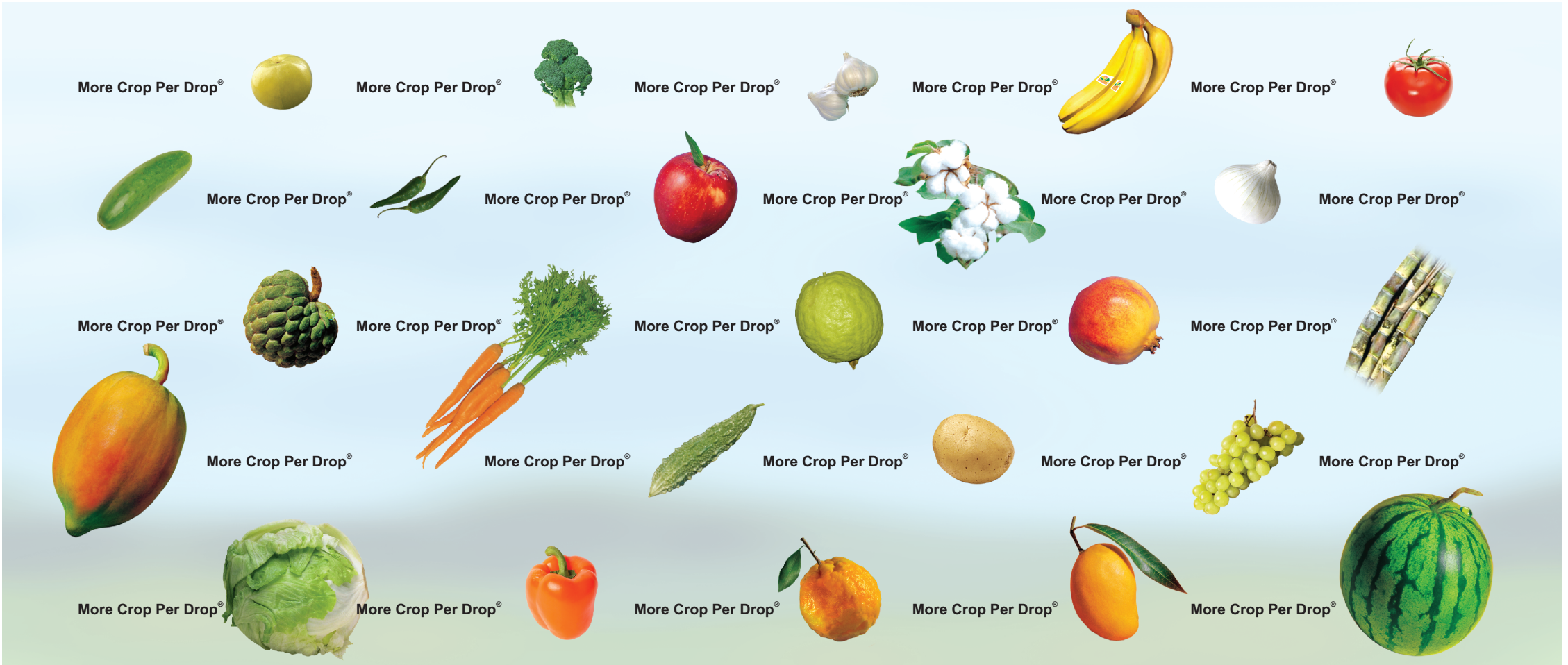
Can any other promise make more sense?



JAIN | API | PEPCO | Chapin | NAANDANJAIN

JAIN®
Jain Irrigation Systems Ltd.

IRRIGATION PRODUCT CATALOGUE 2009

TABLE OF CONTENTS

MICRO IRRIGATION SYSTEMS

FILTRATION EQUIPMENT

FERTIGATION & CHEMIGATION EQUIPMENT

PLASTIC CONTROL & SAFETY VALVES

POLY FITTINGS & ACCESSORIES

SPRINKLER IRRIGATION SYSTEMS

PLASTIC PIPING SYSTEMS

DESIGN - TECHNICAL INFORMATION

JAIN®

Jain Irrigation Systems Ltd.

Small Ideas. Big Revolutions.®

www.jains.com

Corporate

Built With Vision, Fortified With Faith – 'Built To Last'

Corporate Philosophy

The Corporation

More Crop Per Drop®

Brand Equity

Integrated System Approach

The JAIN Self Sustaining Agri Cycle

Sales & Service - India Network

Sales & Service - Worldwide Network

Awards and Accolades

Communication Channel

Built With Vision, Fortified With Faith – 'Built To Last'

Mr. Bhavarlal Jain envisioned and grew an altogether new Micro Irrigation Industry in India in a scientific manner. Indeed, he was working on a new canvas with no model to emulate. The resource-starved small farm holders, unenlightened bureaucracy and political leadership were but a few challenges he had to cope with.

A lifetime commitment to farming rooted since 1963, an obsession to introduce modern, but affordable and viable technology, compelled him to be creatively innovative.

To realise and fulfil his vision – 'Establish leadership in whatever we do in India and abroad', he built a corporation – Jain Irrigation Systems Ltd. He forged an Innovative and Integrated System Approach, where under the full range of products and components are manufactured. Complete services are provided. A 2300 acre Hi-Tech Agri Institute and Demonstration Centre is established since 1995.

To further achieve his vision, seven companies were acquired in India and abroad. With this, Jain Irrigation today is the world's second largest irrigation company.

The corporation has also created world-class Fruit and Vegetable Processing Facilities, making it the world's largest processor of Mango, third largest Onion processor and supplier of a complete range of processed fruits and vegetables to major global food brands. Thus, completing the value chain and cementing its linkages with the farming community.

Such is the foundation which makes Jain Irrigation 'built-to-last'.

Corporate Philosophy

Mission
Leave this world better than you found it.

Vision
Establish leadership in whatever we do at home and abroad.

Credo
Serve and strive through strain and stress;
Do our noblest, that's success.

Goal
Achieve continued growth through sustained innovation for total customer satisfaction and fair return to all other stakeholders. Meet this objective by producing quality products at optimum cost and marketing them at reasonable prices.

Guiding Principle
Toil and sweat to manage our resources of men, material and money in an integrated, efficient and economic manner. Earn profit, keeping in view our commitment to social responsibility and environmental concerns.

Quality Perspective
Make quality a way of life.

Work Culture
Experience : 'Work is life, life is work.'

Our Commitment

Customer and Market
- Commit to total customer satisfaction.
- Build and maintain market leadership.

Quality Excellence
- Strive continually to reach and maintain quality in every aspect.

Safety and Health
- Secure safety and health of associates and other assets.

Environment and Society
- Protect, improve and develop the environment
- Cherish the symbiosis and nurture the creative partnership between society and the environment.

Development of Other Stakeholders
- Adopt transparency and fair practices for continuous sustainable growth.

The Corporation

There is more to Jain Irrigation than irrigation.

The Micro-Irrigation Division manufactures a full range of precision-irrigation products, provides services from soil survey, engineering design to agronomic support and nurtures a sprawling 2300 acre Hi-Tech Agri Institute. It undertakes turnkey projects for total agricultural development. The Division's pool of over 800 agri scientists, technologists and technicians are well equipped to render consultancy for complete or partial project planning and implementation e.g. Watershed or Wasteland and/or Crop Selection and Rotation.

The Tissue Culture Division makes Grand Nain Banana plantlets and has established vast primary and secondary hardening facilities and R&D labs.

The Agricultural and Fruit processing wastes are converted into Bio Gas then further into Organic Manure. Neem-based pesticides are also formulated. Both are critical inputs for Organic Farming.

The Agro Processed Products Division, processes tropical fruits into purees, concentrates, juices, while the Dehydration facility dehydrates Onions & Vegetables.

The Piping division caters to urban and rural infrastructure needs of the country apart from irrigation needs of the farmers.

The Plastic sheet division's globally marketed products help conserve forests by providing an alternative to wood in the home building markets.

Solar Energy Heating and Lighting Equipment.

Bio-Energy sources are a new venture.

A state-of-the-art Bio Tech Lab, accredited with NABL, GoI is established for biological and chemical testing.

In a nutshell, the Corporation is the only 'One-Stop-Shop', encompassing manufacturing and marketing of hi-tech agricultural inputs and services as well as processing of agri produce. No wonder, it has distinguished itself as a leader in the domestic and global markets.

The Corporation has 16 manufacturing plants and numerous offices across the globe.

The Corporate product range improves productivity and adds value to the agri-sector including conservation of scarce Natural resources.

The reward has been millions of smiling farmers and scores of customers in 107 countries.

BACK

More Crop Per Drop®

Jain Plastic Park, Jalgaon (India) – Drip, Sprinkler Irrigation Systems and Plastic Piping

Jain Agri Park, Jalgaon (India) – Farm R & D, Demonstration, Training / Extension Center, Green Houses and Tissue Culture Lab

Jain Irrigation Inc., Fresno (USA) – Drip and Sprinkler Irrigation Systems

Chapin Watermatics – Watertown (USA) – Drip Irrigation

Naan Dan Jain Irrigation CS Ltd., Israel – Drip and Sprinkler Irrigation Systems

Jain Plastic Park, Hyderabad (India) – Drip, Sprinkler Irrigation Systems and Plastic Piping

Jain Agri Industrial Park, Udumalpeth (India) – Drip, Sprinkler Irrigation Systems and Plastic Piping

Brand Equity

Jain Irrigation Systems Ltd.
Small Ideas. Big Revolutions.®

Jain® Pipes

Jain® Drip

Jain® PE Pipes

Jain® Sprinklers

Jain™ Tissue-Culture

Jain® Solar

Jain™ Greenhouse

B-SURE™ SWR PIPING SYSTEM
Better B-Sure, Never be sorry!™

Chapin™
Drip Irrigation

API®
Drip Irrigation

PEPCO™
Drip Irrigation

NAANDANJAIN™
Drip & Sprinkler Irrigation

FARMFRESH®
Food Processing

CASCADE SPECIALTIES™
Onion Processing

EX-CEL®
Plastic Sheets

NuCedar Mills™
finely crafted exteriors
Plastic Sheets

Integrated System Approach

In a world, which is intensely specialised and highly focussed, propagating and practicing an Integrated System Approach can make a world of difference!

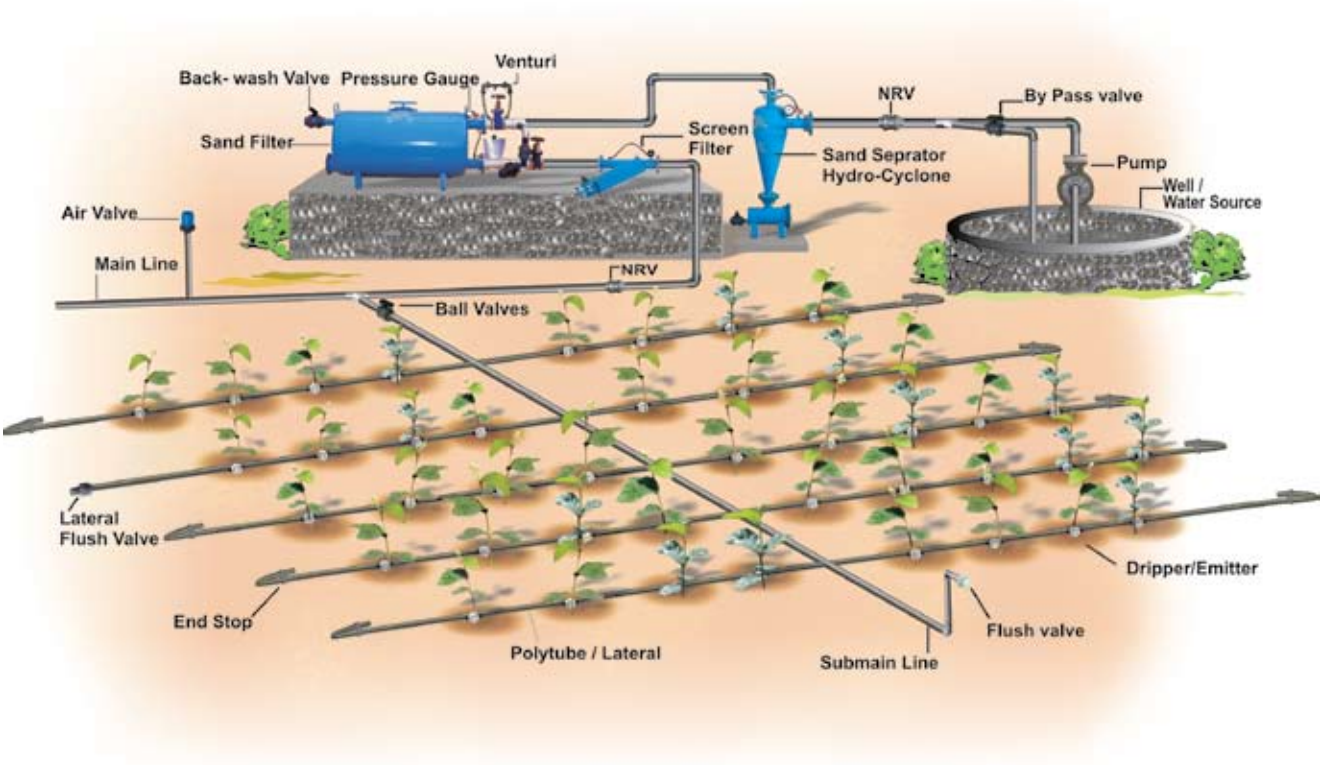
We manufacture and supply every essential component for most cost effective, yet very efficient Micro Irrigation System and undertake turnkey jobs including survey, sampling, system planning, design, installation, as well as after sales, agronomical and technical support even for small farm holder.

Each system is a tailor-made package, based on the soil type and topography, crop, water and climatological parameters and other existing resource constraints. We have pioneered and perfected this holistic approach in India and offer the same around the world.

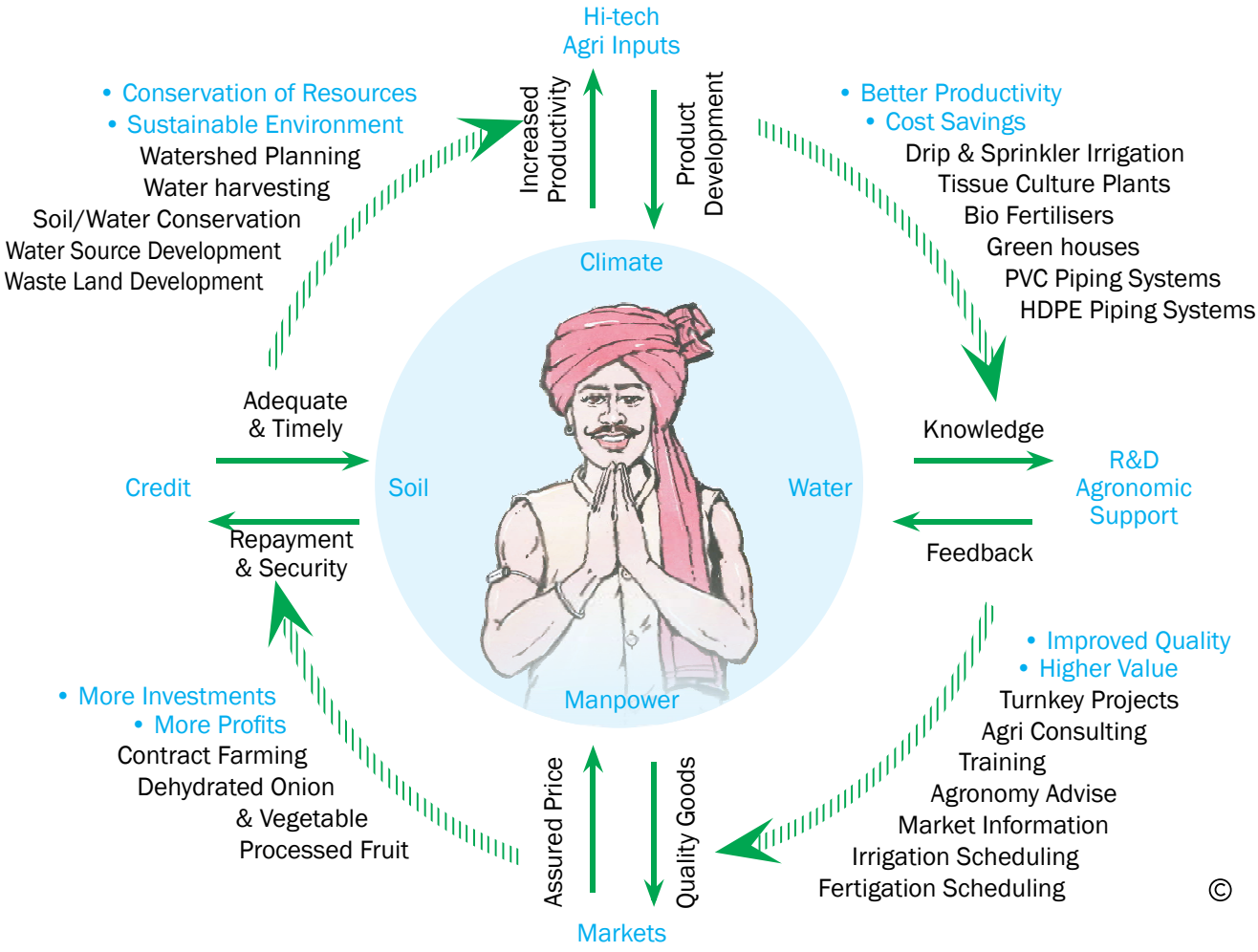
We do not stop only at library, laboratory or field research. We have built up expertise in land preparation, crop selection & rotation as well as Wasteland Transformation through Watershed Development and Micro Irrigation. We undertake tasks from Concept to Commissioning and can go even further, to operate and manage such projects. We offer cost-effective and down-to-earth solutions for complex challenges in the field of agriculture.

We have created a model for the integrated use, regulation and development of land and water resources in a given area to alleviate poverty, through sustained employment generation and to promote social amity and security. Where necessary, we can seek participation from local stakeholders & NGOs and provide even required training and education for lasting success.

However, today we not only manufacture and market the agricultural inputs, but also buy-back the output and process the same in our world-class food-processing facility. The agricultural value chain is thus completed.

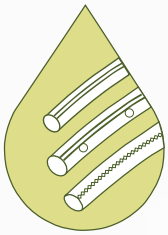


The JAIN Self Sustaining Agri Cycle



JAIN
More Crop Per Drop®

Micro Irrigation Systems



Emitting Pipe

J-Turbo Aqura®

Turbo Cascade™

J-Turbo Line®

Amnon PC & PC CNL

Turboline PC®

Drip Tape

Jain Turbo Slim®

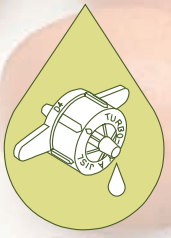
Jain Turbo Tape™

Turbo Cascade™ – Thin Wall

Chapin™ - Deluxe – Drip Tape - 5/8”

Chapin™ - Marathon – Drip Tape - 7/8”

Chapin™ - BTF – Drip Tape



Polyethylene Tubes

Jain Tough Hose – Twin Line®

Extension Tube

Jain Oval Hose

Micro Irrigation Systems

Emitting Devices

J-SC-PC-Plus®

Click Tif

Micro Flapper™

J-Turbo Key Plus™

Jain Emitter®

Turbo Seal®

Mini In Line®

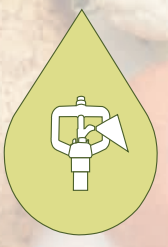
J-Loc®

Turbo Stake Dripper

Trickle-Stik™

Vari Flow® Dripper

Micro Dripper



Jets

Mini Spray Jet™

Turbo-Jet

J-Jets

Foggers and Misters

Fogger

Super Fogger

Jain Fogger

Micro Irrigation Systems

Acu-Mister

Green Mist

LPD

Super LPD

Bubblers

J- Bubbler

J- Bubbler PC

Octa-Bubbler

Quadra Bubbler

QB2 Bubbler

Mini Sprinklers / Rainport™ Assemblies

J-Mini Sprinkler

Modular Sprinklers

2002 AquaSmart

2005 AquaMaster

Green Spin

501-U

502-H

5022-U / 5022

427 B / 427 B AG

Maestro

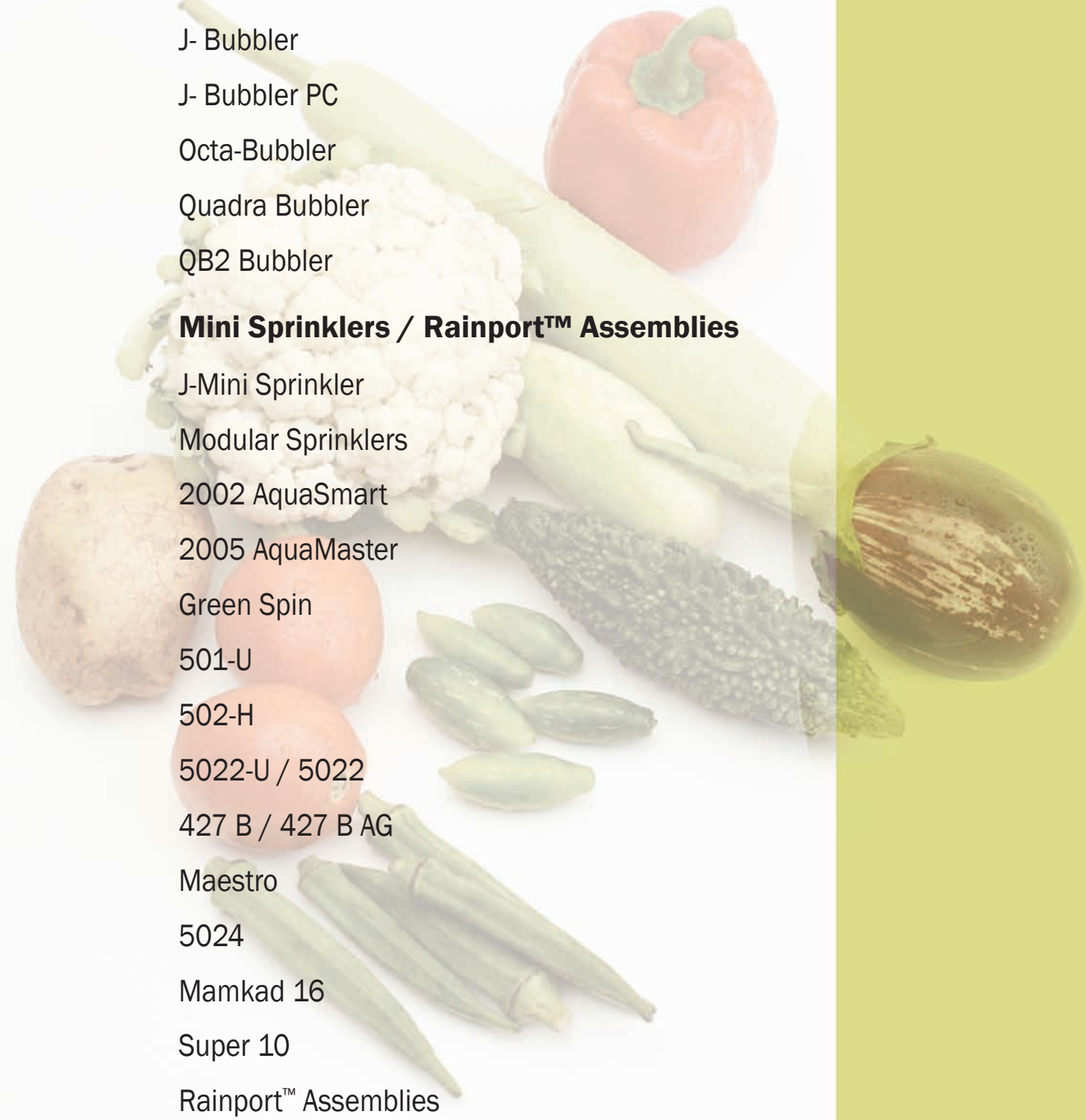
5024

Mamkad 16

Super 10

Rainport™ Assemblies

Rainport™ Fittings



Micro Irrigation Systems

EMITTING PIPE

J-Turbo Aqura®

Features and Specifications

- An extruded, seamless tube with drippers permanently fixed inside.
- Manufactured from special grade virgin plastic using state-of-the art technology that guarantees the best results.
- Manufactured with most modern, state-of-the-art equipment. It's computerised continuous online quality control ensures reliable quality and consistent performance.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality. It also helps to ensure upright positioning of the dripper.
- Large cross-sectional, hydraulically designed turbulent flow-path that makes it a clog resistant emitting pipe.
- Inbuilt filters prevents physical impurities entering in to the dripper.
- Excellent CV_m, manufacturer's coefficient of variation, ensures best field emission uniformity.
- Online stringent quality checks at every stage.
- Precision laser drilled outlet holes.
- Best environmental stress crack resistant.
- Easy to roll back & re-lay.
- Minimum 100 micron filtration recommended.
- Available in four discharge rates of 0.8, 1.3, 2.4 and 4.0 lph at 1 kg/cm² pressure as per metric standard. 0.21, 0.34, 0.62 and 1.06 gph at 14.22 psi as per US standard.
- Available in standard dripper spacing 15, 20, 30, 40, 50, 60, 75 and 90 cm. Other spacing and group spacings are available on demand.
- J-Turbo Aqura® is available in 12, 16, 17, 18, 19, 20 and 23 mm nominal diameter as per metric standard. Also available in 5/8", 7/8" and 1-3/8" nominal diameter as per US standard.
- On demand, available with rodent deterrent feature.
- Specially designed split ring fittings are available. Please refer to 'Poly Fitting & Accessories' pages.

Applications

- J-Turbo Aqura® is recommended for irrigation of closely spaced row crops like sugarcane, cotton, banana, strawberry, vegetables, spices, biofuel crops and floriculture, etc.
- Recommended to use in greenhouses and nurseries.
- Used for widely spaced horticultural plants like mango, citrus, guava, apple etc. in group spacings.
- Suitable for surface as well as sub surface installations.

Dimensions of J-Turbo Aqura® - Metric

Nominal Diameter mm	Inside Diameter mm	Minimum Wall Thickness (mm)			Standard Coil Length in meter
		Class-1	Class-2	Class-3	
12	10.5	0.4	0.6	0.8	100, 250, 500
16	14.2	0.5	0.7	1.0	100, 250, 400
16	13.9	–	0.9	1.0	100, 250, 400
17	15.3	–	–	0.9	100, 250, 400
18	15.7	–	–	0.9	100, 250, 400
** 19	18.9	–	0.8	–	100, 250
20	18.0	0.7	0.9	–	100, 250
23	20.8	–	0.9	–	100

** *As per Australian standard AS 2698*

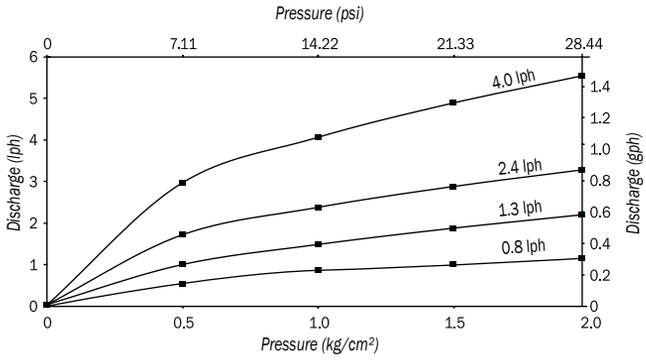
* Rodent Deterrent tubing is manufactured using a special additive, by virtue of which the properties of the tubing is enhanced in such a way that once the rodent bites the tube it gets an extremely bitter taste. This effect deters the rodent from gnawing the tubing again. Rodent deterrent tubing is available in two parallel red stripes – "Twin Line®".

Dimensions of J-Turbo Aqura® - US

Nominal Diameter Inch	Inside Diameter Inch	Minimum Wall Thickness (mil)			Standard Coil Length in feet
		Class-1	Class-2	Class-3	
5/8	5/8	28	36	40	328, 820, 1640
7/8	7/8	28	36	40	328, 820
1-3/8	1-3/8	36	40	–	328, 820

Also available in,
Brown – for landscape application
Purple – for reclaimed water application

Performance Graph-J-Turbo Aqura®



Technical Specifications for Emitter - Metric

Reference Code	Emitter Discharge lph @ 1kg/cm²	Emitter expo-nent	Flow Coefficient	Coeff. of mfgr. Variation,	Flow Path Dimensions, mm			Inlet Filter Area mm²
		x	k	CVm	Length	Width	Depth	
DAIXX08	0.8	0.5	0.8	4	58	0.5	0.6	10.7
DAIXX13	1.3	0.45	1.3	4.5	58	0.7	0.6	10.7
DAIXX24	2.4	0.49	2.4	3.5	58	0.8	0.8	5.4
DAIXX40	4.0	0.46	4	2	58	1	0.9	5.4

Flow equation $q = kH^x$, q = discharge, lph, H = Pressure head, kg/cm², x = Emitter exponent

Technical Specifications for Emitter - US

Reference Code	Emitter Discharge gph @ 14.22 psi	Emitter expo-nent	Flow Coefficient	Coeff. of mfgr. Variation,	Flow Path Dimensions, inch			Inlet Filter Area sq. inch
		x	k	CVm	Length	Width	Depth	
EAIXX08	0.21	0.5	0.054	4	2.3	0.020	0.024	0.017
EAIXX13	0.34	0.45	0.103	4.5	2.3	0.028	0.024	0.017
EAIXX24	0.62	0.49	0.168	3.5	2.3	0.031	0.031	0.008
EAIXX40	1.06	0.46	0.318	2	2.3	0.039	0.035	0.008

Flow equation $q = kH^x$, q = discharge, gph, H = Pressure head, psi, x = Emitter exponent

Ordering Specifications

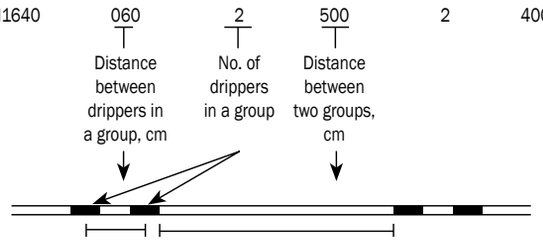
X	A	I	XX	XX	XXX	X	XXX	N
D - Domestic order (within India) E - Export order (outside India)			Nominal diameter 12-12mm 16-16mm 17-17mm 18-18mm 19-19mm 20-20mm 23-23mm 58-5/8" 78-7/8" 138-1-3/8"	Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class	Standard Coil Length in meter	N - Non pressure compensating

Example: DAI16400602400N - This code refers to J-Turbo Aqura® of 16mm nominal diameter having nominal discharge of 4 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 400 m.

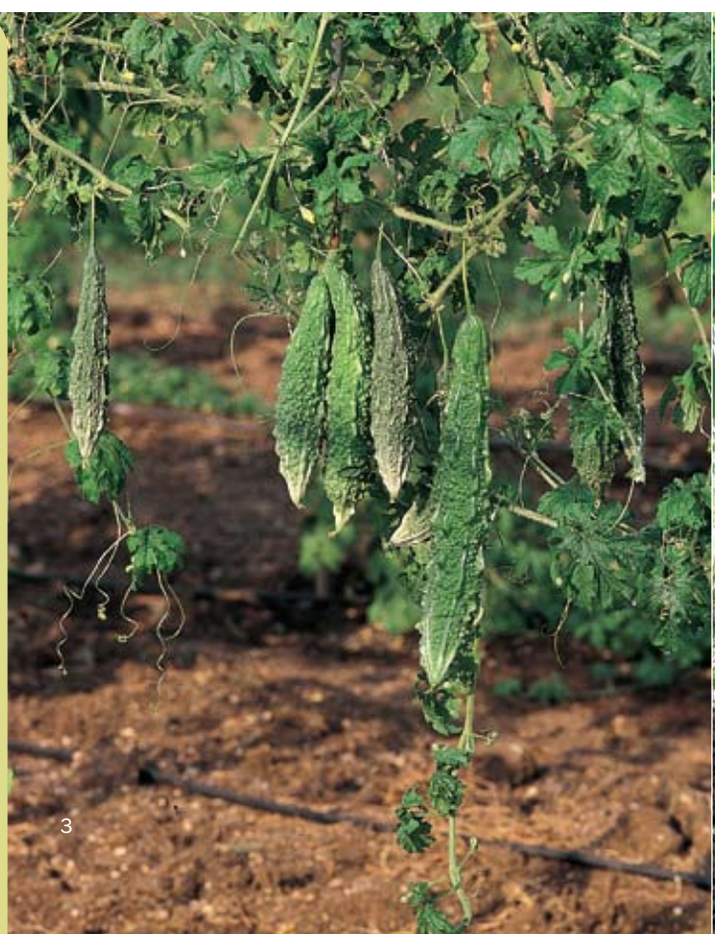
Note

- On request, J-Turbo Aqura® can be supplied in any other wall thickness and pressure ratings.
- J-Turbo Aqura® can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,

DAI1640 060 2 500 2 400 N



- For ordering J-Turbo Aqura® with Rodent Deterrent features, please change the code as DAI16400602R400N.
- For ordering J-Turbo Aqura® brown coloured tubing, please change the code as DAI16400602400NB.
- For ordering J-Turbo Aqura® purple coloured tubing, please change the code as DAI16400602400NP.



Turbo Cascade™

Features and Specifications

- An extruded, seamless tube with drippers permanently fixed inside.
- Manufactured from special grade virgin plastic using state-of-the art technology that guarantees the best results.
- Manufactured with most modern, state-of-the-art equipment. It's computerised continuous online quality control ensures reliable quality and consistent performance.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality. It also helps to ensure upright positioning of the dripper.
- Innovative cascade labyrinth. Its hydrodynamically designed tooth structure helps to create double flow regime viz. central curving flow and turbulent cyclone in the dripper. This helps in continuous flushing of particles.
- Three dimensional filter inlet, unique filtration surface enable clog free operation even under high clog risk conditions.
- Precision laser drilled outlet holes.
- Excellent CV_m, manufacturer's coefficient of variation, ensures best field emission uniformity.
- Online stringent quality checks at every stage.
- Best environmental stress crack resistant.
- Easy to roll back & re-lay.
- Minimum 100 micron filtration recommended.
- Available in three discharge rates of 1.0, 1.7 and 4.0 lph at 1 kg/cm² pressure as per metric standard. 0.27, 0.45 and 1.06 gph at 14.22 psi as per US standard.
- Available in standard dripper spacing 20, 30, 40, 50, 60, 75 and 90 cm. Other spacing and group spacings are available on demand.
- Available in 12, 16, 17, 18, 19, 20 and 23 mm nominal diameter as per metric standard. Also available in 5/8", 7/8" and 1-3/8" nominal diameter as per US standard.
- On demand, available with rodent deterrent feature.
- Specially designed split ring fittings are available. Please refer to 'Poly Fitting & Accessories' pages.

Applications

- Recommended for irrigation of closely spaced row crops like sugarcane, cotton, banana, strawberry, vegetables, spices, biofuel crops and floriculture, etc.
- Suitable for surface as well as sub surface installations.
- Recommended to use in greenhouses and nurseries.
- Used for widely spaced horticultural plants like mango, citrus, guava, apple etc. in group spacings.

Dimensions of Turbo Cascade - Metric

Nominal Diameter mm	Inside Diameter mm	Minimum Wall Thickness (mm)			Standard Coil Length in meter
		Class-1	Class-2	Class-3	
12	10.5	0.4	0.6	0.8	100, 250, 500
16	14.2	0.5	0.7	1.0	100, 250, 400
16	13.9	–	0.9	1.0	100, 250, 400
17	15.3	–	–	0.9	100, 250, 400
18	15.7	–	–	0.9	100, 250, 400
**19	18.9	–	0.8	–	100, 250
20	18.0	0.7	0.9	–	100, 250
23	20.8	–	0.9	–	100

*** As per Australian standard AS 2698*

Dimensions of Turbo Cascade - US

Nominal Diameter Inch	Inside Diameter Inch	Minimum Wall Thickness (mil)			Standard Coil Length in feet
		Class-1	Class-2	Class-3	
5/8	5/8	28	36	40	328, 820, 1640
7/8	7/8	28	36	40	328, 820
1-3/8	1-3/8	36	40	–	328, 820

* Rodent Deterrent tubing is manufactured using a special additive, by virtue of which the properties of the tubing is enhanced in such a way that once the rodent bites the tube it gets an extremely bitter taste. This effect deters the rodent from gnawing the tubing again. Rodent deterrent tubing is available in two parallel red stripes – "Twin Line®".

Technical Specifications for Emitter - Metric

Reference Code	Emitter Discharge lph @ 1kg/cm²	Emitter expo-nent	Flow Coefficient	Coeff. of mfgr. Variation,	Flow Path Dimensions, mm			Inlet Filter Area mm²
		x	k	CVm	Length	Width	Depth	
DCIXX10	1.0	0.46	1.0	4.0				
DCIXX17	1.7	0.46	1.7	4.5				
DCIXX40	4.0	0.46	4.0	2.0				

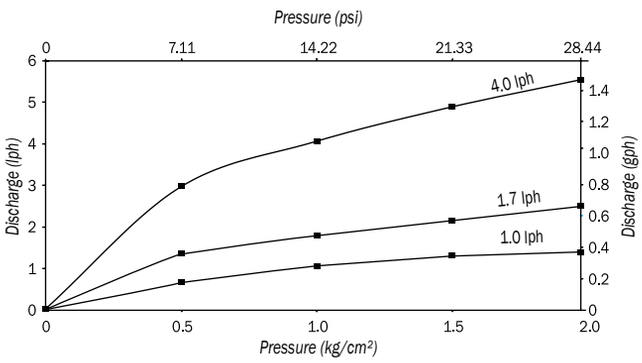
Flow equation $q = kH^x$, q = discharge, lph, H = Pressure head, kg/cm², x = Emitter exponent

Technical Specifications for Emitter - US

Reference Code	Emitter Discharge gph @ 14.22 psi	Emitter expo-nent	Flow Coefficient	Coeff. of mfgr. Variation,	Flow Path Dimensions, inch			Inlet Filter Area sq. inch
		x	k	CVm	Length	Width	Depth	
ECIXX10	0.26							
ECIXX17	0.45							
ECIXX40	1.06							

Flow equation $q = kH^x$, q = discharge, gph, H = Pressure head, psi, x = Emitter exponent

Performance Graph-Turbo Cascade



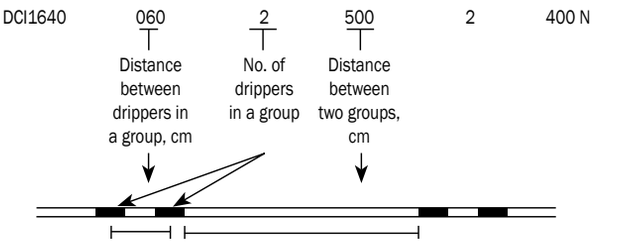
Ordering Specifications

X	C	I	XX	XX	XXX	X	XXX	N
D - Domestic order (within India) E - Export order (outside India)			Nominal diameter 12 - 12 mm 16 - 16 mm 17 - 17 mm 18 - 18 mm 19 - 19 mm 20 - 20 mm 23 - 23 mm 58 - 5/8" 78 - 7/8" 13 - 1-3/8"	Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class	Standard Coil Length in meter	N - Non pressure com-pensating

Example: DCI16400602400N - This code refers to Turbo Cascade of 16mm nominal diameter having nominal discharge of 4 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 400 m.

Note

- On request, Turbo Cascade can be supplied in any other wall thickness and pressure ratings.
- Turbo Cascade can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,



- For ordering Turbo Cascade with Rodent Deterrent features, please change the code as DCI16400602R400N.
- For ordering Turbo Cascade brown coloured tubing, please change the code as DCI16400602400NB.
- For ordering Turbo Cascade purple coloured tubing, please change the code as DCI16400602400NP.

J-Turbo Line®

Features and Specifications

- Manufactured from high performance polyethylene.
- Use of state-of-the-art technology ensures close dimensional tolerance.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality.
- UV stabilized. No environmental effects.
- Best environmental stress crack resistances.
- Online stringent quality checks at every stage.
- Multiple inlet filters provides large filtration area to avoid clogging due to physical contaminations.
- Cylindrical shape permits wide flow path cross section to avoid clogging due to salt precipitation.
- Clog resistant turbulent flow path.
- Multiple outlets breaks vacuum inside the emitter thus avoids soil suck back into the emitter.
- Excellent CV_m, manufacturers co-efficient of variation, ensures best field emission uniformity.
- Available in 6, 12, 16, 18, 20 mm OD sizes.
- Available in standard dripper spacing 20, 30, 40, 50, 60, 75 & 90 cms. Other spacing available on demand.
- J-Turbo Line® can also be supplied in group spacings.
- Minimum 100 micron filtration recommended.
- On demand, available with rodent deterrent feature.
- Specially designed emitting pipe fittings are available. Please refer to 'Poly Fitting & Accessories' pages.

Applications

- Ideal for irrigation of multi seasonal closely spaced row crops like sugarcane, cotton, banana, vegetable, strawberry, spices, biofuel crops, floriculture, etc.
- Suitable for surface as well as sub-surface irrigation.
- Recommended to use in greenhouses and nurseries.
- J-Turbo Line® 6 mm OD is suitable for landscape and loop system of irrigation in orchards.

Technical Specifications

*Reference Code	**Discharge		Emitter exponent (x)	Flow coefficient (k)	Coefficient of Mfg. Variation (CV_m) ≤	Flow Path Dimensions (mm)			Inlet Filter Area
	lph	gph				Length	Width	Depth	mm²
J-Turbo Line® 6mm OD (4.2mm ID)									
DL0640	4.0	1.06	0.48	4.0	5	49.0	0.70	0.94	23.3
J-Turbo Line® 12mm OD (10.5mm ID)									
DL1224 DL1230 DL1240	2.4 3.0 4.0	0.64 0.79 1.06	0.48 0.48 0.48	2.4 3.0 4.0	5 5 5	87.7 87.7 84.8	0.75 0.75 0.90	0.70 0.95 0.95	25.0 25.0 25.0
J-Turbo Line® 16mm OD (14.2mm ID)									
DL1624 DL1640	2.4 4.0	0.64 1.06	0.48 0.48	2.4 4.0	4 4	125.3 118.1	0.80 1.10	0.73 1.10	34.0 34.0
J-Turbo Line® 16mm OD (13.8mm ID)									
DL16___ DL16___	....	....	....	....	4 4	125.3 118.1	0.80 1.10	0.73 1.10	34.0 34.0
J-Turbo Line® 18mm OD (15.9mm ID)									
DL1820 DL1840	2.0 4.0	0.53 1.06	0.48 0.48	2.2 4.2	8 4	297.7 496.2	0.78 1.3	0.82 1.42	9.7 19.2
J-Turbo Line® 20mm OD (18mm ID)									
DL2020 DL2040	2.0 4.0	0.53 1.06	0.48 0.48	2.2 4.2	8 4	297.7 496.2	0.78 1.3	0.82 1.42	9.7 19.2

* For detailed code please refer ordering specifications.

** At an operating pressure of 1kg/cm² (14.22 psi) and for pressure Class-2 for 12 & 16mm OD (10.5mm and 14.2mm ID respectively) and pressure class-1 for 18 and 20mm OD (15.9mm and 18mm ID respectively) under standard test conditions.

New Arrival
J-Turbo Line 6 mm OD

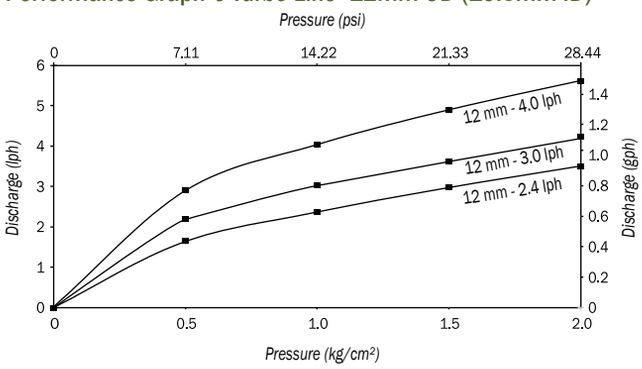
Also available in,
Brown – for landscape application
Purple – for reclaimed water application

* Rodent Deterrent tubing is manufactured using a special additive, by virtue of which the properties of the tubing is enhanced in such a way that once the rodent bites the tube it gets an extremely bitter taste. This effect deters the rodent from gnawing the tubing again. Rodent deterrent tubing is available in two parallel red stripes – "Twin Line®".

Dimensions of J-Turbo Line®

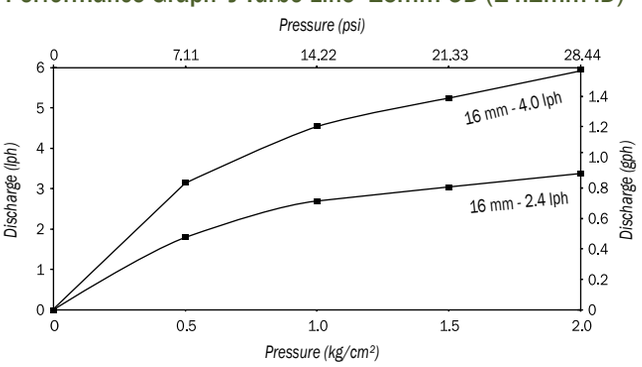
Nominal Diameter mm	Inside Diameter mm	Minimum Wall Thickness, mm				Standard Coil Length, m
		Class-1	Class-2	Class-3	Class-4	
6	4 .2	–	–	–	0.9	100
12	10.5	0.4	0.6	0.8	1.1	100, 250, 500
16	14.2	0.5	0.7	1.0	1.3	100, 250, 400
16	13.8	–	0.9	1.0	1.3	100, 250, 400
18	15.9	0.7	0.9	1.2	1.5	100, 250
20	18.0	0.7	0.9	1.2	1.5	100, 250

Performance Graph -J-Turbo Line® 12mm OD (10.5mm ID)



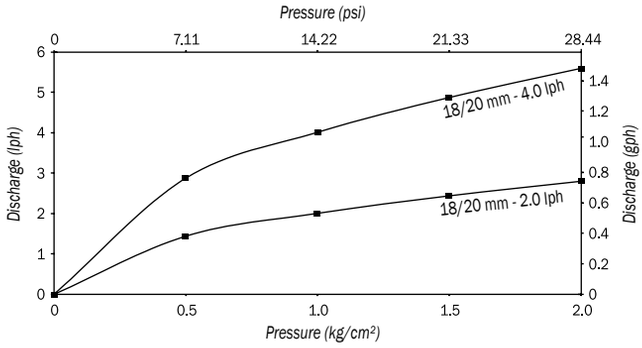
Note: Performance graph for J-Turbo Line® as per Pressure Class-2.

Performance Graph -J-Turbo Line® 16mm OD (14.2mm ID)



Note: Performance graph for J-Turbo Line® as per Pressure Class-2.

Performance Graph -J-Turbo Line® 18 / 20mm OD (15.9/18mm ID)



Note: Performance graph for J-Turbo Line® as per Pressure Class-1.

Ordering Specifications

X	L	I	XX	XX	XXX	X	XXX	N
D - Domestic order (within India) E - Export order (outside India)			Nominal diameter in mm	Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class	Standard Coil Length in meter	N - Non pressure compensating

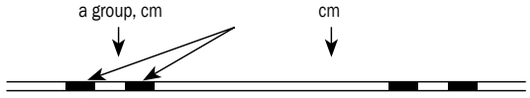
Example: DLI16400602400N - This code refers to J- Turbo Line® of 16mm nominal diameter having nominal discharge of 4 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 400 m.

Note

- J- Turbo Line® can be supplied in any other wall thickness and pressure ratings.
- J- Turbo Line® can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,

DLI1640 060 2 500 2 400 N

- 060: Distance between drippers in a group, cm
- 2: No. of drippers in a group
- 500: Distance between two groups, cm



- For ordering J- Turbo Line® with Rodent Deterrent features, please change the code as DLI16400602R400N.
- For ordering J- Turbo Line® brown coloured tubing, please change the code as DLI16400602400NB.
- For ordering J- Turbo Line® purple coloured tubing, please change the code as DLI16400602400NP.

Amnon PC & PC CNL

Features and Specifications

- The new & innovative pressure-compensated, non-drainage dripline based on the cascade labyrinth.
- Cascade labyrinth gives strong, self-cleaning turbulence.
- Non-drainage and anti-vacuum design.
- Hydrodynamic dripper design ensures continuous flushing of sediments and small dirt particles.
- Weir structure protects against root intrusion and sand suction.
- Side water inlet structure to improve clog resistance.
- Low CVm for maximal uniformity results.
- High quality diaphragm.
- Flow rates: 1.0, 2.2 l/h.
- CNL - Opening pressure - 1.0 kg/cm²
  Closing pressure - 0.25 kg/cm²
- Pressure regulating range - PC model - 0.5-4.0 kg/cm² (7.11-56.88 psi)
- Recommended filtration level - 130 micron.
- Available in 16mm nominal diameter. Other sizes such as 17, 20 and 23 mm OD can be supplied on demand.
- Available in dripper spacing from 15-100 cm.

Applications

- All purpose versatile product.
- PC CNL can be used for pulse irrigation for greenhouse, vegetables and orchards.
- Suitable for surface as well as subsurface applications.
- Large fields with long rows (reduced filling time).

Technical Specifications

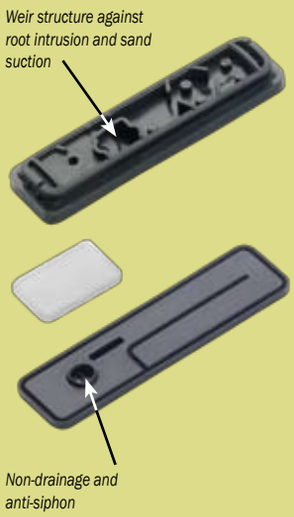
Nominal Diameter	Wall thickness mm	Outside Dia. mm	Inside Dia. mm	Dripper Discharge lph	Dripper spacing cm	Recommended working pressure range, kg/cm²
16	0.65	15.2	13.9	1.0 & 2.2	15-100	1.0-2.0
16	0.90	15.7	13.9	1.0 & 2.2	15-100	1.0-3.0
16	1.00	15.9	13.9	1.0 & 2.2	15-100	1.0-3.5
16	1.15	16.2	13.9	1.0 & 2.2	15-100	1.0-3.5
17	0.9	17.0	15.2	1.0 & 2.2	15-100	1.0-3.5
17	0.63	16.7	15.4	1.0 & 2.2	15-100	1.0-3.5
20	1.2	18.9	17.5	1.0 & 2.2	15-100	1.0-3.5
23	1.0	22.8	20.8	1.0 & 2.2	15-100	1.0-3.5
23	0.9	22.6	20.8	1.0 & 2.2	15-100	1.0-3.5

Ordering Specifications *

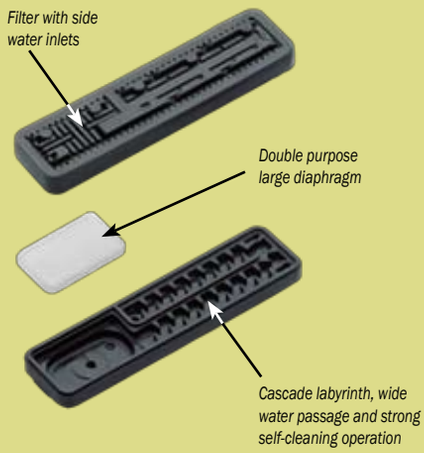
X	913	XX	XXX	
D - Domestic order (within India) E - Export order (outside India)		23 - 1.0 lph 43 - 2.2 lph	dripper spacing (cm)	0

Example: D913430300 - This code represent Amnon PC CNL of 16mm nominal diameter 0.9 mm wall thickness having nominal discharge of 2.2 lph and dripper spaced at 30 cm.

Upper View



Bottom View



Turboline PC®

Features and Specifications

- Manufactured from high performance polyethylene.
- Use of state-of-the-art technology ensures close dimensional tolerance and longer life.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality.
- Resistant to UV radiation & environmental effects.
- Cylindrical dripper with an inbuilt silicone diaphragm ensures consistent performance for longer time.
- Online stringent quality checks at every stage.
- Especially suitable for undulating terrain and steep slopes.
- Wide pressure compensation range from 0.5 - 4 kg/cm² (7.11 to 56.88 psi).
- Self cleaning, diaphragm retracts dynamically to throw away particles which are blocking the emitter.
- Specially designed emitting pipe fittings are available. Please refer to 'Polyfittings & Accessories' pages.
- Available in nominal OD of 16, 18 and 20mm.
- Minimum 100 micron filtration recommended.
- Available in standard dripper spacing 30, 40, 50, 60, 75 & 90 cms. Other spacings available on demand.
- On request Turboline PC® can also be supplied in group spacings.
- On demand, available with rodent deterrent feature.

Applications

- Ideal for irrigation of closely spaced row crops like sugarcane, cotton, banana, strawberry, floriculture, vegetables and spices.
- Suitable for surface as well as sub-surface irrigation.
- Recommended for undulating terrain & steep slopes and where longer lateral running length is necessary.

Technical Specifications

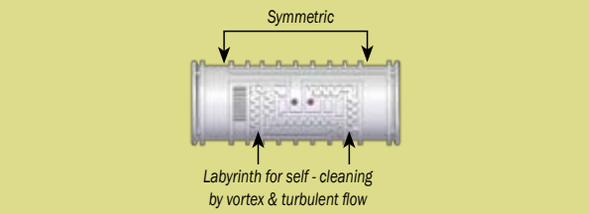
Reference Code	* Nominal Discharge		Emitter exponent (x)	Flow coefficient (k)
	lph	gph		
Turboline PC® 16mm OD (14.2mm ID)				
DL1620XXXXXXP	2.0	0.53	0	1.9
DL1627XXXXXXP	2.7	0.71	0	2.6
DL1645XXXXXXP	4.5	1.19	0	4.5
Turboline PC® 18mm OD (15.9mm ID)				
DL1809XXXXXXP	0.9	0.24	0	0.9
DL1816XXXXXXP	1.6	0.42	0	1.6
DL1822XXXXXXP	2.2	0.58	0	2.5
DL1838XXXXXXP	3.8	1.00	0	3.8
Turboline PC® 20mm OD (18.0mm ID)				
DL2009XXXXXXP	0.9	0.24	0	0.9
DL2016XXXXXXP	1.6	0.42	0	1.6
DL2022XXXXXXP	2.2	0.58	0	2.5
DL2038XXXXXXP	3.8	1.00	0	3.8

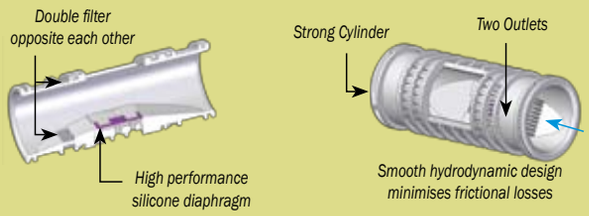
* Nominal discharges for pressure class 2 under standard testing conditions.

Dimensions of Turboline PC®

Nominal Diameter mm	Inside Diameter mm	Minimum Wall Thickness, mm				Standard Coil Length, m
		Class-1	Class-2	Class-3	Class-4	
16	14.2	0.5	0.7	1.0	1.3	100, 250, 400
18	15.9	0.7	0.9	1.2	1.5	100, 250
20	18.0	0.7	0.9	1.2	1.5	100, 250

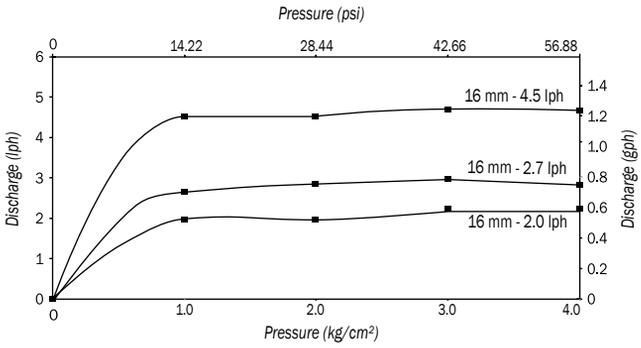
* Rodent Deterrent tubing is manufactured using a special additive, by virtue of which the properties of the tubing is enhanced in such a way that once the rodent bites the tube it gets an extremely bitter taste. This effect deters the rodent from gnawing the tubing again.
Rodent deterrent tubing is available in two parallel red stripes – "Twin Line®".





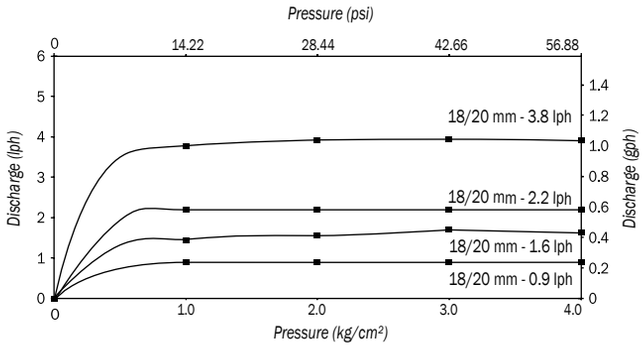
Also available in,
Brown – for landscape application
Purple – for reclaimed water application

Performance Graph – Turboline PC® 16mm OD (14.2mm ID)



Note: Performance graph for Turboline PC® as per Pressure Class-2.

Performance Graph – Turboline PC® 18/20mm OD (15.9/18mm ID)



Note: Performance graph for Turboline PC® as per Pressure Class-1.

Ordering Specifications

X	L	I	XX	XX	XXX	X	XXX	P
D - Domestic order (within India) E - Export order (outside India)			Nominal diameter in mm	Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class	Standard Coil Length in meter	P - Pressure compensating

Example: DLI16450602400P - This code refers to Turboline PC® of 16mm nominal diameter having nominal discharge of 4.5 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 400 m.

Note

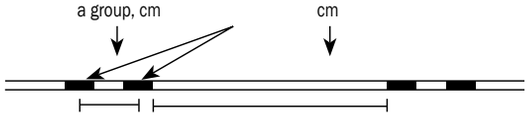
- On request, Turboline PC® can be supplied in any other wall thickness and pressure ratings.
- Turboline PC® can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,

DLI1645 060 2 500 2 400 P

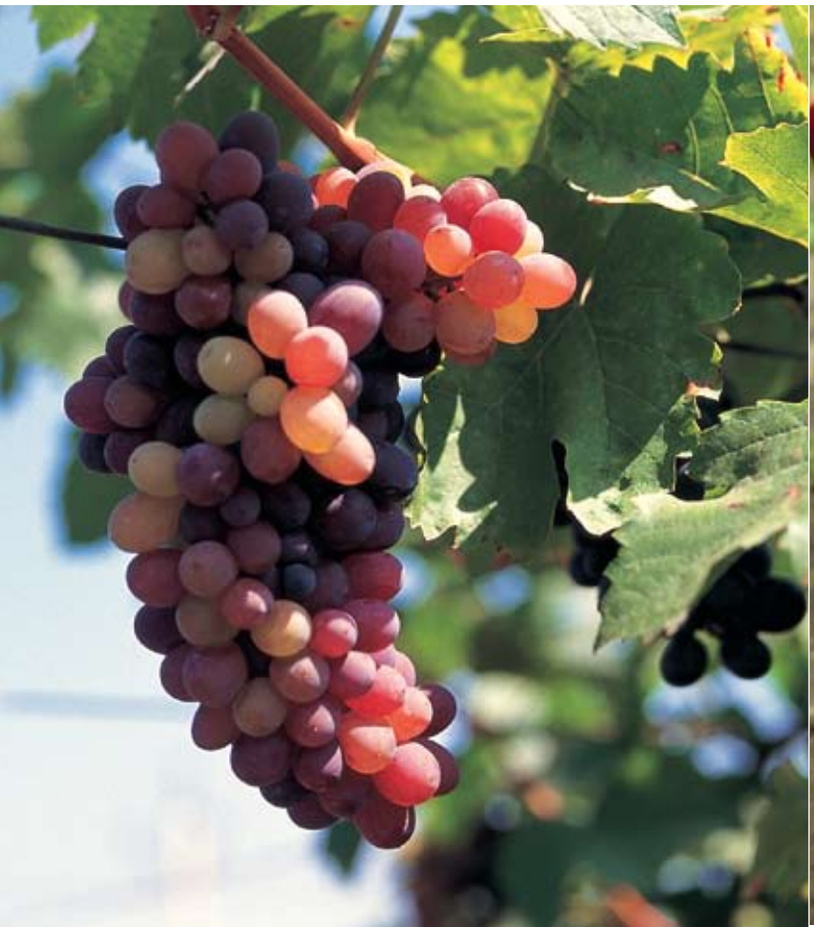
060 – Distance between drippers in a group, cm

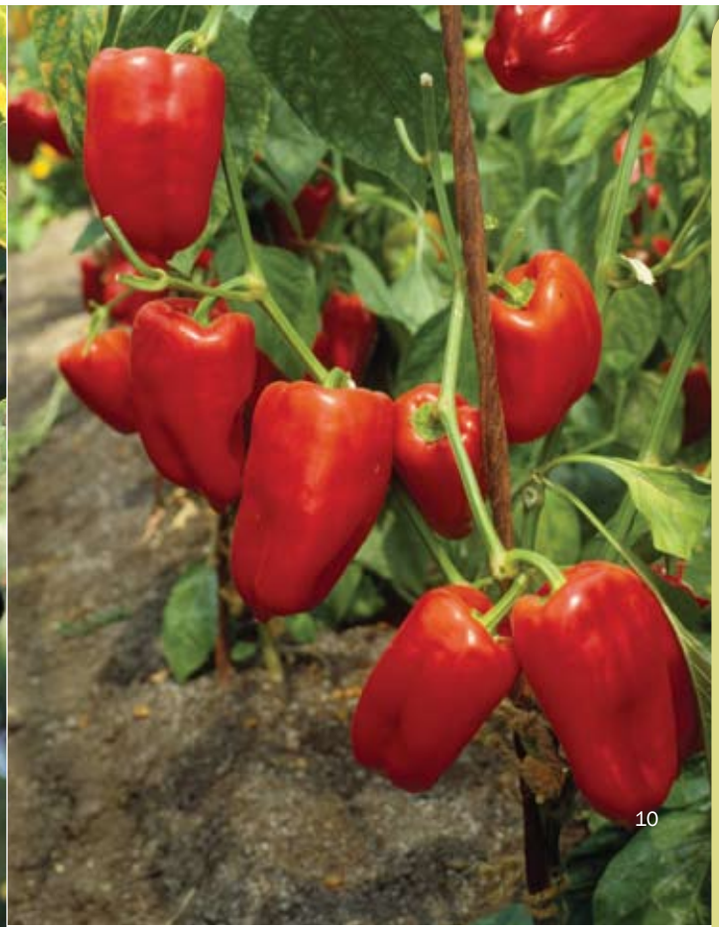
2 – No. of drippers in a group

500 – Distance between two groups, cm



- For Turboline PC® with Rodent Deterrent features, please change the code as DLI16450602R400P.





DRIP TAPE

Jain Turbo Slim®

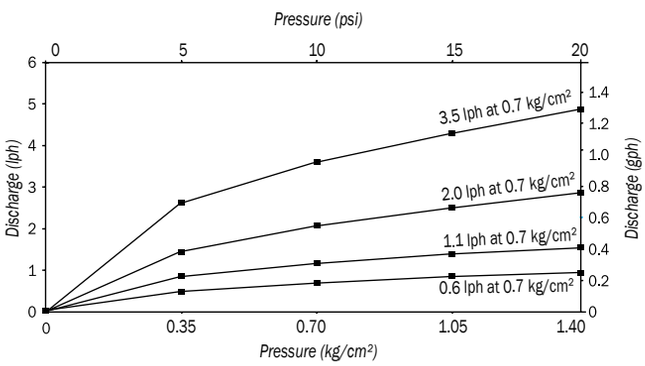
Features and Specifications

- Seamless drip tape with drippers permanently fixed inside. Seamless construction improves ability to withstand pressure fluctuations.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality. It also helps to ensure upright positioning of the dripper.
- Manufactured from special grade, virgin polymer ensuring close dimensional tolerance and higher strength even at lower wall thickness.
- Manufactured with the most modern, state-of-the-art equipment. It's computerized continuous online quality control ensures reliable quality and consistent performance.
- Hydraulically designed turbulent flow path emitter with wide cross sectional area and precision inlet filter that makes it a truly clog resistant drip tape.
- Smooth and round edged emitter gives less stress at the edges of welding points.
- Precision laser drilled outlet holes.
- Extremely low manufacturing coefficient of variation, CV_m ensures high field emission uniformity.
- Available in 12, 16, 17, 19 and 25 mm nominal diameter as per metric standard. 5/8", 7/8", 9/8" and 1-3/8" nominal diameter as per US standard.
- Longer length of coil, higher volume per shipment, less space in warehouse, less handling costs.
- Available in four discharge rates of 0.6, 1.1, 2.0 and 3.5 lph at nominal operating pressure of 0.7 kg/cm² as per metric standard. 0.17, 0.29, 0.52 and 0.92 gph at nominal operating pressure of 10 psi as per US standard.
- Available in wall thickness ranging from 6mil to 25mil (0.15mm to 0.63mm).
- Available in standard dripper spacing of 15, 20, 30, 40, 50, 60, 75, 90 and 100 cm. Any other spacing and group spacings are available on demand.
- Specially designed Tape Lock™ fittings are available. Please refer to 'Poly Fittings & Accessories' page.
- Minimum 100 micron filtration recommended. However required filtration type and precision depends upon quality of source water.

Applications

- Recommended for closely spaced seasonal row crops like sugarcane, cotton, chilly, potato, ground nut, onion, vegetables, oil seeds, banana, strawberry, floriculture etc.
- Suitable for surface and subsurface applications.

Performance Graph - Jain Turbo Slim®



Technical Specifications for Emitter - Metric

Reference Code	Emitter Discharge		Emitter exponent	Flow Coefficient	Coeff. of mfgr. Variation	Flow Path Dimensions, mm			Inlet Filter Area
	lph at 0.7 kg/cm²	lph at 1.0 kg/cm²	x	k	CVm	Length	Width	Depth	mm²
DSXXX06	0.6	0.8	0.5	0.8	4	58	0.5	0.6	10.7
DSXXX11	1.1	1.3	0.45	1.3	4.5	58	0.7	0.6	10.7
DSXXX20	2.0	2.4	0.49	2.4	3.5	58	0.8	0.8	5.4
DSXXX35	3.5	4	0.46	4	2	58	1	0.9	5.4

Flow equation $q = kH^x$, q = discharge, lph, H = Pressure head, kg/cm², x = Emitter exponent

Technical Specifications for Emitter - US

Reference Code	Emitter Discharge		Emitter exponent	Flow Coefficient	Coeff. of mfgr. Variation,	Flow Path Dimensions, inch			Inlet Filter Area
	gph at 10 psi	gph at 14.22 psi	x	k	CVm	Length	Width	Depth	sq. inch
DSXXX06	0.17	0.21	0.5	0.054	4	2.3	0.020	0.024	0.017
DSXXX11	0.29	0.34	0.45	0.103	4.5	2.3	0.028	0.024	0.017
DSXXX20	0.52	0.62	0.49	0.168	3.5	2.3	0.031	0.031	0.008
DSXXX35	0.92	1.06	0.46	0.318	2	2.3	0.039	0.035	0.008

Flow equation $q = kH^x$, q = discharge, gph, H = Pressure head, psi, x = Emitter exponent

Technical Specifications for Tubing - Metric

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
mm	mil	mm	mm	mm	kg/cm²	kg/cm²
Jain Turbo Slim® 12 mm Nominal Diameter						
12	6	0.15	11.8	12.1	1.1	1.7
12	8	0.20	11.8	12.2	1.5	2.3
12	10	0.25	11.8	12.3	1.8	2.7
12	12	0.30	11.8	12.4	2.2	3.3
12	15	0.38	11.8	12.6	2.7	4.1
12	18	0.45	11.8	12.7	3.3	5.0
12	20	0.50	11.8	12.8	3.6	5.4
12	25	0.63	11.8	13.1	4.5	6.8
Jain Turbo Slim® 16 mm Nominal Diameter						
16	6	0.15	15.9	16.2	0.8	1.2
16	8	0.20	15.9	16.3	1.1	1.7
16	10	0.25	15.9	16.4	1.4	2.1
16	12	0.30	15.9	16.5	1.6	2.4
16	15	0.38	15.9	16.7	2	3.0
16	18	0.45	15.9	16.8	2.4	3.6
16	20	0.50	15.9	16.9	2.7	4.1
16	25	0.63	15.9	17.2	3.4	5.1
Jain Turbo Slim® 17 mm Nominal Diameter						
17	6	0.15	16.1	16.4	0.8	1.2
17	8	0.20	16.1	16.5	1.1	1.7
17	10	0.25	16.1	16.6	1.4	2.1
17	12	0.30	16.1	16.7	1.6	2.4
17	15	0.38	16.1	16.9	2	3.0
17	18	0.45	16.1	17.0	2.4	3.6
17	20	0.50	16.1	17.1	2.7	4.1
17	25	0.63	16.1	17.4	3.4	5.1
Jain Turbo Slim® 19 mm Nominal Diameter						
19	6	0.15	19	19.3	0.7	1.1
19	8	0.20	19	19.4	0.9	1.4
19	10	0.25	19	19.5	1.1	1.7
19	12	0.30	19	19.6	1.4	2.1
19	15	0.38	19	19.8	1.7	2.6
19	18	0.45	19	19.9	2	3.0
19	20	0.50	19	20.0	2.3	3.5
19	25	0.63	19	20.3	2.8	4.2
Jain Turbo Slim® 25 mm Nominal Diameter						
25	6	0.15	25	25.3	0.5	0.8
25	8	0.20	25	25.4	0.7	1.1
25	10	0.25	25	25.5	0.9	1.4
25	12	0.30	25	25.6	1.1	1.7
25	15	0.38	25	25.8	1.3	2.0
25	18	0.45	25	25.9	1.6	2.4
25	20	0.50	25	26.0	1.8	2.7
25	25	0.63	25	26.3	2.2	3.3

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Technical Specifications for Tubing - US

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
inch	mil	mm	inch	inch	psi	psi
Jain Turbo Slim® 5/8" Nominal Diameter						
5/8	6	0.15	0.625	0.637	11	17
5/8	8	0.20	0.625	0.641	15	23
5/8	10	0.25	0.625	0.645	20	30
5/8	12	0.30	0.625	0.649	22	34
5/8	15	0.38	0.625	0.655	28	43
5/8	18	0.45	0.625	0.661	34	51
5/8	20	0.50	0.625	0.665	38	58
5/8	25	0.63	0.625	0.675	48	73
Jain Turbo Slim® 7/8" Nominal Diameter						
7/8	6	0.15	0.875	0.887	8	13
7/8	8	0.20	0.875	0.891	11	17
7/8	10	0.25	0.875	0.895	14	21
7/8	12	0.30	0.875	0.899	17	26
7/8	15	0.38	0.875	0.905	21	32
7/8	18	0.45	0.875	0.911	25	38
7/8	20	0.50	0.875	0.915	28	43
7/8	25	0.63	0.875	0.925	34	51
Jain Turbo Slim® 9/8" Nominal Diameter						
9/8	6	0.15	1.125	1.425	7	10
9/8	8	0.20	1.125	1.525	9	12
9/8	10	0.25	1.125	1.625	11	15
9/8	12	0.30	1.125	1.725	13	20
9/8	15	0.38	1.125	1.9	16	24
9/8	18	0.45	1.125	2.0	20	29
9/8	20	0.50	1.125	2.1	22	33
9/8	25	0.63	1.125	2.4	27	41
Jain Turbo Slim® 1-3/8" Nominal Diameter						
1-3/8	6	0.15	1.375	1.675	5	9
1-3/8	8	0.20	1.375	1.775	7	11
1-3/8	10	0.25	1.375	1.875	8	13
1-3/8	12	0.30	1.375	1.975	10	15
1-3/8	15	0.38	1.375	2.1	12	19
1-3/8	18	0.45	1.375	2.3	15	23
1-3/8	20	0.50	1.375	2.4	17	26
1-3/8	25	0.63	1.375	2.6	21	32

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Coil Lengths

Emitter spacing		Nominal Diameter of 16 mm, 17 mm and 5/8"															
		6 mil		8 mil		10 mil		12 mil		15 mil		18 mil		20 mil		25 mil	
cm	inch	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
15	6	2100	6888	2100	6888	2000	6560	1700	5576	1350	4428	1000	3280	900	2952	500	1640
20	8	2300	7544	2300	7544	2100	6888	1800	5904	1400	4592	1050	3444	950	3116	550	1804
25	10	2400	7872	2400	7872	2150	7052	1850	6068	1450	4756	1100	3608	1000	3280	600	1968
30+	12+	2700	8856	2500	8200	2250	7380	1900	6232	1500	4920	1150	3772	1000	3280	600	1968
Nominal Diameter of 7/8"																	
15	6	1300	4264	1100	3608	800	2624	900	2552	750	2460	650	2132	600	1968	350	1148
20	8	1500	4920	1300	4264	1000	3280	1000	3280	800	2624	700	2296	650	2132	350	1148
25	10	1600	5248	1400	4592	1100	3608	1050	3444	850	2788	750	2460	700	2296	400	1312
30+	12+	1800	5904	1500	4920	1200	3936	1100	3608	900	2952	800	2624	700	2296	450	1476

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

* *Coil lengths are for coil size 560 x 280 mm (22" x 11"). Other coil sizes such as 350x160 mm (13.8" x 6.3") and 560x160 mm (22" x 6.3") are also available.Please contact for coil lengths of Jain Turbo Slim 12, 19, 25 mm and 9/8", 1–3/8".*

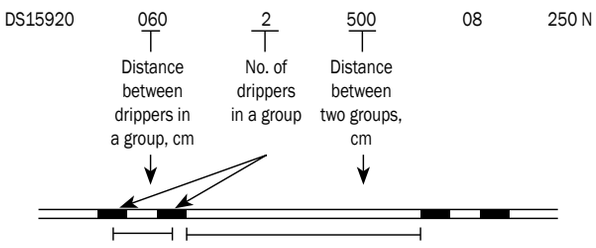
Ordering Specifications

X	S	XXX	XX	XXX	XX	XXX	X
		Inside Diameter	Disch. at 0.7 kg/cm² in lph x 10				
D - Domestic order (within India) E - Export order (outside India)		118 - 11.8 mm 159 - 15.9 mm 161 - 16.1 mm 190 - 19.0 mm 250-25.0mm 058 - 5/8" 078 - 7/8" 098 - 9/8" 138 - 1-3/8"	06 - 0.6 11 - 1.1 20 - 2.0 35 - 3.5	Dripper Spacing in cm	Wall Thick-ness in mil	Standard Coil Length in meter/10	N - Non pressure compensating

Example: DS1592006008250N - This code refers to Jain Turbo Slim® of 15.9mm inside diameter having nominal discharge of 2.0 lph at 0.7 kg/cm² pressure, emitter spaced at 60 cm, 8 mil wall thickness and standard coil length of 2500 m.

Note

- On request, Jain Turbo Slim® can be supplied in any other wall thickness
- Jain Turbo Slim® can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,



Jain Turbo Tape™

Features and Specifications

- Seamless drip tape with integrated emitter stripe welded inside. Seamless construction improves ability to withstand pressure fluctuations.
- Manufactured from special grade virgin polymer ensuring close dimensional tolerance even at lower wall thickness.
- Manufactured with the most modern, state-of-the-art equipment. It's computerized continuous online quality control ensures reliable quality and consistent performance.
- Precisely formed flow path resulting in an extremely low manufacturing coefficient of variation, (CV_m) ensures high field emission uniformity.
- Truly clog resistant design due to,
  - Multiple, fine inlet filters that prevents the entrance of soil, silt particles and algae of size larger than flow path cross section.
  - Dual entry filter segments allows water entry from two side maintains unobstructed water flow.
  - Flexible bottom wall, expands and pushes any particulate matter that tend to block the flowpath. It also helps to break the deposited salt scaling and pushes it out of the emitter.
  - Innovative, laser drilled slit outlet closes when system is pressureless. This inhibits the root intrusion and prevents soil suction.
  - Large cross sectional area and hydrodynamically designed turbulent flow path prevents squirting and makes the emitter clog resistant.
- Smooth inner surface allows longer lengths.
- Available in 12, 16, 17, 19 and 25 mm nominal diameter as per metric standard. 5/8", 7/8", 9/8" and 1-3/8" nominal diameter as per US standard.
- Available in wall thickness ranging from 6 to 25 mil (0.15 to 0.63 mm).
- Flexibility in selection of discharges and outlet spacing.
- Uniform water spread gives high distribution uniformity and improves water application efficiency.
- Specially designed Tape Lock™ fittings are available.
- Minimum 100 micron filtration recommended. However required filtration type and precision depends upon quality of source water.

Applications

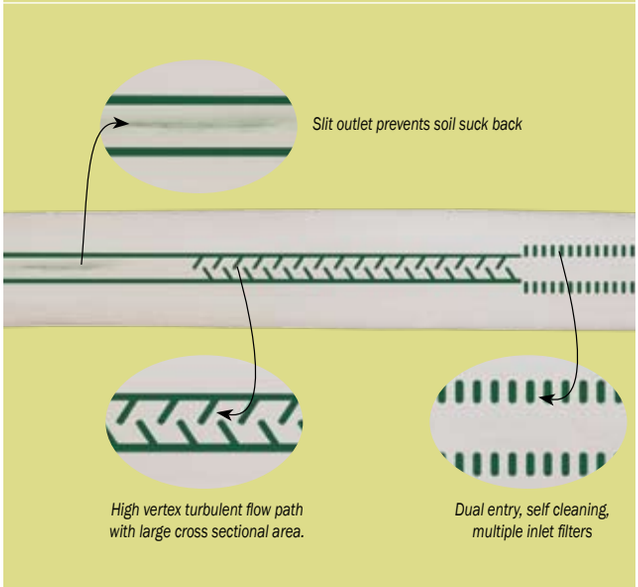
- Recommended for closely spaced seasonal row crops like sugarcane, cotton, chilly, potato, ground nut, onion, vegetables, oil seeds, banana, strawberry, floriculture etc.
- Recommended for irrigation in green house/ shade house.
- Suitable for subsurface and surface applications.

Coil Lengths

Nominal Diameter		Wall Thickness		Coil Lengths	
mm	inch	mm	mil	m	feet
16 17	5/8	0.15	6	2300	7544
		0.20	8	2300	7544
		0.25	10	2100	6888
		0.30	12	1800	5904
		0.38	15	1400	4592
		0.5	20	950	3116
		0.63	25	550	1804
22	7/8	0.15	6	1500	4920
		0.20	8	1300	4264
		0.25	10	1000	3280
		0.30	12	1000	3280
		0.38	15	800	2624
		0.5	20	650	2132
		0.63	25	450	1476

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

* *Coil lengths are for coil size 560 x 280 mm (22" x 11"). Other coil sizes such as 350x160 mm (13.8" x 6.3") and 560x160 mm (22" x 6.3") are also available. Please contact for coil lengths of Jain Turbo Slim 12, 19, 25 mm and 9/8", 1–3/8".*



Technical Specifications - Metric

Reference code	Outlet Spacing, cm	lph/m		lph/emitter	
		0.7 kg/cm²	1 kg/cm²	0.7 kg/cm²	1 kg/cm²
0.57 lph @ 0.7 kg/cm2					
DTXXX015XX380	15	3.80	4.53	0.57	0.68
DTXXX030XX190	30	1.90	2.27	0.57	0.68
0.67 lph @ 0.7 kg/cm2					
DTXXX015XX447	15	4.47	5.33	0.67	0.80
DTXXX030XX223	30	2.23	2.67	0.67	0.80
0.75 lph @ 0.7 kg/cm2					
DTXXX010XX750	10	7.50	9.00	0.75	0.90
DTXXX015XX500	15	5.00	6.00	0.75	0.90
DTXXX020XX375	20	3.75	4.50	0.75	0.90
DTXXX030XX250	30	2.50	3.00	0.75	0.90
0.90 lph @ 0.7 kg/cm2					
DTXXX010XX900	10	9.00	10.70	0.9	1.07
DTXXX020XX450	20	4.50	5.35	0.9	1.07
DTXXX030XX300	30	3.00	3.57	0.9	1.07
DTXXX040XX225	40	2.25	2.68	0.9	1.07
1.0 lph @ 0.7 kg/cm2					
DTXXX010XX1000	10	10.00	12.00	1	1.2
DTXXX020XX500	20	5.00	6.00	1	1.2
DTXXX030XX333	30	3.33	4.00	1	1.2
DTXXX040XX250	40	2.50	3.00	1	1.2
DTXXX050XX200	50	2.00	2.40	1	1.2
DTXXX060XX167	60	1.67	2.00	1	1.2
1.12 lph @ 0.7 kg/cm2					
DTXXX015XX747	15	7.47	8.67	1.12	1.3
DTXXX020XX560	20	5.60	6.50	1.12	1.3
DTXXX030XX373	30	3.73	4.33	1.12	1.3
DTXXX040XX280	40	2.80	3.25	1.12	1.3
DTXXX060XX187	60	1.87	2.17	1.12	1.3
1.2 lph @ 0.7 kg/cm2					
DTXXX020XX600	20	6.00	7.00	1.2	1.4
DTXXX030XX400	30	4.00	4.67	1.2	1.4
DTXXX040XX300	40	3.00	3.50	1.2	1.4
DTXXX060XX200	60	2.00	2.33	1.2	1.4
1.5 lph @ 0.7 kg/cm2					
DTXXX015XX1000	15	10.00	12.00	1.5	1.8
DTXXX020XX750	20	7.50	9.00	1.5	1.8
DTXXX030XX500	30	5.00	6.00	1.5	1.8
DTXXX040XX375	40	3.75	4.50	1.5	1.8
DTXXX060XX250	60	2.50	3.00	1.5	1.8

Technical Specifications - US

Reference code	outlet spacing, inch	gpm/100 feet		gph/emitter	
		at 10 psi	at 14 psi	at 10 psi	at 14 psi
0.15 gph @ 10 psi					
DTXXX015XX380	6	2.51	3.00	0.15	0.18
DTXXX030XX190	12	1.26	1.50	0.15	0.18
0.18 gph @ 10 psi					
DTXXX015XX447	6	2.95	3.53	0.18	0.21
DTXXX030XX223	12	1.48	1.76	0.18	0.21
0.20 gph @ 10 psi					
DTXXX010XX750	4	4.96	5.95	0.20	0.24
DTXXX015XX500	6	3.31	3.97	0.20	0.24
DTXXX020XX375	8	2.48	2.98	0.20	0.24
DTXXX030XX250	12	1.65	1.98	0.20	0.24
0.24 gph @ 10 psi					
DTXXX010XX900	4	5.95	7.08	0.24	0.28
DTXXX020XX450	8	2.98	3.54	0.24	0.28
DTXXX030XX300	12	1.98	2.36	0.24	0.28
DTXXX040XX225	16	1.49	1.77	0.24	0.28
0.26 gph @ 10 psi					
DTXXX010XX1000	4	6.61	7.94	0.26	0.32
DTXXX020XX500	8	3.31	3.97	0.26	0.32
DTXXX030XX333	12	2.20	2.65	0.26	0.32
DTXXX040XX250	16	1.65	1.98	0.26	0.32
DTXXX050XX200	20	1.32	1.59	0.26	0.32
DTXXX060XX167	24	1.10	1.32	0.26	0.32
0.30 gph @ 10 psi					
DTXXX015XX747	6	4.94	5.73	0.30	0.34
DTXXX020XX560	8	3.70	4.30	0.30	0.34
DTXXX030XX373	12	2.47	2.87	0.30	0.34
DTXXX040XX280	16	1.85	2.15	0.30	0.34
DTXXX060XX187	24	1.23	1.43	0.30	0.34
0.32 gph @ 10 psi					
DTXXX020XX600	8	3.97	4.63	0.32	0.37
DTXXX030XX400	12	2.65	3.09	0.32	0.37
DTXXX040XX300	16	1.98	2.31	0.32	0.37
DTXXX060XX200	24	1.32	1.54	0.32	0.37
0.40 gph @ 10 psi					
DTXXX015XX1000	6	6.61	7.94	0.40	0.48
DTXXX020XX750	8	4.96	5.95	0.40	0.48
DTXXX030XX500	12	3.31	3.97	0.40	0.48
DTXXX040XX375	16	2.48	2.98	0.40	0.48
DTXXX060XX250	24	1.65	1.98	0.40	0.48

Technical Specifications for Tubing - Metric

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
mm	mil	mm	mm	mm	kg/cm²	kg/cm²
Jain Turbo Tape™ 12 mm Nominal Diameter						
12	6	0.15	11.8	12.1	1.1	1.7
12	8	0.20	11.8	12.2	1.5	2.3
12	10	0.25	11.8	12.3	1.8	2.7
12	12	0.30	11.8	12.4	2.2	3.3
12	15	0.38	11.8	12.6	2.7	4.1
12	18	0.45	11.8	12.7	3.3	5.0
12	20	0.50	11.8	12.8	3.6	5.4
12	25	0.63	11.8	13.1	4.5	6.8
Jain Turbo Tape™ 16 mm Nominal Diameter						
16	6	0.15	15.9	16.2	0.8	1.2
16	8	0.20	15.9	16.3	1.1	1.7
16	10	0.25	15.9	16.4	1.4	2.1
16	12	0.30	15.9	16.5	1.6	2.4
16	15	0.38	15.9	16.7	2	3.0
16	18	0.45	15.9	16.8	2.4	3.6
16	20	0.50	15.9	16.9	2.7	4.1
16	25	0.63	15.9	17.2	3.4	5.1
Jain Turbo Tape™ 17 mm Nominal Diameter						
17	6	0.15	16.1	16.4	0.8	1.2
17	8	0.20	16.1	16.5	1.1	1.7
17	10	0.25	16.1	16.6	1.4	2.1
17	12	0.30	16.1	16.7	1.6	2.4
17	15	0.38	16.1	16.9	2	3.0
17	18	0.45	16.1	17.0	2.4	3.6
17	20	0.50	16.1	17.1	2.7	4.1
17	25	0.63	16.1	17.4	3.4	5.1
Jain Turbo Tape™ 19 mm Nominal Diameter						
19	6	0.15	19	19.3	0.7	1.1
19	8	0.20	19	19.4	0.9	1.4
19	10	0.25	19	19.5	1.1	1.7
19	12	0.30	19	19.6	1.4	2.1
19	15	0.38	19	19.8	1.7	2.6
19	18	0.45	19	19.9	2	3.0
19	20	0.50	19	20.0	2.3	3.5
19	25	0.63	19	20.3	2.8	4.2
Jain Turbo Tape™ 25 mm Nominal Diameter						
25	6	0.15	25	25.3	0.5	0.8
25	8	0.20	25	25.4	0.7	1.1
25	10	0.25	25	25.5	0.9	1.4
25	12	0.30	25	25.6	1.1	1.7
25	15	0.38	25	25.8	1.3	2.0
25	18	0.45	25	25.9	1.6	2.4
25	20	0.50	25	26.0	1.8	2.7
25	25	0.63	25	26.3	2.2	3.3

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Ordering Specifications

X	T	XXX	XXX	XX	X	XXX	X
D - Domestic order (within India) E - Export order (outside India)		Inside Diameter 118 - 11.8 mm 159 - 15.9 mm 161 - 16.1 mm 190 - 19.0 mm 250 - 25.0mm 058 - 5/8" 078 - 7/8" 098 - 9/8" 138 - 1-3/8"	Outlet Spacing in cm	Wall Thickness in mil	Discharge in lph/m. x 100	Standard Coil Length in meter/10	N - Non pressure compensating P - Pressure compensating

Example: DT15906008090250N - This code refers to Jain Turbo Tape™ of 15.9mm inside diameter having nominal discharge of 0.9 lph at 0.7kg/cm² pressure, outlet spaced at 60 cm, 8 mil wall thickness and standard coil length of 2500 m.

Technical Specifications for Tubing - US

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
inch	mil	mm	inch	inch	psi	psi
Jain Turbo Tape™ 5/8" Nominal Diameter						
5/8	6	0.15	0.625	0.637	11	17
5/8	8	0.20	0.625	0.641	15	23
5/8	10	0.25	0.625	0.645	20	30
5/8	12	0.30	0.625	0.649	22	34
5/8	15	0.38	0.625	0.655	28	43
5/8	18	0.45	0.625	0.661	34	51
5/8	20	0.50	0.625	0.665	38	58
5/8	25	0.63	0.625	0.675	48	73
Jain Turbo Tape™ 7/8" Nominal Diameter						
7/8	6	0.15	0.875	0.887	8	13
7/8	8	0.20	0.875	0.891	11	17
7/8	10	0.25	0.875	0.895	14	21
7/8	12	0.30	0.875	0.899	17	26
7/8	15	0.38	0.875	0.905	21	32
7/8	18	0.45	0.875	0.911	25	38
7/8	20	0.50	0.875	0.915	28	43
7/8	25	0.63	0.875	0.925	34	51
Jain Turbo Tape™ 9/8" Nominal Diameter						
9/8	6	0.15	1.125	1.425	7	10
9/8	8	0.20	1.125	1.525	9	12
9/8	10	0.25	1.125	1.625	11	15
9/8	12	0.30	1.125	1.725	13	20
9/8	15	0.38	1.125	1.9	16	24
9/8	18	0.45	1.125	2.0	20	29
9/8	20	0.50	1.125	2.1	22	33
9/8	25	0.63	1.125	2.4	27	41
Jain Turbo Tape™ 1-3/8" Nominal Diameter						
1-3/8	6	0.15	1.375	1.675	5	9
1-3/8	8	0.20	1.375	1.775	7	11
1-3/8	10	0.25	1.375	1.875	8	13
1-3/8	12	0.30	1.375	1.975	10	15
1-3/8	15	0.38	1.375	2.1	12	19
1-3/8	18	0.45	1.375	2.3	15	23
1-3/8	20	0.50	1.375	2.4	17	26
1-3/8	25	0.63	1.375	2.6	21	32

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Turbo Cascade™ - Thin Wall

Features and Specifications

- Seamless drip tape with drippers permanently fixed inside. Seamless construction improves ability to withstand pressure fluctuations.
- Marked with two parallel yellow stripes 'Twin- Line®'. Symbol of quality. It also helps to ensure upright positioning of the dripper.
- Manufactured from special grade, virgin polymer ensuring close dimensional tolerance and higher strength even at lower wall thickness.
- Manufactured with the most modern, state-of-the-art equipment. It's computerized continuous online quality control ensures reliable quality and consistent performance.
- Innovative cascade labyrinth. Its hydrodynamically designed tooth structure helps to create double flow regime viz. central curving flow and turbulent cyclone in the dripper. This helps in continuous flushing of particles.
- Three dimensional filter inlet, unique filtration surface enable clog free operation even under high clog risk conditions.
- Precision laser drilled outlet holes.
- Extremely low manufacturing coefficient of variation, CV_m ensures high field emission uniformity.
- Available in 12, 16, 17, 19 & 25 mm nominal diameter as per metric standard. 5/8", 7/8", 9/8" and 1-3/8" nominal diameter as per US standard.
- Available in three discharge rates of 0.9, 1.4 and 3.5 lph at nominal operating pressure of 0.7 kg/cm² as per metric standard. 0.23, 0.37 and 0.93 gph at nominal operating pressure of 10 psi as per US standard.
- Available in wall thickness ranging from 6mil to 25mil (0.15mm to 0.63mm).
- Available in standard dripper spacing of 15, 20, 30, 40, 50, 60, 75, 90 and 100 cm. Any other spacing and group spacings are available on demand.
- Specially designed Tape Lock™ fittings are available. Please refer to 'Poly Fittings & Accessories' page.
- Minimum 100 micron filtration recommended. However required filtration type and precision depends upon quality of source water.

Applications

- Recommended for closely spaced seasonal row crops like sugarcane, cotton, chilly, potato, ground nut, onion, vegetables, oil seeds, banana, strawberry, floriculture, etc.
- Suitable for surface and subsurface applications.

Coil Lengths

Emitter spacing		Nominal Diameter of 16 mm, 17 mm and 5/8"															
		6 mil		8 mil		10 mil		12 mil		15 mil		18 mil		20 mil		25 mil	
cm	inch	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
15	6	2100	6888	2100	6888	2000	6560	1700	5576	1350	4428	1000	3280	900	2952	500	1640
20	8	2300	7544	2300	7544	2100	6888	1800	5904	1400	4592	1050	3444	950	3116	550	1804
25	10	2400	7872	2400	7872	2150	7052	1850	6068	1450	4756	1100	3608	1000	3280	600	1968
30+	12+	2700	8856	2500	8200	2250	7380	1900	6232	1500	4920	1150	3772	1000	3280	600	1968
Nominal Diameter of 7/8"																	
15	6	1300	4264	1100	3608	800	2624	900	2552	750	2460	650	2132	600	1968	350	1148
20	8	1500	4920	1300	4264	1000	3280	1000	3280	800	2624	700	2296	650	2132	350	1148
25	10	1600	5248	1400	4592	1100	3608	1050	3444	850	2788	750	2460	700	2296	400	1312
30+	12+	1800	5904	1500	4920	1200	3936	1100	3608	900	2952	800	2624	700	2296	450	1476

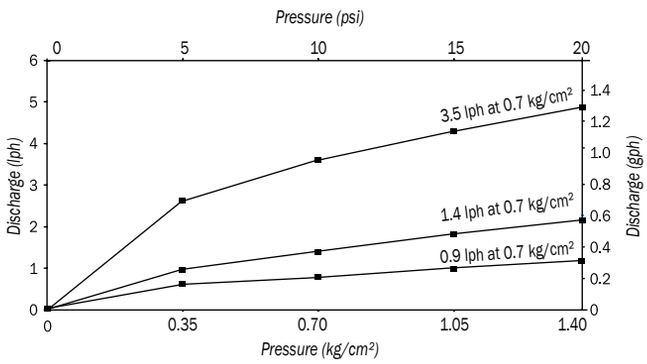
Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

* *Coil lengths are for coil size 560 x 280 mm (22" x 11"). Other coil sizes such as 350x160 mm (13.8" x 6.3") and 560x160 mm (22" x 6.3") are also available.Please contact for coil lengths of J- Turbo Cascade Mini 12, 19, 25 mm and 9/8", 1–3/8".*

Technical Specifications for Emitter

Reference Code	Emitter Discharge				Emitter exponenet	Flow Coefficient	Coeff. of mfgr. Variation
	lph at 0.7 kg/cm²	lph at 1.0 kg/cm²	gph at 10 psi	gph at 14 psi	x	k	CVm
DMXXX09	0.9	1.1	0.23	0.29	0.46	0.8	4
DMXXX14	1.4	1.7	0.37	0.45	0.46	1.3	4.5
DMXXX35	3.5	4.0	0.93	1.06	0.46	4	2

Performance Graph - Turbo Cascade™ - Thin Wall



JAIN
More Crop Per Drop®

Technical Specifications for Tubing - Metric

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
mm	mil	mm	mm	mm	kg/cm²	kg/cm²
Turbo Cascade™ - Thin Wall 12 mm Nominal Diameter						
12	6	0.15	11.8	12.1	1.1	1.7
12	8	0.20	11.8	12.2	1.5	2.3
12	10	0.25	11.8	12.3	1.8	2.7
12	12	0.30	11.8	12.4	2.2	3.3
12	15	0.38	11.8	12.6	2.7	4.1
12	18	0.45	11.8	12.7	3.3	5.0
12	20	0.50	11.8	12.8	3.6	5.4
12	25	0.63	11.8	13.1	4.5	6.8
Turbo Cascade™ - Thin Wall 16 mm Nominal Diameter						
16	6	0.15	15.9	16.2	0.8	1.2
16	8	0.20	15.9	16.3	1.1	1.7
16	10	0.25	15.9	16.4	1.4	2.1
16	12	0.30	15.9	16.5	1.6	2.4
16	15	0.38	15.9	16.7	2	3.0
16	18	0.45	15.9	16.8	2.4	3.6
16	20	0.50	15.9	16.9	2.7	4.1
16	25	0.63	15.9	17.2	3.4	5.1
Turbo Cascade™ - Thin Wall 17 mm Nominal Diameter						
17	6	0.15	16.1	16.4	0.8	1.2
17	8	0.20	16.1	16.5	1.1	1.7
17	10	0.25	16.1	16.6	1.4	2.1
17	12	0.30	16.1	16.7	1.6	2.4
17	15	0.38	16.1	16.9	2	3.0
17	18	0.45	16.1	17.0	2.4	3.6
17	20	0.50	16.1	17.1	2.7	4.1
17	25	0.63	16.1	17.4	3.4	5.1
Turbo Cascade™ - Thin Wall 19 mm Nominal Diameter						
19	6	0.15	19	19.3	0.7	1.1
19	8	0.20	19	19.4	0.9	1.4
19	10	0.25	19	19.5	1.1	1.7
19	12	0.30	19	19.6	1.4	2.1
19	15	0.38	19	19.8	1.7	2.6
19	18	0.45	19	19.9	2	3.0
19	20	0.50	19	20.0	2.3	3.5
19	25	0.63	19	20.3	2.8	4.2
Turbo Cascade™ - Thin Wall 25 mm Nominal Diameter						
25	6	0.15	25	25.3	0.5	0.8
25	8	0.20	25	25.4	0.7	1.1
25	10	0.25	25	25.5	0.9	1.4
25	12	0.30	25	25.6	1.1	1.7
25	15	0.38	25	25.8	1.3	2.0
25	18	0.45	25	25.9	1.6	2.4
25	20	0.50	25	26.0	1.8	2.7
25	25	0.63	25	26.3	2.2	3.3

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Technical Specifications for Tubing - US

Nominal diameter	Wall thickness		Inside diameter	Outside diameter	Maximum operating pressure	Maximum Flushing Pressure
inch	mil	mm	inch	inch	psi	psi
Turbo Cascade™ - Thin Wall 5/8" Nominal Diameter						
5/8	6	0.15	0.625	0.637	11	17
5/8	8	0.20	0.625	0.641	15	23
5/8	10	0.25	0.625	0.645	20	30
5/8	12	0.30	0.625	0.649	22	34
5/8	15	0.38	0.625	0.655	28	43
5/8	18	0.45	0.625	0.661	34	51
5/8	20	0.50	0.625	0.665	38	58
5/8	25	0.63	0.625	0.675	48	73
Turbo Cascade™ - Thin Wall 7/8" Nominal Diameter						
7/8	6	0.15	0.875	0.887	8	13
7/8	8	0.20	0.875	0.891	11	17
7/8	10	0.25	0.875	0.895	14	21
7/8	12	0.30	0.875	0.899	17	26
7/8	15	0.38	0.875	0.905	21	32
7/8	18	0.45	0.875	0.911	25	38
7/8	20	0.50	0.875	0.915	28	43
7/8	25	0.63	0.875	0.925	34	51
Turbo Cascade™ - Thin Wall 9/8" Nominal Diameter						
9/8	6	0.15	1.125	1.425	7	10
9/8	8	0.20	1.125	1.525	9	12
9/8	10	0.25	1.125	1.625	11	15
9/8	12	0.30	1.125	1.725	13	20
9/8	15	0.38	1.125	1.9	16	24
9/8	18	0.45	1.125	2.0	20	29
9/8	20	0.50	1.125	2.1	22	33
9/8	25	0.63	1.125	2.4	27	41
Turbo Cascade™ - Thin Wall 1-3/8" Nominal Diameter						
1-3/8	6	0.15	1.375	1.675	5	9
1-3/8	8	0.20	1.375	1.775	7	11
1-3/8	10	0.25	1.375	1.875	8	13
1-3/8	12	0.30	1.375	1.975	10	15
1-3/8	15	0.38	1.375	2.1	12	19
1-3/8	18	0.45	1.375	2.3	15	23
1-3/8	20	0.50	1.375	2.4	17	26
1-3/8	25	0.63	1.375	2.6	21	32

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

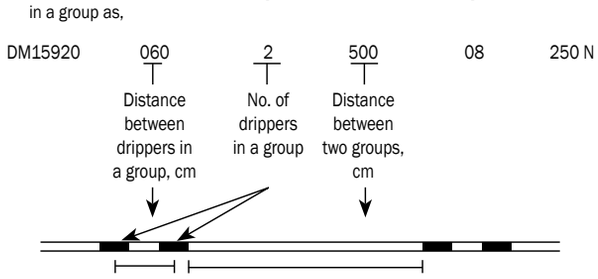
Ordering Specifications

X	M	XXX	XX	XXX	XX	XXX	X
		Inside Diameter	Disch. at 0.7 kg/cm² in lph x 10				
D - Domestic order (within India) E - Export order (outside India)		118 - 11.8 mm 159 - 15.9 mm 161 - 16.1 mm 190 - 19.0 mm 250 - 25.0 mm 058 - 5/8" 078 - 7/8" 098 - 9/8" 138 - 1-3/8"	09 - 0.9 14 - 1.4 35 - 3.5	Dripper Spacing in cm	Wall Thick-ness in mil	Standard Coil Length in meter/10	N - Non pressure compensating

Example: DM1590906008250N - This code refers to Turbo Cascade™ - Thin Wall of 15.9mm inside diameter having nominal discharge of 0.9 lph at 0.7 kg/cm² pressure, emitter spaced at 60 cm, 8 mil wall thickness and standard coil length of 2500 m.

Note

- On request, Turbo Cascade™ - Thin Wall can be supplied in any other wall thickness
- Turbo Cascade™ - Thin Wall can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group as,



Chapin™ - Twin-Wall™ – Deluxe Drip Tape - 5/8”

Features and Specifications

- Manufactured from special grade virgin plastic using state-of-the art technology that guarantees the best results.
- Precision formed flow path channels and filters.
- Clog resistant drip tape with hydraulically efficient, high vortex, turbulent flow path with large cross sectional area.
- Longer flow path of each dripper ensures true drip flow- no squirts.
- Unique continuous inlet filter system which runs along the full length of tape. 333 inlet filters per meter length of the drip tape ensure supply of water to the flow path even if some of the filter segments of the stripe are blocked.
- Double inlet filter protection - Apart from the inlet filters, there are secondary filters at the inlet of each emitter.
- Off center outlets restricts water movement along the tape and ensures each drop falls to the soil.
- Slit outlet, prevents entrance of the soil through outlet.
- Lower tension while winding ensures less retraction in the field and avoids kinking.
- Excellent CV_m and emitter exponent makes longer length of run possible.
- Minimum 100 micron filtration recommended.
- Specially designed Tape Lock™ fittings are available. Please refer to ‘Poly Fitting & Accessories’ page.

Applications

- Suitable for surface as well as subsurface installations.
- Recommended for crops like cotton, banana, vegetables, sugarcane, potato, floriculture, strawberries, peppers, melons, etc.

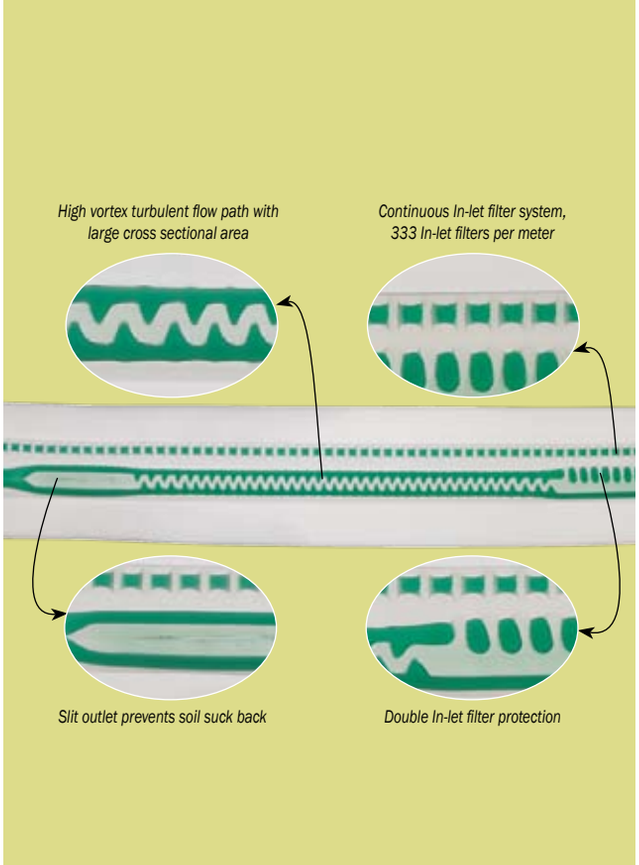
Coil Lengths

Nominal Diameter		Wall Thickness		Coil Lengths	
mm	inch	mm	mil	m	feet
16	5/8	0.1	4	4573, 2287, 1000, 305	15000, 7500, 3280, 1000
16	5/8	0.15	6	3049, 1524, 1000, 305	10000, 5000, 3280, 1000
16	5/8	0.2	8	2287, 1220, 1000, 305	7500, 4000, 3280, 1000
		0.25	10	1829, 915, 1000, 305	6000, 3000, 3280, 1000
		0.38	15	1372, 610, 1000, 305	4500, 2000, 3280, 1000
16	5/8	0.5	20	915, 457, 1000, 305	3000, 1500, 3280, 1000
		0.63	25	762, 1000, 305	2500, 3280, 1000

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

Technical Specifications - Metric

Nominal Diameter, mm	Wall Thickness, mm	Maximum Working Pressure, kg/cm²	Spacing, cm	Discharge (at max. working pressure)	
				lph/m	lph/Emitter
16	0.10	0.4	20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72	0.56, 0.67, 0.89, 1.12
16	0.15	0.7	10	7.44	0.74
			15	2.23, 3.72, 4.84	0.33, 0.56, 0.73
			20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
			45	3.72	1.67
			60	1.49, 2.23, 3.72	0.89, 1.34, 2.23
16	0.20, 0.25	0.7	5	11.16	0.56
			10	7.44	0.74
			20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
			40	1.86, 2.23, 2.98, 3.72	0.74, 0.89, 1.19, 1.49
			45	3.72	1.67
			60	1.49, 2.23, 3.72	0.89, 1.34, 2.23
16	0.38	1.0	5	13.17	0.66
			10	8.63	0.86
			20	3.57, 4.31, 5.73	0.71, 0.86, 1.15
			30	2.23, 2.60, 3.50, 4.39, 5.65	0.66, 0.78, 1.05, 1.32, 1.70
			40	2.16, 2.60, 3.50, 4.39	0.86, 1.05, 1.40, 1.75
			45	4.39	1.98
			60	1.71, 2.60, 4.39	1.04, 1.56, 2.63
16	0.50, 0.63	1.0	20	3.57, 4.31, 5.73	0.71, 0.86, 1.15
			30	2.23, 2.60, 3.50, 4.39, 5.65	0.66, 0.78, 1.05, 1.32, 1.70



Technical Specifications - US

Nominal Diam-eter, inch	Wall Thickness, mil	Maximum Working Pressure, psi	Spacing, inch	Discharge (at max. working pressure)	
				gpm/100 feet	gph/Emitter
5/8	4	6	8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50	0.15, 0.18, 0.24, 0.30
5/8	6	10	4	1.00	0.20
			6	0.30, 0.50, 0.65	0.09, 0.15, 0.19
			8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
			18	0.50	0.44
			24	0.20, 0.30, 0.50	0.24, 0.35, 0.59
5/8	8, 10	10	2	1.50	0.15
			4	1.00	0.20
			8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
			16	0.25, 0.30, 0.40, 0.50	0.20, 0.24, 0.31, 0.39
			18	0.50	0.44
			24	0.20, 0.30, 0.50	0.24, 0.35, 0.59
5/8	15	14	2	1.77	0.17
			4	1.16	0.23
			8	0.48, 0.58, 0.77	0.19, 0.23, 0.30
			12	0.30, 0.35, 0.48, 0.58, 0.77	0.18, 0.21, 0.28, 0.37, 0.46
			16	0.30, 0.35, 0.48, 0.58	0.23, 0.28, 0.35, 0.45
			18	0.58	0.52
			24	0.23, 0.35, 0.58	0.28, 0.41, 0.70
5/8	20, 25	14	8	0.48, 0.58, 0.77	0.19, 0.23, 0.31
			12	0.30, 0.35, 0.48, 0.58, 0.77	0.18, 0.21, 0.28, 0.37, 0.46

Ordering Specifications

DLX	16	XX	XX	XXX
	Nominal Dia. (16 mm)	Wall Thickness, mil	Hole Spacing, cm	Discharge, lph/m (SDR) x 100

Example: DLX160620484 This code refers to Chapin - Twin-Wall™ - Deluxe Drip Tape 16mm (5/8") nominal diameter, 6 mil (0.15mm) wall thickness, hole spacing 20cm (8") and discharge per meter of 4.84 lph (0.65 gpm/100 feet).

Note: Please specify required coil length while ordering.

U.S. Patents 4473191, 4534515, 4572756, 4642152.

Chapin™ - Twin-Wall™ – Marathon Drip Tape - 7/8”

Features and Specifications

- Manufactured from special grade virgin plastic using state-of-the art technology that guarantees the best results.
- Specially developed for longer length of lateral run, where large sections sizes are required to be irrigated at a time.
- Offers highest efficiency and emission uniformity.
- Precision formed flow path channels and filters.
- Clog resistant drip tape with hydraulically efficient, high vortex, turbulent flow path with large cross sectional area.
- Longer flow path of each dripper ensures true drip flow- no squirts.
- Unique continuous inlet filter system which runs along the full length of tape. 333 inlet filters per meter length of the drip tape ensure supply of water to the flow path even if some of the filter segments of the stripe are blocked.
- Double inlet filter protection - Apart from the inlet filters, there are secondary filters at the inlet of each emitter.
- Off center outlets restricts water movement along the tape and ensures each drop falls to the soil.
- Slit outlet, prevents entrance of the soil through outlet.
- Lower tension while winding ensures less retraction in the field and avoids kinking.
- Excellent coefficient of manufacturers variations, CV_m between 2-4%.
- Minimum 100 micron filtration recommended.
- Specially designed Tape Lock™ fittings are available. Please refer to ‘Poly Fitting & Accessories’ page.

Precision drilled slit outlet

Applications

- Suitable for surface as well as sub surface installations.
- Suitable for irrigating large section sizes.
- Recommended for crops like cotton, banana, vegetables, sugarcane, potato, floriculture, strawberries, peppers, melons, etc.

Coil Lengths

Nominal Diameter		Wall Thickness		Coil Lengths	
mm	inch	mm	mil	m	feet
22	7/8	0.15, 0.2	6,8	1677, 1000	5500, 3280
		0.25	10	1372, 1000	4500, 3280
		0.38	15	915, 1000	3000, 3280

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

Technical Specifications - Metric

Nominal Diameter, mm	Wall Thickness, mm	Maximum Working Pressure, kg/cm²	Spacing, cm	Discharge (at max. working pressure)	
				lph/m	lph/Emitter
22	0.15, 0.20, 0.25	0.7	20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
			40	1.86, 2.23, 2.98	0.74, 0.89, 1.19
			60	1.49, 2.23, 3.72	0.89, 1.34, 2.23
22	0.38	0.7	30	1.86, 2.23, 2.98, 3.72,4.84	0.56, 0.67, 0.89, 1.12, 1.45
			40	1.86, 2.23, 2.98	0.74, 0.89, 1.19
			60	1.49, 2.23, 3.72	0.89, 1.34, 2.23

Technical Specifications - US

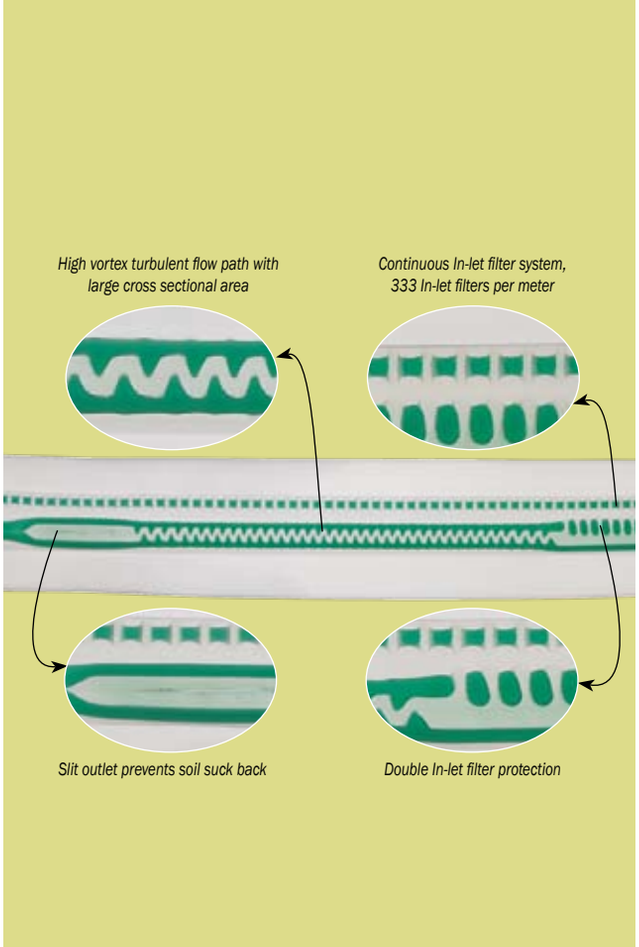
Nominal Diam-eter, inch	Wall Thickness, mil	Maximum Working Pressure, psi	Spacing, inch	Discharge (at max. working pressure)	
				gpm/100 feet	gph/Emitter
7/8	6, 8, 10	10	8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
			16	0.25, 0.30, 0.40	0.20, 0.24, 0.31
			24	0.20, 0.30, 0.50	0.24, 0.35, 0.59
7/8	15	10	12	0.25, 0.30, 0.40,0.50, 0.65	0.15, 0.18, 0.24,0.30, 0.38
			16	0.25, 0.30, 0.40	0.20, 0.24, 0.31
			24	0.20, 0.30, 0.50	0.24, 0.35, 0.59

Ordering Specifications

MAR	22	XX	XX	XXX
	Nominal Dia. (22 mm)	Wall Thickness, mil	Hole Spacing, cm	Discharge, lph/m (SDR) x 100

Example: MAR220620484 – This code refers to Chapin - Twin-Wall™ - Marathon Drip Tape 22mm (7/8") nominal diameter, 6 mil (0.15mm) wall thickness, hole spacing 20cm (8") and discharge per meter of 4.84 lph (0.65 gpm/100 feet).

Note: Please specify required coil length while ordering.



U.S. Patents 4473191, 4534515, 4572756, 4642152

Chapin™ - Twin-Wall™ – BTF Drip Tape

Features and Specifications

- Manufactured from special grade virgin plastic using state-of-the art technology that guarantees the best results.
- Precision formed flow path channels.
- Large cross-sectional, hydraulically designed high vortex, turbulent flow-path that makes it a clog resistant drip tape.
- Economical.
- Off center slit outlets restricts water movement along the tape and ensures each drop falls to the soil.
- Slit outlet, prevents entrance of the soil through outlet.
- Lower tension while winding ensures less retraction in the field and avoids kinking.
- Excellent CV_m and emitter exponent makes longer length of run possible.
- Minimum 100 micron filtration recommended.
- Available in sizes of 16 mm (5/8") nominal diameter.
- Available in wall thickness of 0.1, 0.13, 0.15, 0.2 and 0.25mm (4, 5, 6, 8 and 10 mil)
- Specially designed Tape Lock™ fittings are available. Please refer to 'Poly Fitting & Accessories' page.

Applications

- Suitable for surface as well as sub surface installations.
- Recommended for crops like cotton, banana, vegetables, sugarcane, potato, floriculture, strawberries, peppers, melons, etc.

Technical Specifications - Metric

Nominal Diameter, mm	Wall Thickness, mm	Maximum Working Pressure, kg/cm²	Spacing, cm	Discharge (at max. working pressure)	
				lph/m	lph/Emitter
16	0.1	0.4	20	2.23, 2.98, 3.72, 4.84	0.45, 0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72	0.56, 0.67, 0.89, 1.12
16	0.13	0.7	15	3.72, 4.84	0.56, 0.73
			20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
16	0.15	0.7	15	3.72, 4.84	0.56, 0.73
			20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
16	0.20	0.7	20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45
16	0.25	0.7	20	2.98, 3.72, 4.84	0.60, 0.74, 0.97
			30	1.86, 2.23, 2.98, 3.72, 4.84	0.56, 0.67, 0.89, 1.12, 1.45

Technical Specifications - US

Nominal Diameter, inch	Wall Thickness, mil	Maximum Working Pressure, psi	Spacing, inch	Discharge (at max. working pressure)	
				gpm/100 feet	gph/Emitter
5/8	4	6	8	0.30, 0.40, 0.50, 0.65	0.12, 0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50	0.15, 0.18, 0.24, 0.30
5/8	5	10	6	0.50, 0.65	0.15, 0.19
			8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
5/8	6	10	6	0.50, 0.65	0.15, 0.19
			8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
5/8	8	10	8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38
5/8	10	10	8	0.40, 0.50, 0.65	0.16, 0.20, 0.26
			12	0.25, 0.30, 0.40, 0.50, 0.65	0.15, 0.18, 0.24, 0.30, 0.38

Coil Lengths

Nominal Diameter		Wall Thickness		Coil Lengths	
mm	inch	mm	mil	m	feet
16	5/8	0.1	4	4573, 2287, 1000, 305	15000, 7500, 3280, 1000
16	5/8	0.13	5	3049, 1524, 1000, 305	10000, 5000, 3280, 1000
16	5/8	0.15	6	3049, 1524, 1000, 305	10000, 5000, 3280, 1000
16	5/8	0.2	8	2287, 1220, 1000, 305	7500, 4000, 3280, 1000
16	5/8	0.25	10	1829, 1000, 915, 305	6000, 3280, 3000, 1000

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

Ordering Specifications

BTF	16	XX	XX	XXX
		Wall Thickness, mm x 100	Spacing, cm	Discharge, lph/m (SDR) x 100

Example: BTF161520484: This code refers to Chapin - Twin-Wall™ - BTF Drip Tape 16mm (5/8") nominal diameter, 0.15mm (6 mil) wall thickness, emitter spacing 20cm (8") and discharge per meter of 4.84 lph (0.65 gpm/100 feet).

- Please specify required coil length while ordering.

U.S. Patents 4473191, 4534515, 4572756, 4642152

POLYETHYLENE TUBES

Jain Tough Hose - Twin-Line®

Features and Specifications

- Black in colour with two parallel yellow stripes - 'Twin-Line®'. Also available in red stripes for rodent deterrent option.
- Manufactured from virgin LLDPE using advanced extrusion technology.
- Excellent characteristics of LLDPE provide durable tubing with close dimensional tolerances.
- UV stabilised.
- No environmental effects.
- Smooth inner surface minimises frictional losses.
- Pre-punched tubing at specified distance and hole size can be supplied on demand (standard hole size is 2.9 mm).
- On demand, can be supplied with rodent deterrent feature.
- Manufactured as per IS/ISO/ASAE/AS/ASTM standards.
- Each batch is tested for the following parameters:
  - Dimensional tolerances.
  - Short term & long term hydraulic pressure.
  - Heat reversion.
  - Carbon black content.
  - Environmental stress crack resistance (ESCR).
  - Tensile Strength and Elongation.

Applications

- Used as laterals in drip irrigation systems.
- Used in greenhouses for high pressure foggers, sprayheads and jets application.

Jain Tough Hose-Twin-Line® Drip Polytube as per IS:12786

Reference Code	Nominal OD	Inside Diameter	Min. Wall Thickness	Std. Coil Length	Minimum Weight	
	mm	mm	mm	m	g/m	lbs/100ft
Pressure Class 1						
DT0121	12	10.8	0.6	100, 250, 500	20.09	1.35
DT0161	16	14.4	0.8	100, 250, 400	35.72	2.39
DT0201	20	18.2	0.9	250	50.50	3.38
DT0251	25	22.6	1.2	250	83.90	5.62
DT0321	32	29.0	1.5	100, 250	134.40	9.00
Pressure Class 2						
DT0122	12	10.2	0.9	100, 250, 500	29.35	1.97
DT0162	16	13.8	1.1	100, 250, 400	48.15	3.23
DT0202	20	17.6	1.2	250	66.28	4.44
DT0252	25	21.6	1.7	250	116.37	7.80
DT0322	32	28.0	2.0	100, 250	176.27	11.81
Pressure Class 3						
DT0123	12	9.6	1.2	100, 250, 500	38.07	2.55
DT0163	16	13.2	1.4	100, 250, 400	60.05	4.02
DT0203	20	17.0	1.5	250	81.52	5.46
DT0253	25	20.8	2.1	250	141.28	9.47
DT0323	32	27.0	2.5	100, 250	216.66	14.52

Also available in,
White – for greenhouse application
Brown – for landscape application
Purple – for reclaimed water application

- Jain Irrigation Systems Ltd. are the owners of Trade Mark "Twin-Line®".
- Jain Irrigation Systems Ltd. has the statutory right to use the artistic work of two yellow or golden or red parallel stripes on a black tube for irrigation, under the Copyright Act 1957, India.

* Rodent Deterrent tubing is manufactured using a special additive, by virtue of which the properties of the tubing is enhanced in such a way that once the rodent bites the tube it gets an extremely bitter taste. This effect deters the rodent from gnawing the tubing again.
Rodent deterrent tubing is available in two parallel red stripes – "Twin Line®".

Jain Tough Hose - Twin-Line®

Reference Code	Nom. Dia.	Inside Diameter		Min. Wall Thickess		Max.Working Pressure		Std. Coil Length		Minimum Weight	
	mm	mm	inch	mm	inch	kg/cm²	psi	m	ft	g/m	lbs/100ft
ETI13095	13	13.0	0.512	0.95	0.037	3.7	52	500	1640	38.93	2.61
ETI13110	13	13.0	0.512	1.10	0.043	4.2	59	500	1640	45.56	3.05
ETI13140	13	13.0	0.512	1.40	0.055	5.1	72	500	1640	59.23	3.97
ETI16090	16	16.0	0.630	0.90	0.035	3.0	42	300	984	44.68	2.99
ETI16110	16	16.0	0.630	1.10	0.043	3.5	49	300	984	55.26	3.70
ETI16140	16	16.0	0.630	1.40	0.055	4.3	61	300	984	71.56	4.79

Ordering Specifications

X	T	X	XX	XXX	XXX
D - Domestic order (within India) E - Export order (outside India)		O - Outside Diameter Based Tubing I - Inside Diameter Based Tubing	Nominal Diameter in mm	for Drip Polytube as per IS 12786 1 - Pressure Class1 2 - Pressure Class2 3 - Pressure Class3 for other tubing, Wall Thickness in mm x 100	Standard coil length in meter

Example: ETI13140500 - This code refers to Jain Tough Hose of nominal diameter 13 mm and minimum wall thickness of 1.4 mm with standard coil length of 500 m.

Note:

- Please refer standard specification table while ordering.
- Jain Tough Hose in any other wall thickness & / or coil length can be manufactured and supplied as a special order.
- For ordering Jain Tough Hose with Rodent Deterrent features change the above code as ETI13140R500.
- For ordering Jain Tough Hose white coloured tubing, please change the code as ETI13140500W.
- For ordering Jain Tough Hose brown coloured tubing, please change the code as ETI13140500B.
- For ordering Jain Tough Hose purple coloured tubing, please change the code as ETI13140500P.
- For prepunch Jain Tough Hose change the code as,

ETI13140500 PXX

Hole Spacing in cm.

Jain Tough Hose - Twin-Line® as per AS-2698-1 (Type 30)

Reference Code	Nom. Dia.	Inside Diameter		Min. Wall Thickess		Std. Coil Length	Minimum Weight	
	mm	mm	inch	mm	inch	m	g/m	lbs/100ft
ETI10100	10	09.8	0.385	1.0	0.039	300	31.73	2.12
ETI13120	13	12.7	0.500	1.2	0.047	300	49.00	3.28
ETI16120	16	15.8	0.622	1.2	0.047	200	59.95	4.02
ETI19130	19	18.9	0.744	1.3	0.051	200	77.15	5.17
ETI25150	25	25.2	0.992	1.5	0.059	200	127.65	8.55
ETI32200	32	31.5	1.240	2.0	0.078	100	196.80	13.19

Note:

- Inside diameter based tubing.
- Jain Tough Hose - Twin Line® as per AS-2698-1 can also be supplied with Type 50 material.

Extension Tube

Features and Specifications

- Manufactured from virgin LLDPE using advanced extrusion technology.
- Excellent characteristics of LLDPE provide durable tubing with close dimensional tolerances.
- UV stabilised.
- No environmental effects.
- Each batch passes through stringent quality tests to ensure efficient and trouble free performance.
- Specially designed extension tube fittings are available. Please refer 'Polyfittings and Accessories' for more details.

Applications

- Used as an extension line in micro irrigation system.
- Used for connection of hydraulic control valves.

Technical Specifications

Code	Nominal Diameter	Inside Diameter	Min. Wall Thickness	Std. Coil Length	Minimum Weight	
	mm	mm	mm	m	g/m	lbs/100ft
DM06010250	6.00	4.00	1.0	250	14.89	0.99
DM08010250	8.00	6.00	1.0	250	20.40	1.37

Ordering Specifications

X	M	X	XX	XX	XXX
D - Domestic order (within India) E - Export order (outside India)		O - Outer dia. based tubing I - Inner dia. based tubing	Nominal diameter in mm x 10	Min. wall thickness in mm x 10	Standard coil length in meter

Example: DM06010250 - This code refers to Jain Tough Hose - Extension Tube of nominal diameter 6 mm and wall thickness of 1.0 mm with standard coil length of 250 m.

Vinyl Tube

Features and Specifications

- Manufactured from high quality Poly Vinyl material.
- Light weight yet tough and abrasion resistant .
- Flexible tubing, conforms to any contour.
- Smooth inner surface prevents scaling and reduces frictional losses.
- Handles a wide variety of chemicals and liquids.
- Each batch passes through stringent quality test.

Applications

- Used as an extension tube in micro irrigation system.
- Used with turbo stake dripper.
- Used with "Rainport™" Sprinkler assembly.

Technical Specifications

Code	Nominal Diameter	Inside Diameter	Outer Diameter	Min. Wall Thickness	Shore 'A' Hardness	Std. Coil Length
	mm	mm	mm	mm		m
DVTI04100	4	4	6	1	75 + 5	100
DVTI04150	4	4	7	1.5	75 + 5	100
DVTI08200	8	8	12	2	75 + 5	100
DVTI09200	9	9	13	2	75 + 5	100

Ordering Specifications

X	VTI	XX	XXX
D - Domestic order (within India) E - Export order (outside India)		Nominal Diameter in mm	Wall Thickness in mm x 100

Example: DVTI04100 - This code refers to Vinyl Tube of nominal diameter 4 mm and wall thickness of 1 mm.

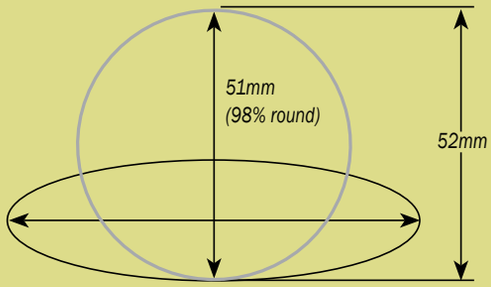
Jain Oval Hose

Features and Specifications

- Manufactured from virgin LLDPE using advanced extrusion technology.
- Excellent characteristics of LLDPE provide durable tubing with close dimensional tolerances.
- Jain Oval Hose once pressurised becomes 98% round.
- UV stabilized. No environmental effects.
- Best environmental stress crack resistance.
- Oval shape reduces freight and storage cost.
- Tested as per ASAE standard.
- Each batch passes through following stringent quality tests to ensure efficient and trouble free performance,
  - Dimensional tolerances.
  - Short term & long term hydraulic pressure.
  - Heat reversion.
  - Carbon black content.
  - Environmental stress crack resistance (ESCR).
  - Tensile strength and Elongation.

Application

- Larger diameter used as main & submain and smaller diameter as laterals in drip / micro irrigation system.



Jain Oval Hose once pressurised becomes 98% round.

Technical Specifications

Reference Code	Nominal Dia.		Inside Dia.		Min. Wall Thickness		Coil Length		Minimum Weight	
	mm	inch	mm	inch	mm	inch	m	ft	g/m	lbs/100ft
2.9 kg/cm² (42 psi) Working Pressure										
D0HI010021	10	--	9.90	0.39	0.533	0.021	1006	3300	16.0	1.07
D0HI013027	13	--	12.70	0.50	0.686	0.027	914	3000	27.0	1.81
D0HI016034	16	0.50	16.00	0.63	0.864	0.034	500	1640	43.0	2.88
D0HI020043	20	0.75	20.57	0.81	1.092	0.043	365	1200	69.0	4.62
D0HI026054	26	1.00	26.41	1.04	1.372	0.054	201	660	112.0	7.50
D0HI035070	35	1.25	34.54	1.36	1.778	0.070	122	400	190.0	12.73
D0HI040084	40	1.50	40.38	1.59	2.134	0.084	107	350	266.0	17.82
D0HI052108	52	2.00	51.99	2.04	2.743	0.108	76	250	441.0	29.55
1.45 kg/cm² (21 psi) Working Pressure										
D0HI026026	26	1.00	26.41	1.04	0.660	0.026	506	1660	52.0	3.48
D0HI035034	35	1.25	34.54	1.37	0.864	0.034	244	800	90.0	6.03
D0HI040040	40	1.50	40.38	1.60	1.016	0.040	183	600	123.0	8.24
D0HI052051	52	2.00	51.99	2.05	1.295	0.051	137	450	203.0	13.60
D0HI077075	77	3.00	77.16	3.03	1.930	0.075	61	200	448.0	30.01
D0HI101100	101	4.00	101.37	3.99	2.540	0.100	40	131	775.0	51.92
1.13 kg/cm² (16 psi) Working Pressure										
D0HI151108	151	6.00	151.30	5.95	2.760	0.108	30	100	1250.0	83.75

Note: Inside Diameter based Hose.

Ordering Specifications

X	OH	X	XXX	XXX	MXXX
D - Domestic order (within India) E - Export order (outside India)		O - Outer dia. based hose I - Inner dia. based hose	Nominal diameter in mm	Min. wall thickness in inch x 1000	Standard coil length in meter

Example: D0HI016034M500 - This code refers to Jain Oval Hose of nominal diameter 16 mm having wall thickness 0.034" with standard coil length of 500 m.

Note:

- Please refer standard specification table while ordering.
- On request, Jain Oval Hose can be supplied in any other length than standard coil length.

EMITTING DEVICES

J-SC-PC-Plus® Emitter

Features and Specifications

- Manufactured from virgin plastic for stable performance.
- Silicone rubber diaphragm ensures consistent performance for longer period.
- Narrow cross shaped inlet acts as a filter.
- Openable dripper - easy to clean.
- Extended outlet for connection of extension tube 4mm ID.
- Self cleaning design ensures flushing at start up, shut down & during operation.
- Wide operating pressure compensating range 1- 3 kg/cm² (14.22 - 42.66 psi) allows longer length of laterals.
- Manufacturing coefficient of variation, CVm ≤ 5% ensure high field emission uniformity.
- Coloured cap facilitates easy identification of flow rate.
- UV stabilised.
- No environmental effects.
- Optional Anti-bug cap- prevents entrance of ants/bugs into the dripper.
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Anti-bug cap (Code - DBCPD)

Applications

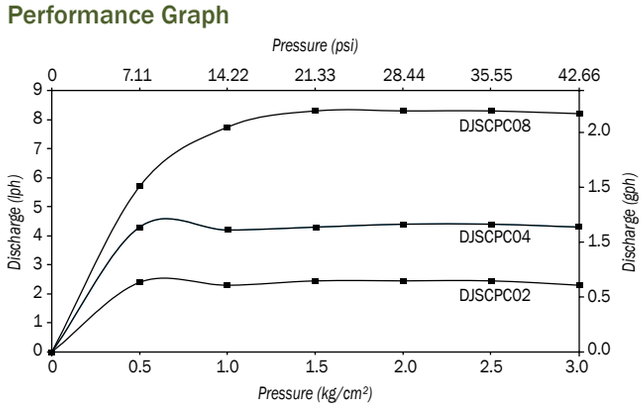
- Recommended for orchards, fruit crops, vegetables, nurseries & flowers.
- Recommended to use where section size is large and longer length of run is required.
- Recommended for undulating terrain & steep slopes.

Technical Specifications

Code	Discharge		Colour of cap & insert	Emitter exponent (x)	Flow coefficient (k)
	lph	gph			
DJSCPC02	2.2	0.58	Yellow	0.04	2.4
DJSCPC04	4.2	1.11	Black	0.03	4.2
DJSCPC08	8.2	2.16	Blue	0.08	7.5

Flow equation $q = kH^x$,
q= discharge, lph, H= Pressure Head, kg/cm², k = flow coefficient, x = Emitter exponent.

Performance Graph



Note: Tested under standard test conditions.

Ordering Specifications

X	JSCPC	XX
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph) 02 04 08

Example: DJSCPC02 - This code represents J-SC-PC-Plus® Emitter having 2.2 lph discharge.

J-SC-PC-Plus®: Dripper Product Design Registration No. 183476.

Click Tif

Features and Specifications

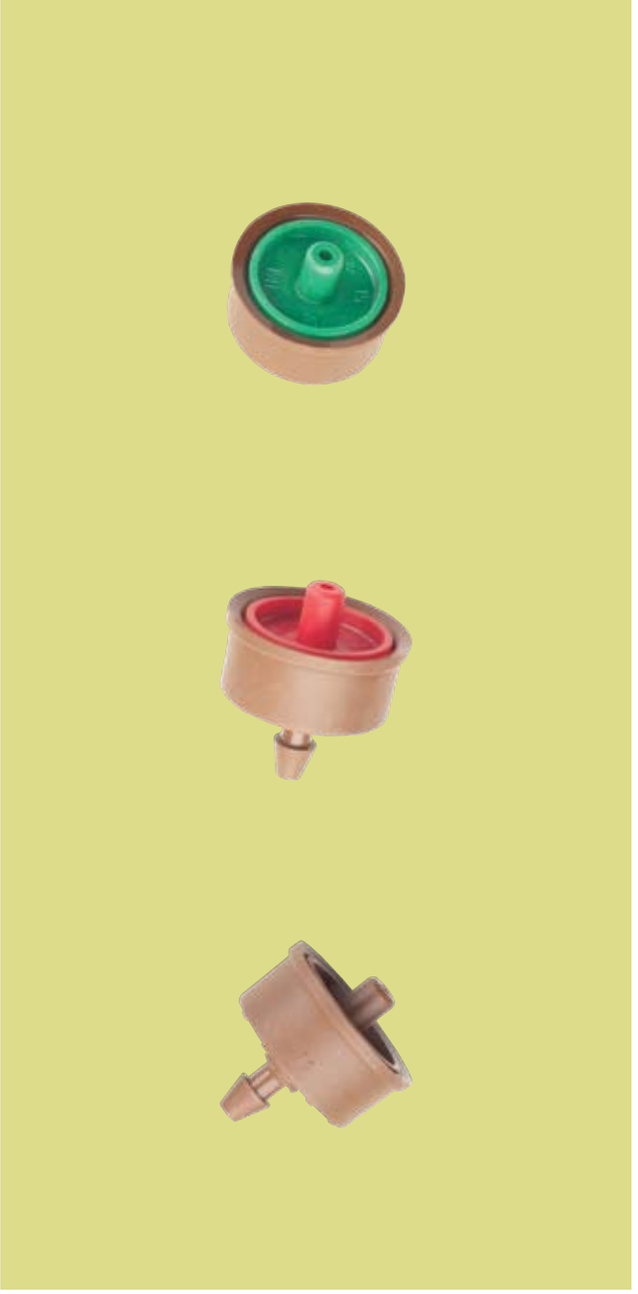
- Chemical-resistant high-grade plastic material for precision, durability and longevity.
- The dripper design integrates three elements to minimize clogging.
  - Protected cross-shaped water inlet.
  - Flushing mechanism of regulating diaphragm.
  - Strong turbulent flow in labyrinth with continual cleaning and flushing.
- Large water passages.
- Two models are available: PC and PC CNL (anti-drainage).
- Colour-coded for identification of discharge and model
  - PC+ CNL: Light brown housing
  - PC: Black housing
  - 2.0 lph: Brown cover
  - 3.0 lph: Blue cover
  - 4.0 lph: Black cover
  - 8.0 lph: Green cover
  - 12.0 lph: Red cover
- Standard 5 mm extension for connection of extension tube.
- Wide and precise regulating range from 0.5 to 4.0 kg/cm^2 (7.11 to 56.88 psi).
- Nominal discharge: 2.0, 3.0, 4.0, 8.0, 12.0 lph.
- CVm: less than 4%.
- Prevents low head drainage (CNL model).
  - Opening pressure: 4.0 m
  - Closing pressure: 2.0 m
- Maximum lateral Length (m) on flat ground at 10% flow variations.
- Precise irrigation in soilless culture growing conditions and pulse irrigation.
- Protection against woodpeckers and animals.
- Can be used for subsurface installation.
- On demand Click Tif can also be supplied with anti-bug cap option for protection against bugs.
- On demand Click Tif can also be supplied with barbed outlet option.
- Required punch size 2.5 mm (code – DITC).
- Minimum filtration requirement - 100 micron.

Applications

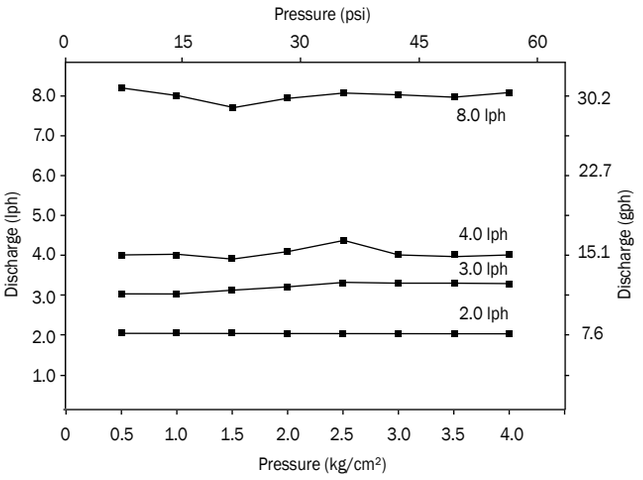
- For orchards and vineyards, greenhouses, nurseries and landscape applications.
- For areas with harsh topographical conditions.
- Irrigation of pot-plants with single, two, four or multiple outlets.

Ordering Specifications

Taper lock		Barb outlet 3/5		Body colour	Flow rate lph
PC Black housing	PC CNL Brown housing	PC Black housing	PC CNL Brown housing		
D102010	D102110	D102020	D102120	Brown	2.0
D102013	D102113	D102023	D102123	Blue	3.0
D102018	D102118	D102028	D102128	Black	4.0
D102012	D102112	D102022	D102122	Green	8.0
D102017	D102117	D102027	D102127	Red	12.0



Performance Graph



Note: Tested under standard test conditions.

Micro Flapper™

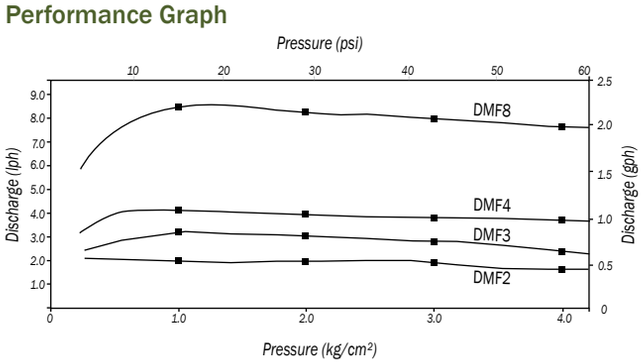
Features and Specifications

- Manufactured with UV & sunlight resistant, chemical resistant, non corrosive plastic material for stable performance.
- One piece, factory sealed emitter
- Wide pressure compensating range of 0.6 to 4 kg/cm² (8.5 to 56.88 psi)
- Precision moulded liquid silicone rubber diaphragm ensures pressure compensation, uniform water application and long lasting high quality performance.
- Unique self cleaning design, flow path expands in case of blockages. Thus flushes off trapped dirt. This reduces the risk of clogging and minimizes maintenance cost drastically.
- Coefficient of manufacturing variance less than 5%.
- Inlet has large barb for maximum retention on hose, even under sustained high operating temperatures and pressures.
- Barbed outlet for connection of extension tube 3.2mm ID (1/8" ID).
- Available in four colour coded models,
  Brown - 2 lph (0.5 gph)
  Gray - 3 lph (0.75 gph)
  Black - 4 lph (1 gph)
  Green - 8 lph (2 gph)
- Compact, lateral can be easily recoiled even when the emitters are installed on it.
- Minimum 100 micron filtration required. Type of filtration and its precision can be decided by quality of source water
- Required punch size 3.9 mm.

Applications

- Recommended for orchards, vineyards, sugarcane, vegetables, cotton, nurseries, greenhouses, etc.
- Recommended to use where longer length of lateral is required or on undulating terrain.

Performance Graph



Note: Tested under standard test conditions.

Ordering Specifications

X	MF	X
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph)
		2
		3
		4
		8

Example: DMF4 - This code represents Micro Flapper emitter of flow 4 lph (1 gph) .

J-Turbo Key Plus™ Dripper

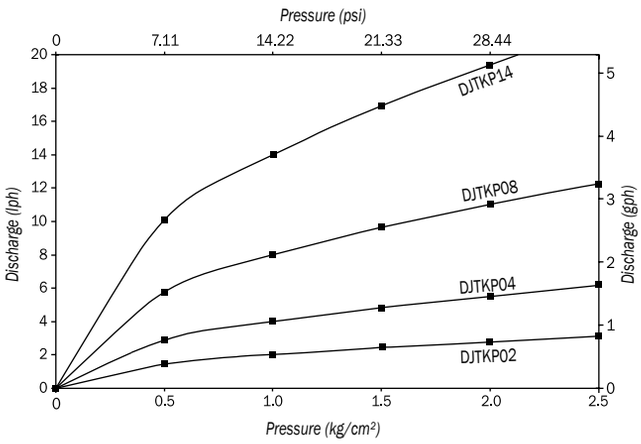
Features and Specifications

- Manufactured from virgin plastic for stable performance.
- Turbulent flow path with wide cross sectional area makes the dripper clog resistant.
- Openable dripper - easy to clean.
- Extended outlet facilitates use of polyethelyne extension tube or vinyl tube.
- Narrow cross shaped inlet acts as a filter.
- UV stabilised. No environmental effects.
- Coloured cap facilitates easy identification of flow rate.
- Manufacturing coefficient of variation, $CV_m \leq 3\%$, ensures high field emission uniformity (EU).
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Application

- Recommended for fruit crops, orchards, vegetables, sugarcane, cotton, etc.

Performance Graph



Note: Tested under standard test conditions.

Technical Specifications

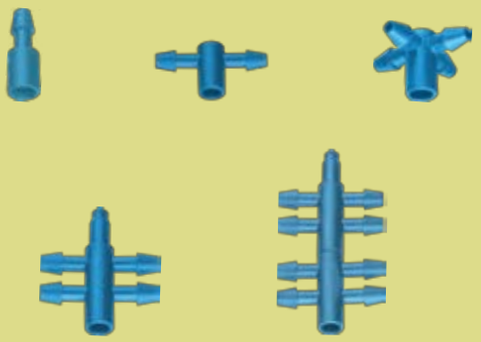
Code	Discharge		Colour of cap & insert	Emitter exponent (x)	Flow coefficient (k)
	lph	gph			
DJTKP02	2.0	0.53	Yellow	0.48	2.0
DJTKP04	4.0	1.06	Black	0.48	4.0
DJTKP08	8.0	2.12	Blue	0.48	8.0
DJTKP14	14.0	3.70	Green	0.48	14.0

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	JTKP	XX
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph)
		02
		04
		08
		14

Example: DJTKP02 - This code represents J-Turbo Key Plus™ Dripper having 2 lph discharge.



Multioutlet Connectors for Drippers

J-Turbo Key Plus™: Dripper Product Design Registration No. 188844.

Jain Emitter®

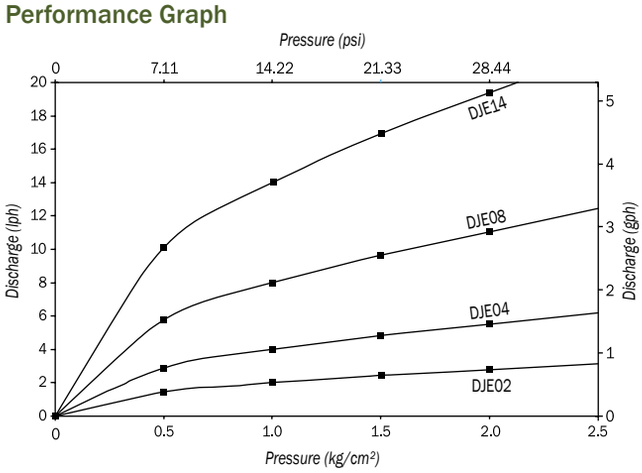
Features and Specifications

- Manufactured from virgin plastic for stable performance.
- Turbulent flow-path with wide cross sectional area makes the dripper clog resistant.
- Openable dripper - easy to clean.
- Narrow cross shaped inlet acts as a filter.
- Coloured cap facilitates easy identification of flow rate.
- UV stabilised. No environmental effects.
- Reliable performance, manufacturing coefficient of variation, $CV_m \leq 3\%$.
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Application

- Recommended for orchards, vegetables, fruit crops and floricultural plants on flat terrain or on moderate slopes.

Performance Graph



Note: Tested under standard test conditions.

Technical Specifications

Code	* Discharge		Colour of cap & insert	Emitter exponent (x)	Flow coefficient (k)
	lph	gph			
DJE02	2.0	0.53	Yellow	0.48	2.0
DJE04	4.0	1.06	Black	0.48	4.0
DJE08	8.0	2.12	Blue	0.48	8.0
DJE14	14.0	3.70	Green	0.48	14.0

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	JE	XX
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph)
		02
		04
		08
		14

Example: DJE02 - This code represents Jain Emitter® having 2 lph discharge.

Turbo Seal® Emitter

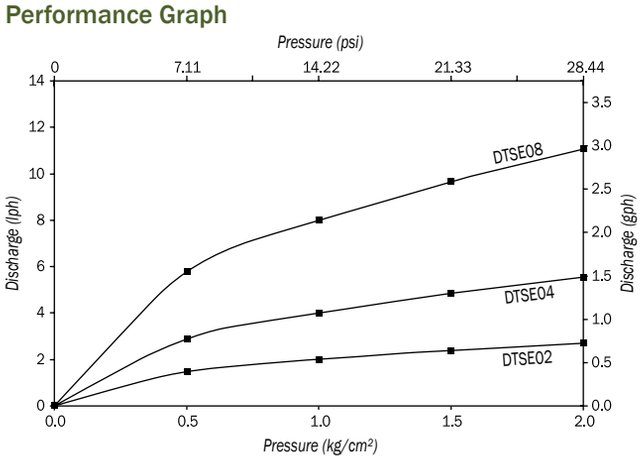
Features and Specifications

- Manufactured from virgin plastic for stable performance.
- Factory sealed emitter.
- Side flow path with wide cross sectional area.
- Hydraulically designed flow path maintains turbulence till the end of flow path length to make emitter clog resistant.
- Bottom outlet helps to prevent entrance of the soil through outlets.
- Narrow cross shaped inlet acts as a filter.
- Coloured base facilitates easy identification of flow rate.
- UV stabilised. No environmental effects.
- Manufacturing coefficient of variation, $CV_m \leq 3\%$. Best field emission uniformity.
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Application

- Recommended for irrigation of vineyards, fruit orchards, vegetables.

Performance Graph



Note: Tested under standard test conditions.

Technical Specifications

Code	* Discharge		Colour of the base	Emitter exponent (x)	Flow coefficient (k)
	lph	gph			
DTSE02	2.0	0.53	Yellow	0.44	2.0
DTSE04	4.0	1.06	Black	0.44	4.0
DTSE08	8.0	2.12	Blue	0.47	8.0

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	TSE	XX
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph)
		02
		04
		08

Example: DTSE02 - This code represents Turbo Seal® Emitter having 2 lph discharge.

Mini In Line® Emitter

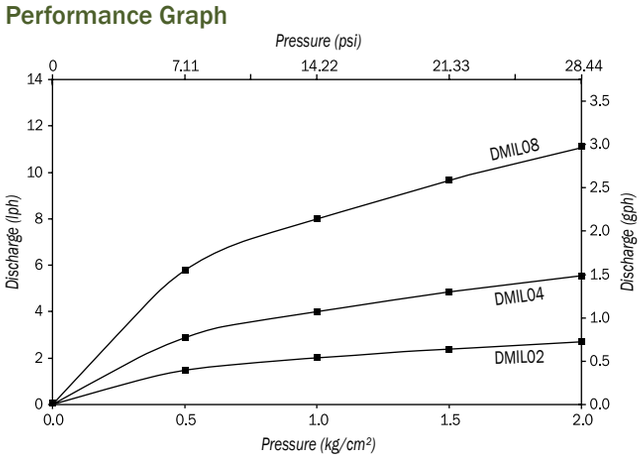
Features and Specifications

- Manufactured from virgin plastic for stable performance.
- Factory sealed emitter.
- Turbulent flow-path with wide cross sectional area makes the dripper clog resistant.
- Narrow cross shaped inlet acts as a filter.
- Coloured base facilitates easy identification of flow rate.
- UV stabilised. No environmental effects.
- Barbed connection suitable for 4mm (0.157 inch) ID tube on both sides facilitates looping of drippers around trunk of the tree. Helps to avoid dispositioning of emitters.
- Manufacturing coefficient of variation, $CV_m \leq 3\%$. Higher field emission uniformity.
- Facilitates loop type installation.
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Application

- Recommended for fruit orchards requiring multiple drippers around the trunk of the tree, to cover widespread root zone.

Performance Graph



Note: Tested under standard test conditions.

Technical Specifications

Code	* Discharge		Colour of the base	Emitter exponent (x)	Flow coefficient (k)
	lph	gph			
DMIL02	2.0	0.53	Yellow	0.44	2.0
DMIL04	4.0	1.06	Black	0.44	4.0
DMIL08	8.0	2.12	Blue	0.47	8.0

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	MIL	XX
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph) 02 04 08

Example: DMIL02 - This code represents Mini In Line® Emitter having 2 lph discharge.

J-Loc® Emitter

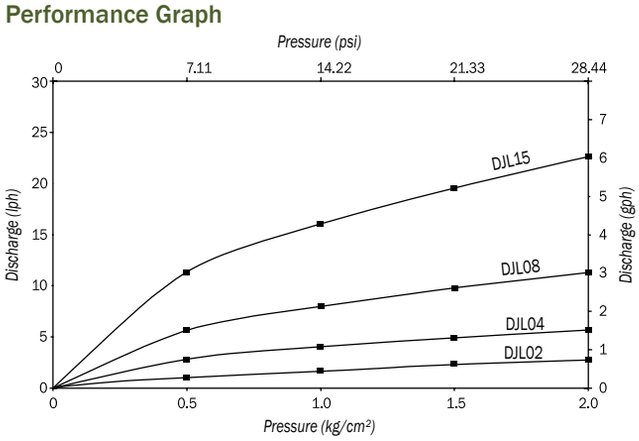
Features and Specifications

- Made of virgin plastic for stable performance.
- Take apart construction for easy cleaning.
- Latching arrangement prevents insert snap-off during pressure fluctuations.
- Manufacturing coefficient of variation, $CV_m \leq 5\%$.
- Unique design facilitates horizontal or vertical installation of the emitter.
- Coloured insert facilitates easy identification of flow rate.
- UV stabilised.
- No environmental effects.
- Required punch diameter 2.9 mm.
- Minimum filtration requirement - 100 micron.

Application

- Suitable for sugarcane, vegetables, closely spaced row crops, glass/green houses & nurseries.

Performance Graph



Note: Tested under standard test conditions.

Technical Specifications

Code	* Discharge		Colour of the insert
	lph	gph	
DJL02	2.0	0.53	Yellow
DJL04	4.0	1.06	Black
DJL08	8.0	2.12	Blue
DJL15	15.0	3.97	Green

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	JL	XX
		Discharge (lph)
D - Domestic order (within India) E - Export order (outside India)		02
		04
		08
		15

Example: DJL04 - This code represents J-Loc® Emitter having 4 lph discharge.

Turbo Stake Dripper

Features and Specifications

- Turbulent flow path resist clogging.
- Strong ribbed stake allows exact positioning of the dripper.
- Can be used with 6mm OD extension tube or vinyl tube.
- Easy to install.
- Colour of the dripper represents flow and facilitates easy identification.
- On demand can supply an assembly including dripper attached with required length of extension tube and take off.
- Minimum filtration requirement - 100 micron.

Application

- Suitable for pot irrigation, nurseries, glass/green houses, vegetables, home gardens.

Technical Specifications

Code	* Discharge		Colour
	lph	gph	
DTSD15	1.5	0.40	Yellow
DTSD4	4.0	1.06	Black
DTSD8	8.0	2.12	Blue

** At an operating pressure of 1kg/cm²(14.22 psi)*

Ordering Specifications

X	TSD	X
D - Domestic order (within India) E - Export order (outside India)		Discharge (lph)
		15 - 1.5
		4 - 4.0
		8 - 8.0

Example: DTSD4-This code represents Turbo Stake Dripper having 4 lph discharge.

Trickle-Stik™

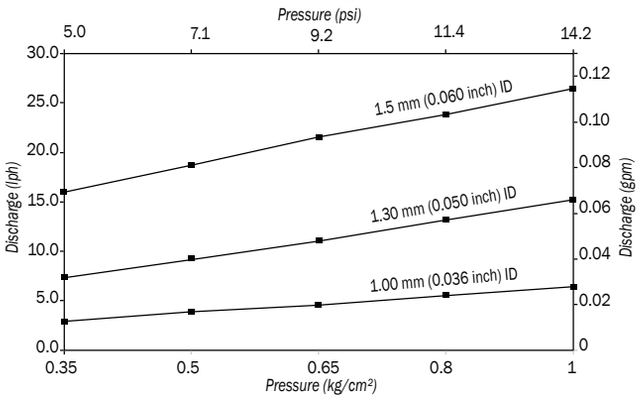
Features and Specifications

- Manufactured from high quality polymers.
- Holds the PE tube firmly at required position. Avoids dispositioning of PE tube.
- Distributes water evenly.
- Used with micro tube of 1.0 mm (0.036") ID, 1.3 mm (0.05") ID, 3.3 mm (0.13") OD and 1.5 mm (0.06") ID.
- Recommended operating pressure of 0.5 kg/cm2 (7 psi) for 1.00mm (0.036")ID tubing and 0.35 kg/cm2 (5 psi) for 1.3mm (0.05") and 1.5 mm (0.06") ID tubing and for 60cm (24") length of tubing.
- Easy to install.
- Easy to monitor.

Applications

- Ideally used for irrigation of bag culture.
- Recommended to use where dispositioning of tubing is a problem.

Performance Chart for 24" Length of Trickle Stik



Note: Tested under standard test conditions.

Ordering Specification

X	TRS	Tube ID x 10	Length of connecting tube, inch
D - Domestic order (within India) E - Export order (outside India)		10 - 1.0 mm 13 - 1.3 mm 15 - 1.5 mm	24 36 48

Example: DTRS1024 - This code refers Trickle Stik™ with 1.0 mm (0.036") ID tubing of 24" length.

Note: Any other tube length can be supplied on demand.

Vari Flow® Dripper

Features and Specifications

- Rugged construction, made of virgin plastic material.
- Adjustable discharge according to the water requirements and growth stages.
- Total shut-off possible.
- Nominal operating pressure 1 kg/cm² (14.22 psi) but can be used even at low pressures.
- Unique design prevents blockage of dripper in desert conditions.
- Available in 0 to 100 lph (0 to 26.45 gph) discharge.
- Can be supplied in black, green & blue colours. Please specify colour while ordering.
- Required punch diameter 2.9 mm.

Applications

- Suitable for trees having high water requirement.
- Recommended for sandy soils / desert conditions.

Technical Specifications

Code	Maximum Discharge*	
	lph	gph
DVF100	100	26.45

** At an operating pressure of 1kg/cm² (14.22 psi).*

Ordering Specifications

X	VF100
D - Domestic order (within India) E - Export order (outside India)	

Micro Dripper

Features and Specifications

- An assembly of micro tube of required length and micro tube holding stake.
- Tubing manufactured from virgin polyethylene, with yellow line.
- Resistant to ultra violet (UV) radiation and other environmental effects.
- Snap proof design, tubing is prevented from snapping off even at higher pressures.
- Designed to hold the dripper at a fixed position.
- The flow is dispersed to avoid soil erosion due to jetting.
- Smooth inner surface minimises frictional losses.
- Can be used at low operating pressure.
- Can be supplied in required length of tubing.

Applications

- Used as a linear flow dripper in drip systems.
- Recommended to use with low pressure / gravity fed system like drum kit, bucket kit, gravity kit etc.
- Suitable to use for irrigation of bag culture.

Technical Specifications

*Reference Code	Flow for 1m length at 1kg/cm² pressure		Inside Diameter	Nominal Outside Diameter	Wall Thickness
	lph	gph	mm	mm	mm
DMD12	14.0	3.7	1.2	3.00	0.90
DMD15	24.0	6.4	1.5	3.30	0.90

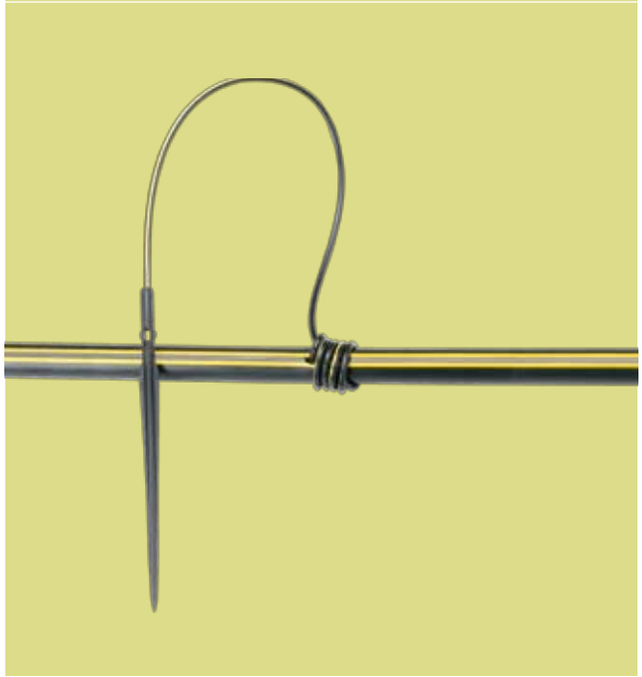
** For detailed code, please refer ordering specifications.*

Ordering Specifications

X	MD	XX
D - Domestic order (within India) E - Export order (outside India)		Nominal ID x 10

Example: DMD12- This code refers to Micro Dripper of inside diameter 1.2 mm of coil length 100 m.

Note: Micro Dripper is also available with microtube holding stake. Please specify the code as DMTS for separate microtube holding stake.



Mini Spray Jet™

Features and Specifications

- Manufactured from high quality polymers to achieve wear resistance and longer trouble free performance.
- Stream jet pattern covers wide area.
- Precision moulding ensures uniform distribution.
- Available in five spray pattern and five colour coded nozzle sizes to make it suitable for variable field conditions.
- Lower maintenance, no moving parts/ seals to wear out.
- Wide surface water distribution provides advantages in areas where soil composition has poor lateral movement.
- Low spray profile minimizes water on foliage.
- Easy to install with different mounting options like,
  a. Clip Stake for J-Jets / Foggers / Misters (Code: DCSJ) with rigid riser.
  b. Stake for Modular / J-Jets / Foggers / Misters (Code: DSJF4 / DSJF8).
  c. Square stake for J-Jets / Foggers / Misters (Code: DSSJ)
- Mini Spray Jet stake assembly including micro jet, 6 mm OD extension tubing (0.5 m or 1.0 m long) and take off available on demand.
- Nominal operating pressure 1 kg/cm² (14.22 psi).
- Minimum filtration requirement - 100 micron.

Applications

- Useful for irrigation of orchards, nurseries, vineyards, green houses.
- Suitable for irrigation of plants having widespread root zone.
- Useful to maintain adequate micro environment in the canopy area.

Performance Chart

Reference Code	Nozzle colour/Size (mm)	Emitter Expo. (x)	Flow coeff. (k)	Pressure		Discharge		Spray Pattern/ radius (m)				
				kg/cm²	psi	lph	gph	60°x2	140°x2	180°	270°	360°
DMSJBK	Black/0.6	0.50	16.2	0.5	7.11	11.5	3.0	0.8	0.8	1.0	1.2	1.2
				1.0	14.22	16.2	4.3	1.1	1.1	1.3	1.4	1.4
				1.5	21.33	20.0	5.3	1.3	1.3	1.5	1.6	1.6
				2.0	28.44	23.0	6.1	1.4	1.4	1.6	1.9	1.8
				2.5	35.55	25.5	6.7	1.5	1.5	1.7	2.1	2.0
DMSJBL	Blue/1.0	0.50	33.2	0.5	7.11	23.5	6.2	1.1	1.2	1.3	1.4	1.4
				1.0	14.22	33.2	8.8	1.8	1.6	1.7	1.9	1.9
				1.5	21.33	40.7	10.8	2.2	1.9	2.0	2.3	2.3
				2.0	28.44	47.0	12.4	2.5	2.1	2.2	2.7	2.6
				2.5	35.55	52.6	13.9	2.7	2.2	2.3	2.9	2.8
DMSJGN	Green/1.3	0.50	56.1	0.5	7.11	39.7	10.5	1.4	1.6	1.7	1.8	1.8
				1.0	14.22	56.2	14.9	2.0	2.1	2.2	2.4	2.4
				1.5	21.33	68.8	18.2	2.4	2.5	2.6	3.0	2.9
				2.0	28.44	79.5	21.0	2.7	2.8	2.8	3.4	3.3
				2.5	35.55	88.9	23.5	2.9	3.0	3.1	3.7	3.6
DMSJRD	Red/1.5	0.50	78.4	0.5	7.11	55.4	14.7	1.6	1.9	2.0	2.1	2.1
				1.0	14.22	78.4	20.7	2.2	2.4	2.6	2.8	2.8
				1.5	21.33	96.0	25.4	2.7	2.8	3.1	3.5	3.4
				2.0	28.44	110.9	29.3	3.1	3.1	3.5	4.0	3.9
				2.5	35.55	124	32.8	3.4	3.3	3.8	4.4	4.3
DMSJWH	White/2.3	0.50	142.4	0.5	7.11	100.7	26.6	2.1	2.1	2.2	2.3	2.3
				1.0	14.22	142.4	37.7	3.0	2.5	2.9	3.0	2.9
				1.5	21.33	174.5	46.2	3.8	2.8	3.5	3.7	3.5
				2.0	28.44	201.5	53.3	4.3	3.0	4.0	4.2	4.0
				2.5	35.55	225.2	59.6	4.6	3.1	4.4	4.5	4.4

Note: Tested under standard test conditions with nozzle positioned at 20 cm above ground.

Ordering Specifications

X	MSJ	XX	XXX
		Colour of Base	Spray Angle
D - Domestic order (within India) E - Export order (outside India)		BK - Black BL - Blue GN - Green RD - Red WH - White	180 - Half Circle 270 - Quarter Circle 360- Full Circle 060 - 60 x 2 Side 140 - 140x2 Side

Example: DMSJGN360 - This code represents Mini Spray Jet™ having green coloured nozzle and with full circle (360°) spraying pattern.

Turbo-Jet

Features and Specifications

- Ray jet for orchard, vineyard and landscape irrigation.
- Static, low maintenance jet.
- High clogging resistance.
- Diverse distribution patterns and wetted diameters.
- Easy to open and clean.
- Unique nozzle structure forms turbulent flow and wide water pathways even at low flow rates, for high clogging resistance.
- Large number of nozzle and spreader combinations provides wide selection of flow rates and distribution patterns.
- Flow rates: 16 - 110 lph.
- Operating pressures: 1.0 - 3.5 kg/cm² (14.22 - 49.77 psi).
- Filtration requirements,
  - Black, orange and blue nozzles: 130 microns.
  - Violet, green and red nozzles: 200 microns.

Application

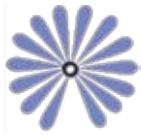
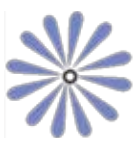
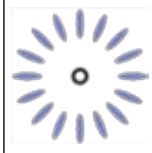
- Recommended for irrigation of wide spread root zone crops.

Technical Specifications - Flow rates by nozzle (lph)

Pressure kg/cm²	Nozzle colour / diameter (mm)					
	Black 0.80	Orange 1.00	Blue 1.15	Violet 1.30	Green 1.40	Red 1.65
1.0	16	23	31	40	48	62
1.4	19	28	37	47	57	76
2.0	23	33	43	56	69	88
2.5	25	36	47	63	75	98
3.0	27	38	50	69	80	105
3.5	29	41	53	74	85	111

Distribution patterns and diameters (m)

Tested at 1.4 & 2.0 kg/cm², 0.25 m height

Nozzle colour	Static Spreaders															
	Strip		300°		12 jets		16 jets		20 jets		180° (radius)		Inverted*		Flat (no jets)	
																
Pressure, kg/cm²	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0
Black	2.7	3.0	3.2	3.8	3.4	4.1	3.1	4.2	3.4	3.2	1.5	2.2	2.8	3.0	2.2	2.2
Orange	3.0	3.7	4.0	4.4	4.3	4.7	4.0	5.6	3.6	4.0	1.8	2.3	3.2	3.8	2.3	2.4
Blue	3.7	4.2	4.8	5.6	4.6	4.9	4.2	6.0	3.8	4.4	2.2	2.4	3.8	4.8	2.4	2.6
Violet	4.2	5.4	5.0	5.8	4.8	5.2	4.3	6.0	4.0	5.0	2.2	2.5	4.6	5.2	2.6	3.0
Green	4.2	5.4	5.4	6.0	5.2	5.9	4.5	6.2	4.2	5.4	2.3	2.7	4.9	5.4	2.8	3.2
Red	4.8	6.1	6.6	7.6	5.6	6.6	5.4	7.2	5.0	6.2	2.4	2.8	5.2	5.8	3.0	3.4

** Tested at 0.6 m height*

Ordering Specifications

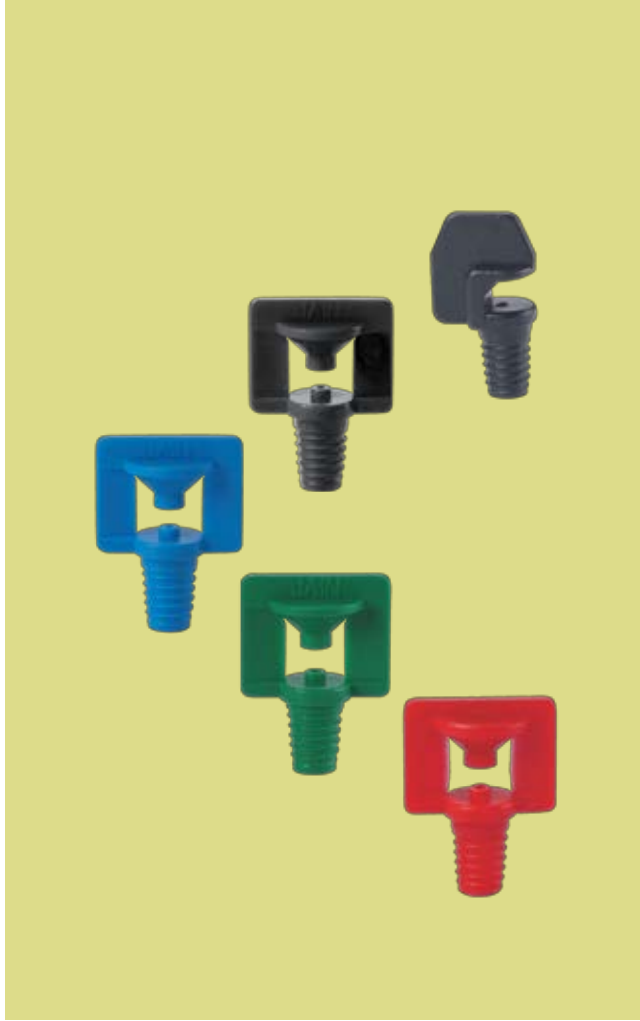
X	TJ	X	XX	XXX
		Connection	Discharge in lph at 1.4 kg/cm²	Pattern
D - Domestic order (within India) E - Export order (outside India)		B - Barbed P - Parallel Q - Quick Threaded	57 - Green 38 - Blue 47 - Violet 28 - Orange 76 - Red 19 - Black	INV - Inverted 180 - 180° 16J - 16 jets FLT - Flat 12J - 12 jets S - Strip 20J - 20 jets 300 - 300°

Example: DTJB28300 - This code represent Turbo Jet with 300° pattern, barbed connections with orange 28 lph nozzle.

J-Jets

Features and Specifications

- Fan type spray jet giving fine droplets and uniform distribution.
- Available in full and half circle spray pattern.
- Uniform coverage, gentle precipitation.
- Self threaded inlet.
- Easy to install with different mounting options like,
  a. Clip Stake for J-Jets / Foggers / Misters (Code: DCSJ) with rigid risers.
  b. Stake for Modular / J-Jets / Foggers / Misters (Code : DSJF4 / DSJF8)
  c. Square stake for J-Jets / Foggers / Misters (Code: DSSJ)
- Jet stake assembly including J-Jet, stake, 6mm OD extension tubing or vinyl tubing (0.5 or 1.0 m) and 4mm take-off available on demand.
- Nominal operating pressure 1 kg/cm² (14.22 psi).
- Minimum filtration requirement - 100 micron.



Applications

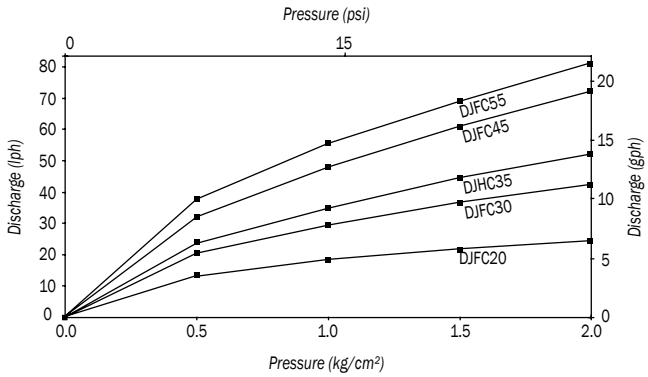
- Useful for irrigation of orchards, nurseries, vineyards, green houses.
- Suitable for irrigation of delicate plants such as flowers, vanilla, etc.
- Suitable for irrigation of mature large trunk-trees or trees having wide spread root zone.
- Useful to maintain adequate micro environment in the canopy area.

Performance Chart

Code	Spray Pattern / Nozzle (mm)	Emitter Exponent (x)	Flow Coeff. (k)	Pressure		Discharge		Radius	
				kg/cm²	psi	lph	gph	m	ft
DJFC20	0.67	0.44	18.00	0.5	7.11	13	3.5	0.58	1.9
				1.0	14.22	18	4.8	0.70	2.3
				1.5	21.33	21	5.7	0.73	2.4
				2.0	28.44	24	6.4	0.73	2.4
DJFC30	0.87	0.52	29.35	0.5	7.11	20	5.4	0.67	2.2
				1.0	14.22	29	7.8	0.73	2.4
				1.5	21.33	36	9.6	0.76	2.5
				2.0	28.44	42	11.2	0.76	2.5
DJFC45	1.10	0.59	47.81	0.5	7.11	32	8.4	0.85	2.8
				1.0	14.22	48	12.6	0.88	2.9
				1.5	21.33	61	16.1	0.91	3.0
				2.0	28.44	72	19.0	0.95	3.1
DJFC55	1.20	0.55	55.00	0.5	7.11	38	9.9	0.95	3.1
				1.0	14.22	55	14.6	1.01	3.3
				1.5	21.33	69	18.2	1.01	3.3
				2.0	28.44	80	21.3	1.04	3.4
DJHC35	1.00	0.58	34.76	0.5	7.11	23	6.2	0.88	2.9
				1.0	14.22	35	9.2	0.91	3.0
				1.5	21.33	44	11.6	0.95	3.1
				2.0	28.44	52	13.8	0.95	3.1

Note: Tested under standard test conditions with nozzle positioned at 20 cm above ground.

Performance Graph



Ordering Specifications

X	J	XX	XX
		Spray Pattern	Discharge (lph)
D - Domestic order (within India) E - Export order (outside India)		FC - Full Circle	20
			30
			45
			55
		HC - Half Circle	35

Example: DJFC45 - This code represents J-Jets having full circle spray pattern with discharge 45 lph.

FOGGERS & MISTERS

Fogger

Features and Specifications

- Manufactured from tough and durable engineering plastic material.
- Leak proof snap fit joint.
- Easy to install and service.
- Available in single nozzle, two nozzle - T shaped or four nozzle - cross shaped.
- Precision engineering to give fine droplets (average 90 microns).
- Provides perfect conditions for plant propagation.
- Can be supplied with Leakage Prevention Device (LPD) for simultaneous start-up and shut-down of the system.
- Recommended operating pressure 4 kg/cm^2 (56.88 psi).
- Minimum filtration requirement 75 micron.

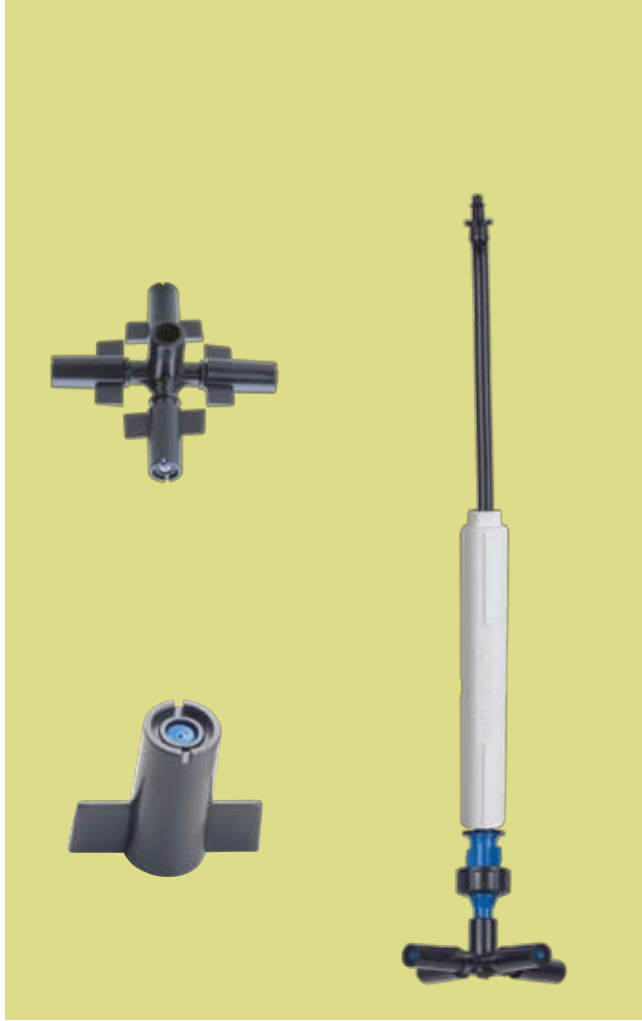
Applications

- Provides optimal cooling or humidifying of greenhouses.
- Reduces greenhouse temperature.
- Increases greenhouse humidity.

Ordering Specifications

X	XXXXXXXXX
D - Domestic order (within India) E - Export order (outside India)	F7TGSSHP - Fogger assembly single nozzle with high pressure LPD
	F28TGS4HP - Fogger assembly four nozzle - cross shaped with high pressure LPD
	F14TGS2HP - Fogger assembly two nozzle - T shaped with high pressure LPD

Note: Please refer Design and Technical Information section for design details.



Super Fogger

Features and Specifications

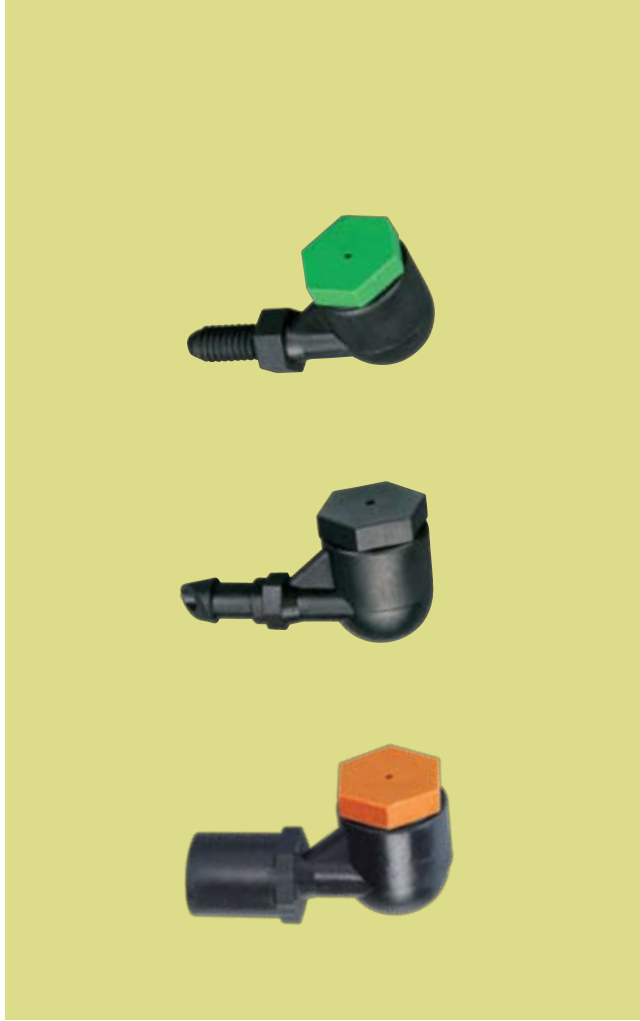
- Chemical resistant raw materials.
- The optimal solution for cooling, humidifying and pesticide spraying in greenhouses.
- Very small droplets (average of 90 microns) for minimal foliage wetting (pulsed operation).
- Two nozzle fogger with built-in Leakage Prevention Device.
- Economical.
- Excellent coverage.
- Easy to install and service.
- Different connection options suitable for PE and PVC pipe.
- Flow rate - 13 lph (2 x 6.5 lph outlets).
- Operating pressure: 4.0 kg/cm² (56.88 psi).
- Recommended spacing:
  - For cooling and humidifying only:
    3.0 to 4.0 m between laterals.
    2.0 to 3.0 m between Foggers.
  - For cooling, humidifying and spraying :
    2.0 to 3.0 m between laterals.
    1.5 m between Super Foggers.
- Filtration requirement 75 microns.

Ordering Specifications

X	XXXXXX
D - Domestic order (within India) E - Export order (outside India)	197808 - Super fogger female
	197208 - Super fogger barbed
	197408 - Super fogger threaded 3/8"

Note: Please refer Design and Technical Information section for design details.

Jain Fogger



Features and Specifications

- Manufactured from stable engineering plastic.
- Simple construction with no moving parts, minimises maintenance.
- Designed for misty spray. Gives very fine droplets.
- Coloured nozzles for various flow rates.
- Easy to disassemble & clean.
- Recommended operating pressure 3.0 kg/cm² (42.66 psi).
- Available in following inlet options:
  a) 4 mm barbed inlet.
  b) 5/32" (4mm) 10-28 UNS screwed inlet.
  c) Push fit type inlet.
- Easy to install with different mounting options
  a. For Fogger with barbed inlet-
    i) Can be mounted directly on polytube or 6 mm OD extension tube or vinyl tube.
  b. For Fogger with 5/32" (4mm) 10-28 UNS screwed inlet-
    i) Clip Stake for J-Jets / Foggers / Misters (Code: DCSJ) with rigid riser of suitable length.
    ii) Stake for Modular / J-Jets / Foggers / Misters (Code : DSJF4 / DSJF8)
    iii) Square stake for J-Jets / Foggers / Misters (Code : DSSJ)
  c. For Fogger with push fit inlet -
    i) Can be installed on push fit stake for foggers.
- Fogger assembly options available on demand.
- Minimum filtration requirement 75 micron.

Applications

- Recommended for orchards and green/glass houses requiring fine mist spray for temperature and humidity control.
- Suitable for crops require to maintain micro climate in the canopy area.

Technical Specifications

Reference Code	Emitter Exponent (x)	Flow Coefficient (k)	* Discharge		Colour
			lph	gph	
DFOG14X	0.45	8.5	14	3.70	Black
DFOG18X	0.45	11.5	18	4.76	Green
DFOG24X	0.45	14.0	24	6.35	Orange

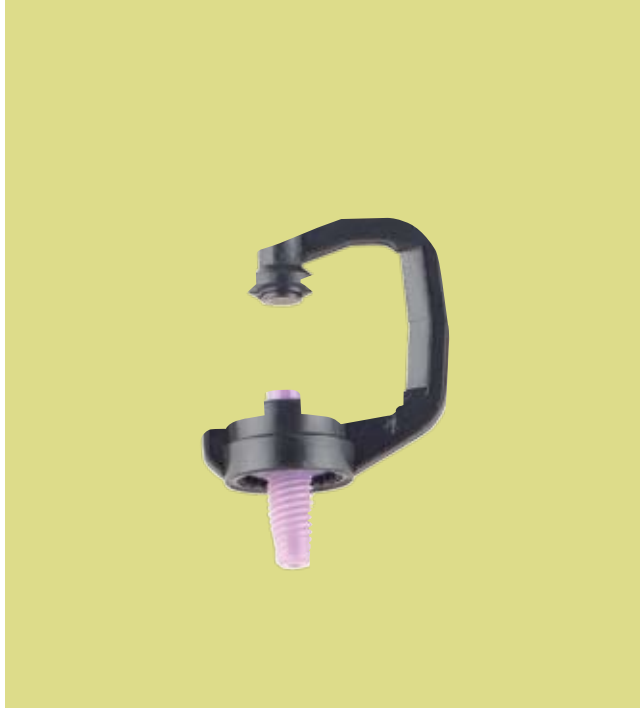
** At an operating pressure of 3kg/cm² (42.66 psi).*
Note: Tested under standard test conditions with nozzle positioned at 20 cm above ground.

Ordering Specifications

X	FOG	XX	X
		Discharge (lph)	Inlet Connection
D - Domestic order (within India) E - Export order (outside India)		14 18 24	B - 4mm Barbed S - 5/32" (4mm) 10-28 UNS Screwed P - Push Fit Inlet

Example: DFOG14B - This code represents Fogger having 14 lph discharge and 4mm barbed inlet connection.

Acu-Mister



Features and Specifications

- Manufactured with UV & sunlight resistant, chemical resistant, non corrosive plastic material for stable performance.
- Colour coded nozzle for different flow rates.
- Uniform coverage.
- Fine misty spray.
- Easy to install and service.
- Wide flow range, 17-71 lph (4.5 - 18.8 gph) at operating pressure of 1 kg/cm² (14.22 psi).
- 10-24 buttress triple lead 'fast' thread inlet.
- Can be supplied with Leakage Prevention Device (LPD) for pulsed operation and to prevent low head drainage.
- On demand, Acu-Mister can be supplied as an assembly.
- Minimum filtration requirement - 100 micron.

Applications

- Ideal for plant propagation.
- Recommended for climate control in Greenhouse / Shade house.

Performance Chart

Code	Nozzle No./ size (mm)	Colour	Emitter Exponent (x)	Flow Coeff. (k)	Pressure		Diameter of throw		Discharge	
					kg/cm²	psi	m	ft	lph	gph
DAM-30	30/ 0.69	Black	0.45	16.86	0.7	10.0	-	-	14.4	3.8
					1.0	14.2	1.5	5.0	16.9	4.5
					1.5	21.3	1.7	5.5	20.3	5.4
					2.0	28.4	1.8	6.0	23.1	6.1
					2.5	35.6	1.8	6.0	25.5	6.8
DAM-40	40/ 1.0	Blue	0.48	32.67	0.7	10.0	1.4	4.5	27.5	7.3
					1.0	14.2	1.5	5.0	32.7	8.6
					1.5	21.3	1.7	5.5	39.7	10.5
					2.0	28.4	1.8	6.0	45.6	12.1
					2.5	35.6	2.0	6.5	50.8	13.4
DAM-45	45/ 1.14	Violet	0.51	46.72	0.7	10.0	2.1	7.0	39.0	10.3
					1.0	14.2	2.3	7.5	46.7	12.4
					1.5	21.3	2.4	8.0	57.4	15.2
					2.0	28.4	2.6	8.5	66.5	17.6
					2.5	35.6	2.7	9.0	74.4	19.7
DAM-55	55/ 1.32	Yellow	0.52	60.48	0.7	10.0	1.7	5.5	50.2	13.3
					1.0	14.2	2.0	6.5	60.5	16.0
					1.5	21.3	2.3	7.5	74.8	19.8
					2.0	28.4	2.6	8.5	87.0	23.0
					2.5	35.6	2.9	9.5	97.8	25.9
DAM-60	60/ 1.47	Red	0.54	70.88	0.7	10.0	1.7	5.5	58.3	15.4
					1.0	14.2	2.1	7.0	70.9	18.8
					1.5	21.3	2.4	8.0	88.4	23.4
					2.0	28.4	2.6	8.5	103.4	27.4
					2.5	35.6	2.9	9.5	116.8	30.9

Note: Tested under standard test conditions with nozzle positioned at 20 cm above ground. All pressures are measured at nozzle discharge.

Ordering Specifications

X	AM	XX
		Nozzle no.
D - Domestic order (within India) E - Export order (outside India)		30 - Black nozzle 40 - Blue nozzle 45 - Violet nozzle 55 - Yellow nozzle 60 - Red nozzle

Example: DAM-60 - This code represents Acu-Mister with nozzle no. 60, red coloured nozzle.

Green Mist

Features and Specifications

- The double purpose emitter for misting & irrigation over propagation benches.
- Uniform coverage.
- Ideal droplet size prevents drift of excessively fine mist.
- No dripping during operation.
- Undisturbed and symmetrical water distribution (no deflection or “dead corners”).
- Can be fitted with Leakage Prevention Device (LPD) for perfect pulsed operation.
- Operating pressure: 2 - 4 kg/cm² (28.44 - 56.88 psi).
- Flow rate: 30 - 44 lph (see performance chart).
- Wetted diameter: 1.2 m.
- Filtration requirements: 100 microns.

Installation instructions

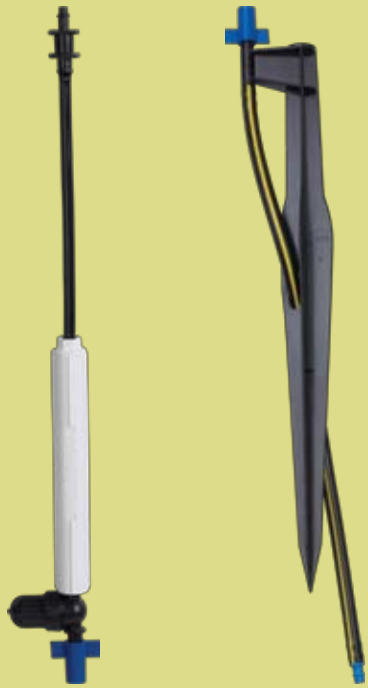
- Height of units above bench: 1.0 - 1.2 m.
- Maximum spacing between units on lateral: 1.0 m.
- Maximum spacing between laterals: 1.0 m
- Maximum distance of lateral from bench edge: 0.2 m.

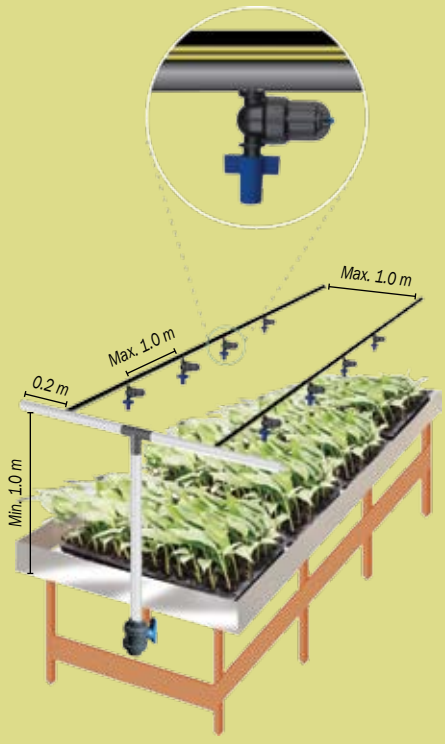
Performance chart

Pressure (kg/cm²)	2.0	2.5	3.0	3.5	4.0
Flow (lph)	32	35	38	41	44

Ordering Specifications

X	199802
D - Domestic order (within India) E - Export order (outside India)	Green Mist with green nozzle of 30 lph nominal flow without LPD

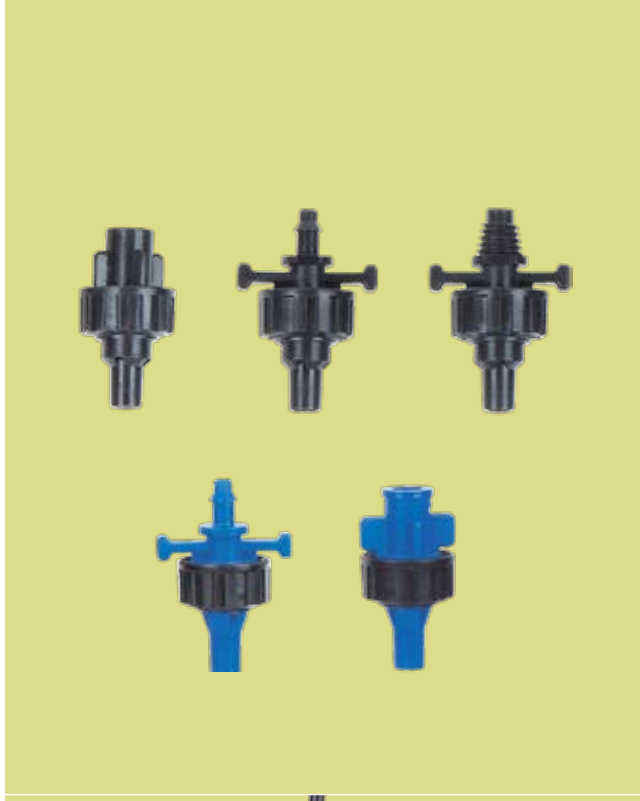


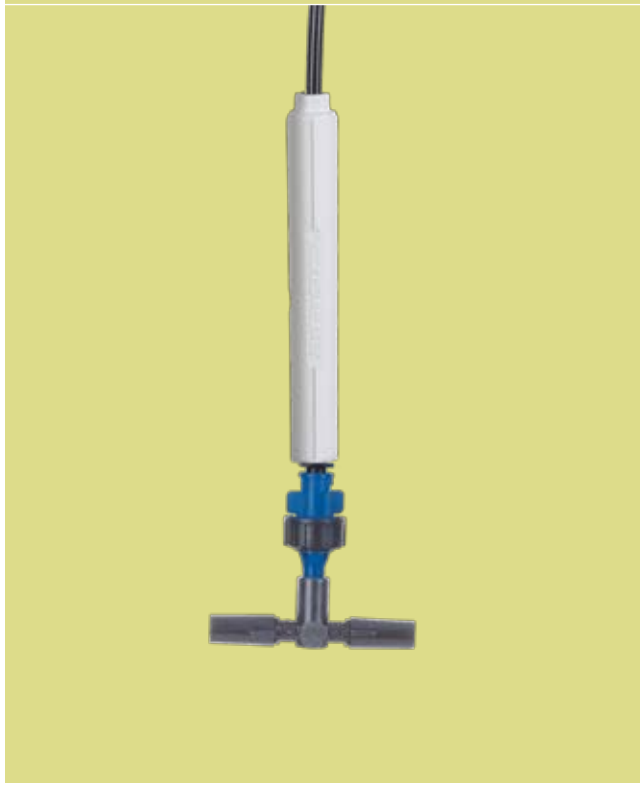


LPD (Leakage Prevention Device)

Features and Specifications

- LPD is a rubber valve which closes the outlet immediately when system is at below specified pressure.
- Prevents low head drainage.
- Keeps system filled with water under pressure, enabling immediate start-up.
- Allows all units to start/stop simultaneously.
- Stops leakage from the emitter when the system reaches closure pressure.
- Can be used for mini/micro sprinkler, fogger etc.
- Minimal pressure loss even with high flow rates.
- One-stage opening: LPD is either completely opened or completely closed.
- Easy to dismantle for cleaning and maintenance.
- PE and PVC connections.
- Available in two types
  - Black: Low pressure LPD for micro-sprinklers.
  - Blue: High pressure LPD for Foggers.





Pressure loss across the LPD

Low pressure LPD (Inlet pressure 20 m)		High pressure LPD (Inlet pressure 40 m)	
Flow rate lph	Pressure loss m	Flow rate lph	Pressure loss m
100	0	60	0
120	0.5	80	0.5
140	0.5	100	1.0
160	1.0	120	1.0
180	1.0	–	–
200	1.5	–	–
220	1.5	–	–

Minimal operating pressure (kg/cm^2)

	Low pressure LPD	High pressure LPD
Opening	~2.0	~3.5
Closure	~1.0	~2.0

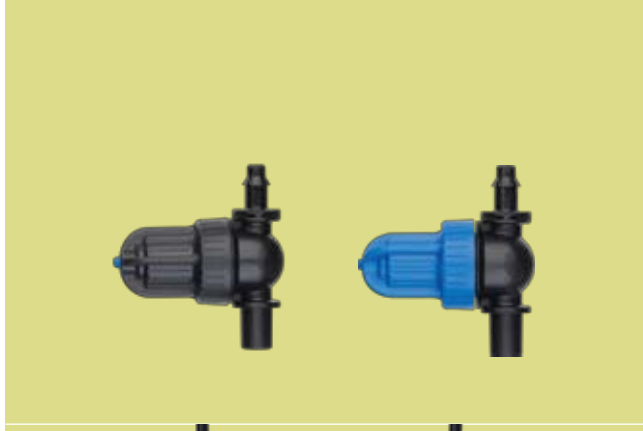
Ordering Specifications

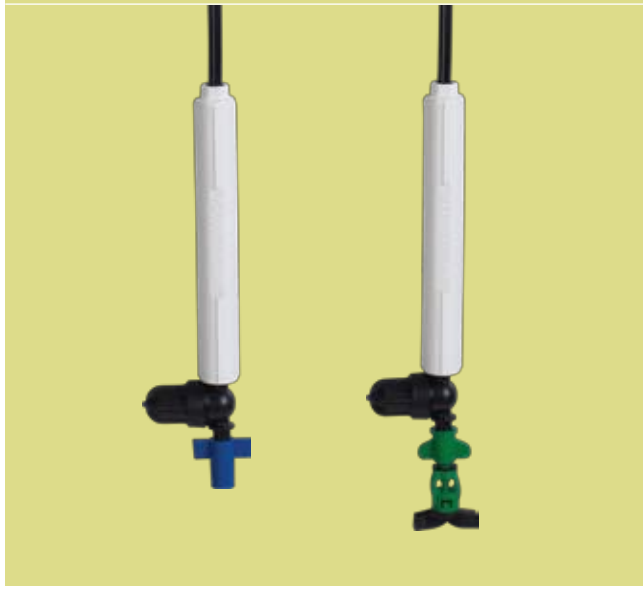
X	XXXXXX
D - Domestic order (within India) E - Export order (outside India)	790008 - LPD Female Black 790038 - LPD M-11 Black 790028 - LPD barbed Black 790048 - LPD 3/8" Black
	790003 - LPD Female Blue 790033 - LPD M-11 Blue 790023 - LPD barbed Blue 790043 - LPD 3/8" Blue

Super LPD

Features and Specifications

- High performance leakage prevention device with spring loaded rubber valve.
- Prevents low head drainage.
- Keeps system filled with water under pressure, enabling immediate start-up.
- Allows all units to start/stop simultaneously.
- Stops leakage from the emitter when the system reaches closure pressure.
- Can be used for mini/micro sprinkler, fogger etc.
- Minimal pressure loss even with high flow rates.
- One-stage opening: Super LPD is either completely opened or completely closed.
- Easy to dismantle for cleaning and maintenance.
- PE and PVC connections.
- Available in two types
  - Black: Low pressure Super LPD for micro-sprinklers / greenmist.
  - Blue: High pressure Super LPD for foggers / misters.





Pressure loss across the LPD

Low pressure super LPD (Inlet pressure 20 m)		High pressure super LPD (Inlet pressure 40 m)	
Flow rate lph	Pressure loss m	Flow rate lph	Pressure loss m
100	0	60	0
120	0.5	80	0.5
140	0.5	100	1.0
160	1.0	120	1.0
180	1.0	–	–
200	1.5	–	–
220	1.5	–	–

Minimal operating pressure (kg/cm^2)

	Low pressure LPD	High pressure LPD
Opening	~1.4	~3.5
Closure	~0.6	~2.4

Ordering Specifications

X	XXXXXX
D - Domestic order (within India) E - Export order (outside India)	790308 - Super LPD Female Black 790338 - Super LPD M-11 Black 790328 - Super LPD barbed Black 790348 - Super LPD 3/8" Black
	790303 - Super LPD Female Blue 790333 - Super LPD M-11 Blue 790323 - Super LPD barbed Blue 790343 - Super LPD 3/8" Blue

BUBBLERS

J-Bubbler - Adjustable Flow '+'

Features and Specifications

- Manufactured from stable engineering plastic.
- Flood bubbler with umbrella pattern.
- Easy flow adjustment.
- ½" BSP female threaded inlet.
- Special inlet filter screen to prevent clogging.
- Supplied with special filter to prevents blockage by sand / silt particles which ensures trouble free operation for longer period.
- Can be easily mounted on stake for bubbler or on multipurpose stake with adaptor for bubbler or on PVC risers.
- Bubbler stake assembly with 13mm ID, 12 & 16mm OD tubing in required lengths available on demand.
- Available in two different models (Code: DJBAFP & DJBAF). DJBAFP is an easy to adjust bubbler. DJBAF is bubbler with screw adjustments for flow.
- Minimum filtration requirement 120 micron.

DJBAFP

DJBAF

Application

- Suitable for controlled irrigation of trees having high water requirement.

Performance Chart

Pressure		Maximum Discharge			
		DJBAFP		DJBAF	
kg/cm²	psi	lpm	gpm	lpm	gpm
1.0	14	6.0	1.6	10.0	2.65
2.0	28	9.0	2.4	15.0	3.97
3.0	42	11.0	2.9	17.0	4.50

Ordering Specifications

X	XXXXX
D - Domestic order (within India) E - Export order (outside India)	JBAFP - J-Bubbler Adjustable Flow '+' JBAF - J-Bubbler Adjustable Flow

Example: DJBAFP - This code represents J-Bubbler Adjustable Flow '+'.

J-Bubbler - PC

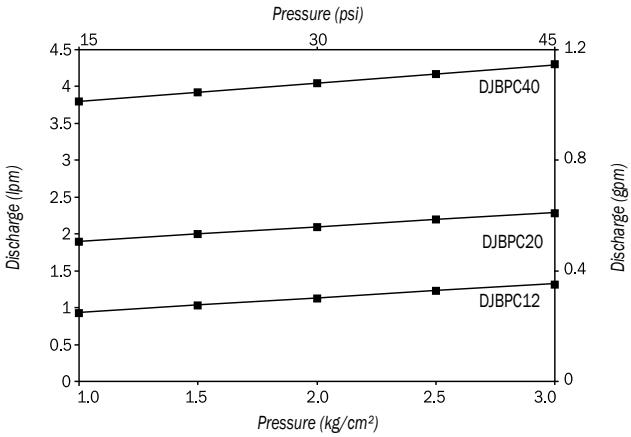
Features and Specifications

- Manufactured from stable engineering plastic.
- Pressure compensating bubbler with trickle pattern and an emitter exponent of 0.09.
- Uniform flow at varying pressure from 1-3 kg/cm² (14.22 -42.66 psi)
- ½" BSP female threaded inlet.
- Special inlet filter screen to prevent clogging.
- Can be easily mounted on stake for bubbler or on multipurpose stake with adaptor for bubbler or on PVC risers.
- Available in 1.2 lpm, 2 lpm and 4 lpm (0.3, 0.5 and 1 gpm) nominal discharges.
- Supplied with special filter to prevents blockage by sand / silt particles which ensures trouble free operation for longer period.
- Bubbler stake assembly with 13mm ID, 12 & 16mm OD tubing in required length available on demand.
- Minimum filtration requirement 120 micron.

Applications

- Suitable for palms, trees, shrubs etc. planted over undulating terrain and where uniform flow is essential.
- Suitable for controlled irrigation of trees having high water requirements.

Performance Graph



Ordering Specifications

X	JBPC	X
D - Domestic order (within India) E - Export order (outside India)		Discharge (lpm)
		12 - 1.2
		20 - 2.0
		40 - 4.0

Example: DJBPC20 - This code represents J-Bubbler - PC having 2 lpm discharge.

Octa-Bubbler

Features and Specifications

- Manufactured with UV & sunlight resistant, chemical resistant non corrosive plastic material for stable performance.
- An eight-outlet self cleaning, pressure compensating bubbler.
- Wide pressure compensating range of 1.5 to 4 kg/cm^2 (21.33 to 56.88 psi).
- Precision moulded liquid silicone rubber diaphragm ensures pressure compensation, uniform water application and long lasting high quality performance.
- 180^0 swivel barbed outlet provides flexibility of positioning the extension tubing to any required direction.
- Coefficient of manufacturing variance less than 7%.
- Available in four colour coded models. Flow per outlet is,

  Blue - 7.5 lph (2 gph)

  Black - 23 lph (6 gph)

  Red - 39 lph (10 gph)

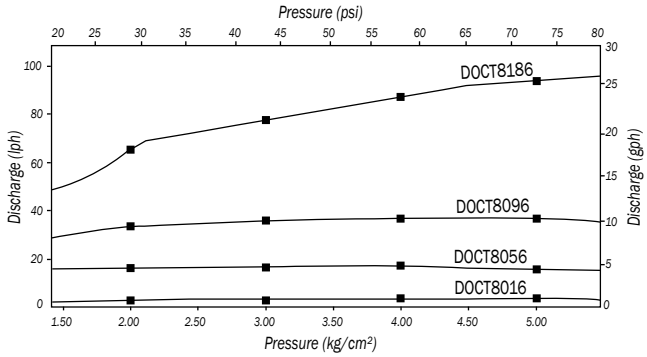
  Green - 75 lph (20 gph)

  Flow control devices are interchangeable facilitates selection of variable discharge in one Octa-Bubbler. Also available with purple cap for reclaimed water use.
- Built-in back flow prevention device engineered for added protection.
- Designed to operate equally well for above or below grade.
- Available with 1/2" FPT inlet.
- Can be used with 6mm OD extension tubing/vinyl tubing for water distribution.

Applications

- Ideal for converting sprinkler system to low flow, because it is designed to apply the amount of water the plants need during the time of sprinkler zone operates.
- Can be used to irrigate where lateral requires to run for longer length and irrigation time is a limitation e.g. landscaping of road dividers, shrub island between turfs and lawns, trees, flowers and ground cover planting beds.

Performance chart



Ordering Specifications

X	OCT8	XXX
D - Domestic order (within India) E - Export order (outside India)		Flow 016 - 7.5 lph (2 gph) 056 - 23 lph (6 gph) 096 - 39 lph (10 gph) 186 - 75 lph (20 gph)

Example: DOCT186 - This code represents Octa-Bubbler of flow 75 lph (20 gph) per outlet.

Note:

- *Octa-Bubbler with purple cap for reclaimed water use, please write the code as DOCT186P insted of DOCT186.*
- *Octa-Bubbler can also be supplied as an assembly including 1/2" stake, 6mm OD PE/ Vinyl Tube of 1 m length, emitter holding stake, on demand. Please specify for any other configuration.*
- *Please specify for combination of flow control device if required.*
- *U.S. Patent No. 5,222,771*

Flow Control Device for Octa Bubbler

Code	Description
D8160	Blue - 7.5 lph (2 gph)
D8560	Black - 23 lph (6 gph)
D8960	Red - 39 lph (10 gph)
D81860	Green - 75 lph (20 gph)

Quadra Bubbler

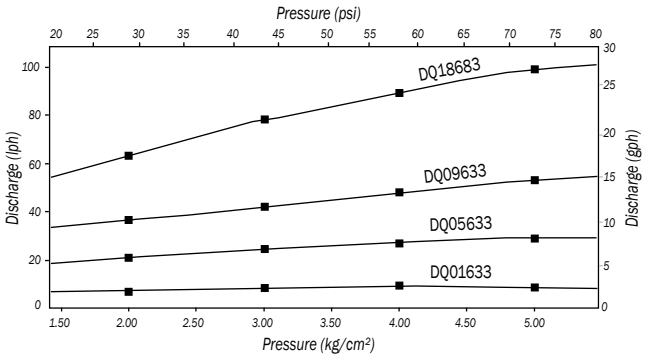
Features and Specifications

- Manufactured with UV & sunlight resistant, chemical resistant non corrosive plastic material for stable performance.
- Four outlet self cleaning, pressure compensating bubbler.
- Wide pressure compensating range of 1.5 to 4 kg/cm² (21.33 to 56.88 psi)
- Precision moulded liquid silicone rubber diaphragm ensures pressure compensation, uniform water application and long lasting high quality performance.
- Coefficient of manufacturing variance less than 7%.
- Available in four colour coded models. Flow per outlet is,
  Blue - 7.5 lph (2 gph)
  Black - 23 lph (6 gph)
  Red - 39 lph (10 gph)
  Green - 75 lph (20 gph)
- Available with 3/4" MPT inlet.
- Can be used with 6mm OD extension tubing/vinyl tubing for water distribution.
- Minimum 100 micron filtration required. Type of filtration and its precision can be decided by quality of source water

Application

- Ideal for converting sprinkler system to low flow, because it is designed to apply the amount of water the plants need during the time of sprinkler zone operates.
- Can be used to irrigate where lateral requires to run for longer length and irrigation time is a limitation e.g. landscaping of road dividers, shrub islands between turfs and lawns, trees, flowers and ground cover planting beds.

Performance chart



Ordering Specifications

X	Q	XXX
D - Domestic order (within India) E - Export order (outside India)		Flow 01633- 7.5 lph (2 gph) 05633 - 23 lph (6 gph) 09633 - 39 lph (10 gph) 18633- 75 lph (20 gph)

Example: DQ18633 - This code represents Quadra Bubbler of flow 75 lph (20 gph) per outlet.

Note:

- *Quadra Bubbler can also be supplied as an assembly including 3/4" stake, 6mm OD PE/Vinyl Tube of 1 m length, emitter holding stake, on demand. Please specify for any other configuration.*

QB2 Bubbler

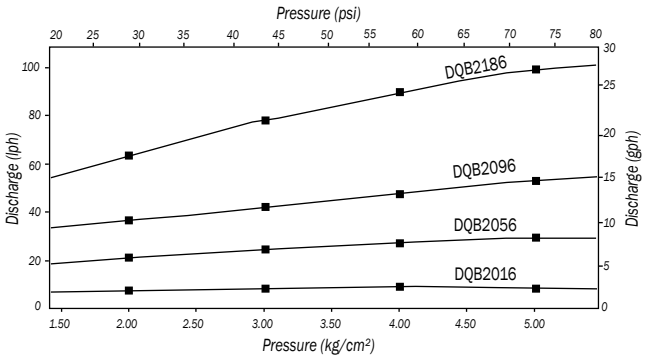
Features and Specifications

- Manufactured with UV & sunlight resistant, chemical resistant non corrosive plastic material for stable performance.
- Four outlet self cleaning, pressure compensating bubbler.
- Wide pressure compensating range of 1.5 to 4 kg/cm^2 (21.33 to 56.88 psi)
- Precision moulded liquid silicone rubber diaphragm ensures pressure compensation, uniform water application and long lasting high quality performance.
- Coefficient of manufacturing variance less than 7%.
- Available in four colour coded models. Flow per outlet is,
  Blue - 7.5 lph (2 gph)
  Black - 23 lph (6 gph)
  Red - 39 lph (10 gph)
  Green - 75 lph (20 gph)
- Available with 1/2" FPT inlet.
- Can be used with 6mm OD extension tubing/vinyl tubing for water distribution.
- Minimum 100 micron filtration required. Type of filtration and its precision can be decided by quality of source water.

Application

- Ideal for converting sprinkler system to low flow, because it is designed to apply the amount of water the plants need during the time of sprinkler zone operates.
- Can be used to irrigate where lateral requires to run for longer length and irrigation time is a limitation e.g. landscaping of road dividers, shrub islands between turfs and lawns, trees, flowers and ground cover planting beds.

Performance chart



Ordering Specifications

X	QB2	XXX
		Flow
D - Domestic order (within India) E - Export order (outside India)		016- 7.5 lph (2 gph) 056 - 23 lph (6 gph) 096 - 39 lph (10 gph) 186- 75 lph (20 gph)

Example: DQB2186 - This code represents QB2 Bubbler of flow 75 lph (20 gph) per outlet.

Note: QB2 Bubbler can also be supplied as an assembly including 1/2" stake, 6mm OD PE/Vinyl Tube of 1 m length, emitter holding stake, on demand. Please specify for any other configuration.

MINI SPRINKLERS

J-Mini Sprinkler

Features and Specifications

- Components manufactured out of revolutionary polymers to achieve wear resistance and longer trouble free performance.
- Colour coded nozzle for different flow rates.
- Smooth streamlined side ribs to secure the spinner and give minimum obstruction to water jet.
- Gentle precipitation, no damage to flowers / plants.
- Detachable nozzle and spinner.
- Uniform distribution.
- Wide flow range, 16-180 lph (4.2-47.6 gph) at an operating pressure of 1kg/cm² (14.22 psi).
- 3/8" BSP male threaded inlet.
- Minimum filtration requirement - 100 micron.
- Easy to install with different mounting options. For details please refer to "Polyfittings & Accessories" section.

Applications

- Under-foliage irrigation.
- Useful in landscape, flower beds, shrubs and nurseries.
- Suitable for soils where adequate wetting is difficult to achieve and where water is available only for short periods.
- Recommended for irrigation of vegetables, nurseries etc. with 'Rainport™' system.

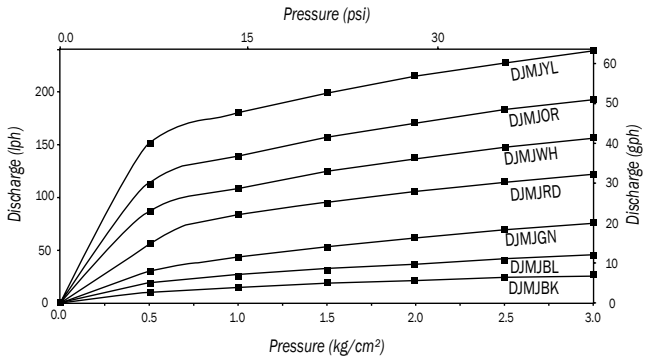
Performance Chart

Code	Nozzle Size (mm) / Colour	Emitter Exponent (x)	Flow Coeff. (k)	Pressure		Discharge		Diameter of throw	
				kg/cm²	psi	lph	gph	m	ft
DJMJBK	0.65 / Black	0.51	16	1.0	14.22	16	4.23	2.4	7.9
				1.5	21.33	19	5.02	2.8	9.2
				2.0	28.44	23	6.08	3.2	10.5
				2.5	35.55	26	6.88	3.6	11.8
				3.0	42.66	28	7.41	4.0	13.1
DJMJBL	0.87 / Blue	0.51	26	1.0	14.22	26	6.89	3.4	11.2
				1.5	21.33	32	8.46	3.6	11.8
				2.0	28.44	37	9.80	4.0	13.1
				2.5	35.55	42	10.99	4.2	13.8
				3.0	42.66	46	12.07	4.4	14.4
DJMJGN	1.12 / Green	0.51	44	1.0	14.22	44	11.64	4.2	13.8
				1.5	21.33	55	14.40	4.4	14.4
				2.0	28.44	63	16.66	4.6	15.1
				2.5	35.55	71	18.70	4.8	15.7
				3.0	42.66	78	20.56	5.0	16.4
DJMJRD	1.50 / Red	0.40	85	1.0	14.22	85	22.49	5.6	18.4
				1.5	21.33	100	26.45	6.0	19.7
				2.0	28.44	112	29.63	6.8	22.3
				2.5	35.55	122	32.28	7.0	23.0
				3.0	42.66	131	34.66	7.2	23.6
DJMJWH	1.85 / White	0.43	110	1.0	14.22	110	29.10	6.0	19.7
				1.5	21.33	130	34.39	7.6	24.9
				2.0	28.44	148	39.15	8.0	26.2
				2.5	35.55	163	43.12	8.2	26.9
				3.0	42.66	176	46.56	8.4	27.6
DJMJOR	2.10 / Orange	0.44	140	1.0	14.22	140	37.03	7.4	24.3
				1.5	21.33	163	43.12	8.0	26.2
				2.0	28.44	185	48.94	8.2	26.9
				2.5	35.55	205	54.23	8.4	27.6
				3.0	42.66	222	58.73	8.6	28.2
DJMJYL	2.50 / Yellow	0.40	180	1.0	14.22	180	47.61	8.0	26.2
				1.5	21.33	211	55.82	8.4	27.6
				2.0	28.44	237	62.69	8.6	28.2
				2.5	35.55	259	68.51	8.8	28.9
				3.0	42.66	279	73.80	8.8	28.9

Flow equation $q = kH^x$,
q= discharge, lph, H= Pressure Head, kg/cm², k = flow coefficient, x = Emitter exponent.

Note:
Tested under standard test conditions with nozzle positioned at 20 cm above ground.

Performance Graph



Ordering Specifications

X	JMJ	XX
D - Domestic order (within India) E - Export order (outside India)		Nozzle Colour BK - Black BL - Blue GN - Green RD - Red WH - White OR - Orange YL - Yellow

Example: DJMJBK - This code represents J-Mini Sprinkler with black coloured nozzle.

Modular Sprinklers

Features and Specifications

- Complete range of micro-sprinklers and micro-jets.
- Unlimited combinations of flow rates and wetting patterns for
  - Irrigation in orchards, vegetables and gardens.
  - Irrigation in greenhouses and shade houses.
  - Cooling of poultry and livestock.
- Wide range of wetted diameters and flow rates.
- Full and part-circle patterns.
- Small, medium or large droplets produced by different sprayers, swivels.
- Optional anti-mist device for higher distribution uniformity.
- Recommended pressure: 1.5 to 3.0 kg/cm² (21.33 to 42.66 psi).
- Flow rate: 25 to 400 lph.
- Wetted diameters: 1 to 10 m.
- Minimum filtration requirement - 100 micron.

Technical Specifications – Flow rate by nozzle (lph)

Pressure (kg/cm²)	Nozzle colour & diameter (mm)									
	Violet 0.82	Brown 0.94	Gray 1.16	Green 1.41	Orange 1.50	Yellow 1.73	Blue 1.92	Ivory 2.07	Red 2.18	Black 2.34
1.0	25	32	49	74	85	113	141	166	184	212
1.5	30	37	60	90	105	140	170	204	225	260
2.0	35	43	70	105	120	160	200	235	260	300
2.5	39	50	78	117	134	179	224	263	291	335
3.0	43	55	86	129	147	196	245	288	318	367
3.5	46	60	93	139	159	212	265	311	344	397

One Sided Swivel

Small Black Swivel

Anti Ant Swivel

Modular with Anti Mist

Modular for Inverted Application

Wetted diameter (m) at 2.0 kg/cm² and 0.25 m above ground level*

			Flow rate (lph)	Static Spreaders						Swivels					
				90°	180°	Strip	Close range	Flat	12 Jets	Small black	Anti-ant	One-sided	Big orange	inverted	
Antimist (Colour / Size, mm)	Nozzle colour	Nozzle Size (mm)												Height (m)	
														0.60	1.80
	Violet	0.82	35	1.7	2.2	3.2	0.9	2.8	3.4	5.5	6.0	6.5		5.0	6.0
	Brown	0.94	43	1.7	2.5	4.2	0.9	3.4	4.5	5.5	6.0	6.5		5.0	6.0
	Gray	1.16	70	2.5	2.7	8.5	0.9	3.4	5.5	6.0	6.5	7.5		5.5	6.5
	Green	1.41	105	3.5	2.7	9.0	0.9	3.4	6.0	6.0	7.0	7.5	9.0	6.5	8.0
	Orange	1.50	120	4.5	2.7	9.0	0.9	4.0	6.0	6.0	7.0	8.0	9.0	7.0	8.5
	Yellow	1.73	160							6.5	8.0	8.0	9.0	7.5	9.0
	Blue	1.92	200								8.0	8.5	9.0	8.0	9.0
	Ivory	2.07	235									8.5	10.0	8.0	9.5
	Red	2.18	260									8.5	10.0	8.5	10.0
	Black	2.34	300									9.0	10.0	8.5	10.0
Green /0.94	Green	1.41	40	2.0	1.2	2.8	0.8	3.5	2.5	4.0				4.5	5.5
Orange/1.16	Orange	1.50	70	2.2	2.2	5.0	0.8	3.5	4.5	5.0				6.0	7.0
Yellow / 1.40	Yellow	1.73	90	2.5	2.5	5.5	0.9	4.0	5.0	5.5				6.0	7.5
Blue / 1.50	Blue	1.92	120	2.5	2.7	7.0	1.0	4.0	6.0	6.0				6.5	8.0

** Inverted swivel at 0.6 and 1.80 m.*

Ordering Specifications

X	25	XX	X
		Swivels	Nozzles, Discharge (lph)
D - Domestic order (within India) E - Export order (outside India)		11 - 90° Spreader (Black) 12 - 180° Spreader (Red) 13 - Closed range spreader (Orange) 15 - Flat spreader (Yellow) 16 - 12 jets spreader (Green) 17 - Strip spreader (Blue) 18 - Misting spreader (Violet) 23 - Small Swivel (Black) 24 - Big Swivel (Orange) 29 - Anti ant Swivel (Red / Black) 42 - One side Swivel (Blue) 43 - One side Swivel (Black) 45 - Inverted Swivel (Green)	0 - Brown, 43 1 - Ivory, 235 2 - Green, 105 3 - Blue, 200 4 - Violet, 35 5 - Orange, 120 6 - Yellow, 160 7 - Red, 260 8 - Black, 300 9 - Gray, 70

Example: D25455 - This code represent modular group of sprinkler with inverted swivel (green) and orange coloured (120 lph) nozzle.

2002 AquaSmart

Features and Specifications

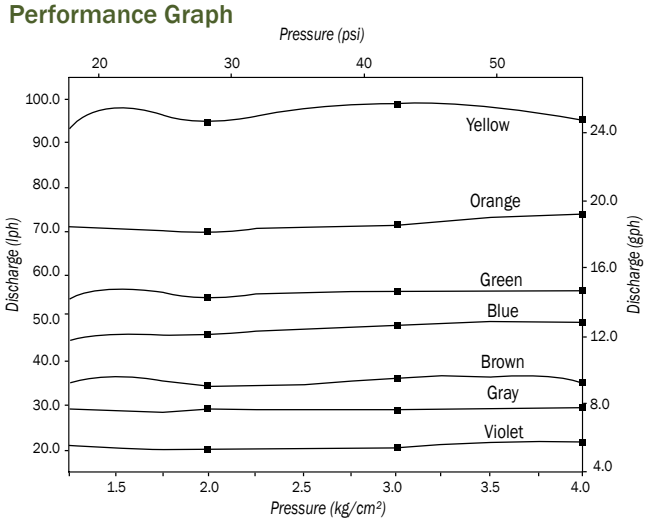
- Flow regulated micro-sprinkler for optimal undertree irrigation.
- Constant flow between 1.5-4.0 kg/cm² (20-60 psi) pressure.
- Uniform irrigation and fertigation at all topographical conditions.
- Wide range of flow rates and distribution patterns.
- Insect-proof pop-up swivel.
- Sturdy and solid structure.
- Easy to dismantle and assemble.
- On demand 2002 AquaSmart can be supplied as an assembly.
- Operating pressure: 1.2 to 4.0 kg/cm² (17- 56.88 psi).
- Flow rate: 20 to 95 lph.
- Wetted diameters: 3.0 to 7.5 m
- Special swivel (green) for inverted operation.
- Two-stage wetted diameter control.
- Clogging resistant even at lowest flow rates.

Technical Specifications

Nozzle Colour	Flow rate (lph)	Nozzle size (mm)	Swivels - Wetted diameter (m)				
			Orange*	Black	Blue	Red	Green (Inverted)**
Violet	20	0.84	3.0	3.5	4.0***	–	5.0
Gray	28	1.00	3.0	4.0	4.5***	–	5.0
Brown	35	1.10	3.5	4.0	5.0	–	6.0
Blue	47	1.25	4.0	5.0	5.0	6.0***	6.0
Green	55	1.33	4.5	5.0	5.5	6.5	6.0
Orange	70	1.48	–	5.0	6.0	7.0	6.5
Yellow	95	1.75	–	5.5	6.5	7.5	6.5

All swivels tested at 0.25m above ground
* Single stage (no diameter limiter)
** Green swivel tested at 1.2 m above ground.
*** To be used only without diameter limiter.

Performance Graph



Ordering Specifications

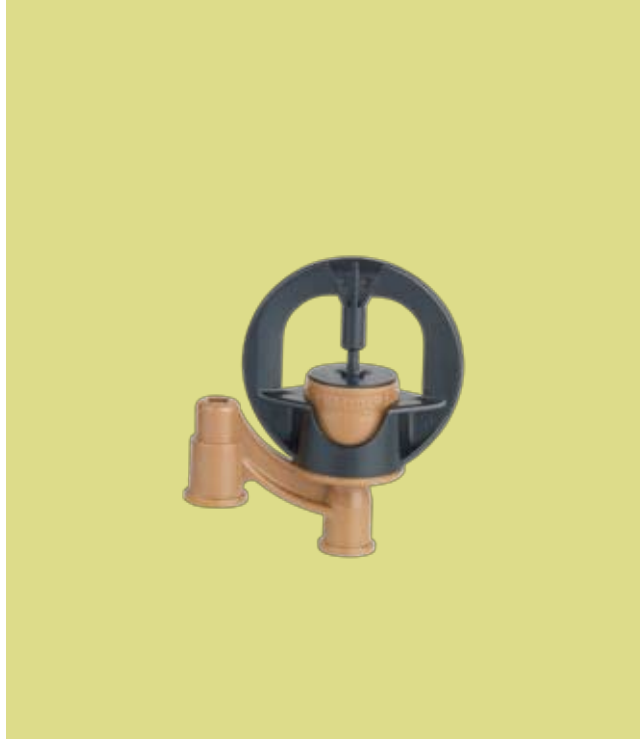
X	21	X	X	X	X
		Swivels	Swivel colour	Housing	Nozzles, Disch. (lph)
D - Domestic order (within India) E - Export order (outside India)		6 - One stage 8 - Two stage 7 - Inverted	1 - red 2 - blue 3 - black 4 - orange 5 - green	1 - female (push fit) 2 - barbed 4 mm 6 - quick thread 4 - thread 3/8"	0 - brown, 35 lph 2 - green, 55 lph 3 - blue, 47 lph 4 - violet, 20 lph 5 - orange, 70 lph 6 - yellow, 95 lph 9 - gray, 28 lph

Example: D216243 - This code represents 2002 AquaSmart with one stage blue swivel, 3/8 threaded housing and blue coloured nozzle.

2005 AquaMaster

Features and Specifications

- The most economical solution for under tree and overhead irrigation.
- Extra-long range.
- Particularly suitable for widely-spaced plantations. (such as walnut, almond, avocado and mango).
- Uniform coverage over a wide range of spacing, flow rates and pressures.
- Suitable also for overhead irrigation on Rainport system for vegetables and nurseries (up to 6 x 6 m spacing).
- Innovative structure for improved durability, performance and insect protection.
- Unique water spreader for optimum distribution, maximum range and fine droplets.
- Operating pressure: 1.5 to 3.0 kg/cm² (21.33-42.66 psi).
- Discharge: 30 to 365 lph.
- Diameter coverage: 5.5 to 13.0 m.
- Filtration requirement:
  - 130 micron for purple and brown nozzles.
  - 200 micron for other nozzles.



Performance table for Rainport™ application

Nozzle colour	P kg/cm²	Q lph	D m	Precipitation (mm/h) / spacing (m)									
				4x4	4x5	4x6	4x7	5x5	5x6	5x7	6x6	6x7	7x7
Orange	1.5	104	9.5	6.5	5.2	4.3	3.7	4.2	3.5	3.0	2.9	2.5	2.1
	2.0	120	9.5	7.5	6.0	5.0	4.3	4.8	4.0	3.4	3.3	2.8	2.4
	2.5	134	9.5	8.4	6.7	5.6	4.8	5.3	4.5	3.8	3.7	3.2	2.7
Black	1.5	138	9.5	8.5	6.8	5.7	4.9	5.4	4.5	3.9	3.8	3.2	2.8
	2.0	160	10.0	10.0	8.0	6.7	5.7	6.4	5.3	4.6	4.5	3.8	3.3
	2.5	179	10.5	11.3	9.1	7.5	6.5	7.2	6.0	5.2	5.0	4.3	3.7
Blue	1.5	173	10.5	10.7	8.6	7.2	6.1	8.6	5.7	4.9	4.8	4.1	3.5
	2.0	200	11.0	12.6	10.1	8.4	7.2	8.0	6.7	5.7	5.6	4.8	4.1
	2.5	223	11.0	14.0	11.2	9.3	8.0	8.9	7.4	6.4	6.2	5.3	4.6
Yellow	1.5	215	10.5	13.3	10.7	8.9	7.6	8.5	7.1	6.1	5.9	5.1	4.4
	2.0	250	11.5	15.7	12.5	10.4	8.9	10.0	8.3	7.2	7.0	6.0	5.1
	2.5	305	12.0	19.0	15.2	12.6	10.8	12.1	10.1	8.7	8.4	7.2	6.2
Red	1.5	260	12.0	16.4	13.1	10.9	9.4	10.5	8.7	7.5	7.3	6.2	5.3
	2.0	300	12.5	18.5	14.8	12.3	10.6	11.8	9.9	8.5	8.2	7.1	6.0
	2.5	365	13.0	22.8	18.2	15.2	13.0	14.6	12.1	10.4	10.1	8.7	7.4

Note: Tested at 0.6 m height and 2.0 kg/cm² pressure.

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications

X	219	X	X	X
		Swivels	Housing	Nozzles, Disch. (lph)
D - Domestic order (within India) E - Export order (outside India)		3 - black (with 35 & 50 lph only) 2 - blue (with 70 & 105 lph only) 5 - green (with 120 & 300 lph only) 6 - green inverted (with 35 & 200 lph only)	1 - Female (push fit) 4 - Threaded 3/8" 6 - Quick thread	0 - brown, 50 2 - green, 105 3 - blue, 200 4 - purple, 35 5 - Orange, 120 6 - Yellow, 250 7 - Red, 300 8 - black, 160 9 - gray, 70

Example: D219548 - This code represents 2005 AquaMaster with green swivel, black nozzle and 3/8" threaded housing.

Flow rates and wetted diameter

Swivel colour	Nozzle colour	Nozzle Size mm	Pressure					
			1.5 kg/cm²		2.0 kg/cm²		2.5 kg/cm²	
			lph	D (m)	lph	D (m)	lph	D (m)
Black	Violet	0.80	30.3	5.5	35	5.5	39.1	5.5
	Brown	0.94	43.3	6.5	50	6.5	55.9	6.5
Blue	Gray	1.14	60.6	7.0	70	7.0	78.3	7.0
	Green	1.40	90.9	8.0	105	9.0	117.4	9.0
Green	Orange	1.50	103.9	9.0	120	9.5	134.2	9.5
	Black	1.74	138.6	9.5	160	10.0	178.9	10.0
	Blue	1.94	173.2	10.5	200	10.5	223.6	11.0
	Yellow	2.16	215.0	10.5	250	11.5	305.0	12.0
	Red	2.36	260.0	12.0	300	12.5	365.0	12.5

Note: Tested at 0.25 m height.

Inverted model - Flow rates and wetted diameters

Swivel colour	Nozzle colour	Nozzle ID mm	2.0 kg/cm²	
			lph	D (m)
Green Inverted	Violet	0.80	35	6.5
	Brown	0.94	50	7.5
	Gray	1.14	70	9.0
	Green	1.40	105	10.0
	Orange	1.50	120	10.5
	Black	1.74	160	11.0
	Blue	1.94	200	11.5

Note: Tested at 1.80 m height.

Green Spin

Features and Specifications

- The perfect micro-sprinkler for overhead irrigation in greenhouses.
- Bridgeless - no dripping during operation.
- No deflection or “dead corners”.
- Low trajectory, no water above nozzle level.
- Superior uniformity over a wide range of spacing.
- Connections to PE or PVC pipes.
- LPD (Leakage Prevention Device) stops drainage after shut-off (optional).
- Patent pending.
- Operating pressure range: 2.0 to 3.0 kg/cm² (14.22 - 42.66 psi).
- Flow rates: 43 to 200lph.
- Filtration requirements
  - Brown and gray nozzles: 130 microns.
  - Green, orange, black and blue nozzles: 200 microns.

Flow rates and wetted diameters

Nozzle colour	Flow rate (lph) at 2.0 kg/cm²	Wetted diameter* (m)
Brown	43	6.5
Gray	70	7.0
Green	105	7.5
Orange	120	7.5
Black	160	8.5
Blue	200	9.0

** Tested at 1.8 m above ground*

Performance chart - Precipitation rates (mm/h) and uniformity (CU%) at various spacing*

Lateral spacing, m	3					4					5					6				
Unit spacing, m	1.0	1.5	2.0	2.5	3.0	1.0	1.5	2.0	2.5	3.0	1.0	1.5	2.0	2.5	3.0	1.0	1.5	2.0	2.5	3.0
Nozzle colour																				
Brown	14.4	9.6	7.2	5.8	4.8															
Gray	23.4	15.6	11.7	9.4	7.8	17.6	11.7	8.8	7.0	5.9										
Green	35.0	23.3	17.5	14.0	11.7	26.3	17.5	13.1	10.5	8.8	21.0	14.0	10.5	8.4	7.0					
Orange	40.0	26.7	20.0	16.0	13.3	30.3	20.0	15.0	12.0	10.0	24.0	16.0	12.0	9.6	8.0					
Black	53.4	35.6	26.7	21.4	17.8	40.1	26.7	20.0	16.0	13.4	32.0	21.4	16.0	12.8	10.7	26.7	17.8	13.4	10.7	8.9
Blue	66.6	44.4	33.3	26.6	22.2	50.0	33.3	25.0	20.0	16.7	40.0	26.6	20.0	16.0	13.3	33.3	22.2	16.7	13.3	

** Tested at 1.8 m above ground*

Colour code - uniformity

- CU = 85-89% - fair
- CU = 90-92% - good
- CU > 93% - excellent

Ordering Specifications

X	28110	X
		Nozzles, discharge (lph)
D - Domestic order (within India) E - Export order (outside India)		0 - brown, 43 2 - green, 105 3 - blue, 200 5 - orange, 120 8 - black, 160 9 - gray, 70

Example: D281105 - This code represents Green Spin with orange coloured nozzle.

501-U - Turbo hammer low-volume sprinkler

Features and Specifications

- Turbo hammer low-volume sprinkler for Rainport™ - MS.
- Excellent water distribution.
- Fine water droplets for delicate irrigation of all crops.
- Requires minimum maintenance.
- Full circle.
- Uniform distribution.
- Minimum operating pressure 1.5 kg/cm² (21.33 psi).
- 1/2" BSP female/male threaded inlet.
- Minimum filtration requirement - 100 micron.

Applications

- Overhead irrigation for extra-range spacings up to 8 m.
- Can also be used for undertree irrigation.
- Recommended for vegetables, nurseries, etc.

Technical Specifications

Nozzle, mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)				
				6 x 6	6 x 7	7 x 7	7 x 8	8 x 8
1.6	1.5	0.100	12.0	2.8	2.4	2.0	1.8	1.6
Red	2.0	0.110	12.0	3.1	2.6	2.2	2.0	1.7
	2.5	0.130	12.0	3.6	3.1	2.7	2.3	2.0
	3.0	0.150	12.0	4.2	3.6	3.1	2.7	2.3
	3.5	0.165	12.5	4.6	3.9	3.4	2.9	2.6
1.8*	1.5	0.150	12.0	4.2	3.6	3.1	2.7	2.3
Green	2.0	0.170	13.0	4.7	4.0	3.5	3.0	2.7
	2.5	0.190	13.0	5.0	4.5	3.9	3.4	3.0
	3.0	0.210	14.0	5.8	5.0	4.3	3.8	3.3
	3.5	0.230	14.0	6.4	5.5	4.7	4.1	3.6
2.0	1.5	0.160	12.0	4.4	3.8	3.3	2.9	2.5
Blue	2.0	0.180	13.0	5.0	4.3	3.7	3.2	2.8
	2.5	0.200	13.0	5.6	4.8	4.1	3.6	3.1
	3.0	0.220	14.0	6.1	5.2	4.5	3.9	3.4
	3.5	0.240	14.0	6.7	5.7	4.9	4.3	3.8
2.2	1.5	0.170	13.5	4.7	4.0	3.5	3.0	2.7
Yellow	2.0	0.200	15.0	5.6	4.8	4.1	3.6	3.1
	2.5	0.215	15.0	6.0	5.1	4.4	3.8	3.4
	3.0	0.235	15.5	6.5	5.6	4.8	4.2	3.7
	3.5	0.250	15.5	6.9	6.0	5.1	4.5	3.9

* Standard nozzle

Colour code - Distribution uniformity

CU < 85% | CU = 85-88% | CU = 88-92% | CU > 92%

Ordering Specifications

X	XXXXXXX		Nozzle colour	Nozzle Size, mm
	501-U female threaded	501-U male threaded		
D - Domestic order (within India) E - Export order (outside India)	5151616	5151516	Red	1.6
	5151618	5151518	Green	1.8
	5151620	5151520	Blue	2.0
	5151622	5151522	Yellow	2.2

Example: D515518 - This code represents 501-U male threaded sprinkler with green nozzle.

502-H - Turbo hammer Medium-volume sprinkler

Features and Specifications

- Turbo hammer medium-volume sprinkler mounted on Rainport™ - PS assemblies.
- Excellent water distribution.
- Fine water droplets for delicate irrigation of all crops.
- 1/2"BSP male threaded connection.
- Full circle.
- Minimum filtration requirement - 100 micron.

Application

- Overhead irrigation for extra-range spacings up to 10 m.

Performance Table

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)				
				8 x 8	8 x 9	9 x 9	9 x 10	10 x 10
2.5	1.5	0.226	13.0	3.5	3.1	2.8	2.5	2.3
Red	2.0	0.263	15.0	4.1	3.5	3.2	2.9	2.6
	2.5	0.292	15.5	4.6	4.0	3.6	3.2	2.9
	3.0	0.318	16.5	5.0	4.4	3.9	3.5	3.2
	3.5	0.345	17.0	5.4	4.8	4.2	3.8	3.4

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications

X	5152105
D - Domestic order (within India) E - Export order (outside India)	

5022-U & 5022

Features and Specifications

- Light weight, plastic construction with minimum metal parts.
- Stainless steel retraction spring maintains uniform rotation speed.
- Used with Rainport™ - PS assembly.
- 1/2" Male threaded inlet connection.
- Full circle.
- Flexibility in selection, four colour coded nozzles.
- Optional sand protection cover to protect the spring from sand.
- Bayonet nozzle for easy service.
- Uniform water distribution.

Applications

- Primary applications: overhead irrigation for extra-range spacings up to 12 m.
- Recommended for closely spaced field crops like potato, leafy vegetables, cotton, oil seeds, pulses, cereals, fodder crops, etc.

Performance Table 5022U

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)					
				9x9	9x10	10x10	9x12	10x12	12x12
2.4	2.5	0.360	19.0	4.4	4.0	3.6	3.3	3.0	2.5
Yellow	3.0	0.390	19.0	4.8	4.3	3.9	3.6	3.2	2.7
(square nozzle)	3.5	0.430	19.0	5.3	4.8	4.3	4.0	3.6	3.0
	4.0	0.460	19.0	5.7	5.1	4.6	4.3	3.8	3.2
2.3 x 1.8	2.5	0.520	22.0	6.5	5.8	5.3	4.9	4.4	3.6
Silver x green	3.0	0.580	22.0	7.2	6.4	5.8	5.4	4.8	4.0
	3.5	0.620	22.0	7.7	6.9	6.2	5.7	5.2	4.3
	4.0	0.670	22.0	8.3	7.4	6.7	6.2	5.6	4.7
2.4 x 1.8	2.5	0.520	20.0	6.5	5.8	5.3	4.9	4.4	3.6
yellow x green	3.0	0.560	20.0	6.9	6.2	5.6	5.2	4.7	3.9
(square nozzle)	3.5	0.620	20.0	7.7	6.9	6.2	5.7	5.2	4.3
	4.0	0.650	20.0	8.0	7.2	6.5	6.0	5.4	4.5
2.5 x 1.8	2.5	0.560	21.0	6.9	6.2	5.6	5.2	4.7	3.9
Purple x green	3.0	0.620	21.0	7.6	6.9	6.2	5.7	5.2	4.3
	3.5	0.670	22.0	8.3	7.4	6.7	6.2	5.6	4.6
	4.0	0.720	22.0	8.9	8.0	7.2	6.7	6.0	5.0

Performance Table 5022

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)				
				10x10	10x12	12x12	12x14	14x14
2.8 x 1.8	2.5	0.690	22.0	6.9	5.8	4.8	4.1	3.5
Orange x Green	3.0	0.760	22.0	7.6	6.3	5.3	4.5	3.9
	3.5	0.820	22.0	8.2	6.8	5.7	4.9	4.2
	4.0	0.860	22.0	8.6	7.2	6.0	5.1	4.4
3.0 x 1.8	2.5	0.760	22.0	7.6	6.3	5.3	4.5	3.9
Red x Green	3.0	0.840	23.0	8.4	7.0	5.8	5.0	4.3
	3.5	0.900	23.0	9.0	7.5	6.3	5.4	4.6
	4.0	0.970	23.0	9.7	8.1	6.7	5.8	4.9
3.2 x 1.8*	2.5	0.820	23.0	8.2	6.8	5.7	4.9	4.2
Green x Green	3.0	0.900	24.0	9.0	7.5	6.3	5.4	4.6
	3.5	0.980	24.0	9.8	8.2	6.8	5.8	5.0
	4.0	1.40	24.0	10.4	8.7	7.2	6.2	5.3
3.5 x 2.5	2.5	1.060	24.5	10.6	8.8	7.4	6.3	5.4
Blue x Gray	3.0	1.160	25.0	11.6	9.7	8.1	6.9	5.9
	3.5	1.240	25.5	12.4	10.3	8.6	7.4	6.3
	4.0	1.330	26.0	13.3	11.1	9.2	7.9	6.8
4.0 x 2.5	2.5	1.260	25.0	12.6	10.5	8.7	7.5	6.4
Black x Gray	3.0	1.380	25.5	13.8	11.5	9.6	8.2	7.0
	3.5	1.480	26.0	14.8	12.3	10.3	8.8	7.5
	4.0	1.580	26.5	15.8	13.2	11.0	9.4	8.1

* Standard nozzle

Rear nozzle colour: 1.8mm, light green; 2.5 mm, gray

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications - 5022U

X	XXXXXXX
D - Domestic order (within India) E - Export order (outside India)	5152901 - 5022-U sprinkler with single yellow nozzle
	5152910 - 5022-U sprinkler with dual nozzle, 2.3 x 1.8mm
	5152911 - 5022-U sprinkler with dual nozzle, 2.4 x 1.8mm
	5152913 - 5022-U sprinkler with dual nozzle, 2.5 x 1.8mm

Example: D5152911 - This code represents 5022-U sprinkler with dual nozzle of 2.4 x 1.8 mm.

Ordering Specifications - 5022

Code	Nozzle Color	Single Nozzle, mm	Code	Dual Nozzle*, mm
D5152700	Silver	2.3	NA	NA
D5152701	Purple	2.5	NA	NA
D5152702	Orange	2.8	D5152722	2.8 x 1.8
D5152703	Red	3.0	D5152723	3.0 x 1.8
D5152704	Green	3.2	D5152724	3.2 x 1.8
D5152705	Blue	3.5	D5152715	3.5 x 2.5
D5152706	Black	4.0	D5152716	4.0 x 2.5

Example: D5152722 - This code represents 5022 sprinkler with dual nozzle of 2.8 x 1.8 mm.
Note: For sales order outside India add 'E' instead of 'D' in the above mentioned ordering code.
e.g. for ordering 5022 sprinkler dual nozzle 2.8 x 1.8mm change the code as E5152722.

Performance Table - Single Nozzle

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
2.3	2.0	0.330	21.5
Gray	3.0	0.390	22.0
	4.0	0.460	22.0
2.5	2.0	0.350	21.5
Purple	3.0	0.430	22.0
	4.0	0.490	22.0
2.8	2.0	0.450	22.0
Orange	3.0	0.550	23.0
	4.0	0.630	24.0
3.0	2.0	0.510	23.0
Red	3.0	0.530	24.5
	4.0	0.720	25.0
3.2*	2.0	0.570	23.5
Green	3.0	0.700	24.5
	4.0	0.810	25.0
3.5	2.0	0.660	25.0
Blue	3.0	0.810	26.0
	4.0	0.930	26.0
4.0	2.0	0.850	24.0
Black	3.0	1.030	26.0
	4.0	1.180	26.0

* Standard nozzle

427B / 427B AG

Features and Specifications

- Full and part circle plastic impact sprinkler, 1/2” male or 3/4” female.
- High water distribution with spacing up to 14 m.
- Colour-coded bayonet nozzles for easy service.
- Integrated stream-straightening vane for maximum range.
- High impact heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation.
- For efficient irrigation of field edges.
- On demand, can also be supplied with deflector shield and diffuser screw control distance and stream pattern (427B).
- User friendly, finger tip adjustment to full or part circle mechanism.

Applications

- Recommended for irrigation and germination of leafy vegetables, potatoes, flowers and nursery crops, etc.
- Used with Rainport™ - PS assembly.

Technical Specifications

Nozzle, mm	Pressure, kg/cm²	Discharge, m³/h	Diameter, m
2.8 Orange	2.0 3.0 4.0	0.450 0.550 0.630	22 23 24
3.0 Red	2.0 3.0 4.0	0.510 0.630 0.720	23 24 25
3.2 Green	2.0 3.0 4.0	0.570 0.700 0.810	23 24 26
3.5 Blue	2.0 3.0 4.0	0.660 0.810 0.930	23 24 26
4.0* Black	2.0 3.0 4.0	0.850 1.030 1.180	24 26 26

** Standard nozzle*

Ordering Specifications

X	XXXXXXX				Nozzle Colour	Nozzle Size, mm
	427B AG		427B			
	½” Male Base	¾” Female Base	½” Male Base	¾” Female Base		
D - Domestic order (within India) E - Export order (outside India)	5146528	5146628	5146028	5146128	Orange	2.8
	5146530	5146630	5146030	5146130	Red	3.0
	5146532	5146632	5146032	5146132	Green	3.2
	5146535	5146635	5146035	5146135	Blue	3.5
	5146540	5146640	5146040	5146140	Black	4.0

Example: D5146528 - This code represents 427B AG part circle sprinkler with orange nozzle.

427B AG

427B

Maestro - Impact Plastic Sprinkler 1/2”

Features and Specifications

- Unique sprinkler design for extra-range coverage.
- Low application and high uniformity ideal for germination and micro-climate.
- Special water path improves coverage diameter.
- VTD (Variable Trajectory Drive) covering near sprinkler areas and far areas properly hence provides excellent uniformity.
- Higher resistance to wind .
- Solid construction with full protection of spring and axle area
- Tool-free nozzle dismantling.

Application

- overhead irrigation for extra-range spacingsup to 15 m.

Technical Specifications - Maestro

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) spacing (m)					
				10x12	12x12	12x14	12x15	14x14	15x15
3.0 Red	2.5	0.560	23.0	4.7	3.9	3.3	3.1	2.9	2.5
	3.0	0.615	24.0	5.1	4.3	3.7	3.4	3.1	2.7
	3.5	0.660	24.0	5.5	4.6	3.9	3.7	3.4	2.9
	4.0	0.710	24.0	5.9	4.9	4.2	3.9	3.6	3.2
3.2 Green	2.5	0.630	24.0	5.3	4.4	3.8	3.5	3.2	2.8
	3.0	0.700	24.2	5.8	4.9	4.2	3.9	3.6	3.1
	3.5	0.750	24.2	6.3	5.2	4.5	4.2	3.8	3.3
	4.0	0.805	24.2	6.7	5.6	4.8	4.5	4.1	3.6
3.5 Blue*	2.5	0.755	24.5	6.3	5.2	4.5	4.2	3.9	3.4
	3.0	0.830	25.2	6.9	5.8	4.9	4.6	4.2	3.7
	3.5	0.895	25.2	7.5	6.2	5.3	5.0	4.6	4.0
	4.0	0.955	26.0	8.0	6.6	5.7	5.3	4.9	4.2

* Standard nozzle

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications

Code	Nozzle Size mm
D5162030	3.0
D5162032	3.2
D5162035	3.5*

5024 - Impact Plastic Sprinkler 1/2”

Features and Specifications

- Low-volume, low-angle undertree plastic impact sprinkler, 1/2” male.
- 9˚, 12˚ and 14˚ with nozzle replacement only .
- Colour-coded bayonet nozzle for easy service.
- Integrated stream-straightening vane for maximum range.
- High impact heavy-duty plastic materials provide resistance to corrosion, chemicals and UV.

Application

- Undertree, Bananas,Vineyards, Orcherds and plantations.

Technical Specifications - 5024

			9°		12°		14°	
Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	msh cm	Diameter m	msh cm	Diameter m	msh cm
2.5 Purple	2.0	0.35	15.5	74	16.5	100	18.0	117
	3.0	0.43	17.0		18.5		19.0	
	4.0	0.49	17.5		20.0		20.0	
2.8* Orange	2.0	0.45	16.0	75	18.5	110	18.5	125
	3.0	0.55	17.5		20.0		19.5	
	4.0	0.63	18.0		21.0		21.0	
3.0 Red	2.0	0.51	16.5	76	18.5	120	19.0	130
	3.0	0.63	18.0		20.5		20.5	
	4.0	0.72	18.0		21.5		21.5	
3.2 Green	2.0	0.57	17.5	77	18.5	122	19.0	135
	3.0	0.70	18.5		20.5		21.0	
	4.0	0.81	18.5		22.0		22.5	
3.5 Blue	2.0	0.66	17.5	84	18.5	125	19.0	140
	3.0	0.81	18.5		20.5		21.0	
	4.0	0.93	19.5		22.0		22.5	

* Standard nozzle

msh - max stream height.

Ordering Specifications

Nozzle mm	9° Nozzle	12° Nozzle	14° Nozzle
2.5	D5152531	D5152551	D5152541
2.8	D5152532	D5152552	D5152542
3.0	D5152533	D5152553	D5152543
3.2	D5152534	D5152554	D5152544
3.5	D5152535	D5152555	NA

Mamkad 16 -Plastic ball sprinkler, 1/2 male

Features and Specifications

- Low-volume Overhead & undertree plastic ball - driven sprinkler, 1/2" male.
- Compact, sturdy closed protected ball engine.
- Uniform water distribution at low pressure and precipitation rate.
- Colour-coded plastic high & low-trajectory nozzles for easy operation and service.
- Extra-strong plastic compounds ceramic washers for minimal ware and tear.
- Insect-proof pop-up, pop-down nozzle
- Optional flow regulator
- Operating pressure :
  2.0-4.0 bar w/o regulator
  2.5-5.0 bar with regulator

Application

- For Vegetables, flowers, nurseries, greenhouses, Orchards, Vineyards and banana plantations

Technical Specifications - High trajectory nozzles

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) spacing (m)					
				6x6	6x7	7x7	7x8	8x8	8x9
Blue	2.0	135	14	3.8	3.2	2.7	2.4	2.1	
	2.5	151	14	4.2	3.6	3.1	2.7	2.5	
	3.0	165	14	4.6	3.9	3.4	2.9	2.6	
	3.5	179	13	5.0	4.2	3.7	3.2	2.8	
	4.0	191	13	5.3	4.5	3.9	3.4	3.0	
F.R.	2.5-5.0	135	13	3.8	3.4	2.9	2.5	2.2	
Yellow	2.0	180	15	5.0	4.3	3.7	3.2	2.8	
	2.5	201	14	5.6	4.8	4.1	3.6	3.1	
	3.0	220	14	6.1	5.2	4.5	3.9	3.4	2.8
	3.5	238	15	6.6	5.6	4.9	4.2	3.7	3.3
	4.0	255	14	7.1	6.1	5.2	4.5	4.0	3.5
F.R.	2.5-5.0	180	14	5.0	4.5	3.7	3.6	2.9	2.6
Violet	2.0	225	15	6.3	5.3	4.6	4.0	3.5	3.1
	2.5	252	16	7.0	6.0	5.1	4.5	3.9	3.5
	3.0	276	15	7.7	6.5	5.6	4.9	4.3	3.8
	3.5	298	15	8.3	7.0	6.1	5.3	4.7	4.1
	4.0	318	14	8.8	7.6	6.5	5.7	5.0	4.4
F.R.	2.5-5.0	225	15	6.3	5.5	4.6	4.1	3.5	3.1
Black	2.0	270	17	7.5	6.4	5.5	4.8	4.2	3.8
	2.5	302	16	8.4	7.2	6.2	5.4	4.7	4.2
	3.0	331	16	9.2	7.9	6.8	5.9	5.2	4.6
	3.5	357	16	9.9	8.5	7.3	6.4	5.6	5.0
	4.0	382	15	10.6	9.1	7.8	6.8	6.0	5.3
F.R.	2.5-5.0	270	16	7.5	6.4	5.5	4.8	4.2	3.8

F.R. = Flow Regulator

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Technical Specifications - Low trajectory nozzles

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	msh
Orange	2.0	180	12	60
	3.0	220	12	60
	4.0	255	12	60
F.R.	2.5-5.0	200	12	60
Red	2.0	225	13	65
	3.0	275	13	65
	4.0	320	13	65
F.R	2.5-5.0	250	13	65

msh - max stream height.

Ordering Specifications

Code	Nozzle Colour	Flow Rate, lph
D347343	Blue	135
D347346	Yellow	180
D347344	Violet	225
D347348	Black	270
D347345	Orange	180
D347347	Red	225

Super 10

Features and Specifications

- Ball-driven, extra-range sprinkler on Rainport™ - PS system.
- Compact, sturdy, closed and protected ball engine.
- Bayonet nozzle for easy service.
- Available with flow regulated option with silver coloured base.
- Specially designed road protector is available on demand.
- High water distribution.

Application

- Overhead irrigation for extra-range spacings up to 12 m.

Performance Table

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)					
				9x9	9x10	9x12	10x10	10x12	12x12
Blue	2.5	0.360	17.0	4.4	4.0	3.3	3.6	3.0	2.5
	3.0	0.395	17.0	4.9	4.4	3.7	4.0	3.3	2.7
	3.5	0.425	16.5	5.2	4.7	3.9	4.3	3.5	3.0
	4.0	0.455	16.5	5.6	5.1	4.2	4.6	3.8	3.2
F.R.	3.0-5.0	0.335	17.0	4.1	3.7	3.1	3.3	2.8	2.3
Yellow	2.5	0.450	20.0	5.6	5.0	4.2	4.5	3.8	3.1
	3.0	0.495	20.0	6.1	5.5	4.6	5.0	4.1	3.4
	3.5	0.530	20.0	6.5	5.9	4.9	5.3	4.4	3.7
	4.0	0.570	20.0	7.0	6.3	5.3	5.7	4.8	4.0
F.R.	3.0-5.0	0.450	20.0	5.6	5.0	4.2	4.5	3.8	3.1
Green	2.5	0.550	20.0	6.8	6.1	5.1	5.5	4.6	3.8
	3.0	0.600	20.0	7.4	6.7	5.6	6.0	5.0	4.2
	3.5	0.650	20.0	8.0	7.2	6.0	6.5	5.4	4.5
	4.0	0.695	20.0	8.6	7.7	6.4	7.0	5.8	4.8
F.R.	3.0-5.0	0.550	20.0	6.8	6.1	5.1	5.5	4.6	3.8
Red	2.5	0.650	21.0	7.9	7.1	5.9	6.4	5.3	4.4
	3.0	0.710	21.0	8.7	7.8	6.5	7.0	5.9	4.9
	3.5	0.770	21.0	9.4	8.5	7.1	7.6	6.4	5.3
	4.0	0.820	21.0	10.1	9.1	7.6	8.2	6.8	5.7
F.R.	3.0-5.0	0.650	21.0	7.9	7.1	5.9	6.4	5.3	4.5

F.R. = Flow Regulator

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Performance Table for brown nozzle for Road Protector only

Nozzle mm	Pressure, kg/cm²	Discharge, m³/h	Diameter, m
Brown	2.5	0.320	16.0
	3.0	0.350	16.0
	3.5	0.380	16.0
	4.0	0.405	16.0
F.R.	3.0-5.0	0.320	16.0

Ordering Specifications

X	XXXXXX	Nozzle Colour	Flow Rate, lph
D - Domestic order (within India) E - Export order (outside India)	335443	Blue	360
	335446	Yellow	450
	335442	Green	550
	335447	Red	670
	335440*	Brown	320

Example: D335446 - This code represents Super 10 sprinkler with yellow nozzle.

** Super 10, Brown nozzle 320 lph for road protector*

Note: Super 10 with Low angel nozzle can be supplied on demand.

Regulated *Road Protector*

RAINPORT™ ASSEMBLIES

Rainport is an ultimate sprinkler irrigation system which overcomes all the limitations of conventional sprinkler/mini sprinkler irrigation system and yet meets the high standards of effective irrigation principles such as,

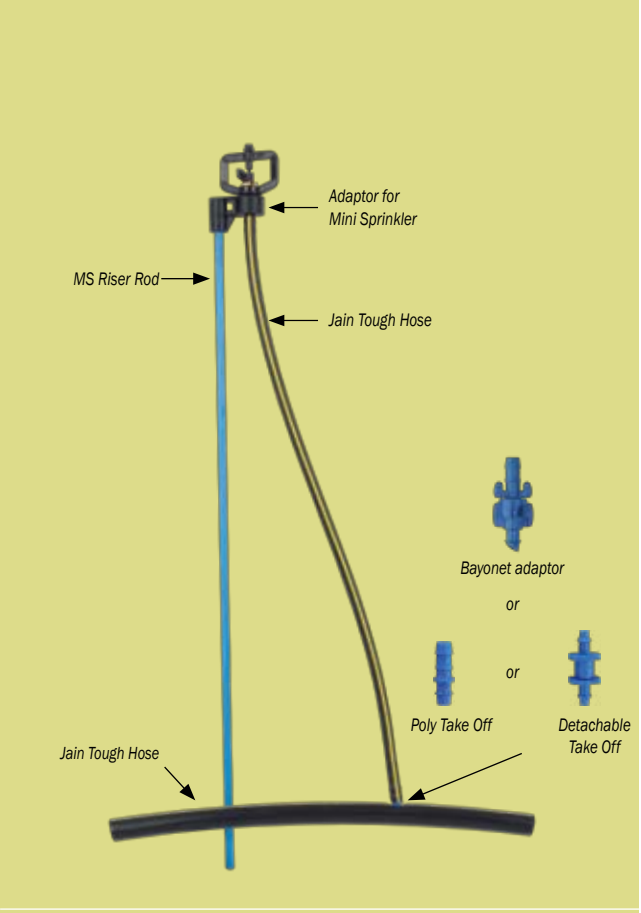
- High distribution uniformity.
- Controlled application rate.
- Gentle precipitation, low droplet impact on soil structure and no foliage damage.
- Short irrigation cycles to provide optimal growing conditions with highly accessible water and nutrient in controlled wetted and aerated soil profile.

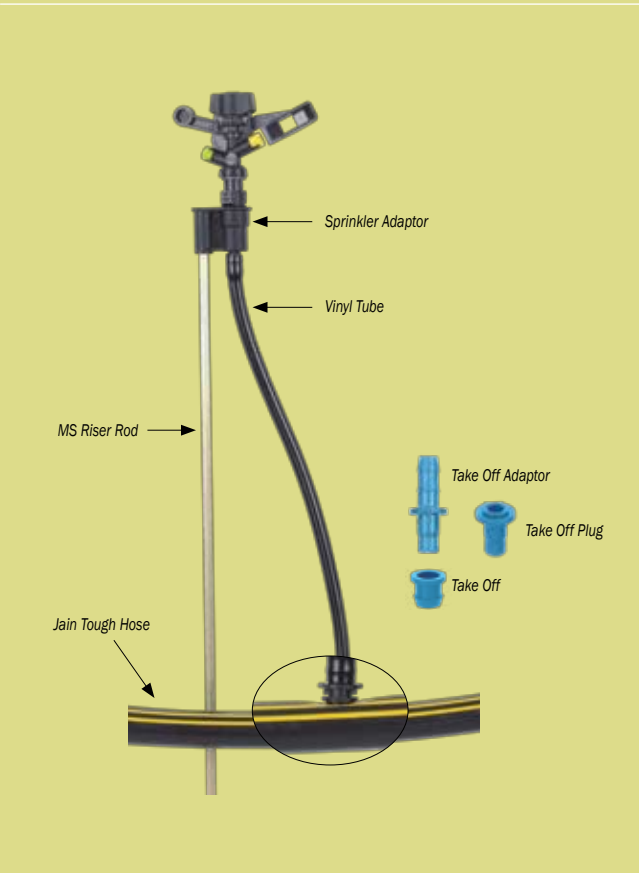
Features and Specifications

- Portable, can be quickly shifted from one place to other.
- Easy to roll back and relay.
- Energy efficient.
- Labour saving.
- Economical, low initial and operational costs.
- Savings in water and fertilizers.
- Helps to increase effective area under irrigation.
- Improves crop quality and gross yield.
- Flexibility in selection of sprinkler/mini sprinkler nozzles on the basis of required discharge, radius or precipitation rate.
- Available in two types,
  - Rainport™ MS - to be used with low/medium discharge (up to 200 lph) sprinkler/mini sprinkler.
  - Rainport™ PS - to be used with high discharge (more than 200 lph) plastic sprinklers.
- Supplied as an assembly including PE/Vinyl tubing, connector set, M.S. rod of required length.

Applications

- Recommended for the irrigation of open field crops like potato, leafy vegetables, cotton, oil seeds, pulses, cereals, etc.
- Specially suitable for light, sandy soil.





Selection Chart for Rainport™ MS Assemblies

Tubing	Rod Diameter, mm	Recommended sprinkler/mini sprinkler	Connector set
8 mm OD Jain Tough Hose	6	J-Mini Sprinkler, Acu-Spinner, 2002 AquaSmart, 2005 AquaMaster	DAMSM8 - Adaptor for mini sprinkler 8 mm OD DBT00804 - Take off for 8 mm OD PE tube
		Modular group (without static and inverted swivel), 2002AquaSmart, 2005 AquaMaster	DAMSM8PF - Push fit adaptor for modular sprinkler DBT00804 - Take off for 8 mm OD PE tube
8 mm OD Jain Tough Hose	6	Modular group (without static and inverted swivel), 2002AquaSmart, 2005 AquaMaster	DBB8P - Butterfly adaptor for modular sprinkler DBT00804 - Take off for 8 mm OD PE tube or DBFT - Bayonet Female Take off & DBMTA8 - Bayonet Male Take off Adaptor 8 mm or DTGAD - Detachable Take off assembly
8 mm OD Jain Tough Hose	8	501U	DHTA12P8 - Adaptor for 501U DBT00804 - Take off for 8 mm OD PE tube
12mm OD Jain Tough Hose	6	J-Mini Sprinkler, Acu-Spinner, 501U (male threaded), 2005 Aquamaster	DAMSM12 - Adaptor for mini sprinkler 12 mm OD DBT01204 - Take off for 12 mm OD PE tube

J-Mini Sprinkler

501

Modular Sprinkler

Selection Chart for Rainport™ PS Assemblies

Tubing	Rod Diameter, mm	Recommended sprinkler/mini sprinkler	Connector set
12/8 mm Vinyl Tube	8	5022U, 502H, 427B AG, Super 10	DHTA1208V - Sprinkler adaptor for 12/8 mm Vinyl tube DHT012V - Take off DHTOA1208V - Take off adaptor for 12/8 mm Vinyl tube

Super 10

502H

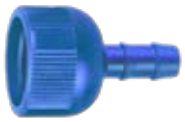
427B AG

Rainport™ - MS Fittings

Adaptor for Mini Sprinkler

Size mm	Code
08 OD	DAMSM8
12 OD	DAMSM12
Push-fit Adaptor for Modular Sprinkler	DAMSM8PF

Polybarbed Mini Sprinkler Adaptor:



Size mm	Code
08 OD	DMSAB6

Poly Take Off

Outlet Tube Size mm	Code
08 OD	DBT00804
12 OD	DBT01204

8 mm Polybarbed Joiner

Size mm	Code
08 OD	DJ008

8 mm Adaptor for 501

Size	Code
1/2" Female Threaded x 8 mm OD Extension Tube	DHTA12P8

8 mm Male Adaptor

Tube Size mm	Code
08 OD	DATGS

8 mm Female Adaptor

Tube Size mm	Code
08 OD	DACTGS

8 mm Detachable take off assembly

Tube Size mm	Code
08 OD	DTGAD

Butterfly adaptor for Modular Sprinkler

Suitability	Code
06 OD	DBB6P
08 OD	DBB8P

Bayonet female take off

Suitability	Code
6mmOD / 8mmOD bayonet male take off adaptor x Jain Tough Hose	DBFT

Bayonet male take off adaptor

Tube Size mm	Code
06 OD	DBMTA6
08 OD	DBMTA8

Bayonet take off plug

Suitability	Code
Bayonet female take off	DBTP

Rainport™ - PS Fittings

Take Off

Suitability	Code
12/8 mm or 13/9 mm Take Off Adaptor x Jain Tough Hose 25-32mm	DHTO12V

Take Off Adaptor

Suitability	Code
12/8 mm Vinyl Tube x Take Off	DHTOA8V
13/9 Vinyl Tube x Take Off	DHTOA9V

Take Off Plug

Suitability	Code
12/8 mm Take Off	DHTP

Sprinkler Adaptor

Suitability	Code
½" Plastic Sprinkler x 12/8 mm Vinyl tube	DHTA1208V
½" Plastic Sprinkler x 13/9 mm Vinyl tube	DHTA1209V

½" x ¾" Adaptor

Suitability	Code
To convert ½" male adaptor to ¾" Female adaptor for 5035	DHTAF1234

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering 8 mm adaptor for mini sprinkler change the code as EAMSM8 instead of DAMSM8.

Poly Compression Fittings

Features and Specifications

- Manufactured from tough engineering plastic.
- EPDM 'O' rings for positive sealing.
- Sharp barbed split rings for positive grip.
- Fast and easy leakproof connection.
- Fits to outer diameter of Jain Tough Hose of 20, 25 and 32 mm OD.
- Non corrosive & resistant to most of the chemicals.

Male Threaded Adaptor

Code	Size mm
DCMTA20012C1	20x0.50"
DCMTA20034C1	20x0.75"
DCMTA25034C1	25x0.75"
DCMTA32100C1	32x1"

End Cap

Code	Size mm
DCEC20C1	20
DCEC25C1	25
DCEC32C1	32

Elbow

Code	Size mm
DCE20C1	20
DCE25C1	25
DCE32C1	32

Compression Threaded Elbow

Code	Size mm
DCMTE20C1	20
DCMTE25C1	25
DCMTE32C1	32

Joiner

Code	Size mm
DCJ20C1	20
DCJ25C1	25
DCJ32C1	32

Compression Female Adaptor

Code	Size mm
DCFA20C1	20
DCFA25C1	25
DCFA32C1	32

Tee

Code	Size mm
DCT20C1	20
DCT25C1	25
DCT32C1	32

Jain Ball Valves™ - SU Compression

Code	Nominal Diameter mm
DSUV20HFC	20
DSUV25HFC	25
DSUV32HFC	32

Compression x Threaded Tee

Code	Size mm
DCTT20C1	20
DCTT25C1	25
DCTT32C1	32

Tools and Accessories for Rainport™

Rainport™ - Quick Drill

Suitability	Code
Hole size 7.5 mm x Polyethylene Hose and Tube	DQDS75

Note: Any other punch size can be supplied on demand.

Rainport™ - Simple Hose Punch

Suitability	Code
Hole size 7.5 mm x Jain Tough Hose	DSPR4
Hole size 3 mm x Jain Tough Hose	DSPR3

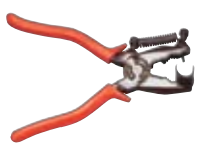
Trigger

Suitability	Code
Multifunctional tool used for cutting, punching hole and insertion	DTRIGGER

Universal Punch

Suitability	Code
12 - 32 mm Jain Tough Hose - 3mm hole	DUP1232

Plier Punch



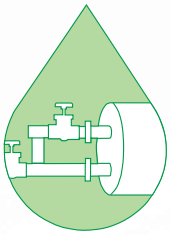
Punch Dia. mm	Code
3.9	DPTS2

Quick Cut

Suitability	Code
16 and 20 mm Jain Tough Hose - 3mm hole	DQC1620

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering compression male threaded adaptor 32 mm x 1" change the code as ECMTA32100C1 instead of DCMTA32100C1.

Filtration Equipment



Sand Separator

Jain Hydrocyclone Filter

Screen Filters

Jain Super Flow®

Smart-Clean™

Super-Clean®

Disclean®

Turbo-Clean®

Spin Clean®

Rotoclean™

Media Filters & Manifolds

Clean-Master®

Filtro-Master™

Filt-O-Clean®

Manifolds & Headers

SAND SEPARATOR

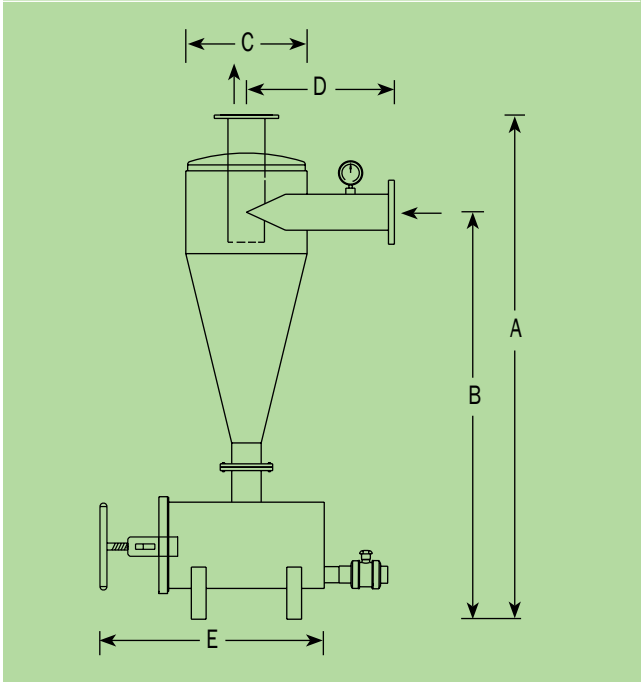
Jain Hydrocyclone Filter - Deluxe

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Hydrodynamically designed to create maximum centrifugal action to separate particles heavier than water.
- Efficiently removes fine sand and silt particles of size higher than 75 microns and specific gravity more than 2.65.
- Special protection plate are provided at the bottom of the cone to prevent wearing.
- Large volume of dirt collection chamber increases flushing interval.
- Dirt can be easily flushed out through dirt collection chamber.
- Available in maximum operating pressure of 10 kg/cm² (142 psi).
- Standard end connections are BSP flanged. Please specify for other end connections. (ANSI flanged or Easy-Fix™)
- Recommended to install before media/screen filters to remove particles heavier than water.
- Improves operational efficiency & life of media / screen filters.
- Can also be supplied in stainless steel as a special order.
- Can be supplied in higher flow capacities in multiple batteries option.

Application

- Used in micro irrigation systems to remove sand and silt particles from irrigation water.



Technical Specifications

*Reference Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	E	Vol. of coll. chamber	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	mm	litres	kg	lbs
DJHFX025	25	110	2"	1065	865	204	198	460	5	36	79.2
DJHFX040	40	176	2½"	1365	1112	264	258	520	10	48	105.6
DJHFX050	50	220	3"	1575	1350	323	317	520	10	60	132.0
DJHFX080	80	352	4"	1950	1745	402	396	500	49	89	195.8
DJHFX120	120	528	6"	2850	2275	600	594	500	78	151	332.2

** For detailed code, please refer the ordering specifications.*

Ordering Specifications

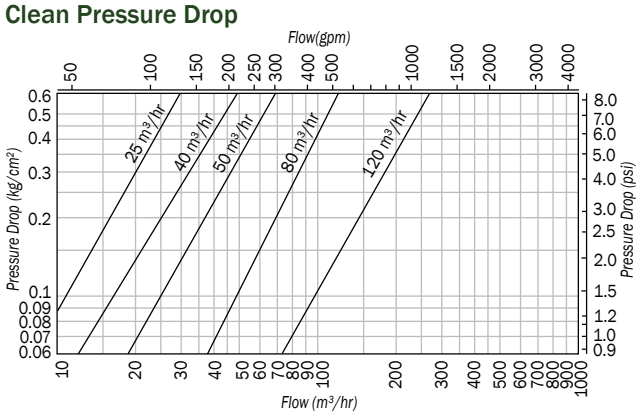
X	JHF	X	XXX
		Material	Nominal Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)		M - Mild Steel S - Stainless Steel	025
			040
			050
			080
			120

Example: DJHFM025 - This code represents Jain Hydrocyclone Filter - Deluxe with mild steel construction having 25 m³/hr nominal flow capacity.

Note: • Jain Hydrocyclone Filter of any other size, flow capacity or end connections can be supplied On demand.

• Jain Hydrocyclone Filter can be supplied in Autoflush option. Please specify code as DJHFM025A instead of DJHFM025.

Clean Pressure Drop



Note: Tested under standard testing conditions.

SCREEN FILTERS

Jain Super Flow® - Screen Filter

Features and Specifications

- Manufactured from reinforced engineering plastic material.
- Available in various sizes from ¾" to 2" BSPT & NPT male threaded inlet & outlet and flow rates ranging from 3 to 25 m³/hr (13 to 110 gpm).
- Easy to open and clean.
- Different filtration element options offers flexibility in selection of filters.
  - Unique 'Smart-Clean' element, assures high performance and effective filtration.
  - Turbo-Clean element, works on cylindrical vortex flow to offer efficient filtration and online flushing.
  - Plastic element with stainless steel mesh, to give maximum filtration area (for 3 & 7 m³/hr filters).
  - Plastic element with polymer mesh, economical element with high filtration efficiency (for 3 & 7 m³/hr filters).
- Available in standard mesh of 100 micron size. (other mesh sizes available On demand).
- Maximum operating pressure - 6 kg/cm² (85 psi).
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- On demand, Jain Super Flow can also be supplied with automatic flushing option.

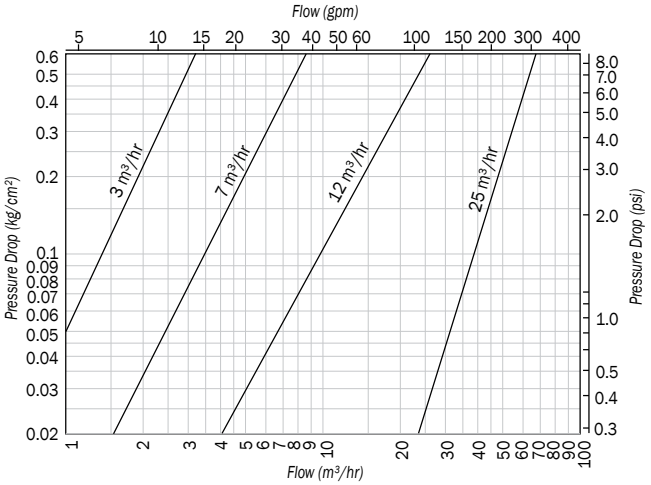
Application

- Ideal for water filtration of micro irrigation systems, landscape irrigation systems and home gardens.

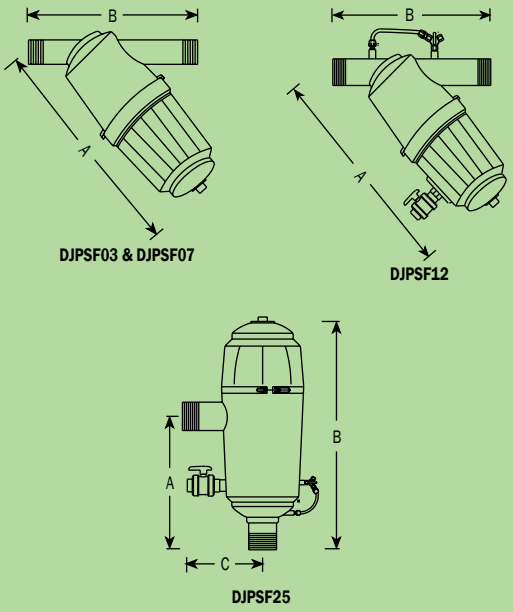
Technical Specifications

Reference Code	Nominal Flow Rate		Inlet / Outlet Connection	A	B	C	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	m²	kg	lbs
DJPSF03	3	13	¾"	180	120	–	0.014	0.20	0.4
DJPSF07	7	31	1"	180	120	–	0.014	0.25	0.5
DJPSF12	12	53	1½"	350	200	–	0.049	1.50	3.3
DJPSF25	25	110	2"	490	260	130	0.126	3.70	8.1

Clean Pressure Drop



Note: Clean pressure drop for standard 100 micron size Smart-Clean™ element, under standard testing conditions.



Ordering Specifications

X	JPSF	XX	XX
		Flow (m³/hr)	Filtering Element Option
D - Domestic order (within India) E - Export order (outside India)		03 07	TC - Turbo-Clean® filtering element MS - Plastic element with SS mesh MP - Plastic element with polymer mesh
		12	SC - Smart-Clean™ filtering element TC - Turbo-Clean® filtering element MS - Plastic element with SS mesh MP - Plastic element with polymer mesh
		25	SCE - Smart-Clean™ filtering element TCE - Turbo-Clean® filtering element

Example: DJPSF12SC - This code represents Jain Super Flow® - Screen Filter of 12 m³/hr flow capacity, fitted with Smart-Clean™ filtering element.
Note: • For automatic flushing change above code as DJPSF12SCA instead of DJPSF12SC.

Jain Super Flow® Plus

Features and Specifications

- Manufactured from special plastic alloy material which gives very high stiffness, toughness, heat and impact resistance.
- Excellent chemical and weather resistance.
- Ribbed body construction, designed to withstand water hammer and surges in the pipe line.
- Strong and smooth opening, drip-tight, stainless steel clamp closure.
- Unique 'Smart-Clean' element, assures high performance and effective filtration. (Flow direction Out to In).
- Maximum operating pressure 10 kg/cm^2 (142 psi).
- Available in standard filtration of 100 micron. (Other mesh sizes are available On demand)
- Available in 2", 2 ½"and 3" BSPT & NPT male threaded inlet & outlet and flow rates of 25, 40 and 50 m^3/hr (110, 176 and 220 gpm) respectively. Standard end connections are BSPT male threaded, please specify for NPT thread connection.
- Optional two outlet positions facilitates installation in angular or straight fashion.
- Optional vortex plate can be provided to create vortex flow within the filter as an effect of which dirt particles are kept away from the filtering element. It helps to prolong the frequent cleaning of the filter. Please specify while spacing the orders.
- On demand, Jain Super Flow Plus can also be supplied with automatic flushing arrangement.

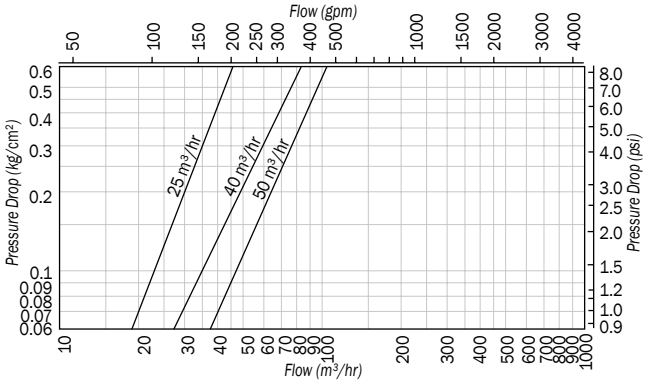
Application

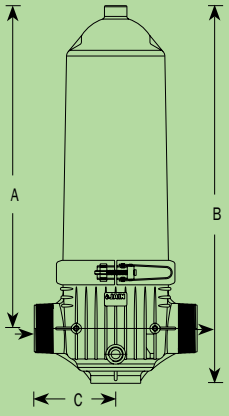
- Used for water filtration of drip & landscape irrigation system.

Technical Specifications

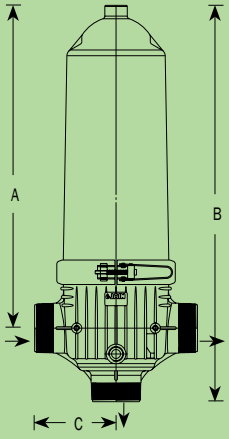
Reference Code	Nominal Flow Rate		Inlet/Outlet Connection	A	B	C	Filtration Surface Area	Gross Weight	
	m^3/hr	gpm	inch	mm	mm	mm	m^2	kg	lbs
Jain Super Flow Plus - Single Inlet/Outlet									
DJPSFP25SW	25	110	2"	460	547	135	0.126	6.25	13.8
DJPSFP40SW	40	176	2 ½"	460	547	140	0.126	6.45	14.2
DJPSFP50SW	50	220	3"	579	677	145	0.166	7.65	16.8
Jain Super Flow Plus - Single Inlet/Two Outlets									
DJPSFP25TW	25	110	2"	460	573	135	0.126	6.30	13.9
DJPSFP40TW	40	176	2 ½"	460	577	140	0.126	6.50	14.3
DJPSFP50TW	50	220	3"	579	710	145	0.166	8.00	17.6

Clean Pressure Drop: Jain Super Flow - Plus





Single Inlet / Single Outlet



Single Inlet / Two Outlets

Ordering Specifications

X	JPSFP	XX	XX
D - Domestic order (within India) E - Export order (outside India)		Flow (m^3/hr)	No. of Outlets
		25 40 50	SW - Single I/O TW - Single Inlet, two outlet

Example: DJPSFP25SW - This code represents Jain Super Flow® Plus filter of 25 m^3/hr flow capacity with single inlet/outlet option,
Note: • For automatic flushing change above code as DJPSFP25SWA instead of DJPSFP25SW.

Jain Super Flow® Plus- Multiple

Features and Specifications

- Specially designed manifolds suitable for installation of multiple units of Jain Super Flow Plus filter.
- Coated Inlet/outlet manifold with more than 70 micron deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Can also be supplied with light weight, durable HDPE manifold or chemical resistant stainless steel manifold. Please specify while placing the order.
- Equipped with high performance, durable valves which can provide consistent performance over the years.
- Standard end connections are BSP flanged. Please specify for other end connections.
- On demand, semi-automatic and fully automatic options are available.

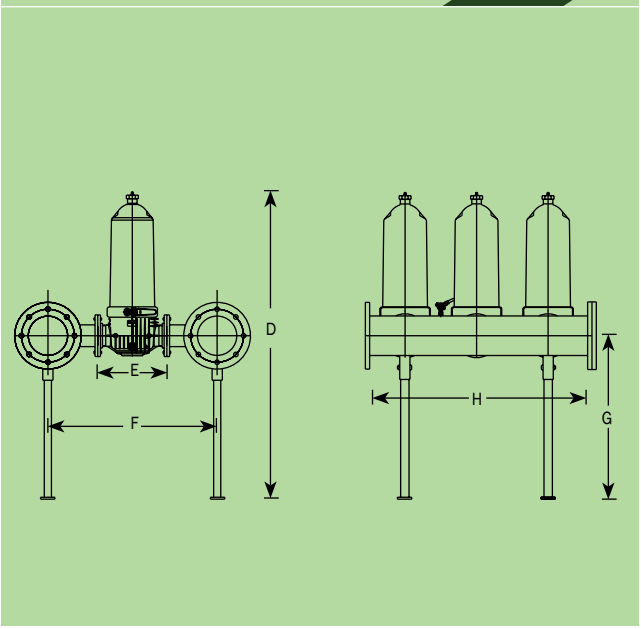
Application

- Used for water filtration of drip & landscape irrigation system of higher flow requirement.

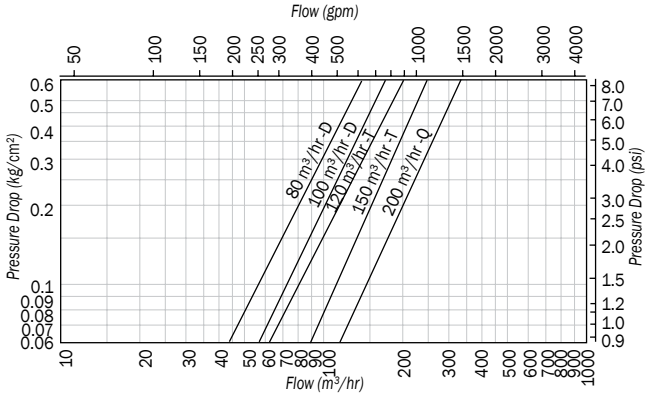
Technical Specifications

Reference Code	Nominal Flow Rate		Inlet/Outlet Connection	D	E	F	G	H	Approx. Gross weight	
	m^3/hr	gpm	inch	mm	mm	mm	mm	mm	kg	lbs
DJPSFP080DSW	80	352	4	1200	300	700	600	900	74	163
DJPSFP100DSW	100	440	4	1300	300	700	600	900	79	174
DJPSFP120TSW	120	528	6	1200	300	700	600	1200	135	297
DJPSFP150TSW	150	660	6	1300	300	700	600	1200	243	535
DJPSFP200QSW	200	880	8	1300	300	700	600	1500	247	543

Note: For dimensional specification of two outlet option, please contact.



Clean Pressure Drop: Jain Super Flow - Plus - Multiple



Ordering Specifications

X		XXX	X	XX
D - Domestic order (within India) E - Export order (outside India)	JPSFP	Flow (m^3/hr)	No. of Units	No. of outlets per unit
		080 100	D - Duplex	SW - Single I/O TW - Single Inlet, two outlet
		120 150	T - Triplex	
		200	Q- Quadraplex	

Example: DJPSFP100DSW - This code represents Jain Super Flow® Plus Filter of 100 m^3/hr flow capacity with duplex unit, manual manifold and filter unit of single Inlet-Outlet connection.

Note

- *Jain Super Flow Plus - Multiple can be supplied with any other combinations on demand.*
- *For Fully Automatic Option, please specify the code as DJPSFP100DSWA instead of DJPSFP100DSW.*

Smart-Clean™ Filtering Element

Features and Specifications

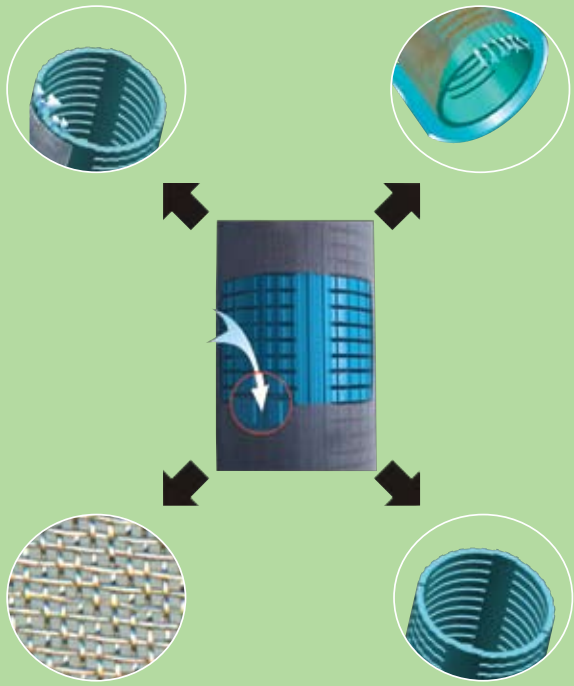
- Unique design of ribbed element to provide extra water passage to reduce pressure loss across the element which gives high filtration efficiency.
- High strength stainless steel 'Twill' mesh reduces possibility of tearing due to continuous abrasion.
- Suitable for screen filters having flow direction from outside of the element towards inside (Out to In).
- Available in standard screen size of 100 micron size. (other sizes such as 50, 74, 150, 200 microns are available On demand).

Application

- Used as a filtering element for Jain Super Flow, Super-Clean Screen filters.

Low pressure drop, *reduced contact area between element and screen helps in reduction of pressure drop.*

Delays flushing, *deep channels between the ribs provides extra water passage even if the slots are clogged due to the dirt.*



Long life twill mesh, *twill weaved stainless steel mesh provides extra strength to withstand impact of stone or any sharp object.*

Reliable, *manufactured from special PVC compound having extra toughness. Resistance to most of the chemicals and fertilizers used in agriculture.*

Super-Clean® - 'Y' Deluxe

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Equipped with Smart-Clean, Unique filtering element, to assure high performance and effective filtration.
- Available in standard mesh of 100 micron size. (other mesh sizes available On demand).
- Flow direction from outside of the element to inside (Out to In).
- Drain valve position on upper & lower sides of the body provides installation flexibility.
- Easy to open and clean.
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum operating pressure 10 kg/cm² (142 psi).
- 'Y' shaped body keeps inlet & outlet in one line.
- Standard end connections are BSP flanged. Please specify for other end connections. (ANSI flanged or Easy-Fix™)
- On demand, Super Clean filter can also be supplied with automatic flushing option.
- Super Clean filter can also be supplied in stainless steel material.
- Can be supplied in multiple batteries option.

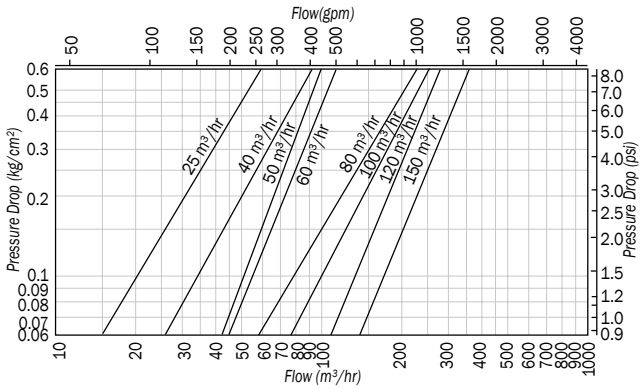
Application

- Prevents irrigation system clogging from physical contaminants.

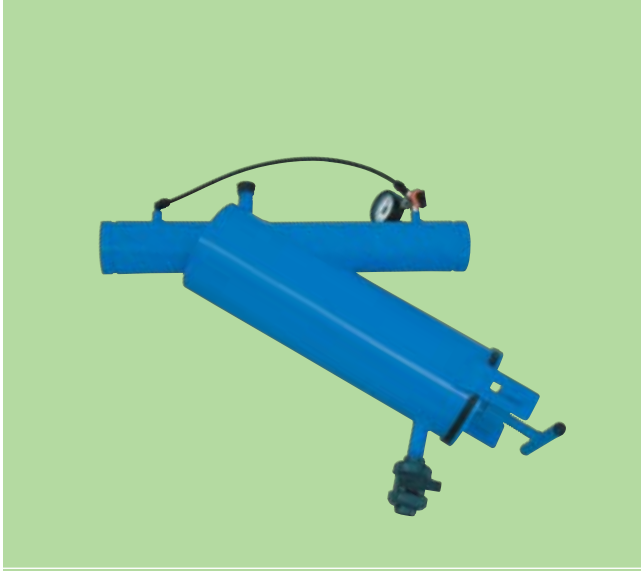
Technical Specifications

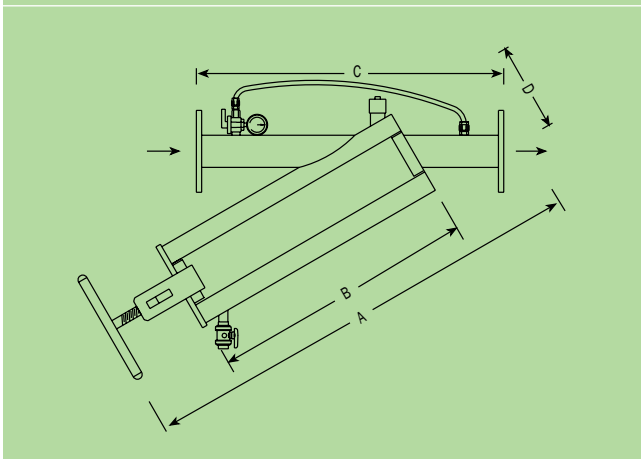
Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	m²	kg	lbs
DSCYM025	25	110	2"	595	292	530	165	0.095	16.2	35.6
DSCYM040	40	176	2½"	722	417	600	165	0.138	21.4	47.1
DSCYM050	50	220	3"	805	500	600	165	0.166	24.0	52.8
DSCYM060	60	264	4"	897	592	600	165	0.198	29.8	65.6
DSCYM080	80	352	4"	927	619	600	216	0.264	35.0	77.0
DSCYM100	100	378	4"	1077	772	600	216	0.330	40.0	88.0
DSCYM120	120	528	6"	1182	808	800	278	0.396	62.2	136.8
DSCYM150	150	567	6"	1380	1005	1000	278	0.496	74.3	163.5

Clean Pressure Drop for Super-Clean® - 'Y' Deluxe



Note: Clean pressure drop for standard 100 micron size Smart-Clean™ element under standard testing conditions.





Ordering Specifications

X	SC	Y	X	XXX
			Material	Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)			M - Mild Steel S - Stainless Steel	025 040 050 060 080 100 120 150

Example: DSCYM040 - This code represents Super-Clean® - 'Y' Deluxe type filter with mild steel construction having flow capacity 40 m³/hr and BS flanged end connection.

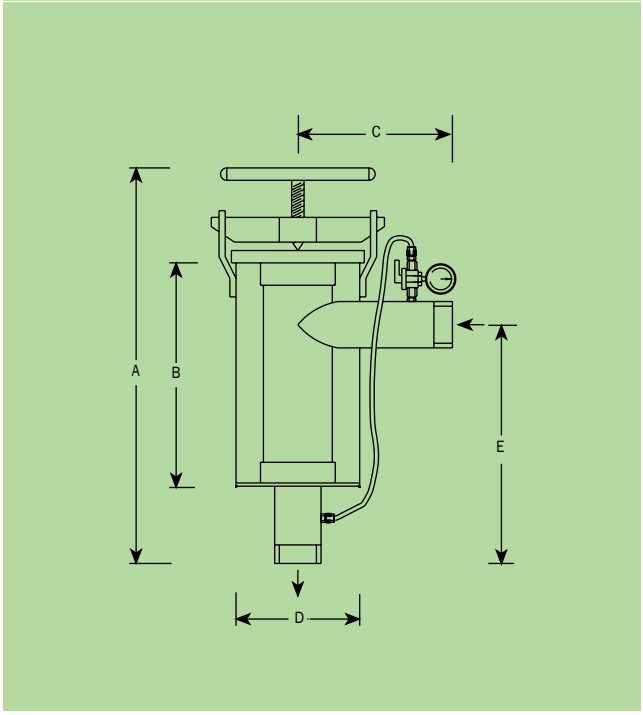
Note:

- *For automatic flushing change above code as DSCYM040A instead of DSCYM040*
- *On demand Super-Clean® - 'Y' Deluxe Type filter can be supplied in any other flow capacity or end connections.*

Super-Clean® - 'L' Deluxe

Features and Specifications

- Mild steel Construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- 'L' shaped body allows installation in angular fashion.
- Easy to open and clean.
- Tangential inlet protects the screen from direct impact of sharp/angular particles.
- Equipped with Smart-Clean™, unique filtering element, to assure high performance and effective filtration.
- Available in standard mesh of 100 micron size. (other mesh sizes available On demand).
- Flow direction from outside of the element to inside (Out to In).
- Slant drain valve position at the bottom facilitates effective flushing.
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum operating pressure 10 kg/cm² (142 psi).
- Epoxy coated stand for support and proper installation of the filter available as optional.
- Standard end connections are BSP male thread. Please specify for other end connections. (NPT male thread or Easy-Fix™)
- On demand, Super-Clean filter can also be supplied with automatic flushing option.
- Super-Clean filter can also be supplied in stainless steel body.
- Can be supplied in multiple batteries option.



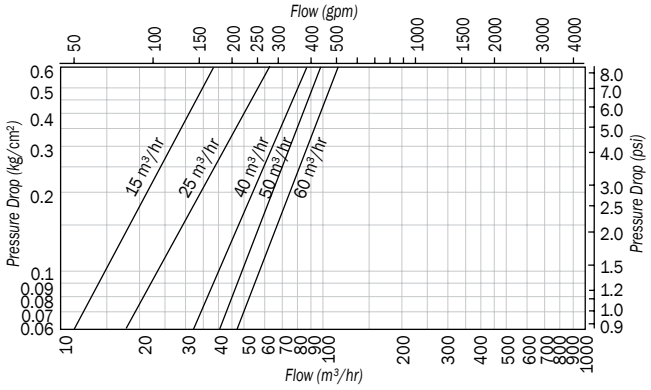
Application

- Micro & Sprinkler irrigation systems.

Technical Specifications

Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	E	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	mm	m²	kg	lbs
DSCLM150	15	66	1½"	420	160	180	165	180	0.049	10.0	22.0
DSCLM250	25	110	2"	535	292	180	165	302	0.095	14.3	31.5
DSCLM400	40	176	2½"	665	417	180	165	427	0.138	16.6	36.5
DSCLM500	50	220	3"	745	500	180	165	510	0.166	20.0	44.0
DSCLM600	60	264	4"	837	592	180	165	602	0.198	22.0	48.4

Clean Pressure Drop Super-Clean® - 'L' Deluxe



Note:
Clean pressure drop for standard 100 micron size Smart-Clean™ element under standard testing conditions.

Ordering Specifications

X	SC	L	X	XX
			Material	Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)			M-Mild Steel S-Stainless Steel	150 250 400

Example: DSCLM400 - This code represents Super-Clean® - 'L' Deluxe Type filter with mild steel construction having flow capacity 40 m³/hr.

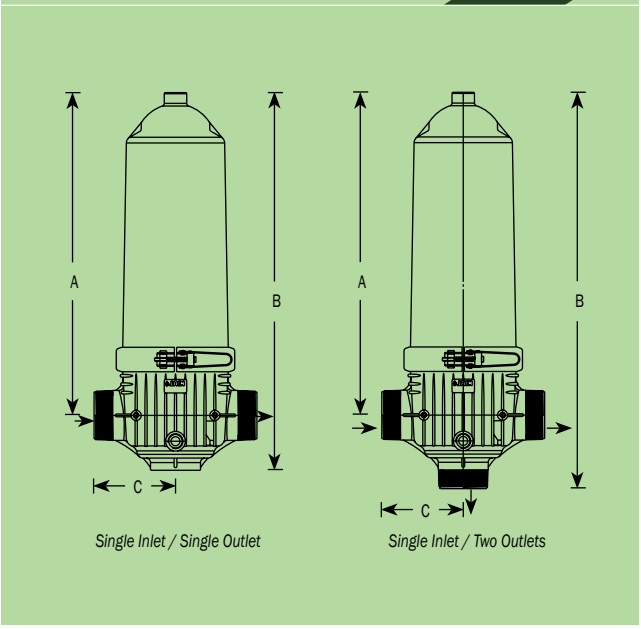
Note:

- *For automatic flushing change above code as DSCLM400A instead of DSCLM400.*
- *On demand Super Clean® - 'L' Deluxe Type filter can be supplied in any other flow capacity or end connections.*

Disclean® - PL

Features and Specifications

- Manufactured from special plastic alloy material which gives very high stiffness, toughness, heat and impact resistance.
- Excellent chemical and weather resistance.
- Ribbed body construction, designed to withstand water hammer and surges in the pipe line.
- Strong and smooth opening, drip-tight SS clamp closure.
- Disclean® element with strong, precision engineered and radially grooved disc to provide fine three dimensional filtration. (Flow direction Out to In).
- Maximum operating pressure 10 kg/cm² (142 psi).
- Available in standard filtration 130 micron. (Other mesh sizes are available On demand)
- Available in 2", 2 ½"and 3" BSPT & NPT male threaded inlet & outlet and flow rates of 25, 40 and 50 m³/hr (110, 176 and 220 gpm) respectively. Standard end connections are BSPT male threaded, please specify for NPT thread connection.
- Optional two outlet positions facilitates installation in angular or straight fashion.
- Optional vortex plate can be provided to create vortex flow within the filter as an effect of which dirt particles are kept away from the filtering element. It helps to prolong the frequent cleaning of the filter. Please specify while spacing the orders.
- On demand, Disclean - PL can also be supplied with automatic flushing arrangement.



Single Inlet / Single Outlet *Single Inlet / Two Outlets*

Applications

- Used for water filtration of drip & landscape irrigation system.
- Suitable to use where precision filtration is required like reclaimed water application.

Technical Specifications

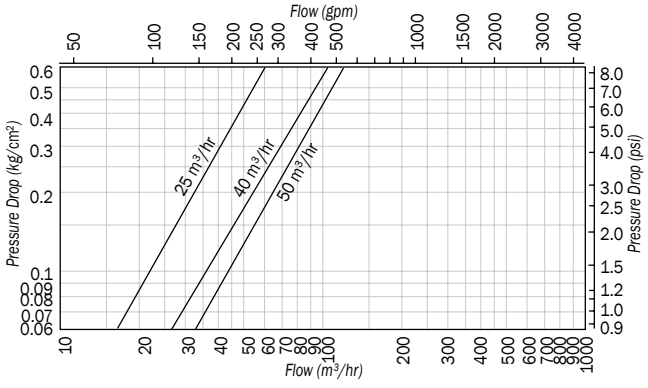
Reference Code	Nominal Flow Rate		Inlet/Outlet Connection	A	B	C	Filtration Surface Area	Gross Weight with Disclean Element	
	m³/hr	gpm	inch	mm	mm	mm	m²	kg	lbs
Disclean-PL - Single Inlet/Outlet									
DDCPL25SW	25	110	2"	460	547	135	0.126	7.45	16.4
DDCPL40SW	40	176	2 ½"	460	547	140	0.126	7.65	16.8
DDCPL50SW	50	220	3"	579	677	145	0.166	9.00	19.8
Disclean-PL - Single Inlet/two outlets									
DDCPL25TW	25	110	2"	460	573	135	0.126	7.50	16.5
DDCPL40TW	40	176	2 ½"	460	577	140	0.126	7.70	16.9
DDCPL50TW	50	220	3"	579	710	145	0.166	9.35	20.6

Ordering Specifications

X	DCPL	XX	XX
D - Domestic order (within India) E - Export order (outside India)		Flow (m³/hr)	No. of Outlets
		25 40 50	SW - Single I/O TW - Single Inlet, two outlet

Example: DDCPL25SW - This code represents Disclean®-PL Filter of 25 m³/hr flow capacity with single inlet/outlet option,
Note: • For automatic flushing change above code as DDCPL25SWA instead of DDCPL25SW.

Clean Pressure Drop: Disclean® - PL



SCREEN FILTERS

JAIN
More Crop Per Drop®

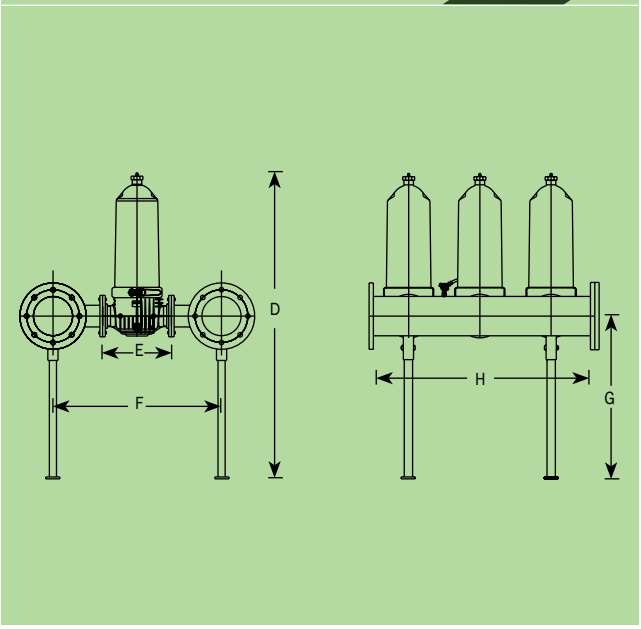
Disclean®-PL - Multiple

Features and Specifications

- Specially designed manifolds suitable for installation of multiple units of Disclean®-PL.
- Coated Inlet/outlet manifold with more than 70 micron deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Can also be supplied with light weight, durable HDPE manifold or chemical resistant SS manifold. Please specify while placing the order.
- Equipped with high performance, durable valves which can provide consistent performance over the years.
- Standard end connections are BSP flanged. Please specify for other end connections.
- Available in manual, semi-automatic and fully automatic options.

Applications

- Used for water filtration of drip & landscape irrigation system.
- Suitable to use where precision filtration is required like reclaimed water application.

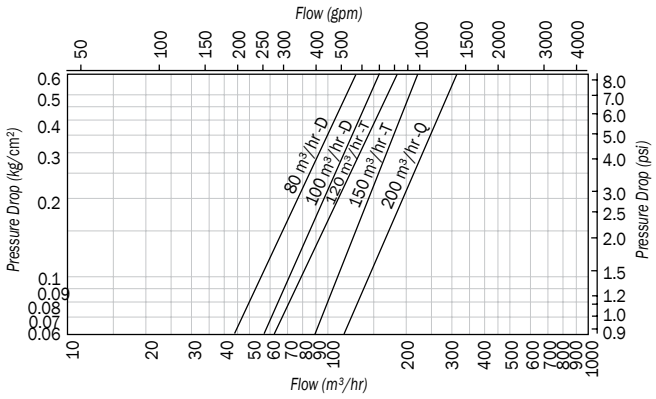


Technical Specifications

Code	Nominal Flow Rate		Inlet/Outlet Connection	D	E	F	G	H	Gross weight with disclean element	
	m³/hr	gpm	inch	mm	mm	mm	mm	mm	kg	lbs
DDCPL080DSW	80	352	4	1200	300	700	600	900	76	167
DDCPL100DSW	100	440	4	1300	300	700	600	900	82	180
DDCPL120TSW	120	528	6	1200	300	700	600	1200	138	304
DDCPL150TSW	150	660	6	1300	300	700	600	1200	147	323
DDCPL200QSW	200	880	8	1300	300	700	600	1500	252	554

Note: For dimensional specification of two outlet option, please contact.

Clean Pressure Drop: Disclean® -PL - Multiple



Ordering Specifications

X	DCPL	XXX	X	X
D - Domestic order (within India) E - Export order (outside India)		Flow (m³/hr)	No. of Units	No. of outlets per unit
		080 100	D - Duplex	SW - Single I/O TW - Single Inlet, two outlet
		120 150	T - Triplex	
		200	Q- Qudraplex	

Example: DDCPL100DSW - This code represents Disclean® Filter of 100 m³/hr flow capacity, Duplex, manual manifold and filter unit of single inlet-outlet connection.

Note:

- *Disclean® - PL Multiple can be supplied with any other combinations on demand.*
- *For Fully Automatic Option, please specify the code as DDCPL100DSWA instead of DDCPL100DSW.*

Disclean® - ML Deluxe

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Disclean® element with strong, precision engineered and radially grooved disc to provide fine three dimensional filtration. (Flow direction Out to In).
- Disc element construction allows easy cleaning under flowing water.
- Available in standard mesh of 100 micron size. (other mesh sizes available On demand).
- Flow direction from outside of the filtering element to inside. (Out to In)
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum operating pressure 10 kg/cm² (142 psi).
- Standard end connections are BSP flanged for 'Y' type and BSP & NPT male threaded for 'L' type model. Please specify for other end connections.
- On demand, Disclean - ML can also be supplied with automatic flushing option.
- Disclean - ML filter can also be supplied with stainless steel body.
- Can be supplied in multiple batteries option.

Application

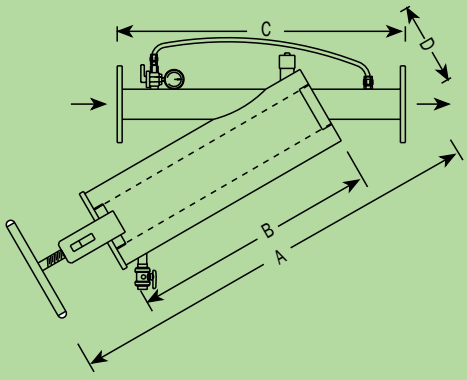
- Efficiently prevents the irrigation system from clogging due to physical and organic impurities.

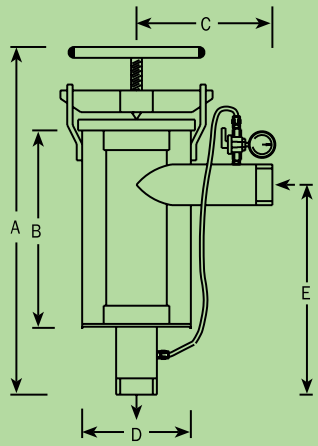
Technical Specifications for Disclean® - ML 'Y' Deluxe

Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	m²	kg	lbs
DDCYM25	25	110	2"	595	292	530	165	0.095	18.2	40.0
DDCYM40	40	176	2½"	722	417	600	165	0.138	23.4	51.5
DDCYM50	50	220	3"	805	500	600	165	0.166	26.0	57.2
DDCYM60	60	264	4"	897	592	600	165	0.198	31.8	70.0

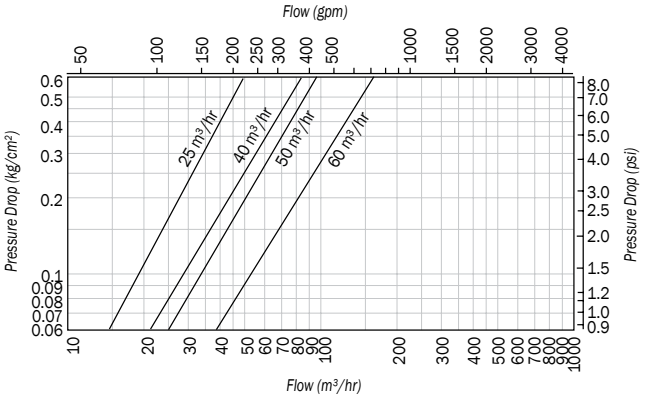
Technical Specifications for Disclean® - ML 'L' Deluxe

Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	E	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	mm	m²	kg	lbs
DDCLM25	25	110	2"	535	292	180	165	302	0.095	16.3	35.9
DDCLM40	40	176	2½"	665	417	180	165	427	0.138	18.6	40.9
DDCLM50	50	220	3"	745	500	180	165	510	0.166	22.0	48.4
DDCLM60	60	264	4"	837	592	180	165	602	0.198	24.0	52.8



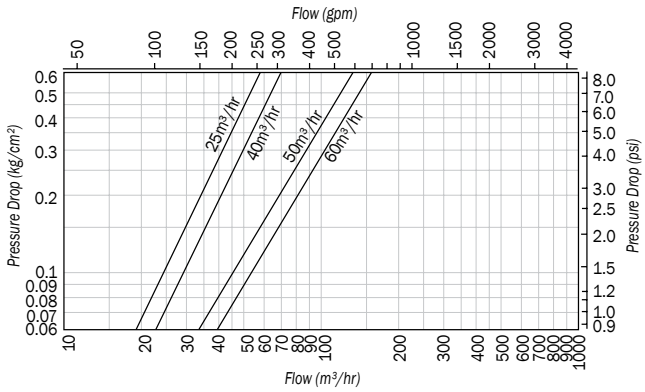


Clean Pressure Drop for Disclean® - ML 'Y' Deluxe



Note: Clean pressure drop for standard 120 mesh filtering element tested under standard testing conditions.

Clean Pressure Drop for Disclean® - ML 'L' Deluxe



Note: Clean pressure drop for standard 120 mesh filtering element tested under standard testing conditions.

Ordering Specifications

X	DC	X	X	XX
		Type	Material	Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)		L - 'L' Type Y - 'Y' Type	M-Mild Steel S-Stainless Steel	25 40 50 60

Example: DDCLM25 - This code represents Disclean® - ML Deluxe filter of 25 m³/hr flow 'L' type with mild steel construction.

Note:

- *For automatic flushing change above code as DCLM25A instead of DCLM25.*
- *Disclean - ML Deluxe Filter of any other flow capacity or end connections can be supplied On demand.*

BACK

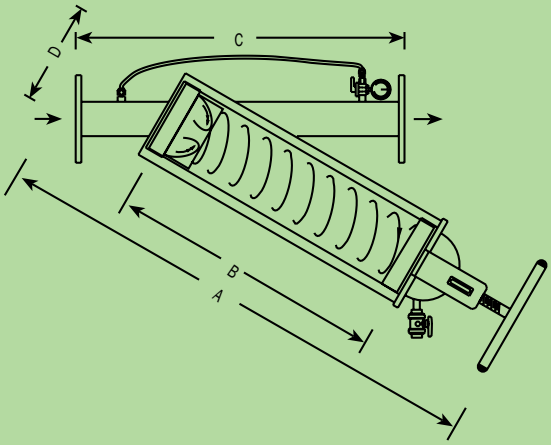
Turbo-Clean®

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Turbo-Clean® mechanism creates continuous vortex inside the element, preventing contaminants from settling on the filtration surface.
- 'Y' shaped body keeps inlet & outlet in one line.
- Flow direction from inside of the element to outside (In to Out).
- Specially designed, collapse resistant stainless steel element.
- High durability.
- Available in standard mesh of 100 micron size. (other mesh sizes available On demand).
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Standard end connections are BSP flanged. Please specify for other end connections. (ANSI flanged or Easy-Fix™)
- Maximum operating pressure 10 kg/cm² (142 psi).
- On demand, Turbo-Clean can also be supplied with automatic flushing option.
- Turbo-Clean® filter can also be supplied in stainless steel material.
- Can be supplied in multiple batteries option.

Applications

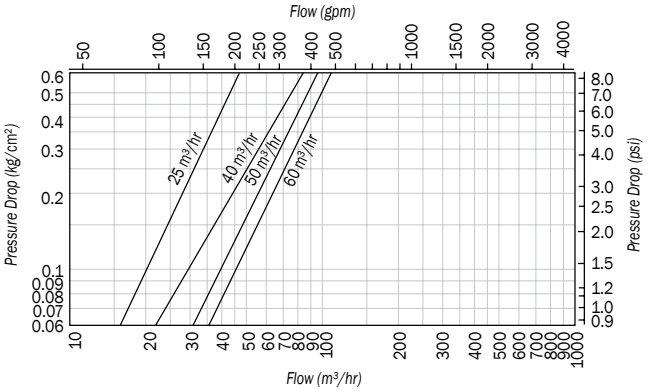
- Prevents irrigation systems clogging due to physical contaminants.
- Useful when water quality is poor and frequent on-line flushing is necessary.



Technical Specifications

Code	Nominal Flow Rate		Inlet/ Outlet Connection	A	B	C	D	Screen Surface Area	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	m²	kg	lbs
DTCYM25	25	110	2"	650	292	530	165	0.095	18.2	40.0
DTCYM40	40	176	2½"	777	417	600	165	0.138	23.4	51.5
DTCYM50	50	220	3"	860	500	600	165	0.166	26.0	57.2
DTCYM60	60	264	4"	952	592	600	165	0.198	31.8	70.0

Clean Pressure Drop



Note:
Clean pressure drop for standard 100 micron size filtering element tested under standard testing conditions.

Ordering Specifications

X	TC	Y	X	XX
			Material	Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)			M-Mild Steel S-Stainless Steel	25 40 50 60

Example: DTCYM40- This code represents Turbo-Clean® of 40 m³/hr flow, 'Y' type filter with mild steel construction.

Note:

- *For automatic flushing change above code as DTCYM40A instead of DTCYM40.*
- *Turbo-Clean® of any other flow capacity or end connections can be supplied On demand.*

Spin Clean®

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Specially equipped hydrocyclone with screen / disc filter for efficient filtration. It also helps to prolong cleaning of screen / disc element.
- Compact design, economical since no extra fittings required for the connection of hydrocyclone to screen filter.
- Removes fine sand and silt particles of size higher than 75 microns.
- Maximum operating pressure 10 kg/cm² (142 psi).
- Standard end connections are BSP flange. Please specify for other end connections. (ANSI flange or Easy-Fix™)
- Can also be supplied in stainless steel as a special order.
- Can be supplied in multiple batteries option.

Application

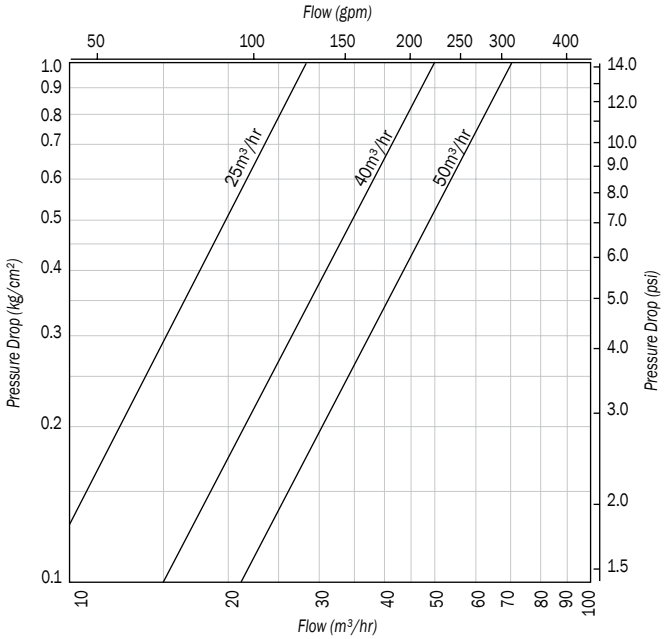
- Used in micro irrigation systems to remove sand and silt particles from irrigation water.

Technical Specifications

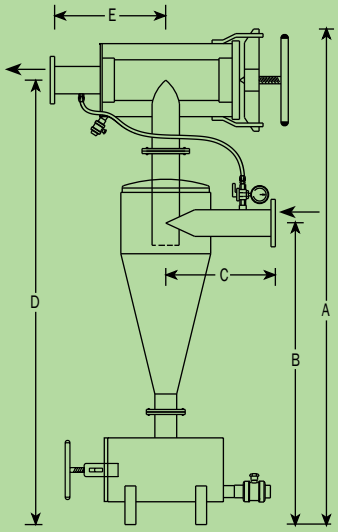
*Reference Code	Nominal Flow Rate		Inlet/ Outlet Connec-tion	A	B	C	D	E	Vol. of coll. cham-ber	Gross Weight	
	m³/hr	gpm	inch	mm	mm	mm	mm	mm	litres	kg	lbs
DSPN025	25	110	2"	1365	865	198	1263	266	5	45	99.0
DSPN040	40	176	2½"	1610	1112	258	1508	328	10	58	127.6
DSPN050	50	220	3"	1848	1350	317	1746	375	10	72	158.2

** For detailed code, please refer the ordering specifications.*

Clean Pressure Drop



Note:
Clean pressure drop for standard 100 micron size and screen filter fitted with Smart-Clean™ element, under standard testing conditions.



Ordering Specifications

X	SPN	X	XX	XXX
D - Domestic order (within India) E - Export order (outside India)		Material	Filter Option	Nominal Flow (m³/hr)
		M - Mild Steel S - Stainless Steel	SC - Super Clean DC - Disclean	025
				040
				050

Example: DSPNMSC025 - This code represents Spin Clean® Filter having mild steel construction with Super Clean filter attached and nominal flow of 25 m³/hr.

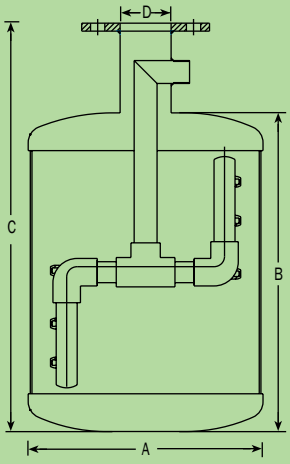
Note:
Spin Clean® Filter of any other size, flow capacity or end connections can be supplied On demand.

Product Design Registration No. 188843.

Rotoclean™ – Suction Screen Filter

Features and specifications

- Self cleaning suction filter.
- Hydraulically powered spray rotor continuously displaces trash/debris away from the screen.
- Flushing of screen using filtered water. Special provision of ¾" screen filter to avoid plugging of nozzles.
- Constructed from mild steel body and stainless steel screen. Stainless steel body can be supplied on demand.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion.
- Low frictional loss across the filter.
- Strong metal ribbed supported screen to avoid collapse due to suction pressure.
- Available in standard screen size of 400 micron. Other screen size can be supplied on demand.
- Maintains constant flow rate.
- Helps to improve system efficiency by reducing load on the micro irrigation filters.
- Low maintenance. Does not require frequent removal of suction pipe or cleaning of foot valve.
- Minimum operating pressure for spray rotor is 1 kg/cm² (14 psi).
- Protects pump and piping system damage and clogging due to physical impurities.
- Available in 2½", 3" and 4" sizes without foot valve. Please specify for Jain foot valve (plastic) or metal foot valve option while ordering.
- Standard end connections are BSP flanged. Please specify for other end connections.



Applications

- Recommended to use for water source having heavy load of algae, trash, sand and other debris.
- Best suitable for irrigation pumping lines running on open wells, reservoirs, ponds, tanks etc.

Technical Specifications

Code	Nominal flow		Inlet connection, BSP flanged	Return inlet size	A	B	C	D	Flange PCD	no. of holes	hole dia.
	m³/hr	gpm	inch	inch	mm	mm	mm	inch	mm	Nos	mm
DRC25JFV	40	176	2½"	3/4"	280	380	485	2.5"	114.0	6	7.0
DRC25MFV	40	176	2½"	3/4"	280	380	485	2.5"	127.0	4	17.0
DRC30JFV	50	220	3"	3/4"	316	500	620	3"	137.0	8	7.0
DRC30MFV	50	220	3"	3/4"	316	500	620	3"	146.05	4	17.0
DRC40JFV	80	352	4"	3/4"	316	500	630	4"	178.0	8	9.0
DRC40MFV	80	352	4"	3/4"	316	500	630	4"	177.8	8	17.0

Note: JFV – Jain Foot Valve, MFV – Metal Foot Valve

Ordering Specifications

X	RC	XX
D - Domestic order (within India) E - Export order (outside India)		Inlet Connection, inch 25 – 2½" BSP flange 30 – 3" BSP flange 40 – 4" BSP flange

Example: DRC30 - This code represents Rotoclean Filter with 3" BSP Flanged inlet connection without foot valve option.
Note: For ordering Rotoclean filter with metal foot valve option add suffix 'MFV' and 'JFV' for Jain foot valve option to the above ordering specification.

MEDIA FILTERS

Clean-Master®

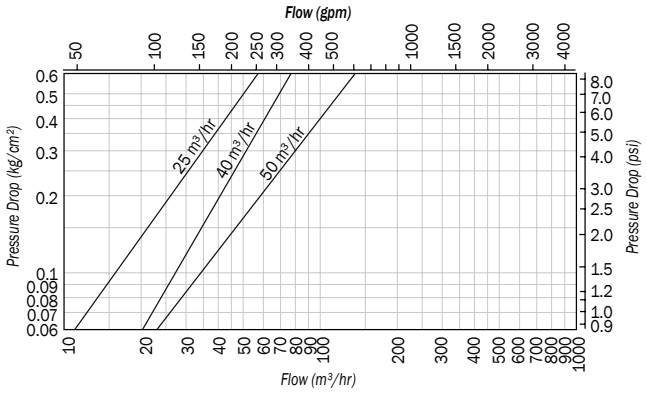
Features and Specifications

- Manufactured from mild steel as per international fabrication standards.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- The unique design of manifold for single tank unit facilitates flushing with filtered water.
- Designed for uniform distribution of incoming raw water over the media bed which ensures very effective filtration & backwash.
- Available in manual, semi automatic or fully automatic backwash options.
- Filtration media is crushed silica sand/quartz gravel of particle size 1 mm to 2 mm (0.039 to 0.078 inch).
- Effective filtration of 75 micron (200 mesh).
- High filtration efficiency due to uniform grade of filtration media (silica sand / quartz gravel) and specially designed outlet candles.
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum pressure rating 10 kg/cm² (142 psi).
- Standard end connections are BSP female threaded for single tank unit and BS10 flange for multiple tank unit. Please specify for other types of end connections.
- Clean-Master can also be supplied with stainless steel body.
- Optional multi tank modules for higher filtration capacities available.

Application

- For filtration of water in micro irrigation systems to prevent clogging due to physical and biological impurities.

Clean Pressure Drop for Clean-Master® - Single Tank Unit



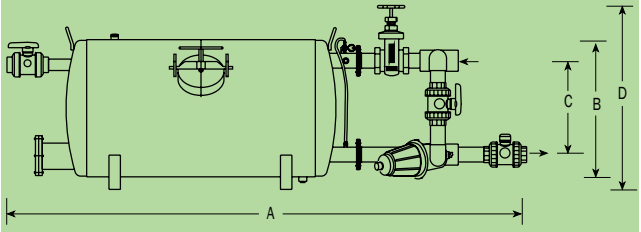
Note: Tested under standard test conditions.

Clean-Master® - Manual Backwash Option

Backwash with filtered water even with single tank unit

Clean-Master® - Semi Automatic Backwash Option

Clean-Master® - Fully Automatic Backwash Option



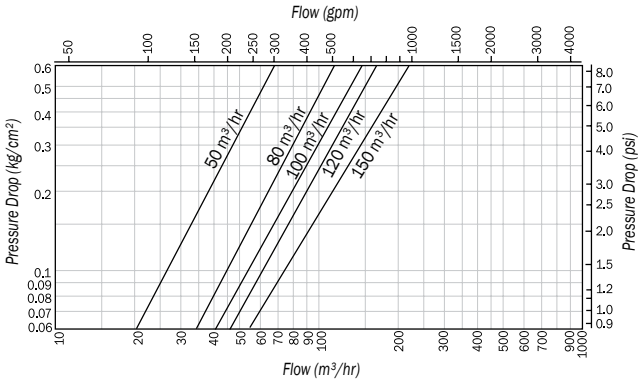
Clean-Master® - single tank unit

Technical Specifications - Single Tank Unit

*Reference Code	Nominal Flow Rate		Connection		Flow per unit area	Back Wash Flow	A		B	C	D	Quantity of Media		Gross Weight			
			Inlet/ Outlet	Back Wash / By Pass			Manual	Semi/Fully Automatic						Manual		Semi / Fully Automatic	
	m³/hr	gpm	inch	inch	m³/hr/m²	m³/hr	mm	mm	mm	mm	mm	kg	lbs	kg	lbs	kg	lbs
DCM025S	25	110	2"	1½"	64	16	1520	1880	500	310	690	150	330	74.0	162.8	100.0	220.0
DCM040S	40	176	2½"	1½"	70	24	1990	2340	500	310	700	200	440	100.0	220.0	143.0	314.6
DCM050S	50	220	3"	2"	70	32	1935	2505	600	370	810	300	660	142.0	312.4	146.0	321.2

** For detailed code please refer ordering specifications.*

Clean Pressure Drop for Clean-Master® - Multiple Tank Units

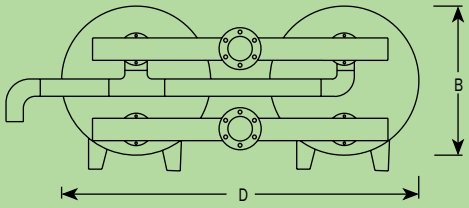


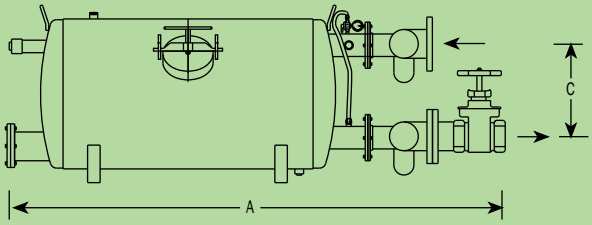
Note: Tested under standard test conditions.

Clean-Master® - multiple tank units

Ordering Specifications

X	CM	XXX	X	X
		Flow (m^3/hr)	No. of Units	Type of backwash manifold
D - Domestic order (within India) E - Export order (outside India)		025 040 050	S-Single	O - Without manifold M - Manual Backwash S - Semi Auto. Backwash F - Fully Auto. Backwash
		050 080 100	D-Duplex	
		120 150	T-Triplex	





Example: DCM080DS - This code represents Clean-Master® having flow rate of 80 m^3/hr, Duplex unit with semi automatic backwash type manifold.

Note

- *Clean-Master® - single tank unit manual backwash option is also available with economical plastic manifold please specify code as DCM025SMP instead of DCM025SM*
- *Clean-Master® of any other flow capacity or end connections can be supplied On demand.*

Technical Specifications - Multiple Tank Units

*Reference Code	Nominal Flow Rate		Connection		Flow per unit area	**Back Wash Flow	A		B	C	D	Quantity of Media		Gross Weight			
			Inlet/Outlet	Back Wash / By Pass			Manual	Semi/Fully Automatic						Manual		Semi / Fully Automatic	
	m^3/hr	gpm	inch	inch	m^3/hr/m^2	m^3/hr	mm	mm	mm	mm	mm	kg	lbs	kg	lbs	kg	lbs
DCM050D	50	220	3"	1½"	68	16	2150	1880	500	310	1250	300	660	202.0	444.40	166.0	365.20
DCM080D	80	352	4"	1½"	69	24	2550	2200	500	310	1250	400	880	236.0	519.20	200.0	440.00
DCM100D	100	440	4"	2"	71	32	2550	2200	600	370	1450	600	1320	310.0	682.00	276.0	607.20
DCM120T	120	528	6"	2"	69	24	2360	1820	500	310	2020	600	1320	510.0	1122.00	512.0	1126.40
DCM150T	150	660	6"	2"	71	32	2360	1820	600	370	2300	900	1980	540.0	1188.60	538.0	1183.60

** For detailed specifications please refer ordering specifications*
*** Backwash flow for single tank unit at a time.*

Filtro-Master™

Features and Specifications

- Manufactured from mild steel as per international fabrication standards.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Designed for uniform distribution of incoming raw water over the media bed which ensures very effective filtration & backwash.
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum pressure rating 10 kg/cm² (142 psi).
- Standard unit consists Filtro-Master tank without manifold and accessories.
- Specially designed manifold suitable for different models can be supplied as a special order.

  Manifold Options:
  - Economical plastic manifold for Filtro-Master single tank unit manual backwash option.
  - For other models, manifold assembled using metal pipes are available.
  - On demand, manifolds can be supplied in custom sizes to meet the customers requirement.
- Manifolds are available in manual, semi automatic and fully automatic backwash option.
- Standard end connections are BS10 flanged. Please specify for other types of end connections.
- Filtro-Master filter can also be supplied with stainless steel body.
- Optional multi tank modules for higher filtration capacity available.

Application

- Prevents blockage of irrigation system due to organic impurities.

Ordering Specifications of Tank without Manifold

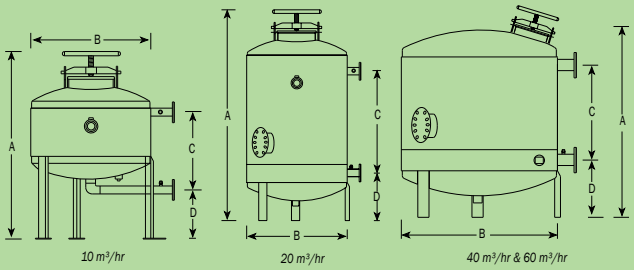
X	FMT	XXX
		Flow (m³/hr)
D - Domestic order (within India) E - Export order (outside India)		010 020 040 060

Example: DFMT020 - This code represents Filtro-Master™ Tank without manifold & accessories having flow rate of 20 m³/hr.

Note:
Filtro-Master™ Tank of any other flow capacity or end connections can be supplied On demand.

Filtro-Master™ - 20m³/hr.

Filtro-Master™ - 40m³/hr.



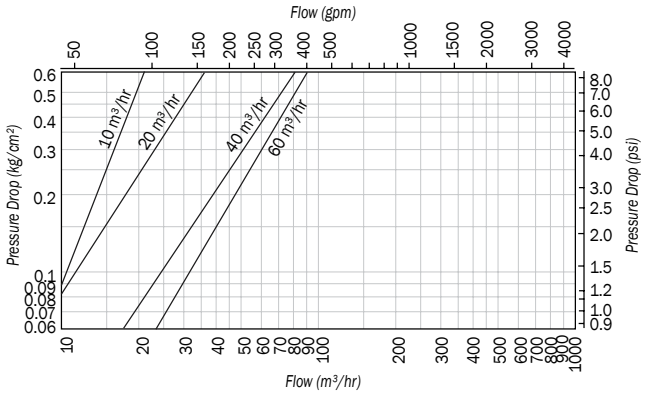
Single Tank Unit

Technical Specifications - Single Tank Unit

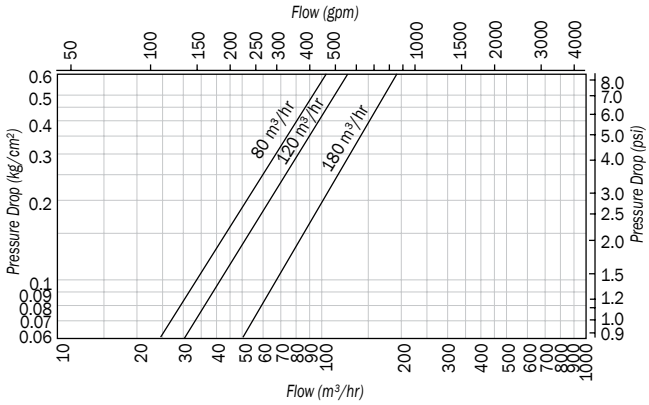
*Reference Code	Nominal Flow Rate		Connection		Flow per unit area	Back Wash Flow	A	B	C	D	Quantity of Media		Gross Weight of Tank (without manifold & media)	
			Inlet/ Outlet	Back Wash / By Pass										
	m³/hr	gpm	inch	inch	m³/hr/m²	m³/hr	mm	mm	mm	mm	kg	lbs	kg	lbs
DFM010S	10	44	1½"	1½"	51	5	700	500	280	210	50	110	31.0	68.2
DFM020S	20	88	2"	1½"	101	8	1190	500	700	260	125	275	67.0	147.4
DFM040S	40	176	3"	2"	90	20	1060	750	480	300	250	550	105.0	231.0
DFM060S	60	264	3"	2"	94	29	1085	900	480	300	400	882	168.0	369.6

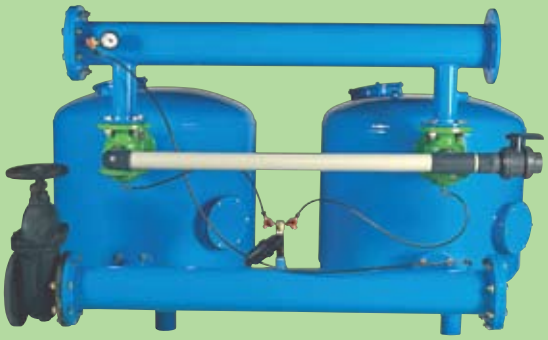
** For detailed code please refer ordering specifications.*

Clean Pressure Drop for Filtro-Master™ - Single Tank Unit

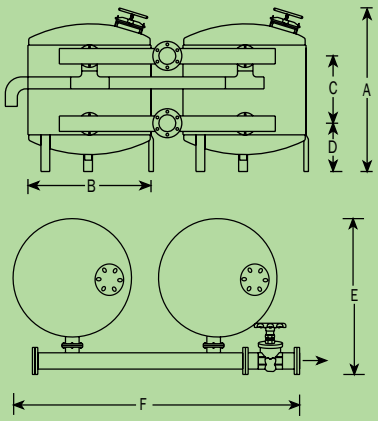


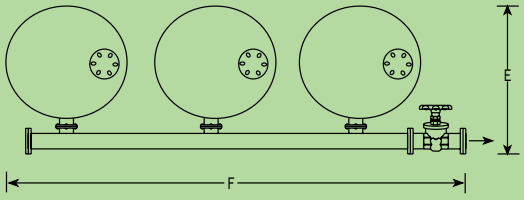
Clean Pressure Drop for Filtro-Master™ - Multiple Tank Unit





Filtro-Master™ - 120m³/hr - Semi Automatic - Duplex Metal Manifold





Technical Specifications - Multiple Tank Units

*Reference Code	Nominal Flow Rate		Inlet/Outlet Size	Back Wash / By Pass	Flow per unit area	**Back Wash Flow	A	B	C	D	E		F	Quantity of Media		Gross Weight			
											Manual	Semi/Fully Automatic				Manual		Semi / Fully Automatic	
	m³/hr	gpm	inch	inch	m³/hr/m²	m³/hr	mm	mm	mm	mm	mm	mm	mm	kg	lbs	kg	lbs	kg	lbs
DFM080D	80	352	4"	2"	90	20	1060	750	480	300	2150	1790	1600	500	1100	470.0	1034.0	462.0	1016.4
DFM120D	120	528	6"	2"	94	29	1085	900	480	300	2275	1920	1900	800	1616	490.0	1078.0	520.0	1144.0
DFM180T	180	792	6"	2"	94	29	1085	900	480	300	2100	1570	2900	1200	2640	1042.0	2292.4	1290.0	2838.0

** For detailed code please refer ordering specifications*
*** Backwash flow for single tank.*

Ordering Specifications

X	FM	XXX	X	X	X
		Flow (m³/hr)	No. of Units	Type of Manifold	Manifold Option
D - Domestic order (within India) E - Export order (outside India)		010 020 040 060	S - Single	P - Plastic M - Metal	M - Manual Backwash S - Semi Auto Backwash F - Fully Auto Backwash
		080 120	D - Duplex	M - Metal	
		180	T - Triplex	M - Metal	

Example: DFM040SPM - This code represents Filtro- Master™ having flow rate of 40 m³/hr, single unit, plastic manifold with manual backwash type manifold.

Note: Filtro-Master™ of any other flow capacity or end connections can be supplied On demand.

Clean Master - Dual Chamber™

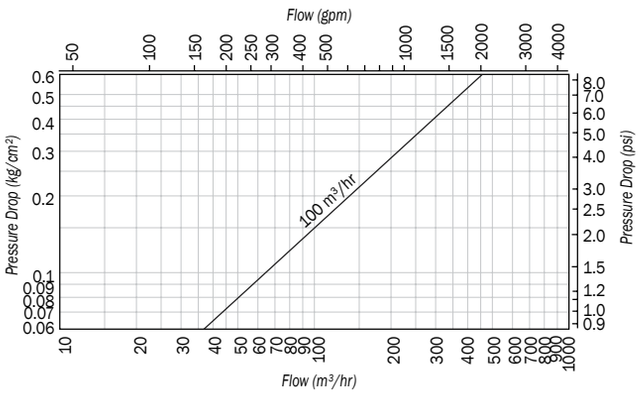
Features and Specifications

- Manufactured from mild steel as per international fabrication standards.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Dual chamber design ensures backwash through filtered water.
- Designed for uniform distribution of incoming raw water over the media bed which ensures very effective filtration & backwash.
- Available in manual, semi automatic or fully automatic backwash options.
- Filtration media is crushed silica sand/quartz gravel of particle size 1 mm to 2 mm (0.039 to 0.078 inch).
- High filtration efficiency due to uniform grade of filtration media (silica sand / quartz gravel) and specially designed low friction 'V' shaped mushroom candles.
- Three way valve assembly for easy monitoring of inlet & outlet pressure.
- Maximum pressure rating 8 kg/cm² (114 psi).
- Standard end connections are BS10 flanged. Please specify for other types of end connections.
- Jain dual chamber media filter can also be supplied with stainless steel body.

Application

- For filtration of water in micro irrigation systems to prevent clogging due to physical and biological impurities.

Clean Pressure Drop



Technical Specifications:

Reference Code	Inlet / Outlet	Tank Diameter	Filtration Surface		Flow Rate		Quantity of silica sand		Maximum Pressure	
	inch	inch	m^2	$in.^2$	m^3/h	gpm	kg	lbs	bar	psi
DCMDC100XXX	4"	36"	1.8	2788	100	440	650	1430	10	142

Manual Backwash

Fully Automatic

MEDIA FILTERS

Laying dimensions

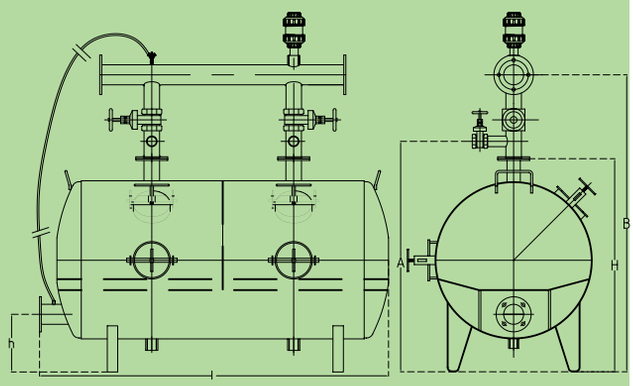
Reference Code	Type of Back-wash	L		H		h		A		B		Approx. Weight	
		mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs
DCMDC 100SMM	Manual	1990	78	1251	49.3	322	12	1351	53	1736	68	380	836
DCMDC 100SMF	Semi/ Fully Auto	1990	78	1251	49.3	322	12	1611	63	1396	55	446	981.2

Ordering Specifications

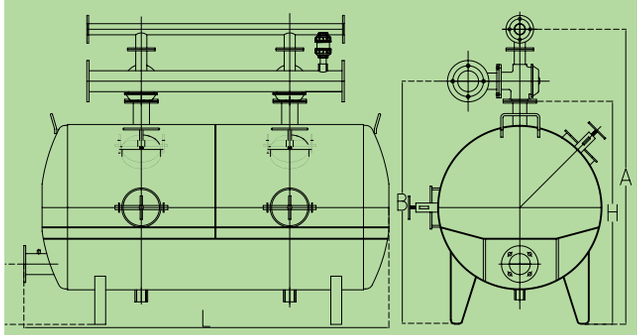
X	CMDC	XXX	X	X	X
D - Domestic order (within India) E - Export order (outside India)		Flow (m^3/hr)	No. of Units	Type of Manifold	Manifold Option
		100	S-Single	P - Plastic M - Metal	M - Manual Backwash S - Semi Auto Backwash F - Fully Auto Backwash

Example: DCMDC100SMM - This code represents Clean- Master™-Dual Chamber having flow rate of 100 m^3/hr, single unit, metal manifold with manual backwash.

Note: Clean- Master™-Dual Chamber of any other flow capacity or end connections can be supplied On demand.



Dimensions of manual backwash filter



Dimensions of semi auto/fully auto. backwash filter

Filt-O-Clean®

Features and Specifications

- Assembled in high quality thermoplastics box with IP55 protection and transparent lid.
- 16 char x 2 line user friendly and self-explanatory LCD screen.
- One touch key pad for easy programming.
- Bicolour LED, turns red while flushing cycle is on and can be easily seen through transparent lid.
- Flush time can be set from 0 to 59 minutes in one minute increments.
- Wait interval can be set from 1 minute to 23 hrs & 59 minutes.
- Count down timer shows status of backflush.
- Pause option, can be paused during operation. Useful to pause backwash during fertigation.
- Flexibility in input power supply, either on 230 VAC or 12 VDC.
- Output 12 VDC (pulse). 24 VAC model can be supplied on demand.
- Can be supplied with solar power option on demand.
- Manual override facility.
- Available in 1, 2, 3, 4, 5 & 6 station models. Higher models can be supplied on demand.
- Inbuilt SMPS for spike suppression and compensation for frequent supply variations.
- Facility to operate on pressure differential mode. Inbuilt melody tune to alarm the user for manual intervention, if pressure difference is not reduced to set point after two attempts by the controller.
- Spacious wiring compartment.

Application

- For controlling automatic periodical backwash operation of media filters.

Ordering Specifications

X	FBC	X	FDC
		No. of stations	
D - Domestic order (within India) E - Export order (outside India)		1 2 3 4 5 6	

Example: DFBC3FDC - This code represents Filt-O-Clean® filter backwash controller with 3 station.

New

Solar Kit for Filt-O-Clean®

Features & Specifications

- Charge controller and battery comes in weather proof cabinet.
- Sealed maintenance free battery.
- Solar module capacity : 10 Watt.
- Battery : 12V / 7.5 AH.
- LED Indications offer user friendliness.
  Green LED: Charging on
  Red LED: Low Voltage
- Protections: Battery low / Battery high open circuit / short circuit / reverse polarity / Reverse flow of current from battery to SPV module.
- System operating voltage : 12V DC.

Applications

- Use with Filt-O-Clean® filter backwash controller.

Ordering Specifications

X	SKFFBWDC
D - Domestic order (within India) E - Export order (outside India)	

Note: Solar kit for filter backwash controller. Consists of 10 Watt panel, 12 V battery with case, charge controller and 1 mtr. Two core wire for connections.

New

Media Filter Manifolds and Header Assemblies

Features and Specifications

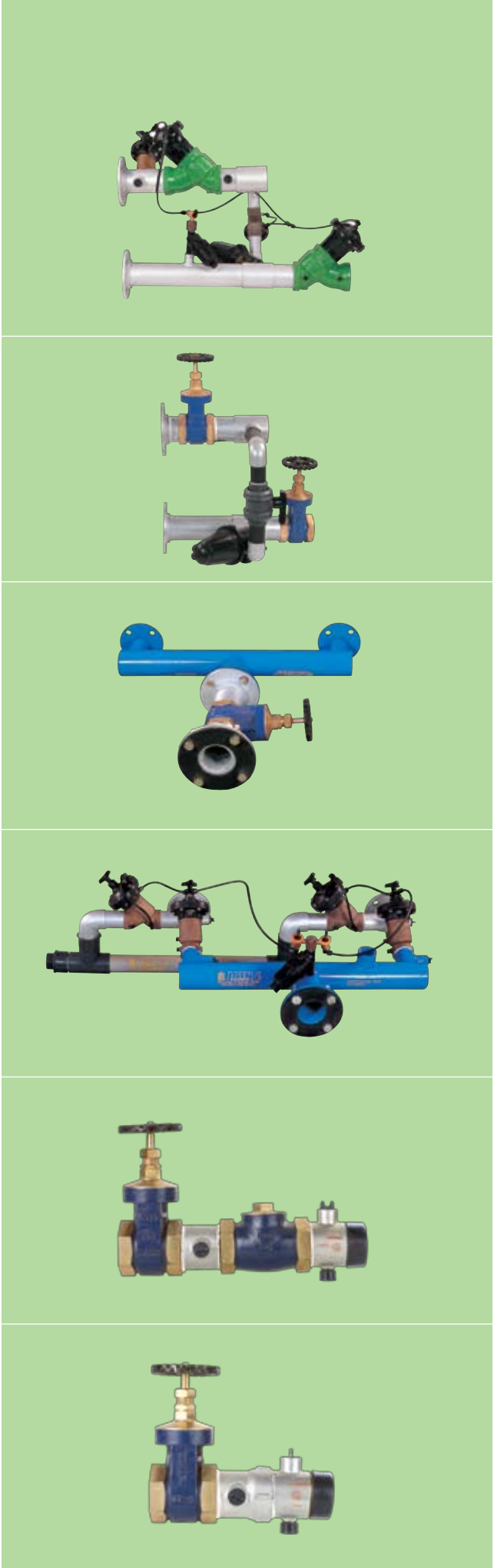
- Fabricated with galvanised / Coated pipe in various combination to assemble single or multiple unit of Clean-Master®, Filtro-Master™ and header assemblies. Light weight and cost effective plastic manifold and chemical resistant Stainless Steel manifold are available on demand.
- For manifold used in Clean-Master®- Single Unit with special provision of screen filter ensures backwash through clean water.
- Available in Manual, Semi Automatic and Fully Automatic option.
- Equipped with high performance, durable valves, which can provide consistent performance over the years.
- Standard range of manifolds includes sizes compatible with Clean-Master® & Filtro-Master™ (single and multiple units). Other sizes can be supplied on demand.
- Standard header assemblies of 2", 2½", 3" sizes are available. Other sizes or combinations can be supplied on demand.
- Standard connection types are BSP Female thread for single unit and BS flanged type for multiple unit. Other type of connections such as NPT thread, ANSI flanged or Easy-Fix™ is available on demand. Please specify type of inlet/outlet connection while ordering.

Ordering Specifications for Media Filter Manifolds

X	M	X	XX	XXX	X	X
		Backwash Option	Filter Type	Flow (m^3/hr)	No. of Units	Type of Manifold
D - Domestic order (within India) E - Export order (outside India)		M - Manual Backwash S - Semi Auto Backwash F - Fully Auto Backwash	CM - Clean Master	025 040 050	S-Single	P-Plastic M-Metal
				050 080 100	D-Duplex	M-Metal
				120 150	T-Triplex	M-Metal
			FM - Filtro Master	010 020 040 060	S-Single	P-Plastic M-Metal
				080 120	D-Duplex	M-Metal
				180	T-Triplex	M-Metal

Example: DMSCM025SM - This code refers to Metal Manifold - Semi Automatic suitable for Clean-Master® of flow capacity 25 m^3/hr.

Note: Custom made header assemblies can be supplied on demand.



Easy-Fix™

Features and Specifications

- Manufactured as per ANSI/AWWA C-606 standard.
- Leakage free joint.
- Easy to assemble & disassemble.
- Can easily absorb expansion / contraction / deflection effects.
- Available in 2", 2½" and 3" sizes. Other sizes can be supplied on demand.

Silica Sand / Quartz Gravel

Features and Specifications

- Uniformly graded, angular sand particles for high filtration efficiency.
- Purity of silica 98.8%.
- Particle size range 1 mm to 2 mm (0.039 to 0.078 inch), passes through 10 mesh and retained on 18 mesh.
- Uniformity coefficient 1.5.
- Available in 25 kg packing.

Application

- Used as media in various media filters for water filtration.

Ordering Specifications

X	SS
D - Domestic order (within India) E - Export order (outside India)	

Example: DSS - This code refers to Silica Sand.

Fertigation & Chemigation Equipment

Proportional Injector Pump

Venturi Injector

Jain Fertilizer Tank

Manifold Fertigation

FERTIGATION & CHEMIGATION EQUIPMENT

Proportional Injector Pump

Features and Specifications

- Made of strong plastic material with high chemical resistance.
- Compact design.
- Accurate and proportional injection rate.
- Non electric, operates on hydraulic pressure.
- Choice of selection on the basis of desired proportions,
  - Adjustable from 0.3% to 2%.
  - Adjustable from 0.4% to 4%.
  - Fixed dosage 6%.
- Available in two models to provide operational flexibility,
  - With on/off system.
  - With Air Release Valve.
- Maximum operating pressure 5 kg/cm² (70 psi). High pressure model (6 kg/cm²) available on demand.
- Simple to install, operate and maintain.
- Low pressure loss.
- ¾" BSP inlet / outlet connection.
- Dosing flow range,
  - 0.6 to 50 lph for 0.3% to 2% adjustable.
  - 0.12 to 100 lph for 0.4% to 4% adjustable.
  - 150 lph for 6% fixed dosage.

Application

- Recommended to use where precise application of fertilizer and other agricultural chemicals are required.

Ordering Specifications

X		X	X
D - Domestic order (within India) E - Export order (outside India)	TFP	A - with air release valve O - with on/off valve	2 - adjustable 0.3% to 2% 4 - adjustable 0.4% to 4% 6 - fixed dosage 6%

Example: DTFPA4 - This code represents Proportional Injector Pump with air release valve and adjustable from 0.4% to 4%.

Venturi Injector

Features and Specifications

- Made of engineering plastic.
- Excellent chemical resistance to most of the chemicals.
- Highly efficient and compact differential pressure injection device.
- Economical and low cost option.
- Available in ¾", 1", 1¼", 1½" and 2" BSP inlet / outlet connection. Any other size can be supplied on demand.

Application

- Fertilizer and chemical injection through drip and sprinkler irrigation systems.

Performance Chart for Venturi Injector ¾"

Pressure		Motive Flow through venturi injector	Injection Rate
Inlet	Outlet		
kg/cm²	kg/cm²	lpm	lph
1.0	0.0	8.5	77.0
	0.2	8.4	70.8
	0.4	8.3	47.7
	0.6	8.2	23.5
	0.8	8.2	-
1.5	0.0	10.5	73.8
	0.2	10.4	64.2
	0.4	10.4	68.1
	0.6	10.3	50.5
	0.8	10.3	30.1
	1.0	10.3	-
2.0	0.0	12.4	70.8
	0.2	12.3	70.2
	0.4	12.2	70.0
	0.6	12.2	64.8
	0.8	12.2	49.8
	1.0	12.2	37.3
	1.2	12.2	30.5
	1.4	11.9	-
2.5	0.0	14.0	69.3
	0.2	13.9	68.4
	0.4	13.9	67.7
	0.6	13.8	66.1
	0.8	13.8	60.6
	1.0	13.8	54.0
	1.2	13.8	47.1
	1.4	13.8	30.9
	1.6	13.7	23.6
	1.8	13.7	-
3.0	0.0	15.2	68.3
	0.2	15.2	66.4
	0.4	15.2	65.2
	0.6	15.1	65.1
	0.8	15.1	63.9
	1.0	15.1	62.4
	1.2	15.1	58.6
	1.4	15.1	50.4
	1.6	15.0	38.0
	1.8	15.0	26.7
	2.0	14.9	20.2
	2.2	14.9	-

Pressure		Motive Flow through venturi injector	Injection Rate
Inlet	Outlet		
kg/cm²	kg/cm²	lpm	lph
3.5	0.0	16.5	66.7
	0.2	16.5	64.9
	0.4	16.5	64.7
	0.6	16.5	64.5
	0.8	16.4	64.7
	1.0	16.4	63.7
	1.2	16.3	61.3
	1.4	16.3	58.0
	1.6	16.3	52.3
	1.8	16.3	44.8
	2.0	16.3	38.1
	2.2	16.2	24.8
	2.4	16.0	-
4.0	0.0	17.7	65.8
	0.2	17.7	65.0
	0.4	17.6	64.6
	0.6	17.6	64.2
	0.8	17.5	63.8
	1.0	17.5	64.0
	1.2	17.5	61.8
	1.4	17.5	60.9
	1.6	17.4	57.7
	1.8	17.4	47.3
	2.0	17.4	41.7
	2.2	17.3	40.3
	2.4	17.4	33.1
	2.6	17.3	33.1
	2.8	17.3	-

Note: Test conducted under standard test conditions with venturi injector installed on bypass.

Performance Chart for Venturi Injector 1" and 1¼"

Pressure		Venturi 1"		Venturi 1¼"	
Inlet	Outlet	Motive flow	Inj. Rate	Motive flow	Inj. Rate
kg/cm²	kg/cm²	lpm	lph	lpm	lph
1	0	59	450	58	790
	0.25	59	375	58	750
	0.5	55	275	51	400
1.5	0	67	540	68	800
	0.5	67	440	68	750
	0.75	62	380	65	700
	1	62	200	60	150
2	0	75	430	78	750
	0.5	75	400	78	700
	0.75	75	375	78	680
	1	75	350	77	650
	1.25	72	300	71	420
	1.5	70	130	-	-
2.5	0	82	400	87	730
	0.5	82	375	87	700
	0.75	82	360	87	680
	1	82	350	87	680
	1.25	81	320	87	610
	1.5	81	300	81	530
	1.75	78	150	79	140
	2	-	-	-	-
3	0	88	420	95	730
	1	88	350	95	720
	1.25	88	330	95	700
	1.5	88	330	95	680
	1.75	88	300	92	450
	2	88	250	89	270
	2.25	86	125	88	110
	2.5	-	-	-	-
3.5	0	95	375	102	670
	1	95	350	102	650
	1.5	95	350	102	640
	1.75	95	330	102	620
	2	95	300	102	550
	2.25	93	250	98	400
	2.5	93	220	96	200
	2.75	-	-	-	-
4	0	100	350	118	670
	1	100	350	118	670
	2	100	350	118	650
	2.25	100	300	118	610
	2.5	100	280	118	600
	2.75	100	250	114	390
	3	98	130	113	200
	3.25	-	-	-	-

Note: Test conducted under standard test conditions with venturi injector installed on bypass.

Performance Chart for Venturi Injector 1½" and 2"

Pressure		Venturi 1½"		Venturi 2"	
Inlet	Outlet	Motive flow	Inj. Rate	Motive flow	Inj. Rate
kg/cm²	kg/cm²	lpm	lph	lpm	lph
1	0	95	950	240	1940
	0.25	86	700	238	1740
	0.5	86	400	235	800
1.5	0	111	950	280	1940
	0.5	111	900	278	1740
	0.75	106	745	265	1200
	1	100	250	250	558
2	0	124	950	315	1900
	0.5	124	800	315	1700
	0.75	124	770	315	1640
	1	124	750	315	1340
	1.25	124	400	300	800
	1.5	-	-	280	250
2.5	0	136	950	335	1940
	0.5	136	950	335	1700
	0.75	136	900	335	1600
	1	136	900	335	1600
	1.25	136	750	330	1400
	1.5	132	530	330	750
	1.75	128	300	320	120
	2	-	-	-	-
3	0	148	950	375	1740
	1	148	800	370	1540
	1.25	148	775	370	1500
	1.5	148	775	370	1300
	1.75	147	720	360	750
	2	140	350	355	750
	2.25	138	150	345	250
	2.5	-	-	-	-
3.5	0	159	880	405	1740
	1	159	800	405	1600
	1.5	159	800	405	1500
	1.75	159	750	405	1500
	2	159	730	400	1030
	2.25	153	440	390	750
	2.5	150	170	375	250
	2.75	-	-	-	-
4	0	168	880	430	1740
	1	168	880	430	1740
	2	168	880	420	1600
	2.25	166	450	420	1470
	2.5	165	400	420	750
	2.75	162	250	410	750
	3	159	150	400	250
	3.25	-	-	-	-

Jain Fertilizer Tank

Features and Specifications

- Mild steel construction.
- Coated with more than 70 micron thick deep blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects.
- Turbulent inlet ensures thorough mixing of chemicals and / or fertilizers.
- Separate valves are provided on the inlet & outlet to control the injection rate.
- High pressure hose assembly inlet / outlet connection.
- Special provision of strainer on the outlet.
- Wide 8" opening for easy pouring of stock solution.
- Drain port to flush the tank.
- Maximum working pressure 10 kg/cm² (142 psi).
- Available in 30, 60, 90, 120 & 160 liter (8, 16, 24, 32 & 42 US gallon) capacity.

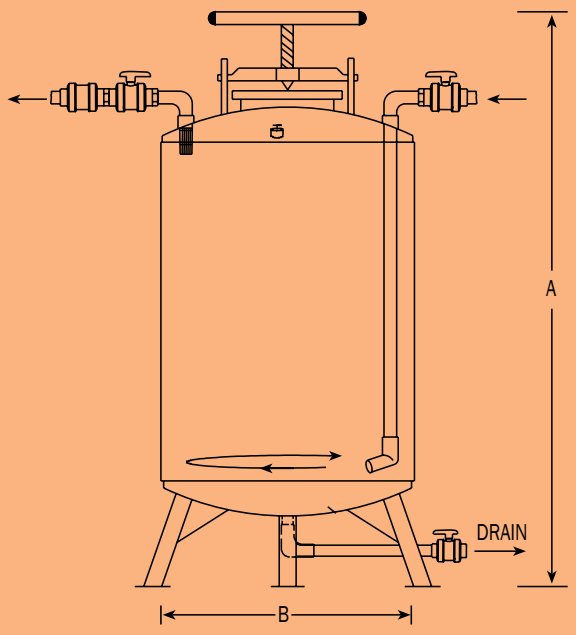
Application

- Fertilizer and chemical injection through drip and sprinkler irrigation systems.

Performance Chart

Inlet / Outlet Pressure Difference	Minimum operation time in minutes				
kg/cm²	DFT030	DFT060	DFT090	DFT120	DFT160
0.2	12	15	25	30	40
0.3	09	10	15	15	20
0.5	07	08	10	10	15

Note: • *Tested under standard test conditions.*
• *Operation time is given as guidelines only and actual timing can be changed according to the density of stock solution and other field conditions.*



Technical Specifications

Code	Tank Capacity	Inlet/Outlet Connection	A	B	Gross Weight	
	litres	inch	mm	mm	kg	lbs
DFT030	30	¼"	830	285	22.0	48.4
DFT060	60	¾"	815	500	33.0	72.6
DFT090	90	¾"	1015	500	40.0	88.0
DFT120	120	¾"	1120	500	48.0	105.6
DFT160	160	¾"	1210	500	51.0	112.2

Ordering Specifications

X	FT	XXX
D - Domestic order (within India) E - Export order (outside India)		Tank Capacity (litres)
		030
		060
		090
		120
		160

Example: DFT120 - This code represents Jain Fertilizer Tank of 120 litre capacity.
Note: Jain Fertilizer Tank of any other capacity can be supplied on request.

Manifold - Fertigation

Features and Specifications

- Available in 1½", 2", 2½" and 3" BSP Female threaded inlet connections. Any other inlet / outlet connection can be supplied on demand.
- Available in inlet/outlet sizes of ¾", 1" 1¼", 1½" and 2" suitable for required fertigation equipment.
- Any other size or end connection available on demand.

Application

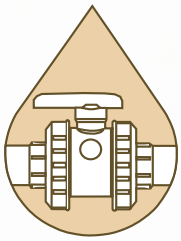
- Convenient and quick attachment of venturi injector, fertilizer tank and injector pump to irrigation system.

Ordering Specifications

X	M	XXX	XX	XXX
		Type of assembly	Size (inch)	Inlet/outlet for fertigation equipment
D - Domestic order (within India) E - Export order (outside India)		GGM - GI Manifold + GM Control Valve	15 - 1.5" BSP female threaded 20 - 2.0" BSP female threaded 25 - 2.5" BSP female threaded 30 - 3.0" BSP female threaded	034 - ¾" BSP Female Threaded (suitable for ¾" venturi) 100 - 1" BSP Female Threaded (suitable for 1" & 1¼" venturi) 150 - 1½" BSP Female Threaded (suitable for 1½" venturi) 200 - 2" BSP Female Threaded (suitable for 2" venturi)

Example: DMGGM15034 - Manifold - Fertigation with GI Manifold and GM Control Valve type assembly with inlet connection of 1.5" and inlet / outlet connection for fertigation equipment is of ¾" BSP Female Threaded connection.

Plastic Control and Safety Valves



Jain PVC Ball Valves®

Jain ARV-C®

Jain Air Release Valves

Jain Check Valve

Jain PVC Foot Valves®

Valve Box

PLASTIC CONTROL & SAFETY VALVES

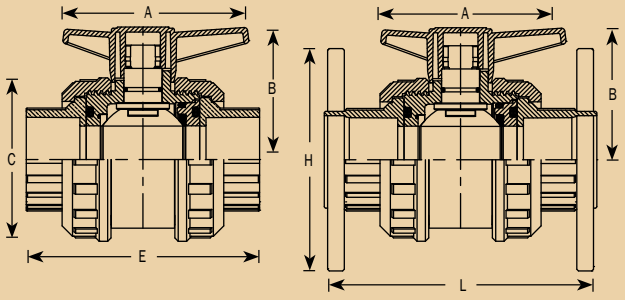
Jain PVC Ball Valves® - DU

Features and Specifications

- Compact Double Union (DU) design.
- Manufactured from high performance rigid PVC compound.
- Designed for added safety. Accidental loosening of the ball is prevented.
- Excellent chemical & corrosion resistance.
- Low frictional losses.
- Chemical resistant nitrile rubber-O-rings ensures leak proof operation for longer period.
- Easy to install and dismantle.
- Solvent weld, BSP threaded or flanged options.
- Available in two seat ring options - economical HDPE seat ring for low pressure applications or leak resistance teflon (PTFE) seat ring for high pressure applications.
- Available in 20 to 90 mm (½" to 3") sizes.

Application

- Used for flow control in irrigation & water supply lines.



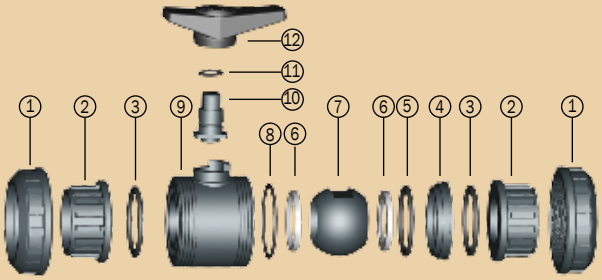
Technical Specifications

*Reference Code	Nominal Diameter		A	B	C	D	E	L	H	Flow at 1 kg/cm² (14 psi) ▲ P		Max. Operating Pressure	
	mm	inch	mm	mm	mm	mm	mm	mm	mm	lpm	gpm	kg/cm²	psi
DBV20	20	½"	56.50	46.50	49.50	16.50	79.50	93.20	98.10	200	52.9	16	227
DBV25	25	¾"	67.60	55.50	63.00	20.00	92.00	103.56	107.25	385	101.9	16	227
DBV32	32	1"	75.20	62.50	68.00	23.00	103.00	117.28	118.30	770	203.7	16	227
DBV40	40	1¼"	91.10	71.50	83.00	26.35	122.35	146.21	136.30	1100	291.0	10	142
DBV50	50	1½"	111.00	80.00	97.00	32.00	140.15	159.61	158.00	1750	463.0	10	142
DBV63	63	2"	135.60	95.50	118.00	36.00	171.35	191.39	180.70	3400	899.5	10	142
DBV75	75	2½"	148.00	114.30	138.00	44.20	207.90	228.52	219.15	5250	1388.9	6	85
DBV90	90	3"	194.00	153.00	181.00	52.00	273.00	315.00	185.00	7100	1878.3	6	85

** For detailed code please refer the ordering specification.*

List of Spares

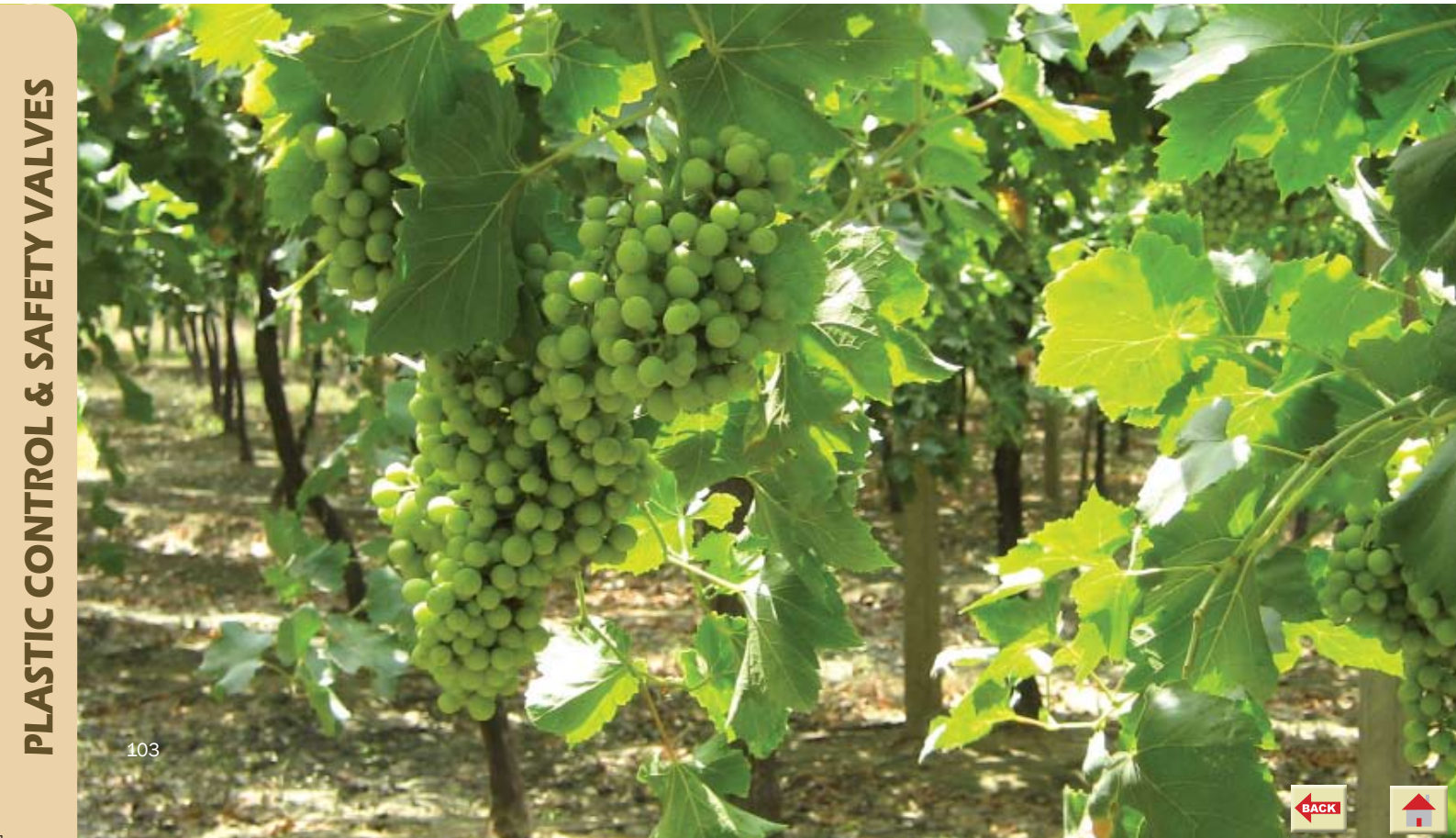
Sl.	Description	Material
1	Union Nut	PVC
2	Socket	PVC
3	Socket 'O' Ring	Nitrile
4	Seat Support	PVC
5	Body 'O' Ring	Nitrile
6	Seat Ring	HDPE/ PTFE
7	Ball	PVC
8	Seat Support 'O' Ring (for sizes 50-90 mm)	Nitrile
9	Body	PVC
10	Stem	PVC
11	Stem 'O' Ring	Nitrile
12	Handle	ABS



Ordering Specifications

X	BV	XX	X	XX
		Size, mm	Seat Ring Material	Type of Connection
D - Domestic order (within India) E - Export order (outside India)		20	H - HDPE T - Teflon (PTFE)	SW - Solvent Welded FF - BSP Female x Female Threaded MM - BSP Male x Male Threaded MF - BSP Male x Female Threaded BF - BS Flanged AF - ANSI Flanged
		25		
		32		
		40		
		50		
		63		
		75		
		90		

Example: DBV50HFF - This code represents Jain PVC Ball Valves® - DU of Size 50 mm BSP female threaded connection with HDPE seat ring.



Jain PVC Ball Valves® - SU

Features and Specifications

- Compact Single Union (SU) design.
- Manufactured from high performance rigid PVC compound.
- Excellent chemical & corrosion resistance.
- Low frictional losses.
- Easy to install and dismantle.
- Available in 20, 25 & 32 mm sizes.
- Available in threaded and compression fitting type jointing options.
- Available in economical HDPE seat ring or leak resistance teflon (PTFE) seat ring options.
- Maximum operating pressure 16 kg/cm² (227 psi).

Application

- For flow control in irrigation & domestic water supply lines.

Technical Specifications

Reference Code	Nominal Diameter		A	B	C	D inch (BSP)	E	Flow at 1 kg/cm² (14 psi) ▲ P	
	mm	inch	mm	mm	mm			lpm	gpm
DSUV20XFF	20	½″	66.5	55.5	57.0	½″	½″	200	52.9
DSUV25XFF	25	¾″	84.5	78.0	66.0	¾″	¾″	385	101.9
DSUV32XFF	32	1″	96.8	85.0	75.0	1″	1″	770	203.7
DSUV20XFM	20	½″	66.5	69.0	57.0	½″	½″	200	52.9
DSUV25XFM	25	¾″	84.5	90.0	66.0	¾″	¾″	385	101.9
DSUV32XFM	32	1″	96.8	101.5	75.0	1″	1″	770	203.7
DSUV20XFP	20	½″	66.5	69.0	57.0	½″	½″	200	52.9
DSUV25XFP	25	¾″	84.5	90.0	66.0	¾″	¾″	385	101.9
DSUV32XFP	32	1″	96.8	101.5	75.0	1″	1″	770	203.7
DSUV20XFC	20	½″	66.5	83.0	57.0	½″	21 mm	200	52.9
DSUV25XFC	25	¾″	84.5	108.0	66.0	¾″	26 mm	385	101.9
DSUV32XFC	32	1″	96.8	127.0	75.0	1″	34 mm	770	203.7

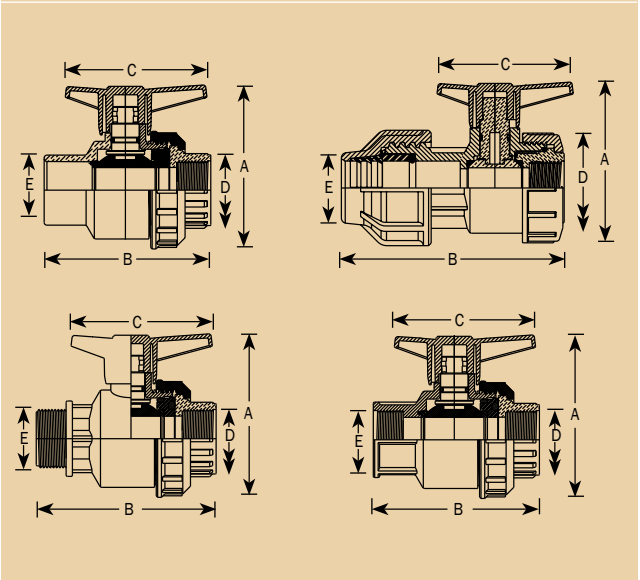
List of Spares

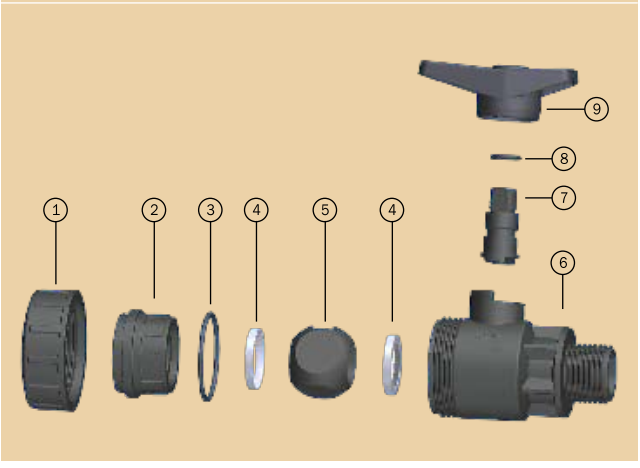
Sl.	Description	Material
1	Union Nut	PVC
2	Socket	PVC
3	Body 'O' Ring	Nitrile
4	Seat Ring	HDPE/PTFE
5	Ball	PVC
6	Body	PVC
7	Stem	PVC
8	Stem 'O' Ring	Nitrile
9	Handle	ABS

Ordering Specifications

X	SUV	XX	X	XX
		Size, mm	Seat Ring Material	Type of Connection
D - Domestic order (within India) E - Export order (outside India)		20 25 32	H - HDPE T - Teflon (PTFE)	FF - BSP Female x Female Threaded FM - BSP Female x Male Threaded FP - BSP Female x Solvent Welded FC - BSP Female Threaded x Compression Joint

Example: DSUV20HFM - This code represents Jain PVC Ball Valves® - SU of size 20mm, with one end BSP female threaded and other end BSP male threaded connection with HDPE seat ring.





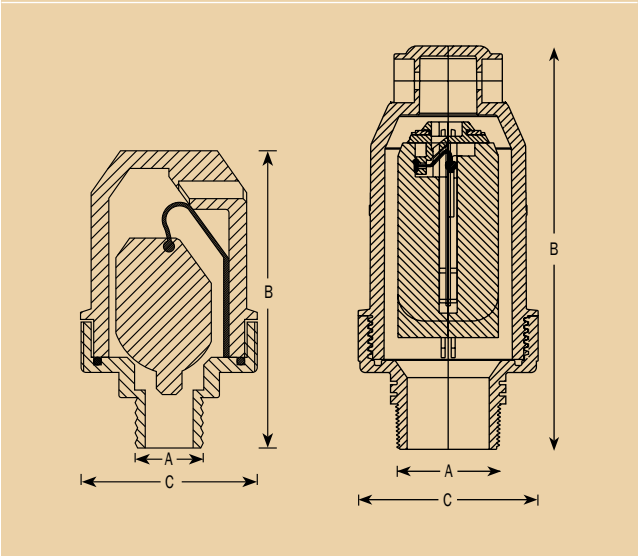
Jain ARV - C®

Features and Specifications

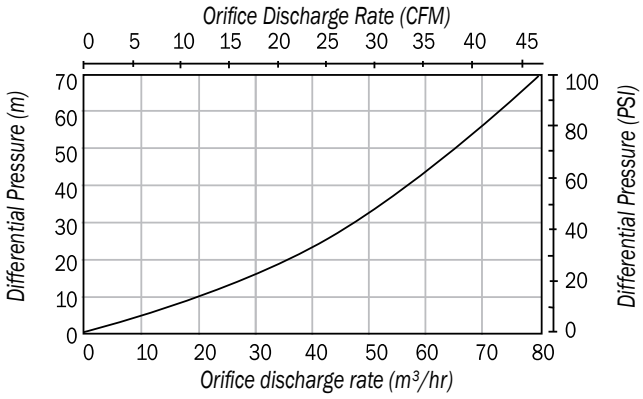
- Continuous acting air release valve that releases air entrapped in the pipeline during start up and while in operation continuously.
- Acts as vacuum breaker while drain off.
- Excellent chemical and weather resistance.
- Perfect pressure balanced float dynamically removes even small air pockets.
- Unique orifice design facilitates easy and quick expulsion of air.
- Specially designed rubber strip seals the air vent perfectly.
- Available in 1" & 2" BSP/NPT male threaded end connections.

Applications

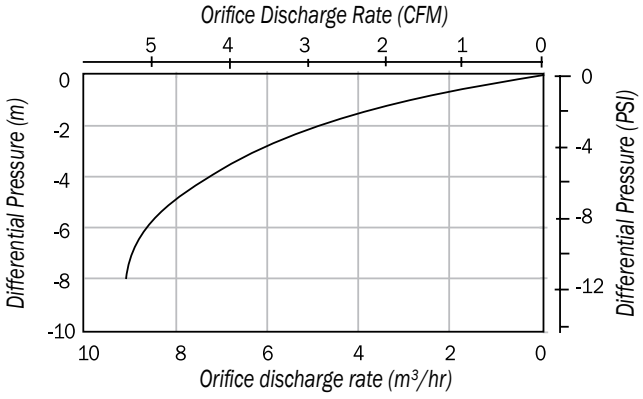
- Recommended in water supply distribution and long pipeline networks.
- Protects irrigation system and components.



Performance Graph of Air Expulsion for Jain ARV-C® - 1"



Performance Graph of Vacuum for Jain ARV-C® - 1"



Technical Specifications

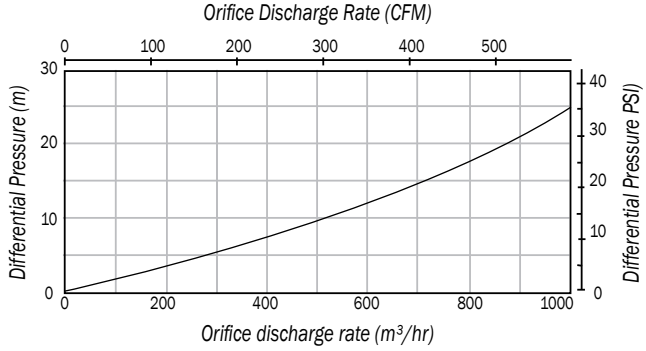
Code	Max. Operating Pressure		Min. sealing pressure		A	B	C
	kg/cm²	psi	kg/cm²	psi	inch (BSPM)	mm	mm
DARVC100	10	142	0.3	4	1"	132	81
DARVC200	10	142	0.3	4	2"	231	103

Ordering Specifications

X	ARVC	XXX
D - Domestic order (within India) E - Export order (outside India)		Size, inch 100 - 1" 200 - 2"

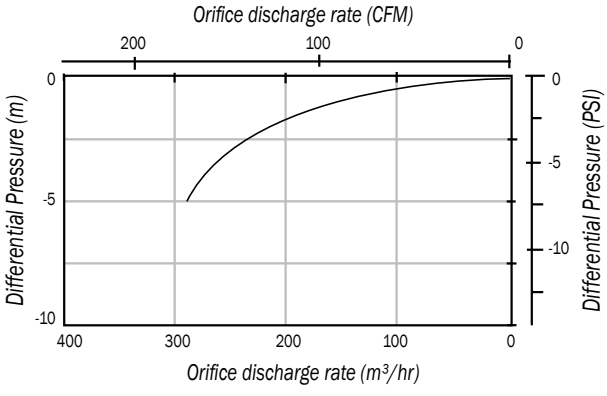
Example: DARVC100 - This code represents Jain ARV - C® of size 1" BSP male threaded connection.

Performance Graph of Air Expulsion for Jain ARV-C® - 2"



Product Design Registration No. for ARVC100 is 183475.

Performance Graph of Vacuum for Jain ARV-C® - 2"



JAIN
More Crop Per Drop®

Jain Air Release Valves

Features and Specifications

- Compact design.
- Manufactured from high performance rigid PVC compound.
- Excellent chemical and corrosion resistance.
- Large orifice opening facilitates easy expulsion of air and breaking the vacuum.
- Light weight.
- Maximum working pressure 6 kg/cm² (85 psi).
- Available in ½", ¾" and 1" BSP male threaded, BSP Female threaded & compression type connection option.

Application

- Recommended in micro/drip irrigation systems as a safety valve to remove entrapped air and to break the vacuum in the system.

Technical Specifications

Code	Size	A	B	C
	mm	mm		mm
DARV20BM	20	82.7	½"	15.0
DARV25BM	25	104.8	¾"	16.3
DARV32BM	32	109.0	1"	19.0
DARV20BF	20	69.7	½"	15.0
DARV25BF	25	93.4	¾"	16.3
DARV32BF	32	94.0	1"	19.0
DARV20CO	20	96.7	21mm	-
DARV25CO	25	120.8	26mm	-
DARV32CO	32	135.0	34mm	-

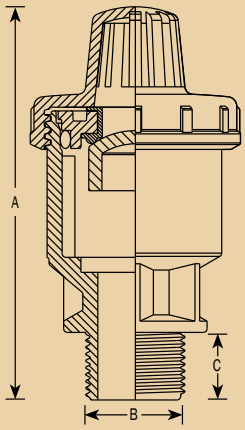
List of Spares

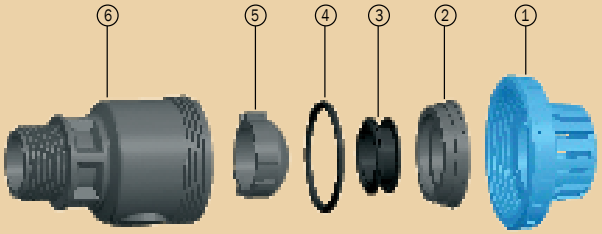
Sl.	Description	Material
1	Strainer Union Nut	PVC
2	Seat Support	PVC
3	Rubber Seal	Nitrile
4	Body 'O' Ring	Nitrile
5	Float	PVC
6	Body	PVC

Ordering Specifications

X	ARV	XX	XX
		Size, mm	Type of Connection
D - Domestic order (within India) E - Export order (outside India)		20 25 32	BM - BSP male threaded BF - BSP female threaded CO - Compression Type

Example: DARV32BM - This code represents Jain Air Release Valve of the size 32 mm with BSP male threaded connection.





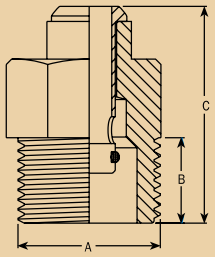
Jain Mini Air Release Valves

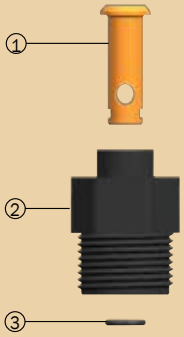
Features and Specifications

- Reinforced plastic construction.
- Excellent chemical resistance.
- Perfect pressure balanced brass float with large orifice opening for quick expulsion of air and for breaking the vacuum.
- Available in ½", ¾" & 1" BSP male threaded end connection.
- Maximum pressure rating 6 kg/cm² (85 psi).

Application

- Micro/drip irrigation systems.





Technical Specifications

Code	Size	A	B	C
	inch	mm	mm	mm
DMARV012	½"	½"	13.2	31.8
DMARV034	¾"	¾"	15.9	40.3
DMARV100	1"	1"	33.0	44.0

List of Spares

Sl.	Description	Material
1	Float	Brass
2	Body	PoM
3	Float 'O' Ring	Nitrile

Ordering Specifications

X	MARV	XXX
D - Domestic order (within India) E - Export order (outside India)		Size, inch 012 - ½" 034 - ¾" 100 - 1"

Example: DMARV034 - This code represents Jain Mini Air Release Valve of size ¾" BSP male threaded connection.

Jain Check Valve

Features and Specifications

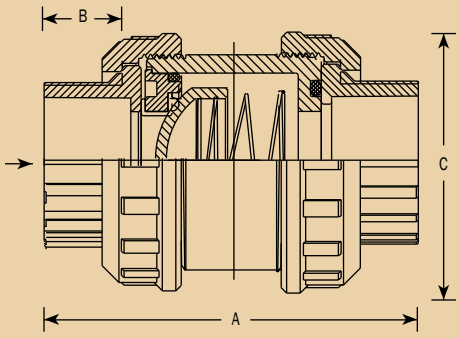
- Compact design.
- Manufactured from high performance rigid PVC compound.
- Excellent chemical and corrosion resistance.
- Positive shut off prevents leakages.
- Energy saving, low frictional losses.
- Light weight.
- Guided float slides smoothly.
- Maximum working pressure 6 kg/cm² (85 psi).

Application

- Recommended in micro/drip irrigation systems as a safety valve to prevent the water hammer and to maintain water column in delivery pipe.

Technical Specifications

Reference Code	Nominal Diameter		A	B	C
	mm	inch	mm	mm	mm
DCV20XX	20	½"	80.7	9.6	50.0
DCV25XX	25	¾"	89.2	11.2	63.0
DCV32XX	32	1"	101.9	16.1	68.0
DCV40XX	40	1¼"	119.1	18.3	84.0
DCV50XX	50	1½"	138.1	21.4	97.6
DCV63XX	63	2"	163.7	30.6	118.2
DCV75XX	75	2½"	204.6	36.7	138.2



Ordering Specifications

X	CV	XX	XX
		Size, mm	Type of Connection
D - Domestic order (within India) E - Export order (outside India)		20 25 32 40 50 63 75	SW - Solvent Welded FF - BSP Female x Female Threaded MM - BSP Male x Male Threaded MF - BSP Male x Female Threaded

Example: DCV32FF - This code represents Jain Check Valve of size 32mm with BSP female threaded connection.

BACK

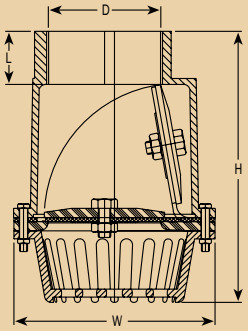
Jain PVC Foot Valves®

Features and Specifications

- Manufactured from high performance rigid PVC compound.
- Unique design of strainer effectively screens trash and ensures minimum obstruction to flow.
- Excellent chemical and corrosion resistance.
- Positive shut off prevents leakage & avoids repeated priming of the pump.
- Light weight, no extra weight on suction pipe.
- Impact resistant nylon strainer.
- 'K' value (friction coefficient of the valve) less than 0.8 ensures low frictional loss.
- Energy savings up to 30%.
- Available in sizes of 2½", 3.0" and 4.0" BSPT/NPT female threaded connections.

Application

- Maintains water column in suction pipe of the pump.

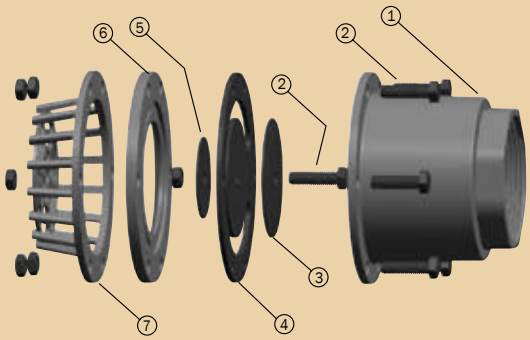


Technical Specifications

Code	Size	D	W	H	L
	inch	mm	mm	mm	mm
DJFV212	2½"	65.00	130.00	148.00	23.00
DJFV300	3"	80.00	153.00	185.00	23.00
DJFV400	4"	110.00	200.00	206.00	30.00

List of Spares

Sl.	Description	Material
1	Body	PVC
2	Nut & Bolt	Mild Steel
3	Weight	Cast Iron
4	Rubber Flap	Nitrile
5	Washer	Mild Steel
6	Flange	PVC
7	Strainer	Nylon



Ordering Specifications

X	JFV	XX	XXX
D - Domestic order (within India) E - Export order (outside India)		Size, inch	Type of Connection
		212 - 2½" 300 - 3" 400 - 4"	BTF - BSPT female threaded NPF - NPT female threaded

Example: DJFV212BTF - This code represents Jain PVC Foot Valves® of size 2½" with BSPT female threaded connection.

Valve Box

Features and Specifications

- Rugged reinforced plastic construction.
- Protects valves from damage due to lawn mowers, other garden equipment and vandalism.
- Robust top cover with non slippery grips.
- Leaf green colour of the cover matches to surrounding lawn/ turf.
- Heavy duty extended bottom keeps the valve box stable and firmly set in the soil.
- Provides convenient access to valves installed bellow ground level.
- Special heavy duty models available.
- Available in circular and rectangular models.

Application

- Valve guard in Turf / Landscaping and in micro irrigation systems.

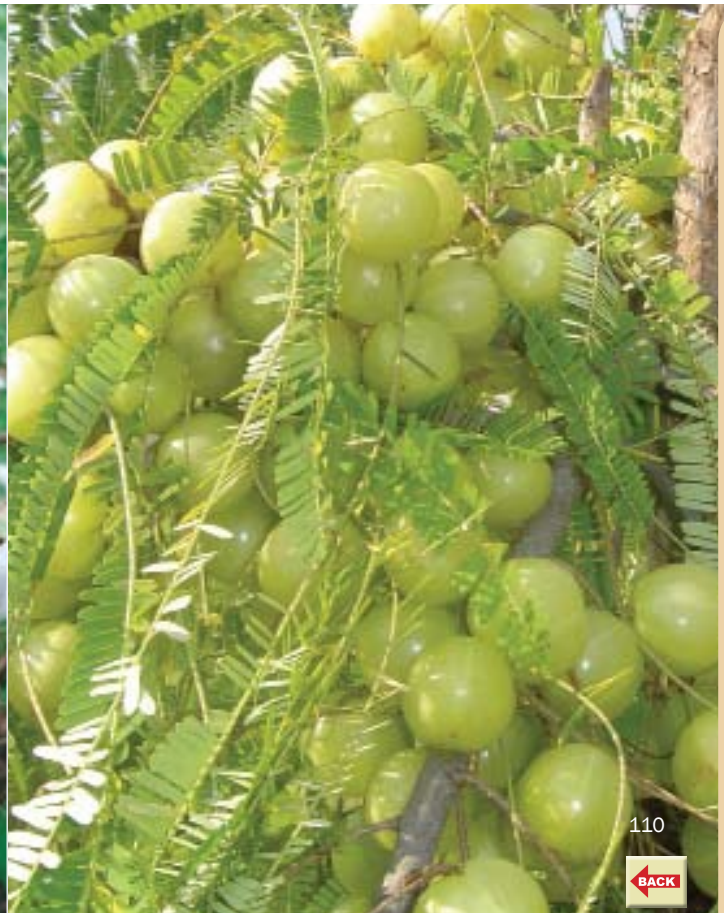
Technical Specifications

Code	Lock	Pipe Access Hole		Dimensions							
				Top		Lid		Base		Height	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
DVB06R	Snap Fit	65	2½″	153	6″	140	5½″	200	8″	240	9½″
DVB10R	Snap Fit	65	2½″	250	10″	274	10¾″	347	13½″	250	10″
DVB09H	Lockable	50	2″	230	9″	230	9″	325	13″	250	10″
DVB12H	Snap Fit & Lockable	65	2½″	405x 275	16x 10.8″	405x 275	16x 10.8″	525x 393	20.7x 15.5″	325	12″

Ordering Specifications

X	VB	XX	X
		Top Opening inch	Model Options
D - Domestic order (within India) E - Export order (outside India)		06	R - Regular
		09	
		10	
		09	H - Heavy Duty
		12	

Example: DVB06R - This code represents valve box with 6″ top openings.



Poly Fittings & Accessories

Auto Flush Lateral Filter

Jain Lateral Drain Valve

Jain Poly Fittings

Stakes & Assembly

Tools & Accessories

Auto Flush Lateral Filter

Winner of the prestigious '' Technical innovation 2005'' award given by EIMA, Italy.

Product Design Registration No. 202302.

Features and Specifications

- Tertiary filter on drip laterals to filter out fine particles, which have passed through the primary and secondary filters.
- Unique autoflush arrangement facilitates auto flushing (Self cleaning) of filter at start-up and shutdown of irrigation cycle, thus eliminating trouble of periodical cleaning and maintenance of filters and lateral lines.
- Releases air at startup of system and acts as vacuum breaker during system shutdown preventing dirt suction through emitters.
- Simple, compact design
- UV Stabilised, No environmental effects.
- Sealing pressure for autoflush port is 0.3 kg/cm^2
- Nominal flow rate 50 lpm (13 gpm)
- Maximum pressure rating 4 kg/cm^2 (57psi)

Applications

- Prevents clogging due to physical contaminants and ensures trouble free service of emitters, J-Turbo Line / J-Turbo Aqura & Drip Tapes.
- Recommended for filtering water used in irrigation and misting system of green houses.
- Specially recommended for nursery application.

Ordering Specifications

X	AFLF	XX	XX
		Tube Size, mm	Connection
D - Domestic order (within India) E - Export order (outside India)		12 - 12OD 16 - 16OD 13 - 13 ID	PB - Polybarbed SR - Split Ring barbed DT - Drip Tape 16 mm ID PS - Polybarbed inlet x Split Ring outlet.

Example: DAFLF16PB - This code represents Auto Flush Lateral Filter suitable for 16mm OD polytube having polybarbed connection and with automatic flushing arrangement.

Lateral Filter

Features and specifications

- Compact and simple design.
- UV stabilised.
- No environmental effects.
- Used as a secondary filter.
- Nominal flow rate 50 lpm (13gpm).
- Maximum pressure rating 4 kg/cm^2 (57 psi).

Applications

- Prevents clogging due to physical contaminants and ensures trouble free service of emitters, J-Turbo Line / J-Turbo Aqura & Drip Tapes.
- Recommended for filtering water used in irrigation and misting systems of green houses.
- Specially recommended for filtering water used in nursery application.

Ordering Specifications

X	LF	XX	XX
		Tube Size, mm	Connection
D - Domestic order (within India) E - Export order (outside India)		12 - 12OD 16 - 16OD 13 - 13 ID	PB - Polybarbed SR - Split Ring barbed DT - Drip Tape 16 mm ID PS - Polybarbed inlet x Split Ring outlet.

Example: DLF16PB - This code represents Lateral Filter suitable for 16mm OD polytube having polybarbed connection.

Jain Lateral Drain Valve

Features and Specifications

- Drains off dirt / garbage from the lateral while starting and stopping of irrigation cycle.
- Stainless steel spring and EPDM seal ensure perfect sealing to provide efficient service.
- UV stabilised.
- No environmental effects.
- Minimises maintenance of drip system by automatically flushing the laterals.
- Acts as an air release valve which releases air at the start up and breaks vacuum at the shut off.
- Positive sealing at 0.3 kg/cm^2 pressure.
- Available in various inlet connections.

Applications

- Used as an end stop that automatically flushes lateral lines in drip irrigation systems.
- Reduces chances of dripper clogging.

Ordering Specifications

X		XXXX
		Connection
D - Domestic order (within India) E - Export order (outside India)	JLD	PB12 - Poly barbed inlet suitable for 12 mm OD lateral
		PB16 - Poly barbed inlet suitable for 16 mm OD lateral
		PB20 - Poly barbed inlet suitable for 20 mm OD lateral
		PB13 - Poly barbed inlet suitable for 13 mm ID lateral
		SR12 - Split ring inlet suitable for 12 mm OD J-TurboLine/J-Turbo Aqura
		SR16 - Split ring inlet suitable for 16 mm OD J-TurboLine/J-Turbo Aqura
		SR20 - Split ring inlet suitable for 20 mm OD J-TurboLine/J-Turbo Aqura
		DT16 - Ring lock inlet suitable for 16 mm ID Drip Tape
		CJ16 - Tape lock inlet suitable for 16 mm ID for Drip Tape

Example: DJLDPB16 - This code represents Jain Lateral Drain Valve with poly barbed inlet suitable for 16mm OD polytube.

JAIN POLY FITTINGS

Features and Specifications

- Manufactured from reinforced PPCP.
- Nylon fittings can be supplied as a special order.
- Excellent chemical and weather resistance.

Emitting Pipe Fittings

J-Turbo Line/ J-Turbo Aqura Joiner

Tube Size mm x mm	Code
12 x 12 OD	DTLJ12
16 x 16 OD	DTLJ16
20 x 20 OD	DTLJ20

J-Turbo Line/ J-Turbo Aqura Elbow

Tube Size mm x mm	Code
12 x 12 OD	DTLE12
16 x 16 OD	DTLE16
20 x 20 OD	DTLE20

J-Turbo Line/ J-Turbo Aqura Threaded Adaptor

Size Tube x Thread mm x inch (BSP)	Code
12 OD x ½"	DTLTA1212
16 OD x ½"	DTLTA1612
20 OD x ½"	DTLTA2012
12 OD x ¾"	DTLTA1234
16 OD x ¾"	DTLTA1634
20 OD x ¾"	DTLTA2034

J-Turbo Line/ J-Turbo Aqura Tee

Size Tube Size mm x mm	Code
12 x 12 x 12 OD	DTLT12
16 x 16 x 16 OD	DTLT16
20 x 16 x 20 OD	DTLT2016
20 x 20 x 20 OD	DTLT20

J-Turbo Line/ J-Turbo Aqura Take Off

Tube x Grommet mm x mm	Code
12 OD x 08	DTLT01208
16 OD x 13	DTLT01613
20 OD x 13	DTLT02013

J-Turbo Line/ J-Turbo Aqura Reducing Joiner

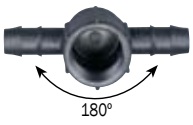
Tube Size mm x mm	Code
16 x 12 OD	DTLJ1612
20 x 16 OD	DTLJ2016

Multi Outlet Take-offs

Two Way Take-off - 60°

Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT02W163460
12 OD x ¾"	DT02W123460
20 OD x 1"	DT02W201060

Two Way Take-off - 180°



Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT02W1634180
12 OD x ¾"	DT02W1234180
20 OD x 1"	DT02W2010180

Three Way Take-off - 60°

Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT03W163460
12 OD x ¾"	DT03W123460
20 OD x 1"	DT03W201060

Three Way Take-off - 120°

Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT03W1634120
12 OD x ¾"	DT03W1234120
20 OD x 1"	DT03W2010120

Four Way Take-off-60°

Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT04W163460
12 OD x ¾"	DT04W123460
20 OD x 1"	DT04W201060

Six Way Take-off - 60°

Size Tube x Thread mm x inch (BSP)	Code
16 OD x ¾"	DT06W163460
12 OD x ¾"	DT06W123460
20 OD x 1"	DT06W201060

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering J-Turboline Joiner 12 x 12 mm OD change the code as ETLJ12 instead of DTLJ12.

Jain Polybarbed Fittings

Poly Joiner

Tube Size mm	Code
8 OD	DJ008
12 OD	DJ012
16 OD	DJ016
20 OD	DJ020
13 ID	DJI13
14 ID	DJI14
15 ID	DJI15
16 ID	DJI16
17 ID	DJI17
18 ID	DJI18
26 ID	DJI26

Poly Reducing Joiner

Tube Size mm x mm	Code
16 x 12 OD	DRJ01612
20 x 12 OD	DRJ02012
20 x 16 OD	DRJ02016
16 x 13 ID	DRJI1613
17 x 13 ID	DRJI1713
17 x 14 ID	DRJI1714
18 x 13 ID	DRJI1813
18 x 15 ID	DRJI1815
18 x 16 ID	DRJI1816
26 x 17 ID	DRJI2617
26 x 18 ID	DRJI2618

Poly Tee

Tube Size mm	Code
12 OD	DT012
16 OD	DT016
20 OD	DT020
13 ID	DTI13
16 ID	DTI16

Poly Reducing Tee

Tube Size mm x mm	Code
16 x 12 x 16 OD	DRT01612
20 x 16 x 20 OD	DRT02016
20 x 12 x 20 OD	DRT02012
16 x 13 x 16 ID	DRTI1613

Poly Elbow

Tube Size mm	Code
12 OD	DEL012
16 OD	DEL016
20 OD	DEL020
13 ID	DELI13
16 ID	DELI16

Grommet

Size Grommet x drill mm x mm	Code
08 x 11.9	DGR008
13 x 17.5	DGR013

Poly Grommet Take Off

Tube x Grommet mm x mm	Code
12 OD x 08	DGT001208
12 OD x 13	DGT001213
16 OD x 08	DGT001608
16 OD x 13	DGT001613
20 OD x 13	DGT002013
13 ID x 08	DGTOI1308
13 ID x 13	DGTOI1313
16 ID x 13	DGTOI1613

Poly End Plug

Tube Size mm	Code
13 ID	DEPI13
16 OD	DEPO16

Poly Goof Plug

Suitability	Code
Plugs 2.9 mm sized punch holes	DGP
Plugs 3.9mm sized punch holes. Suitable for BT00804, BT01204, TGAD	DGP4

Grommet Plug

Size Grommet x drill mm x mm	Code
08 x 11.9	DGRP08
13 x 17.5	DGRP13

Poly End Stop "8" Shape

Tube Size mm	Code
12	DES0812
16	DES0816
20	DES0820
25	DES0825

Poly Take Off

Tube Size mm	Code
8 mm OD	DBT00804
12 mm OD	DBT01208

Multioutlet Connectors for Drippers

Single Way Connector

Suitability	Code
JSCPC Plus, Click tif, J-Turbo key Plus (5mm OD extension) x 3.3 mm OD tube	DA1EWD
JSCPC Plus, Click tif, J-Turbo key Plus (5mm OD extension) x 6 mm OD tube	DA1WD

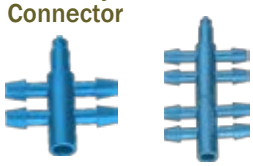
Two Way Connector

Suitability	Code
JSCPC Plus, Click tif, J-Turbo key Plus (5mm OD extension) x 6 mm OD tube	DA2WD

Four Way Connector

Suitability	Code
JSCPC Plus, Click tif, J-Turbo key Plus (5mm OD extension) x 6 mm OD tube	DA4WD

Four Way - Multilevel Connector

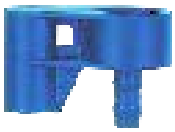


Suitability	Code
JSCPC Plus, Click tif, J-Turbo key Plus (5mm OD extension) x 6 mm OD tube	DA4MWD

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Poly Joiner 8 mm OD change the code as EJ008 instead of DJ008.

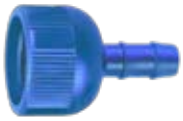
Rainport™ - MS Fittings

Adaptor for Mini Sprinkler



Size mm	Code
08 OD	DAMSM8
12 OD	DAMSM12
Push-fit Adaptor for Modular Sprinkler	DAMSM8PF

Polybarbed Mini Sprinkler Adaptor



Size mm	Code
08 OD	DMSAB6

Poly Take Off

Outlet Tube Size mm	Code
08 OD	DBT00804
12 OD	DBT01204

8 mm Polybarbed Joiner

Size mm	Code
08 OD	DJ008

8 mm Adaptor for 501

Size	Code
1/2" Female Threaded x 8 mm OD Extension Tube	DHTA12P8

8 mm Male Adaptor

Tube Size mm	Code
08 OD	DATGS

8 mm Female Adaptor

Tube Size mm	Code
08 OD	DACTGS

8 mm Detachable take off assembly

Tube Size mm	Code
08 OD	DTGAD

Butterfly adaptor for Modular Sprinkler

Suitability	Code
06 OD	DBB6P
08 OD	DBB8P

Bayonet female take off

Suitability	Code
6mmOD / 8mmOD bayonet male take off adaptor x Jain Tough Hose	DBFT

Bayonet male take off adaptor

Tube Size mm	Code
06 OD	DBMTA6
08 OD	DBMTA8

Bayonet take off plug

Suitability	Code
Bayonet female take off	DBTP

Rainport™ - PS Fittings

Take Off

Suitability	Code
12/8 mm or 13/9 mm Take Off Adaptor x Jain Tough Hose 25-32mm	DHT012V

Take Off Plug

Suitability	Code
12/8 mm Take Off	DHTP

Take Off Adaptor

Suitability	Code
12/8 mm Vinyl Tube x Take Off	DHTOA8V
13/9 Vinyl Tube x Take Off	DHTOA9V

½" x ¾" Adaptor

Suitability	Code
To convert ½" male adaptor to ¾" Female adaptor for 5035	DHTAF1234

Sprinkler Adaptor

Suitability	Code
½" Plastic Sprinkler x 12/8 mm Vinyl tube	DHTA1208V
½" Plastic Sprinkler x 13/9 mm Vinyl tube	DHTA1209V

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering 8 mm adaptor for mini sprinkler change the code as EAMSM8 instead of DAMSM8.

Jain Ring Lock Fittings

Ring Joiner

Tube Size mm	Code
15.60 ID	DTJI16

Ring Tee

Tube Size mm	Code
15.60 ID	DTTI16

Ring Elbow

Tube Size mm	Code
15.60 ID	DTEI16

Ring Swivel Tee

Size Tube x Thread mm x inch (BSPT)	Code
15.60ID x ¾"	DSTI16

Ring Swivel Adaptor

Size Tube x Thread mm x inch (BSPT)	Code
15.60ID x ¾"	DTSAI16

Ring Take-Off

Tube Size mm x mm	Code
7 x 15.60ID	DTOI16

Ring Threaded Adaptor

Size Tube x Thread mm x inch (BSPT)	Code
15.60ID x ¾"	DTTAI16

Tape Lock Fittings

Tape Lock Joiner

Size mm	Code
16 ID	DCJ16

Tape Lock x Poly Hose Connector

Size hose x tape mm x mm	Code
13 x 16 ID	DCPJ1316
08 x 16 ID	DCPJ0816
04 x 16 ID	DCPJ0416

Tape Lock Threaded Adaptor

Size Tube x Thread mm x inch (BSPT)	Code
16 ID x ¾"	DCTA1634

Tape Lock Elbow

Size mm	Code
16 ID	DCE16

Tape Lock End Plug

Size mm	Code
16 ID	DDLEP16

Tape Lock Tee

Size mm	Code
16 ID	DDLT16

Tape Lock x Poly Take Off

Size mm	Code
16 ID	DDLTOP1608

Tape Lock x Lay-flat Take Off

Size mm	Code
16 ID	DDLTOLF16
22 ID	DDLTOLF22

Tape Lock Valves

Size	Code
16 mm x PE Tube	DDLVP16
22 mm x PE Tube	DDLVP22
16 mm x Layflat Hose	DDLVLF16
22 mm x Layflat Hose	DDLVLF22
16 mm x ½" MBSPT	DDLV1612
16 mm x ¾" MBSPT	DDLV1634
22 mm x ¾" MBSPT	DDLV2234

Tape Lock Flush Valve

Size mm	Code
16 ID	DJLDCJ16

3/4" Swivel Adaptor

Size mm	Code
16 ID with screen	DFHS06LSWS
16 ID with washer	DFHS06LSWW

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Ring Joiner 15.60 mm ID change the code as ETJI16 instead of DTJI16

Jain Poly Threaded Fittings

Poly Threaded Adaptor

Size Tube x Thread mm x inch (BSPT)	Code
13 ID x ½"	DTAI1312
13 ID x ¾"	DTAI1334
16 ID x ¾"	DTAI1634
12 OD x ½"	DTA01212
12 OD x ¾"	DTA01234
16 OD x ¾"	DTA01634
16 OD x ½"	DTA01612
20 OD x ½"	DTA02012
20 OD x ¾"	DTA02034
16 OD x ¾"NPT	DTA01634N

Poly Threaded Elbow

Size Tube x Thread mm x inch (BSPT)	Code
13 ID x ½"	DTEI1312
16 ID x ½"	DTEI1612
16 ID x ¾"	DTEI1634

Poly Threaded Tee

Size Tube x Thread mm x inch (BSP)	Code
13 ID x ½"	DBTTI1312

Threaded Tee

Size inch (BSP)	Code
½" x ¾" x ½"	DTT1234

Poly Hose Swivel Adaptor

Size mm x inch (BSP)	Code
13 ID x ¾"	DJHSA1334
14 ID x ¾"	DJHSA1434
15 ID x ¾"	DJHSA1534
16 ID x ¾"	DJHSA1634
17 ID x ¾"	DJHSA1734
18 ID x ¾"	DJHSA1834
26 ID x ¾"	DJHSA2634

Threaded End Plug

Size inch (BSP)	Code
3/8" Male	DEPM38
¼" Male	DEPM14
¾" Male	DEPM34
¾" Female	DEPF34
¾" Male	DEPM34HD (Heavy Duty)
1" Male	DEPM1HD

Threaded Elbow

Size, inch male x female	Code
½"	DSE012
¾"	DSE034
1"	DSE100P

Extension Tube Fittings 6 mm OD

- Suitable for 6 mm OD x 1.0 mm wall thickness tubing. (code: TH006100)
- Available in blue or black colour.

6mm Joiner

Tube Size mm	Code
06 OD	DPJ4S

6mm Elbow - Long

Tube Size mm	Code
06 OD	DPE4L

6mm Take-off

Tube Size mm	Code
06 OD	DPE4S

6mm Joiner-Long

Tube Size mm	Code
06 OD	DPJ4L

6mm Tee

Tube Size mm	Code
06 OD	DPT4S

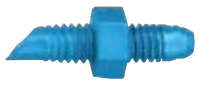
6mm Tee - Long

Tube Size mm	Code
06 OD	DPT4L

6mm Screwed Take-off

Size inch x mm (10-28 UNS)	Code
5/32" x 06 OD	DTT4

5/32 inch Screwed Joiner



Size inch x inch (10-28 UNS)	Code
5/32" x 5/32"	DTJ532

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Poly Threaded Adaptor 13 mm ID x ½" change the code as ETAI1312 instead of DTAI1312

Extension Tube Fittings 8 mm OD

- Suitable for 8.0 mm OD x 1.0 mm wall thickness (Code: TH008100)
- Available in blue or black colour.

Hydraulic Threaded Adaptor

Size mm x inch (BSP)	Code
8 x 1/8"	DHTA818

Hydraulic Threaded Elbow

Size mm x inch (BSP)	Code
8 x 1/8"	DHTE818
8 x ¼"	DHTE814

Hydraulic Elbow

Size mm x mm	Code
8 x 8	DHTE8

Hydraulic Threaded Tee

Size mm x inch (BSP)	Code
8 x 1/8" x 8	DHTT818

Hydraulic Tee

Size mm x mm x mm	Code
8 x 8 x 8	DHTT8

Hydraulic Joiner

Size mm x mm	Code
8 x 8	DHTJ8

Hex Nipple

Size inch x inch (BSP)	Code
1/8" x 1/8"	DHN18

Poly Compression Fittings

Male Threaded Adaptor

Code	Size mm
DCMTA20012C1	20x0.50"
DCMTA20034C1	20x0.75"
DCMTA25034C1	25x0.75"
DCMTA32100C1	32x1"

End Cap

Code	Size mm
DCEC20C1	20
DCEC25C1	25
DCEC32C1	32

Elbow

Code	Size mm
DCE20C1	20
DCE25C1	25
DCE32C1	32

Compression Threaded Elbow

Code	Size mm
DCMTE20C1	20
DCMTE25C1	25
DCMTE32C1	32

Joiner

Code	Size mm
DCJ20C1	20
DCJ25C1	25
DCJ32C1	32

Compression Female Adaptor

Code	Size mm
DCFA20C1	20
DCFA25C1	25
DCFA32C1	32

Tee

Code	Size mm
DCT20C1	20
DCT25C1	25
DCT32C1	32

Jain Ball Valves - SU Compression

Code	Nominal Diameter mm
DSUV20HFC	20
DSUV25HFC	25
DSUV32HFC	32

Compression x Threaded Tee

Code	Size mm
DCTT20C1	20
DCTT25C1	25
DCTT32C1	32

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Hydraulic Threaded Adaptor 8 mm x 1/8" change the code as EHTA818 instead of DHTA818

Stakes & Accessories

• Available in green, yellow or black colour.

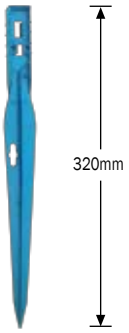
Stake for Modular Sprinkler / J-Jets / Foggers / Misters

Tube, mm	Code
8 mm OD Extension Tube	DSJF8
6 mm OD Extension Tube	DSJF4

Clip Stake for J-Jets / Foggers / Misters

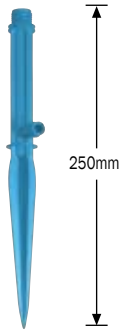
Tube, mm	Code
6/8 mm OD Extension Tube or Rigid Riser	DCSJ

Square Stake for J-Jets / Fogger / Misters



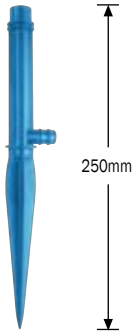
Tube, mm	Code
6 mm & 8 mm OD Extension Tube	DSSJ

Stake for Bubblers



Tube, mm	Code
12 OD	DSBC12
16 OD	DSBC16
13 ID	DSBC13

Stake for Mini Sprinkler-Cl



Tube mm	Code
12 OD	DSMS12
16 OD	DSMS16
13 ID	DSMS13

Mini Sprinkler Pipe Adaptor

Connection mm x inch (BSP)	Code
20 x 3/8"	DMSPA2038
25 x 3/8"	DMSPA2538

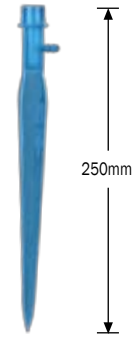
Rigid Riser for J-Jets/ Foggers/Misters

Length inch	Code
06	DHRJ06
12	DHRJ12
18	DHRJ18
24	DHRJ24
36	DHRJ36

Mini Sprinkler Adaptor

Connection	Code
Barbed (6 mm OD)	DMSAB
Barbed (8 mm OD)	DMSAB6
5/32" (4mm) 10 - 28 UNS Screwed	DMSAS4
Push Fit	DMSPF

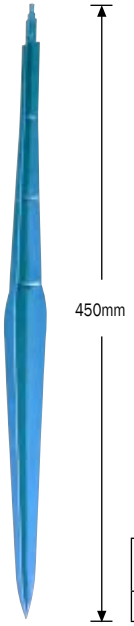
Stake for Mini Sprinkler



Tube mm	Code
6 OD	DSMST06
8 OD	DSMST08
12 OD	DSMST12
16 OD	DSMST16

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Stake for J-Jets 6 mm OD Extension Tube change the code as ESJF4 instead of DSJF4

Multipurpose Stake



Code
DMPS

3/8" Adaptor for Mini Sprinkler

Connection inch (BSP)	Tube mm	Code
3/8" Female Thr.	12/16 OD	DAMSM1216
3/8" Female Thr.	12 OD	DAMSM12
3/8" Female Thr.	16 OD	DAMSM16

1/2" Adaptor for Bubbler

Connection inch (BSP)	Tube mm	Code
½" Male Thr.	12/16 OD	DAJBM

1/2" Adaptor for Sprinkler

Connection inch (BSP)	Tube mm	Code
½" Female Thr.	12/16 OD	DAM1212
½" Female Thr.	08 OD	DAM1206

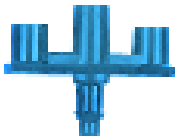
3/4" Adaptor for Sprinkler

Connection inch (BSP)	Tube mm	Code
¾" Female Thr.	12/16 OD	DAM34

1/4" Adaptor

Connection inch (BSP)	Tube mm	Code
¼" Female Thr.	12/16 OD	DAM14

Butterfly Adaptor for Modular Sprinkler



Connection	Tube mm	Code
Push Fit	6 OD	DBB6P
	8 OD	DBB8P

Swing Joints

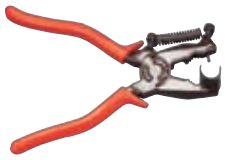
	XXX	XX
	Connection, inch	Length, inch
DSWJ	012 - ½" 034 - ¾" 100 - 1"	06 12 18 24

Polytube Punching Tools

Steel Pin Punch

Punch Dia. mm	Code
2.9	DLSP1
3.9	DLSP2
2.5	DITC (for ClickTif Inst.)

Plier Punch



Punch Dia. mm	Code
2.9	DPTS1
3.9	DPTS2

'S' Hose Punch

Punch Dia. mm	Code
2.9	DSHP

Straight Punch

Punch Dia. mm	Code
3.9	DSTP

Quick Cut

Suitability	Code
16 and 20 mm Jain Tough Hose - 3mm hole	DQC1620

Universal Punch

Suitability	Code
12 - 32 mm Jain Tough Hose - 3mm hole	DUP1232

Trigger

Suitability	Code
Multifunctional tool used for cutting, punching hole and insertion	DTRIGGER

Simple Hose Punch 3 mm

Suitability	Code
Hole size 3 mm x Jain Tough Hose	DSPR3

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Multipurpose Stake change the code as EMPS instead of DMPS

Drilling Tools

Drill Guide

Suitability	Code
Up to pipe size of 90 mm and for drill size 11.9	DDG119
Up to pipe size of 90 mm and drill size 17.5	DDG175

Drilling Tool

Drill Size, mm	Suitability	Code
11.9	DGT0I1308	DDT119
	DGT001208	
	DGT001608	
17.5	DGT0I1313	DDT175
	DGT0I1613	
	DGT001613	
	DGT001213	
	DGT002013	

Rainport - Quick Drill

Suitability	Code
Hole size 7.5 mm x Polyethylene Hose and Tube	DQDS75

Note:
Any other punch size can be supplied on demand.

Rainport - Simple Hose Punch

Suitability	Code
Hole size 7.5 mm x Polyethylene Hose and Tube	DSPR4

Tube Holding Accessories

Stake for Extension Tubing

Tube Size mm	Suitability	Code
2, 4 & 6	Staking and positioning of extension tube / vinyl tube	DSEL

'C' Clip Tube Holding Stake

Tube Size mm	Suitability	Code
12 OD	Staking and positioning of irrigation laterals	DLTHS12
16 OD		DLTHS16
20 OD		DLTHS20

J-Curl

Length, inch	Suitability	Code
2.5	12mm lateral	DJC1225
2.5	16mm lateral	DJC1625
3.0	12mm lateral	DJC1230
3.0	16mm lateral	DJC1630
3.5	12mm lateral	DJC1235
3.5	16mm lateral	DJC1635
4.0	12mm lateral	DJC1240
4.0	16mm lateral	DJC1640

Take-off Installation Tool

Suitability	Code
DGT0I1308	DTOT
DGT001208	
DGT001608	
DGT0I1313	
DGT0I1613	
DGT001613	
DGT001213	
DGT002013	

J-Turbo Key Spanner

Suitability	Code
Opening & retightening of J-Turbo Key Plus, J-SC-PC-Plus Emitters & Fogger Cap	DTKS

Pressure Check Assembly - Poly

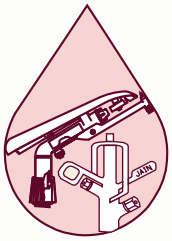
Suitability	Pressure Guage	Code
12 mm & 16 mm lateral / tough hose.	2" dial W/O glycerene filled	DPGLC
	2" dial with glycerene filled	DPGGFLC

Pressure Check Assembly - Sprinkler Nozzles

Suitability	Pressure Guage	Code
Impact & Pop-up Sprinkler Nozzles	2" dial W/O glycerene filled	DPCN
	2" dial with glycerene filled	DQPGAN1/4

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Drill Guide change the code as EDG119 instead of DDG119

Sprinkler Irrigation Systems



Impact Sprinkler

Jain Impact Sprinkler

322 Metal Impact Sprinkler

423 AG

233 B-S / 233 PC

233B AF Sprinkler

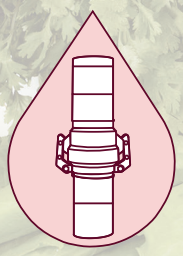
Magnum 21

5035 Plastic Impact Sprinkler

Impact Popup 805

Floppy Sprinkler

Rain Guns



Quick-Connect® PE Pipes & Fittings

Quick-Connect® PE Pipes

Quick-Connect® Joints

Quick-Connect® Fittings

IMPACT SPRINKLERS

Jain Metal Impact Sprinkler - Full Circle

Features and Specifications

- Full circle impact sprinkler.
- Corrosion proof I-beam construction for added strength.
- Stainless steel spindle, fulcrum pin and spring.
- Well balanced gunmetal swing arm ensures smooth and uniform rotation.
- Brass nozzles with hydrodynamically designed inner profile for precise jet and longer radius of throw.
- Easy to install and maintain.
- Uniform precipitation rate.

Applications

- Suitable for field crops like pulses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.

Performance Chart

Code	Nozzle Size, mm	Trajectory	Inlet inch	* Pressure		Discharge		Radius	
				kg/cm²	psi	lpm	gpm	m	ft
DJIS1	3.5	25°	½" BSP	2.00	28.44	10.28	2.72	11.50	37.7
				3.00	42.66	12.60	3.33	11.90	39.0
DJIS2	5.1 x 3.1	27°	¾" BSP	2.00	28.44	30.00	7.94	11.50	37.7
				2.50	35.55	34.00	9.00	12.00	39.4
				3.00	42.66	37.00	9.79	12.25	40.2
				3.50	49.77	38.00	10.05	13.00	42.6
				4.00	56.88	40.00	10.58	14.00	45.9
DJIS3	5.5 x 3.1	30°	¾" BSP	2.00	28.44	35.00	9.25	15.00	49.2
				2.50	35.55	39.00	10.31	15.50	50.8
				3.00	42.66	43.00	11.37	16.00	52.5
				3.50	49.77	46.00	12.16	18.00	59.0
				4.00	56.88	49.00	12.96	19.50	64.0

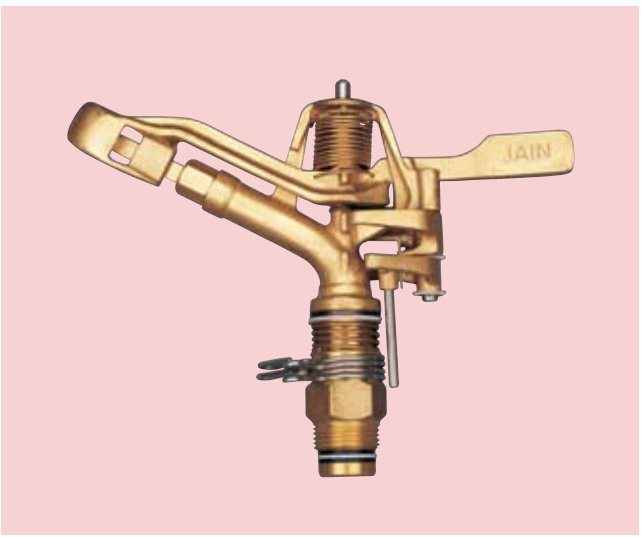
*Note: Performance data were obtained under standard test conditions and may be adversely affected by wind and other factors. * Pressure refers to pressure at the nozzle.*

Ordering Specifications

X	JIS	X
D - Domestic order (within India) E - Export order (outside India)		Nozzle Specifications
		1 - 3.5 mm
		2 - 5.1 x 3.1 mm
		3 - 5.5 x 3.1 mm

Example: DJIS2 - This code represents Jain Metal Impact Sprinkler - Full circle having nozzle size 5.1 x 3.1 mm.

Jain Metal Impact Sprinkler - Part Circle



Features and Specifications

- Adjustable arc impact sprinkler.
- Corrosion proof I-beam construction for added strength.
- Stainless steel spindle, fulcrum pin and spring.
- Easy arc adjustment from 30° to 360°.
- Strong, well balanced gunmetal swing arm ensures smooth and uniform rotation.
- Brass nozzles with hydrodynamic inner profile for precise jet and longer radius of throw.
- Easy to install and maintain.
- Uniform precipitation rate.

Applications

- Can be efficiently used where field layout is uneven or at the sides and corners of the field.
- Suitable for field crops like pulses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.

Performance Chart

Code	Nozzle Size, mm	Trajectory	Inlet inch	* Pressure		Discharge		Radius	
				kg/cm²	psi	lpm	gpm	m	ft
DJISPC21	4.3	27°	¾" BSP	2.50	35.55	17.0	4.5	13.5	44.3
				3.00	42.66	19.0	5.0	14.0	45.9
DJISPC22	4.7	27°	¾" BSP	2.50	35.55	21.0	5.6	14.0	45.9
				3.00	42.66	23.0	6.0	14.5	47.6
DJISPC23	5.1	27°	¾" BSP	2.50	35.55	24.0	6.5	15.0	49.2
				3.00	42.66	27.0	7.1	15.5	50.8

*Note: Bold letter indicates standard stock item others available on special order. Performance data were obtained under standard test conditions and may be adversely affected by wind and other factors. * Pressure refers to pressure at nozzle.*

Ordering Specifications

X	JISPC	XX
D - Domestic order (within India) E - Export order (outside India)		Nozzle Specifications
		21 - 4.3 mm
		22 - 4.7 mm
		23 - 5.1 mm

Note: Bold letter indicates standard stock item others available on special order.
Example: DJISPC23 - This code represents Jain Metal Impact Sprinkler - Part circle having nozzle size 5.1 mm.

Note: For ease of installation and quick shifting of sprinkler systems, Quick-Connect® PE Piping Systems are highly recommended. For more details please refer Quick-Connect® PE Pipes & Fittings Pages.

322 - Metal Impact Sprinkler, 1/2" Male or 3/4" Female

Features and Specifications

- Heavy duty metal impact sprinklers, 1/2" male or 3/4" female.
- Full Circle.
- Uniform precipitation rate.
- Durable, heavy-duty all brass construction
- Totaly dependable sand and dust protection sleeve for reliable operation and durability

Application

- Suitable for field crops like pluses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.

Technical Specifications - 322 Dual Nozzle

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)				
				10x10	10x12	12x12	10x14	12x14
2.8x2.5	2.0	0.710	20.5	7.1	5.9	4.9	5.1	4.2
	3.0	0.860	21.0	8.6	7.2	6.0	6.1	5.1
	4.0	0.990	21.0	9.9	8.3	6.9	7.1	5.9
3.2x2.5	2.0	0.800	22.0	8.0	6.7	5.6	5.7	4.8
	3.0	0.980	22.5	9.8	8.2	6.8	7.0	4.8
	4.0	1.130	23.0	11.3	9.4	7.8	8.1	6.7
3.5x2.5*	2.0	0.980	22.5	9.8	8.2	6.8	7.0	5.8
	3.0	1.190	23.0	11.9	9.9	8.3	8.5	7.1
	4.0	1.370	23.5	13.7	11.4	9.5	9.8	8.2
4.0x2.5	2.0	1.070	24.0	10.7	8.9	7.5	7.6	6.4
	3.0	1.330	25.0	13.3	11.1	9.2	9.5	7.9
	4.0	1.530	25.5	15.3	12.8	10.6	10.9	9.1

* Standard nozzle

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications

Code	Code	Single Nozzle	Code	Code	Dual Nozzle
1/2" Male Base	3/4" Female Base	mm	1/2" Male Base	3/4" Female Base	mm
D5130303	D5130343	3.2	D5130313	D5130353	3.2 x 2.5
D5130304	D5130344	3.5	D5130314	D5130354	3.5 x 2.5
D5130305	D5130345	4.0	D5130315	D5130355	4.0 x 2.5
D5130306	D5130346	4.5	-	-	-
D5130307	D5130347	4.8	-	-	-

Technical Specifications - 322 Single Nozzle

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
2.8	2.0 3.0 4.0	0.420 0.520 0.610	22.0 22.5 23.0
3.2*	2.0 3.0 4.0	0.520 0.630 0.720	23.0 24.5 25.0
3.5	2.0 3.0 4.0	0.690 0.840 0.960	24.0 25.5 26.0
4.0	2.0 3.0 4.0	0.810 0.980 1.120	25.0 26.0 26.0

* Standard nozzle

423 P-AG - Metal Impact Sprinkler - Part Circle

Features and Specifications

- Heavy duty metal impact sprinklers, 1/2" male or 3/4" female.
- Full and part circle.
- Uniform precipitation rate.
- Durable, heavy-duty all brass construction
- Totaly dependable sand and dust protection sleeve for reliable operation and durability.

Applications

- Suitable for field crops like pluses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.
- For efficient irrigation of field edges.

Ordering Specifications

Code	Code	Nozzle Size
1/2" Male Base	3/4" Female Base	mm
D5142232		3.2
D5142235	D5142335	3.5
D5142240	D5142340	4.0

Technical Specifications 423 P- AG

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
3.2 Green	2.0 3.0 4.0	0.570 0.700 0.810	23 25 26
3.5 Blue	2.0 3.0 4.0	0.660 0.810 0.930	24 26 27
4.0* Black	2.0 3.0 4.0	0.850 1.030 1.180	25 27 28

* Standard nozzle

233 B-S - Metal Impact Sprinkler

Features and Specifications

- High water distribution with spacing up to 18 m.
- Colour-coded bayonet nozzle for easy service.
- Integrated stream-straightening vane for maximum range.
- Totally dependable new sand and dust protection sleeve for reliable operation and durability.
- Metal impact sprinklers, 3/4 male.

Application

- Suitable for field crops like pluses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.

Technical Specifications - 233 B-S

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m) 12x12	12x15	12x18	18x18
3.5 x 2.5 Blue	3.0	1.170	27.0	8.1	6.5	5.4	3.6
	4.0	1.340	28.0	9.3	7.4	6.2	4.1
	5.0	1.490	28.5	10.3	8.3	6.9	4.6
4.0x2.5 Black	3.0	1.420	28.5	9.9	7.9	6.6	4.4
	4.0	1.630	29.0	11.3	9.1	7.5	5.0
	5.0	1.800	30.0	12.5	10.0	8.3	5.6
4.5x2.5 Brown	3.0	1.560	30.0	10.8	8.7	7.2	4.8
	4.0	1.780	32.0	12.4	9.9	8.2	5.5
	5.0	1.980	33.0	13.8	11.0	9.2	6.1
5.0x2.5* Purple	3.0	1.930	32.5	13.4	10.7	8.9	6.0
	4.0	2.200	34.5	15.2	12.2	10.1	6.8
	5.0	2.440	36.0	16.9	13.6	11.3	7.5
5.5x2.5 Orange	3.0	2.300	34.5	16.0	12.8	10.6	7.1
	4.0	2.630	35.5	18.3	14.6	12.2	8.1
	5.0	2.930	37.0	20.3	16.3	13.6	9.0
6.0x2.5 Red	3.0	2.700	34.5	18.9	15.0	12.5	8.3
	4.0	3.100	37.5	21.5	17.2	14.4	9.6
	5.0	3.500	37.5	24.3	19.5	16.2	10.8

* Standard nozzle

Colour code - Distribution uniformity

CU < 85% CU = 85-88% CU = 88-92% CU > 92%

Ordering Specifications

Code	Nozzle Colour	Single Nozzle mm	Code	Dual Nozzle mm
D5124740	Blue	3.5	D5124754	3.5 x 2.5
D5124742	Black	4.0	D5124756	4.0 x 2.5
D5124744	Brown	4.5	D5124758	4.5 x 2.5
D5124746	Purple	5.0	D5124760	5.0 x 2.5
D5124748	Orange	5.5	D5124762	5.5 x 2.5
D5124750	Red	6.0	D5124764	6.0 x 2.5

233 PC - Metal Impact Sprinkler - Part Circle

Features and Specifications

- High water distribution with spacing up to 18 m.
- Integrated stream-straightening vane for maximum range.
- Totally dependable new sand and dust protection sleeve for reliable operation and durability.
- Metal impact sprinklers, 3/4" male or female.

Applications

- Suitable for field crops like pluses, oil seeds, vegetables, sugarcane, cotton, cereals, tea, coffee and fodder crops.
- For efficient irrigation of field edges.

Technical Specifications - 233 PC

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
3.4	3.0	0.820	28
	4.0	0.930	30
	4.5	0.980	31
3.9*	3.0	1.060	29
	4.0	1.220	31
	4.5	1.280	32
4.4	3.0	1.220	30
	4.0	1.380	31
	4.5	1.440	32
4.9	3.0	1.580	32
	4.0	1.810	34
	4.5	1.910	35

* Standard nozzle

Ordering Specifications

Code	Nozzle Size mm
D5123102	3.4
D5123103	3.9
D5123104	4.4
D5123105	4.9

233B - AF - Anti Frost Metal Impact Sprinkler

Features and Specifications

- Heavy duty metal impact sprinklers, 3/4" male or female.
- Full Circle.
- Specially designed for frost protection. The top cap completely seals and protects the sprinkler from frost damage.
- Uniform precipitation rate.

Application

- Overhead irrigation and frost protection in vineyards, orchards and vegetables.

Technical Specifications 233B-AF

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
3.5 Blue	3.0 4.0 5.0	0.810 0.930 0.020	26.5 27.5 28.0
4.0* Black	3.0 4.0 5.0	1.060 1.220 1.350	29.0 30.0 30.0
4.5 Brown	3.0 4.0 5.0	1.290 1.500 1.650	30.0 32.0 33.0
5.0 Purple	3.0 4.0 5.0	1.600 1.850 2.100	32.5 34.5 36.0
5.5 Orange	3.0 4.0 5.0	1.950 2.250 2.500	34.0 35.5 37.0
6.0 Red	3.0 4.0 5.0	2.300 2.700 3.000	34.0 37.5 37.5

** Standard nozzle*

Ordering Specifications

Code	Code	Single Nozzle	Code	Code	Dual Nozzle
3/4" Male Base	3/4" Female Base	mm	3/4" Male Base	3/4" Female Base	mm
D5124640	D5124610	3.5	D5124654	D5124624	3.5 x 2.5
D5124642	D5124612	4.0	D5124656	D5124626	4.0 X 2.5
D5124644	D5124614	4.5	D5124658	D5124628	4.5 X 2.5

Magnum 21 - Impact Sprinkler long range

Features and Specifications

- All-purpose full - to part-circle sprinkler 1 1/4" male giant sprinkler.
- Easily attached full- to part-circle mechanism for stock saving and easy maintenance.
- Low angle 21° for highly effective irrigation under wind conditions.
- Extra coverage and distribution uniformity with unique triple-nozzle overlapping design.
- High water distribution with spacing up to 40 m.

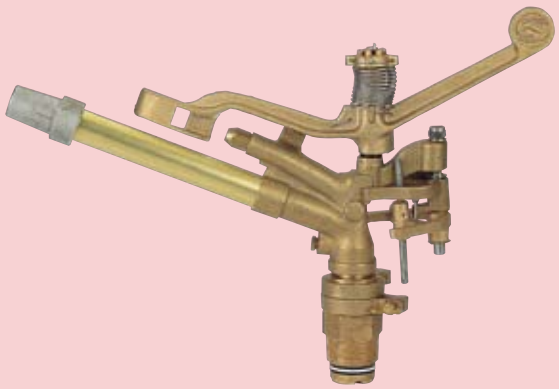
Application

- Large fields and plantations (tea gardens and coffee).

Technical Specifications - Magnum 21

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
9.0 x 6.5 x 3.2	4.0	9.80	51.0
	5.0	10.90	53.0
	6.0	12.00	54.0
	7.0	12.80	55.0
11.0 x 6.5 x 3.2	4.0	12.70	54.0
	5.0	14.00	58.0
	6.0	15.40	67.0
	7.0	16.80	68.0
12.0 x 6.5 x 3.2	4.0	13.20	57.0
	5.0	14.90	62.0
	6.0	16.50	68.0
	7.0	18.00	70 0
13.0 x 6.5 x 3.2*	4.0	14.90	60.0
	5.0	17.90	65.0
	6.0	19.00	69.0
	7.0	20.30	71.0
14.5 x 6.5 x 3.2	4.0	17.00	62.0
	5.0	19.10	65.0
	6.0	20.80	70.0
	7.0	22.30	72.0
15.0 x 6.5 x 3.2	4.0	19.30	65.0
	5.0	21.50	69.0
	6.0	23.60	73.0
	7.0	24.80	76.0

* Standard nozzle



Ordering Specifications

Code	Nozzle Size mm
D5125621	9.0 x 6.5 x 3.2
D5125623	11.0 x 6.5 x 3.2
D5125624	12.0 x 6.5 x 3.2
D5125625	13.0 x 6.5 x 3.2
D5125626	14.5 x 6.5 x 3.2
D5125627	15.0 x 6.5 x 3.2

5035 - Plastic Impact Sprinkler - Full Circle

Features and Specifications

- Light weight, compact and robust design.
- High impact heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation.
- Full circle plastic impact sprinklers, 3/4" male (5035), 1" female (5035-G).
- High distribution uniformity.
- Colour-coded bayonet nozzle for easy service.
- Integrated stream-straightening vane for maximum range.

Application

- Primary applications: general field use with quick connect systems.

Performance Table - 5035 (3/4")

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)			
				12x15	12x18	18x18	20x20
3.5x2.5 Blue	3.0	1.160	26.5	6.4	5.4	3.6	2.9
	4.0	1.330	27.5	7.4	6.2	4.1	3.3
	5.0	1.470	27.5	8.2	6.8	4.5	3.7
4.0x2.5 Black	3.0	1.410	28.0	7.8	6.5	4.4	3.5
	4.0	1.620	29.0	9.0	7.5	5.0	4.1
	5.0	1.800	29.0	10.0	8.3	5.5	4.5
4.5x2.5 Brown	3.0	1.640	28.5	9.1	7.6	5.1	4.1
	4.0	1.900	30.0	10.6	8.8	5.9	4.8
	5.0	2.100	32.0	11.7	9.7	6.5	5.3
5.0x2.5* Purple	3.0	1.950	30.0	10.8	9.0	6.0	4.9
	4.0	2.250	33.5	12.5	10.4	6.9	5.6
	5.0	2.550	33.5	14.2	11.8	7.8	6.4
5.5x2.5 Orange	3.0	2.300	32.0	12.8	10.6	7.1	5.8
	4.0	2.650	34.5	14.7	12.3	8.2	6.6
	5.0	2.950	36.0	16.4	13.7	9.1	7.4
6.0x2.5 Red	3.0	2.650	33.0	14.7	12.3	8.2	6.6
	4.0	3.100	35.5	17.2	14.4	9.6	7.8
	5.0	3.450	36.0	19.2	16.0	10.6	8.6

* Standard nozzle

Performance Table 5035 Single Nozzle (3/4")

Nozzle mm	Pre. kg/cm²	Dis. m³/h	Dia. m
3.5 Blue	3.0	0.810	26.5
	4.0	0.930	27.5
	5.0	1.020	28.0
4.0 Black	3.0	1.060	28.0
	4.0	1.220	29.0
	5.0	1.350	29.5
4.5 Brown	3.0	1.290	28.5
	4.0	1.500	30.0
	5.0	1.650	33.0
5.0* Purple	3.0	1.600	30.0
	4.0	1.850	33.5
	5.0	2.100	34.0
5.5 Orange	3.0	1.950	32.0
	4.0	2.250	34.5
	5.0	2.500	36.0
6.0 Red	3.0	2.300	33.0
	4.0	2.700	35.5
	5.0	3.000	36.0

Performance Table 5035-G-1" Single Nozzle

Nozzle mm	Pre. kg/cm²	Dis. m³/h	Dia. m
6.5 Gray	3.0	2.700	34.0
	4.0	3.100	36.0
	5.0	3.500	38.0
7.0 Green	3.0	3.300	34.0
	4.0	3.500	36.0
	5.0	3.900	38.0

Performance Table - 5035-G-1"

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m	Precipitation (mm/h) / spacing (m)			
				12x18	18x18	20x20	22x22
6.5x2.5	3.0	3.000	34.0	13.9	9.3	7.5	6.2
	4.0	3.450	36.0	16.0	10.6	8.6	7.1
	5.0	3.850	38.0	17.8	11.9	9.6	8.0
6.5x3.2	3.0	3.200	33.5	14.8	9.9	8.0	6.6
	4.0	3.700	36.0	17.1	11.4	9.3	7.6
	5.0	4.150	37.5	19.2	12.8	10.4	8.6
7.0x2.5	3.0	3.400	34.0	15.7	10.5	8.5	7.0
	4.0	3.900	35.5	18.1	12.0	9.8	8.1
	5.0	4.350	36.0	20.1	13.4	10.9	9.0
7.0x3.2	3.0	3.550	34.0	16.4	11.0	8.9	7.3
	4.0	4.100	35.5	19.0	12.7	10.3	8.5
	5.0	4.600	36.0	21.3	14.2	11.5	9.5

Rear nozzle colour: 3.2 mm, orange

Colour code - Distribution uniformity

CU < 85% | CU = 85-88% | CU = 88-92% | CU > 92%

Ordering Specifications

Code ¾" Male base	Code 1" Female base	Nozzle Colour	Single nozzle size, mm	Code ¾" Male base	Code 1" Female base	Dual Nozzle, mm
D5153502		Blue	3.5	D5153512		3.5 x 2.5
D5153503		Black	4.0	D5153513		4.0 x 2.5
D5153504		Brown	4.5	D5153514		4.5 x 2.5
D5153505		Purple	5.0	D5153515		5.0 x 2.5
D5153506		Orange	5.5	D5153516		5.5 x 2.5
D5153507		Red	6.0	D5153517		6.0 x 2.5
D5153508		Gray	6.5	D5153518		6.5 x 2.5
D5153509		Green	7.0	D5153519		7.0 x 2.5
				D5153568		6.5 x 3.2
				D5153569		7.0 x 3.2
	D5153570	Gray	6.5		D5153572	6.5 x 2.5
	D5153571	Green	7.0		D5153574	6.5 x 3.2
					D5153573	7.0 x 2.5
					D5153575	7.0 x 3.2

- *Rear Nozzle - 2.5mm - Gray; 3.2 mm - Orange*

Example: D5153502 - This code represents 5035 sprinkler with blue nozzle of 3.5 mm.

Note: For sales order outside India add 'E' instead of 'D' in the above mentioned ordering code. e.g. for ordering 5035 sprinkler blue nozzle 3.5 mm change the code as E5153502.

5035 PC - Plastic Impact Sprinkler - Part Circle

Features and Specifications

- Light weight, compact and robust design.
- High impact heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation.
- Adjustable arc plastic impact sprinklers, 3/4" male.
- Colour-coded bayonet nozzle for easy service.
- Integrated stream-straightening vane for maximum range.

Application

- Recommended to use on edges to prevent an unnecessary wastage of water.

Performance Table 5035 PC

Nozzle mm	Pressure kg/cm²	Discharge m³/h	Diameter m
3.5 Blue	3.0 4.0 5.0	0.810 0.930 1.020	26.5 27.5 28.0
4.0 Black	3.0 4.0 5.0	1.060 1.220 1.350	28.0 29.0 29.5
4.5 Brown	3.0 4.0 5.0	1.290 1.500 1.650	28.5 30.0 33.0
5.0 Purple	3.0 4.0 5.0	1.600 1.850 2.100	30.0 33.5 34.0

Ordering Specifications

Code	Nozzle Colour	Nozzle size, mm
D5153602	Blue	3.5
D5153603	Black	4.0
D5153604	Brown	4.5
D5153605	Purple	5.0

Example: D5153602 - This code represents 5035 PC sprinkler with blue nozzle of 3.5 mm.

Note: For sales order outside India add 'E' instead of 'D' in the above mentioned ordering code. e.g. for ordering 5035 PC sprinkler blue nozzle 3.5 mm change the code as E5153602.

Impact Pop-Up 805

Features and Specifications

- Excellent water distribution at low & high pressure.
- Full and part circle with easy fingertip adjustment.
- Heavy duty plastic sprinkler and housing construction.
- Rugged all round ribbing for maximum strength and stability.
- Extra high 10 cm pop-up clearance.
- Adjustable diffuser screw controls distance and stream pattern.
- Sand-proof seals and large internal filter.
- Simple to remove and maintain “pull out” large filter.
- Operating pressure range: between 1.5 to 4.0 kg/cm² (20 to 60 psi).
- Flow rate 0.45-1.18 m³/h.
- 1/2” female threaded bottom and side inlet connection.
- Weight: 620 gm.

Application

- Lawns, gardens, parks, playgrounds, golf courses.

Technical Specifications Impact Pop-Up 805

Nozzle mm	Pressure kg/cm²	Discharge m³/hr	Diameter m
2.8 Orange	2.0	0.45	21
	3.0	0.55	23
	4.0	0.63	23
3.0 Red	2.0	0.51	22
	3.0	0.63	24
	4.0	0.72	25
3.2 Green	2.0	0.57	23
	3.0	0.70	24
	4.0	0.81	25
3.5 Blue	2.0	0.66	23
	3.0	0.81	24
	4.0	0.93	26
4.0* Black	2.0	0.85	24
	3.0	1.03	25
	4.0	1.18	26

* Standard nozzle

Ordering Specifications

Item No.	Nozzle Colour	Nozzle Size, mm
D51057321	Orange	2.8
D51057331	Red	3.0
D51057341	Green	3.2
D51057351	Blue	3.5
D51057361	Black	4.0

Floppy Sprinkler

Features and Specifications

- Revolutionary new concept sprinkler having no rotating or moving parts.
- Unique full circle spraying pattern prevents dry patches.
- No moving parts, so maintenance free.
- Pop up feature pops up silicone tube under pressure to irrigate and pops down at shut off.
- Light weight enables to install floppy sprinkler on heights using aluminium/plastic risers.
- Built-in flow regulator provides uniform discharge against pressure fluctuations in hilly/undulating terrain and allows longer lateral length in flat & moderate slopes.
- Large droplet size minimizes wind drift and evaporation losses giving high application efficiency.
- Operating pressure range 2 to 6 kg/cm^2 (28 to 85 psi).

Applications

- Ideally suitable for irrigation of closely spaced crops like sugarcane, vegetables, oil seeds, onions, potato, fodder, cereals, etc.
- Suitable for landscape and turf irrigation.
- Recommended for irrigation in irregular / undulating terrain and hilly areas.

Performance Chart

Code	Colour	Inlet Connections	Discharge at 2 to 6 kg/cm^2 (28 to 85 psi) pressure		Wetting Radius		Spacing		Precipitation	
		inch	lph	gph	m	ft	m	ft	mm/hr	inch/hr
DFSBL	Blue	½" BSP	300	79.4	5.8	19.0	4.5x6.0	14.8x19.7	11.1	0.44
							4.5x7.5	14.8x24.6	8.9	0.35
							6.0x6.0	19.7x19.7	8.3	0.33
							6.0x7.5	19.7x24.8	6.7	0.26
DFSGN	Green	¾" BSP	500	132.3	7.3	24.0	7.5x7.5	24.8x24.8	8.0	0.31
							7.5x9.0	24.8x29.5	6.7	0.26
							7.5x12.0	24.8x39.4	5.0	0.20
							9.0x9.0	29.5x29.5	5.6	0.22
DFSBK	Black	¾" BSP	750	198.4	7.8	25.6	7.5x7.5	24.8x24.8	13.3	0.52
							7.5x9.0	24.8x29.5	11.1	0.44
							7.5x12.0	24.8x39.4	8.3	0.33
							9.0x12.0	29.5x39.4	9.3	0.37
DFSYL	Yellow	¾" BSP	950	251.3	7.8	25.6	7.5x7.5	24.8x24.8	17.1	0.67
							7.5x9.0	24.8x29.5	14.2	0.56
							9.0x9.0	29.5x29.5	11.9	0.47
							12.0x12.0	39.4x39.4	6.7	0.26

Note: Test conducted in no wind condition, under standard test condition with sprinkler installed at 1 m height.

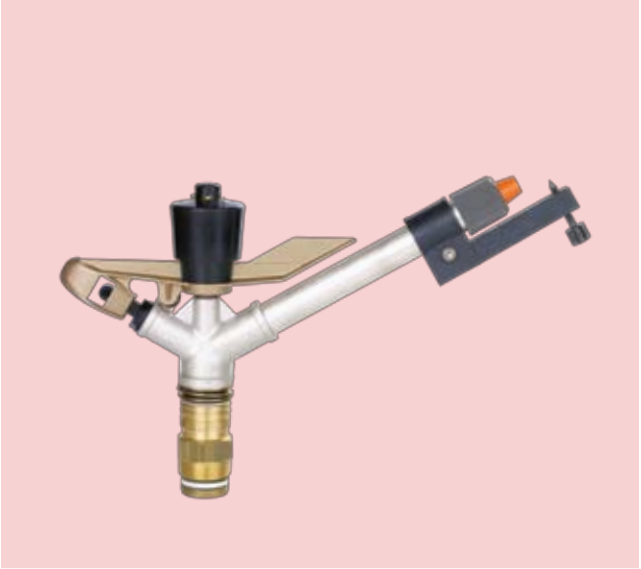
Ordering Specifications

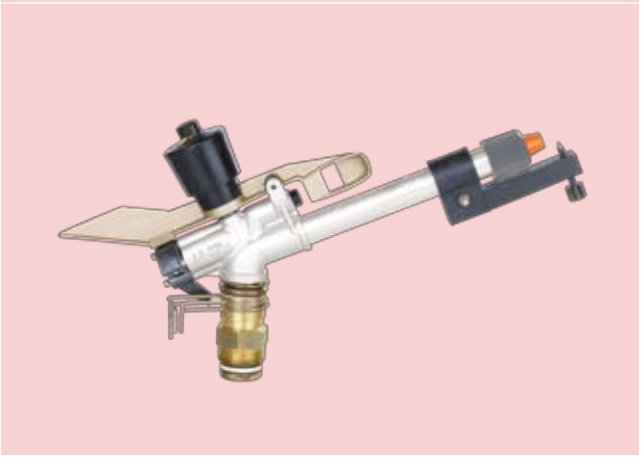
X	FS	XX
D - Domestic order (within India) E - Export order (outside India)		Body Colour BL - Blue GN - Green BK - Black YL - Yellow

Example: DFSBL - This code represents Floppy Sprinkler having blue coloured body.

Medium Volume Rain Gun Model -

162 & 163





Features and Specifications

- Heavy duty construction.
- Most suitable for a variety of climates like tropical, temperate and humid climates.
- Light in weight and easy to install.
- Long life and low maintenance.
- Uniform distribution profile with adjustable jet breaker arrangement.
- Better pattern coverage & good performance in windy conditions.
- Suitable for both solid set field irrigation and mechanically moved (centre pivot etc.) systems.
- Various interchangeable nozzles provide better control in watering and irrigation of desired area and crops.
- Reduced risk of structural damage of soil and delicate plants due to evenness and lightness of watering.
- Available in full circle & part circle models.
- 1¼" BSP Male threaded inlet connection.

Application

- Recommended for field crops like sugarcane, pulses, oil seeds, cereals, tea, coffee, vegetables, etc.

Performance Chart for Model 162 & 163

Trajectory - for 162 - 30°, for 163 - 23°

*Pressure kg/cm²	Nozzle Ø 8 mm			Nozzle Ø 10 mm			Nozzle Ø 12 mm			Nozzle Ø 14 mm			Nozzle Ø 16 mm		
	Radius	Discharge	ppt. rate	Radius	Discharge	ppt.rate	Radius	Discharge	ppt.rate	Radius	Discharge	ppt.rate	Radius	Discharge	ppt.rate
	m	l/s	inch/hr	m	l/s	inch/hr	m	l/s	inch/hr	m	l/s	inch/hr	m	l/s	inch/hr
2.00	19.50	1.37	0.17	21.50	1.89	0.19	23.00	2.52	0.23	24.00	3.27	0.27	24.50	4.14	0.32
3.00	22.00	1.67	0.16	24.00	2.31	0.19	26.00	3.09	0.22	27.50	4.01	0.25	28.50	5.07	0.29
4.00	24.00	1.93	0.15	26.50	2.67	0.18	28.50	3.57	0.21	30.00	4.63	0.24	31.50	5.86	0.27
5.00	25.50	2.16	0.15	28.50	2.98	0.17	30.50	3.99	0.20	32.00	5.18	0.24	33.50	6.55	0.27
6.00	–	–	–	–	–	–	32.50	4.37	0.19	33.50	5.67	0.23	34.50	7.17	0.28

*Note: The Performance data are based on ideal test conditions and may be adversely affected by wind, poor hydraulic entrance. * The pressure refers to pressure at nozzle*

Ordering Specifications

X	XXX	XXX
	Model	Nozzle
D - Domestic order (within India) E - Export order (outside India)	162 - Full Circle 163 - Part Circle	N8 - 8mm N10 - 10mm N12 - 12mm N14 - 14mm N16 - 16mm

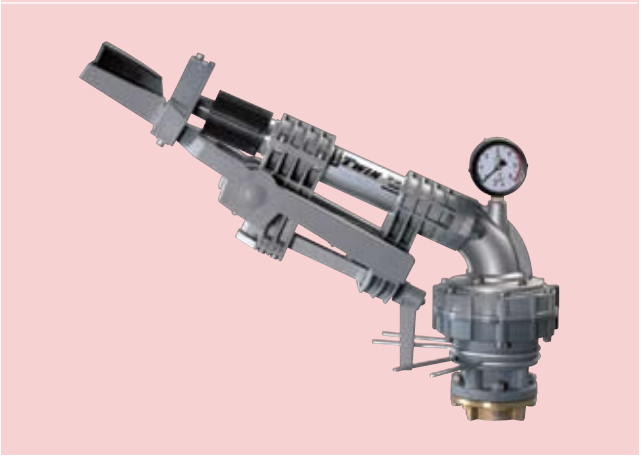
Example: D163N8 - This code represents Medium Volume Rain Gun model 163 with 8 mm nozzle.

Note: If required additional nozzles can be supplied as a special order. Please specify nozzle number while ordering.

Note: For ease of installation and quick shifting of sprinkler systems, Quick-Connect® PE Piping Systems are highly recommended. For more details please refer Quick-Connect® PE Pipes & Fittings Pages.

Big Volume Rain Gun - Model

Twin 95 Plus



Features and Specifications

- Heavy duty construction using high-tech composite materials, in conjunction with sturdy drive arm.
- Extraordinary operation at all pressure levels, works smoothly and uniformly over whole nozzle pressure range.
- Excellent hydraulic design, large barrel cross section and full size taper bore nozzle allows for maximum possible throw and performance.
- Maintenance free, self lubricating sealed bearing, instead of ball bearings allows for long reliable operation over time.
- Three stream break-up frequencies can be selected manually, without tools, in order to adjust rotation speed and to optimize the water distribution.
- Unique patented self compensating break system keeps overall performance constant over time.
- Intermittent dynamic jet breaker option, increases the stream diffusion which allows a more delicate irrigation for sensitive crop and provides flexibility in operation at lower pressure.
- Patented drive system with excellent stream diffusion allows for smooth & steady operation.
- At start up of the system the gun produces a fan-type spray reducing to a minimum crop damage and soil erosion due to run off.
- Light weight, puts less stress on irrigation system structures.
- Available in full circle and part/full circle models with seven interchangeable nozzles to meet discharge and radius requirements.
- 2" BSP female threaded inlet connection.

Applications

- Recommended for field crops like sugarcane, pulses, oil seeds, cereals, tea, coffee, vegetables, etc.
- Easy to use with portable irrigation system.
- Useful for large turfs, lawns and playgrounds.

Performance Chart for Twin 95 Plus

Trajectory 24°

*Pressure kg/cm²	Nozzle Ø 12 mm		Nozzle Ø 14 mm		Nozzle Ø 16 mm		Nozzle Ø 18 mm		Nozzle Ø 20 mm		Nozzle Ø 22 mm		Nozzle Ø 24 mm	
	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius
	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m
2.00	2.17	23.80	2.96	25.90	3.86	27.70	4.89	29.50	6.03	31.30	7.30	32.90	8.69	34.70
2.50	2.43	26.00	3.31	28.30	4.32	30.40	5.46	32.30	6.75	34.20	8.16	36.00	9.71	37.70
3.00	2.66	27.90	3.62	30.30	4.73	32.60	5.99	34.70	7.39	36.60	8.94	38.70	10.64	40.50
3.50	2.87	29.60	3.91	32.10	5.11	34.50	6.47	36.80	7.98	38.90	9.66	41.00	11.49	43.00
4.00	3.07	31.10	4.18	33.80	5.46	36.30	6.91	38.70	8.53	41.00	10.32	43.10	12.29	45.20
4.50	3.26	32.50	4.43	35.30	5.79	38.00	7.33	40.50	9.05	42.80	10.95	45.10	13.03	47.20
5.00	3.43	33.80	4.67	36.80	6.11	39.50	7.73	42.10	9.54	44.50	11.54	46.90	13.74	49.20
5.50	3.60	35.10	4.90	38.10	6.40	41.00	8.10	43.70	10.01	46.20	12.11	48.70	14.41	51.00
6.00	3.76	36.30	5.12	39.40	6.69	42.40	8.46	45.10	10.45	47.80	12.64	50.30	15.05	52.70
6.50	3.92	37.30	5.33	40.50	7.00	43.50	8.81	46.40	10.88	49.20	13.17	51.80	15.67	54.30

*Note: The Performance data are based on ideal test conditions and may be adversely affected by wind, poor hydraulic entrance. * The pressure refers to pressure at nozzle*

Ordering Specifications

X	95	X	XXX
		Model	Nozzle Size
D - Domestic order (within India) E - Export order (outside India)		P - Part Circle F - Full Circle	N12 - 12mm N14 - 14mm N16 - 16mm N18 - 18mm N20 - 20mm N22 - 22mm N24 - 24mm

Example: D95PN14 - This code represents Big Volume Rain Gun Twin 95 Plus part circle model attached with 14mm nozzle.

Note: If required additional nozzles can be supplied as a special order. Please specify nozzle number while ordering.

Big Volume Rain Gun - Model

Twin 140 Plus

Features and Specifications

- Heavy duty construction using high-tech composite materials, in conjunction with sturdy drive arm.
- Extraordinary operation at all pressure levels, works smoothly and uniformly over whole nozzle pressure range.
- Excellent hydraulic design, large barrel cross section and full size taper bore nozzle allow form maximum possible throw and performance.
- Maintenance free, self lubricating sealed bearing, instead of ball bearings allows for long reliable operation over time.
- Three stream break-up frequencies can be selected manually, without tools, in order to adjust rotation speed and to optimize the water distribution.
- Unique patented self compensating break system keeps overall performance constant over time.
- Intermittent dynamic jet breaker option, increases the stream diffusion which allows a more delicate irrigation for sensitive crop and provides flexibility in operation at lower pressure.
- Patented drive system with excellent stream diffusion allows for smooth & steady operation.
- At start up of the system the gun produces a fan-type spray reducingtoaminimumcropdamageandsoilerosionduetorunoff.
- Optional variable trajectory angle model available which allows to change trajectory angle from 10° to 28° thus provides more uniformity even in windy conditions.
- Special high trajectory model with 44° trajectory is available for dust suppression.
- Eight interchangeable nozzles to meet the discharge and radius requirements.
- Light weight, puts less stress on irrigation system structures.
- Available in full/part circle models with seven interchangeable nozzles to meet discharge and radius requirements.
- Flanged connection, flange external diameter 154 mm, 6 holes of diameter 10.5 mm on pitch circle diameter 130 mm.

Applications

- Recommended for field crops like Sugarcane, Pulses, Oil Seeds, Cereals, Tee, Coffee, Vegetables, etc.
- Easy to use with portable irrigation system.
- Useful for large turfs, lawns and playgrounds.

Performance Chart for Twin 140 Plus

Trajectory 24°

*Pressure kg/cm²	Nozzle Ø 16 mm		Nozzle Ø 18 mm		Nozzle Ø 20 mm		Nozzle Ø 22 mm		Nozzle Ø 24 mm		Nozzle Ø 26 mm		Nozzle Ø 28 mm		Nozzle Ø 30 mm	
	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius	Discharge	Radius
	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m	l/s	m
2.00	3.86	27.90	4.89	29.70	6.04	31.50	7.30	33.10	8.69	34.70	10.20	36.30	11.83	37.70	13.58	39.20
2.50	4.32	30.40	5.47	32.40	6.75	34.30	8.17	36.10	9.72	37.80	11.41	39.50	13.23	41.10	15.19	42.60
3.00	4.73	32.60	5.99	34.70	7.39	36.70	8.95	38.70	10.65	40.50	12.49	42.30	14.49	44.00	16.63	45.70
3.50	5.11	34.50	6.47	36.80	7.99	38.90	9.66	41.00	11.50	43.00	13.50	44.90	15.65	46.70	17.97	48.50
4.00	5.46	36.30	6.91	38.70	8.54	41.00	10.33	43.10	12.29	45.20	14.43	47.20	16.73	49.10	19.21	51.00
4.50	5.80	38.00	7.33	40.50	9.05	42.80	10.96	45.10	13.04	47.30	15.30	49.40	17.75	51.40	20.37	53.30
5.00	6.11	39.50	7.73	42.10	9.54	44.60	11.55	46.90	13.74	49.20	16.13	51.40	18.71	53.50	21.48	55.50
5.50	6.41	41.00	8.11	43.70	10.01	46.20	12.11	48.70	14.42	51.00	16.92	53.30	19.62	55.40	22.52	57.50
6.00	6.69	42.40	8.47	45.10	10.46	47.80	12.65	50.30	15.06	52.70	17.61	55.10	20.49	57.30	23.52	59.50
6.50	6.96	43.60	8.81	46.50	10.88	49.30	13.17	51.90	15.67	54.40	18.39	56.80	21.33	59.10	24.49	61.30
7.00	7.23	44.90	9.15	47.90	11.29	50.70	13.66	53.30	16.26	55.90	19.09	58.40	22.13	60.80	25.41	63.10

*Note: The Performance data are based on ideal test conditions and may be adversely affected by wind, poor hydraulic entrance. * The pressure refers to pressure at nozzle*

Ordering Specifications

X	140	X	XXX
		Model	Nozzle Size
D - Domestic order (within India) E - Export order (outside India)		P - Part Circle	N16 - 16mm N18 - 18mm N20 - 20mm N22 - 22mm N24 - 24mm N26 - 26mm N28 - 28mm N30 - 30mm

Example: D140PN24 -This code represents Big Volume Rain Gun Twin 140 Plus, Part Circle model with 24mm nozzle size.

Note: If required additional nozzles can be supplied as a special order. Please specify nozzle number while ordering.

Quick Coupling Key

Features and Specifications

- Fabricated from high quality metal/brass material.
- Easy to install.
- Available in ¾", 1", 1¼", 1½", 2" and above.
- ¾", 1", 1¼", 1½" are available with provision of quick closure valve.
- Sprinkler/Raingun can be easily fixed or removed.
- Rubber seal prevents leakage even at high pressure.

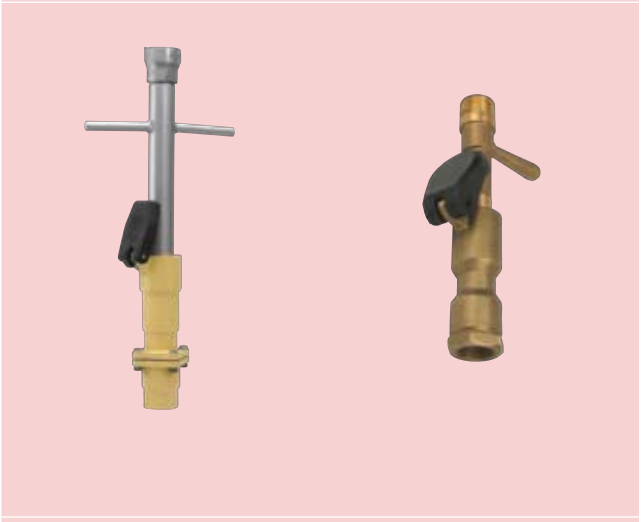
Applications

- Used for installation and shifting of sprinkler/raingun in portable or semipermanent system.

Ordering Specifications

X	QC	XXX	XX
		Connection, inch	Options
D - Domestic order (within India) E - Export order (outside India)		034 - ¾" 100 - 1" 125 - 1¼" 15 - 1½" 2 - 2" Quick Coupler	M - Male Coupling F - Female Coupling MAL - Aluminium Male Coupling FAL - Aluminium Female Coupling

Example: DQC125M - This code represents Quick Coupling Male Key of 1¼" connection.



Raingun Riser Stand

Features and Specifications

- Fabricated from G.I. Pipes to give stable support.
- Easy to carry and install.
- Suitable to hold different riser sizes such as 1¼", 1½", 2" and above.
- Wide leg support gives better stability against sudden jerks of raingun rotation.
- Provides stable support even on hilly slopes.
- Available in standard riser length of 1, 1½, 2 and 3m. Other riser lengths can be supplied on demand.
- Standard connection available is BSP female threaded. Other connections options available are,
  - Quick Connect male connector - Plastic Clamp
  - Quick Connect male connector - Single Metal Clamp
  - Quick Connect male connector - Double Metal Clamp
  - Quick Connect male connector - Metal Latch
- Telescopic legs options available as a special request to provide flexibility in difficult terrain.

Application

- Used for installation and shifting of raingun in portable or semipermanent system.

Ordering Specifications

X	RS	XXX	XX
		Riser Size, inch	Riser Length, m
D - Domestic order (within India) E - Export order (outside India)		125 - 1¼" 12 - 1½" 2 - 2"	1 - 1.0 15 - 1.5 2 - 2.0 3 - 3.0

Example: DRS22 - This code represents Rain Gun Riser Stand with 2" BSP Female riser size with 2m riser length .

QUICK - CONNECT® PE PIPES & FITTINGS

Quick - Connect® PE Pipes

Features and Specifications

- Manufactured from virgin high quality HDPE raw material.
- Conforming to IS-14151, IS-4984, ASTM D3035 and ISO 4427.
- Specially designed quick connect coupler ensures speedy joint and easy detachment.
- All weather installation or disassembly suitable for extreme site conditions.
- Nitrile seal gives pressure tight, leak proof joints.
- Low installation cost.
- Low frictional losses.
- Long System Life - resistance to impact, chemicals & salt in water.
- Available in standard length of 6 m. Other pipe length can be supplied on demand.

Applications

- Suitable for portable impact overhead sprinkler, raingun and floppy sprinkler systems.
- Can be used for portable water supply distribution pipelines.
- Can be used for temporary piping systems.

Technical Specifications

Outside Diameter	Minimum Pipe Wall Thickness (mm)					
	Pressure rating (kg/cm²)					
mm	2.5	3.2	4.0	6.0	8.0	10.0
50	-	-	2.00	2.90	4.60	5.60
63	-	2.00	2.50	3.80	5.80	7.00
75	2.00	2.50	3.00	4.50	6.90	8.40
90	2.20	2.90	3.50	5.30	8.20	10.00
110	2.70	3.40	4.20	6.50	10.00	12.30
125	3.10	3.80	4.80	7.40	11.40	13.90
140	3.50	4.30	5.40	8.30	12.80	15.60
160	3.90	4.90	6.20	9.40	14.60	17.80

Ordering Specifications

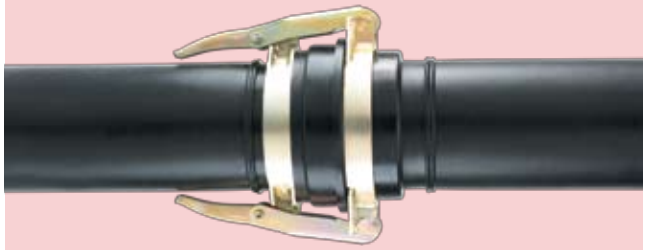
X	QC	XXX	X	X	XXX	X	X
D - Domestic order (within India) E - Export order (outside India)		Type of Joint	Manufacturing Standard	Raw Material Grade	Nominal Diameter, mm	Pressure Rating, kg/cm²	Length of Pipe, m
		PP - Plastic Clamp Type	A - IS 14151	6 - PE 63	050 063 075	25 - 2.5 kg/cm² 32 - 3.2 kg/cm² 04 - 4 kg/cm² 06 - 6 kg/cm²	03 - 3m 06 - 6m 09 - 9m 12 - 12m
		NSP - Single Metal Clamp Type	A - IS 14151	6 - PE 63	075	25 - 2.5 kg/cm² 32 - 3.2 kg/cm²	
		NP - Double Metal Clamp Type	A - IS 14151	6 - PE 63	050	04 - 4 kg/cm² 06 - 6 kg/cm²	
					075	25 - 2.5 kg/cm² 32 - 3.2 kg/cm² 04 - 4 kg/cm² 06 - 6 kg/cm²	
		MP - Metal Latching Type	A - IS 14151	6 - PE 63	063 075 090 110	25 - 2.5 kg/cm² 32 - 3.2 kg/cm² 04 - 4 kg/cm² 06 - 6 kg/cm²	
		HP - High Pressure Type	A - IS 14151	6 - PE 63	110 125 140 160	04 - 4 kg/cm² 06 - 6 kg/cm²	
			B - IS 4984	6 - PE 63	110 125 140 160	08 - 4 kg/cm² 06 - 6 kg/cm²	

Example : *DQCMPA60633206 - This code represents, Quick Connect Pipe with metal latch type joint, 63mm nominal diameter, pressure rating of 3.2 kg/cm² manufactured as per IS 14151, PE 63 grade material and length of pipe is 6m.*

Note: *For wall thicknesses as per IS 4984, please refer HDPE Pipe page in Pipes and Fittings section.*

Quick - Connect® Joints

We have perfected three joints according to the requirement of sizes. These joints are designed to withstand the tensile pull that will be acting on the joint when the pipeline is under pressure. The joint sealing is achieved by a specially designed rubber seal, which not only allows easy and smooth connection, but also makes it watertight as the pipe is brought up to pressure. The unique feature of the joint is that it can take 3 to 5 degrees deflection without any leak.



For sizes 110, 125, 140 & 160, the joints have heavy-duty Zinc plated levers. The levers hook to the clamp on the socket and allow for a high-pressure joint. The joint does not require anchoring during operation. These joints withstand working pressure upto 8 kg/cm² (114 psi).

For sizes 63, 75, 90 & 110 mm, the clamps are Zinc plated metal. These metal joints are Zinc plated to resist corrosion. The clamping is achieved by hooking two points that are diametrically opposite. These joints withstand maximum working pressure of 6 kg/cm² (85 psi).

For sizes 50, 63 & 75 mm Quick-Connect® Joints are made of plastic. These joints are moulded from selected high impact engineering plastic that provides a secure grip on the pipe to give high performance coupled with light weight. These joints are available in maximum working pressure of 4 kg/cm² (57 psi).

Quick-Connect® Joints available in single metal clamp type design. These clamps are available in 75 mm size. These clamps are zinc plated to resist corrosion. These joints are available in maximum working pressure of 4 kg/cm² (57psi).

Similar to plastic clamp type design, Quick-Connect® Pipes are available in double metal clamp type design. It is available in sizes of 50 and 75mm. These clamps are zinc plated to resist corrosion. These joints are available in maximum working pressure of 4 kg/cm² (57psi)

Quick - Connect® Fittings - Plastic Clamp Joints

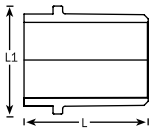
Features and Specifications

- Manufactured from virgin HDPE material.
- Clamps moulded from high impact engineering plastic.
- Nitrile seal for positive sealing.
- Excellent chemical and weather resistance.
- Unique design of joints provides all round grip on pipe to prevent leakage and snapping at high pressure.
- G.I. riser available in ¾" of required lengths.
- Maximum working pressure 4 kg/cm² (57 psi).

Application

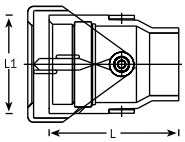
- Used for installation of portable overhead/floppy sprinkler irrigation system.

Quick - Connect® Male Coupler

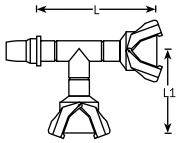
Code	Size	L	L1
	mm	mm	mm
DQCPC6050P1M	50	72	63
DQCPC6063P1M	63	73	78
DQCPC6075P1M	75	94	88

Quick - Connect® Female Coupler

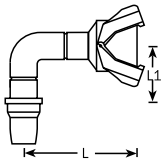
Code	Size	L	L1
	mm	mm	mm
DQCPC6050P1F	50	76	69
DQCPC6063P1F	63	110	80
DQCPC6075P1F	75	104	95

Quick - Connect® Tee

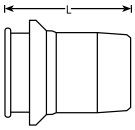
Code	Size	L	L1
	mm	mm	mm
DQCPT6050P1	50	221	152
DQCPT6063P1	63	234	160
DQCPT6075P1	75	310	210

Quick - Connect® Bend

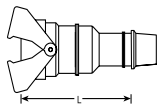
Code	Size	L	L1
	mm	mm	mm
DQCPB6050P190	50	148	78
DQCPB6063P190	63	162	81
DQCPB6075P190	75	211	98

Quick - Connect® End Cap

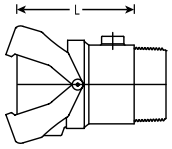
Code	Size	L	L1
	mm	mm	mm
DQCPE6050P1	50	97	-
DQCPE6063P1	63	102	-
DQCPE6075P1	75	100	-

Quick - Connect® Reducer

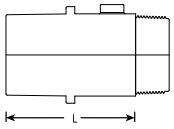
Code	Size	L	L1
	mm	mm	mm
DQCPR606350P1	63 x 50	278	-
DQCPR607550P1	75 x 50	290	-
DQCPR607563P1	75 x 63	295	-

Quick - Connect® Pump Connector*

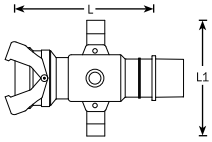
Code	Size	L	L1
	mm	mm	mm
DQCPCT50F	50	325	-
DQCPCT63F	63	309	-
DQCPCT75F	75	137	-

Quick - Connect® Male Connector*

Code	Size	L	L1
	mm	mm	mm
DQCPCT50M	50	220	-
DQCPCT63M	63	100	-
DQCPCT75M	75	130	-

Quick - Connect® Service Saddle

Code	Size	L	L1
	mm	mm	mm
DQCPS6050P134	50	259	356
DQCPS6063P134	63	208	335
DQCPS6075P134	75	250	350

**Flange type connections can be supplied on demand.*

Note: For sales order outside India add E instead of D in the above mentioned ordering code e.g. for ordering Quick Connect - Single Metal Clamp - Bend 63 mm change the code as EQCPB6063P190 instead of DQCPB6063P190.

Quick - Connect® Fittings - Single Metal Clamp Joints

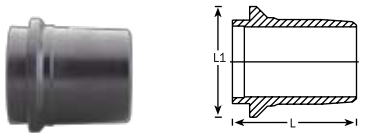
Features and Specifications

- Manufactured from virgin HDPE material.
- Plated single metallic clamp facilitates fast assembling and disassembling.
- Nitrile seal for positive sealing.
- Excellent chemical and weather resistance.
- G.I. riser available in ¾" of required lengths.
- Maximum working pressure 4 kg/cm² (57 psi).

Application

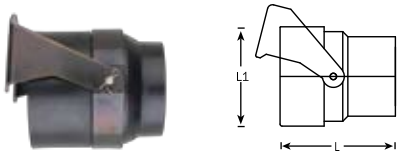
- Used for installation of portable overhead/floppy sprinkler irrigation system.

Quick - Connect® Male Coupler



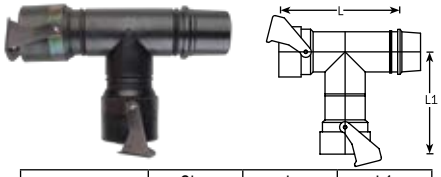
Code	Size	L	L1
	mm	mm	mm
DQCNSC6075P1M	75	94	88

Quick - Connect® Female Coupler



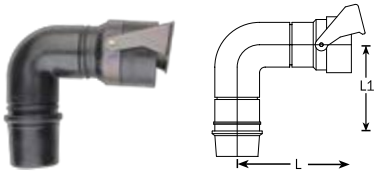
Code	Size	L	L1
	mm	mm	mm
DQCNSC6075P1F	75	104	95

Quick - Connect® Tee



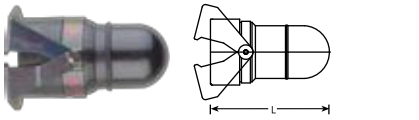
Code	Size	L	L1
	mm	mm	mm
DQCNST6075P1	75	310	210

Quick - Connect® Bend



Code	Size	L	L1
	mm	mm	mm
DQCNSB6075P190	75	211	98

Quick - Connect® End Cap

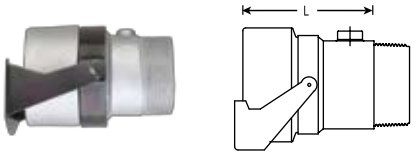


Code	Size	L	L1
	mm	mm	mm
DQCPE6075P1	75	170	-

Quick - Connect® Reducer

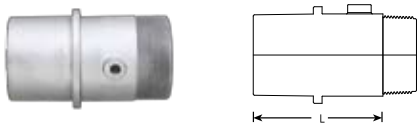
Code	Size	L	L1
	mm	mm	mm
DQCNSR607550P1	75 x 50	290	-
DQCNSR607563P1	75 x 63	295	-

Quick - Connect® Pump Connector*



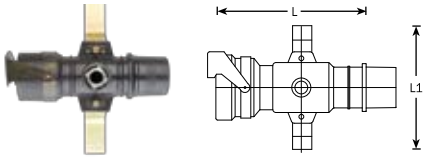
Code	Size	L	L1
	mm	mm	mm
DQCNSCT75F	75	130	-

Quick - Connect® Male Connector*



Code	Size	L	L1
	mm	mm	mm
DQCPCT75M	75	140	-

Quick - Connect® Service Saddle



Code	Size	L	L1
	mm	mm	mm
DQCNSS6075P134	75	250	350

**Flange type connections can be supplied on demand.*

Note: For sales order outside India add E instead of D in the above mentioned ordering code e.g. for ordering Quick Connect - Single Metal Clamp - Bend 63 mm change the code as EQCNSB6063P190 instead of DQCNSB6063P190.

Quick - Connect® Fittings - Double Metal Clamp Joints

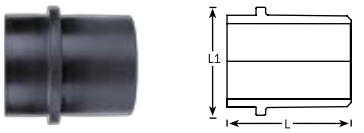
Features and Specifications

- Manufactured from virgin HDPE material.
- Plated double metallic clamp provides all round grip on pipe to prevent leakage and snapping off.
- Easy and fast assembling and disassembling.
- Nitrile seal for positive sealing.
- Excellent chemical and weather resistance.
- G.I. riser available in ¾" of required lengths.
- Maximum working pressure 4 kg/cm² (57 psi).

Application

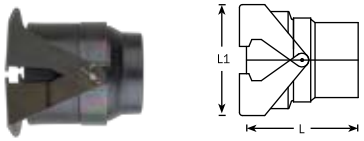
- Used for installation of portable overhead/floppy sprinkler irrigation system.

Quick - Connect® Male Coupler



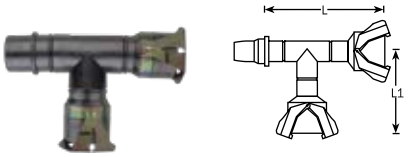
Code	Size	L	L1
	mm	mm	mm
DQCNC6050P1M	50	72	63
DQCNC6075P1M	75	94	88

Quick - Connect® Female Coupler



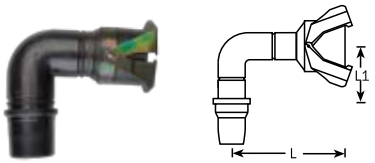
Code	Size	L	L1
	mm	mm	mm
DQCNC6050P1F	50	76	69
DQCNC6075P1F	75	104	95

Quick - Connect® Tee



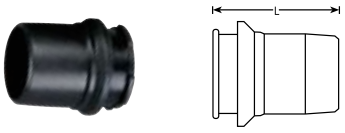
Code	Size	L	L1
	mm	mm	mm
DQCNT6050P1	50	221	152
DQCNT6075P1	75	310	210

Quick - Connect® Bend



Code	Size	L	L1
	mm	mm	mm
DQCNB6050P190	50	148	78
DQCNB6075P190	75	211	98

Quick - Connect® End Cap

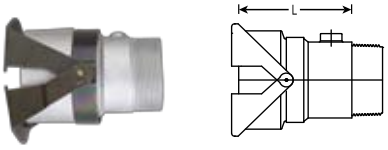


Code	Size	L	L1
	mm	mm	mm
DQCPE6050P1	50	97	-
DQCPE6075P1	75	100	-

Quick - Connect® Reducer

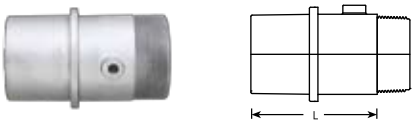
Code	Size	L	L1
	mm	mm	mm
DQCNR607550P1	75 x 50	290	-
DQCNR607563P1	75 x 63	295	-

Quick - Connect® Pump Connector*



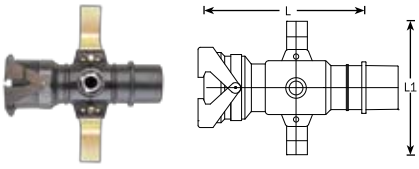
Code	Size	L	L1
	mm	mm	mm
DQCNCT50F	50	325	-
DQCNCT75F	75	130	-

Quick - Connect® Male Connector*



Code	Size	L	L1
	mm	mm	mm
DQCPCT50M	50	220	-
DQCPCT75M	75	140	-

Quick - Connect® Service Saddle



Code	Size	L	L1
	mm	mm	mm
DQCNS6050P134	50	259	356
DQCNS6075P134	75	250	350

**Flange type connections can be supplied on demand.*
Note: For sales order outside India add E instead of D in the above mentioned ordering code e.g. for ordering Quick Connect - Double Metal Clamp - Bend 63 mm change the code as EQCNB6063P190 instead of DQCNB6063P190.

Quick - Connect® Fittings - Metal Latch Joints

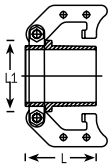
Features and Specifications

- Manufactured from virgin HDPE material.
- Plated metallic clamps designed for easy and fast installation.
- Nitrile seal for positive sealing.
- Excellent chemical and weather resistance.
- G.I. risers available in ¾", 1", 1½", 2" diameter and of required lengths.
- Easy to handle & install.
- Maximum working pressure 6 kg/cm² (85 psi).

Application

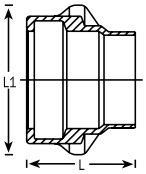
- Used for installation of portable overhead / floppy sprinkler irrigation system.

Quick - Connect® Male Coupler



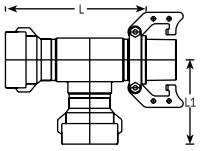
Code	Size	L	L1
	mm	mm	mm
DQCMC6063P1M	63	73	74
DQCMC6075P1M	75	93	88
DQCMC6090P1M	90	109	105
DQCMC6110P1M	110	125	126

Quick - Connect® Female Coupler



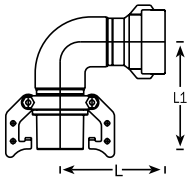
Code	Size	L	L1
	mm	mm	mm
DQCMC6063P1F	63	72	98
DQCMC6075P1F	75	103	116
DQCMC6090P1F	90	89	139
DQCMC6110P1F	110	115	166

Quick - Connect® Tee



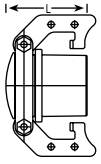
Code	Size	L	L1
	mm	mm	mm
DQCMT6063P1	63	200	122
DQCMT6075P1	75	265	152
DQCMT6090P1	90	378	224
DQCMT6110P1	110	440	270

Quick - Connect® Bend



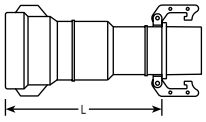
Code	Size	L	L1
	mm	mm	mm
DQCMB6063P190	63	142	120
DQCMB6075P190	75	130	154
DQCMB6090P190	90	244	169
DQCMB6110P190	110	315	235

Quick - Connect® End Cap



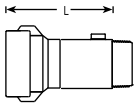
Code	Size	L	L1
	mm	mm	mm
DQCME6063P1	63	80	-
DQCME6075P1	75	80	-
DQCME6090P1	90	119	-
DQCME6110P1	110	130	-

Quick - Connect® Reducer



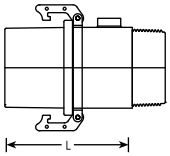
Code	Size	L	L1
	mm	mm	mm
DQCMR607563P1	75 x 63	175	-
DQCMR609075P1	90 x 75	235	-
DQCMR609063P1	90 x 63	250	
DQCMR611075P1	110 x 75	283	-
DQCMR611090P1	110 x 90	294	-
DQCMR611063P1	110 x 63	272	

Quick - Connect® Pump Connector*



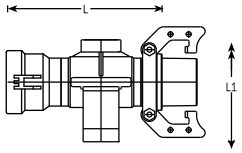
Code	Size	L	L1
	mm	mm	mm
DQCMCT63F	63	100	-
DQCMCT75F	75	130	-
DQCMCT90F	90	143	-
DQCMCT110F	110	178	-

Quick - Connect® Male Connector*



Code	Size	L	L1
	mm	mm	mm
DQCMCT63M	63	125	-
DQCMCT75M	75	140	-
DQCMCT90M	90	155	-
DQCMCT110M	100	304	-

Quick - Connect® Service Saddle



Code	Size	L	L1
	mm	mm	mm
DQCMS6063P134	63	180	340
DQCMS6075P134	75	227	355
DQCMS6090P134	90	269	355
DQCMS6110P134	110	285	385

**Flange type connections can be supplied on demand.*

Note: For sales order outside India add E instead of D in the above mentioned ordering code e.g. for ordering Quick Connect - Metal latch Bend 63 mm change the code as EQCMB6063P190 instead of DQCMB6063P190.

Quick - Connect® Fittings - High Pressure

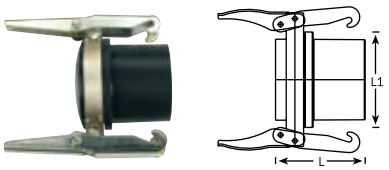
Features and Specifications:

- Manufactured from virgin HDPE material.
- Heavy duty zinc plated clamps and lever.
- Lever hook to clamp on the socket and allow for high pressure joint.
- Nitrile seal for positive sealing.
- Excellent chemical and weather resistance.
- G.I. risers available in ¾", 1", 1½", 2" diameter and of required lengths.
- Easy to handle & install.
- Available in pressure ratings of 4,6,8 and 10 kg/cm² (57, 85, 114, 142 psi)

Application:

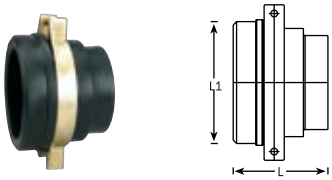
- Used for installation of high pressure raingun / sprinkler irrigation system.

Quick - Connect® Male Coupler



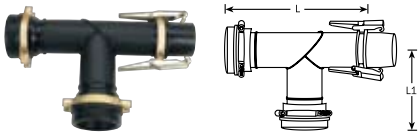
Reference Code	Size	L	L1
	mm	mm	mm
DQCHC6110XXM	110	125	126
DQCHC6125XXM	125	125	126
DQCHC6140XXM	140	156	178
DQCHC6160XXM	160	156	188

Quick - Connect® Female Coupler



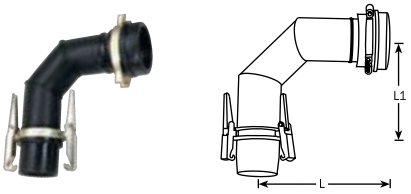
Reference Code	Size	L	L1
	mm	mm	mm
DQCHC6110XXF	110	115	167
DQCHC6125XXF	125	115	167
DQCHC6140XXF	140	143	188
DQCHC6160XXF	160	140	217

Quick - Connect® Tee



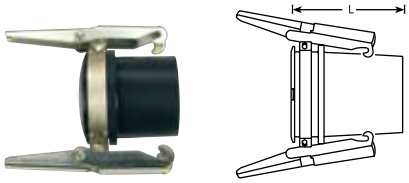
Reference Code	Size	L	L1
	mm	mm	mm
DQCHT6110	110	440	270
DQCHT6125	125	440	270
DQCHT6140	140	750	440
DQCHT6160	160	750	440

Quick - Connect® Bend



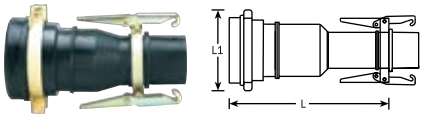
Reference Code	Size	L	L1
	mm	mm	mm
DQCHB6110	110	315	235
DQCHB6125	125	315	235
DQCHB6140	140	470	370
DQCH6B160	160	470	370

Quick - Connect® End Cap



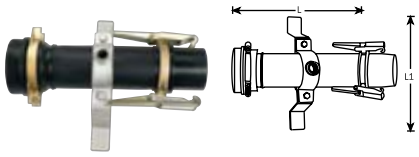
Reference Code	Size	L	L1
	mm	mm	mm
DQCHE6110	110	130	-
DQCHE6125	125	130	-
DQCHE6140	140	156	-
DQCHE6160	160	166	-

Quick - Connect® Reducer



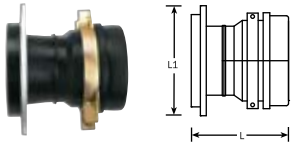
Reference Code	Size	L	L1
	mm	mm	mm
DQCHR6140110	140 x 110	340	210
DQCHR6125110	125 x 110	340	210
DQCHR6160110	160 x 110	340	250
DQCHR6160140	160 x 140	340	250

Quick - Connect® Service Saddle



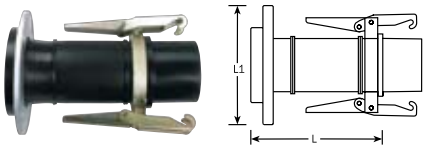
Reference Code	Size	L	L1
	mm	mm	mm
DQCHS6110	110	285	385
DQCHS6125	125	285	385
DQCHS6140	140	500	570
DQCHS6160	160	500	570

Quick - Connect® Flange Connector Female



Reference Code	Size	L	L1
	mm	mm	mm
DQCHC6110XXF	110	194	216
DQCHC6125XXF	125	194	216
DQCHC6140XXF	140	220	255
DQCHC6160XXF	160	220	280

Quick - Connect® Flange Connector Male



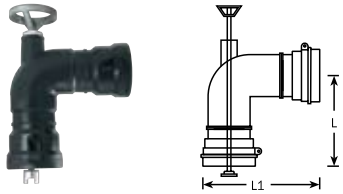
Reference Code	Size	L	L1
	mm	mm	mm
DQCHC6110XXM	110	364	216
DQCHC6125XXM	125	364	216
DQCHC6140XXM	140	270	255
DQCHC6160XXM	160	270	280

Ordering Specifications

X	QC	X	X	X	XXXXXX	XX	XX
D - Domestic order (within India) E - Export order (outside India)		Type of Joint	Type of Fitting	Raw Material Grade	Nominal Diameter, mm	Pressure Rating, kg/cm²	Other Details
		H - High Pressure Type	T - Tee E - End Cap	6 - PE 63	110 140 160	P3 - 4.0 kg/cm² P4 - 6.0 kg/cm² P5 - 8.0 kg/cm² P6 - 10.0 kg/cm²	
			B - Bend				90 - 90 deg.
			S - Service Saddle				34 - 3/4" 01 - 1"
			C - Pump Connector				M - Flanged x Male Connector F - Flanged x Female connector
			J - Coupler				M - Male coupler F - Female coupler
			R - Reducer		140110 - 140 x 110 160110 - 160 x 110 160140 - 160 x 140		

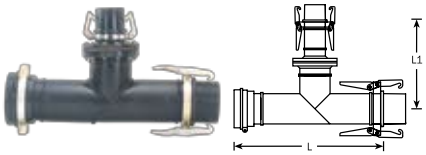
Example : DQCHT6110P3 - This code represents, Quick Connect - High Pressure Tee of nominal diameter 110mm and pressure rating 4 kg/cm².

Quick - Connect® Valve Opener



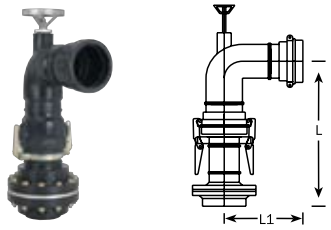
Code	Size	L	L1
	mm	mm	mm
DQCHVO110	110 x 110	255	300

Quick-Connect® Internal Valve Coupler



Code	Size	L	L1
	mm	mm	mm
DQCHIVC110	110 x 110	459	284
DQCHIVC140	140 x 110	575	299
DQCHIVC160	160 x 110	575	309
DQCHIVCF110	110 x 110	459	284
DQCHIVCF140	140 x 110	575	299
DQCHIVCF160	160 x 110	575	309

Quick - Connect® Hydrant Assembly

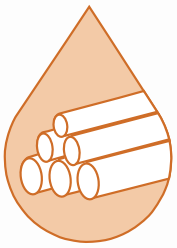


Code	Size	L	L1
	mm	mm	mm
DQCHHA110	110 x 110	615	230
DQCHHA140	140 x 110	615	230
DQCHHA160	160 x 110	615	230

Note: For sales order outside India add E instead of D in the above mentioned ordering code e.g. for ordering Quick Connect - Valve Opener 110 mm change the code as EQCHVO110 *instead of* DQCHVO110.

BACK

Plastic Piping Systems



PVC Pipes & Fittings

PVC Pipes

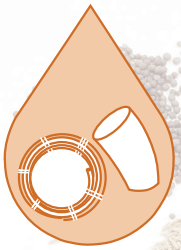
Quick Fix® Pipes

PVC Fittings

Perma Fix® – Solvent Cement.

Jain PVC Well Casing – and Screen Pipes

Jain Sure-Loc Plus™ – Column Pipe



HDPE Pipes & Fittings

Jain High Density Polyethylene Pipe (HDPE)

Jain HDPE Pipes - Jointing & Connections

PVC PIPES

PVC Pipes

Features and Specifications

- Manufactured from high quality uPVC compound.
- Excellent corrosion and chemical resistance to most acidic and alkaline solutions.
- Light weight.
- Easy to handle and transport.
- Excellent flow characteristics.
- Smooth inner wall minimises frictional losses and scaling due to precipitation.
- Available as per IS-4985, DIN-8062 and ISO-4422-2.
- Also manufactured to BS-3505/3506, ASTM D1785-84 and ASTM D 2241 on demand.
- Available in sizes from 20 mm (½") to 560 mm (20") as per above standards.
- Commonly supplied in 6 m lengths with plain ends or socketed at one end for solvent cement weld joint (Any other pipe length can be supplied on request).

Quick Fix® Pipes

Features and Specifications

- Convenient push-fit joints. Saves manpower.
- Jointing can be done during any time of the day under any weather conditions.
- Faster installation, immediate pressure testing and commissioning possible.
- Joints accommodate expansion and contraction.
- Joints are resistant to soil movement due to earthquake effects.
- The elastomeric rings have properties matching to Pipe with long life.
- Available as per IS-4985, ISO-4422-2 and DIN-8062.
- Available in sizes & pressure classes shown in the table in Blue colour.

Application

Used for conveyance of water in drip/sprinkler irrigation systems, lift irrigation systems, surface irrigation systems, subsoil drainage system, potable water supply systems; rising main & distribution lines.

Dimension as per ISO:4422-2

Nominal Outside Diameter	Minimum Wall Thickness in mm								
	Pressure Rating in kg/cm²								
mm	5.0	6.0	6.3	8.0	10.0	12.5	16.0	20.0	25.0
20	-	-	-	-	-	-	1.5	-	2.3
25	-	-	-	-		1.5	1.9	-	2.8
32	-	-	-	-	1.6	1.9	2.4	-	3.6
40	-	-	1.5	1.6	1.9	2.4	3.0	-	4.5
50	-	-	1.6	2.0	2.4	3.0	3.7	-	5.6
63	1.6	1.9	2.0	2.5	3.0	3.8	4.7	-	7.1
75	1.9	2.2	2.3	2.9	3.6	4.5	5.6	-	8.4
90	2.2	2.7	2.8	3.5	4.3	5.4	6.7	-	10.1
110	-	-	2.7	3.4	4.2	5.3	6.6	8.1	10.0
125	-	-	3.1	3.9	4.8	6.0	7.4	9.2	11.4
140	-	-	3.5	4.3	5.4	6.7	8.3	10.3	12.7
160	-	-	4.0	4.9	6.2	7.7	9.5	11.8	14.6
180	-	-	4.4	5.5	6.9	8.6	10.7	13.3	16.4
200	-	-	4.9	6.2	7.7	9.6	11.9	14.7	18.2
225	-	-	5.5	6.9	8.6	10.8	13.4	16.6	-
250	-	-	6.2	7.7	9.6	11.9	14.8	18.4	-
280	-	-	6.9	8.6	10.7	13.4	16.6	20.6	-
315	-	-	7.7	9.7	12.1	15.0	18.7	23.2	-
355	-	-	8.7	10.9	13.6	16.9	21.1	26.1	-
400	-	-	9.8	12.3	15.3	19.1	23.7	29.4	-
450	-	-	11.0	13.8	17.2	21.5	26.7	33.1	-
500	-	-	12.3	15.3	19.1	23.9	29.7	36.8	-
560	-	-	13.7	17.2	21.4	26.7	-	-	-

Note: Blue colour represents wall thickness of available sizes in Quick Fix™ PVC pipes.

Dimension as per IS:4985

Nominal Outside Diameter	Minimum Wall Thickness in mm					
	Pressure Rating in kg/cm²					
mm	2.5	4.0	6.0	8.0	10.0	12.5
20	-	-	-	-	1.1	1.4
25	-	-	-	1.2	1.4	1.7
32	-	-	-	1.5	1.8	2.2
40	-	-	1.4	1.8	2.2	2.8
50	-	-	1.7	2.3	2.8	3.4
63	-	1.5	2.2	2.8	3.5	4.3
75	-	1.8	2.6	3.4	4.2	5.1
90	1.3	2.1	3.1	4.0	5.0	6.1
110	1.6	2.5	3.7	4.9	6.1	7.5
125	1.8	2.9	4.3	5.6	6.9	8.5
140	2.0	3.2	4.8	6.3	7.7	9.5
160	2.3	3.7	5.4	7.2	8.8	10.9
180	2.6	4.2	6.1	8.0	9.9	12.2
200	2.9	4.6	6.8	8.9	11.0	13.6
225	3.3	5.2	7.6	10.0	12.4	15.3
250	3.6	5.7	8.5	11.2	13.8	17.0
280	4.1	6.4	9.5	12.5	15.4	19.0
315	4.6	7.2	10.7	14.0	17.3	21.4
355	5.1	8.1	12.0	15.8	19.6	24.1
400	5.8	9.1	13.5	17.8	22.0	27.2
450	6.5	10.3	15.2	20.0	24.8	30.5
500	7.2	11.4	16.9	22.3	27.5	33.9
560	8.1	12.8	18.9	24.9	30.8	38.0

Note: Blue colour represents wall thickness of available sizes in Quick Fix™ PVC pipes.

Ordering Specifications

X	X	PA	XXX	XXX	X	X	X	00	XXX
Sales Order	Material (Stabilizer)		Nominal outside diameter, mm	Pressure Rating	Reference Standard	Colour of the pipe	Tyep of Joint		Length, m
P - Domestic (within India) E- Export (Outside India)	R- Lead Z - Calcium Zink			**As per Indian Std.** 002 - 2.5 kg/cm² 004 - 4.0 kg/cm² 006 - 6.0 kg/cm² 008 - 8.0 kg/cm² 010 - 10 kg/cm² 012 - 12.5 kg/cm² **As per ASTM D 2241** SDR x 10 e.g. 640 for SDR 64 **As per ASTM D 1785** Schedule no. e.g. 040 for schedule 40 **As per ISO 4422/ Australian/NZ std.** Pressure Rating x 10 e.g. 063 for 6.3 kg/cm²	I - Indian B - British A - ASTM D 1785 R - ASTM D 2241 S - ISO 4422 N - Austalian/NZ D - DIN C - Company Std.	*G - Gray B - Black W - White S - Sky Blue D - Deep Blue E - Dark Gray N - Brown	S - Solvent Welded R- Quick Fix, Elstomeric ring P - Plain (without socketing)		Required Length of Pipe x 100 e.g. 600 for 6.0 m (except 118 for 11.8m)

* Standard Colour

Example: PRPA075006IGR00600 - This code represents PVC Pipe of 75 mm nominal outside diameter having 6.0 kg/cm² pressure rating as per IS-4985 with Quick Fix™ Elastomeric Ring Joint and of 6 m. length.

PVC Fittings (IMF)

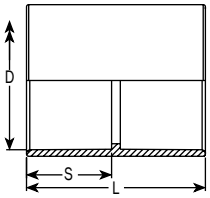
Features and Specifications

- Manufactured from high quality uPVC compound.
- Excellent corrosion and chemical resistance to most acidic and alkaline solutions.
- Exceptionally durable and highly resilient.
- Moulded with precision to match the Pipes.
- Conforming to IS 7834, IS 554, ISO 727, DIN 8063 standards.
- Nominal pressure, PN16 with reduced safety factor of 2.5.

Note:

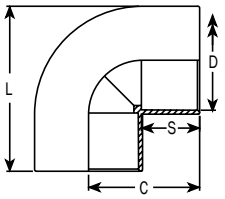
- *PVC Injection moulded fittings are also available in lower pressure rating of 6 kg/cm² (57psi) suitable for flow irrigation and low pressure piping network (Tested at 20° / 2.62 times nominal working pressure).*
- *Fabricated fittings available for all sizes and pressure classes.*
- *Quick Fix fittings (fabricated) available for sizes from 63mm to 315mm and pressure classes upto 12.5 kg/cm².*
- *Repair coupler for all sizes & pressure classes available.*

Coupler / Socket



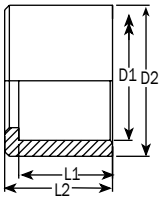
Code	Size mm	D mm		S mm	L mm
		Min.	Max.		
DC020	20	20.1	20.3	18.2	42.0
DC025	25	25.1	25.3	19.0	41.5
DC032	32	32.1	32.3	22.0	47.5
DC040	40	40.1	40.3	26.0	55.5
DC050	50	50.1	50.3	31.0	65.5
DC063	63	63.1	63.3	39.0	82.0
DC075	75	75.1	75.3	44.0	92.5
DC090	90	90.1	90.3	51.0	107.5
DC110	110	110.1	110.4	61.0	129.5

Elbow



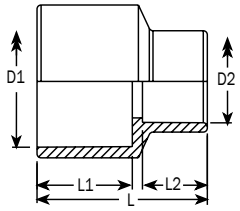
Code	Size mm	D mm		C mm	S mm	L mm
		Min.	Max.			
DE020	20	20.1	20.3	27.5	16.5	40.1
DE025	25	25.1	25.3	33.5	20.0	49.2
DE032	32	32.1	32.3	39.4	22.4	58.6
DE040	40	40.1	40.3	47.6	26.3	71.8
DE050	50	50.1	50.3	60.0	31.5	90.0
DE063	63	63.1	63.3	72.5	39.0	109.0
DE075	75	75.1	75.3	85.5	46.0	129.3
DE090	90	90.1	90.3	98.5	52.0	151.3
DE110	110	110.1	110.4	119.0	61.5	183.5

Reducer Bush



Code	Size mm x mm	D1 mm		D2 mm	L1 mm	L2 mm
		Min.	Max.			
DRB02520	25 x 20	20.1	20.3	25.0	17.0	20.0
DRB03220	32 x 20	20.1	20.3	32.0	17.5	23.0
DRB03225	32 x 25	25.1	25.3	32.0	20.0	23.0
DRB04020	40 x 20	20.1	20.3	40.0	17.0	27.0
DRB04025	40 x 25	25.1	25.3	40.0	19.0	27.0
DRB04032	40 x 32	32.1	32.3	40.0	23.0	27.0
DRB05020	50 x 20	20.1	20.3	50.0	16.0	31.0
DRB05032	50 x 32	32.1	32.3	50.0	23.0	31.0
DRB05040	50 x 40	40.1	40.3	50.0	26.5	31.0
DRB06332	63 x 32	32.1	32.3	63.0	23.0	38.5
DRB06340	63 x 40	40.0	40.3	63.0	26.0	39.0
DRB06350	63 x 50	50.1	50.3	63.0	31.5	37.5
DRB07540	75 x 40	40.1	40.3	75.0	26.0	45.0
DRB07550	75 x 50	50.1	50.3	75.0	32.0	45.0
DRB07563	75 x 63	63.1	63.3	75.0	39.0	45.0
DRB09063	90 x 63	63.1	63.3	90.0	37.8	51.0
DRB09075	90 x 75	75.1	75.3	90.0	45.0	52.5
DRB11063	110 x 63	63.1	63.3	110.0	38.0	61.5
DRB11075	110 x 75	75.1	75.3	110.0	44.0	61.5
DRB11090	110 x 90	90.1	90.3	110.0	52.0	61.5

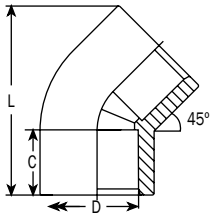
Reducer Socket



Code	Size mm x mm	D1 mm		D2 mm		L mm	L1 mm	L2 mm
		Min.	Max.	Min.	Max.			
DRS02520	25 x 20	25.1	25.3	20.1	20.3	39.0	20.0	17.0
DRS03220	32 x 20	32.1	32.3	20.1	20.3	42.0	23.0	17.0
DRS03225	32 x 25	32.1	32.3	25.1	25.3	45.0	23.0	20.0
DRS04020	40 x 20	40.1	40.3	20.1	20.3	48.0	26.0	17.0
DRS04025	40 x 25	40.1	40.3	25.1	25.3	50.0	26.0	19.0
DRS04032	40 x 32	40.1	40.3	32.1	32.3	52.0	27.0	22.5
DRS05025	50 x 25	50.1	50.3	25.1	25.3	58.0	31.0	19.0
DRS05032	50 x 32	50.1	50.3	32.1	32.3	58.0	31.5	23.0
DRS05040	50 x 40	50.1	50.3	40.1	40.3	65.5	31.5	27.5
DRS06332	63 x 32	63.1	63.3	32.1	32.3	70.5	38.0	23.0
DRS06340	63 x 40	63.1	63.3	40.1	40.3	76.0	39.0	27.0
DRS06350	63 x 50	63.1	63.3	50.1	50.3	75.5	38.5	31.5
DRS07540	75 x 40	75.1	75.3	40.1	40.3	81.5	44.0	27.0
DRS07550	75 x 50	75.1	75.3	50.1	50.3	94.0	45.0	33.0
DRS07563	75 x 63	75.1	75.3	63.1	63.3	86.5	45.0	37.5
DRS09050	90 x 50	90.1	90.3	50.1	50.3	95.0	51.0	33.0
DRS09063	90 x 63	90.1	90.3	63.1	63.3	100.7	52.0	41.7
DRS09075	90 x 75	90.1	90.3	75.1	75.3	102.5	51.5	47.5
DRS11063	110 x 63	110.1	110.4	63.1	63.3	113.5	61.0	41.7
DRS11075	110 x 75	110.1	110.4	75.1	75.3	117.5	62.0	43.5
DRS11090	110 x 90	110.1	110.4	90.1	90.3	118.0	61.5	52.5

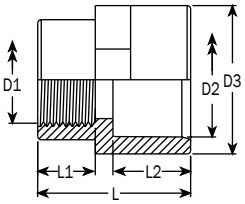
Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Coupler / Socket 63mm change the code as EC063 instead of DC063

Elbow 45°



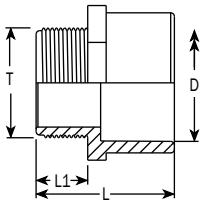
Code	Size mm	D mm		C mm	L mm
		Min.	Max.		
DE45032	32	32.1	32.3	22.0	65.6
DE45040	40	40.1	40.3	26.0	78.9
DE45050	50	50.1	50.3	31.0	94.1
DE45063	63	63.1	63.3	38.0	116.1
DE45075	75	75.1	75.3	44.0	136.5

Reducing FTA



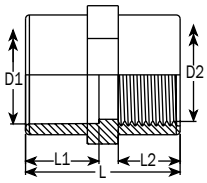
Code	Size	D1	L1	D2, mm		L2	D3	L
	mm x inch	inch (BSP)	mm	Min.	Max.	mm	mm	mm
DRFTA025012	25 x ½"	½"	15.0	25.1	25.3	19.0	34.0	38.0
DRFTA063112	63 x 1½"	½"	21.4	63.1	63.3	38.0	75.0	64.4
DRFTA075112	75 x 1½"	½"	21.4	75.1	75.3	44.0	89.0	70.4
DRFTA075200	75 x 2"	2"	25.7	75.1	75.3	44.0	89.0	74.7
DRFTA090212	90 x 2½"	½"	30.2	90.1	90.3	51.0	106.0	88.7

Male Threaded Adaptor



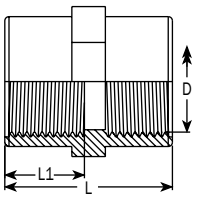
Code	Size mm	D mm		T inch (BSP)	L1 mm	L mm
		Min.	Max.			
DMTA020	20	20.1	20.3	½"	15.0	36.0
DMTA025	25	25.1	25.3	¾"	16.0	40.0
DMTA032	32	32.1	32.3	1"	19.0	45.5
DMTA040	40	40.1	40.3	1¼"	22.0	55.0
DMTA050	50	50.1	50.3	1½"	24.5	59.0
DMTA063	63	63.1	63.3	2"	28.0	74.5
DMTA075	75	75.1	75.3	2½"	32.0	84.5
DMTA090	90	90.1	90.3	3"	40.0	99.5
DMTA110	110	110.1	110.4	4"	40.5	108.5

Female Threaded Adaptor



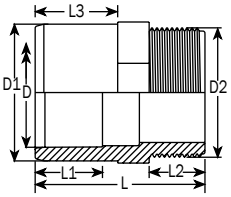
Code	Size mm	D1 mm		D2 inch (BSP)	L1 mm	L2 mm	L mm
		Min.	Max.				
DFTA020	20	20.1	20.3	½"	17.3	14.3	35.5
DFTA025	25	25.1	25.3	¾"	20.0	16.0	40.0
DFTA032	32	32.1	32.3	1"	22.0	19.0	45.5
DFTA040	40	40.1	40.3	1¼"	27.0	24.0	54.5
DFTA050	50	50.1	50.3	1½"	31.0	30.0	64.0
DFTA063	63	63.1	63.3	2"	38.0	33.5	78.0
DFTA075	75	75.1	75.3	2½"	45.0	41.0	91.5
DFTA090	90	90.1	90.3	3"	52.0	49.0	107.5
DFTA110	110	110.1	110.4	4"	62.0	59.5	127.5

Female Threaded Coupler



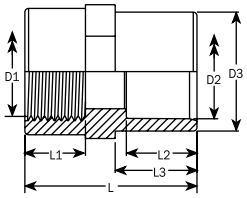
Code	Size mm	D inch (BSP)	L mm	L1 mm
DFTC012	20	½"	35.5	17.3
DFTC034	25	¾"	40.0	20.0
DFTC100	32	1"	45.5	22.0
DFTC114	40	1¼"	54.5	27.0
DFTC112	50	1½"	64.0	31.0
DFTC200	63	2"	78.0	38.0
DFTC250	75	2½"	91.5	45.0
DFTC300	90	3"	107.5	52.0
DFTC400	110	4"	127.5	62.0

Combination Male Threaded Adaptor



Code	Size	D mm		D1	D2	L1	L2	L3	L
	mmxmmxinch	Min.	Max.	mm	inch(BSP)	mm	mm	mm	mm
DCMTA2025012	20 x 25 x ½"	20.1	20.3	25.0	½"	16.0	15.0	19.0	46.0
DCMTA2025034	20 x 25 x ¾"	20.1	20.3	25.0	¾"	16.0	16.3	19.0	47.3
DCMTA2532012	25 x 32 x ½"	25.1	25.3	32.0	½"	19.0	15.0	22.0	49.0
DCMTA2532034	25 x 32 x ¾"	25.1	25.3	32.0	¾"	19.0	16.3	22.0	50.3
DCMTA4050114	40 x 50 x 1¼"	40.1	40.3	50.0	1¼"	26.0	21.4	31.0	66.9
DCMTA4050112	40 x 50 x 1½"	40.1	40.3	50.0	1½"	26.0	21.4	31.0	66.9
DCMTA5063114	50 x 63 x 1¼"	50.1	50.3	63.0	1¼"	31.0	21.4	38.0	73.9
DCMTA5063112	50 x 63 x 1½"	50.1	50.3	63.0	1½"	31.0	21.4	38.0	73.9
DCMTA5063200	50 x 63 x 2"	50.1	50.3	63.0	2"	31.0	25.7	38.0	78.2
DCMTA6375200	63 x 75 x 2"	63.1	63.3	75.0	2"	38.0	25.7	44.0	84.2

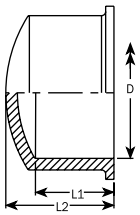
Combination Female Threaded Adaptor



Code	Size	D1	L1	D2, mm		L2	D3	L3	L
	mmxmmxinch	inch(BSP)	mm	Min.	Max.	mm	mm	mm	mm
DCFTA25032034	25 x 32 x ¾"	¾"	16.3	25.1	25.3	19.0	32.0	22.0	46.3
DCFTA63075200	63 x 75 x 2"	2"	25.7	63.1	63.3	38.0	75.0	44.0	78.7
DCFTA63075212	63 x 75 x 2½"	2½"	30.2	63.1	63.3	38.0	75.0	44.0	88.2
DCFTA75090212	75 x 90 x 2½"	½"	30.2	75.1	75.3	44.0	90.0	51.0	95.2
DCFTA90110400	90 x 110 x 4"	4"	39.3	90.1	90.3	51.0	110.0	61.0	115.3

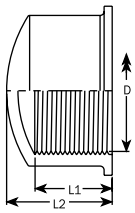
Note: For sales order outside India add E instead of D in the above mentioned ordering code.
e.g. for ordering Elbow 45°-32mm change the code as EE45032 instead of DE45032.

End Cap (Plain)



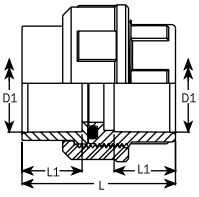
Code	Size mm	D mm		L1 mm	L2 mm
		Min.	Max.		
DECP020	20	20.1	20.3	17.0	21.5
DECP025	25	25.1	25.3	20.0	25.4
DECP032	32	32.1	32.3	23.0	30.0
DECP040	40	40.1	40.3	26.0	34.5
DECP050	50	50.1	50.3	31.0	38.0
DECP063	63	63.1	63.3	38.0	52.0
DECP075	75	75.1	75.3	43.0	57.6
DECP090	90	90.1	90.3	51.0	65.0
DECP110	110	110.1	110.4	65.0	83.0

End Cap (Threaded)



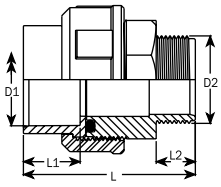
Code	Size	D	L1	L2
	mm	inch (BSP)	mm	mm
DECT112	50	1½"	26.5	35.0
DECT200	63	2"	28.0	39.0
DECT212	75	2½"	33.5	43.0
DECT300	90	3"	41.0	52.0
DECT400	110	4"	43.0	56.0

Union



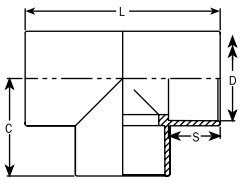
Code	Size mm	D1 mm		L1 mm	L mm
		Min.	Max.		
DU20	20	20.1	20.3	16.0	45.5
DU25	25	25.1	25.3	19.0	51.5
DU32	32	32.1	32.3	22.0	57.5
DU40	40	40.1	40.3	26.0	68.5
DU50	50	50.1	50.3	31.0	79.3
DU63	63	63.1	63.3	38.0	98.0
DU75	75	75.1	75.3	44.0	109.4

Union (Plain x Male Threaded)



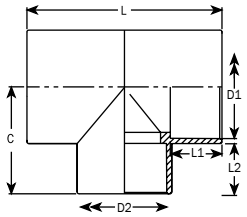
Code	Size mm x inch	D1 mm		D2 inch (BSP)	L1 mm	L2 mm	L mm
		Min.	Max.				
DUMTP32100	32 x 1"	32.1	32.3	1"	22.0	19.1	74.5
DUMTP40114	40 x 1¼"	40.1	40.3	1¼"	26.0	21.4	84.4
DUMTP50112	50 x 1½"	50.1	50.3	1½"	31.0	21.4	94.0
DUMTP50200	50 x 2"	50.1	50.3	2"	31.0	25.7	98.3
DUMTP63200	63 x 2"	63.1	63.3	2"	38.0	25.7	112.0

Tee



Code	Size mm	D mm		C mm	S mm	L mm
		Min.	Max.			
DMT020	20	20.1	20.3	27.5	17.0	55.0
DMT025	25	25.1	25.3	33.0	19.0	66.0
DMT032	32	32.1	32.3	39.0	21.0	78.0
DMT040	40	40.1	40.3	46.5	25.0	93.0
DMT050	50	50.1	50.3	56.8	30.0	113.5
DMT063	63	63.1	63.3	71.8	38.3	143.5
DMT075	75	75.1	75.3	84.0	44.5	168.0
DMT090	90	90.1	90.3	100.0	52.2	200.0
DMT110	110	110.1	110.4	118.0	61.5	236.0

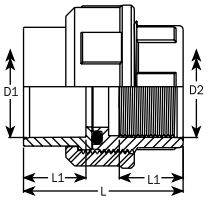
Reducing Tee



Code	Size, mm	D1, mm		D2, mm		L1 mm	L2 mm	C mm	L mm
		Min.	Max.	Min.	Max.				
DMRT06332	63x32x63	63.1	63.3	32.1	32.3	38	22	55	142
DMRT06340	63x40x63	63.1	63.3	40.1	40.3	38	26	59	142
DMRT06350	63x50x63	63.1	63.3	50.1	50.3	38	31	64	142
DMRT07540	75x40x75	75.1	75.3	40.1	40.3	44	26	65	166
DMRT07550	75x50x75	75.1	75.3	50.1	50.3	44	31	70	166
DMRT07563	75x63x75	75.1	75.3	63.1	63.3	44	38	77	166
DMRT09050	90x50x90	90.1	90.3	50.1	50.3	51	31	78	196
DMRT09063	90x63x90	90.1	90.3	63.1	63.3	51	38	85	196
DMRT09075	90x75x90	90.1	90.3	75.1	75.3	51	44	91	196
DMRT11050	110x50x110	110.1	110.4	50.1	50.3	61	31	87	236
DMRT11063	110x63x110	110.1	110.4	63.1	63.3	61	38	95	236
DMRT11075	110x75x110	110.1	110.4	75.1	75.3	61	44	101	236
DMRT11090	110x90x110	110.1	110.4	90.1	90.3	61	51	108	236

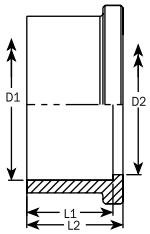
Note: For sales order outside India add E instead of D in the above mentioned ordering code.
e.g. for ordering End Cap Plain 20mm change the code as EECP020 instead of DECP020.

Union (Plain x Female Threaded)



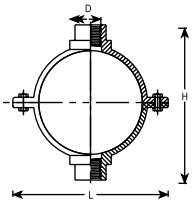
Code	Size mm x inch	D1 mm		D2 inch (BSP)	L1 mm	L2 mm	L mm
		Min.	Max.				
DUFTP20012	20 x ½"	20.1	20.3	½"	16.0	15.0	45.5
DUFTP25034	25 x ¾"	25.1	25.3	¾"	19.0	16.3	51.5
DUFTP32100	32 x 1"	32.1	32.3	1"	22.0	19.1	57.5
DUFTP40114	40 x 1¼"	40.1	40.3	1¼"	26.0	21.4	68.5
DUFTP50112	50 x 1½"	50.1	50.3	1½"	31.0	21.4	79.3
DUFTP63200	63 x 2"	63.1	63.3	2"	38.0	25.7	98.0

Flange Adaptor



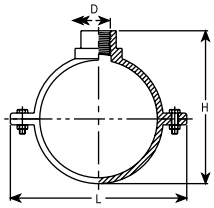
Code	Size mm	D1 mm		D2 mm	L1 mm	L2 mm
		Min.	Max.			
DFA050	50	50.1	50.3	46.0	31.0	34.0
DFA063	63	63.1	63.3	58.0	39.0	40.5
DFA075	75	75.1	75.3	70.0	45.0	48.5
DFA090	90	90.1	90.3	79.0	51.0	57.0
DFA110	110	110.1	110.4	103.0	63.0	68.0

Two Way Service Saddle



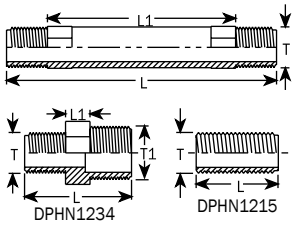
Code	Size	L	H	D
	mm x inch	mm	mm	inch (BSP)
DTSS032012	32 x ½"	64.0	72.6	½"
DTSS032034	32 x ¾"	64.0	72.6	¾"
DTSS040012	40 x ½"	85.0	83.0	½"
DTSS040034	40 x ¾"	85.0	83.0	¾"
DTSS050012	50 x ½"	89.5	105.0	½"
DTSS050034	50 x ¾"	89.5	105.0	¾"
DTSS050100	50 x 1"	89.5	105.0	1"
DTSS063012	63 x ½"	112.5	114.5	½"
DTSS063034	63 x ¾"	112.5	114.5	¾"
DTSS063100	63 x 1"	112.5	114.5	1"
DTSS075012	75 x ½"	124.0	125.0	½"
DTSS075034	75 x ¾"	124.0	125.0	¾"
DTSS075100	75 x 1"	124.0	125.0	1"
DTSS090012	90 x ½"	142.0	142.0	½"
DTSS090034	90 x ¾"	142.0	142.0	¾"
DTSS090100	90 x 1"	142.0	142.0	1"
DTSS110012	110 x ½"	160.5	160.0	½"
DTSS110034	110 x ¾"	160.5	160.0	¾"
DTSS110100	110 x 1"	160.5	160.0	1"

Service Saddle



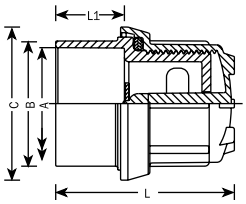
Code	Size	L	H	D
	mm x inch	mm	mm	inch (BSP)
DSS032012	32 x ½"	64.0	55.8	½"
DSS032034	32 x ¾"	64.0	55.8	¾"
DSS040012	40 x ½"	85.0	65.2	½"
DSS040034	40 x ¾"	85.0	65.2	¾"
DSS050012	50 x ½"	89.5	81.5	½"
DSS050034	50 x ¾"	89.5	81.5	¾"
DSS050100	50 x 1"	89.5	81.5	1"
DSS063012	63 x ½"	112.5	92.5	½"
DSS063034	63 x ¾"	112.5	92.5	¾"
DSS063100	63 x 1"	112.5	92.5	1"
DSS075012	75 x ½"	124.0	104.5	½"
DSS075034	75 x ¾"	124.0	104.5	¾"
DSS075100	75 x 1"	124.0	104.5	1"
DSS090012	90 x ½"	142.0	121.0	½"
DSS090034	90 x ¾"	142.0	121.0	¾"
DSS090100	90 x 1"	142.0	121.0	1"
DSS110012	110 x ½"	160.5	140.0	½"
DSS110034	110 x ¾"	160.5	140.0	¾"
DSS110100	110 x 1"	160.5	140.0	1"

Nipple Joints



Code	T inch (BSPT/NPT)	T1 inch (BSPT/NPT)	L inch	L1 mm
DPHN1215	½"	-	1½"	-
DPHN1220	½"	-	2"	12.0
DPHN1230	½"	-	3"	36.4
DPHN1240	½"	-	4"	61.6
DPHN1250	½"	-	5"	87.0
DPHN1260	½"	-	6"	112.4
DPHN1270	½"	-	7"	137.6
DPHN1234	½"	¾"	2"	11.6

Submain Flush Valve

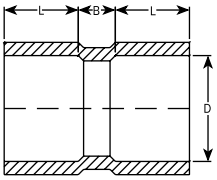


Code	Size mm	A mm		B mm	C mm	L1 mm	L mm
		Min.	Max.				
DSFV40	40	40.1	40.3	46.5	69.0	26.0	75.5
DSFV50	50	50.1	50.3	56.5	69.0	31.0	80.5
DSFV63	63	63.1	63.3	69.5	80.5	38.0	96.5
DSFV75	75	75.1	75.3	82.0	96.3	44.0	105.0
DSFV90	90	90.1	90.3	96.5	109.2	51.0	113.0

Note: For sales order outside India add E instead of D in the above mentioned ordering code. e.g. for ordering Union (PlainxFemale Threaded) 20mm x ½" change the code as EUFTP20012 instead of DUFTP20012.

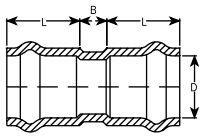
PVC Fabricated Fittings

PVC Solvent Cement Coupler



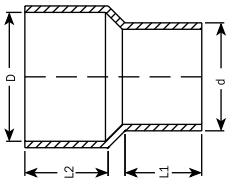
Code	D	B	L
PVFCS020X10	20	20	16.0
PVFCS025X10	25	20	19.0
PVFCS032X10	32	20	22.0
PVFCS040X10	40	20	26.0
PVFCS050X10	50	20	31.0
PVFCS063X10	63	20	37.5
PVFCS075X10	75	20	43.5
PVFCS090X10	90	35	51.0
PVFCS110X10	110	35	61.0
PVFCS125X10	125	35	68.5
PVFCS140X10	140	45	76.0
PVFCS160X10	160	45	86.0
PVFCS180X10	180	45	96.0
PVFCS200X10	200	45	106.0
PVFCS225X10	225	55	118.5
PVFCS250X10	250	55	131.0
PVFCS280X10	280	55	146.0
PVFCS315X10	315	55	163.5
PVFCS355X10	355	65	183.5
PVFCS400X10	400	65	206.0
PVFCS450X10	450	65	231.0
PVFCS500X10	500	65	256.0
PVFCS560X10	560	75	286.0

PVC Quick-fix Coupler



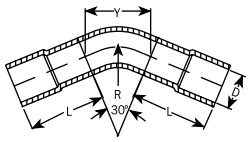
Code	D	B	L
PVFCQ063X10	63	30	128.0
PVFCQ075X10	75	30	123.0
PVFCQ090X10	90	30	133.0
PVFCQ110X10	110	35	135.0
PVFCQ125X10	125	35	143.0
PVFCQ140X10	140	40	158.0
PVFCQ160X10	160	40	155.0
PVFCQ180X10	180	50	173.0
PVFCQ200X10	200	50	185.0
PVFCQ225X10	225	55	195.0
PVFCQ250X10	250	55	223.0
PVFCQ280X10	280	60	220.0
PVFCQ315X10	315	60	220.0
PVFCQ355X10	355	80	230.0
PVFCQ400X10	400	100	240.0

PVC Reducer-Single Stage-Concentric



Code	Size	D	d	L1	L2
PVFRS020016X10	20x16	20	16.0	18	16.0
PVFRS025020X10	25x20	25	20.0	20	19.0
PVFRS032025X10	32x25	32	25.0	23	22.0
PVFRS040032X10	40x32	40	32.0	26	26.0
PVFRS050040X10	50x40	50	40.0	30	31.0
PVFRS063050X10	63x50	63	50.0	35	37.5
PVFRS063075X10	75x63	75	63.0	42	43.5
PVFRS090075X10	90x75	90	75.0	48	51.0
PVFRS110090X10	110x90	110	90.0	55	61.0
PVFRS125110X10	125x110	125	110.0	65	68.5
PVFRS140125X10	140x125	140	125.0	73	76.0
PVFRS160140X10	160x140	160	140.0	80	86.0
PVFRS180160X10	180x160	180	160.0	90	96.0
PVFRS200180X10	200x180	200	180.0	100	106.0
PVFRS225200X10	225x200	225	200.0	110	118.5
PVFRS250225X10	250x225	250	225.0	123	131.0
PVFRS280250X10	280x250	280	250.0	135	146.0
PVFRS315280X10	315x280	315	280.0	150	163.5
PVFRS355315X10	355x315	355	315.0	168	183.5
PVFRS400355X10	400x355	400	355.0	188	206.0
PVFRS450400X10	450x400	450	400.0	210	231.0
PVFRS500450X10	500x450	500	450.0	235	256.0
PVFRS560500X10	560x500	560	500.0	260	286.0

PVC Solvent Cement Bend 30°

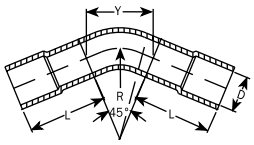


Code	D	Y	L	R
PVFBS30020X10	20	32	20	60
PVFBS30025X10	25	40	25	75
PVFBS30032X10	32	51	32	96
PVFBS30040X10	40	63	40	120
PVFBS30050X10	50	79	50	150
PVFBS30063X10	63	99	63	189
PVFBS30075X10	75	118	75	225
PVFBS30090X10	90	142	90	270
PVFBS30110X10	110	173	110	330
PVFBS30125X10	125	197	125	375
PVFBS30140X10	140	220	140	420
PVFBS30160X10	160	252	160	480
PVFBS30180X10	180	283	180	540
PVFBS30200X10	200	314	200	600
PVFBS30225X10	225	354	225	675
PVFBS30250X10	250	393	250	750
PVFBS30280X10	280	440	280	840
PVFBS30315X10	315	495	315	945
PVFBS30355X10	355	558	355	1065
PVFBS30400X10	400	628	400	1200
PVFBS30450X10	450	707	450	1350
PVFBS30500X10	500	785	500	1500
PVFBS30560X10	560	880	560	1680

Note: • All dimensions are in mm.

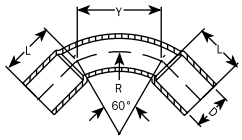
• All fabricated fittings are available in 10 kg/cm² pressure rating. Please specify other pressure ratings as per the requirement viz. 04, 06, 08, 12.5 kg/cm². eg. for PVC Solvent Cement Coupler 20mm size and 6 kg/cm² pressure rating, specify code as PVFCS020X06.

PVC Solvent Cement Bend 45°



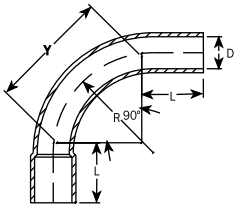
Code	D	Y	L	R
PVFBS45020X10	20	48	20	60
PVFBS45025X10	25	59	25	75
PVFBS45032X10	32	76	32	96
PVFBS45040X10	40	95	40	120
PVFBS45050X10	50	118	50	150
PVFBS45063X10	63	149	63	189
PVFBS45075X10	75	177	75	225
PVFBS4509010	90	212	90	270
PVFBS45110X10	110	259	110	330
PVFBS45125X10	125	295	125	375
PVFBS45140X10	140	330	140	420
PVFBS45160X10	160	377	160	480
PVFBS45180X10	180	424	180	540
PVFBS45200X10	200	471	200	600
PVFBS45225X10	225	530	225	675
PVFBS45250X10	250	589	250	750
PVFBS45280X10	280	660	280	840
PVFBS45315X10	315	742	315	945
PVFBS45355X10	355	837	355	1065
PVFBS45400X10	400	942	400	1200
PVFBS45450X10	450	1060	450	1350
PVFBS45500X10	500	1178	500	1500
PVFBS45560X10	560	1319	560	1680

PVC Solvent Cement Bend 60°



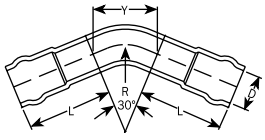
Code	D	Y	L	R
PVFBS60020X10	20	63	20	60
PVFBS60025X10	25	79	25	75
PVFBS60032X10	32	101	32	96
PVFBS60040X10	40	126	40	120
PVFBS60050X10	50	158	50	150
PVFBS60063X10	63	198	63	189
PVFBS60075X10	75	236	75	225
PVFBS60090X10	90	283	90	270
PVFBS60110X10	110	346	110	330
PVFBS60125X10	125	393	125	375
PVFBS60140X10	140	440	140	420
PVFBS60160X10	160	503	160	480
PVFBS60180X10	180	566	180	540
PVFBS60200X10	200	629	200	600
PVFBS60225X10	225	707	225	675
PVFBS60250X10	250	786	250	750
PVFBS60280X10	280	880	280	840
PVFBS60315X10	315	990	315	945
PVFBS60355X10	355	1115	355	1065
PVFBS60400X10	400	1256	400	1200
PVFBS60450X10	450	1413	450	1350
PVFBS60500X10	500	1570	500	1500
PVFBS60560X10	560	1759	560	1680

PVC Solvent Cement Bend 90°



Code	D	Y	L	R
PVFBS90020X10	20	95	20	60
PVFBS90025X10	25	118	25	75
PVFBS90032X10	32	151	32	96
PVFBS90040X10	40	189	40	120
PVFBS90050X10	50	236	50	150
PVFBS90063X10	63	297	63	189
PVFBS90075X10	75	354	75	225
PVFBS90090X10	90	424	90	270
PVFBS90110X10	110	519	110	330
PVFBS90125X10	125	589	125	375
PVFBS90140X10	140	660	140	420
PVFBS90160X10	160	754	160	480
PVFBS90160X10	180	848	180	540
PVFBS90200X10	200	942	200	600
PVFBS90225X10	225	1060	225	675
PVFBS90250X10	250	1178	250	750
PVFBS90280X10	280	1319	280	840
PVFBS90315X10	315	1484	315	945
PVFBS90355X10	355	1673	355	1065
PVFBS90400X10	400	1884	400	1200
PVFBS90450X10	450	2120	450	1350
PVFBS90500X10	500	2355	500	1500
PVFBS90560X10	560	2638	560	1680

PVC Quick-fix Bend 30°

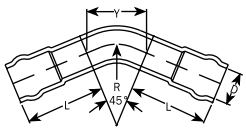


Code	D	Y	L	R
PVFBQ30063X10	63	99	240	189
PVFBQ30075X10	75	118	246	225
PVFBQ30090X10	90	142	266	270
PVFBQ30110X10	110	173	270	330
PVFBQ30125X10	125	197	300	375
PVFBQ30140X10	140	220	316	420
PVFBQ30160X10	160	252	316	480
PVFBQ30180X10	180	283	346	540
PVFBQ30200X10	200	314	370	600
PVFBQ30225X10	225	354	390	675
PVFBQ30250X10	250	393	446	750
PVFBQ30280X10	280	440	450	840
PVFBQ30315X10	315	495	450	945
PVFBQ30355X10	355	558	460	1065
PVFBQ30400X10	400	628	500	1200

Note: • All dimensions are in mm.

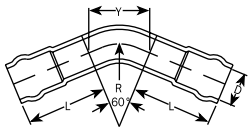
• All fabricated fittings are available in 10 kg/cm² pressure rating. Please specify other pressure ratings as per the requirement viz. 04, 06, 08, 12.5 kg/cm². eg. for PVC Solvent Cement Bend 45°, 20mm size and 6 kg/cm² pressure rating, specify code as PVFBS45020X06.

PVC Quick-fix Bend 45°



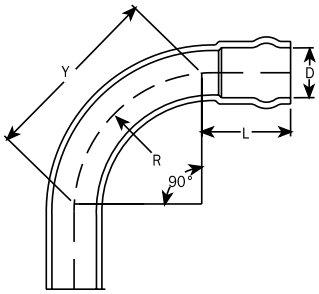
Code	D	Y	L	R
PVFBQ45063X10	63	149	240	189
PVFBQ45075X10	75	177	246	225
PVFBQ45090X10	90	212	266	270
PVFBQ45110X10	110	259	270	330
PVFBQ45125X10	125	295	300	375
PVFBQ45140X10	140	330	316	420
PVFBQ45160X10	160	377	316	480
PVFBQ45180X10	180	424	346	540
PVFBQ45200X10	200	471	370	600
PVFBQ45225X10	225	530	390	675
PVFBQ45250X10	250	589	446	750
PVFBQ45280X10	280	660	450	840
PVFBQ45315X10	315	742	450	945
PVFBQ45355X10	355	837	460	1065
PVFBQ45400X10	400	942	500	1200

PVC Quick-fix Bend 60°



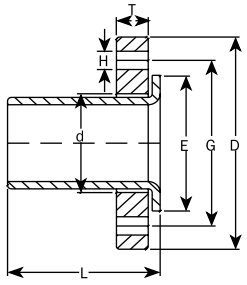
Code	D	Y	L	R
PVFBQ60063X10	63	198	240	189
PVFBQ60075X10	75	236	246	225
PVFBQ60090X10	90	283	266	270
PVFBQ60110X10	110	346	270	330
PVFBQ60125X10	125	393	300	375
PVFBQ60140X10	140	440	316	420
PVFBQ60160X10	160	503	316	480
PVFBQ60180X10	180	566	346	540
PVFBQ60200X10	200	629	370	600
PVFBQ60225X10	225	707	390	675
PVFBQ60250X10	250	786	446	750
PVFBQ60280X10	280	880	450	840
PVFBQ60315X10	315	990	450	945
PVFBQ60355X10	355	1115	460	1065
PVFBQ60400X10	400	1256	500	1200

PVC Quick-fix Bend 90°



Code	D	Y	L	R
PVFBQ90063X10	63	297	240	189
PVFBQ90075X10	75	354	246	225
PVFBQ90090X10	90	424	266	270
PVFBQ90110X10	110	519	270	330
PVFBQ90125X10	125	589	300	375
PVFBQ90140X10	140	660	316	420
PVFBQ90160X10	160	754	316	480
PVFBQ90180X10	180	848	346	540
PVFBQ90200X10	200	942	370	600
PVFBQ90225X10	225	1060	390	675
PVFBQ90250X10	250	1178	446	750
PVFBQ90280X10	280	1319	450	840
PVFBQ90315X10	315	1484	450	945
PVFBQ90355X10	355	1673	460	1065
PVFBQ90400X10	400	1884	500	1200

PVC Flange Adaptor

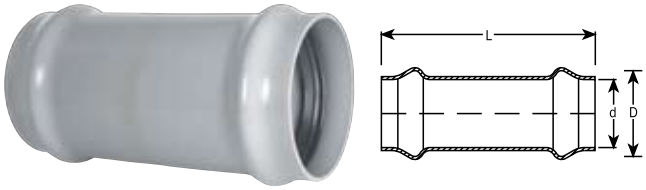


Note: Flange available on demand. Please specify flange sizes.

Code	Size	G	D	d	T	H	No. of Hole	L	E	Bolt Size
PVFA063X10	63	125	165	64	7	19	4	68	101	M16
PVFA075X10	75	145	185	76	7	19	4	80	121	M16
PVFA090X10	90	160	200	91	9.5	19	4	95	136	M16
PVFA110X10	110	180	220	112	9.5	19	8	115	156	M16
PVFA125X10	125	210	250	127	11.0	19	8	130	186	M16
PVFA140X10	140	210	250	142	12.5	19	8	145	186	M16
PVFA160X10	160	240	285	162	12.5	23	8	165	212	M20
PVFA180X10	180	240	285	183	12.5	23	8	185	212	M20
PVFA200X10	200	295	340	203	16.0	23	8	205	267	M20
PVFA225X10	225	295	340	228	20.0	23	8	230	267	M20
PVFA250X10	250	350	395	253	20.0	23	12	255	322	M20
PVFA280X10	280	350	395	284	20.0	23	12	285	322	M20
PVFA315X10	315	400	445	319	24.5	23	12	320	372	M20
PVFA355X10	355	460	505	359	24.5	23	16	360	432	M20
PVFA400X10	400	515	565	405	24.5	28	16	405	483	M24
PVFA450X10	450	565	615	455	28.0	28	16	455	533	M24
PVFA500X10	500	620	670	506	28.0	28	20	505	588	M24
PVFA560X10	560	685	740	566	32.0	33	20	565	649	M24

Note: • All dimensions are in mm.
• All fabricated fittings are available in 10 kg/cm² pressure rating. Please specify other pressure ratings as per the requirement viz. 04, 06, 08, 12.5 kg/cm². eg. for PVC Quick Fix Bend 45°, 20mm size and 6 kg/cm² pressure rating, specify code as PVFBQ45063X06.

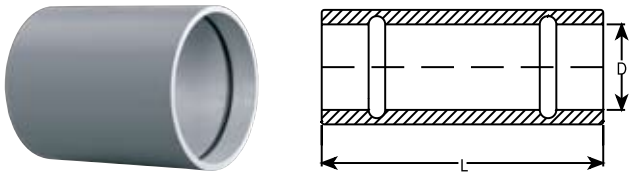
PVC Quick-fix Repair Coupler



Code	D	d	L
PVFRCQ063X10	80.0	63	385.0
PVFRCQ075X10	94.0	75	480.0
PVFRCQ090X10	111.0	90	485.0
PVFRCQ110X10	133.0	110	485.0
PVFRCQ125X10	148.0	125	500.0
PVFRCQ140X10	164.0	140	515.0
PVFRCQ160X10	186.0	160	515.0
PVFRCQ180X10	207.0	180	550.0
PVFRCQ200X10	220.0	200	550.0
PVFRCQ225X10	254.5	225	600.0
PVFRCQ250X10	281.0	250	600.0
PVFRCQ280X10	315.0	280	600.0
PVFRCQ315X10	351.3	315	600.0
PVFRCQ400X10	443.1	400	600.0

Note: • All dimensions are in mm.
• All fabricated fittings are available in 10 kg/cm² pressure rating. Please specify other pressure ratings as per the requirement viz. 04, 06, 08, 12.5 kg/cm². eg. for PVC Quick Fix Repair Coupler 63mm size and 6 kg/cm² pressure rating, specify code as PVFBS45020X06.

PVC Repair Coupler



Code	D	L
PVFRC050X10	50	90
PVFRC063X10	63	100
PVFRC075X10	75	110
PVFRC090X10	90	140
PVFRC110X10	110	160
PVFRC125X10	125	180
PVFRC140X10	140	200
PVFRC160X10	160	220
PVFRC180X10	180	240
PVFRC200X10	200	260
PVFRC225X10	225	300
PVFRC250X10	250	320
PVFRC280X10	280	350
PVFRC315X10	315	385
PVFRC355X10	355	435
PVFRC400X10	400	480
PVFRC450X10	450	530
PVFRC500X10	500	590
PVFRC540X10	540	600
PVFRC560X10	560	635

Perma Fix® - Solvent Cement

Features and Specifications

- Formulated using suspension grade virgin PVC resin.
- Free flowing clear liquid.
- Fully homogenised, free from lumps and undissolved particles.
- Minimum viscosity 90 mPa.s/m² for regular bodied type, 500 mPa.s/m² for medium bodied type and 1600 mPa.s/m² for heavy bodied type.
- Lap joint shear strength 30 - 35 kg/cm² (430 - 500 psi) after 10 hours curing time under laboratory conditions.
- Hydrostatic burst strength 25-28 kg/cm² (355 - 400 psi) after 2 hours curing time.
- Available in 10, 25, 50 & 100 ml tube packing, 0.25, 0.5, 1.0, litres in tin packing & 5 litres can.

Application

- Used for joining uPVC pressure or non pressure pipes.

Guide for selection of solvent cement for various pipe sizes: (IS:14182)

Pipe Size Range mm	Cement Type	Minimum Viscosity mPa.s/m²	Min.Wet Film Thickness mm
16 to 50	regular bodied	90	0.15
51 to 200	medium bodied	500	0.30
> 200	heavy bodied	1600	0.60

Ordering Specifications

X	PF	XXX
		Volume, litre
D - Domestic Order (within India) E - Export Order (outside India)		001 - 0.01 002 - 0.025 005 - 0.05 010 - 0.1 025 - 0.25 05 - 0.5 10 - 1.0 50 - 5.0

Example: DPF50 - This code represents Perma Fix® Solvent Cement of 0.5 litre pack.

Note: Perma Fix® can be supplied in special grade, please write the code as DPF5SP while ordering.

Solvent Cement Requirement for uPVC Pipes

Pipe Size, mm	No. of Joints* per Litre	Pipe Size, mm	No. of Joints* per Liter
20	330	125	45
25	270	140	36
32	225	160	27
40	180	180	20
50	135	200	15
63	125	225	12
75	103	250	9
90	79	280	6
110	54	315	5

** Each joint represents one socket in a Fitting.*

Jain PVC Well Casing and Screen Pipes

Features and Specifications

- Manufactured from special uPVC compound having extra toughness.
- Anti-corrosive. PVC being an inert material most of the chemicals found in soil and water do not affect the casing and screen.
- Continuous ribs increase permeability by keeping gravel pack away from slot opening.
- Chemical rehabilitation possible when chocking occurs due to encrustation.
- Horizontal slots enable laminar flow into the well reducing well entrance losses.
- Higher permeability reduces draw down and results in saving in pumping energy.
- Slot width right from 0.2mm to 3.00mm can be provided.
- Light in weight.
- The socket and spigot with suitable thread make them easy to install and requires no welding equipments and generator.
- Manufactured conforming to IS:12818, DIN 4925 (part I to III) and ASTM F 480.
- Casing and screen available from 1.25" dia to 20" dia.
- Also available HDPE screen and casing for leachate Gas Extraction.
- All accessories for well completion available.

Jain Deepwell Plain Casing Pipe Conforming to DIN 4925

JDW - PC							
Nominal Diameter		Outside Diameter mm		Wall Thickness mm		Max. Outer Diameter Over Socket	Collapse Resistance
Inch	mm	Min.	Max.	Min.	Max.	mm	kg/cm²
4"	100	113.0	113.3	7.0	7.9	125	15.5
4.5"	115	125.0	125.3	7.5	8.5	137	15.5
5"	125	140.0	140.4	8.0	9.0	152	15.5
6"	150	165.0	164.5	9.5	10.7	180	15.5
7"	175	195.0	195.5	11.2	12.5	214	15.5
8"	200	225.0	225.5	13.0	14.8	247	15.5
10"	250	280.0	280.5	16.0	17.6	304	15.5
12"	300	330.0	330.6	19.0	21.0	359	15.5
14"	350	400.0	400.7	21.5	23.9	433	15.5

Jain Shallow Well Plain Casing Pipes conforming to IS:12818

JSW - PC							
Nominal Diameter		Outside Diameter mm		Wall Thickness mm		Max. Outer Diameter Over Socket	Collapse Resistance
Inch	mm	Min.	Max.	Min.	Max.	mm	kg/cm²
6"	150	165.0	165.4	5.7	6.5	174	4
7"	175	200.0	200.5	7.0	7.8	211	4
8"	200	225.0	225.5	7.6	8.8	238	4
10"	250	280.0	280.5	9.6	11.0	292	4
12"	300	330.0	330.6	11.2	13.3	346	4
14"	350	400.0	400.7	14.0	15.5	420	4
16"	400	450.0	450.8	16.0	17.5	470	4
*20"	500	540.0	541.6	20.0	22.2	570	4

** Specially developed by Jains*

Jain Medium Well Plain Casing Pipes Conforming to DIN 4925 & IS 12818

JMW - PC							
Nominal Diameter		Outside Diameter mm		Wall Thickness mm		Max. Outer Diameter Over Socket	Collapse Resistance
Inch	mm	Min.	Max.	Min.	Max.	mm	kg/cm²
1.25"	35	42.0	42.2	3.5	4.1	46	32.0
1.5"	40	48.0	48.2	3.5	4.1	53	32.0
2"	50	60.0	60.2	4.0	4.6	66	24.0
3"	80	88.0	88.3	4.0	4.6	94	7.5
4"	100	113.0	113.3	5.0	5.7	121	7.5
4.5"	115	125.0	125.3	5.0	5.7	132	7.5
5"	125	140.0	140.4	6.5	7.4	149	7.5
6"	150	165.0	165.4	7.5	8.5	176	7.5
**7"	175	200.0	200.5	8.8	9.8	215	7.5
8"	200	225.0	225.5	10.0	11.2	241	7.0
10"	250	280.0	280.5	12.5	14.0	297	7.0
12"	300	330.0	330.6	14.5	16.2	350	7.0
14"	350	400.0	400.7	17.5	19.5	425	7.0
16"	400	450.0	450.8	19.5	21.7	475	7.0
*9"	225	250	250.5	11.0	12.3	270	7.0

** Specially developed by Jains*
*** Dimensions are as per IS: 12818*

Jain Medium Well Ribbed Screen(RS) and Plain Screen(PS) Pipes Conforming to IS:12818 and DIN 4925 Part 1 to 3

JMW - RS						
Nominal Diameter		Outside Diameter mm		Wall Thickness mm		Maximum O.D. Over Socket
Inch	mm	Min.	Max.	Min.	Max.	mm
1.5″	40	52.0	52.2	3.5	4.0	56
2″	50	64.0	64.2	4.0	4.6	69
3″	80	92.0	92.3	4.0	4.6	98
4″	100	117.0	117.3	5.0	5.7	124
5″	125	144.0	144.4	6.5	7.3	154
6″	150	169.0	169.4	7.5	8.5	182
**7″	175	204.0	204.5	8.8	9.8	219
8″	200	229.0	229.5	10.0	11.2	247
10″	250	284.0	284.5	12.5	14.0	302
12″	300	334.0	334.6	14.5	16.2	356
14″	350	404.0	404.7	17.5	19.5	432
JMW - PS						
1.25″	35	42	42.2	3.5	4.0	46
1.5″	40	48	48.2	3.5	4.0	53
2″	50	60	60.2	4.0	4.6	66
3″	80	88	88.3	4.0	4.6	94
4″	100	113.0	113.3	5.0	5.7	121
5″	125	140.0	140.4	6.5	7.3	150
6″	150	165.0	165.4	7.5	8.5	179
**7″	175	200.0	200.5	8.8	9.8	217
8″	200	225.0	225.5	10.0	11.2	244
10″	250	280.0	280.5	12.5	14.0	298
12″	300	330.0	330.6	14.5	16.2	352
14″	350	400.0	400.7	17.5	19.5	428
16″	400	450.0	450.8	19.5	21.7	479
*20″	500	540.0	541.6	20.0	22.2	570

** Suitable for Shallow Well only. ** Dimensions are as per IS: 12818*

Jain Series - Deep Well Screens

JDW - RS						
Nominal Diameter		Outside Diameter mm		Wall Thickness mm		Maximum Outer Diameter Over Socket
Inch	mm	Min.	Max.	Min.	Max.	mm
6″	150	169.0	169.4	9.5	10.5	187
8″	200	229.0	229.5	13.0	14.2	253
10″	250	284.0	284.5	16.0	18.0	312
12″	300	334.0	334.6	18.0	20.5	370
12″	300	334.0	334.6	19.0	21.5	371
JDW-PS						
4″	100	113.0	113.3	7.0	7.9	125
4.5″	115	125.0	125.3	7.5	8.5	137
5″	125	140.0	140.4	8.0	9.0	152
6″	150	165.0	165.4	9.5	10.5	183
8″	200	225.0	225.5	13.0	14.8	247
10″	250	280.0	280.5	16.0	17.6	304
12″	300	330.0	330.6	19.0	21.0	359
14″	350	400.0	400.7	21.5	23.9	433

Slot Width Available on Jain PVC Screen Pipes conforming to – DIN 4925 & IS 12818

Slot Width	Min. mm	0.2	0.3	0.5	0.75	1.0	1.5	2.0	3.0
Tolerance Slot Number	*Inch no.	+0.06 8	+0.06 12	+0.1 20	+0.2 30	+0.2 40	+0.2 60	+0.2 80	+0.3 120

** Slot numbers designate width of openings in thousandth part of an inch. no. 40 is an opening of 40/1000″+0.06.*

Ordering Specifications

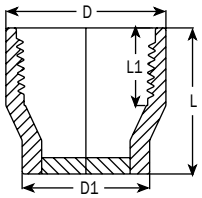
X	X	XX	XXX	XXX	X	X	X	XX	XXX
Sales Order	Material (Stabilizer)	Type of Casing	Nominal Diameter, mm	Pressure Rating/ Class/ SDR/ Schedule/ Min. wall thickness	Reference Standard	Colour of the pipe	Tyep of Joint	Slot width	Length, m
P - Domestic (within India) E- Export (Outside India)	R- Lead Z - Calcium Zink	PS - Plain Casing Screen PC - Plain Casing RS - Ribbed Screen		JSW - Jain shallow well JMW - Jain mediam well JDW - Jain deep well JRS - Jain ribbed screen shallow well JRM - Jain ribbed screen medium well JRD - Jain ribbed screen deep well	I - Indian D - DIN C - Company Std. A - ASTM	S - Sky Blue D - Deep Blue	T - Trapozoidal Thread W - Socket Whit-worth F - Flush Whitworth	slot width,mm x 10 e.g 05 for 0.5mm	Required Length of Pipe x 100 e.g. 600 for 6.0 m (except 118 for 11.8m)

Example: PRRS100JRMIST05300 - This code refers to "Jain PVC Medium Well Ribbed Screen Pipe" with 100mm nominal diameter having slot width 0.5 mm available in standard effective length of 3 m.
Note: • Sure-Loc® & solvent weld jointing system available on demand. • Normally supplied effective lengths of 1, 2, 3 & 4 m. Other lengths available on demand.

BACK

Jain PVC Well Casing and Screen Pipe Fittings

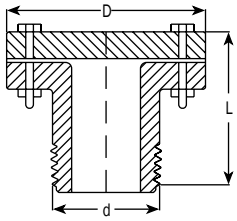
End Cap



Code	Size	D (Min.)	D1 (Max.)	L (Min.)	L1 (Min.)
	Inch	mm	mm	mm	mm
CFTEC04"XX	4"	113	120	130	65
CFTEC05"XX	5"	140	150	145	85
CFTEC06"XX	6"	165	178	155	85
CFTEC07"XX	7"	200	215	155	85
CFTEC08"XX	8"	225	243	180	95
CFTEC09"XX	9"	250	271	200	110
CFTEC10"XX	10"	280	298	205	130
CFTEC12"XX	12"	330	352	230	135
CFTEC14"XX	14"	400	428	255	135
CFTEC16"XX	16"	450	479	305	135
CFTEC20"XX	20"	540	570	330	145

Note: XX - MW - for mediam well pipe, DW - for deep well pipe.

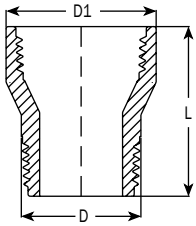
Top Cap



Code	Size	D	L (Min.)	D (Min.)
	Inch	mm	mm	mm
CFTTC04"XX	4"	113	115	155
CFTTC05"XX	5"	140	125	180
CFTTC06"XX	6"	165	160	205
CFTTC07"XX	7"	200	160	240
CFTTC08"XX	8"	225	180	265
CFTTC09"XX	9"	250	190	295
CFTTC10"XX	10"	280	220	320
CFTTC12"XX	12"	330	220	370
CFTTC14"XX	14"	400	220	440
CFTTC16"XX	16"	450	220	490
CFTTC20"XX	20"	540	220	600

Note: XX - MW - for mediam well pipe, DW - for deep well pipe.

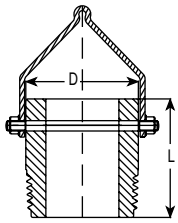
Reducer



Code	Size	D1 (Max.)	D (Min.)	L (Min.)
	Inch	mm	mm	mm
CFTR05"x04"XX	5" x 4"	150	113	245
CFTR04"x06"XX	4" x 6"	178	113	245
CFTR06"x04.5"XX	6" x 4.5"	178	125	245
CFTR06"x05"XX	6" x 5"	178	140	245
CFTR07"x06"XX	7" x 6"	215	165	295
CFTR08"x06"XX	8" x 6"	243	165	305
CFTR08"x07"XX	8" x 7"	243	200	320
CFTR10"x08"XX	10" x 8"	298	225	375
CFTR12"x10"XX	12" x 10"	352	280	435
CFTR14"x12"XX	14" x 12"	428	330	545
CFTR16"x14"XX	16" x 14"	479	400	595

Note: XX - MW - for mediam well pipe, DW - for deep well pipe.

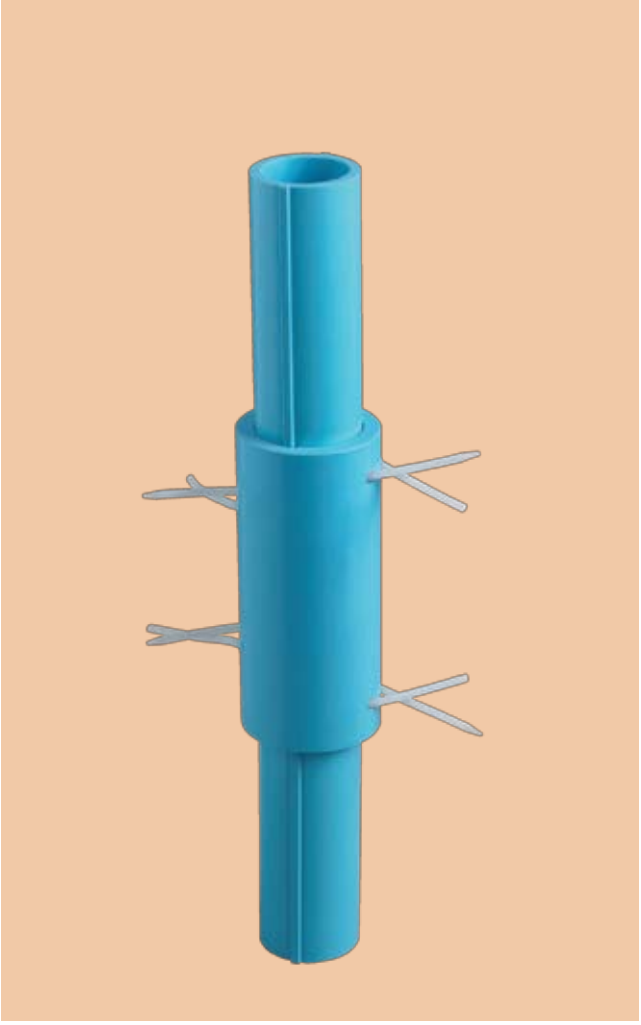
Lifting Cap



Code	Size	D (Min.)	L (Min.)
	Inch	mm	mm
CFTLC04"XX	4"	113	200
CFTLC05"XX	5"	140	250
CFTLC06"XX	6"	165	250
CFTLC07"XX	7"	200	300
CFTLC08"XX	8"	225	325
CFTLC09"XX	9"	250	325
CFTLC10"XX	10"	280	350
CFTLC12"XX	12"	330	350
CFTLC14"XX	14"	400	350
CFTLC16"XX	16"	450	375
CFTLC20"XX	20"	540	400

Note: XX - MW - for mediam well pipe, DW - for deep well pipe.

Jain Sure-Loc Plus™ Column Pipe



Features and Specifications

- Manufactured from high quality uPVC, safe for potable water.
- An innovative locking arrangement hold the joint intact against tensile load coming on the joints and the external ribs take care of torsion forces (i.e. the torque developed at the start and stop of pump).
- Patent pending.
- Light in weight, easy to handle and transport.
- Fast and easy to assemble and disassemble.
- Fast lowering and pulling of pumps, no wait for any joint setting time.
- No effect on installation or disassembly due to extreme weather conditions.
- Immediate pump testing.
- Long life as PVC is totally chemical and corrosion resistant.
- Low installation costs, no wrenches or threading tools required.
- Efficient pumping due to low friction loss resulting in energy saving.
- Smooth inner walls, no scale build up.
- Conforms to or exceeds the performance requirement of ASTM D 1785 standard specifications for PVC Pipes.

Application

- Most suitable for use as submersible pump column pipe.
- Suitable for use as pumping mains.
- Suitable for use as shiftable pumping system.

Range

- 1.5″ to 8″ dia.
- Class: Sch-80 & Sch-120.

Technical Specifications As per ASTM D 1785 - Schedule 80 pipe

Nominal diameter	Outside diameter		Minimum wall thickness	Outside diameter over socket	Maximum depth of installation		Maximum string weight *		Maximum joint strength		Maximum pump rating	Maximum pump pressure		Maximum pump discharge
Inch.	inch	mm	mm	mm	m	feet	kg	lbs	kg	lbs	H.P	kg/cm2	psi	lpm
1.5”	1.894	48	5.08	63	145	475	550	1210	860	1892	15	29.75	423	109
2”	2.369	60	5.54	81	145	475	740	1628	1100	2420	20	25.32	360	182
2.5”	2.868	73	7.01	95	145	475	1050	2310	1540	3388	25	25.32	360	261
3”	3.492	88	7.62	114	145	475	1450	3190	2260	4972	30	23.42	333	407
4”	4.491	114	8.56	141	145	475	2180	4796	3650	8030	50	20.25	288	709
5”	5.553	141	9.52	168	145	475	3180	6996	4690	10318	75	18.35	261	1123
6”	6.614	168	10.97	200	145	475	4460	9812	7200	15840	100	17.72	252	1609
8”	8.610	218	12.70	250	145	475	7070	15554	10200	22440	125	15.82	225	2818

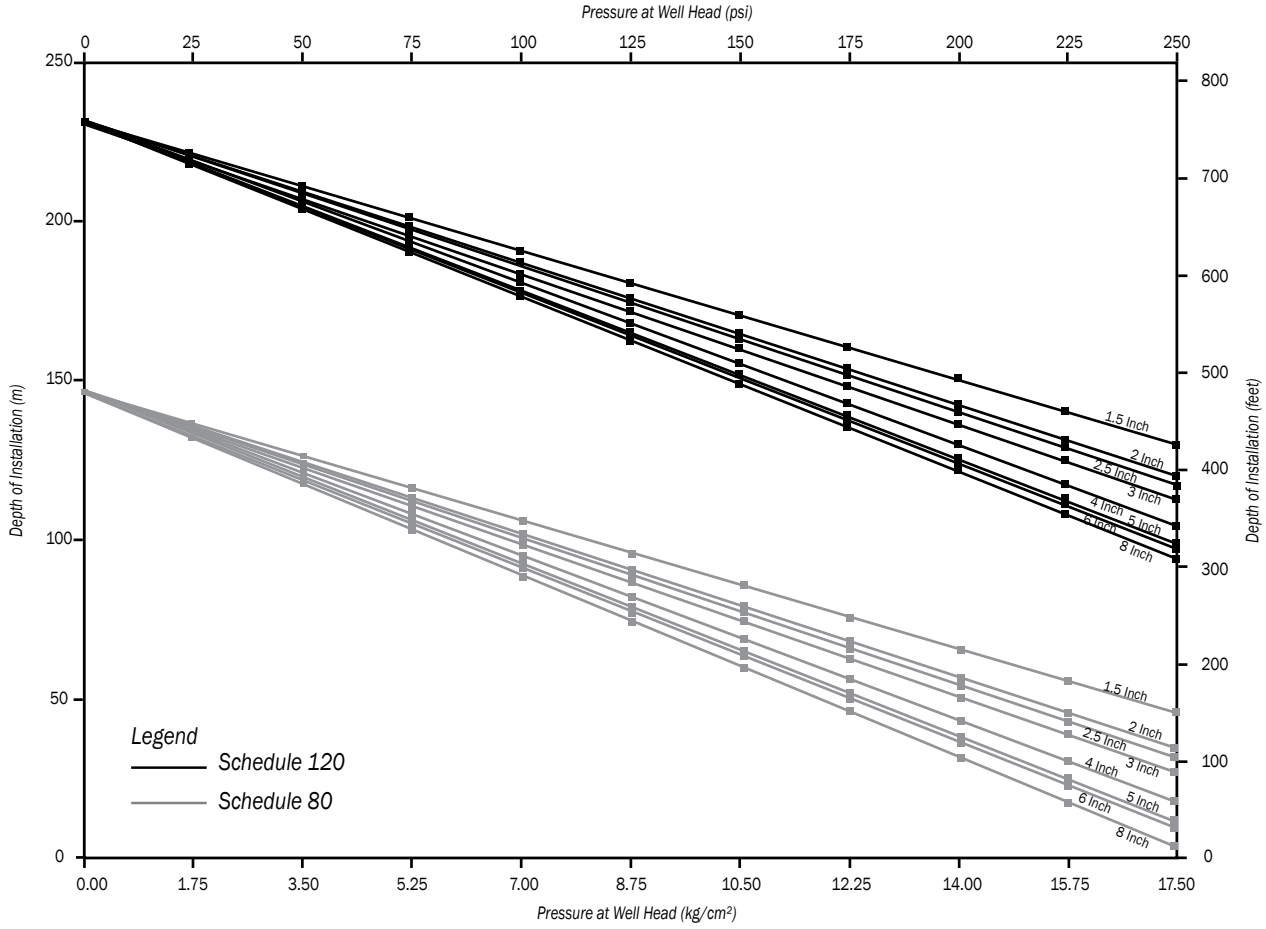
*Note: *Considering discharge pressure of 0.3 kg/cm² (4.26 psi) at well head.*

As per ASTM D 1785 - Schedule 120 pipe

Nominal diameter	Outside diameter		Minimum wall thickness	Outside diameter over socket	Maximum depth of installation		Maximum string weight *		Maximum joint strength		Maximum pump rating	Maximum pump pressure		Maximum pump discharge
Inch.	inch	mm	mm	mm	m	feet	kg	lbs	kg	lbs	H.P	kg/cm2	psi	lpm
1.5”	1.894	48	5.72	63	230	750	825	1815	1030	2266	15	34.18	486	101
2”	2.369	60	6.35	81	230	750	1125	2475	1390	3058	20	29.75	423	170
2.5”	2.868	73	7.62	95	230	750	1600	3520	1790	3938	25	29.75	423	250
3”	3.492	88	8.89	114	230	750	2240	4928	2900	6380	30	27.85	396	379
4”	4.491	114	11.10	141	230	750	3420	7524	4660	10252	50	27.22	387	637
5”	5.553	141	12.70	168	230	750	5000	11000	7230	15906	75	25.32	360	1009
6”	6.614	168	14.27	200	230	750	7000	15400	8600	18920	100	23.42	333	1467
8”	8.610	218	18.24	255	230	750	11460	25212	14090	30998	125	24.05	342	2504

*Note: *Considering discharge pressure of 0.3 kg/cm² (4.26 psi) at well head.*

Quick Selection Chart for Jain Sure-Loc Plus™



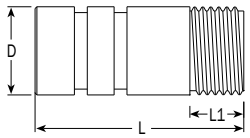
Ordering Specifications

X	X	CL	XXX	XXX	X	X	L	00	XXX
Sales Order	Material (Stabilizer)		Nominal Diameter, mm	Pressure Rating/ Class/ SDR/ Schedule/ Min. wall thickness	Reference Standard	Colour of the pipe			Length, m
P - Domestic (within India) E- Export (Outside India)	R- Lead Z - Calcium Zink			As per ASTM D 1785 Schedule no. e.g. 040 for schedule 40	A - ASTM D 1785 C - Company Std.	W - White D - Deep Blue S - Sky Blue			Required Length of Pipe x 100 e.g. 600 for 6.0 m (except 118 for 11.8m)

Example: EZCL048080CDL00300 - This code represents Sure-Loc Plus™ Column Pipe with nominal diameter of 48mm (1.5") scheduled 80 pipe manufactured as per company standard with deep blue color and 3 m. length.

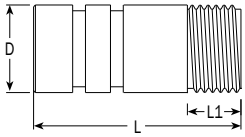
Jain Sure-Loc Plus™ Column Pipe Fitting

S.S. Pump Connector



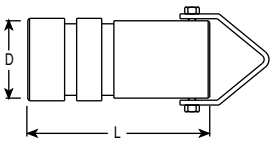
Code	Size	D	L	L1
	inch	inch	inch	inch
CPSSPC15	1.5"	1.911"	6.30"	0.722"
CPSSPC20	2"	2.374"	6.30"	0.755"
CPSSPC30	3"	3.500"	8.07"	1.200"
CPSSPC40	4"	4.500"	9.06"	1.300"
CPSSPC50	5"	5.562"	10.43"	1.405"
CPSSPC60	6"	6.624"	10.43"	1.511"
CPSSPC80	8"	8.624"	11.22"	1.711"

PVC Top Connector



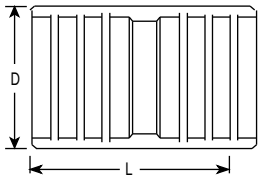
Code	Size	D	L	L1
	inch	inch	inch	inch
CPPVTC15	1.5"	1.911"	6.30"	0.722"
CPPVTC20	2"	2.374"	6.30"	0.755"
CPPVTC30	3"	3.500"	8.07"	1.200"
CPPVTC40	4"	4.500"	9.06"	1.300"
CPPVTC50	5"	5.562"	10.43"	1.405"
CPPVTC60	6"	6.624"	10.43"	1.511"
CPPVTC80	8"	8.624"	11.22"	1.711"

PVC Lifting Cap



Code	Size	D	L
	inch	inch	inch
CPPVLC15	1.5"	1.911"	6.30"
CPPVLC20	2"	2.374"	6.30"
CPPVLC30	3"	3.500"	8.07"
CPPVLC40	4"	4.500"	9.06"
CPPVLC50	5"	5.562"	10.43"
CPPVLC60	6"	6.624"	10.43"
CPPVLC80	8"	8.624"	11.22"

PVC Sure-Loc® Coupler



Code	Size	D	L
	inch	inch	inch
CPPVSC15	1.5"	2.374"	7.05"
CPPVSC20	2"	3.200"	7.26"
CPPVSC30	3"	4.488"	10.28"
CPPVSC40	4"	5.562"	10.28"
CPPVSC50	5"	6.625"	11.62"
CPPVSC60	6"	7.874"	11.74"
CPPVSC80	8"	9.842"	13.06"

HDPE PIPES

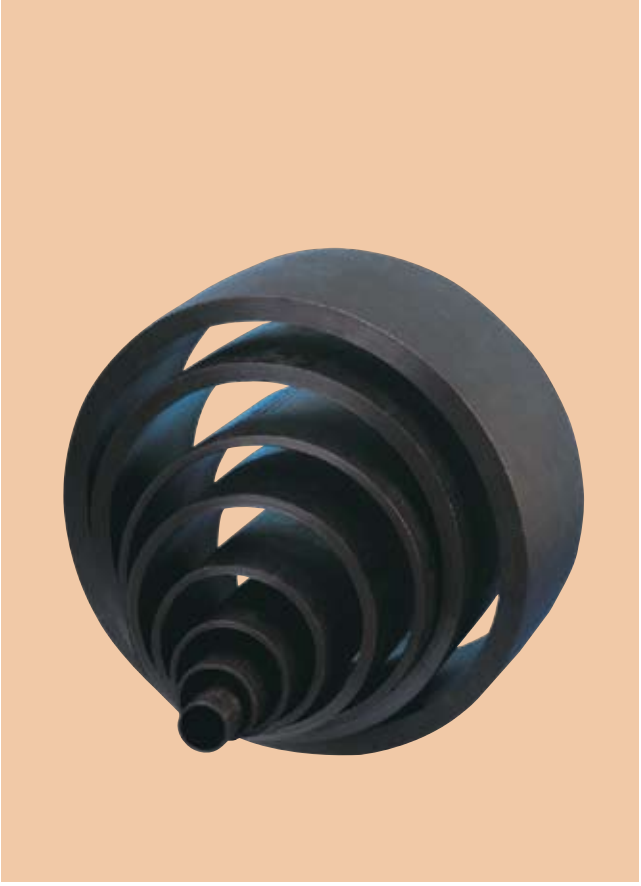
Jain High Density Polyethylene Pipe (HDPE)

Features and Specifications

- Manufactured from virgin pipe grade raw materials (PE80, PE100).
- Excellent corrosion and chemical resistance. Inert to most acidic and alkaline solutions.
- High flow characteristics.
- Light in weight.
- Easy to handle & transport.
- Excellent flexibility combined with strength.
- Good abrasion resistance.
- Smooth inner walls - minimises frictional losses.
- Safe for potable water supply.
- Manufactured as per IS-4984, ISO-4427, DIN-8074, ASTM D 3035 and BS-6437 standards in PE-63, PE-80 & PE-100 grades.
- Manufactured from 20 to 1600 mm sizes at various pressure rating from 2.5 to 16 kg/cm^2 (35.5 to 227.5 psi).
- Upto 6" in straight lengths and coils. Higher sizes in standard and other straight lengths only.

Applications

- Lift and gravity water supply systems.
- Micro & sprinkler irrigation systems.
- Sewerage pumping and effluent disposal systems.
- Column pipes for submersible pumps.



PE Pipe as per ISO 4427-1996
Material Grade PE63

(Pressure rating PN in Kg/cm^2)

Nominal Outside Diameter	Pipe Series 1)							
	S 16	S 12.5	S 8.3	S 8	S 6.3	S 5	S 4	S 3.2
	Standard Dimension Ratio							
	SDR 33	SDR 26	SDR 17.6	SDR 17	SDR 13.6	SDR 11	SDR 9	SDR 7.4
	Nominal Pressure PN2) for σ_S = 5 Mpa							
	PN 3.2	PN 4	PN 6	PN 6.3	PN 8	PN 10	PN 12.5	PN 16
d_n	Nominal Wall Thickness, e_n mm							
16	-	-	-	-	-	2.3	2.3	2.3
20	-	-	-	-	2.3	2.3	2.3	2.8
25	-	-	2.3	2.3	2.3	2.3	2.8	3.5
32	-	-	2.3	2.3	2.4	2.9	3.6	4.4
40	-	2.3	2.3	2.4	3.0	3.7	4.5	5.5
50	-	2.3	2.9	3.0	3.7	4.6	5.6	6.9
63	2.3	2.5	3.6	3.8	4.7	5.8	7.1	8.6
75	2.3	2.9	4.3	4.5	5.6	6.8	8.4	10.3
90	2.8	3.5	5.1	5.4	6.7	8.2	10.1	12.3
110	3.4	4.2	6.3	6.6	8.1	10.0	12.3	15.1
125	3.9	4.8	7.1	7.4	9.2	11.4	14.0	17.1
140	4.3	5.4	8.0	8.3	10.3	12.7	15.7	19.2
160	4.9	6.2	9.1	9.5	11.8	14.6	17.9	21.9
180	5.5	6.9	10.2	10.7	13.3	16.4	20.1	24.6
200	6.2	7.7	11.4	11.9	14.7	18.2	22.4	27.4
225	6.9	8.6	12.8	13.4	16.6	20.5	25.2	30.8
250	7.7	9.6	14.2	14.8	18.4	22.7	27.9	34.2
280	8.6	10.7	15.9	16.6	20.6	25.4	31.3	38.3
315	9.7	12.1	17.9	18.7	23.2	28.6	35.2	43.1
355	10.9	13.6	20.1	21.1	26.1	32.2	39.7	48.5
400	12.3	15.3	22.7	23.7	29.4	36.3	44.7	54.7
450	13.8	17.2	25.5	26.7	33.1	40.9	50.3	61.5
500	15.3	19.1	28.3	29.7	36.8	45.4	55.8	-
560	17.2	21.4	31.7	33.2	41.2	50.8	-	-
630	19.3	24.1	35.7	37.4	46.3	57.2	-	-
710	21.8	27.2	40.2	42.1	52.2	-	-	-
800	24.5	30.6	45.3	47.4	58.8	-	-	-
900	27.6	34.4	51.0	53.3	-	-	-	-
1000	30.6	38.2	56.6	59.3	-	-	-	-
1200	36.7	45.9	-	-	-	-	-	-
1400	42.9	53.5	-	-	-	-	-	-
1600	49.0	61.2	-	-	-	-	-	-

1) The pipe series number is derived from the ratio σ_S/p_{PMS} . where is the design stress at 20°C and p_{PMS} is the maximum allowable operating pressure of the pipe at 20°C.

2) The nominal pressure PN corresponds to the maximum allowable operating pressure p_{PMS} in bars of the pipe at 20°C.

PE Pipe as per IS : 4984-95
Material Grade PE 63

(Pressure rating PN in Kg/cm^2)

Outside Diameter		PN 2.5		PN 4		PN 6		PN 8		PN 10		PN 12.5		PN 16	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
		Minimum Wall Thickness of Pipes in (mm)													
20	20.3	-	-	-	-	-	-	-	-	2.3	2.8	2.8	3.3	3.4	4.0
25	25.3	-	-	-	-	-	-	2.3	2.8	2.8	3.3	3.4	4.0	4.2	4.9
32	32.3	-	-	-	-	2.3	2.8	3.0	3.5	3.6	4.2	4.4	5.1	5.4	6.2
40	40.4	-	-	2.0	2.4	2.8	3.3	3.7	4.3	4.5	5.2	5.5	6.3	6.7	7.6
50	50.5	-	-	2.4	2.9	3.5	4.1	4.6	5.3	5.6	6.4	6.8	7.7	8.4	9.5
63	63.6	2.0	2.4	3.0	3.5	4.4	5.1	5.8	6.6	7.0	7.9	8.6	9.7	10.5	11.8
75	75.7	2.3	2.8	3.6	4.2	5.3	6.1	6.9	7.8	8.4	9.5	10.2	11.5	12.5	14.0
90	90.9	2.8	3.3	4.3	5.0	6.3	7.2	8.2	9.3	10.0	11.2	12.2	13.7	15.0	16.7
110	111.0	3.4	4.0	5.3	6.1	7.7	8.7	10.0	11.2	12.3	13.8	14.9	16.6	18.4	20.5
125	126.2	3.8	4.4	6.0	6.8	8.8	9.9	11.4	12.8	13.9	15.5	16.9	18.8	20.9	23.2
140	141.3	4.3	5.0	6.7	7.6	9.8	11.0	12.8	14.3	15.6	17.4	19.0	21.1	23.4	26.0
160	161.5	4.9	5.6	7.7	8.7	11.2	12.6	14.6	16.3	17.8	19.8	21.7	24.1	26.7	29.6
180	181.7	5.5	6.3	8.6	9.7	12.6	14.1	16.4	18.3	20.0	22.2	24.4	27.1	30.0	33.2
200	201.8	6.1	7.0	9.6	10.8	14.0	15.6	18.2	20.3	22.3	24.8	27.1	30.1	33.4	37.0
225	227.1	6.9	7.8	10.8	12.1	15.7	17.5	20.5	22.8	25.0	27.7	30.5	33.8	37.5	41.5
250	252.3	7.6	8.6	12.0	13.4	17.5	19.5	22.8	25.3	27.8	30.8	33.8	37.4	41.7	46.1
280	282.6	8.5	9.6	13.4	15.0	19.6	21.8	25.5	28.3	31.2	34.6	37.9	41.9	46.7	51.6
315	317.9	9.6	10.8	15.0	16.7	22.0	24.4	28.7	31.8	35.0	38.7	42.6	47.1	52.5	58.0
355	358.2	10.8	12.1	17.0	18.9	24.8	27.5	32.3	35.8	39.5	43.7	48.0	53.0	59.2	65.4
400	403.6	12.2	14.3	19.1	22.2	28.0	32.4	36.4	42.1	44.5	51.4	54.1	62.5	-	-
450	454.1	13.7	16.0	21.5	25.0	31.4	36.4	41.1	47.4	50.0	57.7	-	-	-	-
500	504.5	15.2	17.7	23.9	27.7	34.9	40.4	45.5	52.6	55.6	64.2	-	-	-	-
560	565.0	17.0	19.8	26.7	31.0	39.1	45.2	51.0	58.9	-	-	-	-	-	-
630	635.7	19.1	22.2	30.0	34.7	44.0	50.8	57.3	66.1	-	-	-	-	-	-
710	716.4	21.6	25.1	33.9	39.2	49.6	57.3	-	-	-	-	-	-	-	-
800	807.2	24.3	28.2	38.1	44.1	55.9	64.5	-	-	-	-	-	-	-	-
900	908.1	27.3	31.6	42.9	49.6	-	-	-	-	-	-	-	-	-	-
1000	1009.0	30.4	35.2	47.7	55.1	-	-	-	-	-	-	-	-	-	-

PE Pipe as per IS : 4984-95
Material Grade PE 80

(Pressure rating PN in Kg/cm²)

Outside Diameter		PN 6		PN 10		PN 12.5		PN 16	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
		Minimum Wall Thickness of Pipes in (mm)							
20	20.3	–	–	1.9	2.3	2.3	2.7	2.3	2.7
25	25.3	–	–	2.3	2.7	2.8	3.3	2.8	3.3
32	32.3	1.9	2.3	3.0	3.4	3.6	4.2	3.5	4.0
40	40.4	2.3	2.7	3.7	4.3	4.5	5.1	4.5	5.1
50	50.5	2.9	3.4	4.6	5.3	5.6	6.4	5.6	6.3
63	63.6	3.6	4.2	5.8	6.6	7.0	7.9	6.9	7.8
75	75.7	4.3	4.9	6.9	7.8	8.4	9.4	8.7	9.8
90	90.9	5.1	5.8	8.2	9.3	10.0	11.2	10.4	11.6
110	111.0	6.3	7.1	10.0	11.2	12.3	13.8	12.5	13.9
125	126.2	7.1	8.0	11.4	12.8	13.9	15.5	15.2	16.9
140	141.3	8.0	9.0	12.8	14.3	15.6	17.4	17.3	19.2
160	161.5	9.1	10.2	14.6	16.3	17.8	19.8	19.4	21.5
180	181.7	10.2	11.5	16.4	18.3	20.0	22.2	22.1	24.5
200	201.8	11.4	12.7	18.2	20.3	22.3	24.7	24.9	27.6
225	227.1	12.8	14.3	20.5	22.8	25.0	27.7	27.6	30.6
250	252.3	14.2	15.8	22.8	25.3	27.8	30.8	31.1	34.4
280	282.6	15.9	17.7	25.5	28.3	31.2	34.5	34.5	38.2
315	317.9	17.9	20.0	28.7	31.8	35.0	38.7	38.7	42.7
355	358.2	20.1	22.3	32.3	35.8	39.5	43.6	43.5	48.0
400	403.6	22.7	26.3	36.4	42.1	44.5	51.4	49.0	54.1
450	454.1	25.5	29.5	41.0	47.4	50.0	57.7	55.2	63.7
500	504.5	28.3	32.8	45.5	52.5	55.6	64.1	–	–
560	565.0	31.7	36.7	51.0	58.8	–	–	–	–
630	635.7	35.7	41.3	57.3	66.1	–	–	–	–
710	716.4	40.2	46.5	–	–	–	–	–	–
800	807.2	45.3	52.3	–	–	–	–	–	–
900	908.1	50.1	58.8	–	–	–	–	–	–
1000	1009.0	56.6	65.3	–	–	–	–	–	–

PE Pipe as per IS : 4984-95
Material Grade PE 100

(Pressure rating PN in Kg/cm²)

Outside Diameter		PN 10		PN 12.5		PN 16	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
		Minimum Wall Thickness of Pipes in (mm)					
20	20.3			1.9	2.3	1.9	2.3
25	25.3	1.9	2.3	2.3	2.7	2.3	2.7
32	32.3	2.4	2.8	2.9	3.4	2.9	3.3
40	40.4	3.0	3.5	3.7	4.2	3.7	4.2
50	50.5	3.7	4.3	4.6	5.2	4.6	5.2
63	63.6	4.7	5.3	5.8	6.5	5.7	6.4
75	75.7	5.6	6.3	6.8	7.7	7.1	8.1
90	90.9	6.7	7.5	8.2	9.2	8.5	9.5
110	111.0	8.1	9.1	10.0	11.2	10.2	11.4
125	126.2	9.2	10.4	11.3	12.7	12.4	13.9
140	141.3	10.3	11.6	12.7	14.1	14.1	15.7
160	161.5	11.8	13.2	14.5	16.1	15.8	17.6
180	181.7	13.3	14.8	16.3	18.1	18.1	20.1
200	201.8	14.8	16.4	18.1	20.1	20.3	22.6
225	227.1	16.6	18.4	20.4	22.6	22.6	25.0
250	252.3	18.4	20.5	22.6	25.1	25.4	28.1
280	282.6	20.6	22.9	25.3	28.0	28.2	31.2
315	317.9	23.2	25.7	28.5	31.5	31.6	35.0
355	358.2	26.1	29.0	32.1	35.5	35.5	39.3
400	403.6	29.5	34.1	36.1	41.8	40.0	44.2
450	454.1	33.1	38.3	40.7	47.0	45.1	52.1
500	504.5	36.8	42.5	45.2	52.1	50.7	58.6
560	565.0	41.2	47.6	50.6	58.4	56.4	65.0
630	635.7	46.8	53.5	56.9	65.6	–	–
710	716.4	52.3	60.3	–	–	–	–
800	807.2	58.9	67.9	–	–	–	–
900	908.1	–	–	–	–	–	–
1000	1009.0	–	–	–	–	–	–

Designation of Material

Designation of material	MRS at 50 years and 20 °C	Maximum allowable hydrostatic design stress, σ_S
	Mpa	Mpa
PE100	10	8
PE80	8	6.3

Ordering Specifications

X	H	X	XX	X	X	XX	X	XXXX	X	X
Sales Order		Grade of Material	Type of Pipe	Reference Standard	Nominal diameter, mm	Pressure Rating/ Class/ SDR/ Inside Dia./ Min. wall thickness	Tyep of Joint	Length of pipe, m	Colour of Pipe	Colour of stripes on the pipe
D - Domestic (within India) E- Export (Outside India)		6 - PE 63 8 - PE 80 1 - PE 100	PA - Pressure and Agriculture pipe SW - Sewarage pipe WA - Water Conveyance pipe RC - Regular column pipe HC - Heavy duty column pipe	I - Indian O - ISO A - Australian/ NZ D - DIN C - Company Std. S - ASTM	020 to 900 - 20 to 900 10K - 1000 12K - 1200 14K - 1400 16K - 1600	**As per pressure rating** 01 - 2 kg/cm2 02 - 2.5 kg/cm2 03 - 3.2 kg/cm2 04 - 4 kg/cm2 06 - 6 kg/cm2 08 - 8 kg/cm2 10 - 10 kg/cm2 12 - 12.5 kg/cm2 14 - 14 kg/cm2 16 - 16 kg/cm2 **As per SDR** 07 - 7.4 09 - 9 11 - 11 13 - 13.6 17 - 17.6 17 - 17 21 - 21 26 - 26 33 - 33	N - Normal Pipe A - Air filling	0001 - 1 9999 - 9999 5D88 - 5.88 8D71 - 8.71 8D79 - 8.79 11D9 - 11.9	A - Black B - Blue	B - Blue W - White N - Without stripes

Example: DH8PAI07506N5D88AB - This represents Polyethylene Pipe of 75 mm nominal outside diameter having 6.0 kg/cm² pressure rating as per IS:4984 with material grade PE 80, 6 m. length and black color with blue stripes on it.

Jain HDPE Pipes-Jointing & Connections

"NO CHAIN IS STRONGER THAN ITS WEAKEST LINK" is a common saying which can also be applied to the piping system joints. The main requirements to be fulfilled are hydraulic tightness as well as structural stability of the system.

For the satisfactory performance of Jain HDPE pipe system, design and installation methods mainly rely on the appropriate choice and properly made connections. An adequate and properly made pipe joint will lead to faster and non-hazardous systems operations.

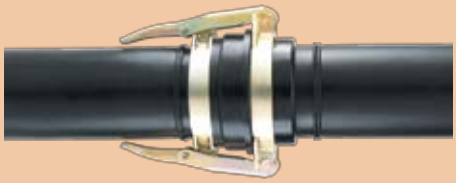
With a view to fulfill the above important aspects of pipeline system as well as to provide the user industry a choice based on application and economy, Jains have developed several types of jointing systems for their range of JAIN HDPE piping systems like - butt fusion, electro-fusion, which are permanent joints and detachable joints such as flanged joints, self restrained sure-loc joints, Quick-Connect® joints and compression joints. The choice of joint required for installing Jain HDPE piping system depends upon requirements based on internal or external pressure, leak tightness, restraint against longitudinal movement, construction and installation requirements as well as application.

Butt Fusion Joint

Electro-fusion Joint

Flange Joint

Self-restrained Sure-loc® Joint



Quick-Connect® Joint

Compression Joint

PE Hand Moulded Fittings (HMF)

PE Bends (Plain Ended)

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar
Deg.	90°, 60°, 45°, 30°.

PE Equal Tees (Plain Ended)

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE Equal Tee with Flanged Ends

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE Unequal Tee with Flanged Ends (Single / Multistage)

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE Moulded Flanges (Slip-on)

Size	20mm - 315mm
PN	4, 6 bar

PE Sandwich Flanges

Size	20mm - 630mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE Blind Flanges

Size	63mm - 1600mm
PN	4, 6 bar

MS Slip-on Flanges

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

Duck Foot Bend

Size	63mm - 560mm
PN	4, 6, 8, 10, 12.5, 16 bar

Note: All flanges will be as per BS-10 (Table-D) unless specified otherwise. Against specific orders MS slip-on flanges also would be supplied.

PE Flange with Weld Neck

Size	20mm - 1600mm
PN	4, 6 bar

PE Single / Multi Stage Reducers (Plain Ended)

Size	32mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE Pipe End (Long Neck)

Size	63mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

PE End Cap

Size	20mm - 1600mm
PN	4, 6, 8, 10, 12.5, 16 bar

Design-Technical Information

Frictional losses in –Jain Tough Hose

Frictional losses in – Emitting Pipe

Frictioinal losses in – Drip Tape

Flow Nomogram for – Polyethylene Pipes

Frictional losses in PVC & –Quick Fix® Pressure Pipes

Design Data

Units & Conversions

Chemical Resistance

Container Loading Details

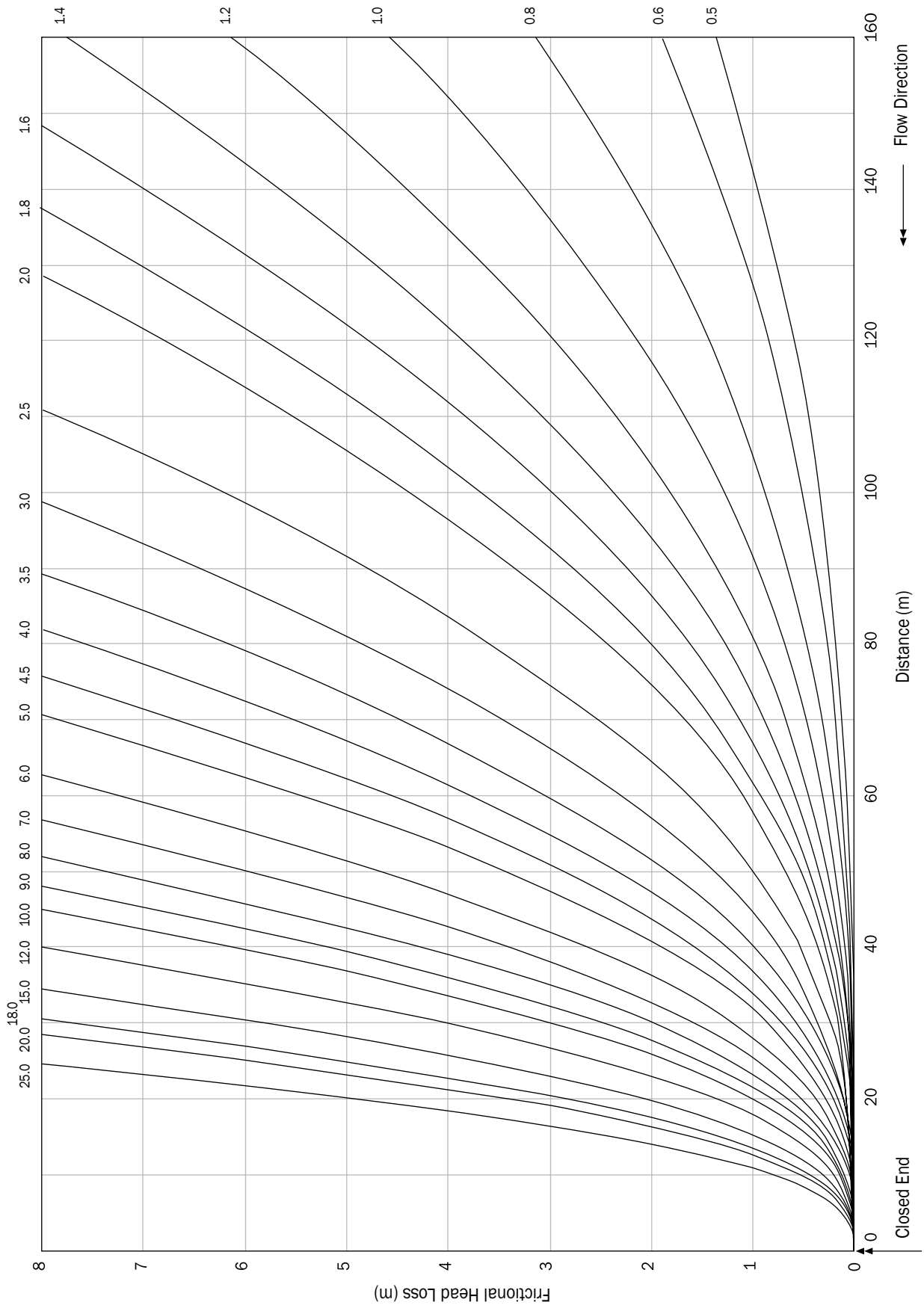
Maintenance Guidelines

Warranty

License & Product–Performance Certifications

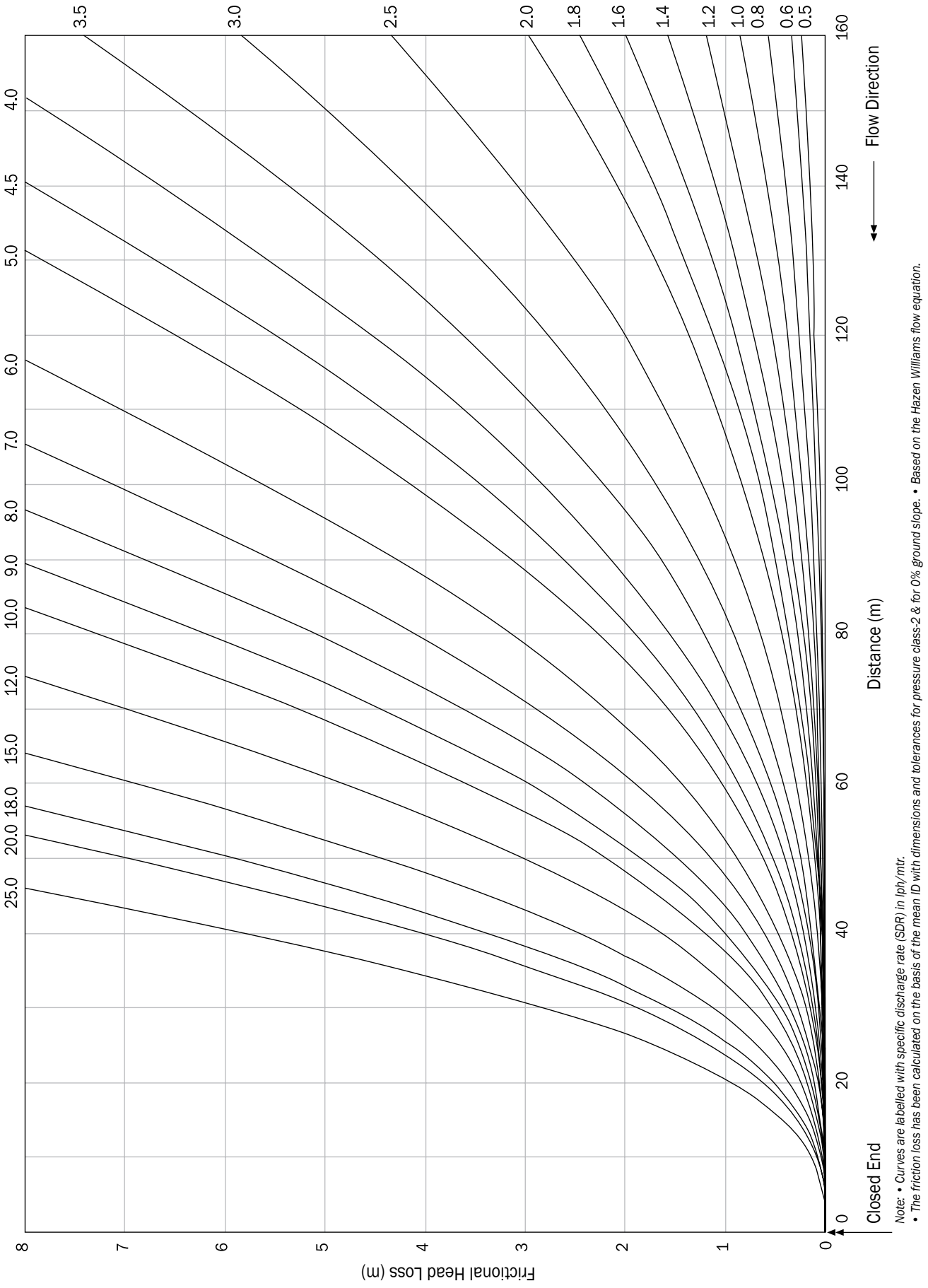
Trade Marks

Friction Loss in Jain Tough Hose 12 mm OD.



Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-2 & for 0% ground slope. • Based on the Hazen Williams flow equation.

Friction Loss in Jain Tough Hose 16 mm OD.

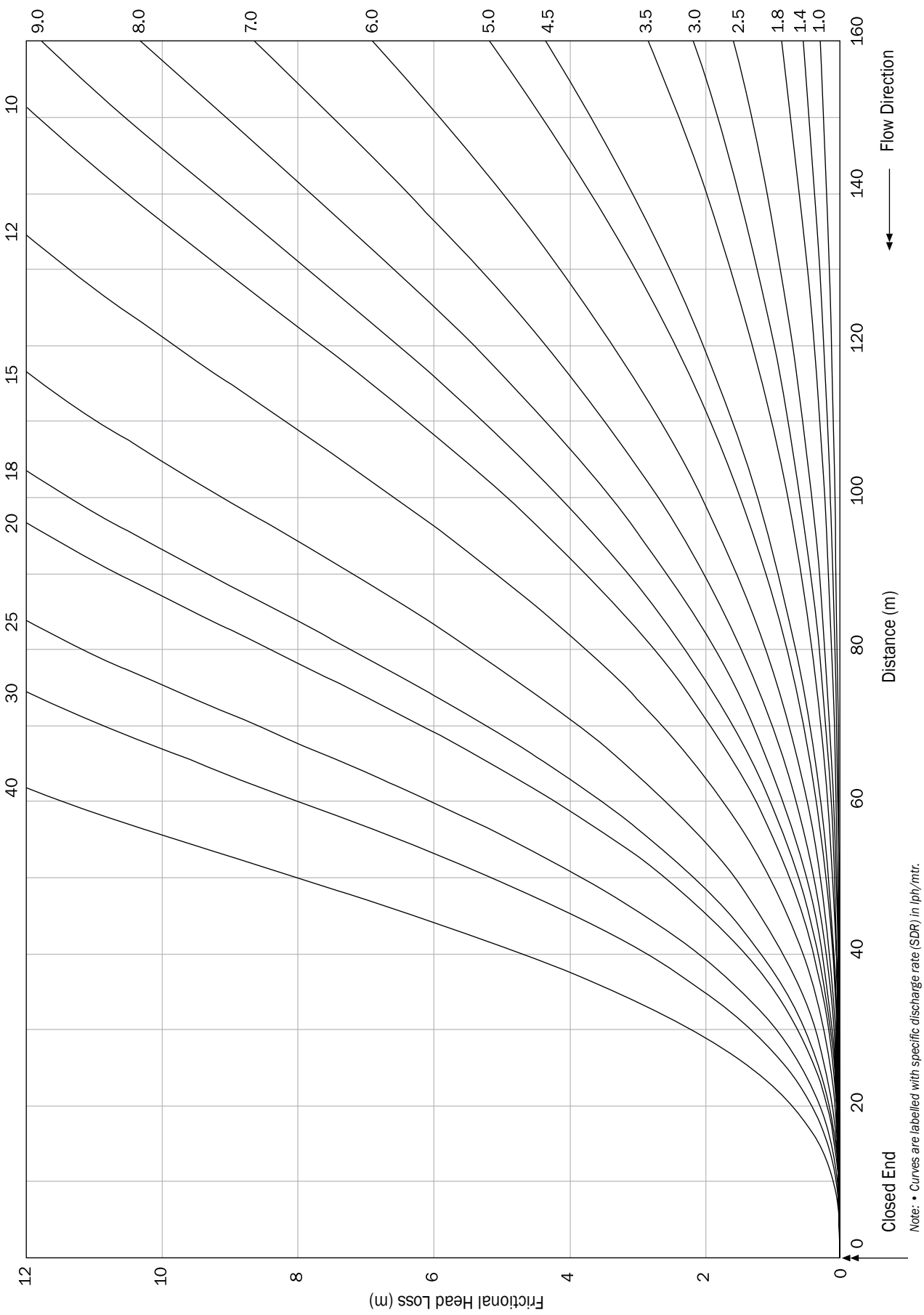


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-2 & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

BACK

Friction Loss in Jain Tough Hose 20 mm OD.

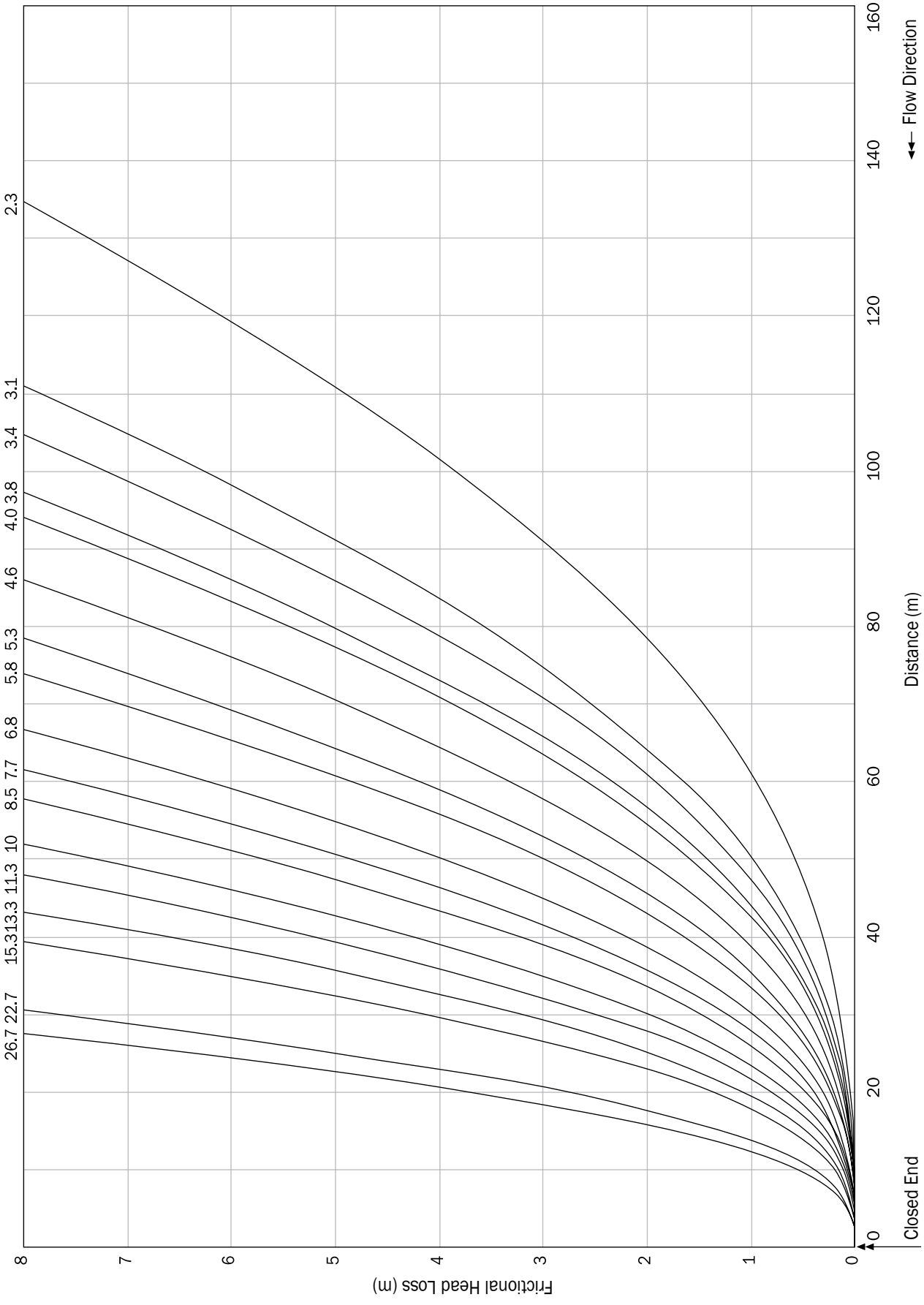


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-2 & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

BACK

Friction Loss in J-Turbo Aqura® / J-Turbo Line® 12 mm OD.

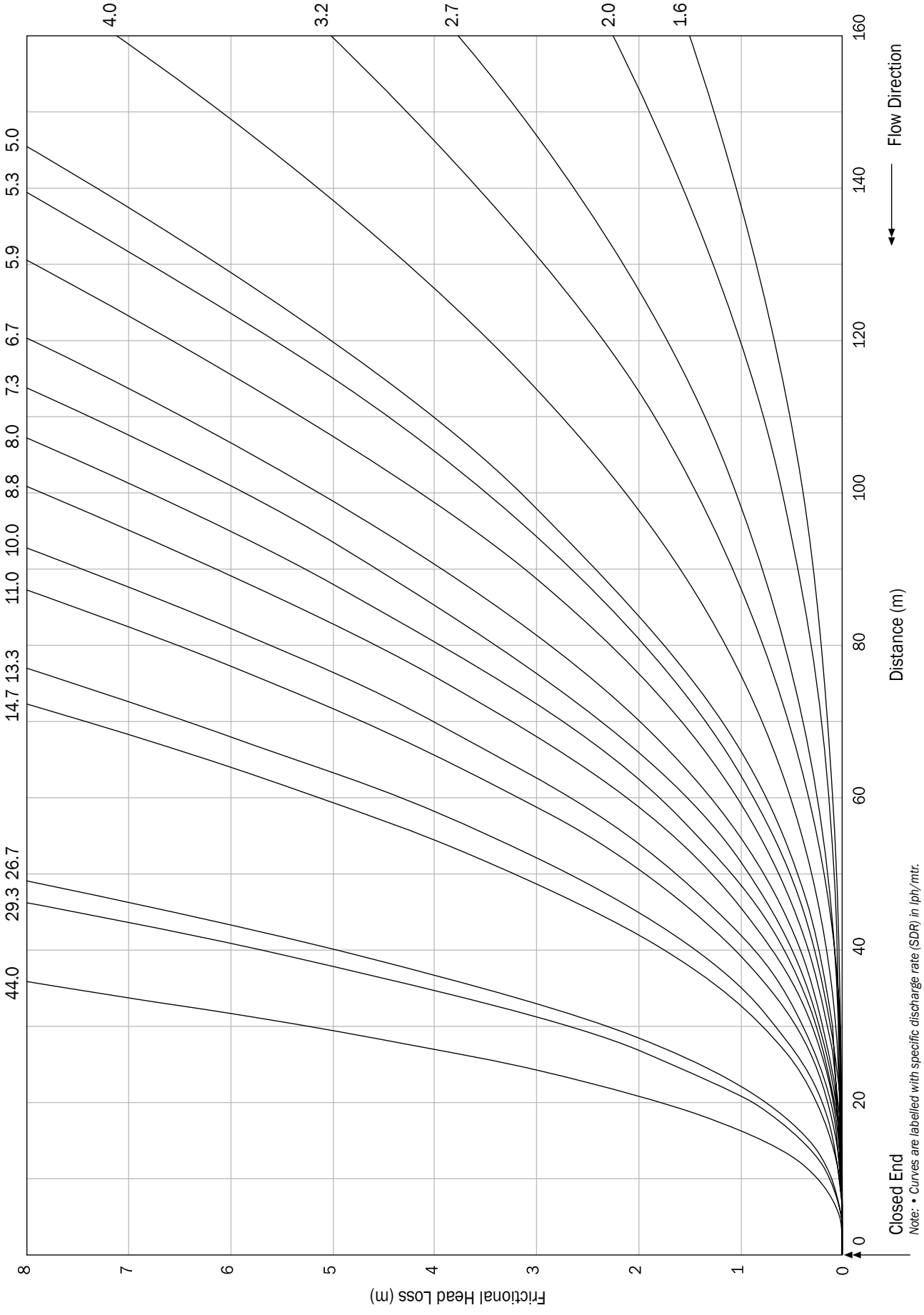


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-2 & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

BACK

Friction Loss in J-Turbo Aqura® / J-Turbo Line® 16 mm OD.

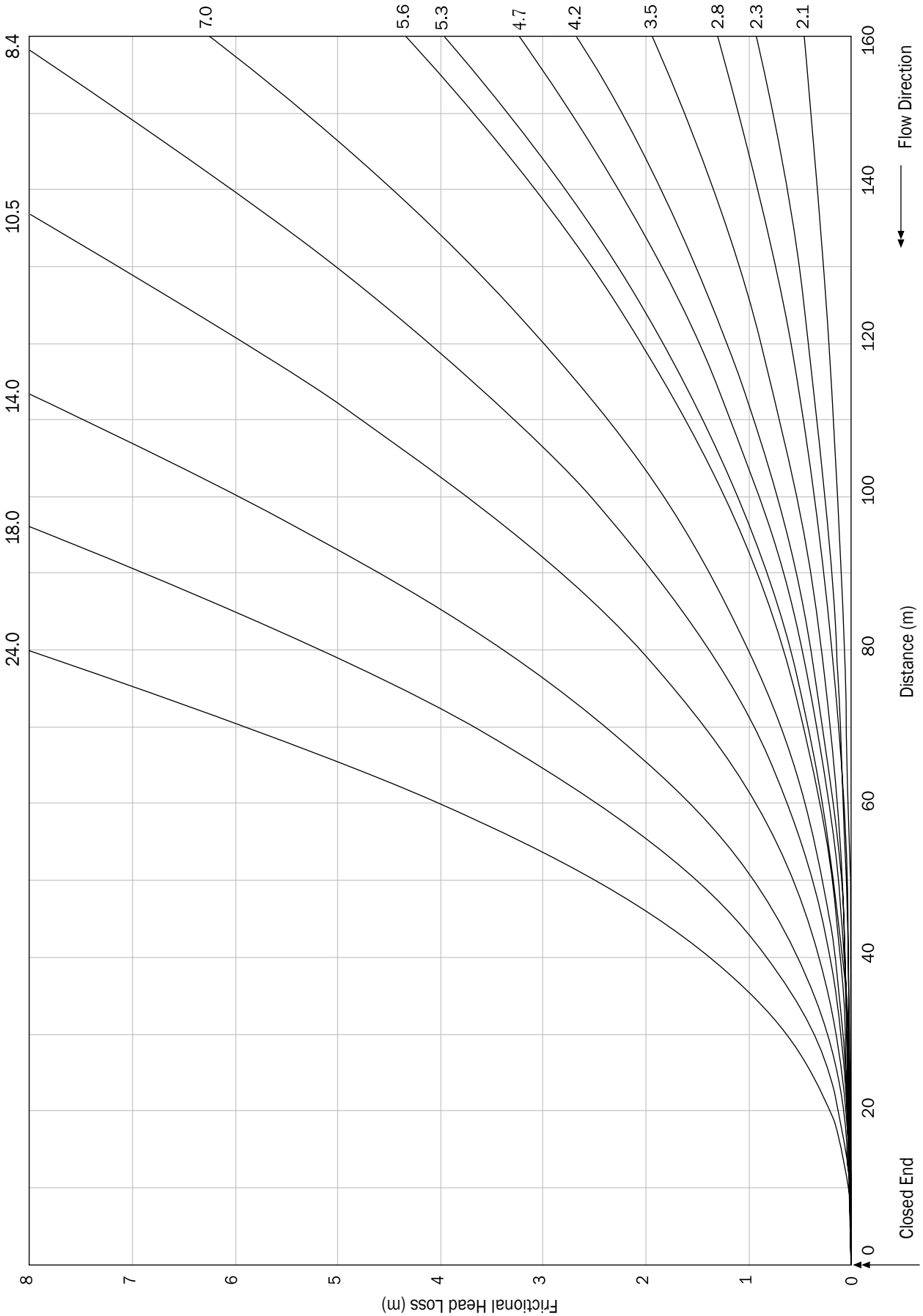


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-2 & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

BACK

Friction Loss in J-Turbo Aqura® / J-Turbo Line® 20 mm OD.

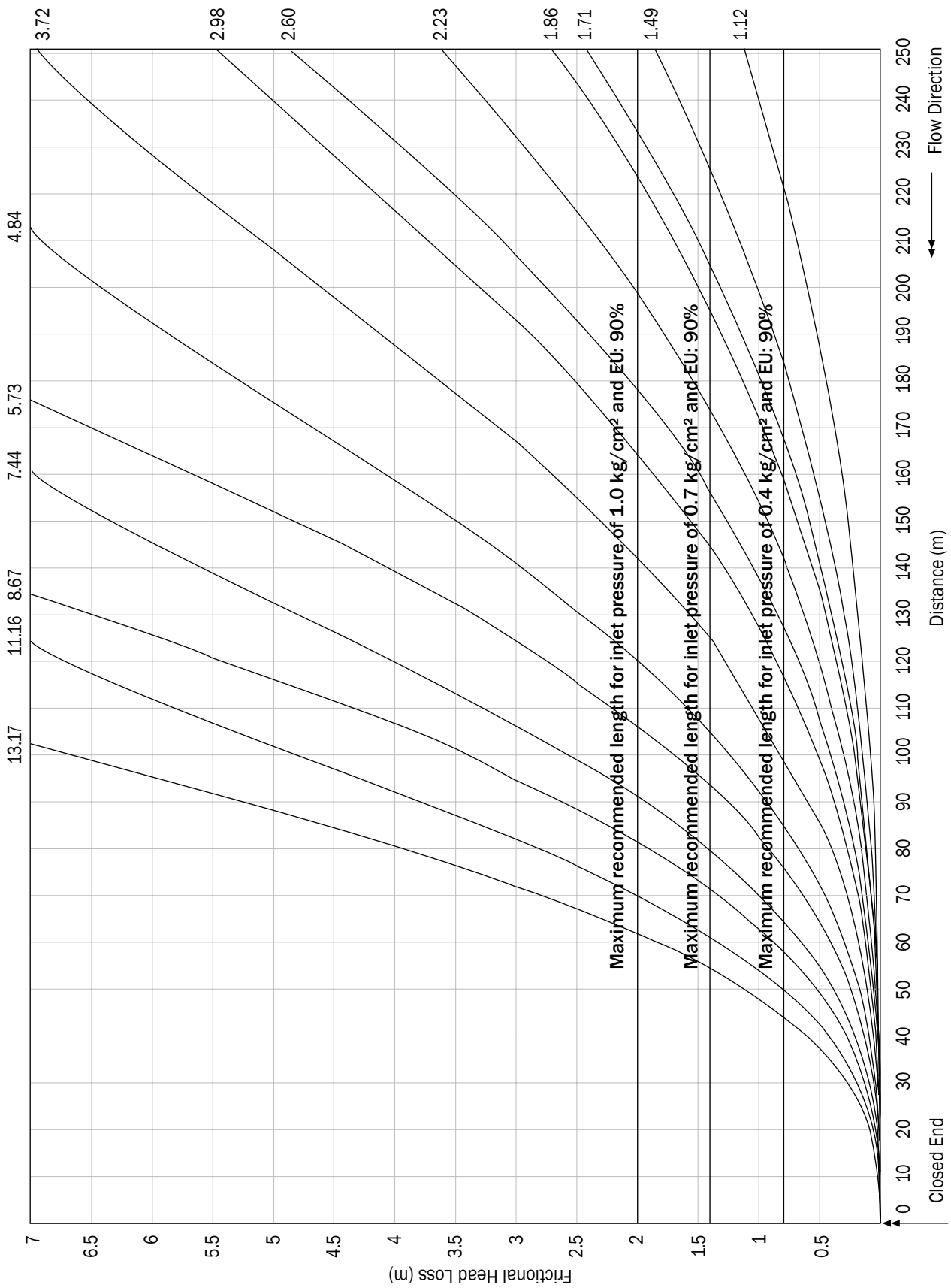


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID with dimensions and tolerances for pressure class-1 & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

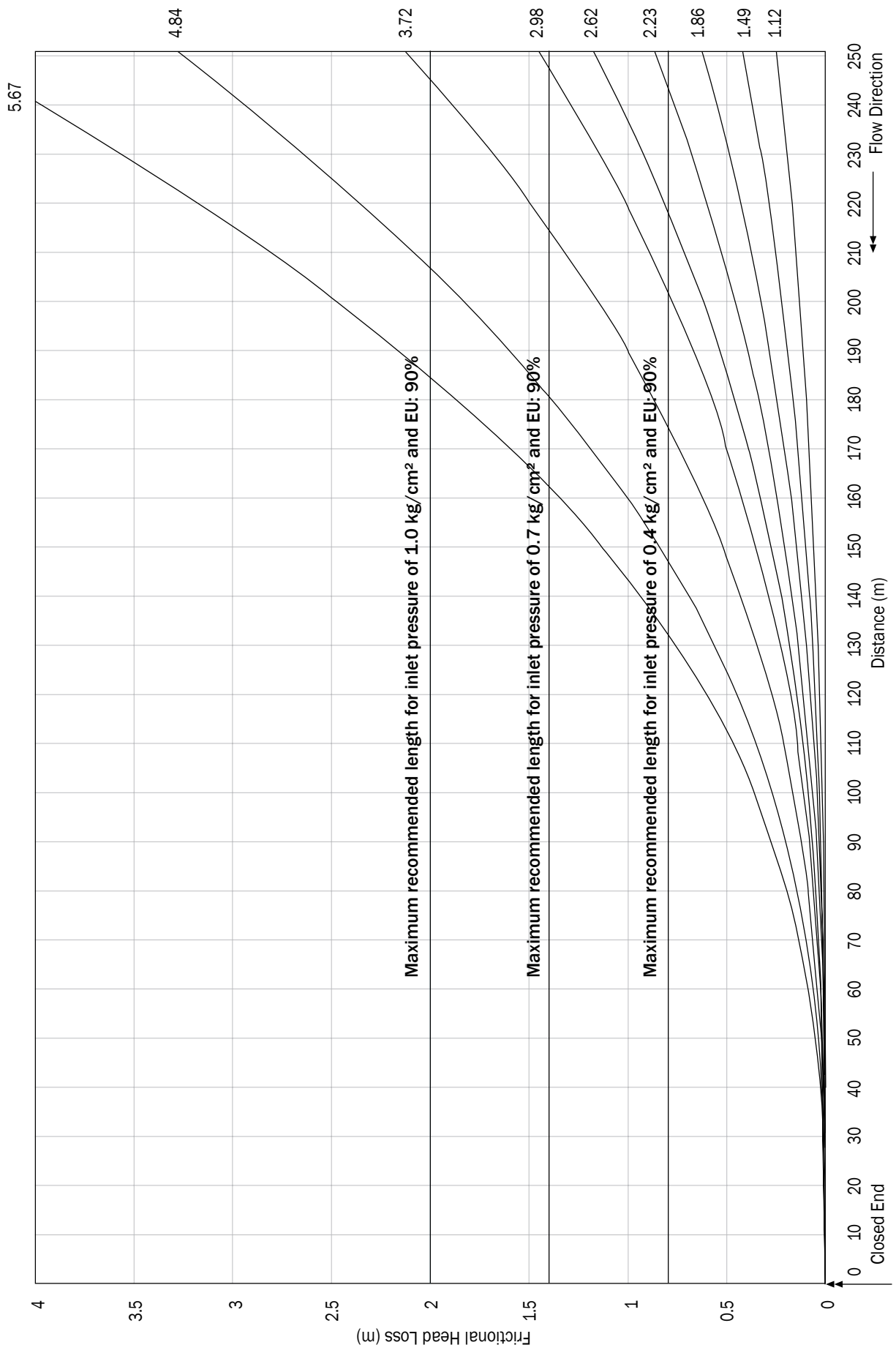
BACK

Friction Loss in Twin-Wall™- Deluxe/Twin-Wall™- BTF/Jain Turbo Slim® Drip Tape 16 mm (5/8") ID



Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID & for 0% ground slope. • Based on the Hazen Williams flow equation.

Friction Loss in Twin-Wall™- Marathon / Jain Turbo Slim® Drip Tape 22 mm (7/8") ID

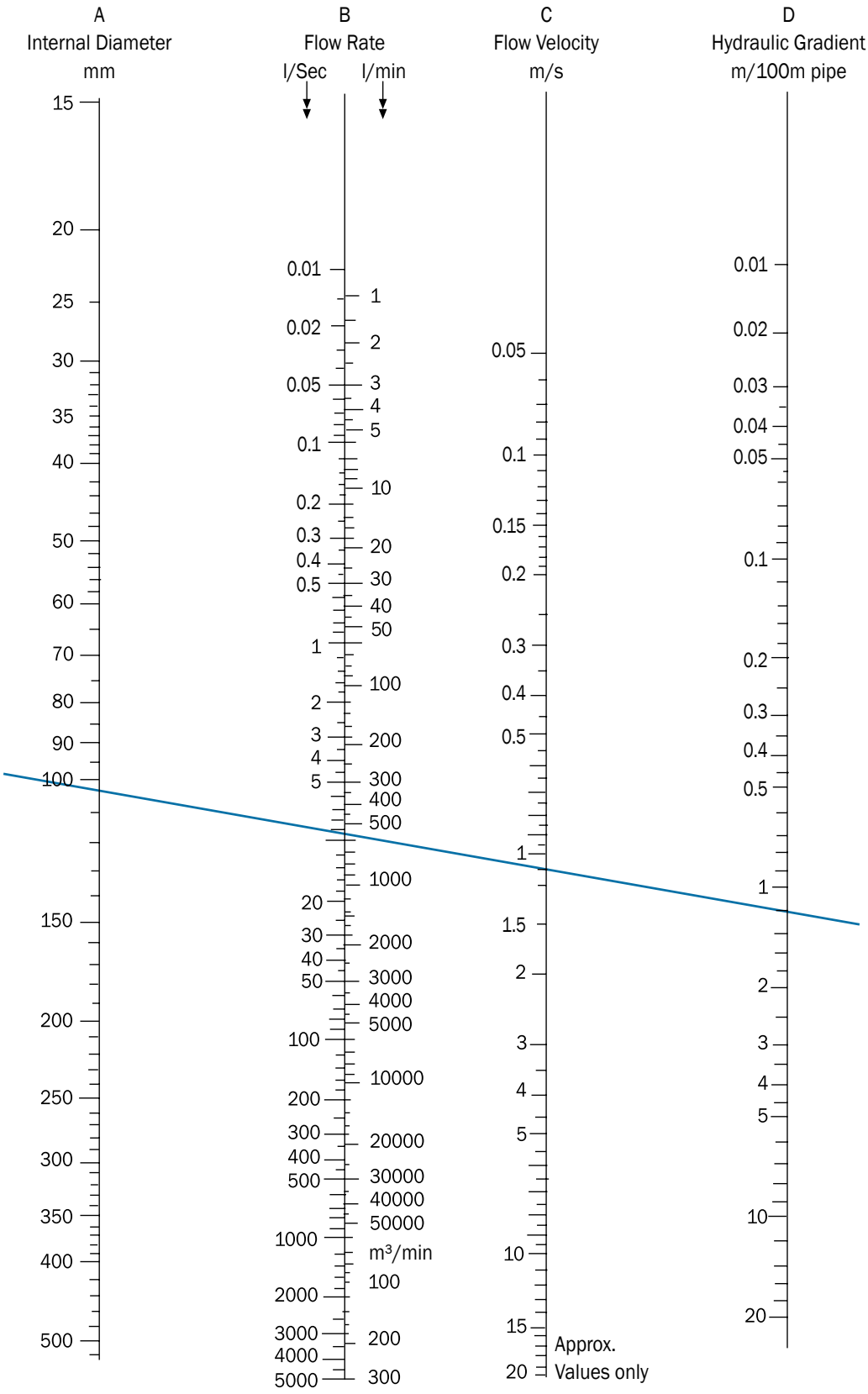


Note: • Curves are labelled with specific discharge rate (SDR) in lph/mtr.
• The friction loss has been calculated on the basis of the mean ID & for 0% ground slope. • Based on the Hazen Williams flow equation.

JAIN
More Crop Per Drop®

BACK

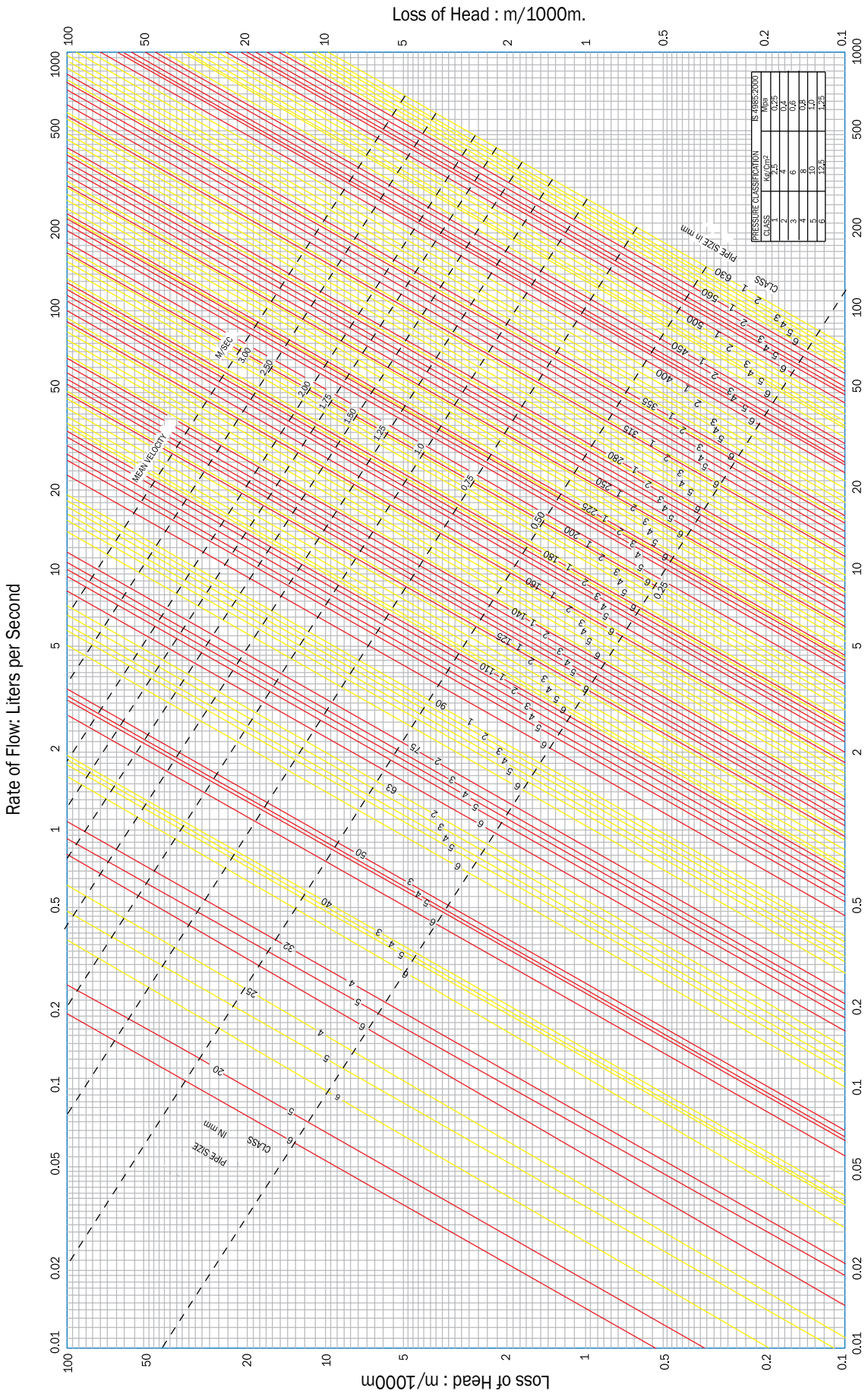
Flow Nomogram for Polyethylene Pipes



Example: Flow 10 lps, Pipe size 110 mm OD (104mm ID), Velocity 1.2 m/s, Hydraulic Gradient 1.2 m/100m.

To use the above FLOW NOMOGRAM at least two values out of A,B,C,D should be known. Joining the two values on lines and extending the line henceforth will give the desired values.

Flow Diagram for uPVC Pressure Pipes & Quick Fix® Pipes



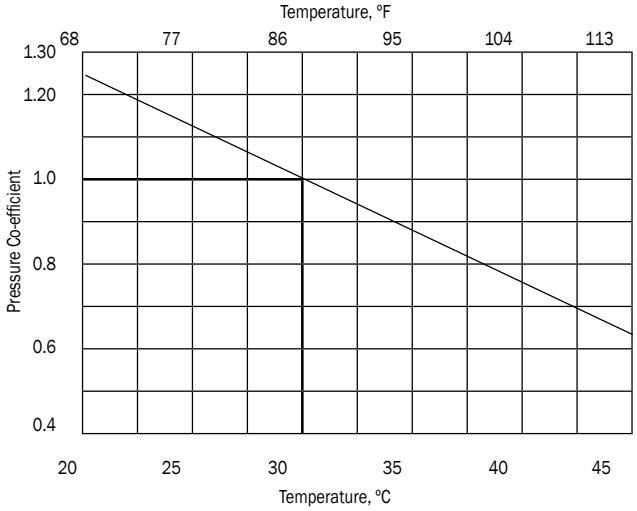
Note: 1) The diagram has been calculated on the basis of the mean ID with dimensions and tolerances to IS 4985. 2) Based on the Hazen Williams Flow Formula.

JAIN
More Crop Per Drop®

Design Data

Allowable design stress for PE Pressure Pipes

If PE pipes are used to convey fluids of excessive temperature then the allowable design stress or the pressure-class ratings should be appropriately reduced in accordance with following graph.



Source: IS - 4984 - Indian Standard for HDPE Pipes.

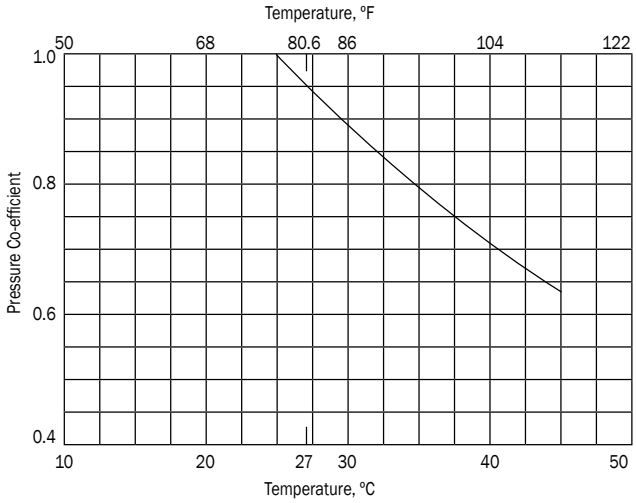
Solvent Cement Requirement for uPVC Pipes

Pipe Size, mm	No. of Joints* per Litre	Pipe Size, mm	No. of Joints* per Liter
20	330	125	45
25	270	140	36
32	225	160	27
40	180	180	20
50	135	200	15
63	125	225	12
75	103	250	9
90	79	280	6
110	54	315	5

** Each joint represents one socket in a Fitting.*

Allowable design stress for uPVC Pressure Pipes

If uPVC pipe or uPVC valve is used to convey fluids of excessive temperature then the allowable design stress or the pressure class ratings should be appropriately reduced in accordance with following graph.



Source: IS - 4985 - Indian Standard for uPVC Pipes.

Frictional Head Losses in Valves and Fittings (As equivalent to the length of pipe in meter)

Nominal (mm)	45° Elbow	90° Elbow	Tee in Flow	Side Out Let Tee	Gate Valve	Sprinkler Angle Valve	Angle Valve	Globe Valve
20	0.30	0.60	0.30	1.21	0.12	0.60	2.74	5.18
25	0.30	0.91	0.60	1.52	0.15	0.91	3.65	6.70
32	0.60	0.91	0.60	1.83	0.18	1.21	4.57	8.22
40	0.60	1.21	0.91	2.44	0.24	1.52	5.48	11.58
50	0.60	1.52	0.91	3.05	0.30	1.83	6.70	13.71
63	0.91	1.83	1.21	3.65	0.36	2.14	8.53	17.76
75	0.91	2.14	1.52	4.26	0.42	2.75	10.66	21.33
90	1.21	2.44	1.83	5.48	0.55	3.35	13.71	27.43
110	1.52	3.31	2.14	7.01	0.70	4.57	18.28	36.57
140	2.00	4.26	2.90	8.50	0.85	5.33	22.09	44.19
160	2.44	5.18	3.65	10.00	1.00	6.10	25.90	51.81

Potential Evapotranspiration Rate (PET) for different climate

Climate	Temperature (°C)	Humidity (%)	PET (mm per day)
Cool Humid	Less than 18	50 - 85	2.54 - 3.80
Cool Dry	18 - 25	Less than 50	3.80 - 5.00
Moderate	28 - 36	50 - 65	5.00 - 6.35
Hot Humid	36 - 40	50 - 85	6.35 - 8.90
Hot Dry	40 - 45	Less than 50	8.90 - 10.00
Hot Dry Desert	45 - 50	Less than 30	10.00 - 11.50

Maximum Precipitation Rate (mm per hour) of Sprinkler in different Soil and Ground Slope

Soil Type	0 to 5 %	5 to 8 %	8 to 12 %	12 to 20 %	Above 20 %
Coarse Sandy Soil	50	50	40	40	38
Coarse Sandy Soil over compact subsoil	45	45	30	30	30
Light Sandy Loam	40	40	25	25	25
Light Sandy loam over compact subsoil	30	30	20	20	20
Uniform Silt Loam	25	25	15	15	15
Silt Loam over compact subsoil	15	15	10	10	10
Heavy Clay / Clay Loam	5	5	3	3	3

Note: Above values are given for reference purpose and may vary with respect to actual soil and site conditions. Designer has to select and decide the appropriate value as per the prevailing conditions of site, soil, climate, type of crops, other agroclimatic factors.

Calculating Precipitation Rates

Depending upon the construction of the irrigation system, the precipitation rate may be calculated by either a 'sprinkler spacing' or 'a total area method'.

Sprinkler Spacing Method

The precipitation rate should be calculated for each individual zone. If all sprinkler head on the zone have the same spacing, flow rate and arc of coverage.

i. Any Arc and Any Spacing

$$\text{Precipitation Rate (mm per hour)} = \frac{\text{Flow (litre per min)} \times 21600}{\text{Degree of arc} \times \text{Head spacing (m)} \times \text{Row spacing (m)}}$$

ii. Equilateral Triangular Spacing

$$\text{Precipitation Rate (mm per hour)} = \frac{\text{Flow (litre per min of 360° Arc)} \times 60}{[\text{Head spacing (m)}]^2 \times 0.866}$$

Total Area Method

The precipitation rate for a system is the average precipitation rate of all sprinklers in an area, regardless of the spacing, flow rate or arc for each head. The total area method calculated all the flows of all the heads in any given area.

$$\text{Precipitation Rate (mm per hour)} = \frac{\text{Total Flow (litre per min)} \times 60}{\text{Total Area (Sq mt)}}$$

Types of Sprinklers based on Precipitation

Type of Sprinkler	Precipitation Rate (mm per hour)
Low Volume Sprinkler	Less than 13
Medium Volume Sprinkler	13 - 25
Big Volume Sprinkler	Above 25

Recommended Sprinkler Spacing

Wind velocity miles / hr.	Maximum spacing	
	Square spacing	Triangular spacing
0 to 3	55% of diameter	60% of diameter
3 to 6	50% of diameter	55% of diameter
6 to 12	45% of diameter	50% of diameter

Matched Precipitation Rates

A zone or system in which all the heads have similar precipitation rates is said to have 'matched precipitation rates'. Systems that have matched precipitation rates reduce wet and dry spots and excessive run times which lead to high water consumption and increased costs. Knowing that the sprinkler spacing, flow rates and arcs of coverage after precipitation rates, a general rule of thumb is : as the spray arQc doubles, so should flow.

- ..... 90° Arc (Quarter Circle) - (0.23 m^3/hr, 3.81 litre/min)
- ..... 180° - Arc (Half Circle) - (0.45 m^3/hr, 7.62 litre/min)
- ..... 360° Arc (Full Circle) - (0.91 m^3/hr, 15.24 litre/min)

The flow rate of half circle heads must be two times the flow rate of the quarter circle heads and the full circle heads must have two times the flow rate of the half circle heads.

In the illustration, the same amount of water is applied to each quarter circle area and precipitation is therefore matched.

Guidelines for Climate Control of Temperature and Humidity in Greenhouses

- Climate control in a greenhouse is based on the principle of the exchange of energy between the air and the fog moisture supplied by the NaanDanJain Fogger.
- One calorie is the amount of heat necessary to raise the temperature of 1 cm^3 of water by 1°C.
- The conversion of water from liquid to vapor absorbs heat from the surrounding air, at a rate of 590 calories/1 gram of evaporated water (1 cm^3). This process lowers the air temperature.
- Efficient installation and operation can reduce the temperature in the greenhouse by 4 to 6°C, depending on the environmental conditions.
- Efficiency of the cooling system depends on two environmental factors:
  - External temperature
  - External humidity

Essential conditions for efficient cooling with the NaanDanJain Fogger are

- An efficient ventilation system which continuously introduces external dry air into the greenhouse to replace the humid air.
- Pulse operation of the fogging system, to minimize the amount of water that may settle on the foliage.

What is the importance of the droplet size created by the NaanDanJain Fogger?

- With a 7 l/h nozzle at 4 kg/cm^2, the average fog droplet is 90 microns. These droplets evaporate without wetting the leaves or greenhouse floor.

Spacing Design

Type	Fogger Confi-guration	Nozzle	Flow rate lph	Spacing		Precipitation rate (mm/hr)
				Between Laterals	On the line	
Fogger	T	7.0 x 2	14	3.0	1.5	3.1
	Cross	7.0 x 4	28	3.0	3.0	3.1
Super Fogger	T	6.5 x 2	13	3.0	1.5	2.9

• The foggers should be installed in as high as possible, with minimal height being 3.0 m. The nozzles should be situated perpendicularly to the main line.
• Operating pressure: 4.0 kg/cm^2 at the fogger.

How much water is needed to cool a greenhouse?

- In our experience, a fog precipitation of 3 to 3.5 mm/h is suitable in the majority of cases (3 mm/h = 30 m^3/h per ha.)

Water Consumption

(meter cube per hectare per 10 hour/day)

Nozzle l/hr	Model configuration	Net precipitation, l/hr/m^2 for various spacing & pulses					
		3.0 x 1.5 m.			3.0 x 3.0 m.		
Fogger							
		1:5*	1:10	1:15	1:5	1:10	1:15
Blue 7.0 x 2	T	0.62	0.31	0.21			
Blue 7.0 x 4	cross				0.62	0.31	0.21
Water consumption m^3/ha/day (10 hour)		62	31	21	62	31	21
Super Fogger							
6.5 x 2	T	0.58	0.29	0.19	* On: Off pulse ratio		
Water consumption m^3/ha/day (10 hour)		58	29	19	Example: ratio 1:5 The system will operate only fifth of the time so the actual precipitation will be only 20%, or 10% for ratio 1:10		

Cooling

- The pulse duration should be as short as possible, between 1 to 3 sec. (Under certain conditions, longer durations can be considered).
- The interval between fogging pulses should be based on the factors of humidity, temperature levels, greenhouse ventilation and height of the foggers.

Initial guide (pulse of 2.0 sec)

- Fine tuning is recommended to be done according to local conditions

Outside relative humidity (%)	Interval (sec.)	Replenish moisture (l/ha)
30	15	4100
40	25	2500
50	25	2500
60	30	2100

Cooling and Humidifying cannot be conducted simultaneously.

Humidification

- In the event that the humidity level needs to be increased then the ventilation system must be shut down. The duration of the fogging process should be as short as possible (1.0 second).
- The intervals between fogging pulses will vary according to the minimal relative humidity required.
- During the morning, when temperatures rise and humidity decreases, the humidity sensor will cause the fogging system to operate.

Humidity	Interval	Duration
30-40%	60 sec	1 sec
40-50%	90 sec	1 sec
50-60%	120 sec	1 sec

Spraying

- Spraying pesticides through the NaanDanJain Fogger system has been tested successfully in various countries.

Water quality

- In order to avoid clogging by carbonates or the accumulation of salt deposits on the leaves, it is recommended to avoid irrigation with hard or saline water. Rainwater, soft water or osmosis-treated water is the most suitable.

Optional nozzles

Colour	blue	orange	red	black
Flow rate l/h at 4.0 bar	7.0	14.0	21.0	28.0

Units & Conversions

Linear Measurements

inch	feet	yards	centime-tres	metres	kilometres	miles	MIL
1	0.083	0.028	2.540	0.0254	0.0000254	0.000016	1015.95
12	1	0.333	30.480	0.3048	0.0003048	0.0001905	12191.41
36	3	1	91.441	0.9144	0.0009144	0.000571507	36574.59
0.394	0.033	0.011	1	0.01	0.0000100	0.0000063	399.9797
39.37	3.281	1.094	100	1	0.001	0.000625	39997.97
39370	3280.83	1093.600	100000	1000	1	0.625	39997968
62992	5249.33	1749.760	160000	1600	1.6	1	63996749
0.0010	0.000082	0.000027	0.0025	0.000025	0.000000025	0.000000016	1

Area Measurements

Sq.inches	Sq.feets	Sq.yards	Sq. mts.	Acres	ha.	Sq. Km.	Sq. Miles
1	0.00694	0.00077	0.00065	1.593x10-7	6.450x10-8	6.450x10-10	2.490x10-10
144.07	1	0.11117	0.09295	0.000023	9.293x10-6	9.293x10-8	3.587x10-8
1296	9.00	1	0.83613	0.000207	8.359x10-5	8.359x10-7	3.227x10-7
1550	10.76	1.19598	1	0.000247	9.997x10-5	9.997x10-7	3.859x10-7
6275753	43560	4842.40	4048.90	1	0.404786	0.004048	0.001562
15503876	107613.5	11962.87	10002.57	2.470	1	0.01	0.00386
1.55x10+9	10761349	1196286.73	1000256.516	247.04	100	1	0.386005
4.016x10+9	27878758	3099145.62	2591302.346	640.00	259.064	2.591	1

Volume Measurements

cubic inches	litres	US gallons	IMP gallons	cubic feets	cubic yards	cubic meters
1	0.0164	0.00433	0.004	0.0006	0.0000214	0.00001639
61.024	1	0.264	0.219	0.0353	0.0013086	0.00100
231	3.785	1	0.830	0.1337	0.0049537	0.00379
278.31	4.561	1.205	1	0.1610	0.0059682	0.00456
1728.11	28.319	7.481	6.209	1	0.0370584	0.02833
46632.12	764.160	201.871	167.555	26.984	1	0.76451
60996.08	1000	264.052	219.166	35.296	1.308	1

Flow Measurements

lps	lpm	lph	m^3/hr	US gpm	US gph	Imp.gpm	Imp. Gph
1	60	3600	3.60	15.87	952.38	13.16	789.45
0.0167	1	60	0.06	0.26	15.876	0.219	13.16
0.0003	0.017	1	0.001	0.0044	0.2648	0.00366	0.219
0.2778	16.66	1000	1	4.4092	264.55	3.65	219.29
0.0630	3.78	226.8	0.227	1	60	0.829	49.74
0.0011	0.06	3.78	0.004	0.017	1	0.0138	0.829
0.0760	4.56	273.6	0.274	1.206	72.38	1	60
0.0013	0.076	4.56	0.005	0.020	1.21	0.0167	1

Pressure Measurements

kg/cm^2	m of water	atm	KPa	bar	psi	m of Hg.	N/m^2
1	10	0.967	98.039	0.98	14.225	0.7355	98033
0.1	1	0.097	9.804	0.098	1.422	0.0736	9803
1.034	10.336	1	101.333	1.013	14.703	0.7602	101327
0.01	0.102	0.01	1	0.01	0.145	0.0075	1000
1.02	10.2	0.987	100	1	14.509	0.7502	99993
0.07	0.7032	0.068	6.894	0.069	1	0.0517	6894
1.36	13.596	1.315	133.294	1.333	19.34	1	133285
0.0000102	0.000102	0.0000099	0.001	0.00001	0.000145	0.000008	1

Weight Measurements

lbs	Kilograms	Quintals	Tonnes(Metric)	Tonnes(English)
1	0.43562	0.00436	0.000436	0.000499
2.2956	1	0.01	0.001	0.001144
229.56	100	1	0.1	0.114437
2295.59	1000	10	1	1.144362
2006	873.846	8.73846	0.873849	1

V-notch Discharge

Height of water over 90° V-notch, cm	Discharge, lps	Height of water over 90° V-notch, cm	Discharge, lps
4	0.45	14	10.5
5	0.80	15	12.5
6	1.80	16	14.5
7	1.80	17	16.7
8	2.5	18	19.4
9	3.4	19	22.3
10	4.5	20	25.5
11	5.7	21	28.3
12	7.1	22	31.0
13	8.6	23	35.7

Filter Screen

Mesh No.	Opening Size		
	Inch	mm	Micron
80	0.0069	0.177	177
100	0.0059	0.149	149
120	0.0049	0.125	125
150	0.0041	0.105	105
200	0.0037	0.094	74

Temperature

To convert °C to °F	To convert °F to °C
$\frac{9}{5}$ °C + 32 = °F	$\frac{5}{9}$ (°F - 32) = °C

Chemical Resistance Table

Chemical & Formula	Concentration	ABS	PP	PVC	PE
Acetic Acid CH_3COOH	25%	N	82	60	60
	40%	–	–	–	–
	60%	N	82	23	23
	85%	N	49	23	23
Ammonium Sulfate (Alum) $AlNH_4(SO_4)2\ 12H_2O$	Sat'd	–	60	60	60
Amonium Hydroxide	10%	49	100	60	60
NH_4OH	30%	–	–	–	R to 60
Amonium Nitrate NH_4NO_3	Sat'd	49	100	60	60
Amonium Phosphate (Monobasic) $NH_4H_2PO_4$	All	49	100	60	60
Amonium Sulfate $(NH_4)2SO_4$	Sat'd	49	100	60	60
Borax $Na_3B_4O_7O_{10}H_2O$	Sat'd	71	100	60	60
Calcium Carbonate $CaCO_3$	Sat'd	–	82	60	60
Calcium Chloride $CaCl_2$	5%	–	–	–	–
	Sat'd	49	82	60	60
Calcium Hypochlorite $Ca(OCl)_2$	30%	71	60	60	60
	Sat'd	–	–	–	–
Copper Sulfate $CuSO_4\ O_5H_2O$	Sat'd	49	49	60	60
Chlorine Gas (Moisture Content)	0-20 ppm	N	N	C to 23	C to 23
	20-50 ppm	N	N	N	C to 23
	50+ ppm	N	N	N	C to 23
Chlorine	liquid	N	N	N	N
Chlorinated Water	10 ppm	–	82	60	60
Chlorinated Water	Sat'd	–	82	60	C to 49
Detergents	–	–	82	60	R to 60
Ferrous Sulfate $FeSO_4$	–	71	60	60	60
Hydrochloric Acid HCl	1%	–	–	–	–
	10%	C to 49	60	60	60
	20%	–	–	–	–
	30%	C to 23	60	60	60
	Conc.	–	–	–	–
Hypochlorous Acid $HOCl$	10%	23	23	60	60
	70%	–	–	–	–
Nitric Acid HNO_3	5%	–	–	–	–
	10%	C to 23	82	60	23
	20%	–	–	–	–
	30%	N	60	60	23
	35%	–	–	–	–
	40%	N	23	60	23
	50%	N	N	38	C to 23
	70%	N	N	23	C to 23
	100	N	N	N	N
Lubricating Oil	–	–	C to 60	60	23
Phosphoric Acid H_3PO_4	10%	–	100	60	60
	50%	23	100	60	60
	85%	–	100	60	23
	98%	–	–	–	–
Potassim Permanganate $KMnO_4$	10%	–	82	23	60
	25%	–	23	23	60
Soap	–	23	60	60	R to 60
Sodium Bicarbonate $NaHCO_3$	–	23	100	60	60
Sodium Carbonate Na_2CO_3	–	23	100	60	60
Sodium Chloride $NaCl$	–	49	100	60	60
Sodium Hypochlorite $NaOCl O_5H_2O$	–	49	23	23	60
Sulfur S	–	–	100	60	60
Sulfuric Acid H_2SO_4	30%	49	82	60	60
	50%	23	82	60	49
	60%	C to 23	23	60	49
	70%	C to 23	23	60	R to 49
	80%	C to 23	82	60	R to 49
	90%	C to 23	66	23	49
	93%	N	C to 23	23	C to 23
	94% - 98%	N	C to 23	N	C to 23
	100%	N	C to 23	N	C to 23
Urea	–	–	82	60	60
Urine	–	71	82	60	60
Water, Acid Mild H_2O	–	71	60	60	60
Water , Deionized H_2O	–	71	60	60	60
Water, Distilled H_2O	–	71	100	60	60
Water, Potable H_2O	–	71	100	60	60
Water, Salt H_2O	–	71	100	60	60
Water, Sea H_2O	–	71	100	60	60
Water, Soft H_2O	–	71	100	60	60
Zinc Sulfate	–	71	82	60	60

Resistance Codes

Code	Meaning	Typical Result
60	Plastic type is generally resistant to tmeperature (°C) indicated by code.	Swelling < 3% or weight loss < 0.5% and elongation at break not significantly changed.
R to 23	Plastic type is generally resistant to tmeperature (°C) indicated by code and may have limited resistance at higher tempera-tures.	Swelling < 3% or weight loss < 0.5% and elongation at break not significantly changed.
C to 23	Plastic type is generally resistant to tmeperature (°C) indicated by code and may be suitable for some conditions.	Swelling 3-8% or weight loss < 0.5-5% and / or elongation at break decreased by < 50%.
N	Plastic type is not resistant.	Swelling < 8% or weight loss < 5% and / or elongation at break decreased by > 50%.
–	Data not available	

- *Chemicals that to do not normally affect the properties of an unstressed thermoplastic may cause completely different behaviour (such as stress cracking) when under thermal or mechanical stress (such as constant internal pressure or frequent thermal or mechanical stresscycles).*
- *Unstressed immersion test chemical resistance information is applicable only when the thermoplastic pipe will not be subject tomechanical or thermal stress that is constant or cycles frequently.*
- *When the pipe will be subject to a continuous applied mechanical or thermal stress or to combinations of chemicals, testing that duplicates the expected field conditions as closely as possible should be performed on representative samples of the pipe product to properly evaluate plastic pipe for use in this applicaiton.*

Container Loading Details

uPVC Pressure Pipe and HDPE Pipes

Pipe OD in mm	Container Size		
	20' Std.	40' Std.	40' HC
20	13923	27846	31,590
25	8930	17860	20,304
32	5402	10804	12264
40	3422	6844	8024
50	2209	4418	5076
63	1176	2738	3182
75	961	1922	2232
90	676	1352	1560
110	441	882	1008
125	342	684	756
140	272	544	608
160	196	392	448
180	169	338	390
200	121	242	286
225	110	220	240
250	81	162	180
280	64	128	144
315	49	98	112
355	36	72	84

Note: The pipe length is 6 mtr for 40 ft Std. & HC container and 5.8 mtr for 20 ft Std. container.

J-Turbo Aqura / J-Turbo Line / Turboline PC

Tube OD	Tube Length, m.	20 ft. Container		40 ft. HC Container	
		Non palletized	Palletized	Non palletized	Palletized
J-Turbo Aqura					
12mm	500	200	168	450	408
16mm	400	200	168	450	408
20mm	300	175	140	325	300
Turboline (PC & NPC)					
12mm	500	150	110	335	290
16mm	400	150	110	335	290
20mm	200	110	80	240	200

Jain Tough-Hose

Hose size Nominal ID mm	Length of Roll meter	Container Size			
		20' Std.		40' HC	
		W/O pallet	Palletized	W/O pallet	Palletized
1	500	1850	1800	4220	3800
4	250	1275	1000	2990	2700
6	250	1150	1000	2900	2700
10	500	150	130	400	360
12	500	170	130	385	360
13	500	190	130	405	360
16	300	175	130	400	360
19	250	165	130	370	360
20	250	165	60	360	175
25	250	75	60	175	175
32	100	120	60	310	175

uPVC Pressure Pipe and HDPE Pipes

Pipe OD in mm	Container Size		
	20' Std.	40' Std.	40' HC
20	13923	27846	31,590
50	841	1682	1856
63	576	1152	1296
75	441	882	966
90	324	648	720
110	196	392	448
125	169	338	364
140	144	288	312
160	100	200	220
180	81	162	180
200	64	128	144
225	49	98	112
250	49	98	98
280	36	72	84
315	25	50	60

Note: The pipe length is 6 mtr for 40 ft Std. & HC container and 5.8 mtr for 20 ft Std. container.

HDPE Pipes

Pipe OD in mm	Length of Coil /Roll meter	Container Size		
		20' Std.	40' Std.	40' HC
20	300	36	80	88
25	200	84	168	192
32	100	84	168	192
40	100	35	63	70
50	100	24	48	54
63	100	-	26	28
75	100	-	28	28
75	50	-	40	42
90	50	-	28	30

Jain Oval Hose

Hose size mm	Container Size			
	20' Std.		40' HC	
	W/O pallet	Palletized	W/O pallet	Palletized
42 PSI				
10	**280**	**200**	**672**	**528**
13	**280**	**200**	**672**	**528**
16	**280**	**200**	**672**	**528**
20	**160**	**120**	**400**	**352**
26	**160**	**120**	**400**	**352**
35	**160**	**120**	**400**	**352**
40	**160**	**120**	**400**	**352**
52	**160**	**120**	**400**	**352**
21 PSI				
26	**160**	**120**	**400**	**352**
35	**160**	**120**	**400**	**352**
40	**160**	**120**	**400**	**352**
52	**160**	**120**	**400**	**352**
77	**144**	**118**	**390**	**260**
101	**144**	**118**	**390**	**260**

Note: All the other items are packed in corrugated boxes.

- *400 Standard boxes (16"x16"x15") can be accommodated / fit in 1 x 20' Std Container.*
- *840 Standard boxes (16"x16"x15") can be accommodated / fit in 1 x 40' Std Container.*
- *980 Standard boxes (16"x16"x15") can be accommodated / fit in 1 x 40' HC Container.*

Chapin - Twin Wall – BTF Drip Tape - 5/8”

Nominal Diameter		Wall Thickness		Coil Length		Pallet Quantity	Estimated Pallet Weight		Estimated Container Quantity					
									On Pallets				Floor Loaded	
									20’ Std.		40’ Std.		20’ Std.	40’ Std.
inch	mm	mil	mm	feet	m		lbs	kg	Pallets	Rolls	Pallets	Rolls	Rolls	Rolls
5/8”	16	4	0.10	15000	4573	24	2250	1023	10	240	20	480	280	480
5/8”	16	5	0.13	12000	3659	24	1875	852	10	240	20	480	280	588
5/8”	16	6	0.15	10000	3049	28	2025	920	10	280	20	560	320	632
5/8”	16	8	0.20	7500	2287	32	2175	989	10	320	20	640	360	662
5/8”	16	10	0.25	6000	1829	32	2150	977	10	320	20	640	360	670
5/8”	16	12	0.30	5000	1524	28	1880	855	10	280	20	560	400	672
5/8”	16	15	0.38	4000	1220	28	1880	855	10	280	20	560	400	672

Chapin - Twin Wall – Deluxe Drip Tape 5/8”

Nominal Diameter		Wall Thickness		Coil Length		Pallet Quantity	Estimated Pallet Weight		Estimated Container Quantity					
									On Pallets				Floor Loaded	
									20’ Std.		40’ Std.		20’ Std.	40’ Std.
inch	mm	mil	mm	feet	m		lbs	kg	Pallets	Rolls	Pallets	Rolls	Rolls	Rolls
5/8”	16	6	0.15	10000	3049	28	2225	1011	10	280	20	560	320	632
5/8”	16	8	0.20	7500	2287	28	2000	909	10	280	20	560	320	662
5/8”	16	10	0.25	6000	1829	28	1950	886	10	280	20	560	320	670
5/8”	16	12	0.30	5000	1524	28	1950	886	10	280	20	560	280	648
5/8”	16	15	0.38	4000	1220	28	1950	886	10	280	20	560	280	648
5/8”	16	20	0.50	3000	915	28	1950	886	10	280	20	560	280	648
5/8”	16	25	0.63	2500	762	28	1950	886	10	280	20	560	280	648

Chapin - Twin Wall – Marathon Drip Tape 7/8”

Nominal Diameter		Wall Thickness		Coil Length		Pallet Quantity	Estimated Pallet Weight		Estimated Container Quantity					
									On Pallets				Floor Loaded	
									20’ Std.		40’ Std.		20’ Std.	40’ Std.
inch	mm	mil	mm	feet	m		lbs	kg	Pallets	Rolls	Pallets	Rolls	Rolls	Rolls
7/8”	22	6	0.15	7500	2287	28	2112	960	10	280	20	560	320	600
7/8”	22	8	0.20	5500	1677	28	1850	841	10	280	20	560	320	672
7/8”	22	10	0.25	4500	1372	28	1875	852	10	280	20	560	320	672
7/8”	22	13	0.33	3500	1067	28	2000	909	10	280	20	560	320	672
7/8”	22	15	0.38	3000	915	28	1900	864	10	280	20	560	320	672

Jain Turbo Slim® Coil Lengths

Emitter spacing		Nominal Diameter of 16 mm, 17 mm and 5/8”																							
		6 mil			8 mil			10 mil			12 mil			15 mil			18 mil			20 mil			25 mil		
cm	inch	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil	m	ft.	kg./coil
15	6	2100	6888	19.9	2100	6888	25.0	2000	6560	28.6	1700	5576	28.5	1350	4428	27.6	1000	3280	24.2	900	2952	24.0	500	1640	16.5
20	8	2300	7544	20.4	2300	7544	26.0	2100	6888	28.8	1800	5904	29.1	1400	4592	27.8	1050	3444	24.8	950	3116	24.8	550	1804	17.8
25	10	2400	7872	20.5	2400	7872	26.3	2150	7052	28.8	1850	6068	29.3	1450	4756	28.3	1100	3608	25.6	1000	3280	25.7	600	1968	19.2
30+	12+	2700	8856	22.4	2500	8200	26.8	2250	7380	29.6	1900	6232	29.6	1500	4920	28.9	1150	3772	26.4	1000	3280	25.5	600	1968	19.1
Nominal Diameter of 7/8”																									
15	6	1300	4264	15.9	1100	3608	17.1	800	2624	15.1	900	2552	20.1	750	2460	20.8	650	2132	21.1	600	1968	21.5	400	1312	17.9
20	8	1500	4920	17.5	1300	4264	19.5	1000	3280	18.3	1000	3280	21.7	800	2624	21.7	700	2296	22.3	650	2132	22.9	450	1476	19.9
25	10	1600	5248	18.1	1400	4592	21.0	1100	3608	19.8	1050	3444	22.4	850	2788	22.7	750	2460	23.6	700	2296	24.5	500	1640	22.0
30+	12+	1800	5904	19.9	1500	4920	21.6	1200	3936	21.3	1100	3608	23.2	900	2952	23.9	800	2624	25.0	700	2296	24.3	500	1640	21.8

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm

* *Coil lengths are for coil size 560 x 280 mm (22” x 11”). Other coil sizes such as 350x160 mm (13.8” x 6.3”) and 560x160 mm (22” x 6.3”) are also available.Please contact for coil lengths of Jain Turbo Slim 12, 19, 25 mm and 9/8”, 1–3/8”.*

Jain Turbo Slim® Container Loading Details

Container Type	Pallet size L X W X H, mm	No. of Pallets	No. of Coils / pallet	Total No. of Coils	Gross Total, Nos.
Coil per 20 ft. container standard 5800 x 2340 x 2350	1120 x 1120 x 100 1120 x 1120 x 100	10 10	16 12	160 120	280
Coil per 40 ft. container standard 11900 x 2340 x 2350	1120 x 1120 x 100 1120 x 1120 x 100 1120 x 560 x 100 1120 x 560 x 100	20 20 2 2	16 12 8 6	320 240 16 12	588
Coil per 40 ft. container H/C 11900 x 2340 x 2650	1120 x 1120 x 100 1120 x 560 x 100	40 4	16 8	640 32	672

General Guidelines for Maintenance of Drip irrigation system

Drip Irrigation System is lifeline for High value Horticulture / Agriculture crops due to high valued features. However for the success of drip irrigation systems proper maintenance is required. Following are few installation and maintenance tips.

1. Ensure that J-Turbo line/J-Turbo Aqura/Jain Turbo Slim/ Jain Turbo Tape/Chapin Twin Wall is connected to submain through 1- 1.5 mtr. long lateral piece (approximately up to the first tree or start of the bed) & not directly to take off to avoid wastage of water, wetting sub-main trench & empty border space. If directly fitted to sub-main the emitter inside trench may suck-back soil while shutting down of the system which may result in to clogging the drippers.
2. While laying - J-Turbo Aqura / Jain Turbo Slim/Jain Turbo Tape/Chapin Twin-Wall always position to emitter facing upwards (yellow line facing upwards). It is recommended to use winders for unwinding and rewinding of tubing.
3. Run the system daily. With daily running all the dissolved salts do not precipitate and can be thrown out in dissolved form only. Also running the system daily would help to keep the salts out of the wetted bulb of the dripper.
4. Use water soluble & EDTA based chelated fertilizers as they helps to prolong frequency of special treatments.
5. To prevent rodent/squirrel damage, use rodent deterrent tubing or if the tubing is not with RD rat repellent apply along the line. Do not kill the snakes in the field, snake controls the population of rats. Rat campaigning on larger scale by a group of farmers is the effective solution for rat problem. To prevent squrill problem, cover the trunk of the tree on which squirrel stays, with polyethylene or GI sheet or use a bowls of water near their places of inhabitant, hole/ tree, etc.
6. Never try to clean the blocked dripper by forced hammering or by using sharp objects like nail, pin etc.
7. Always keep the field clean. Some insects staying in the field garbage can make the holes in the tubing or even in drippers.

The Maintenance schedule of Drip Irrigation System is in 4 steps;

1. Current or Daily maintenance,
2. Periodic or Fortnightly maintenance,
3. Periodic Chemigation.
4. Seasonal, Storage & Re-installation maintenance.

1) Current or Daily maintenance

1. After starting the pump let the pressure be stabilized in the system. Check for leaks & correct the pressure at sub-main. It should be as per the design. If pressure is less adjust it by throttle/ by-pass valve.
2. Inspect the dripping and ensure that water is reaching all the corners of the plot/field if at some portion water is not dripping correctly find the cause & correct.
3. If a twist, fold, cut, puncher etc. is found causing discharge variation, correct it immediately.
4. At the end of shift inspect uniform wetting pattern. If dry patches are found increase duration of operation.
5. Inspect through out the field to detect precipitation, scaling, if clogging is taking place, the end drippers are the first affected. Take corrective actions if scales/ precipitates are found.
6. Monitor the mechanical damages by rodents, farm operations by labour, animal or machinery, causing leakage; correct it immediately by using proper joiners.
7. Flush all the laterals by opening end plug 1 to 5 in a series; then close them 1-5 in the same sequence allowing flushing for 3 minutes until clean water starts flowing.
8. Flush each sub-main at the end of every section (shift) till dirt free clear water starts flowing.
9. Check inlet & outlet filter pressures. Remove slurry from hydrocyclone, back flush sand filter at every 5 hours; flush screen/ disc filter at the end of days operation.

2) Periodic or Fortnightly maintenance

1. Repeat 1 to 9 operations and take corrective actions.
2. Take out the element of screen/disc filter and clean it thoroughly. Open the lid of sand (media) filter manhole, allow the water to come out through manhole, stir the sand thoroughly by moving the hand in between filter mushrooms (candles) without disturbing their position for thoroughly separating accumulated foreign material with media (sand) for recharging its filtering capacity.

3) Periodic Chemigation treatment

Carry out water analysis of water source once every years preferably in April for TDS when salt concentrations are high. For algae samples should be tested in September after the rainy season.

3.1 Acid Treatment: Precautions – Always use goggles & surgical/rubber hand gloves & never pour water in acid but always add acid in to water as safety precaution before handling acid. Always use plastic containers for acids.

The commercial Grade of Acid recommended for Acid Treatment are:

Hydrochloric Acid	HCl - 35 %
Nitric Acid	HNO_3 - 33%
Sulfuric Acid	H_2SO_4 - 65 %
Ortho Phosphoric Acid	H_3PO_4 - 85%

In most of the cases the 0.6% application with irrigation of these commercial grades of acids brings down the pH between 2-4 capable of dissolving most of the precipitations. Most of the cases HCl can be used which is highly effective & the cheapest of all, except the crops which can not tolerate Chloride. In that case HNO_3 or H_2SO_4 could be used. H_2SO_4 is not recommended where ca, mg salts are above 500ppm. Acid treatment is always done before chlorination as chlorination is effective under ph range of 6.5-to-8.5. If iron is present, do not use ortho phosphoric acid (H_3Po_4) as iron would precipitate with phosphoric acid.

H_2O_2 Hydrogen Peroxide can also be used to bring down ph where use of other acids is not feasible.

Select the most suitable acid and proceed as under:

1. Flush & clean filters, Flush main, Submain & lateral ends.

2. Calculate quantity of Acid required for the valve (section/ shift) based on 0.6% injection of Acid for 15 minutes. As a thumb rule 15 ltr Acid @ 1 ltr/min Acid is required for each of 10m³/hr flow. (10,000 lph x 0.006(6%) x 0.25hrs). If injection rate is say 1.5 ltr/min add 7.5 ltr of water in Acid to ensure 0.6% rate of injection.
3. Open inlet & outlet of Venturi without disturbing its calibration settings. In case of fertilizer tank create appropriate pressure differential between inlet & outlet by throttle valve. Do not spill the acid/chlorine on the fertilizer tank.
4. After the injection of Acid, allow acidified water to react with precipitated salts for about minimum 4 - 6 hours (It is desirable to prolong the period for 24 hours). Then open the ends of laterals and submain flush valve. Start on the pump and allow all the water to flow out. Measure the discharges of marked drippers. Flush Main, sub-main & laterals. If there is no significant improvement repeat the treatment, repeat the treatment as above for all the sections.
5. At the end of acid treatment wash the equipment & vessels with clean water, whip & dry removing residue of Acid. If clogging is observed due to algae or other causes; carry out chlorination treatment.
6. Run the system for half an hour more than normal irrigation schedule so that extra quantity of acid will be taken out of root zone.

3.2 Iron, Manganese Treatments: If water analysis report shows higher amount of iron and/or manganese following measures can be taken, oxidation by aerations allows iron to precipitate faster. Store the water in settlement tank after stepped aeration to allow iron to precipitate down and then pump the water for your system. Chlorination along with aeration can enhance rate of oxidation. Please note that manganese impurities react slow with chlorine hence they coagulate after the main filters. In such cases, either allow some additional reaction and precipitation time or use plot filters as secondary fine filter to avoid drip per clogging which cannot be cleaned by any chemical means.

3.3 Chlorinaton Treatment: Precautions for chlorination – Chlorine is toxic to human & animal. Do not have direct contact with Skin, eyes, nose, mouth with any Chlorine substance or Cl_2 gas; as it is poisonous for human and animal. Wear goggles, hand gloves, safety shoes etc. during chlorination treatmenT. Vessels for the solution should be thoroughly washed to avoid accident by reaction. Never use Fertigation of Nitrogenous fertilizer during Chlorination to avoid formation of sublime compound like Ammonium Chloride etc. Never mix acid in Chlorine solution; use another device of injection for acid prior to Chlorine. For making/ diluting solution of Chlorine add Chlorine product into water but do not pour water in chlorine substance/solution. It can be in three forms: Cl_2 gas (100 %Chlorine), Sodium Hypochlorite NaOCl, (10% Chlorine) or Calcium Hypoclorite $Ca(OCl)_2$ (50 to 65% Chlorine).

Chlorination is done,

1. To prevent of occurrence of algae
2. Decomposition of organic matters
3. Prevention of agglomeration of organic suspended solid.
4. Oxidation of ; Iron, Manganese, Sulfur (H_2S) etc separating from water.

The most commonly used chemical is Calcium Hypochlorite which is called bleaching powder & not fully soluble. Equal amount of water is used to prepare solution. Ca+ 2OH (in soluble) remain in solution liberates 2 HOCl which is highly active at pH6.5-8.5. Allow the solution to settle & filter it by fine cloth. It may contain about 35% Cl_2 in form of HOCl.

Procedure of Chlorination Treatment

1 Flush & clean the filters, flush main, sub-mains,& laterals.
2. If Acid treatment is required to be done; it should be done before Chlorination for more effectiveness of the system. HOCl is more efficient at pH 6.5-8.5 range. Chlorine increases pH of water according to its concentration being injected.
3 When Chlorination is done for algae removal; if iron is precipitating to prevent its precipitation; adjust the pH by 6.5 during the treatment. In such cases Chlorination is done before media filter which is the best way to filter Fe precipitations/suspensions. Hydro cyclone filter helps in oxidizing Fe^{+2} (soluble) in to Fe^{+3} (insoluble).
4. Calibrate the Chlorination equipment for desirable concentration of Cl_2.
5. Inject the Chlorine solution for period indicated in the table. When the free Chlorine at the dripper reaches stop the system for 1 hour.

Recommended Concentration of free Chlorine in water (ppm=mg/litr) for various purpose

Purpose of Chlorination	Application Method	Concentration ppm (mg/ltr) at head control	ppm (mg/ltr) level at end of the system (dripper)	Remarks:. 2HOCl (35%Cl) injection ltr/hr/10m³ flow
Algae prevention	Continuous	1-10 max.	0.5 -1.0 max.	0.029-0.29
Algae & bacteria killing	Intermittent	10-20 for 20 min	0.5-1.0 max.	0.29-0.58
Dissolving organic matter	Hyper-Chlorination	50-500 for 5 min	5- 10 max	2.9-29
Oxidation of Iron	Continuous	0.6 mg/ltr/ppm of Iron impurities	0.5-1.0 max.	0.022/ppm of Iron impurities
Oxidation of Manganese	Continuous	0.6 mg/ltr/ppm of Mn. impurities	0.5-1.0 max.	0.022/ppm of Mn impurities
Sulfur impurities	Intermittent	0.6 mg/ltr/ppm H_2S for 20 min	0.5-1.0 max.	0.022/ppm of Sulfur impurities

$$\text{Flow rate Chlorine Solution ltr/hr at Head control} = \frac{\text{Desired Chlorine concentration ppm x water flow m}^3\text{/hr in Plot}}{\text{\% Concentration of Chlorine Solution x 10}}$$

6. Recheck the Chlorine after 1 hour. It should be done by chlorine indicator paper test. If found less than desired ppm repeat step 5.
7. Shut off the system/section valve close for next 24 hours. Flush the system thoroughly.

3.4 Preventing clogging of dripper from root intrusion in sub-surface drip system for seasonal vegetables

The root & plants can be killed by strong acid treatment. for perennial crops precaution should be taken to avoid water stress by operating the system at least 15 minutes daily. However to prevent roots blocking drippers following frequency of treatment by the strong herbicide trifluralin-5 (treflan = root guard) should be given of quantity equal to 1cc/20 outlets at a time in 10 minutes. no. of treatments & frequency depends on irrigation duration of a crop. If treflan treatment is not possible to conduct and if roots are already intruded in to the dripper, try a strong chlorine dose of about 50 ppm to inhibit the root propagation. Use a small quantity (approximately 1cc/20 outlet) of hydrogen peroxide to decompose the dead root in the dripper. Run the system at higher pressure to remove the decomposed root particles out of the drippers.

4. Seasonal, storage & re-installation maintenance.

1. Before retrieving the system carry out fortnightly maintenance. If chemigation is due carryout the same.
2. Remove end plugs, wind lateral from end plug side to start connector each in separate reel of each row. Do not disconnect from sub-main & stack on sub-main, if it is for intercultural operation. If it is for crop rotation; remove from straight connector of blank laterals. The end plugs which were removed from lateral ends should be utilized to close the open ends straight connector of the sub-main to prevent entry of dirt. Number reels row & sub- main wise. Store them in hanging position 30cm above ground a bamboo stand to avert cutting by rats.
3. For restarting the system follow all sequence of pressure test & flushing the sub-main & the permanently fixed lateral by removing end plugs. De-wind the reel number wise & shake it well to shatter loose foreign material. Remove end plug of blank lateral & re-connect dripper line. Start the system & observe the function. Carry out flushing & daily operation. If clogging is found start chemigation to bring the system under original state of working.

5. Criteria for selecting chemical treatment.

1. When dissolved salts & pH are high, the acid treatment is most effective.
2. When the biological load is high, chlorination should be applied to prevent algae development decomposition of organic matter.
3. When suspended matter is high and also biological mass is present, chlorination should be applied to prevent agglomeration.
4. When residual Iron, Sulfur or Manganese above 0.5 ppm is present, Chlorination should be applied to oxidize these compounds and settle& separate them in the filtration system.
5. When water source is an open reservoir, water should be treated by copper sulfate.
6. When Chemical & biological factors are high, both chemical & Chlorination should be applied.

Maintenance Schedule of J-Turbo Line / J-Turbo Line PC / J-Turbo Aqura & Drip Tapes at a Glance

Description	Daily	Fortnightly	Monthly	End of Season/yearly
Check for leak & correct.	✓	✓	✓	✓
Check system &sub-main pressures	✓	✓	✓	✓
Observe water reaching all the field	✓	✓	✓	✓
Check fold, twist, puncher, correct it	✓	✓	✓	✓
Check uniformity of wetting adjust timing	✓	✓	✓	✓
Check algae & salt precipitation for treatment	✓	✓	✓	✓
Check rodent & mechanical damage & correct	✓	✓	✓	✓
Flush Laterals at end of Section.	✓	✓	✓	✓
Flush Submain at the end of section	✓	✓	✓	✓
Check filter in& outlets flush filters at 5 hrs	✓	✓	✓	✓
Flush Main		✓	✓	✓
Clean Filters		✓	✓	✓

- Carry out Acid treatments (As suggested in Water Analysis report)
- Carry out Chlorination (As suggested in Water Analysis report)

Note: The above maintenance tips are for guidelines only and shall be used with due care. Jain Irrigation Systems Ltd., will be not be liable to any party in strict liability, contact, tort or any other manner for damages caused or claimed to be caused as a result of any improper use of abovementioned tips or for any special, incidental or consequential damage of any nature.

Note: for more details and queries if any, please contact our technical service division at jisl@jains.com

General Maintenance Guidelines for Filters

In order to get maximum efficiency and optimum result it is necessary to prevent emitter, mini sprinkler and laterals from clogging. Hence, filtration system is the heart of irrigation systems. Properly maintained filters will ensure maximum efficiency of irrigation systems, by avoiding clogging.

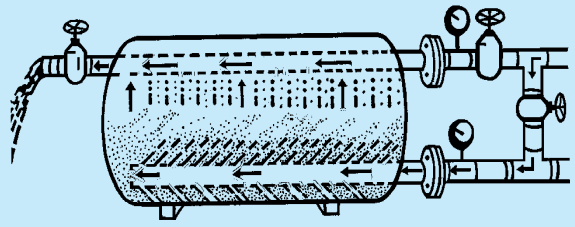
Install the filter/s on properly constructed masonry or concrete platform. Connect all the assembly properly. Ensure that all the filter candles inside the sand/media filters are at their place before filling up the sand. If hydrocyclone is to be connected to sand filter, install air release valve at highest point of the fitting.

1. Maintenance of Hydrocyclone Filters

Hydrocyclone filter requires least maintenance by cleaning the dirt, inside the under flow chamber at daily interval. Flush the chamber by opening flush valve/cap or open the main valve, for thorough cleaning. Please note that hydrocyclone filter becomes ineffective once the dirt collection chamber is full.

Always run the hydrocyclone filter at nominal operating pressure. Clean the dirt regularly. Excess pressure and/or uncleaned dirt chamber may lead to erosion of walls.

2. Maintenance of Sand/media Filter



Sand Filter Backwash Mode

Sand filter is effective for removing organic heavy and inorganic contaminates. Over a period, the contaminants in water accumulate and clog pore space in the sand bed and thus reduce the efficiency of filter. Daily backwashing of your sand filter is very important. Backwashing is the processes in which water flow is reversed and sand bed is lifted and expanded allowing it to release the collected dirt. The dirt is then carried away through backwashing valve.

Backwash flow should be adjusted properly, because excessive backwash flow will lead to removal of sand itself out of the filter and insufficient backwash flow will not clean the sand properly.

Sequence of backwash operation

Step 1. Open the Backwash Valve.
Step 2. Close the Outlet Valve.
Step 3. Open the Bypass Valve.
Step 4. Close the Inlet Valve.

Please note that in semiautomatic and automatic backwash option. Opening and Closing of the valve is done at the same time.

The sand filter should also be cleaned regularly as follows

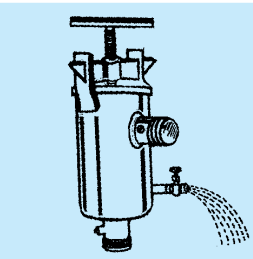
1) Open the lid of sand filter
2) Start the Backflush operation
3) Put your hand inside the sand filter and stir the sand thoroughly.

Sand Filter Cleaning

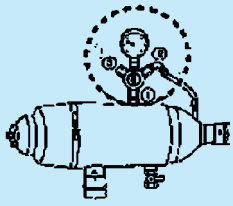
4) Allow all the water alongwith dirt to flow through the man hole of the sand filter
5) Close the lid for normal operation.

Install the filter/s on properly constructed masonry or concrete platform. Connect all the assembly properly. Ensure that all the filter candles inside the sand/media filters are at their place before filling up the sand. If hydrocyclone is to be connected to sand filter, install air release valve at highest point of the fitting.

3 Maintenance of Screen Filter



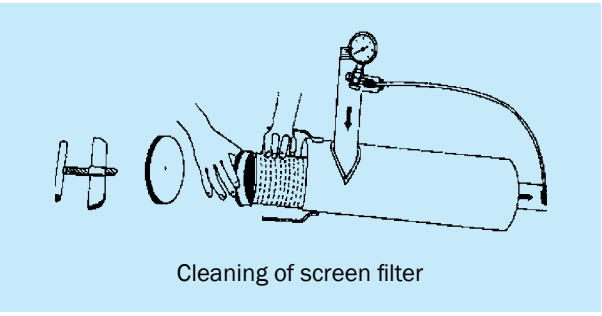
Filter Flushing



Check the In-let / Out-let pressure difference.

Flushing at scheduled daily interval is necessary to maintain your screen filter. It is recommended to flush your screen filter, if pressure drops more than 0.5 Kg/cm^2 (5 m at water head). The pressure difference can be observed by checking inlet and outlet pressure by using a single 3-way control valve

Flushing can be done by simple opening of the drain valve, allowing the force of water to flush the dirt out through drain valve. It is also necessary to clean the screen at regular interval. Procedure of cleaning is very simple, open the screen filter lid, remove the screen & clean it in flowing water by rubbing with cloth or soft nylon brush.



Cleaning of screen filter

Protect the metal parts of the filters from scratches, acid/ chlorine/fertilizer spillage etc. Put oil paint immediately on the scratch to avoid propagation of pitting corrosion.

Note: for more details and queries if any, please contact our technical service division at jisl@jains.com

Help us to help you serve better

We Can Not Spell S ccess Without 'U'

Our success lies in your success. We advise you to follow small tips given below, in order to achieve maximum benefits as well as get longer and trouble free life from Jain's Drip Irrigation System.

General Guidelines

- Test the water quality of source water regularly, during the seasonal changes and/or whenever the water source changes. Water quality parameters shall be as per 'Normal Level' mentioned in Table 1, Clause 4.3 of IS 14791.
- Keep the bypass valve "OPEN" before switching on the pump and adjust / close the same gradually to adjust the required pressure on the mainline.
- Always install suitable pump as per design/system requirements.
- Always maintain the required operating pressure within the system.
- Do not under or over irrigate. Always maintain optimum moisture level in the field.
- Always position J-Turbo Aqura with emitter facing upwards.
- Keep the lid of filter and fertilizer tank optimally tightened while in operation.
- Backwash the media filters regularly. Drain the screen filter and hydrocyclone filter daily.
- While back-washing the manual media filter, always first open backwash valve, then close outlet valve, after this, open the middle valve and then close inlet valve. Follow vice versa procedure while switching over to normal mode.
- Flush the main line, submains, laterals and online emitters at regular interval (generally once in a week) depending upon the water quality.
- Carry out the chemical treatment (Acid and/or chlorine treatment) as per requirement to prevent dripper clogging. Follow procedure given in Indian Standard IS 14791.
- Always add acid to water while conducting acid treatment. (Do not pour water to the acid).
- Drinking water from the system should be strictly avoided & particularly during chemigation and fertigation.
- Root intrusion can occur if plants are under-irrigated or if chemicals and fertilizers are not flushed out of the line properly.
- Periodically inspect all the components installed above the ground for physical abuse, damage by field machinery, rodents etc.
- Do not pull the laterals while shifting, laying / relaying
- The end cap / stop of laterals and flush valve at the end of submain should always be in closed position. If left open, these points may allow pressure loss / drop and also water wastage.
- Operation of valve should be proper as per the direction given on valve. Do not tamper with or disturb the factory setting.
- Before making any alteration or change in the system design, always consult the technical division of the Company or Authorised dealer. The system designed for one crop may not be adequate or suitable for another crop and / or spacing.
- Always use pump as per design requirements. Consult Company or Authorised dealer in case of any change in pump HP.
- Do not change the water source without ascertaining the quality of water.
- Run system daily to keep continuous wetted strip. It also helps to avoid salt precipitation inside the tubing/ emitter.
- To avoid damage, protect the system properly while operating farm machineries in the field or carrying out any manual operation.
- Roll the laterals properly in coil form while removing the laterals from the field and ensure that no damage is done to GTO while folding lateral-tubes.
- Store the polytube/ piping properly stacked and away from rodents at levels higher than ground.
- It is advisable to conduct a 'rat campaigning' when rats/ mice is a nuisance.
- Don't forget to properly protect, safeguard the installation before burning the previous crop stalk (residue).
- Use only 100% Water Soluble Fertilizer during fertigation through MIS. Don't use any other type of fertilizer.
- Do not mix cow dung in suction piping to prevent / stop leakage in the foot valve, instead change rubber flap and / or clean the foot valve strainer properly.
- Power supplied (including current, voltage and frequency) to any electrical/electronics components (including controllers, control panel, pumps etc.) shall be regulated and/or as per the specifications/requirements.
- For further details see maintenance manual or contact us.

Note: for more details and queries if any, please contact our technical service division at jisl@jains.com

Guidelines for use of Drip Tapes

- Always run Drip Tape at nominal operating pressure. viz 0.7 kg/cm^2 (10psi) for wall thickness 6 and 8 mil and 1kg/cm^2 (14psi) for wall thickness more than or equal to 10 mil for 16 mm (5/8") size of tubing.
- The maximum operating pressure for Drip Tape shall not be more than 1.2 kg/cm^2 (from emitter functioning point of view) at the same time ensure that pressure shall not be too much below the recommended operating pressure.
- Minimum 100 micron filtration recommended. Exact filtration type and precision depends upon quality of source water.
- 6 mil and 8 mil tubings are suitable for one crop season. However useful life may be extended to 2 to 3 crop seasons subject to due care and maintenance.
- 10 mil onwards tubing can be used for multi-season subject to due care and maintenance.
- Subsurface use of Drip Tape may improve the life to multi season. Provided proper operational and maintenance guidelines are followed.
- Always position Drip Tape with emitter facing upwards.
- Use Tape Lock™ fittings for leak proof jointing.
- Safeguard Drip Tape from mechanical abuses like pulling the tubing, over-pressurising, movement of man/machine on the tubing. Remove sharp objects like stones, twigs etc. away from the tubing.
- De-coiling and coiling of Drip Tape shall be done carefully. It is recommended to use proper coiling equipment to avoid mechanical damages.
- Chemical treatment shall be done at frequent intervals. Frequency of chemical treatment can be decided by the quality of source water. Follow procedure given in Indian Standard IS 14791.
- Run the system daily to keep continuous wetted strip. Running the system daily helps to avoid salt precipitation inside the tubing/ emitter.
- Always keep the field wet (wetted strip) to reduce rodent problem.
- Use of chlorination or chemicals like trifluriline can help to avoid root intrusion problem in subsurface application of Drip Tape.
- Avoid water stresses (under irrigation) to avoid root intrusion problem. Always maintain the required moisture level within the root zone. Avoid over irrigation, which promotes weeds which may also lead to root intrusion problem.
- In subsurface application maintain proper depth of tubing. If tube is placed at too shallow depth, may lead to water & salts rising up to the surface due to capillary action & may result into root intrusion. If tube is placed too deep, may lead to water percolation beyond root zone.
- Always put sufficient air release cum vacuum breaker valves in the system. This will avoid emitter sucking the mud / soil.

Note: for more details and queries if any, please contact our technical service division at jisl@jains.com

Manufacturers' Limited Warranty

- Jain Irrigation Systems Limited. (hereinafter mentioned as JISL) warrants to its customers that its products will be free from defects in material and workmanship for a period of one year from the date of billing (the "Warranty Period") to the original buyer.
- During the warranty period, JISL will repair or replace solely at its option, any or only the part/s found to be defective or the entire product or refund part or full cost of the product at purchase price, which JISL finds to be defective due to material used or workmanship. Under no circumstances JISL, will be liable for payment of any other charges/liability whatsoever other than mentioned above.
- This warranty does not cover cost of repair or replacement of part and/or product due to misuse of a product, including use of a product for a purpose not intended as set forth in JISL's literature, or improper installation/maintenance, alteration, tampering, modification of the product/s, or unauthorised repairs.
- This warranty does not cover damages inflicted by insects, worms, beetles, crickets, rodents, squirrels and other pests/animals/creatures, root intrusion inside emitters or by miscreants and/or due to natural calamities such as hailstorm, lightening, flood, fire, earthquakes as well as theft, riot, civil commotion or war etc.,
- This warranty does not cover wear and tear caused by fluid abrasives and/or damage caused by overpressurisation of Filter Screen, Hydrocyclone Filter and Fertilizer Tank.
- This warranty does not cover consumable including filter elements required for routine maintenance.
- This is JISL's sole and exclusive warranty. JISL expressly excludes and disclaims all other warranties of any type, whether expressed or implied, including, without limitation, those of merchantability and fitness for a particular purpose.
- JISL will not be liable for any loss, liability, damage, cost or obligation, whether direct or indirect, including but not limited to replacement labor or operating costs, crop or vegetation loss, or any other consequential or incidental or punitive damages of any type, resulting from the use of its products.
- JISL does not assume liability for defective products or damage caused by defective products not manufactured or sold by it even though such products may be used in conjunction with JISL's products. This warranty is NOT deemed to be a consumer warranty, is not transferable, and does not extend to anyone other than those who purchase products from JISL for resale.
- It is the sole responsibility of the customer to notify the Authorized Dealer from whom the materials were purchased in writing within thirty days after discovery of an alleged defect in materials and workmanship. This warranty shall be void unless buyer delivers the defective product to the nearest JISL depo. at buyer's sole cost and in accordance with JISL's instructions.
- Conditions of Usages: This warranty is not valid if the irrigation system and/or its components are subjected or exposed to but not limited to any of the following:

a. Installed pump is not as specified in design or do not generate designed pressure and/or discharge.
b. Irrigation water source and or location is changed and is other than specified originally.
c. Operating pressures greater/less than those specified in the product specifications;
d. Irrigation water which has not been filtered to the level specified;
e. Irrigation water quality parameters are not up to the normal level as specified in Indian Standard IS :14791 (Table 1, clause 4.3);
f. System maintenance is not done as specified in Indian Standard IS 14791;
g. Chemical concentrates and/or mixtures and/or compounds, used or applied internally or externally to the product;
h. Mechanical abuse which are harmful to the individual components;
i. Changes made in the originally supplied system hydraulics;
j. Products/components are not stored properly;
k. Power supplied (including current, voltage and frequency) to any electrical/electronics components (including but not limited to controllers, control panel, pumps) is not regulated and/or not as per the specifications/requirements;
l. General/Maintenance Guidelines specified are not followed strictly.

DISCLAIMER: THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND WARRANTIES OF FITNESS OF PARTICULAR PURPOSE.

If you have any queries in regard to the above warranty or its applicability to our products please communicate with:
Jain Irrigation Systems Limited, Jain Plastic Park, N.H. No. 6, P.O. Box 72, Jalgaon, Zip Code: 425 001, Maharashtra, India.
Tel: +91-257-225 8011; Fax: +91-257-225 8111; E-mail: drip@jains.com;
Website: www.jains.com

Details of License and Product Performance Certifications

License Details

Sr. No.	Product / Product Group	Classification	Standard
1	Jain Tough Hose - Twin Line®	Polytube/Laterals	IS:12786
2	J-Turbo Line®	Emitting Pipe	IS:13488
3	J-Turbo Aqura®	Emitting Pipe	IS:13488
4	J-Turbo Key Plus™	Emitter	IS:13487
5	J-SC PC Plus®	Emitter	IS:13487
6	Jain Emitter®	Emitter	IS:13487
7	J-Loc®	Emitter	IS:13487
8	Turbo Seal®	Emitter	IS:13487
9	Mini In Line®	Emitter	IS:13487
10	Micro Dripper / Micro Tube	Micro Tube	IS:14482
11	Jain Impact Sprinkler, JIS2	Sprinkler	IS:12232-1
13	5035	Sprinkler	IS:12232-1
14	5022	Sprinkler	IS:12232-1
15	162/163	Sprinkler	IS:12232-1
16	R8 / R20	Sprinkler	IS:12232-1
17	Jain Super Flow® Filter	Screen / Strainer Filter	IS:12785
18	Jain Super Flow® Plus Filter	Screen / Strainer Filter	IS:12785
19	Super-Clean® - Y	Screen / Strainer Filter	IS:12785
20	Super-Clean® - L	Screen / Strainer Filter	IS:12785
21	Brush-Clean™	Screen / Strainer Filter	IS:12785
22	Turbo-Clean®	Screen / Strainer Filter	IS:12785
23	Disclean® - PL	Screen / Strainer Filter	IS:12785
24	Disclean® - ML	Screen / Strainer Filter	IS:12785
25	Clean-Master®	Sand / Media Filter	IS:14606
26	Filtro-Master™	Sand / Media Filter	IS:14606
27	Jain Hydrocyclone Filter	Sand Separator / Hydrocyclone	IS:14743
28	uPVC Pressure Pipes	PVC Pipe	IS:4985
29	uPVC Fabricated Fittings	Fabricated Pipe Fittings	IS:10124
30	PVC Fittings (IMF)	Moulded Pipe Fittings	IS:7834
31	Jain uPVC Well Casing & Screen Pipe	Casing & Screen Pipes	IS:12818
32	Jain Sure-Loc® Well Casing & Screen Pipes	Casing & Screen Pipes	IS:12818
33	Jain PE Pipe®	PE Pipe	IS:4984
34	Quick-Connect® PE Pipe and fittings	Sprinkler Pipe	IS:14151-1&2
35	uPVC Sewerage Pipes	Sewerage Pipes	IS:15328
36	uPVC SWR Pipes - B-Sure™	Sewerage Pipes	IS:13592
37	uPVC SWR Fittings - B-Sure™	SWR Fittings	IS:14735

IS: Indian Standard.
Note: Wherever applicable all products mentioned herein will be supplied as per relevant standard with latest amendments.

Product Performance Certification

Sl.	Product/Product Group	Certified by
1	Jain Tough Hose - Twin Line® (Drip Polytube)	(a) CIT, Fresno, CA, USA; (b) CIPET, India (c) ICAR, India
2	Jain Tough Hose - Twin Line® 13mm IDx1.2mm wall thickness 13mm IDx1.5mm wall thickness 16mm IDx1mm wall thickness	(a)CIT, Fresno, CA, USA: (b) ICAR, India
3	Emitting Pipe - J-Turbo Line®	(a) CIPET, India; (b) Cemagref, France
4	Emitting Pipe - J-Turbo Aqura®	(a) Cemagref, France
5	Chapin - Twin-Wall™ Deluxe	(a) CIT, Fresno, CA, USA; (b) Cemagref, France
5	Chapin - Twin-Wall™ Marathon	(a) CIT, Fresno, CA, USA; (b) Cemagref, France
6	Chapin - Twin-Wall™ BTF	(a) CIT, Fresno, CA, USA; (b) Cemagref, France
7	Jain Emitter®	(a) CIT, Fresno, CA, USA; (b) CIPET, India; (c) BIS, India; (d) Cemagref, France
8	J-SC PC®	(a) CIT, Fresno, CA, USA; (b) CIPET, India; (c) BIS, India; (d) Cemagref, France
9	J-Flow®, 8 lph	(a) CIT, Fresno, CA, USA
10	J-Loc®, 8 lph	(a) CIT, Fresno, CA, USA; (b) Cemagref, France
11	Jain Impact Sprinkler	(a) CIPET, India; (b) NTH, India
12	Rain Gun - Model TWIN 95, 162, 163	(a) CIPET, India
13	Jain ARV-C®	(a) CIT, Fresno, CA, USA
14	Jain Super Flow®	(a) CIPET, India; (b) BIS, India (c) CIT
15	Super-Clean®	(a) CIPET, India; (b) BIS, India
16	Media Filter - Clean Master®	(a) CIPET, India
17	PVC Pressure Pipe	(a) CIPET, India; (b) SGS, India
18	PVC Fittings (IMF)	(a) CIPET, India
19	PVC Fabricated Fittings	(a) CIPET, India
20	PVC Well Casing and Screen Pipes	(a) WRAS, U.K.; (b) CIPET, India; (c) DVGW, Gmbh
21	Quick-Connect® PE Pipes	(a) CIPET, India; (b) SGS, India
22	Jain PE Pipe®	(a) CIPET, India; (b) SGS, India; (c) Intox, India
23	PE Pipes & Fittings for potable water supply	(a) WRc, U.K.; (b) SGS, India; (c) ISC, *Austrailia*

CIT: Center for Irrigation Technology, California State University, Fresno, CA, USA.
CIPET: Central Institute of Plastics Engineering and Technology, Chennai, India.
BIS: Bureau of Indian Standards, New Delhi, India.
WRAS: Water Regulation Advisory Scheme, U.K.
NTH: National Testing House, Govt. of India, Kolkata, India.
SGS: SGS India Pvt. Ltd., India.
Intox: Institute for Toxicological Studies, India.
Cemagref: Cemagref, France.
ICAR: Indian Council of Agricultural Research, India.
ISC: International Standards Certifications Pty, Ltd., Austrailia.

National Test House
GoI, Kolkata

Quality is way of Life
Jain Irrigation, Plastic Park is an ISO 9001 & ISO 14001 Certified Company

ISO-9001 from TUV NORD, Germany certifies us for establishment of TUV Certificate procedure and applies a quality system for Design, Manufacture & Supply of Drip (Micro) & Sprinkler Irrigation Systems & Components consisting of Polyethylene Drip Laterals, Emitting Pipes, Drip Tapes, Drippers, Micro Sprinklers, Jets, Foggers, Filtrations & Fertigation Equipment, Valves, Chemical Injector, Poly Fitting & Accessories as well as Sprinkler Pipes & Fittings.

ISO-9001 from TUV NORD, Germany certifies us for establishment of TUV Certificate procedure and applies a quality system for Design, Manufacture, Supply of PVC Pipes & Fittings for various applications, PVC Casing / Screen Pipes & Fittings, SWR Pipes & Fittings, Polyethylene (HD/MD/LD) Pipes & Fittings for various applications, Polyethylene Tubes. As well as Telecom Ducts, Conduit & Plumbing Pipes & Fittings.

ISO-14001 from TUV NORD, Germany certifies us for establishment of TUV Certificate procedure and applies an environmental management system for design manufacture and supply of Micro (Drip & Sprinkler) Irrigation Systems & Components, Plastic (PVC & PE) Piping & Fittings, Plastic (PVC & PC) Sheets for various applications including Tool Room and Engineering Services for internal use.

Jain Irrigation Systems Ltd. are the owners of Registered Trade Mark

J-Turbo Aqura®, Jain Turbo Slim®, Jain Turbo Flat®, Jain Drip Light®, J-Turbo Line®, Twin Line®, Turboline PC®, Turbo Seal®, Turbo Seal-IL®, Turbo-Mini®, Vari Flow®, J-Loc®, Jain Emitter®, J-SC PC®, J-SC-PC-Plus®, Mini in Line®, Tickle Guard®, Turbo Mist®, Jain ARV-C®, Jain PVC Ball Valves®, Jain PVC Foot Valves®, Jain Super Flow®, Disclean®, Turbo-Clean®, Clean-Master®, Spin Clean®, Filt-O-Clean®, Super-Clean®, Quick - Connect®, J-QRC®, Sure-Loc®, Perma Fix®, Quick Fix®, Silicoat®, Easy-Fix®, Jain Spiro-Flo®, Jain PE Pipe®, More Crop Per Drop®, Small Ideas. Big Revolutions.®, Key to Prosperity®, Water is Life®.

Jain Irrigation Systems Ltd. are the owners of Trade Mark

Chapin™, Twin-Wall™, Marathon Tape™, Drip Hose™, Jain Turbo Tape™, J-Turbo Key Plus™, J-Flow™, Jain Turbokey™, Tape Lock™, Sure Loc Plus™, Micro Flapper™, Turbo Cascade™, Smart-Clean™, Brush-Clean™, Filtro-Master™, Easy - Fix™, Drip Lock™, Mini Spray Jet™, Rotoclean™, Trickle-Stik™, Spray-Tube™, Rainport™

Brands

Design of following products has been registered as of the numbers mentioned in pursuance of and subject to the provision of the Design Act - 1911, and the Design Rules - 1933, India.

Sure-Loc® : Pipe Joint Design Registration No. 183473
Jain Spiro-Flo®: Pipe - Product Design Registration No. 183474
Jain ARV-C® : Air Release Valve Product Design Registration No. 183475
J-SC-PC-Plus® : Dripper Product Design Registration No. 183476
Spin Clean® : Filter Product Design Registration No. 188843
J-Turbo Key Plus™ : Dripper Product Design Registration No. 188844
Turbo Seal® : Dripper Product Design Registration No. 191025
Turbo Seal PC: Dripper - Product Design Registration No. 191026
Sure Loc Plus™: Pipe Joint - Product Design Registration No. 202301
Auto Flush Filter: Filter - Product Design Registration No. 202302
Quick Connect® - Fitting - Product Design Registration No. 205544
Smart Clean™ - Fiter Element - Product Design Registration No. 206593
Jain Tough Hose - Twin Line® - Product Design Registration No. 206594
Clean-Master® Filter Manifold - Product Design Registration No. 206592

Copy Right

Jain Irrigation Systems Ltd. has the statutory right to use the artistic work of two yellow or golden or red parallel stripes on a black tube for irrigation, under the Copyright Act 1957, India.

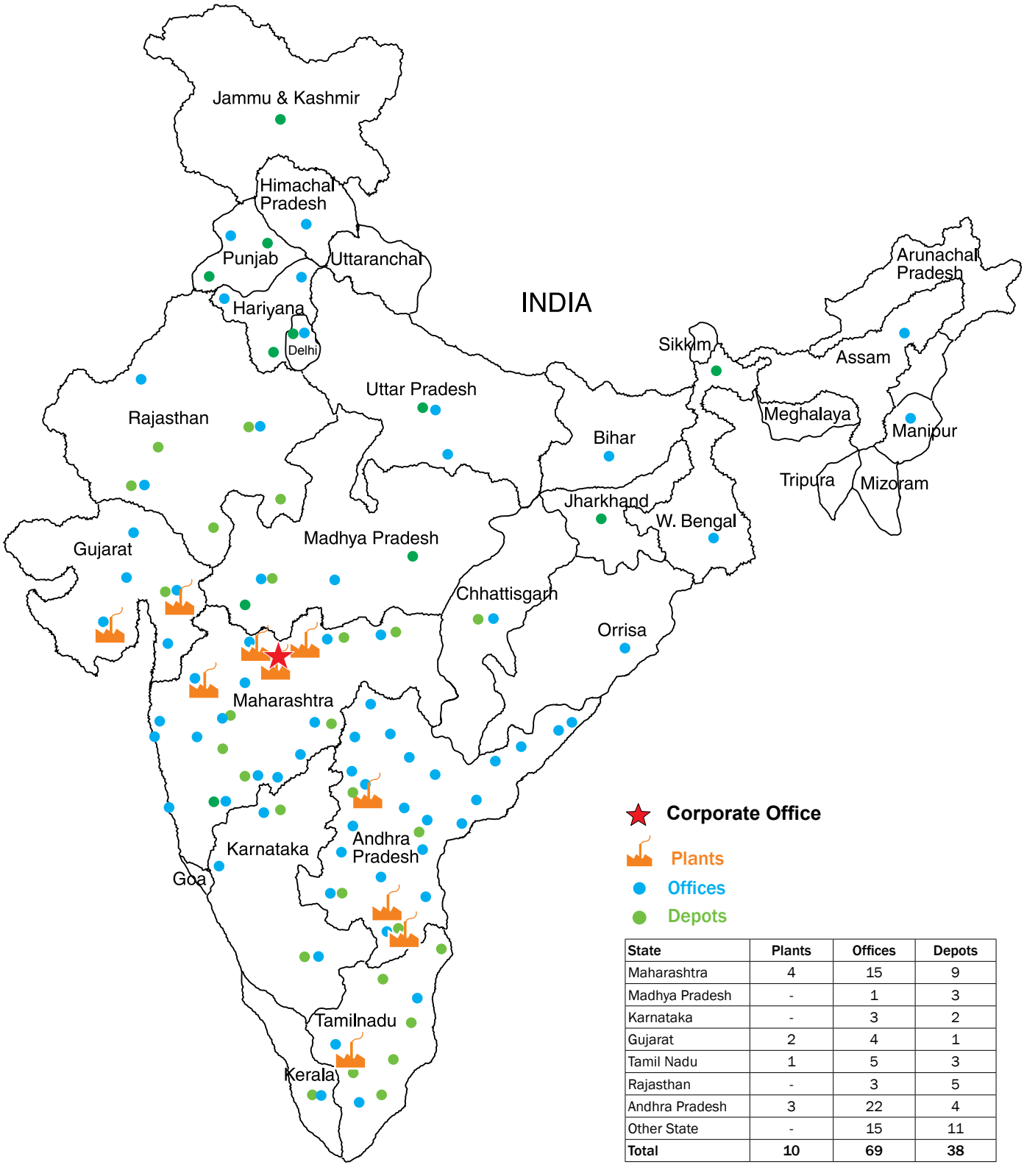
Patent

Patent pending for Sure Loc Plus™ Pipe joint.
Patent pending for Snap Fit Joint

Sole Distributorship

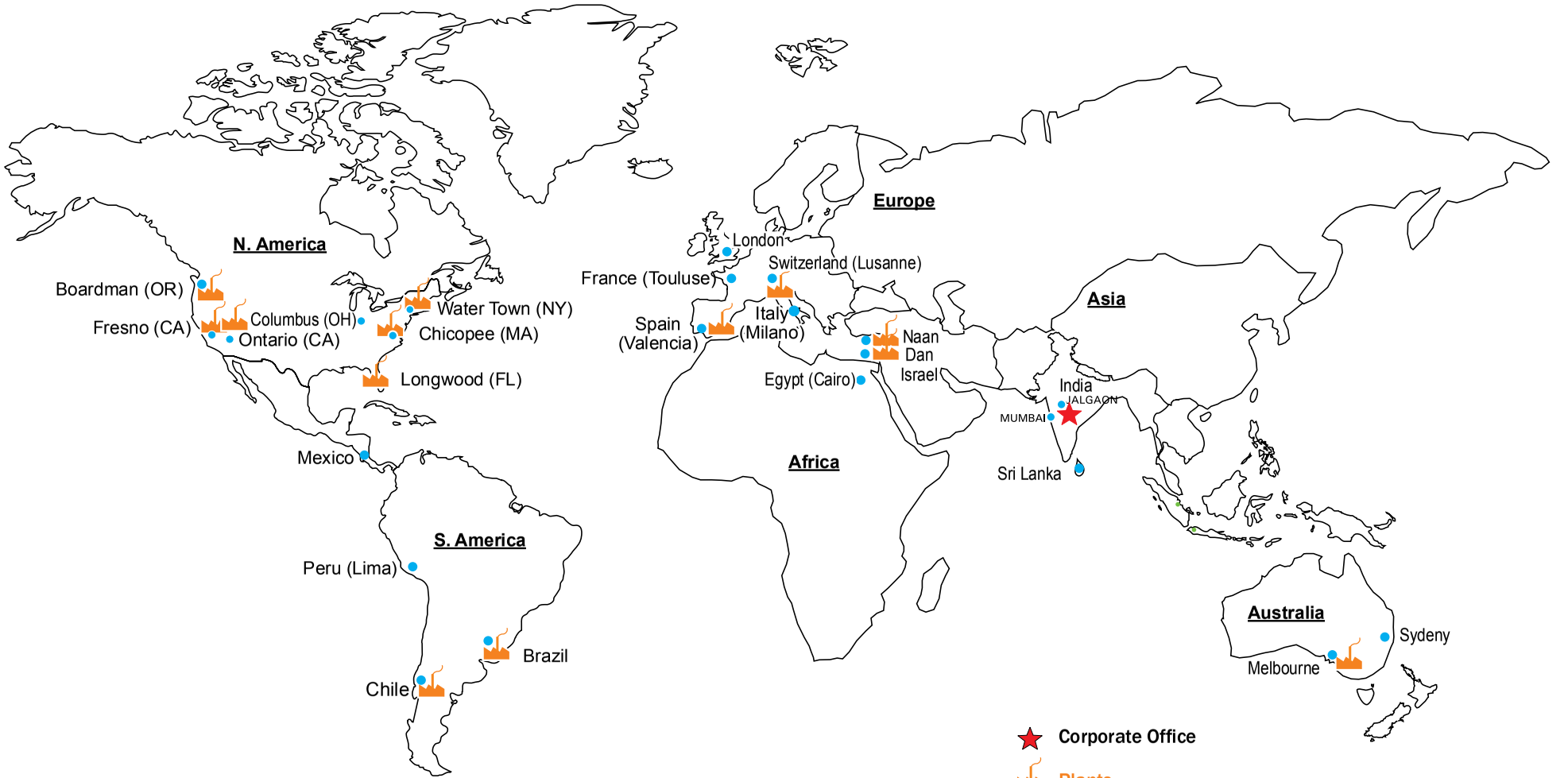
M/s. Komet Irrco-Italy, for their complete range of Sprinklers and Rain Guns.
M/s. Hunter Irrigation-USA, for their complete range of Irrigation Products.
M/s. Tefen Manufacture & Marketing Plastic Products Ltd. for their complete range of fertigation/dosing pumps.
M/s. Galcon-Bakarim Agricultural Co-Operative Society Ltd. for their complete range of computerized control systems & other products.

Sales & Service - India Network



State	Plants	Offices	Depots
Maharashtra	4	15	9
Madhya Pradesh	-	1	3
Karnataka	-	3	2
Gujarat	2	4	1
Tamil Nadu	1	5	3
Rajasthan	-	3	5
Andhra Pradesh	3	22	4
Other State	-	15	11
Total	**10**	**69**	**38**

Sales & Service - Worldwide Network



Continent	Plants	Offices	Agents/Distributors
Australia	1	2	150
Middle East	-	-	16
Europe	2	5	253
South America	2	3	200
North America	6	7	257
Africa	-	1	15
Asia	2	3	5
Total	**13**	**21**	**891**

Awards and Accolades

Awards and Recognition are but milestones which remind us of our responsibility and obligation to do better in future than what we did in the past. We must not bask in the glory of the past and be complacent. If anything, these should inspire us to raise our level of commitment for achieving or surpassing our stated objectives. Search for innovation, exceptional merit and outstanding performance in the field of Agriculture has been unending. It must remain so without bounds.

Awarding Institutions-wise no. of Awards

S.N.	Given by			Total
1	Government of India			90
	Sponsored by	Instituted by	Nos.	
	Ministry of Commerce & Industry	Min. of Commerce & Ind.	4	
	Ministry of Commerce	'Chemexcil'	3	
	Ministry of Commerce & Industry	'Plex-concil'	72	
	Ministry of Commerce & Industry	'APEDA'	7	
	Ministry of Commerce & Industry	'DSIR'	2	
	GOI	BIS	1	
	GOI	ECGC	1	
2	Government of Maharashtra			25
3	International Bodies			2
4	Indian Institutes			17
	Total			134

Business Unit-wise Number of Awards

S.N.	Given to	Total
1	Papain	20
2	Plastic Piping Systems	21
3	Plastic Sheet Products	42
4	Hi-Tech Agri Inputs (MIS, SIS and Tissue Culture)	32
5	Corporate Support / Services	06
6	Agri Processed Products (OVD + FFP)	12
7	Granite	01
	Total	134

Awards Received by the Founder Chairman B.H. Jain

S.N.	Given by	Total
1	International Bodies	2
2	National Level	16
3	State Level	8
	Total	26

Head Office

Jain Plastic Park, P.O. Box: 72, Jalgaon - 425 001. (MS) India.
Tel +91 257 225 8011; Fax +91 257 225 8111; E-mail jisl@jains.com

Plants in India

Jain Plastic Park (Jalgaon)
Tel: +91 257 225 8011; Fax: +91 257 225 8111;
E-mail: jisl@jains.com

Jain Agri Park, Jain Hills (Jalgaon)
Tel: +91 257 226 0011; Fax: +91 257 226 1133;
E-mail: agripark@jains.com

Jain Food Park, Jain Valley (Jalgaon)
Tel: +91 257 226 0033; Fax: +91 257 226 1144;
E-mail: foodpark@jains.com

Bhavnagar
Tel: 09428820461;
Email: jainbhavnagar@jains.com

Chittoor (Food Plant) - Unit No. 01
Tel: +91 8572 273 703; Fax: +91 8572 273663;
E-mail: foodchittoor1@jains.com

Chittoor (Food Plant) - Unit No. 02
Tel: +91 8572 273 185; Fax: +91 8572 273 186;
E-mail: foodchittoor2@jains.com

Dindori
Tel: +91 2557 222 944; Fax: +91 2557 221 399;
E-mail: jaindindori@jains.com

Hyderabad
Tel: +91 8685 277 302; Fax: +91 8685 277 305;
E-mail: hyderabaddepot@jains.com

Udumalpet
Tel: +91 4252 278 401; Fax: +91 4252 278 403;
E-mail: jainudumalpet@jains.com

Vadodara
Tel: +91 2662 267 281; Telefax: +91 2662 267 363;
E-mail: jainbaroda@jains.com

Offices in India

Ahmedabad
Telefax: +91 79 264 21704;
E-mail: jainahmedabad@jains.com

Ahmednagar
Tel: +91 241 241 5480; Fax: +91 241 241 5480;
E-mail: jainahmednagar@jains.com

Amravati
Tel: +91 721 267 4737; Fax: +91 721 267 0363;
E-mail: jainamravati@jains.com

Aurangabad
Tel: +91 240 234 5136; Fax: +91 240 233 5846 PP;
E-mail: jainaurangabad@jains.com

Anantapur
Tel: +91 8554 274 226; Fax: +91 8554 274 227;
E-mail: jainanantapur@jains.com

Bangalore
Tel: +91 80 253 61257; Fax: +91 80 255 48921;
E-mail: jainbangalore@jains.com

Belgaum
Tel: +91 831 245 0022;
E-mail: jainbelgaum@jains.com

Bijapur
Telefax: +91 8352 265 411;
E-mail: jainbijapur@jains.com

Chennai
Tel: +91 44 243 39794; Fax: +91 44 243 28710;
E-mail: jainchennai@jains.com

Coimbatore
Tel: +91 422 254 7318; Fax: +91 422 254 0365;
E-mail: jaincoimbatore@jains.com

Chittoor
Tel: +91 8572 226 261;
E-mail: jainchittoor@jains.com

Hyderabad
Tel: +91 40 276 14474; Fax: +91 40 276 16696;
E-mail: jainhyderabad@jains.com

Indore
Tel: +91 731 280 2835; Fax: +91 731 406 6011;
E-mail: jainindore@jains.com

Jaipur
Telefax: +91 141 220 3515;
E-mail: jainjaipur@jains.com

Jalgaon
Tel: +91 257 222 0077; Fax: +91 257 222 1177;

Latur
Tel: +91 2382 224 098;
E-mail: dongre.subhash@jains.com

Lucknow
Tel: +91 522 402 1067; Fax: +91 522 278 7937 PP;
E-mail: jainlucknow@jains.com

Mumbai
Tel: +91 22 226 10011; Fax: +91 22 226 21177;
E-mail: jainmumbai@jains.com

Nagpur
Tel: +91 7104 645 025; Fax: +91 7104 222 132 PP;
E-mail: jainnagpur@jains.com

Nanded
Tel: +91 2462 274 046; Fax, +91 2462 223 952 PP;
E-mail: jainnanded@jains.com

Nasik
Tel: +91 253 259 7503;
E-mail: jainnasik@jains.com

New Delhi
Tel, +91 11 264 93159; Fax: +91 11 417 48409;
E-mail: jainnewdelhi@jains.com

Pandharpur
Tel: +91 2186 227 328;
E-mail: pangul.dilip@jains.com

Pune
Tel: +91 20 254 34872; Fax: +91 20 254 11920;
E-mail: jainpune@jains.com

Ratnagiri
Tel: +91 2352 230 033; Fax: +91 2352 229 461;
E-mail: jainratnagiri@jains.com

Sangli
Tel: +91 233 242 2434; Fax: +91 233 242 2488;
E-mail: jainsangli@jains.com

Solapur
Tel: +91 217 235 7395; Telefax: +91 217 235 7220;
E-mail: jainsolapur@jains.com

Thane
Tel: +91 22 254 43992; Fax: +91 22 254 43976;
E-mail: jainthane@jains.com

Vadodara
Tel: +91 265 235 6727; Fax: +91 265 235 6525;
E-mail: jainvadodara@jains.com

Vijaywada
Tel:+91 866 284 3308; Fax: +91 866 284 3244;
E-mail: vijaywadadepot@jains.com

Plants in Overseas

Jain Irrigation Inc. [Fresno, California]
Tel: +1 800 695 7171; or (559) 485 7171;
Fax: +1 888 434 3747; or (559) 485 7623;
Email: info@jainsusa.com
Web: www.jainsusa.com.

Jain Irrigation Inc. [Winter Haven, Florida]
Tel: +1 800 848 8153; or (863) 294 1900;
Fax: +1 800 533 6421; or (863) 299 6421;

Jain Irrigation Inc. [Ontario, CA]
Tel: +1 909 3955200; +1 800 828 9919;

Chapin Watermatics, Inc. [Watertown, New York]
Tel: +1 800 242 7467; or (315) 782 1170;
Fax: +1 866 329 2427; or (315) 785 0470;
E-mail: ngupta@chapindrip.com
Web: www.chapindrip.com.

Cascade Specialties Inc. [Onian Plant]
Tel: +1 541 481 2522; Fax: +1 413 593 8955;
E-mail: info@cascadespec.com
Web: www.cascadespec.com

NuCedar Mills Inc. [Chicopee, MA]
Tel: +1 866 393 8883; or +1 413 593 8883;
E-mail: info@nucedar.com;
Web: www.nucedarmills.com.

NaanDanJain Irrigation Systems [Israel]
Tel: +972 8 9442180; Mob: +972 546 741120;
E-mail: mkt@naandanjain.com

NaanDanJain [Australia]
Tel: +61 3 976 71222; Fax: +61 3 976 71223;
E-mail: marketing@naandanjain.com.au

NaanDanJain [Brazil]
Tel: +55 1 935 714646; Fax: +55 1 935 541588;
E-mail: alfredo@naandan.com.br

NaanDanJain [Spain]
Tel: +34 9 505 82121; Fax: +34 9 505 82099;
E-mail: pedros@naandanjain.es

Offices in Overseas

Jain (Americas) Inc. [Columbus, OH]
Tel: +1 614 850 9400;
E-mail: murali@jainamericas.com

Jain Irrigation Inc. [Ontario, CA]
Tel: +1 800 777 6162; or +1 909 395 5201;

Jain (Europe) Limited [London, UK]
Tel: +44 20 8326 5900; +44 20 83265907;
E-mail: ruchi.kapoor@jaineurope.com

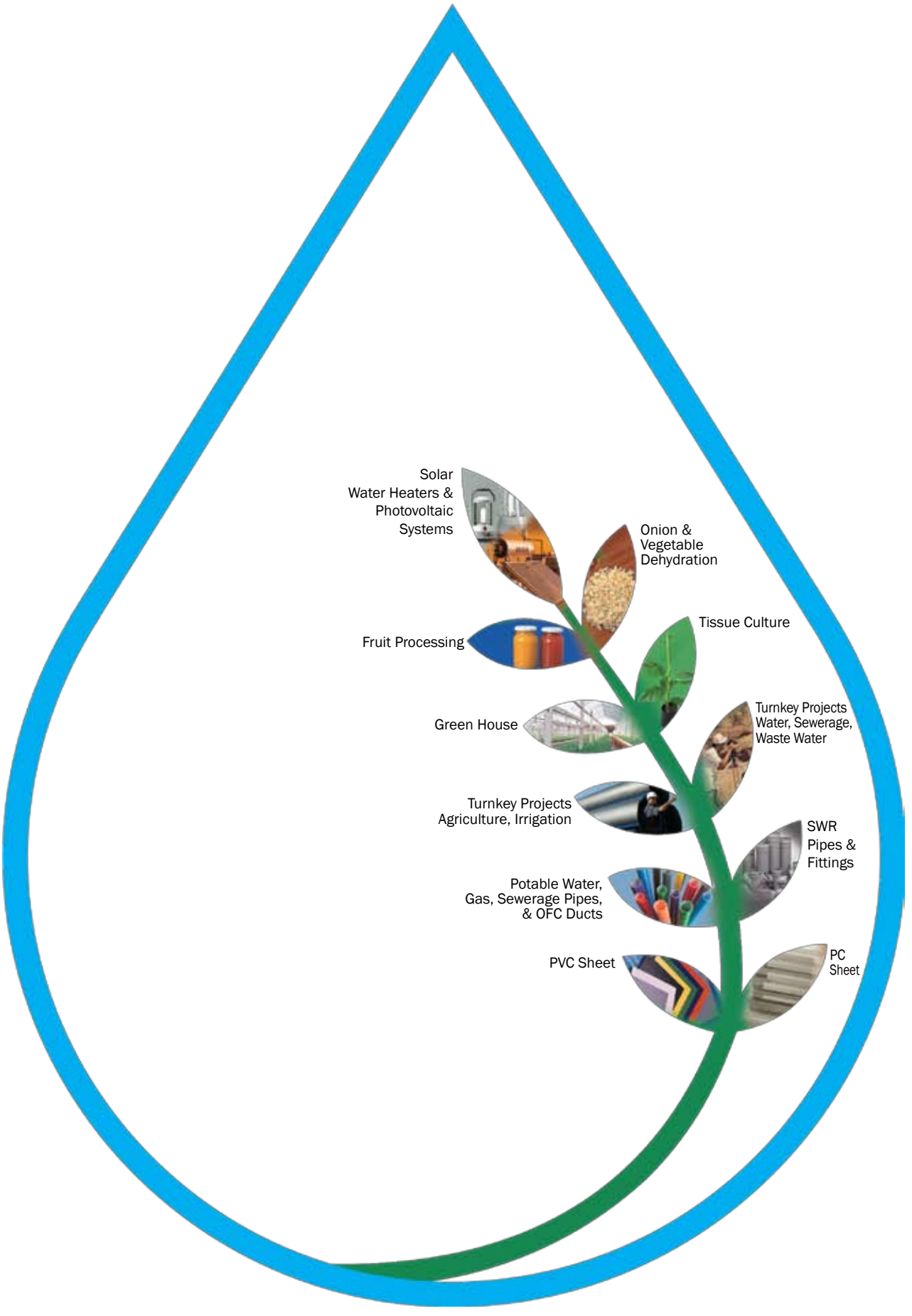
France [Touluse]
Tel: +33 5 61998509; Fax: +33 5 61992738;
E-mail: contact@naandanjain.fr

Italy [Milano]
Tel: +390 255603877; Fax: +390 255601130;
E-mail: info@naandanjain.it

Mexico
Tel: +52 5959 251240/1; Fax: +52 5959251542;
E-mail: info@naandan.com. mx

Peru [Lima]
Tel: +51 14402322; Fax: +51 14402322;
E-mail: mauricio@naandanjain-peru.com

There is more to Jain Irrigation than irrigation



Jain Irrigation Systems Ltd.

Jain Plastic Park, N.H.06, P.O. No. 72, Jalgaon - 425001 M.S. (India).
Tel: +91-257-2258011; Fax: +91-257-2258111;
E-mail: jisl@jains.com; Web: www.jains.com