

J-Turbo Line®

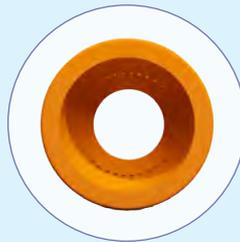


Features & Benefits



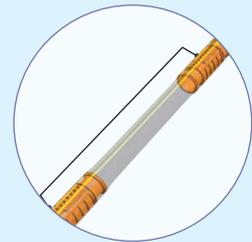
Cylindrical Dripline

Cylindrical dripline with long and wide labyrinth.



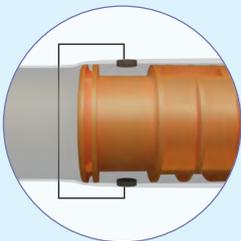
Multiple Inlet Filters

Precision multiple inlet filters placed opposite to each other provides large filtration area and ensures supply of filtered water even if filter is partially plugged due to contamination.



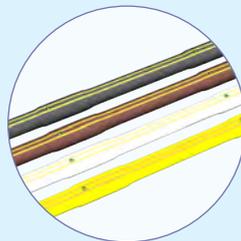
Manufactured with Most Modern, State-Of-the-Art Equipment.

It's computerised continuous online quality control monitors emitter spacing and precision in outlet drilling. Thus ensures reliable quality and consistent performance.



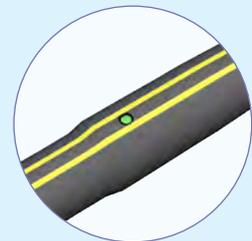
Laser Drilled Multiple Outlet Holes

Precision laser drilled outlet gives uniform and clear opening. Multiple outlets breaks vacuum, prevents sand suction. Standard 2 outlet. Multiple outlets on same orifice bath or on opposite orifice bath can be supplied on demand.



Flexibility in color selection

Black - for agriculture,
Brown - for landscape application,
White - for greenhouse application,
Purple - for reclaimed water application.



Marked with Two Parallel Yellow Stripes 'Twin-Line'

Our copyright marking of two parallel yellow line 'Twin Line®' assures a best quality product.

J-Turbo Line®

Additional Features

Manufactured from Special Grade Virgin Plastic Material

Makes the tubing durable and gives best environmental stress crack resistance (ESCR).

Stringent Quality Checks

Each batch is tested for stringent quality parameter. Conforming to Indian standard IS 13488:2008 and international standard ISO 9261:2004.

Excellent CV_m, manufacturer's coefficient of variation

Maintains close dimensional tolerances to ensure best field emission uniformity.

Twin Blue Line for Class 1 Tube

Special blue colored Twin Line tube is supplied.

Applications

- Ideal for irrigation of 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.
- Used for widely spaced horticultural plants like mango, citrus, guava, apple etc. in group spacings.

Specifications

- **Emitter Spacing** : Standard emitter spacing of 20, 30, 40, 50, 60, 75, 90, 100, 120 and 150 cm. Any other emitter spacing and group spacing can be supplied on demand.
- **Sizes** : 16 mm nominal diameter.
- **Discharges** : J-Turbo Line 16 mm : 2.2 and 4 at working pressure of 1 kg/cm² (0.63 and 1.06 gph at 14.2 psi)

Operating Specifications

- Nominal operating pressure 1 kg/cm². Can be used for other pressure ratings (lower/higher) after consulting company representative and with due care for filtration
- Recommended to use specially designed emitting pipe fittings.
- Filtration recommendation 100 micron or less. Actual quality of filtration can be decided by quality of source water. Please refer to our "Maintenance Manual" for further details.
- For subsurface application, install vacuum breaker valves on the submain as well as on the collective drain to avoid soil suction during system shutdown.



J-Turbo Line®

Technical Specifications for Tubing - Metric

Nominal Dia. (mm)	Inside Dia (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, 300, 400

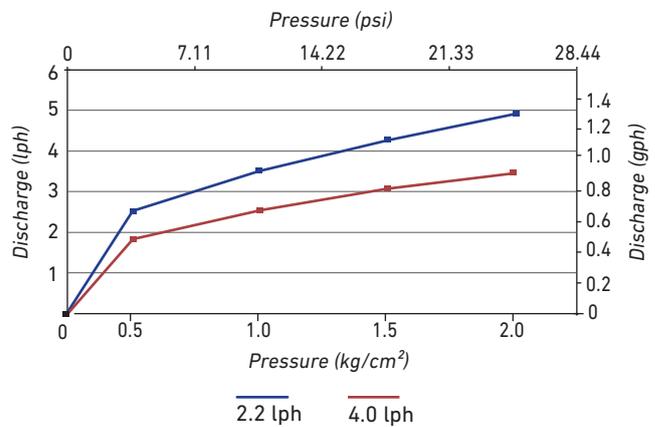
* Dimensions are as per Indian Standard IS 13488:2008.

Technical Specifications for Tubing - US

Nominal Dia. (inch)	Inside Dia (inch)	Minimum Wall Thickness (inch)				Standard Coil Length (ft)
		Class 1	Class 2	Class 3	Class 4	
7/8	7/8	-	0.035	0.039	0.051	328, 820, 984, 1312

Performance Graph- J-Turbo Line

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



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

Technical Specifications for emitter - Metric

*Discharge (lph)	Emitter exponent (x)	Flow coefficient (k)	Coefficient of Mfg. Variation (CVm) ≤	Flow Path Dimensions (mm)			Inlet Filter Area mm²	Size of Filter Openings (mm x mm)
				Length	Width	Depth		
J-Turbo Line® 16mm ND (14.2mm ID)								
2.2	0.48	2.2	4	125.3	1.02	1.30	14.63	0.35 x 1.9
4.0	0.48	4.0	4	118.1	1.24	1.32	19.00	0.5 x 1.9

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

Technical Specifications for emitter - US

*Discharge (gph)	Emitter exponent (x)	Flow coefficient (k)	Coefficient of Mfg. Variation (CVm) ≤	Flow Path Dimensions (inch)			Inlet Filter Area inch²	Size of Filter Openings (inch x inch)
				Length	Width	Depth		
J-Turbo Line® 16mm ND (14.2mm ID)								
0.63	0.48	0.177	4	4.93	0.040	0.051	0.023	0.014 x 0.075
1.06	0.48	0.296	4	4.93	0.049	0.052	0.030	0.020 x 0.075

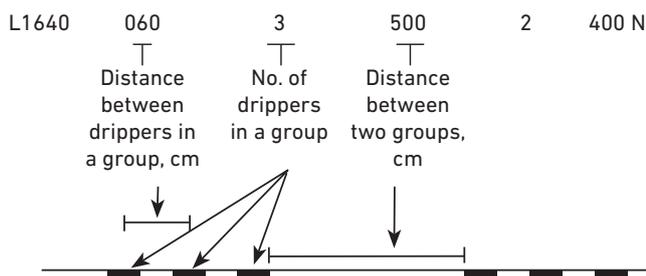
Flow equation $q = kHX$, $q =$ discharge, gph, $H =$ Pressure head, psi, $x =$ Emitter exponent

Ordering Specifications

L	XX	XX	XXX	X	XXX	N	X
	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	Color of the tube Blank - Standard Black with 'Twin Line' B - Brown (Landscape) W - White (Greenhouse) P - Purple (Reclaimed Water)

Example : L16400602400N - 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 black tubing with 'Twin Line'.

- 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 (minimum three drippers) as,



Note

- J- Turbo Line® is manufactured with ID control and declared OD are nominal. If you have specific ID or OD requirement, please mention while ordering.
- J- Turbo Line® can be supplied in any other wall thickness and pressure ratings.

J-Turbo Line® Super Emitter



Maximum Recommended Length (m), 16mm (14.2mm ID), Class 2 at 1 kg/cm² inlet pressure

Dripper Spacing		15 cm	20 cm	30 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm
Slope, %		Length, m								
Discharge: 2.2 lph										
10 % discharge variation	2	33.6	39.6	49.5	57.2	63.0	67.8	73.5	78.3	81.0
	1	36.1	43.4	55.8	66.4	75.5	84.0	94.5	103.5	110.0
	0	38.7	47.2	62.7	76.4	89.0	101.4	117.8	134.1	145.0
	-1	41.2	50.8	69.3	86.4	102.0	118.2	141.0	163.8	180.0
	-2	43.6	54.6	75.6	96.0	114.5	133.8	162.0	190.8	210.0
7.5 % discharge variation	2	29.4	34.4	42.6	48.4	53.0	56.4	60.8	63.9	65.0
	1	32.2	38.4	49.5	58.4	66.0	72.6	81.8	89.1	94.0
	0	34.9	42.6	56.7	69.2	80.5	91.2	106.5	121.5	131.0
	-1	37.8	46.6	63.9	80.0	95.0	109.8	132.0	153.9	169.0
	-2	40.5	50.6	70.8	90.4	108.5	127.2	154.5	181.8	201.0
Discharge: 4.0 lph										
10 % discharge variation	2	25.0	29.8	38.1	44.4	50.0	54.6	61.5	66.6	70.0
	1	26.4	31.8	41.4	49.6	57.0	63.6	72.8	81.9	87.0
	0	27.7	33.8	44.7	54.4	63.5	72.6	85.5	99.0	107.0
	-1	28.9	35.6	48.3	59.6	70.5	81.0	97.5	115.2	126.0
	-2	30.3	37.6	51.6	64.4	77.0	90.0	109.5	130.5	143.0
7.5 % discharge variation	2	22.2	26.4	33.3	38.4	43.0	46.8	51.8	55.8	58.0
	1	23.7	28.4	36.9	44.0	50.0	55.8	63.8	71.1	76.0
	0	25.0	30.6	40.5	49.2	57.5	65.4	77.3	89.1	96.0
	-1	26.5	32.6	44.1	54.8	65.0	75.0	90.8	107.1	117.0
	-2	27.9	34.8	48.0	60.0	72.0	84.0	102.8	123.3	136.0

Note: + slope : Uphill, - slope : Downhill

