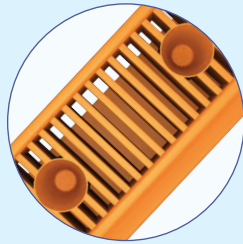


Jain Turbo Excel® Plus



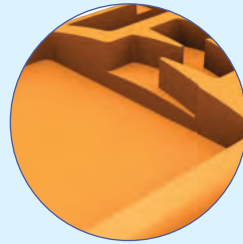
Innovative Cascade Labyrinth

Hydrodynamically designed Cascade teeth structure helps to create double flow regime and turbulent cyclone in the dripper. This helps in continuous flushing of particles.



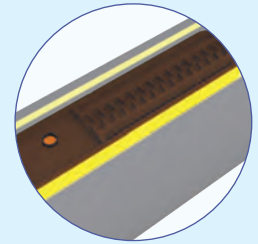
Three Dimensional Inlet Filter

Unique 3-D filtration surface (having length, width and depth) enable clog free operation even under high clog risk conditions.



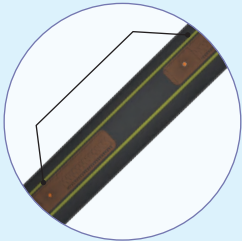
Prevention of Sand Suction

Weir structure to prevent entry of sand particles in flow path



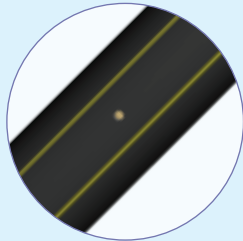
Laser Drilled Outlet Hole

Precision laser drilled outlet gives uniform and clear opening.



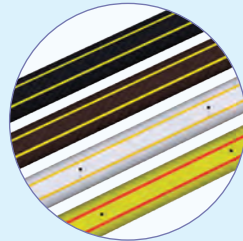
Manufactured With Most Modern, State-Of-The-Art Equipment.

It's computerised continuous online quality control monitors emitter spacing and precision in outlet punching for 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 to provide better clog resistance.



Flexibility in Color Selection

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



Available in Spool Packaging Options with Hologram

Freight saver option on carton spool Jain Turbo Excel® Plus with Hologram

Jain Turbo Excel® Plus

Additional Features

Excellent CVm, manufacturer's coefficient of variation

Maintains close dimensional tolerances to ensure lowest CVm and best field emission uniformity.

Quality Come First

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

Manufactured from special grade virgin plastic material

- Makes the tubing durable and gives best environmental stress crack resistance (ESCR).
- Twin Blue Line for Class 1 Tube
- Special blue colored Twin Line tube is supplied.

Rodent Deterrent optional

Can also be supplied with optional rodent deterrent feature which protects tube from rats.

Applications

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

Specifications

- **Nominal Discharges** : 0.8, 1.2, 1.6, 2.0 and 4.0 lph at 1 kg/cm² pressure (0.20, 0.32, 0.42, 0.53 and 1.06 gph at 14.2 psi pressure).
- **Emitter Spacings** : Standard emitter spacing of 15, 20, 30, 40, 50, 60, 75, 90, 100, 120 and 150 cm. Any other emitter spacings and group spacings can be supplied on demand.
- **Sizes** : Available 12, 16, 17, 18, 19, 20, 23 and 25 mm nominal diameter as per metric standard. Also available in 5/8", 7/8", 9/8" and 1-3/8" nominal diameter as per US standard.

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 130 micron or less. Actual quality of filtration can be decided by quality of source water. Please refer to our "Maintenance Manual" for more details.
- For better clogging resistance always keep the dripper in upright position.
- For subsurface application, install vacuum breaker valves on the submain as well as on the collective drain to avoid soil suction during system shutdown.



Jain Turbo Excel® Plus

Technical Specification for Tubing - Metric

Nominal Dia. (mm)	Inside Dia.(mm)	Minimum Wall Thickness (mm)			Standard Length (m)
		Class 1	Class 2	Class 3	
*12	10.5	0.4	0.6	0.8	400, 700
*16	14.2	0.5	0.7	1.0	500
16	13.9	-	0.9	1.0	500
17	15.3	-	-	0.9	-
18	15.7	-	-	0.9	-
**19	18.9	-	0.8	-	-
*20	18.0	0.7	0.9	-	400, 250
23	20.8	-	0.9	-	-
*25	22.6	0.9	-	-	-

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

** Dimensions as per Australian standard AS 2698.

Technical Specification for Tubing - US

Nominal Dia. (Inch)	Inside Dia. (Inch)	Minimum Wall Thickness (mil)			
		Class 1	Class 2	Class 3	Carton Spool
5/8	5/8	28	36	40	2296
7/8	7/8	28	36	40	1640
9/8	9/8	36	40	-	-
1-3/8	1-3/8	36	40	-	-

* 1 mil = 1/1000th part of 1 inch = 0.0254 mm

Technical Specifications for Emitter - Metric

Nominal Discharge (lph)	Emitter exponent x	Flow coefficient k	Coeff. of mfg. variation, CVm	Flow path dimensions (mm)			Inlet filter area (mm ²)	Size of filter openings (mm x mm)
				Length	Width	Depth		
0.8	0.45	0.80	3.5	16.5	0.47	0.40	3.00	0.30 x 0.40
1.2	0.45	1.18	2.0	16.1	0.62	0.64	3.44	0.27 x 0.51
1.6	0.45	1.58	2.0	17.1	0.68	0.75	5.35	0.33 x 0.60
2.0	0.46	2.00	2.0	17.4	0.80	0.84	6.28	0.31 x 0.75
4.0	0.46	4.00	2.0	18.0	1.04	1.05	5.52	0.30 x 0.60

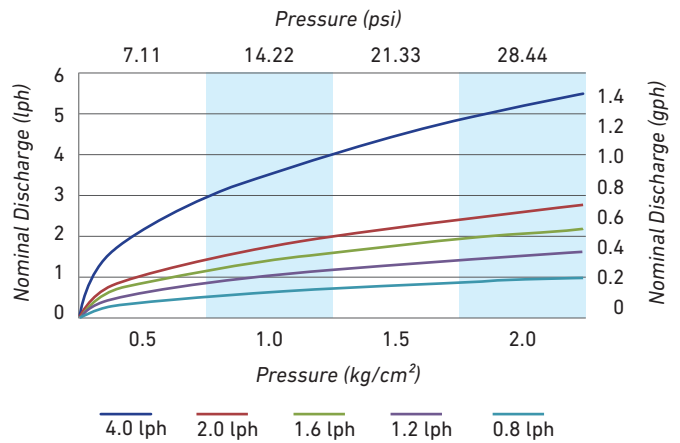
Flow equation $q = kH^x$, q = nominal discharge, lph, H = Pressure head, kg/cm², x = Emitter exponent

Technical Specifications for Emitter - US

Emitter discharge (gph)	Emitter exponent x	Flow coefficient k	Coeff. of mfg. variation, CVm	Flow Path dimensions, inch			Inlet filter area (inch ²)	Size of filter openings (inch x inch)
				Length	Width	Depth		
0.21	0.45	0.062	3.5	0.65	0.018	0.016	0.005	0.016x0.012
0.32	0.45	0.096	2.0	0.63	0.024	0.025	0.005	0.020x0.011
0.42	0.45	0.128	2.0	0.67	0.027	0.029	0.008	0.023x0.013
0.53	0.46	0.164	2.0	0.68	0.031	0.033	0.010	0.029x0.012
1.06	0.46	0.312	2.0	0.70	0.041	0.041	0.008	0.024x0.013

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

Performance Graph - Jain Turbo Excel® Plus



Jain Turbo Excel® Plus

Ordering Specifications

E	X	XX	XX	XXX	X	XXX	N	Color of the tube
+ : Carton Spool Blank : Standard Coil		Nominal diameter	Nominal Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class for Indian Standard tubing	Standard Coil Length in meter	N - Non pressure compensating	Blank - Standard Black with 'Twin Line' B - Brown (Landscape) W - White (Greenhouse) P - Purple (Reclaimed Water)
		12-12mm 16-16mm 17-17mm 18-18mm 19-19mm 20-20mm 23-23mm 58-5/8" 98-9/8" 78-7/8" 138-1-3/8"			For tubings other than Indian Standard- min. wall thickness x 10			

Example : E+16400602500N - This code refers to Jain Turbo Excel® Plus of 16mm nominal diameter having nominal discharge of 4 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 500 m with standard black colored tubing with 'Twin Line'.

Note

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

