

Irrigation Capillary Tubes

Capillary tubes are small irrigation distribution tubes (LDPE drip tubes) that are assembled into drip stakes to make a drip irrigation system for use in modern glasshouse horticulture. These Capillary tubes are available in various sizes and lengths, and with the adjustment in working pressure, you can set the water supply delivery volume you desire.

Size Capillaries

Outside Diameter		Inside Diameter
3.2 mm	x	0.6 mm
3.2 mm	x	0.7 mm
3.2 mm	x	0.8 mm
3.2 mm	x	0.9 mm
3.2 mm	x	1.0 mm

Length Options

60 cm
65 cm
70 cm
75 cm
80 cm
85 cm (standard)
90 cm
95 cm
100 cm



Assembly

Drip Stakes are mounted onto the end of capillary tubes for use in a drip irrigation system. These capillaries are made of LDPE.

Installation

Capillary tubes should be warmed up to a temperature of 15°C to 25°C at least 24 hours before installation/assembly, and this temperature should be maintained during installation. During installation you should **never** use soapy lubricants to facilitate the work. Soapy solutions will make the stressed material brittle in the long run, causing cracks. This property of LDPE is also known as "Environmental Stress Cracking".

Operation

Normal operating conditions:

- Environmental and water temperatures between 0°C and +35°C
- Maximum working pressure of 3.0 bar

In addition you should keep in mind that in practice:

- Increases in external pressures and/or chemical influences to which the capillaries are exposed can shorten the life of these capillary tubes.
- (Over time) internal dirt and resistance in supply tubes can cause the uniformity of the water supply level to deviate from given standards.

Availability

When ordering you should indicate both the size and the length:

Example: Capillary - 3.2 mm x 0.8 mm - 100 cm

Capillaries are available in a bundle of 500 pieces.



NB:

LDPE is not resistant to aromatic and chlorinated hydrocarbons or solvents. In particular, you should **avoid** contact with: benzene, benzole, bromine, chlorine, chloroform, dichloroethylene, ether, fluorine, aqua regia, oleum, ozone, propane, nitric acid, tetrachloroethylene, trichloroethylene, vasaline, sulphuric acid, soap and soapy solutions.

Water supply size capillary

Water Column (mtr)	Length (cm)	Water supply in litre/hour at 20°C				
		0.6 x 3.2	0.7 x 3.2	0.8 x 3.2	0.9 x 3.2	1.0 x 3.2
	50	1.60	2.00	2.70	3.70	4.35
	55	1.50	1.90	2.50	3.40	3.95
	60	1.40	1.80	2.40	3.15	3.75
	65	1.30	1.70	2.30	3.00	3.55
5	70	1.25	1.60	2.20	2.85	3.40
± 0.5 bar	75	1.15	1.50	2.10	2.80	3.20
	80	1.10	1.40	1.95	2.70	3.10
	85	1.05	1.35	1.85	2.60	2.95
	90	1.00	1.30	1.80	2.50	2.75
	95	0.95	1.20	1.70	2.35	2.70
	100	0.90	1.15	1.60	2.25	2.50
	50	1.85	2.35	3.15	4.15	4.85
	55	1.70	2.15	2.90	3.95	4.65
	60	1.60	2.10	2.80	3.65	4.45
	65	1.55	2.00	2.70	3.50	4.15
6	70	1.45	1.85	2.60	3.30	3.85
± 0.6 bar	75	1.40	1.75	2.40	3.25	3.80
	80	1.30	1.65	2.30	3.10	3.60
	85	1.25	1.60	2.20	3.00	3.45
	90	1.20	1.55	2.10	2.85	3.25
	95	1.15	1.45	2.05	2.65	3.10
	100	1.10	1.40	1.95	2.60	3.05
	50	2.10	2.65	3.50	4.75	5.35
	55	1.95	2.45	3.25	4.45	5.10
	60	1.85	2.35	3.10	4.10	5.00
	65	1.75	2.25	3.00	3.95	4.65
7	70	1.65	2.10	2.90	3.70	4.35
± 0.7 bar	75	1.55	2.00	2.75	3.65	4.30
	80	1.50	1.85	2.55	3.55	4.05
	85	1.45	1.80	2.50	3.35	3.85
	90	1.35	1.70	2.40	3.20	3.70
	95	1.30	1.60	2.30	3.05	.50
	100	1.25	1.55	2.15	2.90	3.45

Water supply size capillary

Water Column (mtr)	Length (cm)	Water supply in litre/hour at 20°C				
		0.6 x 3.2	0.7 x 3.2	0.8 x 3.2	0.9 x 3.2	1.0 x 3.2
	50	2.35	2.90	3.90	5.20	5.90
	55	2.15	2.70	3.65	4.90	5.40
	60	2.05	2.60	3.50	4.55	5.15
	65	1.95	2.50	3.40	4.40	4.90
8	70	1.85	2.35	3.25	4.15	4.80
± 0.8 bar	75	1.75	2.20	3.05	4.10	4.70
	80	1.65	2.10	2.85	3.90	4.50
	85	1.60	2.00	2.80	3.75	4.30
	90	1.55	1.95	2.65	3.60	4.15
	95	1.45	1.80	2.55	3.40	3.95
	100	1.40	1.75	2.45	3.20	3.70
	50	2.60	3.20	4.30	5.20	6.35
	55	2.40	2.95	4.00	5.05	5.80
	60	2.25	2.85	3.85	5.00	5.50
	65	2.15	2.75	3.70	4.75	5.20
9	70	2.05	2.55	3.55	4.55	4.95
± 0.9 bar	75	1.90	2.40	3.35	4.50	4.85
	80	1.85	2.30	3.15	4.30	4.65
	85	1.75	2.20	3.05	4.15	4.50
	90	1.70	2.10	2.90	3.95	4.30
	95	1.60	2.00	2.85	3.70	4.15
	100	1.55	1.90	2.75	3.55	4.00
	50	2.80	3.50	4.60	5.85	6.85
	55	2.60	3.20	4.30	5.45	6.30
	60	2.50	3.10	4.20	5.10	5.95
	65	2.35	2.95	4.00	4.95	5.60
10	70	2.20	2.75	3.85	4.90	5.30
± 0.1 bar	75	2.10	2.60	3.65	4.80	5.15
	80	2.00	2.50	3.45	4.65	5.00
	85	1.90	2.40	3.35	4.50	4.80
	90	1.80	2.30	3.15	4.30	4.70
	95	1.75	2.15	3.05	4.05	4.45
	100	1.70	2.05	3.00	3.85	4.35

For more information please contact:

