

MULTI DUCT: 12/10

APPLICATION

- ◆ Direct buried.
- ◆ In duct installation.
- ◆ FTTx deployment.

12/10 MULTI DUCT

CONSTRUCTION

TUBES Co-extruded High Density Polyethylene with a low co-efficient layer.

SHEATHING High Density Polyethylene (UV stable for 1 Year).

MECHANICAL PROPERTIES

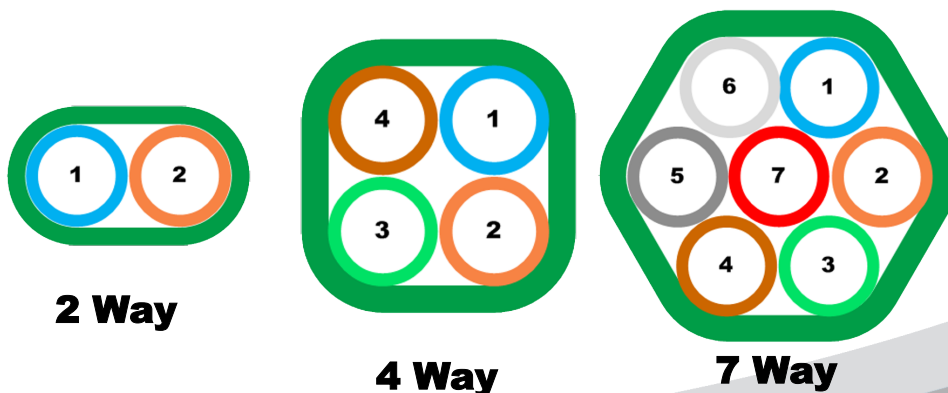
WAY	DUCT DIAMETER NOMINAL (mm)	CABLE WEIGHT (kg/km)	MAXIMUM INSTALLATION LOAD (N)	BENDING RADIUS
				LONG TERM (mm)
2	15.2 x 26.8	160	600	310
4	27.2 x 27.2	288	900	544
7	36 x 39.2	457	1200	784

TUBE COLOURS AS TIA/EIA



ORDERING INFORMATION

WAY	DUCT SIZE	DRUM QUANTITY (m)	CUSTOMER
7	12/10	1000	CBI



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MECHANICAL PERFORMANCE CRITERIA

IMPACT RESISTANCE: Test Method IEC 60794-1-2- Method E4 Test Load 2 Way = 6.5 Joules 7 Way = 6.5 Joules 4 Way = 6.5 Joules	Test requirements: Duct Length: 200mm Conditioning: -10°C for 3 hrs Anvil: 25mm ROC	Weight: 3kg Free Fall Distance: 221mm No. of impacts: 4 spaced equally
	Acceptance Criteria: No cracking or fracturing shall occur.	
CRUSH RESISTANCE: Test Method IEC 60794-1-2- Method E3 Test Load 2 Way = 1000N 7 Way = 1000N 4 Way = 1000N	Test requirements: Duct Length: 150mm Compressive Load: 1000 N Duration of Load: 1 min.	Acceptance Criteria: A Ball with a 8mm OD should pass freely through all the tubes upon a recovery period of 1.0 min.
	Acceptance Criteria: A Ball with a 8mm OD should pass freely through all the tubes upon a recovery period of 1.0 min.	
TENSILE PERFORMANCE: Test Method IEC 60794-1-2- Method E1 Test Load 2 Way = 600N 7 Way = 1200N 4 Way = 900N	Test requirements: Duct Length: <10m Compressive Load: 115mm/min	Tensile Load: 9.81 x Test Weight Duration of Load: 1 min.
	Acceptance Criteria: During load the elongation shall be less than 3%. Three minutes after load is removed the elongation shall be less than 1%.	
FLEXIBILITY (Bend): Test Method IEC 60794-1-2- Method E6	Test requirements: Duct Length: <1000mm Mandrel Diameter: 20D	Acceptance Criteria: A Ball with a 8mm OD should pass freely through all the tubes after a period of 10 min.
	Acceptance Criteria: A Ball with a 8mm OD should pass freely through all the tubes after a period of 10 min.	
KINK RESISTANCE:	Test requirements: Micro-Duct Length: 1000mm Bending Diameter: 12D Duration: 10 min	Acceptance Criteria: After 10 minutes no kinking shall occur.
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FRICTION CO-EFFICIENT:	Test requirements: Duct Length: 5m Loop Internal Diameter: 750mm of 450° Optical Fibre Cable OD: 3.4mm	Weight: 5kg Pulling Speed: 500mm/min
	Acceptance Criteria: The calculated friction co-efficient shall be less than 0.1.	
PRESSURE TEST:	Test requirements: Duct Length: 5000mm Water Pressure: 12 Bar Duration of Test: 10 min	Acceptance Criteria: Micro duct shall not burst.
	Acceptance Criteria: Micro duct shall not burst.	
CHEMICAL RESISTANCE:	Test requirements: Duct Length: 100mm Acid/Base Chemicals: pH 2-12 Solvents: Petrol, Acetone and Diesel	Acceptance Criteria: The duct shall withstand chemical treatment.
	Acceptance Criteria: The duct shall withstand chemical treatment.	
ENVIRONMENTAL STRESS CRACKING:	Test requirements: Strip Length: 8mm wide x 38mm long No. of strips: 5 Chemical: Teepol Blue 825	Temperature: 50°C Duration of Test: 400 hrs
	Acceptance Criteria: No cracks or ruptures shall be visible.	