

MULTI DUCT: 8/5

APPLICATION

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

8/5 MULTI DUCT

CONSTRUCTION

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

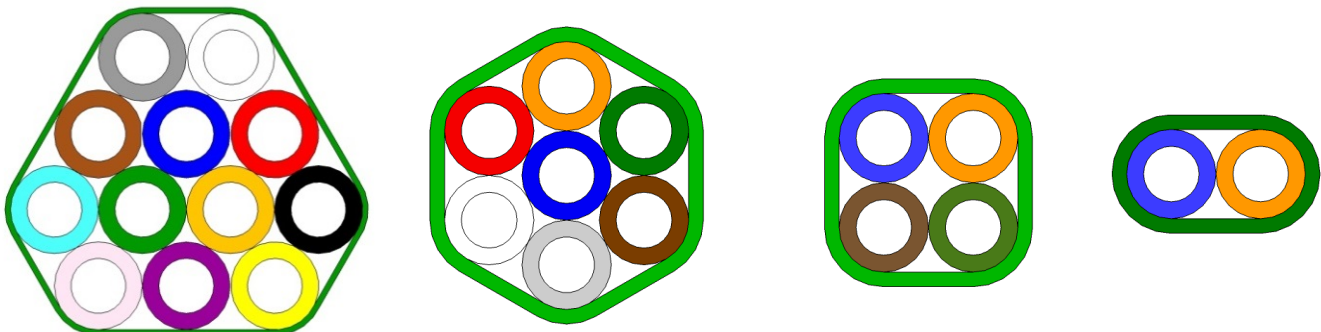
SHEATHING High Density Polyethylene (UV stable for 1 Year).

MECHANICAL PROPERTIES

WAY	DUCT DIAMETER NOMINAL (mm)	CABLE WEIGHT (kg/km)	MAXIMUM INSTALLATION LOAD (N)	BENDING RADIUS
				LONG TERM (mm)
2	10 x 18	105	600	200
4	18 x 18	180	900	360
7	26 x 24	280	1200	480
12	30 x 33	400	1500	660

TUBE COLOURS AS TIA/EIA

Blue	Orange	Green	Brown	Grey	White
Red	Black	Yellow	Violet	Pink	Turquoise



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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 12 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 12 Way = 1000N	Test requirements: Duct Length: 150mm Compressive Load: 1000 N Duration of Load: 1 min.	Acceptance Criteria: A Ball with a 4mm OD should pass freely through all the tubes upon a recovery period of 1.0 min.
	Acceptance Criteria: A Ball with a 4mm 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 12 Way = 1500N	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 4mm OD should pass freely through all the tubes after a period of 10 min.
	Acceptance Criteria: A Ball with a 4mm 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.	