

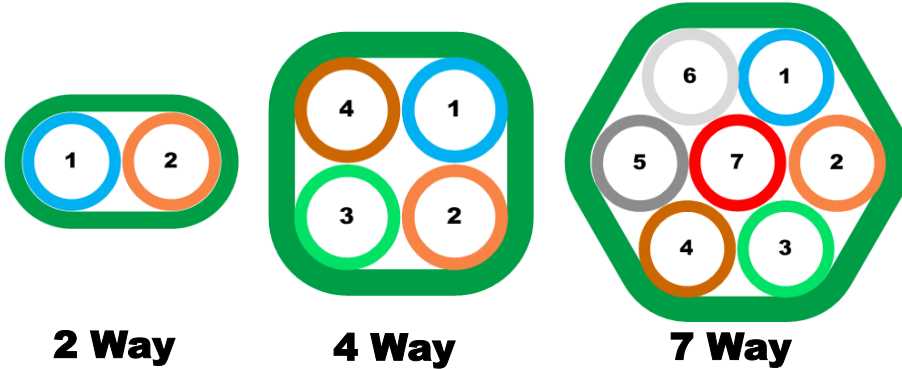
MULTI DUCT: 12/10

Applications

- Direct buried
- In duct installation
- FTTx deployment

Construction

Tubes	Co-extruded High Density Polyethylene with a low coefficient 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

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

Ordering information

WAY	Duct Size	Drum quantity(m)	Customer
7	12/10	1000	CBI

MECHANICAL PERFORMANCE CRITERIA

Impact Resistance: Test Method IEC 60794-1-2 Method E4		Test requirements:	Duct Length 200 mm Conditioning -10°C for 3hrs Anvil 25 mm ROC Weight 3 kg Free Fall Distance 221mm No. of Impacts 4 spaced equally
Test Load	2 Way = 6.5 Joules 4 Way = 6.5 Joules 7 Way = 6.5 Joules	Acceptance Criteria	No cracking or fracturing shall occur.
Crush Resistance: Test Method IEC 60794-1-2 Method E3		Test requirements:	Duct Length 150 mm Compressive Load 1000 N Duration of Load 1 min.
Test Load	2 Way = 1000N 4 Way = 1000N 7 Way = 1000N	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 requirements:	Duct Length <10 m Rate of Extension 115 mm/min Tensile Load 9.81 x Test Weight Duration of Load 1 min.
Test Load	2 Way = 600 N 4 Way = 900 N 7 Way = 1200 N	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 <1000 mm Mandrel Diameter 20D
		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 1000 mm Bending Diameter 12D Duration 10 min
		Acceptance Criteria	After 10 minutes no kinking shall occur.

Friction Co-efficient	Test Requirement	Duct Length 5 m 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 5000 mm Water Pressure 12 Bar Duration of Test 10 min.
	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
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 400hours
	Acceptance Criteria	No cracks or ruptures shall be visible.