

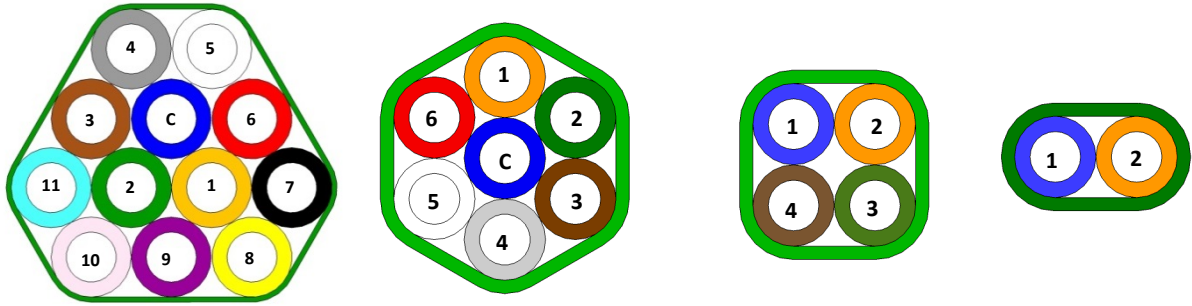
# MULTI DUCT: 8/5

## 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	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

## Ordering information

WAY	Duct Size	Drum quantity(m)	Customer
12	8/5	1000	CBI

## MECHANICAL PERFORMANCE CRITERIA

<b>Impact Resistance:</b> Test Method IEC 60794-1-2 Method E4		<b>Test requirements:</b> 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 12 Way = 6.5 Joules	<b>Acceptance Criteria</b> No cracking or fracturing shall occur.
<b>Crush Resistance:</b> Test Method IEC 60794-1-2 Method E3		<b>Test requirements:</b> Duct Length                      150 mm Compressive Load                      1000 N Duration of Load                      1 min.
Test Load	2 Way = 1000N 4 Way = 1000N 7 Way = 1000N 12 Way = 1000N	<b>Acceptance Criteria</b> a Ball with a 4mm OD should pass freely through all the tubes upon a recovery period of 1.0 min.
<b>Tensile Performance:</b> Test Method IEC 60794-1-2 Method E1		<b>Test requirements:</b> 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 12 Way = 1500N	<b>Acceptance Criteria</b> During load the elongation shall be less than 3%. Three minutes after load is removed the elongation shall be less than 1%
<b>Flexibility (Bend):</b> Test Method IEC 60794-1-2 Method E6		<b>Test requirements:</b> Duct Length                      <1000 mm Mandrel Diameter                      20D
		<b>Acceptance Criteria</b> a Ball with a 4mm OD should pass freely through all the tubes after a period of 10 min.
<b>Kink Resistance:</b>		<b>Test requirements:</b> Micro-Duct Length                      1000 mm Bending Diameter                      12D Duration                                      10 min
		<b>Acceptance Criteria</b> After 10 minutes no kinking shall occur.
<b>Friction Co-efficient</b>		<b>Test Requirement</b> Duct Length                      5 m Loop Internal Diameter                      750mm of 450° Optical Fibre Cable OD                      3.4mm Weight                                      5kg Pulling Speed                      500mm/min
		<b>Acceptance Criteria</b> The calculated friction co-efficient shall be less than 0.1
<b>Pressure Test:</b>		<b>Test requirements:</b> Duct Length                      5000 mm Water Pressure                      12 Bar Duration of Test                      10 min.
		<b>Acceptance Criteria</b> Micro duct shall not burst
<b>Chemical Resistance:</b>		<b>Test requirements:</b> Duct Length                      100mm Acid/Base Chemicals                      pH 2-12 Solvents                                      Petrol, Acetone and Diesel
		<b>Acceptance Criteria</b> The duct shall withstand chemical treatment
<b>Environmental Stress Cracking:</b>		<b>Test requirements:</b> Strip Length                      8mm wide x 38mm long No of strips                      5 Chemical                                      Teepol Blue 825 Temperature                      50°C Duration of Test                      400hours
		<b>Acceptance Criteria</b> No cracks or ruptures shall be visible.