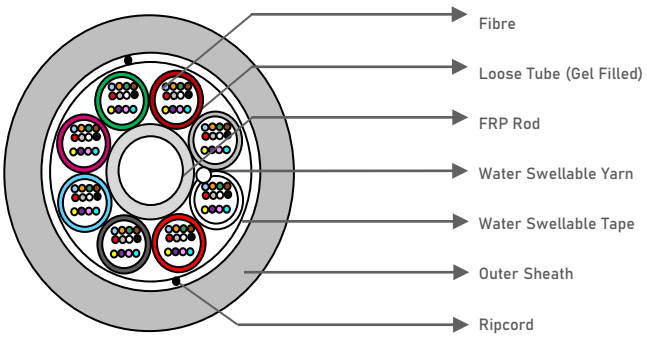
DATASHEET

12-288FO SM Duct Cable Loose Tube Cable



Telenco duct cable combines high mechanical and environmental performance with ultra-low attenuation, bend-resistant G657A1 fibres.

Designed with a central strength member and tough HDPE sheathing, the cable allows for traditional pulling installation techniques. Coloured coded design facilitates easy fibre preparation and identification. Designed with up to two layers of protective tubes and up to 288 fibres.

PN	MODEL
F1223-012-1000	Duct Cable G657A1 12FO
F1223-036-1000	Duct Cable G657A1 36FO
F1223-048-1000	Duct Cable G657A1 48FO
F1223-072-1000	Duct Cable G657A1 72FO
F1223-096-1000	Duct Cable G657A1 96FO
F1223-144-1000	Duct Cable G657A1 144FO
F1223-288-1000	Duct Cable G657A1 288FO

FEATURES & BENEFITS

Optical Fibre containing elements laid up around central strength member
Gel Filled Water blocked loose tubes
Water blocked core interstices
HDPE sheath as external protection

CABLE CONSTRUCTION

Parameter	Structure/Layout/Material			
Fibre Count	12/24/36/48/72F	96F	144F	288F
Number of fibres per tube	12			
Number of loose tubes - PBT	1/2/3/4/6	8	12	Layer I: 9 Layer II: 15
Number of fillers – HDPE - Black	5/4/3/2/0	0	Layer I: 2	
Central Strength Member – FRP Rod	2.1 ± 0.1 mm	2.5 mm up coated	3.5 mm up coated	2.5 ± 0.1 mm
Moisture Barrier	Water Swellable Tape & Water Swellable Yarn			
Outer Sheath	1.1mm (nominal) HDPE- Black – Anti Rodent			
Ripcords	2-Polyester			
Cable Diameter	8.5 ± 0.5 mm	10.0 ± 0.5 mm	13.0 ± 0.5 mm	15 ± 0.5 mm
Cable Weight	55 ± 10 kg/km	80 ± 10 kg/km	130 ± 15 kg/km	170 ± 15 kg/km

CABLE MECHANICAL CHARACTERISTICS

Tensile Strength	2000 N		IEC-60794-1-21-E1
Crush Resistance	2000 N		IEC-60794-1-21-E3
Impact Strength	10 N.m		IEC-60794-1-21-E4
Torsion	± 360 °		IEC-60794-1-21-E7
Minimum Bend Radius	20 x D		IEC-60794-1-21-E11
Kink	15 x D		IEC-60794-1-21-E10
Water Penetration Test	1m water head, 3m sample, 24 hours		IEC-60794-1-21-F5
Environmental Performance	Installation	- 10 °C to + 85 °C	IEC-60794-1-22-F1
	Operation	- 10 °C to + 85 °C	
	Storage	- 10 °C to + 85 °C	

OPTICAL FIBRE CHARACTERISTICS

Single Mode Fibre	G.657A1	
Attenuation		≤ 0.42 dB/km
	1270nm	≤ 0.40 dB/km
	1310nm	≤ 0.35 dB/km
	1383nm	≤ 0.35 dB/km
	1490nm	≤ 0.24 dB/km
	1550nm	≤ 0.21 dB/km
	1625nm	≤ 0.24 dB/km
Chromatic Dispersion	1290 – 1340nm	≤ 3.0 ps/nm.km
	1260 – 1360nm	≤ 7.0.0 ps/nm.km
	1480 – 1580nm	≤ 20.0 ps/nm.km
	1625nm	≤ 22.0 ps/nm.km
PMD (Max. Individual)	≤ 0.2 ps/√km	
PMD (Link design value)	≤ 0.08 ps / km	
Cable cut off wavelength λcc	≤ 1260 nm	
MFD	1310nm	9.2 ± 0.4 µm
Core-Cladding Concentricity Error	≤ 0.5 µm	
Cladding Diameter	125 ± 0.7 µm	
Cladding Non-Circularity	≤ 1 %	
Primary Coating Diameter	250 ± 15 µm (Coloured)	

Cable Length	2.0/4.0 km ± 5 %
Packaging	Wooden drums or reels
	Cable end sealed
	Drum marking: Drum number, User name, Fibre count, Cable Length, Date of manufacture, Net weight, Gross weight
Cable Standards	IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH