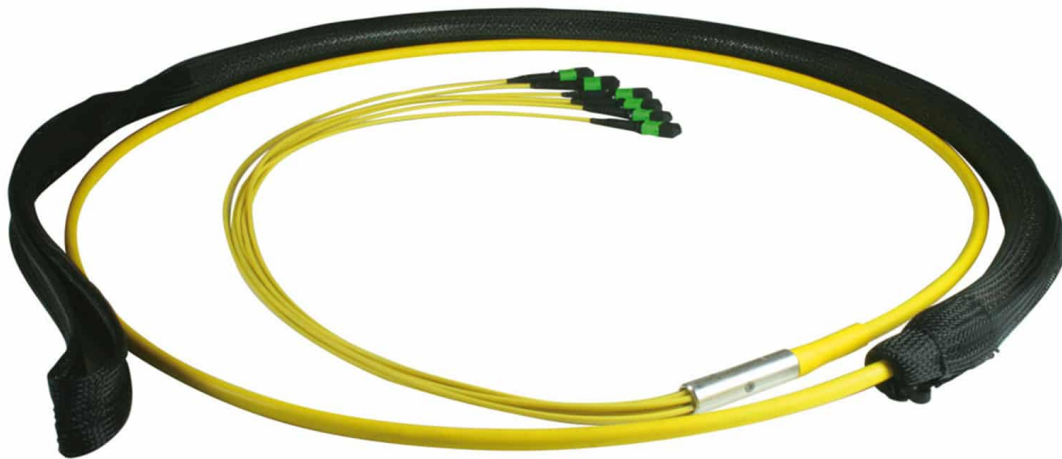


MPO Loose Tube Trunk



Description

LooseTube Cable Assemblies utilize the patented AFL Hyperscale® transition module and guarantees superior tensile strength and crushing resistance. The high density design can scale from 2 up to 144 fibers and can feature both 900 μm and ruggedised 2 mm tail leads. Assemblies can comprise of both multifiber MPO and discrete connectors, making the AFL Hyperscale® a flexible hybrid solution for diverse applications.

Features and Benefits

- Available in OS1/2 G.657A1, OM1, OM2, OM3, OM4
- Available with Multifiber MPO and discrete connectors
- Internal/External Application
- Steel tape armored version available
- Up to 144 fiber core count
- 900 μm or 2 mm ruggedised tails
- Factory terminated and tested
- Very High Density AFL Hyperscale® LT can scale up to 144 fibers for very high density Data Centre or Central Office application.
- Tails Selection 2mm ruggedised tails can be used for a direct front panel or equipment connections whereas 900 μm tails can be used for installation inside fiber management.
- Optimised Performance Low loss Premium MPO, discrete
- Hybrid MPO and Discrete Connector Interface AFL Hyperscale® LT can be used as high density multifiber MPO ruggedised trunk or ruggedised MPO to LC or SC fanouts.
- Rapid Deployment Factory terminated cabling saves

installation and reconfiguration time eliminating field deployment variables.

Premium connectors and OM4 fiber assures low insertion losses and power penalties in tight power budget high speed network environment.

- Compact Size Small dimension of breakout module and multifiber assemblies improves space management in high density applications.

Applications

- Data Centre Infrastructure
- Internal and Backbone Application
- Central Office, Access Points or CATV hubs

Specifications

ELEMENT	CHARACTERISTIC
Fiber	OS1/OS2 G.657A1, OM1, OM2, OM3, OM4 (IEC 60793)
Tail Dimensions	3 mm Simplex Staggered Configuration (MPO)
MPO Connectors	MPO 12 Fiber Ferrule Boot Colour: Black Body Sleeve Colour: MM (Beige) MM Elite (Aqua), SM (Green), SM Elite (Yellow)
Other Terminations	SC, LC, ST, FC, E2000
Cable Construction	Single Loose Tube (LT) 2-24 Cores (IEC 60794) Multi Loose Tube up to 48 Cores Single Loose Tube STA Armoured up to 48 Cores Multi Loose Tube STA Armoured up to 48 Cores Jacket Material: LSZH, PE; OFNP, OFNR
Cable Diameter	Single LT (Up to 24 Cores) OD MAX: 5.8-6.7 ± 0.3 mm Multi LT (Up to 48 Cores) OD MAX: 13.7 ± 0.3 mm
Crush Resistance	Single LT 1000 N/100 mm Multi LT 3000 N/100 mm
Design Pulling Strength	Single LT (Short) 1000N Multi LT (Short) 1000N
Cable Strength Member	Single LT - E-Glass Multi LT - FRP/E-Glass
Storage Temperature	-5 ~ +40°C
Installation Temperature	-20 ~ +60°C
Operating Temperature	-20 ~ +60°C
Tail Protection	Crush Resistance Tube - OD MAX 25 mm (up to 4x3 mm Tails)
Pulling Element	RPS Reusable Sock
Gland	PG 13.5 End A/B (up to 4x3 mm Tails)
Packaging	Length ≤ 100 - Heavy Duty PE bag / Length > 100 m - Drum (up to 24 x Fibers)

Connector Performance

CONNECTOR PERFORMANCE - MPO	IL AVERAGE	IL MAX	RETURN LOSS
MPO Premium (MM)	0.10 dB	0.35 dB	N/A
MPO Premium (SM)	0.10 dB	0.35 dB	>60 dB

OPTICAL PERFORMANCE*	MM PREMIUM	SM PREMIUM	CONFORMANCE
IL Max/Master (Acceptance)	0.15 dB	0.15 dB	IEC 61300-3-4
Ave/Master	0.08 dB	0.12 dB	IEC 61300-3-4
Ave/Random	0.10 dB	0.12 dB	IEC 61300-3-34
RL(Min Acceptance)	NA	55/65**	IEC 61300-3-6

* Connector Performance table does not refer to E2A terminations ** (UPC/APC)

Cable Performance

CABLED FIBRE TYPE (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1310 nm) ≤ 0.25 Max (1550 nm) ≤ 0.34 Typ (1310 nm) ≤ 0.19 Typ (1550 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.9 Typ (850 nm) ≤ 1.2 Typ (1300 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 Typ (1300 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 Typ (1300 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 Typ (1300 nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	N/A	≥ 200 (850 nm) ≥ 500 (1300 nm)	≥ 500 (850 nm) ≥ 500 (1300 nm)	≥ 1500 (850 nm) ≥ 500 (1300 nm)	≥ 3500 (850 nm) ≥ 500 (1300 nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	N/A	N/A	N/A	≥ 2000 (850 nm)	≥ 4700 (850 nm)

Technical Drawing

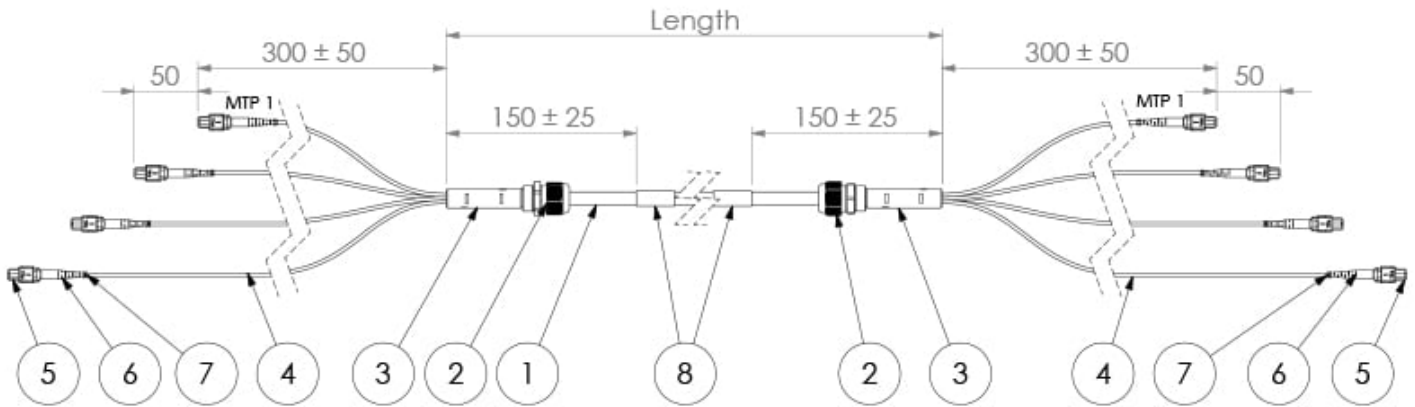


Diagram for illustration only, applies to all fibre counts up to 144. See Sheet 3 for tail lengths.

See sheet 2 for connector, furcation and cable options

See Sheet 4 for polarity map

Tails protected by high crush resistant corrugated tubing.

Pulling sock to be applied to End A for tail lengths over 20m

* Ø15mm up to 72 fibres, Ø22mm for higher fibre counts.

** PG13.5 or M20 for Ø15mm breakout module, M25 for Ø22mm breakout module

No.	Description	Qty.
1	Loose Tube Cable (See Sheet 2)	1
2	Compression Gland without Nut **	2
3	Breakout Module *	2
4	3mm Furcation Tubing (See Options)	-
5	MTP Connector (See Sheet 2)	-
6	MTP Round Connector Boot (Black)	-
7	Tail Identification Marker (C-Clip)	-
8	Serial Number Label (Wrap Around)	2

Ordering Information

Code	Fiber Type	Fiber Count / Cable Type	Jacket Material	Code	End A	End B	Polarity	Polarity	Unit	Length
M	1 OM1	BQB 12F SLT	L LSZH	8P	U MPO F	U MPO F	-A Polarity A	027- MPO Staggered Tails	M Meters	1 1
	2 OM2	BQF 24F SLT	R OFNR		V MPO M	V MPO M	-B Polarity B	035- MPO to Simplex Staggered	F Feet	2 2
	3 OM3	CBJ 48F MLT (5 element)	P OFNP			A LC	-C Polarity C	047- MPO to Uniboot Staggered Tails		3 3

4	OM4	CGM	72F MLT (6 element)*	Y	PE					B	LCA	-L	Fanout 1 to A (Crossed)	088-	MPO to LC Reversible Uniboot Staggered Tails			5	5
9	G.652D	CLP	96F MLT (8 element)*							C	LC Uniboot	-M	Fanout 1 to B (default)					10	10
7	G.657A1	CQT	144F MLT (12 element)*							D	SC								
										E	SCA								
										H	FC								
										J	FCA								
										K	ST								
										L	E2								
										M	E2A								

Legacy ordering information

	Fiber Count	Connector End A	Connector End B	Fiber Type	Cable Construction	Cable Length	Length Unit	Jacket type	Polarity	Termination Grade
PRE	12 12 core	MF MPO (F)	LC LC LCU LC Uniboot	09 OS1/OS2 9/125	LTR Loose Tube	1 1	leave blank metre	leave blank LSZH	A Polarity A	leave blank Standard
	24 24 core	MPF MPO Premium(F)	LCA LC/ APC MF MPO (F)	62 OM1 62.5/125	STAR Loose Tube Steel Tape Armoured	2 2	FT Feet	PE PE	B Polarity B	/P Premium
	48 48 core	MM MPO (M)	SC SC MPF MPO Premium (F)	50 OM2 50/125		3 3		RI Riser	C Polarity C	
	72 72 core	MPM MPO Premium(M)	SCA SC/ APC MM MPO (M)	OM3 OM3 50/125		5 5		PL Plenum		
	96 96 core	* *	ST ST MPM MPO Premium (M)	OM4 OM4 50/125		10 10		RIUL Riser UL		
	144 144 core		FC FC *LCR LC Uniboot Reversible Polarity	7A1 G.657A1		xx Specify		PLUL Plenum UL		
			FCA FC/ APC					E LSZH CPR Euroclass Eca		
			E2 E2000							
			E2A E2000/APC							

*LCR Connector, please contact manager for suitability / 24 Fiber ferrules available on request. Please contact us for more information. 24 MTP US Conec MPO Connectors Available on Request- Add suffix "-US" to the end of PN

Example Part Number

PRE	12	MF	LC	09	LTR	1				C		
-----	----	----	----	----	-----	---	--	--	--	---	--	--

PRE12MFLC09LTR1C - Preterm 12 Fiber MPO (F)- LC OS1/OS2 9/125 Loose Tube LSZH Black 1mtr Polarity C



Additional Information

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC 60793 and IEC 60794
- IEC 61753, IEC 61754 and IEC 61755
- IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- RoHS, REACH and SvHC materials compliant

Related Products

