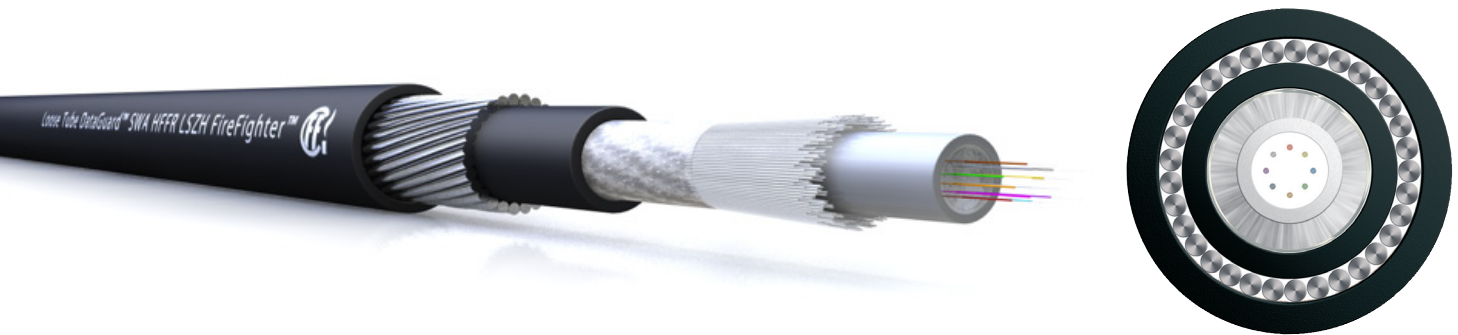


# SureLIGHT™ CLTGF DataGuard™ SWA Armoured FFCi • LSZH FireFighter™ • Fire Resistant • HFFR



Cable Construction		Mechanical Characteristics			
Central tube:	Thermoplastic material (PBT), jelly filled	Pulling Tension (max.)	Installation	2500 N	
Colour Code:	EIA/TIA 598		Operation	500 N	
Strength member:	Glass fibre yarns	Bending radius (min.)	Static	10 x Ø	
Fire Barrier:	Fire resistant Glass tape		Dynamic	20 x Ø	
Inner Jacket:	LSZH FireFighter™SHF-1, Black	Crush	4000 N/10cm		
Armour:	DataGuard™ Steel wire armour (SWA)		<b>Thermal Characteristics</b>		
Outer Jacket:	LSZH FireFighter™SHF-1, UV-Stabilised Black	Temperature range	Storage	-40° C to +80° C	
			Installation	-10° C to +60° C	
			Operating	-30° C to +80° C	
<b>Fire behaviour</b>					
Fire resistance	IEC 60331-25	-	CEI 20-36/2-5		
Flame retardant	IEC 60332-1-2	EN 50265-2-1	CEI 20-35/1-1		
Fire No-fire propagation	IEC 60332-3-24	EN 50266-2-4	CEI 20-22/3-4		
Halogen content	IEC 60754-1	EN 50267-2-1	CEI 20-37/2-1		
Smoke density	IEC 61034-2	EN 50268-2	CEI 20-37/3-1		

Part Number	No. of fibres	Tube diameter (mm)	Ø of Jacket (Inner / Outer) (mm)	Weight (kg/km)
1410*0443CLT-01	4	2.7	10.5	180
1410*0843CLT-01	8	2.7	10.5	180
1410*1243CLT-01	12	2.7	10.5	180
1410*1643CLT-01	16	3.5	11.0	210
1410*2443CLT-01	24	3.5	11.0	210

\*denotes fibre type required 1 = 62.5/125 | 2 = 50/125 OM2 | 3 = 50/125 OM3 | 8 = 9/125

## Optical Characteristics

		Single Mode
IEC 11801 Classification		OS1/OS2
ITU-T Type		G.652D
Mode Field Diameter	at 1310 nm	$9.0 \pm 0.4 \mu\text{m}$
Mode Field Diameter	at 1550 nm	$10.1 \pm 0.5 \mu\text{m}$
Cladding Diameter		$125.0 \pm 0.7 \mu\text{m}$
Coating Diameter (nom.)		$242 \pm 7 \mu\text{m}$
Numerical Aperture		0.13 (nom.)
Attenuation (max.)	at 850 nm	-
	at 1300 nm	-
	at 1310 nm	$\leq 0.35 \text{ dB/km}$
	at 1383 nm	$\leq 0.35 \text{ dB/km}$
	at 1460 nm	$\leq 0.25 \text{ dB/km}$
	at 1550 nm	$\leq 0.21 \text{ dB/km}$
	at 1625 nm	$\leq 0.23 \text{ dB/km}$
Bending Loss 1 turns D= 30mm	at 1550 nm	$\leq 0.25 \text{ dB}$
	at 1625 nm	$\leq 1.0 \text{ dB}$
Chromatic Dispersion	at 1285 - 1330 nm	$\leq 3.0 \text{ ps/nm x km}$
	at 1550 nm	$\leq 18 \text{ ps/nm x km}$
	at 1565 - 1625 nm	$\leq 22 \text{ ps/nm x km}$
Gigabit Ethernet	SX (1310 nm)	10000 m
	LX (1550 nm)	40000 m
10 Gigabit Ethernet	SX (1310 nm)	10000 m
	LX (1550 nm)	40000 m

		Multi Mode 62.5/125	Multi Mode 50/125	
IEC 11801 Classification		OM1	OM2	OM3
ITU-T Type		-	G.651	G.651
Core Diameter		$62.5 \pm 2.5 \mu\text{m}$	$50 \pm 2.5 \mu\text{m}$	$50 \pm 2.5 \mu\text{m}$
Cladding Diameter		$125.0 \pm 2.0 \mu\text{m}$	$125.0 \pm 2.0 \mu\text{m}$	$125.0 \pm 2.0 \mu\text{m}$
Coating Diameter		$242 \pm 5.0 \mu\text{m}$	$242 \pm 7.0 \mu\text{m}$	$242 \pm 7.0 \mu\text{m}$
Numerical Aperture		$0.275 \pm 0.015$	$0.200 \pm 0.015$	$0.200 \pm 0.015$
Attenuation (max.)	at 850 nm	$\leq 3.5 \text{ dB/km}$	$\leq 2.8 \text{ dB/km}$	$\leq 2.8 \text{ dB/km}$
	at 1300 nm	$\leq 1.0 \text{ dB/km}$	$\leq 1.0 \text{ dB/km}$	$\leq 1.0 \text{ dB/km}$
Bending Loss 100 turns D= 75mm	at 1550 nm	$\leq 0.05 \text{ dB}$	$\leq 0.5 \text{ dB}$	$\leq 0.5 \text{ dB}$
	at 1625 nm	$\leq 0.05 \text{ dB}$	$\leq 0.5 \text{ dB}$	$\leq 0.5 \text{ dB}$
Bandwidth	at 850 nm	$\geq 200 \text{ MHz x km}$	$\geq 500 \text{ MHz x km}$	$\geq 1200 \text{ MHz x km}$
	at 1300 nm	$\geq 500 \text{ MHz x km}$	$\geq 500 \text{ MHz x km}$	$\geq 600 \text{ MHz x km}$
Gigabit Ethernet	SX (850 nm)	275 VCLS (m)	550 VCLS (m)	1100 VCLS (m)
	LX (1300 nm)	550 Laser (m)	550 Laser (m)	550 VCLS (m)
10 Gigabit Ethernet	SX (850 nm)	33 VCSL (m)	82 VCSL (m)	300 VCSL (m)
	LX (1300 nm)	300 WWDM (m)	300 WWDM (m)	300 WWDM (m)