

# Glass-armoured multi-fiber loose tube cables – up to 24 fibers



### Properties

- Metal free indoor and outdoor cable
- Rodent protection, glass-armoured
- For high mechanical requirements
- Low smoke, halogen free and self-extinguishing
- Low fire load for high safety requirements
- Longitudinal and transversal watertight cable

### Applications

- For installation directly in the ground and in mechanically unprotected environments
- Data cable in distribution networks
- For installation outdoor, in wet cable ducts and pipes
- Ideal for high safety requirements in case of a fire

### Design

Cable design	multi-fiber loose tube up to 24 fibers, jelly-filled
Strain relief and rodent protection	glass-roving
Fiber colour	according to colour code
Jacket material	LSFH™
Jacket colour	black

According to IEC 60794-1-2

### Ordering information

24-.../W(ZNG)H...70
24-.../W(ZNG)H...85 *
24-.../W(ZNG)H...120

Please see page 158, 159, 160.

### Approvals

\* UL listed acc. OFN/OFNG

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Specification						
Jacket Ø	mm	7.0	8.5	12.0		
Number of fibers		2 to 24	2 to 24	2 to 24		
Multi fiber loose tube		standard	standard	standard		
Approx. weight	kg/km	55	83	178		

Mechanical properties						
Tensile strength	during installation	N	2000	3000	9000	IEC 60794-1-2 E1
	in service	N	1200	1500	4500	
Min. bend radius	during installation	mm	110	130	180	IEC 60794-1-2 E11
	in service	mm	70	80	120	
Crush resistance	short-term	N/dm	5000	8000	11 000	IEC 60794-1-2 E3
	long-term	N/dm	2000	3000	6000	
Impact resistance	Wp = 1.5 J Wp = 4.41 J Wp = 4.5 J	impacts	100	30	500	IEC 60794-1-2 E4
Repeated bending	r = 50 mm/2.5 kg	cycles	2000	5000	5000	IEC 60794-1-2 E6
Torsion	± 1440°, length 1 m	cycles	50	50	5	IEC 60794-1-2 E7
Water penetration	h = 1 m, 48 h, p < 3 m		p	p	p	IEC 60794-1-2 F5B

Thermal properties						
Temperature range	during installation	°C	–10 to +50	–10 to +50	–10 to +50	IEC 60794-1-22 F1
	in service	°C	–40 to +70	–40 to +70	–40 to +70	
	in storage	°C	–40 to +70	–40 to +70	–40 to +70	

Combustion properties						
Fire load		MJ/m	1.2	1.5	3.1	
Fire propagation	on a vertical single cable		p	p	p	IEC 60332-1-2
Fire propagation	on a vertical cable bundle		p	p	p	IEC 60332-3-24
Fire test	with circuit integrity (CI)	min.		180	180	IEC 60331-25
Smoke density				p	p	IEC 61034-2
Halogen acid gas	jacket material		p	p	p	IEC 60754-1
Degree of acidity	jacket material		p	p	p	IEC 60754-2
2011/65/EC (RoHS)			compliant			
(EU) No 305/2011 (CPR)			*	**		EN 50575

p = passed

\* Dcas2, d1, a1

\*\* Dcas1a, d0, a1