

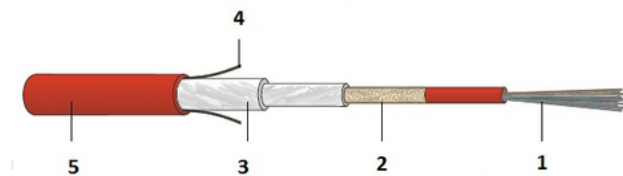
FO Universal ZGGFR Safety / U-DQ(ZN)BH

Safety cable E30*, up to 12 fibres

metal-free, water resistant, rodent protection,

in accordance with IEC 60332-1-2 and IEC 60332-3-24

30 minutes System Circuit Integrity* with reference to DIN 4102-12



1 ≤ 12 fibres

2 Flame retardant protective coating

3 Glass armour

4 Ripcord

5 FR/LSOH sheath



DESCRIPTION

Metal-free fibre optic safety cable with one central loose tube, up to 12 fibres.

The optimal combination of flame retardant fibre coating and flame-inhibiting stabilizing elements ensures enhanced functional integrity (System Circuit Integrity*) in case of fire for 30 minutes (transmission of audio, video and 1Gbit/s signals approved by a certified test report).

APPLICATION

Safety applications in tunnels, underground railways, banks, insurance companies, large-scale industry.

LAN backbone.

Indoor and outdoor cabling.

Can also be installed in cable platforms, trays, ducts and vertical shafts (without System Circuit Integrity*).

Can be spliced in FO distributors.

OPTICAL PROPERTIES

The cables are available with different types of optical fibre (see fibre data sheets).

MECHANICAL PROPERTIES

Temperature range	storage:	-25 / +70°C	IEC 60794-1-22 F1
	during installation:	-10 / +50°C	
	in operation:	-25 / +60°C	
Tensile performance:	IEC 60794-1-21 E1		
Crush resistance:	IEC 60794-1-21 E3		
Impact:	IEC 60794-1-21 E4		
Repeated bending:	IEC 60794-1-21 E6		
Torsion:	IEC 60794-1-21 E7		
Bend:	IEC 60794-1-21 E11		
Water penetration:	IEC 60794-1-22 F5		

NOTE

* System Circuit Integrity is dependent on installation method. Certified clamps, ducts, conduits, etc. are mandatory.

STANDARDS

UV resistance	EN50289-4-17:2015 (UVA-340)
Reaction to fire (Euroclasses)	not classified
Imprint	DATWYLER «cable type» «Datwyler designation» «DIN designation» «no. of fibres» «fibre type» «add. text» «batch no.» «meter marks»
Zero halogen, no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Flame spread	IEC 60332-3-24, EN 60332-3-24, VDE 0482-332-3-24
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Circuit Integrity	IEC 60331-11, IEC 60331-25 (FE90), EN 50200 PH90, VDE 0482-200
System circuit integrity	according to DIN 4102 part 12, VKF Fire Safety Application No. 24176

VERSIONS

Article No.	Product	Number of fibres	Loose Tubes	Sheath colour	Fibre type	Sheath Ø [mm]	Weight [kg/km]	Bending radius [mm]	Tensile load [N]	Crush resistance continuous [N]	Crush resistance short term [N]	Fire load [kWh/m]	PU
187288	FO Universal Safety 1x4	4	1	red	E9/125 G.652.D OS2	7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
186363	FO Universal	4	1	red	G50/125 OM2	7.8	75	120	1000 N	2000 N	5000 N	0.301	by the

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Safety 1x4												metre
190604	FO Universal Safety 1x4	4	1	red	G50/125 OM3 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
193447	FO Universal Safety 1x4	4	1	red	G50/125 OM4 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
191867	FO Universal Safety 1x6	6	1	red	E9/125 G.652.D OS2 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
191851	FO Universal Safety 1x6	6	1	red	G50/125 OM3 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
193448	FO Universal Safety 1x6	6	1	red	G50/125 OM4 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
196130	FO Universal Safety 1x8	8	1	red	E9/125 G.652.D OS2 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
190621	FO Universal Safety 1x8	8	1	red	G50/125 OM2 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
196120	FO Universal Safety 1x8	8	1	red	G50/125 OM3 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
193449	FO Universal Safety 1x8	8	1	red	G50/125 OM4 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
190719	FO Universal Safety 1x12	12	1	red	E9/125 G.652.D OS2 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
187293	FO Universal Safety 1x12	12	1	red	G50/125 OM2 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
191796	FO Universal Safety 1x12	12	1	red	G50/125 OM3 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre
193450	FO Universal Safety 1x12	12	1	red	G50/125 OM4 7.8	75	120	1000 N	2000 N	5000 N	0.301	by the metre