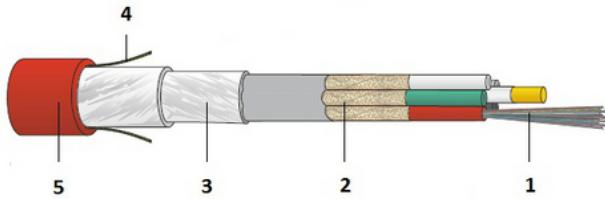


FO Universal wbGGFR Safety / U-DQ(ZN)BH



Safety cable E30*, up to 60 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 multiple loose tubes, up to 60 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		
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]
194430	FO Universal Safety 1x12	12	1	red	E9/125 G.652.D OS2	12.5	133	190	6000 N	3000 N	5000 N	0.733

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

190223	FO Universal Safety 2x12	24	2	red	E9/125 G.652.D OS2	12.5	133	190	6000 N	3000 N	5000 N	0.733
187294	FO Universal Safety 2x12	24	2	red	G50/125 OM2	12.5	131	190	6000 N	3000 N	5000 N	0.733
187360	FO Universal Safety 2x12	24	2	red	G50/125 OM3	12.5	131	190	6000 N	3000 N	5000 N	0.733
193454	FO Universal Safety 2x12	24	2	red	G50/125 OM4	12.5	131	190	6000 N	3000 N	5000 N	0.733
190224	FO Universal Safety 3x12	36	3	red	E9/125 G.652.D OS2	12.5	133	190	6000 N	3000 N	5000 N	0.733
193455	FO Universal Safety 3x12	36	3	red	G50/125 OM4	12.5	133	190	6000 N	3000 N	5000 N	0.733
194575	FO Universal Safety 4x12	48	4	red	E9/125 G.652.D BLO	12.5	133	190	6000 N	3000 N	5000 N	0.733
190225	FO Universal Safety 4x12	48	4	red	E9/125 G.652.D OS2	12.5	133	190	6000 N	3000 N	5000 N	0.733
192119	FO Universal Safety 4x12	48	4	red	G50/125 OM2	12.5	131	190	6000 N	3000 N	5000 N	0.733
191191	FO Universal Safety 4x12	48	4	red	G50/125 OM3	12.5	131	190	6000 N	3000 N	5000 N	0.733
193456	FO Universal Safety 4x12	48	4	red	G50/125 OM4	12.5	133	190	6000 N	3000 N	5000 N	0.733
190226	FO Universal Safety 5x12	60	5	red	E9/125 G.652.D OS2	12.5	133	190	6000 N	3000 N	5000 N	0.733
190605	FO Universal Safety 5x12	60	5	red	G50/125 OM3	12.5	131	190	6000 N	3000 N	5000 N	0.733
193457	FO Universal Safety 5x12	60	5	red	G50/125 OM4	12.5	133	190	6000 N	3000 N	5000 N	0.733