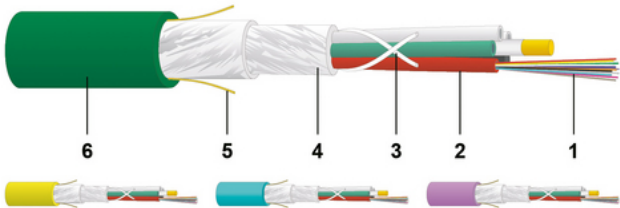


FO Universal wbGGFR / U-DQ(ZN)BH

up to 144 fibres, Euroclass Eca
metal-free, dry interstices,
rodent protection, flame retardant
in accordance with IEC 60332.1 and IEC 60332.3 C



- 1 ≤ 12 fibres
- 2 Loose tube
- 3 Swelling tape
- 4 Glass armour
- 5 Ripcord
- 6 FR/LSOH sheath



DESCRIPTION

Robust, metal-free fibre optic outdoor and indoor cable with stranded loose tubes.
High crush resistance for high transmission reliability.
Easy to handle due to cable construction with dry interstices.
Non-metallic rodent protection.
The two coloured ripcords are easy to identify and enable the safe opening of the cable sheath.
Flame retardant halogen-free FR/LSOH sheath.

APPLICATION

LAN backbone, access and riser zone.
Connection cable between the building distributors and/or floor distributors.
Suitable for laying in cable trays, ducts and vertical shafts.
Can also be spliced in all FO distributors and joints.

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 E1N		
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		

GENERAL PROPERTIES

Sheath colour	G.652.D OS2:	green or yellow
	G.652.D (BLO) OS2:	green or yellow
	G50/125 OM3:	green or turquoise
	G50/125 OM4:	green or heather violet

STANDARDS

UV resistance	EN50289-4-17:2015 (UVA-340)
Reaction to fire (Euroclasses)	EN 13501-6:Eca
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

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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

VERSIONS

Article No.	DoP	Product	Reaction to fire (Euroclasses)	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
19342400EZ		FO Universal 4x12	Eca	48	5	yellow	E9/125 G.652.D OS2	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19342800EZ		FO Universal 4x12	Eca	48	5	turquoise	G50/125 OM3	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19343200EZ		FO Universal 4x12	Eca	48	5	heather violet	G50/125 OM4	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19261300EZ		FO Universal 2x12	Eca	24	5	green	E9/125 G.652.D OS2	11.4	107	175	6000 N	3000 N	5000 N	0.616	by the metre
19020700EZ		FO Universal 3x12	Eca	36	5	green	E9/125 G.652.D OS2	11.4	107	175	6000 N	3000 N	5000 N	0.616	by the metre
18643400EZ		FO Universal 3x12	Eca	36	5	green	G50/125 OM2	11.4	107	175	6000 N	3000 N	5000 N	0.616	by the metre
19267800EZ		FO Universal 3x12	Eca	36	5	green	G50/125 OM4	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19020800EZ		FO Universal 4x12	Eca	48	5	green	E9/125 G.652.D OS2	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
18729100EZ		FO Universal 4x12	Eca	48	5	green	G50/125 OM2	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
18648600EZ		FO Universal 4x12	Eca	48	5	green	G50/125 OM3	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19127800EZ		FO Universal 4x12	Eca	48	5	green	G50/125 OM4	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
19020900EZ		FO Universal 5x12	Eca	60	5	green	E9/125 G.652.D OS2	11.4	110	175	6000 N	3000 N	5000 N	0.616	by the metre
19061800EZ		FO Universal 5x12	Eca	60	5	green	G50/125 OM2	11.4	109	175	6000 N	3000 N	5000 N	0.616	by the metre
18664200EZ		FO Universal 5x12	Eca	60	5	green	G50/125 OM3	11.4	110	175	6000 N	3000 N	5000 N	0.616	by the metre
18734400EZ		FO Universal 6x12	Eca	72	6	green	G50/125 OM2	12.2	129	185	6000 N	3000 N	5000 N	0.681	by the metre
18653900EZ		FO Universal 6x12	Eca	72	6	green	G50/125 OM3	12.2	129	185	6000 N	3000 N	5000 N	0.681	by the metre
19021000EZ		FO Universal 6x12	Eca	72	6	green	E9/125 G.652.D OS2	12.2	110	185	6000 N	3000 N	5000 N	0.681	by the metre
18674700EZ		FO Universal 8x12	Eca	96	8	green	E9/125 G.652.D OS2	13.5	162	205	6000 N	3000 N	5000 N	0.808	by the metre
18654000EZ		FO Universal 8x12	Eca	96	8	green	G50/125 OM3	13.5	162	205	6000 N	3000 N	5000 N	0.808	by the metre
19271400EZ		FO Universal 8x12	Eca	96	8	green	G50/125 OM4	13.5	162	205	6000 N	3000 N	5000 N	0.808	by the metre
19021100EZ		FO Universal 10x12	Eca	120	10	green	E9/125 G.652.D OS2	14.8	110	225	6000 N	3000 N	5000 N	0.936	by the metre
18653600EZ		FO Universal 10x12	Eca	120	10	green	G50/125 OM3	14.8	194	225	6000 N	3000 N	5000 N	0.936	by the metre
19171000EZ		FO Universal 12x12	Eca	144	12	green	G50/125 OM3	16.3	236	245	6000 N	3000 N	5000 N	1.075	by the metre
19271500EZ		FO Universal 12x12	Eca	144	12	green	G50/125 OM4	16.3	236	245	6000 N	3000 N	5000 N	1.075	by the metre

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19021200EZ	 FO Universal 12x12	Eca	144	12	green	E9/125 G.652.D OS2	16.3	110	245	6000 N	3000 N	5000 N	1.075	by the metre
18661600EZ	 FO Universal 12x12	Eca	144	12	green	G50/125 OM2	16.3	236	245	6000 N	3000 N	5000 N	1.075	by the metre