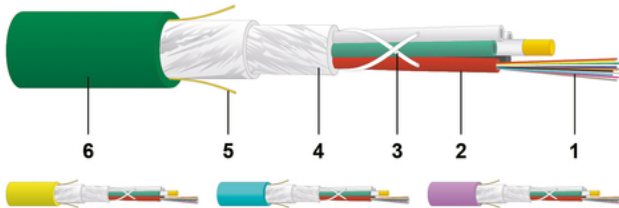


FO Universal wbGGFR / U-DQ(ZN)BH

up to 144 fibres, Euroclass Eca
 metal-free, dry interstices,
 rodent protection, flame retardant
 in accordance with IEC 60332-1-2 and IEC 60332-3-24



- 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	EN 50289-4-17
Reaction to fire (Euroclass)	EN 13501-6: E _{ca}
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

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VERSIONS

Article No.	DoP	Product	Reaction to fire (Euroclass)	Number of fibres	Loose Tubes	Sheath colour	Fibre type	Sheath Ø [mm]	Weight [kg/km]	Bending radius [mm]	Tensile load continuous [N]	Tensile load short term [N]	Crush resistance continuous [N]	Crush resistance short term [N]	Fire load PU [kWh/m]	
19261300EZ		FO Universal 2x12	Eca	24	5	green	E9/125 G.652.D OS2	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19020700EZ		FO Universal 3x12	Eca	36	5	green	E9/125 G.652.D OS2	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19267800EZ		FO Universal 3x12	Eca	36	5	green	G50/125 OM4	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19020800EZ		FO Universal 4x12	Eca	48	5	green	E9/125 G.652.D OS2	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19342400EZ		FO Universal 4x12	Eca	48	5	yellow	E9/125 G.652.D OS2	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
18648600EZ		FO Universal 4x12	Eca	48	5	green	G50/125 OM3	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19342800EZ		FO Universal 4x12	Eca	48	5	turquoise	G50/125 OM3	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19127800EZ		FO Universal 4x12	Eca	48	5	green	G50/125 OM4	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19343200EZ		FO Universal 4x12	Eca	48	5	heather violet	G50/125 OM4	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19020900EZ		FO Universal 5x12	Eca	60	5	green	E9/125 G.652.D OS2	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
18664200EZ		FO Universal 5x12	Eca	60	5	green	G50/125 OM3	11.4	149	175	5000	9000	3000	5000	0.616	by the metre
19021000EZ		FO Universal 6x12	Eca	72	6	green	E9/125 G.652.D OS2	12.2	165	185	5000	9000	3000	5000	0.681	by the metre
18653900EZ		FO Universal 6x12	Eca	72	6	green	G50/125 OM3	12.2	165	185	5000	9000	3000	5000	0.681	by the metre
18674700EZ		FO Universal 8x12	Eca	96	8	green	E9/125 G.652.D OS2	13.5	186	205	5000	9000	3000	5000	0.808	by the metre
18654000EZ		FO Universal 8x12	Eca	96	8	green	G50/125 OM3	13.5	186	205	5000	9000	3000	5000	0.808	by the metre
19271400EZ		FO Universal 8x12	Eca	96	8	green	G50/125 OM4	13.5	186	205	5000	9000	3000	5000	0.808	by the metre
19449900EZ		FO Universal 8x12	Eca	96	8	heather violet	G50/125 OM4	13.5	186	205	5000	9000	3000	5000	0.808	by the metre
19021100EZ		FO Universal 10x12	Eca	120	10	green	E9/125 G.652.D OS2	14.8	219	225	5000	9000	3000	5000	0.936	by the metre
18653600EZ		FO Universal 10x12	Eca	120	10	green	G50/125 OM3	14.8	219	225	5000	9000	3000	5000	0.936	by the metre
19021200EZ		FO Universal 12x12	Eca	144	12	green	E9/125 G.652.D OS2	16.3	272	245	5000	9000	3000	5000	1.075	by the metre
19171000EZ		FO Universal 12x12	Eca	144	12	green	G50/125 OM3	16.3	272	245	5000	9000	3000	5000	1.075	by the metre
19271500EZ		FO Universal 12x12	Eca	144	12	green	G50/125 OM4	16.3	272	245	5000	9000	3000	5000	1.075	by the metre