

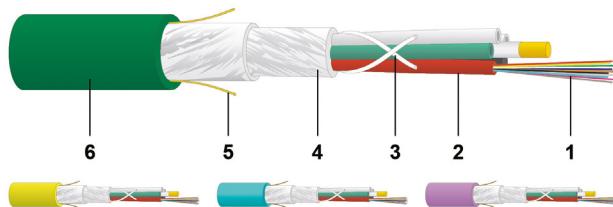
## FO Universal wbGGFR / U-DQ(ZN)BH

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.

### Construction

Outer sheath material

FRNC/LSZH

## General Properties

Imprint	DATWYLER «cable type» «Datwyler designation» «DIN designation» «no. of fibres» «fibre type» «add. text» «batch no.» «meter marks»
Installation temperature	-10 °C - +50 °C
Operating temperature	-25 °C - +70 °C
Storage temperature	-25 °C - +70 °C

## Standards

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
Reaction to fire (Euroclasses)	EN 13501-6
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
UV resistance	EN 50289-4-17

## Versions

Material number	Product	Reaction To Fire	Outer sheath colour	Fibre type	Outer sheath diameter [mm]	Bending radius [mm]	Weight [kg/km]	Tensile load short term [N]	Tensile load continuous [N]	Crush resistance short term [N]	Crush resistance continuous [N]	Fire load [kWh/m]	Packing unit
19261300EZ	FO Universal 2x12	Eca	green	E9/125 G.652.D OS2	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19020700EZ	FO Universal 3x12	Eca	green	E9/125 G.652.D OS2	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19267800EZ	FO Universal 3x12	Eca	green	G50/125 OM4	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19020800EZ	FO Universal 4x12	Eca	green	E9/125 G.652.D OS2	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19342400EZ	FO Universal 4x12	Eca	yellow	E9/125 G.652.D OS2	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
18648600EZ	FO Universal 4x12	Eca	green	G50/125 OM3	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19342800EZ	FO Universal 4x12	Eca	turquoise	G50/125 OM3	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19127800EZ	FO Universal 4x12	Eca	green	G50/125 OM4	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19343200EZ	FO Universal 4x12	Eca	heather violet	G50/125 OM4	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19020900EZ	FO Universal 5x12	Eca	green	E9/125 G.652.D OS2	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
18664200EZ	FO Universal 5x12	Eca	green	G50/125 OM3	11.4	175	149	9,000	5,000	5,000	3,000	0.616	by the metre
19021000EZ	FO Universal 6x12	Eca	green	E9/125 G.652.D OS2	12.2	185	165	9,000	5,000	5,000	3,000	0.681	by the metre

Material number	Product	Reaction To Fire	Outer sheath colour	Fibre type	Outer sheath diameter [mm]	Bending radius [mm]	Weight [kg/km]	Tensile load short term [N]	Tensile load continuous [N]	Crush resistance short term [N]	Crush resistance continuous [N]	Fire load [kWh/m]	Packing unit
18653900EZ	FO Universal 6x12	Eca	green	G50/125 OM3	12.2	185	165	9,000	5,000	5,000	3,000	0.681	by the metre
18674700EZ	FO Universal 8x12	Eca	green	E9/125 G.652.D OS2	13.5	205	186	9,000	5,000	5,000	3,000	0.808	by the metre
18654000EZ	FO Universal 8x12	Eca	green	G50/125 OM3	13.5	205	186	9,000	5,000	5,000	3,000	0.808	by the metre
19271400EZ	FO Universal 8x12	Eca	green	G50/125 OM4	13.5	205	186	9,000	5,000	5,000	3,000	0.808	by the metre
19449900EZ	FO Universal 8x12	Eca	heather violet	G50/125 OM4	13.5	205	186	9,000	5,000	5,000	3,000	0.808	by the metre
19021100EZ	FO Universal 10x12	Eca	green	E9/125 G.652.D OS2	14.8	225	219	9,000	5,000	5,000	3,000	0.936	by the metre
18653600EZ	FO Universal 10x12	Eca	green	G50/125 OM3	14.8	225	219	9,000	5,000	5,000	3,000	0.936	by the metre
19021200EZ	FO Universal 12x12	Eca	green	E9/125 G.652.D OS2	16.3	245	272	9,000	5,000	5,000	3,000	1.075	by the metre
19171000EZ	FO Universal 12x12	Eca	green	G50/125 OM3	16.3	245	272	9,000	5,000	5,000	3,000	1.075	by the metre
19271500EZ	FO Universal 12x12	Eca	green	G50/125 OM4	16.3	245	272	9,000	5,000	5,000	3,000	1.075	by the metre

Subject to technical modification

As of 2020-11-27 15:23:55