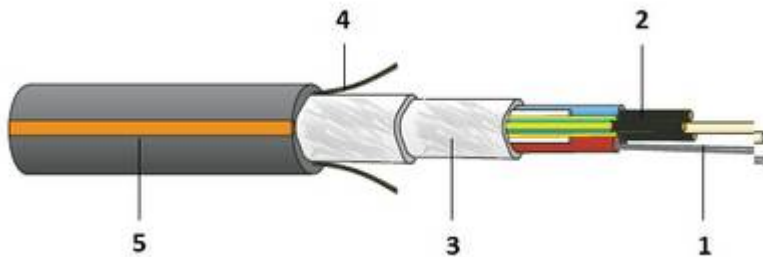


## FO Universal wbGGFR Combi / U-DQS(ZN)BH

### COMBINATION CABLE WITH 3 STRANDED COPPER WIRES, INDOOR AND OUTDOOR USE

dry interstices, rodent protection,  
in accordance with IEC 60332.1 and IEC 60332.3 .C



- 1** Fibres
- 2** Copper wires
- 3** Glass armour
- 4** Ripcord
- 5** FR/LSOH sheath



### FEATURES

The glass armour provides for a combined non metallic rodent protection and strain relief.  
Two ripcords enable the safe opening of the cable sheath.  
Dry stranding interstices - easy handling.  
Longitudinal water resistance.  
Flame retardant, flame resistant cable sheath.

### APPLICATION

Camera combi cable in tunnels, underground railroads, large scale industry.  
Pulling in or blowing through thermoplastic ducts.  
Laying on cable platforms and cable trays.  
Direct burial

### MECHANICAL PROPERTIES

Temperature range	storage:	-25 / +70°C IEC 60794-1-2F1
	during installation:	-10 / +50°C
	in operation:	-25 / +60°C

### OPTICAL PROPERTIES

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

## STANDARDS

Imprint	DATWYLER «cable type» «Datwyler designation» «DIN designation» «no. of fibres» «fibre type» «add. text» «batch no.» «meter marks»	
LS0H	IEC 60754-1/-2, EN 50267-2-1/-2-2, VDE 0482-267-2-1/-2-2	
Flame propagation	IEC 60332-1/-2, EN 60332-1-2, VDE 0482-332-1-2	
Flame spread	IEC 60332.3 C, EN 50266-2-4, VDE 0482-266-2-4	
Smoke density	IEC 61034-1/-2, EN 61034-1/-2 (EN 50268-1/-2), VDE 0482-1034-1/-2 (VDE 0482-268-1/-2)	
Standards	Tensile performance:	IEC 60794-1-2 E1
	Crush resistance:	IEC 60794-1-2 E3
	Impact:	IEC 60794-1-2 E4
	Repeated bending:	IEC 60794-1-2 E6
	Torsion:	IEC 60794-1-2 E7
	Bend:	IEC 60794-1-2 E11
	Water penetration:	IEC 60794-1-2 F5

## VERSIONS

Article No.	Product	Fibres number	Sheath colour	Fibre type	Sheath Ø [mm]	Weight [kg/km]	Bending radius [mm]	Tensile load [N]	Crush resistance short term [N]
186358	wbGGFR Combi 1 x 2 + 3 x 2.5 mm <sup>2</sup>	2	black	E9/125 G.652.D	13.0	233	200	3000	3000
187348	wbGGFR Combi 1 x 2 + 3 x 2.5 mm <sup>2</sup>	2	black	G50/125 OM2	13.0	233	200	3000	3000
186366	wbGGFR Combi 1 x 2 + 3 x 2.5 mm <sup>2</sup>	2	black	G62.5/125 OM1	13.0	233	200	3000	3000