

U-DQ(ZN)BH**E_{ca}****XDG50****E_{ca}**

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**Indoor / outdoor cable with stranded loose tubes and non-metallic armouring
halogen-free and flame retardant outer sheath**

Design



- Central strength element (FRP), up-jacketed if needed
- Optical fibres inside gel-filled loose tube
- Filler if needed
- Water swellable elements
- Armouring (glass yarns)
- Halogen-free and flame retardant outer sheath

Optical fibre options

Singlemode fibre: **ITU-T G.652.D, G.655, G.657**Multimode fibre: **ITU-T G.651: OM2, OM3, OM4 | 62.5µm: OM1**

Product description

- Cable for indoor and outdoor use in ducts and conduits; flammability classification acc. to EN 50575: E_{ca}
- 12 colour-coded optical fibres per tube inside up to 24 gel-filled loose tubes
- Use of naturally coloured fillers if necessary
- Water swellable elements achieving longitudinal watertightness
- Glass yarns as non-metallic armouring; additionally increasing tensile strength
- Outer sheath made of black halogen-free and flame retardant polymeric material

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Characteristics

U-DQ(ZN)BH E_{ca}						
DoP 100						
Fibre count		12 ... 60	72	96	144	288
Tube count, Layer 1 / Layer 2		1...5 / -	6 / -	8 / -	12 / -	9 / 15
Fibres per tube		12	12	12	12	12
Filler		4 ... 0	-	-	-	-
Tube diameter (mm)		2.3	2.3	2.3	2.3	2.3
Cable diameter (mm)		10	10.6	12.1	15.1	17.8
Sheath thickness (mm)		1.5	1.5	1.5	1.5	1.5
Weight (kg/km)		100	120	150	220	300
Maximum tensile force						
- during installation (N)		3000	3500	4500	5500	6000
- in operation (N)		1900	2200	2800	3400	3800
Crush resistance (N/dm)		3000	3000	3000	3000	3000
Minimum bending radius						
- with tensile load		15 x cable diameter				
- without tensile load		10 x cable diameter				
Temperature range						
- Storage, transport (°C)		- 30 to + 70				
- Installation (°C)		- 5 to + 50				
- Operation (°C)		- 30 to + 70				
Thermal load (MJ/m)		1.7	1.9	2.3	3.3	5.5
Flammability classification (EN 50575)		E _{ca}				
Compliance						
- General		IEC 60793 / 60794; ITU-T; VDE 0888				
Maximum production length (m)		8000	8000	8000	8000	5000

All dimensions and weights are nominal values

Cable marking

Per metre:

<Metre marking> U-DQ(ZN)BH <tube count>x12 <fibre type acc. to ITU-T> RHENANIA <cable-ID>

~ ~ ~ Eca DoP 100

Fibre colour code

1 RD | 2 GN | 3 BU | 4 YE | 5 WH | 6 GY | 7 BN | 8 VT | 9 TQ | 10 BK | 11 OG | 12 PK

Tube colour code (for single layer cables)

1 RD | 2 GN | 3 BU | 4 YE | 5 WH | 6 GY | 7 BN | 8 VT | 9 TQ | 10 BK | 11 OG | 12 PK

Tube colour code (for two-layer cables: 1 layer: 1...9; 2 layer: 10...24)

1 RD | 2 GN | 3 BU | 4 YE | 5 WH | 6 GY | 7 BN | 8 VT | 9 TQ | 10 RD | 11 GN | 12 BU
13 YE | 14 WH | 15 GY | 16 BN | 17 VT | 18 TQ | 19 BK | 20 OG | 21 PK | 22 YE | 23 YE | 24 YE

Modification of properties, colour codes and cable marking on request

Subject to change without prior notice