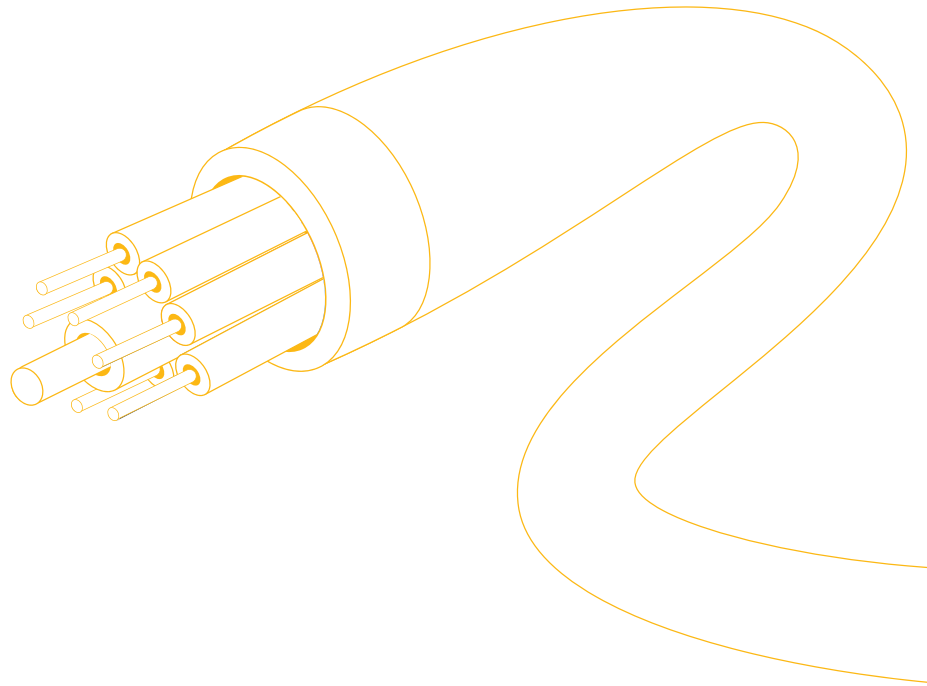




LIGHTWIN

DE



LU-DQ 48E09

UNIVERSAL FIBER CABLE
U-DQ (ZN) BH, LSZH

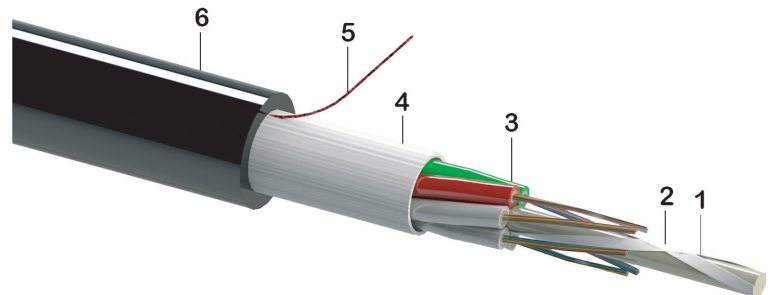
MULTI LOOSE TUBE NON-METALLIC CABLE
FOR INDOOR OR OUTDOOR DUCT INSTALLATION.

LU-DQ 48E09

Universal Cable, 48 Fibers, U-DQ (ZN) BH, LSZH, G657A

Features

- Universal fiber cable U-DQ (ZN) BH, LSZH
- Metal free, rodent protected, UV- stable, halogen free, loose tube; 250µm- fiber coating, color: Black
- Singlemode 9/125µm OS2 G657A
- Tension: 1600N
- Bending radius: 150mm
- Suitable for cable duct systems, pipe systems, cable plus, and many more
- Cable outer diameter: 7,4mm



Description

1. FRPc central strength member
2. Water wellable yarn
3. Gel filled PBT loose tube with optical fibers
4. Water swellable tape or yarn
5. Rip-cord
6. FRLSZH UV stable outer jacket

Cable General Description

Multi Loose Tube non-metallic cable for indoor or outdoor duct installation.

Construction and Dimensions

Max. fiber count (12 fibers/tube)	48
Loose-tubes count	4
Filler-tubes	2
Loose tube nominal diameter (mm)	1,7
FRP/coat. CSM nominal thickness (mm)	1,7
Outer jacket nominal thickness (mm)	1,2
Cable nominal outer diameter (mm)	7,8
Cable informative weight (kg/km)	70
Standard put-up length (m)	2100 / 4100±5%

Outer Jacket

Material	UV stable FRLSZH
Jacket colour	Black. Other colours available on request
Sheath marking	Ink-Jet, white or black depending on the jacket colour
Print legend	Construction name, cable type, batch-number, meter-marking, CE marking, Customer print legend available on request

Optical Fibers

Colour coding (IEC 60304)	1.-12.: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink
Loose-tube colour coding	1.red, 2.green (in each layer), rest of tubes white (fillers uncoloured or black)
Fiber type	Single- and multi-mode fibers (OS2, OM2, OM3, OM4, OM5)

LU-DQ 48E09

Universal Cable, 48 Fibers, U-DQ (ZN) BH, LSZH, G657A

Mechanical Characteristics			
Test	Test method	Value	Acceptance criteria*
Tensile performance	EN 60794-1-21:E1	800 N (long term) 2000 N (short term)	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,05$ dB after test
Crush	EN 60794-1-21:E3A	1000 N/100mm (long term) 2000 N/100mm (short term)	$\Delta\alpha \leq 0,05$ dB prior release, no damage $\Delta\alpha \leq 0,05$ dB after release, no damage
Impact	EN 60794-1-21:E4	10 Nm, 3 impacts, d=20 mm, R=300 mm	$\Delta\alpha \leq 0,05$ dB after test, no damage
Repeated bending	EN 60794-1-21:E6	R=20 x cable diameter, 25 cycles	no damage
Torsion	EN 60794-1-21:E7	L = 1 m, rotation angle $\pm 180^\circ$, 10 cycles	no damage
Bend no tension	EN 60794-1-21:E11A	R=15 x cable diameter, 4 turns, 3 cycles	$\Delta\alpha \leq 0,05$ dB after test, no damage

Environmental characteristics			
Test	Test method	Value	Acceptance criteria*
Temperature cycling	EN 60794-1-22:F1	-40°C - +70°C	$\Delta\alpha \leq 0,05$ dB
Temperature range of use		-5°C - +50°C -40°C - +70°C -40°C - +70°C	installation operation storage, transport
Moisture resistance	EN 60794-1-22:F5B	L = 3 m, 1 m water height, 24 h	no water leakage

* EN 60794-3-10, EN 60794-3-11

Fire performance		
Flammability - cable bundle	EN 60332-3-22 (cat.A)	Pass
Smoke density	EN 61034-1, EN 61034-2	Pass
Halogen Free, Acid gases	EN 60754-2	Pass
Euro classification to CPR	EN 50575, EN 13501-6	Eca

Color Code of the Fiber

1 Red	2 Green	3 Blue	4 Yellow	5 White	6 Grey
7 Brown	8 Violet	9 Aqua	10 Black	11 Orange	12 Pink

Color Code of Tubes

1 Red	2 Green	3 Blue	4 Yellow
-----------------	-------------------	------------------	--------------------



T: +43 31 72 / 4 22 99-0
F: +43 31 72 / 4 22 99-11



Energiestraße 10
8160 Weiz
Austria



office@triotronik.com
www.triotronik.com