

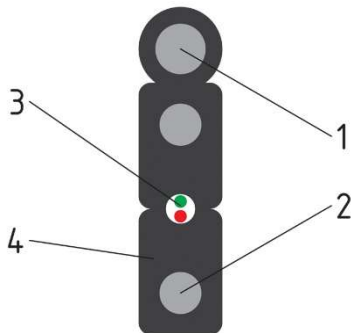
Type

FTTH DROP MES 2xG657A1 nonmetallic flexible optical drop-cable acc. IEC EN 60794
VDE 0888: A/J-(2ZN)(ZM)2Y

Application

Flexible drop-cable type A/J-(2ZN)(ZM)2Y for FTTx/PON is designed for application on pylons of overhead communication lines, city electric transport, and overhead transmission lines under impact of strong winds and ice-loading or their combinations.

Cable Design



- 1. Messenger:** galvanized steel wire
- 2. Strength members:** fiber reinforced plastic (FRP) rods
- 3. Optical fibers** acc. ITU-T G.652D or G.657A1 standards
- 4. Outer sheath:** low smoking, halogen-free, flame retardant (LSZH black) compound

Cable properties

Optical characteristics

Optical fibers ¹	Fujikura FutureGuide-ACE™ or Corning SMF-28e® Ultra singlemode fibers acc. ITU-T G.652D / G.657A1 standards
Outer diameter (uncoloured), µm	240±0.5
Cladding diameter, µm	125±1.0
Core concentricity error, µm	≤ 0.5
Mode field diameter at:	
@ 1310 nm	9.2±0.4
@ 1550 nm	10.4±0.8
Attenuation, dB/km at:	
@ 1310 nm	0.36
@ 1550 nm	0.22
Chromatic dispersion, ps/(nm km):	
@ 1310 nm	3.5
@ 1550 nm	18
Link design value PMD _Q *4, ps/√km	≤ 0.08
Proof test, GPa	≤ 0.69

¹ The fibers of the other manufacturers can be used. See fiber data sheet for more information

Physical characteristics

Fiber count in the cable	1, 2 or 4
Messenger's diameter, mm	1.0
Strength members' diameter, mm	2x0.5
Cable diameter, mm	2.0x5.2
Cable weight, kg/km	19±0.5
Temperature range:	Operational temperature: -40 ... +60 °C Storage temperature: -50 ... +70 °C Installation temperature: 0 ... +60 °C

Mechanical & Environmental characteristics

Test	Standard	Value	Requirements ³
Tensile strength	IEC 60794-1-21-E1	≥ 700 N	$\Delta\alpha$ reversible, $\Delta l \leq 0.05\%$
Crush resistance	IEC 60794-1-21-E3	1000 N/100 mm, 1 min	$\Delta\alpha \leq 0.05$ dB, no damage
Impact	IEC 60794-1-21-E4	1 J, 3 impacts, R=15 mm	$\Delta\alpha \leq 0.05$ dB after the test, no damage
Repeated bending	IEC 60794-1-21-E6	R=20xOD, 100 N, 5 cycles	No damage
Torsion	IEC 60794-1-21-E7	50 N, ±180°, 10 cycles	$\Delta\alpha \leq 0.05$ dB, no damage
Minimum bend radius	IEC 60794-1-21-E11	R=20xOD, 3 cycles, 4 turns	$\Delta\alpha \leq 0.05$ dB, no damage
Temperature cycling	IEC 60794-1-21-F1	-30° -> +60°C	$\Delta\alpha \leq 0.05$ dB/km

³ Values for singlemode fibers, all optical measurements performed at 1550 nm

Logistic

Packing: wooden reels with cover protection

Delivery lengths: 1000, 2000 or 4000 meters (tolerance -3%/+3%), other lengths available upon agreement