

Messenger Flat FRP Drop Cable up to 4 Fibers

Design Type A-N(ZM)H-SH Outdoor 2.0x5.2 mm

Properties

- Completely dry design
- 1-2 Fibers Option
- Enforced with FRP Strength Member
- Steel Messenger Wire
- Halogen free and non-corrosive fire gases
- Low fire load for high safety requirements
- LSZH - FR, UV Resistant Outer Jacket

Cable Construction

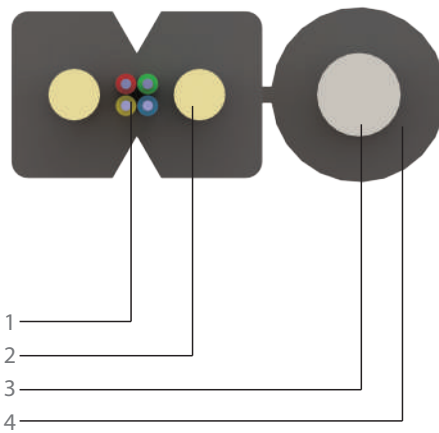
1 Fiber	SM (250 μ)
2 Strength Member	FRP
3 Messenger Wire	FeZn Wire
4 Outer Jacket	LSZH - FR, UV Resistant

Sheath Marking

Print Color/Method	White / Ink-Jet	(length marking 1 m intervals)
Cable Printing	Manufacturer name, fiber count, fiber type, product code, cable type, date, meter marking	

Optical Characteristics and Physical Properties

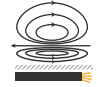
Fiber Type	A2	Unit
Jacket Color	Black	-
Core Diameter (μm)	9.0 ±0.5	μm
Cladding Diameter (μm)	125 ±5.0	μm
Primary Coating Diameter (μm)	245 ±10	μm
Attenuation	≤ 0.40 (850 nm)	dB/km
max. in cable)	≤ 0.30 (1300 nm)	dB/km



Flame Retardant



All Dry Materials



All Dielectric Construction

Mechanical and Environmental Properties

Test	Test Conditions	Value	Unit	Method
Fiber Diameter	-	0.25	mm	IEC 60811-203
FRP Diameter	-	0.5 ± 10%	mm	IEC 60811-203
Steel Wire Diameter	-	1.0 ± 10%	mm	IEC 60811-203
Outer Jacket Diameter	-	2.0 x 5.2	mm	IEC 60811-203
Approx. Weight	-	20 ± 10%	kg/km	-
Max. Tensile Strength	During installation	600	N	IEC 60794-1-2 E1
	In service	300		
Min. Bending Radius	During installation	20	mm	IEC 60794-1-2 E11
	In service	15		
Crush Resistance	Short term	4000	N/dm	IEC 60794-1-2 E3
	Long term	2000		
Impact Resistance	Wp=5J	3	impact	IEC 60794-1-2 E4
Repeated Bending	r=120mm, 1 kg	10	cycles	IEC 60794-1-2 E6
Temperature Range	During installation	+5 to +50		IEC 60794-1-22 F1
	In service	-30 to +70	°C	
	In storage	-30 to +70		

Combustion Properties

Fiber Type	Test Conditions	Value	Unit	Result	Method
Fire Load	-	1.15	Mj/m	-	-
Fire Propagation	On a vertical single cable	-	-	passed	IEC 60332-1-2
Smoke Density	-	-	-	passed	IEC 61034-2
Halogen Acid Gas	Jacket material	-	-	passed	IEC 60754-1
Degree of Acidity	Jacket material	-	-	passed	IEC 60754-2

Cable Coding System

Type	Fiber Count	Cable Type	Diameter	Buffer Type	Fiber Type	Sheath Mat.	Color
Outdoor: O	1 Fiber: 01 2 Fibers: 02 4 Fibers: 04	Steel Wire and FRP: SF	2.0x5.2 mm: 2052	Bare Fiber 250µm: B25	SM G.657 A2: A2	LSZH: H	Black: BK A2