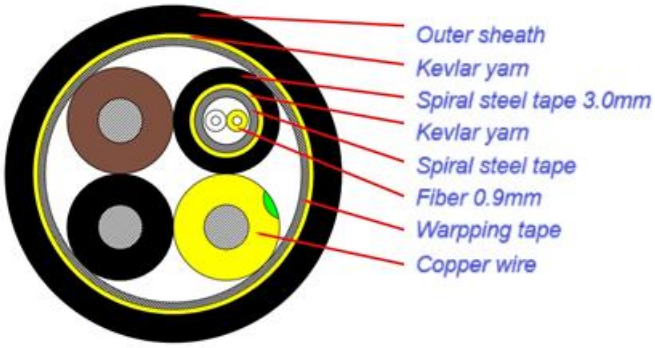
Armored optical-electric hybrid cable

Product description：

GJPFJKH-2B1-RV 3*16AWGThe optical cable structure is to wind a layer of spiral stainless steel wire armor on the surface of the 0.6mm tight-coated optical fiber, lay a multi-stranded aramid fiber outside the armor layer to play a strengthening role, and then extrude a PVC (or LSZH) outer sheath. The optical cable is twisted with wires and made into an optical-electric hybrid cable with an LSZH outer sheath.

Product sectional drawing：



Product features：

Combines optical fiber and electrical conductors in one cable, enabling simultaneous transmission of data and power—ideal for remote monitoring, smart poles, or outdoor IoT applications.

·High-strength aramid, high-performance sheath material for external protection

·Small bending radius, lightweight, soft, flexible, and easy to splice

·Excellent mechanical and environmental performance·Flame retardant or non-combustible sheath, providing good safety protection

Product applications:

·Various conventional connector products

·Tail fibers, cords

·Optical connections for optical devices, instruments, etc.

· Indoor horizontal wiring, vertical wiring within the building; LAN network, multi-information point connection

· Long-distance, field, building wiring optical fiber mixed with cable duct, etc. Optical connection

· Backbone network tail cable, equipment access to the building

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· This optical cable is suitable for fiber to the and under the carpet ceiling wiring.

· Small minimum bending radius, can be used for large capacity, multi-client indoor overall laying, unit wiring, and can be used independently branching, and can be easily connected to various end devices

· Recommended for high-density wiring, where installation space and installation curvature are small

Product standard:

GJPJKH-2B1-RV 3*16AWG Mechanical properties: The optical cable should conform to the YD/T901-201 test requirements for stretching, flattening, impact, repeated bending, twisting, winding, wear, etc.

Optical properties：

		B1.3	B6A1	B6A2	A1b	A1am550
Attenuation （+20℃）	850nm				≤3.5dB/km	≤3.5dB/km
	1300nm				≤1.5dB/km	≤1.5dB/km
	1310nm	≤0.4dB/km	≤0.4dB/km	≤0.4dB/km		
	1550nm	≤0.3dB/km	≤0.3dB/km	≤0.3dB/km		
Bandwidth （Class A）	850nm				≥500MHZ·km	≥500MHZ·km
	1300nm				≥600MHZ·km	≥1000MHZ·km
Numerical aperture					0.275±0.015NA	0.200±0.015NA
Cut-off wavelength		≤1260nm	≤1260nm	≤1260nm		

Optical cable performance

Optical cable model	indoor	GJPFJKH-2B1-RV 3*16AWG
Clad fiber size	mm	0.6mm±0.1
Fiber model	SM	G657A2
Loose buffer	material	TPE
Armored tube diameter	mm	1.8±0.1
Armored tube material	/	SUS204
Weaving	/	w/o
Strength member	Kevlar yarn	4*1000D
Inner sheath O.d	mm	3.0±0.1
Inner sheath material	/	PVC
Power wire elements	Material	Bare copper stranded wire
	Cross-sectional area	16AWG
	Q*OD（mm)	7*0.5±0.01
Insulation	Material	PVC

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	Wall thickness Type mm	0.76
	Wall thickness Min mm	0.69
	Wire diameter(mm)	3.0±0.15
	color	Black, brown, yellow-green or customized
Stranded conductor coating	Warpping tape	0.1±0.01mm
Reinforcement components	Kevlar Yarn	12*1000D
Cable outer diameter	mm	9.5±0.3
Cable jacket material	/	LSZH
Cable sub-unit operating temp	℃	-20-+70
Operating temperature	℃	-15-+70
C weight	Kg/km	115KG/KM (excluding packaging)
Jacket color	/	Black
Bending radius	mm	Dynamic 50D，Static 40D
Tensile strength	N	Long term300N; short term 800N
Compressive strength	N/10CM	Long term 1000N; short term 2000N

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