

KJAAM-HF n x (2+1) x 0,5 mm²

Application

Instrumentation cable for fixed installation in automation, process control, and audio systems. Suitable for digital and analog signals. Can be installed indoors and also outdoors on cable trays.

Maximum rated voltage 300 V AC and 500 V DC according to EN 50288-7.

These cables shall not be connected directly to mains electricity supply or other low impedance sources. Multi-element cables for use in analogue, digital and control circuits are not designed to be used for power supply.

Standards and Directives

Testing EN 50289-x-x, EN 50290-x-x

Fire testing EN 50399, IEC/EN 60332-1-2, IEC/EN 60332-3-22, IEC/EN 61034-2, IEC/EN 60754-2

ROHS directive EU 2011/65/EC

LVD Directive 2014/35/EU

EN 50575 Cables for general applications in construction works subject to reaction to fire requirements



Class of reaction to fire performance

2 - 24 pairs cables

Dca -s2,d2,a2

48 pairs cables

Eca

Fire properties

The cables are tested according to following tests:

EN 50399

Test method for bunch of cables under fire conditions – Heat release and smoke production are measured on cables during flame spread test.

IEC/EN 60332-1-2

Test for vertical flame propagation for a single insulated wire or cable

IEC/EN 60332-3-22

Test for vertical flame spread of vertically-mounted bunched wires or cables-Category A

KJAAM-HF n x (2+1) x 0,5 mm²

Construction

Conductor	Stranded tinned copper
Insulation	Solid PE
Pair	Two conductors twisted together with an earth conductor. Each pair individually shielded with plastic-aluminium tape. Each pair is identified by a number tape. In the pairs all a-conductors are blue and b-conductors are red coloured
Unit	One, two or four pairs are stranded together to form a unit.
Common screen	Plastic-aluminium tape with an earth- conductor
Sheath	Grey (RAL 7035) halogen-free flame retardant and UV-resistant material

All values in this specification are nominal unless otherwise stated.

Dimensions

Nestor-code	SSTL-code	Cable type	Diameter mm	Weight Kg/km	Min. sheath thickness mm	Length / Drum
L10808	0217426	KJAAM-HF 2x(2+1)x0,5	8,5	78	0,9	1000/K7
L10809	0217427	KJAAM-HF 2x(2+1)x0,5 500 m	8,5	78	0,9	500/P5
L10810	0217428	KJAAM-HF 2x(2+1)x0,5 200 m	8,5	78	0,9	200/P4
L10811	0217429	KJAAM-HF 4x(2+1)x0,5	10,2	120	0,9	1000/K7
L10812	0217430	KJAAM-HF 4x(2+1)x0,5 500 m	10,2	120	0,9	500/K6
L10813	0217431	KJAAM-HF 4x(2+1)x0,5 200 m	10,2	120	0,9	200/P5
L10814	0217432	KJAAM-HF 8x(2+1)x0,5	13,4	210	0,9	1000/K10
L10815	0217433	KJAAM-HF 8x(2+1)x0,5 200 m	13,4	210	0,9	200/P5
L10816	0217434	KJAAM-HF 12x(2+1)x0,5	16,3	291	0,9	1000/K11
L10817	0217435	KJAAM-HF 24x(2+1)x0,5	21,5	554	0,9	1000/K14
L10818	0217436	KJAAM-HF 48x(2+1)x0,5	29,7	1028	1,0	1000/K18

KJAAM-HF n x (2+1) x 0,5 mm²

LF - electrical characteristics

Loop resistance, at 20°C	Individual max., ohm/km	
	81	
Mutual capacitance	nominal value, nF/km	
	85	
Insulation resistance, 500 V DC, minimum	2 Gohm x km	
Dielectric strength, 1 min.	Conductor/conductor, V DC	Conductor/Screen, V DC
	2000	2000
Velocity factor	0,66	
Characteristic impedance, ohm	70 ± 10 %	
Nominal attenuation, dB/100 m	9,6 kHz	0,3
	19,2 kHz	0,5
	64 kHz	0,7
	100 kHz	0,9
	200 kHz	1,6
	1000 kHz	4,5

Mechanical characteristics

Bending in accordance with EN 50289-3-6 and Tensile performance in accordance with EN 50289-3-16		
Temperature range	- Transport, storage, operation	-45 to +70 °C
	- Installation	-5 to +60 °C
Bending radius	- During installation (min.)	15 x Diameter
	- Final installation (min.)	10 x Diameter

Testing and inspection

Testing and inspection will be carried in accordance with following characteristics and standards	
Electrical LF-characteristics IEC 60189-1	Loop resistance, mutual capacitance, Dielectric strength, Insulation resistance, short circuits, wire breaks
Mechanical characteristics IEC 60811-1-1	Thickness of sheath Diameter of cable
Visual inspection of cable	Cable design Sheath marking
The LF-electrical characteristics shall be measured as a routine test in accordance with our test program.	