

Signal cable type 2300 FB 90

Halogen free overall screened multipair signal cable mbzh with circuit integrity FE90/E90



Application:

- Special developed for those parts of the circuit installations where 90 minutes circuit integrity is required
- Suitable for applications mentioned in NPR 2576, especially where the demands of fire safety are high
- Halogen free signalling cable for fixed installation
- Suitable for areas with many electromagnetic interference (EMI) signals

Properties regarding fire performance:

- Circuit integrity in accordance with NEN-EN 50200 and NEN-EN 50362 and, in combination with all approved cable tray systems and mounting methods, in accordance with DIN 4102 part 12
- Fire Resistant, in accordance with IEC 60331
- Halogen free, in accordance with NEN-EN 50267 (IEC 60754)
- Low smoke, in accordance with NEN-EN-IEC 61034
- Flame retardant, in accordance with NEN-EN 50266 (IEC 60332-3)
- Self-extinguishing, in accordance with NEN-EN-IEC 60332-1

General properties:

- Good signal transmission at frequencies up to 100 kHz
- The construction of the cable largely prevents cross talk between the pairs
- The overall shield offers good protection against electromagnetic interference (EMI)

Remarks:

- Not suitable for power installations
- 1,5 and 2,5 mm² types suitable for 100 V audio systems
- When larger conductor size is required and screening unnecessary, type HULT FB 30/60 can be used

Construction

Conductor: solid plain copper, unspliced with zinc tape

Product nr.	No. of cores and conductor cross-section (n x mm/mm ²)	Type	Nominal overall diameter (mm)	Minimum bending radius (mm)	Maximum tensile strength (N)	Approx. weight (kg/km)
122172	1x4x0,8	2302Q	7,3	60	15	80
122173	4x2x0,8	2304	8,1	70	30	100
122174	4x2x0,8	2302	10,1	85	30	150
122175	6x2x0,8	2308	11,8	95	60	190
122176	8x2x0,8	2308	15,1	125	120	290
122177	12x2x0,8	2312	16,8	135	180	375
122178	16x2x0,8	2316	18,9	155	240	470
122179	20x2x0,8	2320	21	170	300	550
122180	40x2x0,8	2340	27,8	225	600	980
129171	52x2x0,8	2352	31,6	255	780	1250
129172	1x2x1,5	2301.150	7,3	60	45	86
129173	2x2x1,5	2302.150	12,2	60	45	225
129174	2x2x2,5	2301.250	10,1	85	75	160
129175	2x2x2,5	2302.250	14,9	120	150	330

Type 2302Q FB90: 2 pairs constructed as a quad, the opposite cores form a pair.

NEN-EN 50267 (IEC 60754)
KEMA Attestation of Conformity

Construction data

Diameter conductor	0.8 mm
Conductor category	Class 1 = solid
Core insulation	Mica + Polyolefin
Core identification	Colour
Screen over stranding element	None
Screen over stranding	Foil
Longitudinal water blocking	No
Radial water blocking	No
Protective sheath	No
Armouring	No
Material outer sheath	Copolymer, thermoplastic
Colour outer sheath	Red
Halogen free (acc. EN 50267-2-2)	Yes
Low smoke (acc. EN61034-2)	Yes
Circuit integrity	E 90
Operating temperature, flexible	-20/70 °C
Operating temperature, fix	-40/90 °C
Outdoor use	Yes
Conductor material	Cu, bare
Fire-resistant layer (core)	Yes
Fire-resistant layer (lay-up)	Yes
Armouring/reinforcement	None

Properties

Oil resistant	Good
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Electrical

standards

Standard	KEMA K102
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Product packing

Length of 1 m

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Additional information:

Minimum installation temperature: -20 °C

Operating temperature: min. -40 °C, max. +90 °C

Sheath colour: red

Packaging: coils, drums

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Electrical features

Product nr.	No. of cores and conductor cross-section (n x mm/mm ²)	Type	Conductor resistance at	Mutual capacitance
			20 °C, DC (ohm/km)	(nF/km)
122171	1x2x0,8	2301	37,5000	120
122172	1x4x0,8	2302Q	37,5000	120
122450	2x2x0,8	2302	37,5000	120
122173	4x2x0,8	2304	37,5000	120
122174	8x2x0,8	2308	37,5000	120
122175	12x2x0,8	2312	37,5000	120
122176	16x2x0,8	2316	37,5000	120
122177	20x2x0,8	2320	37,5000	120
122179	40x2x0,8	2340	37,5000	120
122180	52x2x0,8	2352	37,5000	120
122444	1x2x1,5	2301.150	7,4100	150
129172	2x2x1,5	2302.150	12,1000	150
129171	1x2x2,5	2301.250	7,4100	150
129173	2x2x2,5	2302.250	7,4100	150

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