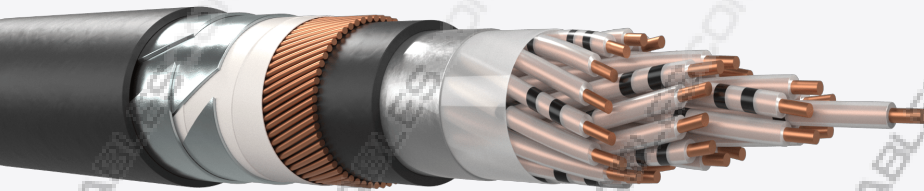


Cable AJ-2YOF(L)2YDB2Y_H115-H145 RK500

RAILWAY SIGNALLING CABLES, MULTICORE, PE SHEATH FOR EXTERNAL INSTALLATIONS WATERBLOCKING AND RODENT RESISTANT



Description and application

Cables from 1 to 200 conductors of 0.9, 1.4 and 1.8 mm, polyethylene insulated. Conductors are stranded in layers to form the core which is filled with a low dielectric compound to prevent water penetration and then is protected by an anti-inductive (L)2YDB2Y sheath with reduction factor according to customer's requirements. They are used as control cables up to 100 Hz signals, especially in rail infrastructures, when protection is required against the induction of high voltage lines. For installation in ducts or directly buried. The cable is rodent resistant. Generally according to DB AG 416.0116 and DB AG 416.0113

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Construction

- Conductors: Annealed copper solid wire, 0.9, 1.4 and 1.8 mm diameter.
- Insulation: Solid polyethylene. (2Y)
- Cabling element: Conductors.
- Core filling: Flooded with low dielectric factor compound to make the cable waterproof. (OF)
- Core formation: Stranded in concentric layers.
- Moisture barrier: Aluminium tape bonded to the inner sheath.(L)
- Inner sheath: PE sheath. (2Y)
- Screening: Layer of copper wires (Ø0,9/1,2/1,4/1,8 mm). (D)
- Armouring: Two helically applied steel tapes (0,5/0,8 mm thickness). (B)

- Outer sheath: UV resistant black polyethylene. (2Y)
- Sheath marks: The sheath shall be marked, at regular intervals with the following information:
 - SIGNAL / AJ-2YOF(L)2YDB2Y / Capacitance / Manufacturer / Length marks
 - Other type of marks according to the customer

ELECTRICAL CHARACTERISTICS (20°C)

	0.9	1.4	1.8
Maximum resistance (Ω/km)	≤ 28.9	≤ 11.9	≤ 7.2
Minimum insulation resistance (MΩxkm, 20°C, 500V)	≥1500	≥1500	≥1500
Mutual capacity (nF/km, 800 Hz)	≤115	≤145	≤145
Dielectric strength (Vdc, 2min) Conductor - Conductor	3500	3500	3500
Dielectric strength (Vdc, 2min) Conductor - Screen			
AS/DC operating voltage (V)			

MECHANICAL AND THERMAL PROPERTIES

Maximum allowable radius	Installation 20 x Ø cable Operation 15 x Ø cable
Operating temperature range	-40° C to +60° C
Installation temperature range	-10° C to +60° C

DIMENSIONS AND WEIGHTS

Cable AJ-2YOF(L)2YDB2Y_H115-H145 RK500 x 0.9

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x1	492	15,2
4x1	544	16
7x1	611	17
10x1	706	18,8
12x1	736	19,1
14x1	768	19,6
20x1	857	20,6
24x1	974	22,4
30x1	1056	23,2
40x1	1168	24,2
50x1	1362	26,8
60x1	1518	28,4
80x1	1803	31,2
100x1	1992	32,2
120x1	2295	35,3

Cable AJ-2YOF(L)2YDB2Y_H115-H145 RK500 x 1.4

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x1	570	16,6
4x1	651	17,7
7x1	765	19,1
10x1	928	21,6
12x1	985	22

14x1	1043	22,7
20x1	1208	24,1
24x1	1393	26,6
30x1	1545	27,9
40x1	1793	29,5
50x1	2135	33,1
60x1	2397	34,9
80x1	2951	39,1

Cable AJ-2YOF(L)2YDB2Y_H115-H145 RK500 x 1.8

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x1	643	17,8
4x1	758	19,1
7x1	912	20,9
10x1	1147	24
14x1	1311	25,3
20x1	1553	27,1
24x1	1838	30,6
30x1	2053	31,9
40x1	2409	33,7
50x1	2935	38,7
80x1	4132	45,7