

## Cable A-2YOF(L)2YV\_H115-H145

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



### Description and application

Cables from 1 to 120 conductors of 0.9, 1.4 and 1.8 mm, polyethylene insulated. Conductors are stranded in layers to form the core which is then protected by a 2YV sheath. They are used as control cables up to 100 Hz signals, especially in rail infrastructures laid in ducts. Generally according to DB AG 416.0116 and DB AG 416.0114

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### Construction

- Conductors: Annealed cooper 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.
- Outer sheath: UV resistant black reinforced sheath of polyethylene. (2YV)
- Sheath marks: The sheath shall be marked, at regular intervals with the following information
  - SIGNAL / A-2YOF(L)2YV / Capacitance / Manufacturer / Length marks
  - Other type of marks according to the costumer

## 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	≥2500	≥2500	≥2500
Dielectric strength (Vdc, 2min) Conductor - Screen	≥2500	≥2500	≥2500
AS/DC operating voltage (V)	420/600	420/600	420/600

## MECHANICAL AND THERMAL PROPERTIES

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

## DIMENSIONS AND WEIGHTS

### Cable A-2YOF(L)2YV\_H115-H145 x 0.9

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x4	75.54	9.70
4x4	97.31	10.50
7x4	128.05	11.50
10x4	169.52	13.30
14x4	205.81	14.10
20x4	259.05	15.10
24x4	310.52	16.90
30x4	362.25	17.70
40x4	443.72	18.70
50x4	552.42	21.30
60x4	636.47	22.30
80x4	822.87	25.10
100x4	975.74	26.10
120x4	1190.50	29.60

### Cable A-2YOF(L)2YV\_H115-H145 x 1.4

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x4	108.17	11.10
4x4	151.73	12.20
7x4	215.18	13.60
10x4	294.45	16.10
14x4	372.21	17.20
20x4	486.24	18.60

24x4	588.80	21.10
30x4	700.31	22.20
40x4	886.44	23.80
50x4	1111.82	27.40
60x4	1296.37	28.80
80x4	1706.69	32.80
100x4	2115.83	36.70
120x4	2474.15	38.50

**Cable A-2YOF(L)2YV\_H115-H145 x 1.8**

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
2x4	141.36	12.30
4x4	207.77	13.60
7x4	306.93	15.40
10x4	427.66	18.50
14x4	548.95	19.80
20x4	730.31	21.60
24x4	893.73	24.90
30x4	1070.60	26.20
40x4	1359.93	28.00
50x4	1730.21	32.80
60x4	2027.81	34.60
80x4	2649.72	39.00
100x4	3205.71	40.80
120x4	3900.75	46.50