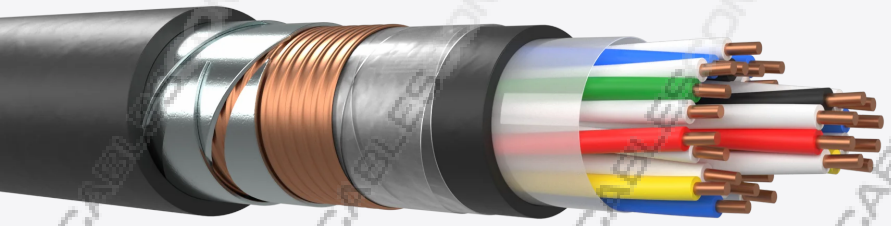
Cable ZPAU

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



Description and application

Railway signal cables from 2 to 28 pairs. Annealed copper conductors of 1, 1.5 mm2 or 2.5 mm2 section, insulated in solid PE. Stranded in pairs or quads Shielded with corrugated copper tape and armoured with two steel tapes applied helically. PVC unleaded outer sheath. This cable is flame retardant and resistant to mineral oils. Generally according to SNCF CT-445 and EN 60332-1.

This cable is used to connect the control centre to the centres of satellite equipment. It can also be installed in short lengths along routes electrified at 25 kV ac.

Construction

- Conductors: Annealed copper solid wire, 1, 1.5 or 2.5 mm2. (1.13 , 1,38 or 1,8 mm diameter)
- Insulation: Solid polyethylene.
- Cabling element: Stranded into pairs.
- Core formation: Stranded in concentric layers, according CT-445.
- Protective layer: Waterproof synthetic material arranged longitudinally with overlap.
- Inner sheath: PE sheath.
- Armouring: Copper tape longitudinally applied. Dielectric tape and two helically applied steel tapes.
- Outer sheath: Black unleaded, oil and UV resistant PVC.
- Sheath marks: The sheath shall be marked, at a regular intervals, with the following information:
    - CABLESCOM – CABLE TYPE –YEAR –LENGTH MARK

TITLE	EDITION	APPROVED BY	DATE
Cable ZPAU	3	O.salomon	2021-08-04

ELECTRICAL CHARACTERISTICS (20°C)

	1.13	1.38	1.8
Maximum resistance (Ω/km)	≤36.2	≤24.2	≤14.82
Minimum insulation resistance (MΩxkm, 20°C, 500V)	≥5000	≥5000	≥5000
Mutual capacity (nF/km, 800 Hz)	≤55	≤55	≤45 (1 pair) ≤55 (2, 4 and 7 pairs)
Dielectric strength (Vdc, 2min) Conductor - Conductor	4500	4500	4500
Dielectric strength (Vdc, 2min) Conductor - Screen	4500	4500	4500
AS/DC operating voltage (V)			

MECHANICAL AND THERMAL PROPERTIES

Maximum allowable radius	15 x Ø cable
Operating temperature range	-25º C a +75º C
Installation temperature range	

DIMENSIONS AND WEIGHTS

Cable ZPAU x 1.13

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
1x2	560	17.6
2x2	577	17.6
4x2	750	21.6
7x2	907	21.6
14x2	1297	29.0
21x2	1646	32.4
28x2	1929	36.8

Cable ZPAU x 1.38

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
1x2	543	17.9
4x2	935	25.4
7x2	1103	27.0
14x2	1645	33.8
28x2	2563	42.8

Cable ZPAU x 1.8

Number of conductors	Nominal Weight (kg/km)	Nominal OD (mm)
1x2	657	19.6
2x2	700	18.6
4x2	1130	27.5