

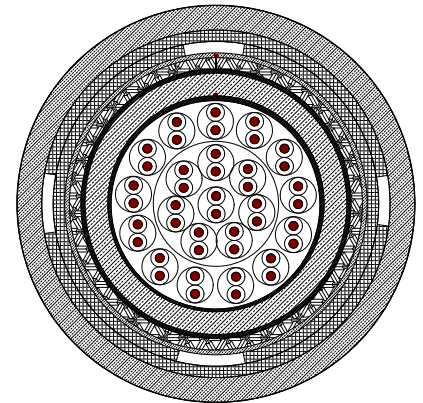


ZPAU ... p x 1.0 / 1.5 / 2.5 mm²

Signalling cable, stranded in pairs, with mechanical protection

Based on French norm SNCF CT445, issue 09/2005

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to technical progress



Principle drawing
ZPAU 21p x 1 mm²

Application

Signalling cable for use in stationary rail facilities.

Colour Coding, Marking

As specified in above mentioned specification..

Construction

ZPAU	
Conductor	copper, solid, 1.0 or 1.5 or 2.5 mm ² nominal cross-section
Insulation	PE (2Y)
Twisting	pairs uniformly twisted in layers
Cable core wrapping	one or more layers of plastic tape with overlap
Slitting cord	KEVLAR [®] , 1870 dtex
Inner sheath	PE (2Y)
Interference protection	by corrugated copper foil running in longitudinally
Slitting cord	KEVLAR [®] , 1870 dtex
Inner sheath	PE (2Y)
Armouring	2 layers steel tape 0.5 mm (2B0.5)
Outer sheath	PVC (Y) or PE (2Y)



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Mechanical and Thermal Properties

Admissible bending radius		≥ 10 x outer cable diameter
Temperature range	during operation	max. + 70°C
	during installation	- 20°C to + 50°C

Electrical Properties

at 20°C ± 5°C

Conductor cross-section	mm ²	1.0	1.5	2.5
Core diameter	mm	2.3	3.4	4.4
Conductor resistance	Ω/km	≤ 18.1	≤ 11.9	≤ 7.0
Insulation resistance	GΩxkm		≥ 5	
Mutual capacitance at 800 Hz	nF/km		≤ 55	
Capacitance unbalance at 800 Hz	pF/500 m		≤ 400	
Operating voltage AC/DC	V		450/750	
peak value AC	V		900	
Test voltage 50 Hz – 3 min				
core/core	V		1000	
core/screen	V		3000	

Additional Properties

Dimension	Outer diameter	Cable weight net	Standard supply length	Drum size flange-ø	Transport weight gross	Copper content	Tensile strength max.	
n	mm	kg/km	m	mm	kg/drum	kg/km	N	
ZPAU n x 2 x 1.0 mm²								
1 x	16.2	490	1000	1200	657	98	110	
2 x	17.0	550	1000	1200	717	124	220	
3 x	22.2	820	1000	1600	1185	173	320	
4 x	23.8	890	1000	1600	1255	213	430	
7 x	26.7	1080	1000	1600	1445	291	730	
14 x	32.3	1560	1000	2000	2199	468	1380	
21 x	37.2	1990	1000	2200	2832	663	1970	
28 x	41.4	2380	500	1800	1673	799	2510	
56 x	52.9	3700	500	2200	2692	1430	4400	
ZPAU n x 2 x 1.5 mm²								
2 x	22.3	850	1000	1400	1096	188	330	
4 x	28.6	1220	1000	1800	1700	280	620	
7 x	32.0	1500	1000	1800	1980	412	1060	
14 x	40.9	2250	1000	2200	3090	692	1940	
21 x	47.7	2910	1000	2600	4250	942	2700	
28 x	52.9	3500	500	2000	2390	1194	3380	
56 x	59.0	5610	500	2600	4140	2195	5400	