



Applications

These AL-PES foiled and PVC insulated cables are used as signal transmission cables in industrial applications. They can be easily used with their flexible construction in narrow applications like: electronic control systems of computer or audio systems or in communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. They are used indoors. Screening, protects the cable from the outer electrical effects.

Construction

Conductor	Stranded Electrolytic Annealed Copper (IEC 228 / VDE 0295 / HD 383 / BS 6360 Class 5, 0.34 mm ² ; Column 3)
Insulation	PVC (EN 50290-2 / HD 21.1.S4 / VDE 0281-TI 2), Color Code : DIN 47100
Lay-up	As pairs and each pair as layers
Separator	PES Tape
Drain Wire	Stranded Tinned Copper
Shielding	AL-PES Foil
Outer Sheath	PVC (EN 50290-2 / HD 21.1.S4 / VDE 0281 TM 1) Outer Sheath Color : RAL 7001 Grey

Reference Standards	VDE 0812, VDE 0814
Flame Test	IEC 60332-1, VDE 0482-265-2-1

Technical and Electrical Properties (20°C)

Operating Voltage	0.14 mm ² ...0.25 mm ²	250 V
	0.34 mm ² ...1.50 mm ²	300 V / 500 V
Test Voltage	0.14 mm ² ...0.25 mm ²	1200 V
	0.34 mm ² ...1.00 mm ²	1500 V
	1.50 mm ²	2500 V
Insulation Resistance	Min. 200 M.Ωm x Km	
Inductance	Approx. 0.65 mH / Km	
Current Carrying Capacity	See Technical Data Table 4	
Temperature Range	Fixed	-30 °C... + 70 °C
	Flexible	-5 °C... + 70 °C
Minimum Bending Radius	Fixed	7.5 x Cable Diameter
	Flexible	15 x Cable Diameter

Cross Section	Loop Resistance (Max. Ω/Km)	Capacitance (Core/Core nF/Km)	Capacitance (Core/Screen nF/Km)
0.14 mm ²	276.0	80	120
0.22 mm ²	170.0	100	150
0.25 mm ²	155.6	100	150
0.34 mm ²	112.0	100	150
0.50 mm ²	78.0	110	170
0.75 mm ²	52.0	110	170
1.00 mm ²	39.0	120	180
1.50 mm ²	26.6	120	180

PART NUMBER	NO.OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
0.14 mm²				
22300102	2x2x0.14	4.7	6.5	24
22300103	3x2x0.14	5.1	9.2	30
22300104	4x2x0.14	5.8	11.9	40
22300105	5x2x0.14	6.1	14.5	46
22300106	6x2x0.14	6.6	17.1	52
22300107	7x2x0.14	6.6	19.8	57
22300108	8x2x0.14	7.2	22.5	64
22300110	10x2x0.14	8.2	27.8	77

0.22 mm²				
22300202	2x2x0.22	5.2	10.6	31
22300203	3x2x0.22	5.7	14.8	41
22300204	4x2x0.22	6.4	19.0	50
22300205	5x2x0.22	6.7	23.2	60
22300206	6x2x0.22	7.3	27.6	68
22300207	7x2x0.22	7.3	31.6	75
22300208	8x2x0.22	7.9	35.9	85
22300210	10x2x0.22	9.1	44.6	104

0.25 mm²				
22300302	2x2x0.25	5.3	11.7	32
22300303	3x2x0.25	5.8	16.3	42
22300304	4x2x0.25	6.6	20.9	53
22300305	5x2x0.25	6.9	25.7	63
22300306	6x2x0.25	7.6	30.4	73
22300307	7x2x0.25	7.6	35.3	82
22300308	8x2x0.25	8.1	40.0	92
22300310	10x2x0.25	9.5	49.8	113

0.34 mm²				
22300402	2x2x0.34	5.9	15.3	42
22300403	3x2x0.34	6.5	21.7	52
22300404	4x2x0.34	7.6	28.2	69
22300405	5x2x0.34	8.0	34.8	83
22300406	6x2x0.34	8.8	41.4	97
22300407	7x2x0.34	8.8	48.1	108
22300408	8x2x0.34	9.3	54.7	120
22300410	10x2x0.34	11.1	68.2	159

PART NUMBER	NO.OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
0.50 mm²				
22300502	2x2x0.50	6.5	19.7	49
22300503	3x2x0.50	7.4	28.5	68
22300504	4x2x0.50	8.5	36.9	87
22300505	5x2x0.50	9.0	46.0	104
22300506	6x2x0.50	9.8	53.9	122
22300507	7x2x0.50	9.8	63.3	138
22300508	8x2x0.50	10.8	71.2	158
22300510	10x2x0.50	12.5	89.3	197

0.75 mm²				
22300802	2x2x0.75	7.5	31.5	68
22300803	3x2x0.75	8.4	44.3	92
22300804	4x2x0.75	9.7	57.2	117
22300805	5x2x0.75	10.3	70.2	144
22300806	6x2x0.75	11.5	82.8	171
22300807	7x2x0.75	11.5	96.2	191
22300808	8x2x0.75	12.3	109.1	217
22300810	10x2x0.75	14.2	136.1	270

1.00 mm²				
22301002	2x2x1.00	8.1	39.4	80
22301003	3x2x1.00	9.1	56.4	110
22301004	4x2x1.00	10.6	73.5	145
22301005	5x2x1.00	11.2	91.1	175
22301006	6x2x1.00	12.3	108.7	204
22301007	7x2x1.00	12.3	126.3	232
22301008	8x2x1.00	13.1	143.5	260
22301010	10x2x1.00	15.2	179.5	322

1.50 mm²				
22301502	2x2x1.50	9.6	56.7	112
22301503	3x2x1.50	10.8	82.2	157
22301504	4x2x1.50	12.5	107.9	205
22301505	5x2x1.50	13.0	133.5	245
22301506	6x2x1.50	14.5	160.3	292
22301507	7x2x1.50	14.5	186.0	327
22301508	8x2x1.50	15.7	213.6	377
22301510	10x2x1.50	18.4	265.2	479