



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-TI2), Color Code : DIN 47100
Lay-up	All cores 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
Flame Test	IEC 60332-1, VDE 0482-265-2-1

Technical and Electrical Properties (20°C)

			Cross Section	Conductor Resistance (Max. Ω/Km)	Capacitance (Core/Core nF/Km)	Capacitance (Core/Screen nF/Km)
Operating Voltage	0.14 mm ² ...0.25 mm ²	250 V	0.14 mm ²	138.0	80	120
	0.34 mm ² ...1.50 mm ²	300 V / 500 V	0.22 mm ²	85.0	100	150
Test Voltage	0.14 mm ² ...0.25 mm ²	1200 V	0.25 mm ²	77.8	100	150
	0.34 mm ² ...1.00 mm ²	1500 V	0.34 mm ²	56.0	100	150
	1.50 mm ²	2500 V	0.50 mm ²	39.0	110	170
Insulation Resistance	Min. 200 M.Ωm x Km		0.75 mm ²	26.0	110	170
Inductance	Approx. 0.65 mH / Km		1.00 mm ²	19.5	120	180
Current Carrying Capacity	See Technical Data Table 4		1.50 mm ²	13.3	120	180
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				

* LSF type of LIY(St)Y cables can be produced as well.

RoHS

Control Cables 2MKAB®

PART NUMBER	NO.OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
0.14mm²				
22100102	2x0.14	3.6	3.8	15
22100103	3x0.14	3.8	5.1	18
22100104	4x0.14	4.0	6.4	21
22100105	5x0.14	4.3	7.7	26
22100107	7x0.14	4.7	10.3	32
22100109	9x0.14	5.4	12.8	40
22100110	10x0.14	5.7	14.1	44
22100114	14x0.14	6.3	19.3	53
22100120	20x0.14	7.4	27.0	74
22100125	25x0.14	8.2	33.5	85
0.22 mm²				
22100202	2x0.22	3.9	6.5	19
22100203	3x0.22	4.1	8.5	23
22100204	4x0.22	4.4	10.5	28
22100205	5x0.22	4.7	12.6	32
22100206	6x0.22	5.3	14.7	38
22100207	7x0.22	5.3	16.7	41
22100209	9x0.22	6.0	20.9	50
22100210	10x0.22	6.5	22.9	57
22100216	16x0.22	7.5	35.6	80
22100220	20x0.22	8.2	44.2	98
22100225	25x0.22	9.3	54.6	121
0.25 mm²				
22100302	2x0.25	4.0	7.1	20
22100303	3x0.25	4.3	9.3	25
22100304	4x0.25	4.6	11.6	30
22100305	5x0.25	5.0	13.9	36
22100306	6x0.25	5.5	16.2	41
22100307	7x0.25	5.5	18.5	46
22100309	9x0.25	6.3	23.1	56
22100310	10x0.25	6.7	25.3	62
22100316	16x0.25	7.9	39.5	90
22100320	20x0.25	8.8	49.4	109
22100325	25x0.25	9.8	59.7	130
0.34 mm²				
22100402	2x0.34	4.5	8.8	24
22100403	3x0.34	4.8	11.7	31
22100404	4x0.34	5.2	15.2	38
22100405	5x0.34	5.7	18.3	44
22100406	6x0.34	6.2	21.5	52
22100407	7x0.34	6.2	24.7	57
22100408	8x0.34	6.5	27.8	65

PART NUMBER	NO.OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
22100409	9x0.34	7.2	31.2	73
22100410	10x0.34	7.7	34.5	80
0.50 mm²				
22100502	2x0.50	5.0	10.8	30
22100503	3x0.50	5.3	15.1	37
22100504	4x0.50	5.6	19.3	45
22100505	5x0.50	6.2	23.4	54
22100506	6x0.50	6.8	27.6	64
22100507	7x0.50	6.8	31.9	75
22100508	8x0.50	7.6	36.3	81
22100509	9x0.50	8.0	40.5	89
22100510	10x0.50	8.6	44.7	97
0.75 mm²				
22100802	2x0.75	5.4	18.4	38
22100803	3x0.75	5.9	24.6	49
22100804	4x0.75	6.2	31.2	61
22100805	5x0.75	7.0	37.5	71
22100806	6x0.75	7.6	43.6	85
22100807	7x0.75	7.6	50.3	94
22100808	8x0.75	8.3	56.6	106
22100809	9x0.75	9.1	63.0	123
22100810	10x0.75	9.8	69.5	136
1.00 mm²				
22101002	2x1.00	6.0	22.6	46
22101003	3x1.00	6.4	30.8	59
22101004	4x1.00	7.0	39.1	74
22101005	5x1.00	7.6	47.6	88
22101006	6x1.00	8.3	56.1	104
22101007	7x1.00	8.3	64.5	115
22101008	8x1.00	9.0	72.9	131
22101009	9x1.00	9.9	81.6	150
22101010	10x1.00	10.6	90.3	169
1.50 mm²				
22101502	2x1.50	7.0	36.8	69
22101503	3x1.50	7.4	49.6	90
22101504	4x1.50	8.1	62.2	109
22101505	5x1.50	9.0	75.3	133
22101506	6x1.50	9.8	82.7	146
22101507	7x1.50	9.8	94.3	165
22101508	8x1.50	10.8	106.9	185
22101509	9x1.50	11.7	119.5	211
22101510	10x1.50	12.6	132.6	240