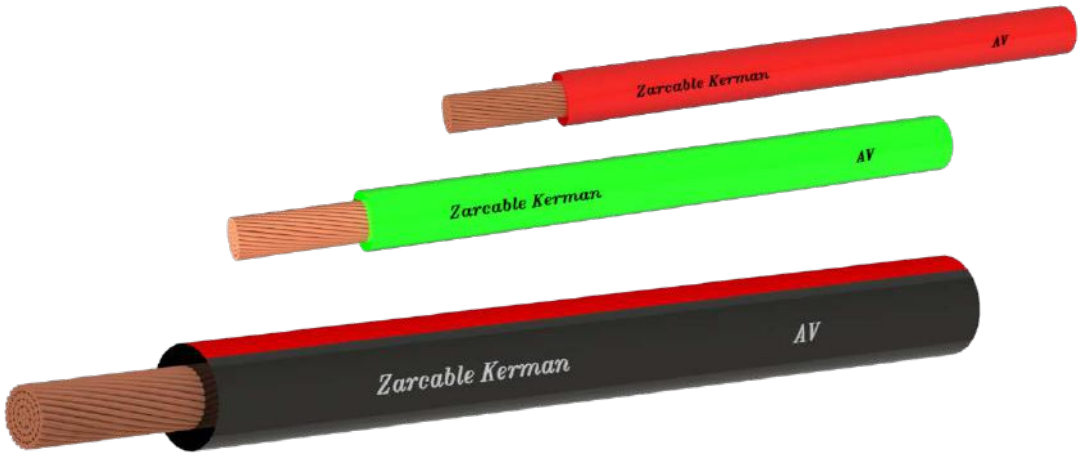
AV (0.5-100)mm^2

CU/PVC



PVC Insulated, Non Sheathed cable for Automotive

Construction

Conductor: Copper conductor fine wire stranded as per DIN ISO 6722 part 3 .

Insulation: Soft-PVC with properties according to ISO 6722-1, Type T1

Insulation colour: ● Black, ● Blue, ● Orange, ● Red, ○ White
Other colours available upon request

Abbreviations
A : low-tension cable for automobiles
V : Vinyl Insulated

Properties :
Oil and fuel resistant as per DIN ISO 6722 part 2

Technical data

Temperature range:

Max Working Temperature :	+80 °C
Min Working Temperature :	- 40 °C
Hot-pressure resistance test at:	+120 °C

Nominal voltage: 25V AC - 60V DC

Test voltage: 3kv i.e < 0.5mm^2
5kv i.e > 0.5mm^2

Minimal inner bending radius: single core :8 x D

Withstand Voltage test : Spark :5000V for 15sec
Immersion :1000V for 1Min

DESIGN STANDARDS

KS C 3311
ISO 6722

APPLICATION

Low-tension electric wire for Automobiles. Used in Motorcycles and other motor vehicles for starting, charging, lighting, signal and instrument panel circuits. Flame retardant. Highly resistant against acids, Petrol and diesel. Flexible conductors with thin wall insulation.

AV (0.5-100)mm^2

CU/PVC

Nominal size (mm2)	Construction (No/mm)	Calculated area (mm2)	Outer diameter (mm)	Thickness (mm)	Overall diameter Standard (mm)	Overall diameter Max (mm)	Conductor resistance (Ω/Km)	Current limit (A)	Approx. weight (g/m)	Standard length (m)
0.5f	20/0.18	0.5087	1.0	0.6	2.2	2.4	36.7	12	8	800
0.5	7/0.32	0.5629	1.0	0.6	2.2	2.4	32.7	12	9	1000
0.75f	30/0.18	0.7630	1.2	0.6	2.4	2.6	24.4	15	12	800
0.85	11/0.32	0.8846	1.2	0.6	2.4	2.6	20.8	15	12	800
1.25f	50/0.18	1.273	1.5	0.6	2.7	2.9	14.7	21	17	600
1.25	16/0.32	1.287	1.5	0.6	2.7	2.9	14.3	20	17	600
2.0f	37/.26	1.964	1.8	0.6	3.0	3.3	9.5	27	25	500
2.0	26/.32	2.091	1.9	0.6	3.1	3.4	8.81	28	25	500
3.0f	61/026	3.239	2.4	0.7	3.3	4.1	5.76	37	39	300
3.0	41/0.32	3.297	2.4	0.7	3.3	4.1	5.59	38	39	300
5.0	65/0.32	5.228	3.0	0.8	4.6	4.9	3.52	51	60	200
8.0	50/0.45	7.952	3.7	0.9	5.5	5.8	2.32	66	90	100
15	84/0.45	13.36	5.4	1.1	7.6	8.0	1.38	92	150	50
20	41/0.60	20.61	6.1	1.1	8.3	8.8	0.887	121	220	50
30	70/0.80	35.19	8.0	1.4	10.8	11.5	0.520	168	390	50
40	85/0.80	42.73	8.6	1.4	11.4	12.1	0.428	188	460	50
50	108/0.80	54.29	9.8	1.6	13.0	13.8	0. 337	220	590	50
60	127/0.80	63.84	10.4	1.6	13.6	14.4	0. 287	243	680	50
85	169/0.80	84.96	12.0	2.0	16.0	17.0	0. 215	300	910	50
100	217/0.80	109.1	13.6	2.0	17.6	18.6	0. 168	356	1.100	50

Insulation materials for the production of automotive cables

Service temperatures						Resistance to				
Temperature index	Thermal overload capacity	Cold winding test	Specific volume resistance	Abrasion	Flame retardance	Oil	Fuels	Brake fluid	Acids/ alkalis	Organic agents
ISO 6722-1 oder ISO 14572			IEC 93 DIN 53482	ISO 6722-1 oder ISO 14572						
°C/3,000 h	°C/48 h	°C	Ω · cm							
100/105	125	−40	$>10^{12}$	+	+	+	+	−	+	−
105	110	−50	$>10^{12}$	+	+	+	+	−	+	−
125	140	−40	$>10^{12}$	+	+	+	+	−	+	−
90	100	−40	$>10^{16}$	+	−−	−	+	−−	+	−
105	140	−40	$>10^{12}$	++	−	++	++	+	+	+
125	150	−40	$>10^{16}$	+	−−	+	+	−	+	+
125	150	−40	$>10^{14}$	+	+	+	+	−	+	+
°C/3,000 h	°C/48 h	°C	Ω · cm							
110/125	150	−40	$>10^{9}$	++	+	++	++	+	+	+
90	150	−40	$>10^{9}$	++	−	++	++	+	−	+
150	180	−40	$>10^{9}$	++	+	++	++	+	+	+
125	150	−40	$>10^{10}$	−	+	+	+	−	+	−
90	120	−40	$>10^{10}$	++	−	++	++	+	−	+
125	150	−40	$>10^{14}$	−	+/−*	−	−	−	+	−
°C/3,000 h	°C/48 h	°C	Ω · cm							
200	225	−80	$>10^{16}$	−	+	+	+	++	+	+
140	180	−40	$>10^{10}$	−	−	−	−	−	−	−
105	140	−40	$>10^{12}$	++	+	+	+	−	+	+
125-150	150	−40	$>10^{14}$	+	+	+	+	−	+	+
°C/3,000 h	°C/48 h	°C	Ω · cm							
260	305	−90	$>10^{18}$	++	++	++	++	++	++	++
210	260	−65	$>10^{13}$	++	++	++	++	++	++	++
180	230	−65	$>10^{13}$	++	++	++	++	++	++	++
150	160	−30	$>10^{14}$	++	++	++	++	++	+	+
260	290	−90	$>10^{13}$	++	++	++	++	++	++	++

++ excellent + good − fair −− poor * depending on the recipe, on demand