

POLARIS AUTO CABLES

Application:

These auto cables, battery cables are used as original equipment for wiring in automobiles and in the auto harnesses by harness manufacturers where high flexibility, thermo and mechanical strength are required. We manufactures battery cables that also find their application in telecommunications, power, computer back up, wind energy farms etc.

Features :

Manufactured from bright annealed 99.97% pure bare copper conductors, which offers very low conductor resistance & special grade PVC compound Insulation available in Lead free grade which is resistant to heat, oil, abrasion and cold. Excellent flexibility. Temperature range up to 105°C & usable to work in tough environments. Available in different colors and stripes.

This cables are made as per :

- 1) **DIN 72551 Part 6** (DEUTSCHES INSTITUT fuer NORMUNG)
- 2) **JIS C 3406 – 1971** (JAPANESE INDUSTRIAL STANDARDS)
- 3) **JASO D 611** (JAPANESE AUTOMOBILE STANDARD ORGANIZATION)
- 4) **BS 6862 : Part 1:1971** (BRITISH STANDARD)
- 5) **ISO 6722 : 2006** (INTERNATIONAL ORGANIZATION for STANDARDIZATION)
- 6) **IS: 2465** (INDIAN STANDARD)

Color codes

Single colors & with /without stripes .

Battery Cable :- RED & BLACK

Packing

In 30 mtrs , 50 mtrs and 100 mtrs coils. Longer coils on special packing available on request.

1) DIN : Thin Wall Single Core PVC Insulated Low tension

Auto Cables as per: DIN 72551 Part 6 For Road Vehicals,FLRY-B TYPE WIRES

FLRY-B TYPE WIRES (DIN 72551 Part 6)					
Conductor Nominal Area Sq. mm.	No. of Strands	Diameter of Single Wire mm(Max.)	Insulation Wall Thickness mm (Min.)	Overall Diameter mm	Resistance mΩ / m @ 20 ° C (Min.-Max)
0.35	12	0.21	0.20	1.20 – 1.40	47.80 - 52.00
0.50	16	0.21	0.22	1.40 – 1.60	34.10 - 37.10
0.75	24	0.21	0.24	1.70 – 1.90	22.70 - 24.70
1.0	32	0.21	0.24	1.90 – 2.10	17.00 - 18.50
1.5	30	0.26	0.24	2.20 – 2.40	11.70 - 12.70
2.5	50	0.26	0.28	2.70 – 3.0	7.00 - 7.60
4.0	56	0.31	0.32	3.40 – 3.70	4.32 - 4.70
6.0	84	0.31	0.32	4.00 – 4.30	2.85 - 3.10

2) JIS: Thick Wall Single Core PVC Insulated Auto Cables as per : JIS C 3406 - 1971 designed for a temperature of -40 to +80 °C ,Plain Copper Conductors.

AV TYPE WIRES (JIS C 3406 - 1971)				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm.(Nom.)	Nom. Thickness Of Insulation mm	Overall diameter mm	Resistance mΩ/m @ 20 °C (Max)
			(Max)	
0.50	7 / 0.32	0.60	2.20	32.70
0.85	11 / 0.32	0.60	2.40	20.80
1.25	16 / 0.32	0.60	2.70	14.30
2.00	26 / 0.32	0.60	3.10	8.81
3.00	41 / 0.32	0.70	3.80	5.59
5.00	65 / 0.32	0.80	4.60	3.52
8.00	50 / 0.45	0.90	5.50	2.32
10.00	80 / 0.40	1.10	6.40	1.82

3 a) JASO: Thin Wall Single Core PVC Insulated Low tension Auto Cables as per : JASO D 611 For Automobiles , AVS TYPE WIRES

AVS (TYPE -1) JASO D 611					
Conductor Nominal Area Sq. mm.	No. of Strands	Diameter of Single Wire mm(Max.)	Insulation Wall Thickness mm (Min.)	Overall Diameter mm (Max.)	Resistance mΩ / m @ 20 °C (Max)
0.5	7	0.32	0.32	2.1	32.70
1.25	16	0.32	0.32	2.6	14.30
1.25f	50	0.18	0.32	2.6	14.70
2.00	26	0.32	0.32	3.1	8.81
3.00	41	0.32	0.40	3.8	5.59
5.00	65	0.32	0.48	4.6	3.52

3 b) JASO: Thin Wall Single Core PVC Insulated Low tension Auto Cables as per : JASO D 611 For Automobiles , AVSS TYPE WIRES

AVSS (TYPE -2) JASO D 611					
Conductor Nominal Area Sq. mm.	No. of Strands	Diameter of Single Wire mm(Max.)	Insulation Wall Thickness mm (Min.)	Overall Diameter mm (Max.)	Resistance mΩ / m @ 20 °C (Max)
0.35	7	0.26	0.24	1.50	50.20
0.50	7	0.32	0.24	1.70	32.70
0.5f	19	0.19	0.24	1.70	34.60
0.75	7	0.39	0.24	1.80	22.30
0.75f	19	0.23	0.24	1.90	23.60
0.85	7	0.40	0.24	1.90	20.80
1.25	19	0.29	0.24	2.20	14.90
2.00	19	0.37	0.32	2.80	9.00
2.00 f	37	0.26	0.32	2.70	9.50

4) BS: Thick Wall Cables for General wiring in Vehicals ,up to & including 100 Volts designed for a temperature of -15 to +85⁰ C , Plain Copper Conductors- PVC insulated As per BS 6862

PVC Single Core Auto Cable (BS 6862)				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm (Nom.)	Radial Thickness of Insulation (Nom.) mm.	Overall diameter (Approx.) mm.	Resistance Ω / Km @ 20 ° C (Max)
0.65	9 / 0.30	0.60	2.25	29.35
1.00	14 / 0.30	0.60	2.50	18.84
1.50	21 / 0.30	0.60	2.80	12.57
2.00	28 / 0.30	0.60	3.00	9.42
2.50	35 / 0.30	0.70	3.45	7.54
3.00	44 / 0.30	0.80	3.90	6.00
4.50	65 / 0.30	1.00	4.75	4.06
6.00	84 / 0.30	1.00	5.15	3.14
7.00	97 / 0.30	1.00	5.45	2.72
8.00	120 / 0.30	1.20	6.15	2.20
10.00	80 / 0.40	1.30	6.75	1.80

5 a) ISO : Thin Wall Single Core PVC Insulated Auto Cables as per : ISO 6722 :2006 For Road Vehicals,upto 60 V ,Class – A (-40 to +85⁰C),Plain Copper Conductors.

PVC Single Core Auto Cable (ISO 6722)				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm.(Nom.)	Thickness of Insulation mm (Min.)	Overall diameter mm (Max.)	Resistance m Ω / m @ 20 ° C (Max)
0.65	9 / 0.30	0.22	1.50	29.35
1.00	14 / 0.30	0.24	2.10	18.50
1.50	21 / 0.30	0.24	2.40	12.70
2.00	28 / 0.30	0.28	2.80	9.42
2.50	35 / 0.30	0.28	3.00	7.60
3.00	44 / 0.30	0.32	3.40	6.15
4.50	65 / 0.30	0.32	3.60	4.06
6.00	84 / 0.30	0.32	4.30	3.14
7.00	97 / 0.30	0.32	4.50	2.72
8.00	120 / 0.30	0.48	5.20	2.20
10.00	80 / 0.40	0.48	6.00	1.82

**5 b) ISO : Thick Wall Single Core PVC Insulated Auto Cables as per : ISO 6722 :2006
For Road Vehicals,upto 600 V ,Class – A (-40 to +85 °C),Plain Copper Conductors.**

PVC Single Core Auto Cable (ISO 6722)				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm (Nom.)	Radial Thickness of Insulation (Nom.) mm.	Overall diameter (Approx.) mm.	Resistance mΩ / m @ 20 ° C (Max)
0.65	9 / 0.30	0.60	2.25	29.35
1.00	14 / 0.30	0.60	2.50	18.50
1.50	21 / 0.30	0.60	2.80	12.70
2.00	28 / 0.30	0.60	3.00	9.42
2.50	35 / 0.30	0.70	3.45	7.60
3.00	44 / 0.30	0.80	3.90	6.15
4.50	65 / 0.30	1.00	4.75	4.06
6.00	84 / 0.30	1.00	5.15	3.14
7.00	97 / 0.30	1.00	5.45	2.72
8.00	120 / 0.30	1.20	6.15	2.20
10.00	80 / 0.40	1.30	6.75	1.82

**6) IS: Thick Wall Cables for Vehicals , designed for a temperature of -30 to +70° C ,
Plain Copper Conductors- PVC insulated.**

PVC Single Core Auto Cables as per : IS : 2465/1984				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm (Nom.)	Nominal Thickness Of Insulation	Over All Diameter (Max)	Resistance Ω / Km @ 20 ° C (Max)
0.50	16 / 0.20	0.60	2.50	39.00
0.75	24 / 0.20	0.60	2.70	26.00
1.00	32 / 0.20	0.70	3.10	19.50
1.50	48 / 0.20	0.70	3.40	13.30
2.50	80 / 0.20	0.70	3.80	7.98
4.00	56 / 0.30	0.80	4.60	4.95
6.00	84 / 0.30	0.80	5.60	3.30
10.00	140 / 0.30	1.00	7.00	1.91

BATTERY / JUMPER / STARTER CABLES



A) Single Insulated Extra Flexible Battery cables , designed for a temperature of -30 to +70⁰ C & up to 600 Volts, Plain Copper Conductors- PVC insulated

PVC Battery Cables As Per BS				
Area Of Conductor Sq.mm	Number / Diameter Of Wire mm	Nominal Thickness Of Insulation mm	Over All Diameter (Approx) mm	Current Rating Amps
16.00	206 / 0.30	1.40	8.00	110
20.00	266 / 0.30	1.40	8.70	135
25.00	322 / 0.30	1.40	9.55	170
35.00	451 / 0.30	1.60	10.90	240
40.00	539 / 0.30	1.80	12.00	300
50.00	640 / 0.30	1.80	12.90	345
60.00	805 / 0.30	1.80	14.20	415
70.00	905 / 0.30	1.80	14.80	485
95.00	684 / 0.40	1.80	16.70	500

B) Battery cables designed up to 100 Volts D.C Plain Copper Conductors- PVC insulated.

PVC Battery Cables As Per IS : 2465/1984				
Conductor Nominal Area Sq. mm.	Conductor Number and dia. of Wire mm (Nom.)	Nominal Thickness Of Insulation	Over All Diameter (Max)	Resistance Ω / Km @ 20 ° C (Max)
16.00	126 / 0.40	1.00	8.10	1.21
25.00	196 / 0.40	1.20	10.00	0.780
35.00	276 / 0.40	1.20	11.40	0.554
50.00	396 / 0.40	1.40	13.70	0.386
70.00	360 / 0.50	1.40	15.80	0.272
95.00	475 / 0.50	1.60	18.40	0.206
120.00	608 / 0.50	1.60	19.90	0.161
150.00	750 / 0.50	1.80	22.40	0.120