

Switchgear Wire

RoHS
Compliant

Design of cable:	
Conductor	Plain copper wire - flexible class 5
Insulation	HT-PVC
Colour	Black, blue, brown, grey, orange, pink, red, violet, white, yellow, green, green/yellow
Packing	100M spool

UL CSA BASEC 0.5mm to 240mm

UL CSA BI-RATED 300mm to 500mm

Construction: UL Style 1015; UL758, UL File No.E344784, CSA C22.2, BS6231 Type CK, BS EN 50525-2-31, HD 21.7

Flame Propagation: VW-1; FT-1; FT-2, BS EN 60332-1-2

Low Voltage Directive: 2006/95/EC

RoHS Directive: 2011/65/EC

Functional characteristics:

Rated voltage: 600 V a.c. - 750 V d.c. (UL - CSA)

U_o/U 600/1000 V a.c. - 1000 V d.c. to ground (BS)

U_o/U 450/750 V a.c. - 675 V d.c. to ground (HD)

Max. operating temperature: 105°C (UL - CSA) 90 °C (BS - HD)

Min. operating temperature: -15°C (without mechanical shocks)

Max. short circuit temperature: 160°C

Special features

Good endurance properties, good abrasion resistance, easy stripping.

Thermal endurance properties (temperature index TI): 110°C referring to 20.000 hours (CEI EN 60216-1)

Installation Conditions:

Minimum installation temperature: 5°C

Recommended minimum bending radius: 6 times the cable diameter

Recommended maximum tensile stress: 50 N/mm² of the cross-section of the copper

Use and Installation Method:

High temperature cables designed for use on internal wiring appliances and for the wiring of switch, control and instruments panels of power switchgear.

Also used as connection of cable for motors and transformers.

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TECHNICAL DATA SHEET



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Size		Approx conductor dia	Average insulation thickness	Mac external dia	Max electrical resistance at 20°C	Approx cable weight	Current rating in air at 45°C
mm	AWG	mm	mm	mm	Ohm/kg	kg/km	A
0.5	22	0.9	0.8	2.6	39.0	11	11
0.75	20	1.1	0.8	2.8	26.0	14	14
1.0	18	1.3	0.8	2.9	19.5	16	17
1.5	16	1.5	0.8	3.2	13.3	21	21
2.5	14	2.0	0.8	3.6	7.98	30	30
4.0	12	2.5	0.8	4.2	4.95	45	40
6.0	10	3.0	0.8	4.8	3.30	64	55
10	8	4.0	1.14	6.3	1.91	110	75
16	6	5.0	1.52	8.0	1.21	175	100
25	4	6.2	1.52	9.2	0.78	260	140
35	2	7.5	1.52	10.7	0.5335	370	170
50	1	8.9	2.03	13.0	0.3860	520	205
70	2/0	10.8	2.03	14.9	0.2660	740	260
95	3/0	12.2	2.03	16.4	0.2060	920	320
120	4/0	13.8	2.03	18.0	0.1610	1145	375
150	250MCM	15.5	2.41	20.4	0.1290	1460	420
185	350MCM	18.3	2.41	23.2	0.1011	1845	480
240	450MCM	20.0	2.41	24.9	0.07867	2335	595
300	550MCM	22.6	2.79	28.2	0.06436	2885	675
400	700MCM	25.5	2.79	31.1	0.04860	3735	810
500	900MCM	28.5	2.79	34.1	0.03840	4730	930

