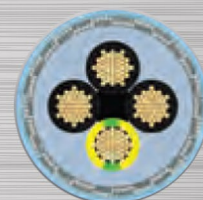




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SY PVC STEEL BRAIDED MULTICORE CABLE

A 300/500 volt PVC insulated and sheathed flexible cable with galvanised steel wire braiding providing mechanical protection.

A wide range of core configurations and conductor sizes enables the SY construction to be versatile for energy distribution and control applications, where mechanical protection is a consideration.

CONSTRUCTION

Plain copper class 5 conductor with PVC insulation, number coded, or colour coded, with green/yellow CPC. Inner sheath of PVC with a galvanised steel wire braid and transparent PVC overall.

TECHNICAL DATA

Generally to VDE 0250 BS EN 50525-1 BS EN 50525-2-51
BS EN 50525-2-11

Nominal Voltage	300/500v
Test Voltage	4000v
Operating Temperature Static	-40°C to +80°C
Operating Temperature Flexing	-5°C to +70°C
Bending Radius	10 times overall diameter (Static) 20 times overall diameter (Flexing)
Current Rating Table	4F3A & 4F3B

SY DIMENSIONS

Cores x mm ²	Nom OD mm	Weight kg / km	Cores x mm ²	Nom OD mm	Weight kg / km
2 x 0.5	7.3	72	3 x 16.0	20.1	780
3 x 0.75	7.6	85	4 x 16.0	21.6	960
4 x 0.75	8.1	100	5 x 16.0	24.1	1210
5 x 0.75	8.9	120	7 x 16.0	26.2	1495
7 x 0.75	9.4	140	4 x 25.0	27.1	1460
12 x 0.75	11.6	220	5 x 25.0	29.5	1850
2 x 1.0	7.6	80	4 x 35.0	33.1	2120
3 x 1.0	8.1	100	5 x 35.0	36.6	2750
4 x 1.0	8.7	120	4 x 50.0	34.3	2605
5 x 1.0	9.2	130	4 x 70.0	38.5	3450
7 x 1.0	10.1	160	4 x 95.0	43.2	4540
12 x 1.0	12.6	270			
18 x 1.0	15.2	390			
25 x 1.0	16.5	460			
2 x 1.5	8.1	100			
3 x 1.5	8.6	120			
4 x 1.5	9.3	140			
5 x 1.5	10.1	170			
7 x 1.5	11.1	210			
12 x 1.5	12.9	340			
18 x 1.5	14.1	500			
25 x 1.5	18.8	600			
34 x 1.5	21.5	790			
2 x 2.5	9.3	140			
3 x 2.5	9.8	160			
4 x 2.5	10.8	210			
5 x 2.5	11.7	240			
7 x 2.5	12.8	280			
12 x 2.5	16.1	470			
18 x 2.5	19.5	660			
25 x 2.5	21.9	870			
3 x 4.0	11.8	240			
4 x 4.0	12.7	290			
5 x 4.0	14.1	360			
7 x 4.0	15.2	420			
12 x 4.0	20.1	700			
3 x 6.0	13.6	330			
4 x 6.0	14.4	390			
5 x 6.0	16.6	530			
7 x 6.0	18.1	600			
3 x 10.0	16.4	520			
4 x 10.0	18.1	650			
5 x 10.0	19.8	790			



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Table 4F3A
Flexible cords, non-armoured (Copper Conductors)

CURRENT-CARRYING CAPACITY (amperes): and MASS SUPPORTABLE (kg):

Conductor Cross sectional area	Current carrying capacity		Maximum mass supportable by twin flexible cord (see regulations 522.7.2 & 559.6.1.5)
	Single-phase a.c.	Three-phase a.c.	
1	2	3	4
(mm ²)	(A)	(A)	(kg)
0.5	3	3	2
0.75	6	6	3
1	10	10	5
1.25	13	-	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

NOTES:

Where cable is on a reel see the notes to Table 4F1A

RATING FACTOR FOR AMBIENT TEMPERATURE					
60°C thermoplastic or thermosetting insulated cords:					
Ambient Temp (°C)	35	40	45	50	55
Rating Factor	0.91	0.82	0.71	0.58	0.41

RATING FACTOR FOR AMBIENT TEMPERATURE						
180°C thermosetting insulated cords:						
Ambient Temp (°C)	35 to 120	125	130	135	140	145
Rating Factor	1.0	0.96	0.85	0.74	0.60	0.42

RATING FACTOR FOR AMBIENT TEMPERATURE						
90°C thermoplastic or thermosetting insulated cords:						
Ambient Temp (°C)	35 to 50	55	60	65	70	-
Rating Factor	1.0	0.96	0.83	0.67	0.47	-

RATING FACTOR FOR AMBIENT TEMPERATURE						
Glass fibre cords:						
Ambient Temp (°C)	35 to 150	155	160	165	170	175
Rating Factor	1.0	0.92	0.82	0.71	0.57	0.40

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SY PVC STEEL BRAIDED MULTICORE CABLE

TABLE 4F3B

Flexible cords, non-armoured (Copper Conductors)

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature: 60°C*

Conductor Cross sectional area	d.c or Single-phase a.c.	Three-phase a.c.
1	2	3
(mm ²)	(mV/A/m)	(mV/A/m)
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

NOTES:

* The tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

90°C thermoplastic or thermosetting insulated	1.09
180°C thermosetting insulated	1.31
185°C glass fibre	1.43

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