

Standard Wiring Cables

Low Voltage (300/500 V)

6181Y

Cable Approvals

Key Applications



Conductor

Insulation

Core Identification

Sheath

PVC Insulated Sheathed Single Core

Cable approved to BS6004



- > Fixed installation in dry or damp premises on walls, boards or trays, in channels or embedded in plaster
- > Plain annealed copper solid (1.0 - 2.5mm²) or stranded (4.0 - 35.0mm²) circular conductor complying with BS EN 60228 Class 1 or Class 2
- > PVC Insulation complying with BS EN 50363-3 Type T11
- red
- black
- blue
- brown
- > PVC Sheath complying with BS7655 Type 6
- > Normally grey but others available on request



Temperature Range
-15 to +70°C



Bending Radius
Fixed r=4D



Mechanical Impact
Medium



Fire Performance
BS EN 60332-1-2



Flexibility
Rigid

PVC Insulated Sheathed Single Core

Cable Details

Nominal cross sectional area	Approx. overall diameter	Approximate cable weight	Maximum conductor resistance at 20°C	Short circuit rating (1 sec)	Current Rating			Volt drop DC or single phase AC	Volt drop three phase AC
					DC or Single phase AC enclosed in conduit or trunking Amps	DC or Single phase AC clipped direct Amps	Three phase AC clipped direct Amps		
mm ²	mm	kg/km	Ohms/km	kA				mV/A/m	mV/A/m
1.0	4.2	28	18.1	0.12	13.5	15.5	14	44	38
1.5	4.6	36	12.1	0.17	17.5	20	18	29	25
2.5	5.3	50	7.41	0.28	24	27	25	18	15
4.0	6.1	75	4.61	0.46	32	37	33	11	9.5
6.0	6.7	98	3.08	0.69	41	47	43	7.3	6.4
10	8	155	1.83	1.15	57	65	59	4.4	3.8
16	9.5	232	1.15	1.84	76	87	79	2.8	2.4
25	11.3	338	0.727	2.88	101	114	104	1.75	1.6
35	12.3	442	0.524	4.00	125	141	129	1.25	1.1

Temperature rating factors

Ambient Temperature °C	25	30	35	40	45	50	55	60
Rating Factor	1.03	1.00	0.94	0.87	0.79	0.71	0.61	0.50

Correction Factors for Groupings

Number of Circuits	2	3	4	5	6	7	8	9
Rating Factor	0.8	0.7	0.65	0.6	0.57	0.54	0.52	0.5



Certificate of Product Approval

Licensee:

Prysmian Cables & Systems Ltd

Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Factory:
Harriet Street

Trecynon, Aberdare, CF44 0TD, Glamorgan, United Kingdom

Standard:
BS 6004:2012

Description:
PVC insulated and sheathed cables

Details:
N/A

Materials:
Insulation TI 1, Sheath Type 6

Brand Name:
N/A

Origin Mark:
BRITCABLE (A) or PRYSMIAN (A)

Permissible Approval Marks:

BASEC

BASEC name



BASEC roundel

Signed for and on behalf of
BASEC Group Ltd

Kieran O'Brien Date: 06/07/2023

Date of original issue: 19/07/2009

Check BASEC website to verify validity.

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BSF079 Issue 5 (20-03-2023)



Expiry date:
11/08/2026



Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size -sqmm
3	6181Y	Class 1	1	1	2.5
3	6181Y	Class 2	1	4	35
3	6192Y	Class 1	2	1	2.5
3	6192Y	Class 2	2	4	4
4	6241Y	Class 1	1	1	1.5
4	6242Y	Class 1	2	1	2.5
4	6243Y	Class 1	3	1	1.5
4	6242Y	Class 2	2	4	16
5	6241Y	Class 2	1	1.5	1.5
5	6242Y	Class 2	2	1.5	2.5

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