Standard Wiring Cables
Low Voltage (300/500 V)

6181Y

PVC Insulated Sheathed Single Core

Cable Approvals

Cable approved to BS6004

Key Applications

> Fixed installation in dry or damp premesis on walls, boards or trays, in channels or embedded in plaster



Conductor

> 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

Insulation

> PVC Insulation complying with BS EN 50363-3 Type TI1

Core Identification

- red
- black
- blue
- brown

Sheath

> 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

Prysmian Cables & Systems Limited, Sales Office, Chickenhall Lane, Eastleigh, Hants, SO50 6YU, UK
Commercial Enquiries, Tel +44 (0) 8457 678 345, Fax: +44 (0) 23 8029 5465
www.prysmian.co.uk

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	DC or Single phase AC clipped direct	Three phase AC clipped direct		
mm²	mm	kg/km	Ohms/km	kA	Amps	Amps	Amps	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

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Certificate No:
017/003/225

Issue No: 6

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 name | BASEC roundel

Signed for and on behalf of BASEC Group Limited

Date: 07/08/2026

Date of original issue: 19/07/2009
Check BASEC website to verify validity.

BASEC Group Limited, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK
Registered in England No. 13950143, Tel: +44 (0)1908 267300
Email: mail@basec.org.uk Web: www.basec.org.uk

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
11/08/2029

BASEC
a kiwa company

Certificate No:
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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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