BS5467 Fixed Wiring & Mains Cable - MDPE, SWA, 1kV - 25mm² to 400mm²

Description

The XLPE insulated cable is ideal for indoor and outdoor applications; the SWA provides mechanical protection and suitability to be installed both indoors and outdoors, through cable ducts and underground. The MDPE provides protection from moisture ingress expanding the range of applications and making it suitable for use on motorways and areas where moisture may cause a problem for cable installation.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
8 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332

Temperature Limits
Fixed: -25°C to +90°C

Core Colours

2 core -	Brown	Blue			
3 core -	Brown	Black	Green Yellow		
4 core -	Brown	Black	Grey	Blue	
5 core -	Brown	Black	Grey	Blue	Green Yellow

Standards

- BS EN/IEC 60332-1-2
- Generally to BS5467
- BS EN/IEC 60502-1
- BS EN/IEC 60228

Construction

- **Conductor**: Class 2 stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Steel Wire Armour (SWA)
- **Outer Sheath**: Medium Density Polyethylene (MDPE)
- **Sheath Colour**: Black

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

BS5467 Fixed Wiring & Mains Cable - MDPE, SWA, 1kV - 25mm² to 400mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size	Gland Size
6942PE25	25	2	7/2.21	22.2	1162	0.9	25
6943PE25	25	3	7/2.21	24.9	1562	1	25
6944PE25	25	4	7/2.21	26.8	1895	1.1	32
6945PE25	25	5	7/2.21	29.5	2280	1.2	32
6942PE35	35	2	7/2.66	25.5	1606	1.1	25
6943PE35	35	3	7/2.66	27.2	1964	1.1	32
6944PE35	35	4	7/2.66	29.5	2393	1.2	32
6945PE35	35	5	7/2.66	32.4	2898	1.4	32
6942PE50	50	2	19/1.88	25.9	1654	1.1	25
6943PE50	50	3	19/1.88	28.6	2199	1.2	32
6944PE50	50	4	19/1.88	32.1	2763	1.4	32
6945PE50	50	5	19/1.88	36.4	3876	1.6	40
6942PE70	70	2	19/2.21	29.2	2174	1.2	32
6943PE70	70	3	19/2.21	32.3	2937	1.4	32
6944PE70	70	4	19/2.21	37.4	3967	1.6	40
6945PE70	70	5	19/2.21	41.7	5166	1.8	50S
6942PE95	95	2	37/1.88	33.2	2987	1.4	32
6943PE95	95	3	37/1.88	37	4036	1.6	40
6944PE95	95	4	37/1.88	41.6	5128	1.8	50S
6945PE95	95	5	37/1.88	48.6	6795	2	50
6942PE120	120	2	30/2.32	36.4	3561	1.6	40
6943PE120	120	3	30/2.32	40.5	4829	1.6	50S
6944PE120	120	4	30/2.32	47	6578	2	50
6942PE150	150	2	37/2.32	39.4	4258	1.6	40
6943PE150	150	3	37/2.32	45.8	6268	2	50S
6944PE150	150	4	37/2.32	51.5	7967	TC9	50
6943PE185	185	3	37/2.55	49.9	7390	2	50
6944PE185	185	4	37/2.55	44.3	5423	1.8	50S
6942PE240	240	2	60/2.32	49.2	6736	2	50
6943PE240	240	3	60/2.32	55.1	9238	TC9	63S
6944PE240	240	4	60/2.32	62.4	11898	TC10	63
6942PE300	300	2	61/2.66	51.3	7896	TC9	50
6943PE300	300	3	61/2.66	60.3	11136	TC10	63
6944PE300	300	4	61/2.66	68.4	14328	TC11	75S
6943PE400	400	3	60/2.96	67.9	13778	TC11	75S
6944PE400	400	4	60/2.96	78.8	18669	TC14	90

Multicore armoured 90 °C thermosetting insulated cables. Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4E4A

CURRENT-CARRYING CAPACITY (amps)

Ambient temperature: 30°C
Ground ambient temperature: 20°C
Conductor operating temperature: 90°C

Conductor cross- sectional area	Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)		Reference Method D (direct in ground or in ducting in ground, in or around buildings)	
	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC
mm2	(A)	(A)	(A)	(A)	(A)	(A)
1.5	27	23	29	25	25	21
2.5	36	31	39	33	33	28
4	49	42	52	44	43	36
6	62	53	66	56	53	44
10	85	73	90	78	71	58
16	110	94	115	99	91	75
25	146	124	152	131	116	96
35	180	154	188	162	139	115
50	219	187	228	197	164	135
70	279	238	291	251	203	167
95	338	289	354	304	239	197
120	392	335	410	353	271	223
150	451	386	472	406	306	251
185	515	441	539	463	343	281
240	607	520	636	546	395	324
300	698	599	732	628	446	365
400	787	673	847	728		

1.Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
2.Where it is intended to group a cable in this tablewith other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).

TABLE 4E4B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross sectional area	Two-core cable DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
(mm2)	(mV/Nm)	(mV/Nm)			(mV/Nm)		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.140	0.190	0.115	0.120	0.165

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