

BS 5467 FIXED WIRING AND MAINS CABLE XLPE / MDPE



APPLICATION

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.

CABLE STANDARDS

Generally to BS 5467

Flame Propagation: BS EN 60332

CONSTRUCTION

Conductor: Class 2 stranded copper conductor

Insulation: Cross Link Polyethylene (XLPE)

Bedding: Polyvinyl Chloride (PVC)

Armour: Steel Wire Armour (SWA)

Sheath: Medium-density polyethylene (MDPE)

CHARACTERISTICS

Voltage Rating: 600/1000 Volts

Temperature Rating:
Fixed: -15°C to +90°C

Minimum Bending Radius
As per cable manufacturer datasheet

CORE IDENTIFICATION

- 2 Core: ■ Brown ■ Blue
- 3 Core: ■ Brown ■ Blue ■ Green/Yellow
- 4 Core: ■ Brown ■ Black ■ Grey ■ Blue
- 5 Core: ■ Brown ■ Black ■ Grey ■ Blue ■ Green/Yellow

Should not be installed below 0°C
or above +40°C

BS 5467 MAINS CABLE XLPE / MDPE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)	GLAND SIZE (MM)	NYLON CLEAT SIZE
6942PE4	4	7/0.86	2	344	13.4	20S	0.6
6943PE4	4	7/0.86	3	389	14.1	20S	0.6
6944PE4	4	7/0.86	4	462	15	20S	0.6
6942PE6	6	7/1.06	2	418	14.4	20S	0.6
6943PE6	6	7/1.06	3	480	15.1	20S	0.6
6944PE6	6	7/1.06	4	655	17	20	0.7
6942PE10	10	7/1.36	2	552	16.2	20	0.7
6943PE10	10	7/1.36	3	739	17.8	20	0.8
6944PE10	10	7/1.36	4	881	19.1	25	0.8
6942PE16	16	7/1.74	2	847	19.1	20	0.8
6943PE16	16	7/1.74	3	1006	20.4	25	0.9
6944PE16	16	7/1.74	4	1211	22	25	0.9
6945PE16	16	7/1.74	5	1606	25.2	25	1
6943PE25	25	7/2.21	3	1562	24.9	25	1
6944PE25	25	7/2.21	4	1895	26.8	32	1.1
6943PE35	35	7/2.66	3	1964	27.2	32	1.1
6944PE35	35	7/2.66	4	2393	29.5	32	1.2
6943PE50	50	19/1.88	3	2199	28.6	32	1.2
6944PE50	50	19/1.88	4	2763	32.1	32	1.4
6943PE70	70	19/2.21	3	2937	32.3	32	1.4
6944PE70	70	19/2.21	4	3967	37.4	40	1.6
6943PE95	95	37/1.88	3	4036	37	40	1.6
6944PE95	95	37/1.88	4	5128	41.6	50S	1.8

BS 5467 MAINS CABLE XLPE / MDPE CURRENT CARRYING CAPACITY (AMPERES)

CCC CODE	REFERENCE METHOD C (CLIPPED DIRECT)		REFERENCE METHOD E (IN FREE AIR OR ON A PERFORATED CABLE TRAY, 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
1	2	3	4	5	6	7
(MM ²)	(A)	(A)	(A)	(A)	(A)	(A)
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

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

BS 5467 MAINS CABLE XLPE / MDPE - VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA MM ²	TWO CORE CABLE DC	TWO CORE CABLE SINGLE-PHASE AC MV/A/M			THREE OR FOUR CORE CABLE THREE-PHASE AC MV/A/M		
		(MV/A/M)			(MV/A/M)		
(MM ²)	(MV/A/M)	(MV/A/M)			(MV/A/M)		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			6.8		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	1.60	0.14	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.0	0.866	0.135	0.870
70	0.67	0.67	0.150	0.69	0.59	0.13	.60
95	0.49	0.50	0.150	0.52	0.43	0.13	0.45

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS
CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT
X = REACTIVE COMPONENT
Z = IMPEDANCE VALUE

FOR CABLES HAVING CONDUCTORS OF 16MM² OR LESS CROSS SECTIONAL AREA THEIR INDUCTANCES CAN BE IGNORED AND (MV/A/M)R VALUES ONLY ARE TABULATED. FOR CABLES HAVING CONDUCTORS GREATER THAN 16MM² CROSS SECTIONAL AREA THE IMPEDANCE VALUES ARE GIVEN AS (MV/A/M)Z, TOGETHER WITH THE RESISTIVE COMPONENT (MV/A/M)R AND THE REACTIVE COMPONENT (MV/A/M)X.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.