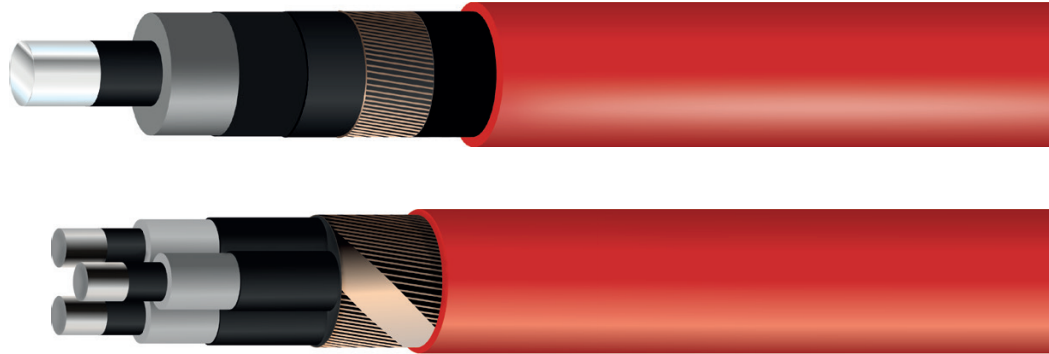
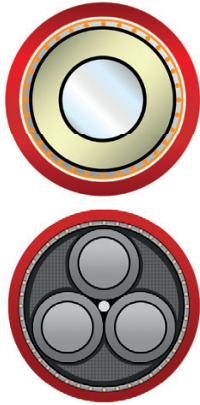




SPEN BS7870 11KV SAC MDPE SCREENED POWER CABLE



APPLICATION

SPEN approved medium voltage aluminium power cable for connections from electrical grid to sub-main developments. Suitable for power networks, underground, outdoors and installation in cable ducting.

Please note: the red outer sheath can be prone to fading when exposed to UV rays.

CABLE STANDARDS

BS 7870 4.20
BS EN 60228
UV Stabilised
Flame propagation to BS EN60332
SPEN CAB-03-020

CONSTRUCTION

Conductor:	Class 1 Solid Circular Compacted Aluminium Conductor
Screen:	Fully Bonded Semi-conductive Compound
Insulation:	Cross Link Polyethylene (XLPE)
Insulation Screen:	Semi-conductive Compound
Screen:	Copper Wires & Helical Equalising Copper Tape
Separator:	Binding Tape Helically Applied
Sheath:	Medium Density Polyethylene (MDPE)
Sheath Colour:	Red

CHARACTERISTICS

Voltage Rating:	6350/11000 Volts (11kV)
Temperature Limits:	-15°C to 90°C
Minimum Bending Radius:	As per cable manufacturer datasheet

CORE IDENTIFICATION

Single Core	Black
Triplex	Brown Black Grey Tapes

Should not be installed at temperatures below 0°C or above +60°C



SPEN BS7870 11KV SAC MDPE SCREENED CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	METALLIC SHIELD (MM ²)	NO. OF CORES	CONDUCTOR THICKNESS (MM)	INSULATION THICKNESS (MM)	OUTER SHEATH THICKNESS (MM)	WEIGHT (KG/KM)	APPROX OVERALL DIAMETER (MM)		
								CONDUCTOR	INSULATION & SCREENS	OVERALL MM
SPEN11KVMDPE1X95	95	35	1	0.3	0.3	1.8	980	10.7	18.7	28
SPEN11KVMDPE1X185	185	35	1	0.3	0.3	1.9	1330	15.2	23.2	33
SPEN11KVMDPE1X300	300	35	1	0.3	0.3	3.4	1760	19.4	27.4	38
SPEN11KVMDPE3X95AL	95	70	3	0.3	0.3	1.8	3250	10.7	18.7	55
SPEN11KVMDPE3X185AL	185	95	3	0.3	0.3	1.9	4880	15.2	23.2	65
SPEN11KVMDPE3X300AL	300	95	3	0.3	0.3	3.4	6580	19.4	27.4	75

SPEN BS7870 11KV SAC MDPE SCREENED CABLE - ELECTRICAL CHARACTERISTICS

CONDUCTOR SIZE	MAXIMUM CONDUCTOR DC RESISTANCE AT (20°C Ω/Km)	CONDUCTOR AC RESISTANCE (90°C Ω/KM)	RESISTANCE AT 50HZ (Ω/KM)	CAPACITANCE mF/Km	CHARGING CURRENT (MA/m)	IMPEDENCE (Ω/KM)	CURRENT RATING IN TREFOIL			1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR kA	1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN kA
							LAI D IN GROUND	LAI D IN 100MM SINGLE WALL DUCT OR 150MM DOUBLE WALL DUCT	LAI D IN FREE AIR		
95	0.320	0.411	0.119	0.31	0.61	0.336	255	226	296	8.9	9.3
185	0.164	0.211	0.107	0.80	0.80	0.181	368	326	446	17.4	12.8
300	0.100	0.130	0.100	0.97	0.97	0.119	481	425	605	28.3	12.8

THE ABOVE IS IN ACCORDANCE WITH SPEN CAB-03-020.

SPEN BS7870 11KV SAC MDPE SCREENED CABLE - CURRENT CARRYING CAPACITY

MAX VOLTAGE RATING	MUTUAL CAPACITANCE pF/m			
	NOMINAL CROSS SECTIONAL AREA (mm ²)	IN GROUND AMPS SEE NOTE 1*	IN DUCTS AMPS SEE NOTE 2**	IN AIR AMPS SEE NOTE 3***
11kV	95	228	197	245
11kV	185	330	289	369
11kV	300	431	381	494

NOTE 1* Ground Temperature = 20°C, Depth = 0.8m, Thermal Resistivity Of Soil = 1.2K M/W

NOTE2** As NOTE 1* But 1 Cable Per Duct

NOTE3*** Ambient Temperature = 30°C

ELECTRICAL DATA:

Maximum conductor operating temperature: 90°C
 Maximum screen operating temperature: 80°C
 Maximum conductor temperature during S.C: 250°C

LAYING CONDITIONS AT TREFOIL FORMATION ARE AS BELOW:

Soil thermal resistivity: 1.2°K.m/W
 Burial depth: 0.6m
 Ground temperature: 15°C
 Air temperature: 25°C
 Frequency: 50Hz

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.