



## MEDIUM-VOLTAGE PVC ARMOURED CABLE

BS 6622

22 orderable sizes

STANDARD BS 6622	VOLTAGE CLASS 6.35/11 kV, 19/33 kV	CONDUCTOR Copper or aluminium conductor
INSULATION / JACKET PVC outer sheath		

### Construction

- 1  Conductor – Aluminium conductor · 37 × Ø2.03 mm · IEC 60228 cl.2
- 2  Conductor screen – Semi-conducting layer
- 3  Insulation – XLPE
- 4  Insulation screen – Semi-conducting layer
- 5  Metallic screen – Copper wire screen (CWS)
- 6  Bedding – PVC bedding
- 7  Armour – Aluminium / steel wire armour
- 8  Sheath – PVC outer sheath

### Size selection — all available cross-sections

Cable reference	Voltage class	Core layout	Cross-section	Conductor	Armour	Max DC resistance at 20 °C	OD guide	Weight guide
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 35 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	35 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.524 Ω/km	37 mm	2.9 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 70 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	70 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.268 Ω/km	41 mm	3.4 kg/m

Cable reference	Voltage class	Core layout	Cross-section	Conductor	Armour	Max DC resistance at 20 °C	OD guide	Weight guide
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 120 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	120 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.153 Ω/km	46 mm	4.0 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 185 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	185 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0991 Ω/km	50 mm	4.9 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 300 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	300 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0601 Ω/km	56 mm	6.5 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Copper 500 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	500 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0366 Ω/km	65 mm	9.3 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Copper 35 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	35 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.524 Ω/km	61 mm	3.8 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Copper 70 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	70 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.268 Ω/km	65 mm	5.2 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Copper 120 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	120 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.153 Ω/km	70 mm	7.2 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Copper 185 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	185 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.0991 Ω/km	74 mm	9.7 kg/m
BS 6622 XLPE/AWA/SWA/PVC	6.35/11 kV	Three core	300 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.0601 Ω/km	80 mm	14.3 kg/m

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6.35/11 kV Three core Copper 300 mm <sup>2</sup> Steel wire armour PVC outer sheath								
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 70 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	70 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.268 Ω/km	47 mm	3.4 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 120 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	120 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.153 Ω/km	52 mm	4.0 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 185 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	185 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0991 Ω/km	56 mm	4.9 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 300 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	300 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0601 Ω/km	62 mm	6.5 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 500 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	500 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0366 Ω/km	71 mm	9.3 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Copper 630 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	630 mm <sup>2</sup>	Copper conductor	Aluminium wire armour	0.0283 Ω/km	76 mm	11.1 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Copper 70 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	70 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.268 Ω/km	71 mm	5.2 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Copper 120 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	120 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.153 Ω/km	76 mm	7.2 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Copper 185 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	185 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.0991 Ω/km	80 mm	9.7 kg/m

Cable reference	Voltage class	Core layout	Cross-section	Conductor	Armour	Max DC resistance at 20 °C	OD guide	Weight guide
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Copper 300 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	300 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.0601 Ω/km	86 mm	14.3 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Copper 400 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	400 mm <sup>2</sup>	Copper conductor	Steel wire armour	0.0470 Ω/km	91 mm	18.2 kg/m
Cable reference	Voltage class	Core layout	Cross-section	Conductor	Armour	Max DC resistance at 20 °C	OD guide	Weight guide
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 35 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	35 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.868 Ω/km	37 mm	2.6 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 70 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	70 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.443 Ω/km	41 mm	2.8 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 120 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	120 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.253 Ω/km	46 mm	3.1 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 185 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	185 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.164 Ω/km	50 mm	3.4 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 300 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	300 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.100 Ω/km	56 mm	4.1 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Single core Aluminium 500 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	6.35/11 kV	Single core	500 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.0605 Ω/km	65 mm	5.2 kg/m

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BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Aluminium 35 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	35 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.868 Ω/km	61 mm	3.0 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Aluminium 70 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	70 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.443 Ω/km	65 mm	3.5 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Aluminium 120 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	120 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.253 Ω/km	70 mm	4.3 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Aluminium 185 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	185 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.164 Ω/km	74 mm	5.4 kg/m
BS 6622 XLPE/AWA/SWA/PVC 6.35/11 kV Three core Aluminium 300 mm <sup>2</sup> Steel wire armour PVC outer sheath	6.35/11 kV	Three core	300 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.100 Ω/km	80 mm	7.3 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 70 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	70 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.443 Ω/km	47 mm	2.8 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 120 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	120 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.253 Ω/km	52 mm	3.1 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 185 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	185 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.164 Ω/km	56 mm	3.4 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 300 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	300 mm <sup>2</sup>	Aluminium conductor	Aluminium wire	0.100 Ω/km	62 mm	4.1 kg/m

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kV Single core Aluminium 300 mm <sup>2</sup> Aluminium wire armour PVC outer sheath					armour			
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 500 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	500 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.0605 Ω/km	71 mm	5.2 kg/m
BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Single core Aluminium 630 mm <sup>2</sup> Aluminium wire armour PVC outer sheath	19/33 kV	Single core	630 mm <sup>2</sup>	Aluminium conductor	Aluminium wire armour	0.0469 Ω/km	76 mm	5.9 kg/m
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BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Aluminium 120 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	120 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.253 Ω/km	76 mm	4.3 kg/m
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BS 6622 XLPE/AWA/SWA/PVC 19/33 kV Three core Aluminium 400 mm <sup>2</sup> Steel wire armour PVC outer sheath	19/33 kV	Three core	400 mm <sup>2</sup>	Aluminium conductor	Steel wire armour	0.0778 Ω/km	91 mm	8.9 kg/m