6941AX Mains Cable - BS5467, XLPE, AWA, PVC - 50mm² to 1000mm²

Description

General single core control / power cable for fixed wiring arrangements and power networks. Suitable for underground, indoor and outdoor use in cable ducting. This cable is BASEC approved.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
8 x Overall Diameter

Flame Retardancy
BS EN 60332-1-2

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

Core Colours

Single core: 50mm² – 1000mm²

(* Please note 50mm² and 70mm² sizes are not Basec Approved)

Insulation: Brown

Outer Sheath: Black

Standards

- BS EN/IEC 60228
- BS5467
- BS EN/IEC 60332-1-2

Construction

- **Conductor**: Class 2 stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Aluminium Wire Armour (AWA)
- **Outer Sheath**: Polyvinyl Chloride (PVC)
- **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

6941AX Mains Cable - BS5467, XLPE, AWA, PVC - 50mm² to 1000mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Trefoil Cleat	Nylon Cleat Size	Nylon A2	Brass A2
6941AX50	50	1	19/1.78	17.7	638	NONE	0.7	25	20
6941AX70	70	1	19/2.14	19.6	891	NONE	0.8	32	25
6941AX95	95	1	19/2.52	21.5	1166	NONE	0.9	32	25
6941AX120	120	1	37/2.03	23.1	1412	NONE	1	32	25
6941AX150	150	1	37/2.25	26	1800	NONE	1.1	40	32
6941AX185	185	1	37/2.52	28	2200	TASB04	1.2	40	32
6941AX240	240	1	61/2.25	32	2800	TASB06	1.4	50S	40
6941AX300	300	1	61/2.52	33	3400	TASB06	1.4	50S	40
6941AX400	400	1	61/2.85	38	4450	TASB10	1.6	50	40
6941AX500	500	1	61/3.20	43	5550	TASB13	1.8	63S	50S
6941AX630	630	1	127/2.52	47	7100	TASB15	2	63S	50
6941AX800	800	1	127/2.85	55	9200	TASB20	TC9	75S	63S
6941AX1000	1000	1	127/3.20	58.8	11270	TASB20	TC10	75S	63S

TABLE 4E3A

CURRENT-CARRYING CAPACITY (Amps)

Ambient temperature: 30°C
Conductor operating temperature:90°C

Conductor cross sectional area	Reference Method C (clipped direct)		Reference Method F (in free air or on a perforated cable tray, horizontal or vertical)								
	Touching		Touching			Spaced by one cable diameter					
	2 cables, single phase AC or DC flat	3 or 4 cables, three phase AC flat	2 cables, single phase AC or DC flat	3 cables, three phase AC flat	4 cables, three phase AC Trefoil	2 cables, DC		2 cables, single- phase AC		3 or 4 cables, three- phase AC	
						Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
(mm^2)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
50	237	220	253	232	222	284	270	282	266	288	266
70	303	277	322	293	285	356	349	357	337	358	331
95	367	333	389	352	346	446	426	436	412	425	393
120	425	383	449	405	402	519	497	504	477	485	449
150	488	437	516	462	463	600	575	566	539	549	510
185	557	496	587	524	529	688	660	643	614	618	574
240	656	579	689	612	625	815	782	749	714	715	666
300	755	662	792	700	720	943	906	842	805	810	755
400	853	717	899	767	815	1137	1094	929	889	848	797
500	962	791	1016	851	918	1314	1266	1032	989	923	871
630	1082	861	1146	935	1027	1528	1474	1139	1092	992	940
800	1170	904	1246	987	1119	1809	1744	1204	1155	1042	978
1000	1261	961	1345	1055	1214	2100	2026	1289	1238	1110	1041

* with or without a protective conductor

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 table with 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).

Single-core armoured 90°C thermosetting insulated cables (non-magnetic armour) (COPPER CONDUCTORS) Reproduced from BS7671:2018 Wiring Regulations

TABLE 4E3B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross-sectional area	2 cables, DC	Reference Methods C & F (clipped direct, on tray or in free air)														
		2 cables, single-phase AC						3 or 4 cables, three-phase AC								
		touching			spaced*			trefoil and touching			flat and touching			flat and spaced*		
(mm^2)	(mV/ Alm)	(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)		
		r	x	z	r	x	z	r	x	z	r	x	z	r	x	z
50	0.98	0.99	0.21	1.00	0.98	0.29	1.00	0.86	0.180	0.87	0.84	0.25	0.88	0.84	0.33	0.90
70	0.67	0.68	0.200	0.71	0.69	0.29	0.75	0.59	0.170	0.62	0.60	0.25	0.65	0.62	0.32	0.70
95	0.49	0.51	0.195	0.55	0.53	0.28	0.60	0.44	0.170	0.47	0.46	0.24	0.52	0.49	0.31	0.58
120	0.39	0.41	0.190	0.45	0.43	0.27	0.51	0.35	0.165	0.39	0.38	0.24	0.44	0.41	0.30	0.51
150	0.31	0.33	0.185	0.38	0.36	0.27	0.45	0.29	0.160	0.33	0.31	0.23	0.39	0.34	0.29	0.45
185	0.25	0.27	0.185	0.33	0.30	0.26	0.40	0.23	0.160	0.28	0.26	0.23	0.34	0.29	0.29	0.41
240	0.195	0.21	0.180	0.28	0.24	0.26	0.35	0.180	0.155	0.24	0.21	0.22	0.30	0.24	0.28	0.37
300	0.155	0.170	0.175	0.25	0.195	0.25	0.32	0.145	0.150	0.21	0.170	0.22	0.28	0.20	0.27	0.34
400	0.115	0.145	0.170	0.22	0.180	0.24	0.30	0.125	0.150	0.195	0.160	0.21	0.27	0.20	0.27	0.33
500	0.093	0.125	0.170	0.21	0.165	0.24	0.29	0.105	0.145	0.180	0.145	0.20	0.25	0.190	0.24	0.31
630	0.073	0.105	0.165	0.195	0.150	0.23	0.27	0.092	0.145	0.170	0.135	0.195	0.24	0.175	0.23	0.29
800	0.056	0.090	0.160	0.190	0.145	0.23	0.27	0.086	0.140	0.165	0.130	0.180	0.23	0.175	0.195	0.26
1000	0.045	0.092	0.155	0.180	0.140	0.21	0.25	0.080	0.135	0.155	0.125	0.170	0.21	0.165	0.180	0.24

*NOTE: * Spacings larger than one cable diameter will result in a larger voltage drop.*