

BS 7889

XLPE Insulated, PVC Sheathed Single Core Cable. BS 7889. 600/1000 V



Prysmian BS 7889 is an unarmoured industrial single core wiring cable with cross linked polyethylene insulation and PVC sheath.

KEY APPLICATIONS

Suitable for installation in areas with reduced risk of mechanical damage; on tray, in free air or clipped direct. Suitable also for conduit and wiring installations when mechanical protection is required.

FEATURES AND BENEFITS

- Manufactured under ISO 9001 Quality management systems

ADDITIONAL TECHNICAL SUPPORT

- [FAQ's](https://uk.prysmian.com/technical-area/faqs) - uk.prysmian.com/technical-area/faqs
- [Technical email](mailto:tech.info@prysmian.com) - tech.info@prysmian.com
- [Live Chat](https://uk.prysmian.com/technical-area) - uk.prysmian.com/technical-area
- Technical hotline: 02380 295222

STANDARDS



BS 7889
BS EN 60332-1-2

Construction Standard
Flame Propagation - Single Cable

CONSTRUCTION

Conductor material	Copper
Conductor surface	Bare
Core insulation material	XLPE
Material outer sheath	Polyvinyl chloride (PVC)
Cable shape	Round

APPLICATIONS PROPERTIES

Nominal voltage U ₀ [V]	600
Nominal voltage U [V]	1,000
Flame retardant	In accordance with BS EN 60332-1-2
Max. conductor temperature [°C]	90
Min. Operation temperature [°C]	-15
UV resistant	Yes
Outdoor installation	Yes
Min. Installation temperature [°C]	0
Max. Installation temperature [°C]	80
Bending radius (rule)	6D

COLOURS

Insulation: Brown or Blue

Sheath: Black

CURRENT RATINGS

Refer to table 4E1 of BS 7671 Requirements for Electrical Installations. IET Wiring Regulations

Note: Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature.

TECHNICAL DATA

Nominal cross section conductor [mm²]	Conductor category	Nominal thickness insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]	Embodied Carbon [CO2e kg/km]
10	Class 2 = stranded	0.7	8.4	150	1.83	476
16	Class 2 = stranded	0.7	9	200	1.15	645
25	Class 2 = stranded	0.9	10.6	295	0.727	851
35	Class 2 = stranded	0.9	11.6	390	0.524	1,078
50	Class 2 = stranded	1	13.2	520	0.387	1,432
50	Class 2 = stranded	1	13.2	520	0.387	1,432
70	Class 2 = stranded	1.1	14.9	720	0.268	1,895
95	Class 2 = stranded	1.1	16.7	1,000	0.193	2,595
120	Class 2 = stranded	1.2	18.9	1,250	0.153	3,426
120	Class 2 = stranded	1.2	18.9	1,250	0.153	3,426
150	Class 2 = stranded	1.4	21	1,550	0.124	4,114
150	Class 2 = stranded	1.4	21	1,550	0.124	4,114
185	Class 2 = stranded	1.6	23	1,900	0.0991	4,997
185	Class 2 = stranded	1.6	23	1,900	0.0991	4,997
240	Class 2 = stranded	1.7	26	2,500	0.0754	6,413
240	Class 2 = stranded	1.7	26	2,500	0.0754	6,413
300	Class 2 = stranded	1.8	29	3,100	0.0601	7,839
300	Class 2 = stranded	1.8	29	3,100	0.0601	7,839
400	Class 2 = stranded	2	33	3,100	0.047	9,955
400	Class 2 = stranded	2	33	3,100	0.047	9,955
500	Class 2 = stranded	2.2	37	5,000	0.0366	12,683
500	Class 2 = stranded	2.2	37	5,000	0.0366	12,683
630	Class 2 = stranded	2.4	41	6,400	0.0283	16,124
630	Class 2 = stranded	2.4	41	6,400	0.0283	16,124
800	Class 2 = stranded	2.6	46	8,300	0.0221	20,998

TECHNICAL DATA

Nominal cross section conductor [mm ²]	Conductor category	Nominal thickness insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]	Embodied Carbon [CO ₂ e kg/km]
1,000	Class 2 = stranded	2.8	51	10,300	0.0176	26,827
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*The embodied carbon figure is taken from a single product in the range, for more information on how we calculate our embodied carbon figure visit here: <https://uk.prysmiangroup.com/embodied-carbon>