

6491B (H07Z-R)

LSOH® Single Core Conduit Wire. BS EN 50525-3-41. 450/750 V



Prysmian 6491B is a single core, low voltage Low Smoke, Zero Halogen (LSOH®) wiring cable designed for installation within conduit, trunking or inside fixed protected environments

KEY APPLICATIONS

Installation in surface mounted or embedded conduits, or similar closed systems and for fixed protected installation in or on lighting fittings and inside appliances, switch gear and control gear particularly for situations in which low emissions of smoke and acid gas is required.

Green/Yellow for use as earth can be installed without mechanical protection.

FEATURES AND BENEFITS

- Low Smoke, Zero Halogen (LSOH®)
- 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 EN 50525-3-41

BS EN 60332-1-2

BS EN 61034-2

BS EN 60754-1

Construction Standard

Flame Propagation - Single Cable

Smoke emission

Corrosive and acid gas

CONSTRUCTION

Conductor material

Conductor surface

Core insulation material

Copper

Bare

Low smoke zero halogen

APPLICATIONS PROPERTIES

Nominal voltage U ₀ [V]	450
Nominal voltage U [V]	750
Flame retardant	In accordance with BS EN 60332-1-2
Halogen free	Yes
Low smoke	Yes
Max. conductor temperature [°C]	90
Min. Operation temperature [°C]	-25
UV resistant	Yes
Min. Installation temperature [°C]	0
Max. Installation temperature [°C]	80
Bending radius (rule)	6D

COLOURS

A range of insulation colours are available, including green/yellow

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]
1.5	Class 2 = stranded	0.7	3	22	12.1	64
2.5	Class 2 = stranded	0.8	3.7	33	7.41	93
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4	Class 2 = stranded	0.8	4.2	48	4.61	133
6	Class 2 = stranded	0.8	4.8	68	3.08	189
10	Class 2 = stranded	1	6.3	120	1.83	336
16	Class 2 = stranded	1	6.9	175	1.15	475
25	Class 2 = stranded	1.2	8.4	260	0.727	801
35	Class 2 = stranded	1.2	9.5	350	0.524	1,034
50	Class 2 = stranded	1.4	11.2	475	0.387	1,303
70	Class 2 = stranded	1.4	12.8	670	0.268	1,787
95	Class 2 = stranded	1.6	15.2	940	0.193	2,513
120	Class 2 = stranded	1.6	16.5	1,200	0.153	3,069
150	Class 2 = stranded	1.8	18.4	1,450	0.124	3,778
185	Class 2 = stranded	2	21	1,800	0.0991	4,724
240	Class 2 = stranded	2.2	24	2,400	0.0754	6,135
300	Class 2 = stranded	2.4	26	3,000	0.0601	7,697

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]
400	Class 2 = stranded	2.6	30	3,800	0.047	9,861
500	Class 2 = stranded	2.8	34	4,900	0.0366	12,581
630	Class 2 = stranded	2.8	37	6,100	0.0283	15,958

*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>