

ELECTRICAL INSTALLATION AND CABLE PROTECTION SYSTEMS

In cooperation with designers and contractors, we have developed the best building and outdoor engineering solutions for cable protection on the market.

TECHNICAL INFORMATION

The purpose of electrical installation protection conduits installed inside buildings is to protect and route insulated wires and/or cables in electrical installation and communication systems with alternating voltage up to 1000 V or direct current up to 1500 V.

The system of conduits and fittings must provide mechanical — and, if necessary, even electrical — protection for the insulated wires and cables installed within them.

The protective properties of the fittings (couplings, elbows, brackets) should be no lower than those of the conduits.

According to the EN 61386-1 standard, electrical installation protection conduits intended for indoor use are classified as follows:

- Rigid electrical installation conduits – cannot be bent, or can only be bent using auxiliary mechanical tools;
- Pliable electrical installation conduits – can be bent by hand, but are not intended for frequent bending;
- Flexible electrical installation conduits – can be bent by hand and are designed for frequent bending throughout their service life.

Mechanical properties

Electrical installation protection conduits must be sufficiently resistant to mechanical impact. They should not crack or deform in a way that would make it difficult to pull in insulated wires and cables. The conduits should also retain their shape when the wires or cables are removed.

According to the EN 61386-1 standard, electrical installation protection conduits intended for indoor use are divided into **five classes** based on their **compression resistance**.

Compression class	Resistance	Crush resistance, N
1	Very low	125
2	Low	320
3	Average	750
4	High	1250
5	Very high	4000

Electrical installation conduits

EXL-W Corrugated, PVC, 320 N, with pulling wire, grey

Suitable for surface mounting, installation in wooden frameworks, and under plaster. Not suitable for installation in concrete.

Standards: EN 61386-1, EN 61386-22

Material: PVC Classification: 2221

Operating temperature: from -5 °C to +60 °C Color: RAL 7035



Outer diameter	Iner diameter	Reel size	Pallet size	Weigth	Part number	Item number
16 mm	11,0 mm	50 m	40 pcs/pal	1,82 kg/pcs	1196020700	70009961
20 mm	14,0 mm	50 m	28 pcs/pal	2,34 kg/pcs	1196043800	70012170
25 mm	18,6 mm	50 m	20 pcs/pal	2,86 kg/pcs	1196074100	70012173
32 mm	24,4 mm	25 m	24 pcs/pal	2,56 kg/pcs	1196114600	70012175
40 mm	31,7 mm	25 m	20 pcs/pal	3,00 kg/pcs	1196144300	70012177
50 mm	39,9 mm	25 m	10 pcs/pal	4,50 kg/pcs	1196191100	70012179

EXM-W-UV Corrugated PVC, 750 N, with pulling wire, black

Suitable for surface mounting, installation in wooden frameworks, under plaster, and in concrete. UV-resistant.

Standards: EN 61386-1, EN 61386-22

Material: PVC Classification: 3341

Operating temperature: from -25 °C to +60 °C Color: RAL 9005



Outer diameter	Iner diameter	Reel size	Pallet size	Weigth	Part number	Item number
16 mm	10,8 mm	50 m	40 pcs/pal	3,48 kg/pcs	1196020900	70012182
20 mm	13,8 mm	50 m	28 pcs/pal	3,52 kg/pcs	1196044000	70012186
25 mm	18,3 mm	50 m	20 pcs/pal	4,50 kg/pcs	1196074300	70012188
32 mm	24,1 mm	25 m	24 pcs/pal	3,00 kg/pcs	1196114800	70012190
40 mm	31,4 mm	25 m	20 pcs/pal	4,13 kg/pcs	1196143800	70012192
50 mm	39,7 mm	25 m	10 pcs/pal	6,4 kg/pcs	1196191200	70012194