

TECHNICAL DATA SHEET



Compression strength:
750 N/5cm

Open product

EVOCAB FLEX FR-UV-0H

Corrugated halogen-free conduits
with UV-stabilisation

Conformity:
EN 61386-1
EN 61386-22
EN 50642
Classification: 33524

PRODUCT DESCRIPTION

A flexible electrical installation conduit made of a special, halogen-free material and ideally suitable for outdoor installations exposed to direct sunlight. The conduit has a sheath made of a plasticised material which is specially modified for resistance against UV radiation. The conduit features medium mechanical resistance. The special structure of the inner surface of the conduit with outstanding gliding properties allows to considerably extend the cable-pulling distances and reduce the length of installation work. The colour of the sheath of the conduits is black.

Material: a special, halogen-free material, high limit load, high impact strength, operating temperature from - 45°C to +90°C, UV-stabilised, self-extinguishing, corrosion-resistant. Conduit is produced according to: EN 61386-1, EN 61386-22, EN 50642 standard specifications.

APPLICATION AREA

The conduits are specifically recommended for outdoor installations, can be used for installations at electric power substations, cable connections between floors and for transition of overhead lines to underground cable networks. The conduit provides mechanical protection of power cables inside buildings and withstands long-term exposure to sunlight. UV-resistance is guaranteed for 10 years.

PRODUCT DIMENSIONS

Nominal size	50	63	75	110	160
Outside OD, mm	50.0	63.0	75.0	110.0	160.0
Inside ID, mm	39.8	50.9	61.9	92.9	136.7
Roll, m	50	50	50	50	25
Bend radius ≥ mm	230	230	230	230	280

PRODUCT PARAMETERS

Parameter	Value	Test method
Material	Special plastic	
UV radiation resistance	10 years	ISO 4892-2
Combustion	Flame retardant, self-extinguishing	
Impact strength, J at 25°C	>2 J	EN 61386-1
Compression strength, N/5cm	>750	EN 61386-1
Operating temperature, min/max °C	-45 .. 90 °C	EN 61386-1
Total halogen content %	≤ 0,40 %	EN 50642
Flexibility	Flexible	EN 61386-22

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EVOEL classification codes according to EN 61386-1

Digit in the classification code										
1		2		3		4		5		
Compression strength		Impact strength		Minimum operating temperature t°		Maximum operating temperature t°		Flexibility		
Codification number	1	125N very low	1	0.5J (0.5 kg/100mm) very low	1	+5°C	1	+60°C	1	rigid
	2	320N low	2	1J (1.0 kg/100mm) low	2	-5°C	2	+90°C	2	pliable
	3	750N medium	3	2J (2.0 kg/100mm) medium	3	-15°C	3	+105°C	3	pliable/self recovering
	4	1250N high	4	6J (2.0 kg/300mm) high	4	-25°C	4	+125°C	4	flexible
	5	4000N very high	5	20.4J (6.8 kg/300mm) very high	5	-45°C	5	+150°C		
							6	+250°C		
							7	+400°C		

3

3

5

2

4

Example: electrical installation conduit with medium compression strength (3), medium impact strength (3), minimum operating temperature -45°C (5), maximum operating temperature +90°C (2), flexible (4).

STANDARTS APPLICABLE TO CONDUITS

Number	Title
EN 61386-1	Conduit systems for cable management - Part 1: General requirements.
EN 61386-21	Conduit systems for cable management - Part 21: Particular requirements. Rigid conduit systems.
EN 61386-22	Conduit systems for cable management - Part 22: Particular requirements. Pliable conduit systems.
EN 61386-23	Conduit systems for cable management - Part 23: Particular requirements. Flexible conduit systems.
EN 50642	Cable management systems—Test method for content of halogens.
EN 50267-2-2	Common test methods for cables under fire conditions - Test on gases evolved during combustion of materials from cables. Parts 2-2: Procedures. Determination of degree of acidity of gases for materials by measuring pH and conductivity.
EN 61034-2	Measurement of smoke density of cables burning under defined conditions. Part 2: Test procedure and requirements.
EN 60332-1-2	Tests on electric and optical fibre cables under fire conditions. Parts 1-2: Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame.
EN 60332-1-3	Tests on electric and optical fibre cables under fire conditions. Parts 1-3: Test for vertical flame propagation for a single insulated wire or cable. Procedure for determination of flaming droplets/particles.
EN 61386-24	Conduit systems for cable management - Part 24: Particular requirements for conduit systems buried underground.
ISO 4892-2:2013	Plastics. Methods of exposure to laboratory light sources. Part 2: Xenon-arc lamps (ISO 4892-2:2013)