

TECHNICAL DATA SHEET



Compression strength class:
750 N/5cm

Open product

EVOCAB FLEX FR-UV-0H

Corrugated halogen-free conduits
with UV-stabilisation

Conformity:
EN 50626-1
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.

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	
Temperature range, min/max	-45...+90°C	
UV radiation resistance	10 years	ISO 4892-2
Combustion	Combustible	EN 60695-11-2:2017
Compression strength, N/5cm	>750	EN 50626-1
Total halogen content %	≤ 0,40 %	EN 50626-1
Flexibility	Pliable	EN 50626-1
Protection against ingress of solid objects	IP3X	EN 50626-1
Protection against ingress of water	Not protected*	EN 50626-1

*Water-resistance (0.5 bar) of joints can be achieved by additional use of the sealing rings.

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EVOEL classification codes according to EN 50626-1

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 50626-1	Conduit systems buried underground for the protection and management of insulated electrical cables or communication cables.
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.
ISO 4892-2:2013	Plastics. Methods of exposure to laboratory light sources. Part 2: Xenon-arc lamps (ISO 4892-2:2013)