



48450OR - Flat cable FE180/E90 3G4 orange



Flat cable Woertz FE180/E30/E90 3x4.00mm 2 FR/LS0H orange LNPE (rodent repellent)Fire protection cable with noncritical behavior (according to VKF guideline 14-15) for use in horizontal and vertical escape routes. Applicable in public buildings and facilities such as hospitals, hotels, offices, museums or other commercial buildings (KBOB). Also recommended for facilities with an increasing number of people in ever tighter spaces such as airports, train stations (above and below ground) or shopping malls (KBOB). Within the Woertz fire protection cabling systems also ideally suited for the high demands of infrastructure buildings such as tunnels, underpasses, parking garages or subway stations.

Characteristics	
Base Unit	Meter
availability	Delivery in 4 weeks
group	170000
Packaging unit	-
country of origin	СН
Customs tariff number	8544.4992
Weight (g)	330 g
Copper weight (g)	116 g
Technical data	
Construction (mm <sup>2</sup> )	3x4.0 mm <sup>2</sup>
Dimensions width x height (mm)	24x7 mm
Halogen free	Yes
Cable type	Fire safety flat cable
International designation	N1ZZ1H2-U





#### 48450OR - Flat cable FE180/E90 3G4 orange

Reaction to fire classification	B2ca s1 d0 a1
Fire behavior	Cables with non-critical behavior (according to VKF 14-15)
Cross section (mm <sup>2</sup> )	4 mm²
Copper conductor	Wire KL1 EN60228
Conductor resistance (ohm/km)	4,61 ohm/km
cores insulation	Flame retardant, high temperature resistant
Cores colors	brown,green/yellow,blue
Sheat insulation	Polyolefin flame retardant
Sheath color	Orange
Rodent protection	rodent repellent
Longitudinal watertightness	< 1 m/14 days EN60794-1-2-F5B
Operating Temperature (°C)	-25 till 90 °C
Installation temperature min. (°C)	5 °C
Nominal voltage (VAC)	600/1000 VAC
Test voltage	4 kV/50Hz
Fire load (kWh/m)	0,95
Halogen free acc. to	IEC/EN60754-1/2
Flame retardant according to	IEC/EN60332-1-2
Minimal smoke emision acc. to	IEC/EN 61034-2
Low fire propagation acc. To	IEC/EN 60332-3-24
Insulation integrity	FE180 (IEC 60331) / PH120 (EN50200)





48450OR - Flat cable FE180/E90 3G4 orange

#### Product accessories

	<b>49370 - Cable fastening clamp 3G2.5/4.0mm2 E90</b> Mounting distance: 800mm
	48511/42 - End cap with mastic IP68 42/15 105mm
	Cable end piece shrink - end cap, diameter 42 mm, after shrinkage 15 mm, length 105 mm, black. Inside coated with adhesive and sealant.
	48961 - End caps FC E90 3G2.5/3G4.0/3G6.0
	End caps E90 IP66/68 for flat cable FE180 E90 3G2.5mm 2 /3G4.0mm 2 /3G6.0mm 2
	49386 E90 - Riser clamp E90
	Max. Bride load: 50kg. For Woertz fire safety flat cable: Woertz FE180 3G2.5 and 4 mm <sup>2</sup> , Woertz FE180 5G2.5, 4 6 mm <sup>2</sup> . For Woertz flat cable: Woertz Technofil 5G2.5 1.5 mm <sup>2</sup> , Woertz power 5G2.5 mm <sup>2</sup> , Woertz Power IP 5G2.5 mm <sup>2</sup> 6 mm <sup>2</sup> , Woertz combi 5G2.5 mm <sup>2</sup> 2x1.5 mm <sup>2</sup> , Woertz Dali IP 5G2.5 mm <sup>2</sup> 2x1.5 mm <sup>2</sup> , Woertz Dali 3/5G2.5 mm <sup>2</sup> 2x1.5 mm <sup>2</sup> , Woertz 5G4 mm <sup>2</sup> , Woertz 7G2.5 mm <sup>2</sup> .





48450OR - Flat cable FE180/E90 3G4 orange

#### **Product systems**

	FE180 E30/E90 3G4 mm <sup>2</sup> Woertz fire safety system FE180 E30/E90 3G4 mm <sup>2</sup> for power supply of safety-relevant elements, such as emergency and escape route lighting, smoke extraction systems or fire department elevators.	
	Tunnel orientation lighting system E90	
	E90 handrail system with integrated LED lighting and flat cable power distribution with integrated LED lighting and flat cable power distribution for escape route orientation for road and rail tunnels with E90 function maintenance. Flame retardant, halogen-free and self-extinguishing. E90 system according to DIN4102-12.	

