



# System overview

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.

## Components



#### 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 non-critical 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.



#### 48453/SI - Box FC E90 3G4 with fuse



Fire safety box with fuse adapter IP66/68 for flat cable FE180 E90 3G4mm²incl. 3 x cable gland M20x1.5, with a clamping range of  $\emptyset$  6-8 mm,  $\emptyset$  8-11 mm and  $\emptyset$  11-15 mm respectively Project-specific design on request see document/G00'299



### 48243/LED/230V - LED box FC IP 3G2.5 / 4mm2 IP68 230V



Quick connection technique without tool, light source (light emittingdiode) LED, colour of light white, LED protected against reversepolarity, IP68



48711 - Alarm unit SBB DE n + 1 (preconf)



.



48709 - Alarm unit SBB DE n-1 (preconf)



48712 - Alarm unit SBB DE n + 2 (preconf)



null

null

null







# **System overview**

Tunnel orientation lighting system E90

	48708 - Alarm unit SBB DE n-2 (preconf) null	
	48710 - Alarm unit SBB DE n (preconf) null	
3	48696 - Bride E90 niche drive 3-cable null	
	48243/LED/24V/A - Can FK LED A IP68 24DC 50 ° Handrail	
	48243/LED/24V/B - Can FK LED B IP68 24DC 50 ° Handrail	
	48705 - Control cable FE05-CLN 8x1.5 L	
	48724 - Handrail Round Tube GFK 2.5m (Fasten.) null	
	48702 - Lighting control handrail	
	48671 - Trunking A2 E90 2.50m (fixing) null	