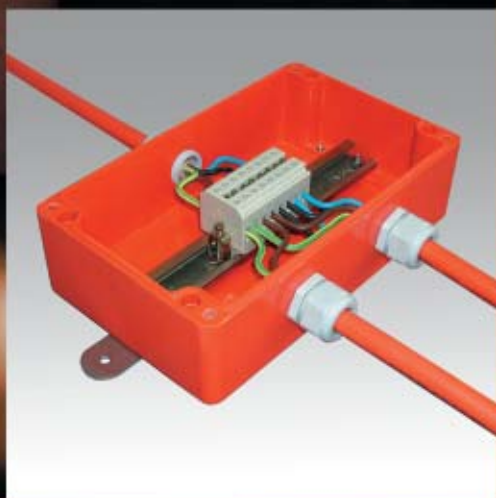
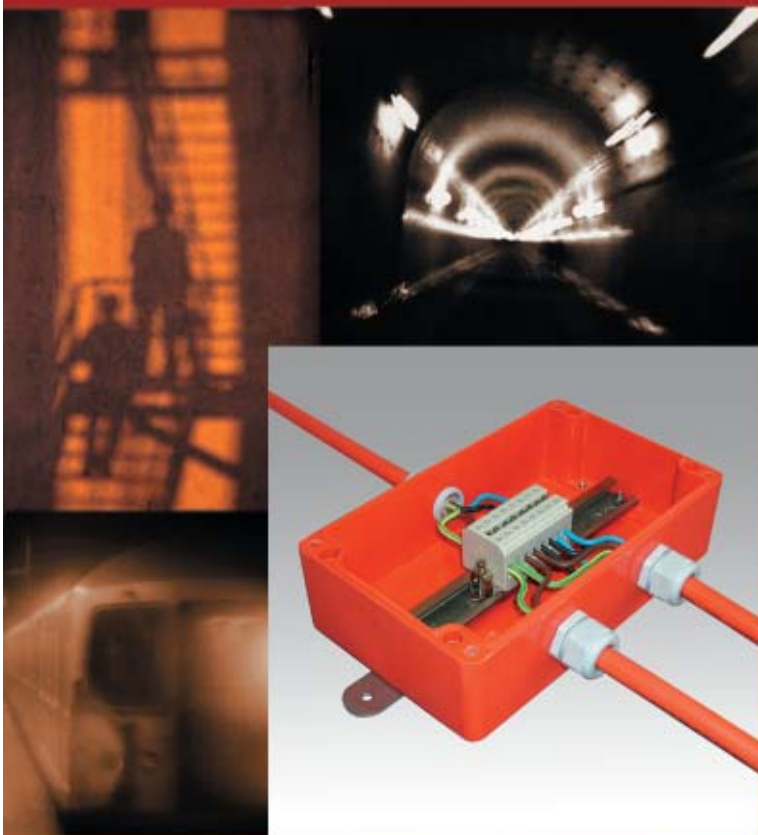


Plan the beginning ...

... anticipate the end.



E 30-Enclosures



A Phoenix Mecano Company

Fire protection in tunnels and public buildings

One of the most important components of planning and design for tunnels and public buildings by the measures provided for preventive fire protection, especially in the light of recent tunnel accidents and fires.

Safety equipment which prevents fire formation and fire spreading, and ensures provision for the saving of human life, is nowadays stipulated as a component of such buildings.

In practice this means:

- Lighting equipment for identification of escape exit routes
- Ventilation equipment for smoke extraction
- Camera systems for monitoring
- Lighting equipment and ventilation systems in fire protection rooms



Relevant requirements:

Function retention

An important factor in a fire situation is retention of power supply for all safety systems for a defined minimum period - function retention. This relates not just to individual components or groups, but includes cables, distribution enclosures and fixing systems to define the entire equipment as one line system.

In accordance with VDE 108, this line system is subject to the safety requirements for fire protection. This system must be tested and certified in accordance with the requirements laid down in **DIN 4102 Part 12**.

E 30 function retention

All measures which are intended to ensure exit route safety must be provided by systems which comply with E 30 function retention. This means that these safety systems must retain their function over a period of 30 minutes during fires:

- Fire alarm systems including all attached transmission lines
- Systems for alarming and providing instructions for visitors and employees
- Safety lighting systems and reserve power lighting systems
- Personnel lift equipment and evacuation protection
- Natural smoke extraction equipment (for example: smoke extraction through thermal lift)

Line systems for this application area are tested in accordance with DIN 4102 Part 12 over a period of 30 minutes in a fire chamber. During this process, the fire

room is subject to predefined heating in accordance with the ETK „Uniform temperature time curve“ up to 840°C.

Safe enclosure systems for many various applications

ROSE Systemtechnik has been offering enclosure concepts for all various safety-relevant applications for decades now. An example of this are our Ex enclosures, which had been in use for over 20 years worldwide in all equipment retiring protection, or special EMC-suitable enclosure systems which have to guarantee secure screening against interfering signals.

The subject of fire protection engineering was considered as long as 15 years ago; an example of this are our plastic enclosures manufactured in special self-extinguishing materials.

ROSE E 30 enclosure systems

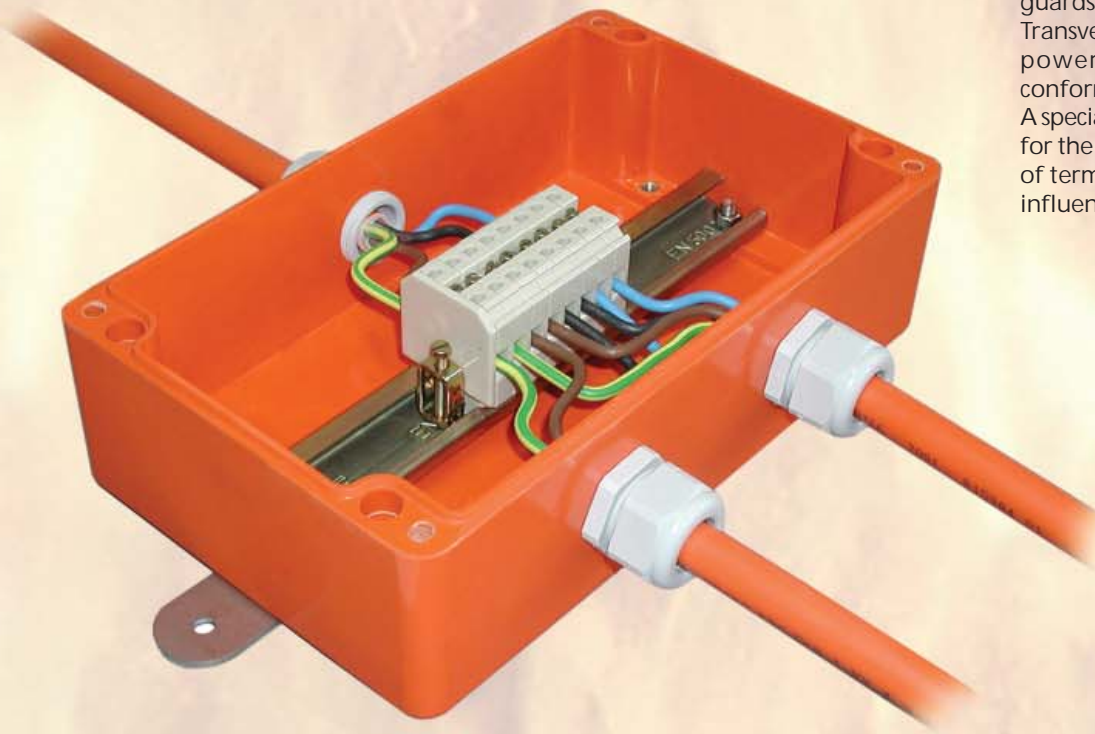
ROSE E 30 enclosure systems are made of a special halogen-free polyester material in pure orange colour, RAL 2004. This ensures that they meet all requirements for minimum smoke development and preventing production of corrosive conflagration gases.

These robust enclosures conform as standard to the basic ingress protection level IP 66, which allows for use in all safety-relevant applications - from emergency exit route lighting in staircases or underground garages to ventilation systems in tunnels through mountains or beneath rivers and lakes.

The terminal clamping point - decisive for safe connections - consists of heat-resistant ceramic terminals with wire guards in all ROSE E30-enclosures.

Transverse bridges allow distribution of power within the equipment conforming to VDE requirements.

A special stainless steel supporting frame for the terminal rails offers secure fixing of terminals and cables even under the influence of extreme heat.



ROSE E30 enclosures comply with all requirements for fire certification in accordance with DIN 4102 part 12

ROSE E 30-enclosures - our product range



Product summary

Type	Dimensions	Max. terminal provision	
		SAKK4	SAKK10
<i>E30.12 12 09</i>	120 x 120 x 90 mm	7 pcs	4 pcs
<i>E30.12 22 09</i>	120 x 220 x 90 mm	18 pcs	12 pcs
<i>E30.16 16 09</i>	160 x 160 x 90 mm	11 pcs	8 pcs
<i>E30.16 26 09</i>	160 x 260 x 90 mm	23 pcs	16 pcs
<i>E30.25 26 12</i>	250 x 260 x 120 mm	2 x 23 pcs	2 x 16 pcs

Accessories

Terminals		
<i>E30.00 01 04</i>	SAKK4	Ceramic terminal block 0.5 to 6 mm ² (single-cable) 0.5 to 4 mm ² (multi-cable)
<i>E30.00 01 16</i>	SAKK10	Ceramic terminal block 2.5 to 16 mm ² (single-cable) 2.5 to 10 mm ² (multi-cable)
Cable connections		
<i>E30.00 01 91</i>	AP/SAKK 4/10	Cover
<i>E30.00 01 92</i>	QL 2/SAKK4	Bridge, 2-pole for SAKK 4
<i>E30.00 01 93</i>	QL 3/SAKK4	Bridge, 3-pole for SAKK 4
<i>E30.00 01 94</i>	QL 4/SAKK4	Bridge, 4-pole for SAKK 4
<i>E30.00 01 96</i>	QL 2/SAKK10	Bridge, 2-pole for SAKK 10
<i>E30.00 01 97</i>	QL 3/SAKK10	Bridge, 3-pole for SAKK 10
<i>E30.00 01 98</i>	QL 4/SAKK10	Bridge, 4-pole for SAKK 10
<i>E30.00 02 01</i>	EW 1	End bracket TS 32
<i>08.08 05 12</i>	M 12 x 1.5	Sealing range 3 - 7 mm
<i>08.08 05 16</i>	M 16 x 1.5	Sealing range 5 - 10 mm
<i>08.08 05 20</i>	M 20 x 1.5	Sealing range 8 - 13 mm
<i>08.08 05 25</i>	M 25 x 1.5	Sealing range 11 - 17 mm
<i>08.08 05 32</i>	M 32 x 1.5	Sealing range 15 - 21 mm
<i>08.08 05 40</i>	M 40 x 1.5	Sealing range 19 - 28 mm

Admissible in connection with the following cables:

Supply lines (n x 1.5 mm² to n x 16 mm²)

designation NHXH FE 180 - 30 from almost all leading manufacturers

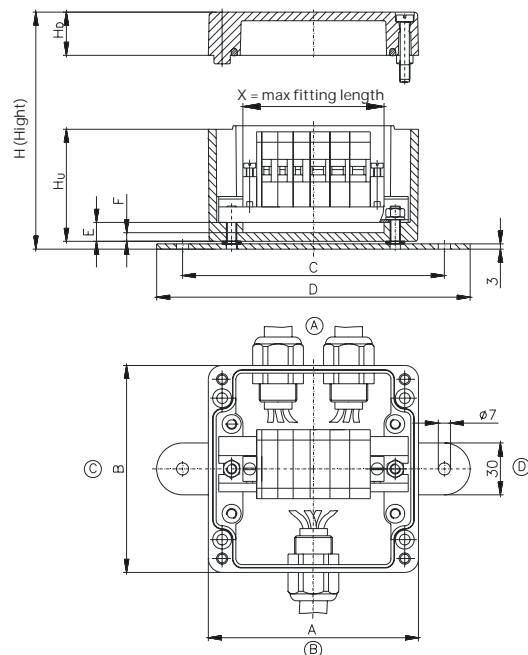
Fitting capabilities:

ROSE E 30 enclosures are designed so that they can be adapted to meet individual fitting conditions.

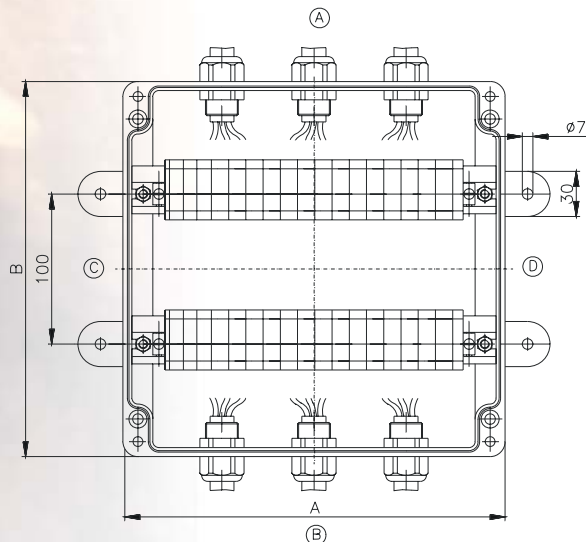
You determined the number of terminals and cable glands. We supply you the required enclosure fitted out as necessary exactly to your requirements. The table below shows the maximum fitting capabilities:

Fitting capability Type	M	Side		Dimensions									
		A/B	C/D	A	B	C	D	E	F	X	HB	H _D	H _{tot}
E30.12 12 09	12	12	8	122	120	152	182	11	5	82	66	25	91
	16	8	6										
	20	6	4										
	25	2	2										
	32	2	1										
	40	1	1										
E30.12 22 09	12	27	8	220	120	250	280	11	5	180	66	25	91
	16	20	6										
	20	14	4										
	25	5	2										
	32	3	1										
	40	3	1										
E30.16 16 09	12	18	12	160	160	189	219	11.5	6	120	71	20	91
	16	15	8										
	20	10	6										
	25	4	2										
	32	2	2										
	40	2	1										
E30.16 26 09	12	36	12	260	160	285	315	11.5	6	220	71	20	91
	16	30	8										
	20	18	6										
	25	7	2										
	32	4	2										
	40	3	1										
E30.25 26 12	12	48	40	255	250	285	315	11.5	6	215	96	25	121
	16	40	27										
	20	24	21										
	25	10	8										
	32	7	5										
	40	4	3										

E30.12 12 09 - E30.16 26 09



E30.25 26 12



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