# Junction boxes



Catalogue

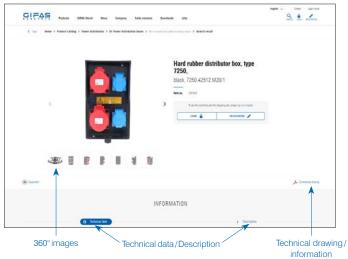








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We will guide you through the GIFAS World on our website with animated situations at the workplace and at home.

Our advanced product solutions are used in the most diverse areas roads, railways, hospitals, sewage plants or wherever electricity, light and safety are required.

The areas of application are numerous and varied. Let us inspire you! Click on www.gifas.ch/world and immerse yourself in the all-embracing landscape of the GIFAS World.



# Juction boxes - Safety first



#### Safety first

Junction boxes from GIFAS-ELECTRIC open up new possibilities for safe electrical installations and all around. Whether on uneven ground or in restricted conditions, whether in industry or in building construction, for interior or exterior applications – our boxes can be used anywhere, where power flows because...

...safety first!

#### Varied applications

- sewage plants chemical industry, galvanizing works
- tunnel construction, tunnels/caverns
- finishing industry
- road and garden construction
- food and luxury food industry
- mines, transport systems

...and much more!

#### Hard rubber junction boxes





- safety insulated
- no corrosion
- no condensation even with significant temperature fluctuations
- weather, UV and ozone-proof
- strong seal (IP65) against dust and water jets
- maintenance-free
- widely resistant to chemicals, therefore also suitable for the chemical industry and sewage plants
- shatterproof and impact-resistant
- maximal safety in fire conditions: self-extinguishing, halogen-free (no toxic gases)
- assembled according to your technical specifications
- individually equipable

#### Polyester junction boxes



- safety insulated
- impact-resistant
- UV resistant
- halogen free
- resistant to aging and temperature resistant
- resistant to oil and acid
- widely resistant to chemicals
- barely flammable, self-extinguishing
- with 4 exterior assembly and fixing points

#### Various junction boxes / casings



- assembled according to your specifications
- various dimensions, executions and materials available:
  - stainless steel V2A / V4A
  - polycabonate
  - small polyester casings
  - ABS standard
- ATEX executions are available

#### Technical notes - perfect, systemised power branching



#### Casing

The casings have a technically matured design and offer maximum Material features quality. Ten casings are available in different sizes and shapes, and in the colours electric grey RAL 7035 and black.



#### Terminals

Only high quality connection and junction terminals are used for the installation.



#### Screwed cable glands

For installation there is a hand-picked range of equipment available with special Material features features. A strong impermeability (IP68) and resistance to chemical influences are key features of these screwed cable glands.



#### Accessories

The accessories available include mounting plates or brackets made from stainless steel (V2A/V4A) for uneven bases or where space is at a premium.



#### Rails

Standardised DIN rails are ideal for the easy and rapid installation of terminals or command and messaging equipment. Retrofitting or add-on installations are possible.

The notes given on this page relate to the solid rubber junction boxes. This information applies to fire-proof junction boxes (see Reg. 04A) in a limited way only.



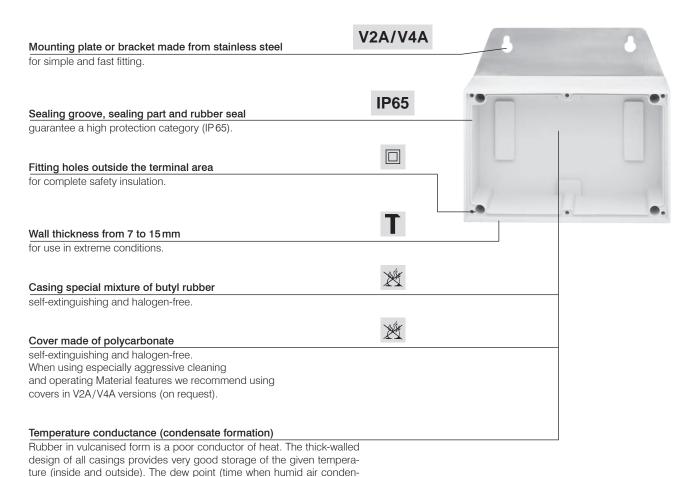
#### Labelling

An engraved or inscription plate is possible for clear identification of technical operating notes on request.



#### With our system you can stay flexible





The notes given on this page relate to the solid rubber junction boxes. This information applies to fire-proof junction boxes (see catalogue 04A) in a limited way only.

ses) is therefore only transferred very slowly towards the inside. The risk of moisture condensate forming on the inside is virtually excluded.

#### Type 1010



#### Type 1212



#### **Technical Data**

For cable-Ø up to.:  $5\times 2.5\,\mathrm{mm}^2$  External dimensions:  $100\times 100\times 65\,\mathrm{mm}$  Internal dimensions:  $83\times 83\times 52\,\mathrm{mm}$  IP rating: IP 65

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

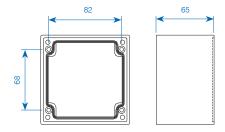
Item no			o	Cable glands	Terminal
	light grey		black		
	057997		058000	3×M16×1.5	no
	057998		058001	4×M16×1.5	no
	057999		058006	2×M20×1.5	no
✓	058007	✓	058008	Empty casing	

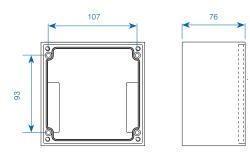
#### Technical Data

For cable-Ø up to.:  $5\times 6\,\mathrm{mm^2}$  External dimensions:  $125\times 125\times 76\,\mathrm{mm}$  Internal dimensions:  $108\times 108\times 64\,\mathrm{mm}$  IP rating: IP 65

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

Item no			)	Cable glands	Terminal
	light grey		black		
	070201		070251	4×M16×1.5	3×6mm²
	070202		070252	2×M20×1.5	5×2.5 mm <sup>2</sup>
	070203		070253	3×M20×1.5	$5 \times 6  \text{mm}^2$
	070204		070254	4×M20×1.5	5×6mm²
	070205		070255	$1\times M25\times 1.5 / 2\times M20\times 1.5$	5×6mm²
	070206		070256	1×M25×1.5/3×M20×1.5	5×6mm²
	070207		070257	2×M25×1.5	5×6mm²
✓	056764	✓	056765	Empty casing incl. DIN Rail	







Type 1616



Type 1812



#### **Technical Data**

 $\begin{array}{lll} \text{For cable-Ø up to.:} & 5\times 16\,\text{mm}^2 \\ \text{External dimensions:} & 160\times 160\times 90\,\text{mm} \\ \text{Internal dimensions:} & 142\times 142\times 74\,\text{mm} \end{array}$ 

IPrating: IP65

Technical Data

For cable-Ø up to.:  $5\times16\,\text{mm}^2$ External dimensions:  $180\times125\times90\,\text{mm}$ Internal dimensions:  $157\times107\times74\,\text{mm}$ 

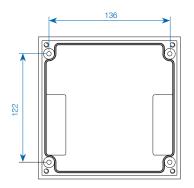
IPrating: IP65

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

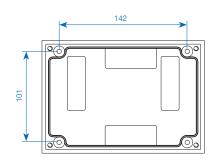
Item no			)	Cable glands	Terminal
	light grey		black		
	070211		070261	3×M20×1.5	5×6mm²
	070212		070262	4×M20×1.5	5×6mm²
	070213 07026		070263	6×M20×1.5	$5 \times 6  \text{mm}^2$
	070215		070265	3×M25×1.5	5×6mm²
	070216		070266	4×M25×1.5	$5 \times 10  \text{mm}^2$
	070217		070267	2×M32×1.5	5×10 mm <sup>2</sup>
	070218		070268	2×M32×1.5/2×M20×1.5	$5 \times 16  \text{mm}^2$
	070219		070269	2×M32×1.5/2×M25×1.5	5×16 mm <sup>2</sup>
✓	056766	✓	056767	Empty casing incl. DIN Rail.	

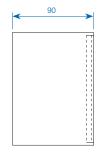
The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

	N° art.			Cable glands	Terminal
	light grey		black		
	070221		070271	3×M20×1.5	5×6mm²
	070222		070272	4×M20×1.5	5×6mm²
	070223		070273	2×M25×1.5	5×6mm²
	070224		070274	3×M25×1.5	5×6mm²
	070225		070275	2×M32×1.5	$5 \times 16  \text{mm}^2$
	070226		070276	2×M25×1.5/2×M20×1.5	5×10 mm <sup>2</sup>
	070227		070277	2×M25×1.5/3×M20×1.5	5×16 mm <sup>2</sup>
✓	056768	✓	056769	Empty casing incl. DIN Rail	









<sup>✓</sup> from stock, offer subject to prior sale

# Hard rubber junction boxes

#### Type 2516



#### Type 3020



#### **Technical Data**

For cable-Ø up to.:  $5\times25\,\text{mm}^2$ External dimensions:  $250\times160\times90\,\text{mm}$ Internal dimensions:  $229\times141\times74\,\text{mm}$ 

IPrating: IP65

Technical Data

For cable-Ø up to.:  $5\times35\,\text{mm}^2$ External dimensions:  $300\times200\times110\,\text{mm}$ Internal dimensions:  $281\times182\times94\,\text{mm}$ 

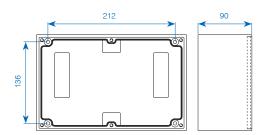
IPrating: IP68

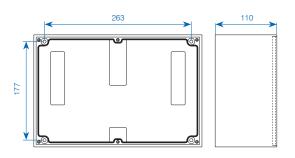
The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

	Item no			Cable glands	Terminal
	light grey		black		
	070231		070281	6×M20×1.5	18×2.5 mm²
	070233		070283	3×M25×1.5	5×10 mm <sup>2</sup>
	070234		070284	4×M25×1.5	$5 \times 10  \text{mm}^2$
	070235		070285	5×M25×1.5	5×16 mm²
	070237		070287	3×M32×1.5	5×16 mm²
	070238		070288	4×M32×1.5	5×35 mm²
	070239		070289	2×M40×1.5	$5 \times 35  \text{mm}^2$
	070240		070290	3×M40×1.5	5×35 mm²
✓	056770	✓	056771	Empty casing incl. DIN Rail	

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

Item no			)	Cable glands	Terminal
	light grey		black		
П	051060		051063	3×M32×1.5	5×35 mm²
	051061		051065	2×M50×1.5	5×70 mm <sup>2</sup>
	051062		051066	10×M20×1.5	10×6 mm²
✓	051072	✓	051073	Empty casing incl. DIN Rail	





# Hard rubber junction boxes



#### Type 3800



#### Type 3900



#### **Technical Data**

For cable-Ø up to.:  $5\times50\,mm^2$  $360\times250\times133\,\text{mm}$ External dimensions:  $327 \times 220 \times 106 \, mm$ Internal dimensions: IP rating:

**Technical Data** 

For cable-Ø up to.:  $5\times50\,mm^2$ External dimensions: 360×250×173 mm Internal dimensions:  $327{\times}220{\times}144\,\text{mm}$ 

IP rating:

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

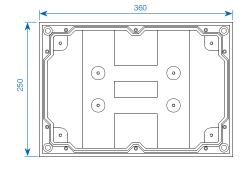
Item no			)	Cable glands	Terminal
	light grey		black		
П	051067		051070	4×M40×1.5	5×70 mm <sup>2</sup>
	051069		051071	2×M63×1.5	5×120 mm <sup>2</sup>
✓	051074	✓	051077	Empty casing incl. DIN Rail	

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

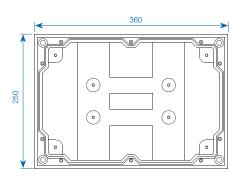
light grey black		
109006 081669 Emp	oty casing incl. DIN Rail	

The casing Type 3900 has a greater installation depth than Type 3800 (+40mm). It is used for special requirements such as all cable glands in the same side wall, terminals installed at different heights, etc.

For special applications we recommend using a mounting plate to fit series Type 3800 and Type 3900 (see page 12).









# Hard rubber junction boxes

#### Type 7800/Type 7900



#### Type 7900 execution with door and lock



#### **Technical Data**

#### Type 7800

For cable-Ø up to.:  $5\times95\,\text{mm}^2$ External dimensions:  $500\times360\times133\,\text{mm}$ Internal dimensions:  $447\times327\times106\,\text{mm}$ 

IPrating: IP65

#### Type 7900

 $\begin{array}{lll} \mbox{For cable-Ø up to.:} & 5\times 95\,\mbox{mm}^2 \\ \mbox{External dimensions:} & 500\times 360\times 173\,\mbox{mm} \\ \mbox{Internal dimensions:} & 447\times 327\times 144\,\mbox{mm} \end{array}$ 

IPrating: IP65

The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

Type 7800

	Item no			Cable glands	Terminal
	light grey		black		
Ī	051079		051082	4×M50×1.5	5×120 mm <sup>2</sup>
	051080		051083	1×cable glands special cable Ø46-60 mm) 4×M50×1.5	5×120 mm²
	051081		051085	10×M32×1.5	5×240 mm <sup>2</sup>
	051086	✓	051088	Empty casing incl. DIN Rail	

The casing type 7900 has a larger installation depth than type 7800 (+40 mm). It is used for special requirements such as all cable glands in the same side wall, terminals installed at different heights, etc.

For special applications we recommend using a mounting plate to fit series type 7800 and type 7900 (see page 12). Versions with door and lock are available on request.

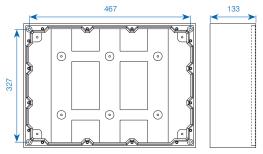
The following items indicate corresponding versions/configurations. The specific execution (placement of cable glands) is redrawn and executed case by case.

Item no		Cable glands	Terminal
light grey	black		
109008	108999	Empty casing incl. DIN Rail, mounting plates	door and

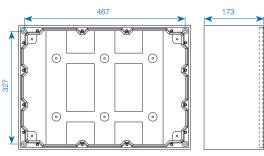
#### Type 7900

Item no		Cable glands Terminal	
light grey	black		
109007	073740	Empty casing incl. DIN Rail	and mounting plate

#### Type 7800



#### Type 7900





#### Mounting plates/Mounting brackets





#### Mounting plates punched/Mounting rings



#### Mounting plates

Solid steel plates which can be mounted all-over onto the rear socket wall. The top of the mounting plate is protruding and is provided with one, two or three fixing holes (large «key» holes).

# => For complex mounting conditions such as shafts, tight spaces, etc.

	Item no	for Type	Version
✓	058205	1010	square, rust-free, A2
✓	052787	1212	square, rust-free, A2
✓	052788	1616	square, rust-free, A2
✓	052789	1812	diagonal, rust-free, A2
✓	052785	1812	vertical, rust-free, A2
✓	052790	2516	diagonal, rust-free, A2
✓	052792	2516	vertical, rust-free, A2
✓	049943	3020	diagonal, rust-free, A2
✓	050917	3020	vertical, rust-free, A2
✓	040119	3800/3900	diagonal, rust-free, A2

#### Mounting plates, punched

	Item no	for Type
✓	011411	3800/3900
✓	019877	7800 / 7900

#### Mounting rings

	Item no			Size	Core hole	Height
	black		light grey	inside	mm	mm
✓	056834	✓	056826	M16×1.5	19	12
✓	056837	✓	056828	M20×1.5	24	12
✓	056838	✓	056829	M25×1.5	29	13
✓	056839	✓	056831	M32×1.5	36	13
✓	056840	✓	056832	M40×1.5	44	15
✓	056841	✓	056833	M50×1.5	55	15
✓	030466	✓	030465	M63×1.5	67	15

#### Mounting brackets

Mounting brackets which can be mounted on the left and right side across the casing rear wall. The top and the bottom of the fitting brackets are protruding and are provided with generous mounting holes.

#### => For a correct and permanent installation with 4 mounting holes

	' "			
	Item no	for Type	Version	
✓	178419	diverse	short, rust-free, V4A	
✓	058206	1010	long/diagonal, rust-free, A2	
✓	056089	1212/1812	long/diagonal, rust-free, A2	
✓	056090	1616/2516	long/diagonal, rust-free, A2	
✓	056091	1812	long/vertical, rust-free, A2	
✓	056092	2516	long/vertical, rust-free, A2	
✓	049691	3020	long/diagonal, rust-free, A2	
✓	049689	3020	long/vertical, rust-free, A2	
✓	032555	3800/3900	long/diagonal, rust-free, A2	
✓	032553	3800/7800	vertical/diagonal, rust-free, A2	

#### Installation instruction

 $\begin{array}{ll} 1^{st} \ step: & \ degrease \ junction \ box \ properly \ (with \ nitro \ diluter) \\ 2^{nd} \ step: & \ drill \ a \ whole \ for \ the \ mounting \ ring \ (\varnothing \ acc. \ to \ chart, \ i.e. \end{array}$ 

M16 = 19 mm)

3<sup>rd</sup> step: paste mounting ring in (superglue Loctite type 406,

caution: sticks within a few seconds)

 $4^{\text{th}}$  step: fix the mounting ring by hammer finish immediately

5<sup>th</sup> step: assemble the cable gland

	Item no.	Designation	
✓	026610	Loctite 406, superglue	

<sup>✓</sup> from stock, offer subject to prior sale

# Universal connection and branching sleeves

#### Universal connction and branching sleeves



#### **Technical Data**

Use:

Dimensions:

Item no. 206290:Item no. 197983:

Material:

Screw connection: Cable receptacle:

Item no. 206290:Item no. 197983:

Tensile stress:

Temperature range: Test: Electronics:

Test number:

Strain relief:

Soil or outdoor area

170×72 mm 280×100 mm Polypropylene black Cover made of polypropylene

4×5-14 mm 4×7-25 mm

Mechanically via the cable grommet after

min. 80 N/mm -30°C to +65°C IP68. IM22

1 kV, ÖVE VAEE 36221

#### Product features

These universal connection and branching sleeves were especially developed to provide simple and absolutely reliable protection for telecommunication and electrical applications. They can be installed outdoors, in pits and below ground, can be opened and reused as required and are provided with protection category IP68. The sleeves basically consist of only 3 parts: sleeve body, rubber end cap and cover. Cable ties, lubricant and a cutter are enclosed and guarantee problem-free processing of the sleeve without additional tools.

#### Scope of delivery



	Item no.	Designation	
✓	206290	Connection sleeve Ø 170 mm×72 mm with 4 inlets Ø 5-14 mm	
✓	197983	Connection sleeve Ø 280 mm×100 mm with 4 inlets Ø 7-25 mm	

# Polyester junction and distribution boxes GFK type 1616



## Glass fibre reinforced polyester junction and distribution boxes

Besides our approved hard rubber product range we are able to fulfill highest chemical and mechanical demands, especially for such systems as in tunnels, in civil engineering, and in chemical and petrochemical industry.

Junction boxes GREY, FE05

#### Design approved to IP66/68

Along to Test Report APM Technica: APM\_BE\_3301389 water and dust in accordance with DIN EN 60529:2014

As a result of the higher protection category and the certification according to DIN 4102 Part, the boxes are ideal for adaptive, lane and safety lighting, especially in the national road network and tunnels - individual equipment to customer requirements possible!

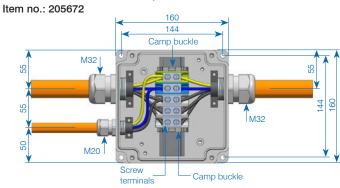
#### Technical Data FE05

Specification box type 1616 FE05

- junction box polyester glass fiber reinforced
- colour: grey RAL 7035
- protection category: IP68
- W×H×P: 160×160×100 mm



TBA 1616 - 160×160×100 mm/5×16 mm<sup>2</sup>



#### Special features

- safety insulated
- impact-resistant
- UV resistant halogen free
- resistant to aging and temperature resistant
- resistant to oil and acid
- widely resistant to chemicals
- with 4 exterior assembly and fixing points
- max. equipment: screw terminals up to 35 mm<sup>2</sup>



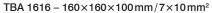


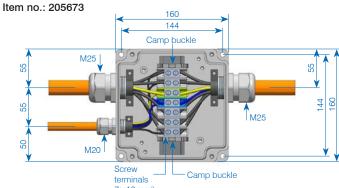












# Polyester junction and distribution boxes GFK type 2516 and 3018

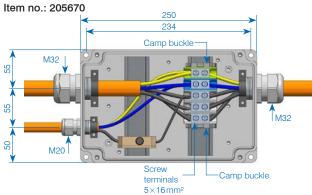
#### Technical Data FE05

Specification box type 2516 FE05

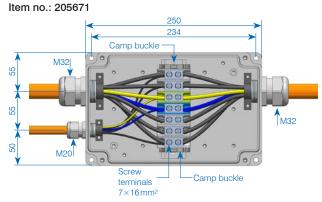
- junction box polyester glass fiber reinforced
- colour: grey RAL 7035
- protection category: IP66
- W×H×P: 250×160×100 mm



TBA 2516 - 250×160×100 mm/5×16 mm<sup>2</sup>



TBA 2516 - 250×160×100 mm/7×16 mm<sup>2</sup>



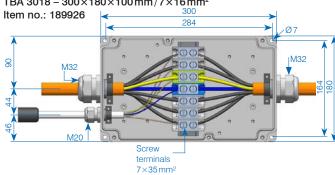
#### Technical Data FE05

Specification box type 3018 FE05

- junction box polyester glass fiber reinforced
- colour: grey RAL 7035
- protection category: IP66
- W×H×P: 300×180×100 mm

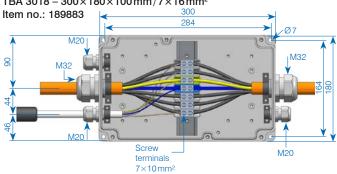


TBA  $3018 - 300 \times 180 \times 100 \, mm / 7 \times 16 \, mm^2$ 



TBA 3018 - 300×180×100 mm/7×16 mm<sup>2</sup>

TBA 3018 - 300×180×100 mm/7×16 mm<sup>2</sup>



Item no.: 189885

terminals  $7 \times 10 \, \text{mm}^2$ 

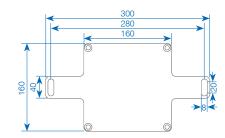


#### Mounting plates and brackets

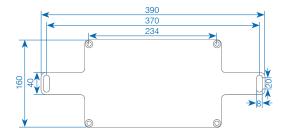
A large number of different mounting plates and brackets are available for quick and easy installation of the junction boxes on ducts, tunnel ceilings or mounting supports. It goes without saying that individual special solutions are possible.

Material in V4A stainless steel 14571 or as according to customer requirements.

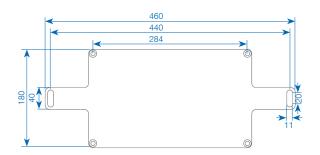
Mounting plate, crosswise, V4A stainless steel for type 1616 boxes  $\checkmark$  Item no.: 207053



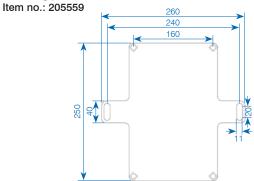
Mounting plate, crosswise, V4A stainless steel for boxes type 2516  $\checkmark$  Item no.: 207052



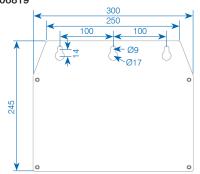
Mounting plate, crosswise, V4A stainless steel for boxes type 3018  $\checkmark$  Item no.: 189869



Mounting plate, vertical, V4A stainless steel for boxes type 2516

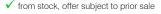


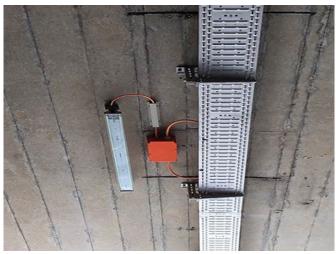
Mounting bracket, V4A stainless steel for boxes type 3018 Item no.: 206819





Junction box type 3018 in FE05 with through-wiring DALI





Typical example of an installation with adaptive lighting for emergency power system in FE180/E30

#### Stainless steel industry V2A / V4A



- casings with concealed hinge and lock
- standard casing for hygiene areas
- IPrating up to IP69K (on request)
- equipped/assembled according to your technical specifications

#### Polyester casings



- polyester casing, glass fiber reinforced, for installations et al.
- mounting options for mounting rails and mounting plates

#### small polyester casings



- casing systems with concealed exterior hinges
- standard execution or with inspection glass
- equipped/assembled according to your technical specifications

#### Polycarbonate/ABS standard



- light plastic casing for industrial applications
- Polycarbonate casing with standard or transparent cover
- ABS casing with standard cover
- optional EMV version (coated)
- equipped/assembled according to your technical specifications

#### Explosion-proof casings/ Explosion-proof equipment



- aluminium, polyester and stainless steel
- authorized for zones 1, 2, 21, 22 (ATEX/IEC Ex II 2G, Ex II 2D tD
- equipped/assembled according to your technical specifications

#### Fire-proof junction boxes



- with preservation of functionality E30 conforming to DIN 4102, part 12
- certified/with test protocol
- to protect life and property in the case of fire
- various dimensions on request
- assembled according to your technical specifications
- individually equipable

Of all casings various dimensions are available. We would like to advise you on your individual application!

# Applications for hard-rubber junction boxes

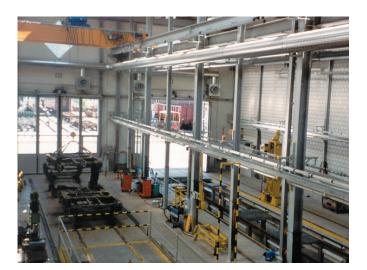




#### Sewage plants Simple – Fast – Durable

Connection of pumps, indicator and monitoring units: With our hard rubber junction boxes you are flexible in any installation!
Rust-free, UV-resistant, and resistant to most chemical substances. For use in the toughest conditions!





## Industry Your control and distribution problem – our expertise

Various casing shapes and sizes give you the options you need. Sensitive controls or terminal strips for combining connection lines can be integrated into our junction boxes in an impact-proof and compact way.





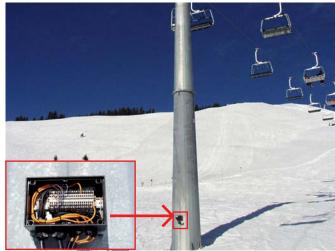
#### National highways/road maintenance We'll keep you on the right track!

Connection and junction boxes for steering, control and maintenance. Individual component fitting conforming to the standards of the relevant road traffic office. Resistant to continually changing environmental and weather conditions.













News about the assortment and specific solutions you can find on our website:

www.gifas.ch

