# COMPACT CATALOGUE EDITION 2025



POWER DISTRIBUTION AND LIGHTING SYSTEMS



## WE ARE GIFAS.

Dear business friends and partners,

We are pleased to present you with our new edition of the GIFAS compact catalogue.

GIFAS is the leading supplier when it comes to power distribution and lighting systems for the highest demands on safety and efficiency. For more than 65 years, we have been delighting customers with innovative solutions that guarantee greater reliability and user-friendliness and stand internationally for quality "Made in Germany". The company claim "Quality with a system" expresses our strengths: reliability, modernity and customer orientation.

We manufacture our solid rubber products at our headquarters in Neuss. The GIFAS range comprises more than 20,000 articles and new product solutions are added daily. Across Europe, our 280 employees are committed to ensuring that we continue to provide the best solutions for the needs of our customers in key industries such as electrical and energy engineering, the construction industry, the chemical industry, transport and safety equipment. Everything from a single source. In addition to our product range, we also offer comprehensive services such as electrical planning, lighting calculations, installation and maintenance.

In the following chapters you will find our renowned GIFAS top sellers as well as new product solutions for your power supply and lighting control.

We hope you enjoy reading!

Your GIFAS ELECTRIC GmbH



«GIFAS-Video» Meet GIFAS ELECTRIC: www.gifas.de/en/



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# YOUR STRONG PARTNER WITH EXPERIENCE

GIFAS ELECTRIC has first-class competence throughout Europe when it comes to the development, manufacture and sale of electrotechnical system solutions in the low-voltage range - and has been doing so since 1957.

The name GIFAS stands for the highest level of quality. In order to be able to guarantee this in the long term, we are structured and certified as a company according to the DIN EN ISO 9001:2015 standard. At the same time, we have established a comprehensive environmental management system in accordance with DIN EN ISO 14001:2015. Our products are manufactured according to the required product standards and every item produced at GIFAS is subject to individual testing with corresponding proof of testing. We guarantee reliable products with safety!

When we talk about quality at GIFAS, we do not just mean the individual product, but our entire activities, from customer requirements to after-sales service. Material use and technologies, processes and efficiency as well as our service - everything is put to the test and continuously optimised.

Perfection is our standard and «systematic quality» our promise - for a guaranteed consistently high level of our services and maximum customer satisfaction.

However, it is not only the cooperation with our business partners that is built to last, but also that with our committed employees in the group of companies. They are the guarantors of our continued success - with passion, competence and the highest level of service orientation. That is what our brand stands for.



#### **Distribution**

We are there for you. Throughout Europe, more than 50 employees are on site as contact persons for your individual application: Competent and reliable. Contact us!



#### **Products**

We are the right partner for demanding fields of application. With over 65 years of practical experience, we develop and advise on suitable system solutions for long-term use. Test us!



#### Quality

Quality with a system. That is our promise. We use only high-quality materials and produce according to certified processes. 100% reliable!



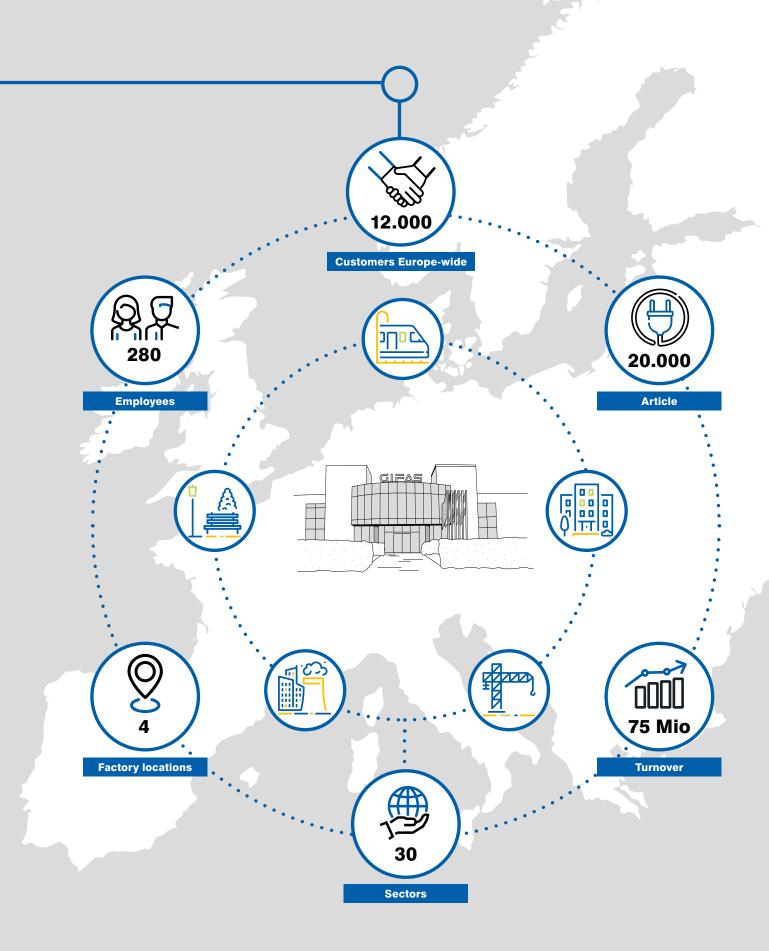
#### Cooperation

As a strong partner, we are at your side with our solutions. We focus on long-term partnership and trusting cooperation. We are there for you!



#### **Brand**

GIFAS stands for reliability. We prove this with more than 280 employees. With us you can plan, you can count on us: Yesterday, today and tomorrow!



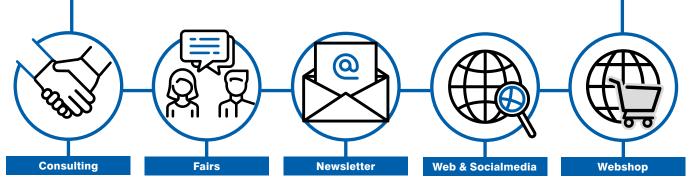
# RIGHT ADVICE FOR EVERY APPLICATION

We see ourselves as consultants for your application. Personally through contact persons on site and also medially through product catalogues, videos, publications in the press as well as our website with our GIFAS World and tips for the selection of products.

On request, we will inform you about news from GIFAS in your sectors in our clear e-newsletters and keep you up to date with interesting facts about power distribution and lighting systems.

But according to the motto «writing is good - showing is better» you can also find us in your area as exhibitors at trade fairs and congresses. Let just talk to each other!

No matter where you meet us: At every point, our goal is to support you with advice and action and to improve your daily working life with our solutions. For us, that is "systematic quality".



When it comes to service and advice, our philosophy is as simple as it is consistent: What counts, is your satisfaction. That swhy you can always expect more from us when it comes to cooperation.

We are represented at trade fairs, conferences and congresses throughout Europe - you can find the dates on our website as well as in the newsletter. We look forward to your visit!

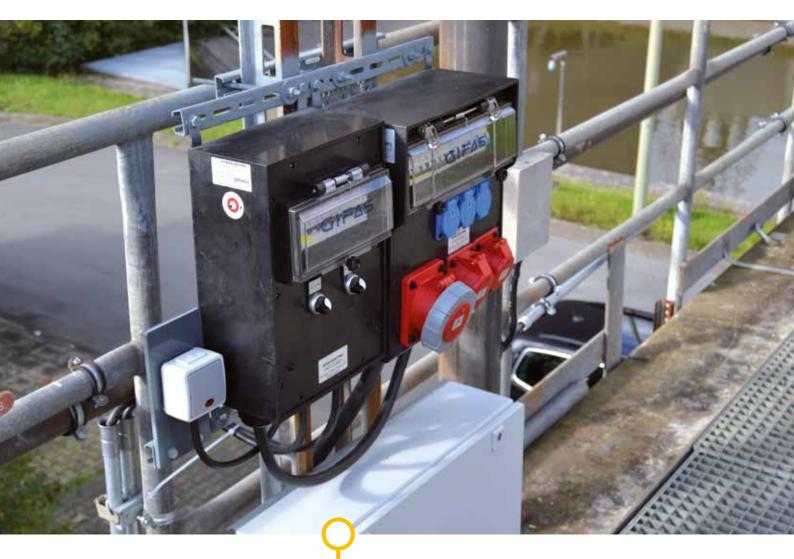
Information about new products and solutions from GIFAS, industry news and things worth knowing: With our newsletter you always stay up to date.

Fast, clear and informative - our website and social media channels help you find relevant information with just a few clicks. Follow us!

Use our GIFAS shop and benefit from the associated advantages: fast, clear, free shipping. Register today!







## WORKING SAFELY WITH ELECTRICITY.

Solid rubber: A material with expertise. This material offers excellent weather-, UV- and ozone-resistance, a high degree of energy absorbent damping, good resistance to acids and a high capacity for electrical insulation. These features make the GIFAS wall distributors a great long-term choice in electrical installations for anybody.

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## Properties Solid rubber, wall-mounted distributors

#### The advantages of GIFAS distributors

- various advantages of solid rubber materials
- all external metal parts are made of rustproof material
- Fuse elements protected by impact-resistant special coverings
- VA, double anchor screws with stainless brass press-in sockets are inserted into the housing
- service-friendly construction, as all parts are individually changeable
- Protection category up to IP65
- self-extinguishing and hard to combust
- from series 7,200, all distributors have terminal blocks as standard
- comply with all basic requirements for equipment of category 2 "K 2"
- checked electrically by the manufacturer



#### Housing material, housings versions

The solid rubber housings may be delivered in various housing measurements. In addition to the standard housings, for special applications, housing variants are available with the preferred tops. According to the customer's wishes, special, individual top solutions can be implemented.



#### Cable inlet

Cable inlets are manufactured on a project-specific basis, dependent on the number and cross-section of the intended connection lines. Bore holes in the corresponding places are provided for this and the PG glands are mounted for supply from above or below.



#### Wall mounting

The solid rubber distributors, by means of the internal fastening points (sealed from within by the manufacturer), may be mounted straight onto the wall. Or, according to the version, mounting via C rails or retaining tabs is a possibility.



#### Solid rubber housing sealing

On grounds of the material's properties, as well as the high wall thickness, no condensation accumulates in the solid rubber distributors. A ventilation recess is not required.



#### Base frame

As a option for wall-mounting, various standard solutions are available. As a simple stand solutions, we offer a galvanised collapsible stand. For high-value stand solutions and higher loads in outdoor use, as an option, robust T stands in various material finishes are available.



#### Equipment

The electrical components can be built in flexibly to the front side or in the side walls. According to the housing shape and size, various distributor units are available.





#### **Properties**

#### Stainless steel, wall-mounted distributors

With our electricity distribution cabinets, combined with assemblies of switchgear and control gear made of solid rubber as housing for the electronic components, you get reliable electricity distribution.

We lay great emphasis on mechanically stable versions and electrical safety. In this, we also offer, in addition to our standard range, individual solutions concerning measurements, socket equipment and protection, as well those materials being used.



#### Housing material, housings versions

The lockable stainless steel housings may be delivered in various materials. In addition to the standard housings (V2A), V4A variants are available. For special applications, housing variants with slanted tops and special seals, as well as surface finishes for the food industry are available.



#### Cable inlet

The cable inlets are manufactured on a project-specific basis, dependent on the number and cross-section of the intended connection lines.



#### Wall mounting

With the supplied wall mounting brackets, the stainless steel housing may be mounted straight onto the wall (surface-mounted).



#### Sealing

In grounds of the material's properties, it is meaningful to provide ventilation from lateral sunlight for the housings, in order to minimise condensation build-up. For particularly low ambient temperatures, the use of a PTC regulated heating element is recommended.



#### Base frame

Optional for wall-mounting are also high-value stand solutions, suitable for outdoor use, are available. Suitable for the housing measurements are optionally also robust T stands in a stainless steel version (V2A) are available.



#### Equipment

To secure Protection Class SK II, in the stainless steel housings are additionally solid rubber distributors for the equipment of project-specific components. In this way, all the advantages of a solid rubber distributor are combined with the particular characteristics of a modern stainless steel housing.

## **Small distributors**

#### Series 1212 / 1400 / 1800

Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

#### Series 1212 / 125x125x76mm Weight 1,5kg Protection category IP54

Assembly variants

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Item no. 209845

209845	2 Protection contact 230V	1 KV M20 from above	
248912	2 Protection contact 230V	1 KV M20 from below	

#### Series 1400 / 78x290x91mm Weight 2kg Protection category IP54

Assembly variants





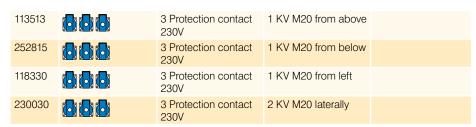
Item no. 211611

	244306	2 Protection contact 230V	1 KV M20	RCCB 25/0.03A 2p.
)	268782	3 Protection contact 230V	1 KV M20	
	211611	4 Protection contact 230V	1 KV M20	
	278634	3 CEE 3x16A/230V	1 KV M20	

#### Series 1800 / 184x92x52mm Weight 2kg Protection category IP54

Assembly variants







Item no. 118330

TOP



#### Series 2516 / 3800 / 7200

Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

#### Series 2516 / 160x250x90mm Weight 1,7-4kg Protection category IP54

Assembly variants



209346	8 Protection contact 230V	1 KV M20 from above	
208873	1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M25 from above	Pre-fusing max. 16A
235857	1 CEE 5x32A/400V 2 Protection contact 230V	1 KV M25 from below 1 KV M20 from below	
270747	2 CEE 5x16A/400V	1 KV M25 from below	



Item no. 208873

#### Series 3800 / 250x360x132mm Weight 5-8kg Protection category IP54

Assembly variants



280770	1 CEE 5x16A/400V 2 protective contact 1 emergency stop button 2 labor bushing for 24 VDC	1 KV M20 from above 2 KV M16 from above	
269216	5 CEE 4x32A/>50V 10h,100-300Hz	1 KV M25 from above	



Item no. 280770

#### Series 7200 / 160x280x132mm Weight 5-8kg Protection category IP54

Assembly variants



211513	3 Protection contact 230V	1 KV M20 from below	3 LS 16A.1P.B 1 FI 25/0,03A 4p
250837	2 CEE 2x16A/42V	2 KV M25 from below	Neozed 16A
211452	1 CEE 5x32A/400V	1 KV M25 from above	1 LS 32A.3P.C 1 FI 40/0,03A 4p
211900	1 CEE 5x32A/400V 2 Protection contact 230V <sup>1)</sup>	1 KV M25 from above	no fuse 2 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
280140	1 CEE 4x16A/400V 1 main control switch 16A	2 KV M20 from above	no fuse



Item no. 211452

<sup>&</sup>lt;sup>1)</sup>Schutzkontaktsteckdosen seitlich links und rechts angeordnet

## Wall-mounted distributors

Item no. Symbole

#### Series 7300

		Output	Catput	Прис	protection
2.2		<b>7300 / 200x350x132mn</b> Dly variants	m Weight 7-10kg Protec	tion category IP54	
****	294961		2 Protection contact 230V	1 KV M40 from below	2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
<b>医</b> 医	210766		4 Protection contact 230V	1 KV M20 from above	2 MCB 16A.1P.B 1 RCCB 25/0.03A 4p
图 图	285538		4 Protection contact 230V	1 KV M32 from below	4 MCB 16A.1P.B 1 RCCB 25/0,03A 4p
Item no. 280266	268449		4 Protection contact 230V	1 KV M16 from below 1 KV M20 from below	1 RCCB 25/0,03A 4p
	210011		1 CEE 3x16A/230V 2 Protection contact 230V	1 KV M25 from above	3 MCB 16A.1P.B 1 RCCB 25/0.03A 4p
	280266		4 CEE 3x16A/230V	2 KV M32 from above	4 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
	230439		1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M25 from above	1 MCB 16A.3P.C 2 MCB 16A.1P.B
	260931		1 CEE 5x16A/400V 2 Protection contact 230V		1 MCB 16A.3P.C 2 MCB 16A.1P.C 1 RCCB 40/0,03A 4p
	240425		1 CEE 5x16A/400V 2 Protection contact 230V	2 KV M25 from below	1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
[	295386		1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M25 from below 1 BV M25 from above	1 MCB 16A.3P.C 1 RCCP/MCB 16/0,03A.2P.C 1 RCCB 40/0,03A 4p
	236545		1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M32 from below	1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
A-M.A	249773		1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M32 from below	1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
233	238138		1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M32 from below	1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
	10P 277670		1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M25 from below 1 BV M25 from above	1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
Item no. 277670	210084		1 CEE 5x32A/400V 2 Protection contact 230V	1 KV M25 from above	1 MCB 32A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
	294666		1 CEE 5x32A/400V 2 Protection contact 230V	1 KV M25 from above	CEE no fuse 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
	286530		1 CEE 5x32A/400V 2 Protection contact 230V		2 MCB 16A.2P.B 1 RCCB 40/0,03A 4p

Output

Input

Cable / personal



#### Series 7400

Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

#### Series 7400 / 265x370x132mm Weight 8-12kg Protection category IP54

Assembly variants



233521		6 Protection contact 230V	2 KV M25 from below	6 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
277477		1 CEE 5x16A/400V 3 Protection contact 230V	2 KV M40 from above	1 MCB 16A.3P.C 3 MCB 16A.1P.C 1 RCCB 40/0,03A 4p
280077		1 CEE 5x16A/400V 4 Protection contact 230V	1 KV M32 from below	1 MCB 16A.3P.C 4 MCB 16A.1P.B 1 RCCB 63/0,03A 4p
204282		2 CEE 5x16A/400V 3 Protection contact 230V	2 KV M32 from below	2 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
246981		1 CEE 5x32A/400V 1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M32 from below	1 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
201899	<b>86</b>	1 CEE 5x32A/400V 1 CEE 5x16A/400V 2 Protection contact 230V	1 KV M32 from below	1 MCB 32A.3P.C 1 MCB 16A.1P.C 2 MCB 16A.1P.C 1 RCCB 40/0,03A 4p
234690		2 CEE 5x32A/400V 3 Protection contact 230V	1 KV M32 from below	2 MCB 32A.3P.C 3 MCB 16A.1P.B
232328	<b>55.00</b>	1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M32 from below	1 MCB 32A. 3P.C 1 MCB 16A. 3P.C 3 MCB 16A. 3P.C
200147		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M32 from below	1 MCB 32A. 3P.C 1 MCB 16A. 3P.C 3 MCB 16A. 1P.B 1 RCCB 40/0.03A 4p
201515		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M32 from below 1 KV M32 from above	1 MCB 32A. 3P.C 1 MCB 16A. 3P.C 3 MCB 16A. 1P.B 1 RCCB 40/0.03A 4p
279057		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M32 from below	1 MCB 16A. 3P.C 3 MCB 16A. 1P.C 1 RCCB 40/0.03A 4p
236083		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M40 from below	1 MCB 32A.3P.C 1 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
296131	<b>55</b>	2 CEE 5x32A/400V 4 Protection contact 230V	1 KV M32 from above	2 MCB 32A.3P.C 3 MCB 16A.1P.B 1 RCCB 40/0,03A 4p
277248	<b>55</b>	1 CEE 5x32A/400V 1 CEE 5x16A/400V 4 Protection contact 230V	2 KV M40 from above	1 MCB 32A.3P.C 1 MCB 16A.3P.C 3 MCB 16A.1P.C 1 RCCB 63/0,03A 4p









Item no. 201515

## Wall-mounted distributors

#### Series 7700



Item no. 279790



Item no. 239304





Item no. 276328

Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

#### Series 7700 / 336x370x162mm Weight 9-13kg Protection category IP54

Assembly variants



	237389		10 Protection	1 KV M25 from	10 MCB 16A.1P.B
	237309		contact 230V	above	1 RCCB 40/0.03A 4p
	279790	<b>5</b> 55	1 CEE 5x16A/400V 3 Protection contact 230V 2 CEE 2x16A/24V	2 KV M32 from above 2 KV M25 from above	1 MCB 16A.3P.C 1 MCB 16A.1P.C 1 RCCB 40/0.03A 4p 1 MCB 16A.1P.C
	254021		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	2 KV M32 from below	1 Neozed 32A 3 Neozed 16A 1 RCCB 63/0.03A 4p
	239304		1 CEE 5x32A/400V 1 CEE 5x16A/400V 4 Protection contact 230V	1 KV M32 from below	1 MCB 32A.3P.C 1 MCB 16A.3P.C 4 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	255014	<b>555</b>	1 CEE 5x32A/400V 2 CEE 5x16A/400V 2 Protection contact 230V	1 KV M32 from above	1 MCB 32A.3P.C 2 MCB 16A.3P.C 2 MCB 16A.3P.C 1 RCCB 25/0.03A 4p
	237386	555	1 CEE 5x32A/400V 2 CEE 5x16A/400V 4 Protection contact 230V	1 KV M32 from below	1 MCB 32A.3P.C 2 MCB 16A.3P.C 4 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	294993	055	1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 2 Protection contact 230V	2 KV M40 from below	1 MCB 63A.3P.C 1 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 63/0,03A 4p
	290635	055	1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M40 from below 1 BV M40 from above	1 MCB 63A.3P.C 1 MCB 32A.3P.C 1 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
)	237388		1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M40 from above	no fuse 1 MCB 32A.3P.C 1 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	262346		1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protection contact 230V	2 KV M40 from below	1 MCB 63A.3P.C 1 MCB 32A.3P.C 1 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
)	276328	<b>Ū</b> B	1 CEE 4x63A/500V 1 CEE 4x32A/500V	1 KV M32 from above	1 MCB 32A.3P.K 1 RCCB 63/0.03A 4p 1 RCCB 40/0.03A 4p
	296829		1 CEE 5x63A/400V 1 CEE 5x16A/400V 4 Protection contact 230V 2 RJ45	1 KV M40 from above 1 KV M32 from above	1 MCB 63A.3P.C 1 MCB 16A.3P.C 4 MCB 16A.1P.B 1 RCCB 63/0,03A 4p



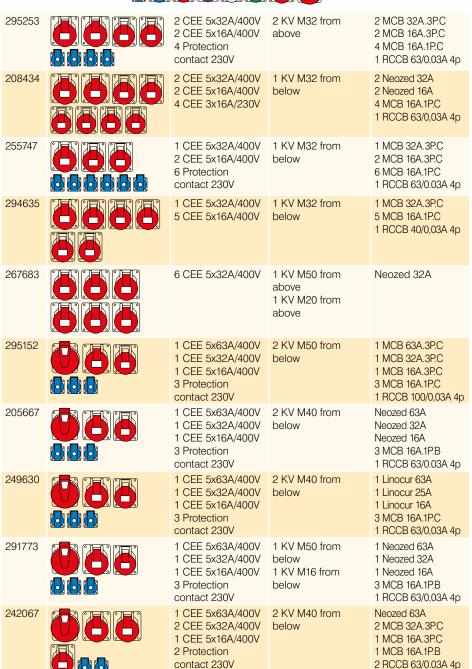
#### Series 7800

Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

#### Series 7800 / 360x500x133mm Weight 13-20kg Protection category IP54

Assembly variants













Item no. 242067

## Wall-mounted distributors

#### Series 7900

Item no.	Symbole Output	Output	Input	Cable / personal protection
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#### Series 7900 / 360x500x173mm Weight 17-25kg Protection category IP54

Assembly variants





Series 7900

	210237	<b>585</b>	2 CEE 5x32A/400V 1 CEE 5x16A/400V 4 Protection contact 230V	1 CEE 5x63A/400V connector plug mounted on the front plate	2 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	292744	<b>555</b>	2 CEE 5x32A/400V 1 CEE 5x16A/400V 4 Protection contact 230V	1 KV M63 from above 1 BV M63 from above 2 BV M63 from below	2 MCB 32A.3P.C 1 MCB 16A.3P.C 4 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	208214	<b>555 566 66</b>	2 CEE 5x32A/400V 2 CEE 5x16A/400V 6 Protection contact 230V	1 KV M40 from below	2 MCB 32A.3P.C 2 MCB 16A.3P.C 6 MCB 16A.1P.B 1 RCCB 40/0.03A 4p
	202418	555 555 555	3 CEE 5x32A/400V 3 CEE 5x16A/400V 6 Protection contact 230V	1 KV M32 from below	Neozed 25A 3 MCB 16A.3P.C 6 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	265480	555 5555 000	3 CEE 5x32A/400V 3 CEE 5x16A/400V 3 Protection contact 230V	1 KV M63 from below	3 MCB 32A.3P.C 3 MCB 16A.3P.C 3 MCB 16A.1P.B 2 RCCB 63/0,03A 4p
	294399	<b>58</b>	1 CEE 5x63A/400V 4 CEE 5x32A/400V	2 KV M50 from below	1 MCB 63A.3P.C 4 MCB 32A.3P.C
	294864	06	1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 2 Protection contact 230V	2 KV M63 from below	Neozed 63A 1 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.B 2 RCCB 63/0,03A 4p 1 RCCB 25/0,03A 4p
)	205292	<b>585</b>	1 CEE 5x63A/400V 2 CEE 5x32A/400V 2 CEE 5x16A/400V 3 Protection contact 230V	1 KV M63 from below	Neozed 63A 2 MCB 32A.3P.C 2 MCB 16A.3P.C 3 MCB 16A.1P.B 1 RCCB 63/0.03A 4p
	296022		1 CEE 5x125A/400V 2 Protection contact 230V		1 MCB 32A.3P.C 2 MCB 16A.1P.B 1 RCCB 125/0,03A 4p 2 RCCB 16/0,03A 4p
	208217		1 CEE 5x63A/400V 2 CEE 5x32A/400V 2 CEE 5x16A/400V 6 Protection contact 230V	1 KV M40 from below	no fuse 2 MCB 32A.3P.C 2 MCB 16A.3P.C 6 MCB 16A.1P.B 1 RCCB 40/0.03A 4p



<sup>1)</sup> Some protective contact sockets are installed laterally on the distributor frame

### Wall-mounted distributors

#### Series 7900 - Block design / Modular design

## Series 7800

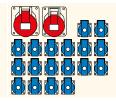
Item no.	Symbole	Output	Input	Cable / personal
	Output			protection

Series 2x 7900 Vertical arrangement / 1000x360x173mm Weight 35kg Protection category IP54

Assembly variants



294143



1 CEE 5x32A/400V 1 CEE 5x16A/400V 18 Protection contact 230V

1 CEE 5x63A/400V 1 MCB 32A.3P.C

1 MCB 16A.3P.C 15 MCB 16A.1P.B 3 MCB 16A.1P.B 1 RCCB 63/0,03A 4p 1 main switch 63A



Series 2x 7900 / Image similar

Series 2x 7900 Horizontal arrangement / 500x720x173mm Weight 40kg Protection category IP54

Assembly variants

294866





1 CEE 5x16A/400V 2 isolation transformer 230/230V 630VA 2 Protective contact 230V

2 KV M63 from below

Neozed 63A 1 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.B 2 RCCB 63/0,03A 4p 1 RCCB 25/0,03A 4p 2 MCB 10A.1P.C



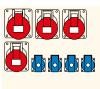
Series 2x 7900 / Image similar

Series 3x 7900 Horizontal arrangement / 500x1080x173mm Weight 75kg Protection category IP54

Assembly variants



276994



1 CEE 5x32A/400V 3 CEE 5x16A/400V

4 Protection contact 230V

from below

1 main switch 63A 3p 1 RCCB 63/0.03A 4p 1 MCB 32A.3P.C 2 MCB 25A.3P.C 7 MCB 16A.3P.C 5 MCB 16A.1P.C 1 MCB 6A.1P.C



Series 3x 7900 / Image similar

## Rubber hanging distributors

#### Series 1616 / 2500







Item no. 111943

Item	Symbols output	Output	Input	Cable / personal
no.				protection

#### Series 1616 / 160x90x160mm Weight 3kg Protection category IP54

Assembly variants



286052



2 Protection contact 230V 2xRJ45

1 KV M20 from above 1 KV M16 from above RCCB 25/0,03A 2p.

#### Series 2500 / 110x79x110mm Weight 1,5kg Protection category IP54

Assembly variants



101659		4 Protection contact 230V	1 KV M20 from above	max. pre-fuse 16A
109658	600	1 CEE 5x16A/400V 3 Protection contact 230V	1 KV M20 from above	max. pre-fuse 16A
111943		4 Protection contact 230V 1 Coupling 1/2" Compressed air	1 KV M20 from above 1 Compressed air connection from above	

#### Automated unit protective caps

Various protective caps are available to choose from as loose construction elements. These components are generally permanently integrated into the housing cover, however they are available for individual processing. The transparent caps are made from impact-resistant polycarbonate and have seaLP in the lower section. A powerful torsion spring guarantees clean closure which can be improved even further with an adjusting screw. This protects the installed parts from the penetration of dirt and moisture. The width of the flaps is aLPo expressed according to their capacity in modules (corresponding to a 1-pin MCB with b=18 mm).

Series	miniature circuit breakers under transparent protective cap
1400	2
2516	4
3800	11
7200	7
7300	9
7400	17 (13 + 4 per transparent protective cap)
7700	21 (17 + 4 per transparent protective cap)
7800	51 (17 per transparent protective cap)
7900	51 (17 per transparent protective cap)



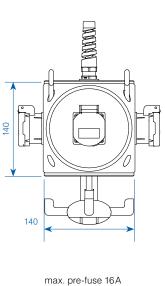
Item no.	Designation
100484	2-module protective cap (37 mm)
201066	4.5-module protective cap (82mm)
118752	9-module protective cap (162mm)
118750	10.5-module protective cap (195mm)
231797	13-module protective cap (232mm)
203000	17-module protective cap (308mm)
206598	Knurled screw M4x18 mm

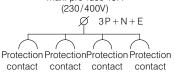
## Plastic hanging distributors

#### Plastic hanging distributors

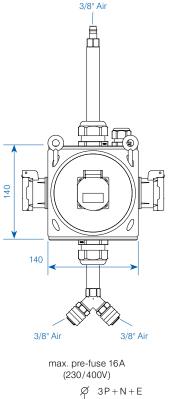


Item no. 298610









Protection Protection Protection contact contact contact contact

Energy from the air or suspended above the workplace is even easier and more efficient to realise today! The handy, robust and compact plastic distributor made of impact-resistant polyamide is individually equipped for the desired application. Different applications require different products - above all in laboratory and medical technology, but the wallmounted distributors made of solid plastic are also used in other areas.

#### **Product features**

- compact design: modular construction, allows for a a multitude of variants and appearances
- can be used as suspended or mobile distributor
- including anchor handle on the underside of the housing (art. no. 298610 / 289255)
- with integrated air connection on underside of enclosure (art. no. 288656)
- Inputs: cable glands and wiring on terminals on the cover plate (also for several circuits), CEE appliance plugs, appliance cables
- Including suspension set (4 galvanised steel cables (L=300mm) with eyelets)

Item	Symbols output	Output	Input	Cable / personal	Housing
no.				protection	colour

#### Plastic hanging distributor / 140x140x240mm Protection category IP44

Assembly variants



298610	4×Protection contact	1×KV M20	max. pre-fuse 16A	yellow
289255	2×Protection contact 2×CEE 16/5	1×KV M20 1×KV M25	max. pre-use 16A	yellow
288656	4×Protection contact 2×Compressed air 3 / 8 One-hand quick coupling	1×KV M20 1×Compressed air 3 / 8 plug nipple	max. pre-fuse 16A	yellow

## System safety switches

#### System safety switches

#### System main switches / safety isolator switches





System main switch with EMERGENCY STOP function

Safety isolator or maintenance switches

#### Product features

- 3-pin switch with N and PE terminaLP
- Operating power rating at 50-60 Hz, AC23, 400/415V
- Operating current rating AC22, 400/415V
- Safety isolator switches with auxiliary contacts 1M+1B

Туре	Dimensions in mm	Housing colour	Item no. System main switch with EMERGENCY STOP function	Item no. Safety isolator switches	Item no. EMERGENCY STOP mushroom button
1212	125x125x76	grey	256926	256959	232588
1212	125x125x76	black	256925	256958	241708
1812	125x180x90	grey	256927	256963	
1812	125x180x90	black	256928	256961	
1616	160x160x90	grey	256930	256965	
1616	160x160x90	black	256929	256964	
2516	160x250x90	grey	256923	256924	
2516	160x250x90	black	256416	256920	
3020	200x300x90	grey	256941	256974	
3020	200x300x90	black	256940	256973	
3800	250x360x133	grey	256943	256976	
3800	250x360x133	black	256942	256975	

#### EMERGENCY STOP mushroom button / "OFF" indicator light







EMERGENCY STOP mushroom button with locking mechanism



"OFF" indicator light with ratchet wheel



"OFF" indicator light with handle lock

#### Safety and control switch combinations



Safety and control switch combination

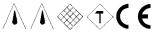


Combination of multiple safety switches



Specialist combinations with integrated high current sockets as service sockets or as a power connection for conversion or repair work







#### Series 1010 / 1212 / 1616 / 1812 / 2516 / 3020 / 3800 / 3900 / 7800 / 7900







#### Technical data, Series 1010

For cable diam: up to max. 5x2,5mm²
Exterior dimensions 100x100x65mm
Interior dimensions: 83x83x52mm

Item no.	Description
249369	Empty housing 1010 grey
251021	Empty housing 1010 black

#### Technical data, Series 1212

For cable diam: up to max. 5x6mm² Exterior dimensions 125x125x76mm Interior dimensions: 108x108x64mm

Item no.	Description
207630	Empty housing 1212 grey
206660	Empty housing 1212 black

#### Technical data, Series 1616

For cable diam: up to max. 5x16mm² Exterior dimensions 160x160x90mm Interior dimensions: 142x142x74mm

Item no.	Description
207631	Empty housing 1616 grey
206662	Empty housing 1616 black

#### Technical data, Series 1812

für Kabel-Ø: up to max. 5x10mm²
Exterior dimensions 180x125x90mm
Interior dimensions: 157x107x74mm

Item no.	Description
207633	Empty housing 1812 grey
206663	Empty housing 1812 black

#### Technical data, Series 2516

For cable diam: up to max. 5x25mm² Exterior dimensions 250x160x90mm Interior dimensions: 229x141x74mm

Item no.	Description
207634	Empty housing 2516 grey
206665	Empty housing 2516 black

#### Technical data, Series 3020

For cable diam: up to max. 5x35mm²
Exterior dimensions 300x200x110mm
Interior dimensions: 281x182x94mm

Item no.	Description
233882	Empty housing 3020 grey
233861	Empty housing 3020 black

#### Technical data, Series 3800

For cable diam: up to max. 5x70mm² Exterior dimensions 360x250x133mm Interior dimensions: 327x220x106mm

Item no.	Description
208449	Empty housing 3800 grey
207848	Empty housing 3800 black

#### Technical data, Series 3900\*

For cable diam: up to max. 5x95mm² Exterior dimensions 360x250x173mm Interior dimensions: 327x220x144mm

Item no.	Description
207849	Empty housing 3900 black

#### Technical data, Series 7800

For cable diam: up to max. 5x150mm² Exterior dimensions 500x360x133mm Interior dimensions: 447x327x106mm

Item no.	Description
237992	Empty housing 7800 grey
207846	Empty housing 7800 black

#### Technical data Series 7900\*

For cable diam: up to max. 5x240mm² Exterior dimensions 500x360x173mm Interior dimensions: 447x327x144mm

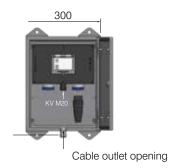
Item no.	Description
207847	Empty housing 7900 black

<sup>\*</sup>Housing series 3900 and 7900 have a larger installation depth than series 3800 and 7800 (+ 40mm). This is used, for example, when all of the cable glands are located in the same side wall or if terminals are installed in a tiered fashion.

#### Other designs available upon request.

## Surface-mounted distributors V2A

#### Series 332 / 442 / 462 / 662



1	tem no.	Symbols	Output	Input	Cable / personal
		Output			protection

#### Series 332 / Solid rubber distributor2516 300×380×210 mm Weight 22kg Protection category IP54

293972		2 Protective contact 230V	1 KV M20 from below Door lock, double-bit	, -
293974	Series 332 (with illustrate	ed equipment) mounte	ed on standpipe, height	600mm

Series 332 (with illustrated equipment) mounted on standpipe, height 800mm

# 400 M25

Cable outlet opening

#### Series 442 / Solid rubber distributor2516 / 1212 400×400×210mm Weight 28kg Protection category IP54

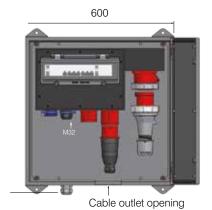
293976	<b>5</b> 66		1 KV M25 from below Door lock, double-bit	
293978	Series 442 (with illustrate	ed equipment) mount	ed on standpipe, height	t 600mm
293979	Series 442 (with illustrate	ed equipment) mount	ed on standpipe, height	t 800mm



#### Series 462 / Solid rubber distributor3800 400×600×210 mm Weight 38kg Protection category IP54

400×600×210 mm Weight 38kg Protection category IP54						
	293980	<b>55</b> 000	1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protective contact 230V	1 KV M32 from below Door lock, double-bit		
	203082	Spring 162 (with illustrate	ad equipment) mount	ad on standning height	600mm	

293982 Series 462 (with illustrated equipment) mounted on standpipe, height 600mm 293983 Series 462 (with illustrated equipment) mounted on standpipe, height 800mm



## Series 662 / Solid rubber distributor3800 / 1616 600×600×210 mm Weight 42kg Protection category IP54

		, , , , , , , , , , , , , , , , , , , ,		
93984	<b>05</b> 5	1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 Protective contact 230V	1 KV M32 from below Door lock, double-bit	

293986 Series 662 (with illustrated equipment) mounted on standpipe, height 600mm Series 662 (with illustrated equipment) mounted on standpipe, height 800mm

Material type for all above listed article numbers is V2A stainless steel.

29

### Surface-mounted distributors V2A

#### Series 663 / 683

Item no.	Symbols	Output	Input	Cable / personal
	Output			protection

#### Series 663 / Solid rubber distributor3800 / 1616 600×600×300 mm Weight 48kg Protection category IP54

293988



1 CEE 5x63A/400V 1 CEE 5x32A/400V

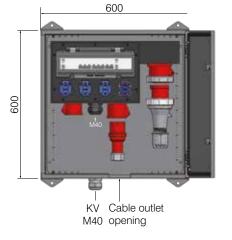
1 CEE 5x16A/400V 4 Protective contact

1 KV M40 from below 2 RCCB Door lock, double-bit 63/0,03A.4P

1 MCB 32A.3P.C 1 MCB 16A.3P.C 2 MCB 16A.1P.C

293990 Series 663 (with illustrated equipment) mounted on standpipe, height 600mm Series 663 (with illustrated equipment) mounted on standpipe, height 800mm

230V



#### Series 683 / Solid rubber distributor7800 600×800×300 mm Weight 50kg Protection category IP54



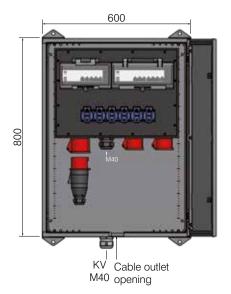
1 CEE 5x32A/400V 1 KV M40 from below 2 RCCB 2 CEE 5x16A/400V 6 Protective contact 230V

Door lock, double-bit 63/0,03A.4P

1 MCB 32A.3P.C 2 MCB 16A.3P.C 3 MCB 16A.1P.C

293994 293995

Series 663 ((with illustrated equipment) mounted on standpipe, height 600mm Series 663 (with illustrated equipment) mounted on standpipe, height 800mm



#### Series 683 / Solid rubber distributor7800 / 1616 600×800×300 mm Weight 50kg Protection category IP54

293996



1 CEE 5x63A/400V 2 CEE 5x32A/400V 2 CEE 5x16A/400V 4 Protective contact

1 KV M50 from below Door lock, double-bit

3 RCCB 63/0,03A.4P 2 RCCP/MCB 16/0,03A.4P 1 MCB 63A.3P.C 2 MCB 32A.3P.C

2 MCB 16A.3P.C

Series 663 (with illustrated equipment) mounted on standpipe, height 600mm Series 663 (with illustrated equipment) mounted on standpipe, height 800mm



Cable outlet

opening

KV

M50

600

Material type for all above listed article numbers is V2A stainless steel.

230V

## **Application cases**

### Application cases wall-mounted distributors

















## READY FOR THE TOUGHEST MISSIONS.

Tested safety for your protection: With our mobile solid rubber distributors you can rely on a trouble-free experience at changing locations. GIFAS stands for proven quality when it comes to materials and components, ensuring that things run smoothly on site.

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## **Small distributors**

#### Series 1400 / 1800 / 2000

Item	Symbols	Output	Input	Cable/personal
no.	Output			protection

RCCB 25/0.03A

RCCB 25/0.03A

2p.

2p.

#### Series 1400 / 78x290x91mm Weight 2-2,5kg Protection category IP54

Assembly variants



P(I)	2
	2

210502 2 protective contact 230V 3m 3x1.5mm<sup>2</sup> Protective contact 3m 3x1.5mm<sup>2</sup> 246104 2 protective contact 230V CEE 3x16A/230V 3m 3x1.5mm<sup>2</sup> 210521 4 protective contact 230V Protective contact 4 protective contact 230V 5m 3x1.5mm<sup>2</sup> 241761 Protective contact

can be supplied with transparent protective cap for max. 2 automated units

#### Series 1800 / 92x184x53mm Weight 2kg Protection category IP54

Assembly variants





Item no. 101294

	101291	3 protective contact 230V	Anti-kink sleeve 3x1.5mm²	
)	101294	3 protective contact 230V	3m 3x1.5mm <sup>2</sup> Protective contact	
	101296	3 protective contact 230V	5m 3x1.5mm <sup>2</sup> Protective contact	
	101297	3 protective contact 230V	10m 3x1.5mm <sup>2</sup> Protective contact	
	200804	3 protective contact 230V	3m 5x2.5mm <sup>2</sup> CEE 5x16A/400V	

#### Series 2000 /130x115x130mm Weight 2-3kg Protection category IP54

Assembly variants





Item no. 101329



	101329		3 protective contact 230V	3m 5x2.5mm <sup>2</sup> CEE 5x16A/400V	
	101337		1 CEE 5x16A/400V 2 protective contact 230V	3m 5x2.5mm <sup>2</sup> CEE 5x16A/400 V	
	101344		3 CEE 2x16A/24V	3m 2x2.5mm <sup>2</sup> CEE 2x16A/24V	
)	101353		3 CEE 2x16A/42V	3m 2x2.5mm <sup>2</sup> CEE 2x16A/42V	
	114899		3 CEE 4x16A/>50V, 10h high-frequency 100-300Hz	3m 4x2.5mm <sup>2</sup> CEE 4x16A/>50V, 10h high-frequency 100-300Hz	
,	with 1 adia	uctable feet and c	earrying handle		

with 4 adjustable feet and carrying handle



## Small distributors / Adapters

TOP

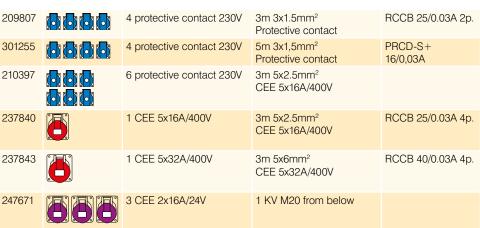
#### Series 2516 / 3020

Item	Symbols	Output	Input	Cable/personal
no.	Output			protection

#### Series 2516 / 250x160x90mm Weight ca. 2-4kg Protection category IP54

Assembly variants







Item no. 209807



Item no. 301255

Distributors equiped with solid rubber-carrying handle

#### Series 3020 / 300x200x110mm Weight 4kg Protection category IP54

Assembly variants



289380



3 protective contact 230V 1 protective contact 230V red 1 CEE 5x16A/400V Built-in appliance plug 1 Main switch 20A 1 Three-phase electricity meter 40A LS 16A.1P.C LS 16A.1P.C FI 25/0,03A 4p.



Item no. 289380

#### **Adapters**

#### Notes

- The setup requirements for adapters are subject to the conditions of VDE series 0623 especially part 4 or in approximation to these.
- An adapter always comprises three parts and is made up of a plug, connecting cable and socket part (e.g. connector socket).
- The flexible connecting cable must be at least 1 m long in order to relieve strain on the wall-mounted socket.
- Not permitted are single-part adapters in which the plug and socket part of both systems are mechanically built together and operated from a single socket since the sockets are not designed for the resulting mechanical rigidity in the event of horizontal and vertical tensile stresses (lever effect).
- Adapters are only intended for short-term use, therefore a clearly visible external warning >For time-limited use only < is required.</li>

Item no.	Output	Input	Cable / personal protection
251882	1 protective contact 230V	2m 5x2.5mm <sup>2</sup> CEE plug 5x16A/400V	1 MCB 16A.1P.B
251883	1 protective contact 230V	2m 5x6,0mm <sup>2</sup> CEE plug 5x32A/400V	1 MCB 16A.1P.B
251885	1 CEE 5x16A/400V	2m 5x6,0mm <sup>2</sup> CEE plug 5x32A/400V	1 MCB 16A.3P.C
251935	1 CEE 5x16A/400V	2m 5x16.0mm <sup>2</sup> CEE plug 5x63A/400V	1 MCB 16A.3P.C
251886	1 CEE 5x32A/400V	2m 5x16.0mm <sup>2</sup> CEE plug 5x63A/400V	1 MCB 32A.3P.C



Item no. 251883 and 251882

Item no. 251885



Item no. 251935 and 251886



## Industrial distributors

#### Series 3500

Item	Symbole	Output	Input	Cable/personal
no.	Output			protection

#### Series 3500 / 361x250x361mm Weight ca. 8-15kg Protection category IP54

Assembly variants





Item no. 278888



Item no. 204884

209284	<b>666</b>	1 CEE 5x32A/400V 2 CEE 5x16A/400V 3 protective contact 230V	3m 5x6mm <sup>2</sup> CEE 5x32A/400V	Neozed 16A Neozed 16A
117675	<b>555</b>	1 CEE 5x32A/400V 2 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	Neozed 16A Neozed 16A RCCB 40/0,03A 4p.
209285	<b>555</b>	1 CEE 5x32A/400V 2 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	Neozed 25A Neozed 16A Neozed 16A
201655	<b>555</b>	1 CEE 5x32A/400V 2 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	Neozed 25A Neozed 16A Neozed 16A RCCB 63/0,03A 4p.
204884		1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	Neozed 25A Neozed 16A Neozed 16A
112221		1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	Neozed 25A Neozed 16A Neozed 16A RCCB 63/0,03A 4p.
278888	<b>5</b> 55	1 CEE 5x32A/400V 2 CEE 5x16A/400V 4 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	1 LS 32A.3P.C 2 LS 16A.3P.C 4 LS 16A.1P.B All-current sensitive RCCB 63/0,03A 4p.

- Also available with miniature circuit breaker
- with transparent protective flap for max. 11 vending machine units or 15 vending machine units available internally in the distributor base, with 4 adjustable feet and carrying handle



#### Series 6200 / 6700 PRCD-S Inside

Item no.	Symbole Output	Output	Input	Cable/personal protection	
		m Weight ca. 6-8kg Protec			CLASE.
208405		6 protective contact 230V	CEE 5x16A/400V device connector	RCCB 25/0,03A 4p.	Vending units under cover plate
208981		1 CEE 5x16A/400V 3 protective contact 230V	3m 5x2,5mm <sup>2</sup> CEE 5x16A/400V	RCCB 25/0,03A 4p.	TOP
207754		1 CEE 5x16A/400V 3 protective contact 230V	3m 5x2,5mm <sup>2</sup> CEE 5x16A/400V		
209315		1 CEE 5x16A/400V 3 protective contact 230V	CEE 5x16A/400V device connector		
208979		1 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	Neozed 16A Neozed 16A	
207755		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	Neozed 16A Neozed 16A	Item no. 207755

- Also available with miniature circuit breaker with max. 9 vending machine units arranged internally under the cover plate

#### Series 6700 / 350x305x280mm Weight ca. 12-14kg Protection category IP54





323316	1 CEE 5x16A/400V	1m 5x2,5mm <sup>2</sup>	1 PRCD-S 5polig,
	3 protective contact 230V	1 CEE 5x16A/400V	400 V, 16 A, 50 Hz, 30 mA (inside)
323318	1 CEE 5x16A/400V 3 protective contact 230V	1m 5x2,5mm <sup>2</sup> 1 CEE 5x16A/400V	1 LS 16A.3P.C 3 LS 16A.1P.B 1 PRCD-S 5polig,
			400 V, 16 A, 50 Hz, 30 mA (inside)



Illustration similar

## Industrial distributors

#### Series 6700 / 7700

Item	Symbols	Output	Input	Cable/personal
no.	Output			protection

#### Series 6700 / 350x305x280mm Weight ca. 12-14kg Protection category IP54

Assembly variants





Item no. 209311



	277386		6 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	6 MCB 16A.1P.B
	209311	<b>66</b> 6	1 CEE 5x32A/400V 1 CEE 5x16A/400V 2 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	MCB 16A.3P.C MCB 16A.1P.B RCCB 40/0,03A 4p.
	208959		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	Neozed 16A Neozed 16A RCCB 40/0,03A 4p.
)	209307		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	MCB 32A.3P.C MCB 16A.3P.C MCB 16A.1P.B
	208960		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x16,0mm <sup>2</sup> CEE 5x63A/400V	Neozed 25A Neozed 16 Neozed 16 RCCB 63/0,03A 4p.
	292612		1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	MCB 32A.3P.C MCB 16A.3P.C 3 MCB 16A.1P.B FI 40/0,03A 4p.
	331127		2 CEE 5x16A/400V 3 protective contact 230V	3m 5x6,0mm <sup>2</sup> CEE 5x32A/400V	2 MCB 16A.3P.C 3 MCB 16A.1P.B RCCB 40/0,03A 4p. Typ B
	261873		2 CEE 5x63A/400V	3m 5x35mm <sup>2</sup> CEE 5x125A/400V	2 MCB 63A.3P.C RCCB 40/0,03A 4p. Typ B
	209517	<b>0</b> 88	1 CEE 5x63A/400V 1 CEE 5x32A/400V 1 CEE 5x16A/400V 3 protective contact 230V	CEE 5x63A/400V device connector	MCB 32A.3P.C MCB 16A.3P.C MCB 16A.1P.B RCCB 63/0,03A 4p.
	280207		3 CEE 5x63A/400V	CEE 5x63A/400V device connector	Neozed 63A



Illustration similar

#### Series 7700 / 370x336x162mm Weight 10kg Protection category IP54

Assembly variants



348327



2 CEE 5x16A/400V 6 protective contact 230V CEE 5x32A/400V device connector

2 MCB 16A.3P.C 6 MCB 16A.1P.C RCCB 40/0,03A 4p.



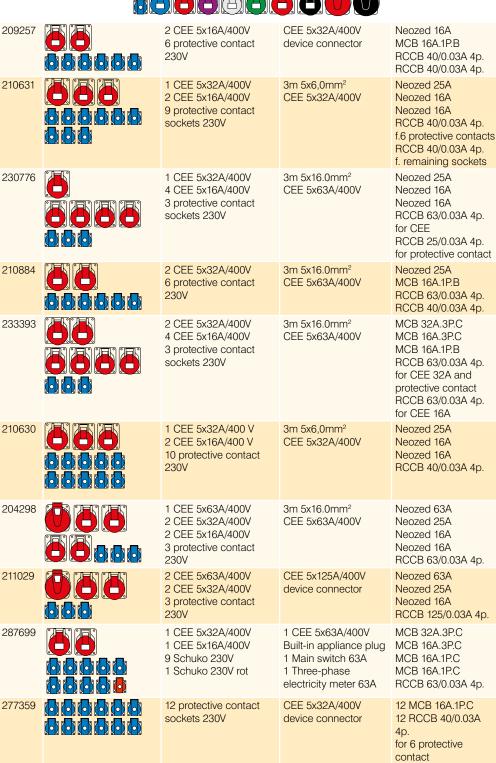
#### Series 7900

Ite	em	Symbols	Output	Input	Cable/personal
no	<b>)</b> .	Output			protection

#### Series 7900 / 360x500x173mm Weight 23kg Protection category IP54

Assembly variants









7900 engraving according to customers requirements



Item no. 287699

- with max. 51 automated units (17 per transparent protective cap), with 4 adjustable feet and 1 or 2 carrying handles
- Distributor equipped with transport handle and leveling feet

## Distributor on hinged stand

#### Distributor on hinged stand



7300 on hinged stand



7400 on hinged stand



7700 on hinged stand

For complex applications (e.g. larger temporary construction sites) wall-mounted distribution boxes with handles are available as an alternative to the classic design of mobile distribution boxes. These can be mounted on a hinged frame. Flexible, versatile assembly options allow the appropriate power supply on site. Thanks to the universal hinged frame, series 7200 to 7700 distribution boxes can be used.

#### Product features hinged stand

- Mobile solution for larger distributors with a wide range of equipment options
- Practical carry case
- Mounting holes for different series
- Solid stainless steel version in V2A
- Protective devices can be viewed and operated directly via the transparent protection flap
- Better operability due to elevated position
- Protection against waterlogging

#### Technical data

Material V2A stainless steel Dimensions (HxWxD) 569x400x40mm

Item no.	Description
294668	Hinged stand for distributors of the series 7200 - 7700



Optional: Stand MINI with double feet



#### Moveable distributors

Item	Symbols	Output	Input	Cable/personal
no.	Output			protection

## Distributor 7900 / 360x500x173mm Protection category IP54 Zinc-plated chassis / 450x977x447mm Weight ca. 55kg

209455	1 CEE 5x63A/400V 1 CEE 5x32A/400V 2 CEE 5x16A/400V 6 protective contact sockets 230V	3m 5x16mm <sup>2</sup> CEE 5x63A/400V	Neozed 32A Neozed 16A 6 MCB 16A.1P.B RCCB 63/0.03A 4p. for all CEE RCCB 40/0.03A 4p. for all protective contacts, IP54
279096	1 CEE 5x63A/400V 1 CEE 5x32A/400V 2 CEE 5x16A/400V 6 protective contact sockets 230V	3m 5x16mm² CEE 5x63A/400V	Neozed 32A Neozed 16A 6 MCB 16A.1P.B RCCB 63/0.03A 4p. for all CEE RCCB 40/0.03A 4p. for all protective contacts, IP67



Item no. 279096

## Distributor 7400 / 265x370x132mm Protection category IP54 Hand truck / 566x1200x560mm Weight ca. 81kg

233431



1 CEE 5x32A/400V 1 CEE 5x16A/400V

1 CEE 5x16A/400V 2 protective contact 230V

40m 5x6mm<sup>2</sup> CEE 5x32A/400V 1 MCB 16A.3P.C 2 MCB 16A.1P.B RCCB 40/0.03A 4p.

## Distributor 7900 / 2x 360x500x173mm Protection category IP54 Barrow / 566x1250x560mm Weight ca. 65kg





1 CEE 5x63A/400V 2 CEE 5x32A/400V 2 CEE 5x16A/400V 6 protective contact 230V 5m 5x35mm<sup>2</sup>
CEE 5x32A/400V
1 energy meter
1 Kunbus Revolution Pi
1 control fuse 2A
1 power supply unit 24 V

1 power supply unit 24 V 1 glass tube fuse 1A 1 RJ45 data socket 1 MCP 63A.3P.C 2 MCP 32A.3P.C 2 MCP 16A.3P.C 6 MCP 16A.1P.B 2 RCCB 63/0,03A 4p. Typ B

1 RCCB 40/0,03A 4p. Typ B

1 RCCB 40/0,03A 4p.

## Distributor 7800 / 360x500x133mm Protection category IP54 Sheet steel cable reel red 521 movable / 720x1130x775mm Weight ca. 90kg

207356



2 CEE 5x32A/400V 2 CEE 5x16A/400V 3 protective contact 230V

25m 5x16mm<sup>2</sup> CEE 5x63A/400V Neozed 32A Neozed 16A 3 MCB 16A.1P.B RCCB 25/0.03A 4p.



Item no. 207356

Item no. 233431

## Inspection trolleys

#### Inspection trolley / Mobil electronic frequency converter / Test unit

These products are equipped entirely in accordance with your wishes and requirements. Our experience and your needs are perfectly tuned to produce the ideal solution. The possibilities are virtually limitless.

#### Possible areas of use

aircraft construction, automotive industry, tool manufacturing, major inspections, assembly, large-scale construction sites, testing and assembly stations in industry, concerts and festivals, theatre stages

#### Installation possibilities

transformers (three-phase current, safety or isolating transformers), control elements, measuring equipment, fuse elements, control lights, insulation monitors, plug connectors, and much more



Inspection trolley







Mobile frequency converter



Inspection trolley "3 in 1" - transformer, big cable reel, trailer, rotary current transformer



#### Application cases mobile distributor

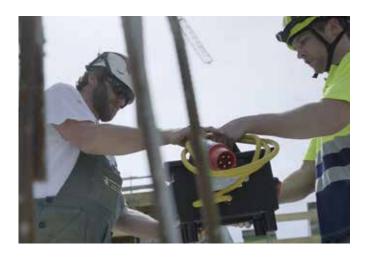


























# THE RELIABLE CONVERSION ARTIST.

With our solid rubber transformers you'll get your custom solution to keep the construction voltage constant and reliable at all time. From low-voltage or isolated transformers to inspection trolleys - we are able to help you find your individual custom solution.

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#### General

#### Our series

Thanks to their mechanical and electrotechnical properties, GIFAS solid rubber safety distributors are ideally suited for use as transformer housings. From wall-mounted distributors and mobile distributors to inspection trolleys, we can supply any technical construction you need. For Example it is possible to engrave the customers company name into the bodypart of the electrical distributor.



#### **Product features**

- Transformers compliant with VDE 0570 IEC 61558
- Safety-insulated housing compliant with VDE 0100 Part 410
- Sockets and plugs compliant with VDE 0623 DIN 49462/63 and EIC 309
- GS mark
- Compliance with regulations as per BVG A1, BVG A2, VDE 0100, Part 100
- Wrapped thermocouple can also be used for tangential fan control on request
- External screws made from non-rusting material and with a captive design
- Maintenance-friendly structures since all parts can be exchanged individually
- 5 years warranty on the solid rubber housing!



#### **BGI 594**

The use of electrical equipment in the case of an increased electrical hazard.

When using electrical equipment

- in high electrical risk areas
- when there is limited freedom of movement
- when one experiences a strained posture due to the work may increase the risk of electrical hazards for the employees.

In case of defects not all of the available protective measures guarantee a sufficient degree of safety in situations mentioned above.

When assessing a potential hazard, a distinction is made between the following:

- conductive areas with limited freedom of movement
- other conductive areas

BGI 594 recommends taking protective measures against receiving an electric shock under fault conditions (fault protection) in the above-mentioned areas. BGI 594 contains regulations for the use of fixed and mobile electrical equipment to protect persons against the threat of an electric shock in high electrical risk areas. In the aforementioned sense:

- 1. There is increased risk of an electrical hazard if electrical systems and equipment are operated in areas with limited freedom of movement or in other conductive areas.
- 2. In a conductive area with limited freedom of movement when its boundaries consist essentially of metallic parts or are electrically conductive, a person may come in extensive physical contact with the surrounding boundary. In such cases the possibility of interrupting said contact is limited (defined in accordance with VDE 0100-706).



#### Table of dimensions for transformers

Secondary currents in A with UN in V

S in VA	U <sub>N</sub>	24 V	42 V	230 V	3 X 42 V	3 X 400 V	3 X 500 V
120	I <sub>n</sub> P <sub>m</sub>	5 A 92 W	2,9 A 92 W	0,5 A 92 W			
160	I <sub>n</sub> P <sub>m</sub>	6,7 A 123 W	3,8 A 123 W	0,7 A 123 W			
320	I <sub>n</sub> P <sub>m</sub>	13,3 A 246 W	7,6 A 246 W	1,4 A 246 W			
500	I <sub>n</sub> P <sub>m</sub>	20,8 A 385 W	12 A 385 W	2,2 A 385 W			
1000	I <sub>n</sub> P <sub>m</sub>	41,7 A 770 W	23,8 A 770 W	4,3 A 770 W			
2000	I <sub>n</sub> P <sub>m</sub>	83,3 A 1540 W	47,6 A 1540 W	8,7 A 1540 W	27,5 A 1540 W	2,9 A 1540 W	2,3 A 1540 W
2500	In Pm	104,2 A 1925 W	59,5 A 1925 W	10,9 A 1925 W	34,4 A 1925 W	3,6 A 1925 W	2,9 A 1925 W
3500	In P	145,8 A 2695 W	83,3 A 2695 W	15,2 A 2695 W	48,2 A 2695 W	5 A 2695 W	4 A 2695 W

A = Apparent power (transformer output)

#### Overview of the various building types and weights

Type 2516 power 120 VA	Weight:	4 kg
Type 6200 power 320 to 500 VA	Weight:	10 kg
Type 6700 power 630 to 1200 VA	Weight:	21 kg
Type 3500 power 2000 VA	Weight:	22 kg
Type 3800power 2500 VA	Weight:	38 kg
Type 7900power 3500 VA	Weight:	48 kg

Start-up current levellers are used with a power output of 1500 VA and upwards (alternating current).

 $I_n$  = Rated current of the transformer  $P_m$  = Connectable engine output at (cos. = 0.77)

# Static safety transformers

#### Series 2516 / 3800 / 3900 / 7900

Item no	o. Symbols Output	Output	Power in VA	Voltage in V	Built-in	Protective devices
						in A PRI / SEC

#### Designs with toroidal core transformer

#### Series 2516 / 160x250x90mm





)	211118	1 CEE 2x16A/24 V	120	230/24	1 thermal overload cut-out switch	0.6
	211119	1 CEE 2x16A/42 V	120	230/42	1 thermal overload cut-out switch	0.6
	211120	1 CEE 2x16A/24 V	160	230/24	1 thermal overload cut-out switch	0.8
	211123	1 CEE 2x16A/42 V	160	230/42	1 thermal overload cut-out switch	0.8

#### Designs with block transformer

#### Series 3800 / 250x360x133mm



262227	<b>5</b> 5	2 CEE 2x16A/24V	320	230/24	1 thermal overload cut-out switch	1,6
261018		2 CEE 2x16A/42V	320	230/42	1 thermal overload cut-out switch	1,6
262250		2 CEE 2x16A/24V	500	230/24	1 thermal overload cut-out switch	2,0
262251		2 CEE 2x16A/42V	500	230/42	1 thermal overload cut-out switch	2,0

#### Designs with block transformer

#### Series 3900 / 250x360x173mm





211201	<b>888</b>	3 CEE 2x16A/24V	1000	230/24	1 thermal overload cut-out switch	5,0 / Microf. 16
211250		3 CEE 2x16A/42V	1000	230/42	1 thermal overload cut-out switch	5,0 / Microf. 16

#### Designs with block transformer

#### Series 7900 / 500x360x173mm



211264	6 CEE 2x16A/24V	2000	230/24	1 thermal overload cut-out switch 1 ICL	10,0 / Microf. 16
211255	6 CEE 2x16A/42V	2000	230/42	1 thermal overload cut-out switch 1 ICL	10,0 / Microf. 16

#### Other equipment upon request.



# Static isolating transformers

#### Series 2516 / 3800 / 3900 / 7900

Item no.	Symbols	Output	Power	Voltage	Built-in	Protective
	Output		in VA	in V		devices
						in A
						PRI / SEC

#### Designs with toroidal core transformer

#### Series 2516 / 160x250x90mm

211129	1 protective contact socket without $\downarrow$	120	230/230	1 thermal overload cut-out switch	0,6
211130	1 protective contact socket without \( \frac{1}{2} \)	160	230/230	1 thermal overload cut-out switch	0,8



#### Designs with block transformer

#### Series 3800 / 250x360x133mm

262258	1 protective contact socket without \( \frac{1}{2} \)	320	230/230	1 thermal overload cut-out switch	1,6
262259	1 protective contact socket without \( \frac{1}{2} \)	500	230/230	1 thermal overload cut-out switch	2,0



#### Designs with block transformer

#### Series 3900 / 250x360x173mm

211192	1 protective contact socket without $\downarrow$	1000	230/230	1 thermal overload cut-out switch	5,0
211245	1 protective contact socket without 🚽	2000	230/230	1 thermal overload cut-out switch 1 ICL	10,0





#### Designs with block transformer

#### Series 7900 / 500x360x173mm

	o , occinco	• * * * * * * * * * * * * * * * * * * *				
211246		1 protective contact socket without $\downarrow$	2500	230/230	1 thermal overload cut-out switch 1 ICL	12,0
211247		1 protective contact socket without $\downarrow$	3500	230/230	1 thermal overload cut-out switch 1 ICL	16,0





Illustration similar

#### Other equipment upon request.

# Mobile safety transformers

#### Series 2516 / 6200 / 6700 / 3500 / 7900

Item no.	Symbols	Output	Power	Voltage	Built-in	Protective
	Output		in VA	in V		devices
						in A
						PRI / SEC

#### Designs with toroidal core transformer

#### Series 2516 / 250x160x90mm



Series 2516 / 250X160X90mm								
208768		1 CEE 2x16A/24V	120	230/24	1 thermal overload cut-out switch	0,6		
208628		1 CEE 2x16A/42V	120	230/42	1 thermal overload cut-out switch	0,6		
209431		1 CEE 2x16A/24V	160	230/24	1 thermal overload cut-out switch	0,8		
209430		1 CEE 2x16A/42V	160	230/42	1 thermal overload cut-out switch	0,8		

#### Designs with block transformer



Series 6200 / 280x275x230 mm							
	208045		2 CEE 2x16A/24V	320	230/24	1 thermal overload cut-out switch	1,6
	208353		2 CEE 2x16A/42V	320	230/42	1 thermal overload cut-out switch	1,6
	208093		2 CEE 2 x16A/24V	500	230/24	1 thermal overload cut-out switch	2,0
	208094		2 CEE 2x16A/42V	500	230/42	1 thermal overload cut-out switch	2,5

#### Designs with block transformer

#### Series 6700 / 350x305x280mm



208899	5555	4 CEE 2x16A/24V	1000	230/24	1 thermal overload cut-out switch	5,0 / Microf. 16
208897		4 CEE 2x16A/42V	1000	230/42	1 thermal overload cut-out switch	5,0 / Microf. 16

#### Designs with block transformer





#### Series 3500 / 1500-2000VA / 360x250x360mm, Series 7900 / 2500VA / 500x360x173mm

211002		6 CEE 2x16A/24V	2000	230/24	1 thermal overload cut-out switch 1 ICL	10,0 / Microf.16
211006		6 CEE 2x16A/42V	2000	230/42	1 thermal overload cut-out switch 1 ICL	10,0 / Microf.16
240790	888 888	6 CEE 2x16A/24V	2500	230/24	1 thermal overload cut-out switch 1 ICL	12,0 / Microf.16
240182		6 CEE 2x16A/42V	2500	230/42	1 thermal overload cut-out switch 1 ICL	12,0 / Microf.16



#### Series 2516 / 3500 / 3900 / 6200 / 6700 / 7900

Item no.	Symbols	Output	Power	Voltage	Built-in	Protective
	Output		in VA	in V		devices
						in A
						PRI / SEC

#### Designs with toroidal core transformer

#### Series 2516 / 250x160x90mm

208629	1 protective contact socket without \( \frac{1}{2} \)	120	230/230	1 thermal overload cut-out switch	0,6
210937	1 protective contact socket without	160	230/230	1 thermal overload cut-out switch	0,8



#### Designs with block transformer

#### Series 6200 / 280x275x230mm

	- ,					
210938		1 protective contact socket without $\frac{1}{2}$	320	230/230	1 thermal overload cut-out switch	1,6
208095		1 protective contact socket without \( \frac{1}{2} \)	500	230/230	1 thermal overload cut-out switch	2,5



#### Designs with block transformer

#### Series 6700 / 350x305x280mm

208900	1 protective contact socket	1000	230/230	1 thermal overload	5,0
	without 🛓			cut-out switch	



#### Designs with toroidal core transformer

#### Series 6700 / 350v305v280mm

Series 6700 / 350x305x280mm										
263293		1 protective contact socket without $\frac{1}{2}$	2500	230/230	1 thermal overload cut-out switch	12,0				



#### Designs with block transformer

#### Series 3500 / 360x250x360mm

Series 3500 / 360x250x360mm										
203732		1 protective contact socket without $\frac{1}{2}$	2000	230/230	1 thermal overload cut-out switch 1 ICL	10,0				



#### Designs with block transformer

#### Series 3900 / 250x360x173mm

0000 000	Solice Code / Eddicoda / Chiam						
236690		1 protective contact socket without $\frac{1}{+}$	2500	230/230	1 thermal overload cut-out switch 1 ICL	12,0	



#### Designs with block transformer

#### Series 7900 / 500v360v173mm

٠	Series 7900 / 500x360x173mm								
	210355		1 protective contact socket without $\frac{1}{2}$	3500	230/230	1 thermal overload cut-out switch 1 ICL	16,0		





## Mobile isolating safety transformers

#### Mobile isolating safety transformers with multiple separate coils

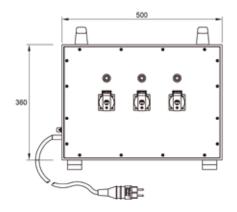
Series 7900 / 500 x 360 x 173 mm

#### Application

- In conductive areas with limited freedom of movement
- For use compliant with VDE 0100 Part 706

For the current supply to hand-held electrical tools and measuring equipment, according to VDE 0100 Part 706, either:

- safety low voltage or
- safety isolation is required, with each secondary coil in the isolating transformer only being allowed to supply a single consumer. An isolating transformer can have various secondary coils.



Item no.	Symbols Output	Output	Power in VA	Voltage in V	Built-in	Protective devices in A PRI / SEC
211336		3 protective contact sockets	3000VA 230V	1000VA/230V 1000VA/230V 1000VA/230V	1 thermal overload cut-out switch 1 ICL	15.0 / microf.16
211340	<b>55</b>	1 protective contact socket 2 CEE 2x16A/24V	3000VA 230V	2500VA/230V 500VA/24V	1 thermal overload cut-out switch 1 ICL	15.0 / microf.16
211343		1 protective contact socket 2 CEE 2x16A/42V	3000VA 230V	2500VA/230V 500VA/42V	1 thermal overload cut-out switch 1 ICL	15.0 / microf.16

#### Mobile transformers

#### Transformer on zinc-plated chassis

#### Technical data

Max. transformer power: Dimensions of distributor: Dimensions of chassis: Weight:

Weight: Protection category: 4kVA 500x360x173 mm 566x1250x560 mm approx. 70 kg IP 54



Item no. 210333, Fig. similar

#### Transformer on zinc-plated special hand cart

#### Technical data

Max. transformer power: Dimensions WxHxD: Weight: Protection category: 12.5 kVA 560x1200x590 mm approx. 200 kg IP 54



Item no. 246321

Item no.	Symbols Output	Output	Input	Built-in	Cable protection / personal safety
210333		10 CEE 2x16A/42V	4m 5x6 mm <sup>2</sup> CEE 5x32A/400V	1 4kVA safety transformer, 400V/42V, 50 Hz compliant with VDE 0551 primary side prefused via 1 6-10 A 3-pin motor circuit breaker, thermal rated current set to 10A	MCB 16A 1p. B
246321		1 CEE 5x16A/400V 3 protective contact sockets	3m 5x2.5 mm <sup>2</sup> CEE 5x16A/400V	1 12.5 kVA three-phase current isolating transformer Primary: 3x400V/ 50Hz Secondary: 1 3x400V coil, 50Hz, 6KVA, 1 intermediate pickup 3.5 KVA, 230 V, 1 intermediate pickup 2.5 KVA, 230 V	Motor circuit breaker 3p., thermal rated current, set to 14A 16A Neozed fuses



#### Inspection trolleys



500 Volt inspection trolley with 5 meter Proflexx 07 cable

#### **Product features**

- Solid rubber distributor 7900 + 3800 attached to a 55 kVA threephase current transformer in sheet steel housing with 2 castor and 2 fixed wheels as well as impact protection at the top
- Primary: 3x500V/50 Hz, Secondary: 3x400V/50 Hz
- Switching group Dyn 5 as per VDE 0570
- Dimensions: LxHxD = 1050x1250x760mm
- Weight: approx. 400kg

#### Technical data

Input: 5m Proflexx-07 cable 4x16mm<sup>2</sup>

with CEE plug 4x63 A/500V

Output: 1 CEE 5x63A/400V, 1 CEE 5x32A/400V,

2 CEE 5x16A/400V, 2 CEE 3x16A/230V,

2 protective contact 230V

1 leakage current circuit breaker switch 63/0.03A

1 leakage current circuit switch 40/0.03A

Built-ins: 1 63A main switch

1 EMERGENCY STOP push-button



50kVA inspection trolley with 20 meter Proflexx 07 cable

#### **Product features**

- Solid rubber distributor 7900 + 3800 attached to a 50 kVA transformer in sheet steel housing, mounted on a special chassis including roof
- Dimensions: LxWxH: 1870x1270x1295mm
- Weight: approx. 400kg

#### Technical data

Input: 20m PROFLEXX-07 cable 4x16mm<sup>2</sup>

with CEE plug 4x63 A/500V

Output: 1 CEE 5x63 A/400V, 2 CEE 5x32A/400V

2 CEE 5x16 A/400V, 6 CEE protective contact 230V

3 leakage current circuit breaker switch 63/0.03A

Built-ins: 1 line switch as main switch 58A 1 digital multimeter for electricity and

Voltage display



Inspection trolley with zinc-plated steel underframe, shock and impact protection, cable winding device, 4 crane eyelets



"3 in 1" inspection trolley Transformer, large cable reel and trailer

#### **Product information**

- Inspection trolley, painted sheet steel housing on flatbed truck
- Flatbed trailer with towing bar
- Approval for public road use possible

#### Technical data

Three-phase current transformer: 100KVA / 500/400Volt Sheet steel cable reel: 2x type 523 with brake Cables: 80m H07RN-F, 4x35qmm, 500Volt side 80m H07RN-F, 5x35qmm, 400Volt side

Total weight: approx. 1,800kg
Overall dimensions: 4490x2010x1230mm

Other designs and equipment available upon request.

















# UNSEEN BUT ALWAYS READY FOR USE.

GIFAS underfloor distributors harmoniously integrate supply technology for electricity, water, sewage, compressed air and media. They are space-saving and ready-to-use on request in your vicinity - they are quick to start and highly resilient without being seen.

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## General

#### Model overview

#### PIAZZA

Technical data	PIAZZA 800	PIAZZA 1000	PIAZZA 2000
Area of use	Internal / external area	Internal / external area	Internal / external area
Classification as per DIN EN 124	400kN (40t) / D400	400kN (40t) / D400	900kN (90t) / F900
Cover achievement	Covers can be individually filled / paved	Covers can be individually filled / paved	Covers can be individually filled / paved
Cover measurements	750x750x70mm	1000x1000x70mm	700x700x70mm
Cover heating	Yes	Yes	Optional
Diving bell	Optional	Optional	Optional
Weight	Approx. 550kg	Approx. 830kg	Approx. 200 kg (without concrete ring)
Installation depth	Approx. 1300mm	Approx. 1300mm	Approx. 310mm plus distributor and fittings
GIFAS solid rubber distributors	7800 series	7800/7900 series	7800 series

#### CAMPETTO

Technical data	CAMPETTO V	CAMPETTO VI	CAMPETTO VII	CAMPETTO VIII
Area of use	Internal / external area	Internal / external area	Internal / external area	Internal / external area
Classification as per DIN EN 124	15kN (1.5t) / A15 Optional B125	125kN (12.5t) / B125 Optional C250	15kN (1.5t) / A15 Optional B125	125kN (12.5t) / B125 Optional C250
Cover achievement	Stainless steel non-slip steel floor plate, can be supplied in two sizes	Covers can be individually filled / paved, can be supplied in two sizes	Stainless steel non-slip steel floor plate	Covers can be individually filled / paved
Cover measurements for series 7700-7900 for series 7200-7400	800x552mm 650x452mm	800x552mm 650x452mm	800x912mm	800x912mm
Cover heating	Optional	Optional	Optional	Optional
Diving bell	Optional	Optional	Optional	Optional
Weight	Approx. 100kg / 130kg	Approx. 100kg / 130kg	Approx. 260kg	Approx. 260kg
Installation depth	Depending on design 500 or 670mm	Depending on design 500 or 670mm	900mm	900mm
GIFAS solid rubber distributors	7200 - 7900 series	7200 - 7900 series	7200 - 7900 series	7200 - 7900 series

#### RETRANT / PICCOLINO

Technical data	RETRANT	PICCOLINO 120	PICCOLINO 200
Area of use	Underfloor distributors for restricted spaces	Underfloor distributors for restricted spaces	Underfloor distributors for restricted spaces
Classification as per DIN EN 124	15kN (1.5t) / A15	2kN (200kg)	250kN (25t) / C250
Cover	Stainless steel non-slip steel floor plate / 340x240mm	Stainless steel non-slip steel floor plate / 120x120mm	Stainless steel non-slip steel floor plate / 200x200mm
Weight	Approx. 25kg	Approx. 4.2kg	Approx. 7.5kg
Installation depth	Approx. 420mm	Approx. 400mm	Approx. 400mm
GIFAS solid rubber distributors	Series 2516, protection category IP65 Equipment options Individual as per the client's wishes	2m H07 Leitung 3x2.5mm² 1 protective contact coupling 16A/230V (IP 68) or 1 CEE coupling 16A/400V (IP67)	2m H07 Leitung 3x2.5mm <sup>2</sup> 1 protective contact coupling 16A/230V (IP 68) or 1 CEE coupling 5x16A/400V (IP 67) or 1 CEE coupling 5x32A/400V (IP 67)



#### Model overview

#### ΡΙΑΖΖΑ

#### **Product features**

- Can be locked, walked on or driven over during operation
- Cover can be filled with surrounding material or designed as a floor plate
- Secured against unauthorised opening (vandal-proof!)
- Gas springs for force-free, assisted opening
- Frost-proof operation thanks to cover heating
- Maintenance-free GIFAS solid rubber distributor system guarantees optimum operating safety down to -40°C
- No formation of condensation thanks to the GIFAS solid rubber distributor
- Resistant to environmental influences
- Stainless steel construction, all metal parts made from V2A
- Visible reflectors on the opened cover system
- Distributor fastening on the underside of the cover
- The connector distributor can be accessed when installed (E-check DGUVA3)
- Pit covers, locks and distributors can be replaced
- Optional: on request with diving bell

#### Locking system







#### **CAMPETTO**

#### **Product features**

- Can be locked, walked on or driven over during operation
- Cover can be filled with surrounding material or designed as a floor plate
- Secured against unauthorised opening (vandal-proof!)
- Gas springs for force-free, assisted opening
- Frost-proof operation thanks to cover heating option
- Maintenance-free GIFAS solid rubber distributor system guarantees optimum operating safety down to -40°C
- No formation of condensation thanks to the GIFAS solid rubber distributor
- Resistant to environmental influences
- Stainless steel construction, all metal parts made from V2A
- Visible reflectors on the opened cover system
- Cover pit can be removed by loosening the screws for maintenance purposes
- Distributor fastening on the underside of the cover
- The connector distributor can be accessed when installed (E-check - DGUVA3)
- Pit covers, locks and distributors can be replaced
- Optional: frost-proof operation through pit cover heating, thermostat controlled
- Optional: on request with diving bell

#### Locking system







#### **RETRANT**

#### Locking system





**PICCOLINO** 

#### Locking system





#### RETRANT / PICCOLINO



# Special feature: Protection class II

Our underfloor systems from the PIAZZA and CAMPETTO series are fitted with particularly robust GIFAS solid rubber distribution systems of protection class II equipped.

Thanks to underfloor distributors from GIFAS ELECTRIC, electrical power is quickly available anywhere and without time-consuming installation work! Power, media and water distributors integrated invisibly into the cityscape, designed with long service and ease of maintenance in mind.

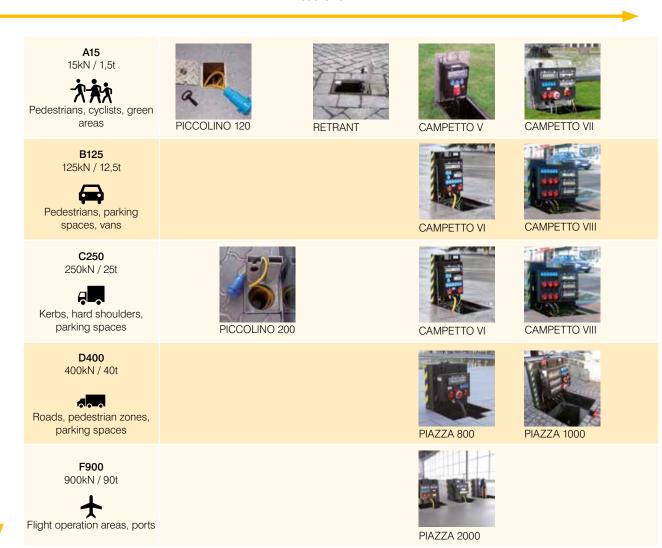


Over the following pages, you will see a synopsis of the advantages of our high-quality components and materials, and how we can help you, step by step, towards a future-proof underfloor distributor system that meets your individual preferences and requirements. We also pay close attention to reliability and product quality. "Made in Germany".

To offer you the right product for every application, GIFAS has a number of different underfloor distributor systems of varying function, size and application in its portfolio.

One characteristic shared by all of the products is the uniqueness and knowledge of how to offer our customers tailored, VDE-compliant products that are virtually impossible to vandalise, remain fully capable of being walked or driven on during operation and which integrate seamlessly into the landscape.

#### Model size





#### PIAZZA 800 (D400)



Solid stainless steel construction (V2A/1.4301) 750x750 mm, gas springs for fully automatic opening, shaft cover can be custom-filled, distributor as per the client's request.

#### Technical additions

Cover filling: The pit with a depth of 70mm can be

custom-filled to blend in with its

surroundings.

Cable exit flap: (210x130mm) integrated into the shaft

cover frame.

Locking: A sturdy closing mechanism

(with snap lock) closes the shaft cover and it can also be secured with a

shackle lock.

Cable exit flap secured with a double bit lock (locking tool included in scope of

delivery).

Heating: To prevent the Floor Pit from being frozen in the closed position, a thermostatically

in the closed position, a thermostatically controlled heating tape is built into the lid

of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding.

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

#### Supplied package

Stainless steel construction with

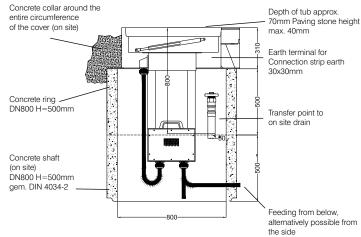
- fillable shaft cover
- solid rubber electrical distributor
- junction box

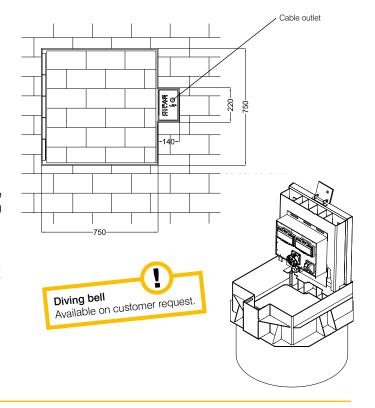
Fully assembled and wired.

Mounted on concrete ring (H=500mm, NW=800mm)

"DN-Concrete pipe by DIN 4034-2"







#### PIAZZA 1000 (D400)



Solid stainless steel construction (V2A/1.4301) 1000x1000mm, gas springs for fully automatic opening, shaft cover can be custom-filled, distributor as per the client's request.

#### Technical additions

Cover filling: The pit with a depth of 70mm can be

custom-filled to blend in with its

surroundings.

Cable exit flap: (210x130mm) integrated into the shaft

cover frame.

Locking: A sturdy closing mechanism

(with snap lock) closes the shaft cover

and it can also be secured with a

shackle lock.

Cable exit flap secured with a double bit

lock (locking tool included in scope of

delivery).

Heating: To prevent the Floor Pit from being frozen

in the closed position, a thermostatically controlled heating tape is built into the lid

of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding.

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

#### Supplied package

Stainless steel construction with

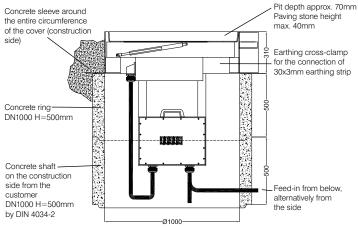
- fillable shaft cover
- solid rubber electrical distributor
- junction box

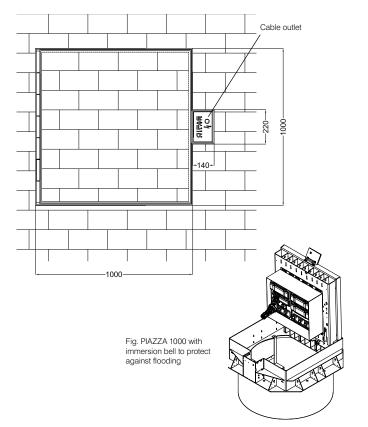
Fully assembled and wired.

Mounted on concrete ring (H=500mm, NW=1000mm)

"DN-Concrete pipe by DIN 4034-2"









#### PIAZZA 2000 (F900)





The GIFAS underfloor distributor PIAZZA 2000 has been specially designed for use at maintenance bases and in hangars.

Thanks to its strongly reinforced shaft cover, the PIAZZA 2000 can withstand the weight of an aircraft wheel, industrial lorry, tractor or pushback.

The main distributors are made of extremely sturdy solid rubber in Germany. They are extremely long-lasting.

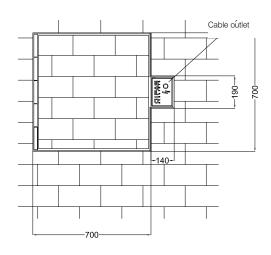
For your application, we can equip the main distributors according to your requirements with any type of connector, jet connectors and fuse installations or controls. Load break switches or back-up fuses can be installed in the connection distributor.

Mounted on an underground substructure, the cover can be used as access and also as a carrier for power distribution.

#### **Product features**

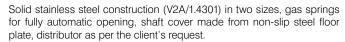
- Can be locked, walked on or driven over during operation
- Cover can be filled with surrounding material or designed as a floor plate
- Secured against unauthorised opening (vandal-proof!)
- Gas springs for force-free, assisted opening
- Frost-proof operation thanks to cover heating
- Maintenance-free GIFAS solid rubber distributor system guarantees optimum operating safety down to -40°C
- No formation of condensation thanks to the GIFAS solid rubber distributor
- Resistant to environmental influences
- Stainless steel construction, all metal parts made from V2A
- Visible reflectors on the opened cover system
- Distributor fastening on the underside of the cover
- The connector distributor can be accessed when installed (E-check DGUVA3)
- Pit covers, locks and distributors can be replaced





#### **CAMPETTO V (A15)**





#### Technical additions

Cover: V2A/1.4301 non-slip steel floor plate Cable exit flap: (135x90mm) in the centre on the head

side of the cover

A self-cleaning lock with snap fastener Locking:

closes the shaft cover (locking tool included in the scope of delivery).

To prevent the Floor Pit from being frozen in the closed position, a thermostatically Heating (optional):

controlled heating tape is built into the lid

of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding.

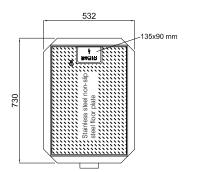
It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

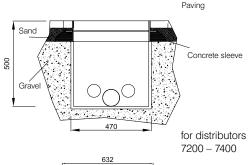
#### Supplied package

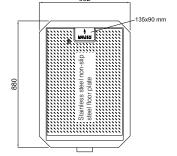
Stainless steel construction with

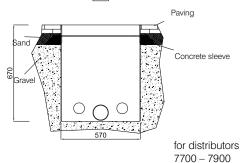
- cover made from V2A non-slip steel floor plate
- solid rubber electrical distributor (Protection class II)
- junction box (Protection class II)
- Fully assembled and wired.







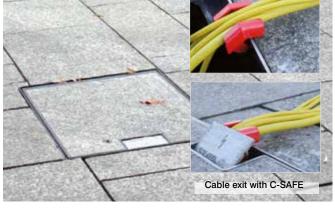






#### **CAMPETTO VI (B125)**





Solid stainless steel construction (V2A/1.4301) in two sizes, gas springs for fully automatic opening, shaft cover can be custom-filled, distributor as per the client's request.

#### Technical additions

Cover filling: The pit with a depth of 70mm can be

custom-filled to blend in with its

surroundings.

Cable exit flap: (135x90mm) in the centre on the head

side of the cover

Locking: A self-cleaning lock with snap fastener

closes the shaft cover (locking tool included in the scope of delivery).

Heating (optional): To prevent the Floor Pit from being frozen

in the closed position, a thermostatically controlled heating tape is built into the lid

of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding.

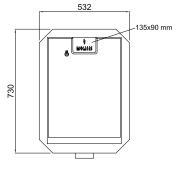
It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

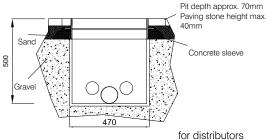
#### Supplied package

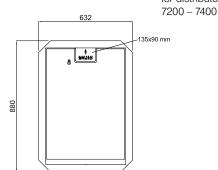
Stainless steel construction with

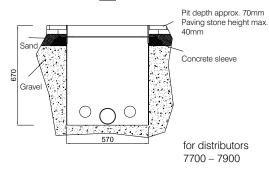
- fillable shaft cover
- solid rubber electrical distributor (Protection class II)
- junction box (Protection class II)
- Fully assembled and wired.





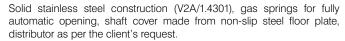






#### **CAMPETTO VII (A15)**





#### Technical additions

Heating (optional):

Cover: V2A/1.4301 non-slip steel floor plate.
Cable exit flap: (280x110mm) in the centre on the head

side of the cover

Locking: A self-cleaning lock with snap fastener

closes the shaft cover (locking tool included in the scope of delivery).

To prevent the Floor Pit from being frozen in the closed position, a thermostatically

controlled heating tape is built into the lid of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

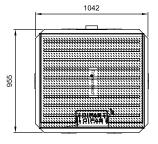
#### Supplied package

Stainless steel construction with

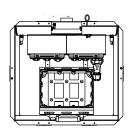
- cover made from V2A non-slip steel floor plate
- solid rubber electrical distributor (Protection class II)
- junction box (Protection class II)
- Fully assembled and wired.

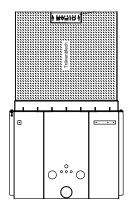


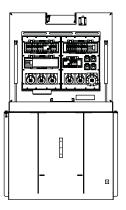
UF-System closed

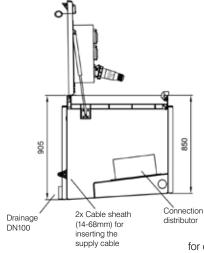


UF-System open







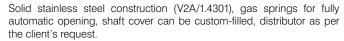


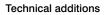
for distributor 7200 - 7900



#### **CAMPETTO VIII (B125)**







Cover filling: The pit with a depth of 70mm can be

custom-filled to blend in with its

surroundings.

Cable exit flap: (280x110mm) in the centre on the head

side of the cover

Locking: A self-cleaning lock with snap fastener

closes the shaft cover (locking tool included in the scope of delivery).

Heating (optional): To prevent the Floor Pit from being frozen

in the closed position, a thermostatically controlled heating tape is built into the lid

of the Floor Pit housing.

Diving bell (optional): Protection against the risk of flooding.

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

#### Supplied package

Stainless steel construction with

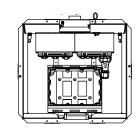
- fillable shaft cover
- solid rubber electrical distributor (Protection class II)
- junction box (Protection class II)
- Fully assembled and wired.

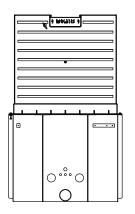


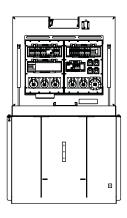
UF-System closed

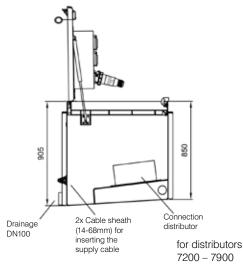
1042 1042

UF-System open









#### **RETRANT (A15)**

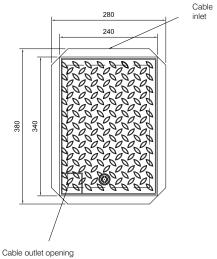




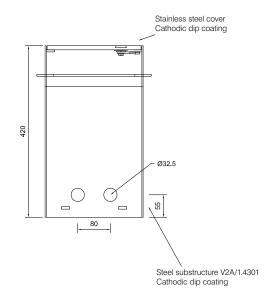
#### **Product features**

- Lockable/ walkable during operation
- Solid stainless steel construction, rust-free
- Completely maintenance-free (E-Check DGUVA3)
- Cover made from non-slip steel floor plate
- No formation of condensation due to GIFAS solid rubber distributor (protection class II)
- Easy operation
- Ground-flush installation
- Excellent safety thanks to the GIFAS double pressure method;
- the cover is held securely closed even without a lock Locking is performed using a countersunk, cover-flush dual bit lock (1 key included in the scope of delivery)
- Cable exit for cables is located in the shaft cover

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.



50x50mm





#### PICCOLINO 120 (A15)



#### **PICCOLINO 200 (C250)**



#### Product features

- Solid stainless steel construction, rust-free
- Completely maintenance-free (E-check)
- Cover made from non-slip steel floor plate
- Easy operation
- Can be walked on or driven over during operation
- Ground-flush installation
- Excellent operating safety thanks to reclosing after commissioning
- Locking is performed using a countersunk, cover-flush dual bit lock (1 key included in the scope of delivery)
- Cable exit opening in the cover lid for cables up to d=15 mm

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

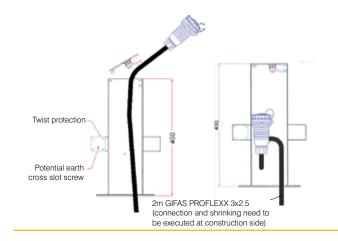
Item no.	Output	Fittings/design
268573	1 protective	Cover tear plate VA2
	contact socket 230V	
276081	-	Cover tear plate VA2

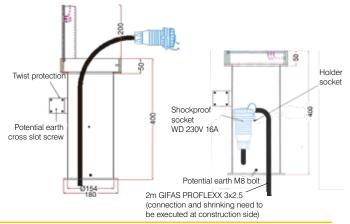
#### **Product features**

- Solid stainless steel construction, rust-free
- Completely maintenance-free (E-check)
- Cover made from non-slip steel floor plate
- Easy operation
- Can be walked on or driven over during operation
- Ground-flush installation
- Excellent operating safety thanks to reclosing after commissioning
- Locking is performed using a countersunk, cover-flush dual bit lock (1 key included in the scope of delivery)
- Cable exit opening in the cover lid for cables up to d=25mm

It is the client's responsibility to ensure the standards-appropriate substructure, correct installation of the shaft and corresponding drainage. The shaft cover is not sealed against surface water.

Item no.	Output	Fittings/design
268534	1 protective	Cover tear plate VA2
	contact socket 230V	
268860	1 CEE 3x16A/230V	Cover tear plate VA2
273546	-	Cover tear plate VA2
278981	-	Cover V2A fillable, pan depth 20mm





## **Application cases**

#### PIAZZA (D400)



Lübeck city hall market, PIAZZA with payment system



Quedlingburg market square, PIAZZA 1000



"Dresdner Zwinger", PIAZZA 700



Dresden "Altmarkt", PIAZZA 700



Regensburg museum, PIAZZA 1000 with diving bell





Tottenham Hotspur Station, PIAZZA 700 and PIAZZA 1000



#### CAMPETTO (A15/B125/C250)



BUGA Schwerin, CAMPETTO V (A15)



Kamp-Lintfort market square, CAMPETTO VIII



"Buga" Coblenz, CAMPETTO VI and CAMPETTO VIII with diving bell



Münster "Alter Steinweg", CAMPETTO VI



Market square Magdeburg, CAMPETTO VIII



Transport infrastructure supply CAMPETTO

# **Applications cases**

#### RETRANT / PICCOLINO



Wiesbaden health resort, RETRANT



Residential building, PICCOLINO 200

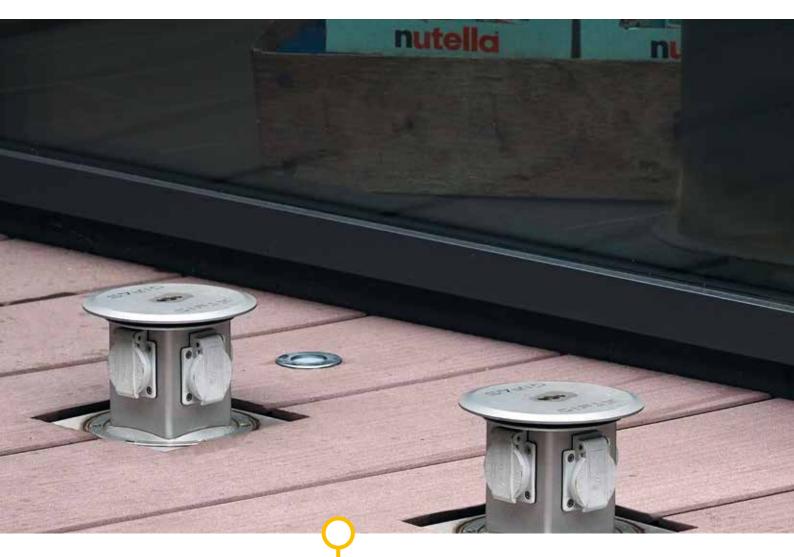


Neuzelle monastery, RETRANT



Bremen "Wesercafé", RETRANT





# AESTHETICS AND FUNCTIONALITY IN HARMONY.

Whether in hotels and restaurants, in conference rooms or in public areas such as foyers and exhibition spaces - GIFAS floor outlets look modern and unobtrusively, suiting any style of architecture. You can make your selection from our comprehensive portfolio.

Product overview FONTO	64
Product overview MASSO	67
FONTO	68
MASSO	80
Solid rubber points heating distributor	84
Solid rubber signal junction boxes	85
Application cases	86

### General

#### **Overview FONTO**

Areas of application: Indoor or protected outdoor area. Floor sockets with hinged cover / with removable cover

Models	FONTO 4290	FONTO 4295	FONTO 4301	FONTO 4308
Technical data	119 60 CIPAS @	119 60 Carram ( 6)	119 60 CUPAN (B)	119 00 00 00 00 00 00 00 00 00 00 00 00 00
Socket symbols				
Max. equipment	2xprotective contact socket 230V*	2xprotective contact socket 230V*	2xprotective contact socket 230V*	2xprotective contact socket 230V*
Cleaning type (IP)	dry or wet-cleaned	dry-cleaned	dry or wet-cleaned	dry or wet-cleaned
IP closed mode	IP65	IP20	IP65	IP65
IP plugged-in	IP20	IP20	IP20	IP20
Cover type	hinged cover, hinge	hinged cover, hinge	hinged cover, removable	hinged cover, removable
Fillable cover	no	no	no	yes
Cover closure type	Snap lock	Snap lock	Snap lock	Snap lock
Levelling support	yes (optionally)	yes (optionally)	yes (optionally)	yes (optionally)
Cable outlet	no	yes	yes	yes
Load coveracity	2t (20 kN)	2t (20 kN)	2t (20 kN)	2t (20 kN)
Dimensions (LxW)	119x119 mm	119x119 mm	119x119 mm	119x119 mm
Mounting depth	83mm	83mm	83mm	83mm
Level-adjustable after installation	yes	yes	yes	yes
Material: Aluminium	anodised	anodised	anodised	anodised
Feed-in cable	2xback M25 (bottom possible)	2xback M25 (bottom possible)	2xback M25 (bottom possible)	2xback M25 (bottom possible)
Detailed description on page	68	69	70	71

<sup>\*</sup>Reading example: 1xprotective contact socket 230V = for 1xmounting socket insert 45x45x4 mm (e.g. protective contact socket 230V, British Standard, RJ45, TV, HDMI, USB etc.)



#### **Overview FONTO**

Areas of application: Indoor or protected outdoor area. Floor sockets with removable cover

Models	FONTO 8301	FONTO 8308	FONTO 9301	FONTO 9308
	in many	The same		
	240 SVJID	240		45
Technical data				
Socket symbols		8 8 8 8 8 8 8 8		
Max. equipment	8xprotective contact socket 230V*	8xprotective contact socket 230V*	2xSchuko + CEE*	2xSchuko + CEE*
Cleaning type (IP)	dry or wet-cleaned	dry or wet-cleaned	dry or wet-cleaned	dry or wet-cleaned
IP closed mode	IP65	IP67	IP67**	IP67**
IP plugged-in	IP20	IP20	IP54	IP54
Cover type	hinged cover, removable	hinged cover, remo- vable	hinged cover, removable	hinged cover, removable
Fillable cover	no	yes	no	yes
Cover closure type	Snap lock	Snap lock	Snap lock	Snap lock
Levelling support	yes (optionally)	yes (optionally)	yes (optionally)	yes (optionally)
Cable outlet	yes	yes	no	yes
Load coveracity	2t (20 kN)	2t (20 kN)	5t (50 kN)	5t (50 kN)
Dimensions (LxW)	240x240 mm	240x240 mm	320x240 mm	5t (50 kN)
Mounting depth	95 mm	95 mm	276,5mm	276,5mm
Level-adjustable after installation	yes	yes	yes	yes
Material: Aluminium	anodised	anodised	anodised	anodised
Feed-in cable	Cyan the side MOE	6xon the side M25	2xback M20	2xback M20
	6xon the side M25 across	across	2xback M25	2xback M25

<sup>\*</sup>Reading example: 1xprotective contact socket 230V = for 1xmounting socket insert 45x45x4 mm (e.g. protective contact socket 230V, British Standard, RJ45, TV, HDMI, USB etc.) \*\*With fitted water protection pipe suitable for cleaning with wet sweepers.

### General

#### **Overview FONTO**

Areas of application: Indoor or protected outdoor area. Retractable floor sockets with screw cap

Models	FONTO 4970W	FONTO 5000	FONTO 5000 R
Technical data	119 GIFAS ©	157 157	156  GIFAS  O
Socket symbols			
Max. equipment	2xprotective contact socket 230V*	2xprotective contact socket 230V*/2xRJ45*	2xprotective contact socket 230V*/2xRJ45*
Cleaning type (IP)	dry or wet-cleaned	dry or wet-cleaned	dry or wet-cleaned
IP closed mode	IP65	IP67	IP67
IP plugged-in	IP20	**IP67 bis 14 mm	**IP67 bis 14 mm
Cover type	hinged cover, remo- vable	screw cover with water protection pipe	screw cover with water protection pipe
Fillable cover	yes	no	no
Cover closure type	Snap lock	Allen screw	Allen screw
Levelling support	yes (optionally)	yes (optionally)	yes (optionally)
Cable outlet	yes	no	no
Load coveracity	2t (20 kN)	4t (40 kN)	4t (40 kN)
Dimensions (LxW)	119x119 mm	157x157mm	156x156mm
Mounting depth	83mm	95 mm	95 mm
Level-adjustable after installation	yes	no	no
Material: Aluminium	anodised	anodised	anodised
Feed-in cable	2xback M25 (bottom possible)	4xM32 on the side shifted	4xM32 on the side shifted
Detailed description on page	76	77	77

<sup>\*</sup>Reading example: 1xprotective contact socket 230V = for 1xmounting socket insert 45x45x4 mm (e.g. protective contact socket 230V, British Standard, RJ45, TV, HDMI, USB etc.) \*\*With fitted water protection pipe suitable for cleaning with wet sweepers.



#### **Overview MASSO**

Areas of application: Indoor or protected outdoor area. Retractable floor sockets with screw cap

Models	MASSO 3000.2	MASSO 4000	MASSO 4010	MASSO 8000
	A B			
	H B			
Technical data	SV±ID  OCIFAS	OP GIFAS	170 SV=1D CO GIFAS	170 OZ GIFAS
Socket symbols				000
Max. equipment	2xprotective contact socket 2x RJ45*	4xprotective contact socket*	1xCEE 16/5*	2xprotective contact socket 2x RJ45*
Cleaning type (IP)	dry or wet-cleaned	dry or wet-cleaned	dry or wet-cleaned	dry or wet-cleaned
IP closed mode	IP67	IP67	IP67	IP67
IP plugged-in	IP20	IP54	IP54	IP20
Cover type	Screw cover	Screw cover	Screw cover	Screw cover
Fillable cover	no	no	no	no
Cover closure type	Allen screw	Allen screw	Allen screw	Allen screw
Levelling support	yes	yes	yes	yes
Cable outlet	no	no	no	no
Load coveracity	4t (40 kN)	4t (40 kN)	4t (40 kN)	4t (40 kN)
Dimensions (LxW)	170x170 mm	170x170 mm	170x170 mm	170x170 mm
Mounting depth	145-245 mm	190 - 290 mm	190-290 mm	145-245 mm
Level-adjustable after installation	no	no	no	no
Material: Aluminium	anodised	anodised	anodised	anodised
Feed-in cable	3xM32 on the side shifted	3xM32 on the side shifted	4xM32 on the side shifted	3xM32 on the side shifted
Drainage	yes	no	no	yes
Detailed description on page	80	81	82	83

<sup>\*</sup>Reading example: 1xCEE 16/5 plus 2xprotective contact socket 230V = for 1xmounting socket insert 70x70x55 mm (e.g. CEE 16/5, CEE 32/5) + 2xmounting socket insert 45x45x4 mm (e.g. protective contact socket 230V, RJ45, TV, HDMI, USB etc.)

#### **FONTO 4290**

Floor socket with hinged cover (levelling feet optionally available)











levellable: +/- 6mm

#### Technical data

Dimensions (LxW)	119 x 119 mm
,	119 / 119 111111
Mounting depth	approx. 83 mm
Levellable	77 - 89 mm
Installation height with levelling feet	95 - 140 mm
Installation height with threaded pin extension	n 95* - 240 mm
Material: Aluminium	anodised
(salt and	seawater resistant)
Color	anodised
Max. static load	20kN

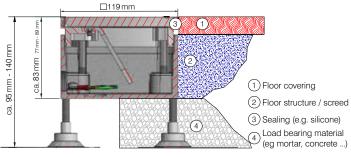
#### **Features**

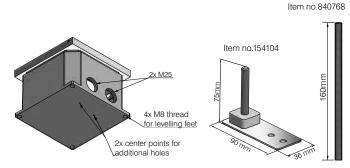
- Frame can be levelled in the offset state (+/- 6 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover
- For 2x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Protective cover made of cardboard to prevent damage during the construction phase (integrated in packaging)
- Can be driven over when closed
- When closed, suitable for maintenance with wet sweepers (IP65)
- When plugged in, only for dry-cleaned floors (IP20)

Item no.	Description	Equipment
840725	FONTO 4290 with hinged cover 119 x 119 x 83 mm, closed IP65, Anodised aluminium, for 2 modules 45 x 45 mm, levellable +/- 6 mm	without equipment
840770	FONTO 4290 with hinged cover, without cable outlet, 119x119x83 mm, close mode IP65, Anodised aluminium, levellable +/- 6 mm	1xprotective contact socket 230V 1xRJ45
840769	FONTO 4290 with hinged cover, without cable outlet, 119x119x83 mm, close mode IP65, Anodised aluminium, levellable +/- 6 mm	2xprotective contact socket 230V
840819	FONTO 4290 with hinged cover, without cable outlet, 119x119x83 mm, close mode IP65, Anodised aluminium, levellable +/- 6 mm	2xBritish Standard (2x13A)

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required





Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).



#### **FONTO 4295**

Floor socket with hinged cover and 2xcable outlet (levelling feet optionally available)











levellable: +/- 6mm

#### Technical data

Dimensions (LxW)		119 x 119 mm
Mounting depth		approx. 83 mm
9 1		
Levellable		77 - 89 mm
Installation height with levelling feet		95 - 140 mm
Installation height with threaded pin	extension	95* - 240 mm
Material: Aluminium		anodised
	(salt and seawa	iter resistant)
Color		anodised
Max. static load		20kN

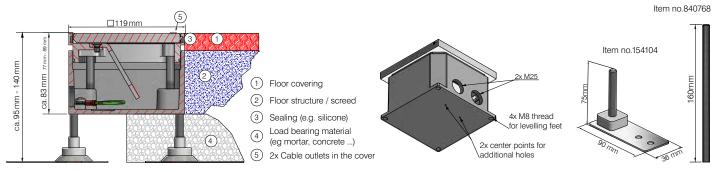
#### Features

- Frame can be levelled in the offset state (+/- 6 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover including 2x cable outlet
- For 2x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Protective cover made of cardboard to prevent damage during the construction phase (integrated in packaging)
- Can be driven over when closed
- When closed and plugged in only for dry-cleaned floor (IP20)

Item no.	Description	Equipment
840764	FONTO 4295 with hinged cover 119 x 119 x 83 mm and cable outlet, closed IP65, Anodised aluminium, levellable +/- 6 mm	without equipment
840772	FONTO 4295 with hinged cover 119 x 119 x 83 mm and cable outlet, closed IP65, Anodised aluminium, levellable +/- 6 mm	1xprotective contact socket 230V 2xRJ45
840771	FONTO 4295 with hinged cover 119 x 119 x 83 mm and cable outlet, closed IP65, Anodised aluminium, levellable +/- 6 mm	2xprotective contact socket 230V
840822	FONTO 4295 with hinged cover 119 x 119 x 83 mm and cable outlet, closed IP65, Anodised aluminium, levellable +/- 6 mm	2xBritish Standard (2x13A)

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required



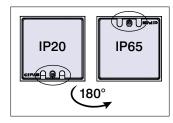
Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

#### **FONTO 4301**

Floor socket with hinged cover and levelling frame (levelling feet optionally available)











levellable: +/- 6mm

Technical data

Dimensions (LxW)	119 x 119 mm
Mounting depth	approx. 83 mm
Levellable	77 - 89 mm
Installation height with levelling feet	95 - 140 mm
Installation height with threaded pin extension	n 95* - 240 mm
Material: Aluminium	anodised
(salt and	seawater resistant)
Color	anodised
Max static load	20kN

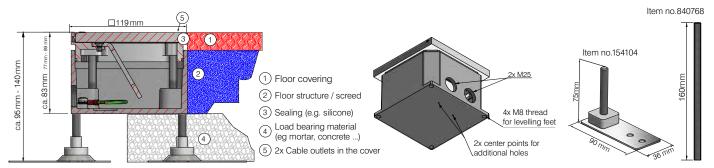
#### **Features**

- Frame can be levelled in the offset state (+/- 6 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover including 2x cable outlet
- For 2x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Protective cover made of cardboard to prevent damage during the construction phase (integrated in packaging)
- Can be driven over when closed
- When closed, suitable for maintenance with wet sweepers (IP65)
- When closed and plugged in only for dry-cleaned floor (IP20)

Item no.	Description	Equipment
840765	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	without equipment
840774	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	1xprotective contact socket 230V 1xRJ45
840773	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	2xprotective contact socket 230V
840827	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	2xBritish Standard (2x13 A)

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required



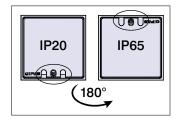
Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

#### **FONTO 4308**

Floor socket with hinged cover and fillable cover, levelling frame, 2x cable outlet (levelling feet optionally available)











levellable: +/- 6mm

#### Technical data

Dimensions (LxW)		119 x 119 mm
Mounting depth		approx. 83 mm
Levellable		77 - 89 mm
Installation height with levelling feet		95 - 140 mm
Installation height with threaded pin	extension	95* - 240 mm
Recess depth for flooring		7 mm
Material: Aluminium		anodised
	(salt and seawater resistant)	
Color	`	anodised
Max static load		20kN

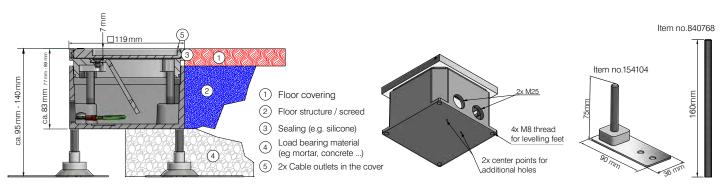
#### Features

- Frame can be levelled in the offset state (+/- 6 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover including 2x cable outlet
- For 2x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Protective cover made of cardboard to prevent damage during the construction phase (integrated in packaging)
- Can be driven over when closed
- When closed, suitable for maintenance with wet sweepers (IP65)
- When closed and plugged in only for dry-cleaned floor (IP20)

Item no.	Description	Equipment
840766	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	without equipment
840776	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	1xprotective contact socket 230V 2xRJ45
840775	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	2xprotective contact socket 230V
840830	FONTO 4301with hinged cover and cable outlet, 119 x 119 x 83 mm, closed IP65, Anodised aluminium, 2 modules 45 x 45 mm, levellable +/- 6 mm	2xBritish Standard (2x13 A)

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required



Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

### FONTO with removable cover

#### **FONTO 8301**

Floor socket with removable cover and levelling frame, 4xcable outlet (levelling feet optionally available)



#### Technical data

Dimensions (LxW)

Mounting depth

Levellable

Installation height with levelling feet

Installation height with threaded pin extension

Material: Aluminium

240 x 240 mm

approx. 95 mm

90 - 100 mm

105 - 150 mm

105\* - 250 mm

anodised

(salt and seawater resistant)

Color anodised

Max. static load 20kN

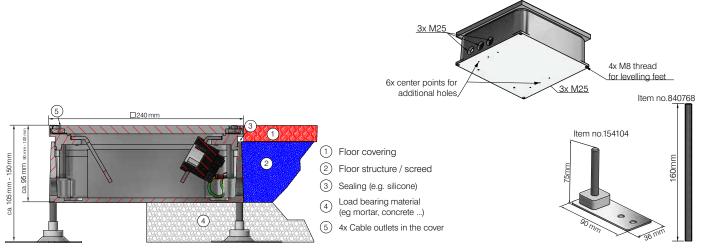
Item no.	Description	Equipment
840845	FONTO 8301 with hinged cover and cable outlet, 240 x 240 x 95 mm, closed IP65, Anodised aluminium, for 8 modules 45 x 45 mm, levellable +/- 5 mm	without Equipment

#### Features

- Frame can be levelled in the offset state (+/- 5 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover including 4x cable outlet
- For 8x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Can be driven over when closed
- When closed, suitable for maintenance with wet sweepers (IP65)
- When closed and plugged in only for dry-cleaned floor (IP20)

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840862	FONTO cable outlet, insertion piece for cable outlet, floor socket FONTO 8301 and FONTO 8308
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required



Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

# FONTO with removable cover

# **FONTO 8308**

Floor socket with removable cover and fillable cover, levelling frame, 4xcable outlet (levelling feet optionally available)



#### Technical data

Dimensions (LxW) 240 x 240 mm Mounting depth approx. 95 mm Levellable 90 - 100 mm Installation height with levelling feet 105 - 150 mm Installation height with threaded pin extension 105\* - 250 mm Recess depth for flooring 7 mm Material: Aluminium anodised (salt and seawater resistant) anodised

20kN

Item no.	Description	Equipment
840848	FONTO 8308 with cover for flooring and cable outlet, 240 x 240 x 95 mm, closed IP65, Anodised aluminium for 8 modules 45 x 45 mm, levellable +/- 5 mm	without Equipment

# **Features**

Max. static load

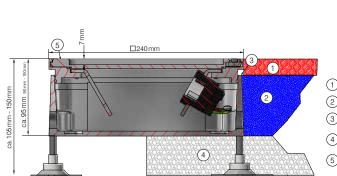
- Frame can be levelled in the offset state (+/- 5 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with hinged cover including 4x cable outlet
- For 8x input 45 x 45 x 4 mm (e.g. Schuko, RJ45, TV, HDMI, USB etc.)
- Can be driven over when closed
- When closed, suitable for maintenance with wet sweepers (IP65)
- When closed and plugged in only for dry-cleaned floor (IP20)

# Accessories / spare parts

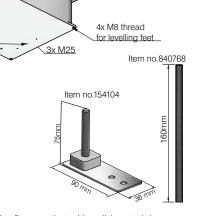
Item no.	Description	
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60	
840862	FONTO cable outlet, insertion piece for cable outlet, floor socket FONTO 8301 and FONTO 8308	
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized	

<sup>\*</sup> Shorten the setscrew as required

6x center points for additional holes



- (1) Floor covering
- 2 Floor structure / screed
- 3 Sealing (e.g. silicone)
- 4 Load bearing material (eg mortar, concrete ...)
- (5) 4x Cable outlets in the cover



Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

# FONTO with removable cover

# **FONTO 9301**

Floor socket with removable cover and levelling frame, cable outlet (levelling feet optionally available)





#### Technical data

Dimensions (L×W×H) Mounting depth

Installation height with levelling feet Material

Cover/Frame

Protection category

Cover Closure type Cable outlet Max. static load Supply cable:

Levelling feet:

320×240×276,5 mm 276,5 mm (Delivery status) 292 - 336 mm

Anodised

(salt and seawater resistant)

Socket V2A (1.4301)

IP54 - IP67

Drainage/Note drainage Removable cover

Snap lock yes

5t (50kN) 2×M20 below

2×M25 below yes (optionally)

# **Features**

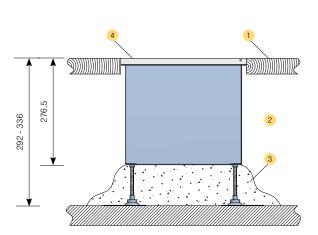
- for indoor or outdoor use
- can be driven over when closed
- Cover with 4-edge lock available on request

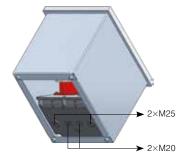
Item no.	Description	Equipment
860856	FONTO 9301	2×CEE 16 / 5
860926	FONTO 9301	2×CEE 16/3
861005	FONTO 9301	1×CEE 16 / 5 2×T25
860860	FONTO 9301	1×CEE 32 / 5
860862	FONTO 9301	1×CEE 16 / 5 2×protective contact socket
860864	FONTO 9301	1×CEE 16 / 5 1×British Standard (1×13 A)
860866	FONTO 9301	2×British Standard (2×13 A)

# Accessories / spare parts

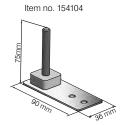
Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840862	FONTO cable outlet, insertion piece for cable outlet, floor socket
220847	FONTO recess box in polystyrene

\* Shorten the setscrew as required





- Floor covering
- Floor structure / screed
- Load bearing material (eg mortar, concrete ...)
- 4x Cable outlet in cover



# **FONTO 9308**

Floor socket with removable cover and fillable cover, levelling frame, cable outlet (levelling feet optionally available)





#### Technische Daten

Dimensions (L $\times$ W $\times$ H) Mounting depth

Installation height with levelling feet

Material

Cover/Frame

Protection category

Cover Closure type Cable outlet Max. static load Supply cable:

Levelling feet:

320×240×276.5 mm 276.5 mm (Delivery status) 292 - 336 mm

Anodised

(salt and seawater resistant) Socket V2A (1.4301)

IP54 - IP67

Drainage/Note drainage

Removable cover

Snap lock yes 5t (50 kN)

2×M20 below

2×M25 below

yes (optional)

# **Features**

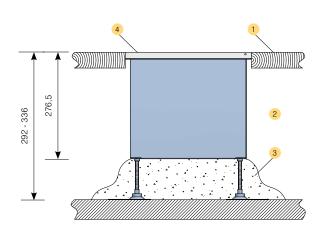
- for indoor or outdoor use
- can be driven over when closed
- Cover with 4-edge lock available on request

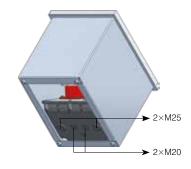
Item no.	Description	Equipment
860857	FONTO 9308	2×CEE 16/5
861006	FONTO 9308	1×CEE 16 / 5 2×T25
860861	FONTO 9308	1×CEE 32 / 5
860863	FONTO 9308	1×CEE 16 / 5 2×protective contact socket
860865	FONTO 9308	1×CEE 16 / 5 1×British Standard (1×13 A)
860867	FONTO 9308	2×British Standard (2×13 A)

# Accessories / spare parts

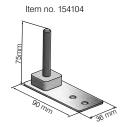
Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840862	FONTO cable outlet, insertion piece for cable outlet, floor socket
220847	FONTO recess box in polystyrene

\* Shorten the setscrew as required





- 1 Floor covering
- 2 Floor structure / screed
- 3 Load bearing material (eg mortar, concrete ...)
- 4x Cable outlet in cover



# **FONTO** with screw cover

# **FONTO 4970W**

Floor socket with screw cover and outlet pipe levelling frame (levelling feet optionally available)











#### Technical data

Dimensions (LxW)

119 x 119 mm

Mounting depth
 approx. 83 mm

Levellable
77 - 89 mm

Installation height with levelling feet
95 - 140 mm

Installation height with threaded pin extension
Material: Aluminium

(act and accustors)

(salt and seawater resistant)

Color anodised

Max. static load 20kN

# Features

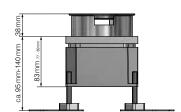
- Frame can be levelled in the offset state (+/- 5 mm) for simple adjustment to the finished floor level
- Floor socket to be placed flush with the floor with screw cover and outlet tube (recessed in the floor when not in use)
- For 1x input 45 x 45 x 4 mm and 1x input 22,5 x 45 x 4 mm
- (e.g. Schuko, RJ45 etc.)
- Protective cover made of cardboard to prevent damage during the construction phase (integrated in packaging)
- IP 67, when closed
- During plugged in (with outlet pipe attached, water height max. 18 mm) suitable for maintenance with wet sweeping equipment
- Tread-proof when plugged in

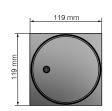
Item no.	Description	Equipment
840983	FONTO 4970W with screw cover, 119 x 119 x 83 mm, Anodised aluminium, with water protection tube, closed IP67, 1 module 45 x 45 mm $+$ 22,5 x 45 mm, levellable $+$ /- 6 mm	without equipment

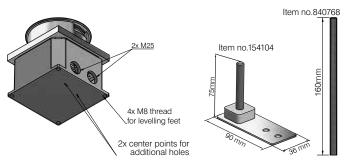
#### Accessories / spare parts

Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

\* Shorten the setscrew as required









# **FONTO 5000 / FONTO 5000 R**

Floor socket with screw cover and outlet pipe levelling frame (levelling feet optionally available)











#### Technical data

$\Box$	ime	naid	nn

Dimensions		
FONTO 5000 R	1:	56x156mm
FONTO 5000	1:	57x157mm
Mounting depth	а	pprox. 95 mm
Installation height with levelling feet	10	00 mm
Installation height with threaded pin	extension 1	00* - 205 mm
Material	А	Juminium natur
	(salt and seawate	r resistant)
Color	a	nodised

40kN

Features

130 mm

Max. static load

- Floor socket to be placed flush with the floor with screw cover and outlet tube (recessed in the floor when not in use)
- For 2x inputs 45 x 45 x 4 mm and 2x inputs 22.5 x 45 x 4 mm (e.g. Schuko, RJ45, etc.)
- IP 67, when closed
- During plugged in (with outlet pipe attached, water height max. 14 mm) suitable for maintenance with wet sweeping equipment

157 mm

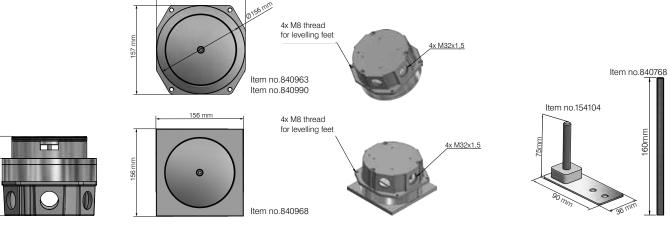
- Tread-proof when plugged in

Item no.	Description	Equipment
840968	FONTO 5000.R with screw cover, 156 x 156 x 95 mm, Anodised aluminium, with water protection tube, closed IP67	without Equipment
840963	FONTO 5000 with screw cover, 156 x 95 mm, Anodised aluminium, with water protection tube, closed IP67	without Equipment
840990	FONTO 5000 with screw cover, 156 x 95 mm, Anodised aluminium, with water protection tube, closed IP67	2xprotective contact socket 230V 2xRJ45 1xblind

#### Accessories / spare parts

Item	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required



Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

# **FONTO Inserts**

# **FONTO Inserts**

Sockets		
Item no.	Description	
285387	Schuko socket outlet 16A 230V white mosaic	
107178	Socket outlet French-Belgian standard, 16A 230V white mosaic	60
121121	2P+E 13A socket outlet to British standard. Connection with screw terminals	1 =

Switches	, signalling devices	
Item no.	Description	
132755	2-pole 20A circuit breaker with 0-1 imprint with LED	
308409	Changeover switch 1pole 10A without LED unit (LED insert item no. 132757)	1

Special a	assignments	
Item no.	Description	
286428	Socket outlet RJ45 8P CAT6 shielded	
302856	Socket outlet French-Belgian standard, 16A 230V white mosaic	8
302858	USB charging module, 1 socket, 750mA	
302859	USB charging module 2gang, 1500mA	
302857	TV single socket TV-SAT end socket	0
119312	TV single socket TV-R-SAT end socket	<b>©</b>
127367	Potential equalisation socket 1-module	***



# **FONTO Inserts**

Blind cov	rers	
Item no.	Description	
286143	Blank cover Legrand mosaic white, 1 mod.	
300483	Blank cover Legrand mosaic white, 2 mod.	
Accesso	ies	
Item no.	Description	
240470	M25 screw plug with metric thread grey	
270503	M32 screw plug with metric thread grey	
308408 133354	00x flat gasket M25 neoprene black inside 23 mm, outside 30 mm, material thickness 1.2 mm 100x flat gasket M32 neoprene black inside 30 mm, outside 40 mm, material thickness 1.5 mm	0
181535	AGRO M25 hose connection nipple, black, straight, for ø21.2 mm plastic hose	
153458	AGRO M25 hose connection nipple, black, straight, for ø28.5 mm crimped hose	
282660	Schlauch-Anschlussnippel AGRO M25 schwarz gerade, für KstSchlauch ø28,5mm	
300724	Corrugated hose AGRO ROHRFLEX PA6 black 16.5/21.2mm flexible (PU=50m)	
282666	Corrugated conduit ROHRFLEX PA6 black 23.0/28.5mm flexible (PU=50m)	
024202	Corrugated conduit ROHRFLEX PA6 black 29.0/34.5mm flexible (PU=25m)	
154104	Levelling foot incl. grub screw M8×60mm for floor socket FONTO/MASSO	
840768	Grub screw M8×160mm for levelling foot for floor socket FONTO/MASSO	

# MASSO with screw cover

# MASSO 3000.2

Retractable floor socket with screw cover (cover flush with floor) (levelling feet optionally available)













# Technical data

Dimensions (LxWxH) 170 x 170 x 142 mm
Installation height with levelling feet 145 mm
Installation height with threaded pin extension 145\* - 245 mm
Material: Aluminium anodised
(salt and seawater resistant)
Color anodised
Max. static load 40kN

# **Features**

- Retractable floor socket to be placed flush with the floor
- Equipment: see article numbers
- When closed: IP67, drivable
- In open state: up to IP20, step resistant

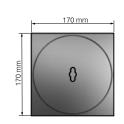
Item no.	Description	Equipment
840919	MASSO 3000.2 Retractable floor socket, with screw cover, 170 x 170 x 142 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	without equipment
840921	MASSO 3000.2 Retractable floor socket, with screw cover, 170 x 170 x 142 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	4xprotective contact socket
840924	MASSO 3000.2 Retractable floor socket, with screw cover, 170 x 170 x 142 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	3xprotective contact socket 1xRJ45
840928	MASSO 3000.2 Retractable floor socket, with screw cover, 170 x 170 x 142 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	2xprotective contact socket 1xRJ45 1xTV-R-SAT

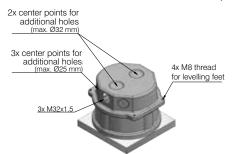
# Accessories / spare parts

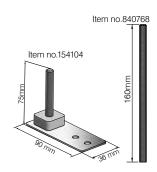
Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

\* Shorten the setscrew as required











Retractable floor socket with screw cover (cover flush with floor) (levelling feet optionally available)















# Technical data

Dimensions (LxWxH) 170 x 170 x 190 mm
Installation height with levelling feet 190 mm
Installation height with threaded pin extension 190\* - 290 mm
Material: Aluminium anodised
(salt and seawater resistant)

Color (salt and seawater resistant anodised Max. static load 40kN

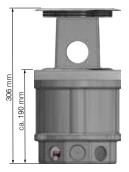
#### Features

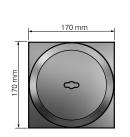
- Retractable floor socket to be placed flush with the floor
- Equipment: see article numbers
- When closed: IP67, drivable
- In open state: up to IP54 (depending on assembly variant), step resistant

Item no.	Description	Equipment
840912	MASSO 4000 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	without equipment
840949	MASSO 4000 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	4xprotective contact socket
840953	MASSO 4000 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	3xprotective contact socket 2xRJ45
840956	MASSO 4000 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	3xprotective contact socket 1xcom- pressed air DN7.2

# Accessories / spare parts

recording y spairs paire		
Item no.	Description	
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60	
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized	



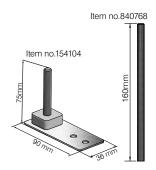


additional holes (max. Ø32 mm)

\* Shorten the setscrew as required

3x center points for additional holes (max. Ø25 mm)

4x M8 thread for levelling feet



Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

2x center points for

Retractable floor socket with screw cover (levelling feet optionally available)















# Technical data

Dimensions (LxWxH) 170 x 170 x 190 mm
Installation height with levelling feet 190 mm
Installation height with threaded pin extension 190\* - 290 mm
Material: Aluminium anodised
(salt and seawater resistant)
Color anodised
Max. static load 40kN

# **Features**

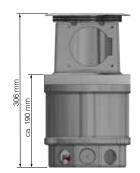
- Retractable floor socket to be placed flush with the floor
- Equipment: see article numbers
- When closed: IP67, drivable
- In open state: up to IP54 (depending on assembly variant), step resistant

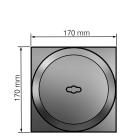
Item no.	Description	Equipment
840909	MASSO 4010 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	without equipment
840931	MASSO 4010 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	1xCEE 16/5
840932	MASSO 4010 Retractable floor socket, with screw cover, 170 x 170 x 190 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	1xCEE 32/5

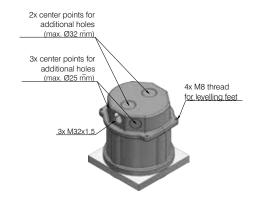
# Accessories / spare parts

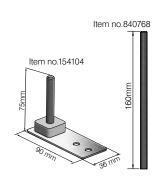
Item no.	Description
154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

<sup>\*</sup> Shorten the setscrew as required











Retractable floor socket with screw cover (levelling feet optionally available)







40kN









# Technical data

Dimensions (LxWxH) 170 x 170 x 255 mm Installation height with levelling feet 255 mm Installation height with threaded pin extension 255\* - 355 mm Material: Aluminium anodised (salt and seawater resistant) anodised

Color Max. static load

# **Features**

- Retractable floor socket to be placed flush with the floor
- Equipment: see article numbers
- When closed: IP67, drivable
- In open state: up to IP54 (depending on assembly variant), step resistant

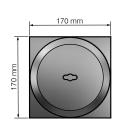
Item no.	Description	Equipment
840905	MASSO 8000 Retractable floor socket, with screw cover, 170 x 170 x 255 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	without equipment
840940	MASSO 8000 Retractable floor socket, with screw cover, 170 x 170 x 255 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	6xprotective contact socket
840943	MASSO 8000 Retractable floor socket, with screw cover, 170 x 170 x 255 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	5xprotective contact socket 2xRJ45
840959	MASSO 8000 Retractable floor socket, with screw cover, 170 x 170 x 255 mm, IP67, Anodised aluminium, incl. key, not lockable when plugged in, not lockable when inserted	3xprotective contact socket RCBO/0,03/ 16A

# Accessories / spare parts

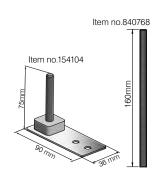
	Item no.	Description
	154104	FONTO/MASSO levelling screw: consisting of: 1x base plate + 1x levelling pin M8x60
2x center points for additional holes (max. Ø32 mm)	840768	FONTO/MASSO grub screw extension M8x160 mm, galvanized

435

255







Levelling feet are only used to set up the floor socket. Loading class / stability is only achieved by backfilling the floor socket with solid material (mortar, concrete ...).

# Solid rubber points heating distributor

# Solid rubber points heating distributor Series 6400



With the help of the practical GIFAS connection distributors, the power for the point heating along the rail network is available at any time and without great effort. During use, all components in the inner part are protected from vibrations and the effects of the weather by the vulcanised, break-proof and impact-resistant butyl rubber housing. The seals between the cover and closure provide additional protection. The electrical connection is made via the integrated solid rubber mounting block inside the distributor. For connection and maintenance work, the manifold can be opened quickly and easily using the ½-turn lock with tools.

The connection distributors can be mounted on standard earth feet using the threaded bush on the underside for central fastening.

#### **Product features**

- Vibration-damping solid rubber material with integrated solid rubber mounting blocks
- No condensation in the event of large temperature fluctuations
- Insensitive to welding and sparks
- Corrosion-resistant
- High UV. ozone and weather resistance
- Silicone-free and halogen-free
- Lid with yellow hinge made of high-quality plastic, with inlaid seal and ribbing (anti-slip protection).
- External locking blocks and locking plugs black made of high-quality plastic
- Lid labelling:
- 1x electric flash black in black triangle, background yellow
- 1x WHZ
- 3x Open Close at each locking plug

#### Technical data

Glow wire test IEC 60695-2-1 with 960°C (certified) Needle flame test DIN EN 60695-11-5; 2005-11

TSI fire class 'B' EN 13501-1

Dielectric strength according to standard IEC 60243

Protection category IP65
Protection class II
Impact resistance IK10
Dimensions (DxH) 296x180mm

# Earth base for point heating distributor



Erdfuss für die Montage eines Weichenheizungsverteiler

# Technical data

Material Hot-dip galvanised or plastic PA6

Dimension (H) 450mm

Accessories	
107405	Hot-dip galvanised earth base for point heating distri- butors, height 450mm, for point heating connection distributors
840706	Earth foot Material PA6 Colour black, height 450 mm, floor mounting 220 x 50 mm, distributor mounting 170 x 50mm Hole 14/18/14mm

Series	Assembly examples
6400	Point heating distributor, hexagonal 2x M32 cable glands with dummy discs 6x M20 cable glands with dummy discs



# Solid rubber signal junction boxes

# Solid rubber signal junction boxes Series 1812 / 2518 / 2612 / 2712







Series 1812

Series 2518

Series 2612 Series 2712

Rubber as a material has excellent properties in terms of mechanical and electrical strength! We have also been successfully using our rubber housings in railway safety technology and its infrastructure for many years. Our products are used particularly in the sensitive areas of signalling, monitoring and control of e.g. point heating systems. Point heating distributors or signal junction boxes - expertise from GIFAS! International standards and their fulfilment are always a priority for us.

# Product features (Series 1812)

- No condensation formation during extreme temperature fluctuations
- Resistant to welding spatter and sparks
- Corrosion resistant
- High UV, ozone and weather resistance
- Silicone-free
- Completely halogen-free
- Dielectric strength 7kV/mm according to EN60243
- Fire behaviour classification 'B' according to ÖNORM EN 13501-1 in accordance with TSI
- Pressure and suction tested for use in railway tunnels with high-speed traffic up to 350 km/h according to TSI
- Yellow cover made of high-quality plastic, with inserted seal
- 2x external locking blocks black made of high-quality plastic
- 2x locking pins made of high-quality black plastic

### Product features (Series 2518, 2612, 2712)

- Vibration-absorbing solid rubber material with integrated solid rubber mounting blocks
- No condensation in the event of large temperature fluctuations
- Insensitive to welding and sparks
- Corrosion-resistant
- High UV, ozone and weather resistance
- Lid with yellow plastic hinge, with inserted seal and ribbing (anti-slip protection).
- The sealing plugs are easy to open, but only with tools, using a ½-turn lock.
- Weather-resistant seals are inserted between the lid and the locking blocks on the locking plugs.
- High-voltage dielectric strength in accordance with the IEC 60243 standard
- Certified dielectric strength 7 KV / mm (up to 70 KV possible with our enclosures)

## Technical data

Glow wire test IEC 60695-2-1 with 960°C (certified) Needle flame test DIN EN 60695-11-5; 2005-11 'B' EN 13501-1 TSI fire class according to standard IEC 60243 Dielectric strength Protection category IP65 Protection class Ш Impact resistance IK10 Dimensions (LxHxW) Series 1812 180x125x90mm Series 2518 250x180x120mm Series 2612 260x120x85mm 260x120x116mm Series 2712

Veight	
Series 1812	2kg
Series 2518	3,2kg
Series 2612	1,9kg
Series 2712	2,3kg

Corios	Accomply evenues
Series	Assembly examples
1812	3x cable glands M20 (clamping range 7-4mm) incl. sealing ring, 5mm and sealing ring, pressure ring and blind plug 8x disconnect terminals STS 2.5-MT grey, labelled 1-8, on top-hat rail Incl. 2x holes for mounting on earth foot
2518	1x cone cable gland PG29 incl. cut-out sealing ring sealed with blind disc 4x cone cable glands PG21 with cut-out sealing ring, 3 of which are sealed with blind discs 2x aluminium rails prepared for mounting 2x pcs. STV2/10 each
2612	3x conical cable glands PG21 with cut-out sealing ring, 2 of which are sealed with blind discs 1x aluminium rail prepared for mounting of 2 STV2 /10
2712	3x conical cable glands PG21 with cut-out sealing ring, 2 of which are sealed with blind discs 1x aluminium rail prepared for installation of 2 STV2 /10

# **Application cases**

# **FONTO**



























# **Application cases**

# Point heating distributor / signal junction box





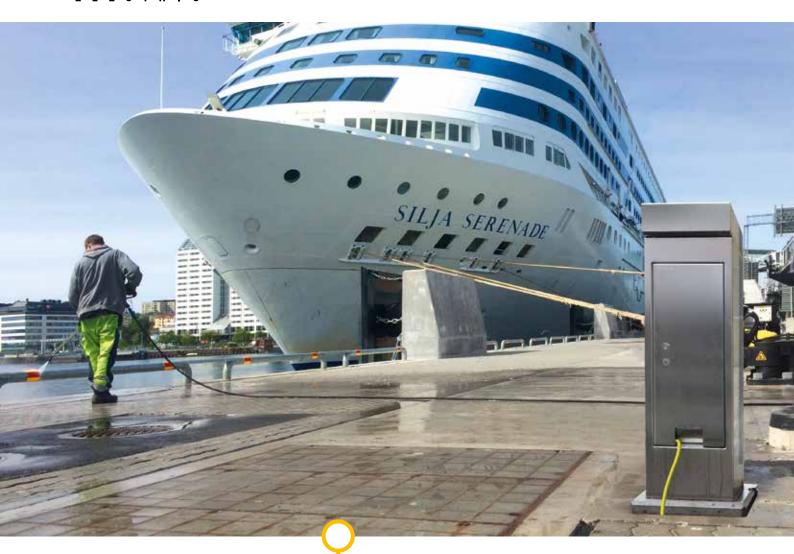








# **ENERGY COLUMNS / POWER BOLLARDS**



# POWER FOR ALL REQUIREMENTS.

Energy poles from GIFAS easily distribute the right amount of power, right where you need it. Our range of models blend into their environment seamlessly and harmoniously. They offer a reliable power supply whenever needed, tailored to your own specific requirements. Made in Neuss.

Energy columns	90
Power bollards	92
Application cases	98

# **Energy columns**

# **GAS 160**



#### **Product features**

- Suitable for indoor and outdoor use
- Closed aluminium profile
- Sturdy design, excellent stability
- Corrosion-free
- Surface impervious to dirt
- Individual equipment on all 4 sides
- Separator plate to separate various power circuits
- Customer-specific equipment
- All kinds of drilling patterns and use of single or multiple frames are possible
- Ceiling connection variant for vertical connection technology
- Can be equipped up to a height of 6m

#### Technical data

Material anodised aluminium
Fastening material V2A
Protection category IP54 = splashproof

(with corresponding built-in elements)

Dimensions 160x110mm closed aluminium profile

length as per the customer's wishes up to

6m

Equipment as per the customer's wishes on all four

sides

Colour anodised silver

other RAL colours available upon request

Terminal blocks up to 16mm<sup>2</sup>

5-pole, L1, L2, L3, N, PE

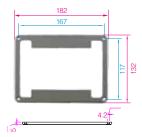
mounted on carrying rail system

Base plate included 4 fastening screws

DIN 7991.M8.40.VA

4 brass dowels





### Possible connection combinations:

Electricity
Compressed air
Video, audio
Data and telephone combinations
Low-voltage combinations

CEE surface-mounted sockets up to 63A etc.

# Supplied package

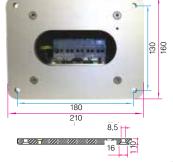
Aluminium column Base and cover plate Terminal block up to 16mm²

Fastening screws for the standard device range Fastening screws for the base plate incl. dowel

Also equipped as necessary (CEE built-in sockets, fuses, etc.)



Compressed air and data socket





Base plate with fastening material

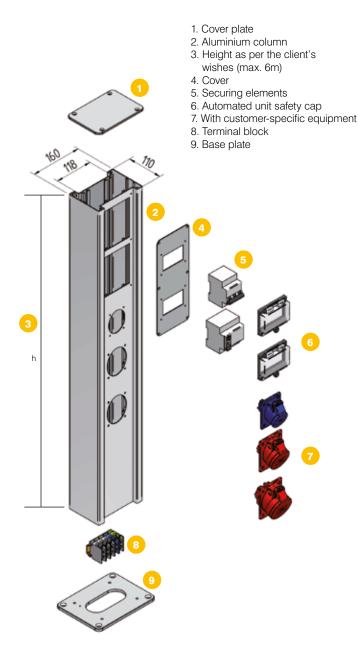
Item no.	Series	Assembly examples
276895	GAS 160	2x protection plugs, 2x CEE 16A/400V, sockets without fuse protection, height 800mm
269720	GAS 160	2x protection plugs, 1x FI 25/0,03A, 1x data socket with 2x RJ45, height 550mm
319421	GAS 160	2x protection plugs, 2x LS 16A.1P.B, 1x CEE 32A/400V, 1x LS 32A.3P.C, 2x CEE 16A/400V, 2x LS 16A.3P.C, 1x El 63/0.03A type A for all sockets, height 1400mm

# Other designs available upon request.

Cuff for double covers and double bases



# GAS 160 structure



# **GAS 160 LED**





The ES luminaire head, made from satinised PMMA plastic, is included in the standard GIFAS ES 160 power column range. LED light in two colour variants (cold white and warm white). Pre-wired and ready for connection.

#### **Product features**

- direct mains supply connection (no power supply unit needed)
- 360° light distribution
- can be used for the entire ES 160 range
- retrofit equipping possible
- 2 light colour variants available
- high light efficiency
- low power consumption
- long lifetime
- vibration-resistant
- immediate light output
- Light unit made from solid PMMA material, therefore extremely robust

# Technical data

Operating voltage 230 VAC
Electric power supply power supply
Illuminant 1×4.5 W LED-Modul
Operating output 4.5 W
Light output 84.4 Im/W
Lighting current 380 Im

Colour temperature (beam angle) 3,000 K/4,200 K

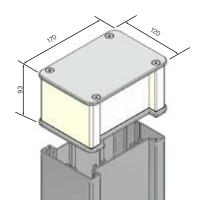
Protection category IP54

 $\begin{array}{ll} \text{Protection class} & \text{I (Protective conductor)} \\ \text{Temperature range operation} & -20^{\circ}\text{C to } +40^{\circ}\text{C} \\ \text{Dimensions (L}\times\text{W}\times\text{H)} & 170\times120\times93\,\text{mm} \end{array}$ 

Weight 1.9 kg

Light unit material PMMA satinised
Decorative feature material aluminium anodised

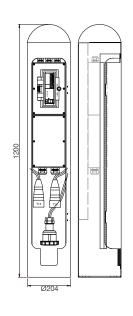
Item no.	Description
860409	ES-LED luminaire head, cool white, for ES 160 alu column
860412	ES-LED luminaire head, warm white, for ES 160 alu column



# Power bollards

# **RONDO 200**





# **RONDO 300**



Series 200 Series 300

The RONDO columns are lockable, can be custom-equipped and offer excellent protection against vandalism. When closed, energy is drawn via the cable outlet flap below the doors. A flange plate allows the column to be mounted on a base outlet and then connected to the grid. The RONDO column has a facility for the distributor housing in which the electrical distribution is integrated. Other connections (water, air, etc.) can also be integrated. Also useful as transit protection and route securing in combination with a secure and problem-free energy supply.

# **Product features**

- Customised distributor equipment (solid rubber distributor) as per the customer's wishes, technical specifications and requirements
- Securing material installed under impact-resistant Macrolon cover
- Excellent operating safety and protection against unauthorised access and vandalism

#### Technical data

Dimensions

Weight

Housing material Coating Colour Power supply Max. CEE Max. Fuse protection

Max. Access Locking system Ø=204xH=1200mm RONDO 200 Ø=324xH=1158mm RONDO 300 approx. 25kg RONDO 200 approx. 55kg RONDO 300 V2A stainless steel construction Powder-coated or polished natural available in all RAL colours built into the bollard 32A 80A

R200 Door with a cylinder lock
R300 Door with swivelling lever for profile
half cylinder

# Available upon request

max. Ø36 mm

- RONDO with a diameter of 500mm

Item no.	Description	Input	Output	Installations / design
248539	RONDO 200 RAL 9007 grey aluminium	1 M40 cable gland 1 5-pole terminal block	1 CEE connector 5x32A/400V 2 230V protective contact plug connectors 1 63/0.03A fault-current circuit breaker	Protective devices located behind 1 transparent protective cap
338450	RONDO 300 RAL 6028 Stainless steel, polished	2 M40 cable glands 1 10-pole terminal block	2 CEE built-in sockets 5x32A/400V 2 230V protective contact sockets 1 63/0.03A fault-current circuit breaker	1 3/4" water connection with ball cock Protective devices located behind 1 transparent protective cap 1x 3-square (8 mm) sash lock
338451	RONDO 300 RAL 9007 grey aluminium	2 M40 cable glands 1 5-pole terminal block	1 CEE built-in socket 5x32A/400V 1 CEE built-in socket 5x16A/400V 2 230V protective contact sockets 1 63/0.03A fault-current circuit breaker 1 40/0.03A fault-current circuit breaker	1x water supply connection 3/4" with ball shut-off valve 1x LS switch 6 A, 1-pole in B characteristic for the heating tape as frost protection for the water connection Protective devices behind 2 transparent arranged behind 2 transparent protective flaps 1x 3-square (8 mm) sash lock

Other designs available upon request.



# Floor mounting part

# Technical drawing of floor installation part for RONDO 200 / 300



# Customised solutions are our strength!

Plan the optimum design for your area of application with our technicians.

# Floor mounting part

The ground installation part with anti-twist protection is used when no concrete base is available on site for bollard installation. The excavation work as well as the professional and standardised installation of the installation of the bollard base installation part are carried out on site.

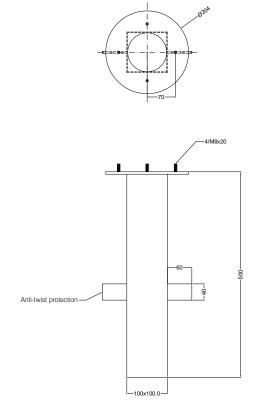
# Water and waste water connection

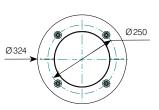
A water supply pipe with ball valve and hose connection piece as well as a mineral-reinforced, hot water-resistant DN50 waste water drainage pipe are optionally available in the floor installation part. The water connection with ball valve and the waste water connection must be provided by the customer (frost protection device for water connection possible as an option).

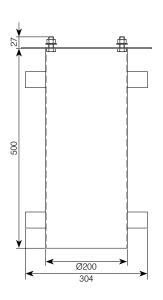




Item no.	Description
246379	Floor installation part for RONDO 200 HxD 500x204
338449	Floor installation part for RONDO 300 HxD 500x304







# Power bollards

# **QUADRO**

QUADRO – the clever solution. The QUADRO can be used for many outdoor applications and optically fits perfectly into the environment. QUADRO has perfect vandal-proof design, and thanks to the compact internal rubber distributor the column is also ideally suited to very rough environments.

Thanks to the flexible cable outlet flap, outside influences can also be reduced to a minimum during operation.

# **Product features**

- Modular configuration
- Three possible cover versions
- Various power distribution options
- Individual lock versions

# Technischal data power distributor 7400

Protection category IP54

Power supply Built into column Dimensions (WxHxD) 320x1100x320mm

# Technischal data power bollard

Protection category Material IP65 with closed cable entry V4A stainless steel construction,

optionally powder-coated

Attachment Floor flange

Lock Door lockable with cylinder lock / 4-sided

Dimensions (WxHxD) 320x1100x320mm





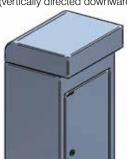
without lighting



diffuse lighting



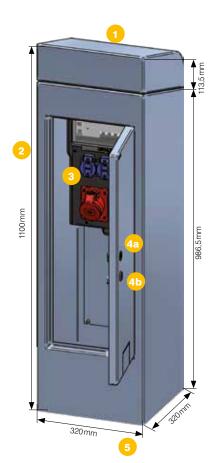
LED lighting (vertically directed downwards)



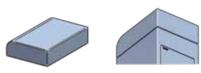
Item no.	Description	Locks	Assembly examples
on request	QUADRO without lighting	Cylinder lock / square	unequipped
on request	QUADRO without lighting	Cylinder lock / square	Distributor Series 7400, 3x safety plug, 1xCEE 16A/400V, 1xCEE 32A/400V
on request	QUADRO with diffuse lighting	Cylinder lock / square	Distributor Series 7400, 3x safety plug, 1xCEE 16A/400V, 1xCEE 32A/400V
on request	QUADRO with LED lighting	Cylinder lock / square	Distributor Series 7400, 3x safety plug, 1xCEE 16A/400V, 1xCEE 32A/400V
on request	Floor flange to QUADRO		

# Other designs available upon request.



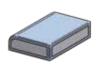


# 1 Cover module



# Cover module without lighting

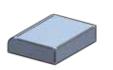
- Classic cover version
- Vandal-proof, sturdy, no maintenance







- Cover module with diffuse lighting Illumination of QUADRO on three
- surrounding sides using muted light No glare, discreet illumination of environment

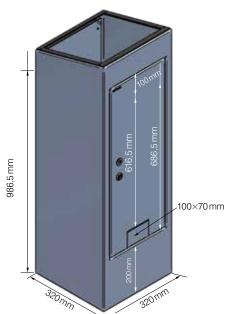




# Cover module with LED lighting

- Lighting of front of QUADRO with latest LED lighting Power-saving, energy-conscious High visibility column

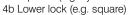




#### 3 Power distributor 7400



4 Locking 4a Top lock (e.g. cylinder lock)





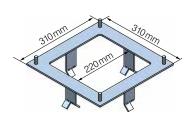


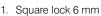






- 5 Floor flange
- Ideal for installation in solid base (e.g. concrete)
- Fast installation possible
- Easy levelling possible





- 2. Square lock 8 mm
- 3. Double-bit lock
- 4. KABA 5000 type lock

# Power bollards

# **NORDSEE**



The NORDSEE power bollard can be used for various outdoor applications and blends in perfectly with its surroundings. The NORDSEE power bollard is safe from vandalism and, thanks to the compact internal solid rubber distributor, the column is ideally suited for harsh environments. The flexible cable outlet flap means that external influences can be reduced to a minimum, even during operation.

# **Product features**

- Sturdy stainless steel design
- Individual distributor equipment (solid rubber distributor) as per the customer's wishes
- Securing material installed under impact-resistant Macrolon cover
- Service door with cylinder lock



#### Technical data for distributor 7900

Protection category IP54
Power supply built into the column
Dimensions (WxHxD) 360x500x173mm

# Technical data for bollard

Protection category Material

Lock Dimensions (WxHxD) Total weight IP65 with closed cable feed V4A stainless steel construction,

powder-coated

lockable door with cylinder lock

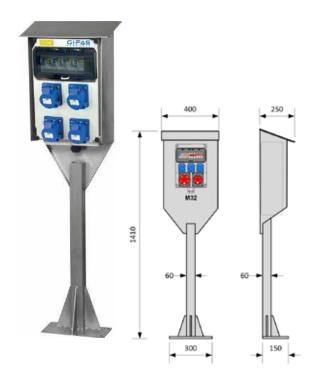
500x1500x450mm

120kg

Item no.	Input	Output	Installations / design
278956	1x M63 cable gland 1x 5-pole terminal block	1x CEE built-in socket 5x63A/400V 1x CEE built-in socket 5x32A/400V 1x CEE built-in sockets 5x16A/400V 3x 230V protective contact sockets 1x 63/0.03A fault-current circuit breaker	1x 3/4" water connection with DVGW approval Protective devices located behind 1 transparent protective cap
272085	1x M32 cable gland 1x 5-pole terminal block	1x CEE built-in socket 5x63A/400V 1x CEE built-in socket 5x32A/400V 2x CEE built-in sockets 5x16A/400V 6x 230V protective contact sockets 1x 63/0.03A fault-current circuit breaker	1x digital three-phase current meter Protective devices located behind 2 transparent protective caps



# **MARINA**



The energy bollards made of stainless steel are ideal for the outdoor area of industrial plants up to the port area. They provide all the necessary connections directly where they are needed and, thanks to the rustproof stainless steel housing, are particularly suitable for outdoor use.

# Product features

- Integrated: robust wall distributor made of plastic, alternatively wall distributor made of solid rubber with the desired equipment
- Integrated base with mounting holes for stability

# Technical data

Protection category IP54

Material V2A stainless steel
Material thickness 1,5 to 4mm

# (!

# Optionally available

- Housing material made of V4A stainless steel
- Housing powder-coated in all common RAL colors
- IP66 / IP67



# Assembly examples

3x CEE built-in socket 16 A 5P 400 V 6h IP44/54

3x pre-fuses Neozed 32 A

3x circuit breakers 3C 16 A

1x residual current circuit breaker 4 / 40 / 0,03 A

# **Application cases**

# RONDO / NORDSEE / QUADRO



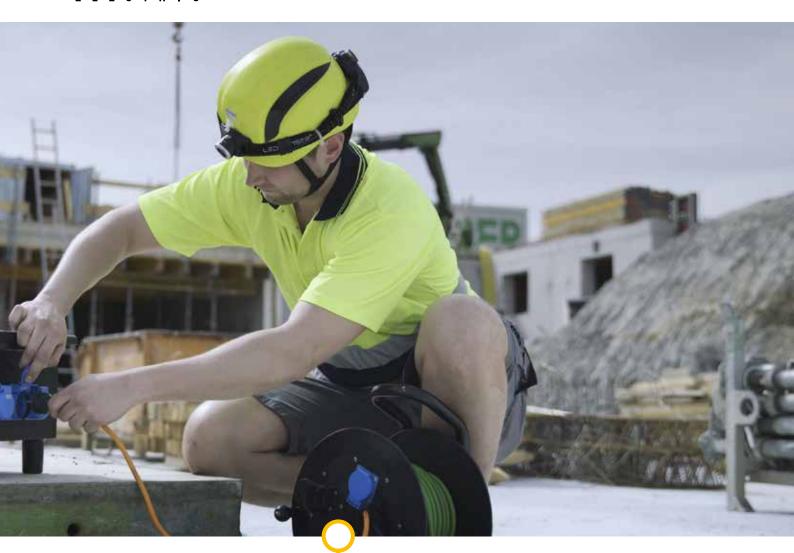












# LOOKING FOR NEW EXTENSIONS.

If you need flexible power distribution on site, GIFAS cable reels ensure that you have power exactly where it is needed. They can be fitted out as required and come with reel bodies made of solid rubber, plastic or sheet steel. Our products are designed to be handled roughly in heavy industry - tried and tested for over 60 years. Quality down-the-line.

Solid rubber cable reels	100
Pull-out cable reels	104
Hose reels	105
Application cases	106

# Solid rubber cable reels

# Series 501







# **Product features**

- Solid, halogen-free solid rubber reel bodies, full protective insulation
- Stable steel tube frame, zinc-plated and black powder-coated
- GIFAS PROFLEXX H07 cable
- High mechanical stability
- UV and weather resistant
- Impact-resistant, ageing-resistant and maintenance-free
- Ergonomic shape, good carrying comfort
- With thermal overload protection
- Internal wedge brake
- With insulating handle coating (BGI 608)
- Built in accordance with VDE 0620 Part 300
- K2-identification

# Technical data

Dimensions Dimensions of reel body Weight (without cable) Protection category Protection class

WxHxD= 250x345x205mm Ø 240mm, width 110mm approx. 3.7kg IP54 Ш



Individual components

PRCD-S+



Internal wedge brake





	Item no.	Input	Output	Fuses	Symbols
	259764	20m 3x1,5mm <sup>2</sup> with protective contact plug	3x protective contact sockets		
)	255873	25m 3x1,5mm <sup>2</sup> with protective contact plug	3x protective contact sockets		
	301253	20m 3x1,5mm² with protective contact plug	3x protective contact sockets	Personal safety switch PRCD-S+ 16/0,03A	
)	301254	25m 3x1,5mm² with protective contact plug		Personal safety switch PRCD-S+ 16/0,03A	



# Series 502







with RFID-system

#### **Product features**

- Solid, halogen-free solid rubber reel bodies, full protective insulation
- Stable steel tube frame, zinc-plated and black powder-coated
- GIFAS PROFLEX H07 cable
- High mechanical stability
- UV and weather resistant
- Impact-resistant, ageing-resistant and maintenance-free
- Ergonomic shape, good carrying comfort
- With thermal overload protection
- Internal wedge brake
- With insulating handle coating (BGI 608)
- Built in accordance with VDE 0620 and 0623 Part 300 and 100
   K2-identification

#### Technical data

Dimensions Dimensions of reel body Weight (without cable) Protection category Protection class

Hans no Institut

WxHxD=300x410x230mm Ø 300mm, width 152mm approx. 4.0kg IP54 Ш

# Product features with RFID system

- with on/off switch via RFID system (13.56 MHz HF)
- with LED status display (ready, standby, registration)
- with 1 RFID master card and 2 RFID chips





PRCD-S+

Internal wedge brake

Item no.	Input	Output	Fuses	Symbols	
253882	50m 3x1,5mm² with protective contact sockets	3x protective contact sockets			
301250	50m 3x1,5mm² with protective contact sockets	3x protective contact sockets	Personal safety switch PRCD-S+ 16/0,03A		
336475	50m 3x1,5mm² with protective contact sockets	3x protective contact sockets	RFID-system		
259809	50m 3x1,5mm² with protective contact sockets	4x protective contact sockets	RCCB 25/0.03A/2p		
259594	30m 5x2,5mm <sup>2</sup> with CEE 5x16A/400V	2x protective contact sockets 1x CEE 5x16A/400V			
301251	40m 3x2,5mm² with protective contact sockets	3x protective contact sockets	Personal safety switch PRCD-S+ 16/0,03A		
301252	50m 3x1,5mm <sup>2</sup> with protective contact sockets	4x protective contact sockets	Personal safety switch PRCD-S+ 16/0.03A		





# Solid rubber cable reels

# Series 503







Can be driven over by transport trolleys. Cable reel with protection and thermal overload protection. Protective device located behind 2 transparent protective caps.

# Product features of cable reels

- Solid, halogen-free solid rubber reel bodies, full protective insulation
- Stable steel tube frame, zinc-plated and black powder-coated
- GIFAS PROFLEXX H07 cable
- High mechanical stability
- UV and weather resistant
- Impact-resistant, ageing-resistant and maintenance-free
- Ergonomic shape, good carrying comfort
- With thermal overload protection
- Internal wedge brake
- With insulating handle coating (BGI 608)
- Built in accordance with VDE 0620 and 0623 Part 300 and 100
- K2-identification

# Technical data

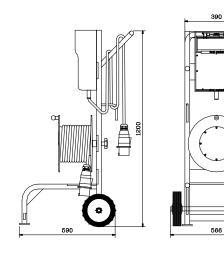
Dimensions WxHxD=340x480x300mm
Dimensions of reel body Ø 350mm
Weight (without cable) approx. 5.5kg
Protection category IP54
Protection class II

#### Product features of transport trolleys

- Solid, stable transport trolley with low-lying centre of gravity
- Black powder-coated
- Solid rubber tyres diam. 200mm bearing-mounted

#### Technical data for transport trolleys

Dimensions HxWxD=1200x590x566 mm Weight (complete) approx. 70.0 kg



Item no.	Description	Input	Output	Fuses	Symbols
254911	Solid rubber cable reel 503	50m 5x2.5 mm <sup>2</sup> with CEE 5x16A/400V	1x CEE 5x16A/400V 2x protective contact sockets	No fuse	
255370	Solid rubber cable reel 503	35m 5x6.0 mm <sup>2</sup> with CEE 5x32A/400V	1x CEE 5x32A/400V 1x CEE 5x16A/400V 2x protective contact sockets	MCB 16A 3p C MCB 16A 1p C RCCB 40/0.03A/4p	
249591	Transport trolley comprising solid rubber distributor 7800 and solid rubber reel body 503 to hold supply cable	25m 5x6.0 mm <sup>2</sup> with CEE 5x32A/400V	2x CEE 5x32A/400V 2x CEE 5x16A/400V 3x protective contact sockets	Neozed 25A Neozed 16A MCB 16A 1p B RCCB 40/0.03A/4p	<b>55 6 6</b>



# Series 518



# Product features Cable reel

- Solid rubber cable reel to DIN 14680/-A1 with blue metal frame (RAL 5002) incl. insulated carrying handle
- Folding crank handle also acts as a parking brake
- With weather-resistant sticker
- Without slip rings
- Without thermal overload protection
- Brass feet

#### Technical data

Dimensions HxWxD 380x544x310mm
Protection category IP67 / IP68
GI factor 1
Cable H07RN-F yellow / black

# Product features Solid rubber distributor

- Highest mechanical load capacity
- Resistant to alkalis / acids
- High protection category IP65
- Flame retardant, halogen-free,
- Self-extinguishing in accordance with VDE 0471
- Ready-to-connect, tested solution for
- Safe and quick installation
- Grey / black solid rubber housing made of special GIFAS rubber compound

Item no.	Description	Input	Output	Fuses	Symbols
132192	Solid rubber cable reel 518, without fittings				
282830	Solid rubber cable reel 518	5m 3x2,5mm² black, 1x protective contact sockets	45m 3x2,5mm² black, 1x protective contact sockets	without protection	
258147	Solid rubber cable reel 518	5m 3x2,5mm <sup>2</sup> 1x protective contact sockets	25m 3x2,5mm <sup>2</sup> 1x protective contact sockets	without protection	
109334	Solid rubber cable reel 518	3m 3x2,5mm <sup>2</sup> 1x protective contact sockets	50m 3x2,5mm <sup>2</sup> 1x protective contact sockets	without protection	
125084	Solid rubber cable reel 518	5m 5x2,5mm <sup>2</sup> 1x CEE 5x16A/400V, IP54	45m 5x2,5mm <sup>2</sup> 1x CEE 5x16A/400V, IP54	without protection	
264084	Solid rubber cable reel 518	45m 5x2,5mm <sup>2</sup> 1x CEE 5x16A/400V, IP54	5m 5x2,5mm <sup>2</sup> 1x CEE 5x16A/400V, IP54	without protection	
234874	Solid rubber cable reel 518	5m 5x2,5mm², black 1x CEE 5x16A/400V, IP67	5m 5x2,5mm², black 1x CEE 5x16A/400V, IP67	without protection	

# 520/XF and 520/XL series







520/XL series

# **4** (€

# **Product features**

- Fully-equipped and pre-set pull-out cable reels
- Sealed casing made from impact-resistant plastic
- Incl. fastening clip
- Thermal protection (2 to 5-pole)
- Special cable black, end cut smooth, no connection coupling
- Factory-fitted with lock, can be set to continuous tension
- Cable back stop with toothed lock every 50 cm
- Easy to disengage if the cable is to be continuously under tension
- Easy to handle, sturdy, easy to assemble
- Standard IEC 1242

# Technical data

Pull-out length 5.5 to 12.5m Slip ring 2 to 5-pole Operating voltage max. 400V Protection category XF IP42 XL IP43

Cable H05VV-F or H07RN-F

# 520/XF accessories

To reduce the ingress of dirt at the cable inlet, a covering cap is available as an accessory. This can be fitted at a later date and increases the protection category to IP 43.

# 520/XF accessories

Item-no.	Description
242284	520/XF covering cap
242723	Optional device

# Installation instructions

1 CE

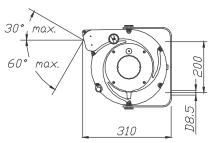
Suitable installation options (see page 15) A, C, G and N swivel motion

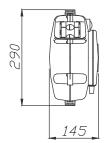
E and F fixed position with adjusting screw

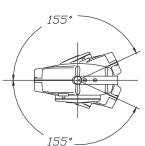
Limited use with cover cap (cable inlet)

# Cover securing mechanism

When the cover is fitted and in the case of a vertical cable uncoiling / coiling motion, the reel body is secured into the fastening clip.







Item-no.	Description	Number of wires	Cross- section in mm <sup>2</sup>	Cable length coiled + 1.0 m free	Output coiled in W	Output uncoiled in W	Stromstärke des Kollektors
242535	Series 520/XF	2	1,0	14	900	1400	10
242541	Series 520/XF	4	1,0	10,5	1100	1600	10
242649	Series 520/XF	3	1,5	7	1200	1800	10
242283	Series 520/XF	3	1,5	10	1200	1800	10
242715	Series 520/XF	3	2,5	7	1850	2500	20
242737	Series 520/XL	3	1,0	12,5	900	1400	10
242704	Series 520/XL	3	1,5	7	1200	1800	10
242738	Series 520/XL	3	1,5	10	1200	1800	10
242696	Series 520/XL	4	1,5	8	1350	1900	10
242739	Series 520/XL	3	2,5	7	1850	2500	20

#### Other versions available upon request.



# Mini / 810 / 813 PR series

# **Product features**

- Hose reels or air and water
- Type Mini / 810 housing made from impact-resistant plastic
  Type 813 PR housing made from cast aluminium, enamelled yellow
  Incl. wall mount
- Factory-fitted with lock, set at approx. every 50 cm
  Can be converted to continuous tension
  Simple assembly



Mini series

Item no.	Hose length in m*	Internal diam. in mm	Connection	pressure in bar	Dimensions WxHxD in mm	Weight in kg
242816	5.5	6	1/4"	12	135x285x302	3.9

<sup>\*</sup> coiled + 1m free



810 series

Ito	em no.	Hose length in m*	Internal diam. in mm	Connection	pressure in bar	Dimensions WxHxD in mm	Weight in kg
24	12590	9	8	1/4"	15	130x315x330	4.0

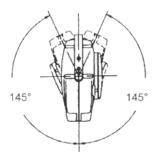
\* coiled + 1m free



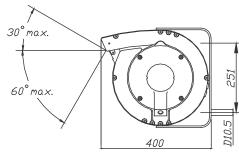
813 PR series

Item no.	Hose length in m*	Internal diam. in mm	Connection	pressure in bar	Dimensions WxHxD in mm	Weight in kg
242592	10	8	1/4"	12	175x251x400	10.50
242594	7	10	3/8"	12	175x251x400	10.50

<sup>\*</sup> coiled + 2m free



Type 810



Type 813 PR



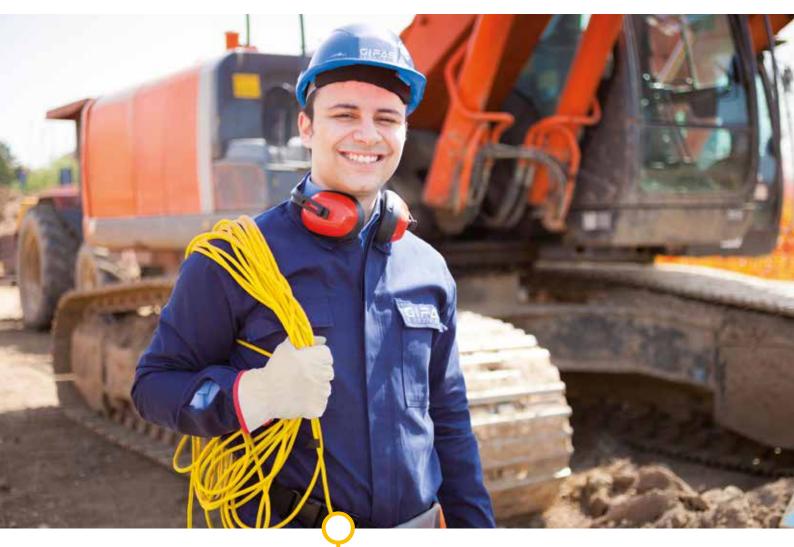












# SAFE CONNECTION ON EVERY STEP OF THE WAY.

Whether dry or wet, whether for connecting small devices or large machines: Electrical cables from GIFAS confront every challenge, from use in heavy industry to high operating temperatures. Additional cable bridges provide protection against abrasion or crimped cables as well as allowing for the safe use of the traffic routes without risk of tripping over.

Cables	108
Equipment connecting cables	112
Extensions	114
Specialist cables	116
Cable protectors	118
Application cases	123

# **Cables**

# **LEUCHTFLEX**





The GIFAS LEUCHTFLEX is designed for the connection of light electrical appliances under medium mechanical stress. This polyvinyl chloride insulated flexible cable meets high demands with regard to mechanical and chemical influences.

#### **Product features**

Item no.

- Silicone-free cable
- Polyvinyl chloride insulated
- Above-average flexibility under normal conditions
- According to DIN VDE 0281-1, HD 21.5.S3
- Stranded copper conductor construction according to DIN VDE 0295 class 5, IEC 228 Cl. 5

Conductors

51x0,25

- Core identification according to DIN VDE 0293

Wires number x

#### Technical data

Cable type H05 VV-F
Operating voltage U<sub>o</sub>/U 300/500V
Test voltage 3000V/50Hz
Temperature range

Wire identification

green-yellow, blue, brown, black, grey

Minimum

# Areas of application

- Apparatus and machine industry
- Mechanical workshops
- Traffic (e.g. railways)
- Construction sites
- Agriculture

Weight

- Food industryMunicipal enterprises
- cross section in number x Ø in mm kg/km ordermm<sup>2</sup> quantity cross section in mm<sup>2</sup> in m 102732 2x1,0 32x0,20 6.8 60 blue, brown 102743 2x1,5 30x0,25 7,4 100 blue, brown 102785 2x 2.5 51x0.25 9.2 130 100 blue, brown 3x 0,75 24x0,20 5,9 66 102842 green-yellow, blue, brown 102850 3x1,0 32x0,20 7,2 70 green-yellow, blue, brown 102860 3x1,5 30x0,25 7,8 110 green-yellow, blue, brown 9,8 150 green-yellow, blue, brown 500 102886 3x2,5 51x0,25 102911 4x0,75 24x0,20 6,9 79 green-yellow, brown, black, grey 30x0,20 8,8 125 green-yellow, brown, black, grey 102925 4x1,5 4x2,5 10,9 210 500 102946 51x0,25 green-yellow, brown, black, grey 102962 5x0,75 24x0,20 7,5 100 green-yellow, blue, brown, black, grey 102978 30x0,25 9,6 145 green-yellow, blue, brown, black, grey 5x1,5

230

Cable outside-

# Other versions on request.

5x2.5

The cable can optionally be printed with your company name (from 100m per cross-section).

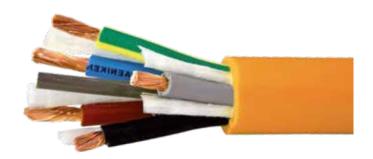
12,0

102999



#### **EXTREMFLEX PUR**





The GIFAS EXTREMFLEX PUR is intended for use in dry, damp and wet environments. This PUR-coated power cable meets increased or aboveaverage requirements. It is suitable for connecting commercial and industrial devices or tools such as drilling machines and grinding witches.

#### **Product features**

- Silicone and halogen-free cable
- Special notched impact strength as well as abrasion and cut resistance
- Resistant to microbes, UV rays, oils, greases, petrol, water and weather influences
- According to DIN VDE 0282 Part-10, HD 22.10.S1
- Stranded copper conductor construction acc. to DIN VDE 0295 bare all 2- and 3-core cables class 6, IEC 228 Cl. 6 all 4- and 5-core cables class 5, IEC 228 Cl. 5
- Core identification according to DIN VDE 0293

#### Technical data

Cable type H05 BQ-F, H07 BQ-F (from 1,5qmm) Operating voltage U/U

300/500V (H05) 450/750V (H07)

2000V/50Hz (H05) Test voltage 2500V/50Hz (H07)

Temperature range

- moved -25°C to +80°C - fixed -40°C to +90°C

Sheath colour orange

### Areas of application

- Industry
- Shipyards
- Transportable engines or machines on construction sites

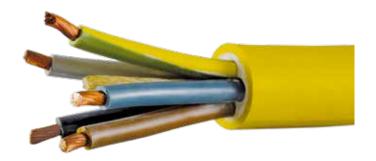
Item no.	Wires number x cross section in mm <sup>2</sup>	Conductors number x cross section in mm <sup>2</sup>	Cable outside- Ø in mm	Weight kg/km	Wire identification
102740	2x1,0	56x0,15	6,9	59	blue, brown
102751	2x1,5	84x0,15	8,5	89	blue, brown
102859	3x1,0	56x0,15	7,3	73	green-yellow, blue, brown
102876	3x1,5	86x0,15	9,0	109	green-yellow, blue, brown
102897	3x2,5	140x0,15	10,5	159	green-yellow, blue, brown
102937	4x1,5	30x0,25	9,8	137	green-yellow, brown, black, grey
102991	5x1,5	30x0,25	10,8	171	green-yellow,blue,brown,black,grey
103011	5x2,5	50x0,25	13,1	250	green-yellow,blue,brown,black,grey
206485	5x4,0	56x0,30	15,5	406	green-yellow,blue,brown,black,grey
206486	5x6,0	84x0,30	16,9	536	green-yellow,blue,brown,black,grey

Other versions on request.

The cable can optionally be printed with your company name (from 100m per cross-section).

#### **PROFLEXX H07**





The GIFAS PROFLEXX H07 is intended for use in dry, damp and wet rooms or for outdoor use such as the connection of equipment in commercial and fire-hazardous premises. With protected and fixed installation, these cables may be operated with max. 1000V AC voltage or 750V DC voltage against earth.

#### **Product features**

- Outer sheath made of mechanically highly stressable polychloroprene silicone-free cable
- High flexibility, excellent weather, ozone, oil and alkali resistance
- High thermal stress
- According to DIN VDE 0165, this cable type is permissible in potentially explosive atmospheres
- According to DIN VDE 0282-4, HD 22.4.S3
- Stranded copper conductor construction according to DIN VDE 0295 class 5, IEC 228 Cl. 5
- Core identification according to DIN VDE 0293

#### Technical data

Cable type Operating voltage U<sub>o</sub>/U Test voltage

- Temperature range moved
- fixed
- short term Max. core temperature

Sheath colour

H07 RN-F 450/750V 2500V/50Hz

-25°C to +60°C -40°C to +60°C to +250°C in operation +85°C (Norm +60°C) yellow

#### Areas of application

- Construction sites
- Industry
- Shipyards
- Portable power tools, motors and machines

Item no.	Wires number x cross section in mm²	Conductors number x cross section in mm <sup>2</sup>	Cable outside- Ø in mm	Weight kg/km	Wire identification
112733	2x1,0	32x0,20	8,4	94	blue, brown
102745	2x1,5	30x0,25	9,5	120	blue, brown
110623	2x2,5	50x0,25	11,0	175	blue, brown
102863	3x1,5	30x0,25	10,1	150	green-yellow, blue, brown
102888	3x2,5	50x0,25	12,0	215	green-yellow, blue, brown
102927	4x1,5	30x0,25	11,2	190	green-yellow, brown, black, grey
128372	4x2,5	50x0,25	13,3	270	green-yellow, brown, black, grey
102980	5x1,5	30x0,25	12,3	230	green-yellow,blue, brown,black,grey
103001	5x2,5	50x0,25	14,5	325	green-yellow,blue, brown,black,grey
123840	5x4,0	56x0,30	16,9	475	green-yellow,blue, brown,black,grey
103029	5x6,0	84x0,30	18,8	630	green-yellow,blue, brown,black,grey
102997	5x16,0	128x0,40	27,6	1530	green-yellow,blue, brown,black,grey

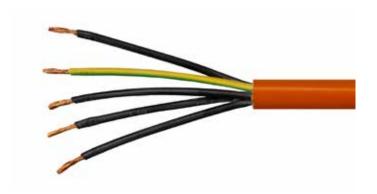
Other versions on request.

The cable can optionally be printed with your company name (from 100m per cross-section).



#### **THERMFLEX**





This GIFAS THERMFLEX is intended for use in dry and damp rooms with medium mechanical stresses. It is used as a connection and link cable for control devices on machine tools, conveyor systems, production lines, etc.

#### **Product features**

- Halogen- and silicone-free cable
- Outer sheath of cross-linked polymer, according to DIN VDE 0266, HXM 1
- Flame-retardant, oil-resistant
- High resistance to chemical effects of ozone, mineral oils, diluted acids and alkalis
- High mechanical strength guarantees a long service life
- In accordance with DIN VDE 0281-13 and DIN VDE 0282-9
- Stranded copper conductor construction
- According to DIN VDE 0295 class 5, IEC 228 Cl. 5
- Core identification according to DIN VDE 0293

#### Technical data

Cable type Operating voltage U<sub>o</sub>/U Test voltage Temperature range

- moved
- fixed Sheath colour

(N) HXSLHXÖ-J 300/500V 2000V/50Hz

-25°C to +100°C -40°C to +100°C orange

#### Areas of application

- Chemical industry
- Pharmaceutical industry
- Paper industry
- Automotive industry

Item no.	Wires number x cross section in mm <sup>2</sup>	Conductors number x cross section in mm <sup>2</sup>	Cable outside- Ø in mm	Weight kg/km	Wire identification
102731	2x0,75	24x0,20	5,6	83	1-2 numbered
102750	2x1,5	30x0,25	6,4	119	1-2 numbered
102873	3x1,5	30x0,25	6,8	129	1-2 numbered, green-yellow
102894	3x2,5	51x0,25	8,3	197	1-2 numbered, green-yellow
102934	4x1,5	30x0,25	7,6	154	1-3 numbered, green-yellow
102952	4x2,5	51x0,25	9,2	237	1-3 numbered, green-yellow
102967	5x0,75	24x0,20	7,2	143	1-4 numbered, green-yellow
102988	5x1,5	30x0,25	8,3	198	1-4 numbered, green-yellow
103008	5x2,5	51x0,25	10,1	289	1-4 numbered, green-yellow
103064	7x1,5	30x0,25	10,0	274	1-6 numbered, green-yellow

Other versions on request.

The cable can optionally be printed with your company name (from 100m per cross-section).

# **Equipment connection cables**

## **LEUCHTFLEX**



## **EXTREMFLEX PUR**



#### **Product features**

- Vulcanised contour plug on 2-wire cableVulcanised protective contact plug on 3-wire cable
- Free end stripped, uninsulated and equipped with wire end sleeves

#### Leuchtflex H05 VV-F

Item no.	Length in m	Wires number x cross section in mm²	Plug
100427	3	2x1.0	Contour plug
100431	3	2x1.5	Contour plug
100440	3	3x1.5	Protective contact plug
100448	5	2x1.0	Contour plug
100452	5	2x1.5	Contour plug
100459	5	3x1.5	Protective contact plug
100410	10	2x1.0	Contour plug
100412	10	2x1.5	Contour plug
100414	10	3x1.5	Protective contact plug

## Extremflex H05 BQ-F or from 1.5m m<sup>2</sup> H07 BQ-F

Item no.	Length in m	Wires number x cross section in mm²	Plug
206919	3	2x1.0	Contour plug
207609	3	2x1.5	Contour plug
206918	3	3x1.5	Protective contact plug
203681	5	2x1.0	Contour plug
203684	5	2x1.5	Contour plug
211890	5	3x1.0	Protective contact plug
203688	5	3x1.5	Protective contact plug
203682	10	2x1.0	Contour plug
203686	10	2x1.5	Contour plug
203689	10	3x1.5	Protective contact plug

Other cross-sections and lengths available upon request.



## **PROFLEXX H07**





#### **Product features**

- Vulcanised contour plug on 2-wire cable
- Vulcanised protective contact plug on 3-wire cable
- Moulded CEE plug
- Free end stripped, uninsulated and equipped with wire end sleeves

#### Proflexx H07 RN-F

Item no.	Length in m	Wires number x cross section in mm <sup>2</sup>	Plug
112735	3	2x1.0	Contour plug
100435	3	2x1.5	Contour plug
100444	3	3x1.5	Protective contact plug
133852	4	2x1.0	Contour plug
112737	5	2x1.0	Contour plug
100454	5	2x1.5	Contour plug
100464	5	3x1.5	Protective contact plug
119034	10	2x1.0	Contour plug
115728	10	2x1.5	Contour plug
116195	10	3x1.5	Protective contact plug
206857	3	3x1.5	CEE 3x16A/230V
206892	5	3x1.5	CEE 3x16A/230V

The minimum order quantity per Type 50

Other cross-sections and lengths available upon request.

# **Extensions**

## PROFLEXX 07 230/400/500V



Cable type H07 RN-F with moulded-on plug connectors



## Areas of application

- Industry
- Assembly plants
- Power plants
- Building sitesServicesESC

- Anywhere that current needs to be distributed safely

Item no.	GIFAS type	Length in m	Wires number x cross section in mm <sup>2</sup>	IP class	Plug / connector
258003	111/211/10/4315PROFLEXX H07	10	3x1.5	IP 44	Protective contact plug / protective contact connector
269425	111/211/20/4315PROFLEXX H07	20	3x1.5	IP 44	Protective contact plug / protective contact connector
113964	111/313/10/4315PROFLEXX H07	10	3x1.5	IP 44	Protective contact plug / 3-way protective contact connector
112131	111/313/20/4315PROFLEXX H07	20	3x1.5	IP 44	Protective contact plug / 3-way protective contact connector
120123	301656/57/10/4525PROFLEXX H07	10	5x2.5	IP 44	CEE 5x16A/400V
113748	301656/57/20/4525PROFLEXX H07	20	5x2.5	IP 44	CEE 5x16A/400V
275940	301656.2/57/10/4525PROFLEXX H07	10	5x2.5	IP 44	CEE 5x16A/400V CEE plug with phase inverter
285566	301656.2/57/20/4525PROFLEXX H07	20	5x2.5	IP 44	CEE 5x16A/400V CEE plug with phase inverter
107247	303256/57/10/4560PROFLEXX H07	10	5x6.0	IP 44	CEE 5x32A/400V
114808	303256/57/20/4560ROFLEXX H07	20	5x6.0	IP 44	CEE 5x32A/400V
275943	303256.2/57/10/4560PROFLEXX H07	10	5x6.0	IP 44	CEE 5x32A/400V CEE plug with phase inverter
285567	303256.2/57/20/4560PROFLEXX H07	20	5x6.0	IP 44	CEE 5x32A/400V CEE plug with phase inverter
112384	306356/57/10/45160PROFLEXX H07	10	5x16.0	IP 67	CEE 5x63A/400V
102221	306356/57/20/45160PROFLEXX H07	20	5x16.0	IP 67	CEE 5x63A/400V
102221	300330/37/20/43100F110FEEXX1107	20	JX 10.0	11 07	CLL SAUGHAUUV
259309	501646/47/10/4425H07	10	4x2.5	IP 44	CEE 4x16A/500V
207628	501646/47/20/4425H07	20	4x2.5	IP 44	CEE 4x16A/500V
259313	503246/47/10/4460H07	10	4x6.0	IP 44	CEE 4x32A/500V
244024	503246/47/20/4460H07	20	4x6.0	IP 44	CEE 4x32A/500V
125615	506346/47/10/44160H07	10	4x16.0	IP 67	CEE 4x63A/500V
245001	506346/47/20/44160H07	20	4x16.0	IP 67	CEE 4x63A/500V

Other designs available upon request.



#### PROFLEXX H07 with differential current protection device PRCD-S+



Portable residual current protective device PRCD (Portable Residual Current Protective Device) with electronic residual current evaluation, for optimum personal protection as an intermediate cord device. Faults caused by defective loads lead to disconnection at all poles (DIN VDE 0661). In the event of system faults in the fixed installation, all possible faults are detected and the PRCD-S+ cannot be switched on. The PRCD-S+ detects external voltage on the protective conductor, it does not interrupt the protective conductor connection, the external voltage can thus release itself via its own, upstream protective devices RCCB and MCB.

#### **Product features**

- encapsulated version for rough operation
- suitable for direct connection into the supply line of the electrical appliance (H07 RN-F 3G 2.5mm2)
- independent of the plug system used
- large, easy-to-operate ON and OFF buttons
- additional optical switch position indicator
- undervoltage release
- all-pole switching
- Can be installed in cable reels and mobile distribution boards

#### Technical data

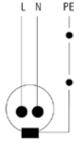
Rated voltage
Rated current
Rated residual current
Ambient temperature
Protection category
Connection cross-section
Mark of conformity
Standards / regulations

230V/50Hz 16A 10 bzw. 30mA - 25°C to +45°C IP 55 1mm² up to 2,5mm² GS DIN VDE 0661

#### Areas of application

- Construction sites
- Fire brigades
- Workshops
- for all portable electrical appliances

Item no.	Length in m	Wires number x cross section in mm <sup>2</sup>	Plug / connector
300750	3	3x1,5	Protective contact plug / protective contact connector
301245	3	3x1,5	Protective contact plug / 3-way protective contact connector
301247	3	3x1,5	Right-angle safety plug / protective contact connector



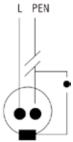
Intact socket full protection Operation possible



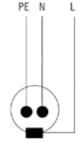
N-interruption full protection no operation possible



PE interruption full protection no operation possible



PEN interruption full protection no operation possible



PE and L reversed full protection no operation possible



L and PE reversed Protection according to VDE 0661

# Specialist cables

#### **KRANFLEX**



The GIFAS KRANFLEX is a special compound of cold-flexible, weatherresistant PVC as sheath and core material. The tensile forces that occur are absorbed by two opposing and axially parallel steel cable support elements connected to the outer sheath.

#### **Product features**

- Crane and lift control cable based on DIN EN 60811

#### Technical data

Load capacity to 135kg critical point approx. 190kg Temperature range

permanent
 fixed
 Rated voltage
 U<sub>o</sub>/U
 30° C to +70° C
 40° C to +70° C
 300/500 V
 300/500 V

Wire conductor structure DIN VDE 0295, Class 5

Wire ID code DIN VDE 0293

### Areas of application

- on control bulbs
- in converter operation
- as unsupported shaft cable
- in high-bay systems
- in cable trays, etc.

#### WENDELFLEX PUR



The long-lasting return force, even in daily use under difficult conditions, is what makes this spiral cable stand out.

#### **Product features**

- High quality, long service life
- Excellent recoil forces, even in cold climates
- Tested with a million load cycles without failure
- Microbe-resistant, therefore also suitable for refrigerated warehouses

#### Technical data

Wire conductor structure DIN VDE 0295, Class 5

IEC 228 Cl.5

Wire ID code DIN VDE 0293

#### Areas of application

- For industrial robots
- Drills, screwdrivers and other hand-held equipment
- High-performance machinery
- Lifting platforms
- Lights

Item no.	Wires number x cross section in mm <sup>2</sup>	Cable outside- Ø d1 / d2 in mm	Weight kg/km
102717	18x1,0	17,0 / 32,0	528
102827	25x1,0	21,0 / 36,0	660

Item no.	Wires number x cross section in mm²	Free ends in mm	Coil length in mm	Extended length in mm
211373	2x1.0	500	800	3000
212040	2x1.0	500	1500	6000
211375	3x1.5	500	800	3000
211774	3x1.5	500	1000	4000
211652	3x1.5	500	1500	6000
211377	5x1.5	500	800	3000
230228	5x1.5	500	1200	4800

Other cross-sections and lengths available upon request.



#### **POTIFLEX**



The green/yellow exterior sheath of the highly flexible grounding spiral cable is made from polyether polyurethane and is therefore free of cadmium, CFCs, halogens and silicon. The green-yellow colour provides additional safety. The cable is mainly used for potential equalisation.

#### **Product features**

- Low weight
- Temperature and corrosion-resistant
- Impact resistant in high and low temperature range
- Relatively high compressive stability with low wall thickness
- Seawater-resistant, shatter-proof and impact-resistant, resistant to termites, ozone-resistant
- Extensively resistant to acids, alkalis and solvents
- Oil-resistant exterior sheath compliant with VDE 0472 Part 803

#### Technical data

Temperature range -40°C to 80°C (short-term 100°C)

Voltage 1000V Testing alternating voltage 3500V

Wire structure ultra-fine wire, Class 6
Single conductor EL Cu 58 F 21 stripped/soft
Conductor resistance compliant with DIN VDE 0295,

## Areas of application

- Measuring and control and laboratory technology
- Chemical industry, automotive industry
- Medicine, electrical engineering, food industry
- Equipment construction, pneumatics and hydraulics

Item no.	Connections	Wires number x cross section in mm <sup>2</sup>
248523	Free ends	1x6.0
249277	1 ground clamp 1 M8 cable lug	1x6.0
248769	2 ground clamps	1x6.0
248526	Free ends	1x10.0
249154	1 ground clamp 1 M8 cable lug	1x10.0
248773	2 ground clamps	1x10.0
248527	Free ends	1x16.0
249659	1 ground clamp 1 M8 cable lug	1x16.0
248784	2 ground clamps	1x16.0

# Cable protectors



Fig. 1 x cable bridge yellow + 2 x ramp module black + connection set

**MINI Upper section** - The low-cost version of GIFAS cable protectors. Rows of bumps moulded into the base allow a large number of cables to be laid under the MINI and the weight of vehicles driving over it to be supported. Not suitable for trucks/lorries! Moulded connecting tenons allow quick connections and the tenons cannot be lost afterwards.

MINI lower section - The ultimate extension for heavy loads. Our MINI stays true to its line. Easy to handle, quick to lay, low protector heights and now also even with a high load-bearing capacity. The reinforced cable protector can withstand even extreme loads. Even forklift trucks and lifting trucks can now drive over these protectors without causing any problems. If several MINIs with a lower section are laid in a line, they remain in a stable row even when driven over by a car.

#### Technical data

 $\begin{array}{lll} \mbox{Material} & \mbox{Polyurethan, black} \\ \mbox{Fire safety class} & \mbox{B2 (nach DIN4102)} \\ \mbox{Working range} & -30^{\circ}\mbox{C to } +60^{\circ}\mbox{C} \\ \mbox{Hardness range} & \mbox{88 Shore} \pm 4\mbox{A}. \\ \mbox{Dimensions} & \end{array}$ 

Upper section (LxWxH) 806x435x37mm Lower section (LxW) 804x241mm

Channels

Upper-/Lower section 7/5

Channel width

Upper- / Lower section 28mm / 22mm

Channel height

Upper- / Lower section 23-30mm / 21mm

weigni

Upper- / Lower section 3.6kg / 3.5kg

For optimal accessibility, the modular cable bridge MIDI 5 2D was developed on the basis of the MIDI cable bridge. It consists of a MIDI-compatible middle section and a flat ramp, which together can be extended and combined as required, both in length and width.

The barrier-free ramp with a 6° slope makes it easier for wheelchair users to cross the cable bridge effortlessly and, due to its high stability, can also be fully accessed by forklifts and trucks.

#### Technical data

Material in lower section black polyurethane Material in upper section yellow polyurethane

Fire safety class E (compliant with DIN EN 13501-1)

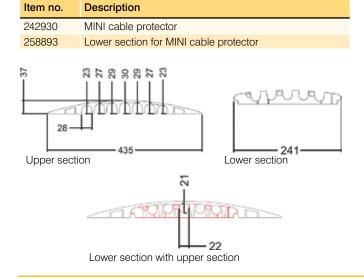
 $\begin{array}{lll} \mbox{Working range} & -30^{\circ}\mbox{C to } +60^{\circ}\mbox{C} \\ \mbox{Hardness range} & 88 \mbox{ Shore } \pm 4\mbox{A} \\ \mbox{Max. load} & \mbox{approx. } 5\mbox{t}/400\mbox{ cm}^2 \\ \end{array}$ 

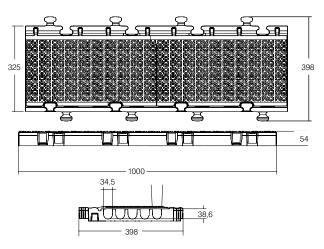
Dimensions (LxWxH) 1000x325x54 mm / 500x325x54 mm

Channels

Channel width 38,6 mm
Channel height 34,5 mm
Weight 11,5 kg

Item no.	Description
300933	Cable bridge MIDI 5 2D, 100 cm, yellow
300934	Cable bridge MIDI 5 2D, 50 cm, yellow
300935	Ramp modul MIDI 5 2D, 100 cm, black
300936	MIDI Connection set, black (4 pins)







#### **SLIM**



#### **SMART**



The smallest model with the biggest potential. Lightweight, professional, suitable for wheelchairs and universally usable. Equipped with 6 channels, this cable protector meets all the expectations of a professional cable protection system in the smallest possible space.

black polyurethane

yellow polyurethane

Technical data

Material in lower section Material in upper section Fire safety class

B2 (compliant with DIN 4102) -30°C to +60°C Working range Hardness range 88 Shore ± 4A. Max. load approx. 2t/400 mm<sup>2</sup> 1000x280x32mm Dimensions (LxWxH)

Channels Channel width 17mm Channel height 18-19mm Weight 4.4kg

The dwarf among giants. Lightweight, professional and universally usable. The SMART cable protector satisfies all of the demands made of a professional cable protection system and extends the GIFAS range with a compact, extremely lightweight cable protector that can be driven over in the familiar black/yellow design

#### Technical data

Material in lower section black polyurethane Material in upper section yellow polyurethane Fire safety class B2 (compliant with DIN 4102) -30°C to +60°C

Working range Hardness range 88 Shore  $\pm$  4A. Max. load 2t/400mm<sup>2</sup> 1000x290x48mm Dimensions (LxWxH)

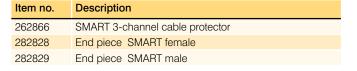
Channels Channel width 35mm

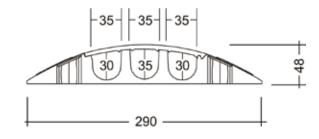
30mm, 35mm, 30mm Channel height

Weight 5kg

Item no.	Description						
266557	SLIM 6-channel cable protector						
297777	End piece SLIM female						
297776	End piece SLIM male						

17, 17	7 17 17	17 17	
18 18	19 19	18 18	32
	_ 280 _		







# Product features

- For electricity, gas, water, compressed air and hydraulic lines Non-slip, temperature-resistant, weathering-resistant, wear-resistant

- Resistant to solvents, petrol, oil, acid and de-icing salt - The section of solvents, petrol, oil, acid and descently sair.
  - Extensions possible with moulded-on or mounted tenons
- Structured non-slip surface
- Self-cleaning locking hinge
- DEKRA-certified tested product safety

# Cable protectors

#### MIDI



## **PROTECT**



The MIDI cable protector has 5 channels, is lower and weighs less than the PROTECT and moulded-on connectors. Its load-bearing capacity is similar to that of PROTECT.

#### Technical data

Weight

Material in lower section black polyurethane Material in upper section yellow polyurethane B2 (compliant with DIN 4102) Fire safety class -30°C to +60°C Working range Hardness range 88 Shore ± 4A. approx. 5t/400 mm<sup>2</sup> Max. load 890x542x52mm Dimensions (LxWxH) Channels Channel width 34mm Channel height 36mm

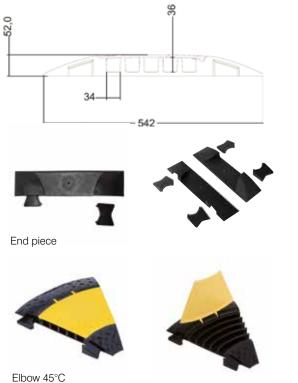
With PROTECT, the individual cable protectors can be connected to each other using screwed-on tenons. Each cable protector is supplied with a pair of pre-mounted connecting tenons. A full range of accessory parts extends the PROTECT range to create a flexible system for protecting expensive cables.

#### Technical data

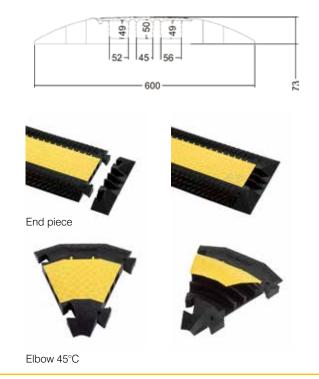
Material in lower section black polyurethane Material in upper section yellow polyurethane Fire safety class B2 (compliant with DIN 4102) Working range -30°C to +60°C Hardness range 88 Shore  $\pm$  4A. approx. 5t/400 mm<sup>2</sup> 1000x600x73mm Max. load Dimensions (LxWxH) Channels Channel width 52mm, 45mm, 56mm Channel height 49mm, 50mm, 49mm Weight 22kg

Item no.	Description
247921	MIDI 5-channel cable protector
247924	MIDI end piece incl. separate connecting tenons
247923	45° MIDI elbow

11.5kg

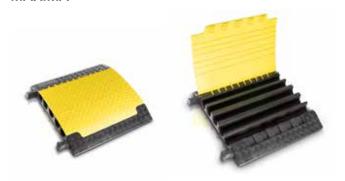


Item no.	Description
242122	Cable protector PROTECT 3 channel
242184	PROTECT end piece
249217	45° PROTECT elbow
242183	PROTECT connecting tenons (2 peaces)





#### **MAXIMA**





The MAXIMA has 5 over-sized cable channels, 3 of them suitable for C-hose types used by the fire brigade (diameter 62 mm). Heavy current cables are afforded optimum protection too. When used in public traffic situations, please be aware of road traffic acts that are pertinent to your The MEGA was developed for major events. The main features of this heavy-load protector are its oversized cable / hose channels for cables of up to 120 mm (e.g. 2 x A hose), shatter-proof connectors and plug housing not >= 100 mm. When used in public traffic situations, please be aware of road traffic acts that are pertinent to your country.

#### Technical data

Material in lower section Material in upper section Fire safety class Working range Hardness range Max. load Dimensions (LxWxH) Channels Channel width

black polyurethane yellow polyurethane B2 (compliant with DIN 4102) -30°C to +60°C 88 Shore ± 4A. approx. 5t/400 mm<sup>2</sup> 700x696x87mm

61mm, 62mm, 60mm, 62mm, 61mm Channel height 59mm, 65mm, 63mm, 65mm, 59mm

Weight 21.4kg

Technical	data

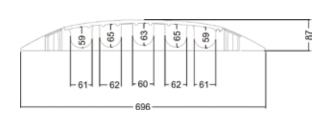
Material in lower section black polyurethane Material in upper section yellow polyurethane Fire safety class B2 (compliant with DIN 4102) Working range -30°C to +60°C Hardness range 88 Shore ± 4A. approx. 5t/400 mm<sup>2</sup> Max. load Dimensions (LxWxH) 700x783x139mm Channels 2+2 Channel width 35mm, 120mm, 120mm, 35mm Channel height

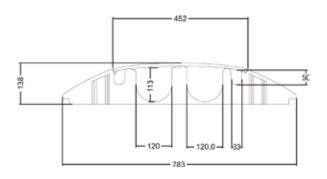
50mm, 115mm, 115mm, 50mm 30.5kg

Weight

Item no.	Description
256985	MEGA 4-channel cable protector

Item no.	Description
256032	Cable protector MAXIMA 5 channel
256034	MAXIMA end piece incl. separate connecting tenons





load.







Project note A clearly defined area load specification is more precise than a load specification using an axle

End piece

# Cable protectors

#### EASY40

#### EASY100





The fastest cable bridge for indoor and outdoor use, such as for exhibitions, trade fairs, shopping centres or offices. The EASY cable bridge saves time when securing cables and prevents tripping hazards. For example, the cable protection can be easily and quickly laid over already laid cables and hoses without a cover or base. In addition, the low weight contributes to handling. The cable duct can be used for various cables and hoses, e.g. up to 5 microphones or mains cables. With a load capacity of approx. 0.5 tons per 20 x 20 cm area, the cable bridges support normal cars, trolleys, bicycles, wheelchairs and pedestrians. With the EASY, the individual cable bridges can be connected to each other using a special plug-in system.

The fastest cable bridge for indoor and outdoor use, such as for exhibitions, trade fairs, shopping centres or offices. The EASY cable bridge saves time when securing cables and prevents tripping hazards. For example, the cable protection can be easily and quickly laid over already laid cables and hoses without a cover or base. In addition, the low weight contributes to handling. The cable duct can be used for various cables and hoses, e.g. up to 5 microphones or mains cables. With a load capacity of approx. 0.5 tons per 20 x 20 cm area, the cable bridges support normal cars, trolleys, bicycles, wheelchairs and pedestrians. With the EASY, the individual cable bridges can be connected to each other using a special plug-in system.

#### Technical data

Material polyurethane, yellow
Fire protection class B2 (according to DIN 4102)
Working range -30°C to +60°C
Hardness range 88 Shore ± 4A.
Max. load approx. 0.5t/ 400cm
Dimensions (LxWxH) 1005x125x20mm

Channels 1
channel width 40mm
channel height 12mm
Weight 1,35kg

#### Technical data

Material polyurethane, yellow
Fire protection class B2 (according to DIN 4102)
Working range -30°C to +60°C
Hardness range 88 Shore ± 4A.

Max. load approx. 0.5t/ 400cm
Dimensions (LxWxH) 1005x250x40mm
Channels 1
channel width 100mm

channel width 100mm channel height 30mm Weight 4,2kg

Item no.	Description
324979	Cable bridge EASY40, 1 channel

Item no.	Description
324980	Cable bridge EASY100, 1 channel



# Cables / Cable protectors











# **Application cases**

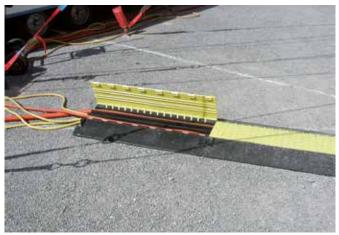
# Cables / Cable protectors













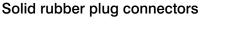


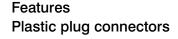
# **BIG, EVEN IN A SMALL SCALE.**

Unbreakable, resistant to most oils, acids and alkalis, flame retardant and corrosion resistant: Plug connections made of solid rubber are a plus in every aspect. Use our extensive range of CEE and special connectors in extraordinary situations or choose one of our standard plastic connectors for everyday use.

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# Features Solid rubber plug connectors











#### Solid rubber

Plug connections made of solid rubber are made of 100% vulcanised, self-extinguishing butyl caoutchouc (Shore hardness 97) in accordance with VDE 0471 part 2.2. They are resistant to oils, various acids and alkalis as well as showers of sparks from welding.



#### Plastic

We guarantee a heavy load-bearing capacity as well as high impact resistance in our plastic products. The selected material is UV- and media-resistant as well as heat and cold resistant (from -40°C to 80°C). The right solution for typical use in trade and industry.



# Vulcanised

VA, double anchor screws with stainless brass press-in sockets are inserted into the housing. The peer-to-peer material connection and the solid rubber provide maximum impermeability and the avoidance of condensation due to e.g., temperature fluctuations.



#### Connected accurately

All components have been manufactured and assembled according to the current quality standards.



#### Durability

Featuring elastic deformability that leads to reducing the possibility of breakage due to the use of solid rubber. Suitable for use in demanding environments.



#### Range of application

KU connectors are used daily in industrial applications under normal, ambient conditions. Durable and reliable.



#### Tension

Proven to relieve tension in the connecting cable. Safe, practical and durable.



#### Quick acting closure

Built-in tension relief thanks to the simple twistclosing of cap and housing receptacle.



## The principle of the voltage clock (time setting)

The position of the protective earth contact relative to the unchangeable lug or slot on the housing indicates the time. The lug or slot is in the 6 o'clock position on all designs. Unlike the lug or slot, the protective earth contact takes its standardised time setting from the required electrical values. In order to facilitate simple product identification, the various clock settings are assigned based on the colours defined by the standard.

The position of the protective contact socket relative to the polarising slot for various operating voltages (V) and frequencies (Hz) based on IEC 60309.

Operating voltage colours	Identifying
20-25 V	violet
40-50 V	white
100-130 V	yellow
200-250 V	blue
380-480 V	red
500-690 V	black
>60-500 Hz	green

Time setting on the protective contact and coloured identification:

	4 o'clock	9 o'clock	6 o'clock	11 o'clock	7 o'clock	5 o'clock	12 o'clock	1 o'clock	10 o'clock	2 o'clock	3 o'clock	8 o'clock
Frequency in Hz	50-60	50-60	50-60	60	50-60	50-60	50-60	-	100-300	Over 300 Up to 500	50-60	
Voltage in V	57/100 – 75/130	120/208 – 144/250	200/346 – 240/415	250/400 – 265/460	277/480 – 288/500	347/600 – 400/690		Over 50	Over 50	Over 50	220/380 – 250/440 16+32 A	
5-pole 3P+N+E												
Voltage in V	100-130	200-250	380-415	440-460	480-500	600-690	Voltages after isolating transformer*		Over 50	Over 50	380-440 only for 16+32 A	
4-pole 3P+E												
Voltage in V	100-130	380-415	200-250		480-500	277*	Voltages after isolating transformer		*		> 50 - 250 direct current	> 250 direct current
3-pole 2P+E					0						O	O

View of the front of the coupling sockets on the contact sockets / 63A + 125A plug connections with pilot contact \*These designs are not standardised.

Position of the auxiliary lug relative to the base lug for voltages up to 50 V and frequencies up to 500 Hz and colour identification:

	-	12 o'clock	4 o'clock	2 o'clock	3 o'clock	11 o'clock	10 o'clock
Frequency in Hz	50-60	50-60	100-200	300	400	Over 400 Up to 500	GS
Voltage in V	20-25	40-50	40-50	Up to 50	Up to 50	Up to 50	Up to 50
2-pole							00
3-pole	000	000					

View of the front of the coupling sockets on the contact sockets

# Solid rubber / plastic protective contact plug connectors

## Solid rubber protective contact plug connectors

## Plastic protective contact plug connectors

#### **Product features**

- Resistant to most oils, acids and alkalis
- Chromated screws
- Flame-retardant as per EN 60695-2-13
- Corrosion-resistant as per IEC 60884-1
- Screwless, outer strain relief (shortened connection time)
- Heat resistance from -40°C to + 120°C
- Unbreakable solid rubber body, apart from protective contact built-in socket
- Large connecting spaces ensure problem-free connection of the supply cable to the plugs, connectors and sockets.
- Simple connection technique
- Ergonomic shape for perfect ease of handling
- 🏠 for harsh conditions

#### **Product features**

- Resistant to most oils, acids and alkalis
- SS screws set in brass press-fit bushings with dual anchor
- Flame-retardant as per DIN IEC 695
- Unbreakable solid rubber body
- Corrosion-resistant
- Large connecting spaces ensure problem-free connection of the supply cable to the plugs, connectors and sockets.
- Ergonomic shape for perfect ease of handling



#### Protective contact plug

Item no.	Pole No.	Amperes	Protection category
108071	2P+E	16	IP 44



#### Protective contact connector

Item no.	Pole No.	Amperes	Protection category
108113	2P+E	16	IP 44



#### Protective contact 3-way connector

Item no.	Pole No.	Amperes	Protection category
102328	2P+E	16	IP 44



# Protective contact built-in socket (made from plastic) with flap cover and flange seal

Item no.	Pole No.	Amperes	Protection category
246198	2P+E	16	IP 54*

<sup>\*</sup>Note! Compliant with BGI 608. IP 54 when connected!



# Solid rubber low-voltage CEE plug connectors

## Solid rubber low-voltage CEE plug connectors for 24/42 V

#### **Product features**

- Resistant to most oils, acids and alkalis
- SS screws set in brass press-fit bushings with dual anchor
- Flame-retardant as per DIN IEC 695
- Unbreakable solid rubber body
- Corrosion-resistant
- Large connecting spaces ensure problem-free connection of the supply cable to the plugs, connectors and sockets.
- Ergonomic shape for perfect ease of handling

#### **CEE** plug

	Item no. 24V 50-60 Hz	Item no. 42V 50-60 Hz	Pole No.	Amperes	Protection category IP
Ī	239558		2	16	54
		239640	2	16	54





#### **CEE** connector

OLL COMMODICA				
Item no. 24V 50-60 Hz	Item no. 42V 50-60 Hz	Pole No.	Amperes	Protection category IP
101545		2	16	54
	108197	2	16	54





#### CEE built-in socket

Item no. 24V 50-60 Hz	Item no. 42V 50-60 Hz	Pole No.	Amperes	Protection category IP
101550		2	16	54
	102771	2	16	54





#### CEE mounted socket (not shown)

Item no. 24V 50-60 Hz	Item no. 42V 50-60 Hz	Pole No.	Amperes	Protection category IP
101547		2	16	54
	102765	2	16	54

# Solid rubber CEE plug connectors

## Solid rubber CEE plug connectors for 230V/400V

#### **Product features**

- Resistant to most oils, acids and alkalis
- SS screws set in brass press-fit bushings with dual anchor
- Flame-retardant as per DIN IEC 695
- Unbreakable solid rubber body
- Corrosion-resistant
- Large connecting spaces ensure problem-free connection of the supply cable to the plugs, connectors and sockets.
- Ergonomic shape for perfect ease of handling



# CEE plug

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Pole No.	Amperes	Protection category IP
122183		3	16	44
	107183	5	16	44
	107165	5	32	44
	118827	5	63	67



#### **CEE** connector

	Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Pole No.	Amperes	Protection category IP
Ī	120150		3	16	44
		107147	5	16	44
		107134	5	32	44



# CEE built-in socket

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Pole No.	Amperes	Protection category IP
101401		3	16	44
	101993	5	16	44
	102095	_	32	44



# CEE mounted socket

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Pole No.	Amperes	Protection category IP
101394		3	16	44
200278		5	32	44
	101978	5	16	44
	102085	5	32	44

IP 44

IP 44



## Plastic low-voltage CEE plug connectors for 24/42 V and high frequency

#### **Product features**

- Excellent impact resistance combined with first-class stability
- High thermal stability
- Very good insulating properties
- High dielectric strength
- High wear resistance
- High weather resistance
- Excellent chemical resistance to a large number of different chemicals
- Temperature resistant from -25°C to +80°C, for a short time 1 h + 100°C
- Contacts made from a copper/zing alloy with high electrical conductivity, high tensile strength and high corrosion resistance

#### CEE plug

Item no. 24V 50-60Hz	Item no. 42V 50-60Hz	Item no. >50-500V 100-300 Hz	Pole No.	Amperes	Protection category IP
235293			2	16	44
279346			2	32	44
	240057		2	16	44
	240059		2	32	44
		231183	4	16	44
		262474	4	32	44



#### CEE connector

OLL COMMODICA					
Item no. 24V 50-60Hz	Item no. 42V 50-60Hz	Item no. >50-500V 100-300Hz	Pole No.	Amperes	Protection category IP
244364			2	16	44
279347			2	32	44
	240058		2	16	44
	240060		2	32	44
		264656	4	16	44
		256393	4	32	44



#### CEE built-in socket straight design

Item no. 42V 50-60Hz	Item no. >50-500V 100-300Hz	Pole No.	Amperes	Protection category IP
		2	16	44
		2	32	44
240201		2	16	44
262216		2	32	44
	209188	4	16	44
	255918	4	32	44
	42V 50-60Hz 240201	42V >50-500V 50-60Hz 100-300Hz 240201 262216 209188	42V 50-60Hz     >50-500V 100-300Hz     No.       2     2       240201     2       262216     2       209188     4	42V 50-60Hz         >50-500V 100-300Hz         No.           2         16           2         32           240201         2         16           262216         2         32           209188         4         16



# Plastic CEE plug connectors

## Plastic CEE plug connectors for 230V/400V/500V

#### **Product features**

- Excellent impact resistance combined with first-class stability
- High thermal stability
- Very good insulating properties
- High dielectric strength
- High wear resistance
- High weather resistance
- Excellent chemical resistance to a large number of different chemicals
- Temperature resistant from -25°C to +80°C, for a short time 1 h + 100°C.
- Contacts made from a copper/zing alloy with high electrical conductivity, high tensile strength and high corrosion resistance







## CEE plug

OLL plug					
Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 Hz	Pole No.	Amperes	Protection category IP
269081			3	16	44
253627			3	32	44
277555			3	63	67
	240573		5	16	44
	240572		5	32	44
	233756		5	63	67
		259310	4	16	44
		245003	4	32	44
		244075	4	63	67

#### CEE connector

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 Hz	Pole No.	Amperes	Protection category IP
236154			3	16	44
253626			3	32	44
277557			3	63	67
	240575		5	16	44
	240574		5	32	44
	233758		5	63	67
		259311	4	16	44
		245004	4	32	44
		245002	4	63	67

## CEE built-in socket angled design

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 Hz	Pole No.	Amperes	Protection category IP
200080			3	16	44
209820			3	32	44
277824			3	63	67
	200081		5	16	44
	200079		5	32	44
	133807		5	63	67
		242376	4	16	44
		241843	4	32	44
		241840	4	63	67



## Plastic CEE plug connectors for 230V/400V/500V

#### **Product features**

- Excellent impact resistance combined with first-class stability
- High thermal stability
- Very good insulating propertiesHigh dielectric strength
- High wear resistance
- High weather resistance
- Excellent chemical resistance to a large number of different chemicals
- Temperature resistant from -25°C to +80°C, for a short time
- Contacts made from a copper/zing alloy with high electrical conductivity, high tensile strength and high corrosion resistance

#### CEE built-in socket straight design

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 Hz	Pole No.	Amperes	Protection category IP
200195			3	16	44
230501			3	32	44
279345			3	63	67
	203538		5	16	44
	203537		5	32	44
	125273		5	63	67
		208969	4	16	44
		202925	4	32	44
		202802	4	63	67



#### CFF mounted socket

Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 H	Pole No.	Amperes	Protection category IP
	269084		5	16	44
	269085		5	32	44
	259996		5	63	67
		254371	4	16	44
		279429	4	32	44
		279430	4	63	67



#### CEE built-in connector plug

ozz bant in connecter plag										
Item no. 230V 50-60 Hz	Item no. 400V 50-60 Hz	Item no. 500V 50-60 H	Pole No.	Amperes	Protection category IP					
101410			3	16	44					
	102003		5	16	44					
	102103		5	32	44					
	102246		5	63	67					
		124772	4	16	44					
		103163	4	32	44					
		103201	4	63	67					



# Powersafe plug connectors



As a result of the increased demand for temporary power generators which operate with high-voltage current in the areas of entertainment and industrial applications, selection of the high-current connector is particularly important, in order to guarantee safety and reliability for any application.

The single-pole Powersafe connectors were developed for the connection of single- and three-phase high-current circuits. They have been used and tested in the world's harshest environments, from the oil fields of Canada to data processing centres in the Arctic Circle. They are the right choice for demanding applications on account of their impressive technical capacity, safety functions, robust design, reliability and quality.

The standard safety functions include an additional locking system which requires a key to activate the connection. In addition, all electrical contacts on all plugs have finger-proof protection against electric shock, whereby the risk of accidental contact when switching on the connector is reduced.

The connectors are available in line and panel mount format with either crimp or screw contacts. The Powersafe connectors can be used with single-core cables between 25 and 300 mm² for high current connections up to 800 A and are currently the highest rated and safest connectors of their type on the market.



#### High current carrying capacity

The Powersafe connector's advanced contact design achieves its 800 A\* continuous rating by utilising an arrangement of 29 transfer bridges. Each transfer bridge is rated at 30 A, giving a total of 870 A per contact. \*Subject to environmental factors, cable choice, etc.

#### **Technical Data**

No. of contacts:

Max. continuous current rating: up to 800 A
Surrge current: 75 kA
Short circuit rating: up to 35.5 kA
Cable cross sectional area C.S.A: 25 mm² to 300 mm²
Contact termination: Screw or crimp connection

Mating method:
Operating voltage:
Max. rated voltage to earth:
Min. flashover:

Max. rated voltage to earth:
Min. flashover:

Min. flashover:

Max. rated voltage to earth:
Min. flashover:
Min. flashover:
Min. flashover:

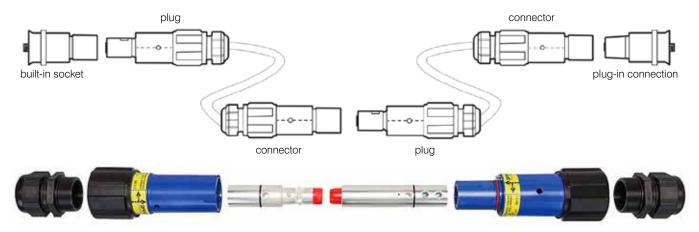
Insulation resistance: >5MOhm@500VDC

Protection category: IP67
Protection against electric shock: IP2X
Flammability: UL94-V0
Mating cycles: > 500
Material housing: thermoplastic
Contact area: silver

#### **Product features**

- maximum continuous current rating 800 A
- colour coded and mechanically keyed to prevent connection errors
- Flame retardant UL94-V0
- Locking mechanism to prevent accidental disconnection under load
- Finger proof contacts both genders (IP2X) to prevent access to electrical contacts when uncoupled
- silver-coated, self-cleaning contacts
- enhanced impact-resistant housing
- Protection category IP67
- for cables between 25 mm² and 300 mm²
- temperature resistant materials
- integrated cable strain relief
- Cable glands with generous clamping range
- Rubber protective caps to protect connectors from moisture, dirt and abrasion when uncoupled (optional)
- compatible with PowerLock
- CE-konform in EN 60309-1, DIN-EN 61984 and IEC 60900

#### System

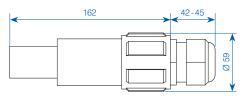




# Powersafe plug connectors

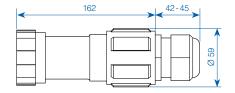
#### Plug





#### Connector with Rotalock





#### Plug

· lug								
Cab	le cross section	25-150mm <sup>2</sup>	120mm <sup>2</sup>	150mm <sup>2</sup>	185mm <sup>2</sup>	240mm <sup>2</sup>	300mm <sup>2</sup>	Protective
Cab	le diameter	19-28mm	19-28mm	22-34mm	22-34mm	30-38mm	30-38mm	cap IP67
Crin	np connection		✓	✓	✓	✓	✓	
Scre	ew connection	1						
		· ·						
Amp	peres	max. 500A	max. 500A	max. 500A	max. 500A	max. 800A	max. 800A	
		Item no.	Item no.	Item no.	Item no.	Item no.	Item no.	Item no.
PE	Yellow-green	Item no. 345976	Item no. 287864	Item no. 287859	Item no. 301218	Item no. 345983	Item no. 292091	Item no. 288926
PE N	Yellow-green Blue							
		345976	287864	287859	301218	345983	292091	288926
Ν	Blue	345976 345977	287864 287863	287859 287858	301218 301638	345983 345984	292091 292092	288926 288925

Powersafe reducing sleeve set 95 mm² / 70 mm² / 50 mm² / 35 mm² / 25 mm² (Item no. 345981) incl. grommet

#### Coupling with Rotalock

<b>-</b>	ge tane en							
Cable cross section		25-150mm <sup>2</sup>	120mm <sup>2</sup>	150mm <sup>2</sup>	185mm <sup>2</sup>	240mm <sup>2</sup>	300mm <sup>2</sup>	Protective
Cable	e diameter	19-28mm	19-28mm	19-28mm	22-34mm	22-34mm	22-34mm	cap IP67
Crim	p connection		✓	✓	✓	✓	✓	
Screw connection		✓						
Ampe	eres	max. 500A	max. 500A	max. 500A	max. 500A	max. 800A	max. 800A	
		Item no.	Item no.	Item no.	Item no.	Item no.	Item no.	Item no.
PE	Yellow-green	329191	345990	288915	345995	288418	346000	288931
Ν	Blue	346014	345991	288914	345996	288421	346001	288930
L1	Brown	329186	345992	288911	345997	288422	346002	288927
L2	Black	329187	345993	288912	345998	288423	346003	288928

 $<sup>^{1}\</sup>quad \text{Powersafe reducing sleeve set 95 mm}^{2}\,/\,70\,\text{mm}^{2}\,/\,50\,\text{mm}^{2}\,/\,35\,\text{mm}^{2}\,/\,25\,\text{mm}^{2}\,(\text{ltem no. 345981})\,\text{incl. grommet}$ 

<sup>&</sup>lt;sup>2</sup> Locking pin for Line-Drain 500A+800A: Item no. 346013 (43 mm)



- <sup>2</sup> Item no. 345982 (47 mm)
- <sup>2</sup> Item no. 346013 (43 mm)







Available on request: Right-angled connector (90° angle) for plug and coupling without Rotalock Cable cross section max. 240 mm² / 800 A

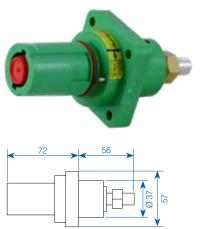


 $<sup>^{2}</sup>$   $\,$  Locking pin for Line-Drain 500A+800A: Item no. 345982 (47 mm)  $\,$ 

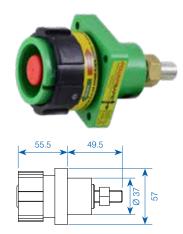
# **Powersafe**

# plug-in connections and build-in sockets

## Plug-in connector



#### Built-in socket with Rotalock



#### Plug-in connector, Screw connection

Thread		M12	M12	Protective cap IP67
Amperes		max. 500A	max. 800A	
		Item no.	Item no.	Item no.
PE	Yellow-green	293909	294821	285518
Ν	Blue	281742	303801	346011
L1	Brown	293906	294820	285514
L2	Black	281740	290713	285515
L3	Grey	293908	294819	285516

<sup>&</sup>lt;sup>3</sup> 45° adapter kit incl. screws for mounting

#### Built-in socket with Rotalock, Screw connection

Thread		M12	M12	Protective cap IP67	
Amperes		max. 500A	max. 800A		
		Item no.	Item no.	Item no.	
PE	Yellow-green	288920	346005	285000	
Ν	Blue	288919	346006	285003	
L1	Brown	288916	346007	284999	
L2	Black	288917	346008	285001	
L3	Grey	288918	346010	285002	

<sup>&</sup>lt;sup>3</sup> 45° adapter kit incl. screws for mounting





# Powersafe compact switchbox/dimensions



The PowerSAFE Box is a connection unit for connecting to a generator or the mains. The sequence of connecting and disconnecting is predetermined to ensure the safety circuits (PE+N) are the first to be connected and the last to be disconnected. The coded connections also prevent the possibility of incorrect contacts.

#### Functional description

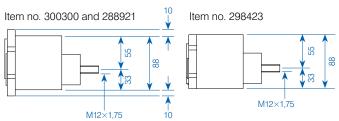
- The cover of the earth connection is opened by rotating it clockwise using the special key provided. Insert the PE high current plug to the end stop and then rotate it clockwise (lock).
- After inserting the earth conductor properly, the protective cover of the neutral conductor opens – also insert the neutral conductor to the end stop and then rotate it clockwise.
- Connect all L1 to L3 phase conductors to the switchbox in the same way – comply with correct sequence!
   Then the L3 phase conductor contact must also be locked with the special key in the clockwise direction. L3 is now also locked and unwanted disconnection is prevented.
- 4. This process triggers two processes:
  - a) It closes the L3 connection to prevent accidental interruptions under load and also prevents access to the device..
  - b) The microswitch (toggle function) is also activated and can therefore switch the switchbox on or off via an external contactor. (Leading or lagging) The load can be regulated in a controlled manner by connecting this switch to the power distribution.
- The removing and unplugging of the individual conductors is carried out in reverse order and procedure: Open the lock at L3 using the special key L3 and undo all connections beginning with L3.
- Important: All protective covers close automatically after removing the plug. (touch protection).

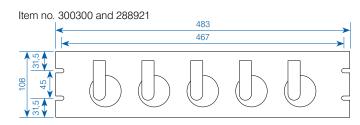
#### Dimensions art. no. 300300 and 288921:

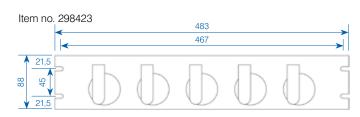
Version for installation in housing / wall 108×483×149 mm (H×W×D)

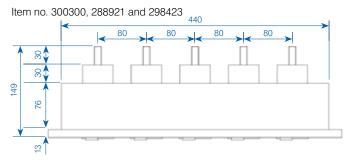
#### Dimensions item no. 298423:

Rack installation version 88×483×149 mm (H×W×D)

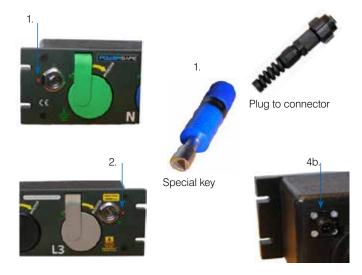








In any case, it is impossible for the conductors to be connected or disconnected to the unit in the wrong order or individually by mistake!

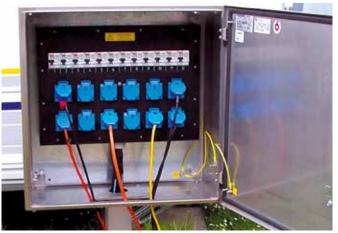


Item no.	Description
288921	Powersafe Panel Box up to 800 A 3 LNPE $108\times483\times149$ mm (H $\times$ W $\times$ D), installation wall / housing 5-way unit Built-in plug

Item no.	Description	
300768	Powersafe Panel Box up to 800 A 3 LPE 108×483×149 mm (H×W×D), installation wall / housing 4-way unit built-in sockets	
300300	Powersafe Panel Box up to 800 A 3 LNPE 108×483×149 mm (H×W×D), installation wall / housing 5-way unit built-in sockets	
298423	Powersafe Panel Box up to 800 A 3 LNPE 2 U 88×483×149 mm (H×W×D), installation in rack 5-way unit built-in sockets	















# SAFETY IS OUR TOP PRIORITY.

Whether in the chemical sector, energy production or in heavy industry: Wherever flammable substances are produced, processed, transported or stored, safety plays a particularly important role. Our recommendation for ATEX-certified, quality GIFAS products can be found in this chapter.

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# Labelling

GAS
Electrical equipment for explosive gas atmospheres (Device group II [Chemistry])

EPL	Standards IEC/EN		Type of protection	
	60079-0		General requirements	
	60079-11	ia	Intrinsic safety	
Ga	60079-18	ma	Encapsulation	
	60079-26		Equipment with equipment protection level (EPL) Ga	
	60079-28	op is	Protection of equipment and transmission systems using optical radiation	
	60079-1	d	Flame-proof enclosure	
	60079-2	p, px, py	Pressurised enclosure	
	60079-5	q	Powder-filled enclosure	
	60079-6	0	Oil immersion	
	60079-7	е	Increased safety	
Gb	60079-11	ib	Intrinsic safety	
	60079-18	mb	Encapsulation	
	60079-25		Intrinsically safe electrical systems	
	60079-27		Fieldbus intrinsically safe concept (FISCO)	
	60079-28	op is	Protection of equipment and transmission systems using optical radiation	
		op pr		
		op sh		
	60079-11	ic	Intrinsic safety	
	60079-18	mc	Encapsulation	
	60079-15	nA	Type of protection «non-sparking»	
	60079-15	nR	Steam cover	
Gc	60079-15	nL	Limited energy (old edition only)	
	60079-15	nC	Sparking apparatus	
	60079-2	pz	Pressurised enclosure	
	60079-28	op is op pr op sh	Protection of equipment and transmission systems using optical radiation	

# **DUST**Electrical apparatus for use in the presence of combustible dust (Device group III)

EPL	standards IEC/EN		Type of protection		
60079-0 General requirements		General requirements			
	60079-31	ta	Protection by enclosures		
Da	60079-11	ia	Protection by intrinsic safety (iaD IEC/EN 61241-11)		
	60079-18	ma	Protection by encapsulation		
	60079-31	tb	Protection by enclosures		
Db	60079-11	ib	Protection by intrinsic safety (ibD IEC/EN 61241-11)		
	60079-18	mb	Protection by encapsulation		
	61241-4	pD	Protection by excessive pressure 'pD'		
	60079-31	tc	Protection by enclosures		
Dc	60079-11	ic	Protection by intrinsic safety		
	60079-18	mc	Protection by encapsulation		
	61241-4	pD	Protection by excessive pressure 'pD'		



# Marking according to directive 94/9/EG (ATEX 95)

Identification number of the notified body	Category zones
(responsible for quality assurance)	1 zones 0 / 20
0102 Physikalisch-Technische Bundesan-	2 zones 1 / 21
stalt PTB, Germany	3 zones 2 / 22
0158 DEKRA EXAM GmbH, Germany	
0032 TÜV CERT-Zertifizierungsstelle,	
Germany	
0344 KEMA N.V., Netherlands	
0081 LCIE Laboratoire Central des	
Industries Electriques, France	
0080 INERIS, France	G = Gas
1180 BASEEFA, Great Britain	D = Staub (Dust)
1258 Electrosuisse SEV, Switzerland	2 (2 33)

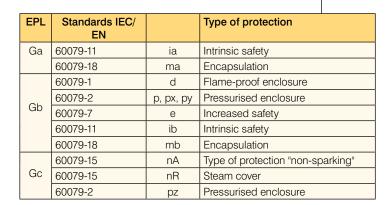
#### Marking according EN 60079-0

Equipment groups (Gas)				
IIA	Acetone, ethane, benzene, automotive gasoline, butane,			
	propane, methane			
IIB	Ethylene, town gas			
IIC	Hydrogen, acetylene			

Tempera- ture class	Max. surface
	temperature
T1	< 450 °C
T2	< 300 °C
T3	< 200 °C
T4	< 135 °C
T5	< 100 °C
T6	< 85 °C
·	

# ( E 0102 (EX) | 2G

Ex d IIC T5 Gb



zone	Equipment protection level (EPL)
0	Ga
1	Gb and Ga
2	Gc, Gb and Ga

Surface temperature (see EN 60078-0)

( E<sub>0102</sub> (E<sub>X</sub>) || 2D

Ex tD A21 IP68 T95°C Ex tb IIIC T95°C Db

EPL	Standards IEC/ EN			Type of protection
	60079-31	ta		Protection by enclosures
Da	60079-11	ia		Protection by intrinsic safety
	60079-18	ma	a	Protection by encapsulation
	60079-31	tb		Protection by enclosures
Gb	60079-11	ib		Protection by intrinsic safety
	60079-18	mb	)	Protection by encapsulation
	61241-4	рD	)	Protection by excessive pressure
Gc	60079-31	tc		Protection by enclosures
GC	61241-4	рD	)	Protection by excessive pressure

Equipment groups (Dust)							
IIIA	Fibres						
IIIB	non-conductive dust						
IIIC	Conductive dust						
iiio Goridactive dast							

Zone	Equipment protection level (EPL)
20	Da
21	Db and Da
22	Dc, Db and Da

IP	First digit (against ingress of solid foreign bodies/ against access to hazar- dous parts)=	Second digit (against ingress of water with damaging effects)
4	≥ 1.0 mm diameter	Splash-proof
5	Dust-proof	Water jet
6	Dust-tight	Strong water jet
7		Temporary immersion
8		Continuous immersion

#### Series 573 STAHL / APPLETON



#### **Product features**

- Cable reel in EX version
- Suitable for zone 1 and 2
- Reel body made of conductive elastomer
- Stable tubular steel frame with ball bearings
- Crank handle rotatable and foldable
- Mechanical latching mechanism for locking
- Stainless steel side plates for mounting the flange sockets, as connection to the frame
- Connection via Ex-e-terminals to the flange socket outlet, with swivel bearing (instead of axle)
- With warning notice: "Using the cable reel in an environment at risk of explosion of gas group IIC is only permitted if the cable is first connected or the cable reel is standing on a conductive base or conductive and earthed base."
- Easy maintenance inside the reel (no additional encapsulation)
- Resistant to oils and acids, resistant to chemical influences
- UV and weather resistant
- High mechanical load capacity
- Impact-resistant and ageing-resistant
- Very good conductivity
- The minimum cable requirement is H07

#### Technical data

🐼 II 2G / CE1258		
Ex db ed IIC T6 Gb		
SEV 18 ATEX 0130		
IP66		
II		
1		
up to 750 V, 50/60 Hz		
max. 32 A		
$-20^{\circ}$ C up to $+40^{\circ}$ C		
unrolled 3600W / 230V		
unrolled 11000W / 400V		
unrolled 22000W / 400\		
approx.13kg		
approx.18kg		
370x532x408		
370x532x354		

<sup>\*</sup> The rated values are maximum values. The actual electrical values are determined by the installed electrical equipment, see nameplate.



Plug connectors from APPLETON Similar to illustration

#### Safety precautions

#### Always read the label on the cable reel before use!

Cable reel 573-Ex is not suitable for zones 0, 20, 21 and 22. The temperature class and ignition protection classes specified on the equipment must be complied with. In order to avoid the non-permitted heating of cables, particularly while coiled, the maximum loads specified must not be exceeded. No modifications or alterations must be made to the cable reels. The cable reels must only be operated in undamaged condition. Note national safety and accident prevention regulations.

Item no.	Symbols Output	Description
860675	STAHL	573-Ex STAHL, Input 30m Cable 3x2,5mm² mit CEE-Stecker 3x16A/230V, Output 1 CEE-Ein-bausteckdose 3x16A/230V
860636	STAHL	573-Ex STAHL, Input 25m cable 3x2,5mm² with CEE connector 3x16A/230V, Output 2 CEE-Plug socket 3x16A/230V
860637	STAHL	573-Ex STAHL, Input 25m cable 5x2,5mm² with CEE connector 5x16A/400V, Output 1 CEE-Plug socket 3x16A/230V, 1 CEE-Plug socket 5x16A/400V
860638	STAHL	573-Ex STAHL, Input 20m cable 5x6mm² with CEE connector 5x32A/400V, Output 1 CEE-Plug socket 5x32A/400V
860676	STAHL	573-Ex STAHL, Input 30m Cable 5x2,5mm <sup>2</sup> with CEE-plug 5x16A/400V, Output 1 CEE-Plug socket 5x16A/400V
860677	APPLETON	573-Ex APPLETON, Input 30m Cable 3x2,5mm² with CEE-plug 3x16A/230V, Output 1 Plug socket 3x16A/230V
860639	APPLETON	573-Ex APPLETON, Input 25m cable 3x2,5mm² with CEE connector 3x16A/230V, Output 2 CEE-Plug socket 3x16A/230V
860640	APPLETON	573-Ex APPLETON, Input 25m cable 5x2,5mm² with CEE connector 5x16A/400V, Output 1 CEE-Plug socket 3x16A/230V, 1 CEE-Plug socket 5x16A/400V
860641	APPLETON	573-Ex APPLETON, Input 20m cable 5x6mm <sup>2</sup> with CEE connector 5x32A/400V, Output 1 CEE-Plug socket 5x32A/400V
860678	APPLETON	573-Ex APPLETON, Input 50m Cable 3x2,5mm <sup>2</sup> with CEE-plug 3x16A/230V, Output 1 CEE-Plug socket 3x16A/230V



#### Series 573 CEAG



Plug connectors from CEAG Item no. 860673

#### **Product features**

- Cable reel in EX version
- Suitable for zone 1 and 2
- Reel body made of conductive elastomer
- Stable tubular steel frame with ball bearings
- Crank handle rotatable and foldable
- Mechanical latching mechanism for locking
- Stainless steel side plates for mounting the flange sockets, as connection to the frame
- Connection via Ex-e-terminals to the flange socket outlet, with swivel bearing (instead of axle)
- With warning notice: "Using the cable reel in an environment at risk of explosion of gas group IIC is only permitted if the cable is first connected or the cable reel is standing on a conductive base or conductive and earthed base."
- Easy maintenance inside the reel (no additional encapsulation)
- Resistant to oils and acids, resistant to chemical influences
- UV and weather resistant
- High mechanical load capacity
- Impact-resistant and ageing-resistant
- Very good conductivity
- The minimum cable requirement is H07

#### Technical data

Labelling	9	II 2G / CE1258		
Explosio	on protection	Ex db ed IIC T6 Gb		
EC type	approval certificate	SEV 18 ATEX 0130		
Protection	on category	IP66		
Protection	on class	II		
Sim. fac	tor	1		
Rated vo	oltage*	up to 750 V, 50/60 Hz		
Rated cu	urrent*	max. 32 A		
Temperature range		$-20^{\circ}$ C up to $+40^{\circ}$ C		
Max. loa	ıd			
	cable 3x2,5mm2	unrolled 3600W / 230V		
	cable 5x2,5mm2	unrolled 11000W / 400V		
	cable 5x6mm2	unrolled 22000W / 400V		
Weight	20m PROFLEXX-07	approx.13kg		
	25m PROFLEXX-07	approx.18kg		
Measure	ements (WxHxD)			
	CEAG	370x532x353		

<sup>\*</sup> The rated values are maximum values. The actual electrical values are determined by the installed electrical equipment, see nameplate.



Plug connectors from CEAG Item no. 860635

#### Safety precautions

#### Always read the label on the cable reel before use!

Cable reel 573-Ex is not suitable for zones 0, 20, 21 and 22. The temperature class and ignition protection classes specified on the equipment must be complied with. In order to avoid the non-permitted heating of cables, particularly while coiled, the maximum loads specified must not be exceeded. No modifications or alterations must be made to the cable reels. The cable reels must only be operated in undamaged condition. Note national safety and accident prevention regulations.

Item no.	Symbols Output	Description
860889		573-Ex plug 3x16A/230V, input 30m cable 3x2,5mm² with CEE connector 3x16A/230V, output 1 CEE-Plug socket 3x16A/230V
860673		573-Ex plug 3x16A/230V, input 50m cable 3x2,5mm² with CEE connector 3x16A/230V, output 1 CEE-Plug socket 3x16A/230V
860633	00	573-Ex CEAG, input 25m cable 3x2,5mm² with CEE connector 3x16A/230V, output 2 CEE plug socket 3x16A/230V
860634		573-Ex CEAG, input 25m cable 5x2,5mm² with CEE connector 5x16A/400V, output 1 CEE plug socket 3x16A/230V, 1 CEE plug socket 5x16A/400V
860635		573-Ex CEAG, input 20m cable 5x6mm² with CEE connector 5x32A/400V, output 1 CEE plug socket 5x32A/400V
860674		573-Ex CEAG, Input 30m cable 5x2,5mm² with CEE-plug 5x16A/400V, output 1 CEE-Plug socket 5x16A/400V

## Plastic CEE plugs Ex for 200-250V/380-415V

#### **Product features**

- Excellent impact strength combined with high strength
- high thermal stability
- very good insulating properties
- high dielectric strengthhigh abrasion resistance
- high resistance to weathering
- very good chemical resistance to a large number of different chemicals
- Temperature resistance from -25°C to + 80°C, short-term 1h +100°C
- Contacts made of a copper-zinc alloy with high electrical conductivity, high tensile strength, high corrosion resistance





#### CEE plugs from CEAG

Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
240480		3	16	66	PTB 99 ATEX 1039
	240329	5	16	66	PTB 99 ATEX 1039
	240674	5	32	66	PTB 99 ATEX 1039





## CEE coupling from CEAG

Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
239692		3	16	66	PTB 99 ATEX 1039
	239615	5	16	66	PTB 99 ATEX 1039
	240675	5	32	66	PTB 99 ATEX 1039





#### CEE surface-mounted socket from CEAG

Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
238165		3	16	66	PTB 99 ATEX 1039
267483		3	16	66	PTB 99 ATEX 1039
	241617	5	16	66	PTB 99 ATEX 1039
	248909	5	32	66	PTB 99 ATEX 1039





## CEE built-in socket outlets from CEAG

Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
239616		3	16	66	PTB 99 ATEX 1039
	241319	5	16	66	PTB 99 ATEX 1039
	239617	5	32	66	PTB 99 ATEX 1039



#### CEE plugs from STAHL

	Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
Ī	251069		3	16	66	PTB 03 ATEX 1227
		251115	5	16	66	PTB 03 ATEX 1227
		253079	5	32	66	PTB 03 ATEX 1227





#### CEE surface-mounted socket from STAHL

Item no. 200-250V	Item no. 380-415V	Pole No.	Amps	Protection IP	EC type-examination certificate
251118		3	16	66	PTB 04 ATEX 1060
	251120	5	16	66	PTB 04 ATEX 1060
	294039	5	32	66	PTB 04 ATEX 1060



## Extensions Ex with connectors from CEAG and STAHL



Connectors CEAG Connectors STAHL

## **Product features**

- Mounted CEE plug Ex
- Mounted CEE coupling Ex

## Areas of application

- Can be used in zones 1, 2, 20 and 21

## Device connection cables Ex with plug connectors from CEAG



## **Product features**

- Mounted CEE plug Ex
- Free end, stripped, stripped and fitted with wire end ferrules

## Areas of application

- Can be used in zones 1, 2, 20 and 21

Extensions Ex						
Item no.	Description	Length in m	Number of cores x Cross-section in mm²	Protection category	Plug/coupling	Make Plug/coupling
322274	201636/37.EX/02,5/4325GG/C	2,5	3x2,5		CEE 3x16A/230V	CEAG
266536	201636/37.EX/03/4325GG/C	3	3x2,5		CEE 3x16A/230V	CEAG
270174	201636/37.EX/04/4325GG/C	4	3x2,5		CEE 3x16A/230V	CEAG
266546	201636/37.EX/08/4325GG/C	8	3x2,5		CEE 3x16A/230V	CEAG
251208	201636/37.EX/10/4325GG/C	10	3x2,5		CEE 3x16A/230V	CEAG
266547	201636/37.EX/15/4325GG/C	15	3x2,5		CEE 3x16A/230V	CEAG
251209	201636/37.EX/20/4325GG/C	20	3x2,5		CEE 3x16A/230V	CEAG
264445	201636/37.EX/30/4325GG/C	30	3x2,5		CEE 3x16A/230V	CEAG
262116	201636/37.EX/50/4325GG/C	50	3x2,5		CEE 3x16A/230V	CEAG
278670	301656/57.EX/02/4525GG/C	2	5x2,5		CEE 5x16A/400V	CEAG
133576	301656/57.EX/02,5/4525GG/C	2,5	5x2,5		CEE 5x16A/400V	CEAG
305361	301656/57.EX/05/4525H07/C	5	5x2,5		CEE 5x16A/400V	CEAG
134121	301656/57.EX/10/4525H07/C	10	5x2,5		CEE 5x16A/400V	CEAG
290835	301656/57.EX/20/4525GG/C	20	5x2,5		CEE 5x16A/400V	CEAG
282753	301656/57.EX/30/4525H07/C	30	5x2,5		CEE 5x16A/400V	CEAG
250760	201636/37.EX/25/4325GG/S	25	3x2,5		CEE 3x16A/230V	STAHL
248567	201636/37.EX/50/4325GG/S	50	3x2,5		CEE 3x16A/230V	STAHL
273179	303256/57.EX/50/4560GG/S	50	5x6		CEE 5x32A/400V	STAHL
Device of	connection cables Ex					
261627	241626.EX.CEAG/10/4215.GG/M	10	2x1,5		CEE 2x16A/24V	CEAG
268933	241626.EX.CEAG/30/4215GG/M	30	2x1,5		CEE 2x16A/24V	CEAG
204218	241626.EX.CEAG/20/4225.GG/M	20	2x2,5		CEE 2x16A/24V	CEAG
261629	241626.EX.CEAG/25/4225.GG/M	25	2x2,5		CEE 2x16A/24V	CEAG
289073	421626.EX.CEAG/15/4215GG/M	15	2x1,5		CEE 2x16A/42V	CEAG
279580	421626.EX.CEAG/25/4225GG/M	25	2x2,5		CEE 2x16A/42V	CEAG
273383	421626.EX.CEAG/30/4225GG/M	30	2x2,5		CEE 2x16A/42V	CEAG

Minimum order quantity for special designs according to customer requirements: 50 pieces

Other cross-sections and lengths on request.













## RECHARGEABLE AND BATTERY POWERED LIGHTS



# PERFECT VISIBILITY ANYWHERE, ANYTIME.

Perfect view anywhere and anytime. Having good work light with you wherever you go is particularly relevant in industry and craft. The wide productrange of GIFAS products is designed for harsh operating conditions and is your reliable companion for every work situation.

FlashLED 2 with emergency light function	148
TorchLED torch / with emergency light function	149
I-LED 2 / I-LED 844 Work spotlight	150
PrimaLED 2 Akku work light	151
WorkLED W60 HYBRID / StarLED D4R work light	152
StarLED W6R work light / Torch rechargeable headlamp	153
WorkLED rechargeable spotlight	154



FlashLED 2 Battery-powered light with emergency light function







FlashLED 2 with charging station

State-of-the-art charging and monitoring electronics coupled with the latest LED technology form the basis of this development. The very latest Li-ion technology ensures a high energy density and a superlative service life (up to 1,000 cycles), while the GIFAS battery management system monitors and safeguards all of the key battery operating parameters.

The swivel-mounted lighting head ensures customised illumination adapted to your working environment. The operating panel is easy to use and clearly laid out. If the supply voltage to the charging station fails, the light switches to "Emergency light" mode. Setting the magnetic switch to the "Emergency Light ON" position activates the emergency light function.

## **Product features**

- Up to 14 hours of light in four selectable operating modes:

Concentrated and wide light beam Spot: Wide: Space-illuminating light Combination of spot and wide Full light: Emergency light: Broad light cone

- Memory function (last setting is saved)
- Flash mode
- Infinitely dimmable
- Sturdy housing made from polyamide
- Corrosion-resistant charging contacts (gold-plated spring steel)
- Vertical swivel light head
- Charging station can be used as a wall-mounted model

## Technical data for light

10-42VDC Input voltage

Li-ion battery, 14,4V 2600mAh Power supply

Charging time

Light duration 10h Spot (3 LED) 14h Wide (2 LED)

Vertically swivelling

luminaire head

5h Full light (5 LED) 5h Emergency light (5 LED)

Light source 5x3W PowerLED Luminous flux 200lm - 1250lm 5000K Light colour

IP65 Protection category Protection class

Temperature range Operation -20°C to +45°C -0°C to +45°C

Charging Housing Polyamide Weight

Dimensions (WxHxD) Light 251x124x93.4mm 323x149x108mm Light incl. charging station

## Technical data for charging station

Input voltage 230VAC, (85-264VDC) or 12-24VDC

Protection category IP20 Protection class 230VAC Protection class 12-24VDC Ш Housing Polyamide Weight 430g

149x276x95mm Dimensions (WxHxD)



Color filter attachment Set à 3 piece, green, red, yellow item no. 268167



FlashLED 2 Ex

Also available as explosion-proof version! Further information please find on our page 213 / Ex-products.



	Item no.	Description
)	861200	FlashLED 2 work and inspection light with emergency light function
	860026	FlashLED 230VAC charging station, incl. 1,5m cable and contour plug
	860027	FlashLED 12/24 VDC charging station, with built-in plug (without cable)
	266884	Charging cable with cigarette lighter plug, 2m

Accessories		
860030	FlashLED 2 carrying strap	
268167	Color filter set: 3 Color filter attachment in red, green and yellow	
860792	Replacement battery 14.4V 2600mAh for FlashLED 2	

## **TorchLED** LED torch



The TorchLED is an extremely practical, lightweight LED torch which, by virtue of its various light functions, can be used as a torch or as a signalling light. The red or green light function, for example, can be used to mark out hazardous areas or declare them safe again, accordingly. The TorchLED's non-slip, sturdy character makes it extremely reliable in this field of operation. The TorchLED has excellent impact and shock resistance, making it extremely robust and suitable for use even in harsh conditions.

## **Product features**

- Non-slip, impact-resistant, free-standing
- Strap holder / retaining clip made from POM
- Can be wall or desktop mounted
- Charging station with lamp retainer
- Including hand strap
- TorchLED with emergency light function: in the event of a power cut, the TorchLED will switch on automatically (wide full load, burn time
- Optional with rechargeable battery (please order 4 rechargeable batteries)

## Technical data for light

Power supply **TorchLED** 

TorchLED EMERGENCY

Charging time Light duration Light source Protection category

Temperature range

Housing

Housing colour

Weight

Dimensions(WxHxD)

4x1.5V batteries AA or 4x1.2V NiMH batteries AA

4x1.2V NiMH batteries AA 5h with 2700mAh batteries 4h with 1900mAh batteries

2x white/2x red/2x green LEDs IP54

-20°C to +45°C

PA6 with elastomer-surrounded

handle parts

Yellow, optional olive

Emergency light function: red

230g

67.8x115.5x34mm

## Technical data for charging station

Power supply 700mA charging current

Protection category

Contacts Spring steel, gold-plated

Temperature range  $0^{\circ}$ C to  $+40^{\circ}$ C **ABS** 

Housing

Dimensions (WxHxD) 86.6x79.6x44mm

## **TorchLED** LED torch with emergency light function







## TorchLED with emergency light function Light functions with rechargeable batteries

Main function	Functions	Operating time
White light per 1 LED	Spot full load	Approx. 6h
	Spot dimmed	> 60h
	Wide full load	Approx. 6h
	Wide dimmed	> 60h
Signal lights per 2 LED	Full load dimmed	> 30h > 60h

## **TorchLED** Light functions with batteries or rechargeable batteries

Main function	Functions	Operating time Battery Rechargeable battery	
White light per 1 LED	Spot full load	Approx. 6h	Approx. 6h
	Spot dimmed	> 80h	> 80h
	Wide full load	Approx. 6h	Approx. 6h
	Wide dimmed	> 80h	> 80h
Signal lights per 2	Full load	> 40h > 80h	> 30h > 60h

Item no.	Description
860237	TorchLED for battery or rechargeable battery (excl.), IP54, incl. hand strap
291822	TorchLED "olive" for battery or rechargeable battery (excl.), IP54, incl. hand strap
860236	TorchLED emergency light for battery or rechargeable battery (excl.), IP54, incl. hand strap
860276	TorchLED 230VAC/15VDC charging station, IP20, incl. 1.5m cable with plug transformer
860440	TorchLED 12-48VDC charging station, IP20, incl. 1.5m cable without plug
860274	NiMH 1900 mAh rechargeable battery (AA) -1 piece-



## TorchLED-Ex

Also available as explosion-proof version! Further information please find on our page 214 / Ex-Products.



## I-LED Akku 2 Rechargeable work lights





The I-LED battery-powered light 2 with base magnet is a highly robust, cable-free work light for professional use. The powerful light ensures a safe working environment. Whether it be positioned on the floor, wall or ceiling - a powerful magnet in the base plinth of the light allows it to be located wherever two-handed working is needed.

#### **Product features**

- With charge and capacity indicator via LED
- 180° swivelling holding / suspension bracket
- Base socket with 4x magnet 50N
- Additional USB connection socket for charging external devices
- Supports the QuickCharge 3+ power bank function and PowerDelivery 3.0
- Full luminous flux is available immediately
- Minimal temperature development
- Maintenance-free
- No UV/IR radiation
- Shock and vibration resistant

## Technical data

Input voltage	7.4VDC
Power supply	Li-ion 6400mAh
Charging time	4.5h with charger via plug
	7h with car charger
	3.5h with USB-C and
	30W power supply unit
Light duration	10h mode 50%
_	5h mode 100%
Switching mode	100, 50%, flashing, OFF
System power	17W
Luminous flux	2000lm
Light colour	6500K
Beam angle	Flood 90°
Protection category	IP54
Protection class	III

Temperature range Operation Housing

Rubberized plastic, shockproof

-20°C to +45°C

Cover

865g incl. battery Dimensions (WxHxD) 120x237x115mm

## Item no. Description

I-LED battery 2, battery light with 4 magnets 841113 incl. plug-in power supply 230V and plug for cigarette lighter 12/24V



## I-LED Akku 844 Rechargeable work lights





The I-LED battery light is a robust, cordless work light for professional use. The powerful light ensures your safety at work. Whether placed on the floor, wall or ceiling - six strongly adhering neodymium magnets in the base of the light allow it to be placed where two-handed working is necessary. Easy to handle, it is possible to choose between several lighting functions. In addition to the flood and spot light functions, a mode with an orange flashing light can also be selected and is used to cordon off danger areas. Several luminaires with flashing lights can be used for securing larger areas or for temporary for securing larger areas or for temporary traffic guidance, several luminaires with flashing mode can be synchronised in series.

#### **Product features**

- Charge and capacity display via LED
- Holding / suspension bracket can be swivelled 180°
- Mounting option: photo tripod thread (1/4 inch)
- Full luminous flux is available immediately
- Minimal temperature development
- Maintenance-free, insensitive to shock and vibration
- No UV/IR radiation

## Technical data

Innut valtage	12V DC
Input voltage	12V DC
Power supply	12.8Ah Li-Ion
Light source	SMD-LED
System power	max. 36W
Charging time	7h
Luminous flux	
Flood light	2100lm

Spot light 2000lm Light duration

Flood light 4,5h / 10h (dimmed) Spot light 5,5h

Flashing light 9h Light colour

5000K / Amber CRI Index Ra >80

Beam angle 25° Flood light / 10° Spot light 50000h [L70/B10] LED-Lebensdauer

Protection category IP54

Protection class -20°C to +50°C Temperature range Housing Plastic

Weight ca. 2kg (incl. accu) Dimensions (LxWxH) 181x135x285mm

## Item no. Description

I-LED Akku 844, rechargeable battery light incl. plug-in power supply 230V and car charging cable 12V (minimum order quantity: 10 pieces)

## PrimaLED 2 Rechargeable Battery light



The PrimaLED 2 Rechargeable is a professional rechargeable luminaire with a high light output of up to 16 hours, low heat generation and low energy consumption. This mobile work light guarantees optimal area illumination with glare-free, evenly distributed light. In addition, it offers various set-up options for every application: hanging, lying or standing!

## **Product features**

- Intelligent lithium-ion battery with balancing function and charging option even on work vehicles
- Long autonomy of use, up to 16 hours
- Minimal temperature development
- No UV / IR radiation
- Synoptic keypad with power switch, setting on levels (25% -50% -100%), display of setting level, Display of remaining battery charge (25% -50% -75% -100%)
- Automatic switchover to the "energy saving" function when the remaining charge is almost exhausted (15 minutes safety reserve at 25%) Shock and impact resistant, waterproof and dustproof (impact resistance IK08)
- Carrying handle also serves as a support, which, by snapping into place the lamp into the desired position

## Technische Daten

Operating voltage 10-30Vdc Light source LED System output 25,2W (10

25,2W (100%) 12,6W (50%)

6,3W (25%) Light colour 4000K

Luminous flux 4200lm (100%) 2100lm (50%)

2100lm (50%) 1050lm (25%)

Power supply Li-lon 22,2V 6000mAh

Light duration 25% 16h

50% >8h 100%> 4h < 8h IP54

Charging time < 8h
Protection category IP54
Protection class III
Impact resistance IK08

Temperature range  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  Dimensions (WxHxD)  $305 \times 295 \times 110 \text{ mm}$ 

Weight with battery 3,7kg

Cover satined PMMA

Weight without battery 3,1kg

Item no.	Description
870021	PrimaLED 2 Rechargeable/4200lm/4000K

D - Marking according to VDE 0711-2-24 resp. EN 60598-2-24



## WorkLED W60 HYBRID Work light for battery and mains operation



StarLED D4R Battery work lights



The work spotlight is the solution for anyone who needs reliable light even under demanding conditions. With a light output of up to 6350 lumens and an illuminance of up to 9000 lux, it provides uniform and powerful illumination. Thanks to five selectable brightness levels, the light output can be flexibly adjusted - depending on the task, environment or battery life.

Particularly practical: the spotlight can be operated flexibly both with mains power and with an 18V rechargeable battery. Three adapter plates supplied make it compatible with common battery systems from Bosch, Makita and Milwaukee / Dewalt. This means you remain independent and flexible - perfect for use on construction sites, in workshops or industrial environments.

## Product features

- Work spotlight for 18V battery or mains operation
- Robust plastic housing with integrated carrying handle
- Battery capacity indicator / power indicator
- Tripod mount
- Illuminance up to 9000 lux

## Technical data

Power supply	100-240VAC 60Hz / 50Hz
Mains connection	Contour plug
Light source	1x60W COB LED
Ŭ	with 130 LEDs
Luminous flux	6350lm
Light colour	6000K
Lighting range	95m
Switching functions	1. 100 %
	2. 75 %
	3. 50 %
	4. 25 %
	5. off
	The direct switch-off function
	is activated after approx. 3s.
Protection category (battery-powered)	IP65
Protection category (AC-powered)	IP44
Impact resistance	IK08
Temperature range	-10°C to +40°C
Housing material	nylon, rubber
Weight	2,4kg
Dimensions (WxHxD)	252x290x170mm

The StarLED D4R is a very handy, lightweight work light that can be used individually thanks to its various light functions. The StarLED D4R has a floodlight with three light levels and a powerful spot beam for inspection work. Thanks to the 180° swivelling head, the light can be adjusted in any direction and stands independently with the magnetic base.

#### **Product features**

- Attractive design
- 4 brightness levels, spotlight, high, medium, low
- 2 light functions spotlight, floodlight
- LED head swivels up to 180
- Magnet in base

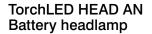
## Technical data

Power supply	Li-lon 3,7 V, 5200 mAh
Luminosity	
<ul><li>Floodlight</li></ul>	45 m
<ul><li>Spotlight</li></ul>	125 m
Luminous flux	
– High	1400 lm
– Medium	900 lm
– Low	450 lm
<ul><li>Spotlight</li></ul>	400 lm
Light duration	
– High	3h
– Medium	4h 15min
– Low	7h
<ul><li>Spotlight</li></ul>	6h 30 min
Light colour	6500 K
Protection category	IP65
Impact resistance	IK07
Temperature range	-10°C to +40°C
Housing	Plastic
Weight with battery	400 g
Dimensions (WxHxD)	101×116×41,5 mm

Item no.	Description
301090	StarLED D4R, 1400 lm, IP65,
	Li-lon 3,7 V 5,2 Ah, USB-C Adapter

## Item no. Description 354677 WorkLED W60 HYBRID incl. 3x battery adapter plates for Bosch, Makita, Milwaukee / Dewalt and 5m connection cable with quick-release lock







The StarLED W6R is a professional luminaire with high light output (4600 lumens) and low heat generation. With its 180° rotatable light panels and the 90° adjustable handle, the work light offers various adjustable handle, the luminaire can be used for a variety of applications. The StarLED W6R can shine in two directions at the same time, so that even large rooms can be illuminated with this work light. In addition, it offers various set-up options for every application: standing or mounted on a tripod. In addition, the StarLED W6R has the protection category IP54, which makes it dust and waterproof and perfect for the construction site.

## **Product features**

- Attractive design
- 4 brightness levels, spotlight, high, medium, low
- 2 LED head each to  $180^{\circ}$  foldable
- Battery with powerbank function via USB

## Technical data

Dimensions (WxHxD)

Power supply Li-lon 14,8 V, 5200 mAh Luminosity to 80 m Luminous flux - Max 4600 lm - High 3000 lm 1500 lm Medium 750 lm – Low Light duration – Max 2h 15 min – High 3 h 30 min - Medium 7h – Low 14 h Light colour 5700 K Protection category IP54 IK07 Impact resistance Temperature range -10 $^{\circ}$ C to +40 $^{\circ}$ C Housing Plastic Weight 2,41kg

Item no.	Description
301092	StarLED W6R, 4600 lm, IP54, Li-lon 14,8 V 5,2 Ah, USB-C Adapter

176×288×131 mm

## Accessories 301093 StarLED W6R Tripod for height 0,73-1,65 m 301097 StarLED W6R Replacement battery Li-lon 5,2 Ah 14,4 V

With a maximum output of 280 lumens, this headlamp is a true light wonder. The LeichtWeight is equipped with the best technology. With its 2 brightness levels, selectable focus and swivelling LED head, the TorchLED HEAD AN makes your work in low-light environments more pleasant and, above all, safer.

## **Product features**

- Rechargeable with Li-Ion battery
- 2 brightness levels, high beam (100%), low beam (20%)
- Stepless adjustment between narrow and wide beam
- LED head swivels to 60
- Soft, adjustable, elastic rubber band for highest wearing comfort

## Technical data

Power supply Li-lon 3,7 V, 1500mAh Light duration up to 6,25h Charging time approx. 3h Luminous flux

High 280 lm Low 100 lm

Switching functions 1. main light low 2. main light high 3. sensor: on/off

Protection category IP65 Housing Plastic Weight 111a

Dimensions (WxHxD) 34,5x39x28mm

Item no.	Description
301100	TorchLED HEAD AN incl. headband and Micro-USB charging cable



## WorkLED Akku W30 AN Battery-powered work light







The rechargeable light is powered by a powerful Li-Ion battery pack with 6600mAh. This means that the LED spotlight can be used anytime and anywhere. The work light lasts up to 3 hours in 100% mode, 7 hours in 50% mode and 13 hours in 25% mode. Whether mobile or at home, with the WorkLED Akku W30 AN you always have the right spotlight to bring light into the dark!

## **Product features**

- Rechargeable work light with 2400lm (100%) and a 30W COB LED
- Integrated Li-Ion battery pack with safety electronics
- Power bank function
- Aluminium housing and protective corners made of high-quality plastic extremely impact-resistant
- Flexible use thanks to stable 180° adjustable support bracket
- LED battery capacity indicator

## Technical data

Power supply Li-Ion battery 3.7V, 6600mAh with safety electronics Micro-USB socket Charging connection approx. 8h Charging time Lighting time up to 13h 30W COB LED Light source 2400lm Luminous flux Light colour 6000K CRI 80 Ra Protection category IP64 Impact resistance IK07

Housing aluminium and plastic

Weight 700g

Dimensions (HxWxD) 129x177x44mm

Item no.	Description
338425	WorkLED rechargeable battery W30 AN work light, incl. USB cable

## WorkLED Akku W50 AN Battery-powered work light



Our battery-powered light is a professional spotlight with SMD LED technology. The reliable light integrates effortlessly into the demanding everyday life for work in and around the house, e.g. in workshops, construction sites, industry, house, garden, yard or garage.

## **Product features**

- 2 light intensities (100% (4500lm) and 50% (2500lm))
- Powerful SMD LEDs installed
- Dustproof and protected against water jets
- Robust and impact-resistant housing
- Incl. USB-C charging cable
- Simultaneous lighting and charging possible
- Mounting bracket is adjustable up to  $70^{\circ}$
- Light head can be adjusted 360°
- Protection against overcharging and deep discharge

## Technical data

Power supply

Charging connection

Charging time

Charging indicator

Remaining capacity indicator

Li-ion battery pack, 8800mAh

USB-C charging cable

approx. 6h

via LED

via LED

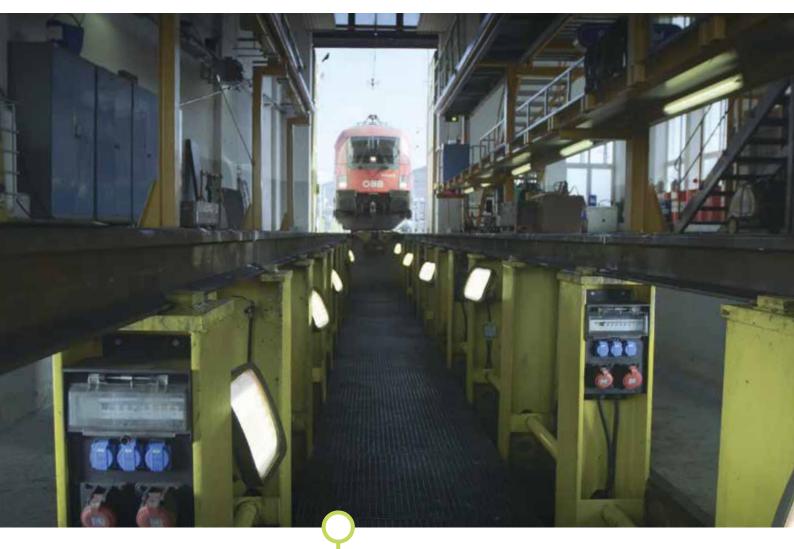
Lighting duration
- 100% approx. 3h
- 50% approx. 6h

Light source 50W SMD LED
Luminous flux 4500Im
Light colour 5000K
CRI >80 Ra
Protection category IP54
Impact resistance IK05
Protection class III

Temperature range -20°C to +45°C Weight 1400g

Dimensions (HxWxD) 305x280x65mm

Item no.	Description
338426	WorkLED rechargeable battery W50 AN work light, incl. USB-C cable



# PERFECT VISIBILITY ANYWHERE, ANYTIME.

Mobile work lights make working more pleasant and are the perfect addition to hall or area lighting. The GIFAS productrange impresses with its robustness and high flexibility in practical use.

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## 911 LED-hand-held floodlight



The powerful 911 hand-held floodlight is now also available with the latest LED technology.

## **Product features**

- Protective insulation, impact-resistant light body made from solid rubber with hanging ring
- Ergonomic handle with combination switch for constant light and pulsed operation
- Shatter-proof safety glass
- Combination ON/OFF switch and touch function

## Technical data

Input voltage 230V, 42/24VAC Power supply Mains connection Light source 6x2W LEDs 1400lm Luminous flux Protection category IP54  $\parallel / \parallel \parallel$ Protection class Housing Solid rubber Cover Safety glass 1200g (without cable) Weight

Item no.	Description	Supply cable	Plug
276195	24VAC/12W	5m 2x1.5mm <sup>2</sup>	CEE 16A/24V
274285	24VAC/12W	10m 2x1.5mm <sup>2</sup>	CEE 16A/24V
273643	42VAC/12W	10m 2x1.5mm <sup>2</sup>	CEE 16A/42V
279566	42VAC/12W	5m 2x1.5mm <sup>2</sup>	CEE 16A/42V
274286	230VAC/12W	3m 2x1.5mm <sup>2</sup>	230V protective contact

Accessories / spare parts			
105119	Rubber housing for light		
105623	Toggle switch		
110223	Spare front pane		
274580	LED driver 24-42 VAC/DC for 911LED, without housing		
270241	LED PCB for 911LED		

911 Additional options



In accordance with applicable regulations, energy consumers with appropriate protective low voltages must be used in areas where there are conductive materials.

The combinationhalogen hand-held floodlight with cable reelis specifically ideal for use during inspection work in large boiler tanks, containers and similar vessels.

Important! The relevant application regulations must be observed while, before using these additional options.

Item no.	Description
278756	LED hand-held spotlight 911, 12W, on cable reel completely equipped with 20m supply line 2x1.5mm² on main role, toroidal transformer 230 / 24V-120VA installed, supply line 5m 2x1.5mm² with contour plug on additional role
284235	LED handheld spotlight 911, 7.5W, on cable reel completely equipped with 20m cable, supply line 2x2.5mm² on main role, toroidal transformer 230 / 24V – 120VA installed, supply line 5m, 2x1.5mm² with contour plug on additional role
208768	Mobile security transformer, case type 2516 120VA, 230/24V
208628	Mobile security transformer, case type 2516 120VA, 230/42V

## StabiLED LED tubular light



Innovative lighting technology with increased safety is the base of our development for the StabiLED series. Outstanding light power with minimal energy consumption is its hallmark feature.

## **Product features**

- Grip and cap made from insulating material with shock absorbing protection glas
- Glare-free work light distributed along a long length
- Built-in electronics with protection module
- Handy hanging device with rotating hook
- Unaffected by temperature fluctuations
- Oil, acid and ageing resistant, self-extinguishing

## Technical data

230VAC, 42/24VAC/DC Input voltage Power supply Mains connection Light source 6x1W high-power LEDs Luminous flux 2600lm Service life > 70000h IP55 Protection category Protection class  $\parallel / \parallel \parallel$ Solid rubber Housing Polycarbonate Cover Weight 250g (without cable) Dimensions (ØxL) 60x500mm

Item no.	Description	Supply cable	Plug			
256735	24V	24V 5m 2x1.0mm <sup>2</sup> CEE 16A/24V				
256738	24V 10m 2x1.0mm <sup>2</sup> CEE 1		CEE 16A/24V			
256737	42V 5m 2x1.0mm <sup>2</sup> CEE 16A/42V					
256739	42V	10m 2x1.0mm <sup>2</sup>	CEE 16A/42V			
256733	230V	5m 2x1.0mm <sup>2</sup>	Contour plug			
256734	230V	10m 2x1.0mm <sup>2</sup>	Contour plug			
Accessori	es / spare parts					
256731	Electronics for 2	4/48VAC/DC				
256724	Electronics for 230V					
256725	Protective tube for 24/42 and 230V					
258153	Rubber cap with hook					
258151	Rubber grip					
258234	Magnetic holder, holding force 209 N with clamping bridge					



## FlexLED Continuous rooflight on cable reel / on reel



Handle with integrated rubber band to lock the castor in place

The flexible and double-sided FlexLED LED strip light is the flexible alternative to conventional lighting. Quick and easy quick and easy suspension from ceilings, tunnel walls, scaffolding or in access areas, the respective work areas are optimally illuminated all round - without casting any shadows. The FlexLED is encased in a high-quality and durable clear PVC tube that is suitable for indoor and outdoor use (IP65). With a length of 10m on a reel and 50m or 25m on a cable reel, the continuous line is supplied ready for connection. It is connected using the supplied connection cable with contour plug. For maximum illumination of large, the FlexLED 230V continuous-row lighting system can be can be operated over a total length of up to 100 metres.

Product features - Emergency battery for FlexLED 230V With the emergency power battery, the FlexLED can continue to be operated at reduced brightness for up to a maximum of 2 hours if the power supply is interrupted.

It has an internal built-in battery charge protection with protection against overcharging and overdischarging. The emergency battery is supplied with a 1.5 metre connection cable with a Schuko plug.

The battery status can be checked by pressing the illuminated push when the emergency function is switched on:

Number of red light flashes (blinking):

 $1 \times = 0$  %-20 % remaining power

 $2 \times = 20$  %-40 % remaining power

 $3 \times = 40 \%$ -60 % remaining power

 $4 \times = 60$  %-80 % remaining power

 $5 \times = 80 \% - 100 \%$  remaining power



Please be sure to follow the instructions for use enclosed with the products!

## Technical data - FlexLED 230V / 42V

LEDs double-sided (2x180 LEDs/m)

System output 13 W/m / 8W/m Luminous efficacy 1,500 lm/m / 920lm/m

Light colour 4,000K

Beam angle 240° (120° on each side)

Service life > 30,000 h
Protection category IP65
Impact resistance IK10

Temperature Application range -20°C to +55°C

Weight approx. 13.5kg / approx. 6kg / approx. 2kg

Dimensions of strip light (WxH) 16x7.5 mm

Length of strip light

FlexLED 230V 50m / 25m / 10m

(can be extended to max. 100 m)

FlexLED 42V 25m

(not extendable)

Connection cable

FlexLED 230V 1.5 m (2x1.5 mm<sup>2</sup> H07 RN-F)

with contour plug)

FlexLED 42V 1.5 m (2x1.5 mm<sup>2</sup> H07 RN-F)

with CEE plug 2x16A/42V)

## Technical data - Emergency battery for FlexLED 230V

Power 50 W Emergency operation battery 120 min

Battery status indicated by indicator light

Connected power max. 1,500 W Input voltage 100-277 VAC Output voltage 175 VDC

Battery 22.2 V 6,000 mAh Li-ion battery

Charging time >8 h
Emergency tripping time <1 s
Protection category IP65
Impact resistance IK08

Temperature operating range -10°C to +45°C

Connection cable 1.5 m (3x1.5 mm² H07 RN-F

with Schuko plug)

**Emergency operation Brightness** 

 10 m
 30% 450 lm / m

 25 m
 20 % 300 lm / m

 50 m
 10 % 150 lm / m

Item no.	Description			
800884	FlexLED strip light 230V on cable reel 50m 'mobile' with trolley and handle, 4,000 K, Wide 240° incl. connection cable			
861020	FlexLED strip light 230V on cable reel 25m, 4,000 K, Wide 240° incl. connection cable			
800833	FlexLED strip light 230V on reel 10m, 4,000 K, Wide 240° incl. connection cable			
335081	FlexLED strip light 42V on cable reel 25m, 4,000 K, Wide 240° incl. connection cable			
Accesso	ries			
800834	Emergency power battery 230V 50W for FlexLED strip light, 1.5m connection cable H07 RN-F with Schuko plug			
800835	1.5m connection cable H07 RN-F with contour plug for FlexLED strip light 230V			
800841	Flicker-free power supply unit with contour plug			
800840	Dimmer for FlexLED with contour plug, 1-50% via dimmer, 100% fixed via switch			
800885	T-connector for FlexLED light strip 230V			
800836	Repair kit for FlexLED continuous-row lighting			

## PrimaLED 2 25W flood light



The PrimaLED 2 is a professional luminaire with high light output in combination with low evolution of heat and low energy consumption. This work light guarantees an optimum surface illumination through glare-free and evenly distributed light. In addition, the flood light offers various installation options for every application: hanging, lying or standing!

## **Product features**

- Full light flux immediately available
- Low energy consumption with a high light yield
- Minimal temperature development
- Extremely switching-resistant (> 1 million)
- Maintenance-free

Technical data
Input voltage

- No UV / IR-radiation
- Carrying handle also serves as a support which, when engaged, moves the lights to the desired position
- Impact and shock resistant, water and dust-proof





	297459	24V/25W	CEE 24V	5m 2x1.5mm <sup>2</sup>	CEE 16A/24V	
	297460	24V/25W	-	5m 2x1.5mm <sup>2</sup>	CEE 16A/24V	
	297461	24V/25W	CEE 24V	10m 2x1.5mm <sup>2</sup>	CEE 16A/24V	
	297462	24V/25W	-	10m 2x1.5mm <sup>2</sup>	CEE 16A/24V	
)	297483	42V/25W	CEE 42V	5m 2x1.5mm <sup>2</sup>	CEE 16A/42V	
	297484	42V/25W	-	5m 2x1.5mm <sup>2</sup>	CEE 16A/42V	
	297485	42V/25W	CEE 42V	10m 2x1.5mm <sup>2</sup>	CEE 16A/42V	
	297486	42V/25W	-	10m 2x1.5mm <sup>2</sup>	CEE 16A/42V	
)	297448	230V/25W	PC*	5m 3x1.5mm <sup>2</sup>	PC*	
	297449	230V/25W	-	5m 2x1.5mm <sup>2</sup>	Contour plug	
	297450	230V/25W	PC*	10m 3x1.5mm <sup>2</sup>	PC*	
	297451	230V/25W	-	10m 2x1.5mm <sup>2</sup>	Contour plug	
	100					

Item no. Description Socket Supply cable Plug

\*PC = protective contact

Power supply	Mains connection	261246	Plus sta
Luminous flux	4200lm	271698	Uni star
LED efficiency	165lm/W	273561	Uni star
Light colour Lifetime	4000K L70/B10 80000h	264916	Twin ac Span w
Protection category	IP54	284468	Front pa
Protection class	I (230V with socket) II (230V without socket)	230801	Reflecto
	III (24/42 V)	230802	Handle
Temperature operating range	-20°C to +40°C	230810	Wall fitt
Housing	Polycarbonate	248199	Ceiling
Cover	Satin-finish PMMA	258506	Magnet
Weight	3.1kg	235824	Plus ma
Dimensions (WxHxD)	305x295x110mm		

230VAC, 24/42VAC/DC

Accessories / spare parts					
Basic stand - height 1.20m to 2.00m, load up to 30kg					
Plus stand 3-part - height 1.22m to 2.75m					
Uni stand top piece					
Uni stand top piece - extension for 1x PrimaLIGHT					
Twin adapter for 1+1 light					
Span width adjustable from 310mm to 490mm					
Front pane PrimaLED 2					
Reflector					
Handle					
Wall fitting					
Ceiling bracket					
Magnetic bracket					
Plus magnetic bracket					

PrimaLED 2 with battery pack
The PrimaLED 2 is also available with a 6.000mAh battery pack.





Scaffolding lighting, recycling plant



Maintenance lighting, silo



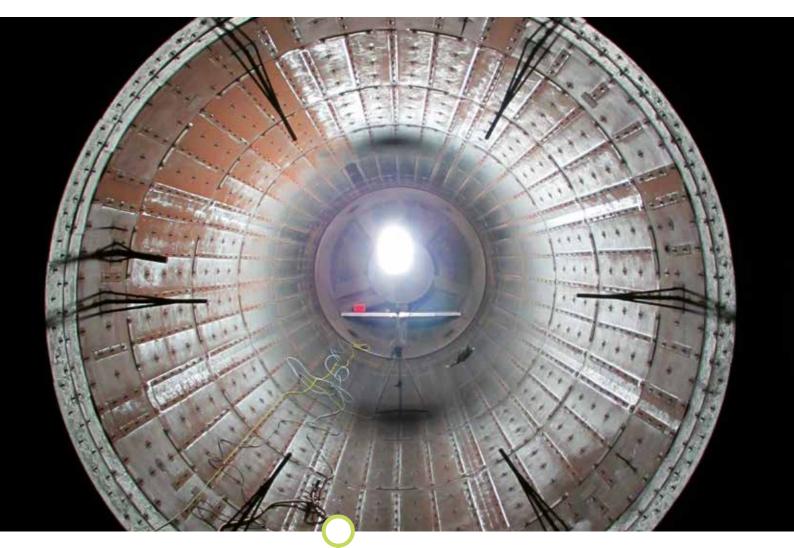
Tunnel illumination, supply tunnel



Maintenance lighting, drying oven



Stationary lighting, maintenance system



# PERFECT VISIBILITY ANYWHERE, ANYTIME.

Mobile large area luminaires are bright luminaires for illuminating large areas. By using them on tripods, they can be easily brought to the place of use. GIFAS offers the right solution for every application - simple usability and practical anywhere, anytime.

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## Large area lights



## ApolloLED ECO Area light



The ApolloLED ECO has a reduced height and lower weight. Thanks to the latest high-end SMD LEDs the luminaire ensures maximum illumination (156 lm/W). Even the accessories, such as transport bag and tripod, are now easier to handle and allow the ApolloLED ECO system to become a practical area lighting in a compact description.

## **Product features**

- Smaller, lighter, enormous power!
- Fully symmetrical light distribution
- Exceptional low evolution of heat

## Technical data

Input voltage 100~277VAC
Light source 480x0.5W SMD-LEDs
System performance 300W
Luminous flux 32320Im
Light colour 5000K
Service life > 50000h
Protection category IP44 (IP54 from above)
Protection class I

Tripod mount
Operating range of temperature
Housing / Cover
Power supply
Opt. mounting
Illumination area
Full power
Weight

38mm
-25°C to +50°C
Plastic
1
2700mm
over 600m²
immediate
7.5kg

600x208mm

## Transport bag

Dimensions (LxD)

Dimensions (LxD) 750x240mm Weight 0.3kg

## Tripod

Dimensions

Height extended 2400mm
Diameter / foot circle 1280mm
Load capacity 50kg
Weight 9.4kg



Item no.	Description					
353174	ApolloLED ECO 230V					
Accessories / spare parts						
274628	Adapter insert (30mm) compliant with DIN 14640					
267529	Tripod joint (inclination up to max. 45°)					
269318	5m connecting cable, 230V*					
268328	5m connecting cable, 230V, IP 68*					
268834	10m connecting cable, 230V*					
269320	10m connecting cable, 230V, IP 68*					
291388	Tripod for ApolloLED ECO, Ø 38mm, crank tripod, height max. 2.40m					
268997	Guide rope set					
277342	Filter bag					
277343	Spare filter for filter bag					
291387	ApolloLED ECO transport bag					

\*The connecting cable is an essential accessory



ApolloLED ECO with tripod joint Item no. 267529

Tilt up to a maximum of 45°



Transport bag Item no. 291387



## ApolloLED 2N Area light





The second generation of the Apollo area light convinces with highest efficiency. Thanks to LED technology, the luminaire requires neither warm-up nor cool-down time. The luminous flux is immediately available. The luminaire can be switched to half-side operation via a selector switch. The cylindrical design has a small wind-exposed surface and can be quickly assembled and disassembled by one person. In addition to setup on the special stand, the ApolloLED 2N can also be mounted and operated in a hanging position. The luminaire has an overheating protection, i.e. if the temperature inside the light exceeds the set value, the temperature switch turns the illuminant off while the internal fan continues to run. In particularly dusty environments, a filter bag protects against contamination inside.

## Product features

- Full power, immediately after switch-on
- Immediately ready for use even at extremely low temperatures
- Low wind load
- Robust design, illuminant cannot splint or break
- Practical, rapid and simple assembly by one person
- Operation with integrated power supplies

## Technical data

Input voltage 100~277VAC
Light source 896x0.5W SMD-LEDs
System performance 440W / switchable 50%

 Luminous flux
 53760lm

 Light colour
 4000K / 5000K

 Service life
 > 50000h

Protection category IP44 (IP54 from above)

Protection class

Tripod mount 38mm

Operating range of temperature -25°C to +45°C Housing / Cover Plastic
Power supply 2
Opt. mounting 3500mm
Illumination area over 700m²
Full power Immediately
Weight 11kg
Dimensions (ØxL) 205x900mm

Transport case

Dimensions (WxLxH) 262x1156x245mm

Weight 8.6kg

Tripod

Dimensions

Height extended 3580mm
Diameter / foot circle 1280mm
Load capacity 30kg
Weight 21.5kg





ApolloLED connection cable with cam switch for glove operation ltem no. 294742

Item no.	Description		
800211	ApolloLED 2N 230V, 4000K		
355677	ApolloLED 2N 230V, 5000K		
Accessorie	s / spare parts		
269318	Connection cable 5m, 230V*		
268328	Connection cable 5m, 230V, IP68*		
268834	Connection cable 10m, 230V*		
269320	Connection cable 10m, 230V, IP68*		
294742	Connection cable 7m, 230V, cam switch with 3 switching functions: 100% / 50% / 0ff		
266688	Stand for ApolloLED 2N, Ø 38mm, chrome steel crank stand with 3 feet, max. height 358 cm		
267529	Tripod joint (inclination up to max. 45°)		
274628	Adapter insert (30mm) according to DIN 14640		
268997	Bracing set		
268160	Tripod disc feet		
330938	ApolloLED 2N case		
268011	Tripod roll bag		
339585	ApolloLED 2N case for tripod		

\*The connecting cable is an essential accessory













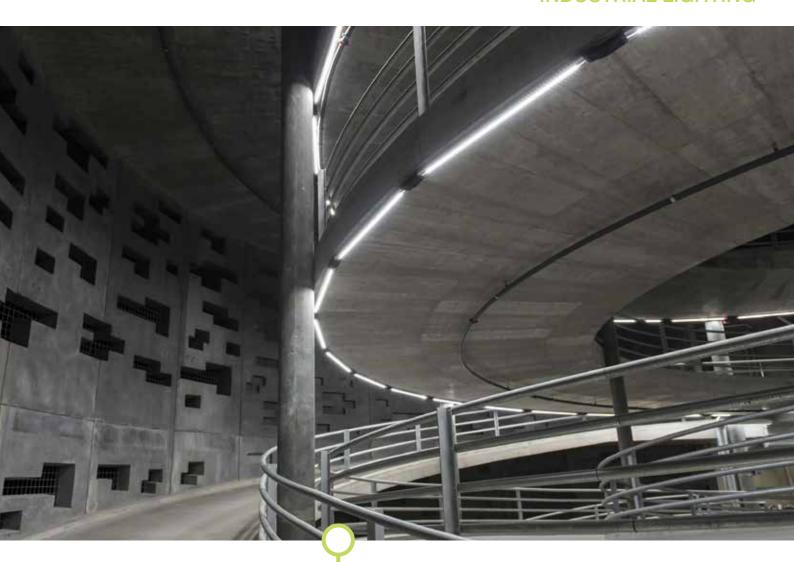








## **INDUSTRIAL LIGHTING**



# PERFECT VISIBILITY ANYWHERE, ANYTIME.

Linear lights are used in particular for homogeneous lighting of large rooms and halls. With good light quality and simple and quick installation, the GIFAS lights cover a wide range of applications - reliably any time.

LineLED PRO moisture-proof lamp	166
StreamLED protected tube light	167
Application cases	170

## **Industrial lighting**



## LineLED PRO 4 Moisture-proof diffuser luminaire



The LineLED PRO 4 is the damp-proof diffuser luminaire for demanding applications in industrial plants, underground car parks and in refrigerated and storage areas. The impact-resistant, frosted polycarbonate (PC) cover minimises glare and ensures uniform light distribution with high visual comfort. The high IP65 protection class protects the luminaire against the ingress of dirt and water. The mounting material is included in the scope of delivery. All versions are designed for 5x2.5mm2 throughwiring as standard.

Please note that the light can only be used in protected areas. Outside of closed rooms, use is only permitted in outdoor areas, e.g. under a canopy, without direct sunlight and without direct weathering.

## **Product features**

- Factory default setting: 45W / 5,000K (art. no. 341674)
- Low energy consumption with high luminous efficacy
- Opal cover for uniform light
- **UV-resistant**
- Fasteners and fixings made of stainless steel
- incl. through-wiring 5x2.5mm<sup>2</sup> (for supply cable 5-12mm)
- Fastening units for ceiling mounting and 2nd cable gland included in the scope of delivery

## Technical data

Input voltage	220-240 VAC / 176-260 VDC
System power (adjustable)	
Item no. 341674	45W / 60W / 65W / 80W
Item no. 347129	20W / 30W / 34W / 40W
Luminous flux (art. no. 347129)	
20W	2,800 - 3,000lm
30W	4,200 - 4,500lm
34W	4,700 - 5,000lm
40W	5,400 - 6,000lm
Luminous flux (art. no. 341674)	
45W	6,450 - 7,270lm
60W	8,060 - 9,000lm
65W	8,830 - 9,750lm
80W	9,940 - 11,140lm
Colour temperature (adjustable)	3,000K / 4,000K / 5,000K
CRI index	Ra >80
Beam angle	120°
LED service life	50,000h
Protection category / class	IP65 / I
Impact resistance	IK08
Temperature Application range	-20°C to +40°C
Housing material	PC grey
Cover	PC matt
Weight	approx. 1.75kg / approx. 1.6kg
Dimensions (LxWxH)	
Item no. 347129	1,200x79x68mm

Item no.	Description
341674	LineLED PRO4/W45-80/V230/ALC/DV5X2,5/-
347129	LineLED-PRO4/W20-40/V230/ALC/DV5X2,5/-/D
Item no.	Version with emergency lighting function
345881	LineLED PRO4/W45-80V230/1500mm/AKKU/IP65

1,500x79x68mm

## LineLED PRO 3 Moisture-proof diffuser luminaire



The LineLED PRO 3 is the moisture-proof diffuser luminaire for demanding applications in industrial plants, underground garages and in cooling and storage areas. An impact-resistant and satinised cover made of polycarbonate (PC) minimises glare and ensures uniform light distribution with high visual comfort. The high protection class IP65 protects the luminaire against the ingress of dirt and water. The mounting material is included in the scope of delivery. All versions are designed for 5x2.5mm<sup>2</sup> through-wiring as standard. The cable gland is suitable for cables with an outer diameter of 5 to 12mm.

#### Product features

- Full luminous flux, available immediately
- Low energy consumption with high luminous efficacy
- Impact-resistant cover (IK08)
- High energy efficiency
- Maintenance-free
- Stainless steel fasteners and fixings
- No UV/IR radiation
- Incl. 5x2.5mm<sup>2</sup> through-wiring
- Emergency light battery:
  - LiFePO4 battery 6.4V
  - Emergency light up to 1h at 10% light output

## Technical data

Input voltage	220-240VAC
Light source	LED
System power	24W / 36W / 50W / 65W
Luminous flux	3000lm / 4500lm / 6250lm / 8125lm
LED efficiency	125 lm/W
Light colour	5000K
CRI	Ra >80
Beam angle	120°
Service life	50000h [L70/B30]
Protection category	IP65
Protection class	I
Shock resistance	IK08
Operation range of temperature	-15°C to +35°C
Housing	GFK
Cover	PC matt
Weight	approx.: 1.6kg / 2.8kg / 3.9kg
Dimensions (LxWxH)	600x100x123mm
	1200x100x123mm

Item no.	Description
293954	LineLED PRO3/W24V230/600mm/DV5X2,5/-
293955	LineLED PRO3/W36V230/1200mm/DV5X2,5/-
293956	LineLED PRO3/W50V230/1500mm/DV5X2,5/-
293957	LineLED PRO3/W65V230/1500mm/DV5X2.5/-

1500x100x123mm

Item no. 341674

## StreamLED POWER Protected tube light



The powerful and energy-efficient LED tubes in modern design are particularly suitable for workshops, large-scale operations, shops, warehouses, supermarkets, cold shops, hospitals, doctors surgeries, museums, etc. In contrast to conventional fluorescent tubes, the latest generation of LED tubes emit light bundled at a defined beam angle of 120° without annoying flickering and flickering.

## **Product features**

- Through-wiring for chain light
- Connection via cable gland M20 (for cable with ø 7-14 mm)
- Can be used indoors and outdoors
- Low energy consumption with high luminous efficacy
- Full luminous flux is available immediately
- Minimal temperature development
- Constant luminosity independent of outdoor temperature
- Extremely switch-resistant (> 1 million)
- Maintenance-free
- Insensitive to shock and vibration
- Unbreakable (work protection)
- No UV/IR radiation

## Technical data

Input voltage 230 VAC, 9-36 VDC Light source LED stripes

System power 6W / 12W / 13,5W / 27W

Luminous flux 934lm / 1371lm /1959lm / 3723lm

Light colour 6.500K Beam angle 120°

Protection category IP68 / IP69

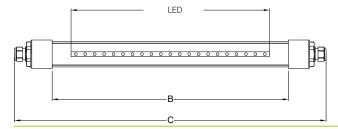
Protection class I
Shock resistance IK10
Operation range of temperature -30 to +50 °C

Housing Acrylic glass shock-resistant

Dimensions Ø 54mm

Item	Voltage	Power	Luminous	Α	В	С
no.			flux	mm	mm	mm
840660	230 VAC	6W	934lm	437	500	660
840663	230 VAC	12W	1371lm	875	920	1080
840661	230 VAC	13,5W	1959lm	437	500	660
840664	230 VAC	27W	3723lm	875	920	1080
840680	9-36 VDC	6W	934lm	437	500	660
840678	9-36 VDC	12W	1371lm	875	920	1080
840679	9-36 VDC	13,5W	1959lm	437	500	660
840964	9-36 VDC	27W	3723lm	875	920	1080

## Essential accessories, see page 183



## StreamLED 2 AQUA Protected tube light



The StreamLED 2 AQUA is our answer to the lighting requirements of water reservoirs in particular. It has a high luminous efficacy with a greatly reduced failure frequency. Glare is minimised thanks to a special satinfinished tube - other features include the high protection rating (IP66/IP69) and the compact design.

## Product features

- High efficiency and uniformity of light
- Robust and impact-resistant
- energy-saving (low power consumption with high light output)
- simple installation
- suitable for use in water reservoirs, SVGW certified for above-water use (certificate no. 2304-H7203)
- Version for direct connection via cable gland and moulded end caps
- Power supply with external power supply unit
- Connection cable 3x1.5mm<sup>2</sup>

## Technical data

Connection cable

Control unit 198 - 264VAC (176 - 264VDC) Input voltage 30 - 35VDC 525mA / 1050mA / 1600mA Constant current System power 20W / 35W / 55W Luminous flux 2121lm / 4245lm / 7102lm Luminous efficacy 106lm/W / 121lm/W / 129lm/W CRI (colour rendering index) Ra > 80Lifetime L70 B10 > 50000h Protection category IP66 / IP69 IK10 Impact resistance Protection class Temperature Application range -25°C to +40°C Colour temperature 5000K Beam angle 120° Material housing / tube PMMA acrylic glass Cover caps anthracite Housing colour RAL7016 / tube transparent matt (satinised)

Item	Power	constant	Luminous	Α	В	С	Line
no.		current	flux	mm	mm	mm	length
861221	20W	525 mA	2121 lm	479	719	786	25m
861220	35W	1050 mA	4245 lm	958	1198	1265	25m
861070	55W	1600 mA	7102 lm	1437	1677	1709	15m
861071	55 W	1600 mA	7102lm	1437	1677	1709	25m

drinking water certified

(Clean Cable)

## Power supply unit and holder not included!

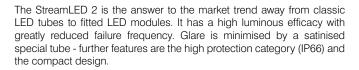




## StreamLED 2 SL70 Protected tube light







#### **Product features**

- High efficiency and uniformity of light
- Robust and impact resistant
- Energy-saving
- Easy to install
- Suitable for use in the harshest environments (tunnels, sewage treatment plants, water reservoirs, chemical industry)
- Design for direct connection via cable glands
- Through-wiring 2x2.5mm2 possible for all models

## Technical data

Input voltage 198-264 VAC (176-264 VDC) System power 20W/35W/55W Luminous flux 2121 lm/4245 lm/7102 lm LED efficiency 106 lm/W/121 lm/W/129 lm/W CRI Ra >80 Service life >50000 h [L70/B10]

Protection category IP66

Shock resistance IK10 Protection class

Operation range of temperature  $-25^{\circ}$ C to  $+40^{\circ}$ C

4000K/5000K (3000K on request) Light colour

Beam angle LED Housing **PMMA** 

Cover caps anthracite RAL7016 / Cover

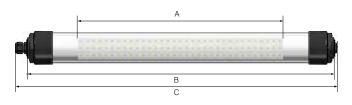
tube transparent matt

(satin finish) 70mm

Dimensions Ø

Item	Power	Light	Voltage	Α	В	С
no.		colour		mm	mm	mm
860666	20 W	4000 K	230 VAC	479	719	751
860667	20W	5000 K	230 VAC	479	719	751
860668	35 W	4000 K	230 VAC	958	1198	1230
860669	35 W	5000K	230 VAC	958	1198	1230
860670	55W	4000 K	230 VAC	1437	1677	1709
860671	55 W	5000K	230 VAC	1437	1677	1709

Essential accessories, see page 183



## StreamLED 2 SL50 Protected tube light





LED protective tube luminaire for use in machine tools and working areas where both a high degree of sealing against penetrating liquids and a special robustness of the housing are required (IP68).

## **Product features**

- High efficiency and uniformity of light
- Robust and impact resistant
- Energy-saving
- Easy to mount
- Suitable for use in the harshest environments (tunnel area, sewage treatment plants, water reservoirs, chemical industry)
- Design for direct connection via cable glands
- Through-wiring 2x2.5mm2 possible for all models

## Technical data

System power 12W/24/36W/48W

Luminous flux 2300lm/4600lm/6900lm/9200lm

CRI Ra >80

>60000h [L80 B10] Service life

Protection category IP68 Shock resistance IK10 Protection class

-25°C to +35°C Operation range of temperature

4000K (5700K on request) Light colour

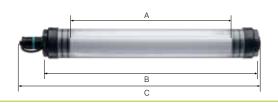
Beam angle LED Housing **PMMA** 

Borosilicate glass tube (on request)

Dimensions Ø 54mm

Item	Voltage	Power	Lumen	Α	В	С
no.				mm	mm	mm
871000	24VAC/DC	12W	2300	250	415	490
871001	24VAC/DC	24W	4600	500	665	740
871002	24VAC/DC	36W	6900	750	935	1010
871003	24VAC/DC	48W	9200	1000	1185	1260
871004	48VAC/DC	12W	2300	250	415	490
871005	48VAC/DC	24W	4600	500	665	740
871006	48VAC/DC	36W	6900	750	915	1010
871007	48VAC/DC	48W	9200	1000	1185	1260
871008	230VAC	12W	2300	250	465	540
871009	230VAC	24W	4600	500	665	740
871010	230VAC	36W	6900	750	915	1010
871011	230VAC	48W	9200	1000	1185	1260

Essential accessories, see page 183



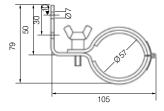
## Protected tube lights Accessories



Accessories / Spare parts			
840082	Wall bracket SL Power / SL50 , Stainless steel V4A*		
840083	Wall bracket SL70 Typ 1, Stainless steel V4A*		
840084	Wall bracket SL70 Typ 2, Stainless steel V4A*		
840085	Wall bracket SL70 Typ 3, Stainless steel V4A*		
282492	Wall bracket SL POWER, Plastic*		
282491	Assembly key		

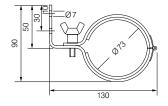
<sup>\*2</sup> x per light





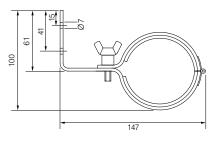


Wall bracket SL50+ SL Power, Item no. 840082



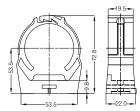


Wall bracket SL70 type 1, Item no. 840083



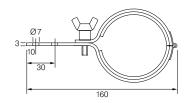


Wall bracket SL70 type 2, Item no. 840084



Wall bracket SL POWER, Item no. 282492





Wall bracket SL70 type 3, Item no. 840085





## LineLED PRO / StreamLED



Tunnel lighting



Workshop lighting



Underground car park lighting



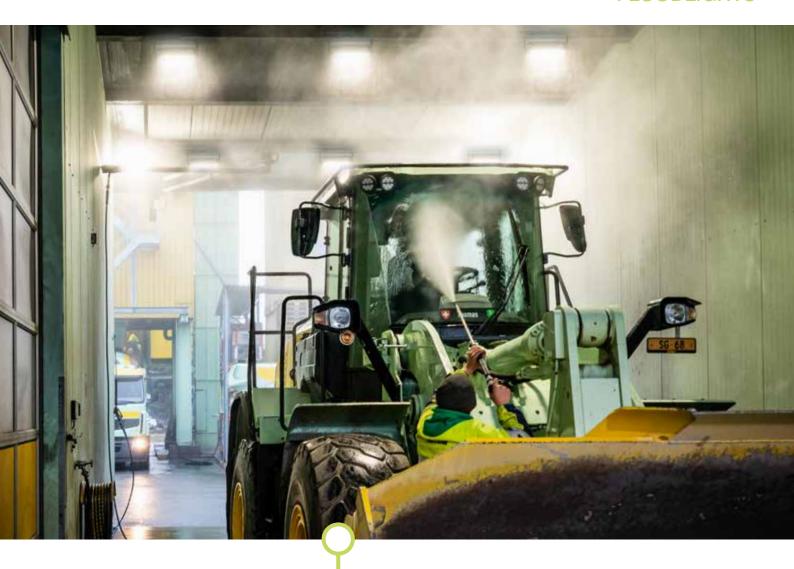
Machine lighting in the food industry



Storage room lighting



Car wash cabin illumination



# PERFECT VISIBILITY ANYWHERE, ANYTIME.

Uniform surface lighting and targeted radiation in work areas are the key to safe working. Spotlights from GIFAS ensure the best conditions - in every situation and under extreme operating conditions.

AlphaLUXX LED floodlights	172
AlphaLUXX 2x60W universal light container	179
FlutLED MODULAR 2	180
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AlphaLUXX 25-60

The AlphaLUXX floodlights are made in Germany. During the development, great emphasis was placed on the quality of the components, coupled with excellent efficiency and state-of-the-art technology.

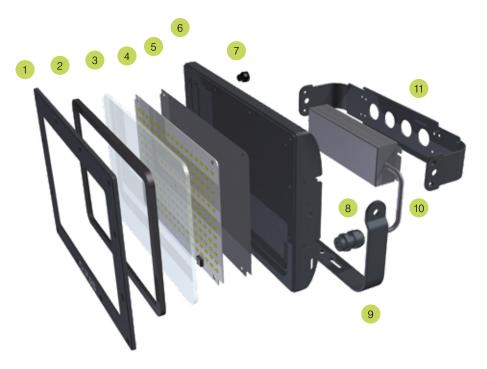
Short response time from the Neuss located factory is guaranteed, meaning we are able to customize the questioned product in regards to custom outputs from the panels, various cable length and special colour conditions.

- Developed and assembled in Germany
- ✓ PTFE surface coating
- Optional as vibration-proof version
- ✓ Approved for the food industry (according to IFS)

## **Product features**

- Robust housing made of corrosion-resistant die-cast aluminium
- Dirt-resistant PTFE surface coating, approved for the food industry
- Toughened safety glass (ESG) or impact resistant plastic cover (PC)
- Custom-made U-profile seal surrounding all sides
- Custom-made, durable, heat-conducting film for lasting, reliable dissipation of heat from the LED board
- Low heat generation thanks to the latest LED technology
- Pressure compensation element for extreme temperature fluctuations
- Full luminous flux is available instantly after switching on
- Low energy consumption with high light output
- Maintenance-free
- Wide operating temperature range (up to 60°C)
- No UV/IR-radiation
- Vibration-resistant
- Accessories available from stock

## Construction



- Die-cast aluminium frame
- 2 U-profile silicon seal
- 3 Front panel (toughened glass or PC)
- 4 LED board
- 5 Heat conducting film
- 6 Die-cast aluminium housing
- 7 Pressure compensation element
- 8 Screwed cable gland
- 9 Mounting bracket
- 10 Power supply
- 11 Power supply bracket

## AlphaLUXX LED Floodlights General



## **Development Approach**

This development is based on the need to manufacture a floodlight which merits the Developed and assembled in Germany mark of excellence, in terms of performance and quality. With the AlphaLUXX, GIFAS has succeeded in developing a competitive LED floodlight that satisfies the highest demands and can also be used in challenging industrial sectors (for example, the food industry).



#### LED

The AlphaLUXX uses exclusively **high-end SMD LEDs** from reputable manufacturers, which are ideal in terms of light quality, lifecycle, light colour and efficiency. The neutral, white 5000K light and the good colour rendering index of over  $R_a$  80, match the maximum human vision in daylight and as a result the best resolution of detail.



## Surface coating

Industrial lights often have problems with dirt gathering on the surface and the associated reduction in cooling capability. The **PTFE surface coating (coll. Teflon®)** on the AlphaLUXX has a very low friction coefficient. Dust and dirt literally "bead" off the light. Even harsh acids cannot attack a PTFE coating. An improved thermal conductivity results from the four-times thinner PTFE coating, in comparison with other powder coating.



## Technology

The **AlphaLUXX** impresses with the enormous **efficiency of up to 167 lumens per watt**. Also available as a dimmable version.



## Thermal management

Efficient cooling is crucial to the longevity of the LEDs and ultimately affects the whole lighting system. In order to achieve this on a long-term basis for the AlphaLUXX, several technical components have been used for optimum thermal management. These include a heat sink (housing with cooling fins) made of highly thermo-conductive die-cast aluminium, a PTFE surface with a very thin coating and heat conducting film for optimum connection of the contact areas. We can therefore ensure an **operating temperature range of up to 60° Celsius**.



## Quality

The components are selected according to the highest quality standards. High-alloy, corrosion-resistant aluminium housing (230D), stainless steel installation material (V4A), LEDs and electronics from reputable manufacturers (Seoul Semiconductor and Meanwell). Individual testing of every light in accordance with DIN EN 60598-1. The specific coordination of the technical components attains a **service life of 80,000 hours**.



## AlphaLUXX 25-60 LED Floodlights







\*for version with PC cover

The AlphaLUXX 25-60 is the practical version for mobile use and convinces with its quality, performance and handling.

## Technical data

Input voltage 100-277 VAC (50/60Hz) Light source SMD-LEDs Version 25 / 40 / 60 System performance 25W / 40W / 60W Lighting current 3550lm / 5500lm / 7700lm System Efficiency 142lm/W / 138lm/W / 128lm/W Light colour 5000K

Beam angle 120° CRI Ra >80

Service life > 80000h [L70/B10]

Protection category

Protection class

Shock resistance IK10 (Version: PC cover)

Operating range

of temperature 25W -30°C to +60°C 40W -30°C to +55°C 60W -30°C to +50°C

Housing Die-cast aluminium PTFE-coated (approved for the Housing surface

food industry)

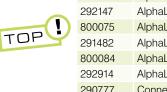
Housing colour black

3mm PC clear, optional 3mm PC satin Cover

finish or 3mm ESG clear or satin finish

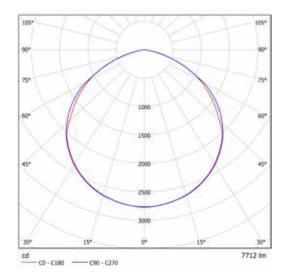
Connection cable

Weight approx. 2.7kg Dimensions (LxWxH) 289x176x85.5mm



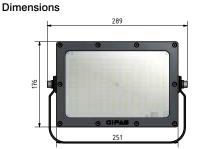
Item no.	Description
800083	AlphaLUXX/W25V230/PC clear
292147	AlphaLUXX/W25V230/ESG clear
800075	AlphaLUXX/W40V230/PC clear
291482	AlphaLUXX/W40V230/ESG clear
800084	AlphaLUXX/W60V230/PC clear
292914	AlphaLUXX/W60V230/ESG clear
290777	Connecting cable 5m H07RN-F H07RN-F 3x1.5mm <sup>2</sup> with protective contact plug and cable connector
293825	Mounting bracket steel 5mm

## Light distribution



## Optional

- Further colour temperatures
- Low voltage versions 20-48VDC
- Other housing colours
- Satin-finished glass
- Double-classed cover





## AlphaLUXX 25-60 RF LED Floodlight vibration-proof



The AlphaLUXX RF -vibration-proof- is developed for special mechanical loads, such as use on moving or vibrating machine parts, conveyor belts or vehicles. Vibration-damped mounting of the ballast and special securing of all screws enable this floodlight beeing robust against vibrations.

## Technical data

100-277 VAC (50/60Hz) Input voltage

Light source SMD-LEDs 25 / 40 / 60 Version System performance 25W / 40W / 60W

Lighting current 3550lm / 5500lm / 7700lm System Efficiency 142lm/W / 138lm/W / 128lm/W

Light colour 5000K Beam angle 120° CRI Ra >80

> 80000h [L70/B10] Service life

Protection category IP65

Protection class

Shock resistance IK10 (Version: PC cover)

Operating range

of temperature 25W -30°C to +60°C

> 40W -30°C to +55°C 60W -30°C to +50°C Die-cast aluminium

Housing PTFE-coated Housing surface Housing colour black Cover 3mm PC clear

Connection cable

approx. 2.7kg Weight Dimensions (LxWxH) 289x176x85.5mm

Item no.	Description
291802	AlphaLUXX/W25V230/PC clear
291431	AlphaLUXX/W40V230/PC clear
290321	AlphaLUXX/W60V230/PC clear
290777	Connecting cable 5m H07RN-F H07RN-F 3x1.5mm <sup>2</sup> with protective contact plug and cable connector
293825	Mounting bracket steel 5mm

## Base frame für AlphaLUXX 25-60



The base frame is an easy way to convert an AlphaLUXX 25-60 into a mobile work lamp. The floodlight can be screwed into the frame in a few simple steps to be available for mobile use.

## Technical data

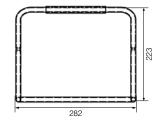
Material aluminium

Surface powder-coated in black, RAL9005

Thickness

Dimensions (WxHxD) 282x223x142mm

Item no.	Description
289356	Base frame for AlphaLUXX 25-60







## AlphaLUXX 80-120 LED Floodlights



The AlphaLUXX 80-120 boasts impressive efficiency and ist also available as a dimmable version.





\*for version with PC cover

## Technical data

Input voltage 100-277 VAC (50/60Hz) Light source SMD-LEDs Version 80 / 100 / 120 System performance 86W / 111W / 128W 12800lm / 16500lm / 18700lm Lighting current System Efficiency 149lm/W / 149lm/W / 146lm/W Light colour 5000K Beam angle 120° CRI Ra >80

IP65

Protection category Protection class

Operating range

Service life

Housing

80W -30°C to +60°C of temperature 100W -30°C to +55°C

120W -30°C to +50°C Die-cast aluminium

> 80000h [L70/B10]

Housing surface PTFE-coated (approved for the

food industry)

Housing colour

Cover 5mm PC clear, optional satin finish or 5mm ESG satin finish, clear

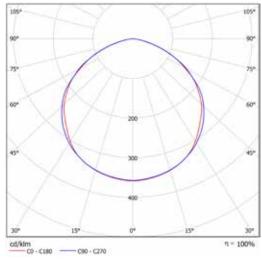
Connection cable 1m

Weight approx. 7kg Dimensions (LxWxH) 389x252x106.5mm



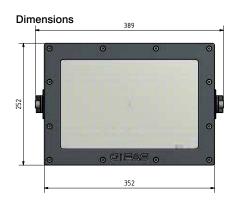
Item no.	Description
800074	AlphaLUXX/W80V230/PC clear
800049	AlphaLUXX/W80V230/ESG clear
800098	AlphaLUXX/W100V230/PC clear
800048	AlphaLUXX/W100V230/ESG clear
800054	AlphaLUXX/W120V230/PC clear clear
800043	AlphaLUXX/W120V230/ESG klar
290777	Connecting cable 5m H07RN-F H07RN-F 3x1.5mm² with protective contact plug and cable connector
293827	Mounting bracket steel 5mm

## Light distribution



## Optional

- Further colour temperatures
- Light control (DALI, 1-10V dimming)
- Low voltage versions 20-48VDC
- Other housing colours
- Satin-finished glass
- Double-classed cover





## AlphaLUXX 80-120 RF LED Floodlight vibration-proof



The AlphaLUXX RF -vibration-proof- is developed for special mechanical loads, such as use on moving or vibrating machine parts, conveyor belts or vehicles. Vibration-damped mounting of the ballast and special securing of all screws enable this floodlight beeing robust against vibrations.

## Technical data

 Input voltage
 100-277 VAC (50/60Hz)

 Light source
 SMD-LEDs

 Version
 80 / 100 / 120

 System performance
 86W / 111W / 128W

Lighting current 12800lm / 16500lm / 18700lm System Efficiency 149lm/W / 149lm/W / 146lm/W

 $\begin{array}{lll} \mbox{Light colour} & \mbox{5000K} \\ \mbox{Beam angle} & \mbox{120}^{\circ} \\ \mbox{CRI} & \mbox{Ra} > 80 \end{array}$ 

Service life > 80000h [L70/B10]

Protection category IP65
Protection class I

Operating range

Housing

of temperature 80W -30°C to +60°C

100W -30°C to +55°C 120W -30°C to +50°C Die-cast aluminium

Housing surface PTFE-coated
Housing colour black
Cover 5mm PC clear

Connection cable 1m

Weight approx. 7kg
Dimensions (LxWxH) 389x252x106.5mm

Item no.	Description
289427	AlphaLUXX/W80V230/PC clear
293517	AlphaLUXX/W100V230/PC clear
290320	AlphaLUXX/W120V230/PC clear
290777	Connecting cable 5m H07RN-F H07RN-F 3x1.5mm <sup>2</sup> with protective contact plug and cable connector
293827	Mounting bracket steel 5mm

## Base frame für AlphaLUXX 80-120



The base frame is an easy way to convert an AlphaLUXX 80-120 into a mobile work lamp. The floodlight can be screwed into the frame in a few simple steps to be available for mobile use.

## Technical data

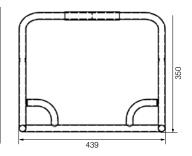
Material aluminium

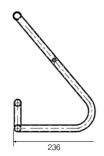
Surface powder-coated in black, RAL9005

Thickness 3mr

Dimensions (WxHxD) 439x350x236mm

Item no.	Description
286996	Base frame for AlphaLUXX 25-60







## AlphaLUXX 80-120 LED Floodlights with optics



The LED floodlight of the AlphaLUXX 80-120 series with optics focuses its light where it is needed. With the 60° or 90° optics, high illuminance and optimum light distribution are achieved in the application. The asymmetrical 60°x150° optic is ideal for area or parking lot lighting. Thanks to its high protection classification, the AlphaLUXX is perfectly predestined for outdoor use as a building or area spotlight.

## **Product features**

- Robust housing made of corrosion-resistant die-cast aluminium
- Dirt-repellent PTFE surface coating,
- Approved for food industry
- Single-pane safety glass (ESG) or Impact-resistant plastic pane (PC)
- Low heat generation thanks to state-of-the-art LED technology
- Pressure compensation element for extreme temperature fluctuations
- Full luminous flux is available immediately after switching on
- Low energy consumption with high luminous efficacy
- Wide temperature application range
- No UV/IR radiation

## Technical data

Input voltage 100-277 VAC Light source CREE-LEDs Optic **LEDiL** 80 / 100 / 120 Version 88W / 108W / 127W System performance

System efficiency 132lm/W / 132lm/W / 133lm/W

Light colour

 $60^\circ\text{, }90^\circ\text{ symmetric}$ Beam angle 60°x150° asymmetric

CRI Ra >80

Service life 80000h [L70/B10]

Protection category IP65

Protection class IK10 (for version with PC cover)

Shock resistance

Operating range of temperature 80W -20°C to +60°C

> 100W -20°C to +55°C 120W -20°C to +50°C

Housing material Die-cast aluminium Housing surface PTFE-coated, black 5mm PC clear 5mm ESG clear

Connecting cable 1m H05RN-F Weight approx. 7kg 389x252x106.5mm Dimensions (LxWxH)





\*for version with PC cover

Item no.	Power	Beam angle	Cover	Luminous flux
800341	80W	60°	PC	11020lm
800339	80W	60°	ESG	11600lm
800342	80W	90°	PC	11020lm
800340	80W	90°	ESG	11600lm
800415	80W	60°x150°	PC	10450lm
800414	80W	60°x150°	ESG	11000lm
800337	100W	60°	PC	13585lm
800335	100W	60°	ESG	14300lm
800338	100W	90°	PC	13585lm
800336	100W	90°	ESG	14300lm
800413	100W	60°x150°	PC	12920lm
800412	100W	60°x150°	ESG	13600lm
800333	120W	60°	PC	16055lm
800331	120W	60°	ESG	16900lm
800334	120W	90°	PC	16055lm
800332	120W	90°	ESG	16900lm
800411	120W	60°x150°	PC	15295lm
800410	120W	60°x150°	ESG	16100lm

## AlphaLUXX 2x60W Universal light container



The modern universal light container impresses with two LED floodlights with a total of more than 15.000 lumens and 120 watts of power consumption and is used to quickly illuminate operational sites.

The container can be used on the floor as well as on a tripod. It has a 5 meter long connection cable with an earthed plug or IP68 plug, which can be wound directly onto the frame to save space.

The two 60W LED floodlights are powered directly on the container. The compact headlights allow great freedom of movement and can be freely rotated and tilted. Illumination is possible up to an angle of 300 degrees. Thanks to effective temperature management, the spotlights only heat up slightly during long operations, which has a positive effect on the life of the LEDs. After use, the container can be stowed away immediately without cooling down.

## **Product features**

- Optimal protection and safe transport of the LED floodlights
- Stable tubular steel frame, coated in yellow
- Integrated cable winder
- LED floodlights can be freely rotated and tilted
- Handle cover with insulating material



\*for version with PC cover

## Technical data

## System

System performance	120W
Luminous flux	15400lm
System efficiency	129lm/W
Protection category	IP65
Weight	approx. 13,5kg
Dimensions (WxDxH)	635x225x350mm

LED floodlight	
Input voltage	100-240VAC
Luminous flux	approx. 7700lm
System performance	approx. 60W
System efficiency	approx. 129lm/W
CRI-Index	Ra >80
Service life	80000h [L70/B10]
Light colour	5000K
Housing material	Die-cast aluminium
Housing surface	PTFE-coated, black
Front glass	3mm Polycarbonat
Protection category	IP65
Protection class	1
Operating range	
of temperature	-30°C to +50°C
Storage temperature	-35°C to +70°C
Weight	2.7kg

Item no.	Description
292339	AlphaLUXX universal light container industry, with 5m connecting cable H07RN-F with protective contact plug, tripod mount 38mm
291770	AlphaLUXX universal light container safety device, 5m connecting cable H07RN-F with blue protective contact plug, IP68 and mounted protective cap on the belt, tripod mount 30mm via adapter insert according to DIN 14640



## FlutLED MODULAR 2 High-power floodlight



The high-power floodlight FloodLED MODULAR 2 is designed for high-intensity indoor and outdoor applications. The LED modules with symmetrical or asymmetrical optics can be tilted and allow perfect alignment to the area to be illuminated. The different optics and power classes cover a wide range of surface geometries from industrial or sports grounds to airfields. The universal bracket allows different types of mounting such as wall or ceiling mounting as well as mounting on a truss.

#### **Product features**

- Full luminous flux, available immediately
- Low energy consumption with high luminous efficacy
- Minimal temperature development
- High energy efficiency
- Maintenance-free
- No UV/IR radiation
- Insensitive to impact and vibration
- Tilt adjustment of individual LED modules possible

Technical data	
Input voltage	100 - 230VAC, 50-60 Hz
System power	230W / 450W / 680W /
	900W / 1350W
Luminous flux (110°)	32800lm / 65700lm / 98500lm /
	131400lm / 197000lm
Light colour	5700K
CRI	Ra >70
Beam angle	60° / 110°
	130°x40° asymmetric
Service life	50000h [L70/B30]
Protection category	IP66
Protection class	I
Shock resistance	IK10
Temperature operating range	-20°C to +50°C
Housing	Die-cast aluminium
Cover	PC
Connection cable	
230W	1.5m H05RN-F 3x1.0mm <sup>2</sup>
450W / 680W / 900W / 1350W	1m H07RN-F 3x1.5mm <sup>2</sup>
Weight	7kg / 19.4kg / 24.1kg /
	33.3kg / 42.8kg
Dimensions (WxHxL)	
230W	340x373x185mm
450W	390x685x240mm

390x890x240mm

700x685x240mm

700x890x240mm





## Tilt adjustment





- Optics with 15°, 25°, 90° or asymmetrical 130°x25°
- Light colours 3000K and 4000K optional

680W

900W

1350W

### FlutLED 3 SR DALI LED spotlight salt water resistant



The FlutLED 3 SR DALI floodlight is ideal for large indoor and outdoor areas such as industrial plants, logistics areas and airfields. Thanks to the angle adjustment bracket, it can be mounted on a wall, ceiling or truss and optimally aligned.

The robust die-cast aluminium housing with self-cleaning function as well as the aluminium bracket and stainless steel screws offer good corrosion protection, even against salt water. The spotlight is also dimmable via DALI 2 and enables customised lighting control.

The FlutLED 3 SR DALI combines performance, flexibility and durability in a compact design to reliably master demanding lighting tasks.

### **Product features**

- Smooth housing with self-cleaning function
- Precise angle adjustment bracket, flexible installation
- Die-cast aluminium housing, aluminium bracket and stainless steel screws, good corrosion resistance even against salt water
- Dimmable via DALI 2

### Technical data

100-240VAC 50/60Hz Input voltage

System power 75W

Luminous flux approx. 10,000lm

Light colour 5,000K CRI index Ra >80 Beam angle 110°

LED service life 82,000h [L80/B50]

IP66 Protection category Impact resistance **IK08** 

Temperature Application range -20°C to +50°C Housing material Die-cast aluminium

Housing colour dark grey ESG clear Cover Mounting Bracket mounting

Weight 3.6kg

Dimensions (WxHxD) 260x386x151mm Item no. Description FlutLED 3 SR, 75W, 230V, 5000K, approx. 10000lm



- Versions with a system power of 150W / 200W / 240W On request



SpotLED 24 **LED Spotlights** 



The powerful and energy-efficient SpotLED spotlights with state-ofthe-art LED technology offer extensive usage options for outdoor and indoor lighting. The housing material (cast aluminium) can be combined individually with other components (LED, lenses, colours) and can be used for a variety of lighting purposes.

The spotlight has a maximum swivel angle of 165°. The SpotLED is supplied as standard with a clip which can be used for wall mounting. Whether it be outdoors on transport or working vehicles (construction, agriculture, cleaning, waste disposal, snow equipment) or in gardens and on facades, the SpotLED casts everything in a favourable light. Indoors too, there are a wealth of possible uses in rooms and workstations.

### **Product features**

- Vibration-resistant
- Housing with cooling fins for optimised heat dissipation
- Housing available in white, silver-grey, black
- Clip made from stainless steel V2A, powder-coated
- Various beam angles available (different lenses)
- Connection via potentiometer possible for brightness adjustment (500kOhm, positive logarithm)

### Technical data

Input voltage	12-30VDC or 24VDC via
	230VAC power supply uni

24VDC 500mA Power supply

12VDC 950mA

5x3W Power LEDs Light source 6350 - 7000K Light colour 2800 - 3200K

Alternative colour filter red/green/yellow

Beam angle Spot 10°

Medium 38° Wide 67° IP66

Protection category Protection class

Operating range of temperature

Surface temperature Housing

Weight

Dimensions (WxHxD)

-10°C to +45°C max. 55°C

Die-cast aluminium

108x67x82mm

Connecting socket Item no.	Fixed connection 5m Item no.	Description	Housing colour	Light colour in K
268315	267779	Spot	white	cool white
268309	267780	Spot	silver-grey	cool white
268312	267781	Spot	black	cool white
268308	267966	Medium	silver-grey	cool white
268314	267964	Medium	white	cool white
268311	267967	Medium	black	cool white
281928	281922	Wide	black	cool white
281929	281923	Wide	silver-grey	cool white
281930	281924	Wide	white	cool white
270954	270955	Spot	black	warm white
270950	270951	Spot	white	warm white
270952	270953	Spot	silver-grey	warm white
270934	270935	Medium	silver-grey	warm white
270930	270933	Medium	white	warm white
270936	270937	Medium	black	warm white
281931	281925	Wide	black	warm white
281932	281926	Wide	silver-grey	warm white
281933	281927	Wide	white	warm white
Accessories				

Accessories	Accessories		
270922	Safety grille V2A		
270923	Safety glass PC transparent		
268167	Colour filter set: 3 colour filter attachments in red, green and yellow		
268322	Plug for cigarette light, 5m cable, for junction box description		
267963	Connector power supply for junction box description		
268321	Connector with 5 m cable for description with junction box		
270489	Magnetic clamp, force 180N		
267765	Star grip		
267829	Power supply 1-phase 1.1 A / 25W, 230 / 24 VDC		
267828	Power supply 1-phase 2.2 A / 50W, 230 / 24 VDC		



12 VDC charging cable with 5m cable 2 x 0.5mm<sup>2</sup>, socket angled for cigarette lighter Item no. 268322



Connecting cable 5m black, angled with socket 3P, IP67, 3 x 0.25mm<sup>2</sup> Item no. 268321



PC transparent safety glass for SpotLED Item no. 270923



230/24 VDC plug-in power supply with 1.8m cable and angled coupling for rated power of max. 24W Item no. 267963



Safety grille V2A Item no. 270922



Colour filter attachments, set of 3, green, red, yellow Item no. 268167

Other designs available upon request.





Whether it be homes or advertising spaces, the SpotLED 230 put the spotlight superbly on your property. The SpotLED 230 requires less than 30 Watt to bathe its surroundings in gleaming light. This incredible efficiency is made possible through the use of 8 Power LEDs as the illuminant. The LED spotlight is mounted in a stable clip. It can be swivelled and secured in place with 2 screws. These spotlights are also ideal in combination with movement sensors. The large cooling fins on the back of the spotlight ensure optimum cooling.

### **Product features**

- Housing made from die-cast aluminium with cooling fins
- Housing colour silver-grey
- Optimised heat dissipation
- Overheating protection
- Mounting clip made from stainless steel, powder-coated, pivotable

### Technical data

Input voltage	230VAC
Power supply	120mA
	0.0144.5

Light source 8x3W Power LEDs Light colour 2800-3300K

3700-4300K 5700-7000K

Beam angle Spot 10° Medium 38°

Wide 67° IP66

Protection category IP6
Protection class I

Operating range

of temperature -10°C to +45°C Housing Die-cast aluminium

 $\begin{array}{ll} \text{Surface temperature} & < 50^{\circ}\text{C} \\ \text{Weight} & 1000\text{g} \end{array}$ 

Dimensions (WxHxD) 170x89x105mm

### Over temperature protection

Temperature of the LEDs is monitored. If temperature reaches a specified maximum LED temperature, brightness will be automatically reduced. If temperature decreases under the maximum specified LED temperature brightness will be adjusted to the set value.

### Dimming

The spotlight can be dimmed with most of common phase angle control dimmers.

Item no.	Description	Light colour	Cable gland/ dummy plug
860200	Spot	warm white	M16/1x
860201	Medium	warm white	M16/1x
860202	Wide	warm white	M16/1x
860206	Spot	comfort white	M16/1x
860203	Medium	comfort white	M16/1x
860207	Wide	comfort white	M16/1x
860204	Spot	cool white	M16/1x
860205	Medium	cool white	M16/1x
860186	Wide	cool white	M16/1x
Accessories			

273854	Compl. standing clip incl. 2 wing screws, 2 spacers and 6 clip protectors
273855	M5 x 25 mm wing screw (2 x required)
273856	Clip protector (6 x required)



Standing clip, Item no. 273854



### SpotLED FLEX Workstation LED spotlight



The SpotLED FLEX work light guarantees excellent visibility in every situation; it is a highly effective, small and compact light source, safe and convenient, providing light on an as-needed basis for every illumination task and offering energy-efficient, long-lasting lighting for the specific workplace thanks to state-of-the-art LED technology.

### **Product features**

- Extremely sturdy, can rotate and swivel, vibration-resistant
- Housing with cooling fins for optimised heat dissipation
- Flexible tube and adapter made from steel, black coated
- Clip made from stainless steel V2A, powder-coated
- Can be supplied as a wide or broad beam

### Technical data

Input voltage		12-30VDC or via mains unit 230VAC, 24VDC (also available in 24VAC on request)
Power supply	24VDC	500mA
,	12VDC	950mA
Light source		5x3W PowerLEDs
Light colour		6350-7000K
Beam angle		Spot 10°
		Medium 38°
Protection catego	ry	IP54 (without connector power supp

Protection category IP54 (without connector power supply)
Protection class III

Operating range
of temperature
-30°C to +45°C
Surface temperature:
max. 55°C
Housing
Die-cast aluminium
black coated

Weight 500g

Dimensions (WxHxD) 108x67x82mm (light)



Item no.	Description	Manage- ment	Connector power supply	Flexible tube
075011	Cnot	IIICIII	power supply	2000000
275211	Spot	-	-	200mm
275214	Spot	-	-	300mm
275215	Spot	-	-	400mm
275595	Spot	-	-	600mm
275216	Medium	-	-	200mm
275217	Medium	-	-	300mm
275218	Medium	-	-	400mm
275596	Medium	-	-	600mm
275516	Spot	1.6m	230V	200mm
275517	Spot	1.6m	230V	300mm
275518	Spot	1.6m	230V	400mm
275718	Spot	1.6m	230V	600mm
275519	Medium	1.6m	230V	200mm
275520	Medium	1.6m	230V	300mm
275522	Medium	1.6m	230V	400mm
275719	Medium	1.6m	230V	600mm

Accesso	Accessories		
275540	230VAC/24VDC plug-in power supply with 1.6m, 2x0.5mm <sup>2</sup> (PUR cable) connecting cable		
275523	Round magnet, diameter 86 x 20 mm, force 540 N incl. M6 fastening screw		
270923	PC transparent safety glass for SpotLED Flex		
270922	Safety grille V2A		



Round magnet



Plug-in power supply with connecting cable



PC transparent safety glass



Safety grille V2A

Other designs available upon request.

### **Workstation lights**

### MasterLED Workstation LED light



Good visibility for safety at work in all situations. The right light source, safe and convenient, provides light on an as-needed basis for every illumination task and offers energy-efficient, long-lasting lighting in commercial situations, industry and applications both indoors and outdoors. The LED workstation light is extremely robust and equipped with shatter-free glass. With its various articulated arms, the MasterLED can rotate and swivel, making it the perfect light for all manner of different uses.

### **Product features**

- Full light flux available immediately
- Low energy consumption with a high light yield
- Extremely resilient to switching (> 1 million)
- Insensitive to shock and vibration
- With satin-finish lens
- Can be rotated and swivelled in various positions
- Screw-on lamp base
- On/Off switch on the rear lamp head
- Grip made from polyamide

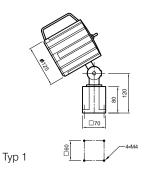
### Technical data

Input voltage 230VAC, 24VAC/DC
Light source 1x20W LED
Luminous flux 1500Im
Service life >50000h
Protection category IP65

Protection class III when operated at safety low voltage

Housing and reflector Aluminium

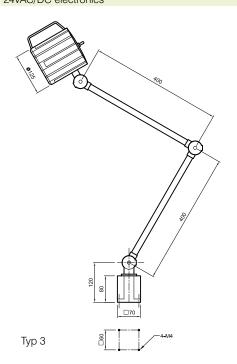
Cover Non-shatter safety glass



With connecting cable on request



Item no.	Description
283110	Type 1 24VAC/DC
283112	Type 3 24VAC/DC
283113	Type 1 230VAC
283115	Type 3 230VAC
Accesso	ries / spare parts
284022	Screw-on magnetic foot
236643	Spare switch
236644	Protective cap for switch
274951	Type 3 joint stand
236641	Clear replacement glass
251620	Glare restriction louvre, black plastic
245361	Handle
285456	Screw-on clamp
236645	Sealing ring for front pane
282898	20W LED head
282899	230VAC electronics
282900	24VAC/DC electronics





### AlphaLUXX / MasterLED / SpotLED / SpotLED FLEX



Industrial workshop lighting with welding workstation



Lighting of the blasting hall (before/after)



SpotLED - Corrugated board factory



SpotLED - Machine lighting



MasterLED - Lighting aluminium press



SpotLED FLEX - Lighting Aluminium processing

### **HIGHBAY LIGHTING**



### **WORKING IN THE BEST LIGHT.**

Durable, sturdy and with low energy consumption: This is what distinguishes modern hall/arena lighting and is exactly where GIFAS comes in with its lighting range. Particular environmental conditions regarding harsh temperatures, excess dirt and dust are often very demanding. We are prepared for such cases and our hall spotlights are designed and engineered with this in mind.

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DeltaLUXX LED highbay lighting

General





The flexible highbay lighting of GIFAS offer an impressive design and provides a variety of functions. The efficient thermal management of these highbay lights, which ensures adequate cooling even in dust and dirt-prone environments, supports the modern and efficient LED technology used, with its lifespan of at least 80,000 hours. Thanks to optional DALI and 1-10V dimmer interfaces, the DeltaLUXX models can be integrated into intelligent lighting systems.

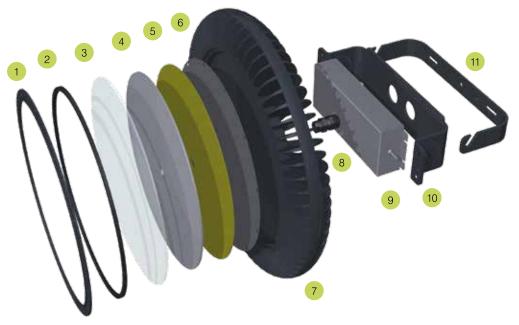
Thanks to high-performance LEDs, the DeltaLUXX boast superlative lighting efficiency, especially in hard-to-illuminate areas with high-up lighting installations. With an external diameter of 450 millimetres, 180 high-end LEDs and high-quality individual single lenses with various beam characteristics, they can be used in halls up to 35 metres in height.

With their cast aluminium housing, special PTFE non-stick coating for minimum dust and dirt build-up, a pressure equalisation membrane and the use of sturdy polycarbonate panes with increased shatter protection or single-pane safety glass, the DeltaLUXX delivers reliable performance in environmental temperatures of up to 65° Celsius.

DeltaLUXX impresses with its modern, industrial design and sleek shapes.

- ✓ Developed and assembled in Germany
- For applications with high light points
- √ Sleek, modern industrial design
- Optional with optics for a wide range of applications
- √ Approved for the food industry (according to IFS)

### Construction



- 1 Die-cast aluminium frame
- U-profile silicon seal
- 3 Front panel (PC or toughened glass)
- 4 Optic
- 5 LED board
- 6 Heat conducting film
- 7 Die-cast aluminium housing
- 8 Cable gland with pressure compensation function
- 9 Power supply
- 10 Power supply bracket
- 11 Mounting bracket

### DeltaLUXX LED highbay lighting Characteristics



### **Development Approach**

This development is based on the need to manufacture a Highbay lighting which merits the Developed and assembled in Germany mark of excellence, in terms of performance and quality. With the DeltaLUXX, GIFAS has succeeded in developing a competitive LED Highbay lighting that satisfies the highest demands and can also be used in challenging industrial sectors.



### LED-Technology

The DeltaLUXX uses exclusively **high-end SMD LEDs** from reputable manufacturers, which are ideal in terms of light quality, lifespan, light colour and efficiency. For efficient light distribution high-quality optics are installed. The neutral, white 5000K light and the good colour rendering index of over R<sub>a</sub> 80, match the maximum human vision in daylight and as a result the best resolution of detail.



### Surface coating

Industrial lights often have problems with dirt gathering on the surface and the associated reduction in cooling capability. The **PTFE surface coating (coll. Teflon®)** on the AlphaLUXX has a very low friction coefficient. Dust and dirt literally "bead" off the light. Even harsh acids cannot attack a PTFE coating. An improved thermal conductivity results from the four-times thinner PTFE coating, in comparison with other powder coating.



### Technical design

The DeltaLUXX impresses with **enormous system efficiency and high lighting quality.** Through optional DALI and 1-10V dimming interfaces, the luminaire can be integrated into intelligent lighting systems.



### Thermal management

Efficient cooling is essential for the LEDs' long service life and ultimately affects the entire lighting system. To achieve this long-term for DeltaLUXX, high-quality technical components were combined with a sophisticated design. The external open ring ensures dissipation of the heat generated, even with high levels of dirt. The design, coupled with an extra-thin coating and heat conduction foil to ensure maximum contact between surfaces, delivers an ambient operating temperature range of up to 65° Celsius and a lifespan of at least 80,000 hours.



### Quality

The components are selected according to the highest quality standards. High-alloy, corrosion-resistant aluminium housing (230D), stainless steel installation material (V4A), LEDs and electronics from reputable manufacturers. **Individual testing of every light in accordance with DIN EN 60598-1.** 



### DeltaLUXX LED highbay lighting Technical data





The highbay lighting meets numerous requirements, such as high efficiency and a wide range of operating temperature ranges as well as control options. In its second generation an efficiency of up to 173lm/W is achieved, which leads to significant energy savings. The housing with its many detailed solutions is predestined for rough industrial use.

### **Product features**

- Robust housing made of corrosion-resistant die-cast aluminium
- Dirt-resistant PTFE surface coating, approved for the food industry
- 3mm impact resistant plastic cover (PC) or 3mm toughened safety glass (ESG)
- Custom-made U-profile seal surrounding all sides
- Custom-made, durable, heat-conducting film for lasting, reliable dissipation of heat from the LED board
- Low heat generation thanks to the latest LED technology
- Pressure compensation element for extreme temperature fluctuations
- Full luminous flux is available instantly after switching on
- Low energy consumption with high light output
- Maintenance-free
- Wide operating temperature range (up to 65°C)
- No UV/IR-radiation
- Vibration-resistant
- Accessories available from stock
- Various directional characteristics available



### Technische Daten

Input voltage Light source System performance DeltaLUXX 2

DeltaLUXX 2 Optic 60° DeltaLUXX 2 Dali System efficiency

DeltaLUXX 2 (ESG)

DeltaLUXX 2 Optic 60° (PC) DeltaLUXX 2 Dali (ESG)

Light colour CRI-Index

Beam angle
Service life

Protection category
Protection class
Shock resistance

Housing Housing surface

Housing colour

Cover

Connection cable Weight

Dimensions (ØxH) Certification 100-277VAC (50/60Hz) SMD-LEDs

95W / 140W / 183W / 215W / 270W 95W / 140W / 183W / 215W / 270W 225W / 264W

173lm/W / 160lm/W / 154lm/W / 151lm/W / 144lm/W 165lm/W / 153lm/W / 147lm/W / 144lm/W / 138lm/W 136lm/W / 128lm/W

5000K Ra >80

open distribution 120° Optics 60° (UGR<22) / 30° / 20°

[L70/B10] > 80000h

IP65

IK08 (Version: PC cover) Die-cast aluminium

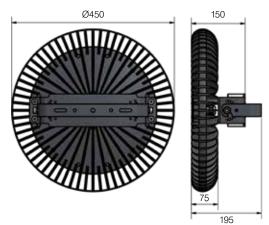
PTFE-coated (approved for the

food industry) black 3mm PC,

optional 3mm ESG (Vision) 1m (Dali-Version 30cm)

approx. 9.5kg 450x195mm CE

### Dimensions

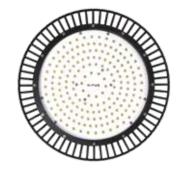


Item no.	Description
289860	1m safety cable for high bay spotlights
293261	2m safety cable for high bay spotlights
330481	Emergency lighting battery for 1-10V dimmable DeltaLUXX 2 with up to 3 hours emergency power operation

### DeltaLUXX LED highbay lighting Range

The DeltaLUXX series covers many typical lighting requirements for highbay lighting in industry. GIFAS supports the lighting planning, so that lighting in accordance with standards can be realised.

Depending on the configuration, other performance levels can be achieved.





### DeltaLUXX 2

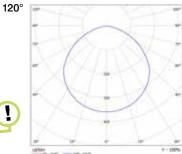
Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800343	90W	120°	PC satiniert	14100	4-9m
800287	90W	120°	PC klar	15700	4-9m
800288	90W	120°	ESG klar	16400	4-9m
800350	130W	120°	PC satiniert	19300	6-11m
800289	130W	120°	PC klar	21400	6-11m
800290	130W	120°	ESG klar	22400	6-11m
800378	170W	120°	PC satiniert	24200	8-14m
800291	170W	120°	PC klar	26800	8-14m
800292	170W	120°	ESG klar	28100	8-14m
800402	200W	120°	PC satiniert	27900	10-16m
800293	200W	120°	PC klar	31000	10-16m
800294	200W	120°	ESG klar	32400	10-16m
800295	250W	120°	PC klar	37200	12-23m
800296	250W	120°	ESG klar	38900	12-23m

### DeltaLUXX / DeltaLUXX 2 with optics

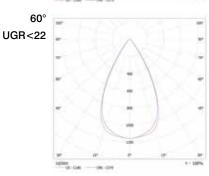
Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800405	90W	60°	PC klar	16500	4-10m
800406	130W	60°	PC klar	22600	6-12m
800115	150W	30°	PC klar	16400	10-16m
800161	150W	30°	ESG klar	17100	10-16m
800112	150W	20°	PC klar	18900	13-28m
800158	150W	20°	ESG klar	19800	13-28m
800407	170W	60°	PC klar	28400	8-16m
800408	200W	60°	PC klar	33000	10-17m
800116	200W	30°	PC klar	20400	13-28m
800162	200W	30°	ESG klar	21300	13-28m
800113	200W	20°	PC klar	23600	14-32m
800159	200W	20°	ESG klar	24700	14-32m
800117	240W	30°	PC klar	23400	15-30m
800163	240W	30°	ESG klar	24500	15-30m
800114	240W	20°	PC klar	27200	16-35m
800160	240W	20°	ESG klar	28400	16-35m
800409	250W	60°	PC klar	39800	12-25m

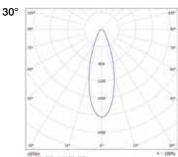
<sup>\*</sup>In thermally steady state after approx. 1 hour of operation (Im) \*\*Depends on the required lux data and light point distances

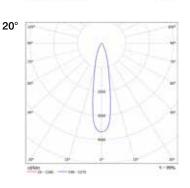
### Light distribution curve













### DeltaLUXX LED spotlight Product range overview

### DeltaLUXX 2 - 2700K

Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
313357	200W	120°	PC	27620	10-16m
800443	200W	60°	PC	29515	10-17m
800448	250W	120°	PC	33020	12-23m
313358	250W	60°	PC	35400	12-25m

### DeltaLUXX 2 HT - operating range of temperature to 70°C

Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800389	130W	120°	PC	21400	6-11m
800390	170W	120°	PC	26800	8-14m

### DeltaLUXX 2 - 1-10V dimmable

Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800400	150W	120°	ESG	23700	
800394	150W	120°	PC	22650	
800456	200W	60°	PC	29400	
800395	200W	120°	PC	31000	
800401	200W	120°	ESG	30600	
800440	240W	60°	PC	33818	
800351	240W	120°	PC	33818	
800416	240W	120°	ESG	35170	

### **DeltaLUXX DALI**

To realise further electricity savings, modern lighting systems are designed to be dimmable and have light or motion sensors if required. Digital DALI 2 is used as the control protocol.

### DeltaLUXX 2 DALI

Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800423	200W	60°	PC	31000	4-20m
800300	200W	120°	ESG	30600	4-16m
800299	200W	120°	PC	31000	4-16m
800424	240W	60°	PC	33818	4-20m
800302	240W	120°	ESG	35345	4-16m
800301	240W	120°	PC	33818	4-16m

### DeltaLUXX DALI mit Optik

Item no.	Туре	Beam angle	Cover	Lighting current*	Typ. mounting high**
800141	240W	30°	PC	23400	10-30m
800138	240W	20°	PC	27200	10-35m

<sup>\*</sup>In thermally steady state after approx. 1 hour of operation (Im)

Colour temperature DeltaLUXX 2 also available in other light colours 4000K / 3000K / 1700K



Safety cable for high bay spotlights art. no. 289860 / art. no. 293261



Emergency lighting battery for high bay spotlights Art. no. 330481



Optional as version with

- dimmability (Dali 1-10V)
- frosted disc
- sacrificial disc

art. no. 316611 / art. no. 316612

<sup>\*\*</sup>Depends on the required lux data and light point distances

### Lichtmanagement mit DALI

GIFAS offers various luminaire models with an optional 1-10V or DALI interface and thus enables integration into intelligent light management systems.

Particular attention is paid to the installation of modern systems on the Digital Addressable Lighting Interface (DALI) which combines many advantages with few components, little wiring effort and simple programming. Due to the expanded options and increased functional reliability, digital dimming is increasingly replacing analog 1-10V dimming.

Due to their individual addressability and status feedback, the light control systems based on DALI not only offers comprehensive monitoring functions, but also opens up new approaches to sophisticated lighting solutions thanks to the programmable parameters. Via gateways, DALI systems can also be operated as a subsystem in modern building automation systems.

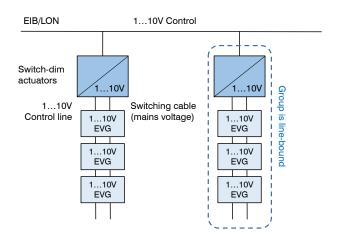
DALI is an independent system. It controls the light with all the DALI components involved and can address and configure each device individually, e.g. assign each luminaire to 16 groups, define individually with 16 light values for lighting staging, or dim all luminaires synchronously. Thanks to the simple combination with daylight or motion sensors, additional energy savings of up to 80% can be achieved depending on the application.

### The planning and commissioning of DALI systems requires the following parameters to be taken into account:

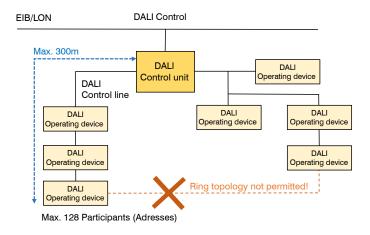
- DALI uses serial asynchronous data protocol transfer rate of 1200bit / s at a voltage level of 16V
- Lines can be in almost any topology, star, line or tree structures. A ring-shaped connection components must be avoided
- There are a maximum of 128 participants and / or a maximum of 16 groups per DALI-Bus allowed
- The maximum current consumption of a DALI circuit is 250 mA.
- The current consumption per DALI load is a maximum of 2 mA
- The maximum voltage drop between transmitter and actuator 2 V do not exceed
- The maximum cable length when using 1.5 mm<sup>2</sup> conductors is 300m

	DALI 2	1-10V
Control signal	Digital	Analog
Control input	Potential free tax entrance	Potential free tax entrance
Connection	Reverse polarity protection two-wire line	Two-wire line with polarity (+/-)
Dimming curve	Logarithmic dimming curve, according to eye sensitivity	Linear dimming curve
Grouping and addressing	Dynamic addressing and group formation - Max. 128 participants (Adresses) - Max. 16 groups - in combination = no groups-wiring necessary	Not addressable, wiring according to groups (high effort)
Scene memory	Scene memory, max. 16	Not possible
Bidirectionality	Bi-directional communication with DALI Master Status message of the DALI control gear - lamp failure - operating time - dimming	Not possible
Storage of dimming settings	Individual dimming, saving of the last dimming value	Not possible
Mains voltage isolation	Via control line	On / off via external relay contact

### Analog interface 1...10V



### Digital interface DALI 2





## Intelligent highbay lighting DeltaLUXX SMART ZigBee

Modern lighting in combination with targeted control and automation is becoming increasingly important. Whether simple switching, presence detection or daylight-dependent control - control makes lighting more flexible and convenient and contributes enormously to energy savings.

Whether LED hall lighting reacts to light incidence from outside and independently provides the desired illuminance, whether warehouses are only lit where work is performed, night lighting is to be switched or other controls are desired - an easy-to-operate, broad-based and future-oriented control system is required for this purpose.

A radio-based solution based on the open ZigBee standard saves wiring costs and can be used in both new and existing installations. The interfaces on luminaires and sensors serve both as transmitters and receivers, which makes an infinite expansion of the measurement network possible with high functional safety.

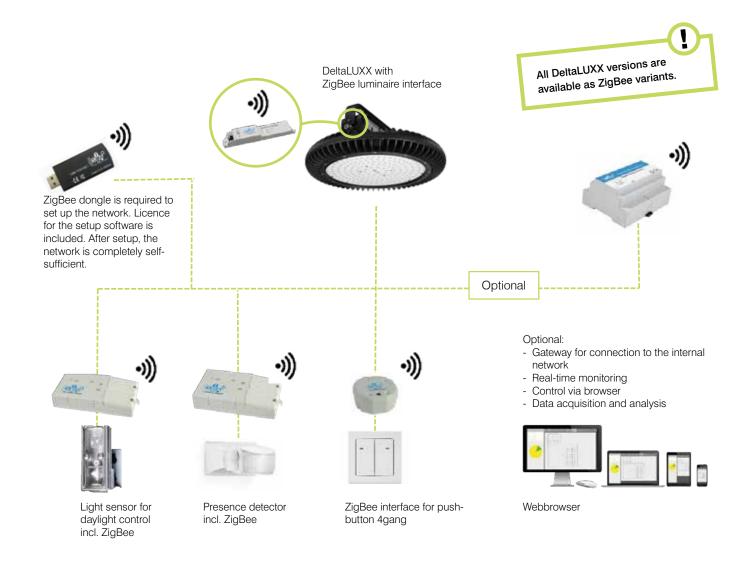
Thanks to the communication of all components with each other, a wide variety of usage scenarios and needs-based lighting situations are possible. Once configured, the system runs completely autonomously - the computer with the configuration software is only needed for changes to the system. If control is to take place

comfortably in real time via a web browser, the gateway is needed as an interface to the building network. In this case, it is possible to record power consumption and status monitoring, among other things.

The ZigBee control system allows a wide range of application scenarios. GIFAS supports you in the right implementation! Starting with project planning of lighting scenarios and definition of the optimal sensor positions up to commissioning. Talk to us!

### What is ZigBee?

- Standard for wireless networks with low data volume.
   There are many possible applications for ZigBee, for example building automation, in the medical sector, for control systems and control systems and for all kinds of sensor measurements.
- ZigBee operates license-free in the 2.4 GHz band, interference-free alongside existing WLAN and Bluetooth networks.
- The range between ZigBee devices is up to 100 m, due to the network, ranges of up to several kilometres are possible.
- High network security through encryption with AES-128



### Intelligent highbay lighting DeltaLUXX SMART CASAMBI

LED luminaires can be easily and flexibly controlled and dimmed via smartphone or tablet thanks to CASAMBI technology. To do this, CASAMBI uses the latest technological developments based on Bluetooth 4.0. To use this intelligent technology, all you need is the free CASAMBI app (available for iOS and Android) and an easy-to-integrate control unit for LED luminaires.

Extraordinary here: with CASAMBI, luminaires connected via three-wire cabling can now also be dimmed. And not only via smartphone, but also by means of a wall-mounted radio switch. A timer function makes it possible to call up lighting scenarios precisely to the minute on the basis of days of the week or times of day, or to have them switched on and off in sequence (switching on and off, dimming). The integrated timer function can be triggered by various events such as freely programmable dates or the sunrise and sunset in your time zone.

Smart switch functions enable CASAMBI installations to integrate presence detectors that have a switchable mains output. In this case, a presence detector is connected in front of a CASAMBI unit, which in turn is part of a network and acts as a 'master' module. Individual scenes can be called up via the 'Control scenes' mode, which are switched off again when inactive. 'Active/Standby' enables switching between two scenarios, for example, in the case of corridor lighting, switching between orientation light and full lighting. These options illustrate the range of applications towards efficient, intelligent and intuitively operable lighting concepts.

CASAMBI control allows a wide range of application scenarios. GIFAS supports you with the right implementation. From project planning of lighting scenarios and definition of sensor positions to commissioning. We will be happy to advise you!

# Mesh-Network iOS & Android Apps Bluetooth 4.0 Smart Control with wallcompatible mounted radio switch

Remote Control, Sensor Data, SW Updates, Configuration

### What is CASAMBI?

- uncomplicated installation
- easy synchronisation with several smartphones and tablets
- can be retrofitted to almost all GIFAS luminaires
- Switching on and off as well as stepless dimming via mobile devices or wall-mounted radio switch (switching, dimming, calling up scenarios)
- Freely definable switching groups
- High range

### Mesh-Network

CASAMBI technology offers the possibility to build a wireless mesh network where all the intelligence of the system is replicated in each node, thus creating a chain without single points of failure.

Such a self-organising mesh network can control a large number of devices from any point. It also allows firmware updates over the network so that changes can be made over-the-air. In this type of fully distributed and symmetrical architecture, each device can go offline and be updated by others when they come back online.

The CASAMBI modules are pre-configured at the factory and can be used directly (plug & play). An internet connection is not required for normal operation. This is only required to make updates or to send or retrieve configurations of the user interface from the cloud service.

All DeltaLUXX versions are available as CASAMBI variants.

### DeltaLUXX BLUE / RED / GREEN



### DeltaLUXX Safety spotlight





The DeltaLUXX BLUE LED spotlight was specially developed for the increased safety requirements when working with crane systems.

The blue warning signal has already proven its worth when working with forklift trucks. With the DeltaLUXX BLUE, a blue spotlight radiating ahead warns the employee of the crane system in use.

Thanks to the  $5^\circ$  optics, a large spot with a diameter of 1 metre is projected onto the ground from a mounting height of up to 20 metres and a range of approx. 30 metres. The DeltaLUXX is designed for robust applications and can even withstand temperature fluctuations from -20°C to  $+50^\circ$ C.

The DeltaLUXX BLUE can also be equipped with a 30° optic and is used, among other things, for façade lighting on tall buildings or industrial facilities.

The DeltaLUXX RED / GREEN LED spotlight is used for safety when working in transport zones.

With the DeltaLUXX RED, a red spotlight shining ahead warns employees of access restrictions, for example. The DeltaLUXX RED projects a red spot on the floor and acts as a signalling light to increase safety on site. The spotlight is designed for robust applications and can even withstand temperature fluctuations from -20°C to +50°C.

### Product features

- Robust housing made of corrosion-resistant die-cast aluminium dirt-repellent PTFE surface coating
- Suitable for the food industry
- 3 mm impact-resistant plastic disc (PC)
- All-round U-profile seal
- Durable heat conducting foil for permanent reliable heat dissipation of the LED board
- Low heat generation thanks to state-of-the-art LED technology
- Full luminous flux is available immediately after switching on
- Low energy consumption with high luminous efficacy
- Maintenance-free
- No UV/IR radiation
- Shock and vibration resistant

### Technical data

100-277VAC (50/60Hz) Input voltage 130W / 80W / 84W System power Light source SMD LEDs Wavelength 460nm / 625nm / 525nm Luminous flux 130W 1600lm 80W 3800lm 84W 5625lm Beam angle 5° IP65 Protection category Protection class Operating temperature -20°C to +50°C Storage temperature -25°C to +70°C Housing material Die-cast aluminium PTFE-coated Housing surface Housing colour black 3mm polycarbonate Cover Connection cable

3mm polycarbonati 1m / 30cm / 30cm approx. 11.5kg 450x208.5mm 2 years

### Crane lighting

Dimensions (ØxH)

Weight

Warranty

Item no.	Description
289861	DeltaLUXX BLUE/W130V230/5°/-
291506	DeltaLUXX BLUE/W130V230/5°/DIMM/ incl. dimmbox
293370	DeltaLUXX RED/W80V230/5°/-
308901	DeltaLUXX-GREEN/W84V230/5°/-

### FlutLED ROUND 2 highbay lighting







The FlutLED Round 2 highbay downlight impresses with its design, efficiency and functionality. Depending on the model and requirements, the output and light colour can be flexibly adjusted using a slider, allowing maximum flexibility with an output of up to 200W. This luminaire fulfils both current and future requirements without the need to replace the lighting system. Thanks to the IP66 protection class, it is reliably protected against the ingress of dirt and water.

### **Product features**

- Full luminous flux, immediately available
- Low energy consumption with high luminous efficacy
- Low temperature development
- High energy efficiency
- maintenance-free
- No UV/IR radiation
- shock and vibration resistant
- with Zhaga interface
- eyelet for mounting included in scope of delivery
- Mounting bracket (item no. 800890) for wall or ceiling mounting wall or ceiling mounting optionally available

### Product features DALI-2 PIR motion sensor

- DALI-2 PIR motion sensor with Zhaga book18 standard interface socket
- PIR Sensor Module for DALI and DALI-2 lighting systems
- Movement detection (PIR) instance type 3 (IEC62386-303) and light intensity measurement instance type 4 (IEC62386-304)
- 4 operating modes:
- Movement triggered.
- 2. Movement triggered with ambient lux thershold
- 3. Constant light control.
- 4. Light control (4 thresholds).
- Double terminals for easy installation
- Multiple sensor modules can be installed within a DALI system
- The module can be used as a DALI light controller or just as sensor unit for integration in building management systems
- Supply via the DALI bus, no additional power supply needed
- Standalone installation design
- Flush mount and ceiling mount installation for option

### Technical data

### Design Power and light colour (CCT) adjustable

Beam angle 120°
Protection category IP66
Impact resistance IK08

Operating temperature -25°C to +45°C Cover ESG clear 5mm Weight approx. 6.5 kg

Dimensions (ØxH) 400x140mm (without eyelet)

### Version Power adjustable

Input voltage 100-240VAC

System power 100W / 120W / 140W / 160W / 180W / 200W

(6-stage adjustable)

Light colour
Luminous flux
System efficiency
LED service life
4,000K / 5,000K
18,500lm - 37,000lm
approx. 185lm/W
[L80/B10] >100,000h

Beam angle 120°
Protection category IP66
Impact resistance IK08

Operating temperature -25°C to +45°C Cover ESG clear 5mm Weight approx. 6.5 kg

Dimensions (ØxH) 400x140mm (without eyelet)

Item no.	Description
800887	FlutLED ROUND 2, 230V, CCT, 120°
800892	FlutLED ROUND 2, 230V, CCT, 120°, DALI 2
800889	FlutLED ROUND 2, 230V, 120°, 4.000K
800888	FlutLED ROUND 2, 230V, 120°, 5.000K
Accessorie	es
800890	Mounting bracket
355779	DALI-2 PIR motion sensor



### DeltaLUXX / DeltaLUXX BLUE / DeltaLUXX RED













# LIGHT MEETS EMOTION AND PRUDENCE.

They are perfect for your service road or employee car park. GIFAS products highly score with their elegant design, modern LED technology and long-lasting service life, providing great lighting for your movement area in the long run.

StreetLED SMART	200
StreetLED 4	202
Application cases	204



### StreetLED SMART

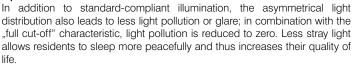


### Light-emitting diode (LED)

Only high quality LEDs are used for the StreetLED SMART, with an optimal balance of colour quality, light output, life expectancy and free of mercury and lead (RoHS compliant). To achieve the best balance between natural colour distribution (true colour rendering) and the human eye at night, the colour temperature of 4000 K was selected.



### Optics





### Electronics / Optional power reduction to 50%

The circuit boards used in the StreetLED SMART are specially designed and equipped with an individual driver to reduce the power to 50 % if required.



### Housing

In addition to a modern housing design, objectives such as resistance to extreme weather conditions, support of the important functions as well as protection of the vital parts of the luminaire had to be fulfilled. The result distinguishes the StreetLED SMART; completely sealed, no openings, disturbing cooling fins or fans. A lightweight aluminium alloy with a multi-layer surface finish is used.



### Future-proof

The StreetLED SMART is a high-tech street lighting system with futureoriented features such as light management via internet, wireless internet connection WIFI, security cameras, video control, speed sensors, light sensors and much more.

### Type comparison - StreetLED SMART

Types	StreetLED SMART 12	StreetLED SMART 12	StreetLED SMART 24	StreetLED SMART 36	StreetLED SMART 42
Technical data	The second	100	100		
Number LED	12	12	24	36	42
Height of light spot (m)	to 5 m	to 5 m	5-7 m	7-12 m	9-14 m
Pole spacing (m)	24 m (5 m height)	20 m (5 m height)	21 m (6 m height)	28 m (8 m height)	35 m (10 m height)
Luminous flux	2390 lm	3950 lm	7990 lm	11420 lm	15730 lm
System output	149 lm/W	141 lm/W	148 lm/W	150 lm/W	157 lm/W
Power input	16W	28W	54W	76W	100W
Connection cable	8 m	8 m	8 m	12 m	12 m
LVK	А	В	В	В	В
Street category	P4/M6	P4/M6	P3/M5	M4	M3
Area of application	For smaller roads, paths and cycle lanes, private driveways, alleyways and parking spaces.	For smaller roads, paths and cycle lanes, private driveways, alleyways and parking spaces.	For larger paths and cycle lanes, private areas and industrial zones.	For communal roads, crossroads, car parks and challenging open land and industrial zones.	For city roads and squares, multiple intersections, large areas and parks, large open land and industrial zones.

### StreetLED SMART



The retrofittable StreetLED SMART is the answer to the diverse possibilities of future-proof and smart street lighting that can do a lot more than just illuminate a street. With a high degree of modularity, the StreetLED SMART is already prepared today for the requirements of tomorrow.

### Scope of services

- Tool-free opening
- Zhaga version for retrofitting standardized Sensors or control solutions
- Tiltable ± 15°
- Overvoltage protection
- Automatically tension-free when opening

### Technical data

Input voltage 202-254 VAC/50-60 Hz

Power factor >0.95 Light colour 4000 K

CRI ≥80 Service life approx. ≥80 100.000 h (L90/B10)

Protection category IP66
Shock resistance IK09
Protection class I

Dimensions LxWxH 520x324x70 mm

Weight 7.2 kg

Adjustability -15° to +15° (5°-Steps)

Control DALI, Sensor Ready via Zhaga socket

Temperature operation range  $-40^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ 

Flash cover 10 kV

Connection cable 3x1.5 m² (8m or 12m pre-assembled))

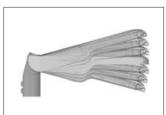
Pole mount 60 mm or 76 mm, to be ordered separately

Cover made of toughened safety glass, 4mm

Housing Die-cast aluminum

Colour RAL 9006



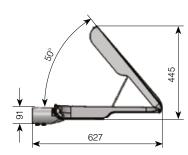


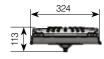


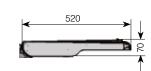


Technical drawing (incl. mast mounting):









The mast mounting is available separately in 60mm or 76mm and enables post-top or side-entry mounting. The slope can be in  $5^{\circ}$  steps can be changed by +/- 15°. All screws are off made of weatherproof stainless steel.

Classic applications of the StreetLED SMART are public Streets, intersections, parking lots and demanding open and industrial terrain.

Item no.	Description
800370	StreetLED SMART 12, Zhaga, 16W, 2390 lm
800371	StreetLED SMART 12, Zhaga, 28 W, 3950 lm
800372	StreetLED SMART 24, Zhaga, 54W, 7990 lm
800373	StreetLED SMART 36, Zhaga, 76W, 11420 lm
800374	StreetLED SMART 42, Zhaga, 100W, 15730Im

Item no.	Accessories			
800375	Mast mount 60 mm, RAL 9002			
800376	Mast mount 76 mm, RAL 9002			
800377	Light and motion sensor for Zhaga socket (Mast height up to 12 m)			
on request	Sensor for traffic detection incl. software			
on request	Radio control for Zhaga socket			



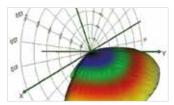
### StreetLED 4





### Light-emitting diode (LED)

Only high-quality LEDs are used for the StreetLED 4, with an optimum balance between colour quality, light output, life expectancy and freedom from mercury and lead (RoHS-compliant). The colour temperature of 4000 K was selected to achieve the best balance between natural colour distribution (true colour rendering) and the human eye at night.



### Optics

In addition to standardised illumination, the asymmetrical light distribution also results in less light pollution or glare; in conjunction with the 'full cut-off' characteristic, light pollution is reduced to zero. Less stray light allows residents to sleep more peacefully and thus improves their quality of life.



### Housing

In addition to a modern housing design, objectives such as resistance to extreme weather conditions, support for important functions and protection of the vital parts of the luminaire had to be met. The result characterises the StreetLED 4; completely sealed, no openings, annoying cooling fins or fans. A lightweight aluminium alloy with a multi-layer surface finish is used.

### Model overview - StreetLED 4

Modelle	StreetLED 4 20W	StreetLED 4 40W	StreetLED 4 60W	StreetLED 4 80W
Technical data				
Recommended Light point height	up to 5m	5-7m	5-7m	7-12m
Luminous flux	3000lm	6000lm	9000lm	12000lm
Light output	150lm/W	150lm/W	150lm/W	150lm/W
System output	20W	40W	60W	80W
Application areas	For smaller roads, footpaths and cycle paths, private forecourts, alleys and car parks.	For smaller roads, footpaths and cycle paths, private forecourts, alleys and car parks.	For municipal roads, junctions, car parks and demanding open and industrial sites.	For urban roads and squares, multiple intersections, large areas and car parks, large open spaces and industrial sites.

### StreetLED 4



The StreetLED 4 for project and outdoor lighting combines advanced LED technology with a modern design that dispenses with additional cooling fins. Longevity is a top priority, both for indoor and outdoor use. An impact-resistant glass cover and long-life LED chips complete this compact luminaire.

To minimise light pollution in accordance with the Dark Sky initiative the luminaire has a closed construction that avoids unnecessary light emissions into the sky. The beam pattern of the StreetLED 4 fulfils the requirements for both the illumination of residential streets and the uniform illumination of paths, roads and objects in industrial facilities.

### **Product features**

- On-site adjustment of the tilt angle  $+ \! / \! \text{-15}^\circ$
- Simple replacement of photometric components
- Universal mounting adapter for pole spigot (Ø76mm or Ø60mm)
- 20kV overvoltage protection
- Two different sizes for more flexibility and aesthetic uniformity

### Technische Daten

Input voltage 100-240VAC

20W / 40W / 60W / 80W System power

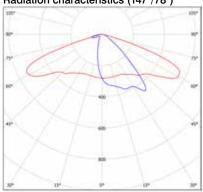
Luminous flux 3000lm / 6000lm / 9000lm / 12000lm

Light colour 4000K CRI index Ra >70 Service life min. 100000h Protection category / class IP66 / I Impact resistance IK08 Adjustment -15 $^{\circ}$  to +15 $^{\circ}$ Temperature range -30°C to +45°C RAL 9007 Housing colour

Dimensions (LxWxH)

20W / 40W 400 x 220 x 128mm 60W / 80W 550 x 280 x 134mm Weight 4.4kg / 4.4kg / 6.4kg / 6.4kg

### Radiation characteristics (147°/78°)



Item no.	Description		
342428 StreetLED 4 20W, 4000K, excl. mast support			
342429	StreetLED 4 40W, 4000K, excl. mast support		
342430 StreetLED 4 60W, 4000K, excl. mast support			
342431	StreetLED 4 80W, 4000K, excl. mast support		
Item no.	Accessories		
342433	Mast mount 60 mm, RAL 9007		
342434 Mast mount 76mm, RAL 9007			









BMW, Munich



Sewage treatment plant, Osnabrück



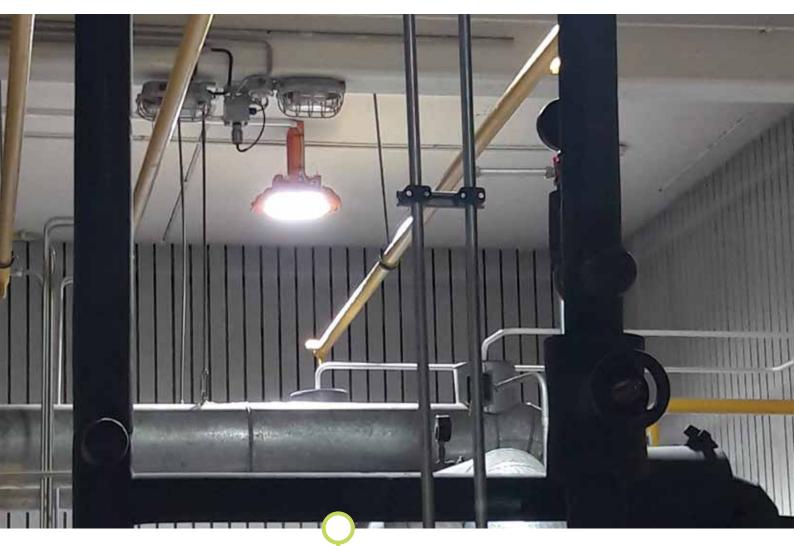
Sewage treatment plant, Osnabrück



Factory site



Ask Chemicals, Wülfrath



# SAFETY IS OUR TOP PRIORITY.

Whether in the chemical sector, energy production or in heavy industry: Wherever flammable substances are produced, processed, transported or stored, safety plays a particularly important role. Our recommendation for ATEX-certified, quality GIFAS products can be found in this chapter.

Labelling	206
Ex-Floodlights	208
Ex-Surface lights	211
Ex-Tubular lights	212
Ex-Hand-held lights	213
Ex-Battery lights	215



GAS
Electrical equipment for explosive gas atmospheres (Device group II [Chemistry])

EPL	Standards IEC/EN		Type of protection	
	60079-0		General requirements	
	60079-11	ia	Intrinsic safety	
Ga	60079-18	ma	Encapsulation	
	60079-26		Equipment with equipment protection level (EPL) Ga	
	60079-28	op is	Protection of equipment and transmission systems using optical radiation	
	60079-1	d	Flame-proof enclosure	
	60079-2	p, px, py	Pressurised enclosure	
	60079-5	q	Powder-filled enclosure	
	60079-6	0	Oil immersion	
	60079-7	е	Increased safety	
Gb	60079-11	ib	Intrinsic safety	
	60079-18	mb	Encapsulation	
	60079-25		Intrinsically safe electrical systems	
	60079-27		Fieldbus intrinsically safe concept (FISCO)	
	60079-28	op is	Protection of equipment and transmission systems using optical radiation	
		op pr		
		op sh		
	60079-11	ic	Intrinsic safety	
	60079-18	mc	Encapsulation	
	60079-15	nA	Type of protection «non-sparking»	
	60070 15	nD.	Charm advice	
Co	60079-15 60079-15	nR	Steam cover	
Gc	60079-15	nL	Limited energy (old edition only)	
	60079-15	nC	Sparking apparatus	
	60079-2	pz	Pressurised enclosure	
	60079-28	op is op pr op sh	Protection of equipment and transmission systems using optical radiation	

### **DUST**

Electrical apparatus for use in the presence of combustible dust (Device group III)

EPL	standards IEC/EN		Type of protection
60079-0 Gen			General requirements
	60079-31	ta	Protection by enclosures
Da	60079-11	ia	Protection by intrinsic safety (iaD IEC/EN 61241-11)
	60079-18	ma	Protection by encapsulation
	60079-31	tb	Protection by enclosures
Db	60079-11	ib	Protection by intrinsic safety (ibD IEC/EN 61241-11)
	60079-18	mb	Protection by encapsulation
	61241-4	pD	Protection by excessive pressure 'pD'
	60079-31	tc	Protection by enclosures
Dc	60079-11	ic	Protection by intrinsic safety
	60079-18	mc	Protection by encapsulation
	61241-4	pD	Protection by excessive pressure 'pD'

### Marking according to directive 94/9/EG (ATEX 95)

### Identification number of the notified body (responsible for quality assurance) 0102 Physikalisch-Technische Bundesanstalt PTB, Germany 0158 DEKRA EXAM GmbH, Germany 0032 TÜV CERT-Zertifizierungsstelle, Germany 0344 KEMA N.V., Netherlands 0081 LCIE Laboratoire Central des Industries Electriques, France 0080 INERIS, France 1180 BASEEFA, Great Britain 1258 Electrosuisse SEV, Switzerland

Category zones			
1	zones 0 / 20		
2	zones 1 / 21		
3	zones 2 / 22		

G = GasD = Staub (Dust)

# (€<sub>0102</sub> ⟨€x⟩ || 2G

### Marking according EN 60079-0

	Equipment groups (Gas)			
	IIA	Acetone, ethane,		
		benzene, automotive		
		gasoline, butane,		
		propane, methane		
	IIB	Ethylene, town gas		
ſ	IIC	Hydrogen, acetylene		

Tempera- ture class	Max. surface temperature
T1	< 450 °C
T2	< 300 °C
T3	< 200 °C
T4	< 135 °C
T5	< 100 °C
T6	< 85 °C

Ex d IIC T5 Gb

EPL	Standards IEC/		Type of protection
	EN		
Ga	60079-11	ia	Intrinsic safety
	60079-18	ma	Encapsulation
	60079-1	d	Flame-proof enclosure
	60079-2	p, px, py	Pressurised enclosure
Gb	60079-7	е	Increased safety
	60079-11	ib	Intrinsic safety
	60079-18	mb	Encapsulation
	60079-15	nA	Type of protection "non-sparking"
Gc	60079-15	nR	Steam cover
	60079-2	pz	Pressurised enclosure

Equipment protection level (EPL)		
Ga		
Gb and Ga		
Gc, Gb and Ga		

Surface temperature (see EN 60078-0)

# Ex tD A21 IP68 T95°C Ex tb IIIC T95°C T95°C Db

	·			
EPL	Standards IEC/ EN			Type of protection
	60079-31	ta	ì	Protection by enclosures
Da	60079-11	ia	ì	Protection by intrinsic safety
	60079-18	m	а	Protection by encapsulation
	60079-31	tb	)	Protection by enclosures
Gb	60079-11	ib	)	Protection by intrinsic safety
	60079-18	m	b	Protection by encapsulation
	61241-4	p[	)	Protection by excessive pressure
Gc	60079-31	to		Protection by enclosures
GC	61241-4	p[	) כ	Protection by excessive pressure

Equipment groups (Dust)		
IIIA	Fibres	
IIIB	non-conductive dust	
IIIC	Conductive dust	

Zone	Equipment protection level (EPL)
20	Da
21	Db and Da
22	Dc, Db and Da

IP	First digit (against ingress of solid foreign bodies/ against access to hazar- dous parts)=	Second digit (against ingress of water with damaging effects)
4	≥ 1.0 mm diameter	Splash-proof
5	Dust-proof	Water jet
6	Dust-tight	Strong water jet
7		Temporary immersion
8		Continuous immersion





### FlutLED-Ex battery 10W



Portable Ex floodlight for flexible applications Easy to attach, bright light, robust design

### **Product features**

- flexible mounting on metal surfaces, thanks to an integrated magnet in the base of the lamp (art. no. 288400)
- flexible use thanks to robust stainless steel base (art. no. 321174)
- portable, handy design
- high luminosity
- shock- and vibration-proof due to hardened glass
- robust aluminium housing with anti-corrosion coating meets the requirements of emergency lighting (discharge time >10h)

### Technical data

Labelling	🖾 II 2 G Ex d IIC T6 Gb
_	
Ex zones	1, 2, 21 and 22
Input voltage	100-277VAC (50/60Hz)
Douger europhy	Li ion bottoni

Li-ion battery Power supply Charging time 3 hours Light duration max. 10h SEOUL SMD-LEDs Light source

System performance 10W System efficiency 1365lm

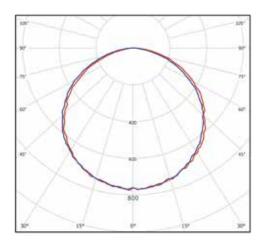
average 6000K Light colour Service life >50000h Protection category IP66

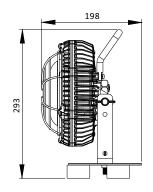
Operating range of temperature -20°C to +55°C Weight 6.5kg

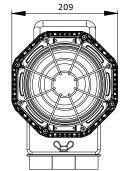
Dimensions (WxDxØ) 210x198x293m

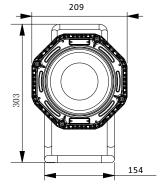
Item no.	Description	
288400	FlutLED-Ex battery 10W	
321174	Floor frame for FlutLED-Ex battery 10W	

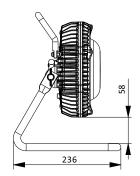
### Light distribution measurements











Item no.: 288400 FlutLED Ex 10W mit Magnetfuß

Item no.: 321174 FlutLED Ex 10W mit Bodengestell

### FlutLED-Ex 60W



FlutLED-Ex 60W is suitable for all areas that require efficient and extremely robust Ex-safe lighting with outstanding illumination.

Areas of application include refineries, on drilling platforms, in the energy and chemical industry, in fire-fighting, in disaster protection, in tunnels and in ports.

### **Product features**

- Thanks to their compact shape, the FlutLED-Ex 60W are especially suitable for use in small and confined spaces
- Reduced dazzle thanks to anti-glare surface, making them especially suitable for applications involving direct visual contact with the light source
- Casing made from highly stable aluminium alloy for applications in corrosive environments
- Shock and vibration-resistant, hardened glass reduces the risk of premature failure
- Explosion-protected, fire-resistant, water and salt water resistant, dust-proof

# Bracket cable assembly Bracket Swivel bracket Safety grille

Supplied state: The light comes without accessories as standard!

### Technical data

Labelling	Ex II 2 G - Ex d IIC T5 Gb Ex II 2 D - Ex t IIIC T95°C Db
Ex zones	1, 2, 21 and 22
Input voltage	24~48VAC/DC or
	100~277VAC (50/60Hz)
Light source	OSRAM LED
System performance	60W
Light current	8190lm
System efficiency	136lm/W
Light colour	average 6000K
CRI-index	Ra >80
Beam angle	80° or 120°
Service life	>50000h
Protection category	IP66
Protection class	1
Operating range of temperature	-40° to +55°C
Housing	Die-cast aluminium
Cover	Close

Housing Die-cast aluminium
Cover Glass
Weight approx. 3.5kg
Dimensions (HxD) 206x220mm

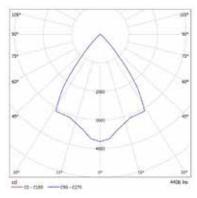
	Item no.	Description
	800019	FlutLED-Ex/W60V230/80°
	800020	FlutLED-Ex/W60V230/120°
	800021	FlutLED-Ex/W60V24-48VAC/DC/80°
	800022	FlutLED-Ex/W60V24-48VAC/DC/120°
Accesories		
	800034	FlutLEDEy/M60 bracket



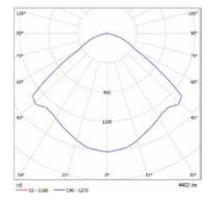
Accesories				
800034	FlutLEDEx/W60.bracket			
800035	FlutLEDEx/W60.bracket cable assembly			
800036	FlutLEDEx/W60.swivel bracket			
800037	FlutLEDEx/W60.safety grille			

\* Essential accessory 800036 swivel bracket

### Light distribution measurements 80°



Light distribution measurements 120°







### FlutLED-Ex 3 120W / 150W

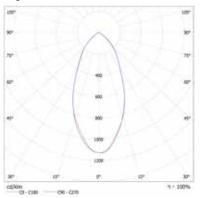


FlutLED-Ex 120W and 150W are suitable for all areas that require efficient and extremely robust Ex-safe lighting. With their excellent illumination, these Ex lights are used in refineries, the energy and chemical industry, on drilling platforms, in fire-fighting, in disaster protection and also as stadium lighting.

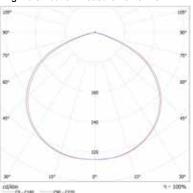
### **Product features**

- High luminous efficacy
- Shock and vibration resistant
- Robust aluminium housing with anti-corrosion coating
- Tempered glass front cover
- Optimum light distribution for different applications
- Through-wiring possible
- Cable gland Ex M20 x 1.5 and an M20 blanking plug included in delivery

### Light distribution measurements 60°



Light distribution measurements 120°



### Technical data

Labelling	⟨E⟩ II 2 G - Ex db IIC T4/T5 Gb
•	II 2 D - Ex tb IIIC T105°/T95°C Db IP66
Ex zone	1, 2, 21 and 22
Input voltage	100-277VAC (50/60Hz)
System performance	120W/150W
Surge protection	5kV
Light current	

60° 13920lm/17400lm 16380lm/20475lm  $-120^{\circ}$ System efficiency  $-60^{\circ}$ 116lm/W

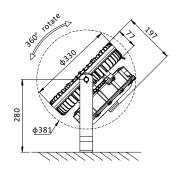
 $-120^{\circ}$ 136lm/W Light colour average 5700K Service life >50000h CRI 70 IP66 Protection category Operating range of -40°C to +55°C temperature Housing colour **RAL 7040** Weight 11kg Dimensions (ØxH) 330x197mm

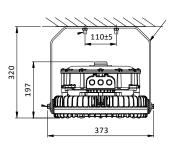
Item no.	Description
316514	FlutLED-Ex 3/W120/60°
316515	FlutLED-Ex 3/W120/120°
316516	FlutLED-Ex 3/W150/60°
316517	FlutLED-Ex 3/W150/120°
Accessories	
316518	Swivel bracket, Stainless steel*
316519	Suspension ring, Stainless steel
316520	Protective grille

<sup>\*</sup> Essential accessory 316518 swivel bracket

### Installation options with the swivel bracket:

Floor, wall or ceiling mounting





Floor mounting

Wall or ceiling mounting



### Optional on request

with battery pack for emergency light 10W / 180 min.

Supplied state:

The light comes without accessories as standard!

### Ex strip luminaire





The Ex strip luminaire is suitable for all areas that require efficient and extremely robust Ex-safe lighting. The robust aluminium casing can withstand forces of up to 10 Joule. The high IP66 protection category makes this light suitable for even the most challenging of locations, and ensures it is able to withstand even corrosive applications and salt water.

The Ex linear luminaire is suitable for all areas that require an efficient and extremely robust Ex luminaire. Thanks to the high protection rating of IP66, this luminaire is suitable for the most demanding locations and can even withstand corrosive applications and salt water.

### Technical data

(a) II 2 G Ex d eb IIB T6 Gb Labelling II 2 D Ex tb IIIC T80°C Db 1, 2, 21 and 22 Ex zone Input voltage 100~277VAC (50/60Hz) Light source SEOUL SMD-LEDs 36/56W System performance Light current 4567lm / 7336lm average 6000K Light colour Service life >50000h Protection category IP66 CRI-Index Ra >80 -40°C to +55°C Operating range of temperature 6.4kg / 8.7kg Weight 187x80x600mm / 187x80x1.130mm Dimensions (WxHxL)

### Technical data

reciffical data	
Labelling	😉 II 2 G Ex d eb IIB T6 Gb
	⟨₺⟩ II 2 D Ex tb IIIC T80°C Db
Ex zone	1, 2, 21 and 22
Input voltage	100 bis 277 VAC
Light source	SEOUL SMD-LED's
System performance	36W / 56W / 72W
Light current	4910lm / 7640lm / 9828lm
Light colour	im Mittel 5700K
Beam angle	120°
Service life	>50000h
Protection category	IP66
Impact resistance	IK08
CRI-Index	Ra >80
Operating range of temperature	-20°C to +55°C
Housing colour	Grey RAL7040
Weight	6.4kg / 8.7kg / 11kg
Dimensions (WxHxL)	136x85x600mm / 136x124x900mn
,	136x124x1200mm

Item no.	Description
800023	Ex strip luminaire 36W 120°, incl. mounting bracket
800024	Ex strip luminaire 56W 120°, incl. mounting bracket

Item no.	Description
800492	Ex long field/W36V230/120°, incl. mounting bracket
800493	Ex long field/W56V230/120°, incl. mounting bracket
341084	Ex long field/W72V230/120°, incl. mounting bracket





### Ex protective tube light LED



Ex-protected machine light with LED technology, especially for local lighting of spaces and machinery or their sub-areas in explosion-risk areas of zones 1 and 2 as well as 21 and 22.

### **Product features**

- High-efficiency LED technology
- Extremely long service life
- No bulb change required at any point in the light's lifetime
- Various operating voltages
- Robust protective tube made from polycarbonate

### Technical data

Labelling

EC type approval certificate International approval Protection category

Protection category
Operating range of temperature
Standard connection

Item no.	Voltage	A (mm)	B (mm)	C (mm)	Weight
287678	12-24VDC-6W,	581	43	66	Approx. 1.5 kg
288882	24-50 VAC/DC -6 W	581	43	66	Approx. 1.5 kg
286926	120-264 VAC/DC -6W	581	43	66	Approx. 1.5 kg
287692	85-265 VAC-25 W	1.601	60	82	Approx. 4.0 kg
287693	85-265 VAC-36 W	1.901	61	82	Approx. 4.1 kg



Accessories for wall mounting available on request!

### Ex tubular light LED



Ex-protected tubular luminaire with highly efficient LED technology and protective tube made of impact-resistant polycarbonate, especially for local illumination of rooms and machines or their sub-areas, in hazardous areas of zones 1 and 2 as well as 21 and 22.

### **Product features**

- highly efficient white LED technology
- extremely long service life
- no lamp replacement during the entire service life of the luminaire
- various operating voltages
- robust protective tube made of polycarbonate

### Technical data

Dimensions (LxD)

recrimical data	
Labelling	<ul><li>II 2 G Ex d IIC T4 Gb</li><li>II 2 D Ex tb IIIC T100 °C Db</li></ul>
Ex zone	1 ,2 ,21 and 22
Operating voltage	24-48VAC/VDC 110-240VAC/VDC
Light source	LED
Power	13W
Luminous flux	1396lm
Light colour	5000K
Voltage frequency	50-60 Hz/DC
Housing	Aluminium
Standard connection	H07RN-F 2x1.5 mm <sup>2</sup>
Protection category	IP66 / IP67
Operating range of temperatur	е
24-48VAC	-40°C to +60 °C
230VAC	-30°C to +60 °C
Weight	1.5kg

Item no.	Description
316165	LED inspection light for Ex zones 1, 2, 21 and 22, 24-48VAC/VDC / 5000K / IP66/67 / SKIII
316166	LED inspection light for Ex zones 1, 2, 21 and 22, 230VAC/VDC / 5000K / IP66/67 / SKIII

595 x 52 mm

### FlashLED2 Ex LED battery light











Wall mount

Our FlashLED 2 series is now also available in the revised generation as an Ex work and inspection light with an emergency light function. The FlashLED 2 Ex is a powerful and robust LED luminaire for daily use in harsh industrial environments. The built-in 6x1.6W power LEDs are supplied by a rechargeable lithium polymer battery and enable hours of work in the brightest light. In the event of a power failure, the lamp switches itself off automatically in charging mode automatically with emergency light.

The luminaire lies through the ergonomically designed plastic handle good in the hand and offers optimal slip resistance thanks to its good feel. The user-friendly switch-on mechanism with a large control panel also simplifies handling - even when wearing gloves.

The FlashLED 2 Ex fulfils the requirements of the Low Voltage Directive 2014/35/EU, the Directive 2014/30/EU concerning electromagnetic compatibility and the ATEX Directive 2014/34/EU.

### **Product features**

- At least 8 hours of light in three selectable operating modes:
  - 1. Spot: Focussed, narrow and broad light beam
  - 2. Wide: Room illuminating, energy-efficient lighting
  - 3. High beam: Widely radiating beam of light
- Memory function (last setting is retained)
- Corrosion-resistant charging pins (gold-plated spring steel)
- Overcurrent, temperature and deep discharge protection
- Vertically swivelling luminaire head
- Compact design
- Flashing mode

### Technical data

Ex zone

Operating voltage

Electric power supply

Labelling (S) II 2G Ex ib IIC T4 Gb ATEX certification number SEV 20 ATEX 0436 X Explosion-proof according to EN IEC 60079-0:2018

(general requirements) EN 60079-11:2012 (intrinsic safety) 1,2,21 and 22 10-32VDC LiPo 7.4V-3,500 mAh 6.5h

Charging time Light duration - Spot (3 LED) 15h - Wide (2 LED) 26h Full light (5 LED) 9.5h - Emergency light 5.5h

Light source 5x1.6W Power LEDs, white 5,000K

Luminous flux 888lm Protection category IP65 Permitted ambient temperature -20°C<Ta<+50°C

Temperature class T<sub>4</sub> Gas group IIC Dust group IIIC Weight 1.1kg

Dimensions (LxWxH)

light excl. charging station 123x251x93.4mm - light incl. charging station 149x323x108mm

### Charging station

Operating voltage 230 VAC (85-264 VAC)

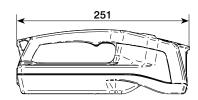
or 12-24 VDC

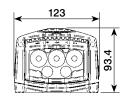
IP20 Protection category Protection class 230 VAC Ш Protection class 12-24 VDC Ш

149×276×95 mm Dimensions (LxWxH)

Weight 430g

Item no.	Description
861199	FlashLED 2 Ex work and inspection luminaires with emergency light function excl. charging station
860026	FlashLED charging station 230 VAC, incl. 1.5 m cable and euro-plug (not ex compliant)
860027	FlashLED charging station 12-24 VDC, with plug-in connection (without cable / not ex compliant)







### TorchLED-Ex torch light





The popular TorchLED work and inspection luminaire with emergency lighting function is now also available in an Ex-version. The luminaire is equipped with a rechargeable lithium polymer (LiPo) battery has to be charged outside the ex-zone. The TorchLED Ex fulfils the requirements of the Low Voltage Directive 2006 / 95 / EC, the Directive 2004 / 108 / EC concerning electromagnetic compatibility and the ATEX Directive 94 / 9 / EC.

### **Product features**

- at least 3 hours of light in three selectable operating modes:
  - 1. Spot: Focussed, narrow and broad light beam
  - 2. Wide: Room illuminating light
  - 3. High beam: Widely radiating beam of light
- memory function (last setting is retained)
- corrosion-resistant charging pins (gold-plated spring steel)
- overcurrent, temperature and deep discharge protection
- compact design



Item no. 860999



Item no. 860998





Technical Data TorchLED Ex

Housing colour black
Operating voltage 6VDC
Electric power supply LiPo 7.4V-820 mAh

Charging time approx. 5h
Light duration factory settings (max. light power)

Spot (1 LED)
Wide (1 LED)
Full light (2 LED)
Emergency light

approx. 7h

approx. 3.5h
approx. 7h

Illuminant 2 Power-LED à 1.6W, cool white 5,000 K
Protection category light IP54

Protection category light Dimensions (W×L×H)

Light excl. charging station
 Light incl. charging station
 116×68×34 mm
 148×87×44 mm

Weight light 182g

ATEX certification number SEV 22 ATEX 0644 X Explosion-proof according to EN 60079-0:2018

(general requirements) EN 60079-11:2012 (intrinsic safety) 1, 2, 21 and 22 -20°C < Ta < +45°C

Permitted ambient temperature  $-20^{\circ}\text{C} < \text{Ta} < +45^{\circ}\text{C}$ Labelling II 2 G Ex ib IIC T4 Gb II 2 D Ex ib IIIC T135°C Db

### **Technical Data Charging station**

Operating voltage 100-240VAC 50/60Hz
Protection category IP44
Protection class 230VAC II

Protection class 230 VAC III
Protection class 12-48 VDC III
Dimensions (I × W × H) 83

 $\begin{array}{ll} \mbox{Dimensions (L\times W\times H)} & 87\times 81\times 44\,\mbox{mm} \\ \mbox{Weight 12-48V/230V} & 70\,\mbox{g/80g} \\ \mbox{Permitted ambient temperature} & 0^{\circ}\mbox{C to } +40^{\circ}\mbox{C} \end{array}$ 

Item no.	Description
862000	TorchLED Ex torch light 6VDC, excl. charging station
Accessories	
860998	TorchLED charging station 230 VAC, incl. 1.5 m cable and euro-plug
860999	TorchLED charging station 12-48 VDC, with 1.5 m cable, without plug



### **UK 4AA eLED**









The 4AA eLED RFL is a safe LED flashlight. Certified for use in hazardous areas. It was developed to offer you safe lighting in every situation. It is lighter and more compact than all other 4AA lamps on the market and therefore easy to use and store in jacket pockets, in a shirt, in a tool box or on a protective helmet.

**Product features** 

- Patented optical system centers 89% of the lumens in the center
- soft wide-angle beam, ideal for illuminating wide areas
- Can be attached by means of helmet holder to work and safety helmet

### **Technical Data**

Labelling 🖾 II 1G Ex ia op is IIC T4 Ga 0.20 Ex zone Light source LED 4xAA Alkaline Battery Luminous flux 225lm Light range 192m Light duration 6,5h Protection category IP67 PC/ABS/LEXAN Housing Dimensions (HxL) 158x41x36mm Weight incl. batteries 156g

The 4AA eLED SUREFOOT is a safe LED flashlight. Certified for use in hazardous areas. A first class tool for poorly lit work areas. The primary beam shines forwards, the secondary beam shines downwards. The burning time does not decrease even when used simultaneously! Particularly recommended for use in deep sewer road construction, heating & sanitary, electrical and metal industry.

### Product features

- the primary beam (170 lumen) is directed to the front, the secondary beam (20 lumen) is directed downwards to the footpath for safe illumination
- can be attached to work and safety helmets by means of a helmet holder
- Especially recommended for use in civil engineering, sewer road construction, heating, plumbing, electrical and metal industries
- Front switch (for primary light) and rotary head switch (for secondary light)

### **Technical Data**

( II 1G Ex ia op is IIC T4 Ga Labelling 0, 20 Ex zone Light source LED Battery 4xAA Alkaline Luminous flux 170lm (primary) / 20lm (secondary) Light range 192m Light duration 6,5h Protection category IP67 PC/ABS/LEXAN Housing Dimensions (HxL) 158x41x36mm Weight incl. batteries 156g

Item no.	Description
294177	Ex-UK 4AA eLED RFL, safety-yellow, incl. 4AA-batteries

Item no.	Description
294179	Ex-UK 4AA eLED SUREFOOT, safety-yellow, incl. 4AA-batteries





### **UK 2AAA eLED PEN I**



### UK 3AAA eLED VIZION I



The 2AAA eLED PEN I generates a narrow, concentrated light beam. The rubberized lamp head prevents glare. The 2AAA PEN I is easy to attach to a shirt pocket so that it can be carried anywhere and is always ready for use. An optionally available light guide attachment with a double lens system brings the light precisely to the places that would otherwise not be accessible.

### **Product features**

- 3 times brighter than conventional pin lamps
- Rubberized lamphead reduces glare
- rubberized rear pressure switch
- electrically non-conductive, corrosion-resistant
- · integrated clip holder
- ABS and polycarbonate housing -
- optionally available: Beamguide fiber optic attachment

### **Technical Data**

Labelling	
•	
Ex zone	1, 21
Light source	LED
Battery	2xAAA Alkaline
Luminous flux	35lm
Light range	64m
Light duration	3h
Protection category	IP67
Housing	PC/ABS
Dimensions (HxL)	132x24x22mm
Weight incl. batteries	53g

Item no.	Description
294183	Ex-UK 2AAA eLED PEN I, safety-yellow, incl. 2AAA-batteries

The Vizion I is a real industrial head lamp. She directs the bright, centered beam where you need it. 3 beam shapes (spot, scattered light and red scattered light) can be selected as well as two power levels. In addition, the LED lamp module can be removed from the lamp and used as an emergency light / work light. This lamp is remarkably light, waterproof and extremely robust. Regardless of whether it is at sub-zero temperatures or in a wet environment, it can be used anywhere.

### **Product features**

- 3 beam shapes (spot, scattered light/ scattered light red)
- two power levels (high and low)
- rubberized, non-slip rotary head switch
- electrically non-conductive, corrosion-resistant
- can be attached to work and safety helmets
- LED lamp module is removable and can be used as a portable work
- high-impact-resistant construction made of ABS, LEXAN®

### Technical Data

Labelling	
E	
Ex zone	0, 21
Lichtquelle	eLED
Battery	3xAAA Alkaline
Luminous flux	65 / 35lm
Light range	150-60m
Light duration	13h
Protection category	IP67
Housing	PC/ABS
Dimensions (HxL)	77x38x46mm
Weight incl. batteries	111g

Item no.	Description
294185	Ex-UK 3AAA eLED VIZION I, safety-yellow, with rubber headband, incl. 3 x AA-batteries



#### 1975Z0 LED



If you need the latest and brightest LED technology in a compact design, choose the new 1975Z0 LED. Small enough to fit in your breast pocket, yet bright enough to illuminate your work area. Long-lasting, energy-saving and bright LEDs in a compact package make the 1975Z0 LED the safety-approved lamp for the job.

#### **Product features**

- pressure switch on luminaire body
- compact, lightweight and with enormous LED power
- ATEX certified
- housing made PC/PBT
- luminaire is resistant to corrosion and extreme temperatures
- submersible

#### Technische Daten

Battery 2xAAA Alkaline Lichtstrom 117lm

Light range approx. 24m Light duration approx. 2,15h Protection category IP68

Housing PC/PBT (neon yellow)

Length 146mm Weight incl. batteries 54g

Item no.	Description
323618	Battery light 1975Z0 LED incl. batteries

#### 3315Z0/20 LED



The light and compact design of the 3315Z0 LED battery light includes 3 AA batteries that make a single LED with 110 lumens extremely bright. With a safety certificate for most explosive work environments according to ATEX Cat. 1 (Zone 0), the 3315Z0 is one of the most efficient flashlights that the market currently offers.

#### Product features

- pressure switch on luminaire body
- compact, lightweight and with enormous LED power
- ATEX certified
- housing made of Anti Static ABS
- luminaire is resistant to corrosion and extreme temperatures
- submersible

#### **Technical Data**

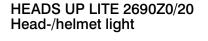
Labelling	II 1 G Ex ia IIC T4 Ga
	TRAC13ATEX0009X
Ex zones	0, 20
Light source	LED
Light duration	approx. 19h
Light range	approx. 160m
Battery	3xAA Alkaline
Length	156mm
Weight incl. batteries	130g

Item no.	Description
283369	Battery light 3315Z0/20 LED incl. batteries





## HEADS UP LITE 2755Z0 LED Head-/helmet light









Bright, compact head lamp for tough applications - the high light output of the head and helmet light 2755Z0 offers up to 72 lumens of brightness, flashing light and a light-saving mode. With a weatherproof housing, which also enables quick and easy battery replacement.

#### **Product features**

- secure fastening and high wearing comfort due to adjustable textile headband
- housing made of shock-resistant and chemical-resistant ABS
- waterproof
- ATEX certified
- bevelled profile knob is fail-safe and easy to operate, even with coarse gloves

#### Technical Data

Labelling	
Ex zone	0
Light source	LED
Luminous flux	74lm
Light duration	approx. 6h (high)
	approx. 15h (low)
Light range	approx. 60m
Battery	3xAAA Alkaline
Length	57mm
Weight incl. batteries	100g

Item no.	Description
283368	Head-/helmet light HEADS UP LITE 2755Z0 LED incl. batteries

This head lamp is more efficient, compact and lighter than other lamps in its class. The beveled profile knob is fail-safe and easy to use - even with rough gloves. The 2690Z0 / 20 is made of shockproof and chemical resistant ABS. Thanks to its water resistance, it is suitable for use in any weather and is also approved for mining. It has an adjustable and comfortable textile strip and a heavy-duty rubber band that does not slip off the helmet.

#### **Product features**

- secure fastening and high wearing comfort due to adjustable textile headband
- Housing made of shock-resistant and chemical-resistant ABS
- impermeable to water
- ATEX certified
- slanted profile knob is fail-safe and easy to operate, even with coarse gloves

#### **Technical Data**

Toominoar Bata	
Labelling	<ul> <li>II 1 D/G Ex ia IIC T4</li> <li>Ex iaD 20 IP65 T65°C</li> </ul>
	TRL08ATEX11184X
Ex zone	0, 20
Light source	LED
Luminous flux	74lm
Light duration	10h
Battery	3xAAA Alkaline
Length	711m
Weight incl. batteries	120g
	Ex zone Light source Luminous flux Light duration Battery Length

Item no.	Description
268524	Head-/helmet light HEADS UP LITE 2690Z0/20
	incl batteries

#### **CEILING FAN FOR HALL BUILDINGS**



## EFFICIENT AIR EQUALISATION FOR YOUR CO2 BALANCE

With the Turbulator® from GIFAS, you can improve the indoor climate in your halls and reduce heating costs at the same time. The patented air circulation keeps the heat where it is needed - this saves energy and reduces CO2 emissions. A simple solution for greater efficiency and sustainability!

General 220

Turbulator® 224



#### GIFAS Turbulator® The intelligent solution

The patented GIFAS turbulators enable heat to be precisely returned to the floor area for the first time. Without causing draughts, the heat is returned in a targeted manner and prevented from rising - regardless of the existing heating system. The result is a pleasant and homogeneous indoor climate. Thanks to the GIFAS motor technology with high-efficiency EC motor, the devices consume significantly less power compared to conventional ceiling fans. This goes hand in hand with significantly higher efficiency, far superior air performance, lower noise emissions and no draughts. The GIFAS Turbulator® technology also enables the effective penetration of complex high-bay racking systems and works specifically against cooler areas of the hall.



#### GIFAS Turbulator® Your product benefits

- ✓ Efficient heat recovery
- Energy saving / cost reduction for heating
- ✓ CO2 reduction
- Lower humidity
- Pleasant and homogeneous indoor climate
- Efficient use of 'heat bells' or dissipation to the outside



#### Reducing CO2 and emissions - sustainably and efficiently

Our GIFAS Turbulators® actively help companies to reduce their CO2 emissions. The efficient distribution of warm air reduces the need for heating, which reduces energy consumption and therefore CO2 emissions. This measure not only supports sustainable climate goals, but also contributes to compliance with CSRD requirements - for an environmentally friendly and economical building solution.



#### Air humidity - optimum indoor climate

Our GIFAS Turbulators® not only ensure efficient heat recovery and reduce heating costs and CO2 emissions, but also improve the indoor climate. The even air distribution reduces humidity - a decisive advantage for industry, e.g. in wood and steel processing, as it minimises corrosion and moisture damage. A smart solution for greater energy efficiency and long-lasting materials.



#### Comfort in accordance with the new RLT comfort standard

Our GIFAS Turbulators® contribute to compliance with the new comfort standard for ventilation and air conditioning (HVAC). Thanks to targeted air distribution, they prevent temperature differences and unpleasant draughts, creating a uniform and pleasant indoor climate. This not only increases well-being, but also ensures optimum working conditions - energy-efficiently and in compliance with standards.



#### Reduce heating costs - save energy

In high halls, warm air accumulates under the ceiling and forms a thermal bell, while it remains cool on the floor. Our Turbulators® overcome this problem by efficiently distributing the heat downwards. This reduces the heating requirement and significantly cuts energy costs. With highly efficient EC motors, they offer a sustainable solution for greater economy and a pleasant indoor climate.

## Product features GIFAS Turbulatoren®

- By using an integrated Turbulator® made of fully galvanised, powder-coated sheet steel with adjustable air deflection blades on the underside, an air-optimised, harmonising functionality was achieved with the hybrid structure sickle blade fan blade.
- 4 stainless steel suspension eyelets are fitted as standard in accordance with UVV regulations
- The junction box is fitted and wired to the motor as standard, both electrically on the load side and electronically on the low-voltage side. It is designed in a UV-stabilised polycarbonate cover.
- An electronically commutated high-efficiency EC motor is equipped with integrated control electronics in the motor. It also has a moisture protection system (tropicalisation protection), which enables the motor to automatically discharge any condensate that forms in the winding to the outside via a semi-permeable membrane.
- The electronics housing is made of solid die-cast aluminium and offers effective corrosion protection. The rotor is finished with a blackened protective lacquer surface.
- The fan blades currently have a unique hybrid structure, which is created by combining an aluminium support structure with a casing made of glass fibre-reinforced plastic. This design follows a flow-optimised sickle blade geometry with 5 sickled blades. Thanks to this innovative design, the fan achieves enormous advantages in terms of noise development while at the same time achieving significantly higher efficiency levels compared to conventional fan blades.
- The intake protection grille complies with UVV regulations and is made of phosphatised steel. To ensure effective corrosion protection, it has a bright plastic coating.
- Powder coating in RAL colour according to individual requirements is possible. On special customer request, the product can also be manufactured in high-gloss stainless steel.
- The minimum distance to the hall ceiling on the suction side is 30 cm.
- There is overtemperature protection for both the electronics and the motor.
- Motor protection is ensured by an internally switched temperature monitor.
- Automatic undervoltage detection is available.
- A motor current limiter is implemented.
- A standard motor soft start is integrated.

#### Three output sizes for different requirements

We offer our patented technology in three useful output sizes: the DV 5000, DV 8000 and DV 15000 turbulators, which are selected according to the type of hall, its size and utilisation.

#### Increased efficiency in large halls

The introduction of the DV 15000 halves the number of devices required in large and high hall areas such as storage and logistics rooms or production halls. This leads to a reduction in installation costs and offers a cost-effective overall solution.

#### Conventional ceiling fans - a cost factor

Conventional ceiling fans generate considerable electricity costs throughout the year, even if their speed is regulated by simple AC motor technology using transformers or triacs. This is not only energy-inefficient, but also not very cost-effective.

#### GIFAS Turbulators® - Highly efficient EC motors

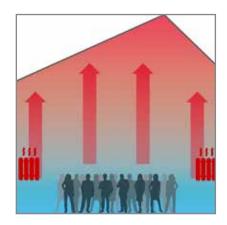
In contrast, GIFAS Turbulators® are characterised by their high-efficiency EC motors, which consume only a fraction of the energy compared to conventional ceiling fans - on average only 10% compared to conventional models

In addition, the high-efficiency EC motors are infinitely variable (0-10V signal) and can be integrated both via GIFAS control devices and into existing building management systems, including facility management systems. This enables precise and energy-saving control that is not only efficient but also cost-effective.

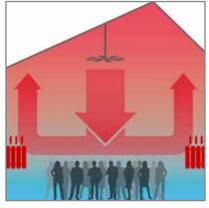
#### Sustainable solution for new and existing buildings

Regardless of the type of heating system, GIFAS Turbulators® are the most cost-effective energy efficiency measure in both new and existing buildings, while also offering comfort benefits. In comparison, retrofitting insulation would not achieve the same energy effect, and at comparatively much higher investment costs.

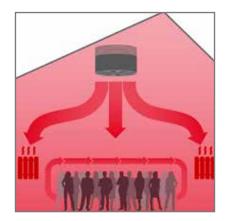
#### Temperature distribution of conventional fans and GIFAS Turbulator in comparison:



Temperature distribution without ceiling fan



Temperature distribution with ceiling fan



Temperature distribution with Turbulator® SILENT



#### Turbulator® SILENT - Function

Verification via thermography with process analysis and full radiometric video measurement:

- Vertical heat return
- Homogeneous heat distribution on the floor

An investigation into the patented mode of operation of the GIFAS turbulators was carried out using CFD (computational fluid dynamics) calculations, flow simulations and tests in indoor buildings.



**Turbulator starts** 



Investigation and visualisation of the GIFAS Turbulator overall function for heat recovery in halls



Turbulator runs for 12 seconds

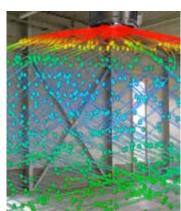
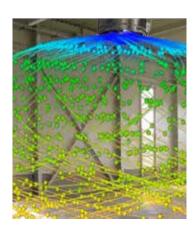


Illustration of vertical heat recovery in the hall building



Turbulator runs for 6 minutes



Visualisation of summer ventilation operation in hall buildings within the framework of the new comfort standards (RLT standards)

### Ceiling fan for hall buildings

#### Turbulator® REVERSE function

In some commercial building projects, there is a requirement for the units to extract heat in the ceiling area and discharge it to the outside via skylights or SHEV openings. The REVERSE description of the GIFAS turbulators can be switched between a downward flow direction for gentle operation and an upward flow direction. This enables an effective discharge in the roof area, followed by a vertically strong discharge upwards. Both the speed and the air volume of the turbulators are infinitely variable in both directions via a 0-10 volt signal. This makes it possible to efficiently direct a potential 'heat bell' under the roof to the outside.

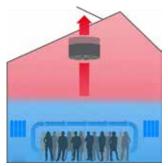
#### Pleasant room climate



#### Save energy and CO2

In summer, the turbulator creates a pleasant air movement, which has a cooling effect for employees in the hot hall.

In winter, the turbulator distributes the unused heat layer at the top of the ceiling and mixes it with the hall air



REVERSE in switched direction upwards



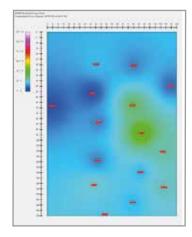
REVERSE in switched conveying direction



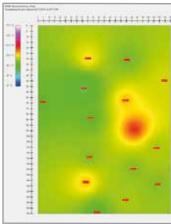
#### Thermographic measurements

Numerous RAM wireless probes were installed in various types of halls to monitor the temperature and humidity in the floor area. If the temperature fell below the heating setpoint, the respective heating system was activated, but without the integration of GIFAS Turbulators®. This often led to an uneven distribution of heat and humidity in the room.

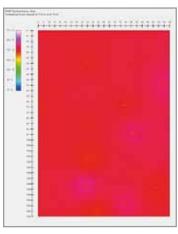
After commissioning the GIFAS Turbulators®, a completely homogeneous temperature and humidity distribution was achieved within a very short time. In addition, the measurements showed that the restart of the heating is significantly delayed if the heat cushion located under the hall ceiling is utilised. Long-term measurements also showed that the running time of the heating systems per heating day could be significantly reduced.



The room temperature falls below the setpoint and the heating systems start.



The heating systems are in operation but there are typical cold and heat pockets with uneven temperature distribution.



Within a very short time of switching on the turbulators, a homogeneous room climate is created in the hall in terms of temperature and humidity.

## Ceiling fan for hall buildings



#### Turbulator® DV 5000



#### Model calculation of cost savings

A conventional ceiling fan with an AC motor, for example, still consumes 300W with transformer control in partial load operation at 50% speed. In comparison, the GIFAS system consumes 20W, i.e. around 280W less per operating hour. Assuming 4000 annual operating hours, this results in a saving of 4000 hours x 0.28 kWh, which corresponds to 1120kWh. Assuming a kWh price of 0.20 EUR/kWh, this results in an annual saving of 224 EUR.

## Exterior Ø approx. 600 mm Eyelet distance approx.395 mm

#### Technical data

Phase 1~ 230VAC Nominal voltage

0-10VDC / PWM Control input Output 10VDC max. 1,1 mA

Frequency 50/60Hz Speed of rotation max. 980 U/min. Nominal power max. 163W Power input 50% 20W Power consumption ~0,086-1,34A Power consumption 50% ~0,086A max. counter pressure

Temperature application -25°C to +60°C

range

Surface Resistant to corrosive environmental substances

Air volume flow max. 5000 m<sup>3</sup>/h

IP54 Protection category

Housing material Fully galvanised sheet metal

Housing color Powder coating RAL9010 / pure white

Weight approx. 11 kg Dimensions Ø x H 600 x 270 mm

Field of work / diameter\* Measured values up to 8 m

Working field radius = 16 m

Suction-side distance to the hall ceiling minimal 30 cm EN 61000-6-2

EMV Interference immunity

according to

Conformity to standards EN 61800-5-1 CE

UL2111, CCC, GOST, CSA C22.2 Nr 77 Certificates

\* Factors such as type of hall construction, furnishings,

type of utilisation

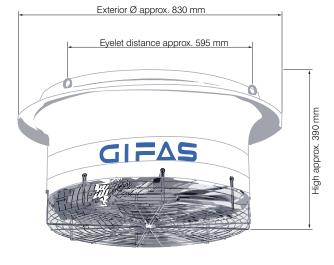
Item no.	Тур	Description
343523	TURBULATOR.DV5000.SILENT	Ceiling fan electronically steplessly controllable via 0-10V signal
343524	TURBULATOR.DV5000.REVERSE	Ceiling fan switchable via digital contact between air flow direction
		downwards and upwards via air outlet nozzle

#### Turbulator® DV 8000



#### Model calculation of cost savings

A conventional ceiling fan with an AC motor, for example, still consumes 400W with transformer control in partial load operation at 50% speed. In comparison, the GIFAS system consumes 30W, i.e. around 370W less per operating hour. Assuming 4000 annual operating hours, this results in a saving of 4000 hours x 0.37kWh, which corresponds to 1480kWh. Assuming a kWh price of 0.20 EUR/kWh, this results in an annual saving of 296 EUR.



#### Technical data

Phase 1~
Nominal voltage 230VAC
Control input 0-10VDC / PWM
Output 10VDC max. 1,1 mA

Frequency 50/60Hz Speed of rotation max. 750 U/min. Nominal power max. 250W Power input 50%  $\sim$ 30W Power consumption ~0,13-1,6A Power consumption 50% ~0.13A max. counter pressure 125Pa Temperature application -25°C to +60°C

range

Surface Resistant to corrosive environmental substances

Air volume flow max. 8000 m<sup>3</sup>/h

Protection category IP54

Housing material Fully galvanised sheet metal

Housing color Powder coating RAL9010 / pure white

Weight approx. 22 kg
Dimensions Ø x H 830 x 390 mm

Dimensions Ø x H 830 x 390 mm
Field of work / diameter\* Measured values up to 12 m

Working field radius = 25 m

Suction-side distance to the hall ceiling minimal 30 cm

EMV Interference immunity EN 61000-6-2

according to

Conformity to standards EN 61800-5-1 CE

Certificates UL2111, CCC, GOST, CSA C22.2 Nr 77

\* Factors such as type of hall construction, furnishings,

type of utilisation

Item no	Тур	Description
343525	TURBULATOR.DV8000	Ceiling fan electronically steplessly controllable via 0-10V signal
343526	TURBULATOR.DV8000.REVERSE	Ceiling fan switchable via digital contact between air flow direction
		downwards and upwards via air outlet nozzle



## Ceiling fan for hall buildings



#### Turbulator® DV 15000



#### Model calculation of cost savings

A conventional ceiling fan with an AC motor, for example, consumes an unchanged 500W with transformer control in partial load operation at 50% speed. In comparison, the GIFAS system consumes 50W, i.e. around 450W less per operating hour. Assuming 4000 annual operating hours, this results in a saving of 4000 hours x 0.45kWh, which corresponds to 1800kWh. Assuming a kWh price of 0.20 EUR/kWh, this results in an annual saving of 360 EUR.

# Exterior Ø approx. 900 mm Eyelet distance ca. 695 mm

#### Technical data

Phase Nominal voltage 230VAC

0-10VDC / PWM Control input Output 10VDC max. 1,1 mA

Frequency 50/60Hz Speed of rotation max. 600 U/min. Nominal power max. 440W Power input 50% ~50W Power consumption ~0,2-1,9A Power consumption 50% ~0,22A max. counter pressure 70Pa

-25°C to +60°C Temperature application range

Surface Resistant to corrosive environmental substances

Air volume flow max. 15000 m<sup>3</sup>/h

Protection category

Fully galvanised sheet metal Housing material

Powder coating RAL9010 / pure white Housing color

Weight approx. 40 kg Dimensions Ø x H 900 x 400 mm

Field of work / diameter\* Measured values up to 16 m Working field radius = 32 m

Suction-side distance to the hall ceiling minimal 30 cm

EMV Interference immunity

EN 61000-6-2

according to

EN 61800-5-1 CE

Conformity to standards

Certificates UL2111, CCC, GOST, CSA C22.2 Nr 77

\* Factors such as type of hall construction, furnishings,

type of utilisation

Item no.	Тур	Description
343527	TURBULATOR.DV15000	Ceiling fan steplessly controllable via 0-10V signal

## Comfort control for Turbulator® DV 5000 / DV 8000 / DV 15000



#### **Product features**

Control unit for fully automatic operation offers the following functions:

- Fully automatic operating mode or manual operating mode for one or more fans
- Separate setpoints for day and night setting
- Switchable operating modes (only with turbulator version reverse)
- Heat recovery in winter
- Extract air in summer
- Timer with time, date, day and week programme
- Protection category IP54

Item no.	Description
343528	TURBULATOR.COMFORT CONTROL

