



# Safety for man, machine and the environment

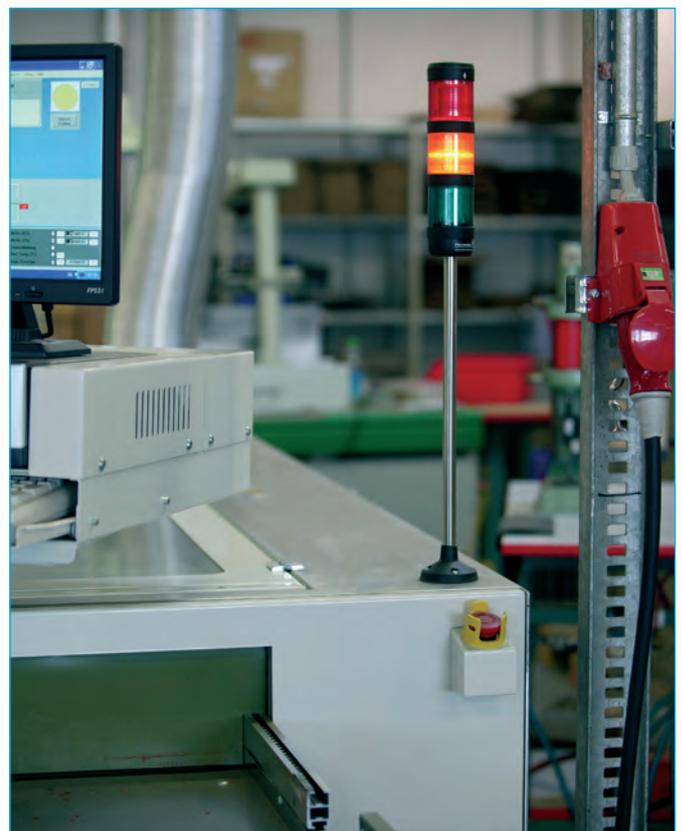
## Pfannenberg is your reliable and competent partner for thermal management and signaling technology

Globally, hardly any other company in this field can advise you so comprehensively and supply you from one source like Pfannenberg can, due to the fact that we have expanded our range by approx. 600 products. We are excited to present our new complete line of SPECTRA lights, beacons and mounted alarms, which optimally compliment and complete our existing product range. With these, we cover the complete industrial spectrum. We are in the position to supply you with all standard solutions from one source as well as countless custom solutions, if desired.

Pfannenberg's utmost priority is to know and really understand our customers' requirements in order to be in a position to tailor and optimise our products and services to suit your needs. That also applies to our new business sector, Add-On Services, which is particularly valuable in the signal technology sector. Our product specialists will be pleased to offer you comprehensive advice on your special requirements.

Following the concept of 'sharing competence', employee potentials unite to form products to suit needs: regular training, seminars and many years of experience put our employees in a position to conduct dialogue with customers professionally, in a goal-orientated manner and to achieve the best results and at a high level when solving tasks. Likewise, the experiences and knowledge gained are proactively made available and are in demand; hence, the organisational development at Pfannenberg is not only permanently promoted, but also shared.

Last but not least, energy efficiency also plays a large part in the newest generations of our devices. Ultimately, we feel obliged to remain true to our company motto: 'Safety for man, machine and the environment!'



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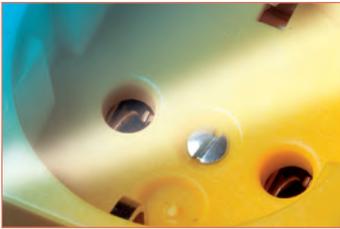
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**PF 11.000**  
Filterfans



- air flow rate up to 29 m<sup>3</sup>/h
- system of protection IP 54, NEMA type 12
- cut-out dimensions: 92 x 92 mm

Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	52,500 hrs
Weight	0.55 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	33 / 33 dB (A)
Duty cycle	100%
Type of connection	terminal strip
Bearing type	sleeve bearing
<b>Model</b>	<b>IP 54</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter
Filter mat quality class	G 3
Unimpeded airflow	25 / 29 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 10.000)	16 / 18 m <sup>3</sup> /h
Filtration efficiency	88%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11611101055	12/11 W	109 x 109 x 62 mm	IP 54
18611600029			spare - filter mats (5 pieces)
18611000032			spare part – fan 230 V AC

**PF 22.000**  
Filterfans



- air flow rate up to 70 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 125 x 125 mm

Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	37,500 hrs
Weight	0.7 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	44 / 44 dB (A)
Duty cycle	100%
Type of connection	terminal strip
Bearing type	sleeve bearing
<b>Model</b>	<b>IP 54</b> <b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter      NEMA type 12 - fluted filter
Filter mat quality class	G 3                              G 4
Unimpeded airflow	61 / 70 m <sup>3</sup> /h                  56 / 64 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 20.000)	44 / 52 m <sup>3</sup> /h                  40 / 46 m <sup>3</sup> /h
Filtration efficiency	88%                            91%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11622101055	19 / 18 W	145 x 145 x 70 mm	IP 54
18611600030			spare - filter mats (5 pieces)
11622103055	19 / 18 W	145 x 145 x 70 mm	IP 55
18611600034			spare - filter mats (5 pieces)
18611000016			spare part – fan 230 V AC

**PF 32.000**  
Filterfans



- air flow rate up to 125 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 177 x 177 mm

Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	37,500 hrs
Weight	0.87 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	40 / 40 dB (A)
Duty cycle	100%
Type of connection	terminal strip
Bearing type	sleeve bearing
<b>Model</b>	<b>IP 54</b> <b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter      NEMA type 12 - fluted filter
Filter mat quality class	G 3                              G 4
Unimpeded airflow	110 / 125 m <sup>3</sup> /h                  100 / 110 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 30.000)	82 / 93 m <sup>3</sup> /h                  55 / 64 m <sup>3</sup> /h
Filtration efficiency	88%                            91%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11632101055	19/18W	202 x 202 x 93 mm	IP 54
18611600031			spare - filter mats (5 pieces)
11632103055	19/18W	202 x 202 x 93 mm	IP 55
18611600035			spare - filter mats (5 pieces)
18611000016			spare part – fan 230 V AC

**PF 42.500**  
Filterfans



- air flow rate up to 171 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 223 x 223 mm

Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs
Weight	1.18 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	40 / 43 dB (A)
Duty cycle	100%
Type of connection	spring-type terminal
Bearing type	ball bearing
<b>Model</b>	<b>IP 54</b> <b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter      NEMA type 12 - fluted filter
Filter mat quality class	G 3                              G 4
Unimpeded airflow	156 / 171 m <sup>3</sup> /h                  145 / 160 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 40.000)	116 / 127 m <sup>3</sup> /h                  109 / 113 m <sup>3</sup> /h
Filtration efficiency	88%                            91%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11642101055	18/17W	252 x 252 x 103 mm	IP 54
18611600032			spare - filter mats (5 pieces)
11642103055	18/17W	252 x 252 x 103 mm	IP 55
18611600036			spare - filter mats (5 pieces)
18611000033			spare part – fan 230 V AC

## PF 43.000 Filterfans

- air flow rate up to 292 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 223 x 223 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	1.67 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	45 / 39 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	256 / 292 m <sup>3</sup> /h	233 / 265 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 40.000)	231 / 265 m <sup>3</sup> /h	180 / 207 m <sup>3</sup> /h
Filtration efficiency	88%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11643101055	45/39W	252 x 252 x 119 mm	IP 54
18611600032			spare - filter mats (5 pieces)
11643103055	45/39W	252 x 252 x 119 mm	IP 55
18611600036			spare - filter mats (5 pieces)
18611000019			spare part – fan 230 V AC

## PF 66.000 Filterfans

- air flow rate up to 785 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 291 x 291 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.2 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	63 / 64 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	640 / 653 m <sup>3</sup> /h	770 / 785 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 60.000)	445 / 445 m <sup>3</sup> /h	490 / 501 m <sup>3</sup> /h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11666102055	115/150W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11666103055	115/150W	320 x 320 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000045			spare part – fan 230 V AC

## PF 65.000 Filterfans

- air flow rate up to 505 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 291 x 291 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.2 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	54 / 52 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	480 m <sup>3</sup> /h	505 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 60.000)	370 m <sup>3</sup> /h	380 m <sup>3</sup> /h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11665102055	65/80W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11665103055	65/80W	320 x 320 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000044			spare part – fan 230 V AC

## PF 67.000 Filterfans

- air flow rate up to 950 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 291 x 291 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.7 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	66 / 69 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	845 / 875 m <sup>3</sup> /h	925 / 950 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 60.000)	560 / 625 m <sup>3</sup> /h	570 / 625 m <sup>3</sup> /h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11667102055	135/200W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11667103055	135/200W	320 x 320 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000046			spare part – fan 230 V AC

### PFA 10.000 Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 92 x 92 mm



Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 Colour RAL 7035  
**Model IP 54**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter  
 Filter mat quality class G 3  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11710001055	92 x 92 x 23 mm	IP 54
18611600029		spare - filter mats (5 pieces)

### PFA 40.000 Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 223 x 223 mm



Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 Colour RAL 7035  
**Model IP 54 IP 55**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter NEMA type 12 - fluted filter  
 Filter mat quality class G 3 G 4  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11740001055	109 x 109 x 42 mm	IP 54
18611600032		spare - filter mats (5 pieces)
11740003055	109 x 109 x 42 mm	IP 55
18611600036		spare - filter mats (5 pieces)

### PFA 20.000 Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 125 x 125 mm



Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 Colour RAL 7035  
**Model IP 54 IP 55**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter NEMA type 12 - fluted filter  
 Filter mat quality class G 3 G 4  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11720001055	145 x 145 x 31 mm	IP 54
18611600030		spare - filter mats (5 pieces)
11720003055	145 x 145 x 31 mm	IP 55
18611600034		spare - filter mats (5 pieces)

### PFA 60.000 Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 291 x 291 mm



Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 Colour RAL 7035  
**Model IP 54 IP 55**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter NEMA type 12 - fluted filter  
 Filter mat quality class G 3 G 4  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11760002055	320 x 320 x 46 mm	IP 54
18611600033		spare - filter mats (5 pieces)
11760003055	320 x 320 x 46 mm	IP 55
18611600037		spare - filter mats (5 pieces)

### PFA 30.000 Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 177 x 177 mm



Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 Colour RAL 7035  
**Model IP 54 IP 55**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter NEMA type 12 - fluted filter  
 Filter mat quality class G 3 G 4  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11730001055	202 x 202 x 40 mm	IP 54
18611600031		spare - filter mats (5 pieces)
11730003055	202 x 202 x 40 mm	IP 55
18611600035		spare - filter mats (5 pieces)

### PF 11.000 EMC Filterfans

- air flow rate up to 29 m³/h
- system of protection IP 54, NEMA type 12
- cut-out dimensions: 93 x 93 mm



Rated voltage 230 V 50 / 60 Hz  
 Operating range ± 10%  
 Design (housing and protection against accidental contact) made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO  
 EMC screen stainless steel  
 Service life L<sub>10</sub> (+ 40 °C) 52,500 hrs  
 Weight 0.55 kg  
 Colour RAL 7035  
 Noise level (EN ISO 3741) 33 / 33 dB (A)  
 Duty cycle 100%  
 Type of connection cable, 2-core, length 310 mm  
 Bearing type sleeve bearing  
**Model IP 54**  
 Protection system according to EN 60529 / UL 50 NEMA type 12 - standard filter  
 Filter mat quality class G 3  
 Unimpeded airflow 25 / 29 m³/h  
 Air flow rate in combination (PF + PFA 10.000) 16 / 18 m³/h  
 Filtration efficiency 88%  
 Approvals UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11811101055	12/11W	109 x 109 x 66 mm	IP 54
18611600029			spare - filter mats (5 pieces)
18611000032			spare part – fan 230 V AC

## PF 22.000 EMC Filterfans

- air flow rate up to 70 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 126 x 126 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	37,500 hrs	
Weight	0.7 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	44 / 44 dB (A)	
Duty cycle	100%	
Type of connection	terminal strip	
Bearing type	sleeve bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	61 / 70 m <sup>3</sup> /h	56 / 64 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 20.000)	44 / 52 m <sup>3</sup> /h	40 / 46 m <sup>3</sup> /h
Filtration efficiency	88%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11822101055	19/18W	145 x 145 x 75 mm	IP 54
18611600030			spare - filter mats (5 pieces)
11822103055	19/18W	145 x 145 x 75 mm	IP 55
18611600034			spare - filter mats (5 pieces)
18611000016			spare part – fan 230 V AC

## PF 32.000 EMC Filterfans

- air flow rate up to 125 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 178 x 178 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	0.96 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	40 / 40 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	110 / 125 m <sup>3</sup> /h	100 / 110 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 30.000)	82 / 93 m <sup>3</sup> /h	55 / 64 m <sup>3</sup> /h
Filtration efficiency	88%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11832101055	19/18W	202 x 202 x 93 mm	IP 54
18611600031			spare - filter mats (5 pieces)
11832103055	19/18W	202 x 202 x 93 mm	IP 55
18611600035			spare - filter mats (5 pieces)
18611000016			spare part – fan 230 V AC

## PF 42.500 EMC Filterfans

- air flow rate up to 171 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 224 x 224 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	1.18 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	40 / 43 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	156 / 171 m <sup>3</sup> /h	145 / 160 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 40.000)	116 / 127 m <sup>3</sup> /h	109 / 113 m <sup>3</sup> /h
Filtration efficiency	88%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11842101055	18/17W	252 x 252 x 103 mm	IP 54
18611600032			spare - filter mats (5 pieces)
11842103055	18/17W	252 x 252 x 103 mm	IP 55
18611600036			spare - filter mats (5 pieces)
18611000033			spare part – fan 230 V AC

## PF 43.000 EMC Filterfans

- air flow rate up to 292 m<sup>3</sup>/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 224 x 224 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	1.83 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	42 / 46 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	256 / 292 m <sup>3</sup> /h	233 / 265 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 40.000)	231 / 265 m <sup>3</sup> /h	180 / 207 m <sup>3</sup> /h
Filtration efficiency	88%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11843101055	45/39W	252 x 252 x 119 mm	IP 54
18611600032			spare - filter mats (5 pieces)
11843103055	45/39W	252 x 252 x 119 mm	IP 55
18611600036			spare - filter mats (5 pieces)
18611000019			spare part – fan 230 V AC

**PF 65.000 EMC**  
Filterfans

- air flow rate up to 505 m³/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 292 x 292 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.43 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	54 / 52 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	480 m³/h	505 m³/h
Air flow rate in combination (PF + PFA 60.000)	370 m³/h	380 m³/h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11865102055	65/80W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11865103055	65/80W	320 x 320 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000044			spare part – fan 230 V AC

**PF 67.000 EMC**  
Filterfans

- air flow rate up to 950 m³/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 292 x 292 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.93 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	40 / 43 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	845 / 875 m³/h	925 / 950 m³/h
Air flow rate in combination (PF + PFA 60.000)	560 / 625 m³/h	570 / 625 m³/h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11867102055	135/200W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11867103055	135/200W	252 x 252 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000046			spare part – fan 230 V AC

**PF 66.000 EMC**  
Filterfans

- air flow rate up to 785 m³/h
- system of protection IP 54 and IP 55, NEMA type 12
- cut-out dimensions: 292 x 292 mm



Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs	
Weight	3.43 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	63 / 64 dB (A)	
Duty cycle	100%	
Type of connection	spring-type terminal	
Bearing type	ball bearing	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Unimpeded airflow	640 / 653 m³/h	770 / 785 m³/h
Air flow rate in combination (PF + PFA 60.000)	445 / 445 m³/h	490 / 501 m³/h
Filtration efficiency	91%	91%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11866102055	115/150W	320 x 320 x 157 mm	IP 54
18611600033			spare - filter mats (5 pieces)
11866103055	115/150W	320 x 320 x 157 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000045			spare part – fan 230 V AC

**PFA 10.000 EMC**  
Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 93 x 93 mm



Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
EMC screen	stainless steel
Colour	RAL 7035
<b>Model</b>	<b>IP 54</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter
Filter mat quality class	G 3
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
11910001055	109 x 109 x 23 mm	IP 54
18611600029		spare - filter mats (5 pieces)

**PFA 20.000 EMC**  
Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 126 x 126 mm



Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
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EMC screen	stainless steel	
Colour	RAL 7035	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
11920001055	145 x 145 x 31 mm	IP 54
18611600030		spare - filter mats (5 pieces)
11920003055	145 x 145 x 31 mm	IP 55
18611600034		spare - filter mats (5 pieces)

## PFA 30.000 EMC Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 178 x 178 mm



Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Colour	RAL 7035	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
11930001055	202 x 202 x 40 mm	IP 54
18611600031		spare - filter mats (5 pieces)
11930003055	202 x 202 x 40 mm	IP 55
18611600035		spare - filter mats (5 pieces)

## PFA 40.000 EMC Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 224 x 224 mm



Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Colour	RAL 7035	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
11940001055	252 x 252 x 44 mm	IP 54
18611600032		spare - filter mats (5 pieces)
11940003055	252 x 252 x 44 mm	IP 55
18611600036		spare - filter mats (5 pieces)

## PFA 60.000 EMC Exhaust filter

- screwless mounting with patented snap fastener
- simple filter mat exchange
- integrated foam to seal
- cut-out dimensions: 292 x 292 mm



Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO	
EMC screen	stainless steel	
Colour	RAL 7035	
<b>Model</b>	<b>IP 54</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - standard filter	NEMA type 12 - fluted filter
Filter mat quality class	G 3	G 4
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
11960002055	202 x 202 x 40 mm	IP 54
18611600033		spare - filter mats (5 pieces)
11960003055	202 x 202 x 40 mm	IP 55
18611600037		spare - filter mats (5 pieces)

## PF 65.000 SL Slim Line Filterfans

- air flow rate up to 550 m<sup>3</sup>/h
- system of protection IP 55, NEMA type 12
- UV resistance
- cut-out dimensions: 291 x 291 mm



Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs
Weight	3.2 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	40 / 43 dB (A)
Duty cycle	100%
Type of connection	spring-type terminal
Bearing type	ball bearing
<b>Model</b>	<b>IP 55</b>
Protection system according to EN 60529 / UL 50	NEMA type 12 - fluted filter
Filter mat quality class	G 4
Unimpeded airflow	500 / 550 m <sup>3</sup> /h
Air flow rate in combination (PF + PFA 60.000)	345 / 380 m <sup>3</sup> /h
Filtration efficiency	91%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11675103055	64/80W	320 x 320 x 131 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000001			spare part – fan 230 V AC

## PF 67.000 SL Slim Line Filterfans

- air flow rate up to 725 m<sup>3</sup>/h
- system of protection IP 55, NEMA type 12
- UV resistance
- cut-out dimensions: 291 x 291 mm



Rated voltage	230 V 50 / 60 Hz
Operating range	± 10%
Design (housing and protection against accidental contact)	made of injection-moulded thermoplastic, self-extinguishing, UL 94 VO
Service life L <sub>10</sub> (+ 40 °C)	40,000 hrs
Weight	3.9 kg
Colour	RAL 7035
Noise level (EN ISO 3741)	66 / 69 dB (A)
Duty cycle	100%
Type of connection	spring-type terminal
Bearing type	ball bearing
<b>Model</b>	<b>IP 55</b>

Protection system according to EN 60529 / UL 50	NEMA type 12 - fluted filter
Filter mat quality class	G 4
Unimpeded airflow	705 / 725 m³/h
Air flow rate in combination (PF + PFA 60.000)	530 / 580 m³/h
Filtration efficiency	91%
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Power	Width x Height x Depth	Model
11677103055	127/180W	320 x 320 x 134 mm	IP 55
18611600037			spare - filter mats (5 pieces)
18611000000			spare part – fan 230 V AC

Protection system according to EN 60529 / UL 50	IP 54	IP 33
Filter mat quality class	G 3	no filter mat
Unimpeded airflow	550 m³/h	700 m³/h
Air flow rate in combination (PTF + PTFA 60.000)	370 m³/h	427 m³/h
Filtration efficiency	81%	0%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11087102055	65/80 W	470 x 140 x 470 mm	IP 54
11087101055	65/80 W	470 x 140 x 470 mm	IP 33
18611600039			spare - filter mats (20 pieces)
18611000044			spare part – fan 230 V AC

### PTF 60.500

#### Top mount filterfan



- air flow rate up to 500 m³/h
- toolless mounting, patented quick fastening system
- system of protection IP 33 and IP 54
- cut-out dimensions: 291 x 291 mm

Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	sheet steel, cover powder-coated; snap-in housing made of injection-moulded thermoplastic, self-extinguishing UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	approx. 40,000 hrs	
Weight	5.5 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	67 dB (A)	
Duty cycle	100%	
Type of connection	terminal strip	
Bearing type	ball bearing	
Protection system according to EN 60529 / UL 50	IP 54	IP 33
Filter mat quality class	G 3	no filter mat
Unimpeded airflow	350 m³/h	500 m³/h
Air flow rate in combination (PTF + PTFA 60.000)	242 m³/h	268 m³/h
Filtration efficiency	81%	0%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11085102055	4x28/29W	430 x 125 x 430 mm	IP 54
11085101055	4x28/29W	430 x 125 x 430 mm	IP 33
18611600038			spare - filter mats (20 pieces)
18611000052			spare part – fan 230 V AC

### PTF 60.700

#### Top mount filterfan



- air flow rate up to 700 m³/h
- toolless mounting, patented quick fastening system
- system of protection IP 33 and IP 54
- cut-out dimensions: 291 x 291 mm

Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	sheet steel, cover powder-coated; snap-in housing made of injection-moulded thermoplastic, self-extinguishing UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	approx. 40,000 hrs	
Weight	5.8 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	69 dB (A)	
Duty cycle	100%	
Type of connection	terminal strip	
Bearing type	ball bearing	

### PTF 61.000

#### Top mount filterfan



- air flow rate up to 1,000 m³/h
- toolless mounting, patented quick fastening system
- system of protection IP 33 and IP 54
- cut-out dimensions: 291 x 291 mm

Rated voltage	230 V 50 / 60 Hz	
Operating range	± 10%	
Design (housing and protection against accidental contact)	sheet steel, cover powder-coated; snap-in housing made of injection-moulded thermoplastic, self-extinguishing UL 94 VO	
Service life L <sub>10</sub> (+ 40 °C)	approx. 40,000 hrs	
Weight	6 kg	
Colour	RAL 7035	
Noise level (EN ISO 3741)	77 dB (A)	
Duty cycle	100%	
Type of connection	terminal strip	
Bearing type	ball bearing	
Protection system according to EN 60529 / UL 50	IP 54	IP 33
Filter mat quality class	G 3	no filter mat
Unimpeded airflow	750 m³/h	1,000 m³/h
Air flow rate in combination (PTF + PTFA 60.000)	500 m³/h	582 m³/h
Filtration efficiency	81%	0%
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Power	Width x Height x Depth	Model
11081102055	115/150 W	470 x 140 x 470 mm	IP 54
11081101055	115/150 W	470 x 140 x 470 mm	IP 33
18611600039			spare - filter mats (20 pieces)
18611000045			spare part – fan 230 V AC

### PTFA 60.000

#### Top mount exhaust filter



- toolless mounting, patented quick fastening system
- system of protection IP 33 and IP 54
- cut-out dimensions: 291 x 291 mm

Design (housing and protection against accidental contact)	sheet steel, cover powder-coated; snap-in housing made of injection-moulded thermoplastic, self-extinguishing UL 94 VO	
Colour	RAL 7035	
Protection system according to EN 60529 / UL 50	IP 54	IP 33
Filter mat quality class	G 3	no filter mat
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
11186002054	252 x 252 x 97 mm	IP 54
18611600038		spare - filter mats (20 pieces)
11186001054	252 x 252 x 97 mm	IP 33

## Heaters, Thermostats and Hygrostats

### FLH 010 – FLH 045 Radiant Heaters

- for the avoidance of excessively low temperatures or excessively high humidity in the control cabinet



Heating performance	10 W	15 W	30 W	45 W
max. surface temperature	55 °C	65 °C	90 °C	105 °C
Power consumption	10 W	15 W	30 W	45 W
Starting current	1.0 A	1.1 A	1.2 A	1.8 A
Rated voltage	230 V AC 50/60 Hz			
Functional range	110 – 250 V AC 50/60 Hz			
System of protection	IP 44 (connecting cable) IP 20 (plug terminal connector)			
Weight	250 g			
Design	aluminium profile, brightly anodised			
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715			
Type of connection	connecting cable (500 mm) or plug terminal connector			
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm <sup>2</sup> , fine wire: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm <sup>2</sup>			
Approvals	UL, cUL, CE, (on request: GOST)			

Article no.	Width x Height x Depth	Model
17001005007	70 x 100 x 50 mm	FLH 010 with terminal
17001005017	70 x 100 x 50 mm	FLH 010 with connecting cable
17001505007	70 x 100 x 50 mm	FLH 015 with terminal
17001505017	70 x 100 x 50 mm	FLH 015 with connecting cable
17003005007	70 x 100 x 50 mm	FLH 030 with terminal
17003005017	70 x 100 x 50 mm	FLH 030 with connecting cable
17004505007	70 x 100 x 50 mm	FLH 045 with terminal
17004505017	70 x 100 x 50 mm	FLH 045 with connecting cable

### FLH 060 – FLH 150 Radiant Heaters

- for the avoidance of excessively low temperatures or excessively high humidity in the control cabinet



Heating performance	60 W	75 W	100 W	150 W
max. surface temperature	105 °C	120 °C	130 °C	150 °C
Power consumption	60 W	75 W	100 W	150 W
Starting current	2.5 A	4.5 A	5.0 A	7.5 A
Rated voltage	230 V AC 50/60 Hz			
Functional range	110 – 250 V AC 50/60 Hz			
System of protection	IP 44 (connecting cable) IP 20 (plug terminal connector)			
Weight	250 g			
Rated voltage	230 V AC 50/60 Hz			
Design	aluminium profile, brightly anodised			
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715			
Type of connection	connecting cable (500 mm) or plug terminal connector			
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm <sup>2</sup> , fine wire: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm <sup>2</sup>			
Approvals	UL, cUL, CE, (on request: GOST)			

Article no.	Width x Height x Depth	Model
17006005007	70 x 175 x 50 mm	FLH 060 with terminal
17006005017	70 x 175 x 50 mm	FLH 060 with connecting cable
17007505007	70 x 175 x 50 mm	FLH 075 with terminal
17007505017	70 x 175 x 50 mm	FLH 075 with connecting cable
17010005007	70 x 175 x 50 mm	FLH 100 with terminal
17010005017	70 x 175 x 50 mm	FLH 100 with connecting cable
17015005007	70 x 250 x 50 mm	FLH 150 with terminal
17015005017	70 x 250 x 50 mm	FLH 150 with connecting cable

### FLH-LST 020 – FLH-LST 050 Surface temperature-limited Radiant Heaters

- for applications where accidental contact with radiant heaters inside control cabinets is possible, where safety regulations prohibit open sources of heat



Heating performance	20 W	30 W	50 W
max. surface temperature	55 °C		
Power consumption	20 W	30 W	50 W
Starting current	1.1 A	1.2 A	2.3 A
Rated voltage	230 V AC 50/60 Hz		
Functional range	110 – 250 V AC 50/60 Hz		
System of protection	IP 44		
Weight	320 g	450 g	770 g
Rated voltage	230 V AC 50/60 Hz		
Design	aluminium profile, brightly anodised		
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715		
Type of connection	connecting cable (500 mm)		
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm <sup>2</sup> , fine wire: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm <sup>2</sup>		
Approvals	UL, cUL, CE, (on request: GOST)		

Article no.	Width x Height x Depth	Model
17002105017	70 x 132 x 50 mm	FLH-LST 020 with connecting cable
17003105017	70 x 177 x 50 mm	FLH-LST 030 with connecting cable
17005105017	70 x 252 x 50 mm	FLH-LST 050 with connecting cable

### FLH 010-M – FLH 030-M Mini Radiant Heaters

- particularly suitable for use in small housings or for the heating of isolated spots in sensitive areas



Heating performance	20 W	30 W	50 W
max. surface temperature	95 °C	115 °C	140 °C
Power consumption	20 W	30 W	50 W
Starting current	1.0 A	1.1 A	1.2 A
Rated voltage	230 V AC 50/60 Hz		
Functional range	110 – 250 V AC 50/60 Hz		
System of protection	IP 54		
Weight	85 g	120 g	120 g
Rated voltage	230 V AC 50/60 Hz		
Design	aluminium profile, black anodised		
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715		
Type of connection	connecting cable (300 mm)		
Approvals	UL, cUL, CE, (on request: GOST)		

Article no.	Width x Height x Depth	Model
17000105017	29.5 x 45 x 50 mm	FLH 010-M
17000205017	29.5 x 45 x 50 mm	FLH 020-M
17000305017	29.5 x 45 x 75 mm	FLH 030-M

## FLH 250 – FLH 400 Fan Heaters



- ideal for use in larger electrical enclosures
- integrated fan for fast and even distribution of the heat

Heating performance	250 W	400 W
max. surface temperature	70 °C	85 °C
Power consumption	260 W	410 W
Starting current	1.1 A	1.8 A
Volumetric air flow	50 m³/h (50 Hz) / 61 m³/h (60 Hz)	
Rated voltage	230 V AC 50/60 Hz	
Design	aluminium profile, brightly anodised	
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715	
Type of connection	plug terminal connector	
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm², fine wire: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm²	
Approvals	UL, cUL, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
17025010007	85 x 186.5 x 104 mm	FLH 250
17040010007	85 x 226.5 x 104 mm	FLH 400
18911000000		spare part – fan 230 V AC

## FLH 250 SL Fan Heater



- ideal for use in larger electrical enclosures
- integrated fan for fast and even distribution of the heat

Heating performance	250 W
max. surface temperature	70 °C
Power consumption	261 W
Starting current	1.0 A
Volumetric air flow	160 m³/h
Rated voltage	230 V AC 50/60 Hz
Design	aluminium profile, brightly anodised
Weight	1.5 kg
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715
Type of connection	plug terminal connector
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm², fine wire: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm²
Approvals	CE (UL, cUL in preparation)

Article no.	Width x Height x Depth	Model
17025110290	126.5 x 170.5 x 103 mm	FLH 250 SL

## FLZ 510 Thermostat



- in combination with control cabinet heaters for temperature control in the control cabinet

Type of contact	changeover with spring contact		
Switching temperature difference	1K	3K	7K
Switching point tolerance	± 3K		
Max. switching power, value in brackets: inductive load at cos φ = 0.6	N.C.: 100-250 V AC / 10 (2) N.O.: 100-250 V AC / 5 (2) DC: max. 30 W		
Probe type	bimetal	bimetal	capillary probe (1.5 m)
System of protection	IP 20		
Weight	75 g		

Type of mounting	snap fastening for 35 mm profile bars according to EN 60715
Type of connection suitable for the operation of	screw terminal for cable 0.5 - 2.5 mm² fan and heater
Approvals	CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
17103000003	37 x 64 x 46 mm	FLZ 510 1K -20°C ... +40°C
17103000000	37 x 64 x 46 mm	FLZ 510 1K 0°C ... +60°C
17103001000	37 x 64 x 46 mm	FLZ 510 1K 0°C ... +60°C (set of 10)
17103000004	37 x 64 x 46 mm	FLZ 510 1K +20°C ... +80°C
17105000003	37 x 64 x 46 mm	FLZ 510 3K -20°C ... +40°C
17105000000	37 x 64 x 46 mm	FLZ 510 3K 0°C ... +60°C
17105000004	37 x 64 x 46 mm	FLZ 510 3K +20°C ... +80°C
17106000003	37 x 64 x 46 mm	FLZ 510 7K -20°C ... +40°C
17106000000	37 x 64 x 46 mm	FLZ 510 7K 0°C ... +60°C
17106000004	37 x 64 x 46 mm	FLZ 510 7K +20°C ... +80°C

## FLZ 520 / FLZ 530 Thermostats



- in combination with control cabinet heaters for temperature control in the control cabinet

Model	FLZ 520	FLZ 530
Type of contact	N.C. with spring contact	N.O. with spring contact
Switching temperature difference	< 7K	
Switching point tolerance	± 4K	
Max. switching power, value in brackets: inductive load at cos φ = 0.6	N.C.: 240 V AC / 10 (2) N.O.: 120 V AC / 15 (2)	DC: max. 30 W
Probe type	bimetal	
System of protection	IP 20	
Weight	50 g	
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715	
Type of connection suitable for the operation of	screw terminal for cable 0.5 - 2.5 mm² heater fan	
Approvals	UL, cUL, CSA, CE, (on request: GOST)	

Article no.	Width x Height x Depth	Model
17111000003	40 x 72 x 36 mm	FLZ 520 N.C. -20°C ... +40°C
17111000000	40 x 72 x 36 mm	FLZ 520 N.C. 0°C ... +60°C
17111001000	40 x 72 x 36 mm	FLZ 520 N.C. 0°C ... +60°C (set of 10)
17111000004	40 x 72 x 36 mm	FLZ 520 N.C. +20°C ... +80°C
17121000003	40 x 72 x 36 mm	FLZ 530 N.O. -20°C ... +40°C
17121000000	40 x 72 x 36 mm	FLZ 530 N.O. 0°C ... +60°C
17121001000	40 x 72 x 36 mm	FLZ 530 N.O. 0°C ... +60°C (set of 10)
17121000004	40 x 72 x 36 mm	FLZ 530 N.O. +20°C ... +80°C

## FLZ 541 – FLZ 543 Twin Thermostats



- 2 independent thermostats in one unit, individually switchable
- connected units can be operated at different temperature settings

Model	FLZ 541	FLZ 542	FLZ 543
Type of contact	N.C. / N.O. with spring contact	N.C. / N.C. with spring contact	N.O. / N.O. with spring contact
Switching temperature difference	< 7K		
Switching point tolerance	± 4K		
Max. switching power, value in brackets: inductive load at cos φ = 0.6	N.C.: 240 V AC / 10 (2) N.O.: 12 V AC / 15 (2) DC: max. 30 W		
Probe type	bimetal		
System of protection	IP 20		
Weight	95 g		

Type of mounting	snap fastening for 35 mm profile bars according to EN 60715
Type of connection suitable for the operation of	screw terminal for cable 0.5 - 2.5 mm <sup>2</sup> fan and heater heaters fans
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
17141000000	59 x 80.5 x 38 mm	FLZ 541 0 °C ... +60 °C
17141005000	59 x 80.5 x 38 mm	FLZ 541 0 °C ... +60 °C (set of 5)
17142000000	59 x 80.5 x 38 mm	FLZ 542 0 °C ... +60 °C
17142005000	59 x 80.5 x 38 mm	FLZ 542 0 °C ... +60 °C (set of 5)
17143000000	59 x 80.5 x 38 mm	FLZ 543 0 °C ... +60 °C
17143005000	59 x 80.5 x 38 mm	FLZ 543 0 °C ... +60 °C (set of 5)

## FLZ 600 Hygrostat

- for controlling enclosure heaters or filter fans when the set relative air humidity is exceeded



Device implementation	mechanical hygrostat
Type of contact	changeover with spring contact
Setting range	40–90% R.H.
Switching temperature difference	approx. 5%
Switching point tolerance	± 4K (50% R.H.)
Max. switching power, value in brackets: inductive load at cos φ = 0.6	N.C.: 24-250 V AC / 5 (0.2) - min.100 mA N.O.: 24-250 V AC / 5 (0.2) - min.100 mA DC: max. 30 W
Probe type	polyamide belt
System of protection	IP 20
Weight	55 g
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715
Type of connection suitable for the operation of	screw terminal for cable 0.5 - 2.5 mm <sup>2</sup> fan and heater
Approvals	CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
17207000000	37 x 64 x 46 mm	FLZ 600
17207000001	37 x 64 x 46 mm	FLZ 600 (set of 5)

## FLZ 610 Hygrostat-thermostat combination device

- for controlling enclosure heaters or filter fans when the set relative air humidity is exceeded
- simultaneous and independant monitoring of relative humidity and temperature



Device implementation	electronic hygrostat-thermostat combination device
Type of contact	changeover/relay
Rated voltage	230 V AC 50/60Hz
Setting range	40–90% R.H. / 0° C to +60° C
Switching temperature difference	approx. 2K ± 1K / approx. 4% R.H. ± 1%
Contact resistance	< 10 mΩ
Max. switching power, value in brackets: inductive load at cos φ = 0.6	N.C.: 240 V AC / 10 (2) N.O.: 12 V AC / 15 (2) DC: max. 30 W
Operating display	LED
System of protection	IP 20
Weight	85 g
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715
Type of connection suitable for the operation of	screw terminal for cable 0.5 - 2.5 mm <sup>2</sup> fan and heater
Approvals	UL, cUL, CE, (on request: GOST)

Article no.	Width x Height x Depth	Model
17218100000	59 x 80.5 x 38 mm	FLZ 610

## Electrical enclosure accessories

### PLS 008/013 Mini / PLS 014 Standard lamp systems



- for illumination of control cabinets

Model	PLS 008 Mini	PLS 013 Mini	PLS 014
Rated voltage	230 V AC 50/60 Hz ± 10%		
Current consumption	0.07 A	0.11 A	0.39 A
Fluorescent tube	8 W	13 W	14 W
Tube type	T5	T5	T8
Light intensity	450 Lm	640 Lm	700 Lm
Service life	8,000 hrs		
System of protection	IP 20		
Protection class	II	II	I
Type of connection	mains cable with plug included		cable 1.5 m 2 x GST 18/3
additional connections			door contact integrated door end switch
Weight	0.17 kg	0.26 kg	1.31 kg
Certification	GS (ITS)	GS (ITS)	ENEC (KEMA)

Article no.	Width x Height x Depth	Model
17308210010	430 x 120 x 50 mm	PLS 008 Mini cable
17313210010	320 x 95 x 50 mm	PLS 013 Mini cable
17314010110	110 x 80 x 50 mm	PLS 014 cable 1.5 m
17314010102	110 x 80 x 50 mm	PLS 014 2xGST door contact
17314010103	110 x 80 x 50 mm	PLS 014 2xGST door end switch

### PLS 015 Special lamp systems



- for illumination of control cabinets

Rated voltage	230 V AC 50/60 Hz ± 10%			
Current consumption	0.29 A			
Fluorescent tube	15 W			
Tube type	T8			
Light intensity	720 Lm			
Service life	8,000 hrs			
System of protection	IP 20			
Protection class	I			
Socket	D			
Type of connection	cable 1.5 m	2 x GST 18/3	2 x GST 18/3	2 x GST 18/3
additional connections			door contact	integrated door end switch
Weight	1.36 kg	1.25 kg	1.29 kg	1.29 kg
Certification	ENEC (KEMA)			

Article no.	Width x Height x Depth	Model
17315010111	500 x 120 x 50 mm	PLS 015 cable / GST
17315010101	500 x 120 x 50 mm	PLS 015 2 x GST
17315010102	500 x 120 x 50 mm	PLS 015 2xGST door contact
17315010103	500 x 120 x 50 mm	PLS 015 2xGST door end switch

**PLS 015 SL**  
Special lamp systems



- for illumination of control cabinets

Rated voltage	230 V AC 50/60 Hz ± 10%				
Current consumption	0.29 A				
Fluorescent tube	15 W				
Tube type	T8				
Light intensity	720 Lm				
Service life	8,000 hrs				
System of protection	IP 20				
Protection class	I				
Type of connection	cable 1.5 m without socket	cable 1.5 m	2 x GST 18/3	2 x GST 18/3	2 x GST 18/3
additional connections				door contact	integra- ted door end switch
Weight	1.43 kg	1.28 kg	1.30 kg	1.32 kg	1.35 kg
Certification	ENEC (KEMA)				

Article no.	Width x Height x Depth	Model
17315110010	500 x 120 x 50 mm	PLS 015 SL cable without socket
17315110011	500 x 120 x 50 mm	PLS 015 SL cable / GST
17315110001	500 x 120 x 50 mm	PLS 015 SL 2 x GST
17315110002	500 x 120 x 50 mm	PLS 015 SL 2xGST door contact
17315110003	500 x 120 x 50 mm	PLS 015 SL 2xGST door end switch

**PLS 008 SL**  
Special lamp systems



- for illumination of control cabinets

Rated voltage	230 V AC 50/60 Hz ± 10%				
Current consumption	0,16A				
Fluorescent tube	8 W				
Tube type	T5				
Light intensity	450 Lm				
Service life	8,000 hrs				
System of protection	IP 20				
Protection class	I				
Type of connection	cable 1.5 m without socket	cable 1.5 m	2 x GST 18/3	2 x GST 18/3	2 x GST 18/3
additional connections				door contact	integra- ted door end switch
Weight	0.89 kg	0.75 kg	0.75 kg	0.78 kg	0.82 kg
Certification	ENEC (KEMA)				

Article no.	Width x Height x Depth	Model
17308110010	500 x 120 x 50 mm	PLS 008 SL cable without socket
17308110011	500 x 120 x 50 mm	PLS 008 SL cable / GST
17308110001	500 x 120 x 50 mm	PLS 008 SL 2 x GST
17308110002	500 x 120 x 50 mm	PLS 008 SL 2xGST door contact
17308110003	500 x 120 x 50 mm	PLS 008 SL 2xGST door end switch

**PLS-C**  
Plugs/connecting cables  
for PLS/PLS SL



- preassembled connectors to integrate lamp systems in the switch cabinet

Article no.	Length	Sales unit	Model
17399091090	1 m	1	mains connection cable with safety plug and GST18/3 socket
17399591090	1 m	5	
17399095090	3 m	1	
17399595090	3 m	5	mains connection cable with GST18/3 plug
17399091092	1 m	1	
17399591092	1 m	5	
17399095092	3 m	1	mains connection cable with GST18/3 socket
17399595092	3 m	5	
17399091091	1 m	1	
17399591091	1 m	5	connecting cable with GST18/3 plug and socket
17399095091	3 m	1	
17399595091	3 m	5	
17398089093	0.5 m	1	
17398589093	0.5 m	5	
17398091093	1 m	1	
17398591093	1 m	5	
17398093093	2 m	1	
17398593093	2 m	5	

**PPS**  
Sockets



- for simple fastening to 35 mm profile bars

Model	PPS D	PPS F	PPS USA
Rated voltage	250 V AC	250 V AC	125 V AC
Nominal current	10 A DC / 16 A AC		15 A AC
Contact material	CuZn37		
Insulation material	PA		
Mounting	snap fastening for 35mm profile bars according to EN 60715		
Cable cross-section	single wire: 0.2 - 4 mm <sup>2</sup> / fine wire: 0.2 - 2.5 mm <sup>2</sup> / AWG 24 - AWG 12		
Insulation stripping length	8 mm		
Standards/approvals	IEC 83, DIN 49440-1		UL

Article no.	Width x Height x Depth	Model
17401000000	65 x 75 x 75 mm	PPS D
17402000000	65 x 75 x 75 mm	PPS F
17403000000	65 x 75 x 75 mm	PPS USA

**PPC**  
Pressure compensation device

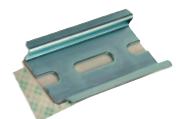


- for compensation of pressure fluctuations whilst retaining the highest protection types

Thread	M12 x 1.5 - 10 mm
Material	polyamide 6, O-Ring: Perbunan
System of protection	IP 66, IP 68, IP 69K

Article no.	Sales unit	Model
17410050000	5	PPC

**PDR**  
Mounting support



Fastening	self-adhesive
Material	sheet steel, galvanised
Weight	approx. 25 g
Load capacity after 24 hrs waiting period	500 g

Article no.	Width x Height x Depth	Model
17411000000	70 x 35 x 7 mm	PDR

## Visual signaling devices

### PMF 2030 Flashing Light

- secure 360° alarm for large distances
- direct- or bracket mounting
- impact-proof polycarbonate lens



Rated voltage	230 V 50 / 60 Hz
Operating range	195 V – 253 V
Material (lens)	polycarbonate (PC)
Material (housing)	bracket mounting: polycarbonate (PC) direct mounting: ABS
Light source	flash tube
Lens colours	clear, amber, red, green, blue
Flash rate	1 Hz = 60 flashes/min.
Flash energy	30 Joules
Service life of light source	light emission still 70% after 8,000,000 flashes
Weight	direct mounting 0.75 kg bracket mounting 1.25 kg
Duty cycle	100%
Cable entry bracket mounting	M20 x 1.5
Connecting terminals	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>
Protection system according to EN 60529	IP 55 (vertical mounting)
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21010104000	amber	Ø 177 x 185 mm	direct mounting
21010105000	red	Ø 177 x 185 mm	direct mounting
21010104010	amber	Ø 150 x 185 mm	bracket mounting
21010105010	red	Ø 150 x 185 mm	bracket mounting

### PMF 2015 Flashing Light

- 2 flash combinations
- direct- or bracket mounting
- impact-proof polycarbonate lens



Rated voltage	230 V 50 / 60 Hz	24 V DC
Operating range	195 V – 253 V	18 V – 30 V
Material (lens)	polycarbonate (PC)	
Material (housing)	bracket mounting: polycarbonate (PC) direct mounting: ABS	
Light source	flash tube	
Lens colours	clear, amber, red, green, blue	
Flash rate	quad or double flash with 120 flashes/min.	
Flash energy	7 Joules	
Service life of light source	light emission still 70% after 12,000,000 flashes	
Weight	direct mounting 0.75 kg bracket mounting 1.25 kg	
Duty cycle	100%	
Cable entry bracket mounting	M20 x 1.5	
Connecting terminals	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 55 (vertical mounting)	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21007104000	amber	Ø 177 x 185 mm	direct mounting 230 V AC
21007105000	red	Ø 177 x 185 mm	direct mounting 230 V AC
21007804000	amber	Ø 177 x 185 mm	direct mounting 24 V DC
21007805000	red	Ø 177 x 185 mm	direct mounting 24 V DC
21007104010	amber	Ø 150 x 185 mm	bracket mounting 230 V AC
21007105010	red	Ø 150 x 185 mm	bracket mounting 230 V AC
21007804010	amber	Ø 150 x 185 mm	bracket mounting 24 V DC
21007805010	red	Ø 150 x 185 mm	bracket mounting 24 V DC

### ABL / ABS Flashing Light

- the powerful flashing light in a metal housing
- designed for alarm functions outdoors and in large halls and plants



Rated voltages	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	18 V – 30 V
Material (lens)	polycarbonate (PC)	
Material (housing)	aluminium (Al MG Si 1), yellow anodised	
Material (base)	polycarbonate (PC) with fibre glass	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	15 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	650 g	800 g
Duty cycle	100%	
Type of connection	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5	
Protection system according to EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height	Model
21001103000	yellow	Ø 80 x 242 mm	230 V AC
21001105000	red	Ø 80 x 242 mm	230 V AC
21001803000	yellow	Ø 80 x 242 mm	24 V DC
21001805000	red	Ø 80 x 242 mm	24 V DC
28710500042		Ø 96 x 100 mm	accessory - protective cage

### P 400 STR Flashing Light

- optimum illumination due to prismatic coloured lens
- attracts maximum attention due to adjustable flash sequences
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, yellow, amber, red, green, blue	
Flash energy	double flash 15 + 10 Joules @ 0.75 Hz single flash 15 Joules @ 1 Hz triple flash 15 + 10 + 10 Joules @ 0.5 Hz	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	632 g	696 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21344103000	yellow	Ø 140 x 220 mm	230 V AC
21344105000	red	Ø 140 x 220 mm	230 V AC
21344403000	yellow	Ø 140 x 220 mm	24 V AC/DC
21344405000	red	Ø 140 x 220 mm	24 V AC/DC
21394000000			accessory - wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

### P 400 STS Flashing Light

- optimum illumination due to prismatic coloured lens
- synchronised flash light when controlling several lights
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	15 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw surface mounting (wall bracket & tubular stand as accessories)	
Mounting		
Weight	632 g	696 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21345103000	yellow	Ø 140 x 220 mm	230 V AC
21345105000	red	Ø 140 x 220 mm	230 V AC
21345403000	yellow	Ø 140 x 220 mm	24 V AC/DC
21345405000	red	Ø 140 x 220 mm	24 V AC/DC
21394000000			accessory – wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

## Quadro F12 Flashing Light

- industrial successor to the legendary Eiffel Tower light
- outstanding mechanical strength with IP 66, IP 67 and IK 08



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	18 V – 30 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	13 Joules	
Service life of light source	light emission still 70% after 12,000,000 flashes	
Mounting	via external lugs or inside holes	
Weight	600 g	
Type of connection	spring-type terminal 0.08 - 2.5 mm <sup>2</sup>	
Cable entry	2 x M20 bottom side / 2 x M20/M32 sideways	
Protection system according to EN 60529	IP 66, IP 67	
Impact resistance as per EN 50102	IK 08	
Protection class	II	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height x Depth	Model
21041103000	yellow	130 x 130 x 130 mm	230 V AC
21041105000	red	130 x 130 x 130 mm	230 V AC
21041803000	yellow	130 x 130 x 130 mm	24 V DC
21041805000	red	130 x 130 x 130 mm	24 V DC

## PB 2010 Flashing Light

- high reliability and long service life due to full on-board electronics
- large variety of mounting methods – cable entry at the side or through the base of the housing



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	185 V – 255 V	18 V – 30 V
Material (lens)	polycarbonate (PC)	
Material (housing)	ABS, light grey similar to RAL 7035	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	10 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	

Weight	340 g	400 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5, sideways or bottom side	
Protection system according to EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height x Depth	Model
21030103000	yellow	166 x 128 x 111 mm	230 V AC
21030105000	red	166 x 128 x 111 mm	230 V AC
21030803000	yellow	166 x 128 x 111 mm	24 V DC
21030805000	red	166 x 128 x 111 mm	24 V DC
28710500040		198 x 144 x 136 mm	accessory - protective cage

## PB 2005 Flashing Light

- high reliability and long service life due to full on-board electronics
- large variety of mounting methods – cable entry at the side or through the base of the housing



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	185 V – 255 V	18 V – 30 V
Material (lens)	polycarbonate (PC)	
Material (housing)	ABS, light grey similar to RAL 7035	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	275 g	310 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5, sideways or bottom side	
Protection system according to EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height x Depth	Model
21025103000	yellow	166 x 128 x 111 mm	230 V AC
21025105000	red	166 x 128 x 111 mm	230 V AC
21025803000	yellow	166 x 128 x 111 mm	24 V DC
21025805000	red	166 x 128 x 111 mm	24 V DC
28710500040		198 x 144 x 136 mm	accessory - protective cage

## WBL/WBS Flashing Light

- housing and mounting bracket made of sturdy anodised aluminium
- ideally suited for tough industrial environments
- impact-proof lens



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	185 V – 255 V	18 V – 35 V
Material (lens)	polycarbonate (PC)	
Material (housing)	aluminium (Al Mg Si 1), yellow anodised	
Material (base)	polycarbonate (PC) with fibre glass	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	260 g	300 g
Type of connection	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5	
Protection system according to EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height	Model
21003103000	yellow	Ø 54 x 200 mm	230 V AC
21003105000	red	Ø 54 x 200 mm	230 V AC
21003803000	yellow	Ø 54 x 200 mm	24 V DC
21003805000	red	Ø 54 x 200 mm	24 V DC
28710500041		Ø 70 x 89 mm	accessory - protective cage

## WBLR/WBSR Flashing Light

- compact plastic housing
- especially suitable for outdoor applications due to high protection type
- mounting via concealed interior holes



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	185 V – 255 V	18 V – 35 V
Material (lens)	polycarbonate (PC)	
Material (housing)	ABS, light grey similar to RAL 7035	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	290 g	300 g
Type of connection	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height x Depth	Model
21004103000	yellow	120 x 144 x 85 mm	230 V AC
21004105000	red	120 x 144 x 85 mm	230 V AC
21004803000	yellow	120 x 144 x 85 mm	24 V DC
21004805000	red	120 x 144 x 85 mm	24 V DC
28710500043		Ø 70 x 85 mm	accessory - protective cage

## P 300 STR Flashing Light

- optimum illumination due to prismatic coloured lens
- electronic components mechanically protected for highest mounting security
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw surface mounting (wall bracket & tubular stand as accessories)	
Mounting		
Weight	300 g	325 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21334103000	yellow	Ø 100 x 150 mm	230 V AC
21334105000	red	Ø 100 x 150 mm	230 V AC
21334403000	yellow	Ø 100 x 150 mm	24 V AC/DC
21334405000	red	Ø 100 x 150 mm	24 V AC/DC
21392000000			accessory – wall bracket
21393000000			accessory - tubular stand 140 mm
28250200000			accessory - wall holder for tubular stand

## PL 105 Flashing Light

- the small flashing light fits many applications without being too bulky
- mounting via internal holes or external lugs



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material (lens)	polycarbonate (PC)	
Material (housing)	ABS	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	200 g	
Type of connection	screw terminals 0.5 - 2.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5	
Protection system according to EN 60529	IP 56	
Approvals on request	GOST, UL	

Article no.	Lens colour	Width x Height x Depth	Model
21301103000	yellow	86 x 83 x 86 mm	230 V AC
21301105000	red	86 x 83 x 86 mm	230 V AC
21301803000	yellow	86 x 83 x 86 mm	24 V DC
21301805000	red	86 x 83 x 86 mm	24 V DC

## DWBL/DWBS Flashing Light

- flashing lights for direct installation at the workstation
- no dazzle – but secure alarm function
- housing and mounting bracket made of sturdy anodised aluminium



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	185 V – 255 V	18 V – 35 V
Material (lens)	polycarbonate (PC)	
Material (housing)	aluminium (Al MG Si 1), yellow anodised	
Material (base)	polycarbonate (PC) with fibre glass	
Light source	flash tube	
Lens colours	clear, white, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	2.5 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Weight	290 g	300 g
Type of connection	single wire 0.5 - 2.5 mm <sup>2</sup> , fine wire 0.5 - 1.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5	
Protection system according to EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens colour	Width x Height x Depth	Model
21005103000	yellow	120 x 144 x 85 mm	230 V AC
21005105000	red	120 x 144 x 85 mm	230 V AC
21005803000	yellow	120 x 144 x 85 mm	24 V DC
21005805000	red	120 x 144 x 85 mm	24 V DC
28710500041		Ø 70 x 85 mm	accessory - protective cage

## P 100 STR Flashing Light

- compact flashing light also for use where space is limited
- panel-mounted device with convenient plug contact
- optimum illumination due to prismatic coloured lens



Rated voltage	230 V 50/60 Hz	12 / 24 V AC/DC
Operating range	207 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, yellow, amber, red, green, blue	
Flash rate	0.75 Hz	
Flash energy	1 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw	
Mounting	panel mount: Ø 37.5 mm (PG29)	
Weight	105 g	100 g

Type of connection	screw terminals 1.5 mm <sup>2</sup> pluggable
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21314103000	yellow	Ø 60 x 65.5 mm	230 V AC
21314105000	red	Ø 60 x 65.5 mm	230 V AC
21314893000	yellow	Ø 60 x 65.5 mm	12/24 V AC/DC
21314895000	red	Ø 60 x 65.5 mm	12/24 V AC/DC

## P 200 STR Flashing Light

- compact flashing light also for use where space is limited
- surface-mounted device for mounting directly or on a wall bracket or tubular stand



Rated voltage	230 V 50/60 Hz	12 / 24 V AC/DC
Operating range	207 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colours	clear, yellow, amber, red, green, blue	
Flash rate	0.75 Hz	
Flash energy	1 Joules	
Service life of light source	light emission still 70% after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	89 g	84 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21324103000	yellow	Ø 60 x 80 mm	230 V AC
21324105000	red	Ø 60 x 80 mm	230 V AC
21324893000	yellow	Ø 60 x 80 mm	12/24 V AC/DC
21324895000	red	Ø 60 x 80 mm	12/24 V AC/DC
21390000000			accessory – wall bracket
21391000000			accessory - tubular stand 137 mm
28250200000			accessory - wall holder for tubular stand

## P 400 FLF Blinking Light

- powerful blinking light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic coloured lens



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	filament lamp E14	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	40 W 0.5 Hz / 1 Hz / 2 Hz	
Design	3 blinking frequencies adjustable	
Mounting	bayonet with anti-tamper locking screw	
Weight	surface mounting (wall bracket & tubular stand as accessories)	
Type of connection	535 g	
Cable entry	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Approvals on request	IP 65	
	GOST	

Article no.	Lens colour	Width x Height	Model
21341103000	yellow	Ø 140 x 220 mm	230 V AC
21341105000	red	Ø 140 x 220 mm	230 V AC
21341803000	yellow	Ø 140 x 220 mm	24 V DC
21341805000	red	Ø 140 x 220 mm	24 V DC
28113000016			spare part - filament lamp 24 V
28113000018			spare part - filament lamp 230 V
21394000000			accessory – wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

## P 400 FLH Blinking Halogen Light

- powerful blinking halogen light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic coloured lens



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	halogen lamp G6,35/GY6,35	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	35 W / 40 W 0.5 Hz / 1 Hz / 2 Hz	
Design	3 blinking frequencies adjustable	
Mounting	bayonet with anti-tamper locking screw	
Weight	surface mounting (wall bracket & tubular stand as accessories)	
Type of connection	535 g	
Cable entry	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Approvals on request	IP 65	
	GOST	

Article no.	Lens colour	Width x Height	Model
21343103000	yellow	Ø 140 x 220 mm	230 V AC
21343105000	red	Ø 140 x 220 mm	230 V AC
21343803000	yellow	Ø 140 x 220 mm	24 V DC
21343805000	red	Ø 140 x 220 mm	24 V DC
28113000032			spare part - halogen filament lamp 24V
28113000034			spare part - halogen filament lamp 230V
21394000000			accessory – wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

## P 300 FLF Blinking Light

- blinking light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic coloured lens
- as standard with on-site selectable signaling mode



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	filament lamp E14	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	25 W 0.5 Hz / 1 Hz / 2 Hz	
Design	3 blinking frequencies adjustable	
Mounting	bayonet with anti-tamper locking screw	
Weight	surface mounting (wall bracket & tubular stand as accessories)	
Type of connection	283 g	
Cable entry	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways	
Approvals on request	IP 65	
	GOST	

Article no.	Lens colour	Width x Height	Model
21331103000	yellow	Ø 100 x 150 mm	230 V AC
21331105000	red	Ø 100 x 150 mm	230 V AC
21331803000	yellow	Ø 100 x 150 mm	24 V DC
21331805000	red	Ø 100 x 150 mm	24 V DC
28113000011			spare part - filament lamp 24V
28113000014			spare part - filament lamp 230V
21392000000			accessory – wall bracket
21393000000			accessory - tubular stand 140 mm
28250200000			accessory - wall holder for tubular stand

## P 300 FLH Blinking Halogen Light

- blinking light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic coloured lens



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	halogen lamp G6,35/GY6,35	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	20 W / 25 W 0.5 Hz / 1 Hz / 2 Hz	
Design	3 blinking frequencies adjustable	
Mounting	bayonet with anti-tamper locking screw	
Weight	surface mounting (wall bracket & tubular stand as accessories)	
Type of connection	279 g	
Cable entry	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways	
Approvals on request	IP 65	
	GOST	

Article no.	Lens colour	Width x Height	Model
21333103000	yellow	Ø 100 x 150 mm	230 V AC
21333105000	red	Ø 100 x 150 mm	230 V AC
21333803000	yellow	Ø 100 x 150 mm	24 V DC
21333805000	red	Ø 100 x 150 mm	24 V DC
28113000028			spare part - halogen filament lamp 24V
28113000030			spare part - halogen filament lamp 230V
21392000000			accessory – wall bracket
21393000000			accessory - tubular stand 140 mm
28250200000			accessory - wall holder for tubular stand

## P 200 FLF Blinking Light

- compact blinking light also for use where space is limited
- surface-mounted device for mounting directly or on a wall bracket or tubular stand
- optimum illumination due to prismatic coloured lens



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	filament lamp BA9s	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	5 W @ 1 Hz	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	93 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21321103000	yellow	Ø 60 x 80 mm	230 V AC
21321105000	red	Ø 60 x 80 mm	230 V AC
21321803000	yellow	Ø 60 x 80 mm	24 V DC
21321805000	yellow	Ø 60 x 80 mm	24 V DC
28113000023			spare part - filament lamp 24V
28113000026			spare part - filament lamp 230V
21390000000			accessory – wall bracket
21391000000			accessory - tubular stand 137 mm
28250200000			accessory - wall holder for tubular stand

## P 100 FLF Blinking Light

- compact blinking light also for use where space is limited
- panel-mounted device with convenient plug contact



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	filament lamp BA9s	
Lens colours	clear, yellow, amber, red, green, blue	
Light capacity	5 W @ 1 Hz	
Design	bayonet with anti-tamper locking screw	
Mounting	panel mount: Ø 37.5 mm (PG29)	
Weight	79 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup> pluggable	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21311103000	yellow	Ø 60 x 80 mm	230 V AC
21311105000	red	Ø 60 x 80 mm	230 V AC
21311803000	yellow	Ø 60 x 80 mm	24 V DC
21311805000	red	Ø 60 x 80 mm	24 V DC
28113000023			spare part - filament lamp 24V
28113000026			spare part - filament lamp 230V

## P 22 DFS Blinking LED Panel mount indicator

- indicator lamp for 22.5 mm mounting hole
- high signaling effect on all sides
- high protection level (IP 65) to housing



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Light source	LED array	
Lens colour	red	
Blinking frequency	1 Hz	
Service life of light source	> 50,000 hrs	
Mounting	panel mount: Ø 22.5 mm	
Weight	90 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65 (to housing)	

Article no.	Lens colour	Width x Depth	Model
23271805000	red	Ø 29 x 62 mm	24 V AC/DC
23271105000	red	Ø 29 x 62 mm	230 V AC
23292000000			label holder 25 x 10 mm
23291000000			label holder 25 x 18 mm

## P 22 D Continuous LED Panel mount indicator

- indicator lamp for 22.5 mm mounting hole
- high signaling effect on all sides
- high protection level (IP 65) to housing



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Light source	LED array	
Lens colours	white, amber, red, green, blue	
Service life of light source	> 50,000 hrs	
Mounting	panel mount: Ø 22.5 mm	
Weight	90 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65 (to housing)	

Article no.	Lens colour	Width x Depth	Model
23273104000	amber	Ø 29 x 52 mm	230 V AC
23273105000	red	Ø 29 x 52 mm	230 V AC
23273804000	amber	Ø 29 x 52 mm	24 V AC/DC
23273805000	red	Ø 29 x 52 mm	24 V AC/DC
23292000000			label holder 25 x 10 mm
23291000000			label holder 25 x 18 mm

### PD 2100 Continuous Light

- elegant pyramid design
- optimum illumination due to prismatic coloured lens



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 15 W
Material (lens)	polycarbonate (PC)
Material (housing)	ABS, light grey similar to RAL 7035
Light source	filament lamp BA15d or E14
Lens colours	clear, yellow, amber, red, green, blue
Weight	250 g
Cable entry	M20 x 1.5, sideways or bottom side
Protection system according to EN 60529	IP 55 (vertical/horizontal mounting)
Approvals on request	GOST

Article no.	Lens colour	Width x Height x Depth	Model
21120303000	yellow	166 x 128 x 111 mm	lamp socket BA15d
21120105000	red	166 x 128 x 111 mm	lamp socket E14
28113000000			accessory - filament lamp 24V E14
28113000004			accessory - filament lamp 230V E14
28710500040		198 x 144 x 136	accessory - protective cage

### P 400 SLF Continuous Light

- powerful status light for universal use
- optimum illumination due to prismatic coloured lens
- large variety of mounting methods



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 40 W
Material	polycarbonate (PC)
Light source	filament lamp E14
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand as accessories)
Weight	510 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>
Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21340623000	yellow	∅ 140 x 220 mm	12-250 V
21340625000	red	∅ 140 x 220 mm	12-250 V
28113000016			accessory - filament lamp 24V
28113000018			accessory - filament lamp 230V
21394000000			accessory – wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

### P 400 SLH Continuous Light

- powerful status light for universal use
- optimum illumination due to prismatic coloured lens
- large variety of mounting methods



Rated voltage	12 – 250 V (light source not included)
Power consumption	12/24V: max. 35W / 115/230V: max. 40W
Material	polycarbonate (PC)
Light source	halogen filament lamp G6,35 / GY6,35
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand as accessories)
Weight	510 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>

Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21342613000	yellow	∅ 140 x 220 mm	12-250 V
21342615000	red	∅ 140 x 220 mm	12-250 V
28113000032			accessory - halogen filament lamp 24V
28113000034			accessory - halogen filament lamp 230V
21394000000			accessory – wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

### P 300 SLF Continuous Light

- status light for universal use
- optimum illumination due to prismatic coloured lens
- large variety of mounting methods



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 15 W
Material	polycarbonate (PC)
Light source	filament lamp E14
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand as accessories)
Weight	262 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>
Cable entry	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21330623000	yellow	∅ 100 x 150 mm	12-250 V
21330625000	red	∅ 100 x 150 mm	12-250 V
28113000011			accessory - filament lamp 24V
28113000014			accessory - filament lamp 230V
21392000000			accessory – wall bracket
21393000000			accessory - tubular stand 140 mm
28250200000			accessory - wall holder for tubular stand

### P 300 SLH Continuous Light

- status light for universal use
- optimum illumination due to prismatic coloured lens
- large variety of mounting methods



Rated voltage	12 – 250 V (light source not included)
Power consumption	12/24V: max. 20W / 115/230V: max. 25W
Material	polycarbonate (PC)
Light source	halogen filament lamp G6,35 / GY6,35
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand as accessories)
Weight	262 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>
Cable entry	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21332613000	yellow	∅ 100 x 150 mm	12-250 V
21332615000	red	∅ 100 x 150 mm	12-250 V
28113000028			accessory - halogen filament lamp 24V
28113000030			accessory - halogen filament lamp 230V
21392000000			accessory – wall bracket
21393000000			accessory - tubular stand 140 mm
28250200000			accessory - wall holder for tubular stand

## P 200 SLF Continuous Light

- compact status light also for use where space is limited
- optimum illumination due to prismatic coloured lens
- large variety of mounting methods



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 5 W
Material	polycarbonate (PC)
Light source	filament lamp BA9s
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand as accessories)
Weight	632 g                      696 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21320613000	yellow	Ø 60 x 80 mm	12-250 V
21320615000	red	Ø 60 x 80 mm	12-250 V
28113000023			accessory - filament lamp 24 V
28113000026			accessory - filament lamp 230 V
21390000000			accessory – wall bracket
21391000000			accessory - tubular stand 137 mm
28250200000			accessory - wall holder for tubular stand

## P 100 SLF Continuous Light

- compact status light also for use where space is limited
- optimum illumination due to prismatic coloured lens
- panel-mounted device with convenient plug contact



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 5 W
Material	polycarbonate (PC)
Light source	filament lamp BA9s
Lens colours	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	panel mount: Ø 37.5 mm (PG29)
Weight	90 g
Type of connection	screw terminals 1.5 mm <sup>2</sup> pluggable
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21310613000	yellow	Ø 60 x 65.5 mm	12-250 V
21310615000	red	Ø 60 x 65.5 mm	12-250 V
28113000023			accessory - filament lamp 24 V
28113000026			accessory - filament lamp 230 V

## P 450 TLA Traffic Light

- signal lights for traffic light use
- for horizontal or vertical orientation
- clear signaling even in the case of extremely bright surroundings due to use of clear globes



Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	high output LED array	
Lens colour	clear	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket as accessory)	
Weight	410 g	
Type of connection	screw terminals 2 x 1.5 mm <sup>2</sup>	
Cable entry (incl. multi-unit connector)	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	

Protection system according to EN 60529 IP 65  
Approvals on request GOST

Article no.	Lens colour	Width x Height	Model
21355644000	amber	Ø 140 x 177 mm	115/230 V AC
21355645000	red	Ø 140 x 177 mm	115/230 V AC
21355646000	green	Ø 140 x 177 mm	115/230 V AC
21355634000	amber	Ø 140 x 177 mm	12/24 V DC
21355635000	red	Ø 140 x 177 mm	12/24 V DC
21355636000	green	Ø 140 x 177 mm	12/24 V DC
21399000000			accessory – wall bracket for single mounting
21397000000			accessory - wall bracket set for 2/3 combination

## P 350 TLA Traffic Light

- signal lights for traffic light use
- for horizontal or vertical orientation



Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	high output LED array	
Lens colour	clear	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket as accessory)	
Weight	230 g	
Type of connection	screw terminals 2 x 1.5 mm <sup>2</sup>	
Cable entry (incl. multi-unit connector)	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21352644000	amber	Ø 100 x 140 mm	115/230 V AC
21352645000	red	Ø 100 x 140 mm	115/230 V AC
21352646000	green	Ø 100 x 140 mm	115/230 V AC
21352634000	amber	Ø 100 x 140 mm	12/24 V DC
21352635000	red	Ø 100 x 140 mm	12/24 V DC
21352636000	green	Ø 100 x 140 mm	12/24 V DC
21398000000			accessory – wall bracket for single mounting
21396000000			accessory - wall bracket set for 2/3 combination

## P 450 TSB Traffic Light

- signal lights for traffic light use
- simple combination for horizontal or vertical orientation
- high signal effect due to prismatic coloured lens



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 25 W
Operating mode	continuous light
Material	polycarbonate (PC)
Light source	filament lamp E27
Lens colours	amber, red, green
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket as accessory)
Weight	395 g
Type of connection	screw terminals 2 x 1.5 mm <sup>2</sup>
Cable entry (incl. multi-unit connector)	1 x 5-7 mm push through grommet; 2 x M20 cable entries
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21354654000	amber	Ø 140 x 177 mm	12-250 V
21354655000	red	Ø 140 x 177 mm	12-250 V
21354656000	green	Ø 140 x 177 mm	12-250 V
28113000019			accessory - filament lamp 24 V
28113000021			accessory - filament lamp 230 V
21399000000			accessory – wall bracket for single mounting
21397000000			accessory - wall bracket set for 2/3 combination

## P 450 TDB Traffic Light

- signal lights for traffic light use
- simple combination for horizontal or vertical orientation
- also for safety-relevant applications through the use of two light sources



Rated voltage	12 – 250 V (light sources not included)
Power consumption	max. 2 x 15 W
Operating mode	continuous light (redundant)
Material	polycarbonate (PC)
Light source	2 x filament lamp E14
Lens colours	amber, red, green
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket as accessory)
Weight	380 g
Type of connection	screw terminals 2 x 1.5 mm <sup>2</sup>
Cable entry (incl. multi-unit connector)	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21353624000	amber	Ø 140 x 177 mm	12-250 V
21353625000	red	Ø 140 x 177 mm	12-250 V
21353626000	green	Ø 140 x 177 mm	12-250 V
28113000000			accessory - filament lamp 24 V
28113000004			accessory - filament lamp 240 V
21399000000			accessory - wall bracket for single mounting
21397000000			accessory - wall bracket set for 2/3 combination

## P 350 TSB Traffic Light

- signal lights for traffic light use
- simple combination for horizontal or vertical orientation
- high signal effect due to prismatic coloured lens



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 15 W
Operating mode	continuous light
Material	polycarbonate (PC)
Light source	filament lamp E14
Lens colours	amber, red, green
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket as accessory)
Weight	210 g
Type of connection	screw terminals 2 x 1.5 mm <sup>2</sup>
Cable entry (incl. multi-unit connector)	1 x 5-7 mm push through grommet; 2 x M20 cable entries
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21351624000	amber	Ø 100 x 140 mm	12-250 V
21351625000	red	Ø 100 x 140 mm	12-250 V
21351626000	green	Ø 100 x 140 mm	12-250 V
28113000000			accessory - filament lamp 24 V
28113000004			accessory - filament lamp 240 V
21398000000			accessory - wall bracket for single mounting
21396000000			accessory - wall bracket set for 2/3 combination

## PMF LED-Flex LED Multi Function Light

- rotating mirror effect, extreme less current consumption
- 4 extern selectable operation modes



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	95 V – 253 V	10 V – 60 V AC / 15 V – 40 V DC

Material (lens)	polycarbonate (PC)
Material (housing)	bracket mounting: polycarbonate (PC) direct mounting: ABS
Light source	LED; 8 x 2 pieces (3 chip Version)
Lens colours	amber, red, green, blue
Operating modes	continuous light, blinking light 1.5 Hz, flashing light 1 Hz, rotating all-round light 2.5 Hz
Service life of light source	> 50,000 hrs
Weight	bracket mounting: 900 g, direct mounting 620 g
Type of connection	spring-type terminal 0.08 – 2.5 mm <sup>2</sup>
Cable entry	bracket mounting: M20 x 1.5
Protection system according to EN 60529	IP 55 (vertical mounting)
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21151644007	amber	Ø 150 x 185 mm	230 V AC bracket mounting
21151645007	red	Ø 150 x 185 mm	230 V AC bracket mounting
21151634007	amber	Ø 150 x 185 mm	24 V AC/DC bracket mounting
21151635007	red	Ø 150 x 185 mm	24 V AC/DC bracket mounting
21151644006	amber	Ø 177 x 185 mm	230 V AC direct mounting
21151645006	red	Ø 177 x 185 mm	230 V AC direct mounting
21151634006	amber	Ø 177 x 185 mm	24 V AC/DC direct mounting
21151635006	red	Ø 177 x 185 mm	24 V AC/DC direct mounting

## P 400 LDA LED Multi Function Light

- optimum illumination due to prismatic coloured lens
- with on-site selectable signaling mode (9 different modes)
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	12/24 V DC
Operating range	207 V – 253 V	10 V – 50 V
Material	polycarbonate (PC)	
Light source	high output LED array	
Lens colours	yellow, amber, red, green, blue	
Operating modes	9 internally selectable operation modes	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	595 g	845 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21348103000	yellow	Ø 140 x 220 mm	230 V AC
21348105000	red	Ø 140 x 220 mm	230 V AC
21348903000	yellow	Ø 140 x 220 mm	12/24 V DC
21348905000	red	Ø 140 x 220 mm	12/24 V DC
21394000000			accessory - wall bracket
21395000000			accessory - tubular stand 145 mm
28250200000			accessory - wall holder for tubular stand

## P 300 LDA LED Multi Function Light

- optimum illumination due to prismatic coloured lens
- with on-site selectable signaling mode (9 different modes)
- large variety of mounting methods



Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 50 V
Material	polycarbonate (PC)	
Light source	high output LED array	
Lens colours	yellow, amber, red, green, blue	
Operating modes	9 internally selectable operation modes	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	

Weight	285 g
Type of connection	screw terminals 1.5 mm <sup>2</sup>
Cable entry	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways
Protection system according to EN 60529	IP 65
Approvals on request	GOST

Article no.	Lens colour	Width x Height	Model
21338103000	yellow	Ø 140 x 150 mm	115/230 V AC
21338175000	red	Ø 100 x 150 mm	115/230 V AC
21338903000	yellow	Ø 140 x 150 mm	12/24 V DC
21338905000	red	Ø 140 x 150 mm	12/24 V DC
21392000000		accessory – wall bracket	
21393000000		accessory - tubular stand 140 mm	
28250200000		accessory - wall holder for tubular stand	

## Quadro LED-Flex LED Multi Function Light

- for tough requirements under industrial conditions
- 4 internally and externally selectable operating modes
- wide range power supplies as standard



Rated voltage	115/230 V 50/60 Hz	24 V AC/DC
Operating range	95 V – 253 V	10 V – 60 V AC / 15 V – 40 V DC
Material	polycarbonate (PC)	
Light source	LED; 8 x 2 pieces (3 chip version)	
Lens colours	clear, white, yellow, amber, red, green, blue	
Operating modes	continuous light, blinking light 1.5 Hz, flashing light 1 Hz, rotating all-round light 2.5 Hz	
Service life of light source	≥ 50,000 hrs	
Weight	500 g	
Type of connection	spring-type terminal	
Cable entry	2 x M20 bottom side / 2 x M20/M32 sideways	
Protection system according to EN 60529	IP 66, IP 67	
Impact resistance as per EN 50102	IK 08	
Protection class	II	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height x Depth	Model
21104643000	yellow	130 x 130 x 130 mm	115/230 V AC
21104645000	red	130 x 130 x 130 mm	115/230 V AC
21104633000	yellow	130 x 130 x 130 mm	24 V AC/DC
21104635000	red	130 x 130 x 130 mm	24 V AC/DC

## PD 2100-LED LED Continuous Light

- vibration and shock resistant
- outstanding illumination of the coloured lens due to scattering lens



Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	AC: 18 V - 27 V DC: 19 V - 30 V
Material (lens)	polycarbonate (PC)	
Material (housing)	ABS, light grey similar to RAL 7035	
Light source	LED	
Lens colours	clear, white, yellow, amber, red, green, blue	
Service life of light source	> 50,000 hrs	
Weight	380 g	270 g
Connecting terminals	fine wire 0.14 - 2.5 mm <sup>2</sup>	
Cable entry	M20 x 1.5, either sideways or bottom side	
Protection system according to EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height x Depth	Model
21120613000	yellow	166 x 128 x 111 mm	230 V AC
21120615000	red	166 x 128 x 111 mm	230 V AC
21120603000	yellow	166 x 128 x 111 mm	24 V AC/DC
21120605000	red	166 x 128 x 111 mm	24 V AC/DC
28710500040		198 x 144 x 136 mm	accessory - protective cage

## P 200 LDA LED Continuous Light

- compact LED light also for use where space is limited
- large variety of mounting methods



Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	9 high output LEDs	
Lens colours	yellow, amber, red, green, blue	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	78 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21328643000	yellow	Ø 60 x 80 mm	115/230 V AC
21328645000	red	Ø 60 x 80 mm	115/230 V AC
21328633000	yellow	Ø 60 x 80 mm	12/24 V DC
21328635000	red	Ø 60 x 80 mm	12/24 V DC
21390000000		accessory – wall bracket	
21391000000		accessory - tubular stand 137 mm	
28250200000		accessory - wall holder for tubular stand	

## P 100 LDA LED Continuous Light

- compact LED light also for use where space is limited
- panel-mounted device with convenient plug contact



Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 30 V
Material	polycarbonate (PC)	
Light source	9 high output LEDs	
Lens colours	yellow, amber, red, green, blue	
Service life of light source	> 50,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	panel mount: Ø 37.5 mm (PG29)	
Weight	93 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup> pluggable	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21318643000	yellow	Ø 60 x 65.5 mm	115/230 V AC
21318645000	red	Ø 60 x 65.5 mm	115/230 V AC
21318633000	yellow	Ø 60 x 65.5 mm	12/24 V DC
21318635000	red	Ø 60 x 65.5 mm	12/24 V DC

## POL 32-M / POL 10-M LED Obstacle Light

- certified acc. ACC, conform to ICAO appendix 14, band 1, chapter 6
- integrated monitoring with potential-free fault contact



Model	POL 32-M	POL 10-M
Rated voltage	115/230 V 50/60 Hz DC	115/230 V 50/60 Hz DC
Operating range	85–265 V	85–265 V
Material (lens)	polycarbonate (PC)	
Material (plinth)	polybutylene terephthalate (PBT)	
Light source	LED array (red)	
Lens colour	clear	
Light intensity (DIN 5037)	> 32 cd	> 10 cd
Service life of light source	> 50,000 hrs	

Weight	approx. 750 g
Connecting terminals	single wire 0.5 - 2.5 mm <sup>2</sup> - H05(07)V-U, fine wire 0.5 - 1.5 mm <sup>2</sup> - H05(07)V-K
Protection system according to EN 60529	IP 68
Approvals	AVV / ICAO

Article no.	Lens colour	Width x Height	Model
21105681005	clear	Ø 114 x 240 mm	POL 32-M, 115/230 V AC
21105671005	clear	Ø 114 x 240 mm	POL 32-M, 12/24 V DC
21105641005	clear	Ø 114 x 240 mm	POL 10-M, 115/230 V AC
21105631005	clear	Ø 114 x 240 mm	POL 10-M, 12/24 V DC

## P 300 RTH Rotating Mirror Light

- very high signaling effect due to use of halogen light source
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	24 V DC
Material	polycarbonate (PC)	
Light source	halogen lamp G6,35 / GY6,35	
Lens colours	clear, yellow, amber, red, green, blue	
Rotation	approx. 180 min <sup>-1</sup>	
Service life	> 5,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	370 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 1 x M20 cable entry sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21337103000	yellow	Ø 100 x 150 mm	230 V AC
21337105000	red	Ø 100 x 150 mm	230 V AC
21337803000	yellow	Ø 100 x 150 mm	24 V DC
21337805000	red	Ø 100 x 150 mm	24 V DC
21392000000		accessory – wall bracket	
21393000000		accessory - tubular stand 140 mm	
28250200000		accessory - wall holder for tubular stand	

## P 400 RTH Rotating Mirror Light

- very high signaling effect due to use of halogen light source
- large variety of mounting methods



Rated voltage	230 V 50/60 Hz	24 V DC
Material	polycarbonate (PC)	
Light source	halogen lamp G6,35 / GY6,35	
Lens colours	clear, yellow, amber, red, green, blue	
Rotation	approx. 180 min <sup>-1</sup>	
Service life	> 5,000 hrs	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	578 g	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Cable entry	1 x 5-7 mm push through grommet bottom side; 2 x M20 cable entries sideways	
Protection system according to EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens colour	Width x Height	Model
21347103000	yellow	Ø 140 x 220 mm	230 V AC
21347105000	red	Ø 140 x 220 mm	230 V AC
21347803000	yellow	Ø 140 x 220 mm	24 V DC
21347805000	red	Ø 140 x 220 mm	24 V DC
21394000000		accessory – wall bracket	
21395000000		accessory - tubular stand 145 mm	
28250200000		accessory - wall holder for tubular stand	

## Spare colour covers for visual signaling devices



Article no.	Lens colour	for lights
28710500000	clear	Quadro range
28710500001	white	Quadro range
28710500002	yellow	Quadro range
28710500003	amber	Quadro range
28710500004	red	Quadro range
28710500005	green	Quadro range
28710500006	blue	Quadro range
28710500007	clear	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500008	white	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500009	yellow	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500010	amber	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500011	red	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500012	green	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500013	blue	WBL/WBS / WBLR/WBSR / DWBL/DWBS
28710500014	clear	ABL/ABS
28710500015	white	ABL/ABS
28710500016	yellow	ABL/ABS
28710500017	amber	ABL/ABS
28710500018	red	ABL/ABS
28710500019	green	ABL/ABS
28710500020	blue	ABL/ABS
28710500021	clear	PB 2005 / PB 2010 / PMB / PD
28710500022	white	PB 2005 / PB 2010 / PMB / PD
28710500023	yellow	PB 2005 / PB 2010 / PMB / PD
28710500024	amber	PB 2005 / PB 2010 / PMB / PD
28710500025	red	PB 2005 / PB 2010 / PMB / PD
28710500026	green	PB 2005 / PB 2010 / PMB / PD
28710500027	blue	PB 2005 / PB 2010 / PMB / PD
28710500028	clear	PL 105
28710500029	white	PL 105
28710500030	yellow	PL 105
28710500031	amber	PL 105
28710500032	red	PL 105
28710500033	green	PL 105
28710500034	blue	PL 105
28710500035	clear	PMF range
28710500036	amber	PMF range
28710500037	red	PMF range
28710500038	green	PMF range
28710500039	blue	PMF range
28710500045	clear	P 100 / P 200 ranges
28710500046	yellow	P 100 / P 200 ranges
28710500047	amber	P 100 / P 200 ranges
28710500048	red	P 100 / P 200 ranges
28710500049	green	P 100 / P 200 ranges
28710500050	blue	P 100 / P 200 ranges
28710500051	clear	P 300 RTH, lens plain
28710500052	yellow	P 300 RTH, lens plain
28710500053	amber	P 300 RTH, lens plain
28710500054	red	P 300 RTH, lens plain
28710500055	green	P 300 RTH, lens plain
28710500056	blue	P 300 RTH, lens plain
28710500057	clear	P 300 range <sup>1</sup> , lens prismatic
28710500058	yellow	P 300 range <sup>1</sup> , lens prismatic
28710500059	amber	P 300 range <sup>1</sup> , lens prismatic
28710500060	red	P 300 range <sup>1</sup> , lens prismatic
28710500061	green	P 300 range <sup>1</sup> , lens prismatic
28710500062	blue	P 300 range <sup>1</sup> , lens prismatic
28710500063	clear	P 400 RTH, lens plain
28710500064	yellow	P 400 RTH, lens plain
28710500065	amber	P 400 RTH, lens plain
28710500066	red	P 400 RTH, lens plain
28710500067	green	P 400 RTH, lens plain
28710500068	blue	P 400 RTH, lens plain
28710500069	clear	P 400 range <sup>1</sup> , lens prismatic
28710500070	yellow	P 400 range <sup>1</sup> , lens prismatic
28710500071	amber	P 400 range <sup>1</sup> , lens prismatic
28710500072	red	P 400 range <sup>1</sup> , lens prismatic
28710500073	green	P 400 range <sup>1</sup> , lens prismatic
28710500074	blue	P 400 range <sup>1</sup> , lens prismatic

<sup>1</sup> without RTH version

## Signal Towers

### BR 35 Stand mounting Signal Tower

- modular design with 6 different coloured elements as well as sounder module
- for stand mounting
- light is intensified by the prismatic arrangement inside the impact- and heat-resistant, dustproof polycarbonate globes and is clearly visible from all sides



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Material (globe)	polycarbonate (PC)	
Material (housing)	acrylonitrile butadiene styrene (ABS)	
Material (tube)	stainless steel	
Light source	filament lamp BA9s	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	35 mm square-shaped	
Sound pressure level, sounder module	75 dB (A)	
Light intensity	3 W	max. 4 W
Connecting terminals	single wire: 1.5 mm <sup>2</sup> , fine wire: 0.14 – 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 54	
Approvals	CE, UL, (on request: GOST)	

Article no.	Width x Height	Model
22080101000	Ø 60 x 228 mm	230 V AC, 1-stage
22080102000	Ø 60 x 276 mm	230 V AC, 2-stage
22080103000	Ø 60 x 324 mm	230 V AC, 3-stage
22080104000	Ø 60 x 372 mm	230 V AC, 4-stage
22080801000	Ø 60 x 228 mm	24 V DC, 1-stage
22080802000	Ø 60 x 276 mm	24 V DC, 2-stage
22080803000	Ø 60 x 324 mm	24 V DC, 3-stage
22080804000	Ø 60 x 372 mm	24 V DC, 4-stage
22080100000	Ø 60 x 324 mm	230 V AC, 3-stage fixed colour sequence; top: red, middle: yellow, bottom: green
22080800000	Ø 60 x 324 mm	24 V DC, 3-stage fixed colour sequence; top: red, middle: yellow, bottom: green
28235808000		assembly kit sounder module
28235200020		mounting bracket (plastic)

### BR 35 Plinth mounting Signal Tower

- modular design with 6 different coloured elements as well as sounder module
- for plinth mounting, also mountable with bracket
- light is intensified by the prismatic arrangement inside the impact- and heat-resistant, dustproof polycarbonate globes and is clearly visible from all sides



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Material (globe)	polycarbonate (PC)	
Material (housing)	acrylonitrile butadiene styrene (ABS)	
Material (tube)	stainless steel	
Light source	filament lamp BA9s	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	35 mm square-shaped	
Sound pressure level, sounder module	75 dB (A)	
Light intensity	3 W	max. 4 W
Connecting terminals	single wire: 1.5 mm <sup>2</sup> , fine wire: 0.14 – 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 54	
Approvals	CE, UL, (on request: GOST)	

Article no.	Width x Height	Model
22081101000	Ø 60 x 228 mm	230 V AC, 1-stage
22081102000	Ø 60 x 276 mm	230 V AC, 2-stage
22081103000	Ø 60 x 324 mm	230 V AC, 3-stage
22081104000	Ø 60 x 372 mm	230 V AC, 4-stage
22081801000	Ø 60 x 228 mm	24 V DC, 1-stage
22081802000	Ø 60 x 276 mm	24 V DC, 2-stage
22081803000	Ø 60 x 324 mm	24 V DC, 3-stage
22081804000	Ø 60 x 372 mm	24 V DC, 4-stage
28235808000		assembly kit sounder module
28235200020		mounting bracket (plastic)

### BR 35 Tube mounting Signal Tower

- modular design with 6 different coloured elements as well as sounder module
- for tube mounting, also mountable with bracket
- light is intensified by the prismatic arrangement inside the impact- and heat-resistant, dustproof polycarbonate globes and is clearly visible from all sides



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Material (globe)	polycarbonate (PC)	
Material (housing)	acrylonitrile butadiene styrene (ABS)	
Material (tube)	stainless steel	
Light source	filament lamp BA9s	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	35 mm square-shaped	
Sound pressure level, sounder module	75 dB (A)	
Light intensity	3 W	max. 4 W
Type of connection	cable, length 0.5 m	
Protection system according to EN 60529	IP 54	
Approvals	CE, UL, (on request: GOST)	

Article no.	Width x Height	Model
22082101000	Ø 35 x 228 mm	230 V AC, 1-stage
22082102000	Ø 35 x 276 mm	230 V AC, 2-stage
22082103000	Ø 35 x 324 mm	230 V AC, 3-stage
22082104000	Ø 35 x 372 mm	230 V AC, 4-stage
22082801000	Ø 35 x 228 mm	24 V DC, 1-stage
22082802000	Ø 35 x 276 mm	24 V DC, 2-stage
22082803000	Ø 35 x 324 mm	24 V DC, 3-stage
22082804000	Ø 35 x 372 mm	24 V DC, 4-stage
28235808000		assembly kit sounder module
28235200010		mounting bracket (metal)

### BR 35 Panel mounting Signal Tower

- modular design with 6 different coloured elements as well as sounder module
- for Ø 20.5 mm mounting holes
- light is intensified by the prismatic arrangement inside the impact- and heat-resistant, dustproof polycarbonate globes and is clearly visible from all sides



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Material (globe)	polycarbonate (PC)	
Material (housing)	PA	
Light source	filament lamp BA9s	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	35 mm square-shaped	
Sound pressure level, sounder module	75 dB (A) @ 1 m	
Light intensity	3 W	max. 4 W

Mounting	panel mount: Ø 20.5 mm
Type of connection	cable, length 0.5 m
Protection system according to EN 60529	IP 54
Approvals	CE, UL, (on request: GOST)

Article no.	Width x Height	Model
22083101000	Ø 35 x 228 mm	230 V AC, 1-stage
22083102000	Ø 35 x 276 mm	230 V AC, 2-stage
22083103000	Ø 35 x 324 mm	230 V AC, 3-stage
22083104000	Ø 35 x 372 mm	230 V AC, 4-stage
22083801000	Ø 35 x 228 mm	24 V DC, 1-stage
22083802000	Ø 35 x 276 mm	24 V DC, 2-stage
22083803000	Ø 35 x 324 mm	24 V DC, 3-stage
22083804000	Ø 35 x 372 mm	24 V DC, 4-stage
28235808000		assembly kit sounder module

## BR 50 Base and end module for signal towers



- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- up to five modules with a choice of 6 globe colours can be simply plugged together in any permutation, even at a later point of time

Material (housing)	acrylonitrile butadiene styrene (ABS)
Protection system according to EN 60529	IP 54
Approvals	CE, UL, (on request: GOST)

Article no.	Model
28250010000	base and end module for signal tower BR 50
	please order modules separately

## Spare light filter for BR 35



Article no.	Colour	Model
28810500000	clear	light filter for BR 35
28810500001	yellow	light filter for BR 35
28810500002	amber	light filter for BR 35
28810500003	red	light filter for BR 35
28810500004	green	light filter for BR 35
28810500005	blue	light filter for BR 35

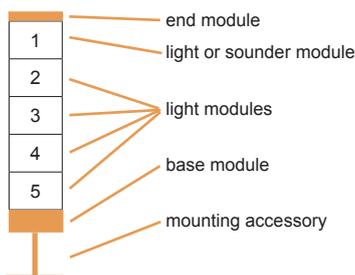
## Spare light source for BR 35 Filament lamp / LED

- light sources with socket BA9s



Article no.	Light source	Model
28813000000	filament lamp	230 V AC 3 W, set of 5
28813000001	filament lamp	115 V AC 3 W, set of 5
28813000002	filament lamp	24 V DC 4 W, set of 5
28813000003	filament lamp	12 V DC 4 W, set of 5
28613000000	LED	12 V / 24 V DC, white
28613000001	LED	12 V / 24 V DC, yellow
28613000002	LED	12 V / 24 V DC, red
28613000003	LED	12 V / 24 V DC, green
28613000004	LED	12 V / 24 V DC, blue

## BR 50 Signal Towers Modular design



## BR 50 continuous light module for signal towers



- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- continuous light module for filament lamps or LED
- up to five modules with a choice of 6 globe colours can be simply plugged together in any permutation, even at a later point of time

Rated voltage	12 V - 253 V (light source not included)
Power consumption	max. 7 W
Material (globe)	polycarbonate (PC)
lamp socket	BA15d for filament lamp or LED
Globe colours	clear, yellow, amber, red, green, blue
Diameter globe	54 mm
Weight	80 g
Protection system according to EN 60529	IP 54
Approvals	CE, UL, (on request: GOST)

Article no.	Lens colour	Model
28250040010	clear	continuous light module
28250040030	yellow	continuous light module
28250040040	amber	continuous light module
28250040050	red	continuous light module
28250040060	green	continuous light module
28250040070	blue	continuous light module
only for use in combination with base- and end module		

## BR 50 Blinking light module for signal towers



- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- blinking light module for filament lamps or LED

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Blinking rate	1.5 Hz	
Material (globe)	polycarbonate (PC)	
lamp socket	BA15d for filament lamp or LED (light source not included)	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	54 mm	
Weight	90 g	
Protection system according to EN 60529	IP 54	
Approvals	CE, UL, (on request: GOST)	

Article no.	Lens colour	Model
28250051050	red	blinking light module 230 V AC
28250051060	green	blinking light module 230 V AC
28250051070	blue	blinking light module 230 V AC
28250058010	clear	blinking light module 24 V DC
28250058030	yellow	blinking light module 24 V DC
28250058040	amber	blinking light module 24 V DC
only for use in combination with base- and end module		

## BR 50 Flashing light module for signal towers



- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- flashing light module with max. 1 Joules flash energy
- up to five modules with a choice of 6 globe colours can be simply plugged together in any permutation, even at a later point of time

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Flash energy	0.6 Joules	1 Joules
Material (globe)	polycarbonate (PC)	
Light source	flash tube	
Globe colours	clear, yellow, amber, red, green, blue	
Diameter globe	54 mm	
Weight	90 g	
Protection system according to EN 60529	IP 54	
Approvals	CE, UL, (on request: GOST)	

Article no.	Lens colour	Model
28250071010	clear	flashing light module 230 V AC
28250071030	yellow	flashing light module 230 V AC
28250071040	amber	flashing light module 230 V AC
28250078050	red	flashing light module 24 V DC
28250078060	green	flashing light module 24 V DC
28250078070	blue	flashing light module 24 V DC
only for use in combination with base- and end module		

## BR 50 Sounder module for signal towers



- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- sounder module with 85 dB (A) noise level
- up to five modules with a choice of 6 globe colours can be simply plugged together in any permutation, even at a later point of time

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	- 15% / + 10%	- 15% / + 20%
Sound pressure level	85 dB (A)	
Material (housing)	polycarbonate (PC)	
Mounting	always installed as the top module	
Weight	230 g	
Protection system according to EN 60529	IP 43	
Approvals	CE, UL, (on request: GOST)	

Article no.	Model
28250081000	sounder module 230 V AC
28250088000	sounder module 24 V DC
only for use in combination with base- and end module	

## BR 50 Mounting accessory for signal towers



- versatility in installation: stand, tube or direct mounting are possible
- easy operation

Design	stand mounting	tube mounting	direct mounting
Material (plinth)	acrylonitrile butadiene styrene (ABS)		
Material (tube)	stainless steel		
Tube thread	30 mm, M16 x 1.5		
Weight	approx. 220 g	approx. 200 g	approx. 180 g

Article no.	Height	Model
28250150010	100 mm	tube with plinth
28250150020	250 mm	tube with plinth
28250150040	400 mm	tube with plinth
28250160010	100 mm	threaded tube with bracket
28250160020	250 mm	threaded tube with bracket
28250160040	400 mm	threaded tube with bracket
28250220000		gasket for light module + base module IP 65
28250230000		gasket for tube or plinth mounting IP 65
28250210000		gasket for direct mounting IP 65
28250200000		plastic wall bracket with hood

## Light source for BR 50 Filament lamp / LED



- bulbs with socket BA15d
- LED with option „plus“ = extra bright
- LEDs with extremely long service life, resistant to shock, vibration and flashing

Article no.	Light source	Model
28213000004	filament lamp	230 V AC, 7 W
28213000000	filament lamp	24 V DC, 7 W
28213000005	filament lamp	230 V AC, 5 W
28213000001	filament lamp	24 V DC, 5 W
28213000013	LED standard plus	230 V AC, white
28213000014	LED standard	230 V AC, white
28213000015	LED standard	230 V AC, yellow
28213000016	LED standard	230 V AC, red
28213000017	LED standard plus	230 V AC, green
28213000018	LED standard	230 V AC, green
28213000019	LED standard plus	230 V AC, blue
28213000020	LED standard	230 V AC, blue
28213000006	LED standard	24 V AC/DC, white
28213000007	LED standard plus	24 V AC/DC, yellow
28213000008	LED standard	24 V AC/DC, yellow
28213000009	LED standard plus	24 V AC/DC, red
28213000010	LED standard	24 V AC/DC, red
28213000011	LED standard	24 V AC/DC, green
28213000012	LED standard	24 V AC/DC, blue

## Audible signaling devices

### SON 2 Sounder

- integrated reverse polarity protection
- automatic synchronisation of several sounders
- integrated volume control



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	± 25%
Material	UL 94 VO & 5VA classified ABS	
Sound pressure level	100 dB (A) @ 1 m	
Alarm tones	32 / 3-stage alarm	
Weight	400 g	300 g
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepared on the side and bottom	
Protection system according to EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23220100010	86 x 86 x 89.5 mm	230 V AC
23220800010	86 x 86 x 64.5 mm	24 V DC

### SON F1 Sounder

- integrated reverse polarity protection
- automatic synchronisation of several sounders
- integrated volume control



Rated voltage	24 V DC	
Operating range	10 V – 30 V	
Material	UL 94 VO & 5VA classified ABS	
Sound pressure level	100 dB (A) @ 1 m	
Alarm tones	10 / 2-stage alarm	
Weight	260 g	
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepared on the side and bottom	
Protection system according to EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23250800010	86 x 86 x 64.5 mm	24 V DC

### DS 5 Sounder

- designed to meet industrial demands for robust operation
- 31 different sounds selectable using the on board switch



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material	cast aluminium GD-Al Si12 CU	
Sound pressure level	105 dB (A) @ 1 m	
Alarm tones	31	
Weight	2.15 kg	1.95 kg

Connecting terminals	max. 2.5 mm <sup>2</sup>	
Size of cable connector	8 – 12 mm	
Cable bushing	2 x M20 1 x chrome-plated brass cable fitting, 1 x chrome-plated brass blanking plug	
Protection system according to EN 60529	IP 66, IP 67	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23106100000	133.5 x 133.5 x 143 mm	230 V AC
23106800000	133.5 x 133.5 x 143 mm	24 V DC

### DS 10 Sounder

- designed to meet industrial demands for robust operation
- 31 different sounds selectable using the on board switch



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material	cast aluminium GD-Al Si12 CU	
Sound pressure level	110 dB (A) @ 1 m	
Alarm tones	31	
Weight	2.15 kg	1.95 kg
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Size of cable connector	8 – 12 mm	
Cable bushing	2 x M20 1 x chrome-plated brass cable fitting, 1 x chrome-plated brass blanking plug	
Protection system according to EN 60529	IP 66, IP 67	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23111100000	133.5 x 133.5 x 143 mm	230 V AC
23111800000	133.5 x 133.5 x 143 mm	24 V DC

### PA 100 Sounder

- high impact resistant plastic
- low current consumption at high sound levels
- universal installation in hospital premises, administration buildings and technical facilities



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	10 V – 30 V
Material	ABS, self-extinguishing	
Sound pressure level	100 dB (A) @ 1 m	
Sound level reduction	up to – 15 dB by potentiometer	
Alarm tones	32 / 3-stage alarm	
Weight	370 g	260 g
Cable entry	M20 disruptions	
Protection system according to EN 60529	IP 56	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23010100000	87 x 87 x 79 mm	230 V AC
23010900000	87 x 87 x 79 mm	24 V DC

## PA 106 Sounder



- high impact resistant plastic
- low current consumption at high sound levels
- universal installation in hospital premises, administration buildings and technical facilities

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	10 V – 30 V
Material	ABS, self-extinguishing	
Sound pressure level	105 dB (A) @ 1 m	
Sound level reduction	up to – 15 dB by potentiometer	
Alarm tones	32 / 3-stage alarm	
Weight	1 kg	0.75 kg
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Cable entry	M20 disruptions	
Protection system according to EN 60529	IP 66	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23016100000	130 x 130 x 132 mm	230 V AC
23016800000	130 x 130 x 132 mm	24 V DC

## P 22 DBZ Panel mount buzzer



- for 22.5 mm mounting holes
- guaranteed high protection level (IP 65) to housing

Rated voltage	230 V 50/60 Hz	24 V AC/DC
Material	polycarbonate (PC)	
Sound pressure level	80 dB (A) @ 10 cm	
Operating mode	pulsating tone	
Weight	30 g	
Connecting terminals	screw terminals 1.5 mm <sup>2</sup>	
Mounting	panel mount: Ø 22.5 mm	
Protection system according to EN 60529	IP 65	

Article no.	Width x Height x Depth	Model
23270100000	Ø 29 x 62 mm	230 V AC
23270800000	Ø 29 x 62 mm	24 V AC/DC
23292000000	accessory - label holder 25 x 10 mm	
23291000000	accessory - label holder 25 x 18 mm	

## PA 110 Sounder



- high impact resistant plastic
- low current consumption at high sound levels
- universal installation in hospital premises, administration buildings and technical facilities

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	10 V – 30 V
Material	ABS, self-extinguishing	
Sound pressure level	110 dB (A) @ 1 m	
Sound level reduction	up to – 12 dB by potentiometer	
Alarm tones	45 / 3-stage alarm	
Weight	2.1 kg	1.8 kg
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Cable entry	M20 disruptions	
Protection system according to EN 60529	IP 66	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23020100000	168 x 168 x 156,5 mm	230 V AC
23020900000	168 x 168 x 156,5 mm	24 V DC

## P 28 DMC Panel mount buzzer



- for 28.6 mm mounting holes
- guaranteed high protection level (IP 65) to housing

Model	P 28 DMC948	P 28 DMC201	P 28 DMC301
Rated voltage	48 V DC	110 V AC	230 V AC
Operating range	9 V – 48 V	30 V – 120 V	130 V – 230 V
Material	plastic "NORYL® N-190", UL 49-VO, black		
Sound pressure level	91 dB (A) @ 1 m		
Sound level reduction	up to 20 dB		
Operating mode	continuous tone		
Weight	40 g		
Mounting	panel mount: Ø 28.6 mm		
Type of connection	quick connect blades, 6.3 mm width, 0.8 mm thick		
Protection system according to EN 60529	IP 65		

Article no.	Width x Height x Depth	Model
23260700000	Ø 35.8 x 38.2 mm	P 28 DMC948
23260160000	Ø 35.8 x 38.2 mm	P 28 DMC201
23260110000	Ø 35.8 x 38.2 mm	P 28 DMC301

## PA 120 Sounder



- high impact resistant plastic
- low current consumption at high sound levels
- universal installation in hospital premises, administration buildings and technical facilities

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	10 V – 30 V
Material	ABS, self-extinguishing	
Sound pressure level	120 dB (A) @ 1 m	
Sound level reduction	up to – 10 dB by potentiometer	
Alarm tones	45 / 3-stage alarm	
Weight	2.7 kg	2.1 kg
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Cable entry	M20 disruptions	
Protection system according to EN 60529	IP 66	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model
23025100000	190 x 190 x 191.5 mm	230 V AC
23025900000	190 x 190 x 191.5 mm	24 V DC

## P 28 DMB530 Panel mount buzzer



- for 28.6 mm mounting holes
- guaranteed high protection level (IP 65) to housing
- 2 different signaling modes in one device

Rated voltage	30 V DC	
Operating range	5 V – 30 V	
Material	plastic „NORYL® N-190“, UL 49-VO, black	
Sound pressure level	91 dB (A) @ 1 m	
Sound level reduction	up to 20 dB	
Operating mode	continuous tone / pulsating tone	
Weight	40 g	
Mounting	panel mount: Ø 28.6 mm	
Type of connection	quick connect blades, 6.3 mm width, 0.8 mm thick	
Protection system according to EN 60529	IP 65	

Article no.	Width x Height x Depth	Model
23265800000	Ø 35.8 x 38.2 mm	P 28 DMB530

## Combined visual-audible signaling devices

### P 22 DBF Blinking LED panel mount indicator with buzzer

- for 22.5 mm mounting holes
- space-saving combination of buzzer and blinking LED indicator
- simple electrical connection



Rated voltage	230 V 50/60 Hz	24 V DC
Light source	LED array	
Blinking frequency	1 Hz	
Lens colour	red	
Sound pressure level	80 dB (A) @ 10 cm	
Operating mode	pulsating tone	
Weight	90 g	
Mounting	panel mount: Ø 22.5 mm	
Type of connection	screw terminals 1.5 mm <sup>2</sup>	
Protection system according to EN 60529	IP 65 (to housing)	

Article no.	Width x Height x Depth	Model
23272105000	Ø 29 x 62 mm	230 V AC, red
23272805000	Ø 29 x 62 mm	24 V DC, red
23292000000	accessory - label holder 25 x 10 mm	
23291000000	accessory - label holder 25 x 18 mm	

### SON 4L LED Blinking Sounder

- protected against reverse polarity
- automatic synchronisation in system operation
- low current consumption



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	± 25%
Material (housing)	UL 94 VO & 5VA classified ABS	
Material (lens)	polycarbonate (PC)	
Sound pressure level	100 dB (A) @ 1 m	
Alarm tones	32 / 2-stage alarm	
Light source	5 high output LEDs	
Blinking frequency	2 Hz	
Lens colours	clear, yellow, amber, red, green, blue	
Weight	400 g	300 g
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepared on the side and bottom	
Protection system according to EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23241103010	86 x 86 x 102 mm	230 V AC amber
23241105010	86 x 86 x 102 mm	230 V AC red
23241803010	86 x 86 x 77 mm	24 V DC amber
23241805010	86 x 86 x 77 mm	24 V DC red

### SON 4L Flashing Alarm Sounder

- protected against reverse polarity
- automatic synchronisation in system operation
- low current consumption



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	± 25%
Material (housing)	UL 94 VO & 5VA classified ABS	
Material (lens)	polycarbonate (PC)	
Sound pressure level	100 dB (A) @ 1 m	
Alarm tones	32 / 3-stage alarm	

Light source	xenon flash tube	
Flash energy	0,25 Joules	
Flash frequency	1 Hz	
Lens colours	clear, amber, red, green, blue	
Weight	400 g	300 g
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepared on the side and bottom	
Protection system according to EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23240103010	86 x 86 x 102 mm	230 V AC yellow
23240105010	86 x 86 x 102 mm	230 V AC red
23240803010	86 x 86 x 77 mm	24 V DC yellow
23240805010	86 x 86 x 77 mm	24 V DC red

### SON FL1 Flashing Alarm Sounder

- protected against reverse polarity
- automatic synchronisation in system operation
- low current consumption



Rated voltage	24 V DC	12 V DC
Operating range	20 V – 28 V	10 V – 14 V
Material (housing)	UL 94 VO & 5VA classified ABS	
Material (lens)	polycarbonate (PC)	
Sound pressure level	100 dB (A) ± 3 dB (A) @ 1 m	
Alarm tones	10 / 2-stage alarm	
Light source	xenon flash tube	
Flash energy	5 Joules	
Blinking frequency	1 Hz	
Lens colours	clear, yellow, amber, red, green, blue	
Weight	260 g	
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepared on the side and bottom	
Protection system according to EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23252804010	86 x 172 x 83 mm	24 V DC amber
23252805010	86 x 172 x 83 mm	24 V DC red

### DSF 5 Flashing Alarm Sounder

- high reliability and a long service life
- 31 different sounder tones adjustable
- extremely bright with 13 joules flash energy



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material (housing sounder)	cast aluminium GD-Al Si12 CU	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	105 dB (A) @ 1 m	
Alarm tones	31	
Flash energy	13 Joules	
Lens colours	clear, yellow, amber, red, green, blue	
Weight	2.6 kg	
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Size of cable connector	8 – 12 mm	
Cable bushing	2 x M20 1 x chrome-plated brass cable fitting, 1 x chrome-plated brass blanking plug	
Protection system according to EN 60529	IP 66, IP 67	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model
23107105000	133.5 x 263.5 x 143 mm	230 V AC, red
23107805000	133.5 x 263.5 x 143 mm	24 V DC, red

## DSF 10 Flashing Alarm Sounder

- high reliability and a long service life
- 31 different sounder tones adjustable
- extremely bright with 13 joules flash energy



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material (housing sounder)	cast aluminium GD-Al Si12 CU	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	110 dB (A) @ 1 m	
Alarm tones	31	
Flash energy	13 Joules	
Lens colours	clear, yellow, amber, red, green, blue	
Weight	2.6 kg	
Connecting terminals	max. 2.5 mm <sup>2</sup>	
Size of cable connector	8 – 12 mm	
Cable bushing	2 x M20	
Protection system according to EN 60529	1 x chrome-plated brass cable fitting, 1 x chrome-plated brass blanking plug	
Approvals	IP 66, IP 67 (on request: GOST)	

Article no.	Width x Height x Depth	Model
23112105000	133.5 x 263.5 x 143 mm	230 V AC, red
23112805000	133.5 x 263.5 x 143 mm	24 V DC, red

Sound level reduction	up to – 15 dB by potentiometer	
Alarm tones	32 / 3-stage alarm	
Flash energy	5 Joules	
Flash rate	1 Hz	
Lens colours	clear, white, yellow, amber, red, green, blue	
Weight	1200 g	460 g
Cable entry	M20	
Protection system according to EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model
23056103000	130 x 213 x 132 mm	230 V AC, yellow
23056104000	130 x 213 x 132 mm	230 V AC, amber
23065803000	130 x 213 x 132 mm	24 V DC, yellow
23065804000	130 x 213 x 132 mm	24 V DC, amber

## PAB 110 Flashing Alarm Sounder

- flashing light and sounder can be connected separately
- 45 different warning signals



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	20 V – 28 V
Material (housing sounder)	ABS, self-extinguishing	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	110 dB (A) @ 1 m	
Sound level reduction	up to – 12 dB by potentiometer	
Alarm tones	45 / 3-stage alarm	
Flash energy	5 Joules	
Flash rate	1 Hz	
Lens colours	clear, white, yellow, amber, red, green, blue	
Weight	2.3 kg	2.0 kg
Cable entry	M20	
Protection system according to EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model
23060104000	168 x 252 x 168 mm	230 V AC, amber
23060105000	168 x 252 x 168 mm	230 V AC, red
23060404000	168 x 252 x 168 mm	24 V DC, amber
23060805000	168 x 252 x 168 mm	24 V DC, red

## PAB 100 Flashing Alarm Sounder

- flashing light and sounder can be connected separately
- automatic synchronisation when controlling several devices



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	20 V – 28 V
Material (housing sounder)	ABS, self-extinguishing	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	100 dB (A) @ 1 m	
Sound level reduction	up to – 15 dB by potentiometer	
Alarm tones	32 / 3-stage alarm	
Flash energy	5 Joules	
Flash rate	1 Hz	
Lens colours	clear, white, yellow, amber, red, green, blue	
Weight	570 g	460 g
Cable entry	M20	
Protection system according to EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model
23050103000	87 x 174 x 83 mm	230 V AC, yellow
23050105000	87 x 174 x 83 mm	230 V AC, red
23050803000	87 x 174 x 83 mm	24 V DC, yellow
23050805000	87 x 174 x 83 mm	24 V DC, red

## PAB 120 Flashing Alarm Sounder

- flashing light and sounder can be connected separately
- 45 different warning signals



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	20 V – 28 V
Material (housing sounder)	ABS, self-extinguishing	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	120 dB (A) @ 1 m	
Sound level reduction	up to – 10 dB by potentiometer	
Alarm tones	45 / 3-stage alarm	
Flash energy	5 Joules	
Flash rate	1 Hz	
Lens colours	clear, white, yellow, amber, red, green, blue	
Weight	2.9 kg	2.3 kg
Cable entry	M20	
Protection system according to EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model
23065103000	190 x 273 x 191.5 mm	230 V AC, yellow
23065105000	190 x 273 x 191.5 mm	230 V AC, red
23065803000	190 x 273 x 191.5 mm	24 V DC, yellow
23065805000	190 x 273 x 191.5 mm	24 V DC, red

## PAB 106 Flashing Alarm Sounder

- flashing light and sounder can be connected separately
- automatic synchronisation when controlling several devices



Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	± 10%	20 V – 28 V
Material (housing sounder)	ABS, self-extinguishing	
Material (housing flashing light)	ABS, self-extinguishing	
Material (lens flashing light)	polycarbonate (PC)	
Sound pressure level	105 dB (A) @ 1 m	

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