

# Signal Solutions

Alarm, Warning & Indicator  
Visual and Audible Technology

Edition 10.1



SHARING  
COMPETENCE | 

**Pfannenberger**   
ELECTRO-TECHNOLOGY FOR INDUSTRY

## ***Safety for man, machine and the environment!***



### ***Reliable signaling devices - a must-have for machines, vehicles, and factories.***

Pfannenberg is your reliable and competent partner for visual and acoustic indication, warning and emergency signals. In factory buildings, on machines, aboard ships or on large structures, highways, bridges and in tunnels—Pfannenberg signals everywhere warn of danger, fire, accidents or technical defects. Early detection of failures and the associated alarm signals are indispensable for a trouble-free production process, as well as warning of and minimizing dangerous situations. Reduced risks, downtime and interruptions will increase efficiency and prevent unnecessary costs.

Pfannenberg's top priority is to thoroughly understand our customers' requirements so that we may tailor our solutions to suit their needs. This also applies to our Add-On Services, which are particularly valuable in the signal technology sector. Our product specialists will be pleased to offer you comprehensive advice on your special requirements.

#### **Industry Specific**

Pfannenberg offers solutions for diverse types of industry:

- Machine safety – Function-monitored flashing lights
- Renewable energies –
  - Voice alarms in bio-gas heating and power plants
- Building equipment – Obstruction lights
- Fire prevention – Sounders in gas-fired power stations
- Art illumination – Illumination of the Eiffel Tower

We have expanded our product range by nearly 600 products and we are excited to present our new line of SPECTRA lights, beacons and mounted alarms, which compliment and complete our existing product range. Covering the industrial spectrum, Pfannenberg can supply standard solutions from one source as well as countless custom solutions.

#### **Reliability and innovation**

Pfannenberg's corporate values are beneficial for all customers: highest efficiency in all business processes, energy-saving products and maintenance-free solutions to go hand-in-hand with environmental and social consciousness, as well as fairness in dealing with business partners and employees.

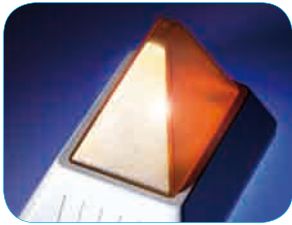
Pfannenberg is a family-owned company in the second generation. It has a long-standing tradition of outstanding innovative product developments, such as shock-resistant and energy-efficient flashing LED lights, wall-penetrating sounders, self-monitoring alarm signals for machines and cost-optimized rotating mirror lights.

Following the concept and practice of 'sharing competence', Pfannenberg works to build products which suit particular needs. Regular training, seminars and many years of experience make our employees savvy in the field and can provide solutions with the best results. The experiences and knowledge gained are made available to all - further promoting organizational development at Pfannenberg, so our clients can benefit from our competence.

By developing products which are efficient and reliable, we remain true to our company motto: 'Safety for man, machine and the environment!'



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## 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 colors	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 EN 60529	IP 55 (vertical mounting)
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21010104000	amber	Ø 177 x 185 mm	direct mount 230 V AC	\$481
21010105000	red	Ø 177 x 185 mm	direct mount 230 V AC	\$481
21010104010	amber	Ø 150 x 185 mm	bracket mount 230 V AC	\$506
21010105010	red	Ø 150 x 185 mm	bracket mount 230 V AC	\$506

## 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 mount: polycarbonate (PC), direct mount: ABS	
Light source	flash tube	
Lens colors	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 EN 60529	IP 55 (vertical mounting)	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21007104000	amber	Ø 177 x 185 mm	direct mounting 230 V AC	\$325
21007105000	red	Ø 177 x 185 mm	direct mounting 230 V AC	\$325
21007804000	amber	Ø 177 x 185 mm	direct mounting 24 V DC	\$345
21007805000	red	Ø 177 x 185 mm	direct mounting 24 V DC	\$345
21007104010	amber	Ø 150 x 185 mm	bracket mounting 230 V AC	\$342
21007105010	red	Ø 150 x 185 mm	bracket mounting 230 V AC	\$342
21007804010	amber	Ø 150 x 185 mm	bracket mounting 24 V DC	\$362
21007805010	red	Ø 150 x 185 mm	bracket mounting 24 V DC	\$362

## 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)	aluminum (Al MG Si 1), yellow anodized	
Material (base)	polycarbonate (PC) with fiber glass	
Light source	flash tube	
Lens colors	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 EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS, CE	

Article no.	Lens color	Width x Height	Model	Price
21001163000	yellow flash	Ø 80 x 242 mm	110 V AC	\$395
21001165000	red flash	Ø 80 x 242 mm	110 V AC	\$395
21001803000	yellow	Ø 80 x 242 mm	24 V DC	\$416
21001805000	red	Ø 80 x 242 mm	24 V DC	\$416
28710500042	accessory	Ø 96 x 100 mm	protective cage	\$90

## P 400 STR Flashing Light

- optimum illumination due to prismatic colored 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21344153000	yellow	Ø 140 x 220 mm	115 V AC	\$316
21344155000	red	Ø 140 x 220 mm	115 V AC	\$316
21344403000	yellow	Ø 140 x 220 mm	24 V AC/DC	\$296
21344405000	red	Ø 140 x 220 mm	24 V AC/DC	\$296
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.

## P 400 STS Flashing Light

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

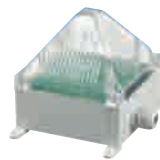


Rated voltage	230 V 50/60 Hz	24 V AC/DC
Operating range	207 V – 253 V	20 V – 28 V
Material	polycarbonate (PC)	
Light source	flash tube	
Lens colors	clear, yellow, amber, red, green, blue	
Flash rate	1 Hz = 60 flashes/min.	
Flash energy	15 Joules	
Service life of light source	light emission still 70 % after 8,000,000 flashes	
Design	bayonet with anti-tamper locking screw	
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 EN 60529	IP 65	
Approvals on request	GOST	

Article no.	Lens color	Width x Height	Model	Price
21345153000	yellow	Ø 140 x 220 mm	115 V AC	\$347
21345155000	red	Ø 140 x 220 mm	115 V AC	\$347
21345403000	yellow	Ø 140 x 220 mm	24 V AC/DC	\$361
21345405000	red	Ø 140 x 220 mm	24 V AC/DC	\$361
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

## 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 colors	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 EN 60529	IP 66, IP 67	
Impact resistance EN 50102	IK 08	
Protection class	II	
Approvals on request	GOST	

Article no.	Lens color	Width x Height x Depth	Model	Price
21041163000	yellow	130 x 130 x 130 mm	115 V AC	\$383
21041165000	red	130 x 130 x 130 mm	115 V AC	\$383
21041803000	yellow	130 x 130 x 130 mm	24 V DC	\$395
21041805000	red	130 x 130 x 130 mm	24 V DC	\$395

P/N's and pricing for other colors and voltages available upon request.

## 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 colors	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 EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens color	Width x Height x Depth	Model	Price
21030163000	yellow	166 x 128 x 111 mm	110 V AC	\$351
21030165000	red	166 x 128 x 111 mm	110 V AC	\$351
21030803000	yellow	166 x 128 x 111 mm	24 V DC	\$370
21030805000	red	166 x 128 x 111 mm	24 V DC	\$370
28710500040	accessory	198 x 144 x 136 mm	protective cage	\$127

## 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 colors	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 EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST, GL, RMS	

Article no.	Lens color	Width x Height x Depth	Model	Price
21025163000	yellow	166 x 128 x 111 mm	110 V AC	\$200
21025165000	red	166 x 128 x 111 mm	110 V AC	\$200
21025803000	yellow	166 x 128 x 111 mm	24 V DC	\$230
21025805000	red	166 x 128 x 111 mm	24 V DC	\$230
28710500040	accessory	198 x 144 x 136 mm	protective cage	\$127

## WBL/WBS Flashing Light

- housing and mounting bracket made of sturdy anodized aluminum
- 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)	aluminum (Al Mg Si 1), yellow anodized	
Material (base)	polycarbonate (PC) with fiber glass	
Light source	flash tube	
Lens colors	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 EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS, CE	

Article no.	Lens color	Width x Height	Model	Price
21003163000	yellow	Ø 54 x 200 mm	110 V AC	\$224
21003165000	red	Ø 54 x 200 mm	110 V AC	\$224
21003803000	yellow	Ø 54 x 200 mm	24 V DC	\$258
21003805000	red	Ø 54 x 200 mm	24 V DC	\$258
28710500041	accessory	Ø 70 x 89 mm	protective cage	\$77

## WBLR/WBSR Flashing Light

- compact plastic housing
- especially suitable for outdoor applications - 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, GL, RMS, CE	

Article no.	Lens color	Width x Height x Depth	Model	Price
21004163000	yellow	120 x 144 x 85 mm	110 V AC	\$167
21004165000	red	120 x 144 x 85 mm	110 V AC	\$167
21004803000	yellow	120 x 144 x 85 mm	24 V DC	\$205
21004805000	red	120 x 144 x 85 mm	24 V DC	\$205
28710500043	accessory	Ø 70 x 85 mm	protective cage	\$79

## P 300 STR Flashing Light

- optimum illumination due to prismatic colored lens
- components mechanically protected for 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 colors	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	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21334153000	yellow	Ø 100 x 150 mm	115 V AC	\$122
21334155000	red	Ø 100 x 150 mm	115 V AC	\$122
21334403000	yellow	Ø 100 x 150 mm	24 V AC/DC	\$123
21334405000	red	Ø 100 x 150 mm	24 V AC/DC	\$123
21392000000	accessory	-	wall bracket	\$13
21393000000	accessory	-	tubular stand 140 mm	\$35
28250200000	accessory	-	wall holder for tubular stand	\$8

## PL 105 Flashing Light

- 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 colors	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 EN 60529	IP 56	
Approvals on request	GOST, UL, CE	

Article no.	Lens color	Width x Height x Depth	Model	Price
21301163002	yellow	86 x 83 x 86 mm with lugs	110 V AC	\$145
21301165002	red	86 x 83 x 86 mm with lugs	110 V AC	\$145
21301803000	yellow	86 x 83 x 86 mm	24 V DC	\$148
21301805000	red	86 x 83 x 86 mm	24 V DC	\$148

P/N's and pricing for other colors and voltages available upon request.

## DWBL/DWBS Flashing Light



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

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)	aluminum (Al MG Si 1), yellow anodized	
Material (base)	polycarbonate (PC) with fiber glass	
Light source	flash tube	
Lens colors	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 EN 60529	IP 54 (vertical mounting)	
Approvals on request	GOST, GL, RMS, CE	

Article no.	Lens color	Width x Height x Depth	Model	Price
21005163000	yellow	120 x 144 x 85 mm	110 V AC	\$217
21005165000	red	120 x 144 x 85 mm	110 V AC	\$217
21005803000	yellow	120 x 144 x 85 mm	24 V DC	\$254
21005805000	red	120 x 144 x 85 mm	24 V DC	\$254
28710500041	accessory	Ø 70 x 85 mm	protective cage	\$77

## 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21324153000	yellow	Ø 60 x 80 mm	115 V AC	\$92
21324155000	red	Ø 60 x 80 mm	115 V AC	\$92
21324893000	yellow	Ø 60 x 80 mm	12/24 V AC/DC	\$91
21324895000	red	Ø 60 x 80 mm	12/24 V AC/DC	\$91
21390000000	accessory	-	wall bracket	\$11
21391000000	accessory	-	tubular stand 137 mm	\$22
28250200000	accessory	-	wall holder for tubular stand	\$8

## 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 colored 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21314153000	yellow	Ø 60 x 65.5 mm	115 V AC	\$97
21314155000	red	Ø 60 x 65.5 mm	115 V AC	\$97
21314893000	yellow	Ø 60 x 65.5 mm	12/24 V AC/DC	\$96
21314895000	red	Ø 60 x 65.5 mm	12/24 V AC/DC	\$96

## P 400 FLF Blinking Light



- powerful blinking light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue	
Light capacity	40 W 0.5 Hz / 1 Hz / 2 Hz 3 blinking frequencies adjustable	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	535 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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21341153000	yellow	Ø 140 x 220 mm	115 V AC	\$139
21341155000	red	Ø 140 x 220 mm	115 V AC	\$139
21341803000	yellow	Ø 140 x 220 mm	24 V DC	\$139
21341805000	red	Ø 140 x 220 mm	24 V DC	\$139
28113000016	spare part	-	filament lamp 24 V	\$12
28113000018	spare part	-	filament lamp 230 V	\$12
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.

## P 400 FLH Blinking Halogen Light

- powerful blinking halogen light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue	
Light capacity	35 W / 40 W 0.5 Hz / 1 Hz / 2 Hz 3 blinking frequencies adjustable	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	535 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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21343153000	yellow	Ø 140 x 220 mm	115 V AC	\$152
21343155000	red	Ø 140 x 220 mm	115 V AC	\$152
21343803000	yellow	Ø 140 x 220 mm	24 V DC	\$152
21343805000	red	Ø 140 x 220 mm	24 V DC	\$152
28113000032	spare part	-	halogen filament lamp 24V	\$12
28113000034	spare part	-	halogen filament lamp 230V	\$12
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

## P 300 FLF Blinking Light

- blinking light for universal use, large variety of mounting methods
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue	
Light capacity	25 W 0.5 Hz / 1 Hz / 2 Hz 3 blinking frequencies adjustable	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	283 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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21331153000	yellow	Ø 100 x 150 mm	115 V AC	\$97
21331155000	red	Ø 100 x 150 mm	115 V AC	\$97
21331803000	yellow	Ø 100 x 150 mm	24 V DC	\$97
21331805000	red	Ø 100 x 150 mm	24 V DC	\$97
28113000011	spare part	-	filament lamp 24V	\$10
28113000014	spare part	-	filament lamp 230V	\$10
21392000000	accessory	-	wall bracket	\$13
21393000000	accessory	-	tubular stand 140 mm	\$35
28250200000	accessory	-	wall holder for tubular stand	\$8

## P 300 FLH Blinking Halogen Light

- blinking light for universal use
- large variety of mounting methods
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue	
Light capacity	20 W / 25 W 0.5 Hz / 1 Hz / 2 Hz 3 blinking frequencies adjustable	
Design	bayonet with anti-tamper locking screw	
Mounting	surface mounting (wall bracket & tubular stand as accessories)	
Weight	279 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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21333153000	yellow	Ø 100 x 150 mm	115 V AC	\$138
21333155000	red	Ø 100 x 150 mm	115 V AC	\$138
21333803000	yellow	Ø 100 x 150 mm	24 V DC	\$138
21333805000	red	Ø 100 x 150 mm	24 V DC	\$138
28113000028	spare part	-	halogen filament lamp 24V	\$12
28113000030	spare part	-	halogen filament lamp 230V	\$12
21392000000	accessory	-	wall bracket	\$13
21393000000	accessory	-	tubular stand 140 mm	\$35
28250200000	accessory	-	wall holder for tubular stand	\$8

## 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 colored 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21321153000	yellow	Ø 60 x 80 mm	115 V AC	\$82
21321155000	red	Ø 60 x 80 mm	115 V AC	\$82
21321803000	yellow	Ø 60 x 80 mm	24 V DC	\$68
21321805000	yellow	Ø 60 x 80 mm	24 V DC	\$68
28113000023	spare part	-	filament lamp 24V	\$9
28113000026	spare part	-	filament lamp 230V	\$9
21390000000	accessory	-	wall bracket	\$11
21391000000	accessory	-	tubular stand 137 mm	\$22
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.



## 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21311153000	yellow	Ø 60 x 80 mm	115 V AC	\$87
21311155000	red	Ø 60 x 80 mm	115 V AC	\$87
21311803000	yellow	Ø 60 x 80 mm	24 V DC	\$73
21311805000	red	Ø 60 x 80 mm	24 V DC	\$73
28113000023	spare part	-	filament lamp 24V	\$9
28113000026	spare part	-	filament lamp 230V	\$9

## 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 color	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 EN 60529	IP 65 (to housing)	

Article no.	Lens color	Width x Height	Model	Price
23271805000	red	Ø 29 x 62 mm	24 V AC/DC	\$31
23271155000	red	Ø 29 x 62 mm	115 V AC	\$31
23292000000	label holder	-	25 x 10 mm	\$3
23291000000	label holder	-	25 x 18 mm	\$3

## 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 colors	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 EN 60529	IP 65 (to housing)	

Article no.	Lens color	Width x Height	Model	Price
23273154000	amber	Ø 29 x 52 mm	115 V AC	\$19
23273155000	red	Ø 29 x 52 mm	115 V AC	\$19
23273804000	amber	Ø 29 x 52 mm	24 V AC/DC	\$19
23273805000	red	Ø 29 x 52 mm	24 V AC/DC	\$19
23292000000	label holder	-	label holder 25 x 10 mm	\$3
23291000000	label holder	-	label holder 25 x 18 mm	\$3

P/N's and pricing for other colors and voltages available upon request.

## PD 2100 Continuous Light

- elegant pyramid design
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue
Weight	250 g
Cable entry	M20 x 1.5, sideways or bottom side
Protection system EN 60529	IP 55 (vertical/horizontal mounting)
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21120303000	yellow	185 x 120 x 140 mm	lamp socket BA15d	\$118
21120305000	red	185 x 120 x 140 mm	lamp socket E14	\$118
28113000000	accessory	-	filament lamp 24V E14	\$10
28113000004	accessory	-	filament lamp 240V E14	\$10
28710500040	accessory	198 x 144 x 136	protective cage	\$127

## P 400 SLF Continuous Light

- powerful status light for universal use
- optimum illumination due to prismatic colored 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 colors	clear, yellow, amber, red, green, blue
Design	bayonet with anti-tamper locking screw
Mounting	surface mounting (wall bracket & tubular stand 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 EN 60529	IP 65
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21340623000	yellow	Ø 140 x 220 mm	12-250 V	\$74
21340625000	red	Ø 140 x 220 mm	12-250 V	\$74
28113000016	accessory	-	filament lamp 24V	\$12
28113000018	accessory	-	filament lamp 230V	\$12
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8



## P 100 SLF Continuous Light

- compact status light also for use where space is limited
- optimum illumination due to prismatic colored 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 colors	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 EN 60529	IP 65
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21310613000	yellow	Ø 60 x 65.5 mm	12-250 V	\$31
21310615000	red	Ø 60 x 65.5 mm	12-250 V	\$31
28113000023	accessory	-	halogen filament lamp 24V	\$9
28113000026	accessory	-	filament lamp 230V	\$9

## 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 color	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21355644000	amber	Ø 140 x 177 mm	115/230 V AC	\$132
21355645000	red	Ø 140 x 177 mm	115/230 V AC	\$132
21355646000	green	Ø 140 x 177 mm	115/230 V AC	\$192
21355634000	amber	Ø 140 x 177 mm	12/24 V DC	\$154
21355635000	red	Ø 140 x 177 mm	12/24 V DC	\$154
21355636000	green	Ø 140 x 177 mm	12/24 V DC	\$209
21399000000	accessory	-	wall bracket for single mounting	\$18
21397000000	accessory	-	wall bracket set for 2/3 combination	\$29

P/N's and pricing for other colors and voltages available upon request.

## 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 color	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21352644000	amber	Ø 100 x 140 mm	115/230 V AC	\$128
21352645000	red	Ø 100 x 140 mm	115/230 V AC	\$128
21352646000	green	Ø 100 x 140 mm	115/230 V AC	\$166
21352634000	amber	Ø 100 x 140 mm	12/24 V DC	\$147
21352635000	red	Ø 100 x 140 mm	12/24 V DC	\$147
21352636000	green	Ø 100 x 140 mm	12/24 V DC	\$185
21398000000	accessory	-	wall bracket/single mount	\$17
21396000000	accessory	-	wall bracket set for 2/3 combo	\$28

## P 450 TSB Traffic Light

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



Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 25 W
Operation mode	continuous light
Material	polycarbonate (PC)
Light source	filament lamp E27
Lens colors	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 EN 60529	IP 65
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21354654000	amber	Ø 140 x 177 mm	12-250 V	\$47
21354655000	red	Ø 140 x 177 mm	12-250 V	\$47
21354656000	green	Ø 140 x 177 mm	12-250 V	\$47
28113000019	accessory	-	halogen filament lamp 24V	\$10
28113000021	accessory	-	halogen filament lamp 230V	\$10
21399000000	accessory	-	wall bracket for single mounting	\$18
21397000000	accessory	-	wall bracket set for 2/3 combination	\$29

## P 450 TDB Traffic Light



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

Rated voltage	12 – 250 V (light sources not included)
Power consumption	max. 2 x 15 W
Operation mode	continuous light (redundant)
Material	polycarbonate (PC)
Light source	2 x filament lamp E14
Lens colors	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 EN 60529	IP 65
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21353624000	amber	Ø 140 x 177 mm	12-250 V	\$63
21353625000	red	Ø 140 x 177 mm	12-250 V	\$63
21353626000	green	Ø 140 x 177 mm	12-250 V	\$63
28113000000	accessory	-	filament lamp 24 V	\$10
28113000004	accessory	-	filament lamp 240 V	\$10
21399000000	accessory	-	wall bracket for single mounting	\$18
21397000000	accessory	-	wall bracket set for 2/3 combination	\$29

## P 350 TSB Traffic Light



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

Rated voltage	12 – 250 V (light source not included)
Power consumption	max. 15 W
Operation mode	continuous light
Material	polycarbonate (PC)
Light source	filament lamp E14
Lens colors	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 EN 60529	IP 65
Approvals on request	GOST, CE

Article no.	Lens color	Width x Height	Model	Price
21351624000	amber	Ø 100 x 140 mm	12-250 V	\$45
21351625000	red	Ø 100 x 140 mm	12-250 V	\$45
21351626000	green	Ø 100 x 140 mm	12-250 V	\$45
28113000000	accessory	-	filament lamp 24 V	\$10
28113000004	accessory	-	filament lamp 240 V	\$10
21398000000	accessory	-	wall bracket for single mounting	\$17
21396000000	accessory	-	wall bracket set for 2/3 combination	\$28

## PMF-LED-Flex Multifunction LED



- rotating mirror effect, extreme less current consumption
- 4 external 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 colors	amber, red, green, blue	
Operation 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 EN 60529	IP 55 (vertical mounting)	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21151644007	amber	Ø 150 x 185 mm	230 V AC bracket mounting	\$365
21151645007	red	Ø 150 x 185 mm	230 V AC bracket mounting	\$374
21151634007	amber	Ø 150 x 185 mm	24 V AC/DC bracket mounting	\$367
21151635007	red	Ø 150 x 185 mm	24 V AC/DC bracket mounting	\$377
21151644006	amber	Ø 177 x 185 mm	230 V AC direct mounting	\$318
21151645006	red	Ø 177 x 185 mm	230 V AC direct mounting	\$328
21151634006	amber	Ø 177 x 185 mm	24 V AC/DC direct mounting	\$321
21151635006	red	Ø 177 x 185 mm	24 V AC/DC direct mounting	\$330

## P 400 LDA LED Multi Function Light



- optimum illumination due to prismatic colored 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 colors	yellow, amber, red, green, blue	
Operation 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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21348153000	yellow	Ø 140 x 220 mm	115 V AC	\$460
21348155000	red	Ø 140 x 220 mm	115 V AC	\$460
21348903000	yellow	Ø 140 x 220 mm	12/24 V DC	\$416
21348905000	red	Ø 140 x 220 mm	12/24 V DC	\$416
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.

## P 300 LDA LED Multi Function Light

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

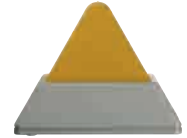


Rated voltage	115/230 V 50/60 Hz	12/24 V DC
Operating range	90 V – 253 V	10 V – 50 V
Material	polycarbonate (PC)	
Light source	high output LED array	
Lens colors	yellow, amber, red, green, blue	
Operation modes	9 internally selectable operation modes	
Service life of light source	> 50,000 hrs	
Design	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 EN 60529	IP 65	
Approvals on request	GOST, C E	

Article no.	Lens color	Width x Height	Model	Price
21338173000	yellow	Ø 140 x 150 mm	115/230 V AC	\$169
21338175000	red	Ø 100 x 150 mm	115/230 V AC	\$169
21338903000	yellow	Ø 140 x 150 mm	12/24 V DC	\$167
21338905000	red	Ø 140 x 150 mm	12/24 V DC	\$167
21392000000	accessory	-	wall bracket	\$13
21393000000	accessory	-	tubular stand 140 mm	\$35
28250200000	accessory	-	wall holder for tubular stand	\$8

## PD 2100-LED LED Continuous Light

- vibration and shock resistant
- scattering lens illuminates colored lens brightly



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 colors	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 EN 60529	IP 55 (vertical/horizontal mounting)	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21120613000	yellow	166 x 128 x 111 mm	230 V AC	\$231
21120615000	red	166 x 128 x 111 mm	230 V AC	\$169
21120603000	yellow	166 x 128 x 111 mm	24 V AC/DC	\$231
21120605000	red	166 x 128 x 111 mm	24 V AC/DC	\$169
28710500040	accessory	198 x 144 x 136 mm	protective cage	\$127

## 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 colors	clear, white, yellow, amber, red, green, blue	
Operation 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 EN 60529	IP 66, IP 67	
Impact resistance as per EN 50102	IK 08	
Protection class	II	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21104643000	yellow	130 x 130 x 130 mm	115/230 V AC	\$368
21104645000	red	130 x 130 x 130 mm	115/230 V AC	\$368
21104633000	yellow	130 x 130 x 130 mm	24 V AC/DC	\$371
21104635000	red	130 x 130 x 130 mm	24 V AC/DC	\$371

## 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21328643000	yellow	Ø 60 x 80 mm	115/230 V AC	\$73
21328645000	red	Ø 60 x 80 mm	115/230 V AC	\$73
21328633000	yellow	Ø 60 x 80 mm	12/24 V DC	\$62
21328635000	red	Ø 60 x 80 mm	12/24 V DC	\$62
21390000000	accessory	-	wall bracket	\$11
21391000000	accessory	-	tubular stand 137 mm	\$22
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.

## 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 colors	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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21318643000	yellow	Ø 60 x 65.5 mm	115/230 V AC	\$75
21318645000	red	Ø 60 x 65.5 mm	115/230 V AC	\$75
21318633000	yellow	Ø 60 x 65.5 mm	12/24 V DC	\$66
21318635000	red	Ø 60 x 65.5 mm	12/24 V DC	\$66

## 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	12/24 V DC	115/230 V 50/60 Hz	12/24 V DC
Operating range	85–265 V	9.6–28.8 V	85–265 V	9.6–28.8 V
Material (lens)	polycarbonate (PC)			
Material (plinth)	polybutylene terephthalate (PBT)			
Light source	LED array (red)			
Lens color	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)JV-U, fine wire 0.5 - 1.5 mm <sup>2</sup> - H05(07)JV-K			
Protection system EN 60529	IP 68			
Approvals	AVV / ICAO, CE			

Article no.	Lens color	Width x Height	Model	Price
21105681005	red	Ø 114 x 240 mm	POL 32-M, 115/230 V AC	\$616
21105671005	red	Ø 114 x 240 mm	POL 32-M, 12/24 V DC	\$643
21105641005	red	Ø 114 x 240 mm	POL 10-M, 115/230 V AC	\$489
21105631005	red	Ø 114 x 240 mm	POL 10-M, 12/24 V DC	\$515

## 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 colors	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 surface mounting (wall bracket & tubular stand as accessories)	
Mounting		
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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21337153000	yellow	Ø 100 x 150 mm	115 V AC	\$164
21337155000	red	Ø 100 x 150 mm	115 V AC	\$164
21337803000	yellow	Ø 100 x 150 mm	24 V DC	\$128
21337805000	red	Ø 100 x 150 mm	24 V DC	\$128
21392000000	accessory	-	wall bracket	\$13
21393000000	accessory	-	tubular stand 140 mm	\$35
28250200000	accessory	-	wall holder for tubular stand	\$8

## 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 colors	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 surface mounting (wall bracket & tubular stand as accessories)	
Mounting		
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 EN 60529	IP 65	
Approvals on request	GOST, CE	

Article no.	Lens color	Width x Height	Model	Price
21347153000	yellow	Ø 140 x 220 mm	115 V AC	\$181
21347155000	red	Ø 140 x 220 mm	115 V AC	\$181
21347803000	yellow	Ø 140 x 220 mm	24 V DC	\$159
21347805000	red	Ø 140 x 220 mm	24 V DC	\$159
21394000000	accessory	-	wall bracket	\$20
21395000000	accessory	-	tubular stand 145 mm	\$38
28250200000	accessory	-	wall holder for tubular stand	\$8

P/N's and pricing for other colors and voltages available upon request.

## BR 35 Stand Mounting Signal Tower

- Six different colors and sounder available
- Prismatic impact- and heat-resistant, dust proof polycarbonate globe intensifies light 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 colors	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 EN 60529	IP 54	
Approvals	(on request: GOST, UL)	



## BR 35 Tube mounting Signal Tower

- Six different colors and sounder available, also mountable with bracket
- Prismatic impact- and heat-resistant, dust proof polycarbonate globe intensifies light 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 colors	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 EN 60529	IP 54	
Approvals	(on request: GOST, UL)	



Article no.	Width x Height	Model	Price
22080101000	Ø 60 x 228 mm	230 V AC, 1-stage	\$93
22080102000	Ø 60 x 276 mm	230 V AC, 2-stage	\$129
22080103000	Ø 60 x 324 mm	230 V AC, 3-stage	\$149
22080104000	Ø 60 x 372 mm	230 V AC, 4-stage	\$168
22080801000	Ø 60 x 228 mm	24 V DC, 1-stage	\$91
22080802000	Ø 60 x 276 mm	24 V DC, 2-stage	\$127
22080803000	Ø 60 x 324 mm	24 V DC, 3-stage	\$146
22080804000	Ø 60 x 372 mm	24 V DC, 4-stage	\$164
22080100000	Ø 60 x 324 mm	230 V AC, 3-stage fixed color sequence; top: red, middle: yellow, bottom: green	\$132
22080800000	Ø 60 x 324 mm	24 V DC, 3-stage fixed color sequence; top: red, middle: yellow, bottom: green	\$128

Article no.	Width x Height	Model	Price
22082101000	Ø 35 x 228 mm	230 V AC, 1-stage	\$90
22082102000	Ø 35 x 276 mm	230 V AC, 2-stage	\$127
22082103000	Ø 35 x 324 mm	230 V AC, 3-stage	\$147
22082104000	Ø 35 x 372 mm	230 V AC, 4-stage	\$167
22082801000	Ø 35 x 228 mm	24 V DC, 1-stage	\$88
22082802000	Ø 35 x 276 mm	24 V DC, 2-stage	\$124
22082803000	Ø 35 x 324 mm	24 V DC, 3-stage	\$144
22082804000	Ø 35 x 372 mm	24 V DC, 4-stage	\$163

## BR 35 Panel Mounting Signal Tower

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 colors	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 EN 60529	IP 54	
Approvals	(on request: GOST, UL)	



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

- light sources with socket BA9s



Article no.	Light source	Model	Price
28813000000	filament lamp	230 V AC 3 W, set of 5	\$38
28813000001	filament lamp	115 V AC 3 W, set of 5	\$35
28813000002	filament lamp	24 V DC 4 W, set of 5	\$33
28813000003	filament lamp	12 V DC 4 W, set of 5	\$32
28613000000	LED	24 V DC, white	\$50
28613000001	LED	24 V DC, yellow	\$50
28613000002	LED	24 V DC, red	\$50
28613000003	LED	24 V DC, green	\$50
28613000004	LED	24 V DC, blue	\$50

## Spare lens for BR 35



Article no.	Color	Model	Price
28810500000	clear	light filter for BR 35	\$11
28810500001	yellow	light filter for BR 35	\$11
28810500002	amber	light filter for BR 35	\$11
28810500003	red	light filter for BR 35	\$11
28810500004	green	light filter for BR 35	\$11
28810500005	blue	light filter for BR 35	\$11

P/N's and pricing for other colors and voltages available upon request.

## BR 50 continuous light module for signal towers

- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications, for filament lamps or LED
- up to five modules with a choice of 6 globe colors can be combined



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 colors	clear, yellow, amber, red, green, blue
Diameter globe	54 mm
Weight	80 g
Protection system EN 60529	IP 54
Approvals	(on request: GOST, UL)

Article no.	Lens color	Model	Price
28250040010	clear	continuous light module	\$30
28250040030	yellow	continuous light module	\$30
28250040040	amber	continuous light module	\$30
28250040050	red	continuous light module	\$30
28250040060	green	continuous light module	\$30
28250040070	blue	continuous light module	\$30
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 colors	clear, yellow, amber, red, green, blue	
Diameter globe	54 mm	
Weight	90 g	
Protection system EN 60529	IP 54	
Approvals	(on request: GOST, UL)	

Article no.	Lens color	Model	Price
28250051650	red	blinking light module 115 V AC	\$94
28250051660	green	blinking light module 115 V AC	\$94
28250051670	blue	blinking light module 115 V AC	\$94
28250058010	clear	blinking light module 24 V DC	\$94
28250058030	yellow	blinking light module 24 V DC	\$94
28250058040	amber	blinking light module 24 V DC	\$94
only for use in combination with base- and end module			

## BR 50 Base and end module for signal towers

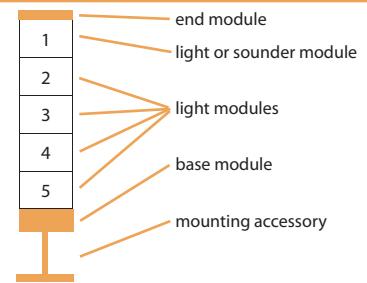
- signal towers in modular design with a sturdy enclosure for indoor and outdoor applications
- up to five modules with a choice of 6 globe colors can be simply plugged together in any permutation, even at a later point of time



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

Article no.	Model	Price
28250010000	base and end module for signal tower BR 50	\$38

## BR 50 Signal Towers Modular Design



## BR 50 Flashing light module for signal towers

- flashing light module with max. 1 Joules flash energy
- up to five modules with a choice of 6 globe colors can be combined



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 colors	clear, yellow, amber, red, green, blue	
Diameter globe	54 mm	
Weight	90 g	
Protection system EN 60529	IP 54	
Approvals	(on request: GOST, UL)	

Article no.	Lens color	Model	Price
28250071610	clear	flashing light module 115 V AC	\$142
28250071630	yellow	flashing light module 115 V AC	\$142
28250071640	amber	flashing light module 115 V AC	\$142
28250078050	red	flashing light module 24 V DC	\$142
28250078060	green	flashing light module 24 V DC	\$142
28250078070	blue	flashing light module 24 V DC	\$142
only for use in combination with base- and end module			

## BR 50 Mounting Accessories 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	Price
28250150010	100 mm	tube with plinth	\$28
28250150020	250 mm	tube with plinth	\$33
28250150040	400 mm	tube with plinth	\$36
28250160010	100 mm	threaded tube with bracket	\$37
28250160020	250 mm	threaded tube with bracket	\$40
28250160040	400 mm	threaded tube with bracket	\$56
28250220000		gasket for light module + base module IP 65	\$1
28250230000		gasket for tube or plinth mounting IP 65	\$1
28250210000		gasket for direct mounting IP 65	\$1
28250200000		plastic wall bracket with hood	\$8

P/N's and pricing for other colors and voltages available upon request.



## BR 50 Sounder module for signal towers



- for indoor and outdoor applications
- sounder module with 85 dB (A) noise level
- up to five modules with a choice of 6 globe colors can be combined

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 EN 60529	IP 43	
Approvals	(on request: GOST, UL)	

Article no.	Model	Price
28250081600	sounder module 115 V AC	\$96
28250088000	sounder module 24 V DC	\$96
only for use in combination with base- and end module		

## 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	Price
28213000004	filament lamp	230 V AC, 7 W	\$8
28213000000	filament lamp	24 V DC, 7 W	\$8
28213000002	filament lamp	115 V AC, 7 W	\$8
28213000021	LED standard plus	115 V AC, white	\$49
28213000022	LED standard	115 V AC, white	\$49
28213000023	LED standard	115 V AC, yellow	\$49
28213000024	LED standard	115 V AC, red	\$49
28213000025	LED standard plus	115 V AC, green	\$49
28213000026	LED standard	115 V AC, green	\$49
28213000027	LED standard plus	115 V AC, blue	\$49
28213000028	LED standard	115 V AC, blue	\$49
28213000006	LED standard	24 V AC/DC, white	\$49
28213000007	LED standard plus	24 V AC/DC, yellow	\$49
28213000008	LED standard	24 V AC/DC, yellow	\$49
28213000009	LED standard plus	24 V AC/DC, red	\$49
28213000010	LED standard	24 V AC/DC, red	\$49
28213000011	LED standard	24 V AC/DC, green	\$49
28213000012	LED standard	24 V AC/DC, blue	\$49

P/N's and pricing for other colors and voltages available upon request.

## Spare Color Covers for Visual Signaling Devices



Article no.	Lens color	for lights	Price
28710500000	clear	Quadro range	\$118
28710500001	white	Quadro range	\$118
28710500002	yellow	Quadro range	\$118
28710500003	amber	Quadro range	\$118
28710500004	red	Quadro range	\$118
28710500005	green	Quadro range	\$118
28710500006	blue	Quadro range	\$118
28710500007	clear	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500008	white	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500009	yellow	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500010	amber	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500011	red	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500012	green	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500013	blue	WBL/WBS / WBLR/WBSR / DWBL/DWBS	\$52
28710500014	clear	ABL/ABS	\$58
28710500015	white	ABL/ABS	\$58
28710500016	yellow	ABL/ABS	\$58
28710500017	amber	ABL/ABS	\$58
28710500018	red	ABL/ABS	\$58
28710500019	green	ABL/ABS	\$58
28710500020	blue	ABL/ABS	\$58
28710500021	clear	PB 2005 / PB 2010 / PMB / PD	\$51
28710500022	white	PB 2005 / PB 2010 / PMB / PD	\$51
28710500023	yellow	PB 2005 / PB 2010 / PMB / PD	\$51
28710500024	amber	PB 2005 / PB 2010 / PMB / PD	\$51
28710500025	red	PB 2005 / PB 2010 / PMB / PD	\$51
28710500026	green	PB 2005 / PB 2010 / PMB / PD	\$51
28710500027	blue	PB 2005 / PB 2010 / PMB / PD	\$51
28710500028	clear	PL 105	\$65
28710500029	white	PL 105	\$93
28710500030	yellow	PL 105	\$84
28710500031	amber	PL 105	\$84
28710500032	red	PL 105	\$65
28710500033	green	PL 105	\$65
28710500034	blue	PL 105	\$93
28710500035	clear	PMF range	\$95
28710500036	amber	PMF range	\$84
28710500037	red	PMF range	\$64
28710500038	green	PMF range	\$95
28710500039	blue	PMF range	\$84
28710500045	clear	P 100 / P 200 ranges	\$27
28710500046	yellow	P 100 / P 200 ranges	\$27
28710500047	amber	P 100 / P 200 ranges	\$27
28710500048	red	P 100 / P 200 ranges	\$27
28710500049	green	P 100 / P 200 ranges	\$27
28710500050	blue	P 100 / P 200 ranges	\$27
28710500051	clear	P 300 RTH, lens plain	\$44
28710500052	yellow	P 300 RTH, lens plain	\$44
28710500053	amber	P 300 RTH, lens plain	\$44
28710500054	red	P 300 RTH, lens plain	\$44
28710500055	green	P 300 RTH, lens plain	\$44
28710500056	blue	P 300 RTH, lens plain	\$44
28710500057	clear	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500058	yellow	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500059	amber	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500060	red	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500061	green	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500062	blue	P 300 range <sup>1</sup> , lens prismatic	\$44
28710500063	clear	P 400 RTH, lens plain	\$64
28710500064	yellow	P 400 RTH, lens plain	\$64
28710500065	amber	P 400 RTH, lens plain	\$64
28710500066	red	P 400 RTH, lens plain	\$64
28710500067	green	P 400 RTH, lens plain	\$64
28710500068	blue	P 400 RTH, lens plain	\$64
28710500069	clear	P 400 range <sup>1</sup> , lens prismatic	\$64
28710500070	yellow	P 400 range <sup>1</sup> , lens prismatic	\$64
28710500071	amber	P 400 range <sup>1</sup> , lens prismatic	\$64
28710500072	red	P 400 range <sup>1</sup> , lens prismatic	\$64
28710500073	green	P 400 range <sup>1</sup> , lens prismatic	\$64
28710500074	blue	P 400 range <sup>1</sup> , lens prismatic	\$64

<sup>1</sup> without RTH version

## 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 EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23220150010	86 x 86 x 89.5 mm	115 V AC	\$149
23220800010	86 x 86 x 64.5 mm	24 V DC	\$96

## 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 EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23250800010	86 x 86 x 64.5 mm	24 V DC	\$70

## 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 aluminum 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 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	Price
23106150000	133.5 x 133.5 x 143 mm	115 V AC	\$367
23106800000	133.5 x 133.5 x 143 mm	24 V DC	\$355

## 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 aluminum 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 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	Price
23111150002	133.5 x 133.5 x 143 mm	115 V AC, UL	\$552
23111800000	133.5 x 133.5 x 143 mm	24 V DC	\$359

## PA 100 Sounder

- high impact resistant plastic, low current draw at high sound levels
- Great for hospitals, administration or 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 EN 60529	IP 56	
Approvals	Vds, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model	Price
23010160002	87 x 87 x 79 mm	115 V AC, UL	\$197
23010900000	87 x 87 x 79 mm	24 V DC	\$131

## PA 106 Sounder

- high impact-resistant plastic
- low current consumption at high sound levels
- Great for hospitals, administration or 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 EN 60529	IP 66	
Approvals	Vds, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model	Price
23016160002	130 x 130 x 132 mm	110 V AC	\$301
23016800000	130 x 130 x 132 mm	24 V DC	\$251

## PA 110 Sounder

- high impact resistant plastic, low current draw at high sound levels
- Great for hospitals, administration or 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 EN 60529	IP 66	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model	Price
23020160000	168 x 168 x 156,5 mm	110 V AC	\$479
23020900000	168 x 168 x 156,5 mm	24 V DC	\$362

## PA 120 Sounder

- high impact resistant plastic, low current draw at high sound levels
- Great for hospitals, administration or 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 EN 60529	IP 66	
Approvals	VdS, EN 54-3 / (on request: RMS, GL, UL, GOST)	

Article no.	Width x Height x Depth	Model	Price
23025160000	190 x 190 x 191.5 mm	230 V AC	\$744
23025900000	190 x 190 x 191.5 mm	24 V DC	\$596

## Individual Sound Levels for Day or Night



Two externally controllable volume levels can be reduced by an external controller or via a floating contact.

Create less disturbance with continuously operating sounders by customizing volume levels for day and night operation.

Avoid startled reactions by starting the alarm at low volume and gradually increase. Call today for more information!

## 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	
Operation 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 EN 60529	IP 65	

Article no.	Width x Height x Depth	Model	Price
23270150000	Ø 29 x 62 mm	115 V AC	\$33
23270800000	Ø 29 x 62 mm	24 V AC/DC	\$33
23292000000	accessory - label holder 25 x 10 mm		\$3
23291000000	accessory - label holder 25 x 18 mm		\$3

## 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		
Operation 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 EN 60529	IP 65		

Article no.	Width x Height x Depth	Model	Price
23260700000	Ø 35.8 x 38.2 mm	P 28 DMC948	\$35
23260160000	Ø 35.8 x 38.2 mm	P 28 DMC201	\$41
23260110000	Ø 35.8 x 38.2 mm	P 28 DMC301	\$39

## 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
Operation 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 EN 60529	IP 65

Article no.	Width x Height x Depth	Model	Price
23265800000	Ø 35.8 x 38.2 mm	P 28 DMB530	\$46

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



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

Rated voltage	230 V 50/60 Hz	24 V DC
Light source	LED array	
Blinking frequency	1 Hz	
Lens color	red	
Sound pressure level	80 dB (A) @ 10 cm	
Operation 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 EN 60529	IP 65 (to housing)	

Article no.	Width x Height x Depth	Model	Price
23272155000	Ø 29 x 62 mm	115 V AC, red	\$38
23272805000	Ø 29 x 62 mm	24 V DC, red	\$38
23292000000	accessory - label holder 25 x 10 mm		\$3
23291000000	accessory - label holder 25 x 18 mm		\$3

## SON 4L LED Blinking Sounder



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

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, Blinking frequency	5 high output LEDs	2 Hz
Lens colors	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 prepped on side and bottom	
Protection system EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23241155010	86 x 86 x 102 mm	115 V AC red	\$168
23241803010	86 x 86 x 77 mm	24 V DC yellow	\$122
23241805010	86 x 86 x 77 mm	24 V DC red	\$122

## SON 4 Flashing Alarm Sounder



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

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, Flash frequency	0,25 Joules, 1 Hz	
Lens colors	clear, amber, red, green, blue	
Connecting terminals	0.5 – 2.5 mm <sup>2</sup>	
Cable entry	M20 / 4 disruptions prepped on side and bottom	
Protection system EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23240155010	86 x 86 x 102 mm	115 V AC red	\$199
23240803010	86 x 86 x 77 mm	24 V DC yellow	\$161
23240805010	86 x 86 x 77 mm	24 V DC red	\$161

## SON FL1 Flashing Alarm Sounder



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

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, Blinking frequency	5 Joules, 1 Hz	
Lens colors	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 EN 60529	IP 55	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23252804010	86 x 172 x 83 mm	24 V DC amber	\$193
23252805010	86 x 172 x 83 mm	24 V DC red	\$193

## DSF 5 Flashing Alarm Sounder



- high reliability and a long service life
- 31 different sounder tones adjustable, extremely bright

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material (housing sounder)	cast aluminum 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	
Flash energy	13 Joules	
Lens colors	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 EN 60529	IP 66, IP 67	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23107155000	133.5 x 263.5 x 143 mm	115 V AC, red	\$667
23107805000	133.5 x 263.5 x 143 mm	24 V DC, red	\$675

## DSF 10 Flashing Alarm Sounder



- high reliability and a long service life
- 31 different sounder tones adjustable, extremely bright

Rated voltage	230 V 50/60 Hz	24 V DC
Operating range	195 V – 253 V	19 V – 29 V
Material (housing sounder)	cast aluminum 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	
Flash energy	13 Joules	
Lens colors	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 EN 60529	IP 66, IP 67	
Approvals	(on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23112155000	133.5 x 263.5 x 143 mm	115 V AC, red	\$686
23112805000	133.5 x 263.5 x 143 mm	24 V DC, red	\$679

P/N's and pricing for other colors and voltages available upon request.

## 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, Flash Rate	5 Joules, 1 Hz	
Lens colors	clear, white, yellow, amber, red, green, blue	
Weight	570 g	460 g
Cable entry	M20	
Protection system EN 60529	IP 56	
Approvals	UL (on request: GOST)	

Article no.	Width x Height x Depth	Model	Price
23050163002	87 x 174 x 83 mm	110 V AC, UL, yellow	\$402
23050165002	87 x 174 x 83 mm	110 V AC, UL, red	\$402
23050803000	87 x 174 x 83 mm	24 V DC, yellow	\$402
23050805000	87 x 174 x 83 mm	24 V DC, red	\$402

## 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, Flash Rate	5 Joules, 1 Hz	
Lens colors	clear, white, yellow, amber, red, green, blue	
Weight	2.3 kg	2.0 kg
Cable entry	M20	
Protection system EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model	Price
23060164002	168 x 252 x 168 mm	110 V AC, UL, amber	\$664
23060165002	168 x 252 x 168 mm	110 V AC, UL, red	\$664
23060804000	168 x 252 x 168 mm	24 V DC, amber	\$664
23060805000	168 x 252 x 168 mm	24 V DC, red	\$664

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

Article no.	Width x Height x Depth	Model	Price
23056163002	130 x 213 x 132 mm	110 V AC, UL, yellow	\$519
23056164002	130 x 213 x 132 mm	110 V AC, UL, amber	\$519
23065803000	130 x 213 x 132 mm	24 V DC, yellow	\$946
23065804000	130 x 213 x 132 mm	24 V DC, amber	\$946

## 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 colors	clear, white, yellow, amber, red, green, blue	
Weight	2.9 kg	2.3 kg
Cable entry	M20	
Protection system EN 60529	IP 56	
Approvals	(on request: GOST, UL)	

Article no.	Width x Height x Depth	Model	Price
23065163002	190 x 273 x 191.5 mm	110 V AC, UL, yellow	\$946
23065165002	190 x 273 x 191.5 mm	110 V AC, UL, red	\$946
23065803000	190 x 273 x 191.5 mm	24 V DC, yellow	\$946
23065805000	190 x 273 x 191.5 mm	24 V DC, red	\$946

## SIL/PL Compliant Signaling Technology

*Now Available!*

Easily integrate new safety standards into your machines or systems.

DS Series Sounders along with Quadro and PMF Series flashing beacons provide a high degree of safety both in the design and construction, and the operation of your machines and facilities with 100% SIL-PL conformity. (OSHA FCR 1910.119 & ANSI/ISA S84.01, i.e. IEC 61511)

Make safety your priority. Call today for more information!





# Aviation & Obstruction Lighting - Highly Reliable, Cost-Efficient Solutions

### Lightweight

The aluminum-constructed housing and core in combination with thermal conducting paste provide the best LED temperature management results with a passive cooling system and a light weight.

### Dimming

In combination with a visibility measurement unit, all lights are dimmable with possible intensity levels at 30% and 10%. Dimming reduces temperature, provides a longer lifespan for LED's, and minimizes the disturbance in surrounding areas. LED technology Degradation Control System for stabilized light output over the entire lifetime of the LED.

### Decentralized Driver Electronics

No active electronic parts inside the light provides increased lightning protection and the option of a central system configuration within one control cabinet.



### LED Drivers

Each light needs it's own LED Driver.

#### Standard Version -

Operates from 170 to 20,000 candela (Night and Day)

#### Small Version -

Operates from 170 to 2000 candela (Night Only)

Maximum cable length between driver and light - 150 m  
(30 m with optimized lightning protection)

### Control & Monitoring Electronics (CME)

#### Standard Version -

Each can handle up to 4 obstruction lights  
(170 to 20,000 candela)

#### Advanced Version -

Same as standard plus 2 x 4 obstacle lights (10 or 23 cd)

All lights connected to the same CME are synchronized  
(without GPS). 99 CME units could be connected together.

#### Monitoring System -

Two warning and failure signals via dry contacts.

### Optional Equipment

- **Twilight Sensor** - to control day and night function
- **GPS Receiver** - to synchronize several systems (if more than one CME is connected to the system)
- **Visibility Measurement** - To provide dimming functionality
- **RF Module** - For communication between CME's of one system (i.e. wind park - dimming function)



**POL 170W-R**  
**LED Obstruction Light**

LED obstruction light for night light indication of wind power plants.



**Technical Information**

170 cd W-red, night light indication (AVV)

Special Flash Sequence -  
1s on, .5s off, 1s on, 1.5s off

Light output reducible

**POL 2000R**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for night light indication of aviation obstructions.



**Technical Information**

2000 cd red, night light indication

Type B: Flash Light, Type C: Steady Light

Light output reducible

**POL 2000W**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for night light indication of aviation obstructions.



**Technical Information**

2000 cd white, night light indication

Type A: Flash Light (20 - 60 fpm)

Light output reducible

**POL 20,000W**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for daylight indication of aviation obstructions.



**Technical Information**

20,000 cd white, daylight indication

Type A: Flash Light (20 - 60 fpm)

Light output reducible

**POL 20,000W / 170W-R**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for day and night light indication of wind power plants



**Technical Information**

20,000 cd white, daylight indication (Type A)

170 cd red, night light indication (AVV)

Flash Light (20 - 60 fpm)

Light output reducible

**POL 20,000W / 2000R**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for day and night light indication of aviation obstructions.



**Technical Information**

20,000 cd white, daylight indication (Type A)

2000 cd red, night light indication (Type B or C)

Type B: Flash Light, Type C: Steady Light

Light output reducible

**POL 20,000W / 2000W**  
**LED Obstruction Light**

Medium intensity LED Obstruction Light for day and night light indication of aviation obstructions.



**Technical Information**

20,000 cd white, daylight indication (Type A)

2000 cd white, night light indication (Type A)

Flash Light (20 - 60 fpm)

Light output reducible

Consult Factory for specifications, pricing and further information.

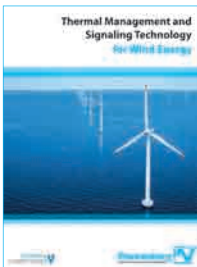
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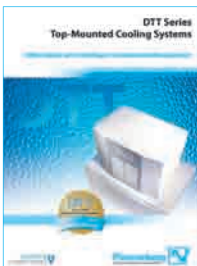
### *DTS Series Thermal Management Solutions Guide*



### *Thermal Management Solutions Guide*



### *Wind Energy Solutions Guide*



### *DTT Series Thermal Management Solutions Guide*

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Subject to technical amendments and misprints.