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We expand our successful product range of the Q-Series. Soon, we provide you additional to the popular LED Multi Strobe Beacons in size 3 and 4, some new models. QBS and QBM are available in the sizes 1 and 2.

With the new products we are now able to offer you LED Multi Strobe Beacons for every industrial or general applications in four different sizes from 94 to 228 mm!

Benefit from:

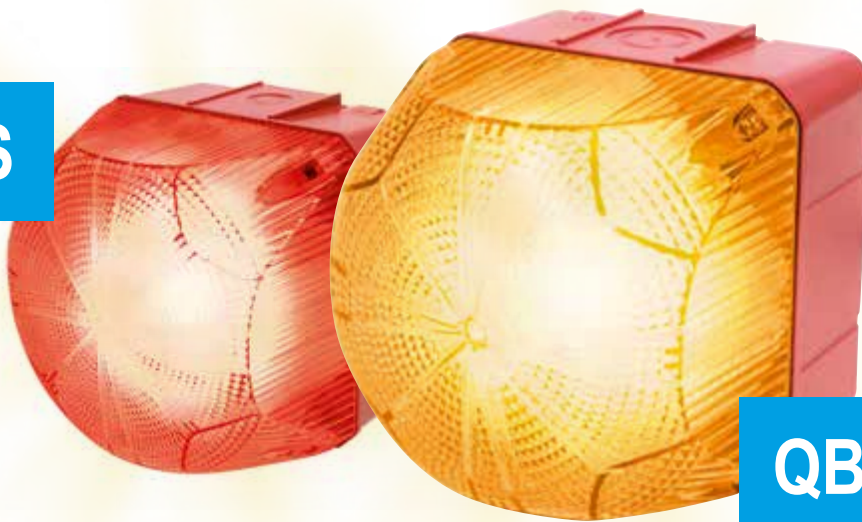
- ✓ versatile installation and mounting options
- ✓ modern LED strobe technique
- ✓ 4 strobe patterns
- ✓ 2 externally switchable strobe patterns
- ✓ separately controllable sound and light

**Also available in combination with
buzzer or multi-tone alarm sounders!**



New Products!

QBS



QBM

LED Multi Strobe Beacons

- ✓ Sizes 1 and 2 – 94 and 132 mm
- ✓ frontal and **lateral** signal effect / light emission
- ✓ **best signal effect**
- ✓ multi strobe patterns more attention than anything else
- ✓ long lifetime of LED
- ✓ low current consumption
- ✓ **vibration proof**
- ✓ unique beacon / lens design

Scheduled availability: 1st quarter 2017





Beacons Series „Q“

LED Steady/Flashing Beacons „Q“
Xenon Strobe Beacons „Q“
LED Multi Strobe Beacons „Q“

	Size 1 H = 94 mm	Size 2 H = 132 mm	Size 3 H = 184 mm	Size 4 H = 228 mm
				
	QDS	QDM	QDL	QDX
LED Steady/ Flashing Beacons	 10 Cd	 120 Cd	 170 Cd	 300 Cd
	QBS	QBM	QBL	QBX
LED Multi Strobe Beacons	 n/a Cd	 n/a Cd	 250 Cd	 400 Cd
	QFS	QFM		
Xenon Strobe Beacons	 ~5 J	 ~5 J		

Features

- Comprehensive range of cubic design beacons in LED and xenon technique
- In modern LED strobe technique**
(long lifetime, low current consumption, vibration proof)
 - LED steady/flashing beacons in sizes 1-4
 - LED multi strobe beacons in sizes 1-4
 - most modern LED technique with high signalling effect, 3-4 strobe patterns (depending on the model) externally switchable
- In conventional xenon strobe technique**
(classic signalling with good signalling effect)
 - xenon strobe beacons in sizes 1-2
- For applications in the industry, process control, fire/gas alarm, marine, etc.
- By combining e.g. LED steady beacons (up to 4 sizes) traffic control signals (eg red-amber-green) but also individual colour combinations for industrial or general applications can be realized
- Unique beacon/lens design
- Versatile installation and mounting options
- Fit for plc applications (leakage, inrush current)

Besides the use of „Q“ beacons as single beacons one can also combine same sized „Q“ beacons – for example to a traffic light solution.

To combine 2 beacons you require accessory type „AMK“ – mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“.

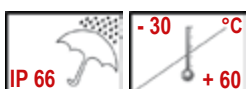
Typical example:

Combination of QDM – LED steady/flashing beacon (size 2), 230/240 V AC for red-amber-green.

Type	Order no.	Product
QDM	874 262 413	LED steady/flashing beacon - size 2, red
QDM	874 261 413	LED steady/flashing beacon - size 2, amber
QDM	874 266 413	LED steady/flashing beacon - size 2, green
AMK	874 010 900	2 pcs. mounting kit for combination of multi-tone alarm sounders „A“ and/or beacons „Q“

For detailed information regarding accessories and installation options please refer to page 79/80.

The Candela values refer to colour clear (white) at 230 V operating voltage and a measuring angle of 1° in axial direction.





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QDS	LED steady/flashing beacon size 1 amber, red, yellow, clear, blue, green	LED 10 Cd	24 V AC/DC	+/- 10%	0,2	874 16C 405
			48 V AC/DC		0,11	874 16C 408
			110/120 V AC		0,05	874 16C 310
			230/240 V AC		0,05	874 16C 313
QDM	LED steady/flashing beacon size 2 amber, red, yellow, clear, blue, green	LED 120 Cd	24-48 V AC/DC	19-75 V DC	0,5	874 26C 408
				19-53 V AC		
			110-240 V AC	80-265 V AC	< 0,07	874 26C 413
QDL	LED steady/flashing beacon size 3 amber, red, clear, yellow, blue, green	LED 170 Cd	24-48 V AC/DC	18-60 V DC	max. 0,780	874 36C 408
				18-53 V AC		
			110-240 V AC/DC	80-265 V AC/DC	max. 0,210	874 36C 413
QDX	LED steady/flashing beacon size 4 amber, red, clear, yellow, blue, green	LED 300 Cd	24-48 V AC/DC	18-60 V DC	max. 1,800	874 46C 408
				18-53 V AC		
			110-240 V AC/DC	80-265 V AC/DC	max. 0,035	874 46C 413

QBS*	LED multi strobe beacon size 1 amber, red, clear, yellow, blue, green	n/a	24-48 V AC/DC	19-75 V DC	<0,2	874 17C 408
				19-53 V AC		
			110-240 V AC	80-265 V AC	<0,035	874 17C 313
QBM*	LED multi strobe beacon size 2 amber, red, clear, yellow, blue, green	n/a	24-48 V AC/DC	19-75 V DC	<0,55	874 27C 408
				19-53 V AC		
			110-240 V AC	80-265 V AC	<0,11	874 27C 313
QBL	LED multi strobe beacon size 3 amber, red, clear, yellow, blue, green	LED 250 Cd	24-48 V AC/DC	18-60 V DC	max. 0,810	874 76C 408
				18-53 V AC		
			110-240 V AC/DC	80-265 V AC/DC	max. 0,220	874 76C 413
QBX	LED multi strobe beacon size 4 amber, red, clear, yellow, blue, green	LED 400 Cd	24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408
				18-53 V AC		
			110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413
QFS	Xenon strobe beacon size 1	xenon tube 5 J	24-48 V AC/DC	18-53 V AC/DC	0,450	874 56C 408
			110/120 V AC	+/- 10%	0,150	874 56C 310
			230/240 V AC		0,075	874 56C 313
QFM	Xenon strobe beacon size 2	xenon tube 10 J	24-48 V AC/DC	18-53 V AC/DC	0,900	874 66C 408
			110/120 V AC	+/- 10%	0,260	874 66C 310
			230/240 V AC		0,160	874 66C 313

* Scheduled availability: 1st quarter 2017

Accessories see page 63



Modular Beacon Series „M“

Steady Beacons MLL - MLM - MLS
Flashing Beacons MBL - MBM - MBS
Xenon Strobe Beacons MFL - MFM - MFS
Rotating Mirror Beacons MRL - MRM - MRS

MLL - MBL - MFL - MRL



Ø 160 mm

MLM - MBM - MFM - MRM



Ø 120 mm

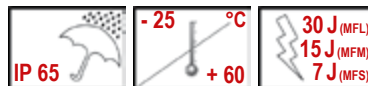
MLS - MBS - MFS - MRS



Ø 90 mm

Features

- Powerful, modular beacon system
3 sizes (Ø 160, mm, 120 mm and 90 mm)
4 types of mounting (horizontal, vertical, pole, magnet)
4 functions/beacon types (steady, flashing, xenon strobe, rotating light)
2 lens types (fresnel, smooth)
- Easy to mount and service
- Function module can be changed without tools (bayonet system)
- Cable entry: bottom grommet or cable gland M20 x 1,5
- Additional safety screw that lens cannot be lost
- Distinct fresnel lens pattern - excellent light distribution
- Rotating mirror models:
 - synthetic bearings - high operating safety (no corrosion)
 - mirror speed 90 or 180 rpm selectable
 - speed monitoring by photo cell





Order data

160 mm

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black			
						Horizontal base	Pole mount base Ø 30 mm	Pole mount base NPT 1"	
MLL	Steady beacon	50 W halogen bulb (included)	24 V AC/DC	+/- 10%	2,100	819 10C 405	819 30C 405	819 31C 405	
			110/120 V AC		0,420	819 10C 310	819 30C 310	819 31C 310	
			230/240 V AC		0,210	819 10C 313	819 30C 313	819 31C 313	
MBL	Flashing beacon		24 V AC/DC	+/- 10%	2,100	839 10C 405	839 30C 405	839 31C 405	
			110/120 V AC		0,420	839 10C 310	839 30C 310	839 31C 310	
			230/240 V AC		0,210	839 10C 313	839 30C 313	839 31C 313	
MFL	Xenon strobe beacon	30 J xenon tube (included)	24 V AC/DC	+/- 10%	1,900	849 10C 405	849 30C 405	849 31C 405	
			110/120 V AC		0,900	849 10C 310	849 30C 310	849 31C 310	
			230/240 V AC		0,350	849 10C 313	849 30C 313	849 31C 313	
MRL	Rotating mirror beacon		50 W halogen bulb (included)	24 V AC/DC	+/- 10%	2,300	419 10C 405	419 30C 405	419 31C 405
				110/120 V AC		0,500	419 10C 310	419 30C 310	419 31C 310
				230/240 V AC		0,390	419 10C 313	419 30C 313	419 31C 313

NOTE: Product also available in voltage 12 V AC/DC

Accessories

Type	Denomination	Order No.
	Accessories for models with horizontal mounting	
WML	Metal bracket for wall mounting, black	819 200 900
EKM	Bonding kit for conduit installations	819 201 900
MP1	Mounting plate for UL type 4/4X/13	819 202 900
MGL	Magnetic mount	819 203 900
AKV	Cable gland M20x1,5	698 800 026



Order data

120 mm

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black		
						Horizontal base	Pole mount base Ø 25 mm	Pole mount base NPT 1/2"
MLM	Steady beacon	35 W halogen bulb (included)	24 V AC/DC	+/- 10%	1,500	818 10C 405	818 30C 405	818 31C 405
			110/120 V AC		0,290	818 10C 310	818 30C 310	818 31C 310
			230/240 V AC		0,150	818 10C 313	818 30C 313	818 31C 313
MBM	Flashing beacon		24 V AC/DC	+/- 10%	1,500	838 10C 405	838 30C 405	838 31C 405
			110/120 V AC		0,290	838 10C 310	838 30C 310	838 31C 310
			230/240 V AC		0,150	838 10C 313	838 30C 313	838 31C 313
MFM	Xenon strobe beacon	15 J xenon tube (included)	12-24 V AC/DC	+/- 10%	0,800 (24 V)	848 10C 405	848 30C 405	848 31C 405
			110/120 V AC		0,300	848 10C 310	848 30C 310	848 31C 310
			230/240 V AC		0,150	848 10C 313	848 30C 313	848 31C 313
MRM	Rotating mirror beacon	35 W halogen bulb (included)	24 V AC/DC	+/- 10%	1,700	418 10C 405	418 30C 405	418 31C 405
			110/120 V AC		0,320	418 10C 310	418 30C 310	418 31C 310
			230/240 V AC		0,170	418 10C 313	418 30C 313	418 31C 313

NOTE: ▶ Product also available in voltage 12 V AC/DC

Accessories

Type	Denomination	Order No.
	Accessories for models with horizontal mounting	
WMM	Metal bracket for wall mounting, black	818 200 900
EKM	Bonding kit for conduit installations	819 201 900
MP2	Mounting plate for UL type 4/4X/13	818 202 900
MGM	Magnetic mount	818 203 900
AKV	Cable gland M20x1,5	698 800 026
	Accessories for models with pole mounting (Ø 25 mm)	
MMR	Aluminium tube with plastic foot, 50 mm, black	698 806 007
	Aluminium tube with plastic foot, 100 mm, black	698 806 008
	Aluminium tube with plastic foot, 250 mm, black	698 806 009
	Aluminium tube with plastic foot, 400 mm, black	698 806 010
MSR	Stainless steel tube with zinc die-cast foot, powder coated, 50 mm, black	698 806 021
	Stainless steel tube with zinc die-cast foot, powder coated, 100 mm, black	698 806 022
	Stainless steel tube with zinc die-cast foot, powder coated, 250 mm, black	698 806 023
	Stainless steel tube with zinc die-cast foot, powder coated, 400 mm, black	698 806 024



Order data

90 mm

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black		
						Horizontal base	Pole mount base Ø 25 mm	Pole mount base NPT 1/2"
MLS	Steady beacon	20 W halogen bulb (included)	24 V AC/DC	+/- 10%	0,830	817 10C 405	817 30C 405	817 31C 405
			110/120 V AC		0,170	817 10C 310	817 30C 310	817 31C 310
			230/240 V AC		0,085	817 10C 313	817 30C 313	817 31C 313
MBS	Flashing beacon		24 V AC/DC	+/- 10%	0,830	837 10C 405	837 30C 405	837 31C 405
			110/120 V AC		0,170	837 10C 310	837 30C 310	837 31C 310
			230/240 V AC		0,085	837 10C 313	837 30C 313	837 31C 313
MFS	Xenon strobe beacon	7 J xenon tube (included)	12-24 V AC/DC	+/- 10%	0,480 (24 V)	847 10C 405	847 30C 405	847 31C 405
			110/120 V AC		0,210	847 10C 310	847 30C 310	847 31C 310
			230/240 V AC		0,120	847 10C 313	847 30C 313	847 31C 313
MRS	Rotating mirror beacon	20 W halogen bulb (included)	24 V AC/DC	+/- 10%	0,950	417 10C 405	417 30C 405	417 31C 405
			110/120 V AC		0,300	417 10C 310	417 30C 310	417 31C 310
			230/240 V AC		0,270	417 10C 313	417 30C 313	417 31C 313

NOTE: ▶ Product also available in voltage 12 V AC/DC

Accessories

Type	Denomination	Order No.
	Accessories for models with horizontal mounting	
WMS	Metal bracket for wall mounting, black	817 200 900
EKM	Bonding kit for conduit installations	819 201 900
MP3	Mounting plate for UL type 4/4X/13	817 202 900
MGS	Magnetic mount	817 203 900
AKV	Cable gland M20x1,5	698 800 026
	Accessories for models with pole mounting (Ø 25 mm)	
MMR	Aluminium tube with plastic foot, 50 mm, black	698 806 007
	Aluminium tube with plastic foot, 100 mm, black	698 806 008
	Aluminium tube with plastic foot, 250 mm, black	698 806 009
	Aluminium tube with plastic foot, 400 mm, black	698 806 010
MSR	Stainless steel tube with zinc die-cast foot, powder coated, 50 mm, black	698 806 021
	Stainless steel tube with zinc die-cast foot, powder coated, 100 mm, black	698 806 022
	Stainless steel tube with zinc die-cast foot, powder coated, 250 mm, black	698 806 023
	Stainless steel tube with zinc die-cast foot, powder coated, 400 mm, black	698 806 024



Steady/Flashing/Strobe Beacon WLG - BKG - FLG LED Steady/LED Flashing Beacon DLG - BLG

WLG - BKG - FLG

DLG - BLG



Ø 120 mm

Features

- Bayonet locking, easy opening (push button)
- WLG/BKG: easy bulb change without tools
- DLG/BLG: 48 LEDs - excellent brightness
- Shock and vibration proof, maintenance free, long lifetime
- Inrush current limitation, EMC-proof, wide voltage range



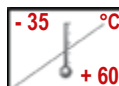
LED Light Bar ILL42

ILL42



Features

- LED illumination with excellent light output
- For universal applications (e.g. work places, cabins, etc.)
- Switched mode power supply for constant light output through changing voltages
- Models with and without built-in on/off switch
- Long lifetime (> 30.000 h), vibrationproof





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
						Housing grey	Housing black
WLG	Steady beacon	25 W bulb GL21 - 26	up to 250 V AC/DC	+/- 10%		822 10C 900	822 50C 900
BKG	Flashing beacon		12-48 V AC/DC	+/- 10%	0,700	832 10C 408	832 50C 408
			230/240 V AC		0,100	832 10C 313	832 50C 313
FLG	Xenon strobe beacon	5J xenon tube (included)	24 V AC/DC	+/- 10%	0,320	842 14C 405	842 54C 405
			110/120 V AC		0,200	842 14C 310	842 54C 310
			230/240 V AC		0,100	842 13C 313	842 53C 313
DLG	LED steady beacon amber, red, yellow	LED (included)	24 V AC/DC	17-32 V DC 17-26 V AC	0,200 0,200	827 10C 405	827 50C 405
			110/120 V AC	+/- 10%	0,060	827 10C 310	827 50C 310
			230/240 V AC		0,060	827 10C 313	827 50C 313
	LED steady beacon clear, blue, green		24 V AC/DC	17-32 V DC 17-26 V AC	0,200 0,220	827 10C 405	827 50C 405
			110/120 V AC	+/- 10%	0,060	827 10C 310	827 50C 310
			230/240 V AC		0,060	827 10C 313	827 50C 313
BLG	LED flashing beacon amber, red, yellow		24 V AC/DC	17-32 V DC 17-26 V AC	0,200 0,220	807 10C 405	807 50C 405
			110/120 V AC	+/- 10%	0,060	807 10C 310	807 50C 310
			230/240 V AC		0,060	807 10C 313	807 50C 313
	LED flashing beacon clear, blue, green		24 V AC/DC	17-32 V DC 17-26 V AC	0,200 0,220	807 10C 405	807 50C 405
			110/120 V AC	+/- 10%	0,060	807 10C 310	807 50C 310
			230/240 V AC		0,060	807 10C 313	807 50C 313

NOTE: ▶ DLG/BLG: also available in voltage 48 V AC/DC

▶ WLG/BKG: GL21-GL26 bulbs 25 W have to be ordered separately

Accessories

Type	Denomination	Order No.
WIG	Metal bracket for wall mounting	822 200 900



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
ILL42	LED steady light bar without on/off switch IP 44	LED	24-48 V AC/DC	17-73 V DC 17-54 V AC	<0,530	805 100 405	
			110-240 V AC/DC	90-250 V DC 90-250 V AC	<0,130	805 100 413	
ILL42	LED steady light bar with on/off switch IP 40		24-48 V AC/DC	17-73 V DC 17-54 V AC	<0,530	805 110 405	
			110-240 V AC	90-250 V AC	<0,130	805 110 413	



Beacons Series „N“

LED Steady/Flashing Beacons NES
LED Strobe/Double Strobe Beacons NFS
LED Multi Colour Beacons NMS
LED Multi Strobe Beacons-HP - NFS-HP
LED Multi Colour Beacons-HP - NMS-HP

NES - NFS - NFS-HP



Features NES, NFS

- Wide voltage range due to switched mode power supply technique (NES, NFS)
- Very good brightness - highest optical efficiency
- Absolutely shock and vibration proof, maintenance free
- Long lifetime - min. 50.000 h
- 4 mounting options (horizontal, vertical, pole, magnet)
- Inrush current limitation, EMC-proof, leakage up to 3 mA possible

Features NMS

- LED steady light, green-red-yellow
- LED flashing light, green-red-yellow
- LED alternate flashing light: green-red, green-yellow, red-yellow, green-red-yellow



HIGH PERFORMANCE models

By using the most modern high performance LEDs in combination with intelligent electronics these models are specifically suitable for

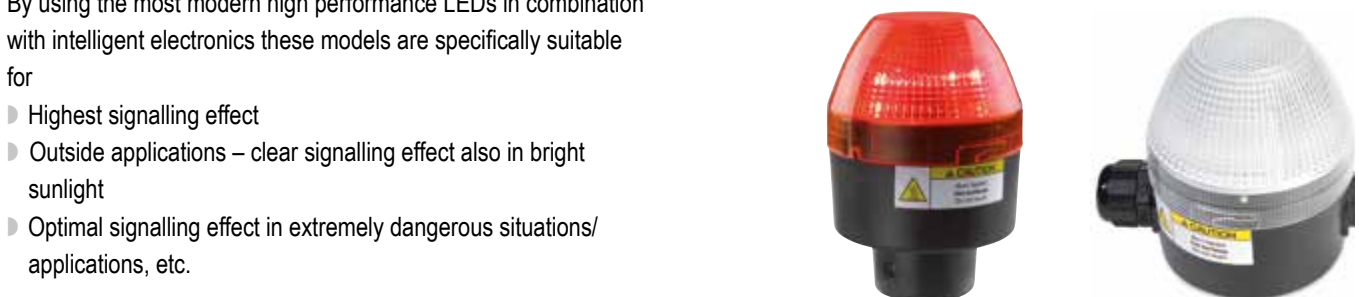
- Highest signalling effect
- Outside applications – clear signalling effect also in bright sunlight
- Optimal signalling effect in extremely dangerous situations/ applications, etc.

Features NFS-HP

- 3 LED strobe patterns switchable via the terminal: LED double strobe, LED 6-times strobe sequence and a LED multi strobe pattern
- Selection of the most suitable LED strobe pattern for the application respectively
- Signalling of different danger stages by switching different LED strobe patterns, etc.

Features NMS-HP

- Selection of the most suitable signal colour RED-YELLOW-GREEN for the application as LED steady light only
- Signalling different application stages by using different LED colours
- External colour selection via the terminal





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black		
						Horizontal base	Pole mount Ø 25 mm	Pole mount NPT 1/2"
NES	LED steady/flashing beacon amber, red, yellow	LED	12-24 V AC/DC	11-30 V DC 11-26 V AC	max. 0,310 max. 0,400	440 10C 405	440 30C 405	440 40C 405
			24-48 V AC/DC	16-80 V DC 16-60 V AC	max. 0,270	440 10C 408	440 30C 408	440 40C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,040	440 10C 413	440 30C 413	440 40C 413
	LED steady/flashing beacon clear, blue, green		12-24 V AC/DC	11-30 V DC 11-26 V AC	max. 0,310 max. 0,400	440 10C 405	440 30C 405	440 40C 405
			24-48 V AC/DC	16-80 VDC 16-60 V AC	max. 0,270	440 10C 408	440 30C 408	440 40C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,040	440 10C 413	440 30C 413	440 40C 413
NFS	LED strobe/double strobe beacon amber, red, yellow	LED	24-48 V AC/DC	16-60 V DC 16-52 V AC	max. 0,220 max. 0,271	442 10C 408	442 30C 408	442 40C 408
			110/120 V AC	+/- 10%	max. 0,074	442 10C 310	442 30C 310	442 40C 310
			230/240 V AC	+/- 10%	max. 0,0704	442 10C 313	442 30C 313	442 40C 313
	LED strobe/double strobe beacon clear, blue, green		24-48 V AC/DC	16-60 V DC 16-52 V AC	max. 0,220 max. 0,271	442 10C 408	442 30C 408	442 40C 408
			110/120 V AC	+/- 10%	max. 0,074	442 10C 310	442 30C 310	442 40C 310
			230/240 V AC	+/- 10%	max. 0,074	442 10C 313	442 30C 313	442 40C 313
NFS- HP	LED multi strobe beacon HIGH PERFORMANCE amber, red, clear, yellow	LED	24-48 V AC/DC	16-65 V DC 16-52 V AC	max. 0,660 max. 0,770	442 15C 408	442 35C 408	442 45C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,170	442 15C 413	442 35C 413	442 45C 413
	LED multi strobe beacon HIGH PERFORMANCE blue, green		24-48 V AC/DC	16-65 V DC 16-52 V AC	max. 0,660 max. 0,770	442 15C 408	442 35C 408	442 45C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,170	442 15C 413	442 35C 413	442 45C 413
NMS	LED multi colour beacon green-red-yellow	LED	24 V AC/DC	+/- 10%	max. 0,142	441 100 405	441 300 405	441 400 405
			48 V AC/DC	+/- 10%	max. 0,111	441 100 408	441 300 408	441 400 408
			110/120 V AC	+/- 10%	max. 0,103	441 100 310	441 300 310	441 400 310
			230/240 V AC	+/- 10%	max. 0,100	441 100 313	441 300 313	441 400 313
NMS- HP	LED multi colour beacon HIGH PERFORMANCE green-red-yellow	LED	24-48 V AC/DC	16-65 V DC 16-52 V AC	max. 0,180 max. 0,230	441 150 408	441 350 408	441 450 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,050	441 150 413	441 350 413	441 450 413

Accessories

Type	Denomination	Order No.
Accessories for models with horizontal mounting		
WMS	Metal bracket for wall mounting, black	817 200 900
EKM	Bonding kit for conduit installations	819 201 900
MP3	Mounting plate for UL type 4/4X/13	817 202 900
MGS	Magnetic mount	817 203 900
AKV	Cable gland M20x1,5	698 800 026
Accessories for models with pole mounting (Ø 25 mm)		
MMR	Aluminium tube with plastic foot, 50 mm, black	698 806 007
	Aluminium tube with plastic foot, 100 mm, black	698 806 008
	Aluminium tube with plastic foot, 250 mm, black	698 806 009
	Aluminium tube with plastic foot, 400 mm, black	698 806 010
MSR	Stainless steel tube with zinc die-cast foot, powder coated, 50 mm, black	698 806 021
	Stainless steel tube with zinc die-cast foot, powder coated, 100 mm, black	698 806 022
	Stainless steel tube with zinc die-cast foot, powder coated, 250 mm, black	698 806 023
	Stainless steel tube with zinc die-cast foot, powder coated, 400 mm, black	698 806 024



Beacons Series „P“

LED Steady/Flashing/Multi Strobe Beacons
LED Multi Colour Beacons
Xenon Strobe Beacons



Ø 75 mm

Model Overview	Ø 75 mm high lens	Ø 75 mm low lens
LED steady/flash beacon	PCH	PCL
LED multi strobe beacon	PFH	PFL
LED multi colour beacon red-yellow-green	PMH	---
Xenon strobe beacon	PXH	PXL

Features

- ▶ Ø 75 mm large compact and brilliant beacon range
- ▶ High ingress protection
- ▶ Prewired with 1 m cable with PUR-jacket (except PMH), open ends, ready to use
- ▶ Premounted stainless fixation screws
- ▶ Customized cable lengths/specifications possible
- ▶ Complete offering of beacons with modern LED technique (long lifetime, low current consumption, vibration-proof)
- ▶ LED multi strobe beacon with 2 LED strobe patterns (LED 6-times strobe/LED multi strobe), externally switchable
- ▶ LED multi colour beacons red-yellow-green with LED steady light and clear lens. Each colour can be externally switched via the terminal
- ▶ Models with high and low lens
- ▶ Xenon strobe models with voltage range 10-100 V DC / 20-70 V AC
- ▶ Mounting options horizontal (standard), vertical and pole mounting (accessory)
- ▶ Lens and base components made of high impact resistant polycarbonate
- ▶ Excellent price/performance ratio
- ▶ For use in industrial/process/general applications
- ▶ Fit for plc applications (leakage, inrush current)

Mounting options

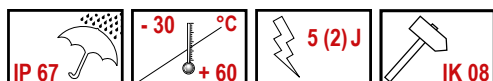
- ▶ **Horizontal mounting**
(standard)



- ▶ **Vertical mounting**
Accessory: plastic bracket (PVW)



- ▶ **Pole mounting**
Accessory: Pole mounting (PMR)





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
Models with high lens						
PCH	LED steady/flashing beacon amber, red, yellow	integrated LEDs	24 V AC/DC	20-35 V DC	0,225	860 50C 405
				18-28 V AC		
			110/120 V AC	80-132 V AC	0,062	860 50C 310
	230/240 V AC	140-264 V AC	0,066	860 50C 313		
	LED steady/flashing beacon clear, blue, green	integrated LEDs	24 V AC/DC	20-35 V DC	0,225	860 50C 405
				18-28 V AC		
110/120 V AC			80-132 V AC	0,062	860 50C 310	
230/240 V AC	140-264 V AC	0,066	860 50C 313			
PFH	LED multi strobe beacon amber, red, yellow	integrated LEDs	24 V AC/DC	20-35 V DC	0,285	860 51C 405
				16-28 V AC		
			110/120 V AC	85-132 V AC	0,042	860 51C 310
	230/240 V AC	140-264 V AC	0,044	860 51C 313		
	LED multi strobe beacon clear, blue, green	integrated LEDs	24 V AC/DC	20-35 V DC	0,285	860 51C 405
				16-28 V AC		
110/120 V AC			85-132 V AC	0,042	860 51C 310	
230/240 V AC	140-264 V AC	0,044	860 51C 313			
PMH	LED multi colour beacon red-yellow-green	integrated LEDs	24 V AC/DC	21-35 V DC	0,120	860 550 405
				16-28 V AC		
			110/120 V AC	75-132 V AC	0,065	860 550 310
230/240 V AC	140-264 V AC	0,065	860 550 313			
PXH	Xenon strobe beacon	5 J xenon tube	110/120 V AC	95-132 V AC	0,100	860 52C 310
			230/240 V AC	180-264 V AC	0,055	860 52C 313
			10-100 V DC	10-100 V DC	0,260	860 52C 410
			20-70 V AC	20-70 V AC		
Models with low lens						
PCL	LED steady/flashing beacon amber, red, yellow	integrated LEDs	24 V AC/DC	+/- 10 %	0,060	861 50C 405
			110/120 V AC		0,030	861 50C 310
			230/240 V AC		0,031	861 50C 313
	LED steady/flashing beacon clear, blue, green	integrated LEDs	24 V AC/DC	+/- 10 %	0,060	861 50C 405
			110/120 V AC		0,030	861 50C 310
			230/240 V AC		0,031	861 50C 313
PFL	LED multi strobe beacon amber, red, yellow	integrated LEDs	24 V AC/DC	+/- 10 %	0,155	861 51C 405
			110/120 V AC		0,045	861 51C 310
			230/240 V AC		0,045	861 51C 313
	LED multi strobe beacon clear, blue, green	integrated LEDs	24 V AC/DC	+/- 10 %	0,155	861 51C 405
			110/120 V AC		0,045	861 51C 310
			230/240 V AC		0,045	861 51C 405
PXL	Xenon strobe beacon	2 J xenon tube	110/120 V AC	85-132 V AC	0,075	861 52C 310
			230/240 V AC	170-265 V AC	0,045	861 52C 313
			10-100 V DC	10-100 V DC	0,250	861 52C 410
			20-70 V AC	20-70 V AC		

Accessories

Type	Denomination	Order No.
PVW	Bracket for vertical mounting	860 600 900
PMR	Pole mounting, 100 mm aluminium tube with plastic foot	860 702 900
	Pole mounting, 250 mm aluminium tube with plastic foot	860 703 900
XWR	Bracket for pole mount base with plastic foot	900 600 900



Beacons Series „T“

LED Steady/Flashing Beacons
LED Multi Strobe Beacons
Steady Beacons

Light/Beacons options	Type 1		Mounting options		Type 2	Complete product
LED steady/flashing beacon	TDC	+	horizontal mounting	internal mounting holes	TMW	any choice of Type 1 + Type 2
				external mounting holes	TMF	
LED multi strobe beacon	TDF		vertical mounting	lateral cable entry (cable gland)	TNL	
					TMV	
Steady beacon	TLL		pole mounting	alu tube/plastic foot	TMR	
				for NPT 1/2" pole mount	TNW	

Features

- Ø 75 mm large comprehensive modular beacon range
- Modern, efficient and long life LED beacons in functions LED steady/flashing (externally adressable) and LED multi strobe (6 times fast strobe and multi strobe patterns adressable)
- Steady beacon option with BA15d socket for 7 W incandescent bulb
- Comprehensive range of mounting options
- Optimized illumination/brightness and signalling effect
- Modular design with high ingress protection IP 66
- Optionally available protective vent for pressure balance in harsh weather conditions (humidity, high temperature fluctuations, etc.) for TMW, TMF, TNL
- Comfortable connection technique with high contact safety (push-in or clamping yoke terminals)
- Lenses and housing made of high-resistant polycarbonates
- 6 lens colours
- For use in industrial/general applications
- Fit for plc applications (leakage, inrush current)
- UL type 4/4X/13 (except TNL and TMW+TVS)

Accessories

- TVS** metal bracket
incl. cable gland M12x1,5 for vertical mounting of TMW horizontal base
allows cable entry form bottom-up with strain relief



TVS

TMW

TDC+TMW+TVS



TDC



TMW



TDC + TMW



TDF



TMF



TDF + TMF



TLL



GL



TMV



TLL + TMV



TMR



TDC + TMR



TNW



TNL



TDC + TNL



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
Light/Beacons options						
TDC	LED steady/flashing beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	0,140	859 50C 405
				18-27 V AC	0,220	
			110/120 V AC	75-132 V AC	0,072	859 50C 310
			230/240 V AC	150-264 V AC	0,066	859 50C 313
TDF	LED multi strobe beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	max. 0,190	859 51C 405
				18-27 V AC	max. 0,250	
			110/120 V AC	75-132 V AC	0,042	859 51C 310
			230/240 V AC	150-264 V AC	0,042	859 51C 313
TLL	Steady light beacon amber, red, yellow, clear, blue, green	incandescent bulb (not included)	up to 250 V AC/DC	---	max. 7 W	859 52C 900
Type	Denomination	Specification		Weight	Pole length	Order No. black
Mounting options/Bases						
TMW	Base for horizontal mounting	with internal mounting holes				859 500 900
TMF		with external mounting holes				859 510 900
TNL		lateral cable entry				859 515 900
TMV	Base for vertical mounting					859 520 900
TMR	Pole mounting	aluminium tube with plastic foot			100 mm	859 532 900
					250 mm	859 533 900
TNW	Pole mounting	for NPT 1/2" mount				859 540 900

Accessories

Type	Denomination		Order No.
TVS	Metal bracket kit	for TMW incl. cable gland M12x1,5 for cable entry bottom-up	859 550 900
PV1	Protective vent	optionally for bases type TMW, TMF, TNL	859 100 000
XWR	Bracket	for pole mount base with plastic foot	900 600 900
Type	Denomination	Nominal voltage (V)	Order No.
GL01	Incandescent bulb BA 15 d	12 V, 5 W	890 010 904
GL02		24 V, 6,5 W	890 010 905
GL05		110/120 V, 7 W	890 010 910
GL06		230/240 V, 6 W	890 010 913



TDE

TDC+TDE+TMW

► TDE piezo buzzer module

continuous or pulsing tone ~ 88-100dB (A) in 1 m, volume infinitely adjustable, tone selection via DIP switch

Further details and product information in product category visual-audible!



Beacons Series „U“

LED Steady/Flashing Beacons
LED Multi Strobe Beacons
Steady Beacons

Light/Beacons options	Type 1		Mounting options		Type 2	Complete product
LED steady/flushing beacon	UDC	+	horizontal mounting	internal mounting holes	UMW	any choice of Type 1 + Type 2
				external mounting holes	UMF	
				lateral cable entry (cable gland)	UNL	
LED multi strobe beacon	UDF		vertical mounting		UMV	
Steady beacon	ULL		pole mounting	alu tube/plastic foot	UMR	
				for NPT 1/2" pole mount	UNW	

Features

- Ø 60 mm large comprehensive modular beacon range
- Modern, efficient and long life LED beacons in functions LED steady/flushing (externally addressable) and LED multi strobe (6 times fast strobe and multi strobe patterns addressable)
- Steady beacon option with BA15d socket for incandescent bulb
- Comprehensive range of mounting options
- Optimized illumination/brightness and signalling effect
- Modular design with high ingress protection IP 66
- Optionally available protective vent for pressure balance in harsh weather conditions (humidity, high temperature fluctuations, etc.) for UMW, UMF, UNL
- Comfortable connection technique with high contact safety (push-in or clamping yoke terminals)
- Lenses and housing made of high-resistant polycarbonates
- 6 lens colours
- For use in industrial/general applications
- Fit for plc applications (leakage, inrush current)
- UL type 4/4X/13 (except UNL and UMW+UVS)

Accessories

- UVS** metal bracket
incl. cable gland M12x1,5 for vertical mounting of UMW
horizontal base allows cable entry from bottom-up



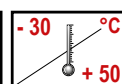
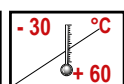
UVS



UMW



UDC+UMW+UVS



ULL: 7 W



UDC



UMW



UDC + UMW



UDF



UMF



UDF + UMF



ULL



GL



UMV



ULL + UMV



UMR



UDC + UMR



UNW



UNL



UDC + UNL



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
Light/Beacons options						
UDC	LED steady/flashing beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	0,100	858 50C 405
				18-27 V AC	0,100	
			110/120 V AC	75-132 V AC	0,045	858 50C 310
			230/240 V AC	150-264 V AC	0,045	858 50C 313
UDF	LED multi strobe beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	max 0,120	858 51C 405
				18-27 V AC	max 0,120	
			110/120 V AC	75-132 V AC	0,033	858 51C 310
			230/240 V AC	150-264 V AC	0,033	858 51C 313
ULL	Steady light beacon amber, red, yellow, clear, blue, green	incandescent bulb (not included)	up to 250 V AC/DC	---	max. 7 W	858 52C 900
Type	Denomination	Specification		Weight	Pole length	Order No. black
Mounting options/Bases						
UMW	Base for horizontal mounting	with internal mounting holes				858 500 900
UMF		with external mounting holes				858 510 900
UNL		lateral cable entry				858 515 900
UMV	Base for vertical mounting					858 520 900
UMR	Pole mounting	aluminium tube with plastic foot			100 mm	858 532 900
					250 mm	858 533 900
UNW	Pole mounting	for NPT 1/2" mount				858 540 900

Accessories

Type	Denomination		Order No.
UVS	Metal bracket kit	for UMW incl. cable gland M12x1,5 for cable entry bottom-up	858 550 900
PV1	Protective vent	optionally for bases type UMW, UMF, UNL	859 100 000
XWR	Bracket for pole mount base with plastic foot		900 600 900
Type	Denomination	Nominal voltage (V)	Order No.
GL11	Incandescent bulb BA 15 d	12 V, 4 W	890 012 904
GL12		24 V, 4 W	890 012 905
GL15		110/120 V, 4 W	890 012 910
GL16		230/240 V, 4 W	890 012 913



Strobe Beacons BZG

BZG



Lens:
Ø 72 mm

Features BZG

- 15 J strobe energy
- Available in amber, red and yellow
- Aluminium die cast housing, epoxy-powder coated



Steady (LED Steady/Flashing) Beacon WLK Strobe Beacon FLK

WLK - FLK



Ø 60 mm

Features

- WLK steady beacon**
for incandescent bulb or
LLL steady LED bulb
- WLK LED flashing beacon**
for LLB flashing LED bulb
- Easy bulb change without tools
- FLK strobe beacon**
Available in amber, red and yellow





Order data

Type	Denomination	Light source	Nominal voltage (V)	Nominal current (V)	Nominal current (A)	Order No.
BZG*	Strobe beacon	15 J xenon tube (included)	24 V DC	+/- 10%	0,700	741 04C 005
			230/240 V AC		0,230	741 03C 313

NOTE: *only available in amber, red and yellow



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
WLK	Steady beacon	bulb (GL)	up to 250 V AC/DC	+/- 10%		
	LED steady beacon	LLL-bulb				820 00C 900
	LED flashing beacon	LLB-bulb				
BHW	Base for horizontal mounting					820 520 900
BVW	Base for vertical mounting					820 530 900
FLK*	Strobe beacon	1 J xenon tube (included)	12-24 V AC/DC	+/- 10%	12 V: 0,120 24 V: 0,095	840 00C 405
			110/120 V AC	+/- 10%	0,021	840 00C 310
			230/240 V AC	+/- 10%	0,015	840 00C 313
BHF	Base for horizontal mounting					840 501 900
BVF	Base for vertical mounting					840 502 900

NOTE: * only available in amber, red and yellow

► WLK - light sources have to be ordered separately

Accessories

Type	Denomination	Nominal voltage (V)	Order No.
GL01	Incandescent bulb BA 15 d	12 V, 5 W	890 010 904
GL02		24 V, 6,5 W	890 010 905
GL03		48 V, 5 W	890 010 908
GL04		60 V, 7 W	890 010 909
GL05		110/120 V, 7 W	890 010 910
GL06		230/240 V, 6 W	890 010 913
LLL	LED bulb BA 15 d steady light	12 V AC/DC	893 00C 404
		24 V AC/DC	893 00C 405
		48 V AC/DC	893 00C 408
		110/120 V AC/DC	893 00C 310
		230/240 V AC/DC	893 00C 313
LLB	LED bulb BA 15 d flashing light	12 V AC/DC	893 01C 404
		24 V AC/DC	893 01C 405
		48 V AC/DC	893 01C 408
		110/120 V AC/DC	893 01C 310
		230/240 V AC/DC	893 01C 313



LED Flashing Beacon BC1

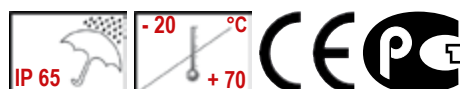
BC1



Ø 63 mm

Features

- Cost effective small LED flashing beacon
- Simple mounting, bayonet system



Strobe Beacon XB2

XB2



Ø 65 mm

Features

- Cost effective small strobe beacon
- Simple mounting, optional mounting adapter included
- Prewired, ready to use





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
						Housing red	Housing white
BC1	LED flashing beacon	LED	24 V DC	20-35 V DC	0,003-0,005	C112 62C 005	C112 22C 005

NOTE: ▸ Lens colour: amber, red



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.
XB2	Strobe beacon amber, red, blue	2 J xenon tube (included)	24 V DC	+/- 10%	0,100	D118 52C 005
			24 V AC		0,120	D118 52C 305
			230 V AC		0,025	D118 52C 313



Panel Mount Beacons Ø 37 mm Series „T“ and „U“

LED Steady/Flashing Beacons
LED Multi Strobe Beacons
Steady Beacons



Ø 75 mm

Ø 60 mm

Features

- Ø 75 mm and Ø 60 mm large panel mount beacon, panel size Ø 37 mm (PG29)
- Vandal and tamper-proof design suitable for any mechanical and environmental requirements
- High impact resistant lens (20 J)
- Modern, efficient and long life LED beacons in functions
 - LED steady/flashing (externally addressable)
 - LED multi strobe
 - (6 times fast LED strobe and LED multi strobe patterns addressable)
 - optionally steady beacon for incandescent bulbs
- Easy bulb change due via bayonet detachable insert with BA15d socket for incandescent bulbs (TLLP/Ullp)
- Optimized illumination/brightness and signalling effect
- High ingress protection IP66
- Comfortable connection technique with high contact safety
- Lenses and housing made of high-resistant polycarbonates
- 6 lens colours
- For use in industrial/general applications
- Fit for plc applications (leakage, inrush current)
- UL type 4/4X/13

Model Overview	Type Ø 75 mm	Type Ø 60 mm
Panel mount LED steady/flashing beacon	TDCP	UDCP
Panel mount LED multi strobe beacon	TDFP	UDFP
Panel mount steady beacon	TLLP	ULLP



flat gasket
anti rotating
washer
fixation nut
detachable plug-in
screw terminal

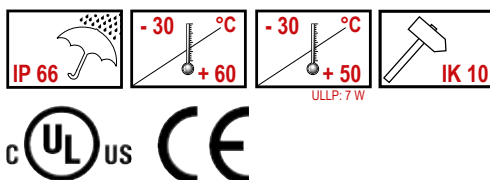


flat gasket
anti rotating
washer
fixation nut
strain relief

Easy bulb change due to rear access via bayonet detachable insert with BA15d socket for incandescent bulbs;
clamping yoke terminal technique for high contact safety

Mode selection for LED steady/flashing/multi strobe models

La	N	Lb	Type
X	X		LED steady light
X	X	X	LED flashing light
X	X		LED 6 time fast strobe
X	X	X	LED multi strobe





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
Light/Beacons options Ø 75 mm						
TDCP	LED steady/flashing beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	0,140	859 57C 405
				18-27 V AC	0,220	
			110/120 V AC	75-132 V AC	0,072	859 57C 310
			230/240 V AC	150-264 V AC	0,066	859 57C 313
TDFP	LED multi strobe beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	max. 0,190	859 58C 405
				18-27 V AC	max. 0,250	
			110/120 V AC	75-132 V AC	0,042	859 58C 310
			230/240 V AC	150-264 V AC	0,042	859 58C 313
TLLP	Steady light beacon amber, red, yellow, clear, blue, green	incandescent bulb (not included)	up to 250 V AC/DC	---	max. 7 W	859 59C 900
Light/Beacons options Ø 60 mm						
UDCP	LED steady/flashing beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	0,100	858 57C 405
				18-27 V AC	0,100	
			110/120 V AC	75-132 V AC	0,045	858 57C 310
			230/240 V AC	150-264 V AC	0,045	858 57C 313
UDFP	LED multi strobe beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	max. 0,120	858 58C 405
				18-27 V AC	max. 0,120	
			110/120 V AC	75-132 V AC	0,033	858 58C 310
			230/240 V AC	150-264 V AC	0,033	858 58C 313
ULLP	Steady light beacon amber, red, yellow, clear, blue, green	incandescent bulb (not included)	up to 250 V AC/DC	---	max. 7 W	858 59C 900

Accessories

Type	Denomination	Nominal voltage (V)	Order No.
Incandescent bulb for Ø 75 mm models (TLLP)			
GL01	Incandescent bulb BA 15 d	12 V, 5 W	890 010 904
GL02		24 V, 6,5 W	890 010 905
GL05		110/120 V, 7 W	890 010 910
GL06		230/240 V, 6 W	890 010 913
Incandescent bulb for Ø 60 mm models (ULLP)			
GL11	Incandescent bulb BA 15 d	12 V, 4 W	890 012 904
GL12		24 V, 4 W	890 012 905
GL15		110/120 V, 4 W	890 012 910
GL16		230/240 V, 4 W	890 012 913



Panel Mount Beacons Ø 22,5 mm Series „I“

LED Steady/Flashing Beacons IBL - IBM - IBS
LED Strobe Beacons ICL - ICM - ISS
Xenon Strobe Beacons ISL - ISM

LED Steady/Flashing Beacons



IBL

Ø 65 mm



IBM

Ø 45 mm



IBS

Ø 30 mm

Features

- Versatile and comprehensive M22 panel mount beacon series
- 3 sizes: Ø 65 mm, 45 mm and 30 mm
- Maintenance free (LED) - long lifetime (~100.000 h)
low nominal current, vibration proof
- Installation depth 34/47 mm depending on model
- new models **ICL** (Ø 65 mm) and **ICM** (Ø 45 mm)
LED strobe light - 2 strobe patterns: LED double strobe/LED
6-time sequence, switching via terminal
ISS-LED single strobe light
- Available light functions:
LED steady or flashing light (IBL - IBM - IBS)
LED strobe light (ICL - ICM - ISS)
Xenon strobe light (ISL - ISM)

LED Strobe Beacons



ICL

Ø 65 mm



ICM

Ø 45 mm



ISS

Ø 30 mm



Xenon Strobe Beacons



ISL

Ø 65 mm



ISM

Ø 45 mm

M22 Panel Mount Beacon (In Built-In Condition)



Ø 65 mm



Ø 45 mm



Ø 30 mm



Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
						Housing grey	Housing black
IBL (65 mm Ø)	LED steady/flashing beacon amber, red, yellow	LED	24 V AC/DC	+/- 10%	0,060	802 10C 405	802 50C 405
			110/120 V AC		0,030	802 10C 310	802 50C 310
			230/240 V AC		0,031	802 10C 313	802 50C 313
	LED steady/flashing beacon clear, blue, green		24 V AC/DC		0,060	802 10C 405	802 50C 405
			110/120 V AC		0,030	802 10C 310	802 50C 310
			230/240 V AC		0,031	802 10C 313	802 50C 313
IBM (45 mm Ø)	LED steady/flashing beacon amber, red, yellow	LED	24 V AC/DC	+/- 10%	0,037	801 10C 405	801 50C 405
			110/120 V AC		0,030	801 10C 310	801 50C 310
			230/240 V AC		0,030	801 10C 313	801 50C 313
	LED steady/flashing beacon clear, blue, green		24 V AC/DC		0,037	801 10C 405	801 50C 405
			110/120 V AC		0,030	801 10C 310	801 50C 310
			230/240 V AC		0,030	801 10C 313	801 50C 313
IBS (30 mm Ø)	LED steady/flashing beacon amber, red, yellow	LED	24 V AC/DC	+/- 10%	0,026	800 10C 405	800 50C 405
			110/120 V AC		0,018	800 10C 310	800 50C 310
			230/240 V AC		0,019	800 10C 313	800 50C 313
	LED steady/flashing beacon clear, blue, green		24 V AC/DC		0,026	800 10C 405	800 50C 405
			110/120 V AC		0,018	800 10C 310	800 50C 310
			230/240 V AC		0,019	800 10C 313	800 50C 313
ICL (65 mm Ø)	LED strobe beacon 2 strobe patterns, amber, red	LED	24 V AC/DC	+/- 10%	max. 0,155	802 12C 405	802 52C 405
			110/120 V AC		0,045	802 12C 310	802 52C 310
			230/240 V AC		0,045	802 12C 313	802 52C 313
ICM (45 mm Ø)	LED strobe beacon 2 strobe patterns, amber, red	LED	24 V AC/DC	+/- 10%	max. 0,110	801 12C 405	801 52C 405
			110/120 V AC		0,033	801 12C 310	801 52C 310
			230/240 V AC		0,033	801 12C 313	801 52C 313
ISS (30 mm Ø)	LED strobe beacon amber, red	LED	24 V AC/DC	+/- 10%	0,046	800 11C 405	800 51C 405
			110/120 V AC		0,018	800 11C 310	800 51C 310
			230/240 V AC		0,021	800 11C 313	800 51C 313
ISL (65 mm Ø)	Xenon strobe beacon	1 J xenon tube	12-24 V AC/DC	+/- 10%	0,150	802 11C 405	802 51C 405
			110/120 V AC		0,030	802 11C 310	802 51C 310
			230/240 V AC		0,020	802 11C 313	802 51C 313
ISM (45 mm Ø)	Xenon strobe beacon	0,5 J xenon tube	12-24 V AC/DC	+/- 10%	0,110	801 11C 405	801 51C 405
			110/120 V AC		0,020	801 11C 310	801 51C 310
			230/240 V AC		0,012	801 11C 313	801 51C 313

NOTE: IBL, IBM, IBS, ISS also available in voltages 12 V AC/DC

Accessories

Type	Denomination	Order No.
ADM30	Adapter M30,5	812 500 900
WZ30	Fastening tool for 30 mm models	812 400 900



M22 Panel Mount Beacons „I“

LED Multi Colour Beacons

IDL - IDM - IDS, ITL - ITM - ITS, IML - IMM

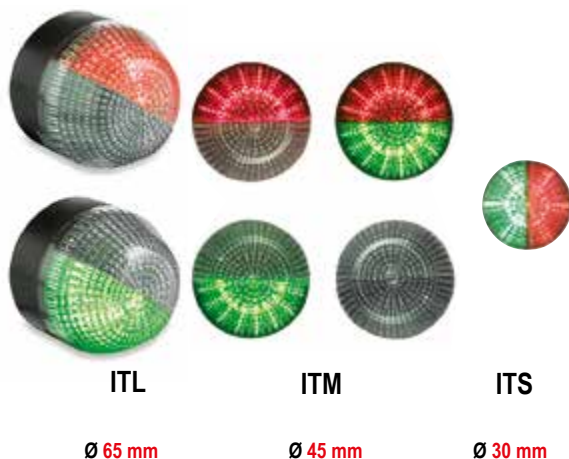
LED Multi Colour Beacons 1 of 2 Colours Visible (whole lens illuminated)



Features

- Versatile and comprehensive M22 panel mount beacon series
- 3 sizes - Ø 65 mm, 45 mm and 30 mm
- Maintenance free (LED) - long lifetime (~100.000 h)
low nominal current, vibration proof
- Installation depth 34/47 mm depending on model
- Standard colours: red-green
(other colours upon request - minimum order quantity)
- Available light functions:
LED 2 colour steady light (IDL-IDM-IDS / ITL-ITM-ITS)
LED 3 colour steady light (IML-IMM, only pre-cabled)

LED Multi Colour Beacons 1 or 2 separate colours visible (half lens illuminated)



Models with sealed cable for special applications



Features

- Sealed cable models with backside IP 67 rating
- Absolutely tight by fixation and sealing of cable
- Individual cable lengths/specifications available upon request
- All I-series models with Ø 65 and 45 mm can be offered as pre-cabled model (minimum order quantity)
- 45 mm models possible depending on project requirements

3-colour LED beacons IML - IMM

- IML (Ø 65 mm) and IMM (Ø 45 mm) signalling in
3 colours (red, yellow, green)
externally switchable/selectable
- 1 m UL cable, open ends





Order data

Type	Denomination	Light source	Nominal volatage (V)	Voltage range (V)	Nominal current (A)	Ordner No.	
						Housing grey	Housing black
IDL (65 mm Ø)	LED multi colour steady panel mount beacon 1 of 2 colours visible red-green	LED	24 V AC/DC	+/- 10%	0,071	802 226 405	802 626 405
			110/120 V AC		0,061	802 226 310	802 626 310
			230/240 V AC		0,061	802 226 313	802 626 313
IDM (45 mm Ø)	LED multi colour steady panel mount beacon 1 of 2 colours visible red-green	LED	24 V AC/DC	+/- 10%	0,046	801 226 405	801 626 405
			110/120 V AC		0,035	801 226 310	801 626 310
			230/240 V AC		0,035	801 226 313	801 626 313
IDS (30 mm Ø)	LED multi colour steady panel mount beacon 1 of 2 colours visible, red-green	LED	24 V AC/DC	+/- 10%	0,028	800 226 405	800 626 405
ITL (65 mm Ø)	LED multi colour steady panel mount beacon 1 or 2 separate colours visible red-green	LED	24 V AC/DC	+/- 10%	0,044	802 326 405	802 726 405
			110/120 V AC		0,041	802 326 310	802 726 310
			230/240 V AC		0,041	802 326 313	802 726 313
ITM (45 mm Ø)	LED multi colour steady panel mount beacon 1 or 2 separate colours visible red-green	LED	24 V AC/DC	+/- 10%	0,039	801 326 405	801 726 405
			110/120 V AC		0,035	801 326 310	801 726 310
			230/240 V AC		0,034	801 326 313	801 726 313
ITS (30 mm Ø)	LED multi colour steady panel mount beacon 1 or 2 sep. colours visible, red-green	LED	24 V AC/DC	+/- 10%	0,030	800 326 405	800 726 405
IML (65 mm Ø)	LED 3 colour steady beacon red-yellow-green	LED	24 V AC/DC	+/- 10%	max. 0,043	802 150 405	802 550 405
			110/120 V AC		0,033	802 150 310	802 550 310
			230/240 V AC		0,033	802 150 313	802 550 313
IMM (45 mm Ø)	LED 3 colour steady beacon red-yellow-green	LED	24 V AC/DC	+/- 10%	max. 0,027	801 150 405	801 550 405

Accessories

Type	Denomination	Ordner No.
ADM30	Adapter M30,5	812 500 900
WZ30	Fastening tool for 30 mm models	812 400 900



Signal Tower ECOmodul70, ECOmodul60, ECOmodul40



ECOmodul70



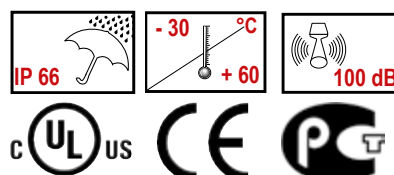
ECOmodul60



ECOmodul40

Features

- Modular signal tower series in diameters Ø 70 mm, 60 mm and 40 mm for universal applications
- Modern signal tower concept based on up-to-date LED technique, alternative operation with conventional incandescent bulb technique
- Excellent cost/performance ratio
- Complete range of bright LED modules in function modes
 - LED steady light
 - LED flashing light
 - LED strobe light (single flash)
 - LED multi strobe light (multi flash)
- LED steady/LED strobe and LED multi strobe modules in version „HIGH PERFORMANCE“ (ECOmodul70 and ECOmodul60)
- Very long lifetime due to maintenance free LED technique, vibration proof and significantly reduced nominal current
- Piezo buzzer and multi-tone siren modules
- Easy to operate connection technique
- Comprehensive range of mounting options including quick mount solutions
- Plc fit (leakage and inrush current)
- High ingress protection IP 66 certified to UL type 4/4X/13



Modern signal tower concept based on up-to-date LED technique

- Comprehensive range of bright LED modules in function modes

	ECModul70	ECModul60	ECModul40
Number of LEDs	12	8	8
LED steady light	✓	✓	✓
LED flashing light	✓	✓	✓
LED strobe light (single flash)	✓	✓	✓
LED multi strobe light (multi flash)*	—	—	✓

*Mode of operation LED multi strobe light (multi flash):

- Combination of differently defined LED strobe sequences
- LED flash sequence appears to viewer as irregular strobe pattern - no familiarization effect
- Extremely high signalling effect for danger notification
- Modern LED strobe light and LED multi strobe light modules replace conventional lifetime, limited xenon strobe modules with simultaneously obtaining
 - excellent efficiency
 - maximum vibration proofness
 - extremely long lifetime
(up to 100.000 h - corresponds to a continuous operation of > 10 years, thereafter LED emits approx. half of its original light output)

Comprehensive range of LED „HIGH PERFORMANCE“ modules

- The use of high performance LEDs in connection with intelligent electronics results in
 - highest signalling effects
 - suitability for outdoor applications/eg in sunlight
 - optimal signalling effects in extremely dangerous situations
- Extremely long lifetime (> 50.000 h)
- LED „HIGH PERFORMANCE“ modules available in function modes:

	ECModul70	ECModul60
Number of high performance LEDs	4	2
LED steady light	✓	✓
LED strobe light (single flash)	✓	—
LED multi strobe light (multi flash)	✓	✓



Steady light with
high performance LEDs



Configurator



MODULES

TONE

Piezo Buzzer - 1 tone
Piezo Buzzer - 2 tones
Multi-tone sounder - 8 tones

LIGHT

Steady light
LED steady light
LED flashing light
LED strobe light
LED multi strobe light
LED steady light „HIGH PERFORMANCE“
LED strobe light „HIGH PERFORMANCE“
LED multi strobe light „HIGH PERFORMANCE“

BASE for

ECModul70
ECModul60
ECModul40



horizontal mounting

with inside mounting holes

XMW	900 570 900
YMW	901 570 900
ZMW	902 570 900



vertical mounting

single side mounting

XMV	900 573 900
YMV	901 573 900
ZMV	902 573 900

ECModul70
ECModul60
ECModul40



with premounted fixation screws

XMS	900 571 900
YMS	901 571 900
ZMS	902 571 900



double side mounting

XZV	900 574 900
YZV	901 574 900
ZZV	902 574 900

ECModul70
ECModul60
ECModul40



with external mounting lugs

XMF	900 572 900
YMF	901 572 900
ZMF	902 572 900

Colour code for lens

C

1	amber	5	blue
2	red	6	green
4	clear	7	yellow

Length code for tubes

L

2	100 mm
3	250 mm
4	400 mm

ECOmodul 70

ECOmodul 60

ECOmodul 40

Specification	Type	Order No.
Continuous or pulsing tone	XDE	900 500 VOL
Continuous and pulsing tone	XDZ	900 510 VOL
8 tone types selectable	XDM	900 520 VOL

Type	Order No.
YDE	901 500 VOL

Type	Order No.
ZDE	902 500 VOL

Light source	Type	Order No.
Bulb	XLL	900 00C 900
Integrated LED	XDC	900 01C VOL
	XDA	900 02C VOL
	XDF	900 03C VOL
Integrated „HIGH PERFORMANCE“ LED	XDC-HP	900 05C VOL
	XDF-HP	900 06C VOL
	XFF-HP	900 07C VOL

Type	Order No.
YLL	901 00C 900
YDC	901 01C VOL
YDA	901 02C VOL
YDF	901 03C VOL
YDC-HP	901 05C VOL
YFF-HP	901 07C VOL

Type	Order No.
ZLL	902 00C 900
ZDC	902 01C VOL
ZDA	902 02C VOL
ZDF	902 03C VOL
ZFF	902 04C VOL

Voltage Code		VOL
405	24 V AC/DC	
310	110/120 V AC	
313	230/240 V AC	



Pole mounting options		
Aluminium tube with plastic foot		
XMR	900 58L 900	
YMR	901 58L 900	
ZMR	902 58L 900	



Accessories for pole mounting		
Bracket (fits XMR, YMR, ZMR)		
XWR	900 600 900	



For horizontal mounting with screw		
XSW	900 59L 900	
YSW	901 59L 900	
ZSW	902 59L 900	



Set for vertical mounting (for XSW, YSW, ZSW)		
XSS	900 700 900	



Quick mount base „Foot Adapter“		
XFR	900 56L 900	
YFR	901 56L 900	
ZFR	902 56L 900	



Base extension (fits all bases)		
XEP	900 800 900	
YEP	901 800 900	
ZEP	902 800 900	



Indication board (fits XMR, YMR, ZMR)		
XIB	900 850 900	



Signal Tower ECOModul70, ECOModul60, ECOModul40

Powerful piezo buzzer and multi-tone siren modules

- Piezo buzzer modules for single tone operation (continuous or pulsing tone) in one signal tower (ECOModul70, 60, 40)
- Piezo buzzer modules for dual tone operation (continuous and pulsing tone) in one signal tower (ECOModul70)
- Multi-tone siren modules - 1 of 8 different tones selectable (ECOModul70)



XDE



XDZ



XDM

Tone table XDM

STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	Max dB
Tone 01	continuous	2700 Hz	=====			100
Tone 02	continuous	1350 Hz	=====			100
Tone 03	intermittent	2700 Hz	— — —	250 ms on, 250 ms off		100
Tone 04	intermittent	1350 Hz	— — —	250 ms on, 250 ms off		100
Tone 05	sweeping	1200 - 500 Hz	~~~~~	1 Hz	evacuation Germany DIN 33404-3	98
Tone 06	sweeping	500 - 1200 Hz	~~~~~	rising in 3 s, 0,5 s off	Netherlands NEN 2575:2000	98
Tone 07	alternating	800 - 1000 Hz	□ □ □ □	2 Hz		94
Tone 08	sweeping	500 - 1500 Hz	~~~~~	10 Hz		94

Comfortable connection technique

- Time and cost savings in electrical connection
- High contact safety and conductivity in vibrations and temperature fluctuations



Connection terminal with clamping yoke technique (ECOModul70 and ECOModul60)



Connection terminal with push-in technique (ECOModul40)

Base extension

The base extension is an economic way to extend the length of an ECOModul signal tower by 100 mm per base extension and to optically adapt the base to the diameter of the modules. Suitable for all bases. The ECOModul70, ECOModul60 and ECOModul40 signal tower system is basically designed to accept maximum 4 pieces base extension „XEP“, „YEP“ resp. „ZEP“ (corresponds to a length/extension of 400 mm). Depending on the individual application (vibration, etc.) also a higher pole length can be achieved.



Quick mount base „Foot Adapter“

Tube lengths 100 mm or 250 mm

ECOmodul70	XFR
ECOmodul60	YFR
ECOmodul40	ZFR

Function

- ▶ The quick mount base is electrically pre-wired; the lower adapter part is mounted on the device and electrically connected
- ▶ The signal tower with quick mount upper base part is simply inserted into the lower part and firmly mounted by twisting the fixing ring
- ▶ The signal tower is now fully functional

Advantages

- ▶ Simple and cost effective disassembly of signal tower for transportation of device
- ▶ Easy re-installation of signal tower at client's location
- ▶ Immediate function, no electrical connection work
- ▶ No wrong installation of signal tower possible as it only fits in one correct position into the quick mount lower part
- ▶ Additional locking option of signal tower with safety screw
- ▶ Quick mount base includes a rubber shipping cover protecting the exposed lower part during transportation or storage



Indication board

suitable for all ECOmodul signal towers

- ▶ Can be set up for one to five-tier signal towers (clean break-off at desired length due to pre-lasered break-off edges)
- ▶ Easy mounting on the pole mount base
- ▶ For attaching of individual instructions and indications
- ▶ Complete scope of supply with 5-tier board, mounting clamp and screws
- ▶ Suitable for all pole mount bases of ECOmodul signal towers

Dimensions of indication board: 150 x 398 mm

Available area per tier: 150 x 62 mm (4 x), 150 x 150 mm (1 x)

Order number: XIB 900 850 900





Type	Light modules	Light source		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
XLL	Steady light	bulb		up to 250 V AC/DC		7 W	900 00C 900
XDC	LED steady light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,049-0,054	900 01C 405	
			110/120 V AC		0,028-0,031	900 01C 310	
			230/240 V AC		0,027-0,028	900 01C 313	
XDC	LED steady light clear, blue		24 V AC/DC	+/- 10%	0,049-0,054	900 01C 405	
			110/120 V AC		0,028-0,031	900 01C 310	
			230/240 V AC		0,027-0,028	900 01C 313	
XDA	LED flashing light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,058	900 02C 405	
			110/120 V AC		0,028-0,030	900 02C 310	
			230/240 V AC		0,030-0,031	900 02C 313	
XDA	LED flashing light clear, blue		24 V AC/DC	+/- 10%	0,058	900 02C 405	
			110/120 V AC		0,028-0,030	900 02C 310	
			230/240 V AC		0,030-0,031	900 02C 313	
XDF	LED strobe light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,130-0,136	900 03C 405	
			110/120 V AC		0,010	900 03C 310	
			230/240 V AC		0,010	900 03C 313	
XDF	LED strobe light clear, blue		24 V AC/DC	+/- 10%	0,130-0,136	900 03C 405	
			110/120 V AC		0,010	900 03C 310	
			230/240 V AC		0,010	900 03C 313	
	„HIGH PERFORMANCE“ models						
XDC-HP	LED steady light HP amber, red, green, yellow	integrated „HIGH PERFORMANCE“ LED		24 V AC/DC	18-30 V DC 18-26 V AC	0,170-0,200	900 05C 405
XDC-HP	LED steady light HP clear, blue			24 V AC/DC	18-30 V DC 18-26 V AC	0,170-0,200	900 05C 405
XDF-HP	LED strobe light HP amber, red, green, yellow	integrated „HIGH PERFORMANCE“ LED		24 V AC/DC	18-30 V DC 18-26 V AC	0,260-0,265	900 06C 405
XDF-HP	LED strobe light HP clear, blue			24 V AC/DC	18-30 V DC 18-26 V AC	0,260-0,265	900 06C 405
XFF-HP	LED multi strobe light HP amber, red, green, yellow	integrated „HIGH PERFORMANCE“ LED		24 V AC/DC	18-30 V DC 18-26 V AC	0,260-0,265	900 07C 405
XFF-HP	LED multi strobe light HP clear, blue			24 V AC/DC	18-30 V DC 18-26 V AC	0,260-0,265	900 07C 405
Type	Tone modules	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
		Tone type	Max. volume				
XDE	Piezo buzzer	continuous or pulsing	100 dB**	24 V AC/DC	+/- 10%	0,092	900 500 405
				110/120 V AC		0,041	900 500 310
				230/240 V AC		0,043	900 500 313
				24 V AC/DC		0,092	900 510 405
XDZ	Piezo buzzer 2 tones selectable	continuous and pulsing	100 dB**	110/120 V AC		0,041	900 510 310
				230/240 V AC		0,043	900 510 313
				24 V AC/DC		0,115	900 520 405
XDM	Multi-tone siren Tones see tone table page 34	8 tones	100 dB**	110/120 V AC		0,045	900 520 310
				230/240 V AC		0,043	900 520 313

Type	Accessories	Denomination	Ordner No., Housing black
XIB	Indication board		900 850 900
LWW	Bulb changing tool (use optional)		890 900 900
BDW		for horizontal mounting, M20	841 501 900
		for horizontal mounting, NPT 1/2"	841 502 900
BDV	Pole connection box (for XMR, YMR, ZMR, BMR, VMR, DMR only)	for vertical mounting, M20	841 511 900
		for vertical mounting, NPT 1/2"	841 512 900
BDM		for magnetic mounting, M20	841 521 900
		for magnetic mounting, NPT 1/2"	841 522 900
SKE	Screw set	for use of pole connection boxes in connection with ECOmodul70/60/40 and modulCOMPACT70	841 000 900
Type	Denomination	Nominal voltage (V)	Ordner No.
GL01	Incandescent bulb BA15d	12 V, 5 W	890 010 904
GL02	Incandescent bulb BA15d	24 V, 6,5 W	890 010 905
GL05	Incandescent bulb BA15d	110/120 V, 7 W	890 010 910
GL06	Incandescent bulb BA15d	230/240 V, 6 W	890 010 913



Order data



Type	Bases		Order No. Housing black
XMW	Base for horizontal mounting	M20, with inside mounting holes	900 570 900
XMS	Base for horizontal mounting	with premounted fixation screws	900 571 900
XMf	Base for horizontal mounting	with external mounting lugs	900 572 900
XMV	Base for vertical mounting	single side mounting	900 573 900
XZV	Base for vertical mounting	double side mounting	900 574 900
XMR	Pole mount base 100 mm	on aluminium tube with plastic foot	900 582 900
XMR	Pole mount base 250 mm	on aluminium tube with plastic foot	900 583 900
XMR	Pole mount base 400 mm	on aluminium tube with plastic foot	900 584 900
XNW	Pole mount base	NPT 1/2" thread	900 570 950
XWR	Bracket	for pole mount base with plastic foot (XMR)	900 600 900
XSW	Pole mount base 100 mm	on aluminium tube for direct mounting with screw	900 592 900
XSW	Pole mount base 250 mm	on aluminium tube for direct mounting with screw	900 593 900
XSW	Pole mount base 400 mm	on aluminium tube for direct mounting with screw	900 594 900
XSS	Set for vertical mounting (for XSW)	metal bracket, adapter with cable gland	900 700 900
XFR	Quick mount base 100 mm	on aluminium tube with „foot adapter“	900 562 900
XFR	Quick mount base 250 mm	on aluminium tube with „foot adapter“	900 563 900
XFR	Quick mount base 400 mm	on aluminium tube with „foot adapter“	900 564 900
XEP	Base extension, length 100 mm	suitable for all bases	900 800 900

Preconfigured ECOmodul70 Signal Towers

Type	Denomination	Specification	Order No. Housing black
24 V AC/DC			
ECO70-Q01	LED steady light Pole mount base 100 mm pole	red-amber-green	ECO70-Q01
ECO70-Q02	LED steady light Pole mount base 100 mm pole	red-green	ECO70-Q02
ECO70-Q05	LED steady light Pole mount base 100 mm pole	red-amber-green-blue	ECO70-Q05
ECO70-Q31	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO70-Q31
230 V AC			
ECO70-Q81	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO70-Q81





Type	Light modules	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black	
YLL	Steady light	bulb	up to 250 V AC/DC		4 W	901 00C 900	
YDC	LED steady light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,022-0,033	901 01C 405	
			110/120 V AC		0,029-0,030	901 01C 310	
			230/240 V AC		0,029-0,030	901 01C 313	
YDC	LED steady light clear, blue		24 V AC/DC		0,022-0,033	901 01C 405	
			110/120 V AC		0,029-0,030	901 01C 310	
			230/240 V AC		0,029-0,030	901 01C 313	
YDA	LED flashing light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,028-0,036	901 02C 405	
			110/120 V AC		0,030	901 02C 310	
			230/240 V AC		0,030	901 02C 313	
YDA	LED flashing light clear, blue		24 V AC/DC		0,028-0,036	901 02C 405	
			110/120 V AC		0,030	901 02C 310	
			230/240 V AC		0,030	901 02C 313	
YDF	LED strobe light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,035-0,065	901 03C 405	
			110/120 V AC		0,010	901 03C 310	
			230/240 V AC		0,010	901 03C 313	
YDF	LED strobe light clear, blue		24 V AC/DC		0,035-0,065	901 03C 405	
			110/120 V AC		0,010	901 03C 310	
			230/240 V AC		0,010	901 03C 313	
	„HIGH PERFORMANCE“ models						
YDC-HP	LED steady light HP amber, red, green, yellow	integrated „HIGH PERFORMANCE“ LED	24 V AC/DC	18-30 V DC 18-26 V AC	0,130-0,150	901 05C 405	
YDC-HP	LED steady light HP clear, blue		24 V AC/DC		0,130-0,150	901 05C 405	
YFF-HP	LED multi strobe light HP amber, red, green, yellow	integrated „HIGH PERFORMANCE“ LED	24 V AC/DC	18-30 V DC 18-26 V AC	0,190-0,250	901 07C 405	
YFF-HP	LED multi strobe light HP clear, blue		24 V AC/DC		0,190-0,250	901 07C 405	
Type	Tone modules	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
		Tone type	Max. Volume				
YDE	Piezo Buzzer	continuous or pulsing	90 dB**	24 V AC/DC	+/- 10%	0,065	901 500 405
				110/120 V AC		0,031	901 500 310
				230/240 V AC		0,032	901 500 313
Type	Bases					Order No. Housing black	
YMW	Base for horizontal mounting			M20, with inside mounting holes		901 570 900	
YMS	Base for horizontal mounting			with premounted fixation screws		901 571 900	
YMF	Base for horizontal mounting			with external mounting holes		901 572 900	
YMC	Base for horizontal mounting			with external mounting holes and integrated 5 pole M12 connector		901 572 914	
WYC	Metal bracket			for YMC		901 573 910	
YMV	Base for vertical mounting			single side mounting		901 573 900	
YZV	Base for vertical mounting			double side mounting		901 574 900	
YMR	Pole mount base 100 mm			on aluminium tube with plastic foot		901 582 900	
YMR	Pole mount base 250 mm			on aluminium tube with plastic foot		901 583 900	
YMR	Pole mount base 400 mm			on aluminium tube with plastic foot		901 584 900	
YNW	Pole mount base			NPT 1/2" thread		901 570 950	
XWR	Bracket			for pole mount base with plastic foot (YMR)		900 600 900	
YSW	Pole mount base 100 mm			on aluminium tube for direct mounting with screw		901 592 900	
YSW	Pole mount base 250 mm			on aluminium tube for direct mounting with screw		901 593 900	
YSW	Pole mount base 400 mm			on aluminium tube for direct mounting with screw		901 594 900	
XSS	Set for vertical mounting (for YSW)			metal bracket, adapter with cable gland		900 700 900	
YFR	Quick mount base 100 mm			on aluminium tube with „foot adapter“		901 562 900	
YFR	Quick mount base 250 mm			on aluminium tube with „foot adapter“		901 563 900	
YFR	Quick mount base 400 mm			on aluminium tube with „foot adapter“		901 564 900	
YEP	Base extension, length 100 mm			suitable for all bases		901 800 900	

** Adjustable by potentiometer



Order data



Preconfigured ECOmodul60 Signal Towers

Type	Denomination	Specification	Order No. Housing black
24 V AC/DC			
ECO60-Q01	LED steady light Pole mount base 100 mm pole	red-amber-green	ECO60-Q01
ECO60-Q02	LED steady light Pole mount base 100 mm pole	red-green	ECO60-Q02
ECO60-Q05	LED steady light Pole mount base 100 mm pole	red-amber-green-blue	ECO60-Q05
ECO60-Q31	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO60-Q31
230 V AC			
ECO60-Q81	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO60-Q81

Accessories

Type	Denomination		Order No. Housing black
XIB	Indication board		900 850 900
LWW	Bulb changing tool		890 900 900
BDW	Pole connection box (for XMR, YMR, ZMR, BMR, VMR, DMR only)	for horizontal mounting, M20	841 501 900
		for horizontal mounting, NPT 1/2"	841 502 900
BDV		for vertical mounting, M20	841 511 900
		for vertical mounting, NPT 1/2"	841 512 900
BDM		for magnetic mounting, M20	841 521 900
		for magnetic mounting, NPT 1/2"	841 522 900
SKE	Screw set	for use of pole connection boxes in connection with ECOmodul70/60/40 and modulCOMPACT70	841 000 900
Type	Denomination	Nominal voltage (V)	Order No.
GL11	Incandescent bulb BA15d	12 V, 4 W	890 012 904
GL12	Incandescent bulb BA15d	24 V, 4 W	890 012 905
GL15	Incandescent bulb BA15d	110/120 V, 4 W	890 012 910
GL16	Incandescent bulb BA15d	230/240 V, 4 W	890 012 913



Type	Light modules	Light source		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
ZLL	Steady light	bulb		up to 250 V AC/DC		4 W	902 00C 900
ZDC	LED steady light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,022-0,033	902 01C 405	
			110/120 V AC		0,030	902 01C 310	
			230/240 V AC		0,030	902 01C 313	
ZDC	LED steady light clear, blue		24 V AC/DC	+/- 10%	0,022-0,033	902 01C 405	
			110/120 V AC		0,030	902 01C 310	
			230/240 V AC		0,030	902 01C 313	
ZDA	LED flashing light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,028-0,036	902 02C 405	
			110/120 V AC		0,030	902 02C 310	
			230/240 V AC		0,030	902 02C 313	
ZDA	LED flashing light clear, blue		24 V AC/DC	+/- 10%	0,028-0,036	902 02C 405	
			110/120 V AC		0,030	902 02C 310	
			230/240 V AC		0,030	902 02C 313	
ZDF	LED strobe light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,035-0,065	902 03C 405	
			110/120 V AC		0,010	902 03C 310	
			230/240 V AC		0,010	902 03C 313	
ZDF	LED strobe light clear, blue		24 V AC/DC	+/- 10%	0,035-0,065	902 03C 405	
			110/120 V AC		0,010	902 03C 310	
			230/240 V AC		0,010	902 03C 313	
ZFF	LED multi strobe light amber, red, green, yellow	integrated LED	24 V AC/DC	+/- 10%	0,048-0,068	902 04C 405	
			110/120 V AC		0,021-0,030	902 04C 310	
			230/240 V AC		0,021-0,030	902 04C 313	
ZFF	LED multi strobe light clear, blue		24 V AC/DC	+/- 10%	0,048-0,068	902 04C 405	
			110/120 V AC		0,021-0,030	902 04C 310	
			230/240 V AC		0,021-0,030	902 04C 313	
Type	Tone modules	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
		Tone type	Max. volume				
ZDE	Piezo buzzer	continuous or pulsing	80 dB	24 V AC/DC	+/- 10%	0,039	902 500 405
				110/120 V AC		0,021	902 500 310
				230/240 V AC		0,021	902 500 313
Type	Bases						Order No. Housing black
ZMW	Base for horizontal mounting			M20, with inside mounting holes			902 570 900
ZMS	Base for horizontal mounting			with premounted fixation screws			902 571 900
ZMF	Base for horizontal mounting			with external mounting lugs			902 572 900
ZMC	Base for horizontal mounting			with external mounting holes and integrated 5 pole M12 connector			902 572 911
WZC	Metal bracket			for ZMC			200 550 900
ZMV	Base for vertical mounting			single side mounting			902 573 900
ZZV	Base for vertical mounting			double side mounting			902 574 900
ZMR	Pole mount base 100 mm			on aluminium tube with plastic foot			902 582 900
ZMR	Pole mount base 250 mm			on aluminium tube with plastic foot			902 583 900
ZMR	Pole mount base 400 mm			on aluminium tube with plastic foot			902 584 900
ZNW	Pole mount base			NPT 1/2" thread			902 570 950
XWR	Bracket			for pole mount base with plastic foot (ZMR)			900 600 900
ZSW	Pole mount base 100 mm			on aluminium tube for direct mounting with screw			902 592 900
ZSW	Pole mount base 250 mm			on aluminium tube for direct mounting with screw			902 593 900
ZSW	Pole mount base 400 mm			on aluminium tube for direct mounting with screw			902 594 900
XSS	Set for vertical mounting (for ZSW)			metal bracket, adapter with cable gland			900 700 900
ZFR	Quick mount base 100 mm			on aluminium tube with „foot adapter“			902 562 900
ZFR	Quick mount base 250 mm			on aluminium tube with „foot adapter“			902 563 900
ZFR	Quick mount base 400 mm			on aluminium tube with „foot adapter“			902 564 900
ZEP	Base extension, length 100 mm			suitable for all bases			902 800 900



Order data



Preconfigured ECOmodul40 Signal Towers

Type	Denomination	Specification	Order No. Housing black
24 V AC/DC			
ECO40-Q01	LED steady light Pole mount base 100 mm pole	red-amber-green	ECO40-Q01
ECO40-Q02	LED steady light Pole mount base 100 mm pole	red-green	ECO40-Q02
ECO40-Q05	LED steady light Pole mount base 100 mm pole	red-amber-green-blue	ECO40-Q05
ECO40-Q31	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO40-Q31
230 V AC			
ECO40-Q81	LED steady light Buzzer continuous or pulsing tone Pole mount base 100 mm pole	red-amber-green	ECO40-Q81

Accessories

Type	Denomination		Order No. Housing black
XIB	Indication board		900 850 900
LWW	Bulb changing tool		890 900 900
BDW	Pole connection box (for XMR, YMR, ZMR, BMR, VMR, DMR only)	for horizontal mounting, M20	841 501 900
		for horizontal mounting, NPT 1/2"	841 502 900
BDV		for vertical mounting, M20	841 511 900
		for vertical mounting, NPT 1/2"	841 512 900
BDM		for magnetic mounting, M20	841 521 900
		for magnetic mounting, NPT 1/2"	841 522 900
SKE	Screw set	for use of pole connection boxes in connection with ECOmodul70/60/40 and modulCOMPACT70	841 000 900
Type	Denomination	Nominal voltage (V)	Order No.
GL11	Incandescent bulb BA15d	12 V, 4 W	890 012 904
GL12	Incandescent bulb BA15d	24 V, 4 W	890 012 905
GL15	Incandescent bulb BA15d	110/120 V, 4 W	890 012 910
GL16	Incandescent bulb BA15d	230/240 V, 4 W	890 012 913

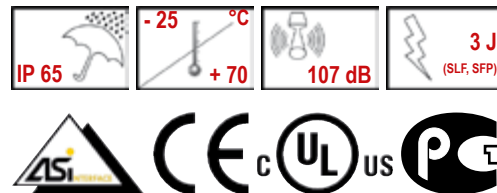


Signal Tower modulSIGNAL70



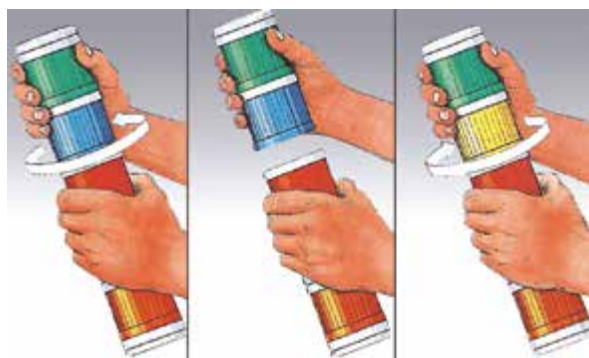
Features

- Modular, well proven signal tower family
- For practically all signal tower applications
- Complete range of visual, audible and special modules
- 6 lens colours, 2 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL type 4/4X/13



- Modular construction with bayonet locking system
- Fast and easy to operate, mount, configurate and change modules
- Troublefree and fingersafe bulb change at any position without using any tools

Quick mount system „FOOT ADAPTER“ (Pat.No. 501053) (Base type BFR)



module contacts



Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturers and their customers.



Signal Tower modul SIGNAL70

Type	Denomination	Light source			Tone options		Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.						
		Bulb GL	LED bulb steady light LLL	LED bulb flash. light LLB	Tone types	Max. sound pressure (dB)				Housing grey	Housing black					
Light Modules																
SLL	Steady light	X	X	X			- 250 V AC/DC	+/- 10%	7 W	210 10C 900	210 50C 900					
SLB	Flashing light	X	X				12-24 V AC/DC		7 W	220 10C 405	220 50C 405					
							110/120 V AC		220 10C 310	220 50C 310						
							230/240 V AC		220 10C 313	220 50C 313						
SLF	Strobe light	3 J xenon tube					12-24 V AC/DC	0,180	230 10C 405	230 50C 405						
							110/120 V AC	0,050	230 10C 310	230 50C 310						
							230/240 V AC	0,035	230 10C 313	230 50C 313						
SDC	LED steady light amber, red, green, yellow	integrated LEDs					24 V AC/DC	+/- 10%	0,070	211 10C 405	211 50C 405					
						110/120 V AC	0,043		211 10C 310	211 50C 310						
						230/240 V AC	0,041		211 10C 313	211 50C 313						
						24 V AC/DC	0,070		211 10C 405	211 50C 405						
	LED steady light clear, blue						110/120 V AC		0,043	211 10C 310	211 50C 310					
						230/240 V AC	0,041		211 10C 313	211 50C 313						
	SDA				LED flashing light amber, red, green, yellow	integrated LEDs					24 V AC/DC	+/- 10%	0,070	221 10C 405	221 50C 405	
										110/120 V AC	0,043		221 10C 310	221 50C 310		
			230/240 V AC	0,041	221 10C 313				221 50C 313							
			24 V AC/DC	0,070	221 10C 405				221 50C 405							
	LED flashing light clear, blue						110/120 V AC		0,043	221 10C 310	221 50C 310					
						230/240 V AC	0,041		221 10C 313	221 50C 313						
	Light-Buzzer Modules															
SLP	Steady light-buzzer	X	X	X	cont. or puls.	107 or 90*	24 V AC/DC 110/120 V AC 230/240 V AC	+/- 10%	7 W, 0,040 A	250 10C 405 250 10C 310 250 10C 313	250 50C 405 250 50C 310 250 50C 313					
SLD	Steady light-buzzer light/sound separately switchable	X	X	X	cont. or puls.	107 or 90*	24 V AC/DC		7 W, 0,043 A	212 10C 405	212 50C 405					
							110/120 V AC		212 10C 310	212 50C 310						
							230/240 V AC		212 10C 313	212 50C 313						
SBP	Flashing light-buzzer	X	X		cont. or puls.	107 or 90*	24 V AC/DC		7 W, 0,040 A	260 10C 405	260 50C 405					
							110/120 V AC			260 10C 310	260 50C 310					
							230/240 V AC			260 10C 313	260 50C 313					
SFP	Strobe light-buzzer	3 J xenon tube			cont. or puls.	107 or 90*	24 V AC/DC	0,220	270 10C 405	270 50C 405						
							110/120 V AC	0,093	270 10C 310	270 50C 310						
							230/240 V AC	0,075	270 10C 313	270 50C 313						
Sound Modules																
SDE	Piezo buzzer, IP65				cont. or puls.	107 or 90*	24 V AC/DC	+/- 10%	0,040	247 100 405	247 500 405					
							110/120 V AC		0,043	247 100 310	247 500 310					
							230/240 V AC		0,040	247 100 313	247 500 313					
SDZ	Piezo buzzer, IP65 tone type externally switchable				cont. + puls.	107 or 90*	24 V AC/DC		0,040	248 100 405	248 500 405					
							110/120 V AC		0,043	248 100 310	248 500 310					
							230/240 V AC		0,040	248 100 313	248 500 313					
SPE	Piezo buzzer, IP54				cont. or puls.	97 or 81**	24 V AC/DC		0,040	243 100 405	243 500 405					
							110/120 V AC	0,043	243 100 310	243 500 310						
							230/240 V AC	0,040	243 100 313	243 500 313						
SPZ	Piezo buzzer, IP54 tone type externally switchable				cont. + puls.	97 or 81**	24 V AC/DC	0,040	244 100 405	244 500 405						
							110/120 V AC	0,043	244 100 310	244 500 310						
							230/240 V AC	0,040	244 100 313	244 500 313						
STE	Electronic sounder IP54, 15 tone types				15	64-103**	12-24 V AC/DC	+/- 10%	0,065	241 100 405	241 500 405					
							110/120 V AC		0,060	241 100 310	241 500 310					
							230/240 V AC		0,060	241 100 313	241 500 313					
STZ	Electronic sounder IP54, 15 tone types 2 tones externally switchable				15	64-103**	12-24 V AC/DC		0,065	242 100 405	242 500 405					
							110/120 V AC		0,060	242 100 310	242 500 310					
							230/240 V AC		0,060	242 100 313	242 500 313					
AS-Interface		Specifications														
BAZ	AS-Interface module	31 slaves / 4 modules									280 500 510					
		62 slaves / 3 modules									280 500 000					
		62 slaves / 4 modules									280 500 100					

NOTE: Product also available in 12 V AC/DC

Bulbs have to be ordered separately * Adjustable via DIP switch

** Adjustable by potentiometer



Order data

Type	Denomination		Pole length mm			Order No.	
						Housing grey	Housing black
	Bases						
BMW	Base for horizontal mounting, M20					200 100 900	200 500 900
BNW	Base for horizontal mounting, NPT 1/2"					200 130 900	200 530 900
BMV	Base for vertical mounting					200 200 900	200 600 900
BMR	Pole mount base on aluminium tube with plastic foot		100 mm			200 302 900	200 702 900
			250 mm			200 303 900	200 703 900
BSR	Pole mount base on stainless steel tube with metal foot		100 mm			200 312 900	200 712 900
			250 mm			200 313 900	200 713 900
BWS	Pole mount base on aluminium tube with horizontal mounting with screw		100 mm			200 332 900	200 732 900
			250 mm			200 333 900	200 733 900
BSS	Set for vertical mounting (for BWS)					200 400 900	200 800 900
BFR	Pole mount base on aluminium base with foot adapter for quick mounting		100 mm			200 342 900	200 742 900
			250 mm			200 343 900	200 743 900
	Accessories						
BDW	Pole connection box (for BMR only)	for horizontal mounting, M20				841 101 900	841 501 900
		for horizontal mounting, NPT 1/2"				841 102 900	841 502 900
for vertical mounting, M20					841 111 900	841 511 900	
for vertical mounting, NPT 1/2"					841 112 900	841 512 900	
for magnetic mounting, M20					841 121 900	841 521 900	
for magnetic mounting, NPT 1/2"					841 122 900	841 522 900	
GL01	Incandescent bulb BA15d	12 V, 5 W					890 010 904
GL02		24 V, 6,5 W					890 010 905
GL05		110/120 V, 7 W					890 010 910
GL06		230/240 V, 6W					890 010 913
LLL	LED Bulb, steady light	12 V AC/DC					893 00C 404
		24 V AC/DC					893 00C 405
		110/120 V AC					893 00C 310
		230/240 V AC					893 00C 313
LLB	LED Bulb, flashing light	12 V AC/DC					893 01C 404
		24 V AC/DC					893 01C 405
		110/120 V AC					893 01C 310
		230/240 V AC					893 01C 313

NOTE: ► Additional pole lengths available: 400, 500, 600, 800 mm

► Cap is automatically included with each base



Notes

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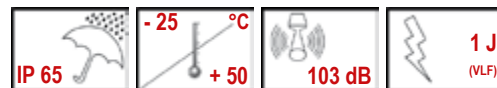
Signal Tower modulSIGNAL50

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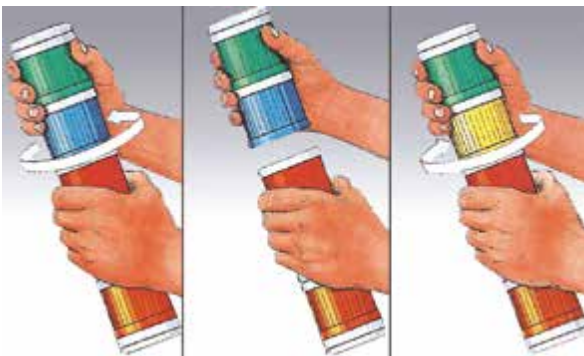


Features

- Modular, well proven signal tower family
- For practically all signal tower applications
- Complete range of visual, audible and special modules
- 6 lens colours, 2 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL type 4/4X/13



Ø 50 mm



Quick mount system „FOOT ADAPTER“ (Pat.No. 501053) (Base type VFR)



- Modular construction with bayonet locking system
- Fast and easy to operate, mount, configure and change modules
- Troublefree and fingersafe bulb change at any position without using any tools

module contacts



Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturers and their customers.



Signal Tower modul SIGNAL50

Type	Denomination	Light source			Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
		Bulb GL	LED bulb steady light LLL	LED bulb flash-light LLB	Tone types	Max. sound pressure (dB)				Housing grey	Housing black
	Light Modules										
VLL	Steady light	x	x	x			- 250 V AC/DC	+/- 10%	7 W	750 00C 900	
VLB	Flashing light	x	x				12-24 V AC/DC		7 W	760 00C 405	
							110/120 V AC			760 00C 310	
							230/240 V AC			760 00C 313	
VDC	LED steady light amber, red, green, yellow	integrated LED					24 V AC/DC		0,029	751 00C 405	
							110/120 V AC		0,033	751 00C 310	
							230/240 V AC		0,036	751 00C 313	
	LED steady light clear, blue						24 V AC/DC		0,029	751 00C 405	
							110/120 V AC		0,033	751 00C 310	
							230/240 V AC		0,036	751 00C 313	
VDA	LED flashing light amber, red, green, yellow						24 V AC/DC		0,030	761 00C 405	
							110/120 V AC		0,034	761 00C 310	
							230/240 V AC		0,035	761 00C 313	
	LED flashing light clear, blue						24 V AC/DC		0,030	761 00C 405	
							110/120 V AC		0,034	761 00C 310	
							230/240 V AC		0,035	761 00C 313	
VDF	LED strobe light amber, red, green, yellow						24 V AC/DC		max. 0,089	771 00C 405	
							110/120 V AC		0,024	771 00C 310	
							230/240 V AC		0,024	771 00C 313	
	LED strobe light clear, blue						24 V AC/DC		max. 0,089	771 00C 405	
							110/120 V AC		0,024	771 00C 310	
							230/240 V AC		0,024	771 00C 313	
VFF	LED multi strobe light amber, red, green, yellow						24 V AC/DC		max. 0,082	772 00C 405	
							110/120 V AC		0,032	772 00C 310	
							230/240 V AC		0,034	772 00C 313	
	LED multi strobe light clear, blue						24 V AC/DC		max. 0,082	772 00C 405	
							110/120 V AC		0,032	772 00C 310	
							230/240 V AC		0,034	772 00C 313	
VLF	Xenon strobe light amber, red, yellow, clear, blue, green	3 J xenon tube					12-24 V AC/DC		0,070	770 00C 405	
							110/120 V AC		0,026	770 00C 310	
							230/240 V AC		0,015	770 00C 313	
	Sound Modules										
VDE	Piezo buzzer, IP 65				cont. or pulsing	103 or 88*	24 V AC/DC	+/- 10%	0,025	781 100 405	781 500 405
							110/120 V AC		0,033	781 100 310	781 500 310
							230/240 V AC		0,033	781 100 313	781 500 313
VDZ	Piezo buzzer, IP65 tone type and sound pressure selectable with DIP switch				cont. and pulsing	103 or 88*	24 V AC/DC		0,025	782 100 405	782 500 405
							110/120 V AC		0,033	782 100 310	782 500 310
							230/240 V AC		0,033	782 100 313	782 500 313
	AS-Interface	Specifications									
VAZ	AS-Interface module	31 slaves/4 Module									780 500 500
		62 slaves/3 Module									780 500 600
		62 slaves/4 Module									780 500 700

NOTE: Additional voltages and pole lengths available

Bulbs have to be ordered separately

* Adjustable via DIP switch



Order data

Type	Denomination		Pole length mm			Order No.	
						Housing grey	Housing black
	Bases						
VMW	Base for horizontal mounting, M20					790 120 900	790 520 900
VNW	Base for horizontal mounting, NPT 1/2"					790 130 900	790 530 900
VMV	Base for vertical mounting					790 140 900	790 540 900
VMR	Pole mount base on aluminium tube with plastic foot		100 mm			790 142 900	790 542 900
			250 mm			790 143 900	790 543 900
VSR	Pole mount base on stainless steel tube with metal foot		100 mm			790 152 900	790 552 900
			250 mm			790 153 900	790 553 900
VSW	Pole mount base on aluminium tube for horizontal mounting with screw		100 mm			790 172 900	790 572 900
			250 mm			790 173 900	790 573 900
BSS	Set for vertical mounting (for VSW)					200 400 900	200 800 900
VFR	Base with foot adapter for quick mounting		100 mm			790 182 900	790 582 900
			250 mm			790 183 900	790 583 900
	Accessories						
BDW	Pole connection box (VMR only)	for horizontal mounting, M20				841 101 900	841 501 900
		for horizontal mounting, NPT 1/2"				841 102 900	841 502 900
for vertical mounting, M20					841 111 900	841 511 900	
for vertical mounting, NPT 1/2"					841 112 900	841 512 900	
for magnetic mounting, M20					841 121 900	841 521 900	
for magnetic mounting, NPT 1/2"					841 122 900	841 522 900	
SIC	Safety screw set					700 000 900	
GL01	Incandescent bulb BA15d	12 V, 5 W				890 010 904	
GL02		24 V, 6,5 W				890 010 905	
GL05		110/120 V, 7 W				890 010 910	
GL06		230/240 V, 6 W				890 010 913	
LLL	LED Bulb, steady light	12 V AC/DC				893 00C 404	
		24 V AC/DC				893 00C 405	
		110/120 V AC				893 00C 310	
		230/240 V AC				893 00C 313	
LLB	LED Bulb, flashing light	12 V AC/DC				893 01C 404	
		24 V AC/DC				893 01C 405	
		110/120 V AC				893 01C 310	
		230/240 V AC				893 01C 313	

NOTE: Cap is automatically included with each base Additional voltages and pole lengths available

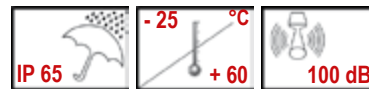


Signal Tower modulCOMPACT70



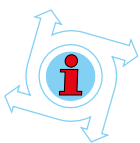
Features

- Compact (ready to use) LED signal tower family
- Tower is built according to customer's requirements
- Prewired with 1 m cable as standard (other cables lengths on request)
- 6 lens colours, 2 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL-certified, protection class IP 65 UL type 4/4X/13
- Excellent price/performance ratio



Quick mount system „FOOT ADAPTER“ (Pat.No. 501053) (Base type DFR)

Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturer and their customers.



NOTE:

The supply voltage 24 V AC/DC, 110/120 V AC oder 230/240 V AC is determined by selecting the base in the desired voltage. Any modules mounted on the base always operate with 24 V only.

For design reasons light modules cannot be changed after dispatch of product!





Order data

Descriptive order number logic for modulCOMPACT70 LED signal towers

	Base	Cable	Housing colour	Nominal voltage	Module Position A		Module Position B		Module Position C	Module Position D		Module Position E	
C70	T2	C5	B	24	L	6	B	2					

Base			
B0	DMW	Base for horizontal mounting	
V0	DMV	Base for vertical mounting	
P0	DMR	Pole mount base on aluminium tube with plastic foot	50 mm
P1	DMR		100 mm
P2	DMR		250 mm
P4	DMR		400 mm
T0	DSW	Pole mount base on aluminium tube for horizontal mounting with screws	50 mm
T1	DSW		100 mm
T2	DSW		250 mm
T4	DSW		400 mm
Q1	DFR	Pole mount base on aluminium tube with foot adapter for quick mounting	100 mm
Q2	DFR		250 mm
Q4	DFR		400 mm

Standard UL cable, yellow	
C1	1 m
C2	2 m
C3	3 m
C5	5 m

Housing colour	
B	black
G	gray

Nominal voltage	
24	24 V AC/DC
10	110/120 V AC
20	230/240 V AC

Modules		
L	DLL	LED steady light (1 Position)
B	DLB	LED flashing light (1 Position)
DD	DDD	Piezo buzzer, continuous tone, 100 dB (1 position)
DP	DDP	Piezo buzzer, pulsing tone, 100 dB (1 position)
DZ	DDZ	Piezo buzzer, continuous and pulsing tone, 100 dB, externally switchable (2 positions)

Lens colour	
1	amber
2	red
4	clear
5	blue
6	green
7	yellow



Accessories

Type	Denomination	Colour	Order No.
BSS	Set for vertical mounting (for DSW)	black	200 800 900
BSS	Set for vertical mounting (for DSW)	gray	200 400 900



How to order correctly a modulCOMPACT70 LED signal tower			
Configuration	Type	New	Correct order number
LED flashing light, red	DLB	B2	C70T2C5B24L6B2
LED steady light, green	DLL	L6	
Nominal voltage 24 V AC/DC		24	
Housing colour black		B	
Cable 5 m		C5	
Pole mount base on aluminium tube with screws, 250 mm	DSW	T2	
Accessory (to be ordered with a separate order no.):			
Set for vertical mounting (for DSW), black	BSS		200 800 900

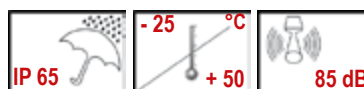


Signal Tower modulCOMPACT30



Features

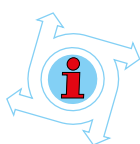
- Compact (ready to use) LED signal tower family
- Tower is built according to customer's requirements
- Prewired with 1 m cable as standard (other cable lengths on request)
- 6 lens colours, 2 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL type 4/4X/13
- Excellent price/performance ratio



Quick mount system „FOOT ADAPTER“

(Pat.No. 501053) (Base type CFR)

Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturer and their customers.



NOTE:

The supply voltage 24 V AC/DC, 110/120 V AC oder 230/240 V AC is determined by selecting the base in the desired voltage. Any modules mounted on the base always operate with 24 V only.

For design reasons light modules cannot be changed after dispatch of product!



CLL/CLB



CDD/CDP/CDZ



CMR



CSW



CFR



CSS



Order data

Descriptive order number logic for modulCOMPACT30 LED signal towers

	Base	Cable	Housing colour	Nominal voltage	Module Position A		Module Position B		Module Position C		Module Position D		Module Position E	
C30	P1	C1	B	20	B	1	L	5	L	4	B	2	D	P

Base			
P0	CMR	Pole mount base on aluminium tube with plastic foot	0 mm
P1	CMR		100 mm
P2	CMR		250 mm
P4	CMR		400 mm
T0	CSW	Pole mount base on aluminium tube for horizontal mounting with screws	0 mm
T1	CSW		100 mm
T2	CSW		250 mm
T4	CSW		400 mm
Q0	CFR	Pole mount base on aluminium tube with foot adapter for quick mounting	0 mm
Q1	CFR		100 mm
Q2	CFR		250 mm
Q4	CFR		400 mm

Standard UL cable, yellow	
C1	1 m
C2	2 m
C3	3 m
C5	5 m

Housing colour	
B	black
G	gray

Nominal voltage	
24	24 V AC/DC
10	110/120 V AC
20	230/240 V AC

Modules			
L	CLL	LED steady light (1 position)	
B	CLB	LED flashing light (1 position)	
DD	CDD	Piezo buzzer, continuous tone, 85 dB (1 position)	
DP	CDP	Piezo buzzer, pulsing tone, 85 dB (1 position)	
DZ	CDZ	Piezo buzzer, cont. and pulsing tone, 85 dB (2 positions)	

Lens colour	
1	amber
2	red
4	clear
5	blue
6	green
7	yellow



Accessories

Type	Denomination	Colour	Order No.
CSS	Set for vertical mounting (for CSW)	black	700 530 900
CSS	Set for vertical mounting (for CSW)	gray	700 130 900

Position E
Position D
Position C
Position B
Position A



How to order correctly a modulCOMPACT30 LED signal tower				
Configuration	Type	New	Correct order number	
Buzzer pulsing tone	CDP	DP	C30P1C1B20B1L5L4B2DP	
LED flashing light, red	CLB	B2		
LED steady light, clear	CLL	L4		
LED steady light, blue	CLL	L5		
LED flashing light, amber	CLB	B1		
Nominal voltage 230 V		20		
Housing colour black		B		
Cable 1 m		C1		
Pole mount base on alu tube with plastic foot, 100 mm	CMR	P1		



Signal Tower modulCOMPACT70, modulCOMPACT30



Preconfigured modulCOMPACT70 Signal Towers			
Type	Denomination	Specification	Order No. Housing black
24 V AC/DC			
C70-Q01	LED steady light pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C70-Q01
C70-Q02	LED steady light pole mount base 100 mm pole prewired with 1 m cable	red-green	C70-Q02
C70-Q05	LED steady light pole mount base 100 mm pole prewired with 1m cable	red-amber-green-blue	C70-Q05
C70-Q31	LED steady light Buzzer continuous and pulsing tone pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C70-Q31
230 V AC			
C70-Q81	LED steady light Buzzer continuous and pulsing tone pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C70-Q81



Order data

Preconfigured modulCOMPACT30 Signal Towers			
Type	Denomination	Specification	Order No. Housing black
24 V AC/DC			
C30-Q01	LED steady light pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C30-Q01
C30-Q02	LED steady light pole mount base 100 mm pole prewired with 1 m cable	red-green	C30-Q02
C30-Q05	LED steady light pole mount base 100 mm pole prewired with 1 m cable	red-amber-green-blue	C30-Q05
C30-Q31	LED steady light Buzzer continuous and pulsing tone pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C30-Q31
230 V AC			
C30-Q81	LED steady light Buzzer continuous and pulsing tone pole mount base 100 mm pole prewired with 1 m cable	red-amber-green	C30-Q81





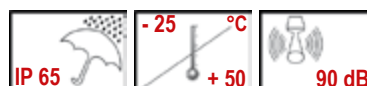
Signal Tower halfDOME90



Ø 90 mm

Features

- Visual-audible signal tower in half dome design
- For universal industrial, building and other applications
- Any colour combination and housing size (2-5 positions) available
- 6 lens colours, 3 housing colours
- LED steady or flashing light for each position selectable
- Particular lens optics with reflective coating
- Optimal signalling effect and visibility from each viewing angle (180°)
- Optional piezo buzzer in upper housing area available (continuous and pulsing tone, 70-90 dB)
- Plc fit (leakage, inrush current)
- UL type 4/4X/13

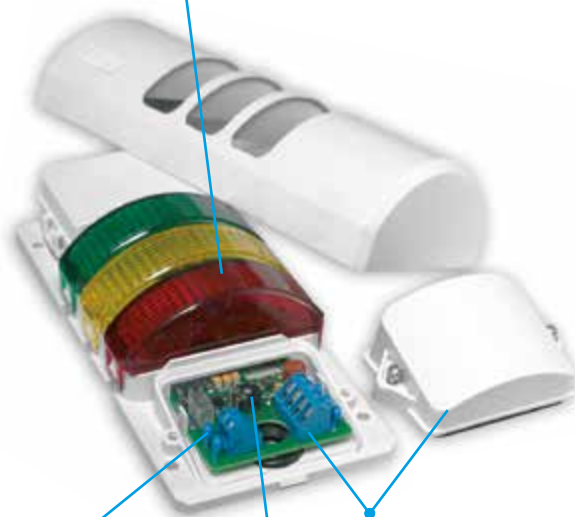


Modules always work with 24 V voltage

Slim design, only 45 mm wide for optimal integration/combination of signal tower unit in machine/panel building or other (building) applications



IP 65 – for use in damp and dusty environmental conditions, also outdoor



Supply voltage is chosen with the respective base

Easy electrical connection (terminals, removable cover)

Volume individually adjustable from ~70-90 dB



Order data

Descriptive order number logic for halfDOME90 LED signal towers

	Housing colour	Nominal voltage	Module Position A		Module Position B		Module Position C		Module Position D		Module Position E		Tone module	
HD	C	24	L	6	B	7	L	2	B	5	L	4	D	Z

Housing colour	
G	gray
C	chrome
B	black

Nominal voltage	
12	12 V AC/DC
24	24 V AC/DC
10	110/120 V AC
20	230/240 V AC

Module		
L	HDL	LED steady light
B	HDB	LED flashing light
DZ	HDZ	Buzzer continuous/pulsing tone 70-90 dB

Lens colour	
1	amber
2	red
4	clear
5	blue
6	green
7	yellow

INFORMATION:

halfDOME LED signal towers are available in 4 housing models:

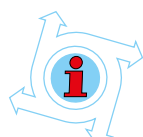
HD2	Housing with 2 lights
HD3	Housing with 3 lights
HD4	Housing with 4 lights
HD5	Housing with 5 lights

Position E
Position D
Position C
Position B
Position A



How to order correctly a halfDOME90 LED signal tower

Configuration	Type	New	Correct order number
Buzzer continuous/pulsing tone	HDZ	DZ	HDC24L6B7L2B5L4DZ
LED steady light, clear	HDL	L4	
LED flashing light, blue	HDB	B5	
LED steady light, red	HDL	L2	
LED flashing light, yellow	HDB	B7	
LED steady light, green	HDL	L6	
Nominal voltage 24 V AC/DC		24	
Housing colour chrome		C	
Housing for 5 lights	HD5		



NOTE:

Light modules mounted in housings of halfDOME products work for nominal voltages 24 V AC/DC, 110/120 V AC and 230/240 V AC with an operating voltage of 24 V only; 12 V AC/DC models work with 12 V operating voltage.

For design reasons light modules cannot be changed after dispatch of product!



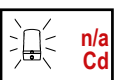
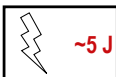
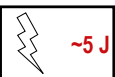
Signal Tower halfDOME90

Preconfigured halfDOME90 Signal Towers

Type	Denomination	Specification	Order No.
Housing grey, 24 V AC/DC			
HD90-Q31	LED steady light buzzer continuous and pulsing tone	red-amber-green	HD90-Q31
HD90-Q32	LED steady light buzzer continuous and pulsing tone	red-green	HD90-Q32
HD90-Q36	LED steady light buzzer continuous and pulsing tone	red-amber-green-blue-clear	HD90-Q36
Housing grey, 230 V AC			
HD90-Q81	LED steady light buzzer continuous and pulsing tone	red-amber-green	HD90-Q81
HD90-Q82	LED steady light buzzer continuous and pulsing tone	red-green	HD90-Q82
HD90-Q86	LED steady light buzzer continuous and pulsing tone	red-amber-green-blue-clear	HD90-Q86
Housing chrome, 24 V AC/DC			
HD90-Q41	LED steady light buzzer continuous and pulsing tone	red-amber-green	HD90-Q41
HD90-Q42	LED steady light buzzer continuous and pulsing tone	red-green	HD90-Q42
HD90-Q46	LED steady light buzzer continuous and pulsing tone	red-amber-green-blue-clear	HD90-Q46
Housing chrome, 230 V AC			
HD90-Q91	LED steady light buzzer continuous and pulsing tone	red-amber-green	HD90-Q91
HD90-Q92	LED steady light buzzer continuous and pulsing tone	red-green	HD90-Q92
HD90-Q96	LED steady light buzzer continuous and pulsing tone	red-amber-green-blue-clear	HD90-Q96



Combinations Multi-Tone Alarm Sounder „A“ – Beacons „Q“

	Size 1	Size 2	Size 3	Size 4	
	H = 188 mm	H = 264 mm	H = 368 mm	H = 456 mm	
					
	 103 dB	 108 dB	 113 dB	 120 dB	 127 dB
	8 Tones	32 Tones	32 Tones	63 Tones	63 Tones
Multi-Tone Sounder + LED Steady/ Flashing Beacon	ASS-P+QDS	ASS-T+QDS	ASM+QDM	ASL+QDL	ASX+QDX
	 10 Cd	 10 Cd	 120 Cd	 170 Cd	 300 Cd
Multi-Tone Sounder + LED Multi Strobe Beacon	ASS-P+QBS	ASS-T+QBS	ASM+QBM	ASL+QBL	ASX+QBX
	 n/a Cd	 n/a Cd	 n/a Cd	 250 Cd	 400 Cd
Multi-Tone Sounder + Xenon Strobe Beacon	ASS-P+QFS	ASS-T+QFS	ASM+QFM		
	 ~5 J	 ~5 J	 ~10 J		

Features

- Comprehensive range of standard and high output alarm sounders in combination with cubic design beacons in LED or xenon technique
- 3 stage alarm/tones externally switchable (ASS-T, ASM, ASL, ASX)
- For applications in the industry, process control, fire/gas alarm, marine, etc.
- Versatile installation and mounting options
- Tone table includes international and standardized signal tones for fire/gas alarm and other applications
- Sound and light separately switchable
- Beacon options**
 - In most up-to-date LED technique**
(long lifetime, low nominal current, vibrationproof)
 - LED steady/flashing beacons (size 1-4)
 - LED multi strobe beacons (size 1-4)
 - 3-4 strobe patterns (depending on the model), externally switchable
 - In conventional xenon technique**
(classic signalling with good signalling effect)
 - xenon strobe beacons 5 - 10 J strobe energy (size 1-2)

2) In conventional xenon technique

(classic signalling with good signalling effect)

- xenon strobe beacons 5 - 10 J strobe energy (size 1-2)
- Optional/customized tones/tone tables upon request
- Automatic synchronization in multi-sounder installations
- Fit for plc applications (leakage, inrush current)

The Candela values refer to colour clear (white) at 230 V operating voltage and a measuring angle of 1° in axial direction.

Tone table

please refer to pages 81-83.

Accessories and Installation options

for details please refer to page 79/80.



Size Comparison



Size 1
94 mm

Size 2
132 mm

Size 3
184 mm

Size 4
228 mm



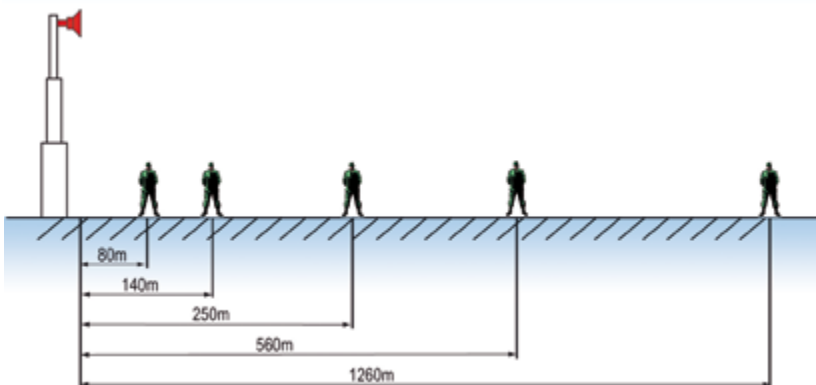
Size 1
94 mm

Size 2
132 mm

Size 3
184 mm

Size 4
228 mm

Signal Recognition



The sound pressure decreases depending on the distance between sounder and hearer (see also table „reduction of sound pressure over distance“ in the AUER catalogue). The illustration shows the maximum distance at which a minimum sound pressure of 65 dB is achieved.

Assumptions here are ideal environmental conditions (wind, rain, humidity, fog, etc.) as well as type and frequency of the tone used.

The directive efficiency of the sounder increases with an increasing tone frequency.

Sounder Type	Max. sound pressure level dB (A) in 1 m	Effective range of signal recognition (min. 65 dB) in m	Approx. area of signal recognition (min. 65 dB) in m ²
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000



Combinations Multi-Tone Alarm Sounder „A“ – Beacons „Q“

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
ASS-P	Multi-tone alarm sounder size 1, 8 tones	103**	24 V AC/DC	+/- 10%	0,100	874 060 405
			48 V AC/DC		0,075	874 060 408
			110/120 V AC		0,040	874 060 310
			230/240 V AC		0,040	874 060 313
ASS-T	Multi-tone alarm sounder size 1, 32 tones	108**	24 V AC/DC	+/- 10%	0,120	874 160 405
			48 V AC/DC		0,090	874 160 408
			110/120 V AC		0,042	874 160 310
			230/240 V AC		0,022	874 160 313
ASM	Multi-tone alarm sounder size 2, 32 tones	113**	24 V AC/DC	+/- 10%	0,120	874 260 405
			48 V AC/DC		0,090	874 260 408
			110/120 V AC		0,042	874 260 310
			230/240 V AC		0,022	874 260 313
ASL	Multi-tone alarm sounder size 3, 63 tones	120**	24-48 V AC/DC	+/- 10%	1,050	874 360 408
			110/120 V AC		0,170	874 360 310
			230/240 V AC		0,085	874 360 313
ASX	Multi-tone alarm sounder size 4, 63 tones	127	24-48 V AC/DC	+/- 10%	2,000	874 460 408
			110/120 V AC		0,350	874 460 310
			230/240 V AC		0,170	874 460 313
QDS	LED steady/flashing beacon size 1 – amber, red, yellow, clear, blue, green	LED 10 Cd	24 V AC/DC	+/- 10%	0,2	874 16C 405
			48 V AC/DC		0,11	874 16C 408
			110/120 V AC		0,05	874 16C 310
			230/240 V AC		0,05	874 16C 313
QDM	LED steady/flashing beacon size 2 – amber, red, yellow, clear, blue, green	LED 120 Cd	24-48 V AC/DC	19-75 V DC	0,5	874 26C 408
			110-240 V AC	19-53 V AC	< 0,07	874 26C 413
QDL	LED steady/flashing beacon size 3 amber, red, clear, yellow	LED 170 Cd	24-48 V AC/DC	18-60 V DC	max. 0,780	874 36C 408
			110-240 V AC/DC	18-53 V AC	max. 0,210	874 36C 413
QDL	LED steady/flashing beacon size 3 blue, green	LED 170 Cd	24-48 V AC/DC	18-60 V DC	max. 0,780	874 36C 408
			110-240 V AC/DC	18-53 V AC	max. 0,210	874 36C 413
QDX	LED steady/flashing beacon size 4 amber, red, clear, yellow	LED 300 Cd	24-48 V AC/DC	18-60 V DC	max. 1,800	874 46C 408
			110-240 V AC/DC	18-53 V AC	max. 0,350	874 46C 413
QDX	LED steady/flashing beacon size 4 blue, green	LED 300 Cd	24-48 V AC/DC	18-60 V DC	max. 1,800	874 46C 408
			110-240 V AC/DC	18-53 V AC	max. 0,350	874 46C 413

** Adjustable by potentiometer



Order data

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QBS*	LED multi strobe beacon size 1 amber, red, yellow, clear, blue, green	n/a	24-48 V AC/DC	19-75 V DC	<0,2	874 17C 408
			110-240 V AC	80-265 V AC	<0,035	874 17C 313
QBM*	LED multi strobe beacon size 2 amber, red, yellow, clear, blue, green	n/a	24-48 V AC/DC	19-75 V DC	<0,55	874 27C 408
			110-240 V AC	80-265 V AC	<0,11	874 27C 313
QBL	LED multi strobe beacon size 3 amber, red, clear, yellow	LED 250 Cd	24-48 V AC/DC	18-60 V DC	max. 0,810	874 76C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,220	874 76C 413
QBL	LED multi strobe beacon size 3 blue, green	LED 250 Cd	24-48 V AC/DC	18-60 V DC	max. 0,810	874 76C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,220	874 76C 413
QBX	LED multi strobe beacon size 4 amber, red, clear, yellow	LED 400 Cd	24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413
QBX	LED multi strobe beacon size 3 blue, green	LED 400 Cd	24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408
			110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413
QFS	Xenon strobe beacon size 1	xenon tube 5 J	24-48 V AC/DC	18-53 V AC/DC	0,450	874 56C 408
			110/120 V AC	+/- 10%	0,150	874 56C 310
			230/240 V AC		0,075	874 56C 313
QFM	Xenon strobe beacon size 2	xenon tube 10 J	24-48 V AC/DC	18-53 V AC/DC	0,900	874 66C 408
			110/120 V AC	+/- 10%	0,260	874 66C 310
			230/240 V AC		0,160	874 66C 313

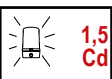
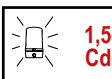
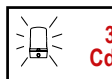
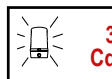
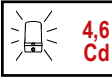
* Scheduled availability: 1st quarter 2017

Accessories

Type	Denomination	Order No.
AMK	mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“	874 010 900
AG1	flat gasket for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 021 900
AG2	flat gasket for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 022 900
AG3	flat gasket for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 023 900
AG4	flat gasket for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 024 900
AB1	metal bracket kit for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 031 900
AB2	metal bracket kit for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 032 900
AB3	metal bracket kit for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 033 900
AB4	metal bracket kit for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 034 900
AKV	cable gland M20x1,5 for multi-tone alarm sounders „A“ and/or beacons „Q“	698 800 026



Multi-Tone Alarm Sounders „A“ with Light Indicator

	Size 1		Size 2		Size 3	Size 4
	H = 94 mm		H = 173 mm		H = 239 mm	H = 284 mm
						
	 103 dB	 108 dB	 113 dB	 120 dB	 127 dB	
	8 Tones 32 Tones		32 Tones		63 Tones	63 Tones
Multi-tone alarm sander + LED steady or flashing light indicator	ADS-P	ADS-T	ADM	ADL	ADX	
	 1,5 Cd	 1,5 Cd	 2,3 Cd	 3 Cd	 3 Cd	
Multi-tone alarm sander + LED strobe light indicator			ACM	ACL	ACX	
			 4,6 Cd	 6 Cd	 6 Cd	

Features

- Comprehensive range of visual-audible signalling products with dominant audible multi-tone sander and additional visual light indicator
- 3 tones externally switchable (ADS-T, ADM/ACM, ADL/ACL, ADX/ACX)
- For most different visual-audible signalling requirements in the industry, process control, fire/gas alarm, marine, etc.
- Light indicators in most up-to-date LED technique (long lifetime, low current consumption, vibration proof):
 - LED steady light indicators or
 - LED steady flashing light indicators or
 - LED strobe light indicators (2 strobe patterns - double/6 times strobe)
- Versatile installation and mounting options
- Tone and light separately switchable
- Tone table includes international and standardized signal tones for fire/gas alarm and other applications
- Optional/customized tones/tone tables upon request
- Fit for plc applications (leakage, inrush current)

Tone table

please refer to page 81-83.

Accessories and Installation options:

for details please refer to page 79/80.

The Candela values refer to colour clear (white) at 230 V operating voltage and a measuring angle of 1° in axial direction.





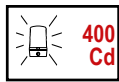
Order data

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
ADS-P	Multi-tone alarm sounder size 1 with LED steady indicator 8 tones amber, red, yellow	103**	24 V AC/DC	+/- 10%	0,120	875 06C 405
			110/120 V AC		0,065	875 06C 310
			230/240 V AC		0,065	875 06C 313
ADS-P	Multi-tone alarm sounder size 1 with LED steady indicator 8 tones clear, blue, green	103**	24 V AC/DC	+/- 10%	0,120	875 06C 405
			110/120 V AC		0,065	875 06C 310
			230/240 V AC		0,065	875 06C 313
ADS-T	Multi-tone alarm sounder size 1 with LED steady/flashing indicator 32 tones amber, red, yellow	108**	24 V AC/DC	+/- 10%	0,160	875 16C 405
			110/120 V AC		0,050	875 16C 310
			230/240 V AC		0,025	875 16C 313
ADS-T	Multi-tone alarm sounder size 1 with LED steady/flashing indicator 32 tones clear, blue, green	108**	24 V AC/DC	+/- 10%	0,160	875 16C 405
			110/120 V AC		0,050	875 16C 310
			230/240 V AC		0,025	875 16C 313
ADM	Multi-tone alarm sounder size 2 with LED steady/flashing indicator 32 tones amber, red, yellow	113**	24 V AC/DC	+/- 10%	0,600	875 26C 405
			110/120 V AC		0,072	875 26C 310
			230/240 V AC		0,052	875 26C 313
ADM	Multi-tone alarm sounder size 2 with LED steady/flashing indicator 32 tones clear, blue, green	113**	24 V AC/DC	+/- 10%	0,600	875 26C 405
			110/120 V AC		0,072	875 26C 310
			230/240 V AC		0,052	875 26C 313
ADL	Multi-tone alarm sounder size 3 with LED steady/flashing indicator 63 tones amber, red, yellow	120**	24 V AC/DC	+/- 10%	1,110	875 36C 405
			110/120 V AC		0,200	875 36C 310
			230/240 V AC		0,116	875 36C 313
ADL	Multi-tone alarm sounder size 3 with LED steady/flashing indicator 63 tones clear, blue, green	120**	24 V AC/DC	+/- 10%	1,110	875 36C 405
			110/120 V AC		0,200	875 36C 310
			230/240 V AC		0,116	875 36C 313
ADX	Multi-tone alarm sounder size 4 with LED steady/flashing indicator 63 tones, amber, red, yellow	127	24 V AC/DC	+/- 10%	2,060	875 46C 405
			110/120 V AC		0,380	875 46C 310
			230/240 V AC		0,200	875 46C 313
ADX	Multi-tone alarm sounder size 4 with LED steady/flashing indicator 63 tones clear, blue, green	127	24 V AC/DC	+/- 10%	2,060	875 46C 405
			110/120 V AC		0,380	875 46C 310
			230/240 V AC		0,200	875 46C 313
ACM	Multi-tone alarm sounder size 2 with LED strobe light indicator 32 tones amber, red, yellow	113**	24 V AC/DC	+/- 10%	0,230	875 66C 405
			110/120 V AC		0,075	875 66C 310
			230/240 V AC		0,550	875 66C 313
ACM	Multi-tone alarm sounder size 2 with LED strobe light indicator 32 tones clear, blue, green	113**	24 V AC/DC	+/- 10%	0,230	875 66C 405
			110/120 V AC		0,075	875 66C 310
			230/240 V AC		0,550	875 66C 313
ACL	Multi-tone alarm sounder size 3 with LED strobe light indicator 63 tones amber, red, yellow	120**	24 V AC/DC	+/- 10%	1,205	875 76C 405
			110/120 V AC		0,215	875 76C 310
			230/240 V AC		0,130	875 76C 313
ACL	Multi-tone alarm sounder size 3 with LED strobe light indicator 63 tones clear, blue, green	120**	24 V AC/DC	+/- 10%	1,205	875 76C 405
			110/120 V AC		0,215	875 76C 310
			230/240 V AC		0,130	875 76C 313
ACX	Multi-tone alarm sounder size 4 with LED strobe light indicator 63 tones amber, red, yellow	127	24 V AC/DC	+/- 10%	2,155	875 86C 405
			110/120 V AC		0,295	875 86C 310
			230/240 V AC		0,185	875 86C 313
ACX	Multi-tone alarm sounder size 4 with LED strobe light indicator 63 tones clear, blue, green	127	24 V AC/DC	+/- 10%	2,155	875 86C 405
			110/120 V AC		0,295	875 86C 310
			230/240 V AC		0,185	875 86C 313

** Adjustable by potentiometer



Beacons „Q“ with Buzzer Indicator

	Size 1 H = 104 mm	Size 2 H = 166 mm	Size 3 H = 207 mm	Size 4 H = 272 mm
				
	 80 dB 2 Tones	 100 dB 2 Tones	 105 dB 3 Tones	 105 dB 3 Tones
LED Steady/ Flashing Beacons + Buzzer Indicator	QSS  10 Cd	QSM  120 Cd	QSL  170 Cd	QSX  300 Cd
LED Multi Strobe Beacon + Buzzer Indicator	QCS  n/a Cd	QCM  n/a Cd	QCL  250 Cd	QCX  400 Cd
Xenon Strobe Beacon + Buzzer Indicator	QTS  ~5 J	QTM  ~10 J		

Features

- Comprehensive range of visual-audible signalling products with dominant beacon and additional buzzer indicator
- For most different visual-audible signalling requirements in the industry, process control, fire/gas alarm, marine, etc.
- Buzzer indicators with up-to-date piezo technique
 - 2 tones – steady/pulsing tone (size 1-2)
 - 3 tones – steady/pulsing/wobble tone (size 3-4)
- Versatile installation and mounting options
- Light and tone separately switchable
- Beacon options**
 - In most up-to-date LED technique**
(long lifetime, low current consumption, vibration proof):
 - LED steady/flashing beacons (size 1-4) and
 - LED multi strobe beacons - 3-4 strobe patterns (depending on the model), externally switchable (size 1-4)
 - In conventional xenon strobe technique**
(classic signalling with good signalling effect):
 - xenon strobe beacons with ~5 J and 10 J strobe energy (size 1-2)
- Fit for plc applications (leakage, inrush current)

Accessories and Installation options

for details please refer to page 79/80.

The Candela values refer to colour clear (white) at 230 V operating voltage and a measuring angle of 1° in axial direction.

* Volume adjustable by potentiometer





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QSS	LED steady/flashing beacon size 1 with buzzer indicator; amber, red, yellow	LED 10 Cd	24 V AC/DC	+/- 10%	0,156	876 16C 405
			110/120 V AC		0,077	876 16C 310
			230/240 V AC		0,080	876 16C 313
QSS	LED steady/flashing beacon size 1 with buzzer indicator clear, blue, green	LED 10 Cd	24 V AC/DC	+/- 10%	0,156	876 16C 405
			110/120 V AC		0,077	876 16C 310
			230/240 V AC		0,080	876 16C 313
QSM	LED steady/flashing beacon size 2 with buzzer indicator amber, red, yellow	LED 120 Cd	24 V AC/DC	+/- 10%	0,320	876 26C 405
			110/120 V AC		0,112	876 26C 310
			230/240 V AC		0,110	876 26C 313
QSM	LED steady/flashing beacon size 2 with buzzer indicator clear, blue, green	LED 120 Cd	24 V AC/DC	+/- 10%	0,320	876 26C 405
			110/120 V AC		0,112	876 26C 310
			230/240 V AC		0,110	876 26C 313
QSL	LED steady/flashing beacon size 3 with buzzer indicator amber, red, clear, yellow	LED 170 Cd	24 V AC/DC	+/- 10%	0,837	876 36C 405
			110/120 V AC		0,252	876 36C 310
			230/240 V AC		0,254	876 36C 313
QSL	LED steady/flashing beacon size 3 with buzzer indicator blue, green	LED 170 Cd	24 V AC/DC	+/- 10%	0,837	876 36C 405
			110/120 V AC		0,252	876 36C 310
			230/240 V AC		0,254	876 36C 313
QSX	LED steady/flashing beacon size 4 with buzzer indicator amber, red, clear, yellow	LED 300 Cd	24 V AC/DC	+/- 10%	1,860	876 46C 405
			110/120 V AC		0,392	876 46C 310
			230/240 V AC		0,394	876 46C 313
QSX	LED steady/flashing beacon size 4 with buzzer indicator blue, green	LED 300 Cd	24 V AC/DC	+/- 10%	1,860	876 46C 405
			110/120 V AC		0,392	876 46C 310
			230/240 V AC		0,394	876 46C 313
QCS*	LED multi strobe beacon size 1 with buzzer indicator amber, red, clear, yellow, blue, green	n/a	24 V AC/DC	n/a	n/a	876 17C 405
			110/120 V AC	n/a	n/a	876 17C 310
			230/240 V AC	n/a	n/a	876 17C 313
QCM*	LED multi strobe beacon size 2 with buzzer indicator amber, red, clear, yellow, blue, green	n/a	24 V AC/DC	n/a	n/a	876 27C 405
			110/120 V AC	n/a	n/a	876 27C 310
			230/240 V AC	n/a	n/a	876 21C 313
QCL	LED multi strobe beacon size 3 with buzzer indicator amber, red, clear, yellow	LED 250 Cd	24 V AC/DC	+/- 10%	0,867	876 76C 405
			110/120 V AC		max. 0,262	876 76C 310
			230/240 V AC		max. 0,264	876 76C 313
QCL	LED multi strobe beacon size 3 with buzzer indicator blue, green	LED 250 Cd	24 V AC/DC	+/- 10%	0,867	876 76C 405
			110/120 V AC		max. 0,262	876 76C 310
			230/240 V AC		max. 0,264	876 76C 313
QCX	LED multi strobe beacon size 4 with buzzer indicator amber, red, clear, yellow	LED 400 Cd	24 V AC/DC	+/- 10%	max. 1,760	876 86C 405
			110/120 V AC		max. 0,440	876 86C 310
			230/240 V AC		max. 0,440	876 86C 313
QCX	LED multi strobe beacon size 4 with buzzer indicator blue, green	LED 400 Cd	24 V AC/DC	+/- 10%	max. 1,760	876 86C 405
			110/120 V AC		max. 0,440	876 86C 310
			230/240 V AC		max. 0,440	876 86C 313
QTS	Xenon strobe beacon size 1 with buzzer indicator	xenon tube ~5 J	24 V AC/DC	+/- 10%	0,496	876 56C 405
			110/120 V AC		0,167	876 56C 310
			230/240 V AC		0,095	876 56C 313
QTM	Xenon strobe beacon size 2 with buzzer indicator	xenon tube ~10 J	24 V AC/DC	+/- 10%	0,919	876 66C 405
			110/120 V AC		0,302	876 66C 310
			230/240 V AC		0,200	876 66C 313

* Scheduled availability: 1st quarter 2017

Type	Denomination	Order No.
AMK	Mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“	874 010 900
AG1	Flat gasket for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 021 900
AG2	Flat gasket for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 022 900
AG3	Flat gasket for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 023 900
AG4	Flat gasket for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 024 900
AB1	Metal bracket kit for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 031 900
AB2	Metal bracket kit for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 032 900
AB3	Metal bracket kit for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 033 900
AB4	Metal bracket kit for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 034 900
AKV	Cable gland M20x1,5 for multi-tone alarm sounders „A“ and/or beacons „Q“	698 800 026

Accessories



Beacons-Buzzer Series „T“

LED Steady/Flashing Beacon-Buzzer Combinations
LED Multi Strobe Beacon-Buzzer Combinations
Steady Beacon-Buzzer Combinations

Light/Beacons options	Type 1		Sound option	Type 2		Mounting options		Type 3	Complete product
LED steady/flashing beacon	TDC	+	Piezo buzzer (contiuous or pulsing tone)	TDE	+	horizontal mounting	internal mounting holes	TMW	Type 1 + Type 3 + Type 2 in matching voltage of Type 1
							external mounting holes	TMF	
LED multi strobe beacon	TDF						lateral cable entry (cable gland)	TNL	
						vertical mounting	TMV		
Steady beacon	TLL					pole mounting	alu tube/plastic foot	TMR	
							for NPT 1/2" pole mount	TNW	

Features

- Ø 75 mm large comprehensive modular beacon-buzzer range
- Modern, efficient and long life LED beacons in functions LED steady/flashing (externally addressable) and LED multi strobe (6 times fast strobe and multi strobe patterns addressable)
- Steady beacon option with BA15d socket for 7 W incandescent bulb
- Piezo buzzer module, ~88-100 dB (A) in 1 m, volume infinitely adjustable (potentiometer) continuous or pulsing tone selectable via DIP switch
- Comprehensive range of mounting options
- Optimized illumination/brightness and signalling effect combined with well audible buzzer with high ingress protection IP66
- Modular design
- Comfortable connection technique with high contact safety push-in or clamping yoke terminals
- Lenses and housing made of high-resistant polycarbonates
- 6 lens colours
- For use in industrial/general applications
- Fit for plc applications (leakage, inrush current)
- UL type 4/4X/13 (TNL, TMW+TVS type 1)



TDC



TDF



TLL



TDE



GL



TMW



TMF



TMV



TMR



TNW



TNL



TDC+TDE+TMW



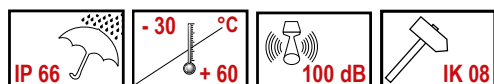
TDF+TDE+TMF



TLL+TDE+TMV



TDC+TDE+TMR





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
Light/Beacons options						
TDC	LED steady/flashing beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	0,140	859 50C 405
				18-27 V AC	0,220	
			110/120 V AC	75-132 V AC	0,072	859 50C 310
			230/240 V AC	150-264 V AC	0,066	859 50C 313
TDF	LED multi strobe beacon amber, red, yellow, clear, blue, green	integrated LEDs	24 V AC/DC	20-32 V DC	max. 0,190	859 51C 405
				18-27 V AC	max. 0,250	
			110/120 V AC	75-132 V AC	0,042	859 51C 310
			230/240 V AC	150-264 V AC	0,042	859 51C 313
TLL	Steady light beacon amber, red, yellow, clear, blue, green	incandescent bulb (not included)	up to 250 V AC/DC	---	max. 7 W	859 52C 900
Sound options						
TDE	Buzzer module	continuous or pulsing tone ~ 100 dB (A) in 1 m	24 V AC/DC	20-32 V DC	0,030	859 560 405
				18-27 V AC	0,048	
			110/120 V AC	75-132 V AC	0,040	859 560 310
			230/240 V AC	150-264 V AC	0,040	859 560 313
Type	Denomination	Specification		Weight	Pole length	Order No.
Mounting options/Bases						
TMW	Base for horizontal mounting	with internal mounting holes				859 500 900
TMF		with external mounting holes				859 510 900
TNL		lateral cable entry				859 515 900
TMV	Base for vertical mounting					859 520 900
TMR	Pole mounting	aluminium tube with plastic foot			100 mm	859 532 900
					250 mm	859 533 900
TNW	Pole mounting	for NPT 1/2" mount				859 540 900

Price

Accessories

Type	Denomination		Order No.
TVS	Metal bracket kit	for TMW incl. cable gland M12x1,5 for cable entry bottom-up	859 550 900
PV1	Protective vent	optionally for bases type TMW, TMF, TNL	859 100 000
Type	Denomination	Nominal voltage (V)	Order No.
GL01	Incandescent bulb BA 15 d	12 V, 5 W	890 010 904
GL02		24 V, 6,5 W	890 010 905
GL03		48 V, 5 W	890 010 908
GL04		60 V, 7 W	890 010 909
GL05		110/120 V, 7 W	890 010 910
GL06		230/240 V, 6 W	890 010 913

Price

Accessories

- TVS metal bracket
 - incl. cable gland M12x1,5 for vertical mounting of TMW
 - horizontal base
 - allows cable entry from bottom-up





Mini Horn-Signal Beacon KLL - KDL Mini Horn-Strobe Beacon KLF - KDF

KLL - KDL KLF - KDF

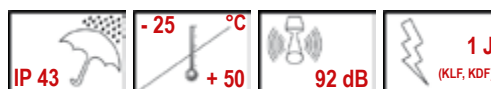


KLL - KLF

KDL - KDF

Features

- Combination of electromechanical horn with signal beacon or strobe beacon
- For universal visual-audible applications
- 3 lens colours (amber, red, yellow)
- Beacon options:
 - steady light with bulb or LED bulb (LLL)
 - flashing light with LED bulb (LLB)
- Models with or without cone
- Sound and light separately switchable
- Attractive price/performance ratio



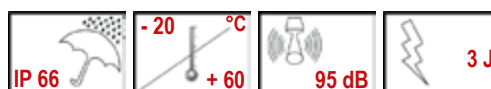
Strobe Beacon-Signalling Sounder VS4

VS4



Features

- Visual-audible signalling sounder for weatherproof applications - IP 66
- For high weatherproof applications in industries, buildings, etc.
- 2 tone types and tone frequencies/settings selectable
- Lens colours amber, red, clear, blue, green
- Aluminium-die cast housing





Order data

Type	Denomination	Light source			Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A) incl. 7W bulb	Order No.	Price
		Bulb GL	LED bulb steady light LLL	LED bulb flash. light LLB	Tone types	Max. sound pressure (dB)					Housing grey	
KLL	Mini horn-signal beacon with cone	x	x	x	cont	88	24 V AC	50	+/- 10%	0,400	710 11C 105	
							48 V AC	50		0,200	710 11C 108	
							230 V AC	50		0,040	710 11C 113	
							120 V AC	60		0,076	710 11C 210	
							92	24 V DC		-	0,320	710 11C 005
KDL	Mini horn-signal beacon without cone	x	x	x	cont	88	24 V AC	50	+/- 10%	0,400	710 01C 105	
							48 V AC	50		0,200	710 01C 108	
							230 V AC	50		0,040	710 01C 113	
							120 V AC	60		0,076	710 01C 210	
							92	24 V DC		-	0,320	710 01C 005
KLF	Mini horn-strobe beacon with cone	1 J xenon tube			cont.	88	120 V AC	60	+/- 10%	0,050	710 12C 210	
						92	230 V AC	50		0,026	710 12C 113	
							24 V DC	-		0,120	710 12C 005	
KDF	Mini horn-strobe beacon without cone	1 J xenon tube			cont.	88	20 V AC	60	+/- 10%	0,050	710 02C 210	
						92	230 V AC	50		0,026	710 02C 113	
							24 V DC	-		0,120	710 02C 005	

NOTE: only available in amber, red and yellow ▶ GL01-GL06 bulbs have to be ordered separately



Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.	Price
			Tone types	Max. sound press. (dB)			Housing black	
VS4	Strobe beacon-signalling sounder	3 J xenon tube	two/three tones	95**	230 V AC	+/- 10%	410 40C 005	

** Adjustable by potentiometer



M22 Panel Mount Buzzer-LED Steady/Flashing Beacons ELG - EDG, ELM - EDM

ELG - EDG

ELM - EDM



ELG - EDG

ELM - EDM

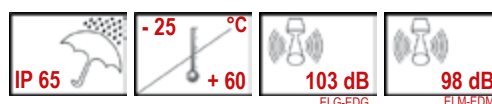
Ø 65 mm

Ø 45 mm



Features

- Versatile M22 panel mount buzzers with LED control light
- 2 sizes - Ø 65 mm, 45 mm
- 2 versions:
 - tone and light synchronized (ELG-ELM)
 - tone and light separately switchable (EDG-EDM)
- Tone type selection via terminal
- Volume individually adjustable also in built-in condition
- LED control light - maintenance free, high brightness
- Plc fit (leakage, inrush current)
- For mounting in standard 22,5 mm or 30,5 mm bore holes (with adapter)



LED Flashing Beacon-Electronic Multi-Tone Siren CS1

CS1



Features

- Cost-effective LED flashing beacon-electronic multi-tone siren
- 32 tone options
- Second stage alarm
- Lens colours amber, red





Order data

Type	Denomination	Light source	Max. sound press. (dB)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
							Housing grey	Housing black
Tone and light synchronized								
ELG (65 mm Ø)	Panel mount buzzer-LED steady/flashing beacon amber, red, yellow	LED	103**	24 V AC/DC	+/- 10%	0,047	814 11C 405	814 51C 405
				110/120 V AC		0,060	814 11C 310	814 51C 310
				230/240 V AC		0,063	814 11C 313	814 51C 313
	Panel mount buzzer-LED steady/flashing beacon clear, blue, green			24 V AC/DC		0,047	814 11C 405	814 51C 405
				110/120 V AC		0,060	814 11C 310	814 51C 310
				230/240 V AC		0,063	814 11C 313	814 51C 313
ELM (45 mm Ø)	Panel mount buzzer-LED steady/flashing beacon amber, red, yellow		98 **	24 V AC/DC		0,058	813 11C 405	813 51C 405
				110/120 V AC		0,042	813 11C 310	813 51C 310
				230/240 V AC		0,040	813 11C 313	813 51C 313
	Panel mount buzzer-LED steady/flashing beacon clear, blue, green			24 V AC/DC		0,058	813 11C 405	813 51C 405
				110/120 V AC		0,042	813 11C 310	813 51C 310
				230/240 V AC		0,040	813 11C 313	813 51C 313
Tone and light separately switchable								
EDG (65 mm Ø)	Panel mount buzzer-LED steady beacon amber, red, yellow	LED	103**	24 V AC/DC	+/- 10%	0,095	814 12C 405	814 52C 405
				110/120 V AC		0,052	814 12C 310	814 52C 310
				230/240 V AC		0,052	814 12C 313	814 52C 313
	Panel mount buzzer-LED steady beacon clear, blue, green			24 V AC/DC		0,095	814 12C 405	814 52C 405
				110/120 V AC		0,052	814 12C 310	814 52C 310
				230/240 V AC		0,052	814 12C 313	814 52C 313
EDM (45 mm Ø)	Panel mount buzzer-LED steady beacon amber, red, yellow		98**	24 V AC/DC		0,073	813 12C 405	813 52C 405
				110/120 V AC		0,051	813 12C 310	813 52C 310
				230/240 V AC		0,051	813 12C 313	813 52C 313
	Panel mount buzzer-LED steady beacon clear, blue, green			24 V AC/DC		0,073	813 12C 405	813 52C 405
				110/120 V AC		0,051	813 12C 310	813 52C 310
				230/240 V AC		0,051	813 12C 313	813 52C 313

NOTE: ▶ All products also available in voltages 12 V AC/DC ** Adjustable by potentiometer

Accessories

Type	Denomination	Order No.
ADM30	Adapter M30,5	812 500 900



Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.	
			Tone types	Max. sound press. (dB)			Housing red	Housing white
CS1	LED flashing beacon- electronic multi-tone siren amber, red	LED	32	88-109*	24 V DC	18-35	C111 62C 005	C111 22C 005

NOTE: ▶ Tone table: www.auer-signal.com

* Adjustable via DIP switch



Mini Horns KLH - KDH

KLH, KDH



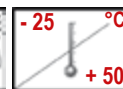
KLH



KDH

Features

- Electromechanical horns in smaller design
- For universal audible applications
- Models with (KLH) or without cone (KDH)
- Attractive price-performance ratio
- Wide voltage range



Signal Horns HPT - HTG

HPT - HTG



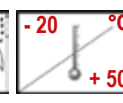
HPT



HTG

Features

- Loud, well designed and robust electromechanical signal horns
- For universal audible applications
- Housing options:
 - impact resistant synthetic housing (HPT)
 - aluminium die-cast housing (HTG)
- Screw holes fortified (HPT)
- Wide voltage range





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound press. (dB)					Housing grey
KLH	Mini horn with cone	continuous	88	24 V AC	50	+/- 10%	0,090	710 100 105
				48 V AC	50		0,060	710 100 108
				110 V AC	50		0,020	710 100 110
				230 V AC	50		0,011	710 100 113
			92	12 V DC	-		0,055	710 100 004
				24 V DC	-		0,026	710 100 005
				110 V DC	-		0,016	710 100 010
				220 V DC	-		0,011	710 100 013
				24 V AC	50		0,090	710 000 105
				48 V AC	50		0,060	710 000 108
KDH	Mini horn without cone	continuous	88	110 V AC	50	+/- 10%	0,020	710 000 110
				230 V AC	50		0,011	710 000 113
			92	12 V DC	-		0,055	710 000 004
				24 V DC	-		0,026	710 000 005
				110 V DC	-		0,016	710 000 008
				220 V DC	-		0,011	710 000 013



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound press. (dB)					Housing grey
HPT	Signal horn	continuous	108	24 V AC	50	+/- 10%	1,200	712 100 105
				48 V AC	50		0,500	712 100 108
				110 V AC	50		0,230	712 100 100
				230 V AC	50		0,100	712 100 113
				120 V AC	60		0,200	712 100 211
				240 V AC	60		0,120	712 100 213
				24 V DC	-		0,600	712 100 005
				110 V DC	-		0,080	712 100 010
				220 V DC	-		0,100	712 100 013
				24 V AC	50		1,200	713 100 105
HTG	Signal horn	continuous	108	48 V AC	50	+/- 10%	0,500	713 100 108
				110 V AC	50		0,230	713 100 110
				230 V AC	50		0,100	713 100 113
				120 V AC	60		0,200	713 100 211
				240 V AC	60		0,120	713 100 214
				24 V DC	-		0,600	713 100 005
				110 V DC	-		0,080	713 100 008
				220 V DC	-		0,100	713 100 013



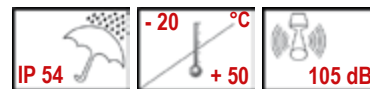
Bells UWS - FWS

UWS - FWS



Features

- Loud bells with typical bell tone for universal applications
- Very robust, high quality design
- Steel bell dome, epoxy powder coated
- Housing aluminium die-cast, epoxy powder coated



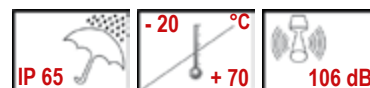
Electronic Multi-Tone Sirens ES1 - ES2

ES1 - ES2



Features

- Cost effective electronic siren with 32 tones
- Second stage tone
- Tone and volume selectable by DIP switch
- Low nominal current
- Easy mounting due to bayonet system





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.	
		Tone types	Max. sound press. (dB)					Housing grey	Housing red
UWS FWS	Signal bell	continuous	105	24 V AC	50-60	+/- 10%	0,400	720 000 305	720 200 305
				230 V AC			0,050	720 000 313	720 200 313
				12 V DC	-		0,800	720 000 004	720 200 004
				24 V DC	-		0,400	720 000 005	720 200 005



Order Data

Type	Denomination	Tone options		Nominal voltage (V)		Voltage range (V)	Nominal current (A)	Order No.	
		Tone types	Max. sound press. (dB)					Housing red	Housing white
ES1	Multi-tone siren	32	106*	24 V DC		15-35	0,009-0,036	C110 620 005	C110 220 005
ES2		32	106*	110 - 230 V AC		+/- 10%	0,012	C115 600 113	C115 200 113

NOTE: ▶ Tone table: www.auer-signal.com

* Adjustable via DIP switch



Multi-Tone Alarm Sounders „A“

Size 1	Size 2	Size 3	Size 4	
H = 94 mm	H = 132 mm	H = 184 mm	H = 228 mm	
				
ASS-P  103 dB 8 Tones	ASS-T  108 dB 32 Tones	ASM  113 dB 32 Tones	ASL  120 dB 63 Tones	ASX  127 dB 63 Tones

Features

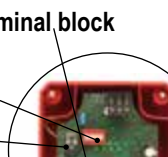
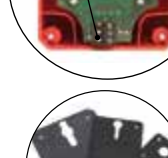
- Comprehensive range of standard to high output alarm sounders in cubic design
- 3 tones externally switchable (ASS-T, ASM, ASL, ASX)
- For applications in the industry, process control, fire alarm, marine, etc.
- Versatile installation and mounting options
- Complete offering of sound-light combinations
- Tone table includes international and standardized signal tones for fire and gas alarm and other applications
- Optional/customized tones/tone tables possible upon request
- Automatic synchronization in multi-sounder installations
- Fit for plc applications (leakage, inrush current)

Tone table

please refer to pages 81-83.



Accessories / Installation Options

- Lateral cable entry** on both sides with **cable gland** (accessory type AKV) 
- Grommet from back side** (included as standard) 
- Metal bracket kit** (accessory type AB1-AB4) for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices, etc. 
- Electrical connection via detachable terminal block** 
- Tone selection via DIP switch volume control by potentiometer** (ASS-P, ASS-T, ASM, ASL) 
- Flat gaskets** for correct IP66 installation on smooth surfaces of housing (accessory type AG1-AG4) 
- Mounting kit AMK** for mounting/combination of 2 or more same size sounders or beacons 



Order data

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
ASS-P	Multi-tone alarm sounder size 1, 8 tones	103**	24 V AC/DC	+/- 10%	0,100	874 060 405
			48 V AC/DC		0,075	874 060 408
			110/120 V AC		0,040	874 060 310
			230/240 V AC		0,040	874 060 313
ASS-T	Multi-tone alarm sounder size 1, 32 tones	108**	24 V AC/DC	+/- 10%	0,120	874 160 405
			48 V AC/DC		0,090	874 160 408
			110/120 V AC		0,042	874 160 310
			230/240 V AC		0,022	874 160 313
ASM	Multi-tone alarm sounder size 2, 32 tones	113**	24 V AC/DC	+/- 10%	0,120	874 260 405
			48 V AC/DC		0,090	874 260 408
			110/120 V AC		0,042	874 260 310
			230/240 V AC		0,022	874 260 313
ASL	Multi-tone alarm sounder size 3, 63 tones	120**	24-48 V AC/DC	+/- 10%	1,050	874 360 408
			110/120 V AC		0,170	874 360 310
			230/240 V AC		0,085	874 360 313
ASX	Multi-tone alarm sounder size 4, 63 tones	127	24-48 V AC/DC	+/- 10%	2,000	874 460 408
			110/120 V AC		0,350	874 460 310
			230/240 V AC		0,170	874 460 313

Accessories

Type	Denomination	Order No.
AMK	Mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“	874 010 900
AG1	Flat gasket for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 021 900
AG2	Flat gasket for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 022 900
AG3	Flat gasket for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 023 900
AG4	Flat gasket for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 024 900
AB1	Metal bracket kit for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“	874 031 900
AB2	Metal bracket kit for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“	874 032 900
AB3	Metal bracket kit for size 3 multi-tone alarm sounders „A“ and/or beacons „Q“	874 033 900
AB4	Metal bracket kit for size 4 multi-tone alarm sounders „A“ and/or beacons „Q“	874 034 900
AKV	Cable gland M20x1,5 for multi-tone alarm sounders „A“ and/or beacons „Q“	698 800 026

** Adjustable by potentiometer



Overview Multi-Tone Alarm Sounders „A“ / Beacons „Q“

Size	Multi-Tone Alarm Sounders „A“	Multi-Tone Alarm Sounders „A“ - Beacon „Q“	Multi-Tone Alarm Sounder „A“ with Light Indicator	Beacons „Q“ with Buzzer Indicator	Beacons „Q“
1	ASS-P ~103 dB  ASS-T ~108 dB 	ASS-P + QDS LED Steady/Flashing ASS-P + QBS LED Multi Strobe ASS-P + QFS ~5 J Xenon Strobe ASS-T + QDS LED Steady/Flashing ASS-T + QBS LED Multi Strobe ASS-T + QFS ~5 J Xenon Strobe 	ADS-P LED Steady  ADS-T LED Steady/Flashing 	QSS LED Steady/Flashing QCS LED Multi Strobe  QTS ~5 J Xenon Strobe 	QDS LED Steady/Flashing QBS LED Multi Strobe  QFS ~5 J Xenon Strobe 
2	ASM ~113 dB 	ASM + QDM LED Steady/Flashing ASM + QBM LED Multi Strobe  ASM + QFM ~10 J Xenon Strobe 	ADM LED Steady/Flashing  ACM LED Strobe 	QSM LED Steady/Flashing QCM LED Multi Strobe  QTM ~10 J Xenon Strobe 	QDM LED Steady/Flashing QBM LED Multi Strobe  QFM ~10 J Xenon Strobe 
3	ASL ~120 dB 	ASL + QDL LED Steady/Flashing  ASL + QBL LED Multi Strobe 	ADL LED Steady/Flashing  ACL LED Strobe 	QSL LED Steady/Flashing  QCL LED Multi Strobe 	QDL LED Steady/Flashing  QBL LED Multi Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady/Flashing  ASX + QBX LED Multi Strobe 	ADX LED Steady/Flashing  ACX LED Strobe 	QSX LED Steady/Flashing  QCX LED Multi Strobe 	QDX LED Steady/Flashing  QBX LED Multi Strobe 

Tone table ASS-P						
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	Max dB
Tone 01	continuous	4600 Hz				103
Tone 02	continuous	1600 Hz				99
Tone 03	intermittent	4600 Hz		250 ms on, 250 ms off		103
Tone 04	intermittent	1600 Hz		250 ms on, 250 ms off		99
Tone 05	sweeping	1200 - 500 Hz		1 Hz	evacuation Germany DIN 33404-3	96
Tone 06	sweeping	500 - 1200 Hz		rising in 3 s, 0,5 s off	Netherlands NEN 2575:2000	98
Tone 07	alternating	800 - 1000 Hz		2 Hz		94
Tone 08	sweeping	500 - 1500 Hz		10 Hz		94

LED steady light 

Tone table ADS-P							
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	Max dB	
Tone 01	continuous	4600 Hz				103	
Tone 02	continuous	1600 Hz				99	
Tone 03	intermittent	4600 Hz		250 ms on, 250 ms off		103	
Tone 04	intermittent	1600 Hz		250 ms on, 250 ms off		99	
Tone 05	sweeping	1200 - 500 Hz		1 Hz	evacuation Germany DIN 33404-3	96	
Tone 06	sweeping	500 - 1200 Hz		rising in 3 s, 0,5 s off	Netherlands NEN 2575:2000	98	
Tone 07	alternating	800 - 1000 Hz		2 Hz		94	
Tone 08	sweeping	500 - 1500 Hz		10 Hz		94	



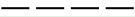
Tone table

STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	ASS-T	ASM	ASL	ASX	STAGE 2 S2	STAGE 3 S3
						max dB	max dB	max dB	max dB*		
Tone 01	continuous	660 Hz			Swedish alarm	101	108	114	116	tone 16	tone 12
Tone 02	continuous	1000 Hz			PFEER toxic gas	103	109	113	117	tone 16	tone 25
Tone 03	continuous	2400 Hz				108	113	120	124	tone 21	tone 17
Tone 04	intermittent	420 Hz		0,625 s on / 0,625 s off	Australian alert AS1670	101	105	109	114	tone 21	tone 01
Tone 05	intermittent	660 Hz		1,8 s on - 1,8 s off	Swedish alarm	102	107	114	120	tone 21	tone 01
Tone 06	intermittent	660 Hz		0,15 s on / 0,15 s off	Swedish alarm	102	107	114	116	tone 16	tone 01
Tone 07	intermittent	970 Hz		1 s on, 1 sec off	PFEER Alarm, BS5839-1:2002	101	109	113	118	tone 18	tone 01
Tone 08	intermittent	970 Hz (950)		0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 low tone, US Temporal	101	109	113	120	tone 16	tone 03
Tone 09	intermittent	800 Hz		0,25 s on / 1 s off		102	107	112	120	tone 27	tone 03
Tone 10	intermittent	700 Hz		0,15 s on / 0,15 s off, total 1 min.	Swedish alarm SS 031711	103	107	112	118	tone 18	tone 02
Tone 11	intermittent	720 Hz		0,7 s on / 0,3 s off	Industrial Alarm Germany	103	108	111	119	tone 02	tone 29
Tone 12	intermittent	2400 Hz		0,5 s on / 0,5 s off		108	113	120	127	tone 03	tone 01
Tone 13	intermittent	2850 Hz		0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 high tone, US Temporal	100	110	111	120	tone 03	tone 17
Tone 14	alternating	440 - 554 Hz		0,4 s (440Hz) / 0,1 s (554Hz)	AFNOR France, NFS 32-001	103	106	109	116	tone 16	tone 01
Tone 15	alternating	554 - 440 Hz		1 Hz	Swedish alarm	103	106	109	116	tone 01	tone 16
Tone 16	alternating	800 - 1000 Hz		2 Hz		103	109	113	120	tone 02	tone 09
Tone 17	alternating	2400 - 2900 Hz		2 Hz		108	113	120	125	tone 03	tone 01
Tone 18	alternating	1000 - 2000 Hz		1 Hz	Singapore	105	110	120	126	tone 02	tone 03
Tone 19	sweeping	500 - 1500 Hz		10 Hz		102	109	119	121	tone 02	tone 01
Tone 20	sweeping	150 - 1000 Hz		rising 10 s, 40 s on, falling 10 s	Industrial Alarm Germany	103	109	114	116	tone 01	tone 29
Tone 21	continuous	400 Hz		simulated horn		99	104	109	112	tone 16	tone 02
Tone 22	sweeping	500 - 1200 Hz		rising in 3,75 s / 0,25 off	Australian evacuation AS 2220	106	109	117	120	tone 02	tone 09
Tone 23	sweeping	500 - 1200 Hz		rising in 3,5 s / 0,5 s off	Netherlands NEN 2575:2000	106	109	117	121	tone 02	tone 09
Tone 24	sweeping	500 - 1200 Hz		0,5 s on/0,5 s off x 3 / 1,5 s off	Australian AS1670 evacuation	105	109	117	120	tone 02	tone 09
Tone 25	sweeping	1200 - 500 Hz		1 Hz	Evacuation Germany DIN 33404-3	106	109	117	122	tone 02	tone 32
Tone 26	sweeping	500 - 1200 Hz		0,3 Hz		106	109	117	122	tone 01	tone 32
Tone 27	sweeping	1400 - 1600 Hz		rising in 1 s / falling in 0,5 s	NFC 48-265	101	111	119	124	tone 02	tone 09
Tone 28	sweeping	2400 - 2900 Hz		1 Hz		108	113	120	123	tone 17	tone 03
Tone 29	bell					105	109	120	122	tone 16	tone 02
Tone 30	slow rise	500 - 2400 Hz		siren rising in 3 s, then cont. 2400 Hz		108	113	120	126	tone 16	tone 01
Tone 31	slow rise	300 - 1200 Hz		siren rising in 3 s, then cont. 1200 Hz		103	110	117	113	tone 16	tone 01
Tone 32	chime	970 - 800 Hz		repeating ding-dong, 1 Hz		102	109	113	119	tone 29	tone 01
Tone 33	continuous	340 Hz				X	X	109	112	tone 16	tone 03
Tone 34	continuous	500 Hz				X	X	109	112	tone 16	tone 03
Tone 35	continuous	825 Hz				X	X	113	119	tone 16	tone 03
Tone 36	continuous	1500 Hz				X	X	118	120	tone 18	tone 02
Tone 37	continuous	2850 Hz				X	X	111	116	tone 21	tone 01
Tone 38	intermittent	660 Hz		0,5 s on - 0,5 s off	Swedish alarm	X	X	114	117	tone 02	tone 32
Tone 39	intermittent	680 Hz		0,875 s on-0,675 s off		X	X	114	117	tone 03	tone 32
Tone 40	intermittent	950 Hz		1 s on, 1 s off		X	X	114	120	tone 02	tone 32
Tone 41	intermittent	1000 Hz		1 s on-1 s off	PFEER general alarm	X	X	113	120	tone 16	tone 03
Tone 42	intermittent	800 Hz		4 ms on, 4 ms off		X	X	112	116	tone 58	tone 03
Tone 43	intermittent	825 Hz		0,5 s on, 0,5 s off		X	X	113	121	tone 16	tone 03
Tone 44	intermittent	825 Hz		2,5 s on, 2,5 s off x 7, then 7 s pulse	IMO SOLAS III/50+SOLAS III/6,4	X	X	113	120	tone 17	tone 02
Tone 45	alternating	440 - 554 Hz		1 Hz		X	X	109	115	tone 16	tone 01
Tone 46	alternating	825 - 1075 Hz		1 Hz		X	X	114	121	tone 48	tone 02
Tone 47	alternating	825 - 1025 Hz		2 Hz		X	X	114	121	tone 48	tone 03
Tone 48	alternating	2500 - 3100 Hz		0,5 Hz		X	X	117	121	tone 60	tone 03
Tone 49	alternating	2400 - 2850 Hz		2 Hz		X	X	120	124	tone 12	tone 03
Tone 50	alternating	500 - 900 Hz		2 Hz		X	X	114	118	tone 41	tone 02
Tone 51	alternating	1200 - 1400 Hz		25 Hz		X	X	119	122	tone 41	tone 02
Tone 52	sweeping	300 - 1200 Hz		1 Hz		X	X	117	121	tone 03	tone 32
Tone 53	sweeping	500 - 1000 Hz		0,15 Hz		X	X	114	120	tone 41	tone 02
Tone 54	sweeping	500 - 1200 Hz		3 Hz		X	X	117	121	tone 41	tone 02
Tone 55	sweeping	700 - 1500 Hz		0,3 Hz		X	X	119	122	tone 16	tone 02
Tone 56	sweeping	800 - 1000 Hz		7 Hz		X	X	114	119	tone 16	tone 02
Tone 57	sweeping	800 - 1000 Hz		50 Hz		X	X	114	90	tone 16	tone 02
Tone 58	sweeping	2400 - 2900 Hz		7 Hz		X	X	120	123	tone 17	tone 03
Tone 59	sweeping	2400 - 2900 Hz		50 Hz		X	X	120	90	tone 17	tone 03
Tone 60	sweeping	2400 - 2900 Hz		3 Hz		X	X	120	125	tone 17	tone 03
Tone 61	slow rise	0 - 800 Hz		siren rising 3 s, then cont 800 Hz		X	X	114	118	tone 16	tone 01
Tone 62	chime	554 - 440 Hz		repeating ding-dong, 1 Hz		X	X	109	116	tone 29	tone 01
Tone 63	chime	554 - 440 Hz		single ding-dong		X	X	109	116	tone 29	tone 01

* Specifications are provisional and subject to change.

— LED steady light
 --- LED flashing light

Tone table

STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	ADS-T		ADM ACM	ADL ACL	ADX ACX	STAGE 2 S2	STAGE 3 S3
						max dB		max dB	max dB	max dB*		
Tone 01	continuous	660 Hz			Swedish alarm	101	—	108	114	116	tone 16	tone 12
Tone 02	continuous	1000 Hz			PFEER toxic gas	103	—	109	113	117	tone 16	tone 25
Tone 03	continuous	2400 Hz				108	—	113	120	124	tone 21	tone 17
Tone 04	intermittent	420 Hz		0,625 s on / 0,625 s off	Australian alert AS1670	101	---	105	109	114	tone 21	tone 01
Tone 05	intermittent	660 Hz		1,8 s on - 1,8 s off	Swedish alarm	102	---	107	114	120	tone 21	tone 01
Tone 06	intermittent	660 Hz		0,15 s on / 0,15 s off	Swedish alarm	102	---	107	114	116	tone 16	tone 01
Tone 07	intermittent	970 Hz		1 s on, 1 s off	PFEER Alarm, BS5839-1:2002	101	---	109	113	118	tone 18	tone 01
Tone 08	intermittent	970 Hz (950)		0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 low tone, US Temporal	101	---	109	113	120	tone 16	tone 03
Tone 09	intermittent	800 Hz		0,25 s on / 1 s off		102	---	107	112	120	tone 27	tone 03
Tone 10	intermittent	700 Hz		0,15 s on / 0,15 s off, total 1 min.	Swedish alarm SS 031711	103	---	107	112	118	tone 18	tone 02
Tone 11	intermittent	720 Hz		0,7 s on / 0,3 s off	Industrial Alarm Germany	103	---	108	111	119	tone 02	tone 29
Tone 12	intermittent	2400 Hz		0,5 s on / 0,5 s off		108	---	113	120	127	tone 03	tone 01
Tone 13	intermittent	2850 Hz		0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 high tone, US Temporal	100	---	110	111	120	tone 03	tone 17
Tone 14	alternating	440 - 554 Hz		0,4 s (440Hz) / 0,1 s (554Hz)	AFNOR France, NFS 32-001	103	—	106	109	116	tone 16	tone 01
Tone 15	alternating	554 - 440 Hz		1 Hz	Swedish alarm	103	—	106	109	116	tone 01	tone 16
Tone 16	alternating	800 - 1000 Hz		2 Hz		103	—	109	113	120	tone 02	tone 09
Tone 17	alternating	2400 - 2900 Hz		2 Hz		108	—	113	120	125	tone 03	tone 01
Tone 18	alternating	1000 - 2000 Hz		1 Hz	Singapore	105	—	110	120	126	tone 02	tone 03
Tone 19	sweeping	500 - 1500 Hz		10 Hz		102	—	109	119	121	tone 02	tone 01
Tone 20	sweeping	150 - 1000 Hz		rising 10 s, 40 s on, falling 10 s	Industrial Alarm Germany	103	—	109	114	116	tone 01	tone 29
Tone 21	continuous	400 Hz		simulated horn		99	—	104	109	112	tone 16	tone 02
Tone 22	sweeping	500 - 1200 Hz		rising in 3,75 s/ 0,25 s off	Australian evacuation AS 2220	106	—	109	117	120	tone 02	tone 09
Tone 23	sweeping	500 - 1200 Hz		rising in 3,5 s/ 0,5 s off	Netherlands NEN 2575:2000	106	—	109	117	121	tone 02	tone 09
Tone 24	sweeping	500 - 1200 Hz		0,5 s on/0,5 s off x 3 / 1,5 s off	Australian AS1670 evacuation	105	—	109	117	120	tone 02	tone 09
Tone 25	sweeping	1200 - 500 Hz		1 Hz	Evacuation Germany DIN 33404-3	106	—	109	117	122	tone 02	tone 32
Tone 26	sweeping	500 - 1200 Hz		0,3 Hz		106	—	109	117	122	tone 01	tone 32
Tone 27	sweeping	1400 - 1600 Hz		rising in 1 s/falling in 0,5 s	NFC 48-265	101	—	111	119	124	tone 02	tone 09
Tone 28	sweeping	2400 - 2900 Hz		1 Hz		108	—	113	120	123	tone 17	tone 03
Tone 29	bell					105	—	109	120	122	tone 16	tone 02
Tone 30	slow rise	500 - 2400 Hz		siren rising in 3 s, then cont. 2400 Hz		108	—	113	120	126	tone 16	tone 01
Tone 31	slow rise	300 - 1200 Hz		siren rising in 3 s, then cont. 1200 Hz		103	—	110	117	113	tone 16	tone 01
Tone 32	chime	970 - 800 Hz		repeating ding-dong, 1 Hz		102	—	109	113	119	tone 29	tone 01
Tone 33	continuous	340 Hz				X	X	X	X	109	tone 16	tone 03
Tone 34	continuous	500 Hz				X	X	X	X	109	tone 16	tone 03
Tone 35	continuous	825 Hz				X	X	X	X	113	tone 16	tone 03
Tone 36	continuous	1500 Hz				X	X	X	X	118	tone 18	tone 02
Tone 37	continuous	2850 Hz				X	X	X	X	111	tone 21	tone 01
Tone 38	intermittent	660 Hz		0,5 s on - 0,5 s off	Swedish alarm	X	X	X	X	114	tone 02	tone 32
Tone 39	intermittent	680 Hz		0,875 s on-0,675 s off		X	X	X	X	114	tone 03	tone 32
Tone 40	intermittent	950 Hz		1 s on, 1 s off		X	X	X	X	114	tone 02	tone 32
Tone 41	intermittent	1000 Hz		1 s on, 1 s off	PFEER general alarm	X	X	X	X	113	tone 16	tone 03
Tone 42	intermittent	800 Hz		4 ms on, 4 ms off		X	X	X	X	112	tone 58	tone 03
Tone 43	intermittent	825 Hz		0,5 s on, 0,5 s off		X	X	X	X	113	tone 16	tone 03
Tone 44	intermittent	825 Hz		2,5 s on, 2,5 s off x 7, then 7 s pulse	IMO SOLAS III/50+SOLAS III/6,4	X	X	X	X	113	tone 17	tone 02
Tone 45	alternating	440 - 554 Hz		1 Hz		X	X	X	X	109	tone 16	tone 01
Tone 46	alternating	825 - 1075 Hz		1 Hz		X	X	X	X	114	tone 48	tone 02
Tone 47	alternating	825 - 1025 Hz		2 Hz		X	X	X	X	114	tone 48	tone 03
Tone 48	alternating	2500 - 3100 Hz		0,5 Hz		X	X	X	X	117	tone 60	tone 03
Tone 49	alternating	2400 - 2850 Hz		2 Hz		X	X	X	X	120	tone 12	tone 03
Tone 50	alternating	500 - 900 Hz		2 Hz		X	X	X	X	114	tone 41	tone 02
Tone 51	alternating	1200 - 1400 Hz		25 Hz		X	X	X	X	119	tone 41	tone 02
Tone 52	sweeping	300 - 1200 Hz		1 Hz		X	X	X	X	117	tone 03	tone 32
Tone 53	sweeping	500 - 1000 Hz		0,15 Hz		X	X	X	X	114	tone 41	tone 02
Tone 54	sweeping	500 - 1200 Hz		3 Hz		X	X	X	X	117	tone 41	tone 02
Tone 55	sweeping	700 - 1500 Hz		0,3 Hz		X	X	X	X	119	tone 16	tone 02
Tone 56	sweeping	800 - 1000 Hz		7 Hz		X	X	X	X	114	tone 16	tone 02
Tone 57	sweeping	800 - 1000 Hz		50 Hz		X	X	X	X	114	tone 16	tone 02
Tone 58	sweeping	2400 - 2900 Hz		7 Hz		X	X	X	X	120	tone 17	tone 03
Tone 59	sweeping	2400 - 2900 Hz		50 Hz		X	X	X	X	120	tone 17	tone 03
Tone 60	sweeping	2400 - 2900 Hz		3 Hz		X	X	X	X	120	tone 17	tone 03
Tone 61	slow rise	0 - 800 Hz		siren rising 3 s, then cont 800 Hz		X	X	X	X	114	tone 16	tone 01
Tone 62	chime	554 - 440 Hz		repeating ding-dong, 1 Hz		X	X	X	X	109	tone 29	tone 01
Tone 63	chime	554 - 440 Hz		single ding-dong		X	X	X	X	109	tone 29	tone 01

* Specifications are provisional and subject to change.

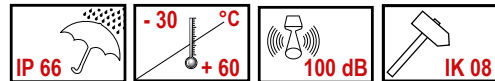


Piezo Buzzer Series „T“



Features

- ▶ Piezo buzzer module of the Ø 75 mm large beacons series „T“ for single audible applications
- ▶ Comprehensive selection of mounting options
- ▶ ~ 88-100 dB (A) in 1 m, volume infinitely adjustable (potentiometer)
- ▶ Continuous or pulsing tone selectable by DIP switch
- ▶ High protection class IP66
- ▶ The cover for buzzer module TDK has to be ordered together with the buzzer module TDE itself and a preferred base for the correct mounting of the complete audible device
- ▶ Optionally available protective vent for pressure balance in harsh weather conditions (humidity, high temperature fluctuations, etc.) for TMW, TMF, TNL
- ▶ Comfortable connection technique with high contact safety
- ▶ Housing made of impact resistant polycarbonate
- ▶ For industrial/general applications
- ▶ Fit for plc applications (leakage, inrush current)
- ▶ UL type 4/4X/13, (TNL, TMW+TVS type 1)





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
TDE	Buzzer module	continuous or pulsing tone ~ 100 dB (A) in 1 m	24 V AC/DC	20-32 V DC	0,030	859 560 405
				18-27 V AC	0,048	
			110/120 V AC	75-132 V AC	0,040	859 560 310
			230/240 V AC	150-264 V AC	0,040	859 560 313
TDK	Cover for buzzer module TDE	Cover is required for operation and has to be ordered separately				859 560 000
Type	Denomination	Specification		Weight	Pole length	Order No.
Mounting options/Bases						
TMW	Base for horizontal mounting	with internal mounting holes				859 500 900
TMF		with external mounting holes				859 510 900
TNL		lateral cable entry				859 515 900
TMV	Base for vertical mounting					859 520 900
TMR	Pole mounting	aluminium tube with plastic foot			100 mm	859 532 900
					250 mm	859 533 900
TNW	Pole mounting	for NPT 1/2" mount				859 540 900

Accessories

Type	Denomination		Order No.
TVS	Metal bracket kit	for TMW incl. cable gland M12x1,5 for cable entry bottom-up	859 550 900
XWR	Bracket	for pole mount base with plastic foot	900 600 900
PV1	Protective vent	optionally for bases type TMW, TMF, TNL	859 100 000



Electronic Sounder EHS - EHL

EHS - EHL



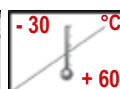
EHS



EHL

Features

- Loud electronic sounders - up to 118 dB
- Robust, high-quality design
- Housing aluminium die-cast, epoxy powder-coated
- 15 different tone types, additionally individual adjustment of lower/upper frequencies and speed by potentiometer
- Tone selection by
 - DIP switch (Type D) - 1 of 15 tone types pre-selectable
 - Terminal (Type K) - all 15 tone types externally addressable
- Special models with volume control, extreme low temperatures, special sound tables, etc. available





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.	
		Tone types	Max. sound press. (dB)					Type D	Type K
EHS	Electronic sounder with swiveling loudspeaker	15	118	12-24 V AC/DC	-	+/- 10%	0,470-0,940	731 010 405	731 020 405
				110/120 V AC	40-60		0,120	731 010 310	731 020 310
				230/240 V AC	40-60		0,060	731 010 313	731 020 313
EHL	Electronic sounder with short loudspeaker	15	110	12-24 V AC/DC	-		0,470-0,940	730 010 405	730 020 405
				110/120 V AC	40-60		0,120	730 010 310	730 020 310
				230/240 V AC	40-60		0,060	730 010 313	730 020 313

NOTE: Tone table: www.auer-signal.com



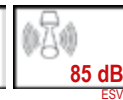
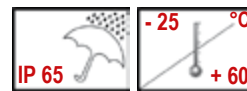
M22 Panel Mount Buzzer ESG - ESM - ESK - ESV

ESG - ESM - ESK - ESV



Features

- Loud universally useable panel mount buzzers
- 3 well distinguishable tones selectable via terminal (ESG)
- Volume infinitely adjustable also in panel mount condition (ESG-ESM)
- Wide voltage range
- Plc fit (leakage, inrush current)
- For mounting in 22,5 mm oder 30,5 mm bore holes (with adapter)



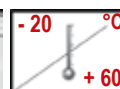
M28 Panel Mount Buzzer ESD - ESP - ESZ

ESD - ESP - ESZ



Features

- Panel mount buzzers with wide voltage range
- For universal applications
- Models with spades or terminal
- Sealed electronics
- Low nominal current
- For mounting in M28 bore holes





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
		Tone types	Max. sound pressure (dB)				Housing grey	Housing black
ESG	M22 panel mount buzzer	3	85-105**	12-24 V AC/DC	8-24	0,057	814 100 405	814 500 405
				110/120 V AC	75-140	0,042	814 100 310	814 500 310
				230/240 V AC	150-260	0,044	814 100 313	814 500 313
ESM	M22 panel mount buzzer	2	85-100**	12-24 V AC/DC	8-24	0,019	813 100 405	813 500 405
				110/120 V AC	75-140	0,042	813 100 310	813 500 310
				230/240 V AC	150-260	0,040	813 100 313	813 500 313
ESK	M22 panel mount buzzer	2	65	12-24 V AC/DC	10-24	0,046	812 100 405	812 500 405
				110/120 V AC	75-140	0,017	812 100 310	812 500 310
				230/240 V AC	150-260	0,020	812 100 313	812 500 313
ESV	M22 panel mount buzzer	2	85	12-24 V AC/DC	10-24	0,046	812 110 405	812 510 405
				110/120 V AC	75-140	0,017	812 110 310	812 510 310
				230/240 V AC	150-260	0,020	812 110 313	812 510 313

** Adjustable by potentiometer

Accessories

Type	Denomination	Order No.
ADM30	Adapter M30,5	812 500 900
WZ30	Fastening tool for 30 mm models	812 400 900



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	
		Tone types	Max. sound pressure (dB)				Housing grey	Housing black
ESD	M28 panel mount buzzer	continuous	90	24 V AC/DC	4-40	0,020	810 000 405	810 100 405
				230/240 V AC	30-250		810 000 313	810 100 313
ESP	M28 panel mount buzzer	pulsing	90	24 V AC/DC	4-40	0,020	811 000 405	811 100 405
				230/240 V AC	30-250		811 000 313	811 100 313
ESZ-S	M28 panel mount buzzer	continuous and pulsing	90	24 V AC/DC	6-28	0,020	809 000 405	809 100 405
				110/120 V AC	20-140		809 000 310	809 100 310
				230/240 V AC	50-250		809 000 313	809 100 313
ESZ-K	M28 panel mount buzzer	continuous and pulsing	90	24 V AC/DC	6-28	0,020	809 010 405	809 110 405
				110/120 V AC	20-140		809 010 310	809 110 310
				230/240 V AC	50-250		809 010 313	809 110 313

NOTE: ► Additional voltages possible upon request



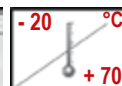
M28 Panel Mount Buzzer BU2 - BU3

BU2 – BU3



Features

- Panel mount buzzers with wide voltage range
- For universal applications
- Very attractive price-performance ratio
- Pulsing tone
- Sound pressure can be infinitely adjusted by turning window (approx. 10 dB reduction)



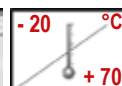
Surface Mount Buzzer-Electronic Siren BU1

BU1



Features

- Very loud surface mount buzzer-electronic siren with high protection class
- Attractive price-performance ratio
- Metal housing bracket
- Prewired with 2,25 m wires



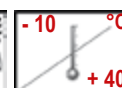
Motor Sirens SE1 - SE2 - SE3

SE1 – SE2 – SE3



Features

- Typical and penetrating siren tone with 360° audibility
- Optional protection hood for outdoor applications
- Air inlet and sound outlet protected against accidental touching





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound pressure (dB)				Housing black
BU2	M28 panel mount buzzer	pulsing	90***	12 V AC/DC	6-16	0,020	B100 520 404
				24 V AC/DC	12-28	0,030	B100 520 405
BU3	M28 panel mount buzzer			220 V AC	180-240	0,020	B100 520 313

*** Adjustable by turning window



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound pressure (dB)				Housing black
BU1	Surface mount buzzer - electronic siren	pulsing	108	12 V DC	6-15	0,300	B100 510 004
				24 V DC	12-28		B100 510 005



Order data

Type	Denomination	Max. sound pressure (dB)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Starting current (A)	Order No.
							Housing dark grey
SE1	Motor siren	112	230 V AC/DC	+/- 10%	0,600	2,400	593 004 413
SE2	Motor siren	110	24 V AC/DC	+/- 10%	7,200	25,000	593 005 405
SE3	Motor siren	110	230 V AC/DC	+/- 10%	1,430	4,600	593 009 413
	Protection hood SE1, SE2						594 001 000
	Protection hood SE3						594 003 000

NOTE: ► Additional voltages available: SE2: 12 V AC/DC



Overview Accessories for explosion-proof Telephones

Type	Telephone	Technology	Ex-proof Audible Telephone Call Signalling Sounder	Ex-proof Visual-Audible Telephone Call Signalling Sounder	Ex-proof Loudspeaker
dST1	ExSafeTel		AS1	VS1	---
dST2	ExSafeTel		AS1	VS1	---
dST-MB	ExSafeTel-MB		AS1	VS1	---
dST-IP	ExSafeTel-IP		---	VS1	---
dFT3	dFT3, Zone 2, 22		AS1	VS1	---
dFT3-IP	dFT3-IP, Zone 2, 22		---	---	---

Overview Accessories for weatherproof Telephones

Type	Telephone	Technology	Audible Telephone Call Signalling Sounder	Visual-Audible Telephone Call Signalling Sounder	Loudspeaker
wST1	SafeTel		AS2	VS2	LS2
wST2	SafeTel		AS2	VS2	LS2
wST-MB	SafeTel-MB		AS2	VS2	LS2
wST-IP	SafeTel-IP		---	VS2	---
wFT3			AS2	VS2	---
wFT3-IP			---	---	---
wIND	INDUSTRY		AS2	VS2	---
wIND-IP	INDUSTRY-IP		---	VS2	---

Ex-proof Additional Earpiece	Ex-proof Headset Kit	Stabalizer Bracket	Ex-proof Telephone Connecting Relay	Telephone Protection Hood
EP1	HS1	---	mTCR	TH1 - TH2
EP1	HS1	---	mTCR	TH1 - TH2
EP1	HS1	---	mTCR	TH1 - TH2
---	HS1	---	---	TH1 - TH2
---	---	STB	mTCR	TH1 - TH2
---	---	STB	---	TH1 - TH2

Additional Earpiece	Headset Kit	Stabalizer Bracket	Telephone Connecting Relay	Telephone Protection Hood
EP2	HS2	---	TCR	TH1 - TH2
EP2	HS2	---	TCR	TH1 - TH2
EP2	HS2	---	TCR	TH1 - TH2
---	HS2	---	---	TH1 - TH2
---	---	STB	TCR	TH1 - TH2
---	---	STB	---	TH1 - TH2
---	---	---	TCR	TH1 - TH2
---	---	---	---	TH1 - TH2



Explosion-Proof analogue Telephone dST

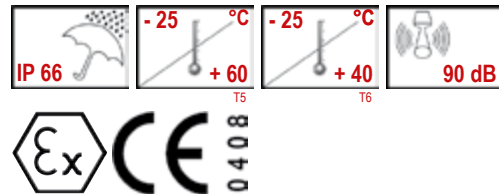
dST



II 2 G Ex e mb [ib] IIC T6/T5 Gb
II 2 D tb [ib] IIIC T80°C/T100°C Db
-25°C ≤ Ta ≤ +40°C/+60°C
Zone 1, 2, 21, 22

Features

- Explosion-proof analogue telephone for universal applications in the industry, onshore and offshore
- Certified for gas and dust explosion endangered areas on zones 1, 2, 21 and 22
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, etc.
- Very robust impact protected telephone housing (impact protection IK 09)
- Freely programmable, well readable alphanumeric display
- Designed for use with gloves, V4A stainless steel keypad - 21 keys
- Model without keypad available as emergency telephone
- Combinable accessories see page 92/93



Explosion-Proof analogue Telephone dST-MB

dST-MB

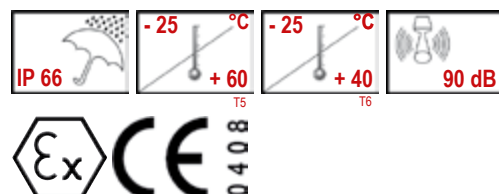
Ex SafeTel-MB



II 2 G Ex e mb [ib] IIC T6/T5 Gb
II 2 D tb [ib] IIIC T80°C/T100°C Db
-25°C ≤ Ta ≤ +40°C/+60°C
Zone 1, 2, 21, 22

Features

- Explosion-proof analogue telephone for universal applications in the industry (onshore and offshore)
- Certified for gas and dust explosion endangered areas (G and D)
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, etc.
- Very robust impact protected telephone housing (impact protection IK 09)
- Designed for use with gloves, V4A stainless steel keypad – 21 keys
- 3 memory buttons - allow quick access to freely programmable individual emergency/call numbers
- Comfort telephone functions as in office communication
- Ringing sound pressure level approx. 90 dB (A) in 1 m
- Combinable accessories see page 92/93





Order data

Type	Denomination	Order No.
dST1	ExSafeTel - explosion-proof analogue telephone, black	410 010 000
	ExSafeTel - explosion-proof analogue telephone, red	410 010 100
dST2	ExSafeTel - explosion-proof analogue emergency telephone without keypad and display, black	410 020 000
	ExSafeTel - explosion-proof analogue emergency telephone without keypad and display, red	410 020 100



Order data

Type	Denomination	Order No.
dST-MB	ExSafeTel-MB - explosion-proof analogue telephone with memory buttons, black	410 050 000



Explosion-Proof VoIP Telephone dST-IP

dST-IP

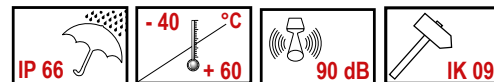
Ex SafeTel-IP

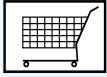


II 2G Rx e ib [ib] mb IIC T4 Gb
III 2D Ex ib [ib] tb IIIC T135°
-40 °C ≤ Ta ≤ +60 °C/+40 °C
Zone 1, 2, 22

Features

- Explosion proof telephone with VoIP technique for universal applications in the industry (onshore and offshore)
- Certified for gas and dust explosion endangered areas G and D
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, greases, etc.
- Very robust impact resistant telephone housing (impact protection IK 09)
- Illuminated pixel-based heated LCD display
- Designed for use with gloves, V4A stainless steel keypad - 21 keys
- Steel armoured handset cord to withstand high tensile forces
- Ringing sound pressure level approx. 95 dB (A) in 1 m
- Intelligent and user-friendly menu structure
- Standard H.323, SIP, TSIP, SIPS protocols
- Power supply Power over Ethernet or external supply
- Simple connection to a single 10/100 BASE-T Ethernet LAN, RJ45
- Combinable accessories see page 92/93





Order data

Type	Denomination	Order No.
dST-IP	Explosion-proof VoIP Telefon ExSafeTel with armoured cord, black	410 030 000



Explosion-Proof analogue Telephone dFT3

dFT3



Features

- Analogue telephone for use in explosion endangered atmospheres of zone 2 and 22
- For use in areas in which explosion endangered atmospheres can develop due to manufacturing reasons
- Housing made of polycarbonate
- Housing colours yellow, red, grey, black
- Can be used as desk or wall telephone
- Models with and without display
- Combinable accessories see page 92/93



II 3 G Ex nAnL IIC T5
II 3 D Ex tD A22 IP65 T80 °C
Zone 2, 22

Explosion-Proof VoIP Telephone dFT3-IP

dFT3-IP



Features

- Well designed telephone with VoIP technique for use in explosion endangered atmospheres of zone 2 and 22
- For use in areas in which explosion endangered atmospheres can develop due to manufacturing reasons (e. g. in chemical and petrochemical industries due to gases, vapours, sprays, etc.)
- Housing made of impact resistant polycarbonate, stainless steel screws
- Illuminated keypad and illuminated pixel-based LCD display
- Intelligent and user friendly menu structure
- Standard H.323, SIP, TSIP, SIPS protocols
- Power supply Power over Ethernet
- Connection to single 10/100BASE-T Ethernet LAN
- Housing colours yellow, red, grey or black
- Can be used as desk or wall telephone
- Option: receiver can be firmly fixed – stabilizer bracket
- Ringing volume approx. 95 dB (A) in 1 m
- Combinable accessories see page 92/93



II 3G Ex nA nL IIC T5
II 3D Ex tD A22 IP65 T80°C
-20°C bis +55°C
Zone 2, 22



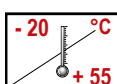
Order data

Type	Denomination	Order No.
dFT3	Explosion-proof analogue telephone with display and spiral cord	410 400 C00
	Explosion-proof analogue telephone without display, with spiral cord	410 410 C00
	Explosion-proof analogue telephone with display and armoured cord	410 420 C00
	Explosion-proof analogue telephone without display, with armoured cord	410 430 C00
STB	Stabilizer bracket	410 400 900



Order data

Type	Denomination	Order No.
dFT3-IP	Ex-proof VoIP telephone with spiral cord	410 450 C00
	Ex-proof VoIP telephone with armoured cord	410 460 C00
STB	Stabilizer bracket	410 400 900



Colour code for telephones

0	black	2	black/red
1	black/yellow	3	black/grey



Explosion-Proof Audible Telephone Call Signalling Sounder AS1

AS1



II 2 G Ex e ib mb IIC T6
Zone 1, 2

Features

- Explosion-proof telephone call sounder for applications in industrial explosion endangered areas
- Tone types and tone frequencies selectable via DIP switch
- Power supply via telephone call voltage
- Works independently also during power failures
- Aluminium-die cast housing



Explosion-Proof Visual-Audible Telephone Call Signalling Sounder VS1

VS1



II 2 G Ex e mb [ib] IIC T6/T5/T4 Gb
-20°C ≤ Ta ≤ +40°C/+50°C/+60°C
Zone 1, 2

Features

- Explosion-proof visual-audible telephone call signalling sounder for universal applications in industrial explosion endangered areas
- For distinct signalling of incoming telephone calls in loud ambient conditions
- 3 tones and 4 frequencies/settings selectable
- Lens colours amber, red, clear, blue, green
- 230 V AC power supply
- Aluminium-die cast housing





Order data

Type	Denomination	Tone options			Order No.
		Tone types	Max. sound pressure (dB)		
AS1	Explosion-proof audible telephone call signalling sounder	4	90		410 100 004



Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.
			Tone types	Max. sound pressure (dB)			
VS1	Explosion-proof visual-audible telephone call signalling sounder	2 x 1 J xenon tube	3	90	230 V AC	+/- 10%	410 10C 005



Explosion-Proof Additional Earpiece Set EP1

EP1

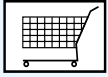


II 2 G Ex ia IIC T6 Gb
II 2 D Ex ia IIIB T80 °C Db
-25 °C ≤ Ta ≤ +60 °C
Zone 1, 2

Features

- ▶ Intrinsically safe additional earpiece enables a second person to follow a telephone conversation
- ▶ Can also be used to reduce ambient noise during a telephone conversation
- ▶ Set contents:
 - ex-proof earpiece with dynamic receiver and coil cord
 - cable gland
 - bracket and screws to hang up earpiece





Order data

Type	Denomination	Order No.
EP1	Explosion-proof additional earpiece set	410 100 002



Headset Kit HS1 for Explosion-Proof Telephone

HS1



II 2G Ex ib IIB T4 Gb
Zone 1, 2



Features

- Headset eases significantly a telephone conversation in loud ambient conditions
- Protects against ambient noise
- Allows telephone calls while both hands need to be free
- Set contents:
 - headset
 - 14 m long connecting cord
 - cable gland
 - bracket and screws to hang up connecting cord and headset

Explosion-Proof Telephone Connecting Relay mTCR

mTCR

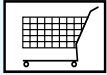


II 2 G Ex e ib mb IIC T4 Gb
II 2 D Ex tb IIIC T135 °C Db
-40 °C ≤ Ta ≤ +70 °C

Features

- Explosion-proof telephone connecting relay for outdoor and indoor use
- Provides potential-free switching contacts for the connection of signalling devices
- Up to 2 external signalling devices can be individually switched via the call signal (e.g. one horn and one xenon strobe or LED signal beacon)
- The call break bypass can be individually adjusted for one of the connected devices
- Unpainted enclosure made of electrostatically conductive compressed polyester
- Housing consists of a square shaped lower part for the electronic components which are firmly potted into the lower housing part and hence cannot be exchanged
- The upper housing part is mounted with 4 screws onto the lower part which provides a non-intrinsically safe compartment in protection class IP 66





Order data

Type	Denomination	Order No.
HS1	Headset kit for explosion-proof telephone dST	410 100 001



Order data

Type	Denomination	Order No.
mTCR	Ex-proof Telephone Connecting Relay	410 100 100



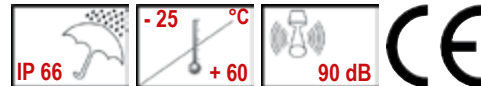
Weatherproof Analogue Telephone wST

wST



Features

- Weatherproof telephone for industrial areas in rugged ambient conditions
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, greases, etc.
- Very robust impact protected telephone housing (impact protection IK 09)
- Freely programmable, well readable alphanumerical display
- Designed for use with gloves, V4A stainless steel keypad - 21 keys
- Model without keypad available as emergency telephone
- Steel armoured handset cord to withstand high tensile forces
- Comprehensive range of accessories available
- Combinable accessories see page 92/93



Weatherproof Analogue Telephone wST-MB

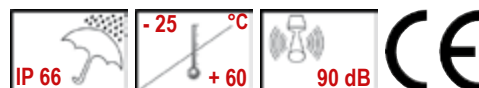
wST-MB

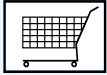
SafeTel-MB



Features

- Weatherproof telephone for industrial areas in rugged ambient conditions
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, greases etc.
- Very robust, impact resistant telephone housing (impact protection IK 09)
- Designed for use with gloves, V4A stainless steel keypad – 21 keys
- Steel armoured handset cord to withstand high tensile forces
- 3 memory buttons - allow quick access to freely programmable individual emergency/call numbers
- Comfort telephone functions as in office communication
- Ringing sound pressure level approx. 90 dB (A) in 1 m
- Combinable accessories see page 92/93





Order data

Type	Denomination	Order No.
wST1	SafeTel - weatherproof analogue telephone, black	410 110 000
	SafeTel - weatherproof analogue telephone, red	410 110 100
wST2	SafeTel - weatherproof analogue emergency telephone without keypad and display, black	410 120 000
	SafeTel - weatherproof analogue emergency telephone without keypad and display, red	410 120 100



Order data

Type	Description	Reference
wST-MB	SafeTel-MB - weatherproof analogue telephone with memory buttons, black	410 150 100



Weatherproof VoIP Telephone wST-IP

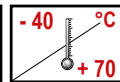
wST-IP

SafeTel-IP



Features

- Weatherproof telephone with VoIP technique for industrial areas in rugged ambient conditions
- Resistant against high temperature differences, humidity, seawater, acids, alkalis, greases, etc.
- Very robust impact resistant telephone housing (impact protection IK 09)
- Illuminated pixel-based heated LCD display
- Designed for use with gloves, V4A stainless steel keypad – 21 keys
- Steel armoured handset cord to withstand high tensile forces
- Ringing sound pressure level approx. 98 dB (A) in 1 m
- Intelligent and user-friendly menu structure
- Handsfree operation
- Standard H.323, SIP, TSIP, SIPS protocols
- Power supply Power over Ethernet or external supply
- Simple connection to a single 10/100 BASE-T Ethernet LAN, RJ45
- Combinable accessories see page 92/93





Order data

Type	Denomination	Order No.
wST-IP	Weaterproof VoIP Telephone SafeTel-IP with armoured cord, black	410 130 000
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord, red	410 130 010
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord and switch LAN module, black	410 130 100
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord and switch LAN module, red	410 130 110
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord and optional relay contact, black	410 130 200
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord and optional relay contact, red	410 130 210
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord, switch LAN module and optional relay contact, black	410 130 300
	Weaterproof VoIP Telephone SafeTel-IP with armoured cord, switch LAN module and optional relay contact, red	410 130 310



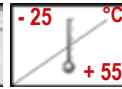
Weatherproof analogue Telephone wFT3

wFT3



Features

- Analogue telephone for use in non-ex indoor and outdoor areas
- Well suitable for universal applications and areas with high humidity, seawater climates or areas with higher mechanical stress
- Housing made of polycarbonate
- Housing colours yellow, red, grey, black
- Can be used as desk and wall telephone
- Models with and without display
- Combinable accessories see page 92/93



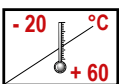
Weatherproof Telephone wFT3-IP

wFT3-IP



Features

- Well designed weatherproof telephone with VoIP technique
- Suitable for universal applications and areas with high humidity, seawater climates or areas with higher mechanical stress (work areas, etc.)
- Polycarbonate housing
- Housing colours: yellow, red, grey or black
- Can be used as desktop or wall mounted telephone
- Models with spiral or armored cord
- Illuminated keypad and pixel based illuminated LCD display
- Intelligent and user-friendly menu logic
- Standard H.323, SIP, TSIP, SIPS protocols
- Power supply over Ethernet
- Connection 10/100BASE-T Ethernet LAN, RJ45
- Call tone ~ 95 dB (A) in 1 m
- Option: receiver can be firmly fixed – stabilizer bracket (e.g. for applications on vessels, moving machines, etc.)
- Menu in German/English/French/Spanish
- Combinable accessories see page 92/93





Order data

Type	Denomination	Order No.
wFT3	Weatherproof analogue telephone with display and spiral cord	410 300 C00
	Weatherproof analogue telephone without display, with spiral cord	410 310 C00
	Weatherproof analogue telephone with display and armoured cord	410 320 C00
	Weatherproof analogue telephone without display, with armoured cord	410 330 C00
wFT3Z	Weatherproof analogue telephone without keypad and display, with armoured cord	410 340 C00
STB	Stabilizer bracket	410 400 900



Order data

Type	Denomination	Order No.
wFT3-IP	Weatherproof VoIP telephone, with spiral cord	410 350 C00
	Weatherproof VoIP telephone, with armoured cord	410 360 C00
	Stabilizer bracket for wFT3/dFT3	410 400 900
	Weatherproof RJ45 LAN plug	410 410 900

Colour code for telephones

0	black	2	black/red
1	black/yellow	3	black/grey



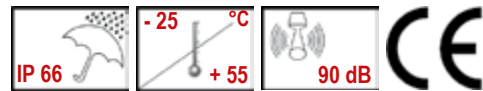
Weatherproof Analogue Telephone wIND „INDUSTRY“

wIND



Features

- Well designed weatherproof telephone for industrial and general applications
- For out- and indoor use with tough operating demands (e.g. sea water, high humidity, dust, strong mech. stress, etc.)
- Housing made of impact resistant polycarbonate
- Protection door in yellow or transparent - protects against pollutions, etc.
- Eye-catching signal colour yellow - easy recognition of telephone
- Connection possibility with secondary signalling sounder
- Models with visual call indicator (LED), illuminated keypad
- High degree of protection IP 66
- Combinable accessories see page 92/93



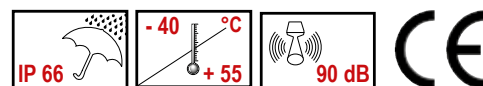
Weatherproof VoIP Telephone wIND-IP „INDUSTRY“

wIND-IP



Features

- Well designed weatherproof telephone for industrial and general applications with VoIP technique
- Standard SIP (RFC3261) protocol
- Codecs: G.711 A-Law, G.711 μ -Law
- RJ45 (10/100 Mbit/s)
- With integrated relay contact
- Power over Ethernet or 24 – 48 V DC
- For out- and indoor use with tough operating conditions (e.g. sea water, high humidity, dust, strong mech. stress, etc.)
- Housing made of impact resistant polycarbonate
- Protection door in yellow or transparent - protects against pollutions etc.
- Eye-catching signal colour yellow - easy recognition of telephone
- Connection possibility with secondary signalling sounder
- Model with visual call indicator (LED), illuminated keypad
- High degree of protection IP 66
- Call tone ~ 90 dB (A) in 1 m
- For wall mounting





Order data

Type	Denomination	Order No.
wIND1	Weatherproof analogue telephone INDUSTRY yellow, with protection door, yellow	410 700 100
	Weatherproof analogue telephone INDUSTRY yellow, with protection door, transparent	410 700 110
	Weatherproof analogue telephone INDUSTRY yellow, without keypad, with protection door, yellow	410 710 100
	Weatherproof analogue telephone INDUSTRY yellow, without keypad, with protection door, transparent	410 710 110
	Model with visual call indicator (LED)	
wIND2	Weatherproof analogue telephone INDUSTRY yellow, with protection door, transparent and with visual call indicator (LED)	410 700 200



Order data

Type	Denomination	Weight	Order No.
wIND-IP	Weatherproof VoIP telephone INDUSTRY yellow, with internal relay, transparent protection door and visual call indicator (LED)		410 750 000



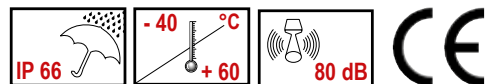
Weatherproof analogue Intercom Telephone IC (IntellyCom)

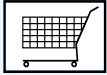
IC



Features

- Analogue intercom telephone with amplified listening in stainless steel housing
- Can be integrated into any analogue private branch exchange systems (PABX)
- Vandalism proof and extremely robust as system is based on pure amplified listening without receiver
- Integrated relay allows activation of individual switching actions such as door closing, signalling, etc.
- Programmable system features – for example: dialing procedures, automatic call acceptance or call rejection, automatic interlinking of telephone numbers when „busy“ or after a certain time elapsed, call melodies, ringing sound pressure levels, etc.
- Corrosion-free and robust stainless steel housings with IP 66 protection for outdoor and indoor applications
- Protected against unauthorized opening or manipulations of intercom telephone
- Tamper contact (sabotage contact)
- Integrated call display
- Models with microphone key and 3 speed code dialogue keys
- Surface and panel mount product options





Order data

Type	Denomination	Order No.
IC1P	Weatherproof analogue Intercom Telephone „IntellyCom“, 1 key, for panel mounting	410 500 000
IC1S	Weatherproof analogue Intercom Telephone „IntellyCom“, 1 key, for surface mounting	410 500 100
IC3P	Weatherproof analogue Intercom Telephone „IntellyCom“, 3 keys, for panel mounting	410 510 000
IC3S	Weatherproof analogue Intercom Telephone „IntellyCom“, 3 keys, for surface mounting	410 510 100



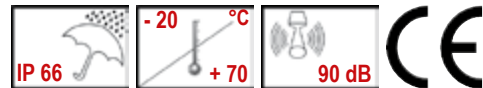
Audible Telephone Call Signalling Sounder AS2

AS2



Features

- Weatherproof telephone call sounder for universal applications in extreme industrial or other ambient conditions
- Resistant against rain, humidity, heat, cold, acids, alkalis, greases, etc.
- 4 tones and tone frequencies selectable via DIP switch
- Power supply via telephone call voltage
- Works independently also during power failures
- Aluminium-die cast housing



Visual-Audible Telephone Call Signalling Sounder VS2

VS2



Features

- Weatherproof visual-audible telephone call signalling sounder for universal applications in industrial areas
- For distinct signalling of incoming telephone calls in loud ambient conditions
- 4 tones and tone frequencies/settings selectable via DIP switch
- Lens colours amber, red, clear, blue, green
- Aluminium-die cast housing





Order data

Type	Denomination	Tone options		Order No.
		Tone types	Max. sound pressure (dB)	
AS2	Audible telephone call signalling sounder	4	90	410 200 004



Order data

Type	Denomination	Light source	Tone options		Nomimal voltage (V)	Voltage range (V)	Order No.
			Tone types	Max. sound pressure (dB)			
VS2	Visual-audible telephone call signalling sounder	3 J xenon tube	4	95**	230 V AC	+/- 10%	410 20C 005

** Adjustable by potentiometer



Loudspeaker Set LS2

LS2



Features

- ▶ Loudspeaker enables loud rendition of ringer sound and of receiving signal in operating modes „open listening“ and „handsfree“
- ▶ Volume adjustable with +/- keys on the SafeTel
- ▶ Set contents:
dynamic loudspeaker in plastic housing with cable gland,
cable gland is located in connection chamber for connection
of loudspeaker cable to SafeTel



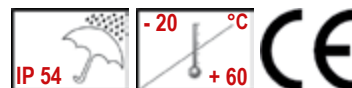
Additional Earpiece EP2

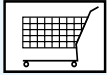
EP2



Features

- ▶ Additional earpiece enables a second person to follow a telephone conversation
- ▶ Can also be used to reduce ambient noise during a telephone conversation
- ▶ Set contents:
earpiece with dynamic receiver and coil cord
cable gland
- ▶ Bracket and screws to hang up earpiece





Order data

Type	Denomination	Order No.
LS2	Loudspeaker set	410 200 003



Order data

Type	Denomination	Order No.
EP2	Additional earpiece set	410 200 002



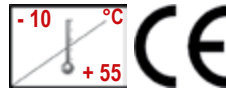
Headset Kit HS2

HS2



Features

- Headset eases significantly a telephone conversation in loud ambient conditions
- Protects against ambient noise
- Allows telephone calls while both hands need to be free
- Set contents:
headset, 14 m long connecting cord
cable gland
- Bracket and screws to hang up connecting cord and headset



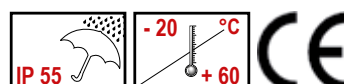
Weatherproof Telephone Connecting Relay TCR

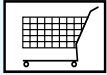
TCR



Features

- Weatherproof telephone connecting relay for outdoor and indoor use
- Provides a potential-free switching contact for the connection of one signalling device
- One signalling device can be switched via the call signal (e.g. a horn or a xenon strobe or LED signal beacon)
- Switchable call break bypass (with or without)
- Robust aluminium housing, grey
- Housing with 2 mounting latches
- Housing contains all electronic components and terminals
- Ringing alternating current adjustable by switch from 23-54 Hz or 15-100 Hz
- Call/break bridging adjustable for connection of visual signalling devices
- Two M20 cable glands provide for 230 V AC power supply for the signalling device, the telephone line is connected with an M12 cable gland





Order data

Type	Denomination	Order No.
HS2	Headset kit	410 200 001



Order data

Type	Denomination	Order No.
TCR	Weatherproof Telephone Connecting Relay	410 100 200



Telephone protection hoods TH1 - TH2

TH1



Features

- Telephone protection hoods for better audibility of telephone conversations in noisy environments
- Available materials
 - GRP (glass reinforced plastic)
 - synthetic (PVC)
 - metal (sheet steel ST37-2 powder coated) or stainless steel 1.4571 (inside 1.4301)
- Inner lining perforated plate metal ST37-2
- Excellent sound absorption up to -25 dB (A) in 1 m
- Various housing colours
- Console for floor mounting of telephone hoods available as option

TH2



Features

- Telephone protection hood for outdoor and indoor applications
- Housing made of
 - synthetic (PVC), yellow
 - stainless steel V2A
- For protection telephones against environmental influences (rain, snow, dirt, dust, etc.)
- Weatherproof design



Order data

Type	Denomination	Weight	Order No.
	Telephone protection hoods - GRP		
TH1	Telephone protection hood yellow (~ RAL 1023)	~ 40 kg	410 100 008
	Telephone protection hood orange (~ RAL 2000)	~ 40 kg	410 100 007
	Telephone protection hoods - synthetic (PVC)		
TH1	Telephone protection hood yellow (~ RAL 1023)	~ 30 kg	410 100 012
	Telephone protection hood orange (~ RAL 2000)	~ 30 kg	410 100 013
	Telephone protection hood red (~ RAL 3020)	~ 30 kg	410 100 014
	Telephone protection hoods - metal		
TH1	Telephone protection hood type yellow (~ RAL 1023)	~ 35 kg	410 100 006
	Telephone protection hood type red (~ RAL 3020)	~ 35 kg	410 100 009
	Telephone protection hood type stainless steel	~ 40 kg	410 100 010
TH1C	Console, sheet steel, fits all hood types, yellow (~ RAL 1023)	~ 17 kg	410 100 011
	Telephone protection hood - stainless steel		
TH2-S	Telephone protection hood, stainless steel V2A	~ 3,0 kg	410 100 020
	Telephone protection hood - synthetic (PVC)		
TH2-P	Telephone protection hood, died synthetic, yellow	~ 3,5 kg	410 100 030



Ex-proof Signal horn mHPT

mHPT



II 2 G Ex e mb II T5
-20 °C ≤ Ta ≤ +50 °C (AC-Mod.)
-20 °C ≤ Ta ≤ +60 °C (DC-Mod.)
Zone 1, 2

Features

- Loud, well designed signal horn
- For use in gas explosion endangered areas of zone 1, 2
- Housing made of impact resistant synthetics
- Available in popular voltages
- Insulation class II
- DC models with electronic contact breaker
- Encapsulation



Ex-proof Signal horn mHTG

mHTG



II 2 G Ex e mb II T5
II 2 D Ex tD A21 IP66 T90°C
-55 °C ≤ Ta ≤ +50 °C (AC-Mod.)
-55 °C ≤ Ta ≤ +60 °C (DC-Mod.)
Zone 1, 2, 21, 22

Features

- Explosion proof, loud, well designed signal horn
- For use in gas and dust endangered areas of zone 1, 2 and 21, 22
- Housing made of aluminium die-cast with weatherproof coating
- Available in popular voltages
- Insulation class I
- DC models with electronic contact breaker
- Encapsulation
- High protection class





Order data

Type	Denomination	Nominal voltage (V)	Nominal current (A)	Order No.
	Design temperature range T5			
mHPT	Ex-proof signal horn	24 V DC	0,300	301 100 005
		115 V AC	0,150	301 100 110
		230 V AC	0,070	301 100 113



Order data

Type	Denomination	Nominal voltage (V)	Nominal current (A)	Order No.
mHTG	Ex-proof signal horn	24 V DC	0,300	302 100 005
		230 V AC	0,070	302 100 113



Ex-proof Signal horn dHH - dHHR

dHH – dHHR



II 2 G Ex d e IIC T5, T6 Gb
II 2 D Ex tb IIC T95°C, T80°C Db
-20°C ≤ Ta ≤ +75°C/+70°C
Zone 1, 2, 21, 22

Features

- Loud signal horns with typical tone
- For use in explosion endangered areas of zone 1 and 2
- Synthetic housings made of glassfibre reinforced polyester
- Flameproof chamber "d" - terminal connection chamber in protection class increased safety "e"
- Wide voltage range
- Reduced weight - robust and corrosion proof design
- Models with telephone call current relay available



Ex-proof Signal Bell dHW - dHWR

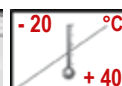
dHW - dHWR



II 2 G Ex de IIC T6
II 2 D Ex tD A21 IP66 T80°C
-20°C ≤ Ta ≤ +40°C
Zone 1, 2, 21, 22

Features

- Loud signal with typical tones
- For use in explosion endangered areas of zone 1 and 2
- Synthetic housings made of glassfibre reinforced polyester
- Flameproof chamber "d" - terminal connection chamber in protection class increased safety "e"
- Wide voltage range
- Reduced weight - robust and corrosion proof design
- Models with telephone call current relay available





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound press. (dB)					Housing grey/black
dHH	Ex-proof signal horn	continuous	105	24 V AC	50	+10%/-15%	0,650	300 000 105
				48 V AC	50		0,350	300 000 108
				230 V AC	50		0,070	300 000 113
				120 V AC	60		0,150	300 000 211
				240 V AC	60		0,070	300 000 213
				24 V DC			0,300	300 000 005
				48 V DC			0,170	300 000 008
				220 V DC			0,050	300 000 013
dHHR	Ex-proof signal horn with telephone call current relay	continuous	105	230 V AC	50	+10%/-15%	0,070	300 100 113

NOTE: ▶ dHH also available in voltages: 42, 60, 110 V AC, 50 Hz and 12, 60, 110 V DC



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.
		Tone types	Max. sound press. (dB)					Housing grey/black
dHW	Ex-proof signal bell	continuous	105	24 V AC	50	+10% / -15%	0,320	320 000 105
				230 V AC	50		0,055	320 000 113
				120 V AC	60		0,180	320 000 211
				240 V AC	60		0,065	320 000 213
				24 V DC			0,350	320 000 005
				48 V DC			0,300	320 000 008
				220 V DC			0,070	320 000 013
dHWR	Ex-proof signal bell with telephone call current relay	continuous	105	230 V AC	50	+10% / -15%	0,055	320 100 113

NOTE: ▶ dHW also available in voltages: 60, 110 V AC, 50 Hz and 12, 110 V DC



Ex-proof Electronic Multi-Tone Siren dMS

dMS



II 2 G Ex d e IIB + H2 T6 Gb
II 2 D Ex tb IIIC T85° Db
-55°C ≤ Ta ≤ +60°C
Zone 1, 2, 21, 22

Features

- ▶ Loud electronic multi-tone siren for warning and audible signalling
- ▶ For use in explosion endangered areas zones 1, 2, 21 and 22
- ▶ Flame-proof robust housing made of copper-free seawater resistant aluminium
- ▶ Sound guide made of impact resistant polyamide
- ▶ 32 signal tones, 2 different tones switchable/addressable (2-stage alarm)
- ▶ Volume max. 115 dB (A) in 1 m – volume adjustable/reducible in 3 steps each by 10 dB
- ▶ High protection class IP66
- ▶ Terminal compartment made in protection class increased safety „e“



Ex-proof Electronic Sounder dHE

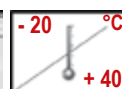
dHE



II 2 G Ex d e mb IIC T6 Gb
Zone 1, 2

Features

- ▶ Loud electronic sounder for use in explosion endangered areas of zone 1 and 2
- ▶ 31 different signal tones resp. signal tone groups, 1 programmable tone group
- ▶ 8 volume settings
- ▶ Synchronization of tones
- ▶ Flame proof chamber „d“ - connection chamber in protection class increased safety „e“, encapsulation „m“
- ▶ Reduced weight - robust and corrosion proof design
- ▶ Insulation class II - no equipotential bonding required





Order data

Type	Denomination	Nominal/operating Voltage (V)	Nominal current (A)	Order No.
dMS1	Ex-proof electronic multi-tone siren	85-265 V AC	0,093	371 000 313
dMS2		24 V DC	0,460	371 000 005



Order data

Type	Denomination	Tone options		Nominal voltage (V)		Nominal current (A)	Order No.
		Tone types	Max. sound press. (dB)				Housing grey/black
dHE1	Ex-proof electronic sounder	31	119*	85-265 V AC, 50-60 Hz		0,100 (230 V AC)	370 000 000
dHE2				21,6-75 V DC		0,520 (24 V DC)	370 000 001

* Adjustable by rotary switch



Ex-proof Strobe Beacon dSF

dSF



II 2 G Ex d e IIC T5/T6 Gb
II 2 D Ex tb IIIC T95°C/T80°C Db
-55 °C ≤ Ta ≤ +55°
Zone 1, 2, 21, 22

Features

- Visual signal device with powerful xenon tube for use in explosion endangered areas of zones 1 and 2
- Models with 5 J or 15 J strobe energy
- Flameproof chamber „d“ - terminal connection chamber in protection class increased safety „e“
- Sturdy aluminium housing, coated or powder coated
- Hardened glass lens
- All models with protection cage made of stainless steel
- 5 lens colours: amber, red, clear, blue, green
- Compact dimensions - can also be built in



0408

Ex-proof LED Signal Beacon dSD

dSD



II 2 G Ex d e IIC T6 Gb
II 2 D Ex tb IIIC T80°C Db
-55 °C ≤ Ta ≤ +40°C
Zone 1, 2, 21, 22

Features

- Robust visual signal beacon with up-to-date LED technique
- High signalling effect, long lifetime
- 4 operating modes selectable:
 - LED steady light
 - LED flashing light
 - LED strobe light
 - LED rotating light
- Available in 5 LED colours: red, clear, blue, green, yellow
- Flameproof chamber „d“ – terminal connection chamber in protection class increased safety „e“



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Order data

Type	Denomination	Strobe energy (J)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.
						Housing yellow/blue
dSF1	Ex-proof strobe beacon	15	110/120 V AC 50-60 Hz	103-127	0,200	335 00C 410
		15	230/240 V AC 50-60 Hz	207-253	0,200	335 00C 413
		5	110/120 V AC 50-60 Hz	103-127	0,135	335 10C 410
		5	230/240 V AC 50-60 Hz	207-253	0,130	335 10C 413
dSF2		15	24 V DC	21-53	1,000	335 00C 005
		5	24 V DC	21-53	0,280	335 10C 005

NOTE: ▸ Also available in 80 V DC



Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Nominal current (A)						Order No.
				Operating mode	red	clear	blue	green	yellow	Housing yellow/blue
dSD1	Ex-proof LED signal beacon with protection cage red, yellow	110 - 240 V AC	85 - 265 V AC	steady light	0,125	0,170	0,170	0,160	0,125	335 21C 313
	flashing light			0,125	0,170	0,170	0,160	0,125		
	Ex-proof LED signal beacon with protection cage clear, blue, green			strobe light	1,800	1,230	1,230	1,210	1,800	335 21C 313
				rotating 1	0,060	0,070	0,070	0,065	0,060	
				rotating 2	0,070	0,085	0,085	0,080	0,070	
dSD2	Ex-proof LED signal beacon with protection cage red, yellow	24 V DC	+/- 20%	steady light	0,550	0,870	0,850	0,800	0,570	335 21C 005
	flashing light			0,550	0,870	0,850	0,800	0,570		
	Ex-proof LED signal beacon with protection cage clear, blue, green			strobe light	1,200	1,600	1,500	1,500	1,200	335 21C 005
				rotating 1	0,190	0,280	0,250	0,250	0,190	
		rotating 2	0,250	0,380	0,350	0,350	0,250			
	Ex-proof LED signal beacon with protection cage red, yellow	48 V DC	43-53 V DC	steady light	0,225				0,235	335 21C 008
				flashing light	0,225				0,235	
				strobe light	0,650	---	---	---	0,650	
				rotating 1	0,115				0,115	
rotating 2				0,140				0,140		

* Only available in red and yellow



Ex-proof LED Signal Beacon mDD

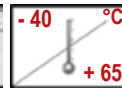
mDD



II 2 G Ex e mb (ib) IIC T4
 $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ (AC-Mod.)
 $-40^{\circ}\text{C} \leq T_a \leq +65^{\circ}\text{C}$ (DC-Mod.)
 II 2 D Ex mbD tD A21 IP 66 T130 °C
 Zone 1, 21, 2, 22

Features

- LED signal beacon for zones 1, 2, 21 and 22
- High protection class IP66
- Polycarbonate housing, mounting bracket V4A
- 4 different operating modes selectable:
 LED steady beacon
 LED flashing beacon
 LED strobe beacon
 LED rotating beacon
- Available in 5 LED colours:
 red, clear/white, blue, green, yellow



Ex-Proof LED Multi Colour Signal Beacon mMD

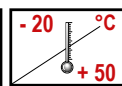
mMD



II 3 G Ex nR IIC T6
 II 3 D Ex tD A22 IP66 T85 °C
 $-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
 Zone 2, 22

Features

- Explosion proof LED multi-colour signal beacon for zone 2 and 22 applications
- 5 signal colours (green, yellow, red, blue, clear) addressable
- 3 operating modes
 (LED steady light, LED flashing light, LED strobe light)
 individually switchable by DIP switch for each colour
- High protection class IP 66
- Polycarbonate housing, mounting bracket V4A
- For outdoor and indoor universal applications





Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Order No.
mDD1	Ex-proof LED signal beacon	230 V AC	+/- 20%	336 00C 413
mDD2	Ex-proof LED signal beacon	24 V DC		336 00C 005

Type	Operating mode	Nominal voltage (V)	Nominal current (A)				
			red	clear	blue	green	yellow
mDD1	LED steady light	230 V AC	0,047	0,055	0,055	0,055	0,047
	LED flashing light		0,040	0,044	0,044	0,044	0,040
	LED strobe light		0,037	0,040	0,040	0,040	0,037
	LED rotating light		0,035	0,037	0,037	0,037	0,035
mDD2	LED steady light	24 V DC	0,480	0,720	0,700	0,680	0,500
	LED flashing light		0,460	0,690	0,680	0,660	0,480
	LED strobe light		0,850	1,280	1,250	1,200	0,900
	LED rotating light		0,240	0,320	0,310	0,310	0,240



Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Order No.
mMD1	Ex-proof LED multi-colour signal beacon	230 V AC	+/- 20%	337 000 313
mMD2	Ex-proof LED multi-colour signal beacon	24 V DC		337 000 005



Ex-proof Visual-Audible Signalling Sounder VS1

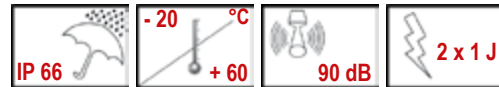
VS1



II 2 G Ex e mb [ib] IIC T6/T5/T4 Gb
-20°C ≤ Ta ≤ +40°C/+50°C/+60°C
Zone 1, 2

Features

- Explosion-proof visual-audible signalling sounder for universal applications in industrial explosion endangered areas
- 3 tones and 4 frequencies/settings selectable
- Lens colours amber, red, clear, blue, green
- 230 V AC power supply
- Aluminium-die cast housing

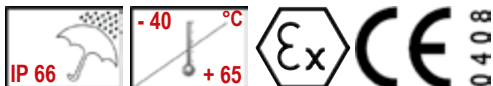


Mounting Plate for Combinations of Ex-proof Devices MPL

MPL

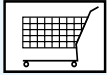


II 2 G Ex e IIC T4 Gb
II 2 D Ex tb IIC T135 °C Db



Features

- Mounting plate for universal combinations of visual and audible explosion-proof devices for outdoor and indoor use in explosion endangered areas of zones 1, 2, 21 and 22
- For combination of following ex-proof devices:
 - dSF – ex-proof xenon beacons
 - dSD – ex-proof LED signal beacons
 - mDD – ex-proof LED signal beacons
 - mMD – ex-proof LED multicolour beacons
 - dMS – ex-proof multitone sirens
- Maximum 3 devices can be mounted/connected
- Including glassfibre reinforced and electrostatically conductive polyester junction box
- Mounting plate made of 3mm thick sturdy DIN type 1.4301 (AISI 304) stainless steel
- High IP66 protection class
- Mounting plate can also be used optionally in connection with the ex-proof telephone connecting relay mTCR



Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.
			Tone types	Max. sound pressure (dB)			
VS1	Ex-proof visual-audible signalling sounder	2 x 1 J xenon tube	3	90	230 V AC	+/- 10%	410 10C 005



Order data

Type	Denomination	Order No.
MPL	Mounting Plate incl. ex-proof junction box	335 500 000





Accessories

LED Bulbs - steady light LLL

LED Bulbs - flashing light LLB

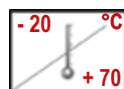
Bulbs - GL, Halogen Bulbs - HL, Xenon Tubes - XT

LLL, LLB



Features

- Complete offering of high performance though price attractive LED bulbs with up-to-date LED technology
- Absolutely shock and vibration proof, maintenance-free
- Very long lifetime - up to approx. 100.000 hours
- Models for steady and flashing light
- Plc fit (leakage, inrush current)



Bulbs, Halogen Bulbs, Xenon Tubes



GL



HL



XT



Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.
LLL	LED steady light bulb amber, red, yellow	24 V AC/DC	+/- 10%	0,029	893 00C 405
		48 V AC/DC		0,019	893 00C 408
		110/120 V AC		0,021	893 00C 310
		230/240 V AC		0,021	893 00C 313
LLL	LED steady light bulb clear, blue, green	24 V AC/DC	+/- 10%	0,029	893 00C 405
		48 V AC/DC		0,019	893 00C 408
		110/120 V AC		0,020	893 00C 310
		230/240 V AC		0,021	893 00C 313
LLB	LED flashing light bulb amber, red, yellow	24 V AC/DC	+/- 10%	0,043	893 01C 405
		48 V AC/DC		0,026	893 01C 408
		110/120 V AC		0,021	893 01C 310
		230/240 V AC		0,021	893 01C 313
LLB	LED flashing light bulb clear, blue, green	24 V AC/DC	+/- 10%	0,043	893 01C 405
		48 V AC/DC		0,026	893 01C 408
		110/120 V AC		0,021	893 01C 310
		230/240 V AC		0,021	893 01C 313

NOTE: ▸ Also available in 12 V AC/DC

Type	Denomination	Nominal voltage (V)		Order No.
GL01	Incandescent bulb BA15d, 5 W	12 V		890 010 904
GL02	Incandescent bulb BA15d, 6,5 W	24 V		890 010 905
GL03	Incandescent bulb BA15d, 5 W	48 V		890 010 908
GL04	Incandescent bulb BA15d, 7 W	60 V		890 010 909
GL05		110/120 V		890 010 910
GL06	Incandescent bulb BA15d, 6 W	230/240 V		890 010 913
GL11	Incandescent bulb BA15d, 4 W	12 V		890 012 904
GL12		24 V		890 012 905
GL13		48 V		890 012 908
GL14		60 V		890 012 909
GL15		110/120 V		890 012 910
GL16	Incandescent bulb BA15d, 25 W	230/240 V		890 012 913
GL21		12 V		890 025 904
GL22		24 V		890 025 905
GL23		48 V		890 025 908
GL24		60 V		890 025 909
GL25	Halogen bulb, 50 W	110/120 V		890 025 910
GL26		230/240 V		890 025 913
HL51		12 V		890 050 904
HL52		24 V		890 050 905
HL55	Halogen bulb, 35 W	110/120 V		890 050 910
HL56		230/240 V		890 050 913
HL31		12 V		890 035 904
HL32		24 V		890 035 905
HL35	Halogen bulb, 20 W	110/120 V		890 035 910
HL36		230/240 V		890 035 913
HL21		12 V		890 020 904
HL22		24 V		890 020 905
HL25	Xenon tube 30 J	110/120 V		890 020 910
HL26		230/240 V		890 020 913
XT30	Xenon tube 15 J			890 130 900
XT15	Xenon tube 7 J			890 115 900
XT07				890 107 900



Colour code

1 amber
2 red
4 clear

5 blue
6 green
7 yellow

ACCESSORIES		
Type	Nominal voltage (V)	Order No.
Bulb, BA15d		
GL01	12 V, 5 W	890 010 904
GL02	24 V, 6,5 W	890 010 905
GL03	48 V, 5 W	890 010 908
GL04	60 V, 7 W	890 010 909
GL05	110/120 V, 7 W	890 010 910
GL06	230/240 V, 6 W	890 010 913
GL11	12 V, 4 W	890 012 904
GL12	24 V, 4 W	890 012 905
GL15	110/120 V, 4 W	890 012 910
GL16	230/240 V, 4 W	890 012 913
Bulb, BA15d, 25 W		
GL21	12 V	890 025 904
GL22	24 V	890 025 905
GL23	48 V	890 025 908
GL25	110/120 V	890 025 910
GL26	230/240 V	890 025 913
LLL - LED Bulb, BA15d, steady light		
	12 V AC/DC	893 00C 404
	24 V AC/DC	893 00C 405
	48 V AC/DC	893 00C 408
	110/120 V AC	893 00C 310
	230/240 V AC	893 00C 313
LLB - LED Bulb, BA15d, flashing light		
	12 V AC/DC	893 01C 404
	24 V AC/DC	893 01C 405
	48 V AC/DC	893 01C 408
	110/120 V AC	893 01C 310
	230/240 V AC	893 01C 313



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