



*Your Signalling
Solution!*

New Beacons Series „P“

Colour code

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



Position letter code

E	5 th position from base
D	4 th position from base
C	3 th position from base
B	2 nd position from base
A	1 st position from base
M	= Base mounted on modules

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

New Products 2013



Beacons „Q“, Page 2



LED Strobe Beacon HIGH PERFORMANCE - NFS-HP, Page 10
LED Multi Colour Beacon HIGH PERFORMANCE - NMS-HP, Page 10



Beacons „P“, Page 14



LED Strobe Beacons ICL - ICM , Page 20
LED Multicolour Beacons IML - IMM, Page 22



modulSIGNAL50 - integrated LED modules, Page 39



Combinations Multi Tone Alarm Sounder „A“ - Beacons „Q“, Page 48
Multi Tone Alarm Sounders „A“ with Light Indicator, Page 52
Beacons „Q“ with Buzzer Indicator, Page 54



Multi Tone Alarm Sounders „A“, Page 64

Contents



Visual Signalling Equipment

Beacons „Q“	2-3
Modular Beacon Series „M“	4-7
Steady/Flashing/Strobe Beacon WLG - BKG - FLG	8-9
LED Steady/LED Flashing Beacon DLG - BLG	8-9
LED Light Bar ILL42	8-9
LED Steady/Flashing Beacon NES	10-11
LED Strobe/Double Strobe Beacon NFS	10-11
LED Multi Colour Beacon NMS	10-11
LED Strobe Beacon HIGH PERFORMANCE NFS-HP	10-11
LED Multi Colour Beacon HIGH PERFORMANCE NMS-HP	10-11
Strobe Beacons BZL - BZG	12-13
Beacons „P“	14-15
LED Flashing Beacon BC1	16-17
Strobe Beacon XB2	16-17
Steady (LED Steady/Flashing) Beacon WLK , Strobe Beacon FLK	18-19
M22 Panel Mount Beacons „I“	20-23
LED Steady/Flashing Beacons IBL - IBM - IBS	20-21
LED Strobe Beacons ICL - ICM - ISS	20-21
Xenon Strobe Beacons ISL - ISM	20-21
LED Multicolour Beacons IDL - IDM - IDS, ITL - ITM - ITS, IML - IMM	22-23



Signal Towers

Signal Tower ECModul70, ECModul60, ECModul40	24-33
Signal Tower moduSIGNAL70	35-37
Signal Tower moduSIGNAL50	39-41
Signal Tower moduCOMPACT70	42-43
Signal Tower moduCOMPACT30	44-45
Signal Tower halfDOME90	46-47



Visual-Audible Signalling Equipment

Combinations Multi Tone Alarm Sounder „A“ – Beacons „Q“	48-51
Multi Tone Alarm Sounders „A“ with Light Indicator	52-53
Beacons „Q“ with Buzzer Indicator	54-55
Mini Horn-Signal Beacon KLL - KDL	56-57
Mini Horn-Strobe Beacon KLF - KDF	56-57
Strobe Beacon-Signalling Sounder VS4	56-57
M22 Panel Mount Buzzer - LED Steady/Flashing Beacons ELG - EDG, ELM - EDM	58-59
LED Flashing Beacon-Electronic Multitone Siren CS1	58-59



Audible Signalling Equipment

Mini Horns KLH - KDH, HMK	60-61
Signal Horns HPT - HTG	60-61
Bells UWS - FWS	62-63
Electronic Multitone Sirens ES1 - ES2	62-63
Multi Tone Alarm Sounders „A“	64-65

Overview Multi Tone Alarm Sounders „A“ / Beacons „Q“	66
Tone tables „Series A“	67-69
Electronic Sounder EHS - EHF - EHL	70-71
Audible Signalling Sounder AS4	70-71
M22 Panel Mount Buzzer ESG - ESM - ESK - ESV	72-73
M28 Panel Mount Buzzer ESD - ESP - ESZ	72-73
M28 Panel Mount Buzzer BU2 - BU3	74-75
Surface Mount Buzzer-Electronic Siren BU1	74-75
Motor Sirens SE1 - SE2 - SE3	74-75



Telephones and Accessories

Ex-Proof Telephone dST	76-77
Ex-Proof Audible Telephone Call Signalling Sounder AS1	76-77
Ex-Proof Visual-Audible Telephone Call Signalling Sounder VS1	78-79
Ex-Proof Loudspeaker LS1	78-79
Ex-Proof Additional Earpiece EP1	80-81
Ex-Proof Headset Kit HS1	80-81
Weatherproof Telephone wST	82-83
Audible Telephone Call Signalling Sounder AS2	82-83
Visual-Audible Telephone Call Signalling Sounder VS2	84-85
Loudspeaker Set LS2	84-85
Additional Earpiece EP2	86-87
Headset Kit HS2	86-87
Ex-Proof Telephone dFT3 FernTel3 - Zone 2, 22	88-89
Weatherproof Telephone wFT3 FernTel3	88-89
Weatherproof Telephone wIND „INDUSTRY“	90-91
Telephone Protection Hoods TH1	90-91



Ex-Proof Signalling Equipment

Ex-Proof Signal Horn mHPT	92-93
Ex-Proof Signal Horn dHH-dHHR	92-93
Ex-Proof Signal Bell dHW-dHWR	94-95
Ex-Proof Loudspeaker dHS	94-95
Ex-Proof Electronic Sounder dHE	96-97
Ex-Proof Audible Signalling Sounder AS3	96-97
Ex-Proof Strobe Beacon dHF	98-99
Ex-Proof Strobe Beacon dSF	98-99
Ex-Proof LED Signal Beacon mDD	100-101
Ex-Proof LED Signal Beacon dSD	100-101
Ex-Proof Rotating Signal Beacon dHR	102-103
Ex-Proof Steady Beacon dHL	102-103
Ex-Proof Audible Signalling Sounder VS1	104-105



Accessories

LED Bulbs – Steady Light LLL	106-107
LED Bulbs – Flashing Light LLB	106-107
Bulbs - GL , Halogen Bulbs - HL , Xenon Tubes - XT	106-107
Notizen	108

The 2013 Product Overview brochure at hand has been specifically extended and completed with product and technical information for the North American and other markets using mainly 110/120 V products.

Furthermore additionally available accessories for individual products are shown in the order data section to specify complete product solutions as easily as possible. Available voltages/product options not shown in the order data are also clearly described below the order data sections to understand the complete available range; all individual product data can be retrieved and found easily in our web page any time (www.auer-signal.com).

A new beacon series „P“ – a 75 mm diameter LED or xenon beacon range with high IP67 ingress protection has been launched and perfectly completes our range of smaller/mid-sized beacons. High and low lens options, various mountings and particular models such as LED multi strobe beacons (two LED strobe patterns switchable via the terminal) or multi colour beacons further complement our range of visual signalling products.

The popular N-series 90 mm diam. beacon range has been extended with powerful HIGH PERFORMANCE models of NFS-HP LED multi strobe and NMS-HP multi colour beacon models.

Also the M22 panel mount range now comprises LED strobe beacons (ICL and ICM with 2 strobe patterns switchable via the terminal) as well as prewired 3 colour beacons IML and IMM in 65 and 45 mm beacon sizes.

The popular 50 mm signal tower range has been completed with integrated LED modules for steady, flashing, single strobe and multi strobe light functions.

We look forward to continuing our excellent and successful cooperation with our customers and distributors and appreciate your contacting us at any time. We will be glad to serve you and guide you for any questions you may have with regard to products, order data, etc.

Thank you for your attention and your continued trust in our range of signalling products and signalling solutions!

For further information please visit www.auer-signal.com

*Your Signalling
Solution!*



Beacons „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
LED Steady/ Flashing Beacons	QDS 	QDM 	QDL 	QDX
Xenon Strobe Beacons	QFS 	QFM 		
LED Multi Strobe Beacons			QBL 	QBX

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 3-4
 most modern LED technique with high signalling effect
 3 strobe patterns (double, 6-times, multi)
 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:

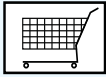
Combination of QDM – LED steady/flashing beacon (size 2), 230/240 V AC for red-amber-green.

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 64/66.

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	Price
QDS	LED steady/flashing beacon size 1 amber, red, yellow	LED 10 Cd	24 V AC/DC	+/- 10%	0,110	874 16C 405	
			48 V AC/DC		0,065	874 16C 408	
			110/120 V AC		0,060	874 16C 310	
			230/240 V AC		0,060	874 16C 313	
QDS	LED steady/flashing beacon size 1 clear, blue, green	LED 10 Cd	24 V AC/DC	+/- 10%	0,110	874 16C 405	
			48 V AC/DC		0,065	874 16C 408	
			110/120 V AC		0,060	874 16C 310	
			230/240 V AC		0,060	874 16C 313	
QDM	LED steady/flashing beacon size 2 amber, red, yellow	LED 120 Cd	24-48 V AC/DC	16-60 V DC	max. 0,300	874 26C 408	
				16-53 V AC			
QDM	LED steady/flashing beacon size 2 clear, blue, green	LED 120 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,070	874 26C 413	
QDM	LED steady/flashing beacon size 2 clear, blue, green	LED 120 Cd	24-48 V AC/DC	16-60 V DC	max. 0,300	874 26C 408	
				16-53 V AC			
QDL	LED steady/flashing beacon size 3 amber, red, clear, yellow	LED 170 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,070	874 26C 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	
				18-53 V AC			
QDL	LED steady/flashing beacon size 3 blue, green	LED 170 Cd	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	LED 300 Cd	24-48 V AC/DC	18-60 V DC	max. 1,800	874 46C 408	
				18-53 V AC			
QDX	LED steady/flashing beacon size 4 blue, green	LED 300 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,035	874 46C 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	
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	
				18-53 V AC			
QBL	LED multi strobe beacon size 3 blue, green	LED 250 Cd	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	
				18-53 V AC			
QBL	LED multi strobe beacon size 3 blue, green	LED 250 Cd	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	
				18-53 V AC			
QBX	LED multi strobe beacon size 4 amber, red, clear, yellow	LED 400 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413	
QBX	LED multi strobe beacon size 4 blue, green	LED 400 Cd	24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408	
				18-53 V AC			
QBX	LED multi strobe beacon size 4 blue, green	LED 400 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413	

Accessories see page 51



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

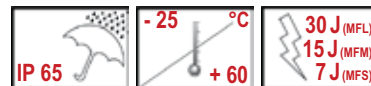
MLS - MBS - MFS - MRS

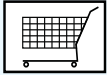


Ø 90 mm

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

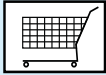
160 mm

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black			Price
						Horizontal base	Pole mount base M20	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		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.	Price
	Accessories for models with horizontal mounting		
WML	Metal bracket for wall mounting, black	819 200 900	
	Bonding kit for conduit installations	819 201 900	
	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

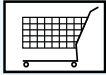
120 mm

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black			Price
						Horizontal base	Pole mount base M20	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		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.	Price
	Accessories for models with horizontal mounting		
WMM	Metal bracket for wall mounting, black	818 200 900	
	Bonding kit for conduit installations	819 201 900	
	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		
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			Price
						Horizontal base	Pole mount base M20	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 40C 405	
			110/120 V AC		0,170	817 10C 310	817 30C 310	817 40C 310	
			230/240 V AC		0,085	817 10C 313	817 30C 313	817 40C 313	
MBS	Flashing beacon		24 V AC/DC	+/- 10%	0,830	837 10C 405	837 30C 405	837 40C 405	
			110/120 V AC		0,170	837 10C 310	837 30C 310	837 40C 310	
			230/240 V AC		0,085	837 10C 313	837 30C 313	837 40C 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 40C 405	
			110/120 V AC		0,210	847 10C 310	847 30C 310	847 40C 310	
			230/240 V AC		0,120	847 10C 313	847 30C 313	847 40C 313	
MRS	Rotating mirror beacon		24 V AC/DC	+/- 10%	0,950	417 10C 405	417 30C 405	417 40C 405	
			110/120 V AC		0,300	417 10C 310	417 30C 310	417 40C 310	
			230/240 V AC		0,270	417 10C 313	417 30C 313	417 40C 313	

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

Accessories

Type	Denomination	Order No.	Price
	Accessories for models with horizontal mounting		
WMS	Metal bracket for wall mounting, black	817 200 900	
	Bonding kit for conduit installations	819 201 900	
	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		
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

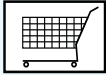
ILL42



Features

- LED illumination with excellent light output
- For universal applications (e.g. work places, cabins, etc.)
- Switched mode power supply for constant light output though 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.		Price
						Housing grey	Housing black	
WLG	Steady beacon	25 W bulb GL21 - 26	up to 250 V AC/DC	+/- 10%	0,700	822 10C 900	822 50C 900	
BKG	Flashing beacon		12-48 V AC/DC	+/- 10%		0,200	832 10C 408	832 50C 408
			110/120 V AC		0,100	832 10C 310	832 10C 310	
			230/240 V AC			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 voltages 12 V and 48 V AC/DC ▶ WLG/BKG: GL21-GL26 bulbs 25 W have to be ordered separately

Accessories

Type	Denomination	Order No.	Price
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.	Price
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



Ø 90 mm

NMS
NMS-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.

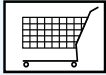
Features NFS-HP

- 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			Price
						Horizontal base	Pole mount M20	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.	Price
WMS	Bracket	817 200 900	
MGS	Magnetic mount	817 203 900	
AKV	Cable gland M20x1,5	698 800 026	



Strobe Beacons BZL-BZG

BZL - BZG



Ø 72 mm

Features BZL

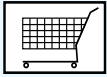
- 5 or 15 J strobe energy available



Features BZG

- 5 or 15 J strobe energy available
- BZG: aluminium die cast housing, epoxy-powder coated





Order data

Type	Denomination	Light source	Nominal voltage (V)	Nominal current (V)	Nominal current (A)	Order No.	Price
BZL	Strobe beacon	5 J xenon tube (included)	24 V DC	+/- 10%	0,280	740 02C 005	
			110/120 V AC		0,010	740 01C 310	
			230/240 V AC		0,050	740 01C 313	
		15 J xenon tube (included)	24 V DC		0,700	740 04C 005	
			110/120 V AC		0,550	740 03C 310	
			230/240 V AC		0,230	740 03C 313	
BZG	Strobe beacon	5 J xenon tube (included)	24 V AC/DC	+/- 10%	0,280	741 01C 405	
			230/240 V AC		0,040	741 01C 313	
		15 J xenon tube (included)	24 V DC		0,700	741 04C 005	
			230/240 V AC		0,230	741 03C 313	

NOTE: ▶ BZL 5 J: also available in 12 V DC ▶ BZG 5 J also available in 12, 24 V DC, 12 V AC/DC ▶ BZG 5 and 15 Joule: 110/120 V AC upon request



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/flashing 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, 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-green with clear lens
- ▶ Models with high and low lens
- ▶ Xenon strobe models with voltage range 10-100 V AC/DC
- ▶ 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

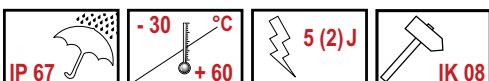
- ▶ **Horizontal mounting**
(standard)

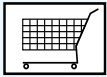


- ▶ **Vertical mounting**
Accessory: plastic bracket (PVW)



- ▶ **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	Price
Models with high lens							
PCH	LED steady/flashing beacon	integrated LEDs	24 V AC/DC	+/- 10 %	0,240	860 50C 405	
			110/120 V AC		0,095	860 50C 310	
			230/240 V AC		0,095	860 50C 313	
PFH	LED multi strobe beacon	integrated LEDs	24 V AC/DC	+/- 10 %	max. 0,360	860 51C 405	
			110/120 V AC		0,095	860 51C 310	
			230/240 V AC		0,095	860 51C 313	
PMH**	LED multi colour beacon red-yellow-green	integrated LEDs	24 V AC/DC	+/- 10 %	---	860 550 405	
			110/120 V AC		---	860 550 310	
			230/240 V AC		---	860 550 313	
PXH	Xenon strobe beacon	5 J xenon tube	24 V AC/DC	+/- 10 %	0,450	860 52C 405	
			110/120 V AC		0,100	860 52C 310	
			230/240 V AC		0,050	860 52C 313	
			10-100 V AC/DC	10-100 V DC	0,500	860 52C 410	
				10-70 V AC	0,500		
Models with low lens							
PCL	LED steady/flashing beacon	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	integrated LEDs	24 V AC/DC	+/- 10 %	max. 0,155	861 51C 405	
			110/120 V AC		0,045	861 51C 310	
			230/240 V AC		0,045	861 51C 313	
PXL	Xenon strobe beacon	2 J xenon tube	24 V AC/DC	+/- 10 %	0,200	861 52C 405	
			110/120 V AC		0,050	861 52C 310	
			230/240 V AC		0,025	861 52C 313	
			10-100 V AC/DC	10-100 V DC	0,200	861 52C 410	
				10-70 V AC	0,200		

* provisional value ** scheduled for end of 2013

Accessories

Type	Denomination	Order No.	Price
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	



LED Flashing Beacon BC1

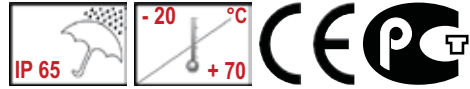
BC1



Ø 63 mm

Features

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



Strobe Beacon XB2

XB2

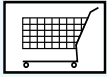


Ø 65 mm

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.		Price
						Housing red	Housing white	
BC1	LED flashing beacon	LED	24 V DC	20-35	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.	Price
XB2	Strobe beacon	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	

NOTE: ▶ Lens colours amber, red on stock ▶ Also partially available in other colours and 12 V DC upon request



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

WLK - FLK



Features

- **WLK steady beacon**
for 7 W incandescent bulb or
LLL steady LED bulb
- **WLK LED flashing beacon**
for LLB flashing LED bulb
- Easy bulb change without tools
- **FLK strobe beacon**
- Comprehensive mounting options





Order data

Type	Denomination	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.		Price
						Housing grey	Housing black	
WLK	Steady beacon	7 W bulb (GL)	up to 250 V AC/DC	+/- 10%		820 00C 900		
	LED steady beacon	LLL						
	LED flashing beacon	LLB						
BHW	Base for horizontal mounting					820 120 900	820 520 900	
BVW	Base for vertical mounting					820 130 900	820 530 900	
BRW	Pole mount base, on aluminium tube, 100 mm					820 102 900	820 502 900	
BWW	Pole mount base, on aluminium tube for horizontal mounting with screws, 100 mm					820 142 900	820 542 900	
BSS	Set for vertical mounting (bracket to BWW)					200 400 900	200 800 900	
BFW	Quick mount base, on aluminium tube with foot adapter for quick mount, 100 mm					820 152 900	820 552 900	
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					840 101 900	840 501 900	
BVF	Base for vertical mounting					840 102 900	840 502 900	
BRF	Pole mount base, on aluminium, 100 mm					840 122 900	840 522 900	
BWF	Pole mount base, on aluminium tube for horizontal mounting with screws, 100 mm					840 152 900	840 552 900	
BSS	Set for vertical mounting (bracket to BWF)					200 400 900	200 800 900	
BFF	Quick mount base, on aluminium tube with foot adapter for quick mount, 100 mm					840 162 900	840 562 900	

NOTE: ▶ WLK - light sources (GL01-GL06) have to be ordered separately ▶ Additional pole lengths optionally available



M22 Panel Mount Beacons „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.		Price
						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	
	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	
	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	
	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, yellow	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	
	24 V AC/DC		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, yellow	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	
	24 V AC/DC		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, yellow	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	
	24 V AC/DC		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	

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

Accessories

Adapter M30,5	812 500 900
Fastening tool for 30 mm models	812 400 900



M22 Panel Mount Beacons „I“

LED Multicolour Beacons

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

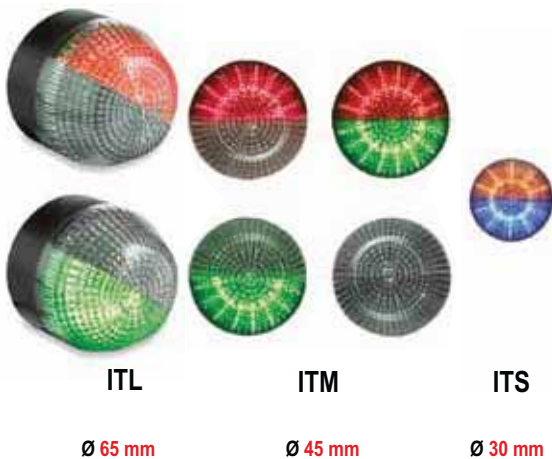
LED Multicolour Beacons 1 of 2 Colours Visible (whole lens illuminated)



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
- 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 Multicolour Beacons 1 or 2 separate colours visible (half lens illuminated)



Models with sealed cable for special applications



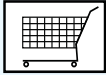
Features

- 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 (min. quantity required)
- 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 voltage (V)	Voltage range (V)	Nominal current (A)	Order No.		Price (€)
						Housing grey	Housing black	
IDL (65 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,071	802 2CC 405	802 6CC 405	
			110/120 V AC		0,061	802 2CC 310	802 6CC 310	
			230/240 V AC		0,061	802 2CC 313	802 6CC 313	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,071	802 2CC 405	802 6CC 405	
			110/120 V AC		0,061	802 2CC 310	802 6CC 310	
			230/240 V AC		0,061	802 2CC 313	802 6CC 313	
IDM (45 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,046	801 2CC 405	801 6CC 405	
			110/120 V AC		0,035	801 2CC 310	801 6CC 310	
			230/240 V AC		0,035	801 2CC 313	801 6CC 313	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,046	801 2CC 405	801 6CC 405	
			110/120 V AC		0,035	801 2CC 310	801 6CC 310	
			230/240 V AC		0,035	801 2CC 313	801 6CC 313	
IDS (30 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,028	800 2CC 405	800 6CC 405	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,028	800 2CC 405	800 6CC 405	
ITL (65 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,044	802 3CC 405	802 7CC 405	
			110/120 V AC		0,041	802 3CC 310	802 7CC 310	
			230/240 V AC		0,041	802 3CC 313	802 7CC 313	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,044	802 3CC 405	802 7CC 405	
			110/120 V AC		0,041	802 3CC 310	802 7CC 310	
			230/240 V AC		0,041	802 3CC 313	802 7CC 313	
ITM (45 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,039	801 3CC 405	801 7CC 405	
			110/120 V AC		0,035	801 3CC 310	801 7CC 310	
			230/240 V AC		0,034	801 3CC 313	801 7CC 313	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,039	801 3CC 405	801 7CC 405	
			110/120 V AC		0,035	801 3CC 310	801 7CC 310	
			230/240 V AC		0,034	801 3CC 313	801 7CC 313	
ITS (30 mm Ø)	LED multicolour steady beacon 1st colour: amber, red, yellow 2nd colour: any color	LED	24 V AC/DC	+/- 10%	0,030	800 3CC 405	800 7CC 405	
	LED multicolour steady beacon 1st colour: clear, blue, green 2nd colour: clear, blue, green		24 V AC/DC		0,030	800 3CC 405	800 7CC 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

Adapter M30,5	812 500 900
Fastening tool for 30 mm models	812 400 900



Signal Tower ECOmodul70, ECOmodul60, ECOmodul40



ECOmodul70



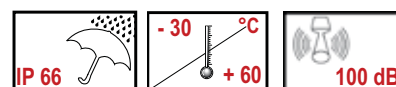
ECOmodul60



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

	ECOmodul70	ECOmodul60	ECOmodul40
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:

	ECOmodul70	ECOmodul60
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
ECOmodul70
ECOmodul60
ECOmodul40
ECOmodul70
ECOmodul60
ECOmodul40
ECOmodul70
ECOmodul60
ECOmodul40



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



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



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	C
2	red	6	green	
4	clear	7	yellow	

Length code for tubes		L
2	100 mm	L
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	VOL
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)



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, .) 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

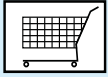
- ▶ Can be set up for one to five-tier signal towers (clean break-off at desired length due to pre-lasered break-off edges)
- ▶ Easy mounting on the pole mount base
- ▶ For attaching of individual instructions and indications
- ▶ Complete scope of supply with 5-tier board, mounting clamp and screws
-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

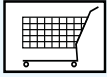
Order number: XIB 900 850 900





Type	Light modules	Light source		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black	Price	
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	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		
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	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		
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	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		
„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	integrated „HIGH PERFORMANCE“ LED	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	integrated „HIGH PERFORMANCE“ LED	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	integrated „HIGH PERFORMANCE“ LED	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	Price	
		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	
XDZ	Piezo buzzer 2 tones selectable	continuous and pulsing	100 dB**	24 V AC/DC	+/- 10%		0,092	900 510 405	
				110/120 V AC			0,041	900 510 310	
				230/240 V AC			0,043	900 510 313	
XDM	Multi tone siren Tones see tone table page 28	8 tones	100 dB**	24 V AC/DC	+/- 10%		0,115	900 520 405	
				110/120 V AC			0,045	900 520 310	
				230/240 V AC			0,043	900 520 313	

** Adjustable by potentiometer



Order data



Type	Bases		Order No. Housing black	Price
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	
XMV	Base for horizontal mounting	with external mounting lugs	900 572 900	
XMF	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	

** Adjustable by potentiometer

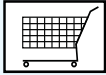
Accessories

Type	Denomination	Nominal voltage (V)	Ordner No.	Price
XIB	Indication board		900 850 900	
LWW	Bulb changing tool (use optional)		890 900 900	
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	



Type	Light modules	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black	Price
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	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	
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	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	
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	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	
„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
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 lugs				901 572 900	
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	

NOTE: ▶ Accessories see page 33 ** Adjustable by potentiometer



Order data



Type	Light modules	Light source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black	Price
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	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	
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	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	
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	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	
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	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	
Type	Tone modules	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing black
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	
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	

Accessories

Type	Denomination	Nominal voltage (V)	Order No.	Price
XIB	Indication board		900 850 900	
LWW	Bulb changing tool		890 900 900	
GL11	Incandescent bulb BA15d	12 V, 4 W	890 012 904	
GL12	Incandescent bulb BA15d	24 V, 4 W	890 012 905	
GL16	Incandescent bulb BA15d	230/240 V, 4 W	890 012 913	



Notes

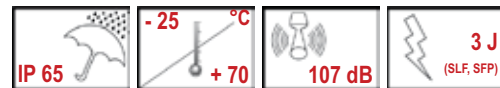
A series of horizontal light blue lines for taking notes.

Signal Tower modulSIGNAL70



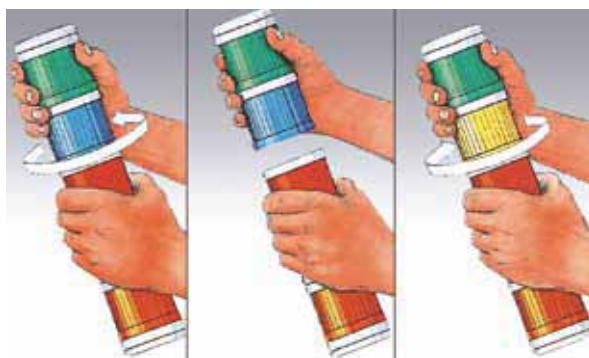
Features

- ▶ Modular, well proven signal tower family
- ▶ For practically all signal tower applications
- ▶ Complete range of visual, audible and special modules
- ▶ 6 lens colours, 3 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



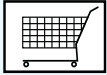
Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturers and their customers.



Signal Tower modul SIGNAL70

Type	Denomination	Light source			Tone options			Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.		Price	Order No.	
		Bulb GL	LED bulb steady light LLL	LED bulb flash. light LLB	Tone types	Max. sound pressure (dB)	Housing grey				Housing black	Housing silver		Price	
Light Modules															
SLL	Steady light	X	X	X			- 250 V AC/DC	+/- 10%	7 W	210 10C 900	210 50C 900		210 80C 900		
SLB	Flashing light	X	X				12-24 V AC/DC			220 10C 405	220 50C 405		220 80C 405		
							110/120 V AC			220 10C 310	220 50C 310		220 80C 310		
SLF	Strobe light			3 J xenon tube			230/240 V AC	220 10C 313	220 50C 313		220 80C 313				
							12-24 V AC/DC	0,180	230 10C 405	230 50C 405		230 80C 405			
							110/120 V AC	0,050	230 10C 310	230 50C 310		230 80C 310			
SDC	LED steady light amber, red, green, yellow			integrated LEDs			230/240 V AC	0,035	230 10C 313	230 50C 313		230 80C 313			
							24 V AC/DC	0,070	211 10C 405	211 50C 405		211 80C 405			
							110/120 V AC	0,043	211 10C 310	211 50C 310		211 80C 310			
	LED steady light clear, blue			integrated LEDs			230/240 V AC	+/- 10%	0,041	211 10C 313	211 50C 313		211 80C 313		
							24 V AC/DC	0,070	211 10C 405	211 50C 405		211 80C 405			
							110/120 V AC	0,043	211 10C 310	211 50C 310		211 80C 310			
SDA	LED flashing light amber, red, green, yellow			integrated LEDs			230/240 V AC	0,041	211 10C 313	211 50C 313		211 80C 313			
							24 V AC/DC	0,070	221 10C 405	221 50C 405		221 80C 405			
							110/120 V AC	0,043	221 10C 310	221 50C 310		221 80C 310			
	LED flashing light clear, blue			integrated LEDs			230/240 V AC	+/- 10%	0,041	221 10C 313	221 50C 313		221 80C 313		
							24 V AC/DC	0,070	221 10C 405	221 50C 405		221 80C 405			
							110/120 V AC	0,043	221 10C 310	221 50C 310		221 80C 310			
Light-Buzzer Modules															
SLP	Steady light-buzzer	X	X	X	cont. or puls.	107 or 90*	24 V AC/DC	+/- 10%	7 W, 0,040 A	250 10C 405	250 50C 405		250 80C 405		
SLD	Steady light-buzzer light/sound separately switchable	X	X	X	cont. or puls.	107 or 90*	110/120 V AC			250 10C 310	250 50C 310		250 80C 310		
							230/240 V AC			250 10C 313	250 50C 313		250 80C 313		
SBP	Flashing light-buzzer	X	X		cont. or puls.	107 or 90*	24 V AC/DC	212 10C 405	212 50C 405		212 80C 405				
							110/120 V AC	212 10C 310	212 50C 310		212 80C 310				
SFP	Strobe light-buzzer			3 J xenon tube	cont. or puls.	107 or 90*	230/240 V AC	212 10C 313	212 50C 313		212 80C 313				
							24 V AC/DC	0,220	270 10C 405	270 50C 405		270 80C 405			
							110/120 V AC	0,093	270 10C 310	270 50C 310		270 80C 310			
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		247 800 405		
							110/120 V AC			0,043	247 100 310	247 500 310		247 800 310	
							230/240 V AC			0,040	247 100 313	247 500 313		247 800 313	
SDZ	Piezo buzzer, IP65 tone type externally switchable				cont. + puls.	107 or 90*	24 V AC/DC	+/- 10%	0,040	248 100 405	248 500 405		248 800 405		
							110/120 V AC			0,043	248 100 310	248 500 310		248 800 310	
							230/240 V AC			0,040	248 100 313	248 500 313		248 800 313	
SPE	Piezo buzzer, IP54				cont. or puls.	97 or 81**	24 V AC/DC	+/- 10%	0,040	243 100 405	243 500 405		243 800 405		
							110/120 V AC			0,043	243 100 310	243 500 310		243 800 310	
							230/240 V AC			0,040	243 100 313	243 500 313		243 800 313	
SPZ	Piezo buzzer, IP54 tone type externally switchable				cont. + puls.	97 or 81**	24 V AC/DC	+/- 10%	0,040	244 100 405	244 500 405		244 800 405		
							110/120 V AC			0,043	244 100 310	244 500 310		244 800 310	
							230/240 V AC			0,040	244 100 313	244 500 313		244 800 313	
STE	Electronic sounder IP54, 15 tone types				15	64-103**	24 V AC/DC	+/- 10%	0,065	241 100 405	241 500 405		241 800 405		
							110/120 V AC			0,060	241 100 310	241 500 310		241 800 310	
							230/240 V AC			0,060	241 100 313	241 500 313		241 800 313	
STZ	Electronic sounder IP54, 15 tone types 2 tones externally switchable				15	64-103**	24 V AC/DC	+/- 10%	0,065	242 100 405	242 500 405		242 800 405		
							110/120 V AC			0,060	242 100 310	242 500 310		242 800 310	
							230/240 V AC			0,060	242 100 313	242 500 313		242 800 313	
AS-Interface															
BAZ	AS-Interface module	Specifications													
		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.		Price	Order No.		
			Housing grey	Housing black		Housing silver	Price	
Bases								
BMW	Base for horizontal mounting, M20			200 100 900	200 500 900		200 810 900	
BNW	Base for horizontal mounting, NPT 1/2"			200 130 900	200 530 900		200 830 900	
BMV	Base for vertical mounting			200 200 900	200 600 900		200 820 900	
BMR	Pole mount base on aluminium tube with plastic foot	100 mm		200 302 900	200 702 900		200 802 900	
		250 mm		200 303 900	200 703 900		200 803 900	
BSR	Pole mount base on stainless steel tube with metal foot	100 mm		200 312 900	200 712 900		200 812 900	
		250 mm		200 313 900	200 713 900		200 813 900	
BWS	Pole mount base on aluminium tube with horizontal mounting with screw	100 mm		200 332 900	200 732 900		200 832 900	
		250 mm		200 333 900	200 733 900		200 833 900	
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		200 842 900	
		250 mm		200 343 900	200 743 900		200 843 900	
Accessories								
BDW		for horizontal mounting, M20		841 101 900	841 501 900			
		for horizontal mounting, NPT 1/2"		841 102 900	841 502 900			
BDV	Pole connection box (for BMR only)	for vertical mounting, M20		841 111 900	841 511 900			
		for vertical mounting, NPT 1/2"		841 112 900	841 512 900			
BDM		for magnetic mounting, M20		841 121 900	841 521 900			
		for magnetic mounting, NPT 1/2"		841 122 900	841 522 900			

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

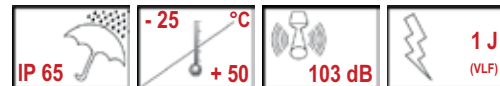
▶ Cap is automatically included with each base

Signal Tower modulSIGNAL50



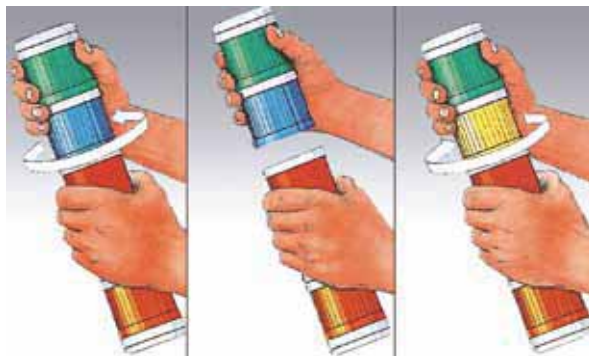
Features

- ▶ Modular, well proven signal tower family
- ▶ For practically all signal tower applications
- ▶ Complete range of visual, audible and special modules
- ▶ 6 lens colours, 3 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 BFR)



- ▶ 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

module contacts



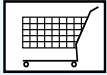
Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufacturers and their customers.



Signal Tower modul SIGNAL50

Type	Denomination	Light source			Tone options		Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.		Price	Order No.						
		Bulb GL	LED bulb steady light LLL	LED bulb flash-light LLB	Tone types	Max. sound pressure (dB)				Housing grey	Housing black		Housing silver	Price					
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						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	integrated LED					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	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											24 V AC/DC	+/- 10%	0,025	781 100 405	781 500 405		781 800 405	
												110/120 V AC		0,033	781 100 310	781 500 310		781 800 310	
		230/240 V AC	0,033	781 100 313	781 500 313							781 800 313							
VDZ	Piezo buzzer, IP65 tone type and sound pressure selectable with DIP switch						24 V AC/DC	+/- 10%	0,025	782 100 405	782 500 405		782 800 405						
							110/120 V AC		0,033	782 100 310	782 500 310		782 800 310						
							230/240 V AC		0,033	782 100 313	782 500 313		782 800 313						
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.		Price	Order No.		
			Housing grey	Housing black		Housing silver	Price	
Bases								
VMW	Base for horizontal mounting, M20			790 120 900	790 520 900		790 820 900	
VNW	Base for horizontal mounting, NPT 1/2"			790 130 900	790 530 900		790 830 900	
VMV	Base for vertical mounting			790 140 900	790 540 900		790 840 900	
VMR	Pole mount base on aluminium tube with plastic foot	100 mm		790 142 900	790 542 900		790 842 900	
		250 mm		790 143 900	790 543 900		790 843 900	
VSR	Pole mount base on stainless steel tube with metal foot	100 mm		790 152 900	790 552 900		790 852 900	
		250 mm		790 153 900	790 553 900		790 853 900	
VSW	Pole mount base on aluminium tube for horizontal mounting with screw	100 mm		790 172 900	790 572 900		790 872 900	
		250 mm		790 173 900	790 573 900		790 873 900	
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		790 882 900	
		250 mm		790 183 900	790 583 900		790 883 900	
Accessories								
BDW		for horizontal mounting, M20		841 101 900	841 501 900			
		for horizontal mounting, NPT 1/2"		841 102 900	841 502 900			
BDV	Pole connection box (VMR only)	for vertical mounting, M20		841 111 900	841 511 900			
		for vertical mounting, NPT 1/2"		841 112 900	841 512 900			
BDM		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				

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

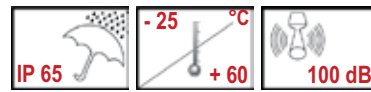


Signal Tower modulCOMPACT70



Features

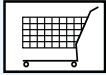
- Compact (ready to use) LED signal tower family
- Tower is built according to customer's requirements
- Prewired with 1 m cable as standard (other cables lengths on request)
- 6 lens colours, 3 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL-certified, protection 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.

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.		Price	Order No.	
			Tone types	Max. sound pressure (dB)				Housing grey	Housing black		Housing silver	Price
Light Modules												
DLL	LED steady light amber, red, yellow	integrated LEDs			(24 V AC/DC)	+/- 10%	max. 0,031	705 00C 900P				
	LED steady light clear, blue, green						max. 0,031	705 00C 900P				
DLB	LED flashing light amber, red, yellow	integrated LEDs			(24 V AC/DC)	+/- 10%	max. 0,031	706 00C 900P				
	LED flashing, light clear, blue, green						max. 0,031	706 00C 900P				
Sound Modules												
DDD	Piezo buzzer		cont.	100	(24 V AC/DC)	+/- 10%	0,053	707 100 900P	707 500 900P		707 800 900P	
DDP			pulsing				0,053	707 110 900P	707 510 900P		707 810 900P	
DDZ			cont. + pulsing				0,053	707 120 900P	707 520 900P		707 820 900P	
DLD			cont.				0,053	707 101 900P	707 501 900P		707 801 900P	
DLP	Piezo buzzer		pulsing	85	(24 V AC/DC)	+/- 10%	0,053	707 111 900P	707 511 900P		707 811 900P	
DLZ			cont. + pulsing				0,053	707 121 900P	707 521 900P		707 821 900P	



Order data

Type	Denomination	Specifications	Pole length	Nominal voltage (V)	Volt. range (V)	Order No.		Price	Order No.	
						Housing grey	Housing black		Housing silver	Price
Bases										
DMW	Base for horizontal mounting	up to 3 modules		24 V AC/DC	+/- 10%	708 100 405M	708 500 405M		708 800 405M	
				110/120 V AC		708 100 310M	708 500 310M		708 800 310M	
				230/240 V AC		708 100 313M	708 500 313M		708 800 313M	
		up to 5 modules		24 V AC/DC		708 101 405M	708 501 405M		708 801 405M	
				110/120 V AC		708 101 310M	708 501 310M		708 801 310M	
				230/240 V AC		708 101 313M	708 501 313M		708 801 313M	
DMV	Base for vertical mounting	up to 3 modules		24 V AC/DC	+/- 10%	708 110 405M	708 510 405M		708 810 405M	
				110/120 V AC		708 110 310M	708 510 310M		708 810 310M	
				230/240 V AC		708 110 313M	708 510 313M		708 810 313M	
		up to 5 modules		24 V AC/DC		708 111 405M	708 511 405M		708 811 405M	
				110/120 V AC		708 111 310M	708 511 310M		708 811 310M	
				230/240 V AC		708 111 313M	708 511 313M		708 811 313M	
DSW	Pole mount base on aluminium tube for horizontal mounting in hole with screw	up to 3 modules	100 mm	24 V AC/DC	+/- 10%	708 122 405M	708 522 405M		708 822 405M	
			250 mm			708 123 405M	708 523 405M		708 823 405M	
		up to 5 modules	100 mm	24 V AC/DC		708 132 405M	708 532 405M		708 832 405M	
			250 mm			708 133 405M	708 533 405M		708 833 405M	
		up to 3 modules		100 mm		110/120 V AC	708 122 310M		708 522 310M	708 822 310M
				250 mm			708 123 310M		708 523 310M	708 823 310M
up to 5 modules		100 mm	110/120 V AC	708 132 310M	708 532 310M	708 832 310M				
		250 mm		708 133 310M	708 533 310M	708 833 310M				
DSW	Pole mount base on aluminium tube for horizontal mounting in hole with screw	up to 3 modules		230/240 V AC	+/- 10%	708 122 313M	708 522 313M		708 822 313M	
						708 123 313M	708 523 313M		708 823 313M	
		up to 5 modules		230/240 V AC		708 132 313M	708 532 313M		708 832 313M	
						708 133 313M	708 533 313M		708 833 313M	
		up to 3 modules				200 400 900	200 800 900			
DMR	Pole mount base on aluminium tube with plastic foot	up to 3 modules		24 V AC/DC	+/- 10%	708 142 405M	708 542 405M		708 842 405M	
						708 143 405M	708 543 405M		708 843 405M	
		up to 5 modules		24 V AC/DC		708 152 405M	708 552 405M		708 852 405M	
						708 153 405M	708 553 405M		708 853 405M	
		up to 3 modules		110/120 V AC		708 142 310M	708 542 310M		708 842 310M	
						708 143 310M	708 543 310M		708 843 310M	
up to 5 modules		110/120 V AC	708 152 310M	708 552 310M	708 852 310M					
			708 153 310M	708 553 310M	708 853 310M					
DMR	Pole mount base on aluminium tube with plastic foot	up to 3 modules		230/240 V AC	+/- 10%	708 142 313M	708 542 313M		708 842 313M	
						708 143 313M	708 543 313M		708 843 313M	
		up to 5 modules		230/240 V AC		708 152 313M	708 552 313M		708 852 313M	
						708 153 313M	708 553 313M		708 853 313M	
		up to 3 modules				708 162 405M	708 562 405M		708 862 405M	
						708 163 405M	708 563 405M		708 863 405M	
up to 5 modules			708 172 405M	708 572 405M	708 872 405M					
			708 173 405M	708 573 405M	708 873 405M					
DFR	Pole mount base on aluminium tube with foot adapter for quick mounting	up to 3 modules		24 V AC/DC	+/- 10%	708 162 310M	708 562 310M		708 862 310M	
						708 163 310M	708 563 310M		708 863 310M	
		up to 5 modules		24 V AC/DC		708 172 310M	708 572 310M		708 872 310M	
						708 173 310M	708 573 310M		708 873 310M	
		up to 3 modules		110/120 V AC		708 162 313M	708 562 313M		708 862 313M	
						708 163 313M	708 563 313M		708 863 313M	
up to 5 modules		110/120 V AC	708 172 313M	708 572 313M	708 872 313M					
			708 173 313M	708 573 313M	708 873 313M					
DFR	Pole mount base on aluminium tube with foot adapter for quick mounting	up to 3 modules		230/240 V AC	+/- 10%	708 162 313M	708 562 313M		708 862 313M	
						708 163 313M	708 563 313M		708 863 313M	
		up to 5 modules		230/240 V AC		708 172 313M	708 572 313M		708 872 313M	
						708 173 313M	708 573 313M		708 873 313M	

NOTE: ▶ Additional pole lengths available ▶ Cap is automatically mounted



Signal Tower modulCOMPACT30



Features

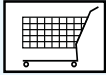
- Compact (ready to use) LED signal tower family
- Tower is built according to customer's requirements
- Prewired with 1 m cable as standard (other cable lengths on request)
- 6 lens colours, 3 housing colours
- Wide range of mounting options
- Plc fit (leakage, inrush current)
- UL type 4/4X/13
- Excellent 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.

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.		Price	Order No.	
			Tone types	Max. sound press. (dB)				Housing grey	Housing black		Housing silver	Price
Light Modules												
CLL	LED steady light amber, red, yellow	integrated LEDs			(24 V AC/DC)	+/- 10%	max. 0,031	701 00C 900P				
	LED steady light clear, blue, green						max. 0,031	701 00C 900P				
CLB	LED flashing light amber, red, yellow	integrated LEDs			(24 V AC/DC)		max. 0,031	702 00C 900P				
	LED flashing light clear, blue, green						max. 0,031	702 00C 900P				
Sound Modules												
CDD	Piezo buzzer		cont.	85	(24 V AC/DC)	+/- 10%	0,040	703 100 900P	703 500 900P		703 800 900P	
CDP			pulsing				0,040	703 110 900P	703 510 900P		703 810 900P	
CDZ			cont. + pulsing				0,040	703 120 900P	703 520 900P		703 820 900P	



Order data

Type	Denomination	Specifications	Pole length	Nominal voltage (V)	Volt. range (V)	Order No.		Price	Order No.	
						Housing grey	Housing black		Housing silver	Price
Bases										
CSW	Pole mount base on aluminium tube for horizontal mounting in hole with screw	up to 3 modules	0 mm	24 V AC/DC	+/- 10%	700 110 405M	700 510 405M		700 810 405M	
			100 mm			700 112 405M	700 512 405M		700 812 405M	
		up to 5 modules	0 mm	700 120 405M		700 520 405M		700 820 405M		
			100 mm	700 122 405M		700 522 405M		700 822 405M		
CSW	Pole mount base on aluminium tube for horizontal mounting in hole with screw	up to 3 modules	0 mm	110/120 V AC		700 110 310M	700 510 310M		700 810 310M	
			100 mm			700 112 310M	700 512 310M		700 812 310M	
		up to 5 modules	0 mm	700 120 310M		700 520 310M		700 820 310M		
			100 mm	700 122 310M		700 522 310M		700 822 310M		
CSW	Pole mount base on aluminium tube for horizontal mounting in hole with screw	up to 3 modules	0 mm	230/240 V AC		700 110 313M	700 510 313M		700 810 313M	
			100 mm			700 112 313M	700 512 313M		700 812 313M	
		up to 5 modules	0 mm	700 120 313M		700 520 313M		700 820 313M		
			100 mm	700 122 313M		700 522 313M		700 822 313M		
CSS	Set for vertical mounting	for CSW			700 130 900	700 530 900				
CMR	Pole mount base on aluminium tube with plastic foot	up to 3 modules	0 mm	24 V AC/DC	700 140 405M	700 540 405M		700 840 405M		
			100 mm		700 142 405M	700 542 405M		700 842 405M		
		up to 5 modules	0 mm	700 150 405M	700 550 405M		700 850 405M			
			100 mm	700 152 405M	700 552 405M		700 852 405M			
CMR	Pole mount base on aluminium tube with plastic foot	up to 3 modules	0 mm	110/120 V AC	700 140 310M	700 540 310M		700 840 310M		
			100 mm		700 142 310M	700 542 310M		700 842 310M		
		up to 5 modules	0 mm	700 150 310M	700 550 310M		700 850 310M			
			100 mm	700 152 310M	700 552 310M		700 852 310M			
CMR	Pole mount base on aluminium tube with plastic foot	up to 3 modules	0 mm	230/240 V AC	700 140 313M	700 540 313M		700 840 313M		
			100 mm		700 142 313M	700 542 313M		700 842 313M		
		up to 5 modules	0 mm	700 150 313M	700 550 313M		700 850 313M			
			100 mm	700 152 313M	700 552 313M		700 852 313M			
CFR	Pole mount base on aluminium tube with foot adapter for quick mounting	up to 3 modules	0 mm	24 V AC/DC	700 160 405M	700 560 405M		700 860 405M		
			100 mm		700 162 405M	700 562 405M		700 862 405M		
		up to 5 modules	0 mm	700 170 405M	700 570 405M		700 870 405M			
			100 mm	700 172 405M	700 572 405M		700 872 405M			
CFR	Pole mount base on aluminium tube with foot adapter for quick mounting	up to 3 modules	0 mm	110/120 V AC	700 160 310M	700 560 310M		700 860 310M		
			100 mm		700 162 310M	700 562 310M		700 862 310M		
		up to 5 modules	0 mm	700 170 310M	700 570 310M		700 870 310M			
			100 mm	700 172 310M	700 572 310M		700 872 310M			
CFR	Pole mount base on aluminium tube with foot adapter for quick mounting	up to 3 modules	0 mm	230/240 V AC	700 160 313M	700 560 313M		700 860 313M		
			100 mm		700 162 313M	700 562 313M		700 862 313M		
		up to 5 modules	0 mm	700 170 313M	700 570 313M		700 870 313M			
			100 mm	700 172 313M	700 572 313M		700 872 313M			

NOTE: ▶ Additional pole lengths available ▶ Cap is automatically mounted



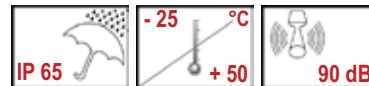
Signal Tower halfDOME90



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

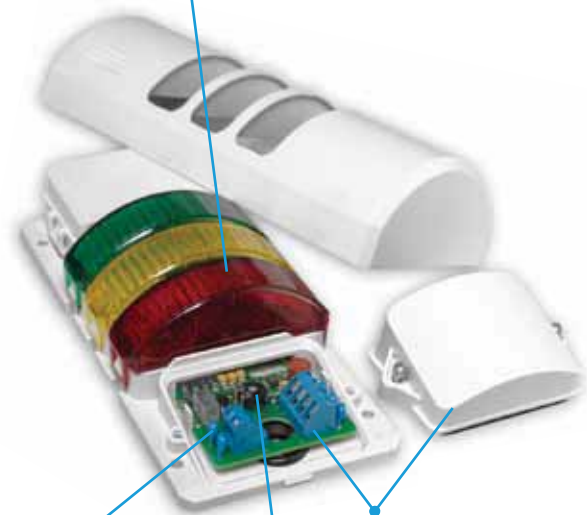


Modules always work with 24 V voltage

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



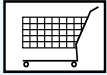
IP 65 – for use in damp and dusty environmental conditions, also outdoor



Supply voltage is chosen with the respective base


Easy electrical connection (terminals, removable cover)

Volume individually adjustable from ~70-90 dB










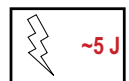
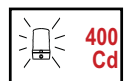
Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Volt. range (V)	Nominal current (A)	Order No.	Price	Order No.			
			Tone types	Max. sound press. (dB)								Price	
Light Modules													
HDL	LED steady light amber, red, yellow	integrated LEDs			(24 V AC/DC)		max. 0,042	745 00C 900P					
	LED steady light clear, blue, green					max. 0,042	745 00C 900P						
HDB	LED flashing light amber, red, yellow	integrated LEDs			(24 V AC/DC)		max. 0,042	745 01C 900P					
	LED flashing light clear, blue, green					max. 0,042	745 01C 900P						
Buzzer Module													
HDZ	Piezo buzzer		continuous and pulsing	70-90**	(24 V AC/DC)		max. 0,062	745 020 900					
Housings													
								Housing grey		Housing chrome	Housing black		
HD2	Housing for 2 lights				24 V AC/DC	+/- 10%		745 102 405		745 502 405	745 802 405		
HD3	Housing for 3 lights								745 103 405		745 503 405	745 803 405	
HD4	Housing for 4 lights								745 104 405		745 504 405	745 804 405	
HD5	Housing for 5 lights								745 105 405		745 505 405	745 805 405	
HD2	Housing for 2 lights				110/120 V AC	+/- 10%		745 102 310		745 502 310	745 802 310		
HD3	Housing for 3 lights								745 103 310		745 503 310	745 803 310	
HD4	Housing for 4 lights								745 104 310		745 504 310	745 804 310	
HD5	Housing for 5 lights								745 105 310		745 505 310	745 805 310	
HD2	Housing for 2 lights				230/240 V AC	+/- 10%		745 102 313		745 502 313	745 802 313		
HD3	Housing for 3 lights								745 103 313		745 503 313	745 803 313	
HD4	Housing for 4 lights								745 104 313		745 504 313	745 804 313	
HD5	Housing for 5 lights								745 105 313		745 505 313	745 805 313	

NOTE:  Additional voltages available ** Adjustable by potentiometer



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	
	8 Tones	32 Tones	32 Tones	63 Tones	
Multi-Tone Sounder	ASS-P+QDS	ASS-T+QDS	ASM+QDM	ASL+QDL	ASX+QDX
+ LED Steady/Flashing Beacon	 10 Cd	 10 Cd	 120 Cd	 170 Cd	 300 Cd
Multi-Tone Sounder	ASS-P+QFS	ASS-T+QFS	ASM+QFM	ASL+QBL	ASX+QBX
+ Xenon Strobe Beacon	 ~5 J	 ~5 J	 ~10 J	 250 Cd	 400 Cd
			Multi-Tone Sounder + LED Multi Strobe Beacon		

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 3-4)
 - 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)

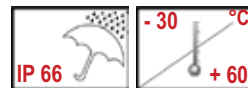
The Candela values refer to colour clear (white) at 230 V operating voltage and a measuring angle of 1° in axial direction.

Tone table

please refer to pages 67-69.

Accessories and Installation options

for details please refer to page 64/66.



Size Comparison



Size 1
94 mm

Size 2
132 mm

Size 3
184 mm

Size 4
228 mm



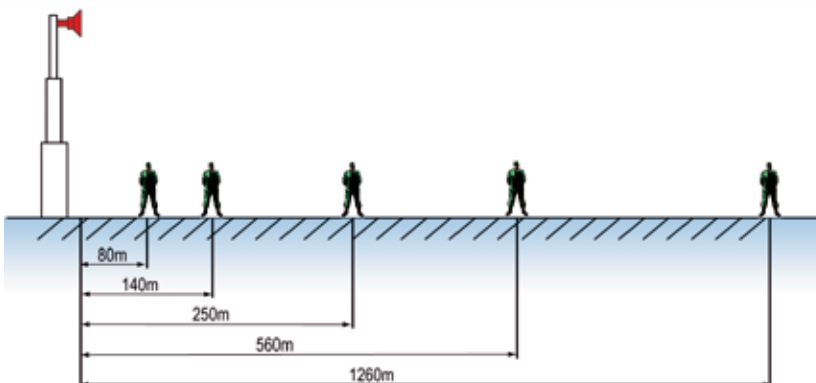
Size 1
94 mm

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.

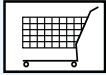
Sounder Type	Max. sound pressure level dB (A) in 1 m	Effective range of signal recognition (min. 65 dB) in m	Approx. area of signal recognition (min. 65 dB) in m ²
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000



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	Price
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	LED 10 Cd	24 V AC/DC	+/- 10%	0,110	874 16C 405	
			48 V AC/DC		0,065	874 16C 408	
			110/120 V AC		0,060	874 16C 310	
			230/240 V AC		0,060	874 16C 313	
QDS	LED steady/flashing beacon size 1 clear, blue, green	LED 10 Cd	24 V AC/DC	+/- 10%	0,110	874 16C 405	
			48 V AC/DC		0,065	874 16C 408	
			110/120 V AC		0,060	874 16C 310	
			230/240 V AC		0,060	874 16C 313	
QDM	LED steady/flashing beacon size 2 amber, red, yellow	LED 120 Cd	24-48 V AC/DC	16-60 V DC 16-53 V AC	max. 0,300	874 26C 408	
			110-240 V AC/DC	80-265 V AC/DC	max. 0,070	874 26C 413	
QDM	LED steady/flashing beacon size 2 clear, blue, green	LED 120 Cd	24-48 V AC/DC	16-60 V DC 16-53 V AC	max. 0,300	874 26C 408	
			110-240 V AC/DC	80-265 V AC/DC	max. 0,070	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 18-53 V AC	max. 0,780	874 36C 408	
			110-240 V AC/DC	80-265 V AC/DC	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 18-53 V AC	max. 0,780	874 36C 408	
			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	LED 300 Cd	24-48 V AC/DC	18-60 V DC 18-53 V AC	max. 1,800	874 46C 408	
			110-240 V AC/DC	80-265 V AC/DC	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 18-53 V AC	max. 1,800	874 46C 408	
			110-240 V AC/DC	80-265 V AC/DC	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	Price
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	
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	
				18-53 V AC			
QBL	LED multi strobe beacon size 3 blue, green	LED 250 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,220	874 76C 413	
			24-48 V AC/DC	18-60 V DC	max. 0,810	874 76C 408	
	18-53 V AC						
QBX	LED multi strobe beacon size 4 amber, red, clear, yellow	LED 400 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,220	874 76C 413	
			24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408	
	18-53 V AC						
QBX	LED multi strobe beacon size 3 blue, green	LED 400 Cd	110-240 V AC/DC	80-265 V AC/DC	max. 0,400	874 86C 413	
			24-48 V AC/DC	18-60 V DC	max. 1,700	874 86C 408	
	18-53 V AC						

Accessories

Type	Denomination	Order No.	Price
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	ADS-P	ADS-T	ADM	ADL	ADX
+ LED steady/ flashing light indicator	 1,5 Cd	 1,5 Cd	 2,3 Cd	 3 Cd	 3 Cd
Multi-tone alarm sander			ACM	ACL	ACX
+ LED strobe light indicator			 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/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)

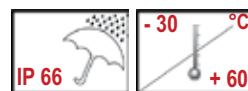
Tone table

please refer to page 67-69.

Accessories and Installation options:

for details please refer to page 64/66.

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	Price
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	 100 dB	 105 dB	 105 dB
	2 Tones	2 Tones	3 Tones	3 Tones
LED Steady/ Flashing Beacons + Buzzer Indicator	QSS  10 Cd	QSM  120 Cd	QSL  170 Cd	QSX  300 Cd
Xenon Strobe Beacon + Buzzer Indicator	QTS  ~5 J	QTM  ~10 J	LED Multi Strobe Beacon + Buzzer Indicator	QCL  250 Cd
				QCX  400 Cd

Features

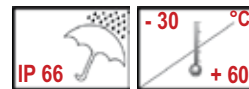
- Comprehensive range of visual-audible signalling products with dominant beacon and additional buzzer indicator
- For most different visual-audible signalling requirements in the industry, process control, fire/gas alarm, marine, etc.
- Buzzer indicators with up-to-date piezo technique
 - 2 tones – 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 strobe patterns (double, 6 times, multi strobe), externally switchable (size 3-4)
 - 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)

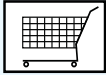
Accessories and Installation options

for details please refer to page 64/66.

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	Price
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	
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	
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	

Accessories

Type	Denomination	Order No.	Price
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	



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

KLL - KDL KLF - KDF

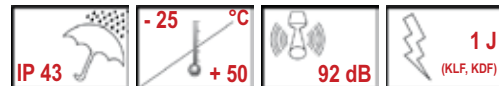


KLL - KLF

KDL - KDF

Features

- Combination of electromechanical horn with signal beacon or strobe beacon
- For universal visual-audible applications
- 6 lens colours
- 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



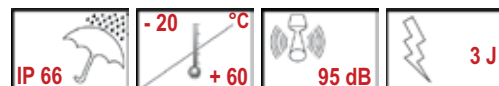
Strobe Beacon-Signalling Sounder VS4

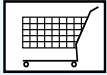
VS4



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	12 V AC	50	+/- 10%	0,750	710 11C 104		
							24 V AC	50		0,400	710 11C 105		
							48 V AC	50		0,200	710 11C 108		
							230V AC	50		0,040	710 11C 113		
							120 V AC	60		0,076	710 11C 210		
						12 V DC	-	0,640		710 11C 004			
						24 V DC	-	0,320		710 11C 005			
						48 V DC	-	0,170		710 11C 008			
						220 V DC	-	0,042		710 11C 013			
						92							
KDL	Mini horn-signal beacon without cone	x	x	x	cont.	88	12 V AC	50	+/- 10%	0,750	710 01C 104		
							24 V AC	50		0,400	710 01C 105		
							48 V AC	50		0,200	710 01C 108		
							230V AC	50		0,040	710 01C 113		
							120 V AC	60		0,076	710 01C 210		
						12 V DC	-	0,640		710 01C 004			
						24 V DC	-	0,320		710 01C 005			
						48 V DC	-	0,170		710 01C 008			
						220 V DC	-	0,042		710 01C 013			
						92							
KLF	Mini horn-strobe beacon with cone	1 J xenon tube			cont.	88	120 V AC	60	+/- 10%	0,050	710 12C 210		
							230 V AC	50		0,026	710 12C 113		
						12 V DC	-	0,170		710 12C 004			
						24 V DC	-	0,120		710 12C 005			
						92							
KDF	Mini horn-strobe beacon without cone	1 J xenon tube			cont.	88	120 V AC	60	+/- 10%	0,050	710 02C 210		
							230 V AC	50		0,026	710 02C 113		
						12 V DC	-	0,170		710 02C 004			
						24 V DC	-	0,120		710 02C 005			
						92							

NOTE: KLL/KDL: product also available in voltages 110 V DC, 100 V AC 50 Hz 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

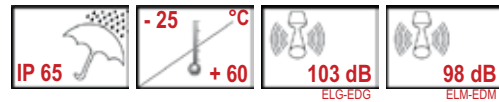
Ø 65 mm

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 Multitone Siren CS1

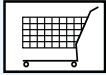
CS1



Features

- ▶ Cost-effective LED flashing beacon-electronic multitone siren
- ▶ 32 tone options
- ▶ Second stage alarm
- ▶ Lens colours amber, red, clear, blue





Order data

Type	Denomination	Light source	Max. sound press. (dB)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.		Price
							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	
	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	LED	98**	24 V AC/DC	+/- 10%	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	
	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/flashing 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	
	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/flashing beacon amber, red, yellow	LED	98**	24 V AC/DC	+/- 10%	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	
	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.	Price
	Adapter M30,5	812 500 900	



Order data

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

NOTE: ▶ Tone table: www.auer-signal.com * Adjustable via DIP switch



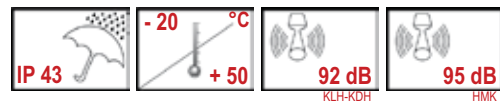
Mini Horns KLH - KDH, HMK

KLH, KDH, HMK



Features

- Electromechanical horns in smaller design
- For universal audible applications
- Models with (KLH) or without cone (KDH)
- Attractive price-performance ratio
- Wide voltage range
- Special lift-alarm models with reduced nominal current (KDH-L)



Signal Horns HPT - HTG

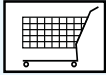
HPT - HTG



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
- HTG-L: special RILSAN-coating against galvanic corrosion (for vessels, etc.)





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.		Price
		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		
				230 V AC	50		0,011	710 100 113		
				12 V DC			0,055	710 100 004		
				24 V DC			0,026	710 100 005		
				48 V DC			0,016	710 100 008		
KDH	Mini horn without cone	continuous	88	24 V AC	50	+/- 10%	0,090	710 000 105		
				48 V AC	50		0,060	710 000 108		
				230 V AC	50		0,011	710 000 113		
				12 V DC			0,055	710 000 004		
				24 V DC			0,026	710 000 005		
				48 V DC			0,016	710 000 008		
KDH-L	Lift alarm	continuous	85	220 V DC		+/- 10%	0,011	710 100 013		
				6 V DC			0,065	710 030 003		
				24 V AC	50		0,260	711 000 105		
HMK	Mini horn	continuous	95	48 V AC	50	+/- 10%	0,150	711 000 108		
				230 V AC	50		0,026	711 000 113		
				12 V DC			0,150	711 000 004		
				24 V DC			0,060	711 000 005		
				48 V DC			0,033	711 000 008		
				220 V DC			0,008	711 000 013		

NOTE: ▶ Also available in voltages: 6, 60, 110 V DC; 6, 12, 42, 60 V AC; 110 V AC 50 Hz; 120 V AC 60 Hz



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.		Price
		Tone types	Max. sound press. (dB)					Housing grey		
HPT	Signal horn	continuous	108	12 V AC	50	+/- 10%	2,000	712 100 104		
				24 V AC	50		1,200	712 100 105		
				48 V AC	50		0,500	712 100 108		
				230 V AC	50		0,100	712 100 113		
				120 V AC	60		0,200	712 100 211		
				12 V DC			1,000	712 100 004		
				24 V DC			0,600	712 100 005		
				48 V DC			0,500	712 100 008		
				220 V DC			0,100	712 100 013		
HPT-R	Signal horn with telephone call current relay	continuous	108	230 V AC	50	+/- 10%	0,100	712 102 113		
HTG	Signal horn	continuous	108	12 V AC	50	+/- 10%	2,000	713 100 104		
				24 V AC	50		1,200	713 100 105		
				48 V AC	50		0,500	713 100 108		
				230 V AC	50		0,100	713 100 113		
				120 V AC	60		0,200	713 100 211		
				12 V DC			1,000	713 100 004		
				24 V DC			0,600	713 100 005		
				48 V DC			0,500	713 100 008		
				220 V DC			0,100	713 100 013		
HTG-L	Signal horn with RILSAN coating	continuous	108	230 V AC	50	+/- 10%	0,100	713 150 113		
				120 V AC	60		0,200	713 150 211		
				24 V DC			0,600	713 150 005		
HTG-R	Signal horn with telephone call current relay	continuous	108	230 V AC	50	+/- 10%	0,100	713 102 113		

NOTE: ▶ Also available in voltages: 6, 110 V DC; 6, 12, 42, 60 V AC; 110 V AC 50 Hz, 240 V AC 60 Hz



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
- Special models with telephone call current relay
- Wide voltage range



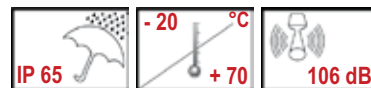
Electronic Multitone Sirens ES1 - ES2

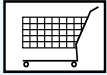
ES1 - ES2



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.		Price
		Tone types	Max. sound press. (dB)					Housing grey	Housing red	
UWS FWS	Signal bell	continuous	105	12 V AC	50-60	+/- 10%	0,800	720 000 304	720 200 304	
				24 V AC			0,400	720 000 305	720 200 305	
				48 V AC			0,200	720 000 308	720 200 308	
				110 V AC			0,100	720 000 310	720 200 310	
				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	
UWS-R FWS-R	Signal bell with telephone call current relay	continuous	105	230 V AC	50-60	+/- 10%	0,050	720 010 313	720 220 313	

NOTE: Additional voltages available: 42, 60 V AC



Order Data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.		Price
		Tone types	Max. sound press. (dB)				Housing red	Housing white	
ES1	Multitone 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	ASS-T	ASM		ASL	ASX		
8 Tones	32 Tones	32 Tones		63 Tones	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)

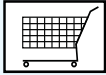
Tone table

please refer to pages 67-69.



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, ASX)
- 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	Price
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.	Price
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-P + QDS LED Steady/Flashing ASS-P + QFS ~5 J Xenon Strobe 	ADS-P LED Steady 	QSS LED Steady/Flashing 	QDS LED Steady/Flashing 
	ASS-T ~108 dB 	ASS-T + QDS LED Steady/Flashing ASS-T + QFS ~5 J Xenon Strobe 	ADS-T LED Steady/Flashing 	QTS ~5 J Xenon Strobe 	QFS ~5 J Xenon Strobe 
2	ASM ~113 dB 	ASM + QDM LED Steady/Flashing 	ADM LED Steady/Flashing 	QSM LED Steady/Flashing 	QDM LED Steady/Flashing 
		ASM + QFM ~10 J Xenon Strobe 	ACM LED Strobe 	QTM ~10 J Xenon Strobe 	QFM ~10 J Xenon Strobe 
3	ASL ~120 dB 	ASL + QDL LED Steady/Flashing 	ADL LED Steady/Flashing 	QSL LED Steady/Flashing 	QDL LED Steady/Flashing 
		ASL + QBL LED Multi Strobe 	ACL LED Strobe 	QCL LED Multi Strobe 	QBL LED Multi Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady/Flashing 	ADX LED Steady/Flashing 	QSX LED Steady/Flashing 	QDX LED Steady/Flashing 
		ASX + QBX LED Multi Strobe 	ACX LED Strobe 	QCX LED Multi Strobe 	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	







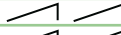
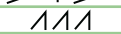




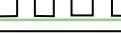
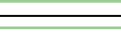
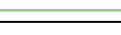


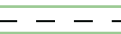








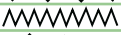



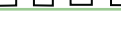





Tone table											
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	ASS-T	ASM	ASL	ASX	STAGE 2 S2	STAGE 3 S3
						max dB	max dB	max dB	max dB*		
Tone 01	continuous	660 Hz	————		Swedish alarm	101	108	114	116	tone 16	tone 12
Tone 02	continuous	1000 Hz	————		PFEER toxic gas	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 GeminyDIN 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	ADL	ADX	STAGE 2 S2	STAGE 3 S3
						max dB		ACM	ACL	ACX		
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	109	112	tone 16	tone 03
Tone 34	continuous	500 Hz	=====			X	X	X	109	112	tone 16	tone 03
Tone 35	continuous	825 Hz	=====			X	X	X	113	119	tone 16	tone 03
Tone 36	continuous	1500 Hz	=====			X	X	X	118	120	tone 18	tone 02
Tone 37	continuous	2850 Hz	=====			X	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	X	114	117	tone 02	tone 32
Tone 39	intermittent	680 Hz	-- -- -- --	0,875 s on-0,675 s off		X	X	X	114	117	tone 03	tone 32
Tone 40	intermittent	950 Hz	-- -- -- --	1 s on, 1 s off		X	X	X	114	120	tone 02	tone 32
Tone 41	intermittent	1000 Hz	-- -- -- --	1 s on, 1 s off	PFEER general alarm	X	X	X	113	120	tone 16	tone 03
Tone 42	intermittent	800 Hz	-- -- -- --	4 ms on, 4 ms off		X	X	X	112	116	tone 58	tone 03
Tone 43	intermittent	825 Hz	-- -- -- --	0,5 s on, 0,5 s off		X	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	X	113	120	tone 17	tone 02
Tone 45	alternating	440 - 554 Hz		1 Hz		X	X	X	109	115	tone 16	tone 01
Tone 46	alternating	825 - 1075 Hz		1 Hz		X	X	X	114	121	tone 48	tone 02
Tone 47	alternating	825 - 1025 Hz		2 Hz		X	X	X	114	121	tone 48	tone 03
Tone 48	alternating	2500 - 3100 Hz		0,5 Hz		X	X	X	117	121	tone 60	tone 03
Tone 49	alternating	2400 - 2850 Hz		2 Hz		X	X	X	120	124	tone 12	tone 03
Tone 50	alternating	500 - 900 Hz		2 Hz		X	X	X	114	118	tone 41	tone 02
Tone 51	alternating	1200 - 1400 Hz		25 Hz		X	X	X	119	122	tone 41	tone 02
Tone 52	sweeping	300 - 1200 Hz		1 Hz		X	X	X	117	121	tone 03	tone 32
Tone 53	sweeping	500 - 1000 Hz		0,15 Hz		X	X	X	114	120	tone 41	tone 02
Tone 54	sweeping	500 - 1200 Hz		3 Hz		X	X	X	117	121	tone 41	tone 02
Tone 55	sweeping	700 - 1500 Hz		0,3 Hz		X	X	X	119	122	tone 16	tone 02
Tone 56	sweeping	800 - 1000 Hz		7 Hz		X	X	X	114	119	tone 16	tone 02
Tone 57	sweeping	800 - 1000 Hz		50 Hz		X	X	X	114	90	tone 16	tone 02
Tone 58	sweeping	2400 - 2900 Hz		7 Hz		X	X	X	120	123	tone 17	tone 03
Tone 59	sweeping	2400 - 2900 Hz		50 Hz		X	X	X	120	90	tone 17	tone 03
Tone 60	sweeping	2400 - 2900 Hz		3 Hz		X	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	X	114	118	tone 16	tone 01
Tone 62	chime	554 - 440 Hz		repeating ding-dong, 1 Hz		X	X	X	109	116	tone 29	tone 01
Tone 63	chime	554 - 440 Hz		single ding-dong		X	X	X	109	116	tone 29	tone 01

* Specifications are provisional and subject to change.



Electronic Sounder EHS - EHF - EHL

EHS - EHF - EHL



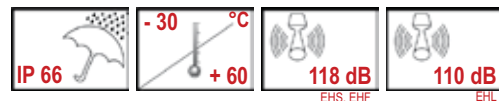
EHS

EHF

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
- Models: EHS - swiveling loudspeaker, EHF- fixed loudspeaker, EHL - short loudspeaker
- Special models with volume control, extreme low temperatures, special sound tables, etc. available



Audible Signalling Sounder AS4

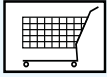
AS4



Features

- Audible signalling sounder for high weatherproof applications - IP 66
- For universal applications in industries, outdoor, etc.
- 4 tones/tone sequences selectable by DIP switch
- Aluminium-die cast housing





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.		Price
		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		0,120	731 010 310	731 020 310	
				230/240 V AC		0,060	731 010 313	731 020 313	
EHF	Electronic sounder with fixed loudspeaker			12-24 V AC/DC		0,470-0,940	731 110 405	731 120 405	
				110/120 V AC		0,120	731 110 310	731 120 310	
				230/240 V AC		0,060	731 110 313	731 120 313	
EHL	Electronic sounder with short loudspeaker	110	110	12-24 V AC/DC	+/- 10%	0,470-0,940	730 010 405	730 020 405	
				110/120 V AC		0,120	730 010 310	730 020 310	
				230/240 V AC		0,060	730 010 313	730 020 313	

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



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
		Tone types	Max. sound pressure (dB)				Housing black	
AS4	Signalling sounder	4	90	110-230 V AC	94-253 V AC	0,016	410 400 004	



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

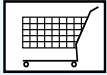
ESD - ESP - ESZ



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.		Price
		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	50-140	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	50-140	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	50-140	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	50-140	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.	Price
	Adapter M30,5	812 500 900	
	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.		Price
		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



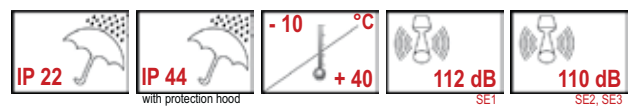
Motor Sirens SE1 - SE2 - SE3

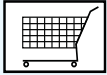
SE1 – SE2 – SE3



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.	Price
		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.	Price
		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.	Price
							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	
			230 V AC/DC				0,720	2,500
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: SE1, SE2: 12 V AC/DC



Explosion-Proof Telephone dST

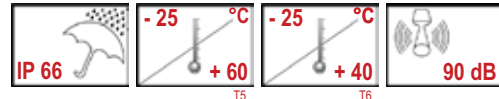
dST



II 2 G Ex emb [ib] IIC T5/T6
II 2 D tD A21 IP66 T100 °C/T80 °C
-25 °C ≤ Ta ≤ +60 °C/+40 °C
Zone 1, 2, 21, 22

Features

- Explosion-proof 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
- Comprehensive range of accessories available



Explosion-Proof Audible Telephone Call Signalling Sounder AS1

AS1

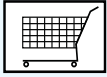


II 2 G Ex e ib mb IIC T6
Zone 1, 2

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





Order data

Type	Denomination	Order No.	Price
dST1	ExSafeTel - explosion-proof telephone	410 010 000	
dST2	ExSafeTel - explosion-proof emergency telephone without keypad and display	410 020 000	



Order data

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



Explosion-Proof Visual-Audible Telephone Call Signalling Sounder VS1

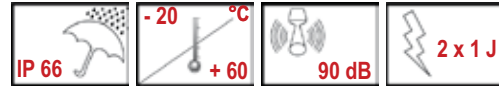
VS1



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



Explosion-Proof Loudspeaker LS1

LS1

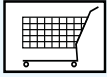


II 2 G EEx ib IIC T5/T6
II 2 D Ex ibD 21 T100°C/T80°C
-25°C ≤ Ta ≤ +60°C/+40°C
Zone 1, 2, 21, 22

Features

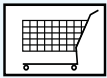
- Explosion-proof loudspeaker enables loud rendition of ringer sound and of receiving signal in operating modes „open listening“ and „handsfree“
- Volume adjustable with +/- keys on the ExSafeTel
- Set contents:
dynamic loudspeaker in plastic housing with cable gland, cable gland is located in connection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





Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.	Price
			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	



Order data

Type	Denomination	Order No.	Price
LS1	Explosion-proof loudspeaker	410 100 003	



Explosion-Proof Additional Earpiece EP1

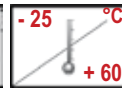
EP1



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



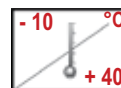
Headset Kit HS1 for Explosion-Proof Telephone dST

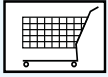
HS1



Features

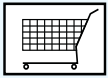
- ▶ Ex-proof headset eases significantly a telephone conversation in loud ambient conditions
- ▶ Protects against ambient noise
- ▶ Allows telephone calls while both hands need to be free
- ▶ Set contents:
ex-proof headset
14 m long connecting cord
cable gland
bracket and screws to hang up connecting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





Order data

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



Order data

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



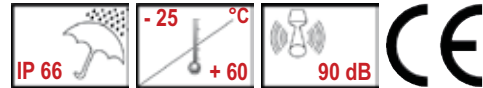
Weatherproof Telephone wST

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 alphanumeric 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



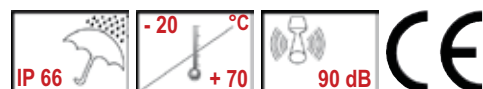
Audible Telephone Call Signalling Sounder AS2

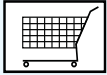
AS2



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





Order data

Type	Denomination	Order No.	Price
wST1	SafeTel - weatherproof telephone	410 110 000	
wST2	SafeTel - weatherproof emergency telephone without keypad and display	410 120 000	



Order data

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



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



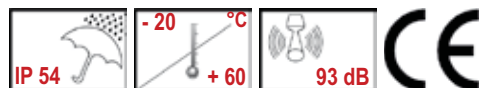
Loudspeaker Set LS2

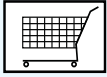
LS2



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





Order data

Type	Denomination	Light source	Tone options		Nomimal voltage (V)	Voltage range (V)	Order No.	Price
			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



Order data

Type	Denomination	Order No.	Price
LS2	Loudspeaker set	410 200 003	



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



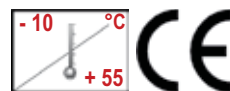
Headset Kit HS2

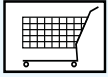
HS2



Features

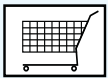
- Headset eases significantly a telephone conversation in loud ambient conditions
- Protects against ambient noise
- Allows telephone calls while both hands need to be free
- Set contents:
 - headset, 14 m long connecting cord
 - cable gland
- Bracket and screws to hang up connecting cord and headset





Order data

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



Order data

Type	Denomination	Order No.	Price
HS2	Headset kit	410 200 001	



Explosion-Proof Telephone dFT3 FernTel3 - Zone 2, 22

dFT3



FernTel 3

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



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

Weatherproof Telephone wFT3 FernTel3

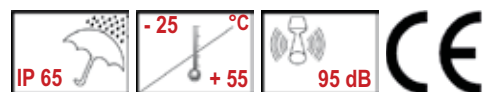
wFT3

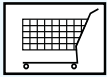
FernTel 3



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





Order data

Type	Denomination	Order No.	Price
dFT3	FernTel 3 zone 2 and 22 explosion-proof telephone with display and spiral cord	410 400 C00	
	FernTel 3 zone 2 and 22 explosion-proof telephone without display, with spiral cord	410 410 C00	
	FernTel 3 zone 2 and 22 explosion-proof telephone with display and armoured cord	410 420 C00	
	FernTel 3 zone 2 and 22 explosion-proof telephone without display, with armoured cord	410 430 C00	
	Stabilizer bracket	410 400 900	



Order data

Type	Denomination	Order No.	Price
wFT3	FernTel3 weatherproof telephone with display and spiral cord	410 300 C00	
	FernTel3 weatherproof telephone without display, with spiral cord	410 310 C00	
	FernTel3 weatherproof telephone with display and armoured cord	410 320 C00	
	FernTel3 weatherproof telephone without display, with armoured cord	410 330 C00	
wFT3Z	FernTel3 weatherproof telephone without keypad and display, with armoured cord	410 340 C00	
	Stabilizer bracket	410 400 900	

Colour code for telephones

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



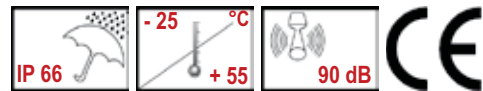
Weatherproof Telephone wIND „INDUSTRY“

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)
- High degree of protection IP 66



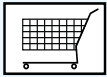
Telephone protection hoods TH1

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



Order data

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



Order data

Type	Denomination	Weight	Order No.	Price
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	

Ex-proof Signal horn mHPT

mHPT



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



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

Ex-proof Signal horn dHH - dHHR

dHH – dHHR

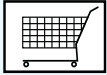


Features

- ▶ 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



II 2 G Ex de IIC T5/T6
II 2 D Ex tD A21 IP66 T95 °C/T80 °C
-20 °C ≤ Ta ≤ +75 °C/+70 °C
Zone 1, 2, 21, 22



Order data

Type	Denomination	Nominal voltage (V)	Nominal current (A)	Order No.	Price
	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	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.	Price
		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: 6, 12, 42, 60, 110 V AC, 50 Hz and 6, 12, 110 V DC



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



Ex-proof Loudspeaker dHS

dHS

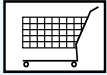


II 2 G Ex d e mb IIC T4/T5/T6 Gb
II 2 D Ex tb IIIC T130°C/T95°C/T80°C Db
T4 -55 °C ≤ Ta ≤ +80 °C
T5 -55 °C ≤ Ta ≤ +65 °C
T6 -55 °C ≤ Ta ≤ +55 °C
Zone 1, 2, 21, 22

Features

- Ex-proof loudspeaker for emergency communication and for warning, calling, indicating in explosion-proof endangered areas of zone 1 and 2
- Power up to 25 W at sound pressure levels up to 119 dB (A)
- Built-in 100 V transformer – for connection to 100 V loudspeaker systems
- Antistatic, UV-resistant synthetic housing
- Flameproof chamber "d"
- Terminal connection chamber in protection class increased safety "e"
- Insulation class II – no equipotential bonding required
- Excellent sound quality





Order data

Type	Denomination	Tone options		Nominal voltage (V)	Hz	Voltage range (V)	Nominal current (A)	Order No.	Price
		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	
				48 V AC	50		0,300	320 000 108	
				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: 6, 12, 42, 60, 110 V AC, 50 Hz und 6, 12, 110 V DC



Order data

Type	Denomination	Power (W)	Temperature range	Order No.	Price
				Housing black	
dHS	Ex-proof loudspeaker	25	-55 °C – +80° C	360 000 000	



Ex-proof Electronic Sounder dHE

dHE



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



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

Ex-proof Audible Signalling Sounder AS3

AS3



Features

- ▶ Explosion-proof signalling sounder for universal applications in explosion endangered areas in the industry
- ▶ Tone types and tone frequencies selectable via DIP switch
- ▶ Power supply 110-230 V AC
- ▶ Aluminium-die cast housing



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



Order data

Type	Denomination	Tone options		Nominal voltage (V)	Nominal current (A)	Order No.	Price
		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		370 000 001	

* Adjustable by rotary switch



Order data

Type	Denomination	Nominal voltage (V)	Tone options		Order No.	Price
			Tone types	Max. sound press. (dB)		
AS3	Ex-proof audible signalling sounder	110-230 V AC, 50-60 Hz	4	90	410 300 004	



Ex-proof Strobe Beacon dHF

dHF



II 2 G Ex d e IIC T5/T6
-20°C ≤ Ta ≤ +75°C/+40°C
Zone 1, 2

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“
- Synthetic housing, low weight, robust and corrosion proof design
- 4 lens colours: amber, red, blue, green
- Insulation class II - no equipotential bonding required



Ex-proof Strobe Beacon dSF

dSF

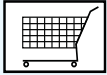


II 2 G Ex d e IIC T5/T6 Gb
II 2 D Ex tb IIIC T95°C/T80°C Db
-55°C ≤ Ta ≤ +55°C/+40°C
Zone 1, 2, 21, 22

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





Order data

Type	Denomination	Strobe energy (J)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
						Housing grey/black	
dHF1	Ex-proof strobe beacon	15	230/240 V AC 50-60 Hz	207-253	0,200	340 00C 413	
		5	110/120 V AC 50-60 Hz	103-127	0,135	340 10C 410	
		5	230/240 V AC 50-60 Hz	207-253	0,130	340 10C 413	
dHF2		15	24 V DC	21-53	1,000	340 00C 005	
		5	24 V DC	21-53	0,280	340 10C 005	

NOTE: ▶ Also available in 80 V DC



Order data

Type	Denomination	Strobe energy (J)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
						Housing yellow/blue	
dSF1	Ex-proof strobe beacon	15	230/240 V AC 50-60 Hz	207-253	0,200	335 00C 413	
		5	120/120 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



Ex-proof LED Signal Beacon mDD

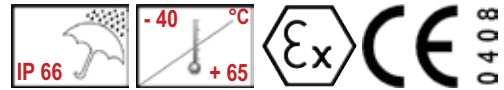
mDD



II 2 G Ex e mb (ib) IIC T4
 -40 °C ≤ Ta ≤ +60 °C (AC-Mod.)
 -40 °C ≤ Ta ≤ +65 °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 Signal Beacon dSD

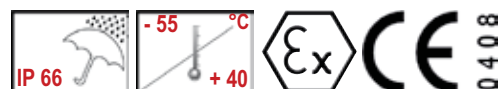
dSD

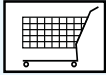


II 2 G Ex d e IIC T6 Gb
 II 2 D Ex tb IIIC T80 °C Db
 -55 °C ≤ Ta ≤ +40 °C
 Zone 1, 2, 21, 22

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“





Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Order No.	Price
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)	Nominal current (A)						Order No.	Price
				Operating mode	red	clear	blue	green	yellow		
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 Rotating Signal Beacon dHR

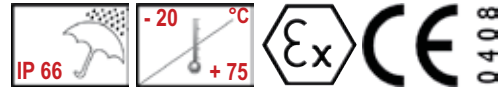
dHR



II 2 G Ex de IIC T5/T6
-20°C ≤ Ta ≤ +75°C/+40°C
Zone 1, 2

Features

- Visual rotating signalling device with powerful 20 W halogen bulb and triple lens system for use in explosion endangered areas of zones 1 and 2
- Wear resistant friction gear
- Flameproof chamber „d“ - terminal connection chamber in protection class increased safety „e“
- 4 lens colours: amber, red, blue, green
- Insulation class II - no equipotential bonding required
- Synthetic housing, low weight, robust and corrosion proof design



Ex-proof Steady Beacon dHL

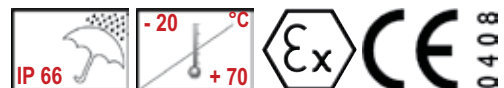
dHL

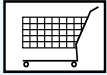


II 2 G Ex de IIC T5/T6
-20°C ≤ Ta ≤ +70°C/+40°C
Zone 1, 2

Features

- Ex-proof steady beacon with 15 W energy saving bulb for use in explosion endangered areas of zones 1 and 2
- Flameproof chamber „d“ - terminal connection chamber in protection class increased safety „e“
- Energy saving bulb in 5 colours: amber, red, white, blue, green
- Insulation class II - no equipotential bonding required





Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
					Housing grey/black	
dHR1	Ex-proof rotating signal beacon	24 V AC/DC	+/- 10%	0,900	350 00C 405	
		110/120 V AC 50-60 Hz		0,200	350 00C 410	
		230/240 V AC 50-60 Hz		0,100	350 00C 413	

NOTE: ▶ Also available in 12 V DC



Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
					Housing grey/black	
dHL1	Ex-proof steady beacon	230/240 V AC 50-60 Hz	+/- 10%	0,150	310 00C 413	

NOTE: ▶ Additional voltages available



Ex-proof Visual-Audible Signalling Sounder VS1

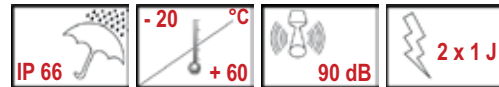
VS1

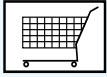


II 2 G Ex e mb [ib] IIC T6/T5/T4 Gb
-20°C ≤ Ta ≤ +40°C/+50°C/+60°C
Zone 1, 2

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





Order data

Type	Denomination	Light source	Tone options		Nominal voltage (V)	Voltage range (V)	Order No.	Price
			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	



Accessories

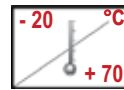
LED Bulbs - steady light LLL
LED Bulbs - flashing light LLB
Bulbs - GL, Halogen Bulbs - HL, Xenon Tubes - XT

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



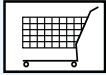
GL



HL



XT



Order data

Type	Denomination	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No.	Price
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.	Price
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		230/240 V	890 012 913	
GL21		Incandescent bulb BA15d, 25 W	12 V	890 025 904
GL22	24 V		890 025 905	
GL23	48 V		890 025 908	
GL24	60 V		890 025 909	
GL25	110/120 V		890 025 910	
GL26	230/240 V		890 025 913	
HL51	Halogen bulb, 50 W	12 V	890 050 904	
HL52		24 V	890 050 905	
HL55		110/120 V	890 050 910	
HL56		230/240 V	890 050 913	
HL31	Halogen bulb, 35 W	12 V	890 035 904	
HL32		24 V	890 035 905	
HL35		110/120 V	890 035 910	
HL36		230/240 V	890 035 913	
HL21	Halogen bulb, 20 W	12 V	890 020 904	
HL22		24 V	890 020 905	
HL25		110/120 V	890 020 910	
HL26		230/240 V	890 020 913	
XT30	Xenon tube 30 J		890 130 900	
XT15	Xenon tube 15 J		890 115 900	
XT07	Xenon tube 7 J		890 107 900	

HEADQUARTERS

**J.AUER – FABRIK ELEKTRISCHER
MASCHINEN Ges.m.b.H.**

Perfektastraße 102
1230 Vienna / AUSTRIA
Tel. +43 (0)1 813 82 20
Fax +43 (0)1 815 99 51
office@auer-signal.com
www.auer-signal.com

SALES GERMANY

J.AUER – SIGNALGERÄTE GmbH

Sperberweg 11
41468 Neuss / GERMANY
Tel. +49 (0)2131 29 86 86-0
Fax +49 (0)2131 29 86 86-6
info@auer-signal.de
www.auer-signal.com

