

Eco-Modul

the Flexible Allrounder





MODULAR SIGNAL TOWER SYSTEM WITH BAYONET LOCKING

- Option to change configuration of tower system to suit individual requirements
- Electrical contact made instantly and automatically

TIME AND COST SAVINGS WITH ELECTRICAL CONNECTION

- Terminal with push-in or spring-cage mechanism
- Extremely high contact reliability and conductivity, even when exposed to vibrations and temperature fluctuations



Modular



STATE-OF-THE-ART LED TECHNOLOGY WITH EXTREMELY HIGH LEVELS OF EFFICIENCY

- Also available in the form of high-power LEDs (Ø 60 mm and Ø 70 mm)
- Resistant to vibrations and impact
- Maintenance-free and long-lasting
- Traditional Xenon light technology replaced by state-of-the-art LED strobe technology (longer service life)
- Steady, flashing, strobe and multi strobe beacon
- Low energy consumption



EASY BULB REPLACEMENT SUITABLE EVEN FOR INCANDESCENT BULBS

- Straightforward bulb replacement with protection against contact and using cost-effective tool
- Alternatively operated with conventional incandescent bulb technology



POWERFUL PIEZO BUZZERS AND MULTI-TONE ALARM SOUNDERS

- Volume infinitely adjustable
- Buzzers with one tone and two tones
- Steady and pulsing tone
- Multi-tone alarm sounder with up to eight different tones



PATENTED QUICK MOUNTING SYSTEM

- Signal tower fully functional right away
- No possibility of installing incorrectly
- Quick to put together and easy and cost-effective to dismantle for transportation



A WIDE RANGE OF ACCESSORIES FOR ALL MOUNTING TYPES

IDEALLY SUITED TO DEMANDING INDUSTRIAL APPLICATIONS

- High degree of protection IP66 for all beacon, tone and base modules
- UL certification allowing for international use



CUSTOMISABLE IDENTIFICATION PLATE

- Allowing for individual labelling



Eco-Modul 40 Signal tower

- Ø 40 mm modular signal tower series
- Complete range of high-luminosity LED light modules with
- steady/flashing/strobe and multi-strobe beacon functions, 6 different lens colours
- Alternatively operated with conventional incandescent bulb technology
- Piezo buzzer module available with steady/pulsing tone
- Pre-assembled towers or individual tower modules available for configuration
- Extensive range of mounting types
- User-friendly connection technology
- PLC-suitable
- High degree of protection IP66, UL type 4/4X/13

TECHNICAL DATA

Housing	Ø 40 mm, Polycarbonate black
Lens	Polycarbonate, ribbed inside orange, red, clear, blue, green or yellow
Type of mounting	any
Connection technology	up to 1,5mm ² / 16 AWG
Leakage current	> 0,003 A (PLC-suitable)
Beacon type	LED steady beacon, LED flashing beacon, LED strobe beacon, LED multi strobe beacon or Steady beacon (incandescent bulb)
Light source	8 LEDs, incandescent bulb
Strobe/flash frequency	Flashing beacon 2 Hz, strobe beacon 1.4 Hz, multi strobe beacon 1-2.6 Hz
Tone	Steady tone or Pulsing tone
Volume	80 dB
Tone frequency	4.000 Hz
Duty cycle	100 %
Service life	Light source: LED 100,000 hours
Number of possible modules	max. 5, with double bracket max. 10
Operating temperature	-30 °C / +60 °C
Degree of protection	IP66 & UL Type 4/4x/13
Weight (modules)	40-46 g



Eco-Modul 40 Pre-configured Signal towers



Modular



Order number: ECO40-Q01
Colours: red/orange/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO40-Q02
Colours: red/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO40-Q05
Colours: red/orange/green/blue
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)

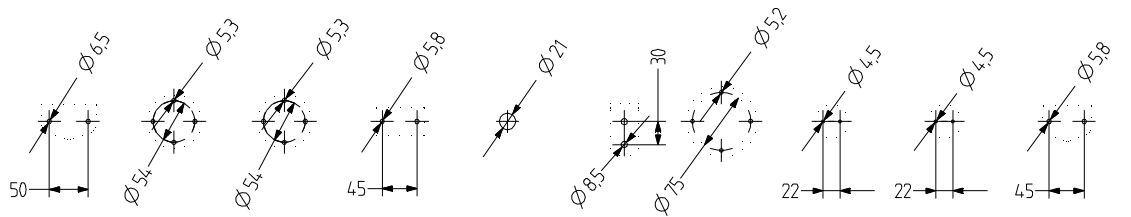
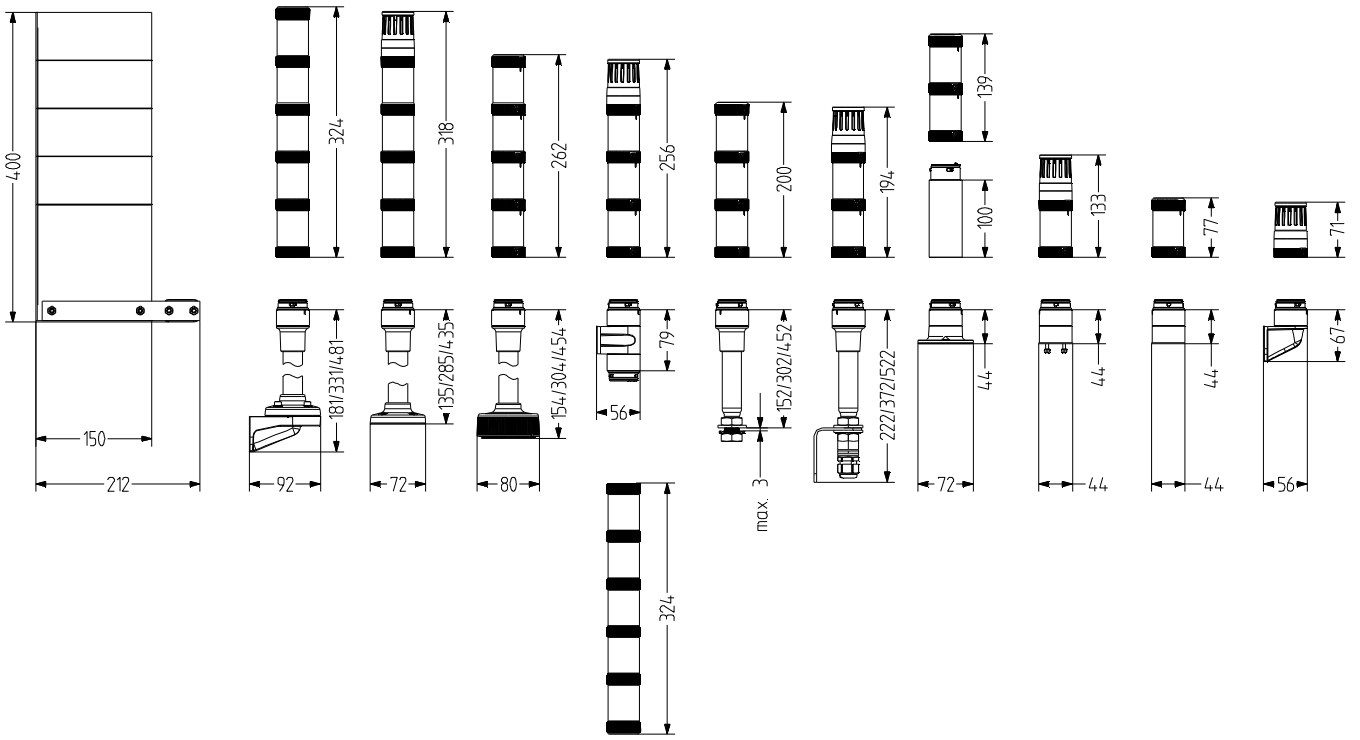


Order number: ECO40-Q31
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO40-Q81
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 230 V AC
Type of mounting: Tube mounting
 (100 mm tube length)

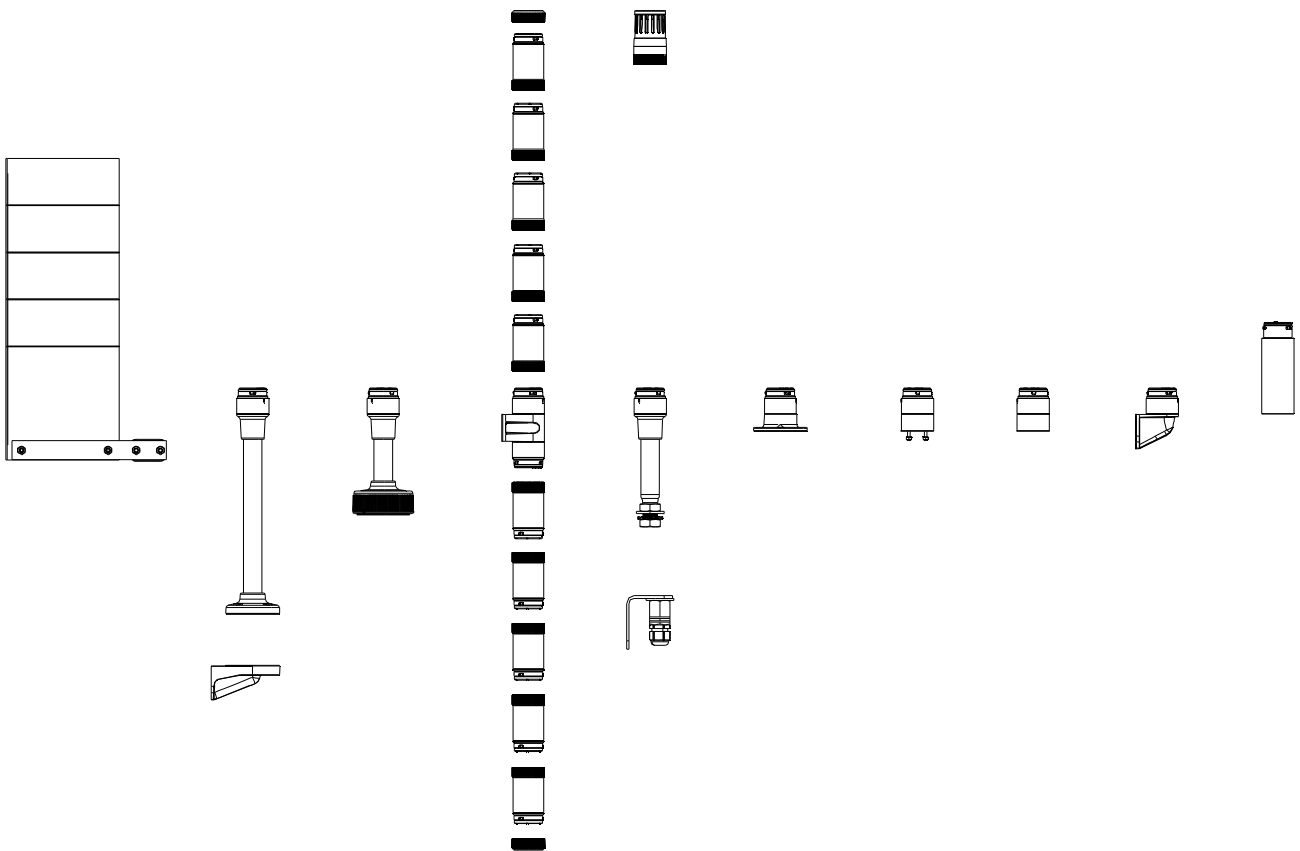
Eco-Modul 40



Eco-Modul 40



Modular



Eco-Modul 40

VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range [V]	Nominal current [A]	Order number	Item Nr.		
ZLL	Steady beacon	orange	12-250 V AC/DC	+/- 10 %	4 W	902 001 900	902 001 900		
		red	12-250 V AC/DC	+/- 10 %	4 W	902 002 900	902 002 900		
		clear	12-250 V AC/DC	+/- 10 %	4 W	902 004 900	902 004 900		
		blue	12-250 V AC/DC	+/- 10 %	4 W	902 005 900	902 005 900		
		green	12-250 V AC/DC	+/- 10 %	4 W	902 006 900	902 006 900		
		yellow	12-250 V AC/DC	+/- 10 %	4 W	902 007 900	902 007 900		
ZDC	LED steady beacon	orange	24 V AC/DC	+/- 10 %	0,022-0,033	902 011 405	902 011 405		
			110-120 V AC	+/- 10 %	0,030	902 011 310	902 011 310		
			230-240 V AC	+/- 10 %	0,030	902 011 313	902 011 313		
		red	24 V AC/DC	+/- 10 %	0,022-0,033	902 012 405	902 012 405		
			110-120 V AC	+/- 10 %	0,030	902 012 310	902 012 310		
			230-240 V AC	+/- 10 %	0,030	902 012 313	902 012 313		
		clear	24 V AC/DC	+/- 10 %	0,022-0,033	902 014 405	902 014 405		
			110-120 V AC	+/- 10 %	0,030	902 014 310	902 014 310		
			230-240 V AC	+/- 10 %	0,030	902 014 313	902 014 313		
		blue	24 V AC/DC	+/- 10 %	0,022-0,033	902 015 405	902 015 405		
			110-120 V AC	+/- 10 %	0,030	902 015 310	902 015 310		
			230-240 V AC	+/- 10 %	0,030	902 015 313	902 015 313		
		green	24 V AC/DC	+/- 10 %	0,022-0,033	902 016 405	902 016 405		
			110-120 V AC	+/- 10 %	0,030	902 016 310	902 016 310		
			230-240 V AC	+/- 10 %	0,030	902 016 313	902 016 313		
		yellow	24 V AC/DC	+/- 10 %	0,022-0,033	902 017 405	902 017 405		
			110-120 V AC	+/- 10 %	0,030	902 017 310	902 017 310		
			230-240 V AC	+/- 10 %	0,030	902 017 313	902 017 313		
		ZDA	LED flashing beacon	orange	24 V AC/DC	+/- 10 %	0,028-0,036	902 021 405	902 021 405
					110-120 V AC	+/- 10 %	0,030	902 021 310	902 021 310
					230-240 V AC	+/- 10 %	0,030	902 021 313	902 021 313
				red	24 V AC/DC	+/- 10 %	0,028-0,036	902 022 405	902 022 405
					110-120 V AC	+/- 10 %	0,030	902 022 310	902 022 310
					230-240 V AC	+/- 10 %	0,030	902 022 313	902 022 313
clear	24 V AC/DC			+/- 10 %	0,028-0,036	902 024 405	902 024 405		
	110-120 V AC			+/- 10 %	0,030	902 024 310	902 024 310		
	230-240 V AC			+/- 10 %	0,030	902 024 313	902 024 313		
blue	24 V AC/DC			+/- 10 %	0,028-0,036	902 025 405	902 025 405		
	110-120 V AC			+/- 10 %	0,030	902 025 310	902 025 310		
	230-240 V AC			+/- 10 %	0,030	902 025 313	902 025 313		
green	24 V AC/DC			+/- 10 %	0,028-0,036	902 026 405	902 026 405		
	110-120 V AC			+/- 10 %	0,030	902 026 310	902 026 310		
	230-240 V AC			+/- 10 %	0,030	902 026 313	902 026 313		
yellow	24 V AC/DC			+/- 10 %	0,028-0,036	902 027 405	902 027 405		
	110-120 V AC			+/- 10 %	0,030	902 027 310	902 027 310		
	230-240 V AC			+/- 10 %	0,030	902 027 313	902 027 313		

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VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number	Item Nr.		
ZDF	LED strobe beacon	orange	24 V AC/DC	+/- 10 %	0,035-0,065	902 031 405	902 031 405		
			110-120 V AC	+/- 10 %	0,010	902 031 310	902 031 310		
			230-240 V AC	+/- 10 %	0,010	902 031 313	902 031 313		
		red	24 V AC/DC	+/- 10 %	0,035-0,065	902 032 405	902 032 405		
			110-120 V AC	+/- 10 %	0,010	902 032 310	902 032 310		
			230-240 V AC	+/- 10 %	0,010	902 032 313	902 032 313		
		clear	24 V AC/DC	+/- 10 %	0,035-0,065	902 034 405	902 034 405		
			110-120 V AC	+/- 10 %	0,010	902 034 310	902 034 310		
			230-240 V AC	+/- 10 %	0,010	902 034 313	902 034 313		
		blue	24 V AC/DC	+/- 10 %	0,035-0,065	902 035 405	902 035 405		
			110-120 V AC	+/- 10 %	0,010	902 035 310	902 035 310		
			230-240 V AC	+/- 10 %	0,010	902 035 313	902 035 313		
		green	24 V AC/DC	+/- 10 %	0,035-0,065	902 036 405	902 036 405		
			110-120 V AC	+/- 10 %	0,010	902 036 310	902 036 310		
			230-240 V AC	+/- 10 %	0,010	902 036 313	902 036 313		
		yellow	24 V AC/DC	+/- 10 %	0,035-0,065	902 037 405	902 037 405		
			110-120 V AC	+/- 10 %	0,010	902 037 310	902 037 310		
			230-240 V AC	+/- 10 %	0,010	902 037 313	902 037 313		
		ZFF	LED multi strobe beacon	orange	24 V AC/DC	+/- 10 %	0,048-0,068	902 041 405	902 041 405
					110-120 V AC	+/- 10 %	0,021-0,030	902 041 310	902 041 310
					230-240 V AC	+/- 10 %	0,021-0,030	902 041 313	902 041 313
				red	24 V AC/DC	+/- 10 %	0,048-0,068	902 042 405	902 042 405
					110-120 V AC	+/- 10 %	0,021-0,030	902 042 310	902 042 310
					230-240 V AC	+/- 10 %	0,021-0,030	902 042 313	902 042 313
				clear	24 V AC/DC	+/- 10 %	0,048-0,068	902 044 405	902 044 405
					110-120 V AC	+/- 10 %	0,021-0,030	902 044 310	902 044 310
					230-240 V AC	+/- 10 %	0,021-0,030	902 044 313	902 044 313
blue	24 V AC/DC			+/- 10 %	0,048-0,068	902 045 405	902 045 405		
	110-120 V AC			+/- 10 %	0,021-0,030	902 045 310	902 045 310		
	230-240 V AC			+/- 10 %	0,021-0,030	902 045 313	902 045 313		
green	24 V AC/DC			+/- 10 %	0,048-0,068	902 046 405	902 046 405		
	110-120 V AC			+/- 10 %	0,021-0,030	902 046 310	902 046 310		
	230-240 V AC			+/- 10 %	0,021-0,030	902 046 313	902 046 313		
yellow	24 V AC/DC			+/- 10 %	0,048-0,068	902 047 405	902 047 405		
	110-120 V AC			+/- 10 %	0,021-0,030	902 047 310	902 047 310		
	230-240 V AC			+/- 10 %	0,021-0,030	902 047 313	902 047 313		



Modular

Eco-Modul 40

AUDIBLE MODULES

Type	Tone	Volume	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number
ZDE	Piezo buzzer module steady tone/pulsing tone	80 dB	24 V AC/DC	+/- 10 %	0,039	902 500 405
			110-120 V AC	+/- 10 %	0,021	902 500 310
			230-240 V AC	+/- 10 %	0,021	902 500 313

ORDER DATA - BASE

Type	Type of accessory	Tube length	Item Nr.
ZMW	Base for horizontal mounting M20, inside mounting holes		902 570 900
ZMS	Base for horizontal mounting with pre-mounted fixing screws		902 571 900
ZMF	Base for horizontal mounting with external mounting holes		902 572 900
ZMC	Base for horizontal mounting with external mounting holes and integrated 5-pole M12 connector		902 572 911
ZMV	Base for vertical mounting for single-sided mounting		902 573 900
ZZV	Base for vertical mounting for double-sided mounting		902 574 900
ZMR	Tube base 100 mm on aluminium tube with plastic foot	100 mm	902 582 900
	Tube base 250 mm on aluminium tube with plastic foot	250 mm	902 583 900
	Tube base 400 mm on aluminium tube with plastic foot	400 mm	902 584 900
ZNW	Tube base NPT 1/2" thread		902 570 950
ZSW	Tube base 100 mm on aluminium tube for horizontal mounting with banjo bolt	100 mm	902 594 900
	Tube base 250 mm on aluminium tube for horizontal mounting with banjo bolt	250 mm	902 592 900
	Tube base 400 mm on aluminium tube for horizontal mounting with banjo bolt	400 mm	902 593 900
ZFR	Quick mounting system 'foot adapter' 100 mm on aluminium tube with foot adapter	100 mm	902 562 900
	Quick mounting system 'foot adapter' 250 mm on aluminium tube with foot adapter	250 mm	902 563 900
	Quick mounting system 'foot adapter' 400 mm on aluminium tube with foot adapter	400 mm	902 564 900



XWR



XSS



XIB



WZC



ZEP

ACCESSORIES

Type	Type of accessory	Tube length	Weight	Order number
XWR	Bracket for vertical mounting of TMR/UMR tube base		95 g	900 600 900
XSS	Set Set for vertical mounting (bracket, cable gland)		135 g	900 700 900
XIB	Identification plate		235 g	900 850 900
WZC	Bracket		85 g	200 550 900
ZEP	Base extension 100 mm long, suitable for all bases	100 mm		902 800 900

Eco-Modul 60 Signal tower



Modular

- Ø 60 mm modular signal tower series
- Complete range of high-luminosity LED light modules with steady/flashing/strobe beacon functions, 6 different lens colours
- High-performance steady and multi-strobe beacon modules
- Alternatively operated with conventional incandescent bulb technology
- Piezo buzzer module available with steady/pulsing tone
- Pre-assembled towers or individual tower modules available for configuration
- Extensive range of mounting types
- User-friendly connection technology
- PLC-suitable
- High degree of protection IP66, UL type 4/4X/13



TECHNICAL DATA

Housing	Ø 60 mm, Polycarbonate black
Lens	Polycarbonate, ribbed inside orange, red, clear, blue, green or yellow
Type of mounting	any
Connection technology	up to 2,5mm ² / 14 AWG
Leakage current	> 0,003 A (PLC-suitable)
Beacon type	LED steady beacon, LED flashing beacon, LED strobe beacon, HP LED steady beacon, HP LED multi strobe beacon or Steady beacon (incandescent bulb)
Light source	8 LEDs, 2 high-power LEDs, incandescent bulb
Strobe/flash frequency	Flashing beacon 2 Hz, strobe beacon 1.4 Hz, multi strobe beacon 1-2.6 Hz
Tone	Steady tone or Pulsing tone
Volume	90 dB
Tone frequency	2.500 Hz
Duty cycle	100 %
Service life	Light source: LED 100,000 hours, HP LED 50,000 hours
Number of possible modules	max. 5, with double bracket max. 10
Operating temperature	-30 °C / +60 °C
Degree of protection	IP66 & UL Type 4/4X/13
Weight (modules)	63-83 g



Eco-Modul 60 Pre-configured Signal towers



Order number: ECO60-Q01
Colours: red/orange/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO60-Q02
Colours: red/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO60-Q05
Colours: red/orange/green/blue
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO60-Q31
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)

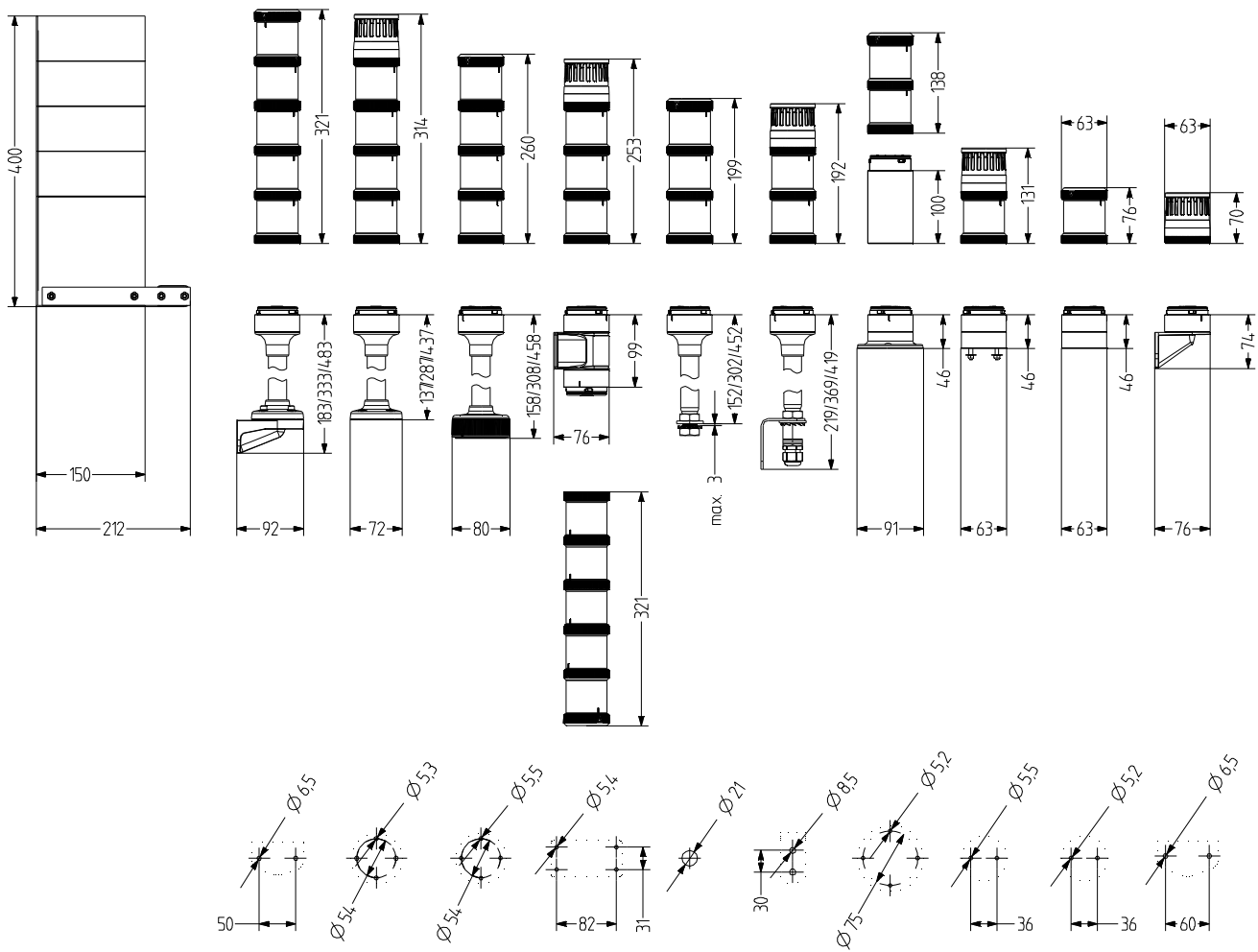


Order number: ECO60-Q81
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 230 V AC
Type of mounting: Tube mounting
 (100 mm tube length)

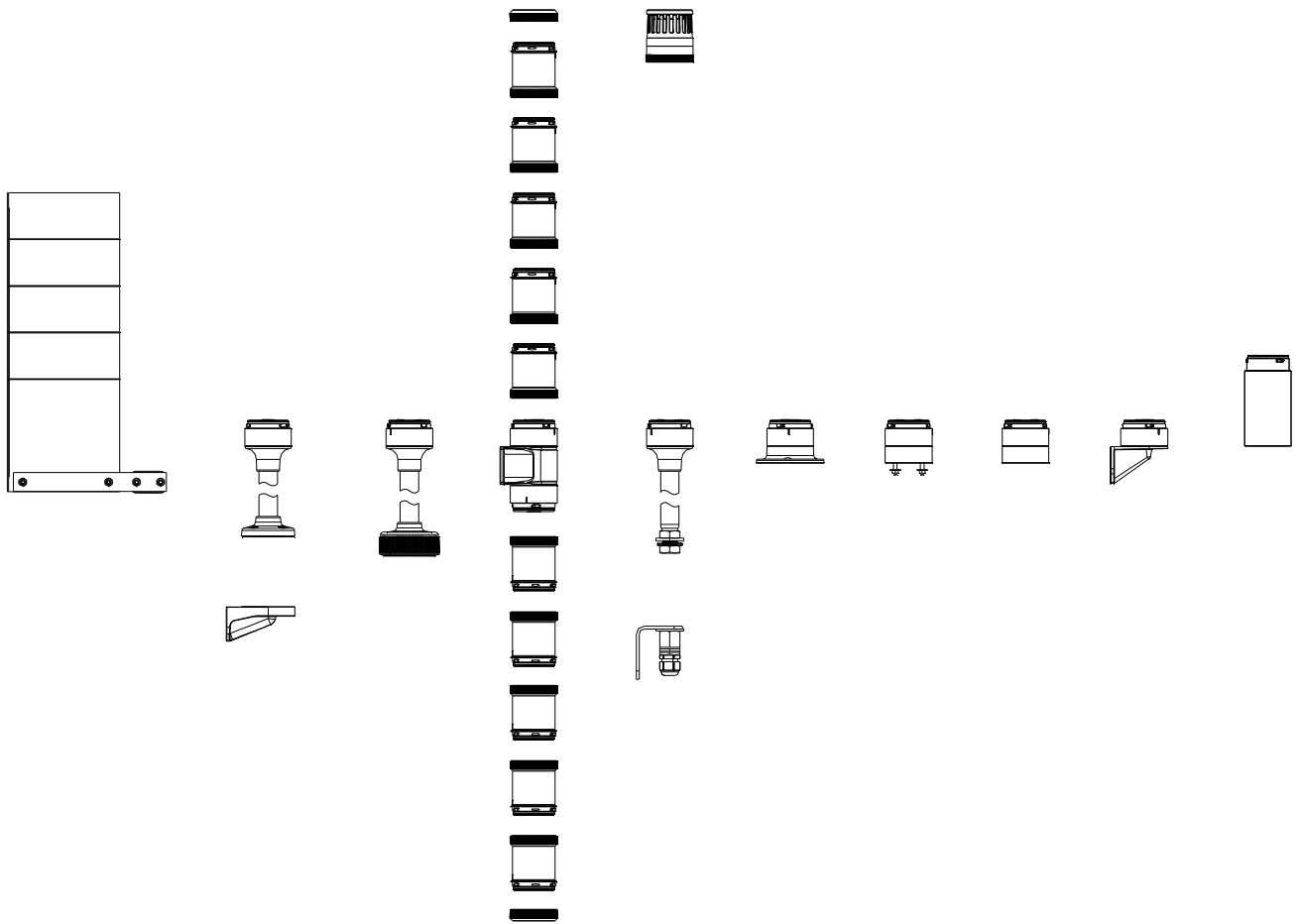
Eco-Modul 60



Modular



Eco-Modul 60



Eco-Modul 60

VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number	Item Nr.		
YLL	Steady beacon	orange	12-250 V AC/DC		4 W	901 001 900	901 001 900		
		red	12-250 V AC/DC		4 W	901 002 900	901 002 900		
		clear	12-250 V AC/DC		4 W	901 004 900	901 004 900		
		blue	12-250 V AC/DC		4 W	901 005 900	901 005 900		
		green	12-250 V AC/DC		4 W	901 006 900	901 006 900		
		yellow	12-250 V AC/DC		4 W	901 007 900	901 007 900		
		YDC	LED steady beacon	orange	24 V AC/DC	+/- 10 %	0,022-0,033	901 011 405	901 011 405
110-120 V AC	+/- 10 %				0,029-0,090	901 011 310	901 011 310		
230-240 V AC	+/- 10 %				0,029-0,090	901 011 313	901 011 313		
red	24 V AC/DC			+/- 10 %	0,022-0,033	901 012 405	901 012 405		
	110-120 V AC			+/- 10 %	0,029-0,090	901 012 310	901 012 310		
	230-240 V AC			+/- 10 %	0,029-0,090	901 012 313	901 012 313		
clear	24 V AC/DC			+/- 10 %	0,022-0,033	901 014 405	901 014 405		
	110-120 V AC			+/- 10 %	0,029-0,090	901 014 310	901 014 310		
	230-240 V AC			+/- 10 %	0,029-0,090	901 014 313	901 014 313		
blue	24 V AC/DC			+/- 10 %	0,022-0,033	901 015 405	901 015 405		
	110-120 V AC			+/- 10 %	0,029-0,090	901 015 310	901 015 310		
	230-240 V AC			+/- 10 %	0,029-0,090	901 015 313	901 015 313		
green	24 V AC/DC			+/- 10 %	0,022-0,033	901 016 405	901 016 405		
	110-120 V AC			+/- 10 %	0,029-0,090	901 016 310	901 016 310		
	230-240 V AC			+/- 10 %	0,029-0,090	901 016 313	901 016 313		
yellow	24 V AC/DC			+/- 10 %	0,022-0,033	901 017 405	901 017 405		
	110-120 V AC			+/- 10 %	0,029-0,090	901 017 310	901 017 310		
	230-240 V AC			+/- 10 %	0,029-0,090	901 017 313	901 017 313		
YDA	LED flashing beacon			orange	24 V AC/DC	+/- 10 %	0,028-0,036	901 021 405	901 021 405
					110-120 V AC	+/- 10 %	0,030	901 021 310	901 021 310
					230-240 V AC	+/- 10 %	0,030	901 021 313	901 021 313
				red	24 V AC/DC	+/- 10 %	0,028-0,036	901 022 405	901 022 405
					110-120 V AC	+/- 10 %	0,030	901 022 310	901 022 310
					230-240 V AC	+/- 10 %	0,030	901 022 313	901 022 313
				clear	24 V AC/DC	+/- 10 %	0,028-0,036	901 024 405	901 024 405
					110-120 V AC	+/- 10 %	0,030	901 024 310	901 024 310
					230-240 V AC	+/- 10 %	0,030	901 024 313	901 024 313
		blue	24 V AC/DC	+/- 10 %	0,028-0,036	901 025 405	901 025 405		
			110-120 V AC	+/- 10 %	0,030	901 025 310	901 025 310		
			230-240 V AC	+/- 10 %	0,030	901 025 313	901 025 313		
		green	24 V AC/DC	+/- 10 %	0,028-0,036	901 026 405	901 026 405		
			110-120 V AC	+/- 10 %	0,030	901 026 310	901 026 310		
			230-240 V AC	+/- 10 %	0,030	901 026 313	901 026 313		
		yellow	24 V AC/DC	+/- 10 %	0,028-0,036	901 027 405	901 027 405		
			110-120 V AC	+/- 10 %	0,030	901 027 310	901 027 310		
			230-240 V AC	+/- 10 %	0,030	901 027 313	901 027 313		



Modular

Eco-Modul 60

VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number	Item Nr.		
YDF	LED strobe beacon	orange	24 V AC/DC	+/- 10 %	0,035-0,065	901 031 405	901 031 405		
			110-120 V AC	+/- 10 %	0,010	901 031 310	901 031 310		
			230-240 V AC	+/- 10 %	0,010	901 031 313	901 031 313		
		red	24 V AC/DC	+/- 10 %	0,035-0,065	901 032 405	901 032 405		
			110-120 V AC	+/- 10 %	0,010	901 032 310	901 032 310		
			230-240 V AC	+/- 10 %	0,010	901 032 313	901 032 313		
		clear	24 V AC/DC	+/- 10 %	0,035-0,065	901 034 405	901 034 405		
			110-120 V AC	+/- 10 %	0,010	901 034 310	901 034 310		
			230-240 V AC	+/- 10 %	0,010	901 034 313	901 034 313		
		blue	24 V AC/DC	+/- 10 %	0,035-0,065	901 035 405	901 035 405		
			110-120 V AC	+/- 10 %	0,010	901 035 310	901 035 310		
			230-240 V AC	+/- 10 %	0,010	901 035 313	901 035 313		
		green	24 V AC/DC	+/- 10 %	0,035-0,065	901 036 405	901 036 405		
			110-120 V AC	+/- 10 %	0,010	901 036 310	901 036 310		
			230-240 V AC	+/- 10 %	0,010	901 036 313	901 036 313		
		yellow	24 V AC/DC	+/- 10 %	0,035-0,065	901 037 405	901 037 405		
			110-120 V AC	+/- 10 %	0,010	901 037 310	901 037 310		
			230-240 V AC	+/- 10 %	0,010	901 037 313	901 037 313		
		YDC-HP	LED steady beacon	orange	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 051 405	901 051 405
					red	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 052 405
				clear	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 054 405	901 054 405
				blue	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 055 405	901 055 405
				green	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 056 405	901 056 405
				yellow	24 V AC/DC	18-26 V AC 18-30 V DC	0,130-0,150	901 057 405	901 057 405
				YFF-HP	LED multi strobe beacon	orange	24 V AC/DC	18-26 V AC 18-30 V DC	0,190-0,250
		red	24 V AC/DC				18-26 V AC 18-30 V DC	0,190-0,250	901 072 405
		clear	24 V AC/DC			18-26 V AC 18-30 V DC	0,190-0,250	901 074 405	901 074 405
blue	24 V AC/DC	18-26 V AC 18-30 V DC	0,190-0,250			901 075 405	901 075 405		
green	24 V AC/DC	18-26 V AC 18-30 V DC	0,190-0,250			901 076 405	901 076 405		
yellow	24 V AC/DC	18-26 V AC 18-30 V DC	0,190-0,250			901 077 405	901 077 405		

Eco-Modul 60

AUDIBLE MODULES

Type	Tone	Volume	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number
YDE	Piezo buzzer module steady tone/pulsing tone	90 dB	24 V AC/DC	+/- 10 %	0,065	901 500 405
			110-120 V AC	+/- 10 %	0,031	901 500 310
			230-240 V AC	+/- 10 %	0,032	901 500 313



Modular

ORDER DATA - BASE

Type	Type of accessory	Tube length	Order number
YMW	Base for horizontal mounting M20, inside mounting holes		901 570 900
YMS	Base for horizontal mounting with pre-mounted fixing screws		901 571 900
YMF	Base for horizontal mounting with external mounting holes		901 572 900
YMC	Base for horizontal mounting with external mounting holes and integrated 5-pole M12 connector		901 572 911
YMV	Base for vertical mounting for single-sided mounting		901 573 900
YZV	Base for vertical mounting for double-sided mounting		901 574 900
YMR	Tube base 100 mm on aluminium tube with plastic foot	100 mm	901 582 900
	Tube base 250 mm on aluminium tube with plastic foot	250 mm	901 583 900
	Tube base 400 mm on aluminium tube with plastic foot	400 mm	901 584 900
YNW	Tube base NPT 1/2" thread		901 570 950
YSW	Tube base 100 mm on aluminium tube for horizontal mounting with banjo bolt	100 mm	901 592 900
	Tube base 250 mm on aluminium tube for horizontal mounting with banjo bolt	250 mm	901 593 900
	Tube base 400 mm on aluminium tube for horizontal mounting with banjo bolt	400 mm	901 594 900
YFR	Quick mounting system 'foot adapter' 100 mm on aluminium tube with foot adapter		901 562 900
	Quick mounting system 'foot adapter' 250 mm on aluminium tube with foot adapter		901 563 900
	Quick mounting system 'foot adapter' 400 mm on aluminium tube with foot adapter		901 564 900



XWR



XSS



XIB



YEP

ACCESSORIES

Type	Type of accessory	Weight	Order number
XWR	Bracket for vertical mounting of TMR/UMR tube base	95 g	900 600 900
XSS	Set Set for vertical mounting (bracket, cable gland)	135 g	900 700 900
XIB	Identification plate	235 g	900 850 900
WYC	Metal bracket for YMC		901 573 910
YEP	Base extension 100 mm long, suitable for all bases		901 800 900

Eco-Modul 70 modular Signal tower

- Ø 70 mm modular signal tower series
- Complete range of high-luminosity LED light modules with steady/flashing/strobe/multi-strobe beacon functions, 6 different lens colours
- High-performance steady/strobe/multi-strobe beacon modules
- Alternatively operated with conventional incandescent bulb technology
- Piezo buzzer and multi-tone alarm sounder modules available
- Pre-assembled towers or individual tower modules available for configuration
- Extensive range of mounting types
- User-friendly connection technology
- PLC-suitable
- High degree of protection IP66, UL type 4/4X/13

TECHNICAL DATA

Housing	Ø 70 mm, Polycarbonate black
Lens	Polycarbonate, ribbed inside orange, red, clear, blue, green or yellow
Type of mounting	any
Connection technology	up to 2,5mm ² / 14 AWG
Leakage current	> 0,003 A (PLC-suitable)
Beacon type	LED steady beacon, LED flashing beacon, LED strobe beacon, HP LED steady beacon, HP LED strobe beacon, HP LED multi strobe beacon or Steady beacon (incandescent bulb)
Light source	12 LEDs, 4 high-power LEDs, incandescent bulb
Strobe/flash frequency	Flashing beacon 2 Hz, strobe beacon 1.4 Hz, multi strobe beacon 1-2.6 Hz
Tone	Steady tone or Pulsing tone
Volume	100 dB
Tone frequency	500-2.700 Hz
Duty cycle	100 %
Service life	Light source: LED 100,000 hours, HP LED 50,000 hours
Number of possible modules	max. 5, with double bracket max. 10
Operating temperature	-30 °C / +60 °C
Degree of protection	IP66 & UL Type 4/4X/13
Weight (modules)	72-102 g



Eco-Modul 70 Pre-configured Signal towers



Modular



Order number: ECO70-Q01
Colours: red/orange/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO70-Q02
Colours: red/green
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO70-Q05
Colours: red/orange/green/blue
Function: LED steady beacon
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)

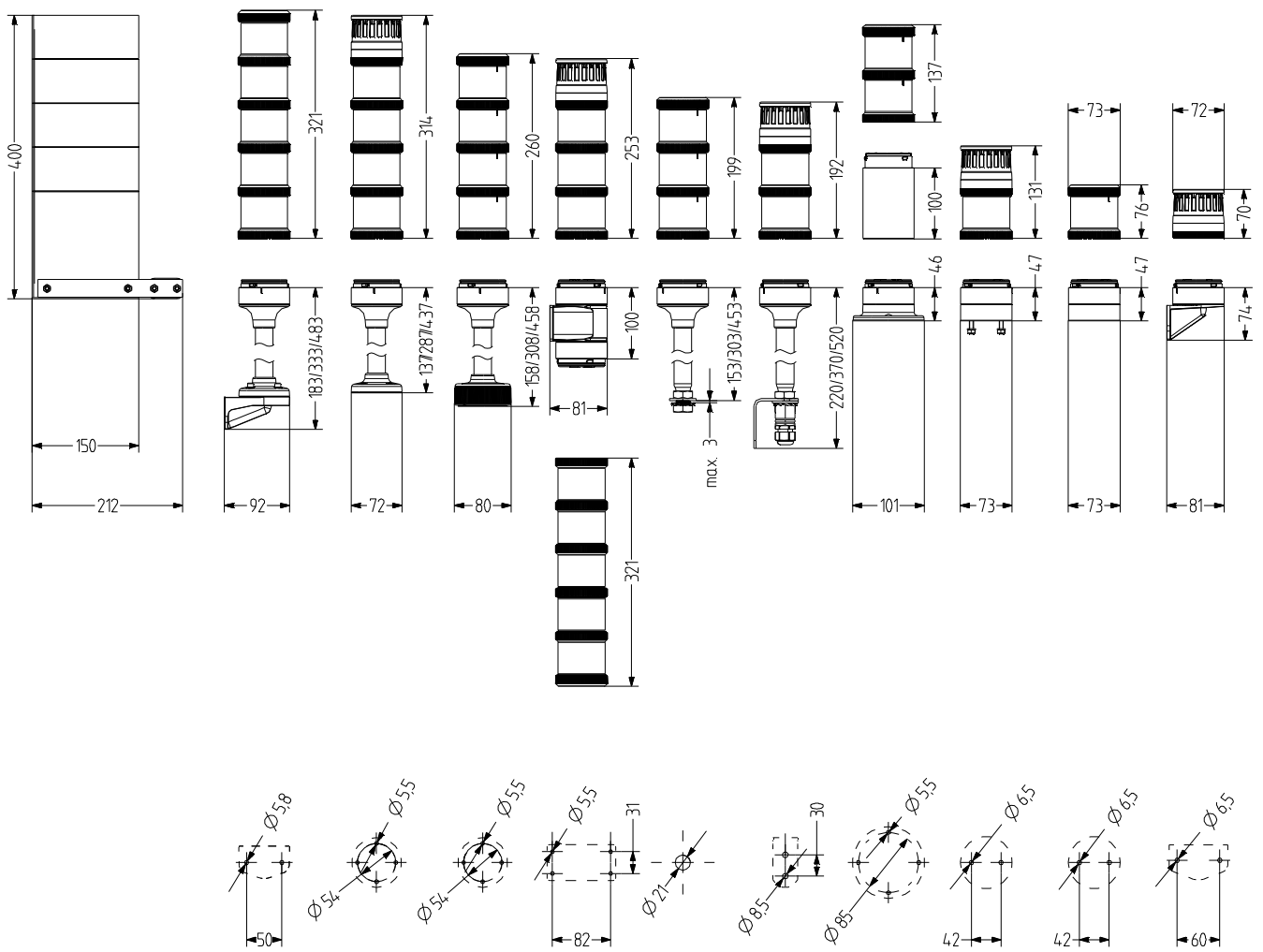


Order number: ECO70-Q31
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 24 V AC/DC
Type of mounting: Tube mounting
 (100 mm tube length)



Order number: ECO70-Q81
Colours: red/orange/green
Function: LED steady beacon, buzzer
 steady or pulsing tone
Nominal voltage: 230 V AC
Type of mounting: Tube mounting
 (100 mm tube length)

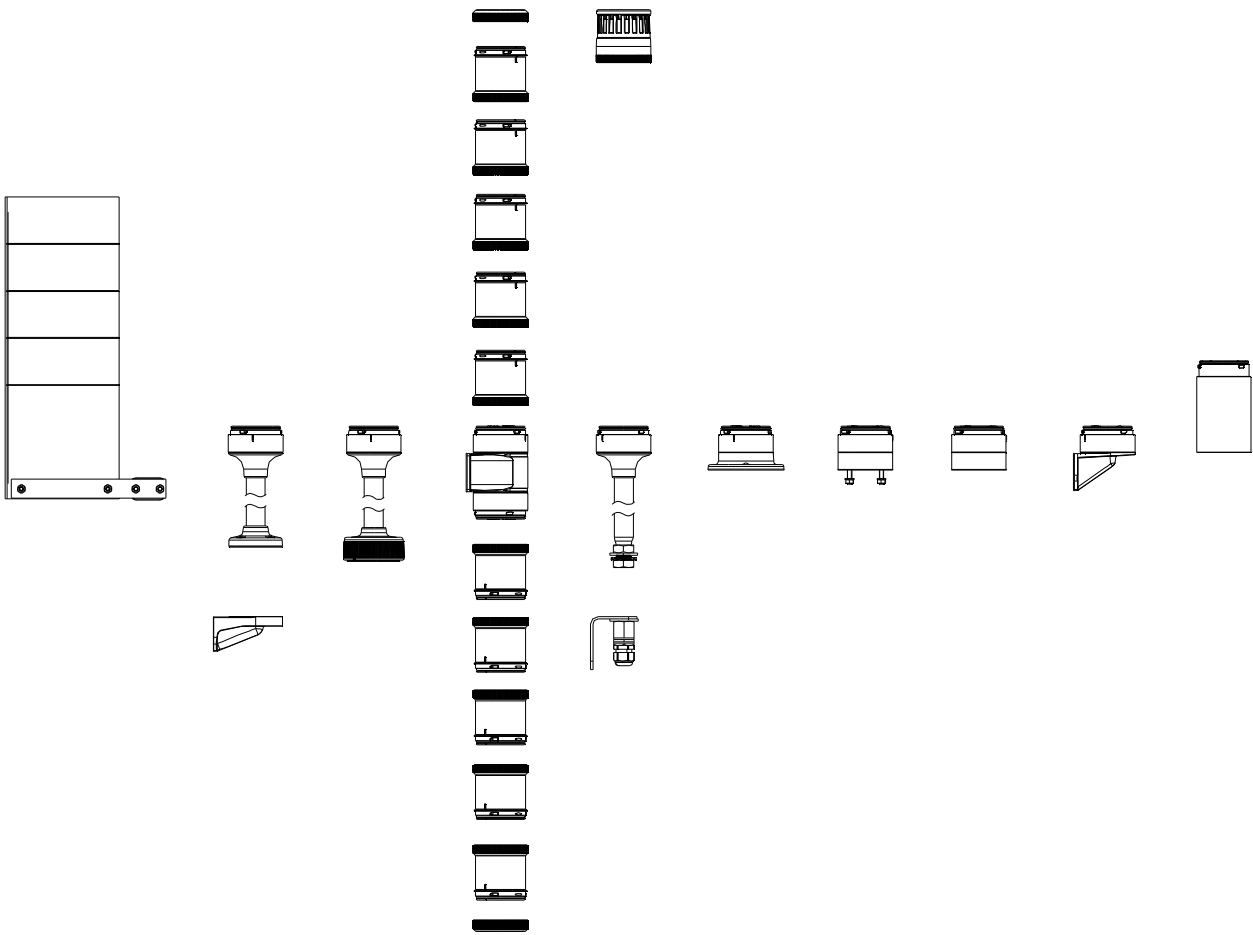
Eco-Modul 70



Eco-Modul 70



Modular



Eco-Modul 70

VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number		
XLL	Steady beacon	orange	12-250 V AC/DC		7 W	900 001 900		
		red	12-250 V AC/DC		7 W	900 002 900		
		clear	12-250 V AC/DC		7 W	900 004 900		
		blue	12-250 V AC/DC		7 W	900 005 900		
		green	12-250 V AC/DC		7 W	900 006 900		
		yellow	12-250 V AC/DC		7 W	900 007 900		
		XDC	LED steady beacon	orange	24 V AC/DC	+/- 10 %	0,049-0,054	900 011 405
110-120 V AC	+/- 10 %				0,028-0,031	900 011 310		
230-240 V AC	+/- 10 %				0,027-0,028	900 011 313		
red	24 V AC/DC			+/- 10 %	0,049-0,054	900 012 405		
	110-120 V AC			+/- 10 %	0,028-0,031	900 012 310		
	230-240 V AC			+/- 10 %	0,027-0,028	900 012 313		
clear	24 V AC/DC			+/- 10 %	0,049-0,054	900 014 405		
	110-120 V AC			+/- 10 %	0,028-0,031	900 014 310		
	230-240 V AC			+/- 10 %	0,027-0,028	900 014 313		
blue	24 V AC/DC			+/- 10 %	0,049-0,054	900 015 405		
	110-120 V AC			+/- 10 %	0,028-0,031	900 015 310		
	230-240 V AC			+/- 10 %	0,027-0,028	900 015 313		
green	24 V AC/DC			+/- 10 %	0,049-0,054	900 016 405		
	110-120 V AC			+/- 10 %	0,028-0,031	900 016 310		
	230-240 V AC			+/- 10 %	0,027-0,028	900 016 313		
yellow	24 V AC/DC			+/- 10 %	0,049-0,054	900 017 405		
	110-120 V AC			+/- 10 %	0,028-0,031	900 017 310		
	230-240 V AC			+/- 10 %	0,027-0,028	900 017 313		
XDA	LED flashing beacon			orange	24 V AC/DC	+/- 10 %	0,058	900 021 405
					110-120 V AC	+/- 10 %	0,028-0,030	900 021 310
					230-240 V AC	+/- 10 %	0,030-0,031	900 021 313
				red	24 V AC/DC	+/- 10 %	0,058	900 022 405
					110-120 V AC	+/- 10 %	0,028-0,030	900 022 310
					230-240 V AC	+/- 10 %	0,030-0,031	900 022 313
				clear	24 V AC/DC	+/- 10 %	0,058	900 024 405
					110-120 V AC	+/- 10 %	0,028-0,030	900 024 310
					230-240 V AC	+/- 10 %	0,030-0,031	900 024 313
		blue	24 V AC/DC	+/- 10 %	0,058	900 025 405		
			110-120 V AC	+/- 10 %	0,028-0,030	900 025 310		
			230-240 V AC	+/- 10 %	0,030-0,031	900 025 313		
		green	24 V AC/DC	+/- 10 %	0,058	900 026 405		
			110-120 V AC	+/- 10 %	0,028-0,030	900 026 310		
			230-240 V AC	+/- 10 %	0,030-0,031	900 026 313		
		yellow	24 V AC/DC	+/- 10 %	0,058	900 027 405		
			110-120 V AC	+/- 10 %	0,028-0,030	900 027 310		
			230-240 V AC	+/- 10 %	0,030-0,031	900 027 313		

Eco-Modul 70

VISUAL MODULES

Type	Beacon type	Lens colour	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number		
XDF	LED strobe beacon	orange	24 V AC/DC	+/- 10 %	0,130-0,135	900 031 405		
			110-120 V AC	+/- 10 %	0,010	900 031 310		
			230-240 V AC	+/- 10 %	0,010	900 031 313		
		red	24 V AC/DC	+/- 10 %	0,130-0,135	900 032 405		
			110-120 V AC	+/- 10 %	0,010	900 032 310		
			230-240 V AC	+/- 10 %	0,010	900 032 313		
		clear	24 V AC/DC	+/- 10 %	0,130-0,135	900 034 405		
			110-120 V AC	+/- 10 %	0,010	900 034 310		
			230-240 V AC	+/- 10 %	0,010	900 034 313		
		blue	24 V AC/DC	+/- 10 %	0,130-0,135	900 035 405		
			110-120 V AC	+/- 10 %	0,010	900 035 310		
			230-240 V AC	+/- 10 %	0,010	900 035 313		
		green	24 V AC/DC	+/- 10 %	0,130-0,135	900 036 405		
			110-120 V AC	+/- 10 %	0,010	900 036 310		
			230-240 V AC	+/- 10 %	0,010	900 036 313		
		yellow	24 V AC/DC	+/- 10 %	0,130-0,135	900 037 405		
			110-120 V AC	+/- 10 %	0,010	900 037 310		
			230-240 V AC	+/- 10 %	0,010	900 037 313		
		XDC-HP	LED steady beacon	orange	24 V AC/DC	18-36 V AC 18-30 V DC	0,170-0,2	900 051 405
				red	24 V AC/DC	18-36 V AC 18-30 V DC	0,170-0,2	900 052 405
				clear	24 V AC/DC	18-36 V AC 18-30 V DC	0,170-0,2	900 054 405
blue	24 V AC/DC			18-36 V AC 18-30 V DC	0,170-0,2	900 055 405		
green	24 V AC/DC			18-36 V AC 18-30 V DC	0,170-0,2	900 056 405		
yellow	24 V AC/DC			18-36 V AC 18-30 V DC	0,170-0,2	900 057 405		
XDF-HP	LED strobe beacon	orange	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 061 405		
		red	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 062 405		
		clear	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 064 405		
		blue	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 065 405		
		green	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 066 405		
		yellow	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 067 405		
XFF-HP	LED multi strobe beacon	orange	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 071 405		
		red	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 072 405		
		clear	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 074 405		
		blue	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 075 405		
		green	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 076 405		
		yellow	24 V AC/DC	18-36 V AC 18-30 V DC	0,26-0,265	900 077 405		



Modular

Eco-Modul 70

AUDIBLE MODULES

Type	Tone	Volume	Nominal voltage	Voltage range (V)	Nominal current (A)	Order number
XDE	Piezo buzzer module steady tone/pulsing tone	100 dB (can be adjusted with potentiometer)	24 V AC/DC	+/- 10 %	0,092	900 500 405
			110-120 V AC	+/- 10 %	0,041	900 500 310
			230-240 V AC	+/- 10 %	0,043	900 500 313
XDZ	Piezo buzzer module steady tone/pulsing tone, 2 tones, tone can be switched externally	100 dB (can be adjusted with potentiometer)	24 V AC/DC	+/- 10 %	0,092	900 510 405
			110-120 V AC	+/- 10 %	0,041	900 510 310
			230-240 V AC	+/- 10 %	0,043	900 510 313
XDM	Piezo buzzer module steady tone/pulsing tone, 8 tones	100 dB (can be adjusted with potentiometer)	24 V AC/DC	+/- 10 %	0,311	900 520 405
			110-120 V AC	+/- 10 %	0,045	900 520 310
			230-240 V AC	+/- 10 %	0,043	900 520 313

ORDER DATA - BASE

Type	Type of accessory	Tube length	Order number
XMW	Base for horizontal mounting M20, inside mounting holes		900 570 900
XMS	Base for horizontal mounting with pre-mounted fixing screws		900 571 900
XMV	Base for horizontal mounting with external mounting holes		900 572 900
XMV	Base for vertical mounting for single-sided mounting		900 573 900
XZV	Base for vertical mounting for double-sided mounting		900 574 900
XMR	Tube base 100 mm on aluminium tube with plastic foot	100 mm	900 582 900
	Tube base 250 mm on aluminium tube with plastic foot	250 mm	900 583 900
	Tube base 400 mm on aluminium tube with plastic foot	400 mm	900 584 900
XNW	Tube base		900 570 950
XSW	Tube base 100 mm on aluminium tube for horizontal mounting with banjo bolt	250 mm	900 593 900
	Tube base 250 mm on aluminium tube for horizontal mounting with banjo bolt	100 mm	900 592 900
	Tube base 400 mm on aluminium tube for horizontal mounting with banjo bolt	400 mm	900 594 900
XFR	Quick mounting system 'foot adapter' 100 mm on aluminium tube with foot adapter	100 mm	900 562 900
	Quick mounting system 'foot adapter' 250 mm on aluminium tube with foot adapter	250 mm	900 563 900
	Quick mounting system 'foot adapter' 400 mm on aluminium tube with foot adapter	400 mm	900 564 900



XWR



XSS



XIB



XEP

ACCESSORIES

Type	Type of accessory	Weight	Order number
XWR	Bracket for vertical mounting of TMR/UMR tube base	95 g	900 600 900
XSS	Set Set for vertical mounting (bracket, cable gland)	135 g	900 700 900
XIB	Identification plate	235 g	900 850 900
XEP	Base extension 100 mm long, suitable for all bases		900 800 900