INTENSE SIGNAL TOWERS
BR 50



- **Ultra bright and super slim** – Excellent perceptibility and slim design (ø 54 mm).
- **Signaling mode determinable by LED** – Replaceable LEDs determine the signaling mode (continuous or blinking light). The standard modules are already equipped with continuous light LEDs.
- **Individual configuration** – Up to 5 modules can be combined at any time. In addition to various LED light modules, Xenon flashing light modules, or an audible module can also be installed.
- **Flexible design options** – Fully Coloured or Crystal-Clear modules with coloured LEDs - the choice is yours. Assemble your individual signal tower according to your needs and design ideas.
- **Versatile mounting options** – Can either be mounted by tubular stand with plinth, tube, mounting bracket or directly - even with ready-made M12 connector available (see mounting equipment)
- **Universally applicable** – Usable indoors and outdoors.
- **Function-monitored** – Separate LED module for more safety in sensitive applications where a signal must be sent to an external safety system, operating station or control centre in the event of a malfunction.
- **Connectivity** – Easy integrationto IO-Link is possible with a separate module.

IP 54 — protection system
IP 65 — option
UL
I/O Link
+50 °C / –25 °C — operating temperature
EAC

		EASY- and FLEXI MODULES	BASE / END MODULE
Total number of modules		max. 5 (Customisable order and colour)	1
Operating temperature		-25°C - +50°C	
Protection type EN 60529		IP 54 (Optional IP65)	
Material	Lens	Polycarbonate (UV-resistant)	–
	Base	Acrylonitrile butadiene styrene (ABS)	
Article no.			28250010000

EASY MODULES (LED INTEGRATED BY DEFAULT)

	LIGHT INTENSITY	NOMINAL CURRENT CONSUMPTION	OPERATING RANGE	ARTICLE NO.
Continuous light module Fully coloured - Yellow	27 cd	AC: 171mA; DC: 85 mA	10-30V AC/DC	28250376033
Continuous light module Fully coloured - Amber	15 cd	AC: 114mA; DC: 85 mA		28250376042
Continuous light module Fully coloured - Red	5 cd	AC: 121mA; DC: 85 mA		28250376055
Continuous light module Fully coloured - Green	9 cd	AC: 113mA; DC: 85 mA		28250376066
Continuous light module Fully coloured - Blue	3 cd	AC: 114mA; DC: 85 mA		28250376072
Continuous light module Crystal Clear - White	23 cd	AC: 114mA; DC: 85 mA		28250376012
Continuous light module Crystal Clear - Yellow	28 cd	AC: 171mA; DC: 85 mA		28250376013
Continuous light module Crystal Clear - Green	22 cd	AC: 113mA; DC: 85 mA		28250376016
Continuous light module Crystal Clear - Red	6 cd	AC: 121mA; DC: 85 mA		28250376015

FLEXI MODULES (WITHOUT LIGHT SOURCE)

	LIGHT INTENSITY	NOMINAL CURRENT CONSUMPTION	OPERATING RANGE	ARTICLE NO.
Signaling module Clear (Crystal Clear)	According to the selected LED			28250040010
Signaling module Yellow				28250040030
Signaling module Orange				28250040040
Signaling module Red				28250040050
Signaling module Green				28250040060
Signaling module Blue				28250040070

Further versions on request

INTENSE SIGNAL TOWER

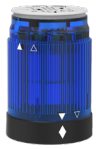

Base / End Module


Yellow


Amber


Red


Green


Blue


Clear

LED CONTINUOUS LIGHT					
	LIGHT INTENSITY*	NOMINAL CURRENT CONSUMPTION	OPERATING RANGE	SERVICE LIFE	ARTICLE NO.
LED BA 15d Continuous light Yellow 24V AC/DC	28 cd	AC: 171mA; DC: 85 mA	10-30V AC/DC	>25.000h	28213000099
LED BA 15d Continuous light Red 24V AC/DC	6 cd	AC: 121mA; DC: 85 mA			28213000100
LED BA 15d Continuous light Green 24V AC/DC	22 cd	AC: 113mA; DC: 85 mA			28213000101
LED BA 15d Continuous light White 24V AC/DC	23 cd	AC: 114mA; DC: 85 mA			28213000102
LED BA 15d Continuous light Yellow 230V AC	17 cd	19 mA	220-240V AC		28213000103
LED BA 15d Continuous light Red 230V AC	4 cd	21 mA			28213000104
LED BA 15d Continuous light Green 230V AC	12 cd	22 mA			28213000105
LED BA 15d Continuous light White 230V AC	14 cd	22 mA			28213000106

LED BLINKING LIGHT (1Hz)					
	LIGHT INTENSITY*	NOMINAL CURRENT CONSUMPTION	OPERATING RANGE	SERVICE LIFE	ARTICLE NO.
LED BA 15d Blinking light Yellow 24V AC/DC	28 cd	AC: 86 mA; DC: 51 mA	10-30V AC/DC	>25.000h	28213000107
LED BA 15d Blinking light Red 24V AC/DC	6 cd	AC: 61 mA; DC: 37 mA			28213000108
LED BA 15d Blinking light Green 24V AC/DC	22 cd	AC: 57 mA; DC: 53 mA			28213000109
LED BA 15d Blinking light White 24V AC/DC	23 cd	AC: 57 mA; DC: 58 mA			28213000110
LED BA 15d Blinking light Yellow 230V AC	17 cd	10mA	220-240V AC		28213000111
LED BA 15d Blinking light Red 230V AC	4 cd	11 mA			28213000112
LED BA 15d Blinking light Green 230V AC	12 cd	11 mA			28213000113
LED BA 15d Blinking light White 230V AC	14 cd	11 mA			28213000114

* Values for LEDs with clear signal module
Further versions on request
Please note that the LEDs are only intended for use in the BR 50 modules!

RECOMMENDED COLOUR COMBINATIONS	
SIGNALING MODULE COLOUR	LED COLOUR
red	red
yellow	yellow
green	green
blue	white
orange	white
white	white, green, yellow, red


LED light source

FLASHING LIGHT MODULES		
	24V AC/DC	**230V AC**
Flash energy	1 J	0.6 J
Flash frequency	ca. 1 Hz	
Nominal current consumption (50/60 Hz)	100 mA	10.5 mA
Operating range	AC: 10-27V I DC: 10-35V	-10% ...+15%
Duty cycle	100%	
Service Life	after 8 million flashes still at least 70% light emission	
ARTICLE NO.		
Flashlight module Clear	28250078010	28250071010
Flashlight module Yellow	28250078030	28250071030
Flashlight module Amber	28250078040	28250071040
Flashlight module Red	28250078050	28250071050
Flashlight module Green	28250078060	28250071060
Flashlight module Blue	28250078070	28250071070

SAFETY AND IO-LINK MODULES		
	Monitored-LED	**IO-Link Modul**
Module Type	2x8 LED, monitored continuous light	can be combined with LED, flash and sounder modules
Total number of modules	max. 3	max.4; not preconfig. max. 3
Profile	–	revision 1.1.4
Specification	–	IEC 61131-9
Alarm output	max. 230V /80mA, RONmax = 35 Ω (Closed during fault-free operation)	–
Rated voltage	24V DC	
Functional area	-15% ... + 20%	–
Nominal current consumption	35 mA	total output current: 1300 mA
ARTICLE NO.		
LED module Yellow monitored top segment	28250068030	–
LED module Red monitored top segment	28250068050	–
LED module Green monitored top segment	28250068060	–
LED module Yellow monitored bottom segment	28250368030	–
LED module Red monitored bottom segment	28250368050	–
LED module Green monitored bottom segment	28250368060	–
IO-Link Modul M12 incl. base	–	28250988000
IO-Link Module	–	28250998000

SOUNDER MODULES		
	24V DC	**230V AC**
Nominal current consumption	31 mA	15 mA
Operating range	-10% ... +20%	-15% ... +10%
Sound pressure level / reducible	96 / -20 dB (A)	87 / -10 dB (A)
Tone types	32 (details see chapter Tone Tables)	10 (details see chapter Tone Tables)
Operating temperature	-25° C ... + 50° C	
Protection type EN 60529	IP54 (option IP65)	IP54
ARTICLE NO.		
Sounder module	28250818000	28250081000
Further versions on request		

PRE-CONFIGURED BR50 SIGNAL TOWERS	
ARTICLE NO.	
2-Stage (Green, red) with mounting stand 100mm. IP 65	2211820000
3-Stage (Green, yellow, red) with mounting stand 100mm. IP 65	22118300009
3-Stage (Green, red, blue) with mounting stand 100mm. IP 65	22118300010
3-Stage (Green, yellow, red) direct mounting. IP 65	22138300002



Ordering example

SIGNAL TOWER	ARTICLE NO.		
5-stage, IP 65	**Version**	**230 V AC**	**24 V DC**
 230V AC  24V DC Sounder modules	**BR50-SM**	28250081000	28250818000
+			
 Flashing light module	**BR50-MG** + **BR50-FL**	28250220000 28250071050	28250078050
+			
 Continuous light module with bulb or LED	**BR50-MG** + **BR50-CL** + **LED BA15d**	28250220000 28250040060 28213000018	28213000011
+			
 Blinking light module with bulb or LED	**BR50-MG** + **BR50-BL** + **LED BA15d**	28250220000 28250051030 28213000030	28250058030 28213000007
+			
 Continuous light module with bulb or LED	**BR50-MG** + **BR50-CL** + **LED BA15d** + **BR50-MG** + **BR50-BC**	28250220000 28250040010 28213000014 28250220000 28250010000	28213000006
+			
 Mounting stand (100 mm) and seal	**BR50-TG** **BR50-S100**	28250230000 28250150010	

Configuration alternatives

STAGE 5



Sounder module



STAGE 4



Flashing light module





STAGE 3



Continuous light module with LED





STAGE 2



Blinking light module







Monitored module

STAGE 1



Continuous light module



IO-Link modul





MOUNTING VARIANTS









IO-Link modul with premounted base





Modular design permits quick and easy configuration and assembly.

MOUNTING EQUIPMENT

	MATERIAL	ARTICLE NO.
Wall bracket	ABS; for mounting stand	28250200000
Mounting stand with plinth - 100mm	Stainless steel tube and PA 6 (Polyamid) plinth	28250150010
Mounting stand with plinth - 250mm	Stainless steel tube and PA 6 (Polyamid) plinth	28250150020
Mounting stand with plinth - 400mm	Stainless steel tube and PA 6 (Polyamid) plinth	28250150040
Tube with thread and bracket - 100mm	Stainless steel tube and bracket	28250160010
Tube with thread and bracket - 250mm	Stainless steel tube and bracket	28250160020
Tube with thread and bracket - 400mm	Stainless steel tube and bracket	28250160040
Base / end module with M12 connector	ABS and stainless steel adapter	28250126000
Base / end module on stand 100mm + M12 connector	ABS and stainless steel tube with PA 6 (Polyamid) plinth	28250126010
Base / end module on stand 250mm + M12 connector	ABS and stainless steel tube with PA 6 (Polyamid) plinth	28250126020
Base / end module on stand 400mm + M12 connector	ABS and stainless steel tube with PA 6 (Polyamid) plinth	28250126040
Bracket for direct mounting for all bases w. or w/o M12	Stainless steel	28250180000
Bracket for stand mouting for all stands w. or w/o M12	Stainless steel	28250190000


Wall bracket


Stand with plinth


Tube with bracket


Base / end module with M12 connector


Base / end module on stand + M12 connector


Bracket for direct mounting for all bases w. or w/o M12 connector


Bracket for stand mouting for all stands w. or w/o M12 connector

DIMENSIONS ASSEMBLED SIGNAL TOWERS

	DIAMETER: 54mm; TOTAL HEIGHT WITH SOUNDER MODULE +21mm						
	STAND WITH PLINTH INSTALLATION LENGTH OF PIPE			TUBE WITH THREAD INSTALLATION LENGTH OF PIPE			DIRECT ASSEMBLY
Signal module	100mm	250mm	400mm	100mm	250mm	400mm	-
1	183mm	333mm	483mm	209mm	359mm	509mm	107mm
2	246mm	396mm	546mm	272mm	422mm	572mm	170mm
3	309mm	459mm	609mm	335mm	485mm	635mm	233mm
4	372mm	522mm	672mm	398mm	584mm	698mm	296mm
5	435mm	585mm	735mm	461mm	611mm	761mm	359mm

ACCESORIES

		ARTICLE NO.
Flexi Tool	for easy change of the LED bulb	28250250000
Module gasket IP 65	1x per light module plus 1x base module	28250220000
Tube gasket IP 65	for stand or tube mounting	28250230000
Direct mounting set	1x surface gasket; 4x screws 4,2x16	28250210000

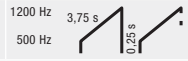
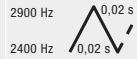
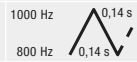

Flexi Tool


Module gasket

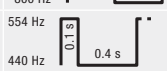

Tube gasket


Surface gasket

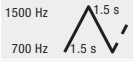
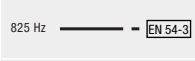
Tone table **INTENSE BR 50 SM 230V AC**

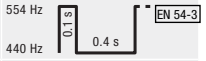
NO.	DESCRIPTION	
2	Slow whoop	
16	Slow whoop, evacuation Australia AS2220	
29	Sweeping (fast)	
35	Sweeping, UK BS5839-1 (fast sweep)	
56 [1]	Continuous tone	

[1] factory setting

NO.	DESCRIPTION	
109	Intermittent, Australia AS2220,AS1610, AS1670	
110	Simulated bell	
131	Alternating tone	
146	Alternating tone, France NFS 32-001 (fire alarm)	
167	Slow whoop	

Tone table **INTENSE BR50 SM 24V DC**

NO.	DESCRIPTION	
1	no tone	
2	Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP	
9	Slow whoop, fire alarm, UK BS 5839-1	
15	Slow whoop, evacuation alarm Netherlands NEN 2575	
18	Slow whoop, NFPA	
22	Whoop, Australien alert AS 1670, ISO 8201	
24	Siren	
26	Siren (industrial alarm Germany – Hoechst –)	
27	Sweeping	
29	Sweeping (fast)	
36	Sweeping	
54	Continuous tone, Finland (all-clear signal)	
56	Continuous tone	
60	Continuous tone	
63	Continuous tone	
71	Continuous tone	

NO.	DESCRIPTION	
82	Interrupted tone, PFEER (general alarm), UK BS 5839-1 (back-up alarm)	
83	Interrupted tone, PFEER (general alarm)	
100	Interrupted tone, industrial alarm Germany	
102	Interrupted tone, Sweden SS 031711 (local warning)	
103	Interrupted tone, Sweden SS 031711 (air raid warning)	
104	Interrupted tone, Sweden SS 031711 (emergency signal)	
112	Interrupted tone, ISO 8201 (emergency evacuation signal)	
123	Alternating tone	
130	Alternating tone, UK BS 5839-1 (fire alarm)	
131	Alternating tone, UK BS 5839-1 (fire alarm, railway crossing)	
146	Alternating tone, France NFS 32-001 (fire alarm)	
160	Continuous tone	
161	Continuous tone	
162 [1]	Interrupted tone	
163	Interrupted tone	
164	Slow whoop	

[1] factory setting