

SIGNALLING DEVICES



- Set in Zone 1/21, Zone 2/22
- Protection class IP 65
- Sound level 105 dB
- Temperature range -40 °C to +50 °C
- Easy to install

Machines and equipment are provided with acoustic warning and emergency devices for the protection of people and the environment. These devices signal hazardous situations and thus allow for instant safety measures to be taken. BARTEC provides a loud signal horn with continuous tone in attractive design. The device is suitable for applications in potentially explosive gas and dust atmospheres without further accessories. The signal horn reliably warns against hazards in a wide temperature range of -40 °C up to +50 °C outdoors and indoors.

Explosion protection

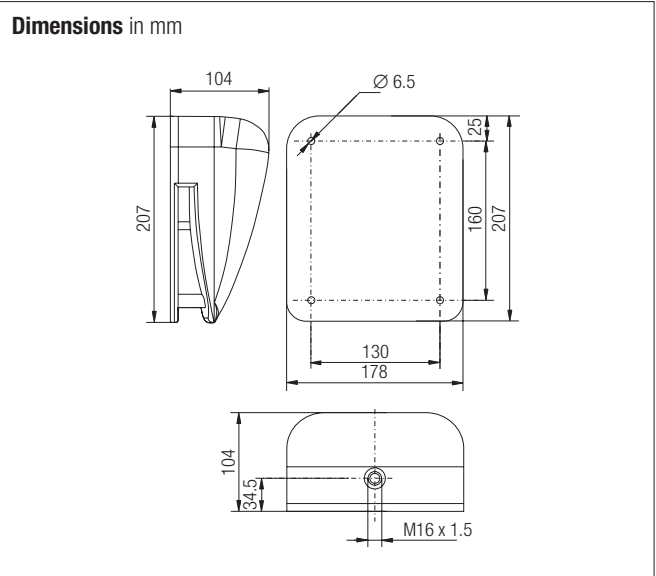
Marking ATEX	II 2G Ex e mb IIC T5 Gb II 2D Ex tb IIIC T70 °C Db
Certification	BVS 05 ATEX E113 X
Other approvals and certificates, see www.bartec.de	

Technical data

Dimensions	207 mm x 178 mm x 104 mm
Mounting dimensions	160 mm x 130 mm
Enclosure	PC
Connection	terminal screw max. 2.5 mm ²
Cable entry	cable gland M16 x 1.5 cable diameter 5 to 9 mm
Mounting	wall mounting and floor mounting

Electrical data

Rated voltage	see selection chart
Sound level	max. 105 db (A)
Type of tone	continuous tone



Ordering information

Rated voltage	Code no.
DC 24 V	1
AC 24 V, 50 Hz	2
AC 42 - 48 V, 50 Hz	3
AC 115 V, 50/60 Hz	4
AC 120 V, 60 Hz	
AC 230 V, 50 Hz	5

Complete order no. 07-4602-1 12
Please insert correct code.

Technical data subject to change without notice.



- Set in Zone 1/21, Zone 2/22
- Maintenance-free
- Compact design
- Very sturdy
- Low power demand due to high lamp efficiency
- Easy installation

Plant and machinery are fitted with visual alarms to give timely warning of dangerous situations and to enable machinery to be shut down before damage occurs. BARTEC flashing lamps are designed for continuous operation. BARTEC's flashing lamps provide information, warnings and alarms on machinery and plant in explosion-endangered areas in Zone 1 and Zone 2, Zone 21 and 22.

Function

The flashing lamp is made of an aluminium Ex d enclosure with a dome made of Borosilikat glass. The connection compartment was designed in the "increased safety" type of protection in conformance to EN 60079-7. An M20 x 1.5 gland is available to facilitate the insertion of the cable. A optional LED flashing lamp is available and can be set on 4 different modes: flashing, flash, permanent and rotating light.

Explosion protection

Marking ATEX	II 2G Ex d e IIC T5, T6 Gb II 2D Ex tb IIIC T95 °C, T80 °C Db
Certification	PTB 00 ATEX 1013
Marking IECEx	Ex d e IIC T5, T6 Gb Ex tb IIIC T95 °C, T80 °C Db
Certification	IECEx PTB 12.0059
Other approvals and certificates, see www.bartec.de	

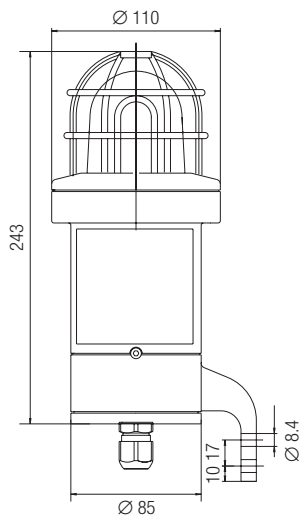
Technical data

Protection class	IP 66/IP 67 according to IEC 60529
Enclosure material	Aluminium, powder-coated with hardened glass dome and with protective cage

Electrical data

Rated voltage	AC 230 V DC 24 V
Flash energy	15 J
Flash frequency	approx. 60/min (1 Hz)
Operating mode	Continuous operation S 1 after IEC 60034-1; DIN EN 60034-1; VDE 0530 level 1
Activation	by connecting with the rated voltage
Temperature range	Service: -55 °C ≤ T _a ≤ +40 °C (T6) (T80 °C) -55 °C ≤ T _a ≤ +55 °C (T5) (T95 °C) Storage: -60 °C to + 80 °C

Dimensions in mm



Ordering information

Description	Nominal voltage	Code no.	Signal colour	Code no.
Flashing lamp 15 J	AC 230 V	1	yellow	3
			red	4
	DC 24 V	8	green	5

Complete order no. 07-4838-31

Please insert correct code.

Technical data subject to change without notice.



- Seawater-resistant
- External trigger
- Siren card available
- Wide temperature range
- Multiple dome colors

BARTEC TECHNOR's TNFCD/M series is an extreme duty flash beacon solution for use in hazardous location on- or offshore. Designed for the most demanding environments of the North Sea, the beacons have for more than 25 years proven their excellence, providing a low maintenance solution for operators and rig owners worldwide. Available in Ex de, Ex d or non-Ex. The beacon offers a multiple of options like power on when connected, external triggering or a siren card for acoustic warning.

Explosion protection

Marking

TNFCD II 2G Ex d IIC T4 Gb or Ex de IIC T4 Gb

TNFCDM II 2G Ex d IIC T4 Gb

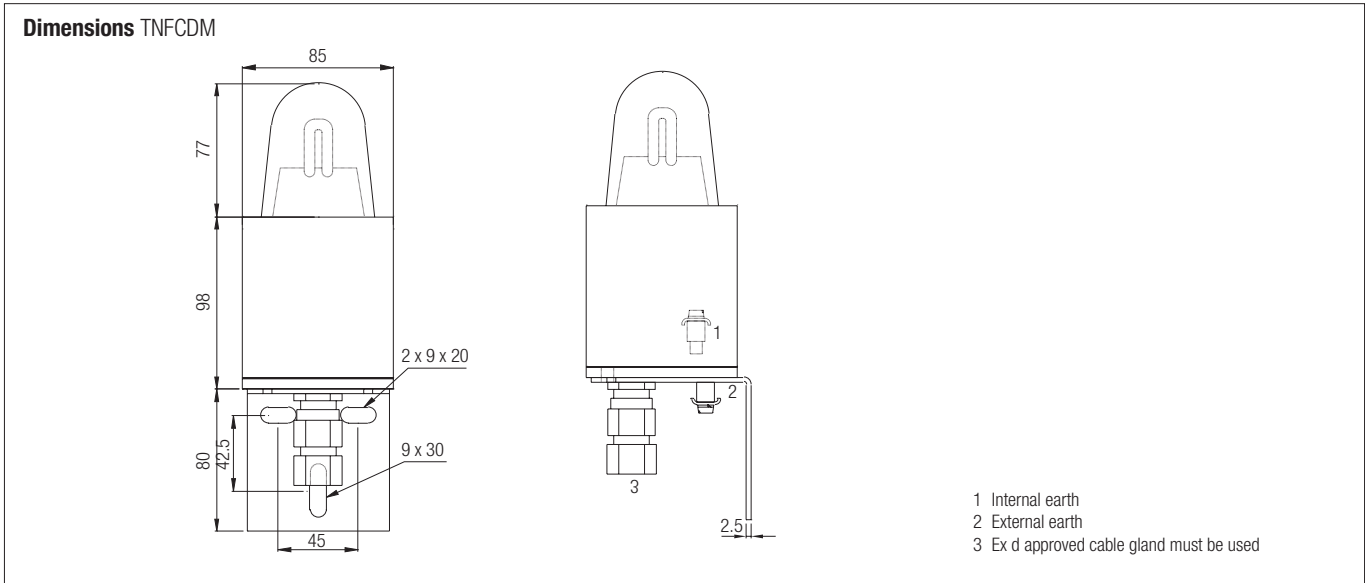
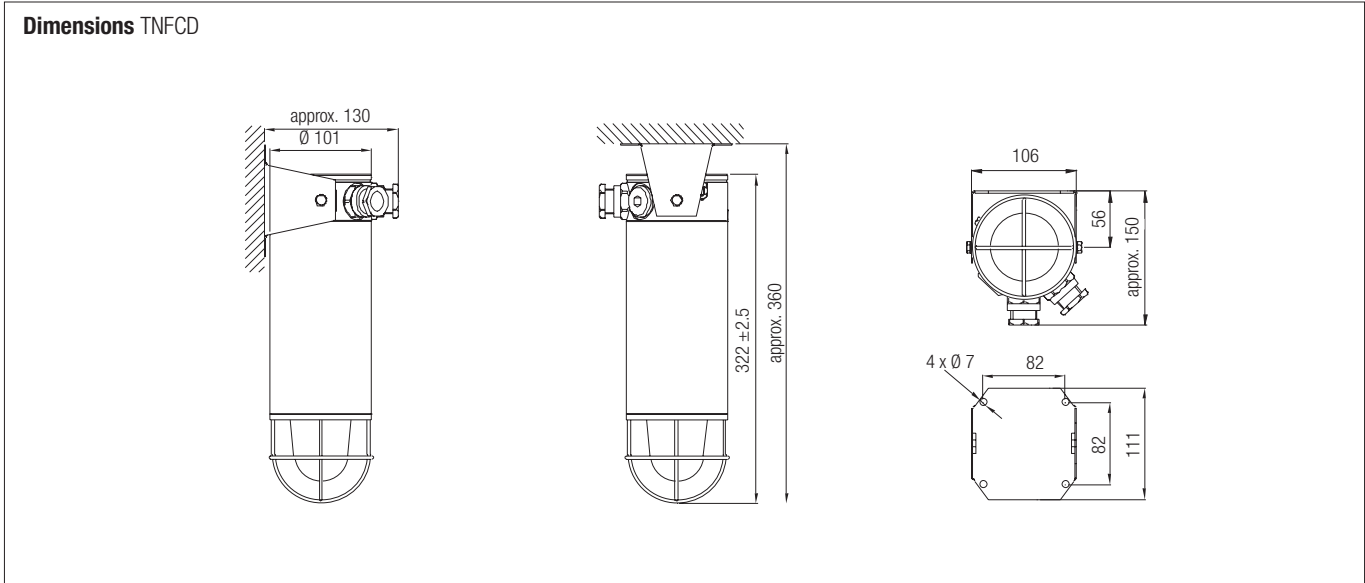
Certification NEMKO 01 ATEX 430

Other approvals and certificates, see www.bartec.de

Ambient temperature -50 °C to +60 °C

Technical data

Material	stainless steel 316L/CF-3M	
Surface treatment	machined/shot blasted	
SS316L		
Earth terminal	inside and outside	
Cable entry	TNFCD	Standard M25
	TNFCDM	Standard M25, M20 or flying lead on request
Real humidity	100 %	
Dome colours	red, yellow, blue, green, orange, clear	
Flash frequency	1 Hz	
Flash energy	TNFCD	10 joule
	TNFCDM	5 joule
Weight	TNFCD	5.1 kg
	TNFCDM	2.5 kg
Protection class	IP 66 (IP 67 upon request)	
Standards	EN/IEC: 60079-0, 60079-1, 60079-7, 50281-1-1	



Flashing beacon TNFCD

Rated voltage	Voltage range	Rated current	Power consumption	Supply frequency	Typical start current	Triggering	Fuse	Siren card for acoustic warning
AC 220 to 254 V	±10 %	110 mA	24 VA	50/60 Hz	>1 A in max. 1 msec.	direct, telephone, DC 24 to 48 V, fail safe	1 to 2 A < time-lag fuse is recommended	8 W, 20 W or 25 W for Ex loudspeaker (8 ohm, 20 ohm or 100 V line)
AC 110 to 120 V	±10 %	220 mA	24 VA	50/60 Hz				
DC 24 to 48 V	±10 %	DC 24 V/670 mA DC 48 V/330 mA	16 VA					

Flashing beacon TNFCDM

Rated voltage	Voltage range	Power consumption	Typical start current	Triggering
AC 220 to 254 V	AC 190 to 272 V	100 mA	1 A in max. 1 msec	direct
AC 110 to 127 V	±20 %	100 mA		
DC 24 V	±10 %	380 mA		
DC 48 V	±10 %	200 mA		

Technical data subject to change without notice.



- Low to no maintenance
- Installation kits for high/low temperatures
- Lengths available from 24 cm and up in increments of 1 cm and combinations of units

The range of TNCLS Ex em LED backlights are designed for use to illuminate level gauges in all kinds of industry where an explosive atmosphere may be present. The TNCLS LED back lights are designed to illuminate see through level gauges found in a variety of industries where an explosive atmosphere may be present. The BARTEC TECHNOR back light solution has a proven track record of more than twenty years and is considered by some to be the only choice for low life cycle cost level gauge illumination.

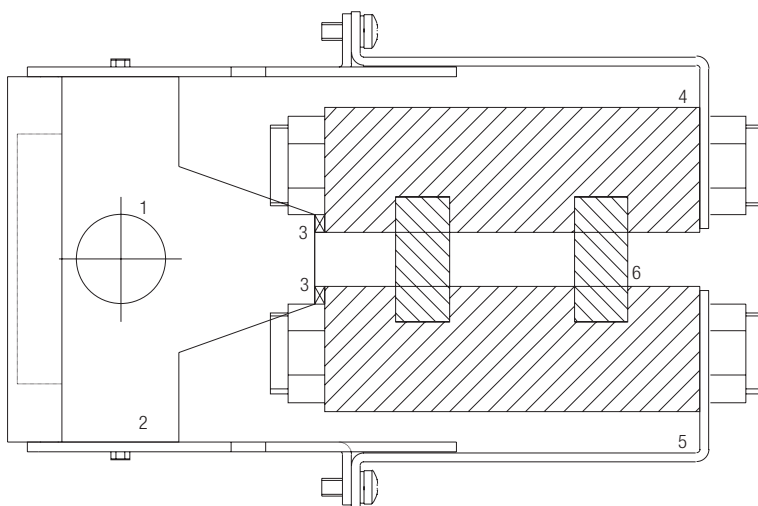
Explosion protection

Marking	⊕ II 2G/Ex ebmtbopis IIC/IIIC T4Gb Ex II 2G/Ex ebmtbopis IIC/IIIC T4Gb
Certification	
ATEX	Presafe 16ATEX8117X
IECEX	Pre16.0008x
Other approvals and certificates, see www.bartec.de	
Ambient temperature	-25 °C to +60 °C

Technical data

Material	stainless steel 316L
Surface treatment	acidized
Earthing	M6 inside and outside
Cable entry	up to 2 x M25 in top, bottom and /or side
Power consumption	approx. 3 VA per module
Voltage	220 to 240 V AC or 254 V AC Other voltages on request
Frequency	50/60 Hz
Humidity	100 %
Terminals	4 x 2.5 m ² other terminal size on request
Illumination colour	yellow
Protection class	IP 66
Directives	EN/IEC: 60079-0, 60079-7, 60079-18, 60079-28, 60079-31

Dimensions



- 1 Cable entrance, max. M25
- 2 Backlight
- 3 Gasket
- 4 Level gauge
- 5 Mounting bracket
- 6 Level glas

Ordering information

Dimensions	Total length A mm	Light exposure B mm	Weight kg
27-1	270	250	2.3
30-1	300	280	2.5
34-1	340	320	2.7
36-1	360	340	2.8
27-2	540	520	4.3
30-2	600	580	4.6
34-2	680	660	5.1
36-2	720	700	5.3
27-3	810	790	6.2
30-3	900	880	6.7
34-3	1020	1000	7.3
36-3	1080	1060	7.5
27-4	1080	1060	7.9
30-4	1200	1180	8.5
34-4	1360	1340	9.3
36-4	1440	1420	9.6

Several units can be assembled to one unit
 Type key: TNCLS L-X, L = Module length,
 X = No. of modules, Total length: A = L*X
 Other sizes on request.

Technical data subject to change without notice.

Reservation

Technical data subject to change without notice. No claims for damages arising from alterations, errors or misprints shall be allowed. Attention is drawn to the applicable standards and regulations on safety components and systems together with the relevant operating and installation instructions.