

Сигнальные устройства и системы заземления

Технические характеристики

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- Устройства визуальной сигнализации

Визуальные сигнальные устройства обеспечивают предупреждение или информацию и имеют корпус из армированного стекловолокном или морского класса и коррозионно-стойкого алюминия. Доступны ксеноновые и светодиодные варианты, а также различные цвета линз и различные рабочие напряжения.



- Звуковые сигнальные устройства

Звуковые сигнальные устройства обеспечивают предупреждающие или статусные сигналы и изготавливаются из коррозионно-стойкого алюминия или армированного стекловолокном полиэстера. Доступны многочисленные тона, ступени и выходные диапазоны, а также различные рабочие напряжения.



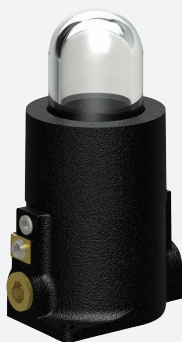
- Комбинированные устройства

Комбинированные устройства — это разумный способ объединения преимуществ визуального и звукового сигнального оборудования. Они подают звуковые и визуальные сигналы для оповещения в случае опасности, предупреждения или состояния.



- Системы заземления

Системы заземления DMT сертифицированы по стандартам Ex d и Ex tb и предназначены для контроля емкости и сопротивления оборудования, в котором могут возникать статические заряды.



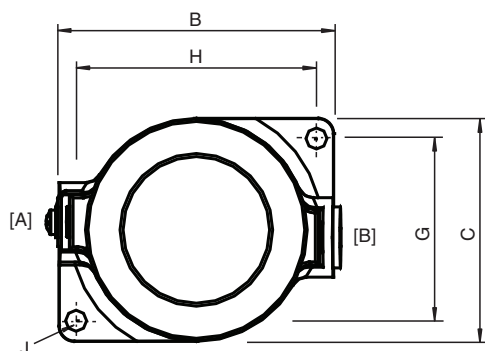
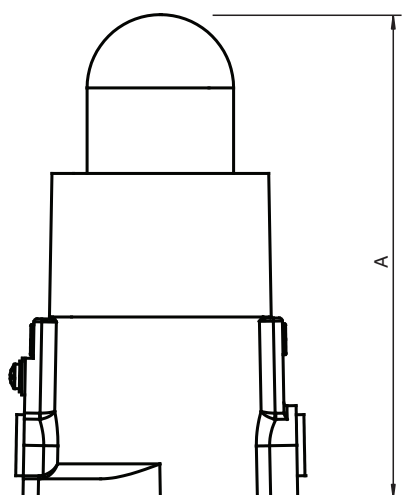
Ex d Cast Iron Single Status/Indicator Lamp

E501001

- Glass color: white
- 158 mm x 90 mm x 73 mm
- Cast Iron
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Threaded cable entries
- Ex d certified



Dimensions



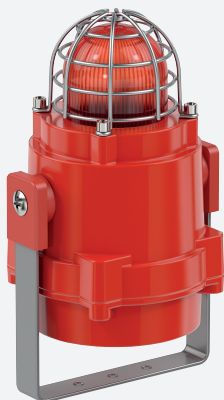
Technical Data

Electrical specifications

Operating voltage	220 ... 254 V 50/60 Hz	
Operating current	I _B	0.15 A max.

Technical Data

Terminal capacity	2.5 mm ²
Lamps	incandescent
Power	15 W
Lampholder	BC type
Function	Signal light
Mechanical specifications	
Cover fixing	threaded joint
Degree of protection	IP65
Cable entry face A	
M20 quantity	1
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug
Cable entry face B	
M20 quantity	1
M20 type	metric ISO pitch 1.5 mm
Material	
Enclosure	cast iron
Glass	toughened glass
Glass color	white
Finish	cast iron: painted black
Seal	nitrile O-ring
Mass	approx. 2 kg
Dimensions	
External dimension (A)	159 mm
External dimension (B)	89.8 mm
External dimension (C)	78.2 mm
Mounting holes distance (G)	64 mm
Mounting holes distance (H)	78 mm
Mounting holes diameter (J)	6.9 mm
Grounding	internal & external brass grounding terminals on base
Ambient conditions	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	CML 21 ATEX 1699
Marking	Ex db IIB T5 Gb, Ex tb IIIC T100°C Db (ta ... +40°C) Ex db IIB T4 Gb, Ex tb IIIC T120°C Db (ta ... +55°C)
International approvals	
IECEx approval	IECEx CML 21.0081
UKCA approval	CML 21 UKEX 1819
Conformity	
Degree of protection	EN 60529
General information	
Supplementary information	



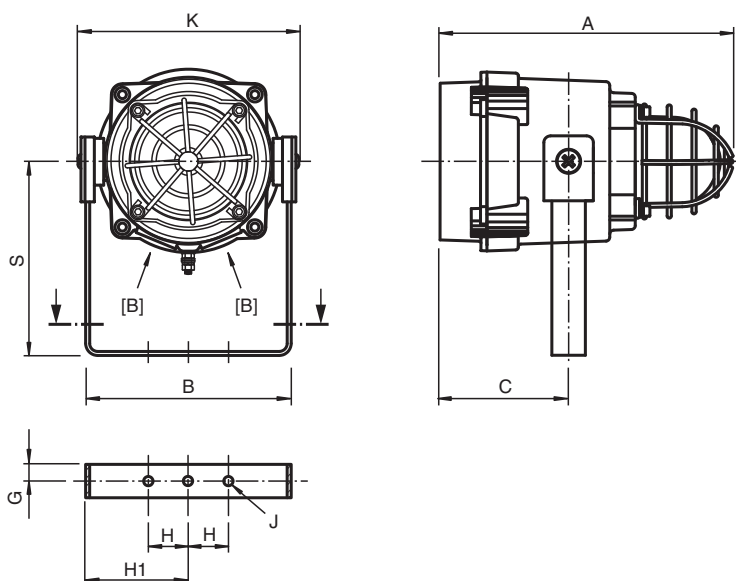
Beacon Xenon 250 cd Ex d IIC

PF-BExBG05-DP*

- Automatic synchronisation with systems operation
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems
- Glass lens and stainless steel guard
- Degree of protection IP66 / IP67
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket
- Reverse polarity diode fitted
- UV stable PC field replaceable lens colour filter
- Xenon tube mechanically secured against shock and vibrations



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	flashing beacon
Lens color	red , amber , blue , green , further on request
Energy	5 J
Flash rate	1 Hz
Luminous intensity, peak, calculated	500000 cd , calculated from energy
Luminous intensity, peak, measured	39463 cd , measured according to I.E.S.
Effective luminous intensity, calculated	250 cd , calculated from energy
Effective luminous intensity, measured	120 cd , measured according to I.E.S.
Illuminant, type	xenon tube
Illuminant, life	Luminous intensity reduced to 70% after 5 million flashes

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 2.45 kg , AC: 2.75 kg
Dimensions	
External dimension (A)	246 mm
External dimension (B)	153.6 mm
External dimension (C)	100 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Grounding	external grounding bolt M5

Technical Data

Ambient conditions

Ambient temperature -50 ... 70 °C (-58 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate KEMA 00 ATEX 2006 X

Marking

Ex II 2 GD
 Ex d IIC T* Gb
 Ex tb IIIC T** °C Db
 T5 @ Ta +45 °C , T4 @ Ta +70 °C
 T90 °C @ Ta +40 °C , T105 °C @ Ta +55 °C , T120 °C @ Ta +70 °C

International approvals

IECEX approval IECEX KEM 10.0002X

INMETRO approval 10-IEEx-0010

EAC approval RU C-GB.AA71.B.00109

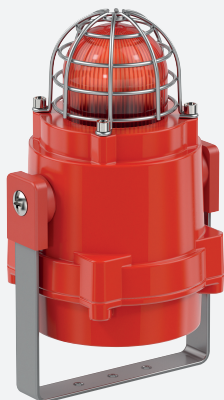
Conformity

Degree of protection EN 60529

General information

Scope of delivery device , 1 Stopping Plug , Instruction leaflet

Supplementary information



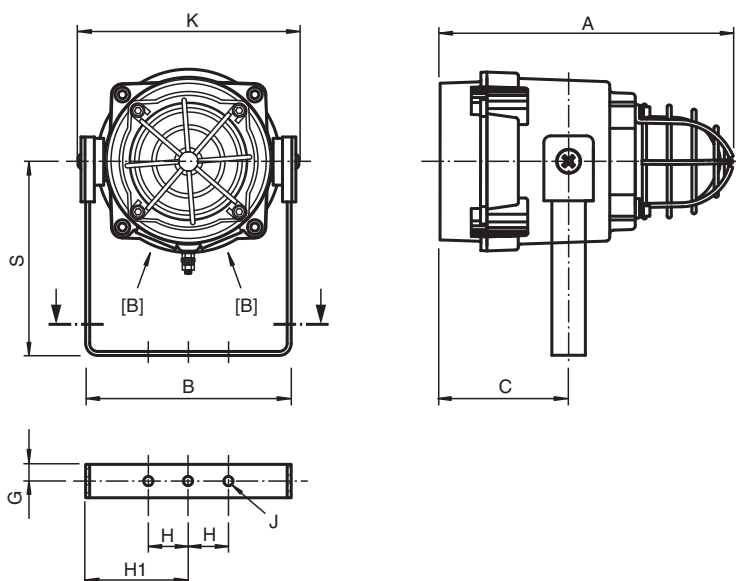
Beacon Xenon 750 cd Ex d IIC

PF-BExBG15-DP*

- Automatic synchronisation with systems operation
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems
- Glass lens and stainless steel guard
- Degree of protection IP66 / IP67
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket
- Reverse polarity diode fitted
- UV stable PC field replaceable lens colour filter
- Xenon tube mechanically secured against shock and vibrations



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	flashing beacon
Lens color	red , amber , blue , green , further on request
Energy	15 J
Flash rate	1 Hz
Luminous intensity, peak, calculated	1500000 cd , calculated from energy
Luminous intensity, peak, measured	99106 cd , measured according to I.E.S.
Effective luminous intensity, calculated	750 cd , calculated from energy
Effective luminous intensity, measured	468 cd , measured according to I.E.S.
Illuminant, type	xenon tube
Illuminant, life	Luminous intensity reduced to 70% after 5 million flashes

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 2.45 kg , AC: 2.75 kg
Dimensions	
External dimension (A)	246 mm
External dimension (B)	153.6 mm
External dimension (C)	100 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Grounding	external grounding bolt M5

Technical Data

Ambient conditions

Ambient temperature -50 ... 70 °C (-58 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate KEMA 00 ATEX 2006 X

Marking

Ex II 2 GD
 Ex d IIC T* Gb
 Ex tb IIIC T** °C Db
 T4 @ Ta +50 °C , T3 @ Ta +70 °C
 T120 °C @ Ta +40 °C , T135 °C @ Ta +55 °C , T150 °C @ Ta +70 °C

International approvals

IECEx approval IECEx KEM 10.0002X

INMETRO approval 10-IEEx-0010

EAC approval RU C-GB.AA71.B.00109

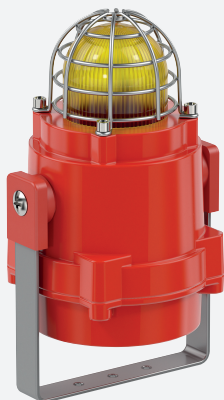
Conformity

Degree of protection EN 60529

General information

Scope of delivery device , 1 Stopping Plug , Instruction leaflet

Supplementary information



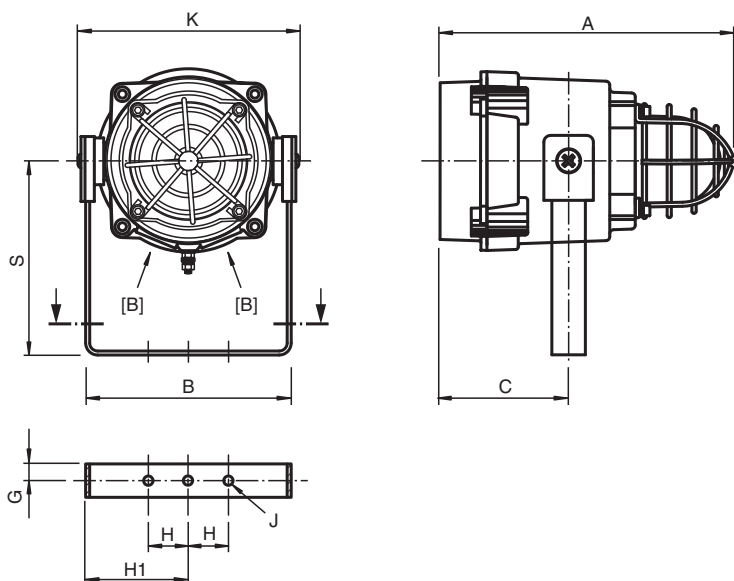
Beacon LED 160 cd Ex d IIC

PF-BExBGL2-DP*

- Degree of protection IP66 / IP67
- Choice of five flash rates: 1 Hz, 1.5 Hz, 2 Hz, double and triple flash
- Duplicate cable terminations for daisy-chain installations
- Glass lens and stainless steel guard
- High and low power steady modes
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket
- UV stable PC field replaceable lens colour filter



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	flashing beacon
Lens color	red , amber , blue , green , further on request
Flash mode	flash rate: 1 Hz / 1.5 Hz / 2 Hz double strike / triple strike flash steady light high power / low power
Effective luminous intensity	87 cd @ steady light high power 160 cd @ 1 Hz flash
Illuminant, type	array of 4x high-intensity Cree® LED
Illuminant, life	60000 hours

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 2.45 kg , AC: 2.75 kg
Dimensions	
External dimension (A)	246 mm
External dimension (B)	153.6 mm
External dimension (C)	100 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Grounding	external grounding bolt M5

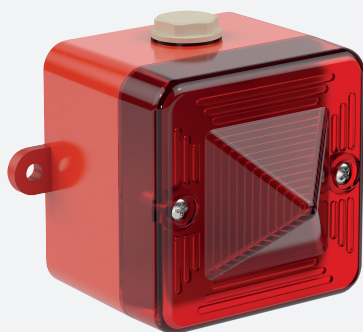
Ambient conditions

Ambient temperature	-50 ... 70 °C (-58 ... 158 °F)
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Technical Data

Data for application in connection with hazardous areas

EU-type examination certificate		KEMA 00 ATEX 2006 X
Marking		Ⓔ II 2 GD Ex d IIC T* Gb Ex tb IIIC T** °C Db T6 @ Ta +60 °C , T5 @ Ta +70 °C T60 °C @ Ta +40 °C , T75 °C @ Ta +55 °C , T90 °C @ Ta +70 °C
International approvals		
IECEx approval		IECEx KEM 10.0002X
EAC approval		RU C-GB.AA71.B.00109
Conformity		
Degree of protection		EN 60529
General information		
Scope of delivery		device , 1 Stopping Plug , Instruction leaflet
Supplementary information		



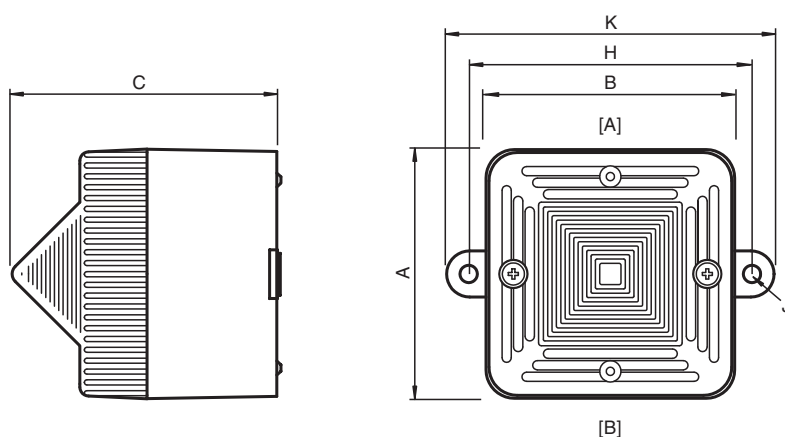
Beacon LED 48 cd Ex ia IIC

PF-IS-L101L*

- Input overload and reverse current protection
- Prismatic lens optimises LED effectiveness
- FM approval



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	25 mA
Terminal capacity	0.5 ... 2.5 mm ²
Function	flashing beacon
Lens color	red , amber and clear clear with LEDs in green or blue
Flash mode	double flash at 2 Hz
Effective luminous intensity, measured	48 cd measured according to I.E.S.
Illuminant, type	array of 6x high-intensity LED

Mechanical specifications

Degree of protection	IP66
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	0.4 kg
Dimensions	
External dimension (A)	86 mm
External dimension (B)	86 mm
External dimension (C)	93 mm
Mounting holes distance (H)	98 mm
Mounting holes diameter (J)	6 mm
Maximum external dimension (K)	114 mm

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 04 ATEX 2302X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

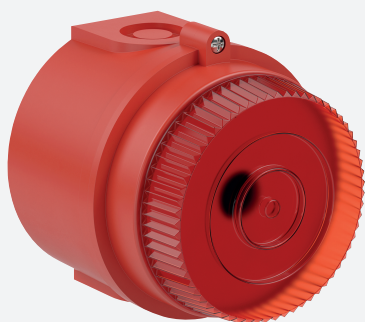
FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEx approval	IECEx SIR 04.0039X
EAC approval	RU C-GB.MH04.B.00048

Conformity

Degree of protection	EN 60529
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General information

Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	

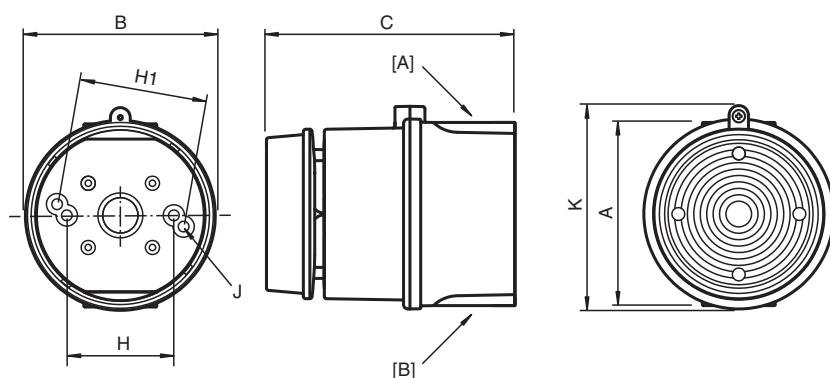


Beacon LED 23 cd Ex ia IIC PF-IS-mB1*

- Input overload and reverse current protection
- Prismatic lens optimises LED effectiveness
- FM approval



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	25 mA @ 24 V via 28 V 300 Ω zener barrier
Terminal capacity	0.5 ... 2.5 mm ²
Function	flashing beacon
Lens color	red , amber and clear clear with LEDs in green or blue
Flash mode	double flash at 2 Hz and 1 Hz
Effective luminous intensity, measured	23 cd measured according to I.E.S.
Illuminant, type	array of 6x high-intensity LED

Mechanical specifications

Degree of protection	IP65
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	PC (Polycarbonate) fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	0.4 kg
Dimensions	
External dimension (A)	85.5 mm
External dimension (B)	88.7 mm
External dimension (C)	85 mm
Mounting holes distance (H)	50 mm
Mounting holes distance (H1)	60 mm
Mounting holes diameter (J)	5 mm
Maximum external dimension (K)	95 mm

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 05 ATEX 2084X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEx approval	IECEx SIR 06.0045X
EAC approval	RU C-GB.MH04.B.00048

Conformity

Degree of protection	EN 60529
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General information

Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	



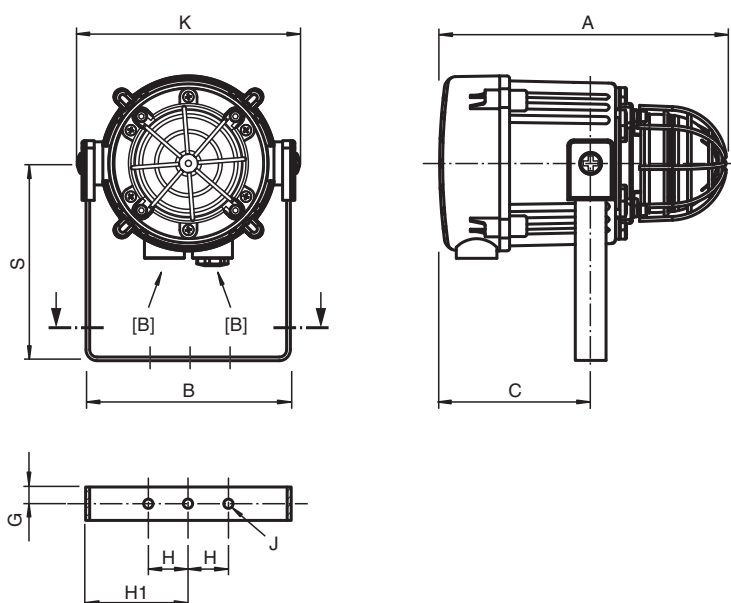
Beacon LED 160 cd Ex nA

PF-E2xBL2*

- Choice of five flash rates: 1 Hz, 1.5 Hz, 2 Hz, double and triple flash
- Duplicate cable terminations for daisy-chain installations
- Glass lens and stainless steel guard
- High and low power steady modes
- Ratchet adjustable stainless steel 'U' bracket



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included
Function	flashing beacon
Lens color	red , amber , blue , green , further on request
Flash mode	flash rate: 1 Hz / 1.5 Hz / 2 Hz double strike / triple strike flash steady light high power / low power
Effective luminous intensity	87 cd @ steady light high power 160 cd @ 1 Hz flash
Illuminant, type	array of 4x high-intensity Cree® LED
Illuminant, life	60000 hours

Mechanical specifications

Degree of protection	IP66 acc. to EN 60529 IP64 acc. to EN 60079-0 type rating per UL50E/NEMA2 50: 4/4X/13
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x plastic
Material	
Enclosure	PPS and fiber reinforced ABS, UL94-V0 and 5VA
Glass	Borosilicate glass
Finish	inherent color black
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	1.48 kg
Dimensions	
External dimension (A)	233 mm
External dimension (B)	166 mm
External dimension (C)	123 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	160 mm
Maximum external dimension (K)	170.6 mm

Ambient conditions

Technical Data

Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	DEMKO 06 ATEX 0421554X
Marking	Ex II 3 GD Ex nA IIC T* Gc , T4 @ Ta +55 °C Ex tc IIIC T** Dc , T85 °C @ Ta +55 °C
International approvals	
UL approval	
cULus	E245313
IECEX approval	IECEX ULD 14.0012X
Conformity	
Degree of protection	EN 60529
General information	
Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	



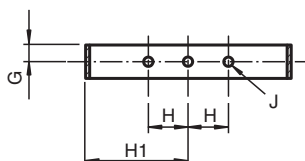
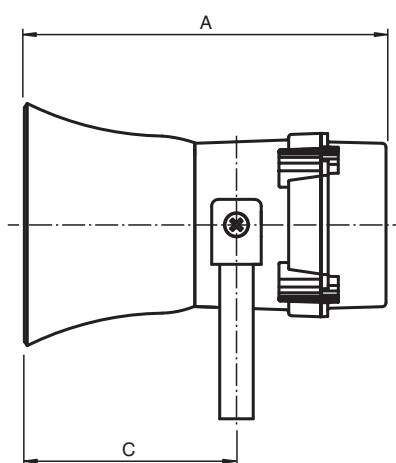
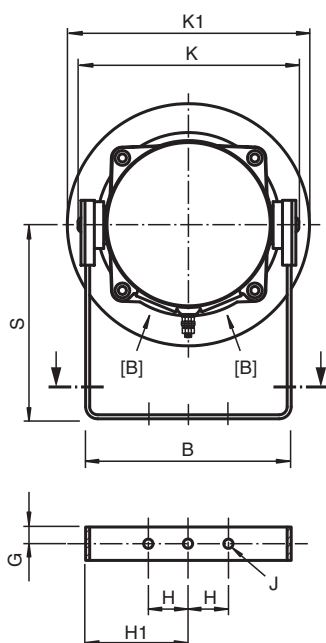
Alarm Sounder 110 dB Ex d IIC

PF-BExS110-DF*

- Automatic synchronisation with systems operation
- Reverse polarity diode fitted
- 'Stage Programmable' version available with 32 sounds and 3 remotely selectable stages
- Degree of protection IP66 / IP67
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	alarm sounder
Sound pressure level, maximum	117 dB @ 1 m , 108 dB @ 3 m
Sound pressure level, nominal	110 dB @ 1 m +/- 3 dB - sound 2 , 101 dB @ 3 m
Sound pressure level, control	72 ... 110 dB , sound 2
Effective sound range	100 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3
Stage switching	negative or positive

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Horn	fiber reinforced ABS, UL94-V0 and 5VA
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 3 kg , AC: 3.2 kg
Dimensions	
External dimension (A)	262.6 mm
External dimension (B)	153.6 mm
External dimension (C)	100 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Maximum external dimension (K1)	181 mm
Grounding	external grounding bolt M5

Technical Data

Ambient conditions

Ambient temperature -50 ... 70 °C (-58 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate KEMA 99 ATEX 6312 X

Marking

Ex II 2 GD
Ex d IIB T*, T4 @ Ta +70 °C
Ex d IIC T*, T4 @ Ta +55 °C
Ex tb IIC T** °C Db
T100 °C @ Ta +55 °C, T115 °C @ Ta +70 °C

International approvals

IECEx approval IECEx KEM 10.0003X

INMETRO approval 10-IEEx-0009

EAC approval RU C-GB.AA71.B.00109

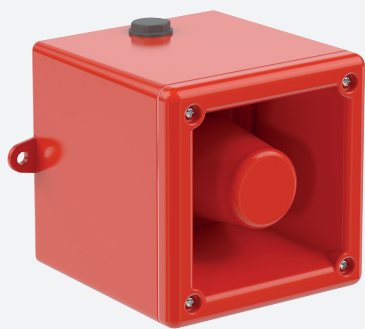
Conformity

Degree of protection EN 60529

General information

Scope of delivery device, 1 Stopping Plug, Instruction leaflet

Supplementary information



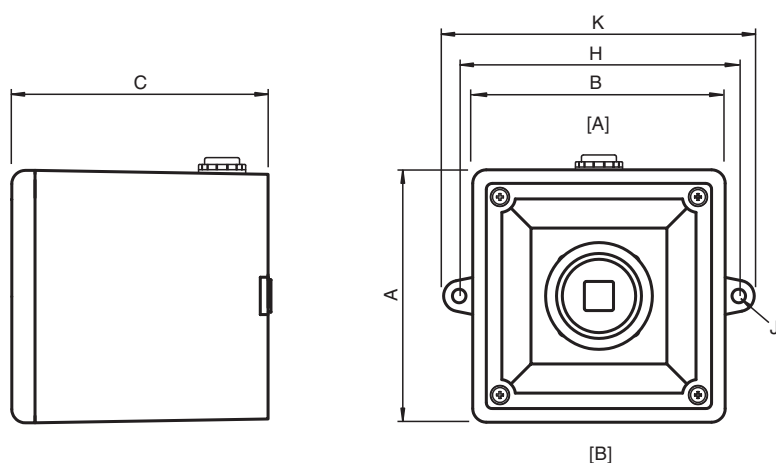
Alarm Sounder 105 dB Ex ia IIC

PF-IS-A105N*

- Available with custom sound and frequency configurations
- Duplicate cable terminations for daisy-chain installations
- Input overload and reverse current protection
- FM approval



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	25 mA @ 24 V via 28 V 300 Ω zener barrier
Terminal capacity	0.5 ... 2.5 mm ²
Function	alarm sounder
Sound pressure level, nominal	105 dB @ 1 m +/- 3 dB - sound 2 , 96 dB @ 3 m
Sound pressure level, control	96 ... 105 dB , sound 2
Effective sound range	60 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3

Mechanical specifications

Degree of protection	IP66
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	0.75 kg
Dimensions	
External dimension (A)	130 mm
External dimension (B)	130 mm
External dimension (C)	133.5 mm
Mounting holes distance (H)	144 mm
Mounting holes diameter (J)	7 mm
Maximum external dimension (K)	160 mm

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 04 ATEX 2301X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEX approval	IECEX SIR 04.0038X
EAC approval	RU C-GB.MH04.B.00048

Conformity

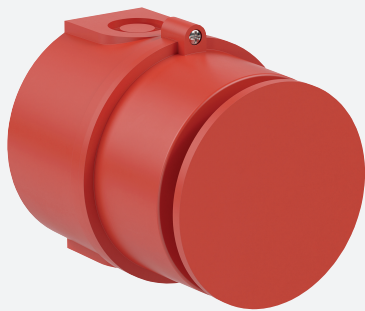
Degree of protection	EN 60529
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General information

Scope of delivery	device , Instruction leaflet
Supplementary information	

Alarm Sounder 100 dB Ex ia IIC

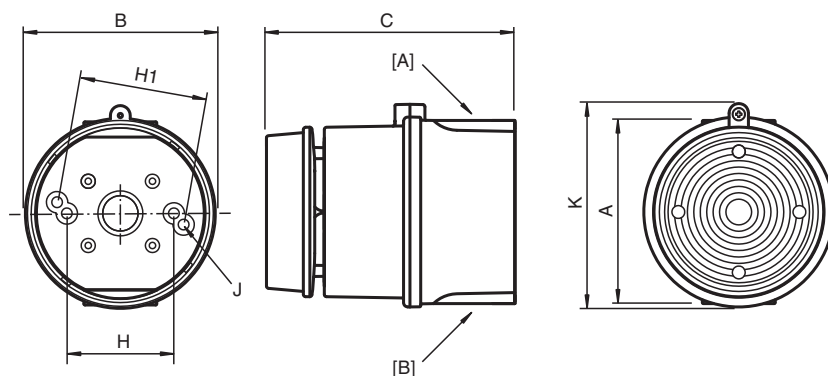
PF-IS-mA1*



- Available with custom sound configurations
- Input overload and reverse current protection
- Automatic synchronisation with systems operation
- FM approval



Dimensions



Dimension values see data table.
Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	25 mA @ 24 V via 28 V 300 Ω zener barrier
Terminal capacity	0.5 ... 2.5 mm ²
Function	alarm sounder
Sound pressure level, nominal	100 dB @ 1 m +/- 3 dB - sound 2 , 91 dB @ 3 m
Sound pressure level, control	90 ... 100 dB , sound 2
Effective sound range	40 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3

Mechanical specifications

Degree of protection	IP65
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	0.75 kg
Dimensions	
External dimension (A)	85.5 mm
External dimension (B)	88.7 mm
External dimension (C)	99 mm
Mounting holes distance (H)	50 mm
Mounting holes distance (H1)	60 mm
Mounting holes diameter (J)	5 mm
Maximum external dimension (K)	95 mm

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 05 ATEX 2084X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEX approval	IECEX SIR 06.0045X
EAC approval	RU C-GB.MH04.B.00048

Conformity

Degree of protection	EN 60529
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General information

Scope of delivery	device , Instruction leaflet
Supplementary information	



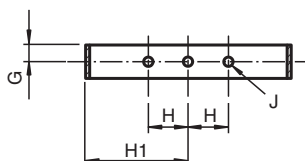
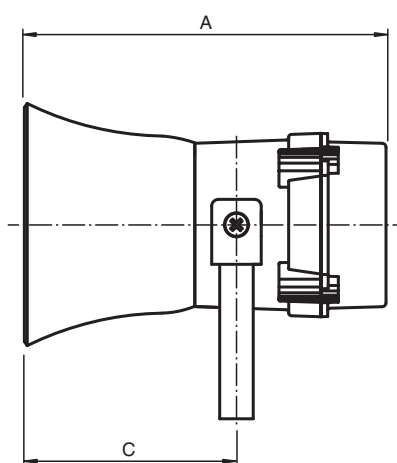
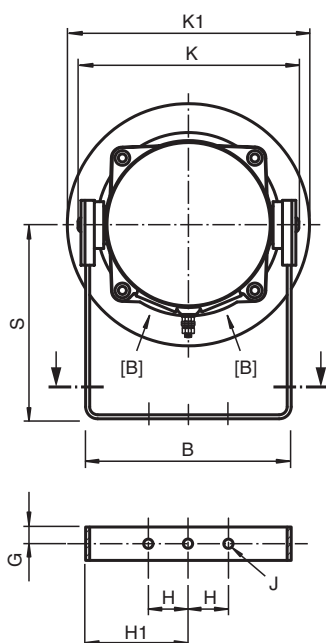
Alarm Sounder 113 dB Ex nA

PF-E2xS1-F*

- 'Stage Programmable' version available with 45 sounds and 3 remotely selectable stages
- Automatic synchronisation with systems operation
- Available with custom sound and frequency configurations
- Duplicate cable terminations for daisy-chain installations
- Ratchet adjustable stainless steel 'U' bracket



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included
Function	alarm sounder
Sound pressure level, maximum	116 dB @ 1 m , 107 dB @ 3 m
Sound pressure level, nominal	113 dB @ 1 m +/- 3 dB - sound 2 , 104 dB @ 3 m
Sound pressure level, control	105 ... 113 dB , sound 2
Effective sound range	100 m @ 1 kHz
Number of sounds	45 , UKOOA / PFEER compliant
Number of stages	3

Mechanical specifications

Degree of protection	IP66 acc. to EN 60529 IP64 acc. to EN 60079-0 type rating per UL50E/NEMA2 50: 4/4X/13
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x plastic
Material	
Enclosure	PPS and fiber reinforced ABS, UL94-V0 and 5VA
Horn	fiber reinforced ABS, UL94-V0 and 5VA
Finish	inherent color black
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 2.5 kg , AC: 3 kg
Dimensions	
External dimension (A)	273.1 mm
External dimension (B)	142 mm
External dimension (C)	123 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	160 mm
Maximum external dimension (K)	166 mm
Maximum external dimension (K1)	181 mm
Grounding	external grounding bolt M5

Technical Data

Ambient conditions

Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	DEMKO 06 ATEX 0421554X
Marking	Ⓔ II 3 GD Ex nA IIC T* Gc , T4 @ Ta +55 °C Ex tc IIIC T** Dc , T85 °C @ Ta +55 °C

International approvals

UL approval	
cULus	E230764
IECEx approval	IECEx ULD 14.0012X

Conformity

Degree of protection	EN 60529
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General information

Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	



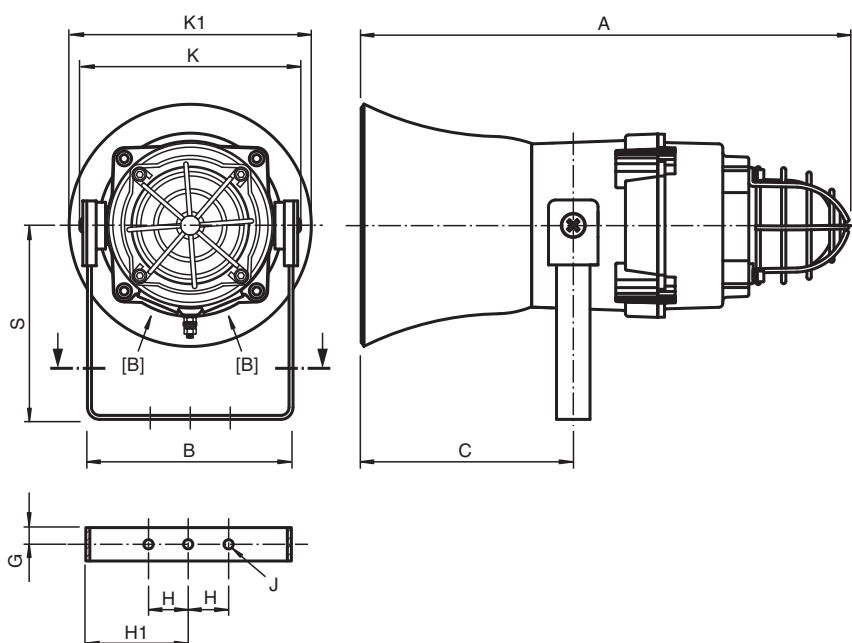
Alarm Sounder 110 dB with Beacon Xenon 250 cd Ex d IIB

PF-BExCS11005-DPF*

- UV stable PC field replaceable lens colour filter
- 'Stage Programmable' version available with 32 sounds and 3 remotely selectable stages
- Automatic synchronisation with systems operation
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems
- Degree of protection IP66 / IP67
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket
- Xenon tube mechanically secured against shock and vibrations



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	alarm sounder
Sound pressure level, maximum	117 dB @ 1 m , 108 dB @ 3 m
Sound pressure level, nominal	110 dB @ 1 m +/- 3 dB - sound 2 , 101 dB @ 3 m
Sound pressure level, control	72 ... 110 dB , sound 2
Effective sound range	100 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3
Stage switching	negative or positive
Function 2	flashing beacon
Lens color	red , yellow , blue , green , further on request
Energy	5 J
Flash rate	1 Hz
Luminous intensity, peak, calculated	500000 cd calculated from energy
Luminous intensity, peak, measured	39463 cd measured according to I.E.S.
Effective luminous intensity, calculated	250 cd calculated from energy
Effective luminous intensity, measured	120 cd measured according to I.E.S.
Illuminant, type	xenon tube
Illuminant, life	Luminous intensity reduced to 70% after 5 million flashes

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Horn	fiber reinforced ABS, UL94-V0 and 5VA
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 4.8 kg , AC: 5 kg
Dimensions	
External dimension (A)	365 mm

Technical Data

External dimension (B)	153.6 mm
External dimension (C)	162 mm
Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Maximum external dimension (K1)	181 mm
Grounding	external grounding bolt M5
Ambient conditions	
Ambient temperature	-50 ... 70 °C (-58 ... 158 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	KEMA 01 ATEX 2223 X
Marking	Ⓔ II 2 GD Ex d IIB T* Gb Ex tb IIIC T** °C Db T5 @ Ta +40 °C , T4 @ Ta +70 °C T110 °C @ Ta +55 °C , T125 °C @ Ta +70 °C
International approvals	
IECEx approval	IECEx KEM 10.0025X
INMETRO approval	16-IEEx-0034
EAC approval	RU C-GB.AA71.B.00109
Conformity	
Degree of protection	EN 60529
General information	
Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	



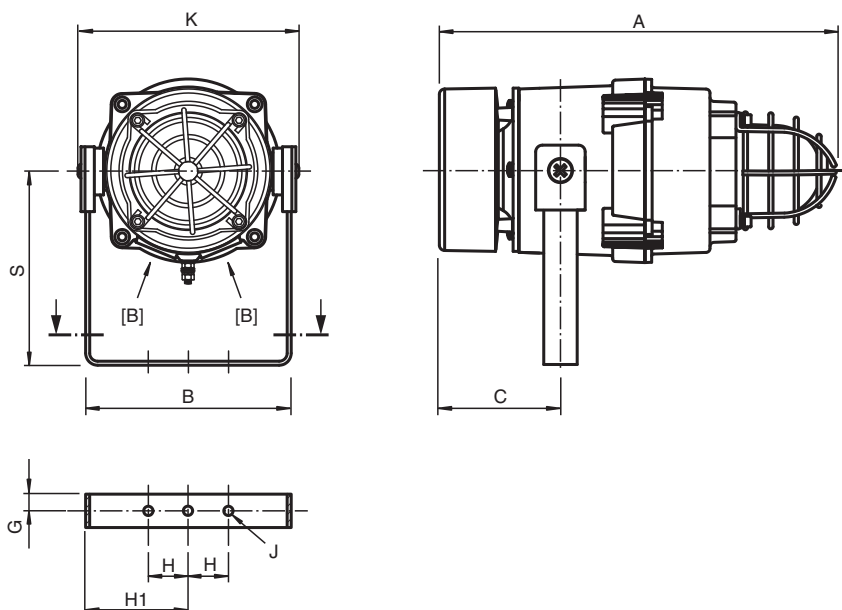
Alarm Sounder 110 dB with Beacon LED 160 cd Ex d IIB

PF-BExCS110-L2-DPR*

- 'Stage Programmable' version available with 32 sounds and 3 remotely selectable stages
- Automatic synchronisation with systems operation
- Reverse polarity diode fitted
- Degree of protection IP66 / IP67
- Marine grade and corrosion proof LM6 aluminium enclosure
- Ratchet adjustable stainless steel 'U' bracket
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems
- Omni-directional sound output
- UV stable PC field replaceable lens colour filter



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included EOL resistors (AC) or diodes (DC) available on request
Function	alarm sounder
Sound pressure level, maximum	115 dB @ 1 m , 106 dB @ 3 m
Sound pressure level, nominal	110 dB @ 1 m +/- 3 dB - sound 2 , 101 dB @ 3 m
Sound pressure level, control	72 ... 110 dB , sound 2
Effective sound range	100 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3
Stage switching	negative or positive
Function 2	flashing beacon
Lens color	red , yellow , blue , green , further on request
Flash mode	flash rate: 1 Hz / 1.5 Hz / 2 Hz double strike / triple strike flash steady light high power / low power
Effective luminous intensity	87 cd @ steady light high power 160 cd @ 1 Hz flash
Illuminant, type	array of 4x high-intensity Cree® LED
Illuminant, life	60000 hours

Mechanical specifications

Degree of protection	IP66/IP67
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x brass nickel-plated
Material	
Enclosure	Aluminum LM6
Horn	fiber reinforced ABS, UL94-V0 and 5VA
Finish	chromated, powder coated RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 4.8 kg , AC: 5 kg
Dimensions	
External dimension (A)	296.7 mm
External dimension (B)	153.6 mm
External dimension (C)	90.5 mm

Technical Data

Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	76.8 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	145 mm
Maximum external dimension (K)	165 mm
Grounding	external grounding bolt M5
Ambient conditions	
Ambient temperature	-50 ... 70 °C (-58 ... 158 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	KEMA 01 ATEX 2223 X
Marking	Ⓜ II 2 GD Ex d IIB T* Gb Ex tb IIIC T** °C Db T5 @ Ta +50 °C , T4 @ Ta +70 °C T70 °C @ Ta +40 °C , T85 °C @ Ta +55 °C , T100 °C @ Ta +70 °C
International approvals	
IECEx approval	IECEx KEM 10.0025X
EAC approval	RU C-GB.AA71.B.00109
Conformity	
Degree of protection	EN 60529
General information	
Scope of delivery	device , 1 Stopping Plug , Instruction leaflet
Supplementary information	



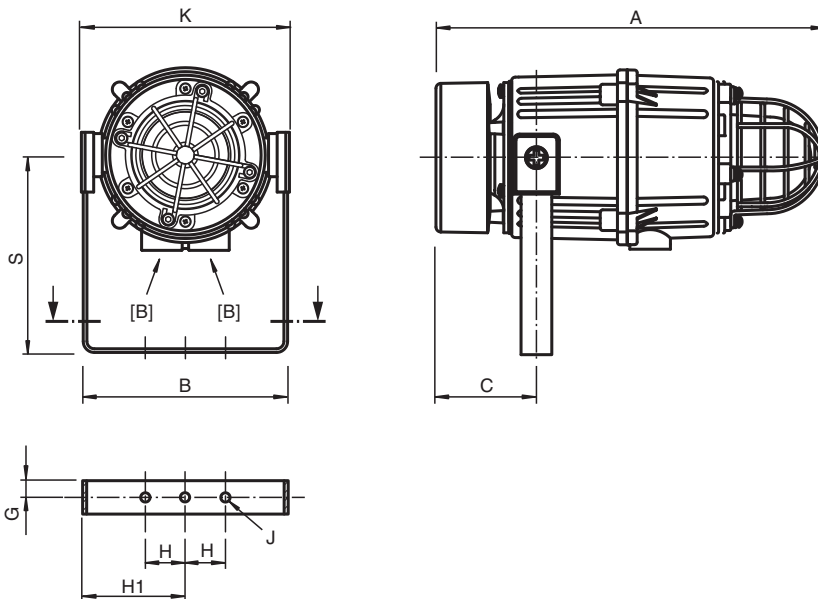
Alarm Sounder 110 dB with Beacon LED 160 cd Ex nA

PF-E2xC1LD2*

- Automatic synchronisation with systems operation
- Ratchet adjustable stainless steel 'U' bracket
- Choice of five flash rates: 1 Hz, 1.5 Hz, 2 Hz, double and triple flash
- Corrosion proof PPS enclosure
- Duplicate cable terminations for daisy-chain installations
- Glass lens and stainless steel guard
- High and low power steady modes
- Degree of protection IP66 / IP67, NEMA Type 4/4X
- UV stable PC field replaceable lens colour filter
- Omni-directional sound output



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

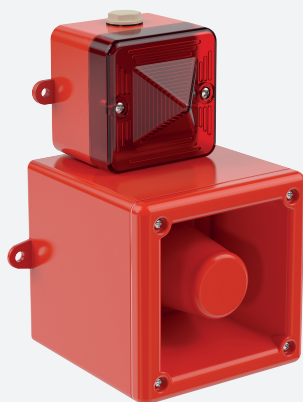
Operating voltage	240 V AC , 115 V AC , 24 V DC , further on request
Terminal capacity	0.5 ... 2.5 mm ²
Line monitoring	blocking diode included
Function	alarm sounder
Sound pressure level, maximum	114 dB @ 1 m , 107 dB @ 3 m
Sound pressure level, nominal	110 dB @ 1 m +/- 3 dB - sound 2 , 104 dB @ 3 m
Sound pressure level, control	105 ... 113 dB , sound 2
Effective sound range	100 m @ 1 kHz
Number of sounds	45 , UKOOA / PFEER compliant
Number of stages	3
Function 2	flashing beacon
Lens color	red , yellow , blue , green , further on request
Flash mode	flash rate: 1 Hz / 1.5 Hz / 2 Hz double strike / triple strike flash steady light high power / low power
Effective luminous intensity	87 cd @ steady light high power 160 cd @ 1 Hz flash
Illuminant, type	array of 4x high-intensity Cree® LED
Illuminant, life	60000 hours

Mechanical specifications

Degree of protection	IP66 acc. to EN 60529 IP64 acc. to EN 60079-0 type rating per UL50E/NEMA2 50: 4/4X/13
Cable entry face B	
M20 quantity	2
M20 type	metric ISO pitch 1.5 mm
M20 info	Stopping Plug 1x plastic
Material	
Enclosure	PPS and fiber reinforced ABS, UL94-V0 and 5VA
Glass	Borosilicate glass
Finish	inherent color black
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	DC: 3 kg , AC: 3.5 kg
Dimensions	
External dimension (A)	316 mm
External dimension (B)	166 mm
External dimension (C)	81 mm

Technical Data

Mounting holes distance (G)	12.5 mm
Mounting holes distance (H)	30 mm
Mounting holes distance (H1)	83 mm
Mounting holes diameter (J)	7 mm
Depth mounting frame (S)	160 mm
Maximum external dimension (K)	170.6 mm
Ambient conditions	
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	DEMKO 06 ATEX 0421554X
Marking	Ⓜ II 3 GD Ex nA IIC T* Gc , T3 @ Ta +55 °C Ex tc IIIC T** Dc , T90 °C @ Ta +40 °C , T105 °C @ Ta +55 °C
International approvals	
UL approval	
cULus	E230764
IECEx approval	IECEx ULD 14.0012X
Conformity	
Degree of protection	EN 60529
General information	
Scope of delivery	device , 2 Stopping Plug , Instruction leaflet
Supplementary information	



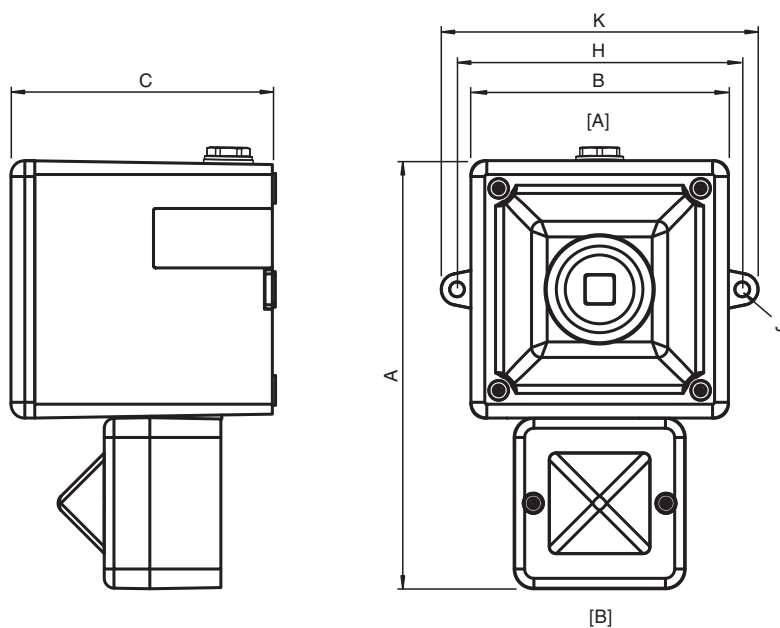
Alarm Sounder 105 dB with Beacon LED 48 cd Ex ia IIC

PF-IS-A105N*-IS-L101L*

- Available with custom sound and frequency configurations
- Duplicate cable terminations for daisy-chain installations
- Input overload and reverse current protection
- Prismatic lens optimises LED effectiveness
- FM approval



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	25 mA @ 24 V via 28 V 300 Ω zener barrier
Terminal capacity	0.5 ... 2.5 mm ²
Function	alarm sounder
Lens color	red , amber and clear clear with LEDs in green or blue
Sound pressure level, nominal	105 dB @ 1 m +/- 3 dB - sound 2 , 96 dB @ 3 m
Sound pressure level, control	96 ... 105 dB , sound 2
Effective sound range	60 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3
Function 2	flashing beacon
Flash mode	double flash at 2 Hz and 1 Hz
Effective luminous intensity, measured	48 cd measured according to I.E.S.
Illuminant, type	array of 6x high-intensity LED

Mechanical specifications

Degree of protection	IP66
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	1.15 kg
Dimensions	
External dimension (A)	216.2 mm
External dimension (B)	130 mm
External dimension (C)	133.5 mm
Mounting holes distance (H)	144 mm
Mounting holes diameter (J)	7 mm
Maximum external dimension (K)	160 mm

Technical Data

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 04 ATEX 2301X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

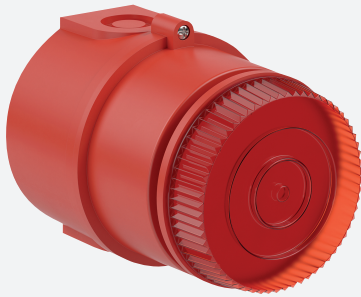
FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEx approval	IECEx SIR 04.0038X
EAC approval	RU C-GB.MH04.B.00048

Conformity

Degree of protection	EN 60529
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General information

Scope of delivery	device , Instruction leaflet
Supplementary information	



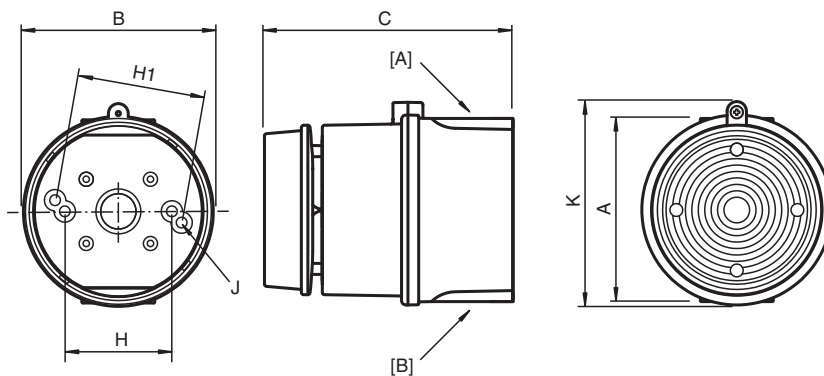
Alarm Sounder 100 dB with Beacon LED 23 cd Ex ia IIC

PF-IS-mC1*

- Available with custom sound configurations
- Input overload and reverse current protection
- Prismatic lens optimises LED effectiveness
- FM approval



Dimensions



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance
H	Mounting holes distance
H1	Mounting holes distance from edge of bracket
J	Mounting holes diameter
K	Maximum outer dimension with bracket
K1	Maximum outer dimension with horn
S	Depth of mounting bracket
[A] ... [B]	Cable entry faces

Technical Data

Electrical specifications

Operating voltage	16 ... 28 V DC , via zener barrier or galvanic isolator
Operating current	30 mA @ 24 V via 28 V 300 Ω zener barrier
Terminal capacity	0.5 ... 2.5 mm ²
Function	alarm sounder
Lens color	red , amber and clear clear with LEDs in green or blue
Sound pressure level, nominal	100 dB @ 1 m +/- 3 dB - sound 2 , 91 dB @ 3 m
Sound pressure level, control	90 ... 100 dB , sound 2
Effective sound range	40 m @ 1 kHz
Number of sounds	32 , UKOOA / PFEER compliant
Number of stages	3
Function 2	flashing beacon
Flash mode	double flash at 2 Hz and 1 Hz
Effective luminous intensity, measured	23 cd measured according to I.E.S.
Illuminant, type	array of 6x high-intensity LED

Mechanical specifications

Degree of protection	IP65
Cable entry face A	
M20 quantity	1
M20 type	thru-holes
M20 info	Stopping Plug 1x plastic
Cable entry face B	
M20 quantity	1
M20 type	thru-holes
Material	
Enclosure	PC (Polycarbonate) fiber reinforced ABS, UL94-V0 and 5VA
Finish	RAL 3000 (red)
Mounting bracket	stainless steel 1.4301 / AISI 304
Mass	1.15 kg
Dimensions	
External dimension (A)	85.5 mm
External dimension (B)	88.7 mm
External dimension (C)	116 mm
Mounting holes distance (H)	50 mm
Mounting holes distance (H1)	60 mm
Mounting holes diameter (J)	5 mm
Maximum external dimension (K)	95 mm

Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Data for application in connection with hazardous areas

EU-type examination certificate	SIRA 05 ATEX 2084X
Marking	Ⓔ II 1 G Ex ia IIC T* Ga , T4 @ Ta +60 °C

International approvals

FM approval	
Approved for	Class I, Division 1, Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIC T4
IECEx approval	IECEx SIR 06.0045X
EAC approval	RU C-GB.MH04.B.00048

Conformity

Degree of protection	EN 60529
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General information

Electronic Earthing System (Resistive and Capacitive)

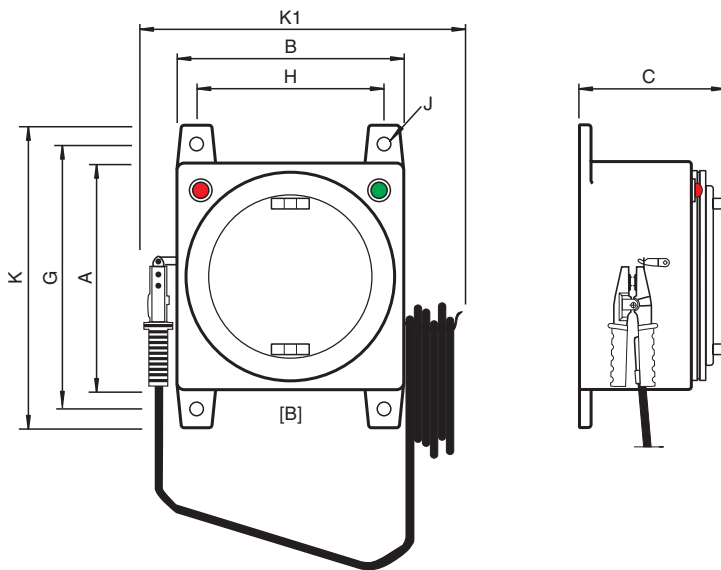
GUB3L*DMT*



- Elimination of electrostatic charges
- Copper-free aluminum enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIC
- Degree of protection: IP 65



Dimensions



Dimensions

Dimension values see data table.

Real values might differ slightly due to manufacturing tolerances.

Dimensions are valid for standard enclosures and IP66 variants only.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of mounting brackets
K1	Maximum external dimension with clamp and cable hook
[B]	Cable entry face

Technical Data

Electrical specifications

Operating voltage	230 V AC , optional 110 V AC
Function	elimination of electrostatic charges
Lens color	red and green
Operator action	Cable: hydrocarbon-resistant, 3x 3 mm ² , length 8 m. Other lengths on request. Connection clamp: Aluminum with phosphor bronze contacts, isolating thermoplastic handles

Mechanical specifications

Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	threaded round cover
Cover fixing	flamepath thread
Cover seal	none, O-ring for IP66/67
Flamepath grease	petroleum jelly
Degree of protection	IP65 , Enclosure IP66 (IP66/67 with O-ring)
Cable entry	face B
Cable entry face B	
M25 quantity	2
M25 type	NPT 3/4"
M25 info	as standard, other on request
Material	
Enclosure	aluminum alloy
Finish	epoxy coated RAL 7005 (grey)
O-Ring	silicone
Mass	approx. 25 kg
Dimensions	values might differ slightly due to casting and manufacturing tolerances
External dimension (A)	360 mm
External dimension (B)	360 mm
External dimension (C)	245 mm
Mounting holes distance (G)	395 mm
Mounting holes distance (H)	318 mm
Mounting holes diameter (J)	10 mm
Number of mounting brackets	4
Maximum external dimension (K)	430 mm
Maximum external dimension (K1)	510 mm
Grounding	M6 external grounding points

Ambient conditions

Technical Data

Ambient temperature	-20 ... 40 °C (-4 ... 104 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0035X
Marking	Ⓔ II 2 GD Ex db [ia Ga] IIC T6 Gb, II 2 GD Ex tb [iaD] IIIC T85°C Db
Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
General information	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	

Electronic Earthing System (Resistive and Capacitive)

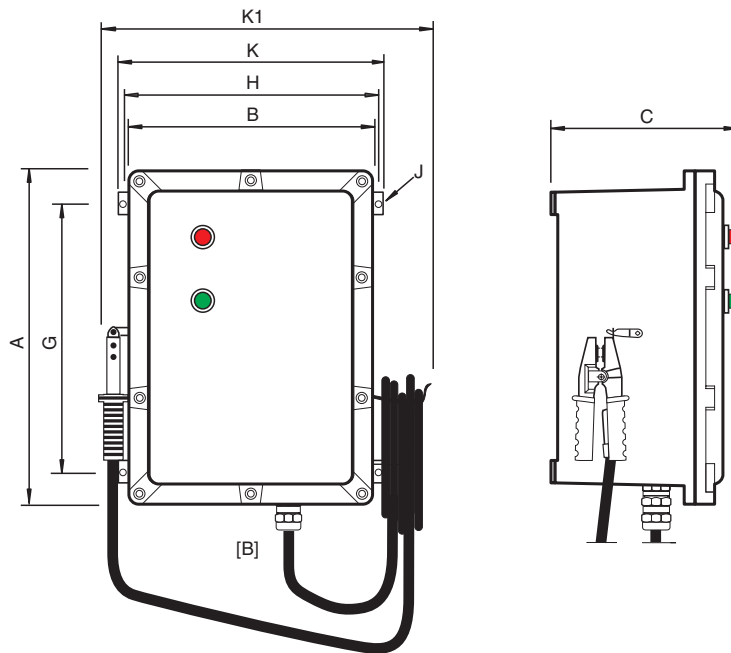
EJB6A*DMT*



- Elimination of electrostatic charges
- Copper-free aluminum enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIB+H₂
- Degree of protection: IP 65



Dimensions



Dimensions

Dimension values see data table.

Real values might differ slightly due to manufacturing tolerances.

Dimensions are valid for standard enclosures and IP66 variants only.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of mounting brackets
K1	Maximum external dimension with clamp and cable hook
[B]	Cable entry face

Technical Data

Electrical specifications

Operating voltage	230 V AC , optional 110 V AC
Function	elimination of electrostatic charges
Lens color	red and green
Operator action	Cable: hydrocarbon-resistant, 3x 3 mm ² , length 8 m. Other lengths on request. Connection clamp: Aluminum with phosphor bronze contacts, isolating thermoplastic handles

Mechanical specifications

Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	detachable , optional hinges
Cover fixing	stainless steel socket cap head screws
Screws	M8
Number	10
Tightening torque	20 Nm
Material of screws	stainless steel
Yield stress	min. 450 N/mm ²
Cover seal	none, O-ring for IP66/67
Flamepath grease	Greasil MS4 or NEVER SEEZ Marine Grade
Degree of protection	IP65 , Enclosure IP66 (IP66/67 with O-ring)
Cable entry	face B
Cable entry face B	
M25 quantity	2
M25 type	NPT 3/4"
M25 info	as standard, other on request
Material	
Enclosure	aluminum alloy
Finish	epoxy coated RAL 7005 (grey)
O-Ring	silicone
Mass	approx. 13 kg
Dimensions	values might differ slightly due to casting and manufacturing tolerances
External dimension (A)	332 mm
External dimension (B)	232 mm
External dimension (C)	185 mm
Mounting holes distance (G)	230 mm
Mounting holes distance (H)	196 mm
Mounting holes diameter (J)	8 mm

Technical Data

Maximum external dimension (K)	216 mm
Maximum external dimension (K1)	380 mm
Grounding	M6 external grounding points
Ambient conditions	
Ambient temperature	-20 ... 40 °C (-4 ... 104 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0022X
Marking	Ⓔ II 2 GD Ex db [ia Ga] IIB+H ₂ T6 Gb, II 2 GD Ex tb [iaD] IIIB T85 °C Db
International approvals	
IECEX approval	IECEX INE 14.0029X
UKCA approval	CML 21 UKEX 1424X
Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
General information	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	

Electronic Earthing System (Resistive and Capacitive)

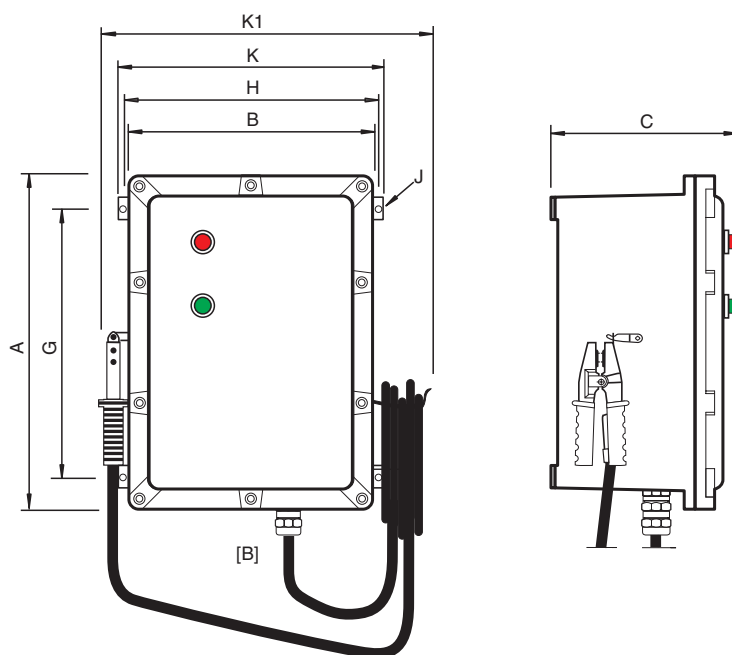
EJBX6A*DMT*



- Elimination of electrostatic charges
- Stainless Steel enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIB+H₂
- Degree of protection: IP 65



Dimensions



Dimensions

Dimension values see data table.

Real values might differ slightly due to manufacturing tolerances.

Dimensions are valid for standard enclosures and IP66 variants only.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of mounting brackets
K1	Maximum external dimension with clamp and cable hook
[B]	Cable entry face

Technical Data

Electrical specifications

Operating voltage	230 V AC , optional 110 V AC
Function	elimination of electrostatic charges
Lens color	red and green
Operator action	Cable: hydrocarbon-resistant, 3x 3 mm ² , length 8 m. Other lengths on request. Connection clamp: Aluminum with phosphor bronze contacts, isolating thermoplastic handles

Mechanical specifications

Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	detachable , optional hinges
Cover fixing	stainless steel socket cap head screws
Screws	M8
Number	10
Tightening torque	20 Nm
Material of screws	stainless steel
Yield stress	min. 450 N/mm ²
Cover seal	none, O-ring for IP66/67
Flamepath grease	Greasil MS4 or NEVER SEEZ Marine Grade
Degree of protection	IP65 , Enclosure IP66 (IP66/67 with O-ring)
Cable entry	face B
Cable entry face B	
M25 quantity	2
M25 type	NPT 3/4"
M25 info	as standard, other on request
Material	
Enclosure	AISI 316L stainless steel
Finish	shot peened
O-Ring	silicone
Mass	approx. 23 kg
Dimensions	values might differ slightly due to manufacturing tolerances
External dimension (A)	309 mm
External dimension (B)	209 mm
External dimension (C)	185 mm
Mounting holes distance (G)	233 mm
Mounting holes distance (H)	196 mm
Mounting holes diameter (J)	8 mm

Technical Data

Maximum external dimension (K)	216 mm
Maximum external dimension (K1)	360 mm
Grounding	M6 external grounding points
Ambient conditions	
Ambient temperature	-20 ... 40 °C (-4 ... 104 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0022X
Marking	Ⓔ II 2 GD Ex db [ia Ga] IIB+H ₂ T6 Gb, II 2 GD Ex tb [iaD] IIIB T85 °C Db
International approvals	
UKCA approval	CML 21 UKEX 1424X CML 21 UKEX 1425U
Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
General information	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	

Electronic Earthing System (Resistive and Capacitive)

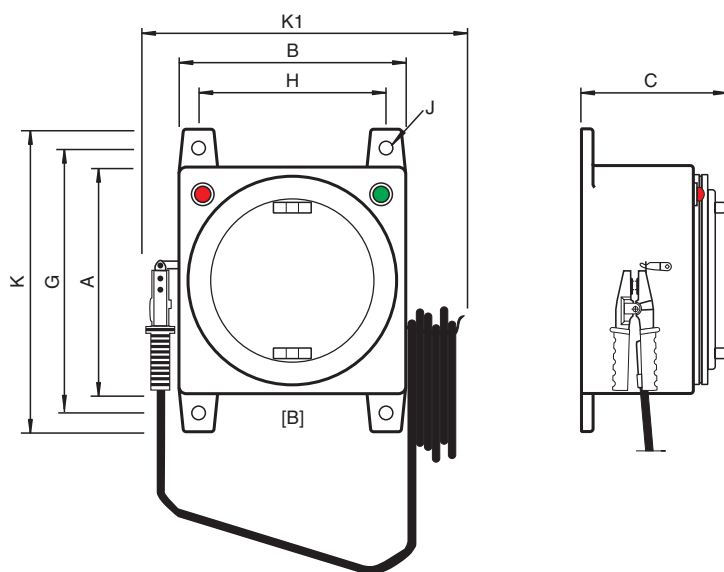
GUBX3L*DMT*



- Elimination of electrostatic charges
- Stainless Steel enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIC
- Degree of protection: IP 65



Dimensions



Dimensions

Dimension values see data table.

Real values might differ slightly due to manufacturing tolerances.

Dimensions are valid for standard enclosures and IP66 variants only.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of mounting brackets
K1	Maximum external dimension with clamp and cable hook
[B]	Cable entry face

Technical Data

Electrical specifications

Operating voltage	230 V AC , optional 110 V AC
Function	elimination of electrostatic charges
Lens color	red and green
Operator action	Cable: hydrocarbon-resistant, 3x 3 mm ² , length 8 m. Other lengths on request. Connection clamp: Aluminum with phosphor bronze contacts, isolating thermoplastic handles

Mechanical specifications

Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	threaded round cover
Cover fixing	flamepath thread
Cover seal	none, O-ring for IP66/67
Flamepath grease	petroleum jelly
Degree of protection	IP65 , Enclosure IP66 (IP66/67 with O-ring)
Cable entry	face B
Cable entry face B	
M25 quantity	2
M25 type	NPT 3/4"
M25 info	as standard, other on request
Material	
Enclosure	AISI 316L stainless steel
Finish	shot peened
O-Ring	silicone
Mass	approx. 96 kg
Dimensions	values might differ slightly due to manufacturing tolerances
External dimension (A)	360 mm
External dimension (B)	360 mm
External dimension (C)	225 mm
Mounting holes distance (G)	395 mm
Mounting holes distance (H)	318 mm
Mounting holes diameter (J)	10 mm
Number of mounting brackets	4
Maximum external dimension (K)	430 mm
Maximum external dimension (K1)	510 mm
Grounding	M6 external grounding points

Ambient conditions

Technical Data

Ambient temperature	-20 ... 40 °C (-4 ... 104 °F)
Data for application in connection with hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0035X
Marking	Ⓔ II 2 GD Ex db [ia Ga] IIC T6 Gb, II 2 GD Ex tb [iaD] IIIC T85°C Db
Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
General information	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	

Features

- Elimination of electrostatic charges
- Enclosures copper-free aluminum or stainless steel
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIC
- Gas group IIB+H₂
- Degree of protection IP65

Function

The DMT Electronic Earthing System consists of a flameproof enclosure either for gas group IIB+H₂ or IIC. Integrated is an electronic resistance/ capacity device. Its modularity by dip switches placed on the electronic card allows the selection of different capacity or resistance sensibility levels. External features are a support hook and an earthing clamp complete with 8 m of cable for measuring the continuity towards the earth, in order to eliminate electrostatic charges. Red and green LED indicators on the enclosure front indicate the operational status. The enclosures are available in copper-free aluminum alloy or high-quality stainless steel. DMT electronic earthing systems are used during loading operations of tankers, drums and railway trucks in hazardous areas.



Type Code / Model Number

Enclosure type

EJB enclosure Ex d IIB+H₂

GUB enclosure Ex d IIC

Material

copper-free aluminum

X stainless steel

Enclosure size

6A EJB size - see dimensions data table

3L GUB size - see dimensions data table

Electrical circuits

I.IP integrated panel with intrinsically safe circuits

Variant number

Y-xxxxxx without intrinsically safe circuits

Device type

DMT14 electronic earthing system

Cable length

/xx length of clamp cable [m]

Operating voltage

23 230 V AC

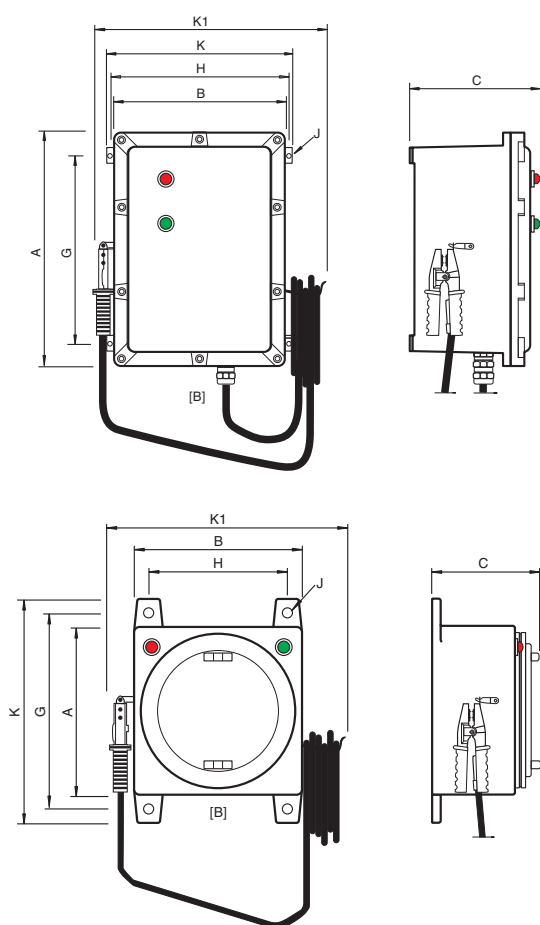
11 110 V AC

EJB		6A	I.IP	-Y277198	DMT14	/08	23	
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Example: Electronic earthing system for gas group IIB+H₂ based on EJB size 6A in aluminum with 8 m of cable and 230 V AC operating voltage

Technical Data	
Electrical specifications	
Operating voltage	230 V AC, optional 110 V AC
Function	elimination of electrostatic charges
Lens color	red and green
Operator action	Cable: hydrocarbon-resistant, 3x 3 mm ² , length 8 m. Other lengths on request. Connection clamp: Aluminum with phosphor bronze contacts, isolating thermoplastic handles
Mechanical specifications	
Dimensions	see data tables values might differ slightly due to manufacturing tolerances
Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	see data tables
Cover fixing	see data tables
Cover seal	none, O-ring for IP66/67
Degree of protection	IP65, enclosure IP66 (IP66/67 with O-ring)
Cable entry	face B
Quantity	2
Type	NPT 3/4" as standard, other on request
Grounding	M6 external grounding points
Mass	see data tables
Material	
Enclosure	Aluminum alloy or AISI 316L, (1.4404) stainless steel
Finish	epoxy coated RAL 7005 (grey) or shot peened
O-Ring	silicone
Flamepath grease	see data tables
Ambient conditions	
Ambient temperature	-20 ... 40 °C (-4 ... 104 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	see data tables
Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
General information	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable.

Dimensions



Legend

A	Height
B	Width
C	Depth
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension with mounting bracket
K1	Maximum external dimension with clamp and cable hook
[B]	Cable entry face

Dimension values see data table.
Image and drawing are generic for this device type and may deviate from the specific variant.

top drawing: EJB6A*
bottom drawing: GUB3L*

Dimensions and Data for Application in Connection with Hazardous Areas

Type	Material	External dimensions [mm]					Mounting [mm]			Mass approx. [kg]	EU-Type Examination Certificate	Marking
		A	B	C	K	K1	G	H	J			
EJB6A*DMT*	Aluminum alloy	332	232	185	216	380	230	196	8	13	INERIS 14 ATEX 0022X	Ex db [ia Ga] IIB+H ₂ T6 Gb Ex tb [iaD] IIIB T85 °C Db
EJBX6A*DMT*	Stainless steel	309	209	185	216	360	233	196	8	23		
GUB3L*DMT*	Aluminum alloy	360	360	245	430	510	395	318	10	25	INERIS 14 ATEX 0035X	Ex db [ia Ga] IIC T6 Gb Ex tb [iaD] IIIC T85 °C Db
GUBX3L*DMT*	Stainless steel	360	360	225	430	510	395	318	10	96		

Enclosure Details

Type	Material	Cover			Cover screws		
		Type	Fixing	Flamepath grease	Mx	qty.	Torque [Nm]
EJB6A*DMT*	Aluminum alloy	detachable, optional hinges	stainless steel socket cap head screws	Greasil MS4 or NEVER SEEZ Marine Grade	M8	10	20
EJBX6A*DMT*	Stainless steel						
GUB3L*DMT*	Aluminum alloy	threaded round cover	flamepath thread	petroleum jelly		-	
GUBX3L*DMT*	Stainless steel						

For details please refer to individual product datasheet
For further configurations please contact Pepperl+Fuchs

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Орел (4862)44-53-42
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