ARTIDOR

Explosion–Safe Products 2026

The comprehensive edition

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Handbook Explosion Safety
for gas and dust environments

Features

- Hard cover
- B5 format (176 x 247 mm)
- 141 pages
- 57 images
- 25 tables
- Full color
- ISBN 978-90-83371-11-5
- Available in Dutch, English and German

Price: € 39

Description

Daily practice proves time and again that explosion safety is a difficult subject. For many, it is a subject they only have to deal with occasionally and it is therefore difficult to tell the difference between the various zones, categories and protection methods. The underlying technical standards are constantly changing due to continuous improvement and globalization, and certification of explosion-safe equipment has become a compromise between European and American standards. It doesn't get any easier!

This book provides an overview and insight into the many aspects of explosion safety. It discusses the physical properties of gases and substances, the origins of the ATEX guidelines, assessing and avoiding explosion risks, technical and organizational measures against explosion hazards, the explosion safety document, potential ignition sources, protection methods against ignition (electrical and non-electrical), marking of equipment, certificates and legislation. This makes the book a good basis for every machine builder, manufacturer, buyer, installer and user who has to deal with explosion safety. The many images, diagrams and photos make the book easy to read. In addition, the book contains a complete overview of all concepts and an up-to-date overview of the relevant standards, guidelines and guides.

This book was produced in close collaboration with Notified Body CSA Group Bayern GmbH and CSA Group Testing UK Ltd.

Handbook Explosion Safety
for gas and dust environments

Ordering codes

Article number	Description	ISBN
AR-001/NL	Handboek Explosieveiligheid voor gas- en stofomgevingen	978-90-83371-10-8
AR-001/EN	Handbook Explosion Safety for gas and dust environments	978-90-83371-11-5
AR-001/DE	Handbuch Explosionsschutz für Gas- und Staubumgebungen	978-90-83371-12-2

Explosion-safe Motion Sensor AR-021
Based on radar detection technology

Features

- ATEX-certified
- Suitable for use in locations with gas and dust, zone 2 and 22
- Ingress protection level IP66
- Coated aluminum housing
- Max. output power up to 4,000 VA
- Opening angle of 140°
- Detection range adjustable from 1 – 8 m
- Light sensitivity adjustable from 3 – 3,000 lux
- Stainless steel mounting bracket included

II 3 G Ex nR IIC T6 Gc
II 3 D Ex tc IIIC T80°C Dc

Description

The Artidor motion sensor is based on the latest high frequent radar technology and therefore capable of detecting even the slightest movements.

Thanks to the wide opening angle and its 8 m detection range, any movement is detected. Even through doors, glass panes and thin walls, movements will be detected.

The sensor electronics offers an electrical output that can deliver up to 4.000 VA on resistive or light inductive loads and an extra potential free contact. The intelligent, microprocessor-based sensor technology switches the light ON and OFF again after the pre-set time. Most convenient, safe and both energy and cost saving.

The motion sensor can successfully be applied in porches, circulation areas, staircases, storerooms, cold storage rooms and business areas. The motion sensor meets the latest explosion safety requirements and can be applied in a wide range of locations such as at oil and gas production sites, in chemical and petrochemical industries, the pharmaceutical industry and the food industry.

The Artidor motion sensor is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas or dust hazardous areas and is CE marked.

NEN
STANDARDS COMMITTEE MEMBER

Explosion-safe Motion Sensor AR-021
Based on radar detection technology

Technical data

Explosion safety:	II 3 G Ex nR IIC T6 Gc, II 3 D Ex tc IIIC T80°C Dc
Applicable EU directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
CE conformity:	EN 60079-0:2018, EN 60079-15:2010, EN 60079-31:2014
Sensor:	5.8 GHz radar frequency, 1 mW transmission power
Detection range:	1 – 8 m, adjustable
Registration angle:	360° with 140° opening angle
Light sensitivity:	3 – 3,000 Lux
Preset time:	10 seconds – 12 minutes
Supply voltage:	230 VAC, 50 Hz
Switched power AC1:	4,000 VA (resistive and light inductive loads)
Rated current 250 VAC:	16 A continuous
Rated current 24 VDC:	2 A (potential free contacts 1 – 2 only)
Output:	Switched 230 VAC supply (L', N2) and potential free contact (1, 2)
Electrical connection:	Connection terminals 8 x 2.5 mm²
Material:	Die cast aluminum housing, RAL 7015, slate grey, polyamide frame with impact resistant safety glass
Entries:	M20 cable glands suitable for use with cables from Ø6 – Ø 14 mm
Ingress protection level:	IP66 according to EN 60529
Mounting bracket:	Stainless steel mounting bracket, mounting holes Ø6,5 (4x), mutual distance 60 x 60 mm
Ambient temperature:	-20 °C to +50 °C
Dimensions housing:	160 x 80 x 128 mm (incl. mounting bracket)
Weight:	1,340 grams (incl. mounting bracket)

Ordering codes

Type number	Details
AR-021	M20 cable glands suitable for use with cables from Ø6 – Ø 14 mm

Explosion-safe Twilight Switch AR-022
Suitable for use in zone 2 and 22

Features

- ATEX certified
- Suitable for use in locations with gas and dust, zone 2 and 22
- Ingress protection level IP66
- Coated aluminum housing
- Max. output power up to 4,000 VA
- Light sensitivity 10 – 300 Lux
- Delay ± 1 minute
- Mounting bracket included

II 3 G Ex nR IIC T6 Gc
II 3 D Ex tc IIIC T85°C Dc

Description

The Artidor AR-022 twilight switch is based on a highly sensitive photodiode and modern electronics and offers an electrical output that can deliver up to 4.000 VA on pure resistive or light inductive loads and an additional potential free contact.

The twilight switch can be applied successfully in circulation areas, staircases, storage spaces, cooling and freezing cells and business areas where safety and good visibility are important.

The twilight switch meets the latest explosion safety requirements and can be applied in a wide range of locations with potentially explosive atmosphere as a result of gas or dust.

The Artidor AR-022 twilight switch is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas or dust hazardous areas and is CE marked

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NEN STANDARDS COMMITTEE MEMBER

Explosion-safe Twilight Switch AR-022
Suitable for use in zone 2 and 22

Technical data

Explosion safety:	II 3 G Ex nR IIC T6 Gc, II 3 D Ex tc IIIC T80°C Dc
EU directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
Standards applied:	EN 60079-0:2018, EN 60079-15:2010 and EN 60079-31:2014
Light sensitive cell:	Photodiode
Light sensitivity:	10 – 300 Lux
Delay:	± 1 minute
Supply voltage:	230 VAC, 50 Hz
Switched power AC1:	4,000 VA (resistive and light inductive loads)
Rated current 250 VAC:	16 A continuous
Rated current 24 VDC:	2 A (potential free contacts 1 – 2 only)
Output:	Switched 230 VAC supply (L', N2) and potential free contact (1, 2)
Electrical connection:	Connection terminals 8 x 2.5 mm²
Material:	Die cast aluminum housing, RAL 7015, slate grey, polyamide frame with impact resistant safety glass
Entries:	M20 cable gland (2x) suitable for cables from 6 – 14 mm in diameter
Ingress protection level:	IP66 according to EN 60529
Mounting bracket:	Stainless steel mounting bracket, mounting holes Ø6,5 (4x), mutual distance 60 x 60 mm
Ambient temperature:	-20 °C to +50 °C
Dimensions housing:	160 x 80 x 128 mm (incl. mounting bracket)
Weight:	1,330 grams (incl. mounting bracket)

Ordering codes

Type number	Details
AR-022	M20 (2x) cable glands for cables from 6 – 14 mm in diameter

Explosion-safe Occupancy Sensor AR-024
Based on passive infrared technology

Features

- ATEX-certified
- Suitable for use in locations with gas and dust, zone 2 and 22
- Ingress protection level IP65
- Coated aluminum housing
- Registration angle circular 360°
- Range of coverage 24 x 44 m
- Dimmer setting 10 – 2.000 Lux
- Preset time 15 seconds – 30 minutes
- Mounting height 2 – 12,5 m
- Mounting bracket included, adjustable

II 3 G Ex ec mc IIC T6 Gc
II 3 D Ex mc tc IIIC T80˚C Dc

Description

The Artidor explosion-safe occupancy detector AR-024 is based on passive infrared technology and capable of detecting movements of heat sources. Thanks to the wide opening angle and its 12,5 m range, this detector is suitable for monitoring large areas.

The occupancy detector is designed for use inside large buildings for example warehouses and combines energy saving and the protection of the environment in addition to convenient lighting.

Motion detectors switch the light depending on movements and the ambient light. The sensor itself does not emit any radiation and is therefore called "passive". Unlike motion detectors, occupancy detectors can also switch off lighting if there is sufficient daylight, because of their advanced mixed light measurement (the principle on which occupancy detectors are based). Do not install detectors near heat sources like air-conditioning units, lights or radiators. The sensor electronics offers a potential free contact for switching up to 1,150 VA load.

The occupancy detector is mounted on top a coated aluminum housing. The explosion safety to gas and dust is arranged by the appliance of protection degrees against ignition "Increased safety", "molding" and "protected by enclosure".

The Artidor AR-024 occupancy detector is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas or dust hazardous areas and is CE marked.

Explosion-safe Occupancy Sensor AR-024
Based on passive infrared technology

Technical data

Explosion safety:	II 3 G Ex ec mc IIC T6 Gc, II 3 D Ex mc tc IIIC T80˚C Dc
Applicable EU directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
CE conformity:	EN 60079-0:2018, EN 60079-7:2015 / A1:2018, EN 60079-18:2015 / A1:2017 and EN 60079-31:2014
Sensor:	Passive infrared; 0,8 W power consumption
Mounting height:	2 – 15 m
Range of coverage:	An oval area of 24 x 44 m
Registration angle:	Circular 360°
Dimmer setting:	10 – 2,000 Lux
Preset time:	15 seconds – 30 minutes
Supply voltage:	110 - 240 VAC, 50 / 60 Hz
Switch power AC1:	1,150 VA (resistive and light inductive loads)
Output:	Potential free contact
Electrical connections:	Terminals 8 x 2,5 mm²
Material:	Die cast aluminum housing (RAL 7015, slate grey), cable glands nickel plated brass
Entries:	M20 cable glands (2x) for cables from 6 – 14 mm in diameter
Ingress protection:	IP 65 according to EN 60529
Mounting bracket:	Stainless steel mounting bracket, mounting holes Ø6,5 (4x), mutual distance 60 x 60 mm
Ambient temperature:	-25 ˚C to +50 ˚C
Housing dimensions (L x W x H):	120 x 120 x 195 mm (including mounting bracket, excluding cable glands)
Detector dimensions:	65 x Ø98 mm
Weight:	1,860 grams (incl. mounting bracket)

Ordering codes

Type number	Details
AR-024	M20 (2x) for cables from 6 – 14 mm in diameter

Explosion-safe Smoke Detector AR-025
Based on optical detection technology

Features

- ATEX certified
- Suitable for use in locations with gas, zone 2
- Power supply 12 V DC
- Max. switching capacity 1 A at 30 V DC
- Connections normally open or normally closed
- Suitable for connection to a (fire) alarm system
- Equipped with status indication
- Ingress protection level IP65
- Coated aluminum housing

⟨Ex⟩ II 3 G Ex ec mc IIC T6 Gc

Description

The explosion-safe Artidor AR-025 optical smoke detector reacts to visible smoke particles. If too much smoke enters its measuring chamber, an alarm is triggered. In the measuring chamber, an integrated infrared light source generates a light pulse every 8 seconds. Smoke particles from a fire change the light signal received by the light diode. A relay trips and the alarm center reports a fire alarm. The 12 V optical smoke detector is mounted on the ceiling in the center of the room. The minimum distance to the side wall should be 30cm. We recommend a separate smoke detector for each entrance area, staircase, living room and bedroom. By changing a jumper, you can configure the optical smoke detector as NO or as NC detector. It is therefore suitable for every wired alarm system. The smoke detector is supplied externally with 12V operating voltage and is EN54 certified.

The AR-025 Smoke detector is mounted on top a coated aluminum housing. The explosion safety is arranged by the application of protection degrees against ignition "Increased safety" and "molding".

The Artidor AR-025 Smoke detector is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas hazardous areas and is CE marked.

NEN STANDARDS COMMITTEE MEMBER

Explosion-safe Smoke Detector AR-025
Based on optical detection technology

Technical data

Explosion safety:	II 3 G Ex ec mc IIC T6 Gc
Applicable EU directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
CE conformity:	EN 60079-0:2018, EN 60079-7:2015 / A1:2018 and EN 60079-18:2015 / A1:2017
Sensor:	Photodiode
Supply voltage:	12 V DC
Rated current:	35 mA
Rated power:	0,368 W
Status indicator:	Green LED is blinking in operation, red LED lights continuously at an alarm
Certification:	EN 54-7
Switch power AC1:	1 A at 30 VDC
Output:	Switched NO or NC output with option to connect multiple detectors in series
Material:	Die cast aluminum housing (RAL 7015, slate grey)
Electrical connections:	Terminals 4 x 2,5 mm²
Entries:	M16 cable glands (2x) for cables from 5 – 9 mm in diameter
Ambient temperature:	-20 ˚C to +50 ˚C
Ingress protection:	IP 65 according to EN 60529
Housing dimensions (L x W x H):	120 x 120 x 113 mm (excluding cable glands)
Weight:	1,265 grams

Ordering codes

Type number	Output
AR-025/001	NO
AR-025/002	NC

Other versions on request

Explosion-safe Time lapse camera AR-027
Up to 6 months of uninterrupted use

Features

- ATEX-certified
- Suitable for use in locations with gas and dust, zone 2 and 22
- 1,3 mega pixel
- Focal length 35 mm
- Video in AVI format, 1280 x 720 px
- 16 GB SD data card included
- Ingress protection level IP67
- Coated aluminum housing
- Wall mount bracket and pole support optional

Ex II 3 G Ex nR IIC T6 Gc
II 3 D Ex tc IIIC T80°C Dc

Description

With a timelapse camera, activities can be recorded over a longer period of time. Think of monitoring a construction project, larger infrastructural works or the construction of ships. With the development of an explosion-proof variant, these options are now also available for explosion-hazardous areas classified as zone 2 and zone 22.

To create an explosion-safe solution, a "restricted breathing" housing according to EN 60079-15:2010 was used. This housing could be used because the camera does not produce sparks or heat in normal operation. To increase the gas tightness, the impact-resistant polycarbonate window was fixed in the housing and the tap holes for the cable glands were hermetically sealed with a blind plug and synthetic resin. The housing is also provided with an extra casing (sun shroud) to reduce heating of the housing caused by direct sunlight. With this, the "breathing" of the housing was reduced as much as possible.

To make the camera usable for a longer period, it has been connected to a high-capacity pack of non-chargeable batteries. Dependent on the camera settings, recordings up to 6 months are possible.

The Artidor time lapse camera is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas or dust hazardous areas and is CE marked.

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Explosion-safe Time lapse camera AR-027
Up to 6 months of uninterrupted use

Technical data

Explosion safety:	II 3 G Ex nR IIC T6 Gc, II 3 D Ex tc IIIC T80°C Dc
Applicable EU directives:	2014/34/EU (ATEX 114)
CE conformity:	EN 60079-0:2018, EN 60079-15:2010 and EN 60079-31:2014
Sensor:	1/3" HDR sensor
Resolution:	1,3 mega pixel
Lens opening	112°
Focal length	35 mm
Diaphragm:	F2.0
Video:	AVI format, 1280 x 720 px
Recording interval:	1 second up to 24 hours
Memory card:	16 GB SD card for storage of up to 56.000 photo's in highest quality included (up to 32 GB possible)
Supply voltage:	6 V DC
Time of operation:	6 months (day light setting, 1 minute interval, 16 hours / day)
Material:	Aluminum housing, silicone seals
Ingress protection level:	IP67 according to EN 60529
Mounting:	Four mounting 1/4" holes in line, 51 and 74 mm apart
Ambient temperature:	-10 °C to +50 °C
Dimensions housing:	430 x 164 x 120 mm (excl. mounting bracket)
Weight:	2,5 kg

Ordering codes

Type number	Details
AR-027/001	Time laps camera incl. 16 GB SD memory card
AR-027/002	Wall mount bracket for outdoor use, 30 cm
AR-027/003	Pole mount adaptor for AR-027/002

Explosion-safe Door Magnet AR-030
Universally applicable for floor or wall mounting

Features

- ATEX certified
- Suitable for use in gas and dust environments, zones 2 and 22
- Protection rating IP65
- Impact-resistant plastic housing, nickel-plated magnet
- 24 V DC and 24 V AC
- Provided with 5 meters of factory sealed cable
- Optional anchor plate
- Surface mount on floor, ceiling or wall
- Other versions available on request

II 3 G Ex ic mc IIC T6 Gc
II 3 D Ex ic mc IIIC T80°C Dc

Description

The Artidor explosion-safe door magnet is a universally-applicable door magnet for floor or wall mounting. The magnetic head can easily be positioned horizontally or vertically. The door magnet is manufactured from impact-resistant plastic with a vandal-proof release button and a factory sealed cable, 5 meters long.

The door-retaining magnet system provides a completely reliable solution. For normal use, the doors are held open by electromagnets. In case of fire or alarm, the door magnets are switched off from the porter's lodge or automatically by the fire alarm system, so that the door closers or springs close the doors immediately. The doors can still be opened, but close again straight afterwards.

The Artidor door magnet is explosion-safe and certified in accordance with European Directive 2014/34/EU (ATEX 114) and is CE marked. The door magnet is therefore suitable for a wide variety of applications.

Other versions are available on request.

Explosion-safe Door Magnet AR-030
Universally applicable for floor or wall mounting

Technical specifications

Explosion safety:	II 3 G Ex ic mc IIC T6 Gc; II 3 D Ex ic mc IIIC T80°C Dc
European Directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
Standards applied:	EN 60079-0:2018, EN 60079-11:2012 and EN 60079-18:2015 / A1:2017
Supply voltage:	24V AC/DC ± 10%
Nominal current:	100 mA AC / 63 mA DC
Power:	1.5 W
Holding force:	490 N
Magnet diameter:	50 mm
Mounting spacing:	Floor/ceiling mounting: 150 mm, wall mounting: 175 mm
Activation time:	100%
Material:	Black plastic anchor plate and housing, magnet nickel plated
Ingress protection level:	IP65 according to EN 60529
EN 1155 corrosion class:	3 (High resistance to corrosion)
Connection:	Factory sealed cable, 3 x 1 mm^2, length 5 meters
Ambient temperature:	-25 °C to +50 °C
Weight:	770 grams

Order code

Type number	Model	
AR-030/001	Door magnet	Factory sealed cable, 3 x 1 mm², 5 meters

Options

Type number	Model	
AR-030/002	Anchor plate (standard)	Ø 55 x 18 mm, ± 20°
AR-030/003	Anchor plate with angle adjustment	Ø 55 x 50 mm, ± 60°

Explosion-safe SpotLED AR-040
For industrial applications and transportation vehicles

Features

- ATEX certified: suitable for use in zone 2 (gas) and zone 22 (dust) hazardous areas
- Ingress protection level IP67
- Coated silver gray aluminum housing
- Stainless steel bracket, powder coated
- Light source: 5 PowerLEDs, 3 Watts each
- 780 Lumen
- Various beam angles with different optics
- Rotation angle from -50° to +105°

II 3 G Ex ec IIC T4 Gc
II 3 D Ex tc IIIC T135°C Dc

Description

Artidor's explosion-safe SpotLED combines high-performance and energy-efficiency with state-of-the-art LED technology, making it suitable for a wide range of applications. The robust SpotLED can successfully be applied on construction sites, transport vehicles, forklifts, lathes, or milling machines or for the illumination of facades.

The SpotLED is available with LED optics with an angle of 10° (spotlight), 38° (wide-angle light), or a combination of both (work light). The cable has a standard length of 5 meters. Due to the stainless steel bracket and the large 155° rotation angle, the SpotLED is suitable for mounting against walls or sloping surfaces.

Artidor's SpotLED is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in hazardous areas and is CE marked.

NEN STANDARDS COMMITTEE MEMBER

Explosion-safe SpotLED AR-040
For industrial applications and transportation vehicles

Technical data

Explosion safety:	II 3 G Ex ec IIC T4 Gc; II 3 D Ex tc IIIC T135°C Dc
Applicable European Directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
CE conformity:	EN 60079-0:2018, EN 60079-7:2015 / A1:2018 and EN 60079-31:2014
Power supply:	12 - 30 VDC
Power consumption:	500 mA @ 24 VDC, 950 mA @ 12 VDC
Light source:	Cree 3 Watt PowerLEDs (5x), 780 Lumen
Beam angles:	10° - 38° (depending on the optics used)
Light color:	Neutral white (~6700 K)
Rotation angle:	-50° to +105°
Material:	Die cast aluminum housing and stainless steel bracket, RAL 7001, silver gray Polycarbonate impact-resistant safety glass
Ingress protection level:	IP67 according to EN 60529
Electrical connection:	Fixed cable, length 5 meters (brown = +24 VDC, white = 0 V, green = ground / earth)
Ambient temperature:	-30 °C to +50 °C
Dimensions:	120 x 62 x 87 mm
Weight:	540 grams

Ordering codes

Type number	LED optics
AR-040/100	5 x 38°
AR-040/110	5 x 10°
AR-040/120*	3 x 10° / 2 x 38°

* Shown in the image on the front page

Explosion-safe LED Signal light AR-043
Omnidirectional, with fixed cable

Features

- ATEX certified
- Suitable for use in gas and dust environments, Zone 2 and 22
- 15 LEDs
- Light color red, yellow / amber or green
- Continuous lighting or blinking, user selectable
- Anodized aluminum housing
- Polycarbonate (PC) impact-resistant window
- Ingress protection level IP65
- 24 VDC, 4 Watt
- Fixed cable, 5 meters

II 3 G Ex mc IIC T4 Gc
II 3 D Ex mc IIIC T135°C Dc

Description

Artidor's omnidirectional explosion-safe LED signal light is designed for use under normal weather conditions.

The 15 latest generation LEDs ensure a clearly perceptible visual signal. Dependent on the user's selection, the light will burn continuously or it blinks at a frequency of 1 Hertz. The signal light can be ordered with a radial cable connection or (at request) with a bottom connection. This makes the lamp highly suitable for use as a warning light on control cabinets.

The connection cable has a standard length of 5 meters.

The Artidor LED signal light is explosion-safe and certified in accordance with European Directive 2014/34/EU (ATEX 114) and is CE marked.
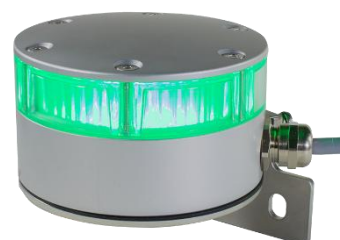
ZONE 2/22

STANDARDS COMMITTEE MEMBER

Explosion-safe LED Signal light AR-043
Omnidirectional, with fixed cable

Technical data

Explosion safety:	II 3 G Ex mc IIC T4 Gc, II 3 D Ex mc IIIC T135°C Dc
European directives:	2014/34/EU (ATEX 114), 2014/30/EU (EMC)
Applied standards:	EN 60079-0:2018 and EN 60079-18:2015 / A1:2017
Light color:	Red (625 nm), yellow / amber (610 nm) or green (530 nm)
Luminance:	Red: 4.250 Cd/m^2, yellow / amber: 6.350 Cd/m^2 and green: 8.300 Cd/m^2
Material:	Anodized aluminum housing, 20 mm impact-resistant polycarbonate window
Ingress protection level:	IP65 according to EN 60529
Supply voltage:	24 VDC ± 10%
Nominal current:	160 mA @ 24 VDC
Connection:	Fixed cable, 4 x 0,75 mm^2, length 5 m
Earth connection:	External, stainless steel, 4 mm^2
Ambient temperature:	-20 °C to +60 °C
Dimensions:	Ø 95 x 60 mm (excl. cable gland)
Mounting:	Stainless steel bracket
Weight:	930 gram

Order code

AR-043 / 0 3 1 - R

Light color
R = Red, 625 nm
Y = Yellow / amber, 610 nm
G = Green, 530 nm

Housing material
1 = Anodized aluminum

Lighting mode
3 = Continuous or blinking, user selectable – 4-wire connection

Cable position
0 = Radial (default, see picture)
w1 = Axial (at request)

Explosion-safe LED Warning light AR-044
With fixed cable

Features

- ATEX certified
- Suitable for use in gas and dust environments, Zone 2 and 22
- 15 LEDs
- Light color red, yellow / amber or green
- Continuous lighting or blinking, user selectable
- Anodized aluminum housing
- Polycarbonate (PC) impact-resistant window
- Ingress protection level IP65
- 24 VDC, 4 Watt
- Fixed cable, 5 meters

II 3 G Ex mc IIC T4 Gc
II 3 D Ex mc IIIC T135°C Dc

Description

Artidor's omnidirectional explosion-safe LED signal light is designed for use under normal weather conditions.

The 15 latest generation LEDs ensure a clearly perceptible visual signal. Dependent on the execution, the light will burn continuously or it blinks at a frequency of 1 Hertz. The warning light can be ordered either with a radial cable connection or with a connection on the back of the lamp. This makes the lamp highly suitable for use as a warning light on control cabinets.

The connection cable has a standard length of 5 meters.

The Artidor LED warning light is explosion-safe and certified in accordance with European Directive 2014/34/EU (ATEX 114) and is CE marked.

ZONE 2/22

NEN
STANDARDS COMMITTEE MEMBER

Explosion-safe LED Warning light AR-044
With fixed cable

Technical data

Explosion safety:	II 3 G Ex mc IIC T4 Gc, II 3 D Ex mc IIIC T135°C Dc
European directives:	2014/34/EU (ATEX 114), 2014/30/EU (EMC)
Applied standards:	EN 60079-0:2018 and EN 60079-18:2015 / A1:2017
Light color:	Red (625 nm), yellow / amber (610 nm) or green (530 nm)
Light intensity:	195 lm
Material:	Anodized aluminum housing, 4 mm impact-resistant polycarbonate window
Degree of protection:	IP65 according to EN 60529
Supply voltage:	24 VDC ± 10%
Nominal current:	160 mA @ 24 VDC
Connection:	Fixed cable, 4 x 0,75 mm^2, length 5 m
Earth connection:	External, stainless steel, 4 mm^2
Ambient temperature:	-20 °C to +60 °C
Dimensions:	Ø95 x 41 mm (excl. cable gland)
Assembly:	Stainless steel bracket
Weight:	830 gram

Order code

AR-044 / 0 3 1 - R

Light color
R = Red, 625 nm
Y = Yellow / amber, 610 nm
G = Green, 530 nm

Housing material
1 = Anodized aluminum

Lighting mode
3 = Continuous or blinking, user selectable – 4-wire connection

Cable position
0 = Radial (default, see picture)
1 = Axial (at request)

Explosion-safe LED Signal light AR-047
Suitable for Zone 1 / 21, with fixed cable

Features

- ATEX and IECEx certified
- Suitable for use in gas and dust environments, Zone 1, 2, 21 and 22
- Light color red, yellow / amber or green
- Continuous lighting or blinking, user selectable
- AISI 316 stainless steel or anodized aluminum housing
- Polycarbonate (PC) impact-resistant window
- Ingress protection level IP65
- 24 - 48 VDC, 4 Watt
- Fixed cable, 5 meters

⟨Ex⟩ II 2 G Ex mb IIC T4 Gb
II 2 D Ex mb IIIC T135°C Db

Description

Artidor's omnidirectional explosion-safe AR-047 LED signal light is designed for use under the most demanding conditions. The robust stainless steel AISI 316 housing and top plate, the 20 mm thick impact-resistant window, the silicon seals and molded electronics ensure that the lamp is completely impervious to water and salt.

The latest generation LEDs ensure a clearly perceptible visual signal. Dependent on the user's selection, the light will burn continuously or it blinks at a frequency of 1 Hertz. The signal light can be ordered with a radial cable connection or (at request) with a bottom connection. This makes the lamp highly suitable for use as a warning light on control cabinets.

The connection cable has a standard length of 5 meters. For application under less demanding conditions there is also a version available with an anodized aluminum housing and top plate.

The Artidor AR-047 LED signal light is explosion-safe and certified in accordance with European Directive 2014/34/EU (ATEX 114) and is CE marked. The AR-047 signal light also meets the requirements of the IEC certification system for explosive atmospheres (IECEx).

ZONE 1/21

NEN STANDARDS COMMITTEE MEMBER

Explosion-safe LED Signal light AR-047
Suitable for Zone 1 / 21, with fixed cable

Technical data

Explosion safety:	II 2 G Ex mb IIC T4 Gb, II 2 D Ex mb IIIC T135°C Db
European directives:	2014/34/EU (ATEX 114), 2014/30/EU (EMC)
Applied standards:	EN IEC 60079-0:2018 and EN 60079-18:2015 / A1:2017
Certificates:	DEKRA 23ATEX0068X (ATEX) and IECEx DEK 23.0048X (IECEx)
Light color:	Red (625 nm), yellow / amber (610 nm) or green (530 nm)
Luminance:	Red: 4.250 Cd/m^2, yellow / amber: 6.350 Cd/m^2 and green: 8.300 Cd/m^2
Material:	AISI 316 stainless steel or anodized aluminum housing, 20 mm impact-resistant polycarbonate window
Ingress protection level:	IP65 according to EN 60529
Supply voltage:	24 - 48 VDC ± 10%
Nominal current:	160 mA @ 24 VDC
Connection:	Fixed cable, 4 x 0,75 mm^2, length 5 m
Earth connection:	External, stainless steel, 4 mm^2
Ambient temperature:	-20 °C to +60 °C
Dimensions:	Ø 95 x 60 mm (excl. cable gland)
Mounting:	Stainless steel bracket
Weight:	1.750 gram (stainless steel) / 930 gram (aluminum)

Order code

AR-047 / 0 3 3 - R

Light color
R = Red, 625 nm
Y = Yellow / amber, 610 nm
G = Green, 530 nm

Housing material
1 = Anodized aluminum
3 = Stainless steel AISI 316

Lighting mode
3 = Continuous or blinking, user selectable – 4-wire connection

Cable position
0 = Radial (default, see picture)
1 = Axial
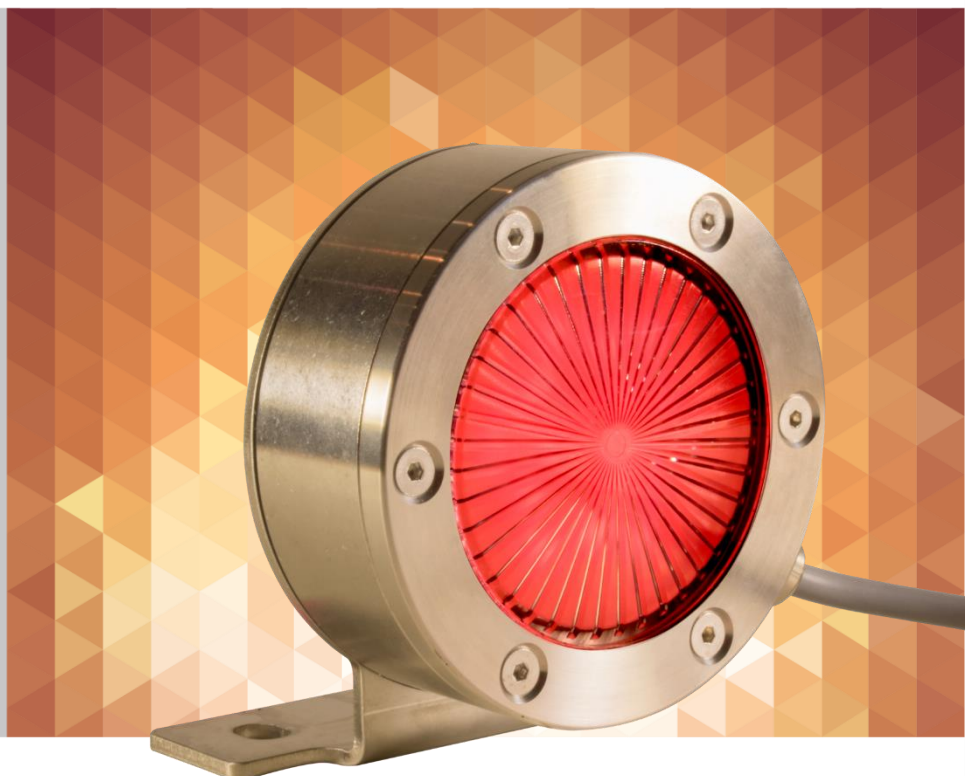
Explosion-safe LED Warning light AR-048
Suitable for zone 1 / 21, with fixed cable

Features

- ATEX and IECEx certified
- Suitable for use in gas and dust environments, Zone 1, 2, 21 and 22
- Light color red, yellow / amber or green
- Continuous lighting or blinking, user selectable
- AISI 316 stainless steel or anodized aluminum housing
- Polycarbonate (PC) impact-resistant window
- Ingress protection level IP65
- 24 - 48 VDC, 4 Watt
- Fixed cable, 5 meters

II 2 G Ex mb IIC T4 Gb
II 2 D Ex mb IIIC T135°C Db

Description

Artidor's explosion-safe AR-048 LED warning light is designed for use under the most demanding conditions. The robust stainless steel housing, the 4 mm thick impact-resistant window, the O-ring seal and molded electronics ensure that the lamp is completely impervious to water and salt.

The latest generation LEDs ensure a clearly perceptible visual signal. Dependent on the execution, the light will burn continuously or it blinks at a frequency of 1 Hertz. The warning light can be ordered either with a radial cable connection or with a connection on the back of the lamp. This makes the lamp highly suitable for use as a warning light on control cabinets.

The connection cable has a standard length of 5 meters. For application under less demanding conditions there is also a version available with an anodized aluminum housing.

The Artidor AR-048 LED warning light is explosion-safe and certified in accordance with European Directive 2014/34/EU (ATEX 114) and is CE marked. The AR-048 signal light also meets the requirements of the IEC certification system for explosive atmospheres (IECEx).

ZONE 1/21

NEN STANDARDS COMMITTEE MEMBER

Explosion-safe LED Warning light AR-048
Suitable for zone 1 / 21, with fixed cable

Technical data

Explosion safety:	II 2 G Ex mb IIC T4 Gb, II 2 D Ex mb IIIC T135°C Db
European directives:	2014/34/EU (ATEX 114), 2014/30/EU (EMC)
Applied standards:	EN IEC 60079-0:2018 and EN 60079-18:2015 / A1:2017
Certificates:	DEKRA 24ATEX0038X (ATEX) and IECEx DEK 24.0027X (IECEx)
Light color:	Red (625 nm), yellow / amber (610 nm) or green (530 nm)
Light intensity:	195 lm
Material:	AISI 316 stainless steel or anodized aluminum housing, 4 mm impact-resistant polycarbonate window
Degree of protection:	IP65 according to EN 60529
Supply voltage:	24 -48 VDC ± 10%
Nominal current:	160 mA @ 24 VDC
Connection:	Fixed cable, 4 x 0,75 mm^2, length 5 m
Earth connection:	External, stainless steel, 4 mm^2
Ambient temperature:	-20 °C to +60 °C
Dimensions:	Ø95 x 41 mm (excl. cable gland)
Assembly:	Stainless steel bracket
Weight:	1.610 gram (stainless steel) / 830 gram (aluminum)

Order code

AR-048 / 0 3 3 - R

Light color
R = Red, 625 nm
Y = Yellow / amber, 610 nm
G = Green, 530 nm

Housing material
1 = Anodized aluminum
3 = Stainless steel AISI 316

Lighting mode
3 = Continuous or blinking, user selectable – 4-wire connection

Cable position
0 = Radial (default, see picture)
1 = Axial

Explosion-safe Bulkhead Connector AR-081
For gasses and liquids

Features

- ATEX certified
- Method of protection against ignition Ex d
- For the passage of gases and liquids
- Minimal pressure losses
- Holds hardly any moisture and dries quickly
- Modern industrial design
- Easy to clean
- Stainless steel AISI 316

II 2 G EEx d IIC

Description

The Artidor bulkhead connector was designed as a flame arrester for fitting in the wall of an explosion-safe flameproof Ex d housing. The bulkhead connector ensures the unobstructed passage of gases and liquids without affecting the explosion-safe nature of the housing.

In the event of an explosion in the flameproof housing, the bulkhead connector prevents the flames and hot gases from being emitted; the hot gas is cooled by the bulkhead connector to such an extent that it is no longer capable of igniting the potentially explosive atmosphere.

The bulkhead connection can be used as a coupling for pipes for gases and liquids such as coolants, refrigerants, hydraulic fluids and pneumatics. Thanks to its special design, the pressure loss in the bulkhead connector is very low and it holds no moisture. Therefore the bulkhead connector is extremely suitable for use in sampling pipes in gas analysis equipment.

Flameproof housings are not usually designed to withstand an explosion arising at a pressure higher than 110% of the atmospheric pressure. A simple way to prevent pressure build up is the use of the bulkhead connector as a breather.
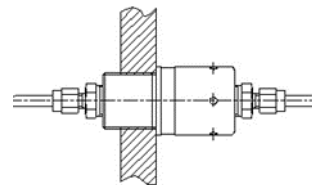
NEN STANDARDS COMMITTEE MEMBER

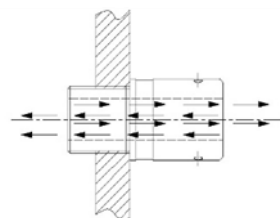# Explosion-safe Bulkhead Connector AR-081
For gasses and liquids

Technical data

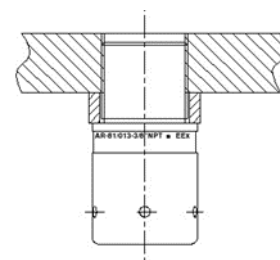|	
Explosion safety:	II 2 G EEx d IIC
Applicable EU directives:	2014/34/EU (ATEX 114)
Applied standards:	EN 50014:1997, EN 50018:2000
EU Type Examination Certificate:	KEMA 01ATEX2136 U component certificate
Temperature class:	Dependent on the volume of the applied flameproof enclosure
Material:	Stainless steel AISI 316
Ingress Protection level:	IP65 according to EN 60529
Mounting thread:	M32 x 1,5
Connections:	3/8" NPT (2x)
Free transmission area:	28 mm^2
Transmission ratio:	10 liter / minute at 28 mBar pressure differential (gas)
Ambient temperature:	-20 °C to +40 °C
Dimensions:	Ø 39 x 75 mm
Weight:	510 gram

Transit of tubing

For the installation of tubing in an Ex d housing
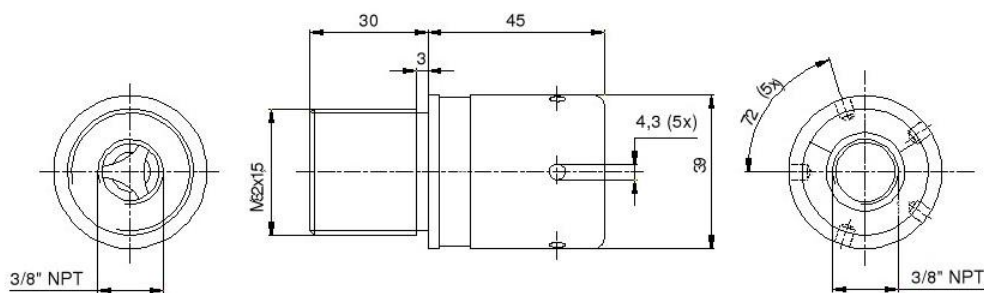

Breather

As an open connection between the in- and outside of an Ex d housing

Dimensions

Drain

To drain condense water from an Ex d enclosure.

Ordering code

Type number	Product	
AR-081/013	Bulkhead Connector	
GE-081/000	Hook spanner	Tool to mount the bulkhead connector in a flameproof housing