

# ANT-DIR-2459-01 - Antenna

2701186

<https://www.phoenixcontact.com/us/products/2701186>

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Directional antenna for wall or mast mounting, 2.4 GHz / 5 GHz, gain: 9 dBi, degree of protection: IP67, shockproof: IK06, saltwater-resistant, connection: N (female), incl. mounting bracket and mast clamps, ATEX and IECEx approval



## Your advantages

- Ideally suited for stationary or linear mobile applications with 2.4 GHz or 5 GHz
- For use in potentially explosive areas
- Salt water resistant
- Impact-resistant housing (IK06)

## Commercial data

Item number	2701186
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN23
Product key	DNN2Z1
GTIN	4046356717182
Weight per piece (including packing)	431.8 g
Weight per piece (excluding packing)	210 g
Customs tariff number	85177100
Country of origin	PL

## Technical data

### Notes

#### Note on application

Note on application	Only for industrial use
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#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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### Product properties

Product type	Antenna
Scope of supply	included mounting bracket and mast clamps
Radiation characteristics	Directional
Gain	9 dBi
Vertical beamwidth	55 ° (2.4 GHz ... 2.5 GHz)
	55 ° (5.1 GHz ... 5.9 GHz)
Horizontal beamwidth	75 ° (2.4 GHz ... 2.5 GHz)
	55 ° (5.1 GHz ... 5.9 GHz)
Polarization	Linear vertical

### Electrical properties

Frequency band	2.4 GHz
	5 GHz
Frequency range	2.4 GHz ... 2.5 GHz
	5.15 GHz ... 5.875 GHz
Impedance	50 Ω
Maximum capacity	10.00 W
Voltage standing wave ratio VSWR in a 50 Ω system	≤ 2.00

### Connection data

#### Connection technology

Connection method	N (female)
Outside diameter	25 mm ... 85 mm (Mast)

### Ex data

#### Safety data

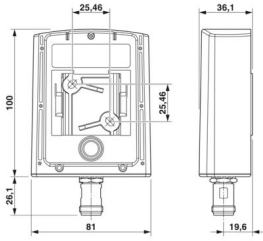
Input voltage $U_i$	max. 30 V
Input current $I_i$	max. 600 mA
Input power $P_i$	0.25 W (Maximum HF input power, 24 dBm, group IIC)
	0.43 W (Maximum HF input power, 26.4 dBm, group IIB)
	0.74 W (Maximum HF input power, 28.7 dBm, group IIA)
Max. internal inductance $L_i$	negligible
Max. internal capacitance $C_i$	negligible

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## Dimensions

Dimensional drawing	
Width	80 mm
Height	100 mm
Length	35 mm

### External dimensions

Outside diameter	25 mm ... 85 mm (Mast)
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## Material specifications

Color	light gray (RAL 7035)
Material (Radom)	PC
Material (Holder)	Stainless steel V2A
Material (Mast clamp)	Stainless steel V2A

## Cable/line

Connecting cable	no
Other resistance	salt water resistant

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 75 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Air pressure (operation)	80 kPa ... 110 kPa
Wind velocity	220 km/h

## Approvals

### CE

Certificate	CE-compliant
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### ATEX

Identification	Ⓔ II 1G Ex ia IIC T6 Ga
Certificate	IBExU14ATEX1116 X
Note	Please follow the special installation instructions in the documentation!

### IECEX

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Identification	Ex ia IIC T6 Ga
Certificate	IECEX IBE 14.0039X

## Electronic devices in rail vehicles

Shock (operation)	In accordance with EN 50125-3, positioning profile: "away from the rails"
Vibration (operation)	In accordance with EN 50125-3, positioning profile: "away from the rails"

## Standards and regulations

Other resistance	salt water resistant
Standards/specifications	EN 60079-0
	EN 60079-11
	EN 60079-26
Note	Explosion protection
Standards/specifications	EN 50155
Note	Railway application
Standards/specifications	EN 45545-2
	NFPA 130
	BS 6853
Note	Fire protection on railway vehicles

## Mounting

Mounting type	Panel mounting
	Mast mounting
Assembly note	Outdoors and indoors

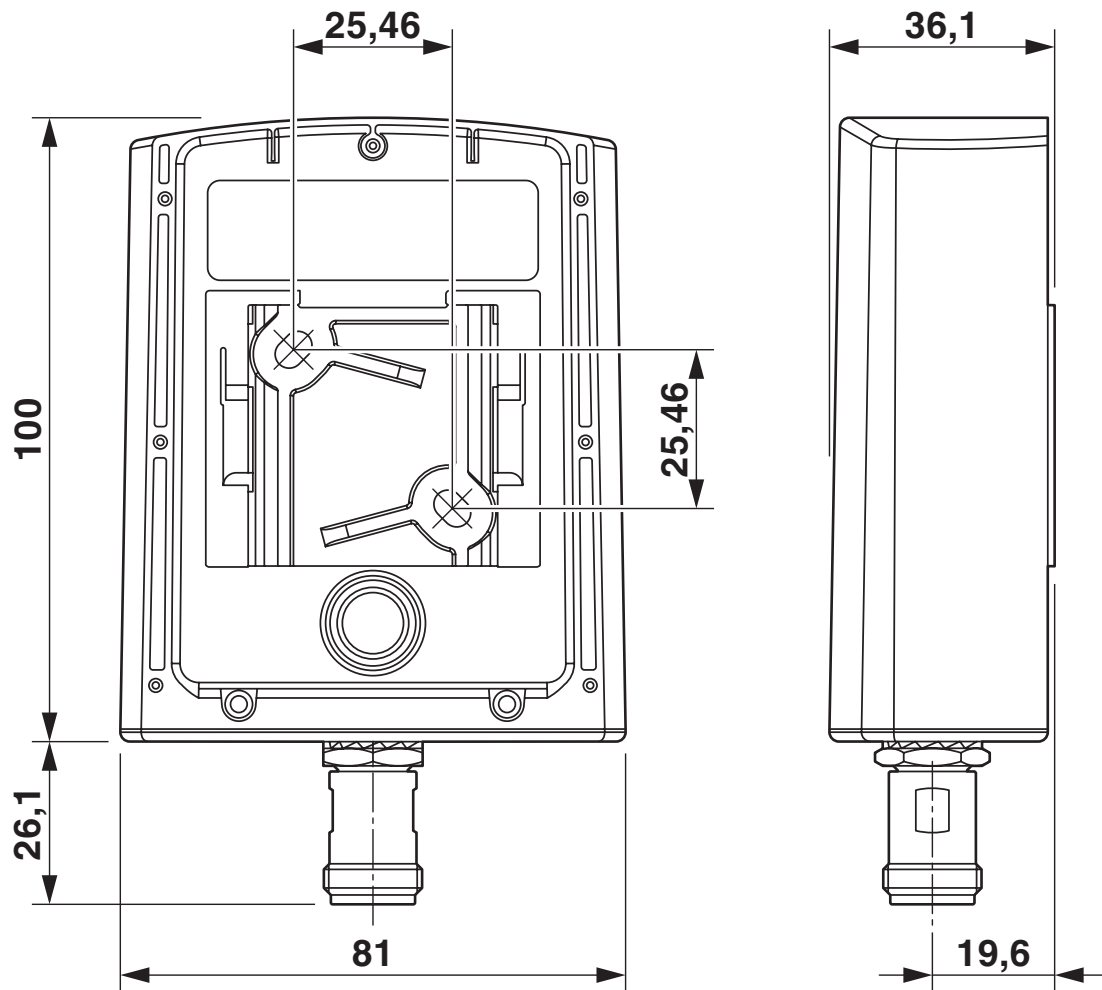
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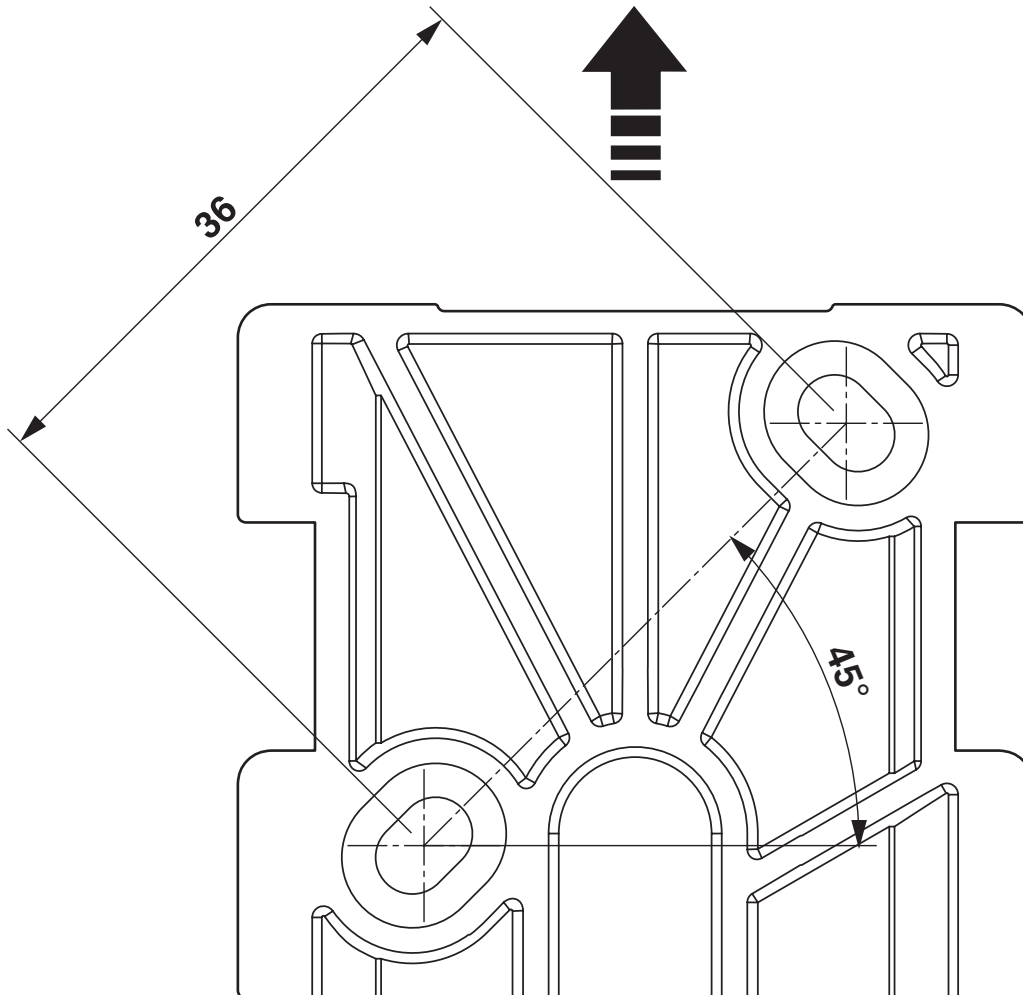
## Drawings

Dimensional drawing



Dimensional drawing

Dimensional drawing



Mounting panel

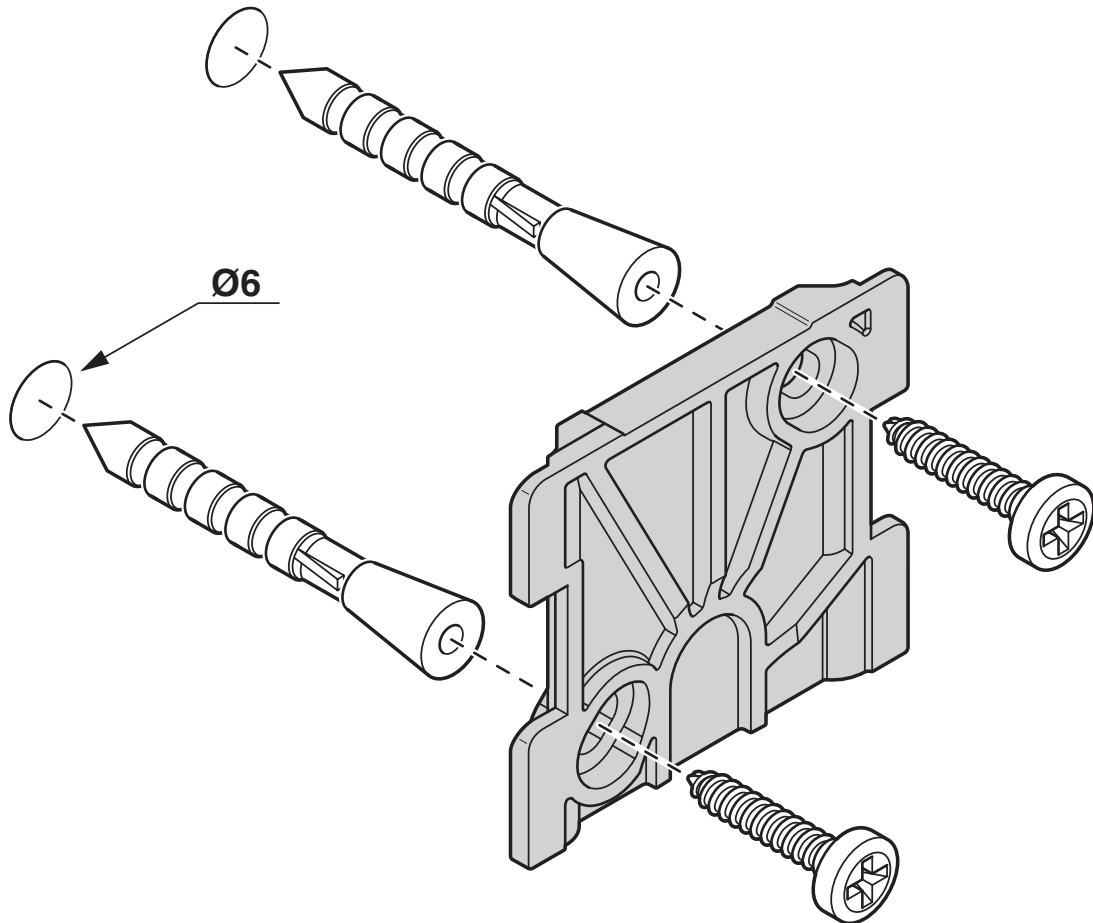
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Schematic diagram



Mounting panel

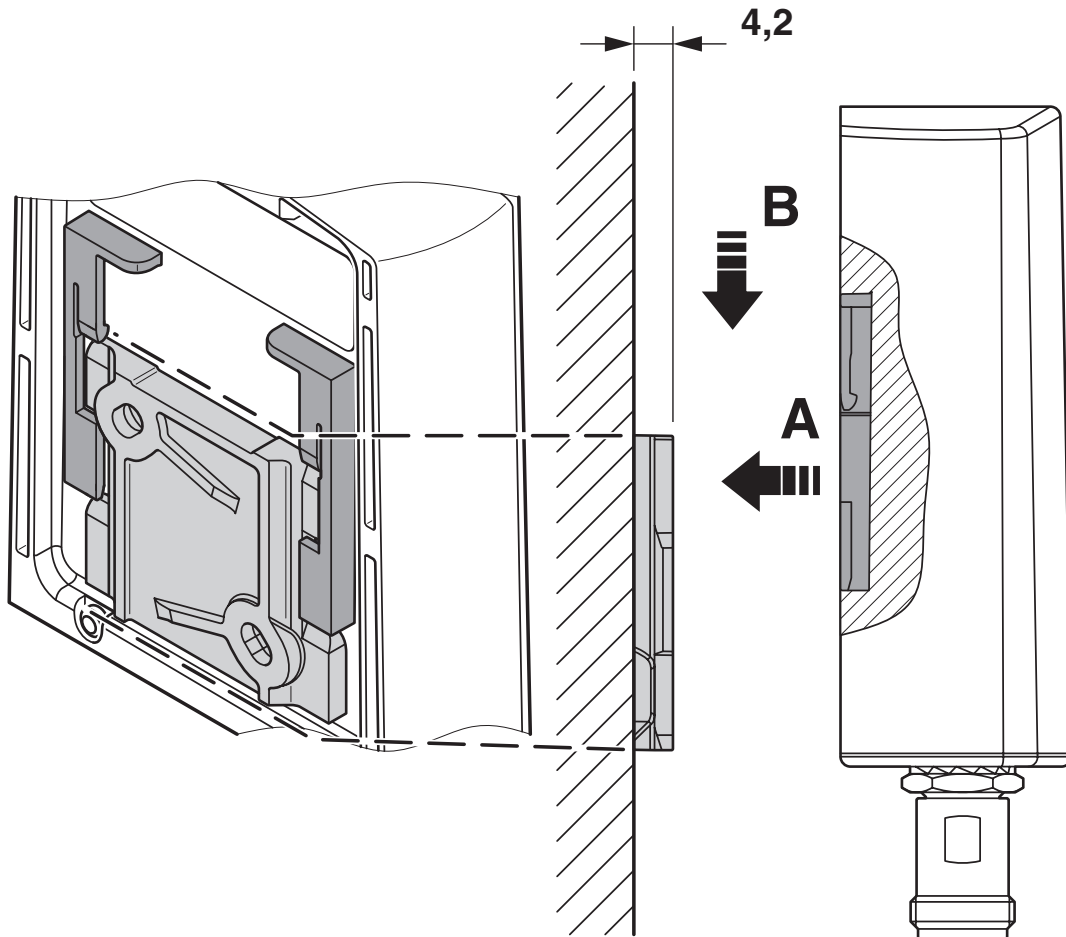
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Schematic diagram



Panel mounting

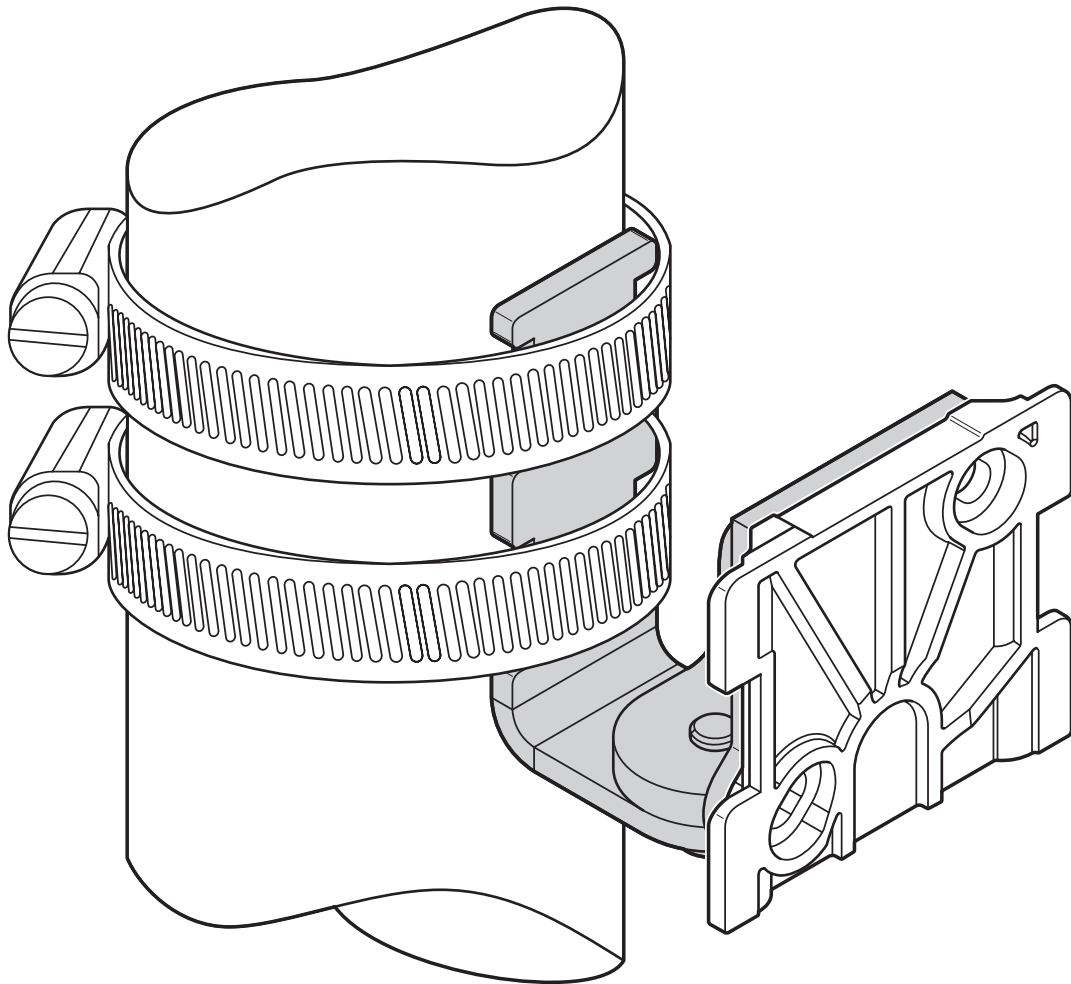
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Schematic diagram



Mast mounting

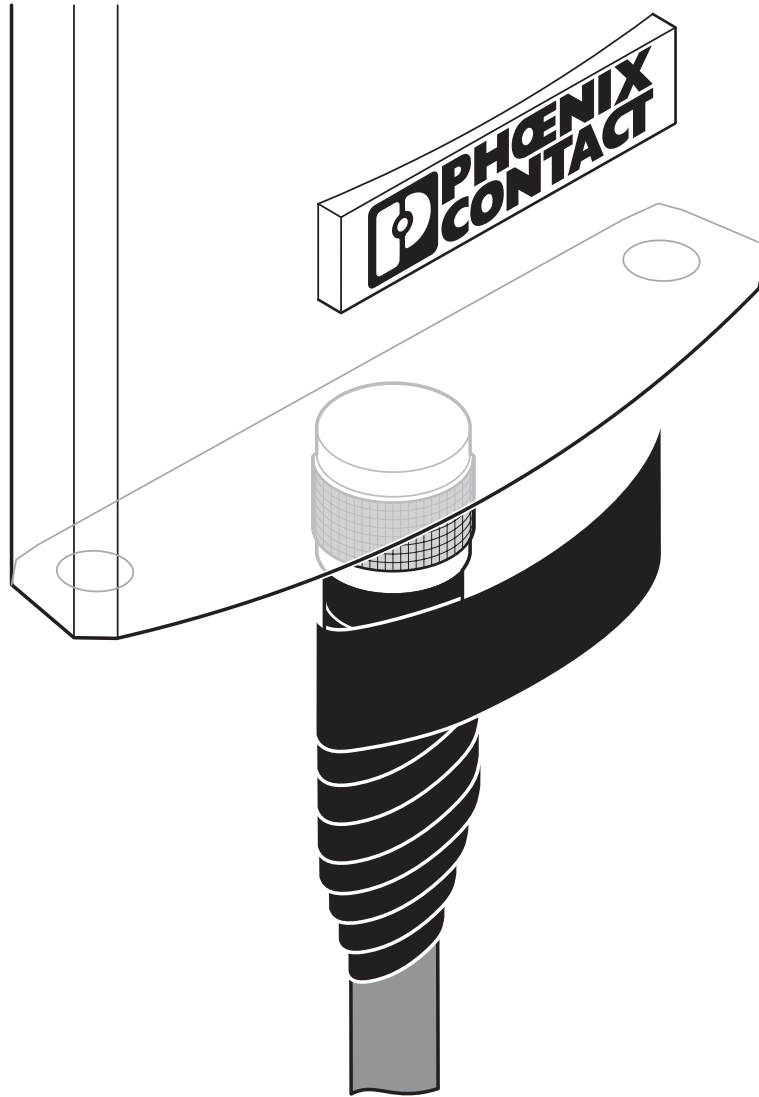
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Schematic diagram



Sealing tape available as an accessory

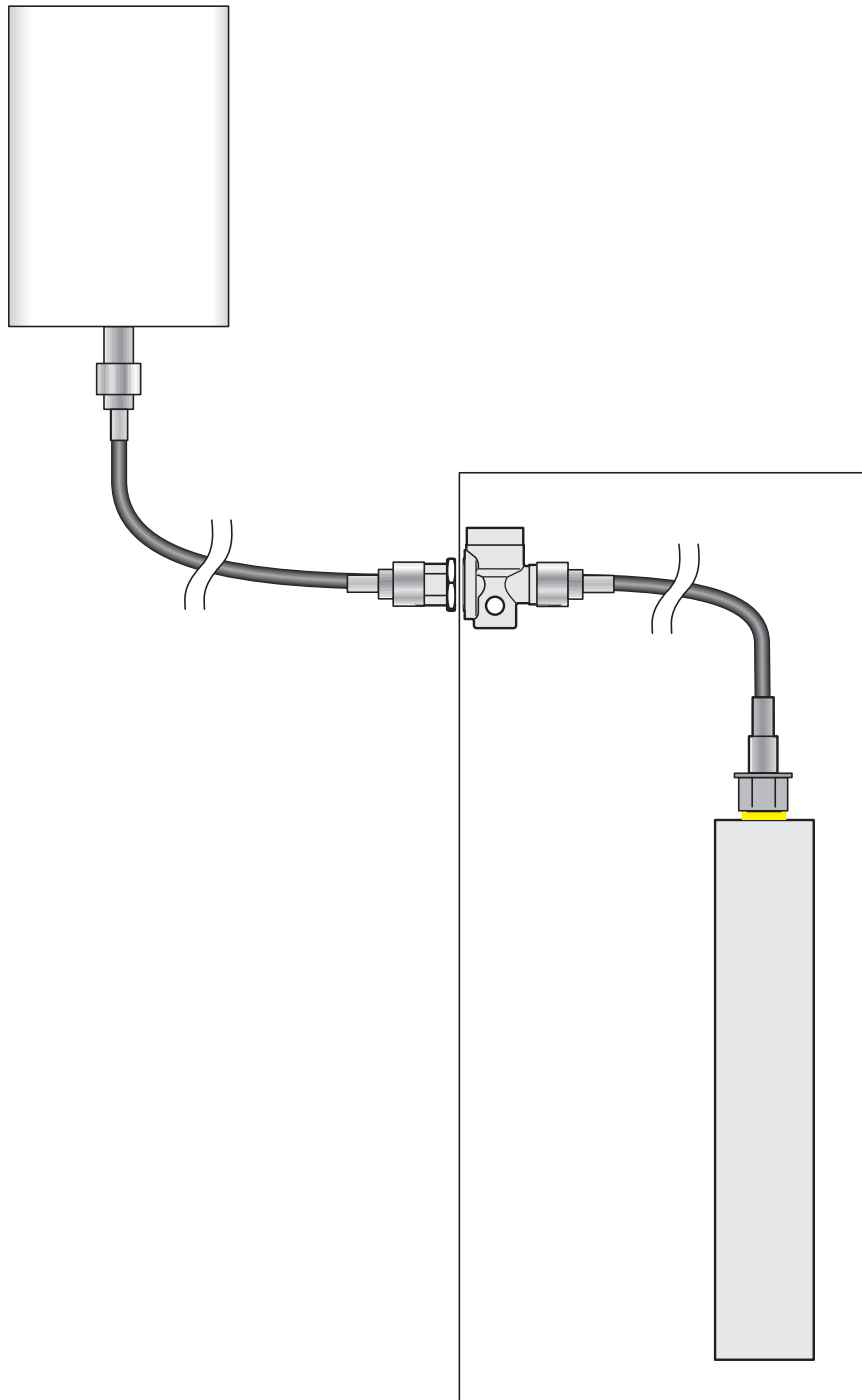
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Schematic diagram



Installation example

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2701186>



**IECEx**

Approval ID: IECEx IBE 14.0039X



**ATEX**

Approval ID: IBExU14ATEX1116 X

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## Classifications

### ECLASS

ECLASS-13.0	19070105
ECLASS-15.0	19070105

### ETIM

ETIM 10.0	EC001698
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### UNSPSC

UNSPSC 21.0	43223100
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

### China RoHS

Environment friendly use period (EFUP)	EFUP-25
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	04d3ab30-15cc-4723-8954-2ea08bbad731

### EF3.1 Climate Change

CO2e kg	10.264 kg CO2e
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