

# Antenna - ANT-DIR-868-01

2702137

<https://www.phoenixcontact.com/pc/products/2702137>

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Directional antenna for mast or wall mounting, frequency band: 868 MHz, gain: 3.5 dBi, circular polarized, degree of protection: IP67, shockproof: IK06, seawater-resistant, connection: N (female), incl. mounting bracket and mast clamps, ATEX and IECEx approval



## Your advantages

- For applications in reflective environments
- For point-to-point connections
- For use in potentially explosive areas
- Resistant to salt water

## Commercial Data

Item number	2702137
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DNC6A2
Catalog Page	Page 390 (C-6-2019)
GTIN	4055626006512
Weight per Piece (including packing)	519.2 g
Weight per Piece (excluding packing)	519.2 g
Customs tariff number	85177100
Country of origin	PL

## Technical Data

### Notes

#### Utilization restriction

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

Product type	Antenna
Gain	3.5 dBi
Vertical beamwidth	90 °
Horizontal beamwidth	135 °
Polarization	Circular clockwise

### Electrical properties

Frequency band	868 MHz
Frequency range	868 MHz ... 870 MHz
Impedance	50 Ω
Maximum capacity	10.00 W

### Connection data

#### Connection technology

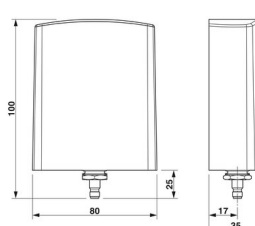
Connection method	N (female)
Outside diameter	25 mm ... 85 mm (Mast)

### Ex data

#### Safety data

Input voltage $U_i$	30 V
Input current $I_i$	600 mA
Input power $P_i$	≤ 1 W (30 dB)
Max. internal inductance $L_i$	negligible
Capacitance $C_i$	negligible

### Dimensions

Dimensional drawing	
Width	80 mm
Height	100 mm

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Length	35 mm
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## External dimensions

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

Material	Lexan EXL 9330 (Antenna housing)
	V2A (Bracket)
	V2A (Mast clamp)
Flammability rating according to UL 94	V0

## Cable / line

Other resistance	salt water resistant
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## 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
Wind velocity	3666 km/h

## Approval data

### CE

Certificate	CE-compliant
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### ATEX

Identification	<input type="checkbox"/> II 1G Ex ia IIC T6 Ga
Certificate	IBExU14 ATEX1116X
Note	Please follow the special installation instructions in the documentation!

### IECEX

Identification	Ex ia IIC T6 Ga
Certificate	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

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Standards/specifications	EN 50155
Standards/specifications	EN 45545-2
	NFPA 130
	BS 6853

## Mounting

Mounting type	Mast mounting or wall mounting
Assembly instructions	Outdoors and indoors

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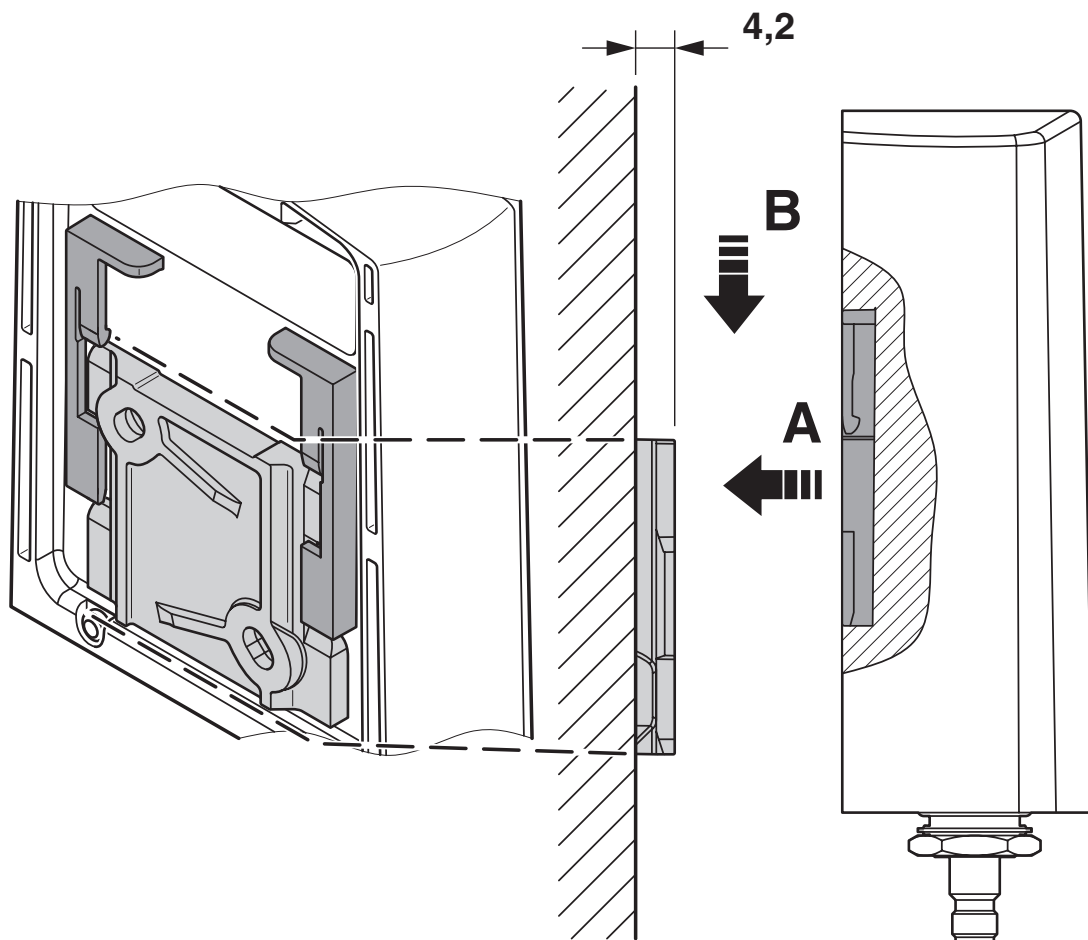
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## Drawings

Schematic diagram



Wall mounting

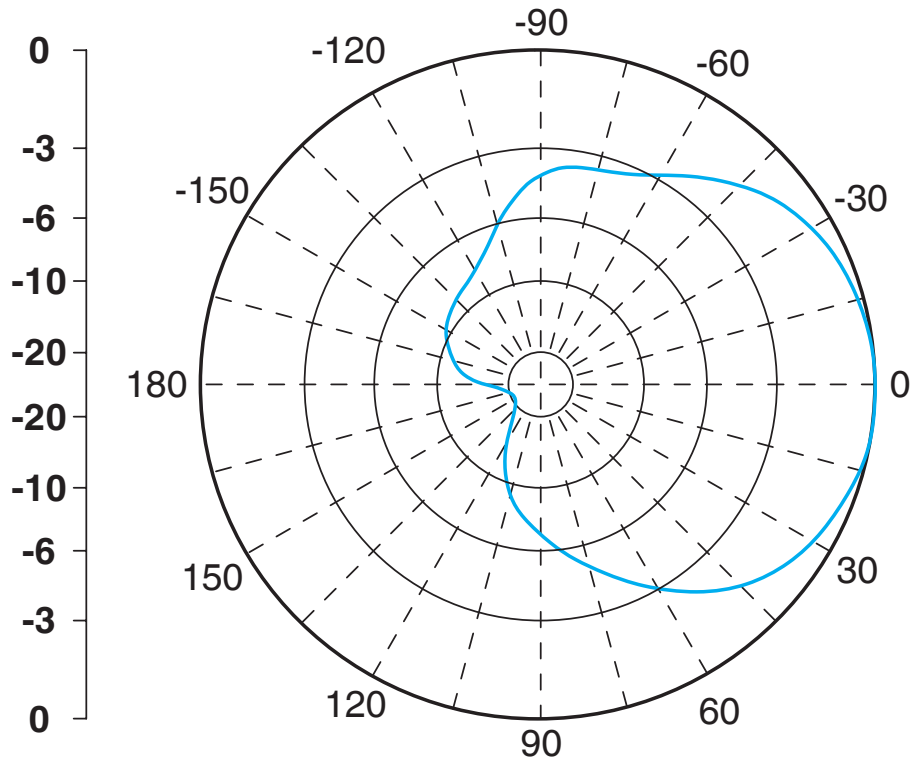
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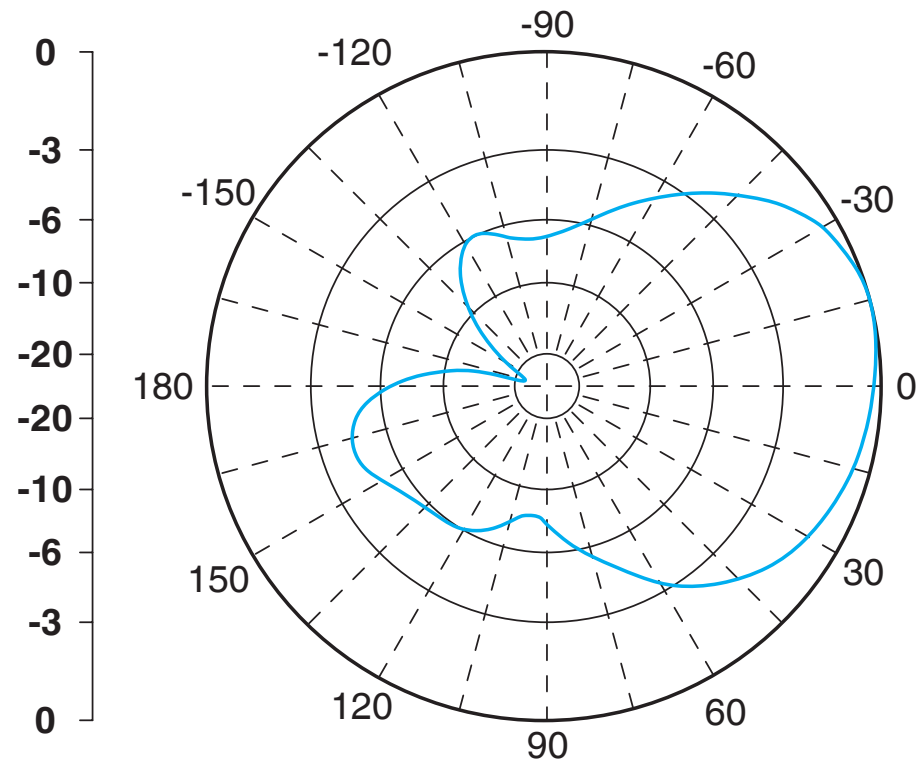
<https://www.phoenixcontact.com/pc/products/2702137>

Diagram



Horizontal

Diagram



Vertical

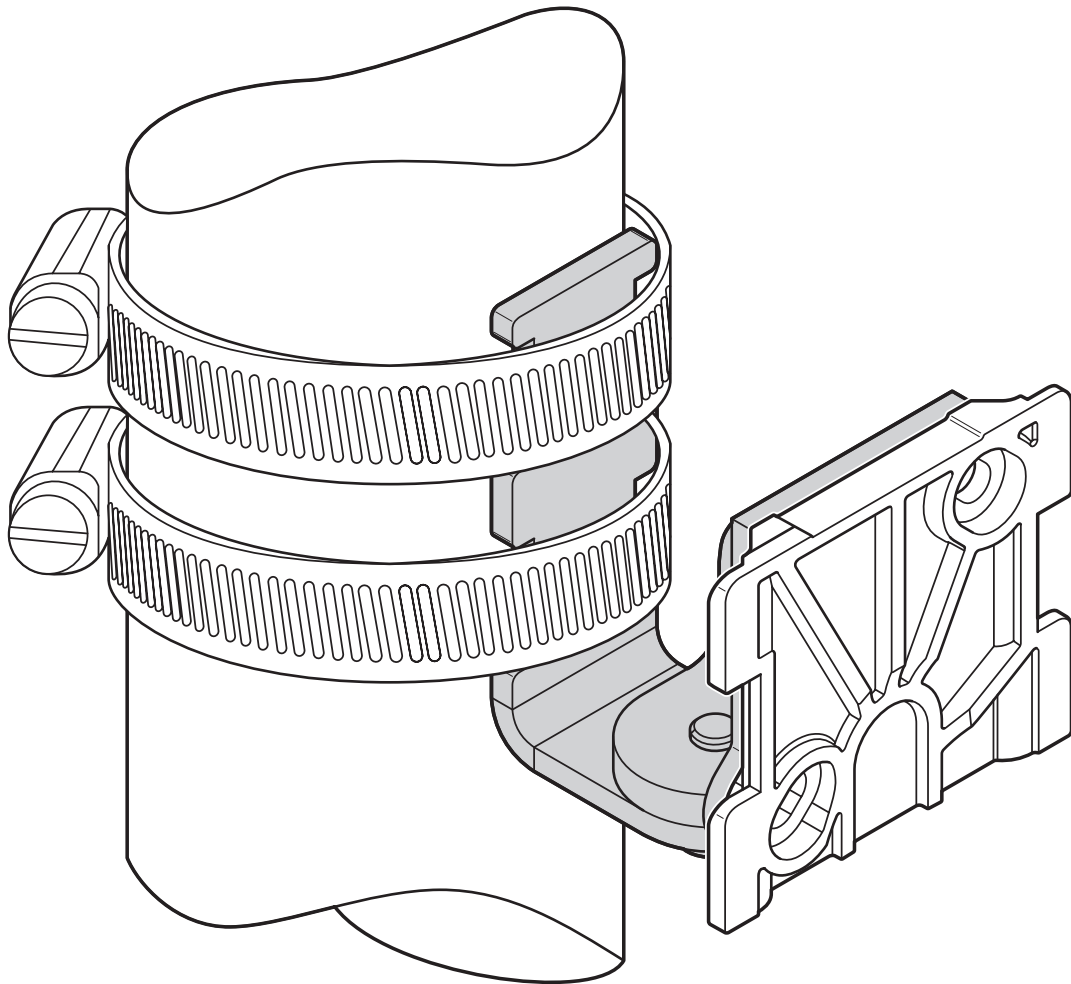
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Schematic diagram



Mast mounting

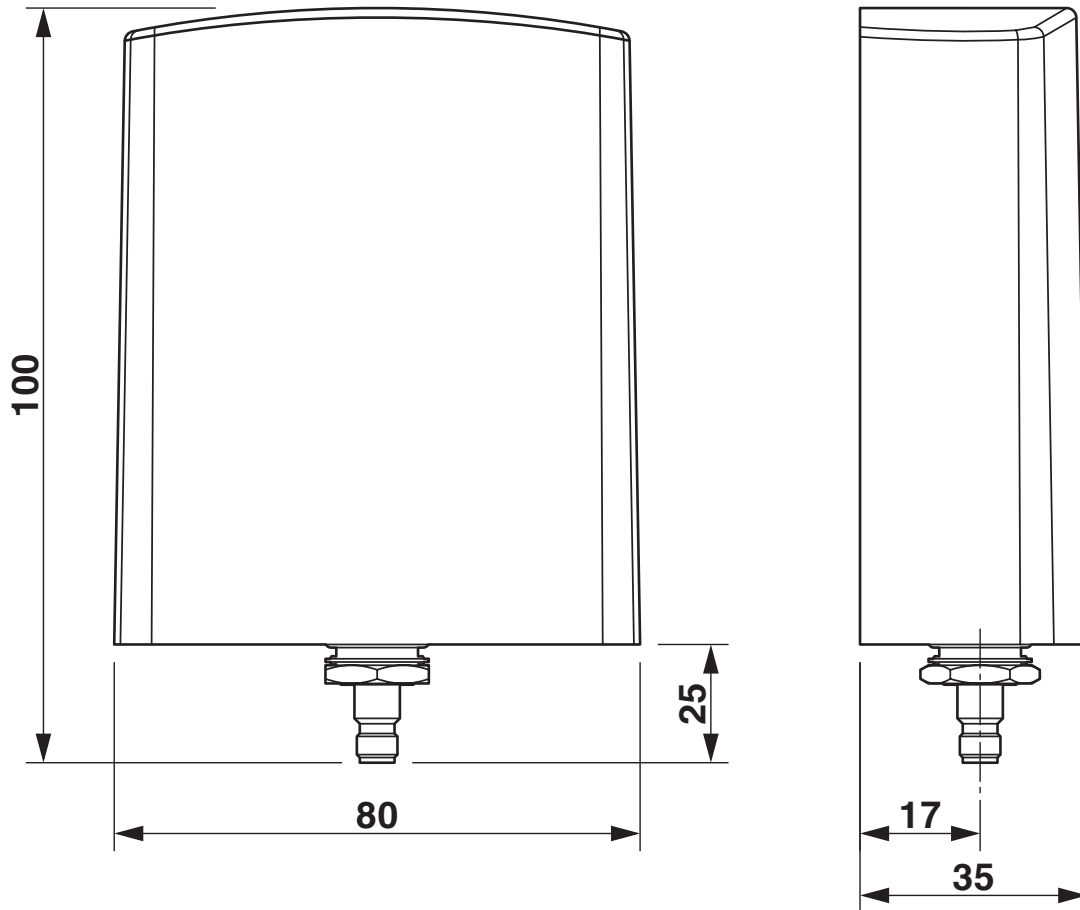
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Dimensional drawing



Housing dimensions



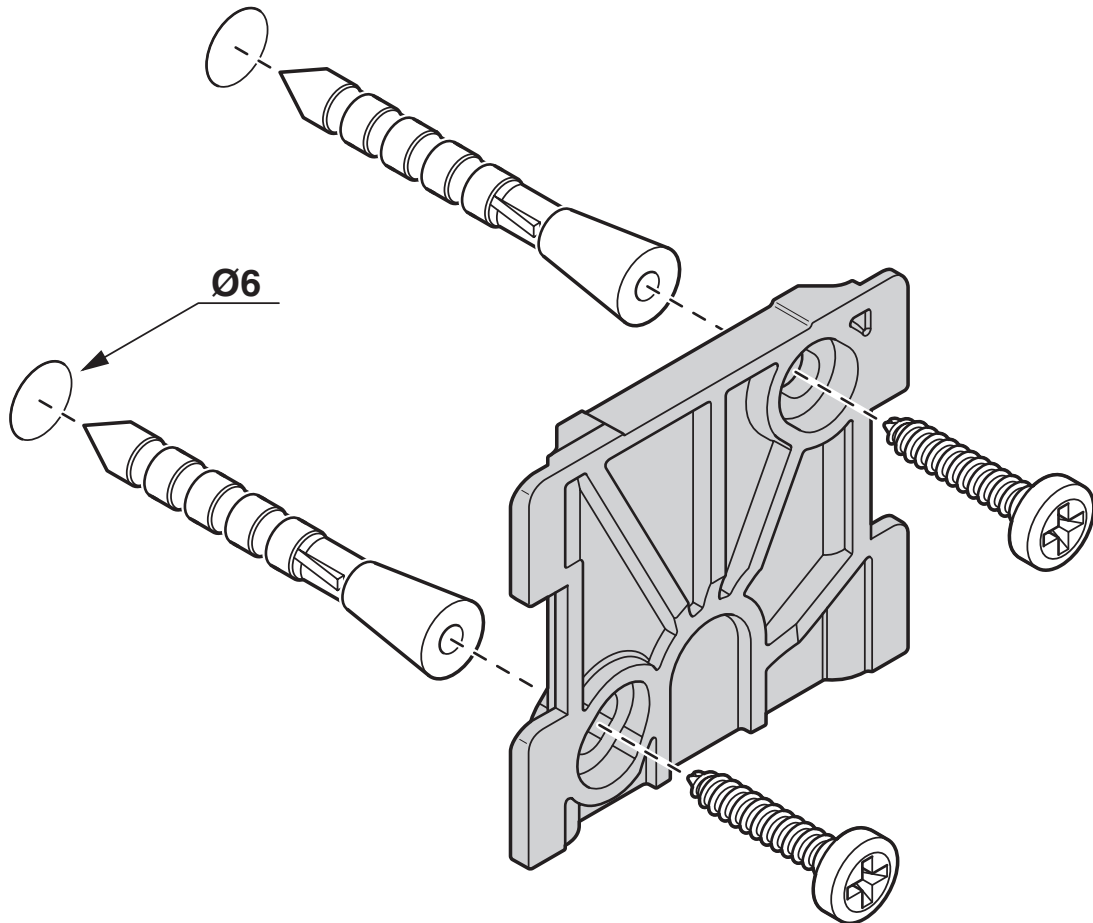
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Schematic diagram



Mounting plate

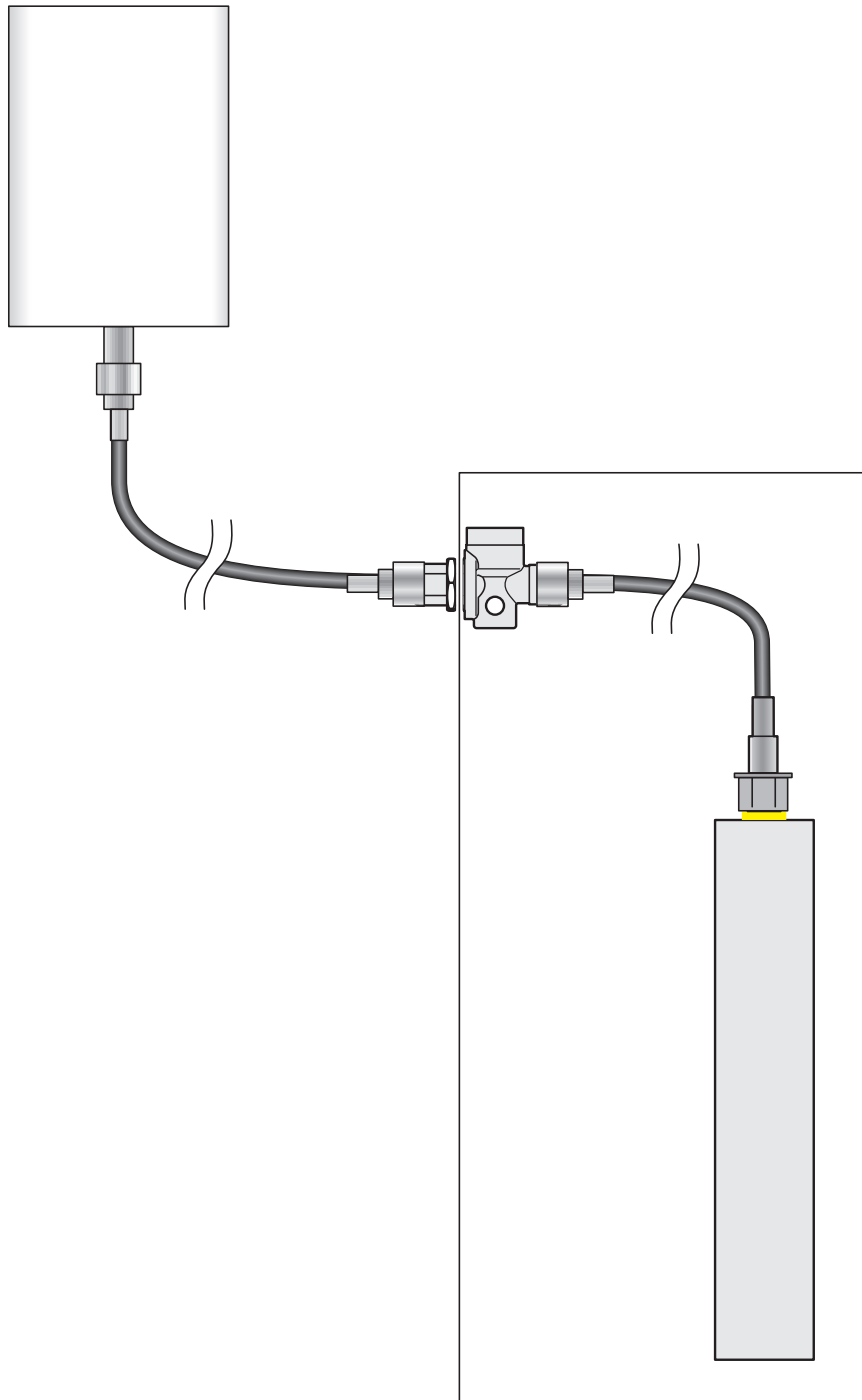
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Schematic diagram



Installation example

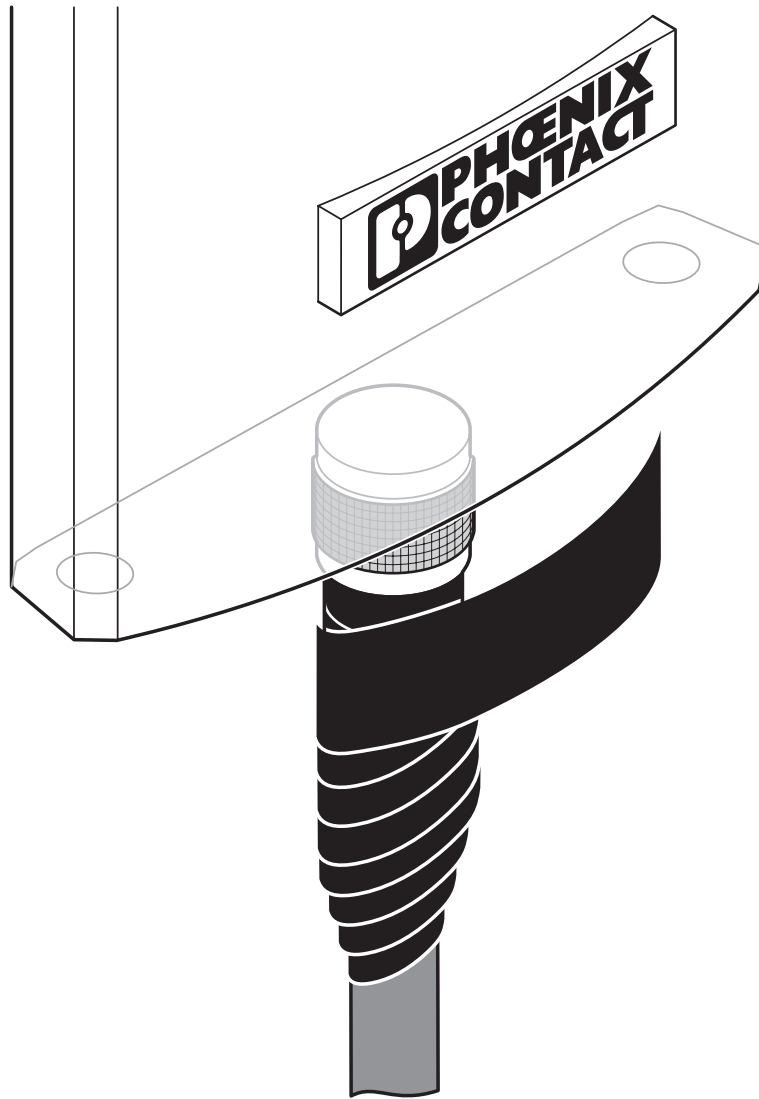
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Schematic diagram



Sealing tape available as an accessory

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## Approvals



**IECEx**

Approval ID: IECEx IBE 14.0039X



**ATEX**

Approval ID: IBExU 14 ATEX 1116 X

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## Classifications

### ECLASS

ECLASS-9.0	19070102
ECLASS-10.0.1	19070102
ECLASS-11.0	19070105

### ETIM

ETIM 8.0	EC001698
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### UNSPSC

UNSPSC 21.0	43223100
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## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Accessories

### Antenna barrier

Antenna barrier - BAR-ANT-N-N-EX - 2702198

<https://www.phoenixcontact.com/pc/products/2702198>



Antenna barrier for control cabinet feed-through, type of protection: Ex i, degree of protection: IP65, barrier installation: Zone 2 / 22, antenna installation: in dust and gas Ex area, frequency range: 0.3 GHz ... 6 GHz, connection: 2 x N (female), ATEX, EAC Ex and IECEx approval

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### Weather protection tape

Weather protection tape - RAD-TAPE-SV-19-3 - 2903182

<https://www.phoenixcontact.com/pc/products/2903182>



Vulcanizing sealing tape for external protection of adapters, cable connections, etc. against the effects of weather, roll length: 3 m

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## Surge protection device

Surge protection device - CN-UB-70DC-6-BB - 2803166

<https://www.phoenixcontact.com/pc/products/2803166>



Attachment plug with surge protection for coaxial signal interfaces. Connection:  
N connector, female/female

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