



## Capacitive Proximity Sensors Rectangular housing, CQ35

CQ35-25NNP-KC1



**Model Name** > [CQ35-25NNP-KC1](#)  
**Part No.** > [6021464](#)



#### At a glance

- Rectangular housing
- Operating distance up to 25 mm
- High electromagnetic immunity
- IP 67 enclosure rating
- Complementary output function
- LED status indicator
- Short-circuit reverse polarity and power-up pulse suppression protection
- PNP or NPN output versions are available

#### Your benefits

- Durable housing withstands harsh industrial applications, reducing maintenance costs and downtime
- Quick and easy adjustment of the switching point saves installation and setup time
- Application flexibility - solves applications where other sensing technologies cannot provide a solution
- High shock and vibration resistance increases sensor life and reduces maintenance costs
- Non-contact level measurement, even through container or tank walls, which eliminates drilling holes and thus reduces installation time



#### Features

Design:	Rectangular
Dimensions (W x H x D):	35 mm x 15 mm x 69.5 mm
Sensing range Sn:	25 mm
Assured sensing range Sa:	18 mm
Installation type:	Non-flush
Switching frequency:	50 Hz
Output type:	NPN
Output function:	Complementary
Electrical wiring:	DC 4-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Electrical connection:	Connector M12, 4-pin
Adjustment:	Potentiometer, 270 ° , Sensitivity

<sup>1)</sup> According to EN 60529

## Mechanics/electronics

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Housing material:	Plastic
Supply voltage:	10 V DC ... 36 V
Residual ripple:	$\leq 10\%$ <sup>1)</sup>
Voltage drop:	$\leq 2.5\text{ V DC}$ <sup>2)</sup>
Power consumption:	$\leq 10\text{ mA}$ <sup>3)</sup>
Time delay before availability:	$\leq 100\text{ ms}$
Hysteresis:	4 % ... 20 %
Repeatability::	$\leq 5\%$ <sup>4) 5)</sup>
Temperature drift (of Sr):	$\pm 10\%$
EMC:	According to EN 60947-5-2 <sup>6)</sup>
Output current I <sub>a</sub> :	$\leq 200\text{ mA}$
Short-circuit protection:	✓
Reverse polarity protection:	✓
Power-up pulse protection:	✓
Shock and vibration resistance:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient temperature operation:	-25 °C ... +75 °C
Housing cap material:	PC
Sensing face material:	Plastic
UL File No.:	NRKH.E191603

<sup>1)</sup> Of U<sub>b</sub> <sup>2)</sup> At I<sub>a</sub> max <sup>3)</sup> Without load <sup>4)</sup> Of Sr <sup>5)</sup> U<sub>b</sub> and T<sub>a</sub> constant <sup>6)</sup> In EMC critical applications, conducted interference levels may lie in the frequency range of the oscillator. This can cause changes to the output signal.(see operating instructions)

## Reduction factors

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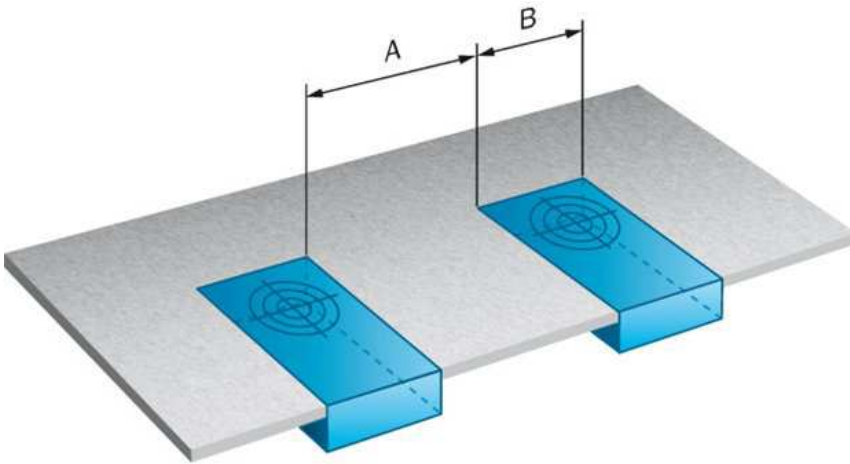
Note:	The values are reference values which may vary
Metal:	1
Water:	1
PVC:	Ca. 0.4
Oil:	Ca. 0.25

## Installation note

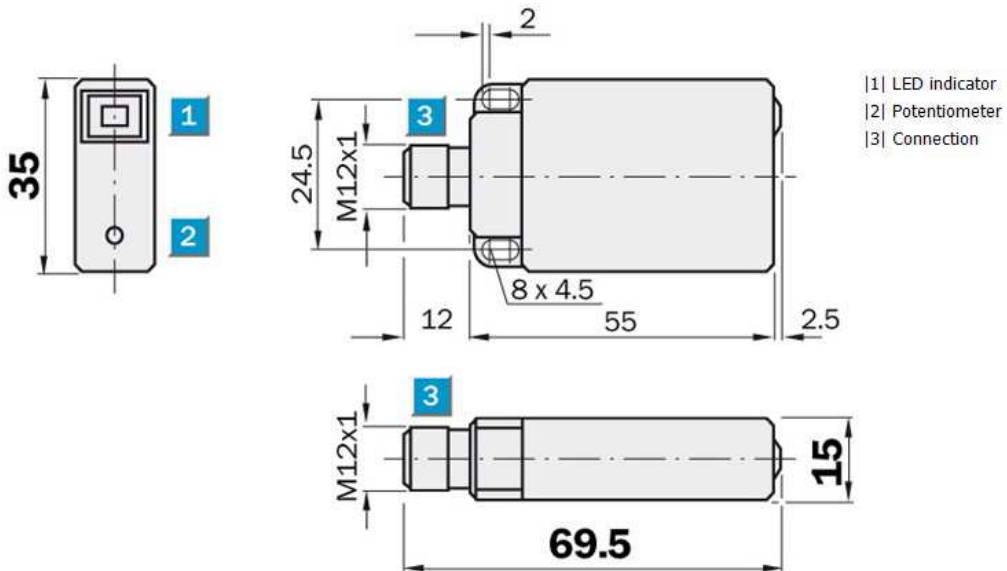
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Remark:	Associated graphic see "Installation"
A:	35 mm
B:	35 mm

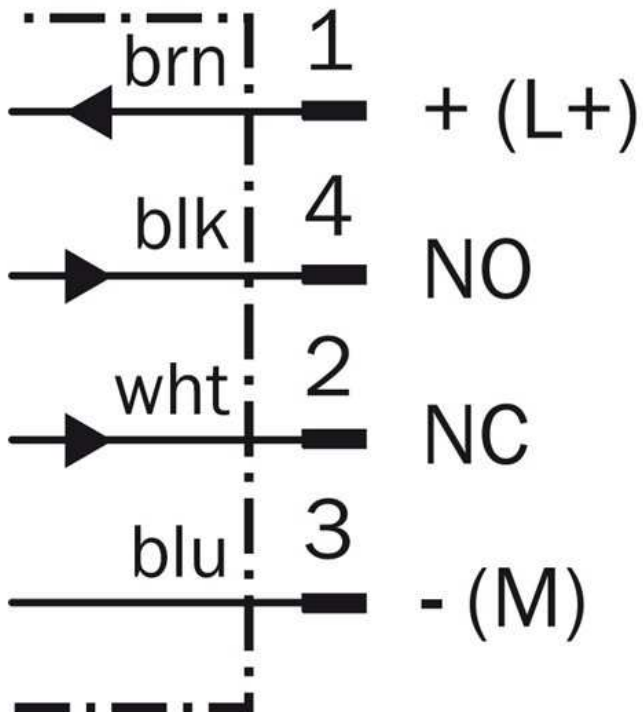
## Installation note



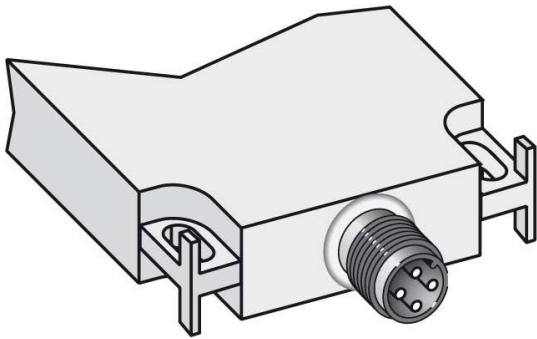
## Dimensional drawing



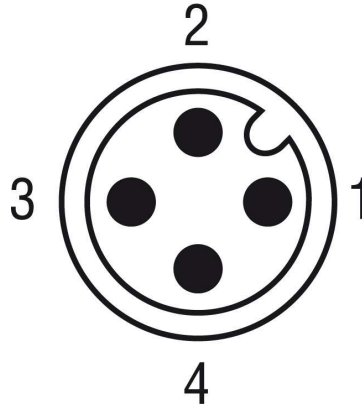
Connection diagram



Connection type



Connection to conveyor



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