CQ

Reliable capacitive proximity sensors enclosed in a rectangular housing

CAPACITIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

Technical data overview

Housing	Rectangular
Dimensions (W x H x D)	16 mm x 39.5 mm x 12 mm 28 mm x 46 mm x 5.5 mm 35 mm x 69.5 mm x 15 mm
Sensing range S_n	6 mm … 25 mm (depending on type)
Housing material	Plastic
Enclosure rating	IP67 / IP68 (depending on type)
Connection	Cable Male connector Cable with male connector (depending on type)
Electrical wiring	DC 3-wire / DC 4-wire (depending on type)

Product description

Capacitive proximity sensors can detect all types of material: powder-based, granulated, liquid, and solid – even through plastic walls. SICK's capacitive proximity sensors also feature high electromagnetic compatibility (EMC), which prevents incorrect switching.

CQ sensors feature rectangular housings that are suitable for all manner of installation conditions.

At a glance

• Rectangular housing
• Detects powders, granulates, liquids and solids
• Extremely high electromagnetic compatibility
• Electric version: DC, 4 cables
• Supply voltage: 10 V … 36 V DC
• Short-circuit protection (pulsed)

Your benefits

• Non-contact level measurement, even through container or tank walls, which eliminates drilling holes and thus reduces installation time
• Durable housing withstands harsh industrial applications, reducing maintenance costs
• Quick and easy adjustment of the switching point - via pushbutton, remote teach for the CQ28 and via potentiometer for CQ35 - saves time
• Simple and safe detection alternative to photoelectric and inductive sensors in applications such as detecting product in a sealed box, container or tank

Ordering information

Other models and accessories → www.sick.com/CQ

Sensing range S_n	Installation type	Electrical wiring	Connection type	Switching output	Output function	Type	Part no.
1 mm … 10 mm	Non-flush	DC 3-wire	Cable with M8 male connector, 4-pin	NPN	NO	CQ28-10NNP-KW1S03	6049010
				PNP	NC or NO	CQ28-10NPP-KPDS12	6068324
			Cable with connector M12, 3-pin	NPN	NC or NO	CQ28-10NNP-KW1S01	6036123
				PNP	NO	CQ28-10NPP-KW1S13	6068387
			Cable with connector M8, 3-pin	PNP	NC or NO	CQ28-10NPP-KW1S05	6049285
		DC 4-wire	Cable with M12 male connector, 4-pin	PNP	NC or NO	CQ28-10NPP-KW1S08	6059505
			Cable with M8 male connector, 4-pin	PNP	NC or NO	CQ28-10NPP-KW1S02	6037194
			Cable, 4-wire	NPN	NC or NO	CQ28-10NNP-KW1	6030133
				PNP	NC or NO	CQ28-10NPP-KW1	6030132
1 mm … 8 mm [1] 1 mm … 6 mm [2]	Non-flush, flush	DC 3-wire	Cable with connector M8, 3-pin	NPN	NC	CQ4-08ENOKP1	6051003
					NO	CQ4-08ENSKP1	6051002
				PNP	NC	CQ4-08EPOKP1	6051001
					NO	CQ4-08EPSKP1	6051000
			Cable, 3-wire	NPN	NC	CQ4-08ENOKU1	6051012
					NO	CQ4-08ENSKU1	6051011
				PNP	NC	CQ4-08EPOKU1	6051010
					NO	CQ4-08EPSKU1	6051009
			Connector M8, 3-pin	NPN	NC	CQ4-08ENOKT1	6051007
					NO	CQ4-08ENSKT1	6051006
				PNP	NC	CQ4-08EPOKT1	6051005
					NO	CQ4-08EPSKT1	6051004
4 mm … 25 mm	Non-flush	DC 4-wire	Cable, 4-wire	NPN	Complementary	CQ35-25NNP-KW1	6021463
				PNP	Complementary	CQ35-25NPP-KW1	6020478
			Male connector M12, 4-pin	NPN	Complementary	CQ35-25NNP-KC1	6021464
				PNP	Complementary	CQ35-25NPP-KC1	6020479

[1] For non-flush installation.

[2] For flush mounting.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations –**www.sick.com**

SICK AG | Waldkirch | Germany | www.sick.com

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