CQF

Reliable level measurement of water-based liquids

CAPACITIVE PROXIMITY SENSORS
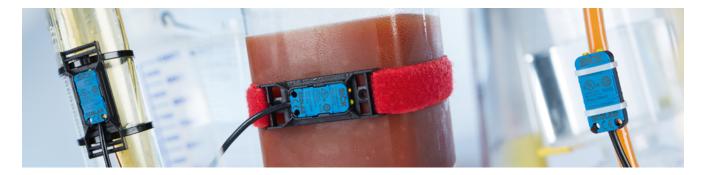
SICK
Sensor Intelligence.

Advantages

Reliable level measurement of liquids

The CQF16 capacitive level sensor from SICK is designed to detect water-based liquids, for example water, milk, honey, syrup, ink, bodily fluids (such as blood), acids, alkali solutions, and other liquids with a conductivity of up to 50 mS/cm. The CQF16 can detect these media inside or outside non-metallic container walls (made from plastic, glass). The sensor compensates for foam, moisture and deposits, thereby ensuring a reliable level measurement.

Result: "Guaranteed highest possible plant availability"

Flexible and straightforward installation, fast commissioning

Thanks to the supplied mounting bracket, the CQF16 can be easily fastened to many different pipes and containers made from glass or plastic. The sensor lock enables the sensor to be securely fastened to the container wall. It also allows the sen-

sor to be replaced without changing the mounting device. In most applications, the sensor is plug and play connectable and immediately ready for use. For demanding applications, the sensor can be taught-in via a cable. The status of the voltage supply and output function are indicated by means of two LEDs, thereby ensuring quick commissioning.

Various mounting options: pipe mounting

Different connection options to suit your needs

LED display simplifies commissioning

Result: "Easier mounting and commissioning, which saves time and money"

Technical data overview

Housing	Rectangular
Dimensions (W x H x D)	16 mm x 34 mm x 8 mm
Sensing range S_n	≤ 6 mm
Housing material	Plastic
Enclosure rating	IP67, IP68, IP69K
Connection	Cable / cable with male connector (depending on type)
Electrical wiring	DC 4-wire

Product description

The CQF capacitive level sensor detects liquids through container walls and through direct contact with the liquids. The measurement principle compensates for foam, moisture and deposits. This ensures that the CQF only detects the liquid in the container - nothing else. For standard applications, the sensor is ready for operation without additional settings. For challenging applications, it can be taught-in quickly and easily using the cable. The mounting set offers different installation options, making the CQF is well-suited for countless customer applications.

At a glance

- Compact, rugged housing, enclosure rating: IP67, IP68, IP69K
- Output signal: 100 mA, output type and function can be selected: PNP/NPN, N/O/N/C
- Two LEDs for signaling voltage supply and output signal
- Cable and cable with M8 male connector
- Supplied mounting bracket
- CULus certification
- Ecolab certified

Your benefits

- Reliable level detection - compensation for foam, moisture and deposits
- Flexible and straightforward installation - thanks to supplied mounting bracket
- Quick commissioning - plug and play
- Quick adaption to challenging applications - teach-in via cable
- Space-saving compact housing, enclosure rating: IP67, IP68, IP69K

Fields of application

- Level detection from outside through container walls
- Semi-conductor industry: Detection of process liquids without direct contact to the liquids
- Food industry: Detection of food in pipes
- Food industry: Detection of condensate water in freezers

Ordering information

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

- **Sensing range S$_n$:** 0.5 mm ... 6 mm
- **Installation type:** flush, non-flush

Electrical wiring	Connection type	Switching output	Output function	Type	Part no.
–	Cable with M8 male connector, 4-pin	NPN	NC	CQF16-06EN0EP1	6068629
			NO	CQF16-06ENSEP1	6068628
		PNP	NC	CQF16-06EPOEP1	6068625
			NO	CQF16-06EPSEP1	6068624
DC 4-wire	Cable, 4-wire	NPN	NC	CQF16-06EN0EW1	6068627
			NO	CQF16-06ENSEW1	6068626
		PNP	NC	CQF16-06EPOEW1	6068623
			NO	CQF16-06EPSEW1	6068622

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