



UP56

Tough, non-contact, pressure-resistant

LEVEL SENSORS

SICK
Sensor Intelligence.



Technical data overview

Measurement principle	Ultrasonic sensor
Detection principle	Non contact
Medium	Fluids, bulk solids
Measurement	Switch, Continuous
Process temperature	-25 °C ... +70 °C
Process pressure	0 bar ... 6 bar, gauge pressure
Output signal	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V 2 x PNP 2 x NPN 1 x push-pull: IO-Link 1.1 (process data, diagnostics, parameterization, data repository) (depending on type) (depending on type)

Product description

The product family UP56 of ultrasonic level sensors is the ideal solution for demanding applications. The teflon-protected transducer handles overpressure up to 6 bar (87 psi) and is resistant against numerous difficult fluids. Wetted parts can be chosen either as stainless steel or PVDF, thus making the UP56 the perfect solution for measurement in aggressive, viscous, or abrasive liquids, or bulk solids. By combining two output signals in one device, new cost-effective solutions can be created for measurement and integration into the system. With two switching outputs, the UP56 can measure dry running and overflow in one device. Combining analog and a switching output enables continuous level measurement with a separate overflow signal. Parameters are easy to set via an integrated display, PC or the connect+ adapter.

At a glance

- Non-contact measurement up to 3.4 m operating distance / 8.0 m scanning distance limit
- Pressure resistant up to 6 bar
- Converter protected by PVDF cover for increased resistance
- 3-in-1: Continuous measurement, switching signal, and display
- Analog output can be switched 4 mA ... 20 mA and 0 V ... 10 V
- Process connector thread G 1 and G 2
- IP67 enclosure rating
- Simple operation, also via Connect+

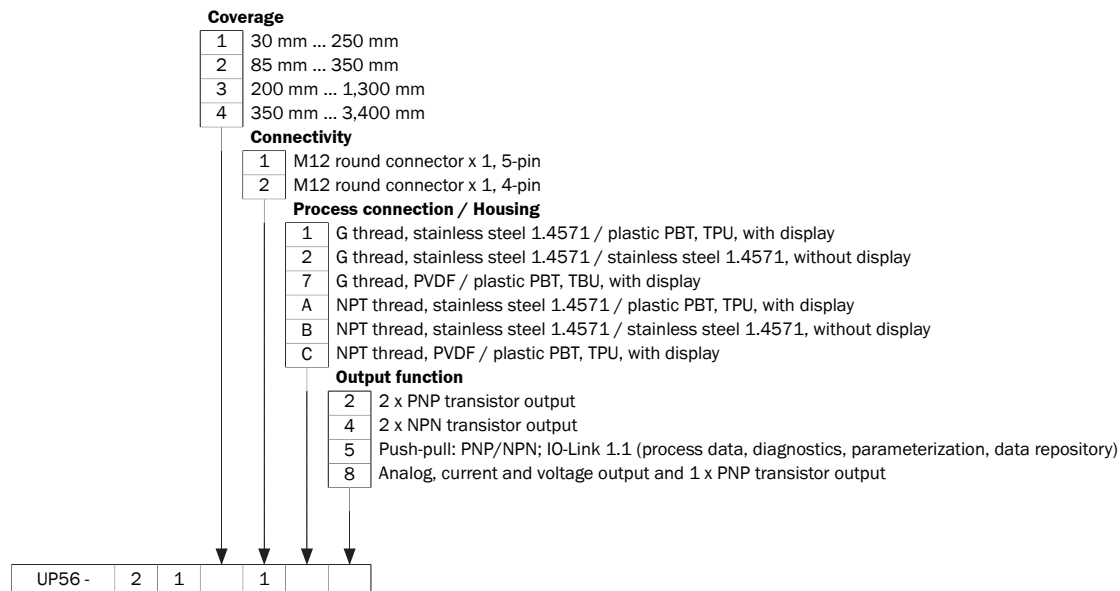
Your benefits

- Non-contact and hence wear-free measurement in pressurized containers
- Easy parameterization, saving time
- Flexible measurement on many different sized containers with only one sensor saves storage costs
- Switching output and analog output combined in a single device
- Adjustable sonic beam for stable measurements even with limited installation space
- Reliable blanking of stirrers possible
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Type code

Other models and accessories → www.sick.com/UP56

Type code



Not all variants of the type code can be combined!

Ordering information

Other models and accessories → www.sick.com/UP56

- **Process connection:** G 1 A
- **Output signal:** 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Measuring range in tank	Measuring range immersion tube	Type	Part no.
Stainless steel 1.4571	200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213128	6048702
	30 mm ... 250 mm	30 mm ... 990 mm	UP56-211128	6048700
	85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212128	6048701
Stainless steel 1.4571, PBT, TPU	200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213118	6041660
	30 mm ... 250 mm	30 mm ... 990 mm	UP56-211118	6041658
	85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212118	6041659

- **Process connection:** G 1 A
- **Output signal:** 2 x PNP
- **Housing material:** Stainless steel 1.4571, PBT, TPU
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Measuring range in tank	Measuring range immersion tube	Type	Part no.
200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213112	6041663
30 mm ... 250 mm	30 mm ... 990 mm	UP56-211112	6041661
85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212112	6041662

- **Process connection:** G 1 A
- **Output signal:** 2 x NPN
- **Housing material:** Stainless steel 1.4571, PBT, TPU
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Measuring range in tank	Measuring range immersion tube	Type	Part no.
200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213114	6041666
30 mm ... 250 mm	30 mm ... 990 mm	UP56-211114	6041664
85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212114	6041665

- **Process connection:** 1" NPT
- **Output signal:** 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V
- **Housing material:** Stainless steel 1.4571, PBT, TPU
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Measuring range in tank	Measuring range immersion tube	Type	Part no.
30 mm ... 250 mm	30 mm ... 990 mm	UP56-2111A8	6054782
85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-2121A8	6054783

- **Process connection:** 2" NPT
- **Output signal:** 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Measuring range in tank	Measuring range immersion tube	Type	Part no.
PVDF, PBT, TPU	350 mm ... 3,400 mm	350 mm ... 8,000 mm	UP56-2141C8	6054786
Stainless steel 1.4571	350 mm ... 3,400 mm	350 mm ... 8,000 mm	UP56-2141B8	6071459
Stainless steel 1.4571, Stainless steel 1.4571	30 mm ... 250 mm	30 mm ... 990 mm	UP56-2111B8	6076769

- **Process connection:** G 1 A
- **Output signal:** 1 x push-pull: IO-Link 1.1 (process data, diagnostics, parameterization, data repository)
- **Housing material:** Stainless steel 1.4571, PBT, TPU
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Measuring range in tank	Measuring range immersion tube	Type	Part no.
200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213115	6073257
30 mm ... 250 mm	30 mm ... 990 mm	UP56-211115	6073255
85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212115	6073256

- **Process connection:** G 2 A PN 6
- **Output signal:** 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V
- **Measuring range in tank:** 350 mm ... 3,400 mm
- **Measuring range immersion tube:** 350 mm ... 8,000 mm
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Type	Part no.
PVDF, PBT, TPU	UP56-214178	6039866
Stainless steel 1.4571	UP56-214128	6048703
Stainless steel 1.4571, PBT, TPU	UP56-214118	6041693

- **Process connection:** G 2 A PN 6
- **Output signal:** 2 x PNP
- **Measuring range in tank:** 350 mm ... 3,400 mm
- **Measuring range immersion tube:** 350 mm ... 8,000 mm
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Type	Part no.
PVDF, PBT, TPU	UP56-214172	6039864
Stainless steel 1.4571, PBT, TPU	UP56-214112	6041695

- **Process connection:** G 2 A PN 6
- **Output signal:** 2 x NPN
- **Measuring range in tank:** 350 mm ... 3,400 mm
- **Measuring range immersion tube:** 350 mm ... 8,000 mm
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Type	Part no.
PVDF, PBT, TPU	UP56-214174	6039865
Stainless steel 1.4571, PBT, TPU	UP56-214114	6041694

- **Process connection:** 2" NPT
- **Output signal:** 2 x PNP
- **Housing material:** Stainless steel 1.4571
- **Measuring range in tank:** 350 mm ... 3,400 mm

Measuring range immersion tube	Connection type	Process temperature	Process pressure	Type	Part no.
350 mm ... 8,000 mm	Round connector M12 x 1, 5-pin	-25 °C ... +70 °C	0 bar ... 6 bar, gauge pressure	UP56-2141B2	6066586

- **Process connection:** G 2 A PN 6
- **Output signal:** 1 x push-pull: IO-Link 1.1 (process data, diagnostics, parameterization, data repository)
- **Measuring range in tank:** 350 mm ... 3,400 mm
- **Measuring range immersion tube:** 350 mm ... 8,000 mm
- **Connection type:** round connector M12 x 1, 5-pin
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar, gauge pressure

Housing material	Type	Part no.
PVDF, PBT, TPU	UP56-214175	6073274
Stainless steel 1.4571, PBT, TPU	UP56-214115	6072094

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