



More than **sensors + automation**



EHEDG Certified Sensors

For conductivity, temperature, and pressure





EHEDG certified for highest hygienic standards

What does EHEDG stand for?

EHEDG is the abbreviation of the expert community European Hygienic Engineering & Design Group, which was founded in 1989. Its goals are:

- Increase hygiene awareness for the processing and packaging of food
- Contribute to hygienic construction and design in all areas of food production
- Ensure the safe manufacturing of food
- Support European legislation with guidelines for hygienic handling, processing, and packaging of food in a hygienic environment as well as by using hygienic machines

Your advantages:

Hygienic conductivity, temperature, and pressure sensors from JUMO meet these guidelines and have been certified by EHEDG. As a producer of food and beverages, you can therefore rely on the hygienic design of our sensors and process connections.



Conductivity sensors and transmitters

µs/cm
ms/cm



Product name	JUMO tecLine Ci Hygienic conductivity sensor	JUMO digiLine Ci HT10 Head transmitter with inductive conductivity sensor	JUMO CTI-750 Inductive conductivity concentration and temperature transmitter in plastic or stainless steel case
Type	202941	202761	202756
Features	- Hygienic sensor design - Fast-response internal temperature sensor - Seal-free construction	- Individual characteristic line for concentration display - Reliable digital data transmission through JUMO digiLine or IO-Link	- Individual characteristic line for concentration display - Easy-to-use programming options with setup program - CIP and SIP capable
Measurands	- Conductivity - Concentration of NaOH, HNO₃, H₂SO₄, HCl - Temperature	- Conductivity - Concentration of NaOH, HNO₃ - Temperature	- Conductivity - Concentration of NaOH, HNO₃ - Temperature
Versions	For transmitters with remote mount design	Combined unit (transmitter and measuring cell together in one device)	- Combined unit (transmitter and measuring cell together in one device) - Remote design type (transmitter and measuring cell connected by cable)
Mounting	Pipe mounting	- Pipe mounting - Wall-mounting	- Pipe mounting - Wall-mounting
Process connection	VARIVENT®	VARIVENT®	VARIVENT®
Outputs	Connection to the transmitter/controller - JUMO AQUIS 500 Ci - JUMO CTI-750 - JUMO AQUIS touch	- RS485; IO-Link 2 analog outputs 2 digital outputs	2 outputs 2 potential-free contacts
Protection type	IP67	IP66, IP67, IP69K	IP67
Sensor material	PEEK	PP, PVDF, or PEEK	PEEK or PVDF



RTD temperature probe and temperature switch



Product name	RTD temperature probe for the food and pharmaceutical industry	JUMO Dtrans T100 Screw-in RTD temperature probe with/without transmitter
Type	902810	902815
Sensor	Pt100	Pt100, Pt1000
Temperature range	-50 to +250 °C	-50 to +260 °C
Transmitters	Optional extra	Optional extra
Interface	–	–
Outputs	• Pt100 passive • Analog output 4 to 20 mA or 0 to 10 V (analog transmitter) • Analog output 4 to 20 mA and 20 to 4 mA (programmable transmitter)	• Pt100/1000 passive • Analog output 4 to 20 mA and 20 to 4 mA (programmable transmitter)
Protection tube	Stainless steel 316L (1.4404 and 1.4435)	Stainless steel 316L (1.4404 and 1.4435)
Process connection	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA • Hygienic thermowells	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA • Hygienic thermowells
Special features	• CIP-compliant process connections, electropolished version available (Ra < 0.8 µm) • SIL and PL compatible	• CIP-compliant process connections, electropolished version available (Ra < 0.8 µm) • SIL and PL compatible • ATEX/IECEx upon request

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Conductivity **Temperature** Pressure JUMO PEKA



Product name	JUMO dTRANS T1000 Temperature sensor with IO-Link	JUMO DELOS T Electronic temperature switch with display and analog output	Hygienic thermowells for temperature probes
Type	902915	902940	902812
Sensor	Pt1000	Pt1000	–
Temperature range	-50 to +150 or +260 °C	-50 to +260 °C	-50 to +260 °C
Transmitters	Inclusive	Inclusive	–
Interface	IO-Link	–	–
Outputs	• 1 output for IO-Link operation • 2 outputs for switching operation	• 1 × PNP switching output • 2 × PNP switching output • 1 × PNP switching output and 1 × analog output 0(4) to 20 mA, 0 to 10 V	–
Protection tube	Stainless steel 316L (1.4404 and 1.4435)	• Stainless steel 316L (1.4404 and 1.4435) • Stainless steel 316Ti (1.4571)	Stainless steel 316L (1.4404)
Process connection	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA • Hygienic thermowells	• Aseptic screw connection • Clamp • VARIVENT®
Special features	• Fully welded • Simple startup • Easy sensor replacement • Accustomed accuracy • Connection via IO-Link master • LED status display	• Programmable • Switching output • Display of the unit selectable • Housing and protection fitting made of stainless steel (316L)	• Rapid response times t0.50 = approx. 3 s; t0.90 = approx. 8 s • Easy cleaning • Electropolished (Ra ≤ 0.8 µm; optional: Ra ≤ 0.4 µm)



Pressure transmitters



Product name	JUMO TAROS S46 H Hygienic pressure transmitter	JUMO MIDAS SI OEM pressure transmitter	JUMO DELOS SI Precision pressure transmitter with switching contact and display
Type	402071	401006	405052
Measuring range	• 0 to 100 bar relative • 0 to 40 bar absolute	• 0.25 to 1.6 bar relative • 0.01 to 0.6 bar relative • 0 to 25 bar absolute	400 mbar to 60 bar relative, absolute
Medium temperature	-25 to +125 °C (maximum 140 °C for 1 h/day)	-30 to +125 °C	-25 to +200 °C
Accuracy	Up to 0.25 %	0.3 %	0.1 to 0.15 %
Outputs	• 4 to 20 mA, 2-wire • 0 to 10 V, 3-wire • 1 to 5 V, 3-wire • 1 to 6 V, 3-wire	• 4 to 20 mA, 2-wire • 0.5 to 4.5 V, 3-wire • 0 to 10 V, 3-wire • 1 to [5]6 V, 3-wire	• 1 × PNP switching output • 2 × PNP switching output • 1 × PNP switching output and 1 × analog output (either 0[4] to 20 mA, 0 to 10 V)
Materials in contact with the medium	Stainless steel 316L (1.4404 and 1.4435)	Stainless steel 316Ti and 316L	Stainless steel 316L
Electrical connection	• Attached cable • Round plug M12 × 1 • Line socket • Terminal head	–	–
Process connection	• Clamp • VARIVENT® • JUMO PEKA	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA
Special features	• Electropolished, Ra ≤ 0.4 µm • FDA-compliant materials	–	• Programmable • Switching output • Measuring range scaling 1:4 • Selectable measuring unit • Housing and process connection made of stainless steel (316L)

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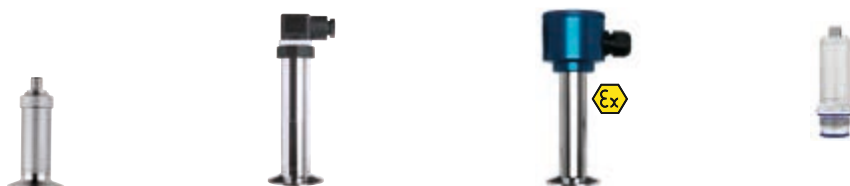
Conductivity Temperature Pressure JUMO PEKA



Product name	JUMO dTRANS p02 Pressure transmitter with display	JUMO dTRANS p20 JUMO dTRANS p20 Ex d Process pressure transmitters
Type	404385	403025/26
Measuring range	20 mbar to 600 bar relative, absolute	60 mbar to 600 bar relative, absolute
Medium temperature	-40 to +200 °C	-40 to +200 °C
Accuracy	0.1 %	0.05 %
Outputs	• 4 to 20 mA, 2-wire	• 4 to 20 mA, 2-wire
Materials in contact with the medium	Stainless steel 316L and 316Ti	
Electrical connection	–	–
Process connection	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA
Special features	• Maximum precision • Programmable • Stainless steel sensor • Aluminum housing	• Maximum precision • Programmable • Stainless steel sensor • Stainless steel case • DNV GL and ATEX approvals



JUMO dTRANS p30 pressure transmitter series



Product name	JUMO dTRANS p30 Pressure transmitter	JUMO dTRANS p31 Pressure transmitter for elevated medium temperature	JUMO dTRANS p33 Pressure transmitters for Ex areas	JUMO dTRANS p35 Pressure sensor with IO-Link
Type	404366	402050	404753	402058
Measuring range	250 mbar to 600 bar relative, absolute	1 to 60 bar relative, absolute	250 mbar to 600 bar relative, absolute	• -1 to +600 bar relative • 0 to 100 bar absolute
Medium temperature	-30 to +120 °C	-30 to +200 °C	-40 to +200 °C	-40 to +125 °C
Accuracy	0.2 to 0.5 %	0.2 to 0.5 %	0.5 %	0.5 to 0.7 %
Outputs	• 4 to 20 mA, 2-wire • 0(4) to 20 mA, 3-wire • 0.5 to 4.5 V, 3-wire • 0 to 10 V, 3-wire • 1 to 5(6) V, 3-wire	• 4 to 20 mA, 2-wire • 0(4) to 20 mA, 3-wire • 0.5 to 4.5 V, 3-wire • 0 to 10 V, 3-wire • 1 to 5(6) V, 3-wire	4 to 20 mA, 2-wire	• 1 output for IO-Link operation • 2 outputs for switch operation (SIO mode; SIO = standard IO)
Materials in contact with the medium	Stainless steel 316L	Stainless steel 316L	Stainless steel 316L	Stainless steel 316L
Electrical connection	• Attached cable • Round plug M12 × 1 • Line socket	• Attached cable • Round plug M12 × 1 • Line socket	• Attached cable • Round plug M12 × 1 • Line socket • Terminal head	Round plug M12 × 1
Process connection	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA	• Aseptic screw connection • Clamp • VARIVENT® • JUMO PEKA	Clamp	• Clamp • JUMO PEKA
Special features	High overload resistance	High temperature measuring cell	ATEX approval	• Stainless steel, fully welded • Simple startup • Easy sensor replacement



JUMO Wtrans p wireless measuring probe system



Product name	JUMO Wtrans p pressure transmitter with wireless data transmission	JUMO Wtrans receiver Universal receiver for JUMO wireless measuring probe
Type	402060	902931
Measuring range	0.25 to 600 bar relative, absolute	Radio signal from transmitters
Medium temperature	-30 to +85 °C	–
Accuracy	0.2 %	0.1 %
Outputs	Radio signal to receiver	• 2 × 0(4) to 20 mA/0 to 10 V, 2 × relay or 4 × 0(4) to 20 mA/0 to 10 V • RS485 interface (Modbus)
Materials in contact with the medium	Stainless steel 316L or 316Ti with surface roughness Ra < 0.8 µm	–
Electrical connection	Transmitter	Screw terminals up to 2.5 mm ²
Process connection	• JUMO PEKA	–
Special features	• Frequency: 868.4 or 915 MHz • Transmission interval: 0.5 to 3600 s • Range: up to 300 m when using the receiver antenna holder for wall mounting and with 3 m antenna cable	• 16 receiving channels (receiving frequency 868.4 MHz) • Galvanic isolation (50 V) • NAMUR compliant (NE21) • LCD display

JUMO PEKA

Hygienic process connection

The hygienic JUMO PEKA adapter system is available for devices that measure temperature, pressure, and conductivity. All parts in contact with the product are made of 316L stainless steel (1.4435) with FDA-compliant seals. The system is easy to clean due to cavity-free mounting and the hygienic design. As a result, it is especially adapted to the requirements of the food industry, the pharmaceutical industry, and biotechnology. The system's different process connections (welding socket, orbital welding socket, clamp, aseptic according to DIN 11864-1, and VARIVENT®) make it versatile and suitable for every application.

Temperature, pressure, and conductivity sensors from JUMO also meet the strict hygiene requirements and have been certified by EHEDG. Consequently, food and beverage manufacturers can rely just as much on the hygienic design of sensors as they can on the product connections.



JUMO PEKA – the EHEDG certified adapter system

Your advantages at a glance

- Fast and easy replacement of the sensor
- Reduction of storage costs
- Easy cleaning
- High degree of process reliability
- EHEDG certification

Process connection JUMO PEKA*



*Process connection in the data sheet of the respective measuring device: 997.

Adapter system

Material	1.4435 (316L)
Surface	Ra ≤ 0.8 µm
Process seal	FPM, FDA compliant

Process connection adapter





www.jumo.net