JUMO

More than sensors + automation

Pressure

Innovative solutions for the toughest requirements

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Dear Reader,

Sensor technology is one of our core areas of expertise. This is particularly so for pressure-sensor technology. After all, we produce both the pressure sensors and the pressure electronic components ourselves. The high quality of our products is the result of more than 40 years of knowledge and experience as well as the motivation to continually improve.

We attach just as much importance to new developments as we do to the continuous improvement of existing products. We optimize our production methods so that we can respond flexibly to your requirements and deliver the highest quality at the best price. As a universal supplier for all industrial sectors, JUMO develops standard devices as well as customized versions – both in small and large quantities – with the same diligence and commitment.

Why is this diversity so important to us? Because we do not only want to be among the best in Germany but also in all other markets throughout the world. As a result, we make sure that all our products meet the current standards, directives, and laws.

This brochure provides an overview of JUMO's extensive range of products for pressure measurement technology. In addition, we would be happy to work with you to attain solutions that are tailored to your specific requirements. We look forward to hearing from you.

Further information about our products can be found at www.jumo.net using the specified type designation or data sheet number.

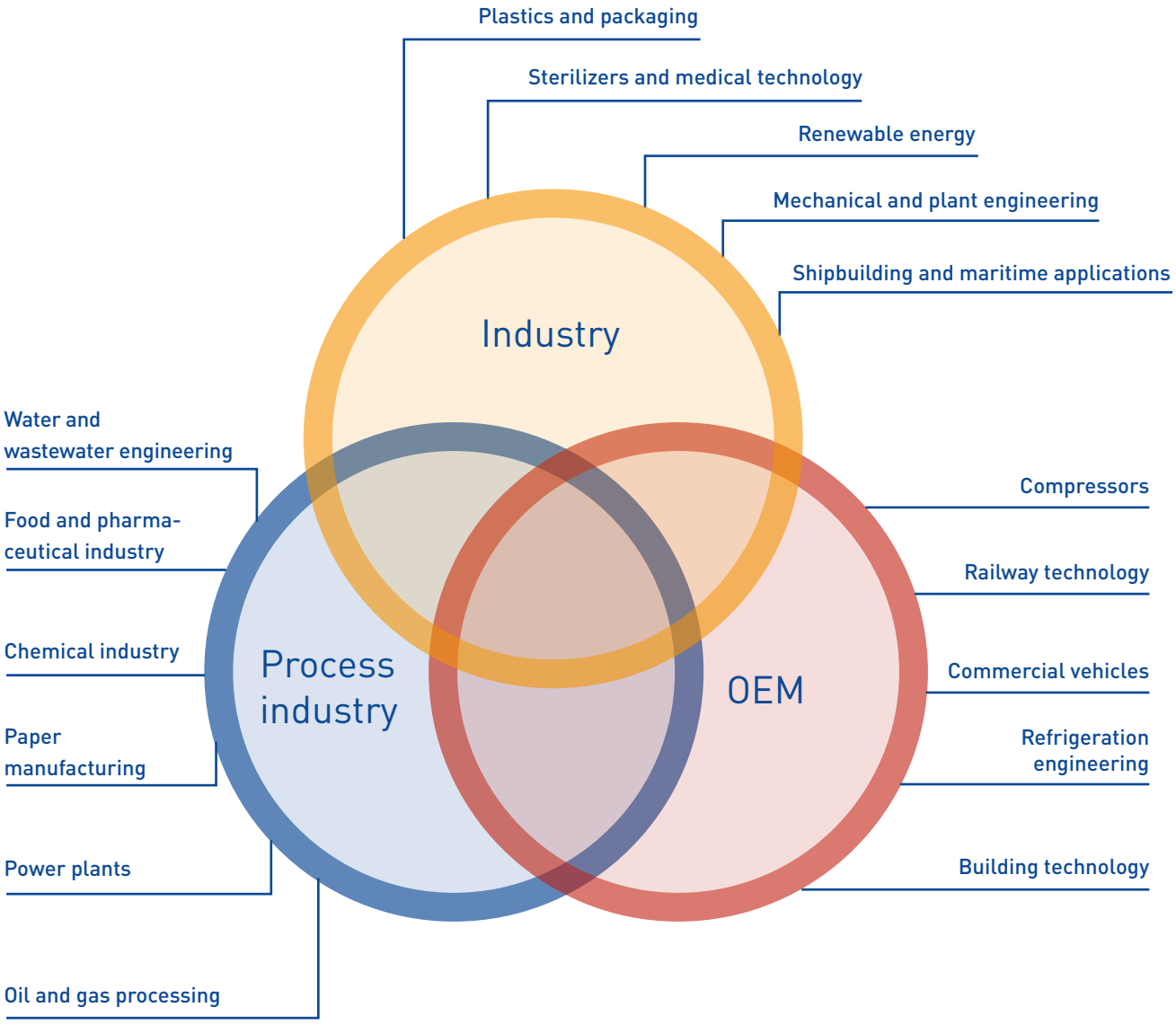
Table of contents

Pressure measurement

Pressure measurement is one of the most important tasks in almost all industrial sectors.

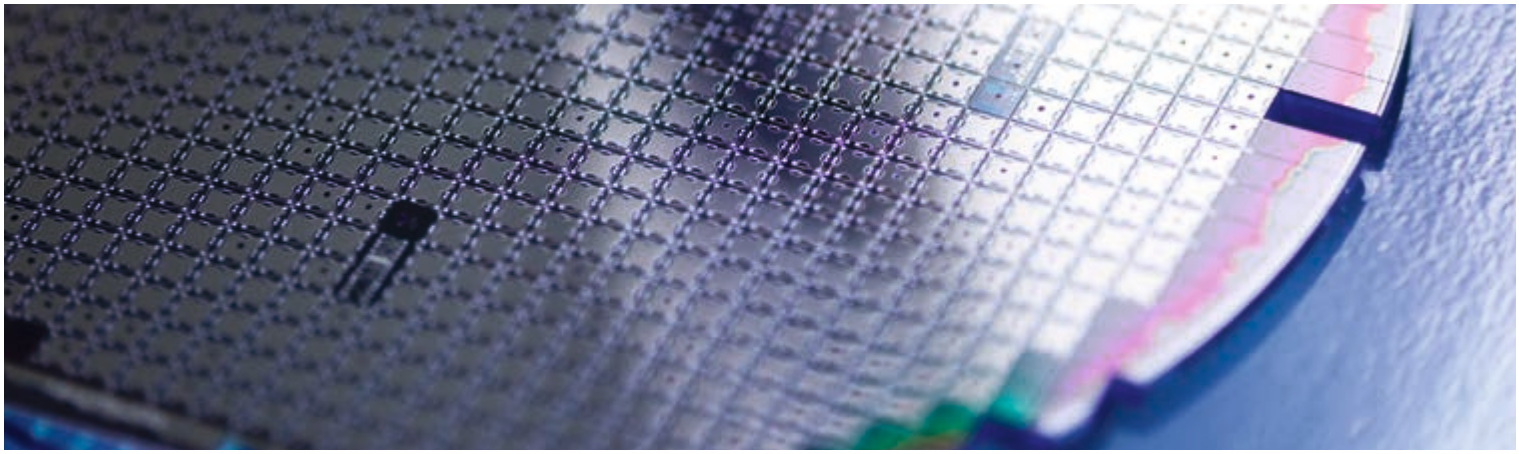
High-quality pressure measuring devices ensure reliable and safe measuring results. JUMO supplies precision solutions for the process industries, hygienic solutions for the food and pharmaceutical industry, universal solutions for mechanical and plant engineering, large quantities for the OEM market, and modules for its competitors. As a result, JUMO can also provide the right solution for your specific application.

The industries



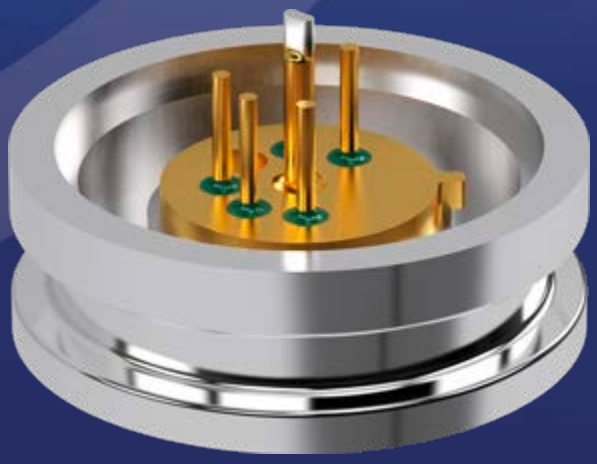
The right solution for every task: our wide range of different devices offers the perfect sensors for classic mechanical and plant engineering as well as for the process industry or the OEM sector.

In addition to standard devices, JUMO's product range also includes customer-specific versions for special applications.



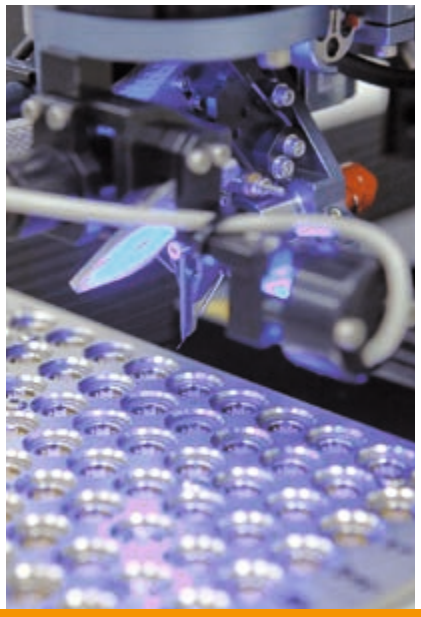
JUMO sensor and measuring system production

Our internally-developed, patented pressure sensors and measuring systems are characterized by the highest quality. Benefit from the large variety of producible sensor technologies and our high degree of flexibility. Our many years of experience and modern production lines enable us to implement your solution.

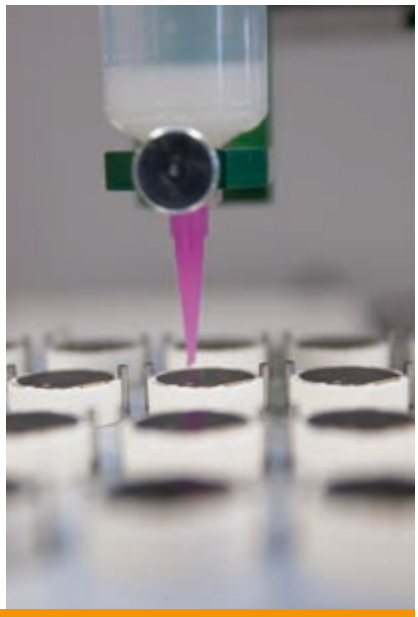


JUMO sensor and measuring system production

Working in a cleanroom for pressure sensors



Production: Silicon pressure sensors



Production: Ceramic pressure sensors

Quality through attention to detail

Our products set the benchmark for precision. This quality results from the extensive experience of our highly-qualified staff as well as close cooperation with our customers in development and production. We are familiar with complex interrelationships and therefore see quality as a process to be continuously examined and improved. Starting with new product development based on sensors that we manufacture ourselves, we safeguard our manufacturing process with the very latest production lines and finally subject each device to a full final inspection.

Flexibility

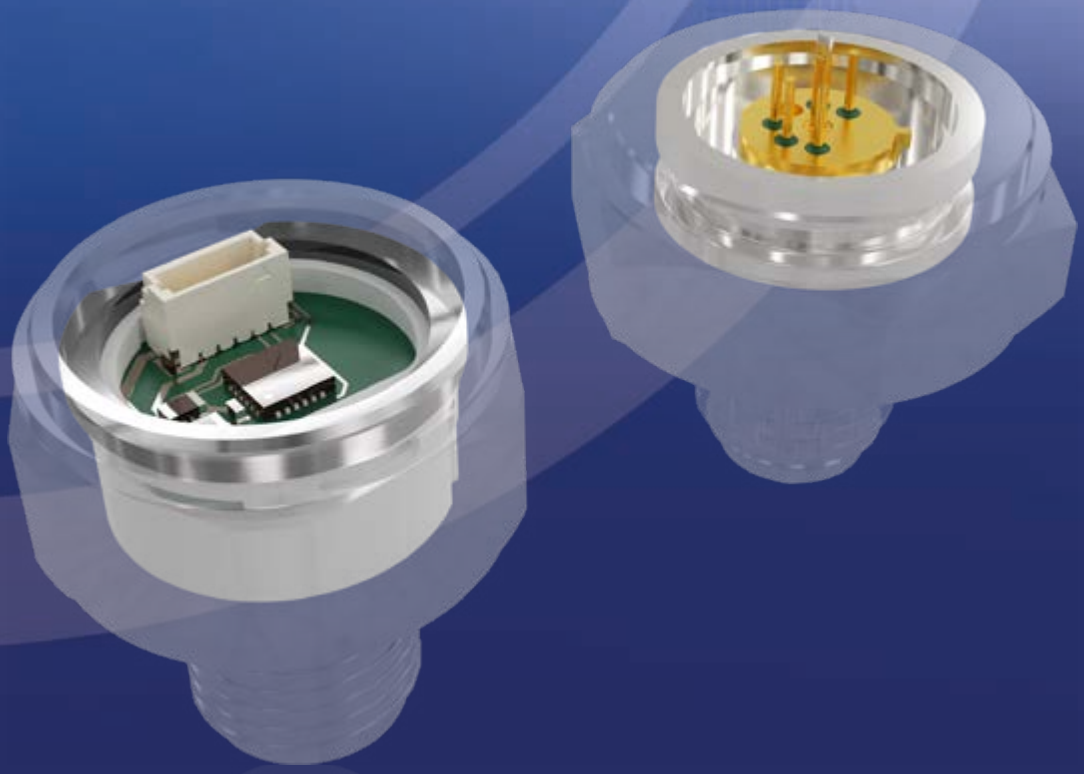
At JUMO we develop, produce, and test new products or customer-specific versions ourselves. Our independence and many years of experience enable us to respond flexibly to special customer requests as well as to meet the requirements of the respective application.

Diversity and expertise

Even the sensor itself – the basis of any pressure measuring device – can be individually adapted to your applications and requirements. You can choose between different measuring systems. These include piezoresistive silicon, metal thin film, ceramic thick film, or capacitive ceramic. You can also use other selection criteria such as size or materials.
Our sensors are available in various expansion stages as modules or in complete devices.

JUMO CEROS series

The JUMO CEROS S01/S02/C02 M digital pressure cells are used for measuring the pressure of liquid and gaseous media. Unlike ordinary pressure measuring cells, this is an active component that provides a temperature-compensated and calibrated output signal – which can be digital or analog. The measuring element with integrated signal processing ensures stable, precise linearity and accuracy values even under adverse conditions. The digital pressure measuring cells allow the production of pressure transmitters and level probes to be greatly optimized, as time-consuming and cost-intensive production steps, such as calibration and temperature compensation, are no longer required. As a result, faster and cost-optimized production is made possible. The JUMO CEROS 02 series is also suitable for battery operation.



Digital pressure measuring cells

The features at a glance

- Digital measuring cells with piezoresistive silicon sensor or thick-film ceramic sensor for absolute and relative pressure measurement
- Temperature-compensated and calibrated digital or analog output signal
- Digital output signal includes pressure and temperature values
- Easy zero point correction possible (e.g. after installation or welding of the measuring cell)
- Direct mounting on circuit board possible without additional connector
- Adjustable sensor monitoring (signal limitation, attenuation, limit value)
- Traceability of the sensor with a clear digital signature
- Variants with low energy demand available for battery operation

Features

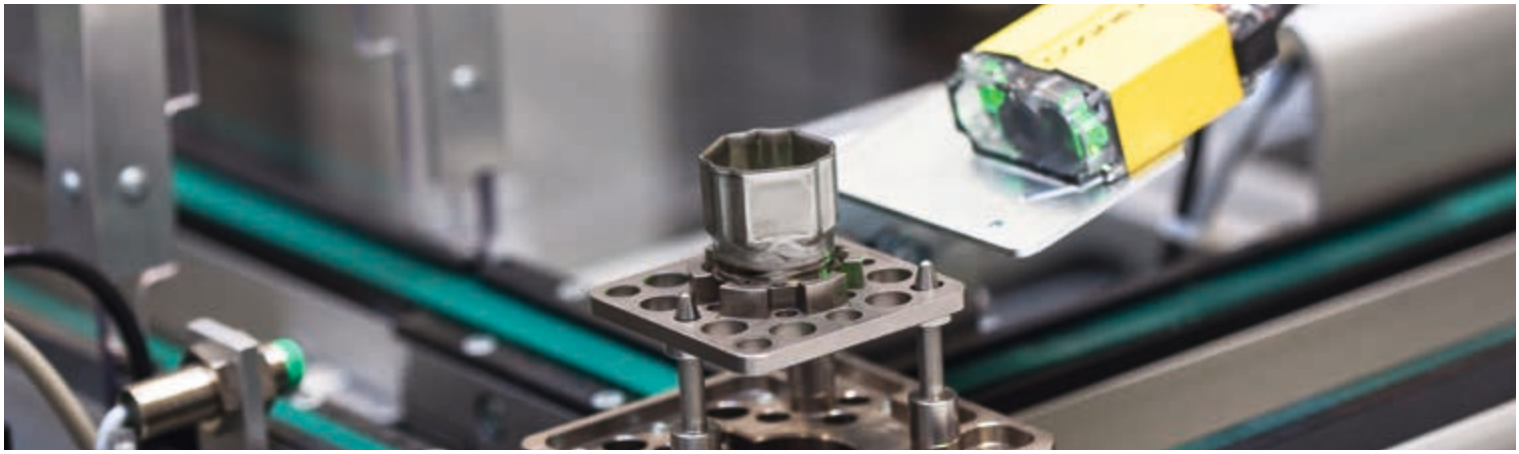
- Piezoresistive silicon sensor or ceramic thick-film sensor
- Integrated temperature sensor
- Oil filling: silicone (piezoresistive silicon sensor)
- Output: digital I²C interface or 0.5 to 4.5 V ratiometric
- Accuracy: <0.4 % from the end value
- Linearity: < 0.2 % from the end value
- Housing material: 1.4404, 1.4571 (piezoresistive silicon sensor)
- Measuring ranges: 100 mbar to 100 bar relative, 0 to 100 bar absolute
- Temperature range: -40 to +125 °C
- Signal resolution: up to 16 bit
- Response time: T90 <3 ms
- Optional: surface roughness Ra ≤ 0.8 µm

Product benefits

- No investments in additional production technology – the pressure measuring cell provides an elaborately temperature-compensated and calibrated, pressure-proportional, digital/ratiometric output signal
- Space-saving design – digital pressure measuring cell with integrated signal processing for applications in which installation space is extremely limited
- Simple zero point correction possible to correct welding or installation errors
- Digital communication allows transfer of pressure and temperature values with minimal cabling
- Increased reliability of the sensor due to improved temperature stability
- Simple, hassle-free use through protection against reverse-polarity, overvoltage, and electrostatic discharge

Application areas and special features

- For installation in pressure transmitters, level probes, hand-held devices, valve blocks, data loggers, and digital pressure gauges
- Battery operation possible
- Can be used in the food and pharmaceutical industry (front-flush installation)

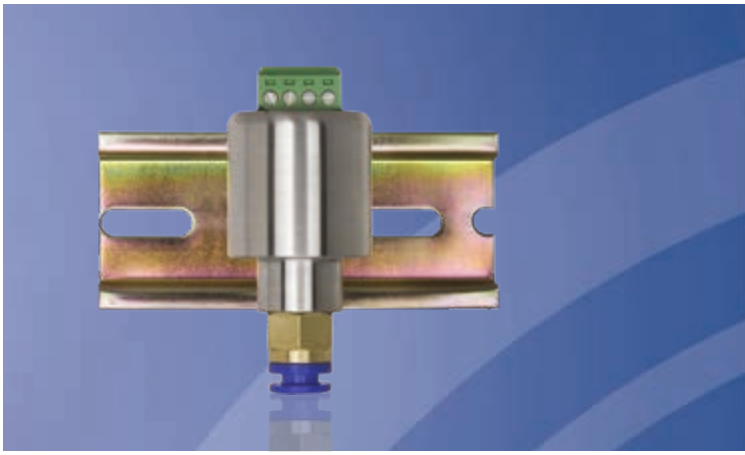


JUMO MIDAS series

The compact pressure transmitters of the JUMO MIDAS series are characterized by measurement that is reliable and that has long-term stability – at an excellent price-performance ratio. We ensure high quality due to a fully-automated production and complete final inspection. Different measuring ranges, process connections, and electrical connections result in a versatile portfolio with solutions for every measuring task.

OEM pressure transmitter series JUMO MIDAS

	OEM pressure transmitters	Basic	Universal	Low pressure	Standard
	Product name	JUMO MIDAS C08	JUMO MIDAS S05	JUMO MIDAS S06	JUMO MIDAS SI
Application	Type	401002	401010	401011	401006
	Facility management	•			
	Industry	•	•	•	•
	Air conditioning and refrigeration technology		•	•	
	Compressors	•		•	•
	Co-generation (combined heat and power)	•	•	•	•
	Medical technology		•	•	
	Pneumatics	•			•
	Packaging and filling	•	•	•	•
	Wind power		•		
Technical data	Measuring range	0 to 60 bar relative	0 to 100 bar relative 0 to 40 bar absolute	0.1 to 0.6 bar relative	0.25 to 1.6 bar relative 0.01 to 0.6 bar relative 0 to 25 bar absolute
	Measuring system	Thick film on ceramic bodies (piezoresistive)	Silicon sensor with stainless steel separating membrane		
	Medium temperature	-20 to +125 °C	-40 to +125 °C	-20 to +100 °C	-30 to +125 °C
	Accuracy (linearity)	0.25 %	0.2 to 0.3 %	0.2 to 0.3 %	0.3 %
	Output	4 to 20 mA, 2-wire DC 0.5 to 4.5 V, 3-wire; DC 0 to 10 V, 3-wire; DC 1 to (5)6 V, 3-wire			4 to 20 mA, 2-wire DC 0.5 to 4.5 V, 3-wire; DC 0 to 10 V, 3-wire; DC 1 to (5)6 V, 3-wire; DC 0 to 10 V, 3-wire
	Process connection	All industry-related screw connections			
	Approvals	cULus		–	–



OEM pressure transmitter series JUMO MIDAS

	OEM pressure transmitters	Ship approval	Railway	High pressure	ATEX
	Product name	JUMO MIDAS S07 MA	JUMO MIDAS S19 R	JUMO MIDAS H20 HP	JUMO MIDAS S21 Ex
Application	Type	401021	401008	401020	404710
	Shipbuilding	•			
	Railway		•		
	Hydraulics			•	
	Industry	•		•	•
	Compressors	•		•	•
	ECE type approval			•	
	Wind power			•	
	ATEX, explosion protection				•
Technical data	Measuring range	1 to 100 bar relative; 1 to 25 bar absolute	2.5 to 60 bar relative; 2.5 to 40 bar absolute	100 to 1000 bar relative	0.25 to 100 bar relative; 0.6 to 25 bar absolute
	Measuring system	Silicon sensor with stainless steel separating membrane		Thin film sensor	Silicon sensor with stainless steel separating membrane
	Medium temperature	-40 to +125 °C	-40 to +125 °C	-40 to +125 °C	-40 to +85 °C
	Accuracy (linearity)	0.25 to 0.3 %	0.25 to 0.3 %	0.5 to 1 %	0.3 %
	Output	4 to 20 mA, 2-wire; DC 0 to 10 V, 3-wire; DC 1 to 5(6) V, 3-wire	4 to 20 mA, 2-wire	4 to 20 mA, 2-wire; DC 0.5 to 4.5 V, 3-wire; DC 0 to 10 V, 3-wire; DC 1 to 5(6) V, 3-wire	4 to 20 mA, 2-wire
	Process connection	All industry-related screw connections			
	Approvals	DNV	Tested for railway applications according to DIN EN 50155 and DIN EN 50121	cULus; ECE type approval	ATEX



	OEM pressure transmitters	Cabinet	Differential pressure	Seawater
	Product name	JUMO MIDAS DR	JUMO MIDAS DP10	JUMO MIDAS C18 SW
Application	Type	401009	401050	401012
	Facility management	•	•	
	Industry	•	•	•
	Air conditioning and refrigeration technology		•	
	Compressors	•	•	
	Co-generation (combined heat and power)		•	
	Pneumatics	•		
	Packaging and filling		•	
	Water treatment			•
Technical data	Measuring range	1.6 to 16 bar relative	0.4 to 16 bar DP	1.6 to 100 bar relative
	Measuring system	Thick film on ceramic bodies (piezoresistive)	Piezoresistive silicon sensor	Thick film on ceramic bodies (piezoresistive)
	Medium temperature	-15 to +60 °C	-15 to +100 °C	-20 to +125 °C
	Accuracy (linearity)	0.5 %		0.25 to 0.3 %
	Output	4 to 20 mA, 2-wire; DC 0 to 10 V, 3-wire; DC 0.5 to 4.5 V, 3-wire; DC 1 to 5(6) V, 3-wire		4 to 20 mA, 2-wire; DC 0 to 10 V, 3-wire
	Process connection	Push-in fittings for pipe or tube	Rp 1/8 internal thread, push-in fitting for pipe or tube	All industry-related screw connections
	Approvals	–	Tested for railway applications according to DIN EN 50155 and DIN EN 50121	DNV

JUMO dTRANS p30 series

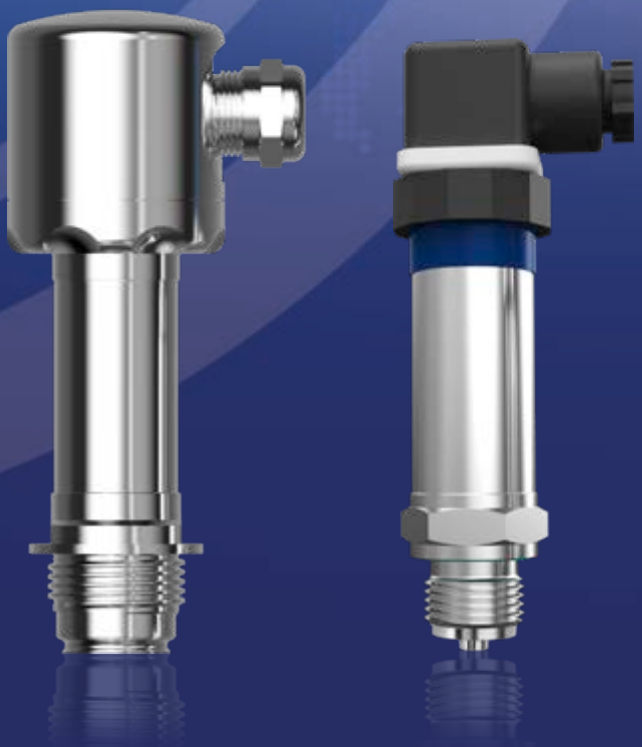
The JUMO dTRANS p30 series stands out with its diversity. Its universal use is reflected in the large selection of measuring ranges, process connections, and electrical connections. The front-flush, sealless measuring system and the high temperature variant for use in media with temperatures of up to 200 °C allow this series to meet the requirements of hygienic applications. This flexible series is complemented by a variation with explosion protection so that virtually all application areas are covered.

Industrial pressure transmitter series JUMO dTRANS p30

	Pressure transmitters	Standard	High temperature	Gases	Ex version	Small ranges
	Product name	JUMO dTRANS p30	JUMO dTRANS p31	JUMO dTRANS p32	JUMO dTRANS p33	JUMO dTRANS ceramic
Application	Type	404366	402050	402051	404753	404327
	Biogas plants	•				•
	Chemical industry	•	•			•
	Compressed air control	•		•		
	Food and pharma-ceutical industry	•	•		•	•
	HVAC technology	•		•		
	Industry, universal	•			•	
	Laboratory technology	•		•		
	Medical technology	•	•			•
	Cleanroom technology			•		
	Sterilization/ autoclaving		•			
Technical data	Measuring range	250 mbar to 600 bar relative, absolute	1 to 60 bar relative, absolute	40 to 600 mbar relative	250 mbar to 600 bar relative, absolute	50 mbar to 1 bar relative
	Medium temperature	-30 to +120 °C	-30 to +200 °C	-30 to +120 °C	-40 to +200 °C	-20 to +80 °C
	Accuracy (linearity)	0.2 to 0.5 %		0.5 %		0.2 %
	Output	4 to 20 mA, 2-wire; 0(4) to 20 mA, 3-wire; DC 0.5 to 4.5 V, 3-wire; DC 0 to 10 V, 3-wire; DC 1 to 5(6) V, 3-wire			4 to 20 mA, 2-wire	4 to 20 mA, 2-wire; DC 0.5 to 4.5 V, 3-wire
	Process connection	Thread; hygienic connections (with EHEDG); JUMO PEKA; diaphragm seal		Thread; hose connection	Thread	Thread; hygienic connections

JUMO TAROS series

The devices of the JUMO TAROS series are designed for precision measurement and durability. They offer process reliability through a high degree of accuracy, which also applies over a wide temperature range. Relative and absolute pressures in liquid and gaseous media are measured reliably. The pressure measuring ranges, which are adjustable at the factory, lie between 0 and 100 bar relative as well as between 0 and 40 bar absolute. The transmitters are used in many industries, including mechanical and plant engineering as well as the food and pharmaceutical industry.



Precision and hygienic pressure transmitter

Your benefits in a nutshell:

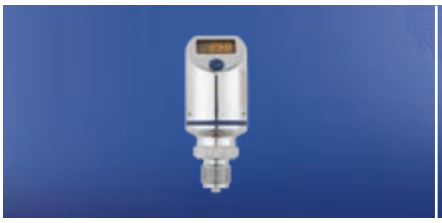
- More process reliability through high-precision measurement
- Extended application area for special uses due to autoclavability at up to 140 °C/3.6 bar absolute as well as operation in CIP and SIP processes at up to 140 °C
- Reliable measurement results over a long period due to simple zero point correction using a magnet
- Maximum operational safety – protection type IP69 enables operation in all areas
- Hygienic safety and good cleanability through use of FDA-compliant materials and hygienic process connections with Ra ≤ 0.4 µm

	Product name	JUMO TAROS S46 H	JUMO TAROS S47 P
Application	Type	402071	402072
	Special features	Electrolytically polished, Ra ≤ 0.4 µm; FDA-compliant materials	Simple zero point correction using a magnet
	Areas of application	Food industry, CIP and SIP applications; sterilizers and autoclaves; pharmaceutical, medical, and biotechnology; hygienic applications	Plant and mechanical engineering; pump construction; sterilizers; test equipment construction; calibration technology; laboratories
Technical data	Parts in contact with the product	1.4404 and 1.4435 (316L)	
	Electrical connection	Attached cable, round plug M12 × 1, line socket, terminal head	
	Measuring range	From 0 to 0.1 bar relative to from 0 to 100 bar relative; from 0 to 0.6 bar absolute to from 0 to 40 bar absolute	From 0.1 to 100 bar relative; from 0.6 to 40 bar absolute
	Medium temperature	-25 to +125 °C (maximum 140 °C for 1h/day)	-40 to +125 °C (maximum 140 °C for 1h/day)
	Output	4 to 20 mA, 2-wire DC 0 to 10 V, 3-wire DC 1 to 5 V, 3-wire DC 1 to 6 V, 3-wire	
	Process connection	Clamp, VARIVENT®, JUMO PEKA (with EHEDG)	All common process connections
	Protection type	IP65 to IP69 (depending on the electrical connection)	
	Accuracy	Up to 0.25 % of the measuring span at 20 °C	
	Linearity	0.1 %	
	Long-term stability	0.1 %	
	Voltage supply	DC 8 to 30 V	DC 24 V

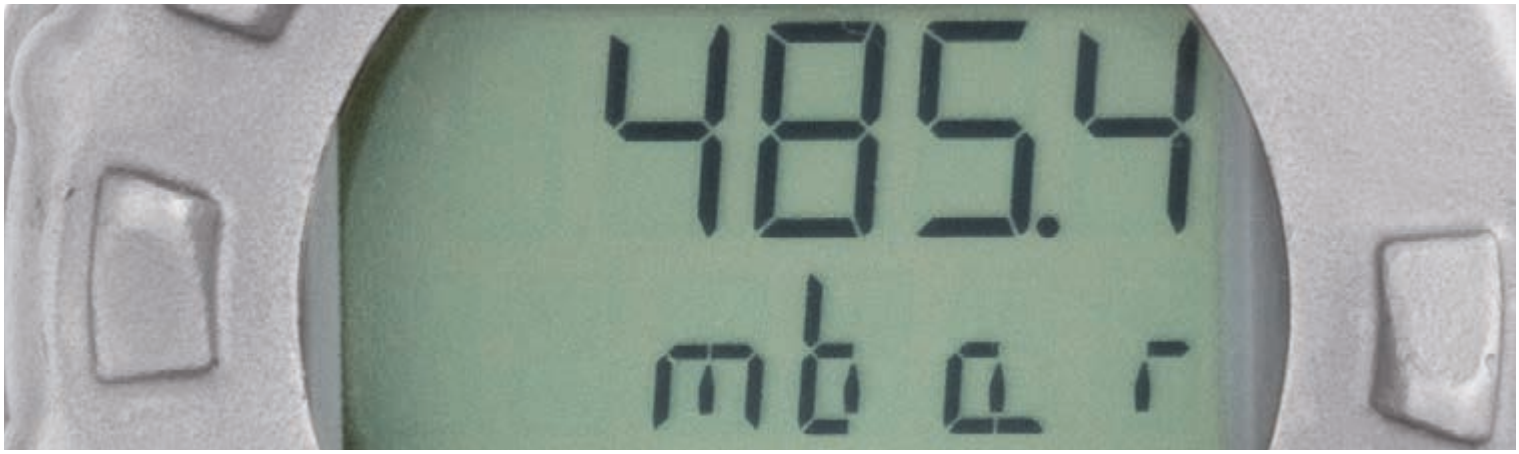
JUMO DELOS series

Reduced costs due to measuring range scaling: the JUMO DELOS series allows various measuring tasks to be performed with one device. Configuration is performed directly at the device or by using an easy-to-use setup program. The large, illuminated LCD display visualizes the setting parameters during configuration. During operation, the current measured value and the switching contact status are displayed. To improve readability you can rotate the device itself by ±160° and the display by 180° (e.g. when installed overhead). Its easy-to-clean design and front-flush sealless measuring system make the JUMO DELOS series suitable for hygienic applications as well.

Precision pressure transmitters with switching contact and display



	Product name	JUMO DELOS SI	JUMO DELOS HP
Application	Type	405052	405054
	Food and pharmaceutical industry	•	
	CIP and SIP plants	•	
	Mechanical and plant engineering	•	•
	Refrigeration and air conditioning engineering	•	
	Hydraulic units		•
	Special features	Programmable; switching output; measuring range scaling 1:4; selectable measuring unit; housing and process connection made of stainless steel (316L)	Programmable; switching output; measuring range scaling 1:4; selectable measuring unit; housing and process connection made of stainless steel; for high-pressure applications
Technical data	Measuring range	400 mbar to 60 bar relative, absolute	160 to 600 bar relative
	Medium temperature	-25 to +200 °C	-25 to +100 °C
	Ambient temperature	-25 to +75 °C	
	Accuracy (linearity)	0.1 to 0.15 %	0.1 %
	Output	1x PNP switching output, 2x PNP switching output, 1x PNP switching output, and 1x analog output (either: 0(4) to 20 mA, 0 to 10 V)	
	Process connection	Thread; hygienic connections (with EHEDG); diaphragm seal; JUMO PEKA (with EHEDG)	Thread



JUMO dTRANS p20 series

The highest precision with simple operation – that is what the programmable pressure transmitters from JUMO offers you. You will find the optimum solution to all your tasks whether it involves pressure, differential pressure, level, or flow. We provide an extensive selection of process connections and special approvals.

Process pressure transmitter series JUMO dTRANS p20

Startup with just a few easy steps

You can perform startup quickly and easily with the rotary knob or the membrane keys. The devices are also easy to operate at any time in an Ex area. The user does not even have to open the housing.

Essential device features:

- Clear LCD display as a standard feature
- High degree of accuracy and stability
- Low temperature drift
- Reduced stockkeeping due to variable setting on the device
- High temperature range
- Sturdy aluminum or stainless steel case

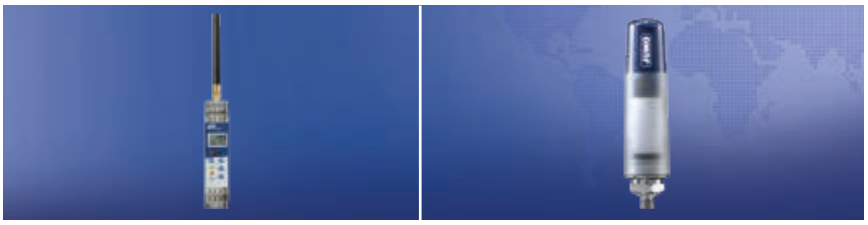
	Product name	JUMO dTRANS p20 JUMO dTRANS p20 Ex d	JUMO dTRANS p20 DELTA JUMO dTRANS p20 DELTA Ex d
Application	Type	403025/26	403022/23
	[Ex d]	•	•
	[Ex ia]	•	•
	Process pressure	•	
	Differential pressure		•
	Flow		•
	Level		•
	Special features	Maximum precision; programmable; stainless steel sensor; stainless steel case	
Technical data	Measuring range	60 mbar to 600 bar relative, absolute	1 mbar to 100 bar DP
	Medium temperature	-40 to +200 °C	-40 to +110 °C
	Accuracy (linearity)	0.05 %	0.07 %
	Output	4 to 20 mA, 2-wire	
	Process connection	Thread; hygienic connections (with EHEDG); JUMO PEKA (with EHEDG); diaphragm seal	2x 1/4-18 NPT, diaphragm seals
	Approval	DNV, ATEX	ATEX

JUMO Wtrans p

The JUMO Wtrans p is a system for wireless acquisition of pressure measured values using state-of-the-art wireless technology. Universally applicable sensors enable measured value acquisition even on moving locations. As a result, they open up entirely new possibilities for measured value acquisition. The devices are particularly suitable for mobile, rotating, or even stationary applications – wherever interference-free transmission is required but cable laying is too costly.

The measured value is transmitted wirelessly to the receiver of the Wtrans system from where it is forwarded to measurement and control technology equipment such as controllers, automation systems, displays, or recording devices. In Europe, the system uses radio frequency 868.4 MHz. In the USA, Canada, Australia, New Zealand, and additional countries radio frequency 915 MHz is used. These frequencies are largely immune to external interference and, in addition, ideal for use in rough industrial environments. Up to 16 transmitters can be connected to each receiver in any combination.

JUMO Wtrans p – pressure transmitter with wireless measured value transmission



	Product name	JUMO Wtrans receiver	JUMO Wtrans p
Application	Type	902931	402060
	Mechanical and plant engineering	•	•
	Food and pharmaceutical industry	•	•
	Chemical industry	•	•
	Plastic	•	•
	Building technology	•	•
Technical data	Measuring range	Wireless signal from transmitters	0.25 to 600 bar relative, absolute
	Medium temperature	–	-30 to +85 °C
	Accuracy	0.1 %	0.2 %
	Output	(0)4 to 20 mA 0 to 10 V relay	Wireless signal to receiver
	Process connection	–	Thread; NPT; UNF; JUMO PEKA (with EHEDG)
	Frequency	868.4/915 MHz	868.4 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	
	Voltage supply	AC 110 to 240 V; AC/DC 20 to 30 V	Lithium battery 3.6 V

JUMO differential pressure transmitters

Our differential pressure transmitters are the ideal solution for measuring absolute pressure, differential pressure, flow, and level. Their versatility and uncomplicated operation make them ideal for use in Ex areas as well as for less critical applications.

JUMO differential pressure transmitters




	Product name	Multirange pressure and differential pressure transmitter	Pressure and differential pressure transmitter	JUMO MIDAS DP 10	JUMO dTRANS p20 DELTA
Application	Type	402006	404304	401050	403022/403023
	[Ex d]				•
	[Ex ia]				•
	Gas	•	•	•	•
	Liquid			•	•
	Heating, air conditioning technology	•	•	•	•
	Filter monitoring	•	•	•	•
	Pump control			•	
	Differential pressure	•	•	•	•
	Flow		•		•
	Level				•
	Special features	Measuring range adjustable; with LCD display as an optional extra	With switching contacts; very small measuring ranges; adjustable; with LCD display as optional extra	For liquid and gaseous media	Maximum precision, programmable, stainless steel case
Technical data	Measuring range (min./max.)	2.5 to 100 mbar DP, relative	0.50 to 1200 mbar DP, relative	0.4 to 16 bar DP, relative	1 mbar to 100 bar DP, relative
	Medium temperature	0 to 60 °C	-10 to +50 °C	-15 to +100 °C	-40 to +110 °C
	Accuracy (linearity)	1 %		0.5 %	0.07 %
	Output	(0)4 to 20 mA, 3-wire; DC 0(2) to 10 V, 3-wire	4 to 20 mA, 2-wire; 0 to 20 mA, 3-wire; DC 0 to 10 V, 3-wire	4 to 20 mA, 2-wire; DC 0 to 10 V, 3-wire; DC 0.5 to 4.5 V, 3-wire	4 to 20 mA, 2-wire
	Process connection	Hose connection	Thread; hose connection	G 1/8" internal thread, stainless steel socket, compression fitting	2x 1/4-18 NPT, diaphragm seals

JUMO CANtrans series

When networking with CANopen is required, our transmitters of the CANtrans series are the first choice. The IP67 protection type and high vibration resistance of the compact and robust sensors also ensure maximum process reliability. In conjunction with the safety mechanisms of the CAN protocol, the built-in sensor monitoring ensures extremely reliable measured value acquisition. The standardized interface also allows simple integration of the sensors in all CANopen plants.

JUMO CANtrans series for CANopen systems

	Product name	JUMO CANtrans p ceramic	JUMO CANtrans p
Application	Type	402055	402056
	Pressure	•	•
	Special features	Programmable, ceramic sensor, device profile DS 404	Programmable; stainless steel sensor, device profile DS 404
Technical data	Measuring range	1.6 to 100 bar relative	0.25 to 600 bar relative, absolute
	Medium temperature	-20 to +85 °C	-40 to +200 °C
	Accuracy (linearity)	0.5 %	
	Output	CANopen	
	Process connection	Thread	Thread; hygienic connections (with EHEDG); JUMO PEKA (with EHEDG)

JUMO dTRANS p35

Long plant downtimes now belong to the past. The new JUMO pressure sensors with IO-Link help you to better plan sensor replacement and therefore availability via the integrated diagnostic function. Time-consuming parameterization when exchanging sensors is no longer required as the necessary data is transferred from the higher-level system.

IO-Link

Sensors that have a say

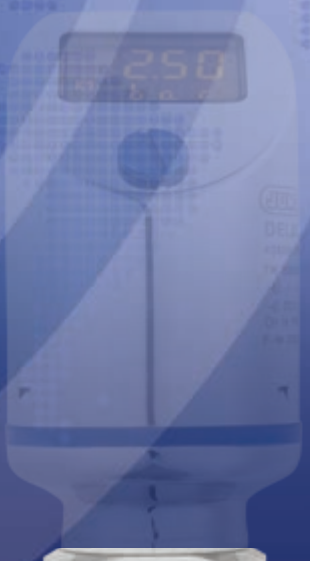
Your benefits in a nutshell:

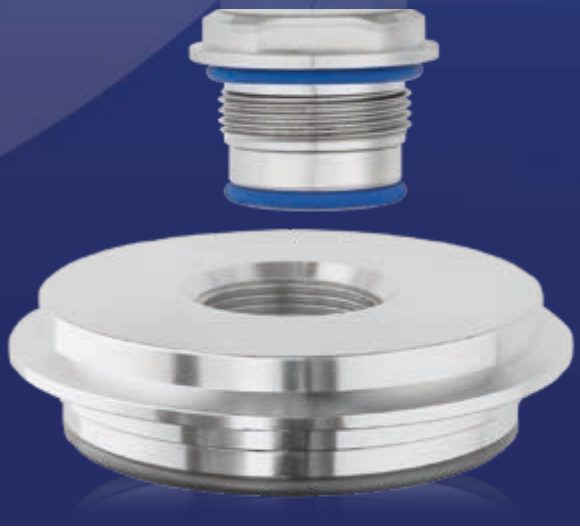
- Optimization of the production process due to communication down to the lowest field level
- Reduction of mounting and startup times
- Increase of plant efficiency due to maximum transparency down to the sensor level
- Reduction of maintenance and service costs while plant availability increases at the same time
- High degree of process reliability due to long operating life and great accuracy
- Flexible use through compact design type and a variety of process connections

	Product name	**JUMO dTRANS p35 Pressure sensor with IO-Link**
Application	**Type**	402058
	Features	Fastest data transfer rate: COM3; clearly assignable due to IODD
	Areas of application	Food industry, mechanical and plant engineering, packaging industry, process automation
Technical data	**Measuring range**	400 mbar to 600 bar relative, absolute
	Medium temperature	-25 to +125 °C
	Ambient temperature	-40 to +85 °C
	Output	IO-Link device V 1.1 (downward compatible to IO-Link V 1.0); 2 outputs for switch operation (SIO mode; SIO = standard IO)
	Data transfer rate	COM3 (230.4 kBaud)
	Process connection	Commercially available screw connections and hygienic process connections (with EHEDG)
	Protection type	IP65, IP67
	Cycle time	2 ms
	Special features	Compact design type

JUMO PEKA and diaphragm seal

To protect the pressure sensor and therefore safeguard the process, diaphragm seals – either with or without capillary lines – can be applied as a connection between the measuring device and the medium. This is used, for example, to maintain material resistance with aggressive media or for medium temperatures above 200 °C. In addition to diaphragm seals, which can achieve the lowest possible surface roughness, the JUMO PEKA system is also available for hygienic applications. It has been designed according to hygienic guidelines.





JUMO PEKA and diaphragm seal

JUMO Dtrans T100
Screw-in RTD temperature probe without/with transmitter
Type 902815

JUMO tecLine CR-4P
Conductive four-electrode conductivity measuring cell
Type 202930

JUMO DELOS SI
Precision pressure transmitter with switching contact and display
Type 405052

JUMO dTRANS p20 DELTA
Differential pressure transmitter
Type 403022

JUMO PEKA
Process connection adapter system
Type 409711

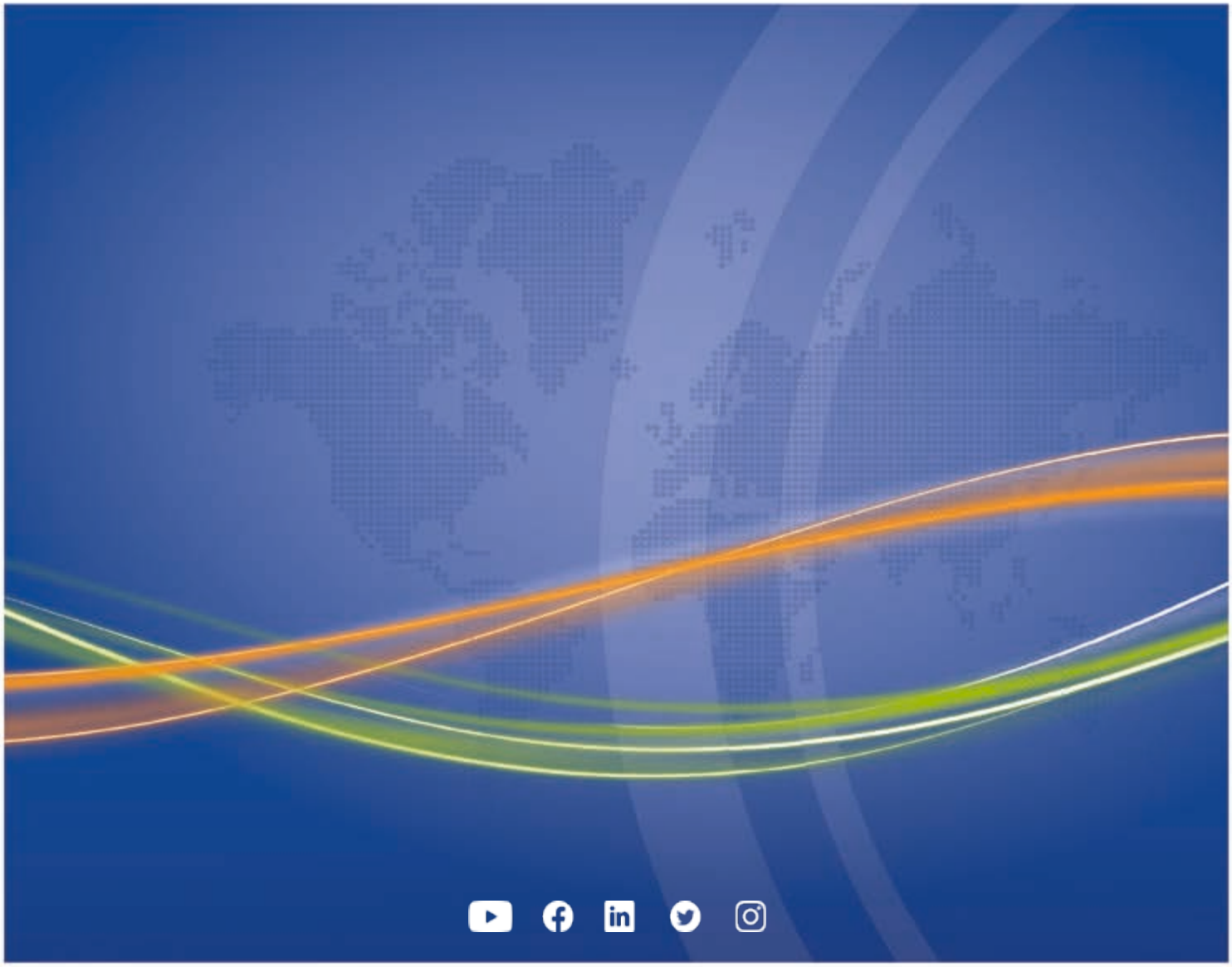
Diaphragm seal with flange connection according to ANSI B 16.5
With form RF sealing strip
Type 409786

JUMO PEKA

The process connection JUMO PEKA allows the measuring device (for different physical measuring values or electrolytic conductivity) to be connected to an application-specific process connection adapter (clamp, VARIVENT®, aseptic, or orbital welding socket). Based on an easy-to-clean design without cavities, the modular adapter system is specifically tailored to the requirements of hygienic processes. The rigid connector with rotatable adapter allows alignment of the measuring device and protects the flush-mounted O-ring from damage during installation. The thread allows the measuring device to be installed and removed unlimited times which simplifies mounting, cleaning, and repair work.

Diaphragm seals

Diaphragm seals, as extended process connections, protect the measuring device and its sensor from difficult environmental influences such as media that is contaminated, highly viscous, thickening (curdling), highly corrosive, toxic, and hot. Diaphragm seals can also be used for installation points that are difficult to access. In such cases, the pressure is transmitted to the sensor via a capillary line filled with filling oil.
JUMO offers 2 basic designs: membrane and inline diaphragm seals. The possible combinations for diaphragm material (stainless steel, titanium, PTFE, etc.) and filling oil (silicone oil, high temperature oil, vegetable oil, etc.) are so versatile that they can also be used in hygienic applications.



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