

## Pressure Transmitters

Comprehensive range for industrial applications



## G3100/3200 compact pressure transmitter

- Small and compact package size
- Lifetime > 100 M cycles
- Measuring range up to 2,200 bar
- Process temperatures from – 40 ... +125°C
- Wide range of pressure ports and electrical connectors
- Premium stainless steel housing and diaphragm
- Customised OEM versions available



### Application

The pressure transmitters G3100 and G3200 are used for common industrial gauge pressure measurement that needs in addition to a consistent high level of reliability and long term stability, especially in a small package size. The pressure port and the housing are made completely out of 17-4PH/1.4548 stainless steel (without Polymers). This gives an excellent durability and a use for various gases, liquids and vapours. A broad selection of pressure ports, electrical and pressure connections, and wide choice of electrical outputs allow stock configurations suitable for most applications without modification. For OEM application customised versions are available.

### Function

The transducer uses element using thin film technology, giving the benefit of not needing transmission fluids (e.g oil) . For outstanding accuracy throughout the operating temperature range, compensation at the sensor element is included.

The series G3200 feature thicker diaphragms and an optional pressure restrictor (mechanical damping) to withstand the rigors of cavitations or extreme pressure spikes, delivering years of reliable and stable performance in pulsating applications.

## G3500 pressure transmitter for gauge, absolute and vacuum pressure measurement

- Small and compact package size
- Lifetime > 100 M cycles
- Measuring range from +/-350 mbar to -1 ... 40 bar
- Process temperatures from –40 ... +125°C
- Wide range of pressure ports and electrical connectors
- Housing and diaphragm made of premium stainless steel
- Customized OEM versions available



### Application

For OEMs that need consistent high levels of performance, reliability and stability the G3500 series units offer a compact size with all 316L stainless steel wetted parts at an unbeatable price performance ratio. A wide choice of output signal types in addition to various electrical connection and pressure port types means the unit is suitable for most applications without modification. The compact construction of the G3500 series makes it ideal for installation where space is at a premium.

### Function

A MEMS pressure sensor has a significantly more complex design than a traditional thin-film pressure sensor. The pressure sensor element is made of a silicon chip, which deflects under pressure and consists of a diaphragm structure with piezo-resistive resistors.

A bare MEMS chip is hermetically sealed to protect against environmental influences. For this reason, it is installed in a stainless-steel case that is sealed using a thin, flat, stainless steel diaphragm. The cavity between the MEMS chip and the external diaphragm is filled with synthetic oil.

### P30-2 pressure transmitter for gauge measurement

- Premium Pressure Transmitter for gauge and pressure measurement with 3 years warranty
- High repeatability and long-term stability
- High overload resistance
- Measuring ranges up to 40 bar (600psi)
- Customer specific measuring ranges available
- Flush mounted or manometer connection
- Housing and connection made from 316L

*\*High Quality\**  
*3 Years Warranty*



#### Application

For precise measurement of gauge pressure in simple industrial applications. The measurement ranges available start from -200 ... 200 mbar or 0...400 mbar to the highest measurement ranges of -1 ... 40 bar or 0...40 bar. Custom ranges are also available for volume applications. P30-2 transducers are made from AISI 316L stainless steel for improved robustness and have a permissible overload is four times the nominal span.

Typical applications: Hydraulic systems, compressed air, plant construction, pumps, filling and weighing machines, level measuring, packaging machines.

#### Function

The P30-2 pressure transmitter is available with a process connection with an internal diaphragm or in a flush-mount design. The process pressure deflects the metal process isolating diaphragm of the sensor and the fill fluid transfers the pressure to a Wheatstone bridge (semiconductor technology). As pressure varies, the related bridge output voltage changes and is measured by the connected device. The transducer can be supplied with a 0...10V (3-wire) or 4...20mA (2-wire) output.

### P40-2 pressure transmitter for gauge, absolute and vacuum pressure measurement

- Premium Pressure Transmitter for gauge, absolute and vacuum pressure measurement with 3 years warranty
- High repeatability and long-term stability
- High overload resistance
- Measuring ranges up to 40 bar (600psi)
- Customer specific measuring ranges available
- Flush mounted or manometer connection
- Housing and connection made from 316L

*\*High Quality\**  
*3 Years Warranty*



#### Application

The measurement ranges available start from -125 ... 125 mbar or 0...250 mbar to the highest measurement ranges of -1 ... 400 bar or 0...400 bar. Custom ranges are also available for volume applications. P40-2 transducers are made from AISI 316L stainless steel for improved robustness and have a permissible overload is four times the nominal span.

Typical applications: Hydraulic systems, compressed air, cold production, pump pressure and flow rate, industrial measuring and control technology.

#### Function

The P40-2 pressure transmitter is working with same principle as P30-2, the electronics supply only a 4 ... 20 mA output signal. As an option a fixed cable outlet (protection class IP68) is available.

## The right pressure transmitter for every need

		G3100	G3200	G3500	P30-2	P40-2
<b>Description/Feature</b>						
<b>Measuring ranges</b>	: bar	0 ... 2,200	0 ... 2,200	-1/0 ... 0.35/40 bar	-1/-0.2 ... 0.2/40 bar	-1/-0.125 ... 0.2/400 bar
	: Other Units	○	○	○	○	○
<b>Version pressure measurement</b>	: Gauge	●	●	●	●	●
	: Absolute	-	-	●	-	●
	: Vacuum	-	-	●	●	●
<b>Measuring principle</b>	: Thin film	●	●	-	-	-
	: MEMS (Micromechanical System)	-	-	●	●	●
<b>Damping</b>	: Mechanical Damping	-	●	-	●	●
	: Electronic Damping (until 500ms)	-	-	-	●	●
<b>Accuracy</b>	: 0.3 % Full Scale	-	-	-	-	●
	: 0.5 % Full Scale	-	-	-	●	-
	: 0.75 % Full Scale	●	● < 60 bar	●	-	-
	: 1.5 % Full Scale	-	● < 60 bar	-	-	-
<b>Output signal</b>	: 4 ... 20 mA (2-wire)	●	●	●	●	●
	: 0 ... 10 V (3-wire)	●	●	●	●	-
	: 0 ... 5 V (3-wire)	●	●	●	-	-
	: Other Voltage Signal	●	●	●	-	-
	: Ratiometric	○	○	○	-	-
<b>Pressure port</b>	: G1/4" and 1/4" NPT	●/●	●/●	●/●	●/○	●/○
	: M12x1,5 and M14x1,5	●/●	●/●	●/-	-/-	-/-
	: M20 x 1,5	○	○	○	●	●
	: 1/8" NPT	●	●	●	-	-
	: 7/16"-20 UNF	●	●	●	-	-
	: Schrader 7/16"	●	●	○	-	-
	: 9/16" -18 Heavy Duty	●	●	○	-	-
	: G1/2" A	○	○	○	●	●
	: G1/2" A flush mounting	-	-	-	●	●
	: M5 inner thread	-	-	-	●	●
: Other connections	○	○	○	○	○	
<b>Electrical connections</b>	: With O-Ring/sealing	○	○	○	○	○
	: Fixed cable connections	●	●	-	-	●
	: Plug connection DIN EN 175301-803 A	●	●	●	● <sup>1</sup>	● <sup>1</sup>
	: Plug connection DIN EN 175301-803 C	●	●	●	-	-
	: M12 x 1	●	●	●	●	●
	: Amp Superseal 1.5	●	●	-	-	-
	: Deutsch DT04-4P	●	●	●	-	-
<b>Other options/features</b>	: Reinforced diaphragm	-	●	-	-	-
	: Process temperature	-40 ... +125°C	-40 ... +125°C	-40 ... +125°C	-25 ... +85°C	-40 ... +100°C
	: Free of oil and grease	○	○	○	○	○
	: ATEX version	○	○	-	-	○
	: End Test Protocol	●	●	●	●	●
	: Calibration certificate (Test points)	● (5 or 11)	● (5 or 11)	● (5 or 11)	● (3)	● (3)
	: Customized version	●	●	●	○	○
	: OEM multiple piece packaging	●	●	●	○	○
: Accesories connection plug	○	○	○	○ (M12)	○ (M12)	

**Key:** ● available ○ on request  
 - not available <sup>1</sup> Valve plug included

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