

ifm electronic



Fusion of electronic pressure sensor and analogue display.



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**For hygienic areas
and viscous media**

The first fully electronic contact manometer.

Increase your process safety.

In the process industry mechanical contact manometers are often used because of their highly visible display. The electronic "contact manometer" of the series PG combines the high visibility of a manometer display with the advantages of an electronic pressure sensor. It withstands vibrations, dynamic load changes, overpressure or temperature fluctuations.



Food industry



Pharmaceutical industry



Highly visible, easy to use.

Compared to mechanical units, the electronic manometer features varied options for optimum adaptation to the application. NO or NC function as well as set and reset points can be set precisely via the user menu. The analogue output provides a current

signal and is scalable using the 2-point calibration for a certain measuring range. More functions are the adjustable damping and the user menu with electronic lock function. To be on the safe side, the pointer is not visible when the unit is disconnected.



The LED display indicates the current measured value. The user can select between different display units. In combination with the two touch fields, the alphanumeric display is also used for a menu-guided parameter setting of the unit.

The clearly visible scale features an LED ring which has one LED per tick mark. It shows the adjusted set and reset points. As an alternative, it can be set as a trend display.



Easy setting and legibility, high-precision measurement and switching.

3-in-1:

Analogue display, transmitter and switch in one unit – without using relays or switching amplifiers.

Highly visible:

Simultaneous analogue and digital display of measured values. Rotatable display with LED ring for trend or switch point display.

Precise:

High precision (0.2 %) due to electronic processing of measured values. Long-term stability and excellent overload protection thanks to the high-purity ceramic measuring cell.

Vibration-resistant:

Optimum legibility due to the electronic pointer display – a stepper motor serves as a positioner, no damping liquid required.

Clean:

Hygienic, flush housing design with high-quality surfaces. Front pane of laminated safety glass.

Long life:

Wear-free, even in case of dynamic load changes thanks to measured values being picked up electronically – reduce your maintenance.



scale 1:1

In case of "overhead" or "slantingly" installed units the scale can be aligned horizontally for optimum legibility.

Electronics replaces mechanics.

Measurement method and evaluation electronics are based on the PI type pressure sensor. The measured values are picked up electronically via a corrosion-resistant and long-term stable ceramic measuring cell. It is resistant to dynamic

pressure peaks and features excellent overload protection. The system works without mechanical components, so it operates with no wear at all. The electronic manometer provides a number of powerful functions due to its electronic

operating principle. It can be directly connected to the inputs of a PLC via the solid-state switching output. There are no mechanical contacts subject to wear as are used for mechanical contact manometers.



Water / wastewater technology

Variable in the hygienic process.

The new flush process connection Aseptoflex Vario provides a variety of adapter options, for example:

- ① **Clamp adapter**
1-1.5" and 2"
- ② **DIN 11851**
DN40 adapter 1.5"
- ③ **Welding adapter**

Selecting your suitable manometer is as simple as that.

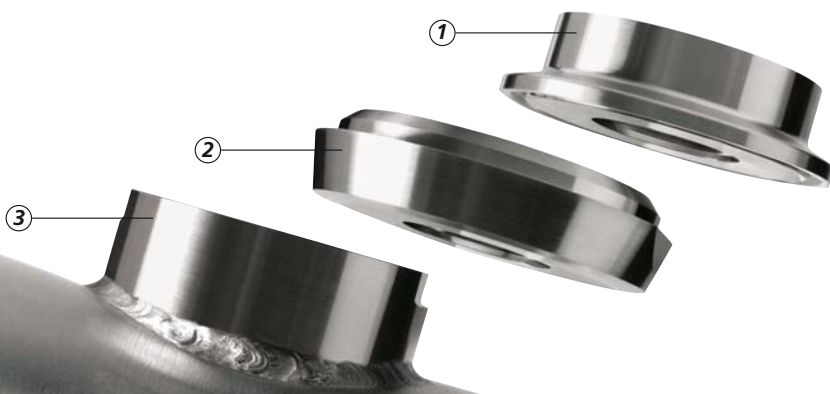
The fully electronic operating principle of the manometer facilitates the selection of the right type

of unit. Just select the required pressure range, the suitable process adapter and the requested sealing concept.



Flexible sealing.

Using Aseptoflex Vario you have the free choice between four different sealing options:

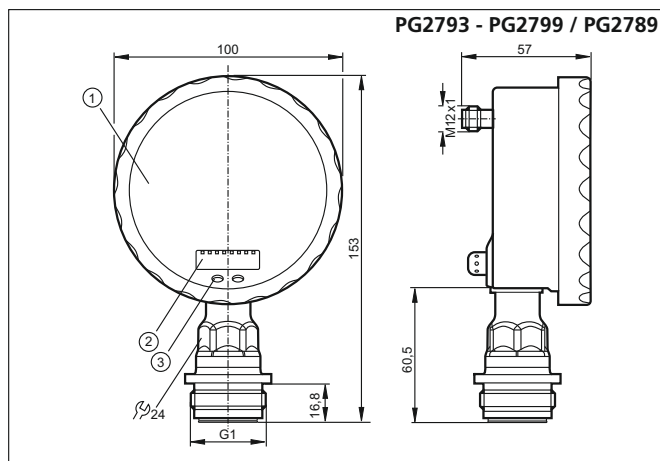


- Conventional sealing**
(e.g. teflon tape)
- Metal on metal**
- PEEK seal**
- EPDM / FKM O-ring**



Technical data of the electronic manometer

Application	Liquids and gases Type of pressure: relative pressure							
Electrical design	DC							
Connection	3-wire							
Process connection	G 1 thread Aseptoflex Vario							
Measuring range relative pressure [bar]	-1... 25	-1... 10	-1... 4	-0.124... 2.5	-0.05... 1	-0.0124... 0.25	-1... 1	-0.005... 0.1
Extended display range [bar]	40	16	6.4	4	1.6	0.4	1.6	0.16
P_{overload max.} [bar]	100	50	30	20	10	10	10	4
Analogue start point [bar]	-1.00... 33.76	-1.00... 13.50	-1.00... 5.40	-0.124... 3.370	-0.05... 1.35	-0.0124... 0.3376	-1.00... 1.10	-0.005... 0.135
Analogue end point [bar]	5.24... 40.00	1.50... 16.00	0.00... 6.40	0.50... 4.00	0.20... 1.60	0.05... 0.40	-0.50... 1.60	0.02... 0.16
Switch point SP1 [bar]	-0.96... 40.00	-0.98... 16.00	-0.99... 6.40	-0.12... 4.00	-0.048... 1.60	-0.012... 0.40	-0.998... 1.60	-0.0048... 0.16
Order no.	PG2793	PG2794	PG2795	PG2796	PG2797	PG2798	PG2799	PG2789
Operating voltage [V]	18...32							
Current consumption [mA]	< 45							
Current rating [mA]	250							
Output function	NC / NO, analogue output (4...20 mA or 0...10 V)							
Programming options	hysteresis / window; NO / NC; output logic; current output; damping; calibration of displayed values; scalable, display unit; 2-point calibration							
Precision / deviation (in % of the span) turn down 1:1								
Deviation of the switch point	< ± 0.2						< ± 0.5	
Deviation of the characteristics	< ± 0.2						< ± 0.5	
Linearity	< ± 0.15						< ± 0.25	
Hysteresis	< ± 0.15						< ± 0.2	
Repeatability	< ± 0.1						< ± 0.1	
Long-term stability	< ± 0.1						< ± 0.1	
Temp. coefficient (TEMPCO) in the temp. range 0 ... 70 °C (in % of the span per 10 K)	< ± 0.05						< ± 0.1	
Greatest TEMPCO of zero	< ± 0.15						< ± 0.2	
Greatest TEMPCO of the span	< ± 0.15						< ± 0.2	
Medium temperature [°C]	-25...125 (145 max. 1 h)							
Materials (wetted parts)	stainless steel / 316L (1.4435); ceramics (99,9 % Al ₂ O ₃); PTFE							



1 = analogue display
2 = 4-digit alphanumeric display
3 = programming buttons

Accessories (selection)

Description	Order no.
Adapter Aseptoflex Vario for clamp ISO 2852 1-1.5" with EPDM O-ring, FKM or PEEK seal as an option	E33201
Adapter Aseptoflex Vario for clamp ISO 2852 1-1.5" metal on metal	E33701
Adapter Aseptoflex Vario for clamp ISO 2852 2" with EPDM O-ring, FKM or PEEK seal as an option	E33202
Adapter Aseptoflex Vario for clamp ISO 2852 2" metal on metal	E33702
Adapter Aseptoflex Vario for DIN 11851 DN40 (1.5") with EPDM O-ring, FKM or PEEK seal as an option	E33212
Adapter Aseptoflex Vario for DIN 11851 DN40 (1.5") metal on metal	E33712
Welding adapter Aseptoflex Vario	E30122
FKM (Viton) seal for Aseptoflex Vario	E30123
PEEK seal for Aseptoflex Vario	E30124

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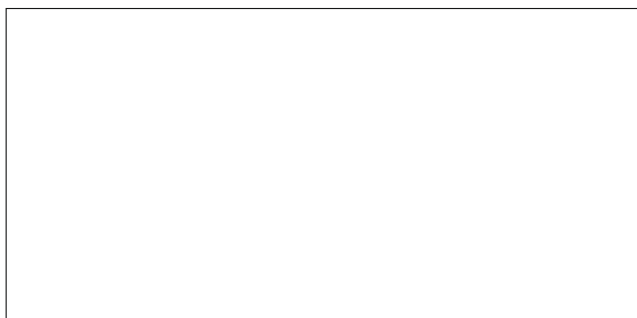
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