

Process fittings CPM: Optimized pressure measurement for smallest pipe diameters

Zero dead-leg, completely flush installation

For **high-precision and hygienic pressure measurement**, the pressure diaphragm must be integrated into the process as **flush as possible and without dead space**. This is a particular challenge for pipes with **small nominal diameters**.

Here, the CPM installation system offers a **process connection that is easy and safe to install** and offers unique advantages due to its special design.

- **Zero dead-leg installation with perfect diaphragm position:** Due to the design of the CPM adapter and the extension of the sensor nozzle, the pressure diaphragm sits inline precisely at the height of the media feed-through. This results in an absolutely flow-optimized and hygienic process adaptation. Due to the design of the CPM, dead spaces such as with Tees or weld-on sockets are excluded.
- **Pressure sensors with standard sizes:** Pressure sensors with standard diaphragm diameters of 22 or 38 mm are also used for the smallest nominal pipe diameters from 1/4". Measurement tolerances such as those for smaller diaphragm diameters are avoided by design
- **Easy installation:** The CPM adapter is simply fixed in the process with Tri-Clamp or can be welded safely and hygienically with AWF welding collar in orbital process. The pressure sensor itself is sealed with an O-ring and mounted with a standard 1 1/2" clamp



Pressure transmitters / Pressure gauges



CPM fitting system



Zero dead-leg, flush front inline process connection for pipes from 1/4" to 4"

Available pressure transmitters and gauges

- L3 Pressure and level sensor
- MPP Modular pressure and level sensor
- PF Modular pressure sensor
- HA Pressure sensor (autoclavable)
- EK Pressure gauge 63 mm (autoclavable with CPM)
- EM Pressure gauge 90 mm (autoclavable)
- EP Pressure gauge with digital display

Variants of the CPM fitting system



- **CPM (Ø 38,1 mm)**, for nominal widths 1/2" - 4"
- **CPM Mini (Ø 22,2 mm)**, for nominal widths 1/4" - 1/2"
- **Tri-Clamp connection**, for nominal widths 1/2" bis 4"
- **AWF (butt weld)**, for nominal widths 1/4" bis 4"
- **Material: Stainless steel 316L** (Option: Hastelloy)
- **Surface: Ra = 0,4 | 0,5 | 0,6 µm** (see table)

CPM Fitting systems (Details see product information)

Materials:



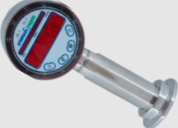




Stainless steel 316L with 3.1 Certificate with batch number | Hastelloy (Option)

O-Ring EPDM USP Class VI (Standard) | Silicon or Viton (Option)

	Type	Pipe size	Connection	Surface Ra Ep= electropolished	Length in mm
	CPM Mini	¼"	AWF (butt weld)	Ra≤0,5 (ep)	101,6
	CPM Mini	½"	AWF (butt weld)	Ra≤0,4 (ep)	101,6
	CPM Mini	½"	Tri-Clamp	Ra≤0,4 (ep)	152,4
	CPM	½"	AWF (butt weld)	Ra≤0,4 (ep)	133,4
	CPM	½"	Tri-Clamp	Ra≤0,4 (ep)	114,3
	CPM	¾"	AWF (butt weld)	Ra≤0,4 (ep)	133,4
	CPM	¾"	Tri-Clamp	Ra≤0,4 (ep)	120,7
	CPM	1"	AWF (butt weld)	Ra≤0,4 (ep)	120,7
	CPM	1"	Tri-Clamp	Ra≤0,4 (ep)	133,4
	CPM	1-½"	AWF (butt weld)	Ra≤0,4 (ep)	139,7
	CPM	1-½"	Tri-Clamp	Ra≤0,4 (ep)	146,1
	CPM	2"	AWF (butt weld)	Ra≤0,4 (ep)	177,8
	CPM	2"	Tri-Clamp	Ra≤0,4 (ep)	171,5
	CPM	2-½"	AWF (butt weld)	Ra≤0,6	184,2
	CPM	2-½"	Tri-Clamp	Ra≤0,6	184,2
	CPM	3"	AWF (butt weld)	Ra≤0,6	196,9
	CPM	3"	Tri-Clamp	Ra≤0,6	196,9
	CPM	4"	AWF (butt weld)	Ra≤0,6	241,3
	CPM	4"	Tri-Clamp	Ra≤0,6	241,3



Available pressure transmitters and gauges (Details see respective product information)

	Type	Application	Connection		Type	Application	Connection
	L3	Pressure and level sensor	CPM		HA	Pressure sensor (autoclavable only with CPM)	CPM CPM Mini
	MPP	Modular pressure and level sensor	CPM CPM Mini		EK	Pressure gauge 63 mm (autoclavable only with CPM)	CPM CPM Mini
	PF	Modular pressure sensor	CPM		EM	Pressure gauge 90 mm (autoclavable)	CPM
					EP	Pressure gauge with digital display	CPM CPM Mini

Illustrations partly not with CPM connection