

Relative and differential pressure transmitter type 692

Pressure range
0 ... 0.1 – 25 bar

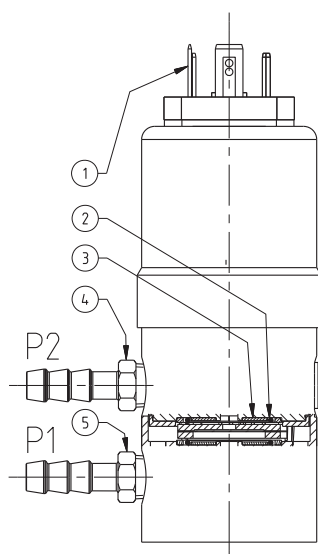


Type 692 pressure transmitters have a unique, well proven ceramic technology. There are variety of pressure and electrical connections available, together with several standardised output signals. The wide variety of options makes these transmitters ideal for applications across a broad spectrum of industries.

- Very low temperature sensitivity
- High resistance to extreme temperatures
- No mechanical creepage
- Modular system and choice of materials to suit individual applications

Technical overview

Pressure range				
Relative and differential			0 ... 0.1 – 25 bar	
Operating conditions				
Medium			Liquids and neutral gases	
Temperature	Medium / ambient		-15 ... +85 °C	
	Storage		-40 ... +85 °C	
Tolerable overload on one side			See order code selection table	
System pressure	≤ 6 bar	PVDF	12 bar	
	≥ 10 bar	Stainless steel 1.4305 / AISI 303	25 bar	
Rupture pressure			50 bar	
			1.5x system pressure	
Materials				
Case			Stainless steel 1.4305 / AISI 303	
Materials in contact with the medium	Pressure connection		Stainless steel 1.4305 / AISI 303, PVDF, CuZn nickel plated	
	Sensor		ceramic Al ₂ O ₃ (96%)	
	Sealing material		FPM, EPDM, NBR, MVQ	
Electrical overview				
2 wire	Output 4 ... 20 mA	Power supply 11 ... 33 VDC	Load $\frac{\text{supply voltage} - 11 \text{ V}}{0.02 \text{ A}}$ [Ohm]	Current consumption (at nominal pressure) < 20 mA
	0 ... 5 V	11 ... 33 VDC / 24 VAC ±15%	>10 kOhm	< 5 mA
3 wire	0 ... 10 V	18 ... 33 VDC / 24 VAC ±15%	>10 kOhm	< 5 mA
	ratiom. 10 ... 90%	5 VDC ±5%	>10 kOhm	< 5 mA
Polarity reversal protection		Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.		
Dynamic response				
Response time			< 5 ms	
Load cycle			< 50 Hz	
Protection standard				
IP 65				
Electrical connection				
Connector DIN EN 175301-803-A				
Connector DIN EN 60130-9				
Cable 1.5 m			PG7	
Pressure connection				
Pressure tube tip			Ø 4 mm Ø 6 mm	
Pipe fitting			Ø 6 mm Ø 8 mm	
Outside thread			7/16-20 UNF G 1/4	
Inside thread			1/4 -27 NPT G 1/4	
Mounting instruction				
Installation arrangement			Unrestricted	
Mounting			Mounting bracket	
Tests / Admissions				
Electromagnetic compatibility			CE conformity acc. EN 61326-2-3	
Weight				
~ 430 g				
Packaging				
Single packaging in cardboard			accessories included	



Legend to cross-section drawing

- 1 Electrical connection
- 2 Seals
- 3 Ceramic element
- 4 P2 Pressure connection (lower pressure)
- 5 P1 Pressure connection (higher pressure)

Accuracy

Parameter	Unit	Versions with overload on one side ≤ 2x nominal pressure	Versions with overload on one side ≤ 3x nominal pressure	Versions with overload on one side ≤ 7.5x nominal pressure
Tolerance zero point	max. % fs	± 0.4	± 0.75	± 1.25
Tolerance full scale	max. % fs	± 0.4	± 0.75	± 1.25
Resolution	% fs	0.1	0.15	0.25
Total of linearity, hysteresis and repeatability	max. % fs	± 0.5	± 0.75	± 1.25
Long term stability acc. to DIN EN 60770	% fs	± 0.5	± 0.5	± 0.5
TC zero point ¹⁾	max. % fs/10K	See order code selection table	See order code selection table	See order code selection table
TC sensitivity ¹⁾	max. % fs/10K	± 0.15	± 0.23	± 0.38

Test conditions: 25 °C, 45% RH, Power supply 24 VDC
TC z.p. / TC s. -15 ... +80 °C

						1	2	3	4	5	6	7	8	9	10
Order code selection table						692.	X	X	X	X	X	X	X	X	X
	Tolerable overload on one side			TC z.p. (fs/10K)											
	P1	P2													
Pressure range ²⁾	0 ... 0.1 bar	max. 0.6 bar (6 x Nominal pressure)	0.6 bar	± 1.2 %	9	0	0								
	0 ... 0.2 bar	max. 1.2 bar (6 x Nominal pressure)	1.2 bar	± 1.2 %	9	0	2								
	0 ... 0.2 bar	max. 0.6 bar (3 x Nominal pressure)	0.6 bar	± 0.6 %	9	4	0								
	0 ... 0.25 bar	max. 1.2 bar (4.8 x Nominal pressure)	1.2 bar	± 1.0 %	9	0	3								
	0 ... 0.25 bar	max. 0.6 bar (2.4 x Nominal pressure)	0.6 bar	± 0.5 %	9	4	1								
	0 ... 0.3 bar	max. 0.6 bar (2 x Nominal pressure)	0.6 bar	± 0.4 %	9	0	1								
	0 ... 0.4 bar	max. 1.2 bar (3 x Nominal pressure)	1.2 bar	± 0.6 %	9	0	4								
	0 ... 0.4 bar	max. 2 bar (5 x Nominal pressure)	2 bar	± 1.0 %	9	0	5								
	0 ... 0.5 bar	max. 1.2 bar (2.4 x Nominal pressure)	1.2 bar	± 0.5 %	9	0	6								
	0 ... 0.5 bar	max. 3 bar (6 x Nominal pressure)	3 bar	± 0.8 %	9	0	7								
	0 ... 0.6 bar	max. 1.2 bar (2 x Nominal pressure)	1.2 bar	± 0.4 %	9	0	8								
	0 ... 0.6 bar	max. 3 bar (5 x Nominal pressure)	3 bar	± 0.7 %	9	0	9								
	0 ... 1 bar	max. 2 bar (2 x Nominal pressure)	2 bar	± 0.4 %	9	1	1								
	0 ... 1 bar	max. 5 bar (5 x Nominal pressure)	5 bar	± 1.0 %	9	1	2								
	0 ... 1.6 bar	max. 3.2 bar (2 x Nominal pressure)	3.2 bar	± 0.4 %	9	1	3								
	0 ... 1.6 bar	max. 12 bar (7.5 x Nominal pressure)	12 bar	± 1.0 %	9	1	4								
	0 ... 2.5 bar	max. 5 bar (2 x Nominal pressure)	5 bar	± 0.4 %	9	1	5								
	0 ... 2.5 bar	max. 12 bar (4.8 x Nominal pressure)	12 bar	± 0.6 %	9	1	6								
	0 ... 4 bar	max. 8 bar (2 x Nominal pressure)	8 bar	± 0.4 %	9	1	7								
	0 ... 4 bar	max. 12 bar (3 x Nominal pressure)	12 bar	± 0.5 %	9	1	8								
	0 ... 6 bar	max. 12 bar (2 x Nominal pressure)	12 bar	± 0.4 %	9	1	9								
	0 ... 10 bar	max. 20 bar (2 x Nominal pressure)	20 bar	± 0.4 %	9	3	0							1,4	
	0 ... 16 bar	max. 32 bar (2 x Nominal pressure)	32 bar	± 0.4 %	9	3	1							1,4	
	0 ... 25 bar	max. 50 bar (2 x Nominal pressure)	50 bar	± 0.4 %	9	3	2							1,4	
▲ Fullscale signal at these pressures															
Sealing material	FPM	Fluoro elastomer				0									
	EPDM	Ethylene propylene				1									
	NBR	Butadiene Acrylonitrile				2									
	MVQ	Silicone polymer				3									
Adjustment	Factory						0								
Output / power supply	0 ... 5 V	11 ... 33 VDC / 24 VAC ±15%						0							
	0 ... 10 V	18 ... 33 VDC / 24 VAC ±15%						1							
	4 ... 20 mA	11 ... 33 VDC						7							
	ratiom. 10 ... 90%	5 VDC ±5%						9							
Electrical connection	Cable 1.5 m, PG7											0			
	Connector ³⁾	DIN EN 175301-803-A										1			
		DIN EN 60130-9										3			
Pressure connection	Inside thread	Stainless steel 1/8"-27 NPT or PVDF G 1/8"												0	
		CuZn nickel plated	for tube inside Ø 4 mm											1	1,4
		Stainless steel 1.4571 / AISI 316Ti	for tube inside Ø 4 mm											E	1,4
	Hose connection	CuZn nickel plated	for tube inside Ø 6 mm											2	1,4
		PVDF	for tube inside Ø 6 mm											3	2
		Stainless steel 1.4571 / AISI 316Ti	for tube inside Ø 6 mm											D	1,4
		CuZn nickel plated	for pipe outside Ø 6 mm											4	1,4
		Stainless steel 1.4305 / AISI 303	for pipe outside Ø 6 mm											5	1,4
	Pipe fitting	PVDF	for pipe outside Ø 6 mm											8	2
		CuZn nickel plated	for pipe outside Ø 8 mm											6	1,4
		Stainless steel 1.4305 / AISI 303	for pipe outside Ø 8 mm											7	1,4
		PVDF	for pipe outside Ø 8 mm											9	2
	Outside thread	1/8"-20 UNF CuZn nickel plated												A	1,4
	Adapter inside	G 1/8" Stainless steel 1.4305 / AISI 303												B	1,4
Case	Adapter outside	G 1/8" CuZn nickel plated with union nut												C	1,4
		Stainless steel 1.4305 / AISI 303													1
		PVDF to 6 bar max.													2
Pressure range variation (optional)		Stainless steel with pressure tip orifice													4
		Indicate W and state range on order (e.g.: W0... + 8bar/OUT1...6V)													W

Accessories

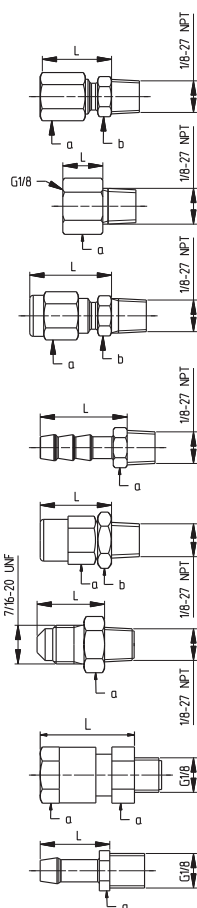
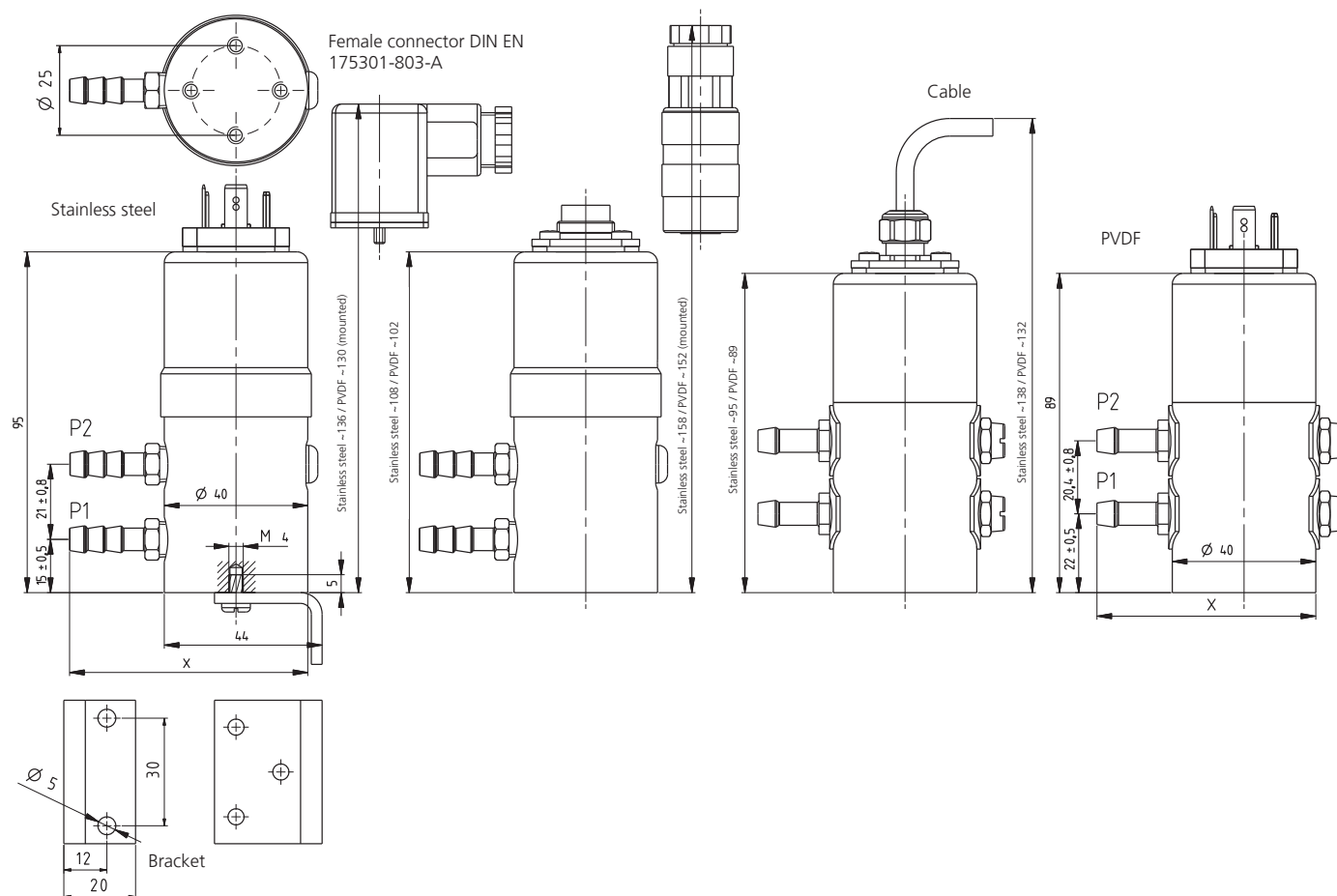
	Order number
Female connector DIN EN 175301-803-A with seal	103510
Female connector DIN EN 60130-9	103524
Mounting bracket incl. screws	101999
Calibration certificate	104551

¹⁾ TC = Temperature coefficient

²⁾ Other pressure range on request

³⁾ Delivery without female connector

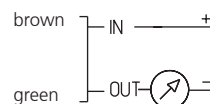
Female Connector
DIN EN 60130-9



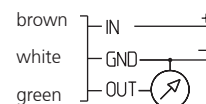
Stainless steel 1.4305 AISI 303	Screw fitting for pipe outside Ø 6	L~24	a=10
	Screw fitting for pipe outside Ø 8	X~65	b=12
Stainless Steel 1.4305 AISI 303	Inside thread G 1/8	L~12	a=14
		X~53	
CuZn nickel plated	Screw fitting for pipe outside Ø 6	L~24	a=10
	Screw fitting for pipe outside Ø 8	X~65	b=12
CuZn nickel plated Stainless steel 1.4571 AISI 316Ti	Hose connection for tube Ø 4	L~20	a=10
	Hose connection for tube Ø 6	X~61	a=10
CuZn nickel plated	Outside thread G 1/8	L~20	a=10
		X~61	b=12
CuZn nickel plated	Outside thread 7/16-20 UNF	L~18	a=14
		X~59	
PVDF	Screw fitting for pipe Ø 6	L~20	a=12
	Screw fitting for pipe Ø 8	L~23	a=14
PVDF	Hose connection for tube Ø 6	L~20	a=10

Cable

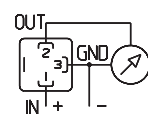
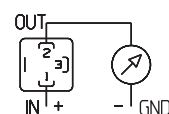
2 wire



3 wire



Connector DIN
EN 175301-803-A



Connector DIN
EN 60130-9

