

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	25 bar
	≥ 10 bar	50 bar
Rupture pressure		1.5x fs

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

	Output	Power supply	Load	Current consumption (at nominal pressure)
2 wire	4 ... 20 mA	11 ... 33 VDC	$\frac{\text{supply voltage} - 11 \text{ V}}{0.02 \text{ A}}$ [Ohm]	< 20 mA
3 wire	0 ... 5 V	11 ... 33 VDC / 24 VAC ± 15%	>10 kOhm	< 5 mA
	0 ... 10 V	18 ... 33 VDC / 24 VAC ± 15%	>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
Screw fitting	Ø 6 mm
	Ø 8 mm
Outside thread	7/16"-20 UNF
	G 1/8"
Inside thread	1/8"-27 NPT
	G 1/8"

Mounting instruction

Installation arrangement	Unrestricted
Mounting	Mounting bracket

Tests / Admissions

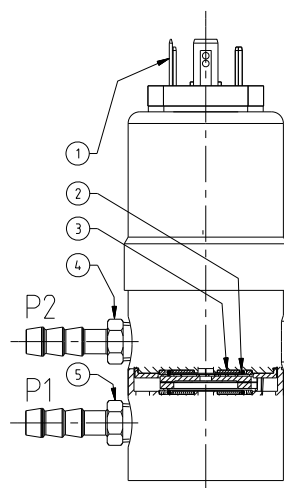
Electromagnetic compatibility CE conformity acc. EN 61326-2-3

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

Order code selection table

692.9 X X X X X X X X X X

Pressure range ²⁾	Tolerable overload on one side	TC z.p. (fs/10K)																		
	P1	P2																		
0 ... + 0.1 bar	max. 0.6 bar (6 x Nominal pressure)	0.6 bar	± 1.2 %	0	0															
0 ... + 0.2 bar	max. 1.2 bar (6 x Nominal pressure)	1.2 bar	± 1.2 %	0	2															
0 ... + 0.2 bar	max. 0.6 bar (3 x Nominal pressure)	0.6 bar	± 0.6 %	4	0															
0 ... + 0.25 bar	max. 1.2 bar (4.8 x Nominal pressure)	1.2 bar	± 1.0 %	0	3															
0 ... + 0.25 bar	max. 0.6 bar (2.4 x Nominal pressure)	0.6 bar	± 0.5 %	4	1															
0 ... + 0.3 bar	max. 0.6 bar (2 x Nominal pressure)	0.6 bar	± 0.4 %	0	1															
0 ... + 0.4 bar	max. 1.2 bar (3 x Nominal pressure)	1.2 bar	± 0.6 %	0	4															
0 ... + 0.4 bar	max. 2 bar (5 x Nominal pressure)	2 bar	± 1.0 %	0	5															
0 ... + 0.5 bar	max. 1.2 bar (2.4 x Nominal pressure)	1.2 bar	± 0.5 %	0	6															
0 ... + 0.5 bar	max. 3 bar (6 x Nominal pressure)	3 bar	± 0.8 %	0	7															
0 ... + 0.6 bar	max. 1.2 bar (2 x Nominal pressure)	1.2 bar	± 0.4 %	0	8															
0 ... + 0.6 bar	max. 3 bar (5 x Nominal pressure)	3 bar	± 0.7 %	0	9															
0 ... + 1 bar	max. 2 bar (2 x Nominal pressure)	2 bar	± 0.4 %	1	1															
0 ... + 1 bar	max. 5 bar (5 x Nominal pressure)	5 bar	± 1.0 %	1	2															
0 ... + 1.6 bar	max. 3.2 bar (2 x Nominal pressure)	3.2 bar	± 0.4 %	1	3															
0 ... + 1.6 bar	max. 12 bar (7.5 x Nominal pressure)	12 bar	± 1.0 %	1	4															
0 ... + 2.5 bar	max. 5 bar (2 x Nominal pressure)	5 bar	± 0.4 %	1	5															
0 ... + 2.5 bar	max. 12 bar (4.8 x Nominal pressure)	12 bar	± 0.6 %	1	6															
0 ... + 4 bar	max. 8 bar (2 x Nominal pressure)	8 bar	± 0.4 %	1	7															
0 ... + 4 bar	max. 12 bar (3 x Nominal pressure)	12 bar	± 0.5 %	1	8															
0 ... + 6 bar	max. 12 bar (2 x Nominal pressure)	12 bar	± 0.4 %	1	9															
0 ... + 10 bar	max. 20 bar (2 x Nominal pressure)	20 bar	± 0.4 %	3	0															
0 ... + 16 bar	max. 32 bar (2 x Nominal pressure)	32 bar	± 0.4 %	3	1															
0 ... + 25 bar	max. 50 bar (2 x Nominal pressure)	50 bar	± 0.4 %	3	2															
▲ 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
Electrical connection	Cable 1.5 m, PG7																			0
	Connector ³⁾	DIN EN 175301-803-A																		1
	Connector ³⁾	DIN EN 60130-9																		3
Pressure connection	Inside thread	Stainless steel 1/8"-27 NPT or PVDF G 1/8"																		0
	Hose connection	CuZn nickel plated	for tube inside Ø 4 mm																	1
	Hose connection	Stainless steel 1.4571 / AISI 316Ti	for tube inside Ø 4 mm																	E
	Hose connection	CuZn nickel plated	for tube inside Ø 6 mm																	2
	Hose connection	PVDF	for tube inside Ø 6 mm																	3 2
	Hose connection	Stainless steel 1.4571 / AISI 316Ti	for tube inside Ø 6 mm																	D
	Screw fitting	CuZn nickel plated	for pipe outside Ø 6 mm																	4
	Screw fitting	Stainless steel 1.4305 / AISI 303	for pipe outside Ø 6 mm																	5
	Screw fitting	PVDF	for pipe outside Ø 6 mm																	8 2
	Screw fitting	CuZn nickel plated	for pipe outside Ø 8 mm																	6
	Screw fitting	Stainless steel 1.4305 / AISI 303	for pipe outside Ø 8 mm																	7
	Screw fitting	PVDF	for pipe outside Ø 8 mm																	9 2
	Outside thread	1/16"-20 UNF CuZn nickel plated																		A
	Adapter inside	G 1/8" Stainless steel 1.4305 / AISI 303																		B
	Adapter outside	G 1/8" CuZn nickel plated	with union nut																	C
Case	Stainless steel	1.4305 / AISI 303																		1
	PVDF all ranges up to 6 bar max., overload on one side and system pressure max. 12 bar																			2
	Stainless steel with pressure tip orifice																			4
	Stainless steel, free of oil and grease (only seal FPM, not compound-filled)																			5
	Stainless steel with pressure tip orifice, free of oil and grease (only seal FPM, not compound-filled)																			6
Pressure range variation	Indicate W and state range on order (e.g.: W0... + 8bar/OUT1...6V)																			W

Accessories

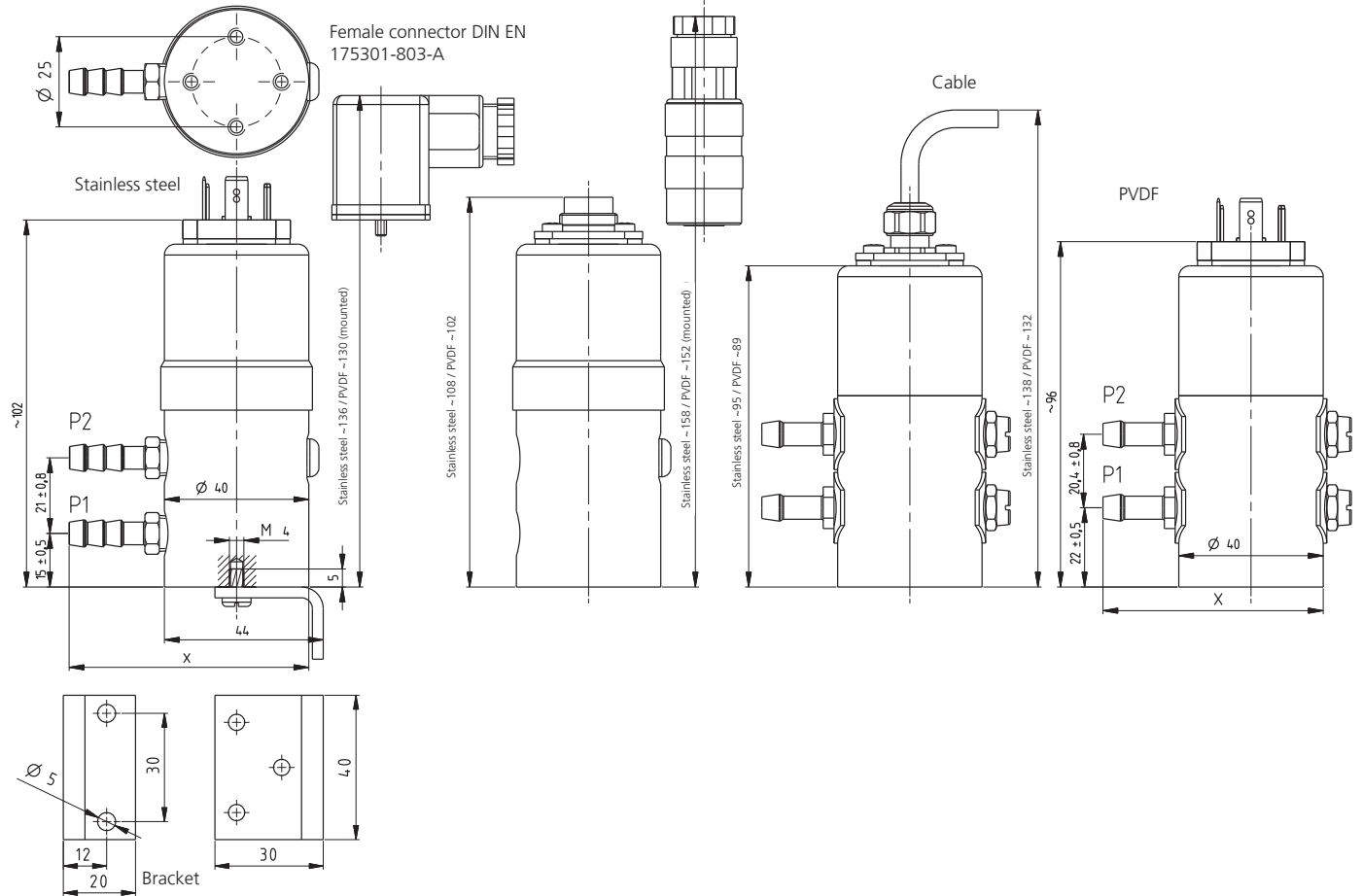
	Order number
Female connector DIN EN 175301-803-A with seal	IP 65, when installed and screwed 103510
Female connector DIN EN 60130-9	IP 65, when installed and screwed 103524
Mounting bracket incl. screws	101999
Calibration certificate	104551

¹⁾ TC = Temperature coefficient

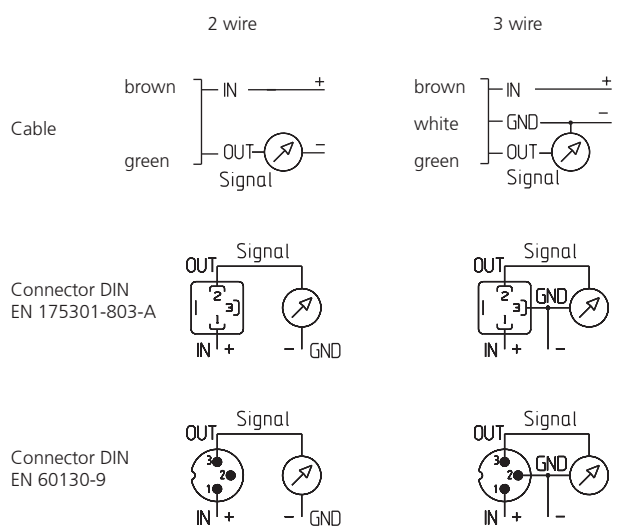
¹⁾ Other pressure range on request

²⁾ Delivery without female connector

Female Connector
DIN EN 60130-9



	Stainless steel 1.4305	Screw fitting for pipe outside Ø 6	L~24	a=10
	AISI 303	Screw fitting for pipe outside Ø 8	X~65	b=12
	Stainless Steel 1.4305	Inside thread G 1/4	L~12	a=14
	AISI 303		X~53	
	CuZn nickel plated	Screw fitting for pipe outside Ø 6	L~24	a=10
		Screw fitting for pipe outside Ø 8	L~25	a=12
	CuZn nickel plated	Screw fitting for pipe outside Ø 6	X~66	b=14
		Screw fitting for pipe outside Ø 8	X~66	b=14
	CuZn nickel plated	Hose connection for tube Ø 4	L~20	a=10
	Stainless steel 1.4571	Hose connection for tube Ø 6	X~61	
	AISI 316Ti	Hose connection for tube Ø 4	L~25	a=10
		Hose connection for tube Ø 6	X~66	
	CuZn nickel plated	Outside thread G 1/4	L~20	a=10
		Outside thread G 1/4	X~61	b=12
	CuZn nickel plated	Outside thread 7/16-20 UNF	L~18	a=14
		Outside thread 7/16-20 UNF	X~59	
	PVDF	Screw fitting for pipe Ø 6	L~20	a=12
		Screw fitting for pipe Ø 8	X~61	
	PVDF	Screw fitting for pipe Ø 6	L~23	a=14
		Screw fitting for pipe Ø 8	X~64	
	PVDF	Hose connection for tube Ø 6	L~20	a=10
		Hose connection for tube Ø 6	X~61	



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