

# All stainless steel process gauge with integrated transmitter

## Model T55E

Stainless steel transducer incorporating polysilicon thin film technology, output 4 ... 20 mA  
Nominal size 100 mm  
Accuracy of the gauge: Class 1 (EN)  
Accuracy of electrical output signal: 0,5 % or 1 % F.S.



### Features

- Rugged stainless steel construction
- Socket and case welded
- Protection IP65
- Usable to full scale
- Overload protection 130 %
- Integrated pressure transmitter

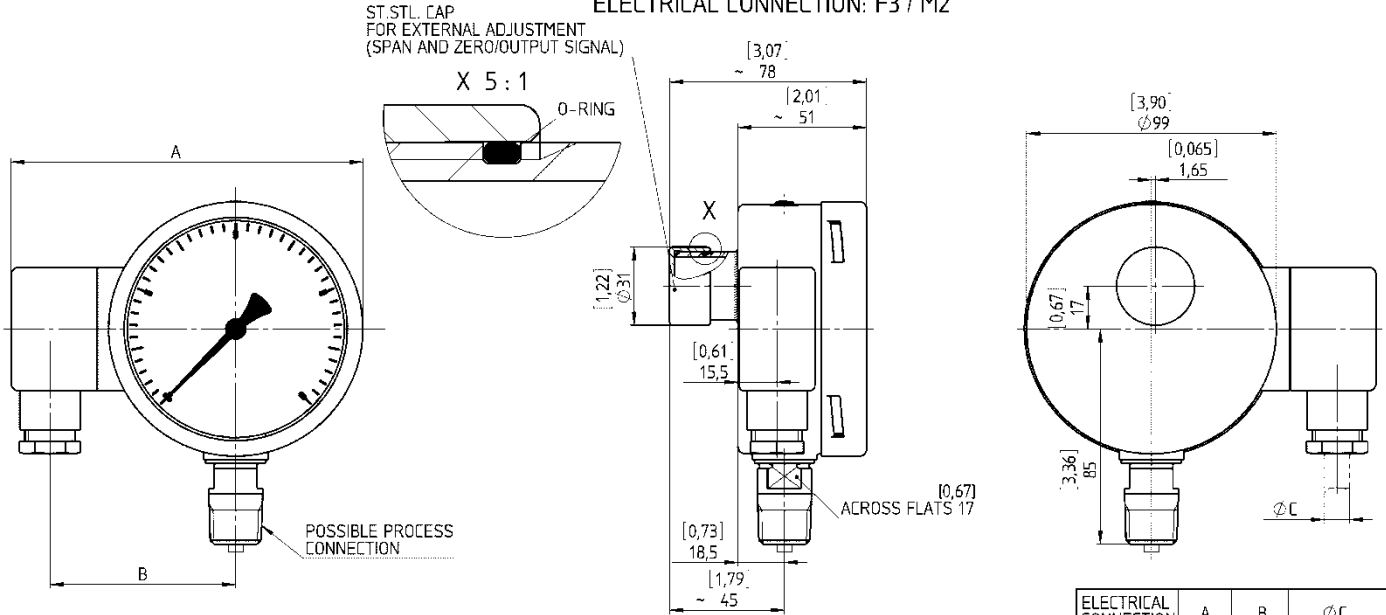
### Ranges

-1 ... 0 bar up to 0 ... 1000 bar  
-30 in. Hg ... 0 psi up to 0 ... 15.000 psi

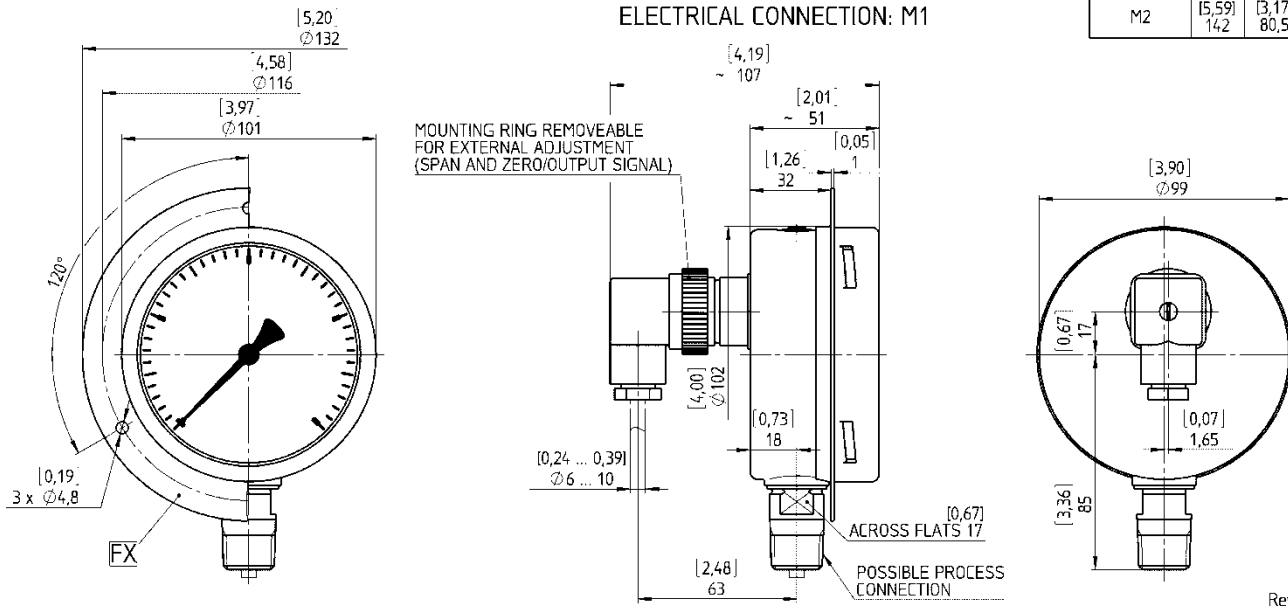
Technical specification of gauge	T55E
Construction	Cylindrical case with top vent plug, bayonet ring
Measuring principle	Bourdon tube
Range [bar]	1 1,6 2,5 4 6 10 16 25 40 60 100 160 250 400 600 1000 -1/0 -1/1,5 -1/3 -1/5 -1/9
Overpressure limit	130 % F.S., short time
Pressure type	Gauge, vacuum and compound
Process connection	G 1/4 B male, G 1/2 B male, G 3/8 B male according EN 837, M20x1,5 male, R 1/2 male tapered (DIN 2999), 1/2" male straight (JIS, BSP), 3/8" male straight (JIS, BSP) 1/4 NPT male, 1/2 NPT male according ANSI/ASME B1.20.1 9/16-18 UNF-2B Aminco (high pressure), others on request
Connection location	Lower
Material	
Pressure connection	Stainless steel 316L (1.4404)
Tube	Stainless steel 316L (1.4404)
Case and ring	Stainless steel 304 (1.4301), optional 316L (1.4404)
Window	Laminated safety glass, acrylic glass on request
Dial	Aluminum, black markings on white background
Pointer	Aluminum, black, micrometer adjustment, red set hand or maximum pointer on request
Movement	Stainless steel 304/303 (1.4301/1.4305)
Accuracy	Class 1 (1 % F.S.)
Technical specification of transmitter	
Measuring principle	Polysilicon thin film technology
Material sensor	Stainless steel diaphragm 1.4542/1.4548 (17-4 PH)
Power supply	12 ... 30 VDC
Output signal	4 ... 20 mA, 2-wire
Maximum loop resistance	≤ (U <sub>B</sub> - 9,5 V) / 0,02 A
Isolation between case and electrical connection	> 1 MΩ at 50 VDC
Isolation voltage	350 VAC
Supply current	Max. 20 mA
Accuracy according DIN 16 086 (terminal point)	0,5 % F.S.; 1,0 % F.S. for the ranges 1 bar; 1,6 bar; 2,5 bar, 600 bar and 1000 bar
Repeatability	≤ ±0,03 % F.S.
Response time (10 ... 90 %)	≤ 1 ms
Compensated temperature	-20 ... 70 °C
Temperature effect	±0,3 % / 10 K from 0 ... 50 °C (ref. 20 °C)
CE-mark/EMC	Emission according EN 50 081-1 (March 1993) Immunity according EN 50 082-2 (March 1996)
Electrical connection	Cable connection box universal Typ B on the left site, angle connector according DIN EN 175301-803 on the back or on the left site
General specification	
Permissible	
Ambient temperature	-25 ... 60 °C
Medium temperature	-25 ... 85 °C
Storage temperature	-40 ... 85 °C
Protection according EN 60 529/IEC 529	IP65
Weight [kg]	1,0
Accessories, options	Diaphragm seals, manifolds

### General dimensions [mm]

ELECTRICAL CONNECTION: F3 / M2

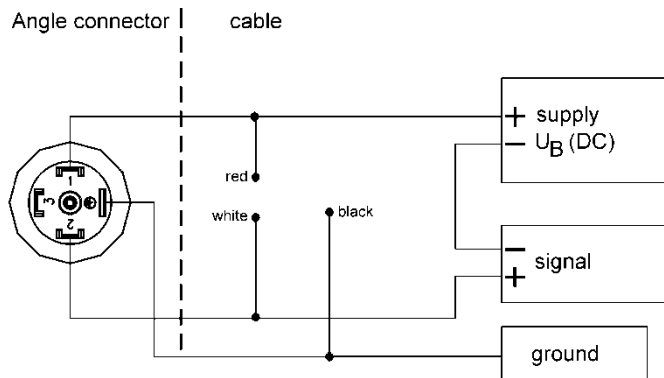


ELECTRICAL CONNECTION: M1



Rev. A

### Electrical connection



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## Order information

Size	Execution	Process connection	Connection orientation	Range	Engineering units	Electrical connection	Case material	Options
(100) 100 mm	(SH) IP65, material wetted parts 316 L (1.4404)	(02) ¼ NPT male	(L) Lower	-1/ 0 <sup>1)</sup>	BAR	(F3) Cable connection box universal Typ B on the left site	(=) Standard	(NH) Tagging wired
		(04) ½ NPT male		-1/ 1,5 <sup>1)</sup>				
		(09) 9/16-18 UNF-2B Aminco		-1/ 3				
				-1/ 5				
				-1/ 9				
				0/ 1 <sup>1)</sup>				
		(13) G ¼ B male		0/ 1,6 <sup>1)</sup>				
		(14) G 3/8 B male		0/ 2,5 <sup>1)</sup>				
				0/ 4				
				0/ 6				
		(15) G ½ B male		0/ 10				
		(16) M20x1,5 male		0/ 16				
				0/ 25				
	0/ 40							
	0/ 60							
	0/100							
	0/160							
	0/250							
	0/400							
	0/600 <sup>1)</sup>							
	0/1000 <sup>1)</sup>							
	(KN) ½" male straight (JIS, BSP)					(M1) Angle connector according DIN EN 175301-803 on the back	(YW) Case material 316L (1.4404)	(TU) Throttle screw stainless steel
	(KP) 3/8" male straight (JIS, BSP)					(M2) Angle connector according DIN EN 175301-803 on the left site		(LL) Liquid less gauge
	(KQ) R½ male tapered DIN 2999							(NZ) Liquid less gauge, silicone free
								(OS) Overload stop
								(VS) Underload stop
								(EP) Maximum pointer, adjustable
								(PD) Acrylic glass
								(F3X) Front flange

<sup>1)</sup> min. 1 % for electrical signal

psi and others on request

## How to order

Size	Type	Execution	Process connection	Connection orientation	Range	Engineering unit	Electrical connection	Case material	Option
100	T55E	SH	15	L	0/16	BAR	M1	YW	NH

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