

## All stainless steel process gauge with integrated transmitter Model T55E

Stainless steel thinfilm sensor, 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

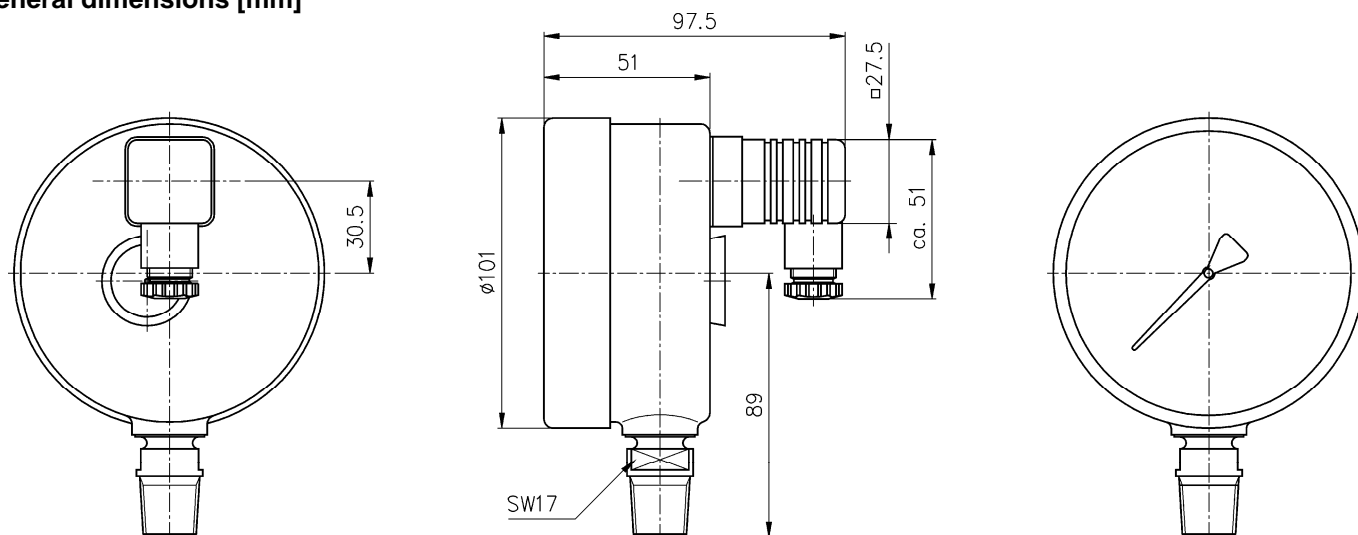
### Ranges

-1 ... 0 bar up to 0 ... 100 bar  
-30 in. Hg ... 0 psi up to 0 ... 1500 psi



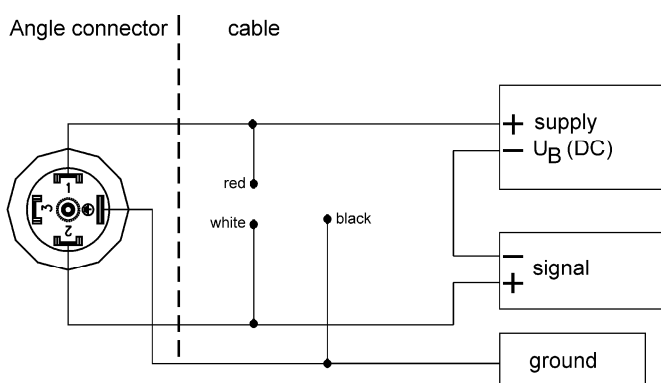
Technical specification of gauge	T55E
Construction	Cylindrical case with blow out disk at the back, bayonet ring
Measuring principle	Bourdon tube
Range [bar]	1 1,6 2,5 4 6 10 16 25 40 60 100 -1/0 -1/1,5 -1/3 -1/5 -1/9
Overpressure limit	130 % F.S., short time
Pressure type	Gauge, vacuum and compound
Process connection	G ¼ B male, G ½ B male, G ¾ B male according EN 837, M20x1,5 male, R ½ male tapered (DIN 2999), ½" male straight (JIS, BSP), ¾" male straight (JIS, BSP) ¼ NPT male, ½ 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 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	Thinfilm
Material sensor	Stainless steel diaphragm 1.4542/1.4548 (17-4 PH) with polysilicon cell
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
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	4-PIN angle connector according EN 175301-803 at back side of case, cable connection
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, valves

## General dimensions [mm]



Rev.C

## Electrical connection



## 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 (04) ½ NPT male (09) 9/16-18 UNF-2B Aminco (13) G ¼ B male (14) G 3/8 B male (15) G ½ B male (16) M20x1,5 male (KQ) R½ male tapered DIN 2999 (KN) ½" male straight (JIS, BSP) (KP) 3/8" male straight (JIS, BSP)	(L) Lower	-1/ 0 <sup>1)</sup> -1/ 1,5 <sup>1)</sup> -1/ 3 -1/ 5 -1/ 9  0/ 1 <sup>1)</sup> 0/ 1,6 <sup>1)</sup> 0/ 2,5 <sup>1)</sup> 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25 0/ 40 0/ 60 0/100	BAR	(M1) Angle connector EN 175301-803 (F2) Cable connection  specify cable lengths in [m]	(=) Standard (YW) Case material 316L (1.4404)	(NH) Tagging wired (TU) Throttle screw stainless steel (6B) Oxygen cleaned (MP) Micrometer pointer (EP) Maximum pointer, adjustable (PD) Acrylic glass (FX) 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

## Ashcroft Instruments GmbH

Germany  
Max-Planck-Str. 1, D-52499 Baesweiler  
P.O. Box 11 20, D-52490 Baesweiler  
Tel.: +49 (0) 2401 808-0, Fax: +49 (0) 2401 808-125

France  
„206“ ZA Le Mandinet Rue des Campanules  
F-77185 Lognes  
Tel.: +33 (0) 1 60 37 25 30, Fax: +33 (0) 1 60 37 25 39

Website: [www.ashcrofteurope.com](http://www.ashcrofteurope.com)

e-Mail: [sales@ashcrofteurope.com](mailto:sales@ashcrofteurope.com)

United Kingdom  
Unit 5 William James House  
Cowley Road, Cambridge CB4 0WX  
Tel.: +44 (0) 12 23 39 55 00, Fax: +44 (0) 12 23 39 55 01