

# Test Gauges, Solid Front Model 1082

According ASME B40.1

Nominal size: 4 1/2, 6 and 8 1/2 inch

Accuracy: Grade 3A (0,25 %)

## Features

- External adjustable dial facilitates compensation for tare or zero adjustment (standard version)
- Temperature compensated movement that significantly reduces temperature error
- MicroSpan™ adjustment for ease in span calibration
- Long life bourdon tube
- Hydraulically staked movement provides improved stability
- Improved dial and pointer results in excellent readability
- Supplied with solid front case for safety
- Overload protection 130 %
- Measuring system brass or Monel

## Ranges

-1 ... 0 bar up to 0 ... 700 bar

-30 in. Hg ... 0 psi up to 0 ... 10.000 psi

## Applications

Test benches

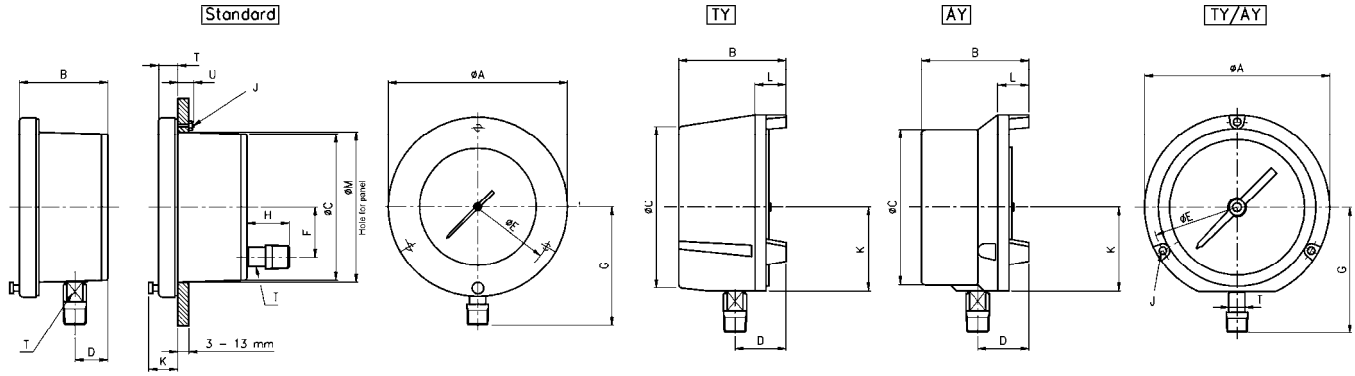
Calibration laboratories

Maintenance repair shops



Technical specification	1082															
	Standard			TY	AY											
Case type																
Dial size in inch	4 1/2	6	8 1/2	4 1/2	4 1/2 6											
Construction housing ring	Solid front safety pattern with blow out at the back															
Zero adjustment	At the front, adjustable dial			Threaded												
Measuring principle	Bourdon tube															
Range in bar	1	1,6	2,5	4	6	10	16	25	40	60	100	160	250	400	600	700
Overpressure limit	130 % F.S., short time															
Pressure type	Gauge, vacuum and compound															
Process connection	1/4 NPT male (standard), 1/2 NPT male according ANSI/ASME B1.20.1 9/16-18 UNF-2B Aminco G1/4 B male, G1/2 B male, M20x1,5 male, metric connections with adapter Others on request															
Connection location	Lower, back			Lower		Lower										
Material	Brass (max. 25 bar) and Monel															
Pressure connection	Phosphor bronze (max. 25 bar) and Monel															
Tube	Aluminum <sup>1)</sup>			Phenolic		Aluminum <sup>1)</sup>										
Case	Steel enamel coated			Polypropylene												
Ring	<sup>1)</sup> Black epoxy coated															
Window	Instrument glass, optional laminated safety glass or acrylic															
Dial	Aluminum, black markings on white background, with polished mirror band															
Pointer	Aluminum, black, red painted knife edge															
Movement	Stainless steel 400 series, bimetallic temperature compensated, with micro-span adjustment and under-load/overload stops															
Accuracy	Grade 3A (0,25 % F.S.)															
Permissible																
Ambient temperature	-25 ... 60 °C															
Medium temperature	Max. 100 °C															
Storage temperature	-40 ... 65 °C															
Effect	Automatic compensated, max. 0,09 % / 10 K															
Protection according EN 60 529/IEC 529	IP54															
Filling liquids	Filling not available															
Mounting	Stem, optional flush			Stem, surface, flush with 1278M ring		Stem, surface										
Weight in kg	1,1	1,4	2	1,1		1,1	1,4									
Accessories, options	Valves															

## General dimensions in mm



Type	Dial	A	B	C	D	E	F	G	H		J	K	L	M	T	U		
									Max	Min								
Standard	4 1/2"	155	73	121	30	137	41	100	35	#10-24	34	-	124	165	16	19		
	6"	192	73	121	30	178	41	114									1/4-20	165
	8 1/2"	257	73	121	30	244	41	152									1/4-20	229
TY	4 1/2"	148	86	129	-	137	-	94	-	6	6.7	24	-	16	-	-		
	6"	194	89	162	41	178	-	113	-	6	6.7	27	-	16	-	-		
AY	4 1/2"	148	87	124	41	137	-	94	-	6	6.7	27	-	16	-	-		
	6"	194	89	162	41	178	-	113	-	6	6.7	27	-	16	-	-		

Rev. F

Temperature compensation reduces temperature-caused errors to less than 0,09 % / 10 K temperature change.



The Micro-Span™ adjustment permits precise adjustments to achieve zero error in calibration at zero and 100 % of scale

## Order information

Size	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Case type	Options
(45) 4 1/2 inch (115 mm)	(A) Brass socket, phosphor bronze tube (max. 25 bar)  (P) Monel 400 socket, K-Monel tube	(S) Solid front IP54	(04) 1/2 NPT male  (02) 1/4 NPT male <sup>1)</sup>  (09) 9/16-18 UNF-2B Aminco	(L) Lower  (B) Back <sup>1)</sup>	-1/ 0 -1/ 1,5 -1/ 3 -1/ 5 -1/ 9  0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25 0/ 40 0/ 60 0/100 0/160 0/250 0/400 0/600 0/700	(BAR)	(=) Standard no filling  (AY) Aluminum threaded polypropylene ring (only 4 1/2" and 6" dial with lower connection)  (TY) Phenolic threaded polypropylene ring (only 4 1/2" dial with lower connection)	(NH) Tagging wired  (6B) Oxygen cleaned  (PD) Acrylic glass  (SG) Safety glass  (1278M) Flush mounted ring for 4 1/2" and 6" case type TY and AY
(60) 6 inch (150 mm) <sup>1)</sup>								
(85) 8 1/2 inch (215 mm) <sup>2)</sup>								
<sup>1)</sup> not for case type TY  <sup>2)</sup> only for standard			<sup>1)</sup> standard connection  others with adapter	<sup>1)</sup> not for case type AY and TY		psi and others on request		

## Order example

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Case type	Options
45	1082	P	S	02	L	0/16	BAR	=	NH

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