# ASHCRO

### 1082 Test Gauge

#### **FEATURES**

- MircoSpan<sup>™</sup> adjustment eases span calibration
- Mirror-band dial and knife-edge pointer eliminates paralax error while assuring easy readability of precise measurements
- Teflon<sup>™</sup> coated, stainless steel movement
- Accuracy complies with ±0.25% of span (ASME B40.1 Grade 3A)
- Externally adjustable dial

#### **TYPICAL USES**

- Test benches
- Specialized OEM equipment
- Test and measurement & validation
- Calibration labs

Case

Aluminum, solid front,

black epoxy coated

SPECIFICATIONS								
Accuracy:	±0.25% of span (ASME B40.100 Grade 3A)							
Ranges:	Vacuum, Compound to 10	0,000 psi						
Sizes:	4½", 6"or 8½"							
Process Connection Location:	Lower or Back							
Process Connection:	1/4 NPT Male or 1/2 NPT Male	ale						
Dial:	Externally adjustable alur with polished mirror band	,						
Case Style:	Solid front							
Movement:	ovement: 400 Series SS rotary design, Teflon™ S coat bearings, micrometer span adjustment, bim temp. compensator (0.005%/per °F Max. temperature error)							
Pointer:	Black painted aluminum edge tip	Black painted aluminum with red-painted, knife edge tip						
Mounting Options:	Stem or flush							
Weather Protection:	Case not sealed, recomm protected environment or							
Approvals:	CE/UKCA, CRN							
WETTED COMPO	NENTS							
Bourdon Tube	Process Connection	Joints						
Bronze	Brass Silver Brazed							
Monel <sup>®</sup>	Monel® Welded							
NON-WETTED COMPONENTS								

Ring

Hinged steel, black

wrinkle finish

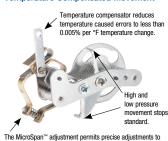


1082

41/2", 6", 81/2" dial sizes



#### **Temperature Compensated Movement**



achieve zero error in calibration at zero and 100% of scale.

#### **Externally Adjustable Dial**



#### **KEY BENEFITS**

- Temperature-compensated movement significantly reduces temperature error
- Rugged stainless steel construction
- Compact design

MIN/MAX TEMPERATURE LIMITS										
Version	Ambient	Process	Storage							
Dry		-20 °F to 250 °F (-29 °C to 121 °C)	-40 °F to 250 °F (-40 °C to 121 °C)							

Window

Glass



# 1082 Test Gauge

Note   1082	ORDERING CODE	Example:	45	1082	Р	s	02	L	100#	-XPD
60 - 6" dial 85 - 81% dial Model  Model  1082 - Test gauge 1082  System  A - Bronze tube and brass socket (maximum available range 400 psi) P - Monel® tube and socket P P - Monel® tube and socket M P - Monel® tube and socket P P - Monel® tube and socket M P - Monel® tube and s	Dial Size									
85 - 89'' dial	45 - 4½" dial		45							
Mode    1082	60 - 6" dial									
1082 - Test gauge	85 - 8½" dial									
Nomine   N	Model			-						
A - Bronze tube and brass socket (maximum available range 400 psi) P - Monel* tube and socket P Case Style S - Solid front S Process Connection Size 02 - ¼ NPT Male 02 4 - ½ NPT Male 04 - ½ NPT Male 05 - Back Ranges (See additional range tables on page 3) 15# - 0-15 psi 30# - 0-30 psi 60# - 0-60 psi 100# - 0-100 psi 100# - 0-100 psi 100# - 0-100 psi 100# - 0-000 psi (Monel* wetted parts only) 1000# - 0-400 psi (Monel* wetted parts only) 1000# - 0-1,000 psi (Monel* wetted parts only) 1000# -	1082 - Test gauge			1082						
P	System									
Case Style         S         S         S         S         F	A - Bronze tube and brass socket (maximum availab	ole range 400 psi)								
S - Solid front	P - Monel® tube and socket				Р					
Process Connection Size           02 - ½ NPT Male         02           04 - ½ NPT Male         02           L - Lower         L           L - Lower         L           B - Back         L           8 - Back [See additional range tables on page 3)         -0-15 psi           30# - 0-30 psi         -0-60 psi           100# - 0-100 psi         100#           160# - 0-100 psi         100#           200# - 0-200 psi	Case Style									
02 - ½ NPT Male         02           04 - ½ NPT Male         L           Process Connection Location           L - Lower         L           B - Back         L           Ranges (See additional range tables on page 3)           15# - 0-15 psi           30# - 0-30 psi         50# - 0-60 psi           100# - 0-100 psi         100#           160# - 0-160 psi         100#           200# - 0-200 psi         100#           300# - 0-300 psi         400# - 0-400 psi           400# - 0-400 psi (Monel® wetted parts only)         50# - 0-600 psi (Monel® wetted parts only)           PD - Acrylic window         -X           PD - Acrylic window           SG - Safety Glass window           TS - Throttling devices           Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)           TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	S - Solid front					S				
Name	Process Connection Size						-			
Process Connection Location   L - Lower	02 - 1/4 NPT Male						02			
L - Lower	04 - 1/2 NPT Male									
B - Back  Ranges (See additional range tables on page 3)  15# - 0-15 psi  30# - 0-30 psi 60# - 0-60 psi 100# - 0-100 psi 100# 160# - 0-160 psi 200# - 0-200 psi 300# - 0-300 psi 400# - 0-300 psi 400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window PD SG - Safety Glass window TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	Process Connection Location									
Ranges (See additional range tables on page 3)	L - Lower							L		
15# - 0-15 psi         30# - 0-30 psi         60# - 0-60 psi         100# - 0-100 psi       100#         160# - 0-160 psi         200# - 0-200 psi         300# - 0-300 psi         400# - 0-400 psi (Monel® wetted parts only)         1000# - 0-1,000 psi (Monel® wetted parts only)         Options (If choosing an option(s) must include an "X")       -X         PD - Acrylic window       PD         SG - Safety Glass window         TS - Throttling devices         AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)         TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	B - Back									
30# - 0-30 psi   100# - 0-100 psi   100#	Ranges (See additional range tables on page 3)									
100# - 0-100 psi   100#   10	15# - 0-15 psi									
100# - 0-100 psi 160# - 0-160 psi 200# - 0-200 psi 300# - 0-300 psi 400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window SG - Safety Glass window TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	30# - 0-30 psi									
160# - 0-160 psi 200# - 0-200 psi 300# - 0-300 psi 400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window SG - Safety Glass window TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	60# - 0-60 psi									
200# - 0-200 psi 300# - 0-300 psi 400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X") PD - Acrylic window PD SG - Safety Glass window TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	100# - 0-100 psi								100#	
300# - 0-300 psi 400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window  SG - Safety Glass window  TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	160# - 0-160 psi									
400# - 0-400 psi 600# - 0-600 psi (Monel® wetted parts only) 1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window  PD SG - Safety Glass window  TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	200# - 0-200 psi									
600# - 0-600 psi (Monel® wetted parts only)  1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window  SG - Safety Glass window  TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	300# - 0-300 psi									
1000# - 0-1,000 psi (Monel® wetted parts only)  Options (If choosing an option(s) must include an "X")  PD - Acrylic window  SG - Safety Glass window  TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	400# - 0-400 psi									
Options (If choosing an option(s) must include an "X")  PD - Acrylic window  SG - Safety Glass window  TS - Throttling devices  AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	600# - 0-600 psi (Monel® wetted parts only)									
PD - Acrylic window PD SG - Safety Glass window TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	1000# - 0-1,000 psi (Monel® wetted parts only)									
SG - Safety Glass window TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	Options (If choosing an option(s) must include an	"X")								-X
TS - Throttling devices AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only) TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	PD - Acrylic window									PD
AY - Aluminum case, threaded ring (N/A with adjustable dial, Lower connection only)  TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	SG - Safety Glass window									
TY - Phenolic case, threaded ring (N/A with adjustable dial, Lower connection only)	TS - Throttling devices									
	AY - Aluminum case, threaded ring (N/A with adjusta	ble dial, Lower connection	n only)							
C4 - <u>Traceable calibration certificate</u>	TY - Phenolic case, threaded ring (N/A with adjustab	le dial, Lower connection	only)							
	C4 - <u>Traceable calibration certificate</u>									



# 1082 Test Gauge

		STANDARD I	RANGES	
	Ra	nge	Grad	uations
Vacuum	psi	in. Hg	Figure Interval	Minor Graduations
Vac	-	30/0 in. Hg	2 in. Hg	0.1 in. Hg
	0/15	_	1	0.05
	0/30	-	2	0.1
	0/60	-	5	0.2
	0/100	-	5	0.5
	0/150	_	10	0.5
ė	0/200	-	10	1
Positive Pressure	0/300	_	20	1
Pre	0/400	-	20	2
tive	0/600	_	50	2
Posi	0/800	-	50	5
	0/1000	_	50	5
	0/1500	-	100	5
	0/2000	_	100	10
	0/3000	-	200	10
	0/5000	_	500	10
	0/10,000	-	1000	50

COMPOUND RANGES									
		in. Hg/psi							
	30/0/15	30/0/20	5/0/2						
	30/0/30	30/0/20	5/0/1						
pur	30/0/60	30/0/20	2/0/1						
Compound	30/0/100	30/0/10	2/0/1						
Con	30/0/150	10/0/5	1/0/0.5						
	30/0/200	10/0/5	1/0/0.5						
	30/0/300	10/0/5	0.5/0/0.2						
	30/0/400	5/0/2	0.5/0/0.1						
	30/0/400	5/0/2	0.5/0/0.1						

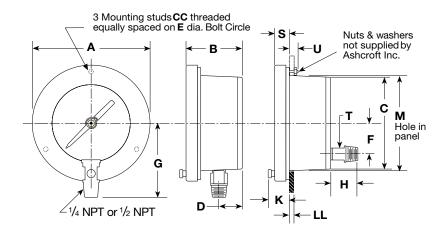
	STAN	DARD RANGI	ES
mm .	Bar	kPa	kg/cm²
Vacuum	-1/0	-100/0	-1/0
ᅙ	-1/0/1.5	-100/0/150	-1/0/1.5
Compound	-1/0/3	-100/0/300	-1/0/3
E O	-1/0/5	-100/0/500	-1/0/5
3	-1/0/9	-100/0/900	-1/0/9
	0/1	0/100	0/1
	0/1.6	0/160	0/1.6
	0/2.5	0/250	0/2.5
	0/4	0/400	0/4
	0/6	0/600	0/6
ure	0/10	0/1000	0/10
ress	0/16	0/1600	0/16
Positive Pressure	0/25	0/2500	0/25
sitiv	0/40	0/4000	0/40
2	0/60	0/6000	0/60
	0/100	0/10,000	0/100
	0/160	0/16,000	0/160
	0/250	0/25,000	0/250
	0/400	0/40,000	0/400
	0/600	0/60,000	0/600



# 1082 Test Gauge

#### **DIMENSIONS** in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



Dial Size (inches)	A	В	С	СС	D	E	F	G	н	К	LL	M	S	т	U
41/2	6 <sup>3</sup> / <sub>32</sub> [155]	2 <sup>7</sup> / <sub>8</sub> [73]	4 <sup>3</sup> / <sub>4</sub> [121]	#10-24	1 <sup>3</sup> / <sub>16</sub> [30]	5³/ <sub>8</sub> [137]	1 <sup>5</sup> / <sub>8</sub> [41]	4 <sup>7</sup> / <sub>8</sub> [100]	1 <sup>3</sup> / <sub>8</sub> [35]	<sup>11</sup> / <sub>32</sub> [34]		4 <sup>7</sup> / <sub>8</sub> [124]		<sup>5</sup> / <sub>8</sub> [16]	<sup>3</sup> / <sub>4</sub> [19]
6	7 <sup>9</sup> / <sub>16</sub> [192]	2 <sup>7</sup> / <sub>8</sub> [73]	4 <sup>3</sup> / <sub>4</sub> [121]	1⁄4-20	1 <sup>3</sup> / <sub>16</sub> [30]	7 [178]	1 <sup>5</sup> / <sub>8</sub> [41]	4 ½ [114]	1 <sup>3</sup> / <sub>8</sub> [35]	1 <sup>1</sup> / <sub>32</sub> [34]	<sup>1</sup> / <sub>8</sub> to ½ [3 to 13]	6½ [165]	<sup>5</sup> / <sub>8</sub> [16]	<sup>5</sup> / <sub>8</sub> [16]	<sup>3</sup> / <sub>4</sub> [19]
81/2	10 <sup>1</sup> / <sub>16</sub> [257]	2 <sup>7</sup> / <sub>8</sub> [73]	4 <sup>3</sup> / <sub>4</sub> [121]	1⁄4-20	1⁄4-20	9 <sup>5</sup> / <sub>8</sub> [244]	1 <sup>5</sup> / <sub>8</sub> [41]	6 [152]	1 <sup>3</sup> / <sub>8</sub> [35]	<sup>11</sup> / <sub>32</sub> [34]		9 [229]		<sup>5</sup> / <sub>8</sub> [16]	<sup>3</sup> / <sub>4</sub> [19]