

Data Sheet

1082 Test Gauge

FEATURES

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

TYPICAL USES

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

SPECIFICATIONS

| | |
|------------------------------|---|
| Accuracy: | $\pm 0.25\%$ of span (ASME B40.100 Grade 3A) |
| Ranges: | Vacuum, Compound to 10,000 psi |
| Sizes: | 4½", 6" or 8½" |
| Process Connection Location: | Lower or Back |
| Process Connection: | ¼ NPT Male or ½ NPT Male |
| Dial: | Externally adjustable aluminum, black numerals with polished mirror band |
| Case Style: | Solid front |
| Movement: | 400 Series SS rotary design, Teflon® S coated bearings, micrometer span adjustment, bimetallic temp. compensator (0.005%/per °F Max. temperature error) |
| Pointer: | Black painted aluminum with red-painted, knife edge tip |
| Mounting Options: | Stem or flush |
| Weather Protection: | Case not sealed, recommended for weather protected environment only |
| Approvals: | CRN |

WETTED COMPONENTS

| Bourdon Tube | Process Connection | Joints |
|--------------|--------------------|---------------|
| Bronze | Brass | Silver Brazed |
| Monel® | Monel® | Welded |

NON-WETTED COMPONENTS

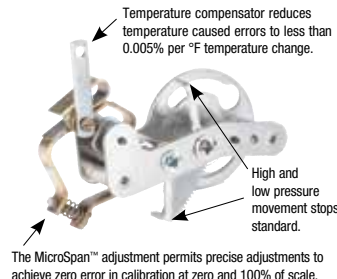
| Case | Ring | Window |
|---|------------------------------------|--------|
| Aluminum, solid front, black epoxy coated | Hinged steel, black wrinkle finish | Glass |



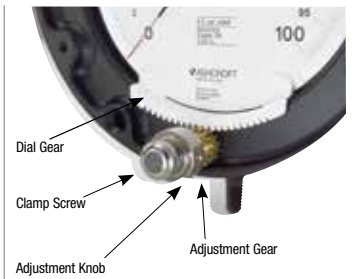
1082
4½", 6", 8½" dial sizes



Temperature Compensated Movement



Externally Adjustable Dial



KEY BENEFITS

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

MIN/MAX TEMPERATURE LIMITS

| Version | Ambient | Process | Storage |
|---------|-----------------------------------|------------------------------------|------------------------------------|
| Dry | -20°F to 200°F (-29°C to 93°C) | -20°F to 250°F (-29°C to 121°C) | -40°F to 250°F (-40°C to 121°C) |

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| ORDERING CODE | Example: | 45 | 1082 | P | S | 02 | L | 100# | -XPD |
|---|----------|----|------|---|---|----|---|------|--------|
| Dial Size | | | | | | | | | |
| 45 - 4½" dial | | 45 | | | | | | | |
| 60 - 6" dial | | | | | | | | | |
| 85 - 8½" dial | | | | | | | | | |
| Model | | | | | | | | | |
| 1082 - Test gauge | | | 1082 | | | | | | |
| System | | | | | | | | | |
| A - Bronze tube and brass socket (max. available range 400 psi) | | | | | | | | | |
| P - Monel [®] tube and socket | | | | P | | | | | |
| Case Style | | | | | | | | | |
| S - Solid front | | | | | S | | | | |
| Process Connection Size | | | | | | | | | |
| 02 - ¼ NPT Male | | | | | | 02 | | | |
| 04 - ½ NPT Male | | | | | | | | | |
| Process Connection Location | | | | | | | | | |
| L - Lower | | | | | | | L | | |
| 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# - 0-400 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 | | | | | | | | | -X_ PD |
| SG - Safety Glass window | | | | | | | | | |
| TS - Throttling devices | | | | | | | | | |
| AY - Aluminum case, threaded ring (N/A with adj. dial, Lower connection only) | | | | | | | | | |
| TY - Phenolic case, threaded ring (N/A with adj. dial, Lower connection only) | | | | | | | | | |

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| STANDARD RANGES | | | | |
|--------------------------|-----------------------|-----------|-----------------|-------------------|
| | Range | | Graduations | |
| | psi | inHg | Figure Interval | Minor Graduations |
| Vacuum | - | 30/0 inHg | 2 inHg | 0.1 inHg |
| | 0/15 | - | 1 | 0.05 |
| Positive Pressure | 0/30 | - | 2 | 0.1 |
| | 0/60 | - | 5 | 0.2 |
| | 0/100 | - | 5 | 0.5 |
| | 0/150 | - | 10 | 0.5 |
| | 0/200 | - | 10 | 1 |
| | 0/300 | - | 20 | 1 |
| | 0/400 | - | 20 | 2 |
| | 0/600 | - | 50 | 2 |
| | 0/800 | - | 50 | 5 |
| | 0/1000 ⁽¹⁾ | - | 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 | | | |
|-----------------|-----------------|---------|-----------|
| | inHg/psi | | |
| | Compound | 30/0/15 | 30/0/20 |
| 30/0/30 | | 30/0/20 | 5/0/1 |
| 30/0/60 | | 30/0/20 | 2/0/1 |
| 30/0/100 | | 30/0/10 | 2/0/1 |
| 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 |

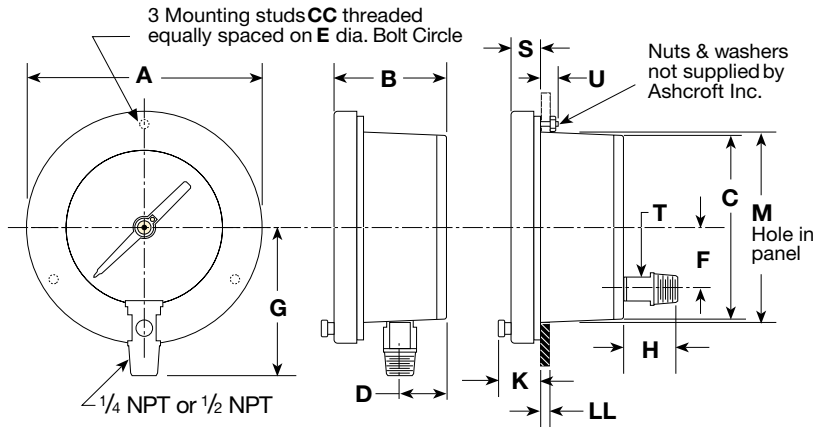
| STANDARD RANGES | | | |
|--------------------------|---------------------|------------|--------------------|
| | Bar | kPa | kg/cm ² |
| | Vacuum | -1/0 | -100/0 |
| -1/0/1.5 | | -100/0/150 | -1/0/1.5 |
| Compound | -1/0/3 | -100/0/300 | -1/0/3 |
| | -1/0/5 | -100/0/500 | -1/0/5 |
| | -1/0/9 | -100/0/900 | -1/0/9 |
| | 0/1 | 0/100 | 0/1 |
| Positive Pressure | 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 |
| | 0/10 | 0/1000 | 0/10 |
| | 0/16 | 0/1600 | 0/16 |
| | 0/25 | 0/2500 | 0/25 |
| | 0/40 | 0/4000 | 0/40 |
| | 0/60 ⁽¹⁾ | 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 | |

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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



| Dial Size (inches) | A | B | C | CC | D | E | F | G | H | K | LL | M | S | T | U |
|--------------------|------------------|---------------|----------------|--------|----------------|----------------|---------------|----------------|---------------|----------------|-------------------------|----------------|-------------|-------------|-------------|
| 4 1/2 | 6 3/32 [155] | 2 7/8 [73] | 4 3/4 [121] | #10-24 | 1 3/16 [30] | 5 3/8 [137] | 1 5/8 [41] | 4 7/8 [100] | 1 3/8 [35] | 1 1/32 [34] | | 4 7/8 [124] | | 5/8 [16] | 3/4 [19] |
| 6 | 7 9/16 [192] | 2 7/8 [73] | 4 3/4 [121] | 1/4-20 | 1 3/16 [30] | 7 [178] | 1 5/8 [41] | 4 1/2 [114] | 1 3/8 [35] | 1 1/32 [34] | 1/8 to 1/2 [3 to 13] | 6 1/2 [165] | 5/8 [16] | 5/8 [16] | 3/4 [19] |
| 8 1/2 | 10 1/16 [257] | 2 7/8 [73] | 4 3/4 [121] | 1/4-20 | 1/4-20 | 9 5/8 [244] | 1 5/8 [41] | 6 [152] | 1 3/8 [35] | 1 1/32 [34] | | 9 [229] | | 5/8 [16] | 3/4 [19] |