

## Type 1082 Test Gauge



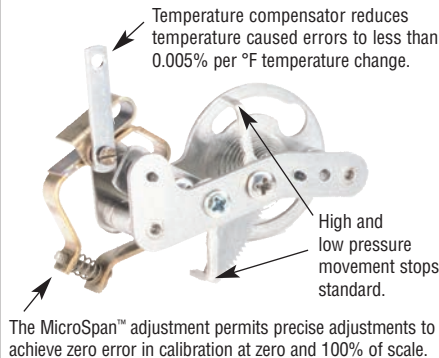
TYPE 1082

### FEATURES

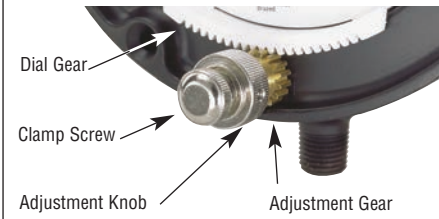
- Externally adjustable dial (standard case)
- White aluminum dial, black numbers with polished mirror band
- Temperature-compensated movement significantly reduces temperature error
- MicroSpan™ adjustment for ease in span calibration
- Hydraulically staked movement with Teflon-coated gears and bearings improves stability

The standard Ashcroft® test gauge case style features a solid-front aluminum case with a hinged ring. The dial has a polished mirror band for pointer reflection to prevent parallax error and is available in 4½", 6" and 8½" dial sizes in both lower and back connection. Pointer is a balanced-friction adjustable design with red knife edge tip for easy reading. Optional aluminum or phenol cases are also available.

#### Temperature Compensated Movement



#### Externally Adjustable Dial



### HOW TO ORDER:

From Table A, Dial Size: 4½" : 45    1082    P\*    02L    XXX    0/2,000 psi

From Table A, Case Type Number: 1082

From Table B, Bourdon tube and socket:

From Table B, Connection: ¼ NPT (02), ½ NPT (04), Lower (L), Back (B)

From Optional Features:

From Range Table: 2000 psi

(\*) "S" denotes solid front case design

### SPECIFICATIONS

|                                  |  |
|----------------------------------|--|
| <b>Model Number:</b>             | 1082   |
| <b>Accuracy:</b>                 | 0.25/ASME B40.100, Grade 3A  |
| <b>Ranges:</b>                   | Vac., compound, 10,000 psi   |
| <b>Dial Size:</b>                | 4½" 6", 8½"  |
| <b>Case Material:</b>            | Aluminum, solid front, black epoxy coated  |
| <b>Ring:</b>                     | Hinged steel, black wrinkle finish   |
| <b>Tube and Socket Material:</b> | – (A) Phosphor bronze tube, brass socket<br>– (P) Monel tube and socket  |
| <b>Movement:</b>                 | 400 Series SS rotary design, Teflon <sup>(1)</sup> S coated bearings, Micrometer span adjustment, Bimetallic temp. compensator (.005%/per °F max. temp. error) |
| <b>Connection Location:</b>      | Lower or back for flush mounting <sup>(2)</sup>  |
| <b>Connection Size:</b>          | ¼ or ½ NPT   |
| <b>Window Material:</b>          | Glass  |
| <b>Pointer:</b>                  | Black-painted aluminum with red-painted, knife-edge tip  |
| <b>Dial:</b>                     | Externally adjustable aluminum, black numerals with polished mirror band   |
| <b>Weather Proof:</b>            | No   |

### OPTIONS

Acrylic window: **XPD**  
 Safety glass window: **XSG**  
 Throttling devices: **XTS**  
 Carrying handle: **XHC**  
 Carrying case: **XS7**  
 Aluminum case, threaded ring: **XAY<sup>(3)</sup>**  
 Phenol case, threaded ring: **XTY<sup>(3)</sup>**

(1) Registered TM of DuPont Co.

(2) Cases supplied with studs for flush mounting.

(3) Not available with externally adjustable dial. Lower connect only.

## Type 1082 Test Gauge

### STANDARD RANGES

| psi             | Minor Graduations |      |      |
|-----------------|-------------------|------|------|
|                 | 4½"               | 6"   | 8½"  |
| <b>Pressure</b> |                   |      |      |
| 0/15            | 0.05              | 0.05 | 0.02 |
| 0/30            | 0.1               | 0.1  | 0.05 |
| 0/60            | 0.2               | 0.2  | 0.1  |
| 0/100           | 0.5               | 0.2  | 0.2  |
| 0/150           | 0.5               | 0.5  | 0.2  |
| 0/200           | 0.5               | 0.5  | 0.5  |
| 0/300           | 1                 | 1    | 0.5  |
| 0/400           | 1                 | 1    | 1    |
| 0/600           | 2                 | 2    | 1    |
| 0/800           | 2                 | 2    | 2    |
| 0/1000          | 5                 | 2    | 2    |
| 0/1500          | 5                 | 5    | 2    |
| 0/2000          | 10                | 5    | 5    |
| 0/3000          | 10                | 10   | 5    |
| 0/5000          | 20                | 10   | 10   |
| 0/10,000        | 50                | 20   | 20   |

### Vacuum

|            |     |     |      |
|------------|-----|-----|------|
| 30 in.Hg/0 | 0.1 | 0.1 | 0.05 |
|------------|-----|-----|------|

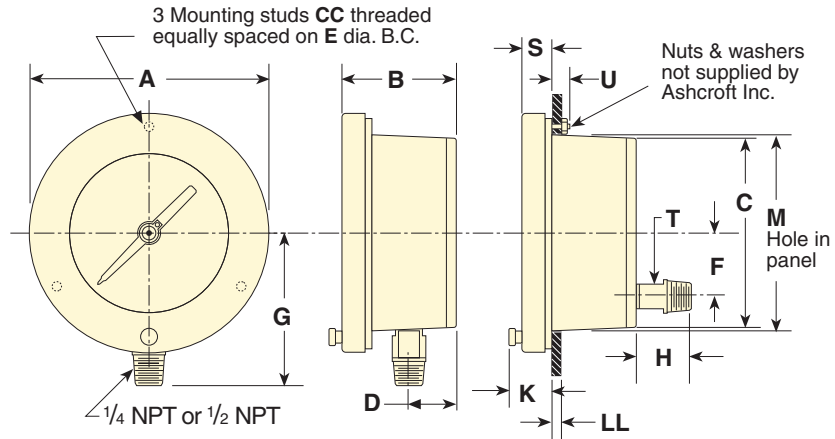
### Compound

| Hg/psi   | Vac. | Pres. | Vac. | Pres. | Vac. | Pres. |
|----------|------|-------|------|-------|------|-------|
| 30/0/15  | 0.2  | 0.1   | 0.2  | 0.1   | 0.1  | 0.05  |
| 30/0/30  | 0.5  | 0.2   | 0.2  | 0.1   | 0.2  | 0.1   |
| 30/0/60  | 0.5  | 0.2   | 0.5  | 0.2   | 0.5  | 0.2   |
| 30/0/100 | 1    | 0.5   | 0.5  | 0.5   | 0.5  | 0.2   |
| 30/0/150 | 1    | 0.5   | 1    | 0.5   | 0.5  | 0.5   |
| 30/0/200 | 2    | 1     | 1    | 0.5   | 1    | 0.5   |
| 30/0/300 | 2    | 1     | 2    | 1     | 1    | 0.5   |
| 30/0/400 | 5    | 2     | 2    | 1     | 2    | 1     |

### STANDARD RANGES

| kg/cm2 – bar    | kPa      |
|-----------------|----------|
| <b>Pressure</b> |          |
| 0/1             | 0/100    |
| 0/1.6           | 0/160    |
| 0/2.5           | 0/250    |
| 0/4             | 0/400    |
| 0/6             | 0/600    |
| 0/10            | 0/1000   |
| 0/16            | 0/1600   |
| 0/25            | 0/2500   |
| 0/40            | 0/4000   |
| 0/60            | 0/6000   |
| 0/100           | 0/10,000 |
| 0/160           | 0/16,000 |
| 0/250           | 0/25,000 |
| 0/400           | 0/40,000 |
| 0/600           | 0/60,000 |
| 0/10,000        |          |
| <b>Vacuum</b>   |          |
| -1/0            | -100/0   |
| <b>Compound</b> |          |
| -1/1.5          | -100/150 |
| -1/3            | -100/300 |
| -1/5            | -100/500 |
| -1/9            | -100/900 |

### DIMENSIONS



| Model | Dial Size Inches | A                          | B          | C           | D                        | E          | F          | G                         | H          | K                       | M           | S         | T         | U         | CC     | LL                 |
|-------|------------------|----------------------------|------------|-------------|--------------------------|------------|------------|---------------------------|------------|-------------------------|-------------|-----------|-----------|-----------|--------|--------------------|
| 1082  | 4½"              | 6½ <sub>2</sub><br>(155)   |            |             |                          | 5<br>(137) |            | 3½ <sub>16</sub><br>(100) |            |                         | 4<br>(124)  |           |           |           | #10-24 |                    |
|       | 6"               | 7¾ <sub>16</sub><br>(192)  | 2½<br>(73) | 4¼<br>(121) | 1¾ <sub>16</sub><br>(30) | 7<br>(178) | 1½<br>(41) | 4½<br>(114)               | 1½<br>(35) | 1½ <sub>2</sub><br>(34) | 6½<br>(165) | ¾<br>(16) | ¾<br>(16) | ¾<br>(19) | ¼-20   | ¾ to ½<br>(3) (13) |
|       | 8½"              | 10¾ <sub>16</sub><br>(257) |            |             |                          | 9<br>(244) |            | 6<br>(152)                |            |                         | 9<br>(229)  |           |           |           | ¼-20   |                    |

\*Millimeters shown in ( ).

Table A - Case selection & mounting

| Dial Size (in) | Ordering Code | Case Type | Case: Material Finish | Ring: Style Material Finish | Mounting / Connection  |
|----------------|---------------|-----------|-----------------------|-----------------------------|--|
| 4½             | (45)          | 1082      | Aluminum,             | Hinged Steel Wrinkle finish | Stem – Lower or back<br>Flush – Lower <sup>(1)</sup> or back |
| 6              | (60)          |           | Black, epoxy Coated   |                             |  |
| 8½             | (85)          |           |                       |                             |  |

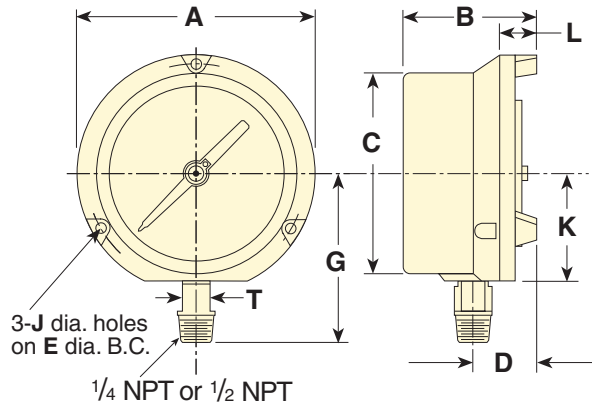
Table B - System Location and Connection Bourdon Tube & Tip Material

| (all joints TIG welded except code "A")        | Socket Material | Tube & Socket Code | Case Style Code | NPT Conn. & Code | Conn. Location & Code | Range Selection Limits (psi) |
|--|-----------------|--------------------|-----------------|------------------|-----------------------|------------------------------|
| Phosphor bronze tube, Brass tip, silver brazed | Brass           | (A)-Tube           | (S) Solid Front | (02) ¼           | Lower (L)             | Vac./400                     |
| Monel 400                                      | Monel 400       | (P)                | (S) Solid Front | (04) ½           | Back (B)              | Vac./10,000                  |

NOTES: (1) Standard case only.

## Type 1082 Test Gauge – XAY, XTY Case Options

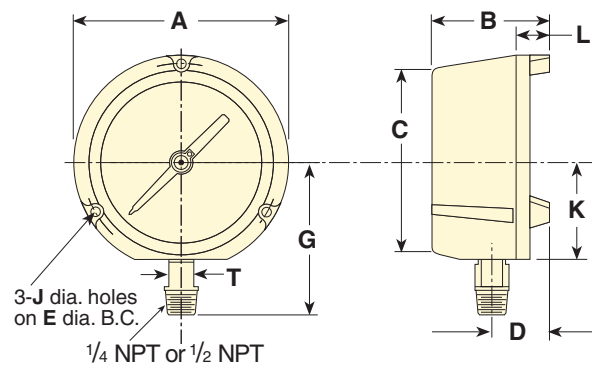
### XAY DIMENSIONS



| Model    | Dial Size Inches | A                | B             | C              | D             | E              | G                | J    | K             | L             | T           |
|----------|------------------|------------------|---------------|----------------|---------------|----------------|------------------|------|---------------|---------------|-------------|
| 1082 XAY | 4 1/2"           | 5 13/16<br>(143) | 3 1/6<br>(87) | 4 7/8<br>(124) | 1 1/8<br>(41) | 5 5/8<br>(137) | 3 1/16<br>(94)   | .218 | 2 5/8<br>(67) | 1 1/6<br>(27) | 5/8<br>(16) |
|          | 6"               | 7 7/8<br>(194)   | 3 1/2<br>(89) | 6 3/8<br>(162) | 1 1/8<br>(41) | 7<br>(178)     | 4 13/16<br>(113) | .218 | 2 5/8<br>(67) | 1 1/6<br>(27) | 5/8<br>(16) |

\*Millimeters shown in ( ).

### XTY DIMENSIONS



| Model    | Dial Size Inches | A                | B             | C              | D             | E              | G              | J    | K             | L             | T           |
|----------|------------------|------------------|---------------|----------------|---------------|----------------|----------------|------|---------------|---------------|-------------|
| 1082 XTY | 4 1/2"           | 5 13/16<br>(143) | 3 1/6<br>(87) | 4 7/8<br>(124) | 1 1/8<br>(41) | 5 5/8<br>(137) | 3 1/16<br>(94) | .218 | 2 5/8<br>(67) | 1 1/6<br>(27) | 5/8<br>(16) |

\*Millimeters shown in ( ).