

Data Sheet

1279 Duragauge® Pressure Gauge

FEATURES

- Custom dial printing options
- Micrometer adjustable pointer
- **PLUS!**™ Performance option dampens vibration, shock and pulsation effects
- Pressure range from vacuum to 30,000 psi

TYPICAL USES

- Refineries
- Chemical and petrochemical plants
- Offshore oil rigs
- Water and wastewater pressure control
- Pulp and water
- Mining and metals
- Equipment skids
- Specialized OEM equipment
- Cryogenics



1279
4 1/2" dial size



SPECIFICATIONS

| | | | |
|------------------------------|--|---|---------------|
| Accuracy: | ±0.5% of span (ASME B40.100 Grade 2A) | | |
| Size: | 4 1/2" | | |
| Range: | Vacuum, compound to 30,000 psi | | |
| Process Connection Location: | Lower, back, side, top | | |
| Process Connection: | 1/4 NPT, 1/2 NPT, 3/16 -18 UNF-2B Aminco® (high pressure connection) | | |
| Case Style: | Solid front with pressure relief back | | |
| Window: | Glass (STD.), acrylic, shatter proof glass, non-glare glass (OPT.) | | |
| Movement: | Rotary, adjustable, 400 SS, Teflon™ coated | | |
| Movement Materials: | 400 SS, Teflon™ coated pinion gear and segment | | |
| Dial: | Aluminum, white background, black scale | | |
| Pointer: | Micrometer, adjustable, aluminum | | |
| Weather Protection: | Case | IP Rating | Ordering Code |
| | Dry | Case not sealed, recommended for weather protected environment only | S |
| | Dry, not field fillable | IP65 | PH |
| | Dry, field fillable | IP66 | SH |
| | Liquid filled | IP66 | SL |
| Dampening Options: | Liquid: glycerin, silicone, Halocarbon®, PLUS! ™ Performance | | |
| Mounting: | Stem, surface, flush (STD.), pipe, remote (OPT.) | | |
| Approvals: | CE/UKCA, CRN | | |

WETTED COMPONENTS

| Bourdon Tube | Process Connection | Joints |
|------------------|--------------------|---------------|
| 316L SS | 316L SS | Welded |
| 316L SS | Steel | Welded |
| K-Monel® 500 | Monel® 400, Steel | Welded |
| C510 Pho. Bronze | Brass | Silver Brazed |

KEY BENEFITS

- Available with a wide variety of accessory and diaphragm seal assemblies
- Available with high process temperature dissipation siphons

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) |
| PLUS! ™ | -40 °F to 150 °F (-40 °C to 66 °C) | -40 °F to 200 °F (-40 °C to 93 °C) | -40 °F to 150 °F (-40 °C to 66 °C) |
| Glycerin fill | 20 °F to 150 °F (-7 °C to 66 °C) | 20 °F to 150 °F (-7 °C to 66 °C) | 0 °F to 150 °F (-18 °C to 66 °C) |
| Silicone fill | -40 °F to 150 °F (-40 °C to 66 °C) | -40 °F to 200 °F (-40 °C to 93 °C) | -40 °F to 150 °F (-40 °C to 66 °C) |
| Halocarbon® fill | -40 °F to 150 °F (-40 °C to 66 °C) | -40 °F to 200 °F (-40 °C to 93 °C) | -40 °F to 150 °F (-40 °C to 66 °C) |

NON-WETTED COMPONENTS

| Case | Ring | Pressure Relief Back |
|----------|---|---------------------------------|
| Phenolic | Threaded, Polycarbonate (meets UL 94 V-0) | Polycarbonate (Meets UL 94 V-0) |

Note: Other than discoloration of the dial and hardening of the gasketing that may occur as ambient or process temperatures exceeds 150 °F, non-liquid-filled gauges with standard glass windows, can withstand continuous operating temperatures up to 250 °F (121 °C). Liquid-filled gauges can withstand 200 °F (93 °C) but glycerin fill and acrylic window will tend to yellow. Accuracy at temperatures above or below the reference ambient temperature of 68 °F (20 °C) will be affected by approximately .4% per 25 °F. Gauges with welded joints will withstand 750 °F (400 °C), 450 °F (232 °C) with silver brazed joints for short times without rupture, although other parts of the gauge will be destroyed and calibration will be lost. For continuous use and for process or ambient temperatures above 250 °F (121 °C), a diaphragm seal or capillary or siphon is recommended.

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1279 Duragauge® Pressure Gauge

| ORDERING CODE | Example: | 451279 | S | SH | 04 | L | XLL | 15# |
|---|----------|--------|---|----|----|---|-----|-----|
| Dial Size/Model Code | | | | | | | | |
| 451279 - 4½" solid front | | 451279 | | | | | | |
| System (tube and process connection) | | | | | | | | |
| A - Bronze tube, brass process connection, Max. pressure connection 1,000 psi | | | | | | | | |
| P - K-Monel® 500 tube, Monel® 400 process connection, Max. pressure 30,000 psi | | | | | | | | |
| R - 316L SS tube, steel process connection, Max. pressure 20,000 psi | | | | | | | | |
| S - 316 SS tube, 316L SS process connection, Max. pressure 20,000 psi | | | | | | | | |
| Case Design | | | | | | | | |
| S - Solid front case, dry | | | | | | | | |
| SH - Solid front case, dry (IP66 NEMA 4X) | | | | | | | | |
| PH - Solid front case, dry (IP65, cannot be liquid filled) | | | | | | | | |
| SL - Solid front case, liquid filled (glycerin STD.) | | | | | | | | |
| Process Connection Sizes | | | | | | | | |
| 02 - ¼ NPT Male, N/A for ranges over 20,000 psi | | | | | | | | |
| 04 - ½ NPT Male, N/A for ranges over 20,000 psi | | | | | | | | |
| 09 - 9/16 18 UNF-2B, Aminco® high pressure fitting, pressures over 20,000 psi (STD.) | | | | | | | | |
| AM - AND 10050-4 (¼ tubing connection) | | | | | | | | |
| RW - SAE 7/16 & 20 Straight thread | | | | | | | | |
| Process Connection Location | | | | | | | | |
| L - Lower | | | | | | | | |
| B - Back | | | | | | | | |
| D - Side (3 o'clock) | | | | | | | | |
| E - Side connection (9 o'clock) | | | | | | | | |
| T - Top connection | | | | | | | | |
| Options (If choosing an option(s) must include a "X") (See Table 1 on page 3 for more options) | | | | | | | | |
| GV - Silicone case fill | | | | | | | | |
| GX - Halocarbon® case fill | | | | | | | | |
| LL - PLUS! ™ Performance | | | | | | | | |
| ND - PLUS! Performance, silicone free (glycerin and silicone filled gauges) | | | | | | | | |
| NZ - PLUS! ™ Performance, silicone free dry gauges | | | | | | | | |
| NH - SS tag wired to case | | | | | | | | |
| PD - Acrylic window (STD. with liquid filled or hermetically sealed cases) | | | | | | | | |
| SG - Safety Glass | | | | | | | | |
| C4 - Traceable calibration certificate | | | | | | | | |
| 6B - Cleaned for oxygen service | | | | | | | | |
| 5G - Attach one accessory to gauge. Applicable to PL02 pressure limiting valve, V01,V02,V03 valves, 1098, 1100, 1198, 2198 siphons, 7001, 7004 needle valves, 1115 capillary, 1106 pulsation dampner, 1112, PD02 pressure snubbers, MDV swivel adapter, 2265 electric warning contact | | | | | | | | |
| Range (coding examples only, see range table on page 3 for all standard ranges) | | | | | | | | |
| Single Scales | | | | | | | | |
| 15# - 15 psi | | | | | | | | |
| 1BR - 1 bar | | | | | | | | |
| 1KG - 1 kg/cm² | | | | | | | | |
| 100KP - 100 kPa | | | | | | | | |
| Dual Scales | | | | | | | | |
| 15#/BR - 15 psi inner scale, 1 bar outer scale | | | | | | | | |
| 1BR/# - 1 bar inner scale, 15 psi outer scale | | | | | | | | |

When selecting a diaphragm seal or isolation ring, refer to the [Min/Max Guide](#) for compatibility with this gauge or scan the QR code to the right.



1279 Duragauge® Pressure Gauge

TABLE 1

| CODE | OPTION |
|------|---|
| AB | Gauges calibrated to compensate for absolute pressure |
| DA | Dial marking (text marking on the dial) |
| EP | Maximum pointer (adjustable, N/A with liquid filled or hermetically sealed cases) |
| HY | Hydrostatic/pneumatic testing (system pressurized to 150% of rated system pressure for 5 minutes. Overload stop STD.) |
| NG | Non-glare glass (N/A with liquid fill or hermetically sealed cases) |
| OS | Overload stop |
| SH | Red set hand, stationary |
| SG | Safety glass |
| TS | Throttle screw (STD. with liquid filled, hermetically sealed or PLUS! ™ Performance) |
| VS | Underload stop |
| 56 | Flush mounting ring |
| D3 | DuraVis™ retroreflective dial |
| TM | 2" pipe mounting bracket |

| STANDARD PRESSURE RANGES | | | | | |
|--------------------------|--------|----------|------------|-------------|--------------------|
| | psi | bar | kPa | mPa | kg/cm ² |
| Vacuum | 30IMV | N1BR | N100KP | N1MP | N1KG |
| | - | N1/0.6BR | N100/60KP | 0.1/0.06MP | N1/0.6KG |
| Compound | V/15# | - | - | - | - |
| | - | N1/1.5BR | N100/150KP | N0.1/0.15MP | N1/1.5KG |
| | V/30# | - | - | - | - |
| | - | N1/3BR | N100/300KP | N0.1/0.3MP | N1/3KG |
| | V/60# | - | - | - | - |
| | - | N1/5BR | N100/500KP | N0.1/0.5MP | N1/5KG |
| | V/100# | - | - | - | - |
| | - | N1/9BR | N100/900KP | N0.1/0.9MP | N1/9KG |
| | 15# | 1BR | 100KP | 0.1MP | 1KG |
| | 20# | - | - | - | - |
| Positive Pressure | - | 1.6BR | 160KP | 0.16MP | 1.6KG |
| | 30# | - | - | - | - |
| | - | 2.5BR | 250KP | 0.25MP | 2.5KG |
| | 60# | 4BR | 400KP | 0.4MP | 4KG |
| | - | 6BR | 600KP | 0.6MP | 6KG |
| | 100# | - | - | - | - |
| | 120# | - | - | - | - |
| | - | 10BR | 1000KP | 1MP | 10KG |
| | 160# | - | - | - | - |
| | 200# | - | - | - | - |
| | - | 16BR | 1600KP | 1.6MP | 16KG |
| | 300# | - | - | - | - |
| | - | 25BR | 2500KP | 2.5MP | 25KG |
| | 400# | - | - | - | - |
| | 500# | - | - | - | - |
| | 600# | 40BR | 4000KP | 4MP | 40KG |
| | 800# | - | - | - | - |
| | - | 60BR | 6000KP | 6MP | 60KG |
| | 1000# | - | - | - | - |
| | 1500# | 100BR | 10000KP | 10MP | 100KG |
| | 2000# | - | - | - | - |
| | - | 160BR | 16000KP | 16MP | 160KG |
| | 3000# | - | - | - | - |
| | - | 250BR | 25000KP | 25MP | 250KG |
| 4000# | - | - | - | - | |
| 5000# | - | - | - | - | |
| 6000# | 400BR | 40000KP | 40MP | 400KG | |
| 8000# | - | - | - | - | |
| - | 600BR | 60000KP | 60MP | 600KG | |
| 10000# | - | - | - | - | |
| 15000# | 1000BR | 100000KP | 100MP | 1000KG | |
| 20000# | - | - | - | - | |
| - | 1600BR | - | 160MP | 1600KG | |
| 30000# | - | - | - | - | |

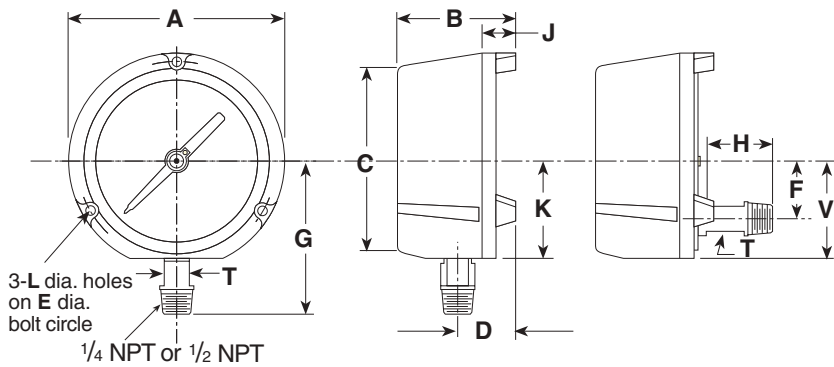
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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

| Dial Size Inches | A | B | C | D | E | F | G | H | J | K | L | T | V | Weight oz/kg |
|------------------|-----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------------|
| 4½ | 5.81 [147.6] | 3.36 [85.3] | 5.07 [128.7] | 1.60 [40.6] | 5.375 [137] | 1.62 [41.2] | 3.92 [99.6] | 0.73 [18.4] | 0.94 [23.9] | 2.62 [66.7] | 0.218 [5.5] | 0.62 [15.7] | 2.62 [66.7] | 2.5 (Dry) 3.5 (L.F.) |



1278M Series Flush Mounting Ring

1278M Series Flush Mounting Ring. Used to flush mount gauge case 1279(*S. Black finish (STD.); Polished SS finish (OPT.)

| Gauge Size Inches | Ring O.D. | "A" DIA. | "B" Size of 3 Screws | "C" Size of Washers |
|-------------------|------------|----------------|----------------------|---------------------|
| 4½ | 6 [152] | 5.625 [148] | #10-24 x 1½ | 7/16 x 17/64 x 5/8 |

