

## Data Sheet

### 1133 Differential Pressure Gauge

#### FEATURES

- High static pressure capability (500 psi)
- Ranges from 1 IWD to 25 IWD
- Reed switches (OPT.) for direct system control
- Superior magnets for smoother pointer motion
- Buna-N Diaphragm & O-Rings (others available)
- Large convoluted diaphragm actuator

#### TYPICAL USES

- Filtration Monitoring
- Flow Measurement
- Liquid Level Indication
- Leak Detection



**1133**  
 3½", 4", 4½", 6" dial sizes

#### SPECIFICATIONS

|                              |  |
|------------------------------|--|
| Accuracy:                    | ±2% ascending pressure full scale differential         |
| Sizes:                       | 3½", 4", 4½", 6"                                       |
| Ranges:                      | 0-1 IWD to 25 IWD                                      |
| Process Connection Location: | Lower, back, in-line                                   |
| Process Connection Sizes:    | ¼ NPT Female (STD.), ⅜ or ½ NPT Female Adapters (OPT.) |
| Migration:                   | Zero   |
| Maximum Process Temperature: | 175° F (80° C)   |
| Maximum Static Pressure:     | 500 psi  |

#### WETTED COMPONENTS

| Actuator             | O-Rings/Diaphragm | Body Material                      |
|----------------------|-------------------|------------------------------------|
| Convoluted diaphragm | Buna-N            | Aluminum, brass or stainless steel |

Ceramic magnet & SS spring are also wetted components

#### NON-WETTED COMPONENTS

| Case Material | Window                                       |
|---------------|--|
| SS            | Glass (STD.), safety glass or plastic (OPT.) |

#### KEY BENEFITS

- No migration of the process media
- Switch outputs available
- 5 year warranty

#### RATINGS FOR STANDARD REED SWITCHES

| Switches | Contact Rating              | Current                       | Voltage            |
|----------|-----------------------------|-------------------------------|--------------------|
| SPST     | 10 VA ac (rms) or dc (Max.) | 0.5 Amp ac (rms) or dc (Max.) | 100 Vac/Vdc (Max.) |
| SPDT     | 3 VA ac (rms) or dc (Max.)  | 0.3 AMP ac (rms) or dc (Max.) | 30 Vac/Vdc (Max.)  |

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| ORDERING CODE   | Example: | 35 | 1133 | A | D | 25 | S | XV1 | 5# |
|---|----------|----|------|---|---|----|---|-----|----|
| <b>Size</b>   |          |    |      |   |   |    |   |     |    |
| 35 - 3½"  |          | 35 |      |   |   |    |   |     |    |
| 40 - 4"   |          |    |      |   |   |    |   |     |    |
| 45 - 4½"  |          |    |      |   |   |    |   |     |    |
| 60 - 6"   |          |    |      |   |   |    |   |     |    |
| <b>Series</b>   |          |    |      |   |   |    |   |     |    |
| 1133 - Large Convolute Diaphragm  |          |    | 1133 |   |   |    |   |     |    |
| <b>Body Material</b>  |          |    |      |   |   |    |   |     |    |
| A - Brass   |          |    |      | A |   |    |   |     |    |
| F - Aluminum  |          |    |      |   |   |    |   |     |    |
| S - SS  |          |    |      |   |   |    |   |     |    |
| <b>Case Fill</b>  |          |    |      |   |   |    |   |     |    |
| D - Dry   |          |    |      |   | D |    |   |     |    |
| L - Glycerin fill (Liquid fill has an effect on accuracy that varies with range and temperature)  |          |    |      |   |   |    |   |     |    |
| <b>Process Connection Size</b>  |          |    |      |   |   |    |   |     |    |
| 25 - ¼ NPT Female   |          |    |      |   |   | 25 |   |     |    |
| <b>Process Connection Location</b>  |          |    |      |   |   |    |   |     |    |
| S - In-Line   |          |    |      |   |   |    | S |     |    |
| L - Lower   |          |    |      |   |   |    |   |     |    |
| B - Back  |          |    |      |   |   |    |   |     |    |
| <b>Options (If choosing an option(s) must include an "X")</b>                                     |          |    |      |   |   |    |   | X   |    |
| BF - Surface mounting plate   |          |    |      |   |   |    |   |     |    |
| CS - Dual scale   |          |    |      |   |   |    |   |     |    |
| DD - Color band (any combination of green, yellow, red)   |          |    |      |   |   |    |   |     |    |
| GE - ½ NPT Female adapters  |          |    |      |   |   |    |   |     |    |
| GM - ½ NPT Female adapters  |          |    |      |   |   |    |   |     |    |
| EP - Maximum pointer  |          |    |      |   |   |    |   |     |    |
| FF - Front flange   |          |    |      |   |   |    |   |     |    |
| VD - Viton® Diaphragm and O-rings   |          |    |      |   |   |    |   |     |    |
| EM - EPDM Diaphragm and O-rings   |          |    |      |   |   |    |   |     |    |
| GV - Silicone fill (Recommended for outside applications even though unit is hermetically sealed) |          |    |      |   |   |    |   |     |    |
| PD - Plastic window   |          |    |      |   |   |    |   |     |    |
| SG - Safety glass   |          |    |      |   |   |    |   |     |    |
| TM - Pipe mounting bracket (In-line only)   |          |    |      |   |   |    |   |     |    |
| V1 - 1-SPST switch w/DIN plug (Adj. from 30%-100% of range. Preset @ 90%)                         |          |    |      |   |   |    |   | V1  |    |
| V3 - 2-SPST switch w/DIN plug (Adj. from 30%-100% of range. Preset @ 90%)                         |          |    |      |   |   |    |   |     |    |
| V5 - 1-SPDT switch w/DIN plug (Adj. from 30%-100% of range. Preset @ 90%)                         |          |    |      |   |   |    |   |     |    |
| V7 - 2-SPDT switch w/DIN plug (Adj. from 30%-100% of range. Preset @ 90%)                         |          |    |      |   |   |    |   |     |    |
| <b>Range (coding examples only, see range table on page 3 for all standard ranges)</b>            |          |    |      |   |   |    |   |     |    |
| 5# - 5 psi  |          |    |      |   |   |    |   |     | 5# |

## Data Sheet

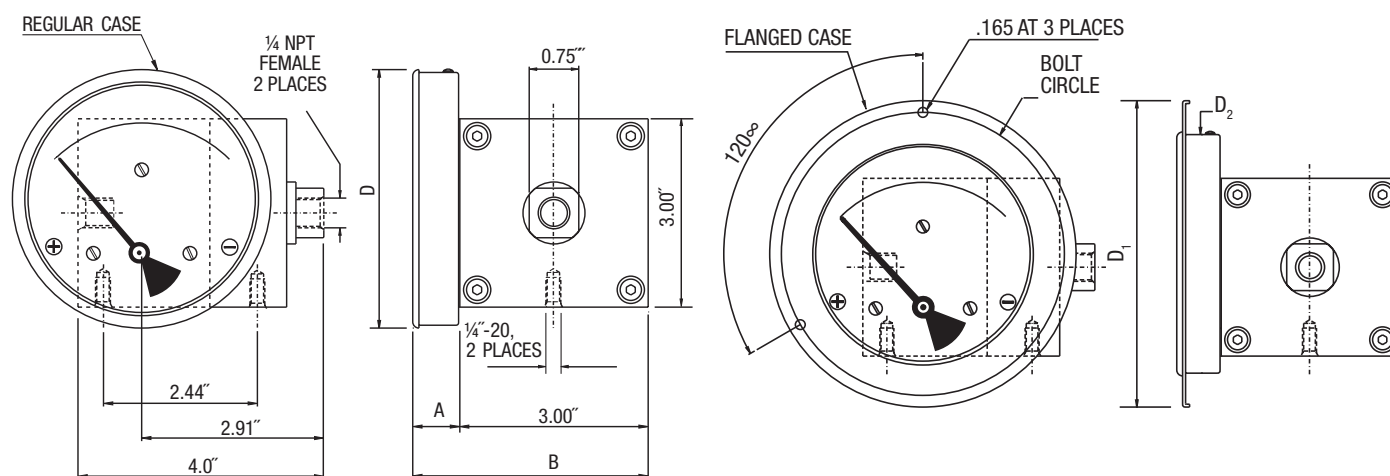
### 1133 Differential Pressure Gauge

#### 1133 - Single Scale

| in. H <sub>2</sub> O | mmH <sub>2</sub> O |
|----------------------|--------------------|
| 1IW                  | 25MW               |
| 2IW                  | 50MW               |
| 5IW                  | 125MW              |
| 10IW                 | 250MW              |
| 25IW                 | 600MW              |

#### DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings.



| Dial Size (Inches) | A     | B     | D     | D <sub>1</sub> | D <sub>2</sub> | Bolt Circle |
|--------------------|-------|-------|-------|----------------|----------------|-------------|
| 3.5                | 0.75" | 3.75" | 3.25" | 4.29"          | 3.22"          | 3.90"       |
| 4                  | 0.75" | 3.75" | 4.10" | 5.15"          | 4.01"          | 4.75"       |
| 4.5                | 0.75" | 3.75" | 4.75" | 5.74"          | 4.60"          | 5.40"       |
| 6                  | 0.75" | 3.75" | 6.07" | 7.12"          | 6.00"          | 6.75"       |