The unique electric switch design in the 1640 is another Dwyer Instruments, Inc. innovation. The Dwyer Model 1640 Differential Pressure Switch resembles the Series 1630 switches described on the previous page. The Model 1640, however, is equipped with a single pole, double throw floating contact switch (not snap acting) so it functions as a null switch. Drawing shows the switching action schematically. As the diaphragm moves in response to pressure changes, it moves the floating contact to cause switching action at two preset points with no switching action between those points. The “high” circuit will be closed when falling pressure differential reaches the preset level. The “low” circuit will be closed when rising pressure differential reaches the preset level.

### SPECIFICATIONS
- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Temperature Limits:** -30 to 110°F (-34 to 43.3°C).
- **Pressure Limits:** 10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge.
- **Switch Type:** Single-pole double-throw (SPDT) floating contact (not snap acting).
- **Electrical Rating:** Non-inductive — 2.5 A @ 110 VAC, 0.5 A @ 220 VAC; 24 VDC. Inductive — 1 A @ 110 VAC, 0.5 A @ 220 VAC, 0.5 A @ 24 VDC (derate 70-80% for very slow pressure changes).

See page 587 for process tubing options.