

## Stainless Steel Turbine Flow Sensor Outstanding performance in higher process pressure

The stainless steel flow sensor of Equflow has flow sensing capabilities in a wide range of applications suitable for neutral, corrosive, aqueous and opaque liquids including fuel. An ultra light-weight turbine rotor follows the fluctuation of the flow very accurately and generates a high resolution infrared reflected digital output signal.

## **CHARACTERISTICS**

- Sanitary process Tri-Clamp connections available
- · SS316L material for high chemical and corrosive resistance
- · Various validation documents available (including US
- Pharmacopeia Class VI)
- · High resolution square wave output
- · Measuring with revolutionary infrared turbine rotor reflection
- · Suitable for opaque liquids





| MODEL                         | 0045 Low Flow                    | 0045                             | 0085   | 0125                             | 0250                             |
|-------------------------------|----------------------------------|----------------------------------|--|----------------------------------|----------------------------------|
| Inner diameter in mm          | 4.6 mm (0.18")                   | 4.6 mm (0.18")                   | 9.3 mm (0.37")                                   | 14.0 mm (0.55")                  | 25.4 mm (1")                     |
|                               | 0.07 – 1.0 L/min                 | 0.1 – 2.0 L/min                  | 1.0 - 20.0 L/min                                 | 3.0 – 40.0 L/min                 | 10.0 – 200.0                     |
| Linear flow range             | (0.02 – 0.26<br>GPM)             | (0.03 – 0.53<br>GPM)             | (0.26 – 5.28<br>GPM)                             | (0.79 – 10.57<br>GPM)            | L/min (10.64 – 52.83 GPM)        |
| Minimum flow                  | 0.02 L/min<br>(0.005 GPM)        | 0.03 L/min (0.008<br>GPM)        | 0.5 L/min<br>(0.13 GPM)                          | 1.5 L/min<br>(0.40 GPM)          | 3.0 L/min<br>(0.79 GPM)          |
| Accuracy                      | 1% of reading                    | 1% of reading                    | 1% of reading                                    | 1% of reading                    | 1% of reading                    |
| Repeatability                 | < 0.15%                          | < 0.15%                          | < 0.15%  | < 0.15%                          | < 0.15%                          |
| Wetted parts                  | SS316L, PVDF,<br>Ruby            | SS316L, PVDF,<br>Ruby            | SS316L, PVDF,<br>Ruby                            | SS316L, PFA,<br>Ruby             | SS316L, PVDF,<br>Ruby            |
| O-ring seals                  | Viton or EPDM                    | Viton or EPDM                    | Viton or EPDM                                    | Viton or EPDM                    | Viton or EPDM                    |
| Connections                   | 1/4" BSP/NPT or 3/4" Tri-Clamp   | 1/4" BSP/NPT or 3/4" Tri-Clamp   | 3/8" BSP/NPT or<br>1/2" BSP or<br>3/4" Tri-Clamp | ½" BSP/NPT or 1" Tri-Clamp       | 1" BSP                           |
| Length (incl. housing)        | 69 mm (2.72")                    | 69 mm (2.72")                    | 81 mm (3.19")                                    | 72 mm (2.83")                    | 90 mm (3.54")                    |
| Liquid temperature            | -20°C to 80°C<br>(-4°F to 176°F) | -20°C to 80°C<br>(-4°F to 176°F) | -20°C to 80°C<br>(-4°F to 176°F)                 | -20°C to 80°C<br>(-4°F to 176°F) | -20°C to 80°C<br>(-4°F to 176°F) |
| Max. pressure at 20°C (68°F)  | 20 Bar<br>(290 PSI)*             | 20 Bar<br>(290 PSI)              | 20 Bar<br>(290 PSI)                              | 20 Bar<br>(290 PSI)              | 20 Bar<br>(290 PSI)              |
| Viscosity                     | 0.8 – 10 cP                      | 0.8 - 10 cP                      | 0.8 – 10 cP                                      | 0.8 – 10 cP                      | 0.8 – 10 cP                      |
| Approx. K-factor (P = pulses) | 130,000 P/L<br>(490,000 P/G)     | 100,000 P/L<br>(377,000 P/G)     | 4,800 P/L<br>(18,000 P/G)                        | 2,000 P/L<br>(7,500 P/G)         | 250 P/L<br>(940 P/G)             |
| Power Supply                  | 5 - 24 Vdc                       | 5 - 24 Vdc                       | 5 - 24 Vdc                                       | 5 - 24 Vdc                       | 5 - 24 Vdc                       |
| Output signal                 | 5 - 24 V SQW                     | 5 - 24 V SQW                     | 5 - 24 V SQW                                     | 5 - 24 V SQW                     | 5 - 24 V SQW                     |
| Power consumption             | 34 mA at 5 V                     | 34 mA at 5 V                     | 34 mA at 5 V                                     | 34 mA at 5 V                     | 34 mA at 5 V                     |
| Default cable                 | PVC 1 meter (39.37")             | PVC 1 meter (39.37")             | PVC 1 meter (39.37")                             | PVC 1 meter (39.37")             | PVC 1 meter (39.37")             |



