

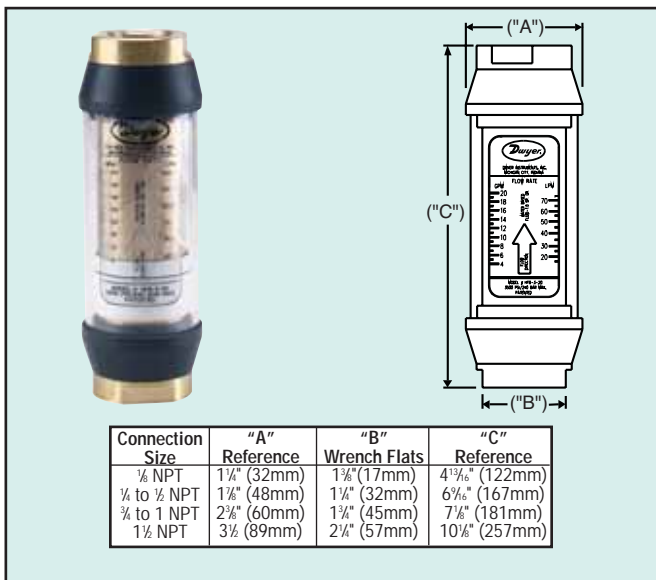


Series
HF

In-Line Flow Monitors

For Air, Water or Caustic Fluids, $\pm 2.5\%$ Accuracy, Unrestricted Mounting

Flow



| Connection Size | "A" Reference | "B" Wrench Flats | "C" Reference |
|-----------------|---------------|------------------|-----------------|
| 1/4" NPT | 1 1/4" (32mm) | 1 3/8" (17mm) | 4 1/8" (122mm) |
| 1/2 to 1/2" NPT | 1 1/2" (48mm) | 1 1/4" (32mm) | 6 5/8" (167mm) |
| 3/4 to 1" NPT | 2 3/8" (60mm) | 1 3/4" (45mm) | 7 7/8" (181mm) |
| 1 1/2" NPT | 3 1/2" (89mm) | 2 1/4" (57mm) | 10 1/8" (257mm) |

Low Cost, Series HF In-Line Flow Monitors have a patented design based on a floating sharp-edged orifice disk and variable area flow measurement to yield accuracy of $\pm 2.5\%$ over center one-third of scale. This unique design allows accurate performance with fluid viscosities up to 500 SSU. All internal wetted parts are contained inside a sealed metal tubular casing assuring a virtually maintenance-free unit. Flowing media forces linear motion of a spring loaded, sharp edge orifice disk and ring shaped transfer magnet which both ride on a tapered center shaft. The transfer magnet drives a clearly visible magnet follower located outside the flow tube, protected under the clear Polycarbonate tube. A ring on the magnet follower indicates flow rate on the direct reading scale. Rubber bumpers are provided for external impact resistance.

Designed for single-direction flow, Series HF Monitors are recommended for use with system filtration of at least 74 microns or a 200 mesh screen. Some applications may also require magnetic filtration. These flowmeters do not require inlet or outlet straight plumbing and can be mounted horizontally, vertically, or inverted.

APPLICATIONS

HF Flow Monitors can be used to set flow rates, fluid motor and cylinder speeds. Check pump high pressure performance, pressure relief valve settings, fluid handling systems in agricultural, construction or industrial machinery, power tools and equipment. Monitor; petrochemical operations with brass or stainless steel models. Industrial pneumatic systems air flow can be monitored with the HFA models which are calibrated at 100 psig inlet pressure.

SPECIFICATIONS

Service: Compatible gases or liquids.

Wetted Materials: Body: Aluminum, brass or 304 SS; Seals: Buna-N or Fluoroelastomer; Magnet: PTFE coated Alnico; Other internal parts: 304 SS.

Maximum Viscosity: 500 SSU.

Temperature Limits: HFA, HFL, HFB and HFS Models: 240°F (116° C); HFH Models: 400°F (204° C).

Pressure Limits: HFA Models: 600 psig (41 bar); HFL, HFB and HFH Models: 3500 psig (240 bar); HFS Models: 6000 psig (413 bar).

Accuracy: $\pm 4\%$ FS over entire range; $\pm 2.5\%$ over center third of the measuring range.

Repeatability: $\pm 1\%$ of full scale.

Shipping Weight: 1/4" to 1/2" female NPT Models: 2 lb (0.9 kg); 3/4 to 1" female NPT Models: 3.5 lb (1.59 kg); 1-1/2" female NPT Models: 11 lb (5 kg); 2" female NPT Models: 13.5 lb (6.12 kg).

Aluminum body for air or other non-corrosive gases:

Wetted Parts: Aluminum, PTFE coated Alnico, 304 SS and Buna-N

| Model Number | Connection Size | Range, Air SCFM |
|--------------|-----------------|-----------------|
| HFA-1-12 | 1/4" female NPT | 2-12 |
| HFA-1-22 | 1/4" female NPT | 2-22 |

Aluminum body for oil based fluids:

Wetted Parts: Aluminum, PTFE coated Alnico, 304 SS and Buna-N

| Model Number | Connection Size | Range, GPM (LPM) Oil |
|--------------|-----------------|----------------------|
| HFL-2-05 | 1/2" female NPT | 0.5-5 (1-19) |
| HFL-4-25 | 1" female NPT | 2-25 (7.5-95) |

Brass body for water based fluids (non-steam):

Wetted Parts: Brass, PTFE coated Alnico, 304 SS and Buna-N

| Model Number | Connection Size | Range, Water GPM (LPM) |
|--------------|-------------------|------------------------|
| HFB-2-05 | 1/2" female NPT | 0.5-5.0 (1-19) |
| HFB-3-15 | 3/4" female NPT | 2-15 (7.5-55) |
| HFB-3-20 | 3/4" female NPT | 2-20 (7.5-75) |
| HFB-4-35 | 1" female NPT | 5-35 (19-130) |
| HFB-5-50 | 1-1/2" female NPT | 5-50 (19-189) |
| HFB-5-100 | 1-1/2" female NPT | 10-100 (38-379) |
| HFB-6-75 | 2" female NPT | 8-75 (31-284) |
| HFB-6-150 | 2" female NPT | 20-150 (76-568) |

304 SS body for high-pressure fluids:

Wetted Parts: 304 SS, Fluoroelastomer and PTFE

| Model Number | Connection Size | Range, Water GPM (LPM) |
|--------------|-----------------|------------------------|
| HFS-2-02 | 1/2" female NPT | 0.2-2.0 (0.75-7.5) |
| HFS-2-10 | 1/2" female NPT | 0.5-10 (1.9-38) |

Brass Body High Temperature 400°F for water based fluids:

Wetted Parts: Brass, PTFE coated Alnico, 304 SS and Fluoroelastomer

| Model Number | Connection Size | Range, Water GPM (LPM) |
|--------------|-----------------|------------------------|
| HFH-2-05 | 1/2" female NPT | 0.5-5.0 (1-19) |
| HFH-2-10 | 1/2" female NPT | 1-10 (3.8-38) |
| HFH-4-35 | 1" female NPT | 5-35 (19-130) |