POSITIVE DISPLACEMENT OMEGATION FLOW METER FOR FUELS AND OILS

FPD3000 Series



- ✓ Aluminum Body
- ✓ FKM Seals
- ✓ Temperatures up to 80°C (176°F)
- ✓ NPT or BSP Threads
- **✓** DIN. JIS or ANSI **Connection (Available** on 1" and Larger Sizes)

The FPD3000 Series positive displacement flow meters are affordable and accurate. One primary feature is the ability to maintain consistent accuracy despite changing viscosity conditions. The meter's solid construction and excellent dynamic response are well suited to the measurement of fuels and oils as well as other non-abrasive lubricating fluids. Since there is no need for straight run piping upstream or downstream of the flow meter, the FPD3000 flow meters are simple to use and to install. The meter has good resolution and high accuracy at low flow rates.



SPECIFICATIONS

Accuracy: ±0.5% of reading Repeatability: ±0.03%

Fitting Type: **NPT**: Female BSP: "-BSP" option DIN: "-DIN" option JIS: "-JIS" option ANSI: "-ANSI" option

Hall-Effect Sensor Power: 4.5 to

24 Vdc (7.5 mA)

Reed Sensor Power: 30 Vdc (500 mA)

Output Options:

Pulse Output: Standard 4 to 20 mA Transmitter:

"-D-A" option; no output on battery powered "-D" model

Display: 7-digit/12 mm (0.47") upper, 7-digit/7 mm (0.28") lower all

"-D" options

Rate: User defined Total: Resettable

Acc-Total: Non-resettable Minimum Viscosity: 1cPs

Maximum Viscosity: 1000 cPs standard

Maximum Pressure: See chart

on page 3

Strainer Size: See chart on next page Mounting: Shafts must be in a

horizontal plane

Electrical Connections: 2 x 12 mm (0.08 x 0.47"), fittings included "-**D-A**" option

Cable Length: 1 m (3') stripped ends

non-display models

Mounting: Pipe

Power: 4 to 20 mA, "-D-A" models 18 to 30 Vdc display. "-D" models 3 Vdc lithium battery (included) Liquid Temperature: -40 to 80°C

(-40 to 176°F) **Materials**

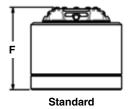
Body: Aluminum

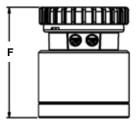
Enclosure: Polypropylene

Seals: FKM

Fasteners: Stainless steel Cable Insulation: PVC Enclosure: NEMA 6 (IP67)

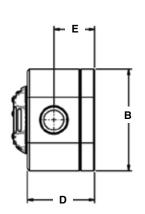
Pulsar and Display Height, F

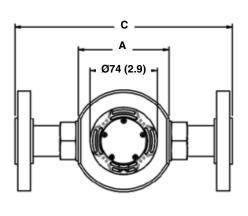


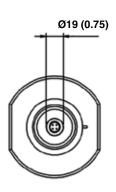


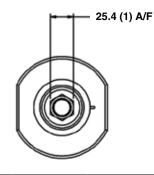
| | mm | | | | |
|-----------|--|------------|-------------------------|--|--|
| Model No. | Standard | -D options | Recommended Strainer | | |
| FPD3002 | 59 (2.3) | 90 (3.5) | 200 mesh (74 um) | | |
| FPD3003 | 59 (2.3) | 90 (3.5) | 200 mesh (74 um) | | |
| FPD3004 | 66 (2.6) | 97 (3.8) | 60 mesh (250 um) | | |
| FPD3034 | 79 (3.1) | 110 (4.3) | 60 mesh (250 um) | | |
| FPD3005 | 92 (3.6) | 123 (4.8) | 60 mesh (250 um) | | |
| FPD3006 | 120 (4.7) | 151 (5.9) | 60 mesh (250 um) | | |
| FPD3007 | 141 (5.5) | 172 (6.7) | 60 mesh (250 um) | | |
| FPD3008 | See operator's manual for Dimensional drawings | | | | |
| FPD3009 | See operator's manual for Dimensional drawings | | | | |

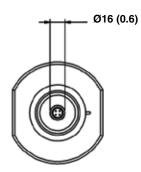
Display (-D options)

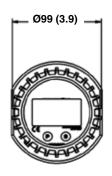










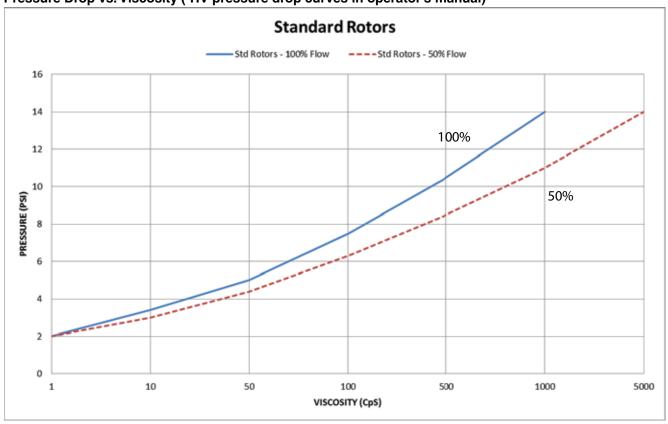


Ø = Diameter

| | Meter and Flange, Dimensions: mm (inch) | | | | | | |
|-----------|--|-----------|-----------|------------|-----------|----------|--|
| Model No. | Port Size | Α | В | C* | D | E | |
| FPD3002 | 1/4" | 71 (2.8) | 74 (2.9) | N/A | 42 (1.7) | 25 (1) | |
| FPD3003 | 1/4" | 71 (2.8) | 74 (2.9) | N/A | 42 (1.7) | 24 (0.9) | |
| FPD3004 | 1/2" | 81 (3.2) | 87 (3.4) | N/A | 49 (1.9) | 28 (1.1) | |
| FPD3034 | 3/4" | 100 (3.9) | 112 (4.4) | N/A | 62 (2.4) | 37 (1.5) | |
| FPD3005 | 1" | 100 (3.9) | 112 (4.4) | 240 (9.4) | 75 (3) | 45 (1.8) | |
| FPD3006 | 1½" | 120 (4.7) | 137 (5.4) | 240 (9.4) | 103 (4.1) | 61 (2.4) | |
| FPD3007 | 2" | 140 (5.5) | 163 (6.4) | 264 (10.4) | 124 (4.9) | 72 (2.8) | |
| FPD3008 | See operator's manual for Dimensional drawings | | | | | | |
| FPD3009 | See operator's manual for Dimensional drawings | | | | | | |

^{*} Flanges

Pressure Drop vs. Viscosity (-HV pressure drop curves in operator's manual)



| To Order | | | | | | | |
|-----------|-----------|-----------------------------------|-----------------------------------|--------------|--|--|--|
| | Port Size | Flow | Maximum Pressure | | | | |
| Model No. | | < 5 cPs | > 5 cPs | psi (Kpa) | | | |
| FPD3002 | 1/4" | 2 to 100 LPH (0.5 to 26 GPH) | 0.5 to 100 LPH (0.13 to 26 GPH) | 1000 (6895) | | | |
| FPD3003 | 1/4" | 25 to 500 LPH (6.6 to 132 GPH) | 15 to 500 LPH (4 to 132 GPH) | 1000 (6895) | | | |
| FPD3004 | 1/2" | 3 to 25 LPM (0.8 to 6.6 GPM) | 2 to 30 LPM (0.5 to 8 GPM) | 2000 (13790) | | | |
| FPD3034 | 3/4" | 8 to 70 LPM (2 to 18.5 GPM) | 3 to 80 LPM (0.8 to 21 GPM) | 2000 (13790) | | | |
| FPD3005 | 1" | 10 to 100 LPM (2.6 to 26 GPM) | 6 to 120 LPM (1.6 to 32 GPM) | 2000 (13790) | | | |
| FPD3006 | 11/2" | 15 to 235 LPM (4 to 62 GPM) | 10 to 250 LPM (2.6 to 66 GPM) | 1200 (8274) | | | |
| FPD3007 | 2" | 15 to 500 LPM (4 to 130 GPM) | 16 to 500 LPM (4 to 130 GPM) | 1000 (6895) | | | |
| FPD3008 | 3" | 60 to 600 LPM (15.8 to 158 GPM) | 20 to 733 LPM (5.3 to 193 GPM) | 175 (1206) | | | |
| FPD3009 | 4" | 220 to 1000 LPM (58.1 to 264 GPM) | 120 to 1200 LPM (31.7 to 317 GPM) | 175 (1206) | | | |

Comes complete with lithium battery and operator's manual.

For units with a battery powered digital display add "-D" to the model number, for an additional charge.

For units with a DC powered digital display and 4 to 20 mA output add "-D-A" to the model number, for an additional charge.

For units with BSP connections add "-BSP" to the model number, no additional charge.

For units with DIN flanges add "-DIN" to the model number, for an additional charge (1" and larger only).

For units with JIS flanges add "-JIS" to the model number, for an additional charge (1" and larger only).

For units with ANSI flanges add "-ANSI" to the model number, for an additional charge (1" and larger only).

For units with high viscosity rotors add "-HV" to the model number, for an additional charge.