# VFF Rotary Piston Flow Meter & FlowPod Transmitter

## Common Uses

The VFF Flow Meter was designed for use in Chemical Injection applications or those that require high pressure tolerance, low flow capabilities, and corrosion resistance. VFF meters are available in a wide range of flow rates; as low as 0.008 L/hr up to 2400 L/hr. Practical applications include:

- · Offshore Chemical Injection
- Hydraulic line monitoring for well control valves and leak detection
- Wash water measurement and general metering of low and high viscosity fluids
- · Subsea Chemical Injection and hydraulic fluid measurement



# **Technical Specifications**

8 Flow Ranges	0.01 to 634 gal/day (across all meter sizes)
Measuring Accuracy	±1.0% of reading
Linearity	±0.5% of reading
Repeatability	± 0.1% of reading
Viscosity	0.5 - 100.000 cSt or greater
Max. Operating Pressure	15,000 psi as standard (higher upon request)
Temperature Rating	-40°C to 75°C (up to 100°C with remote mount display)
Filtration	40 micron for LF03 and LF05; 100 micron for all other meter sizes
Connections	NPT and Autoclave Medium Pressure as standard (others on request)

## Materials of Construction

Body	JVA = 7075 Aluminum, JVM = 303 Stainless Steel, or JVS = 316L Stainless Steel
Gears & Bearings	Stainless Steel (DIN 1.4122)
O-Ring	FKM, FFKM, or PTFE
Shaft	402 Stainless Steel
Bolts	Zinc Flake Coated Carbon Steel (Inconel 718 optional)



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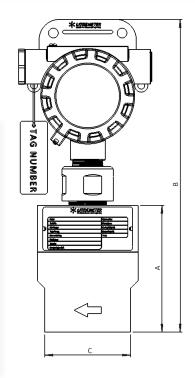
## Meter Data

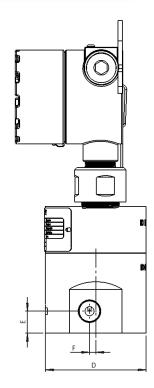
Meter Size	Flow Range		Process Connection		Max Pressure	Seal Material	Filtration
	(gal/hr)	(gal/day)	NPT	Autoclave Medium Pressure	(bar/psi)	Wetted/Pressure	(microns)
LF03	0.01-4.76	0.24-30.18	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	40
LF05	0.017-7.93	0.40-190.2	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	40
LF15	0.139-23.8	3.33-570.6	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	100
MF30	0.277-39.63	6.66-951.0	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	100
VFF4	0.515-105.7	12.36-2536	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	100
VFF8	1.03-211.3	24.73-5072	1/2"	9/16"	1035/15,000	FEP Encapsulated FKM	100
HF20	2.58-317.0	61.82-7608	3/4"	3/4"	1035/15,000	FEP Encapsulated FKM	100
HF40	5.15-634.0	123.6-15,216	3/4"	3/4"	1035/15,000	FEP Encapsulated FKM	100
	Minimum flow wil	l vary with viscosity	Other connections available on request		Higher pressures on request	Inconel is used for pressures greater than 690 bar - other materials on request	

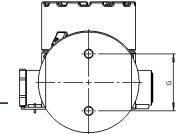
<sup>\*</sup>Ultra-Low Flow custom calibration available on request.

## **Meter Dimensions**

Meter Size	Dimensions (in)							Weights	
	A±2	B±5	С	D	E	F	G (mounting holes)	(Lb)	(Kg)
LF03	4.4	10.8	3.0	3.5	0.76	0.22	1.97	15	7
LF05	4.4	10.8	3.0	3.5	0.76	0.22	1.97	15	7
LF15	4.4	10.8	3.0	3.5	0.76	0.22	1.97	15	7
MF30	5.4	11.8	3.9	4.7	0.89	0.31	1.97	26	12
VFF4	6.5	12.9	5.0	5.7	1.12	0.30	3.15	40	18
VFF8	6.5	12.9	5.0	5.7	1.12	0.30	3.15	40	18
HF20	7.4	13.9	6.9	7.7	1.18	0.71	3.94	100	45
HF40	7.4	13.9	6.9	7.7	1.18	0.71	3.94	100	45







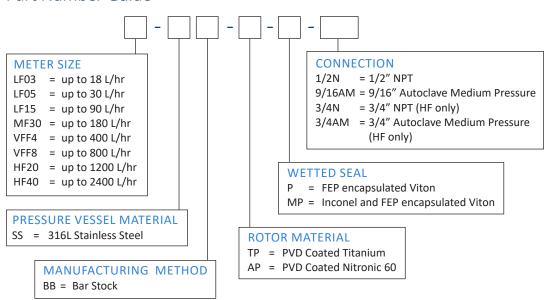
3D STEP Models are available upon request of factory.

Products may be subject to change without notice. Contact factory for the most up-to-date product information.



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#### Part Number Guide



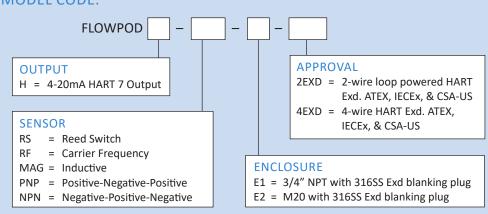


#### Recommended Sensor

#### FLOWPOD DISPLAY

FlowPod Display comes in a compact, light-weight, flame-proof 316 housing. The FlowPod also offers HART 7, IP66/IP68 rating, removable memory card, and back-lit display with high contrast and large digits for easy reading from a distance.

#### **MODEL CODE:**



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