


VFF HF66

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|  | Model: | VFF/HF66/SS/207 bar VFF Rotary Piston Positive Displacement Flowmeter |
| | Body: | 207bar (3000 psi) body provided in 316 stainless steel with 1" NPT female process connections in-line. Higher pressure versions available with connections to suit including wafer fitting between ANSI flanges. Alternate materials are available such as titanium, duplex, super duplex and 17-4PH steel. |
| | Rotor: | The rotor is provided in either anti galling stainless steel (AG, Nitronic 60), Brass (B) or Carbon graphite (C), with a 316SS encapsulated magnet depending on the application. Part code becomes VFF/HF66/SS/207AG etc. An optional coating is available on the AG rotor & chamber which doubles the maximum flow rate (AGPVD) and improves minimum flow achievable. |
| | Seal: | There is a single FPM O-ring seal between the top cap and body. Other elastomers are available e.g. Kalrez®, FEP covered silicon and in higher pressure versions PTFE and Inconel. |
| Pick-up/Transmitter: | There is one reed switch installed in a SS housing which is O-sealed to the meter body providing a rating of IP68. The optional Ex ia or Ex d display is mounted on the housing. Typical reed switch life is 30 years at continuous maximum operating flow rate. | |
| Pressure rating: | 207, 414, 690, 1035 and 1380 bar. Lower pressure ratings are all served by the 207bar version. (3000, 6000, 10000, 15000 and 20000 psi). Part code becomes VFF/HF66/SS/690 etc. | |
| Temperature rating: | -40°C to +150°C (subject to chemical compatibility, pressure rating and location of the display), higher temperature sensor available. | |
| Pulse output: | The unit provides a reed switch output with 6.6 pulses per litre (25 pp USG). | |
| Viscosity range: | 0.8 to 2000 cSt or greater. The normal meter maximum flow rate applies for viscosities from 1.2 to 30 cSt. For higher viscosities up to 2000 cSt a reduced maximum flow rate may apply. | |
| Flow rate range: | - Normal flow rate range 0-4000l/hr (0-66 l/min, 1050 USG/hr, 25100 USGPD). Minimum flow rate repeatably measured relates to application viscosity and rotor type; for example less than 270 l/hr for 11 cSt, less than 12 l/hr on water for AGPVD option. Consult Litre Meter for rangeability at specific viscosities with specific rotor materials. 0-8000 l/hr (0-132 l/min, 2100 USG/hr, 50200 USGPD) available with AGPVD option. | |
| Filtration: | A 100 micron filter is advisable for 100% long life serviceability. If filtration is not possible, consult Litre Meter. | |
| Accuracy: | A calibration certificate is provided based on a representative viscosity fluid for the application. The calibration certificate confirms the flowmeter accuracy. Improved system accuracy can be provided typically to ±1% of actual reading where the linearisation signal processing facility of the display instrument is employed. | |
| Optional Display, remote or head mounted: | Display of rate and total, battery, loop powered, 24 Vdc, 110 Vac, 240 Vac, optional flow alarms. GRP or Aluminium. See separate F112 or F118 data sheet. | |
| | Exia display of rate and total, battery or loop-powered, optional flow alarms, ATEX. GRP or coated aluminium. See separate F112 or F118 data sheet. | |
| | Exd display of rate and total, 24Vdc, 3 or 4 wire with Optional HART, MODBUS or Fieldbus comms. ATEX or UL. Coated aluminium or stainless. See separate FPodExd data sheet. | |
| Documentation: | | |
| Operating & Maintenance Manual | LM0333 with Quick Start Info on LM0548 | |
| Installation Drawing | C6086 with Exia display, C5830 with Exd. Flanged versions: C6087 & C5826 respectively. If in doubt ask factory advice. | |
| Conformity: | These products conform to PED and EMC. Hazardous Area approved as standard. | |

Flowmeter Specification Sheet