

# Flow MD Small Volume Prover Data Sheet FMD-025

#### SERVICE, EXPERIENCE, INNOVATION & EXCELLENCE



Flow MD is the leader in compact prover technology. With an innovative and patented design, the FMD line of meter provers provides superior performance, design, and functionality. All FMD small volume provers conform to API MPMS Chapter 4 Standards. The FMD-025 includes 6" ANSI B16.5 flanges on both the inlet and outlet, 2" drain flanges, and 2" vents with thermowell and ports for temperature and pressure verification. The FMD-025 is an excellent choice for all your meter proving applications.

#### Flow Rates & Displaced Volumes:

FMD-025 Max Flow R	ates*								
	BPH	GPM	M³H	*We want to ensure that you get the proper FMD Meter Prover for your application.  Please contact us to discuss your specific application and the optimal FMD Prover for your application. Meter type, brand, operating conditions, and fluid characteristics will affect prover sizing.					
FMD-025	3,570	2,500	560						
Displaced Volumes**									
Gallons Liters* **Please Note: Standard prover volume is in gallons, liters are o									
	Primary	Secondary	Primary	Secondary	Prover requires non-standard switchbar for liters. Alternate displaced volumes are available for liters, please contact factory for additional				
FMD-025	20	15	75	60	information.				

Included with Standard Prover Package:







P.I.M Electronics Module



Vent Manifolds (2)

#### Field Installation Pictures:





#### FMD Prover - Meter Compatability

Coriolis - Turbine & Helical Turbine - Positive Displacement - Ultrasonic

### FMD Prover Performance Specifications

Repeatability	< 0.02% – Exceeds API Standard				
Performance	Exceeds 0.02% (ISO17025 Calibration Lab)				
Uncertainty	Typically 0.005% (Water Draw)				
Pressure Drop	5 psi at max flow rate of each prover (calculated with water)				
Turndown	1200:1*				

\*1200:1 Turndown is typical of normal operations. Turndown ratio can vary significantly depending on installation and process conditions. Actual turndown may be much greater than 1200:1 in some conditions such as water draw, or much less in high pressure, dry product applications such as NGL service.

#### FMD Prover Available Options

Prover Flange Configuration Options Electrical Panel Placement Options Transmitter Type Options

#### FMD Prover Spare Parts & Accessory Kits

Seal Kits & Spare Parts Pressure Relief Valves Insulation Jacketing Shaft Seal Monitor Kit Mass Proving/Denisty Kit Prover Validation Kit Spring Assist Kit

Drain Kit Internal or External Leak Detector Kit Thermal Relief Kit Spectacle Blind Kit PDAQ Kit

## Approvals & Certifications

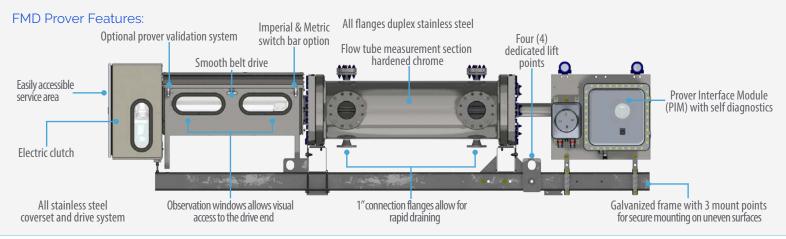
130	9001.2015, 17025.2005				
EC	Mach Dir:2006/42/EC, EN 12100- 2:2003, ATEX Directive 94/9/EC, EN 13463-1:2009, EN 13463-5:2003, EN 60079-0, EN 60079-7, EN 60079-11				
CSA (US & Canada	Class 3218 06, Class 1 Div 1 Group D; Class 1 Div 2 Group D / Clutch & Brake Assembly - EX m IIC T5				
IECEx	USA /ETL/QAR 15.0014/00 , 101653329CRT-002				
ABSA	CRN: 0F1072.2				

Contact us today to discuss the benefits provided by FMD Small Volume Provers

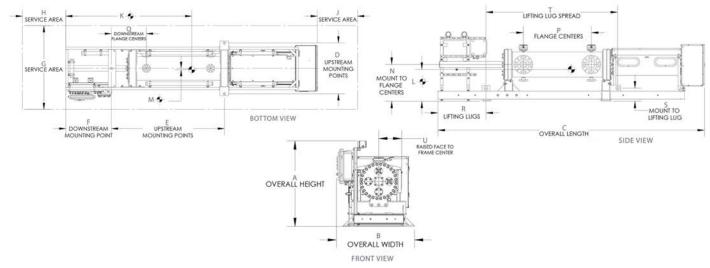
<sup>\*</sup>Please Note: Proving calculations require switch bar temperature, tube temperature, and tube pressure. FMD quotes these as standard options with the prover package.

#### **FMD-025 Features & Technical Specifications**





#### FMD-025 Prover Dimensions:



FMD-025 Dimensions	A	В	C	D	E	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U
Pressure Rating																			
150#	52.20	47.55	174.75	40.50	76.75	30.63	109	30	30	86	24	2	29.50	42	25.25	38.13	9.75	78	12.5
300#	52.20	47.55	174.75	40.50	76.75	30.63	109	30	30	86	24	2	29.50	42	25.25	38.13	9.75	78	12.88
600#	52.20	47.55	174.75	40.50	76.75	30.63	109	30	30	86	24	2	29.50	42	25.25	38.13	9.75	78	14
900#	52.20	47.55	174.75	40.50	76.75	30.63	109	30	30	84	27	2	30	42	24.32	38	9.75	78	15.50
1500#	54.52	58.21	179.83	51.50	80.50	31.74	120	30	30	83	31	2	34.13	45.25	25.20	40	11.75	78.25	18.84

Drawing Notes: 1. Dimensions "K" and "L" are for center of gravity within 6 inches. 2. Spacial dimensions have a tolerance of 1.00 inches. 3. Dimension "P" is inlet-to-outlet flange distance, drains and vents may vary. 4. All FMD-130 600# and FMD-200 models have 8 lifting lugs. Table gives dimensions to outermost lugs. 5. All dimensions are subject to change without notice. 6. For TT configurations see specific outline. 7. Dimension "H" is the distance required to remove fully assembled piston assembly from the prover. Complete seal change may be done with piston not completely removed which requires 32" (FMD-007 thru FMD-130) and 42" (FMD-200 & FMD-200 EV50).

FMD-025 Weights		ight · 5%)		vith Crate 5%)	Weight Filled w/ Water (+/- 5%)			
	LBS	KGS	LBS	KGS	LBS	KGS		
ANSI Pressure - 150#	3,930	1,790	4,530	2,060	4,090	1,860		
ANSI Pressure - 300#	4,020	1,830	4,630	2,100	4,180	1,900		
ANSI Pressure - 600#	4,110	1,870	4,710	2,140	4,270	1,940		
ANSI Pressure - 900#	5,400	2,450	6,000	2,730	5,560	2,530		

Energy Consumption Motor Voltage / Phase	Availability & Amperage [	)raw			
FMD-025 Motor Horespower	24VDC	120 VAC 50-60 Hz	208-240 VAC 1-3 Phase 50-60 Hz	380-415 VAC 3 Phase 50-60 Hz	440-480 VAC 3 Phase 50-60 Hz
1	40	13	6.5	2	1.6

