

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-035 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-035 is an excellent choice for your all your meter proving applications.

Flow Rates & Displaced Volumes:

FMD-035 Max Flow Rates*					
FMD-035	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.	
	5,000	3,500	790		
Displaced Volumes**					
	Gallons		Liters*		**Please Note: Standard prover volume is in gallons, liters are optional. Prover requires non-standard switchbar for liters. Alternate displaced volumes are available for liters, please contact factory for additional information.
	Primary	Secondary	Primary	Secondary	
FMD-035	25	20	95	75	

Included with Standard Prover Package:



Electrical Connections



P.I.M Electronics Module



Vent Manifolds (2)

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

Field Installation Pictures:



FMD Prover – Meter Compatibility

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/Density Kit

Prover Validation Kit

Spring Assist Kit

Drain Kit

Internal or External Leak

Detector Kit

Thermal Relief Kit

Spectacle Blind Kit

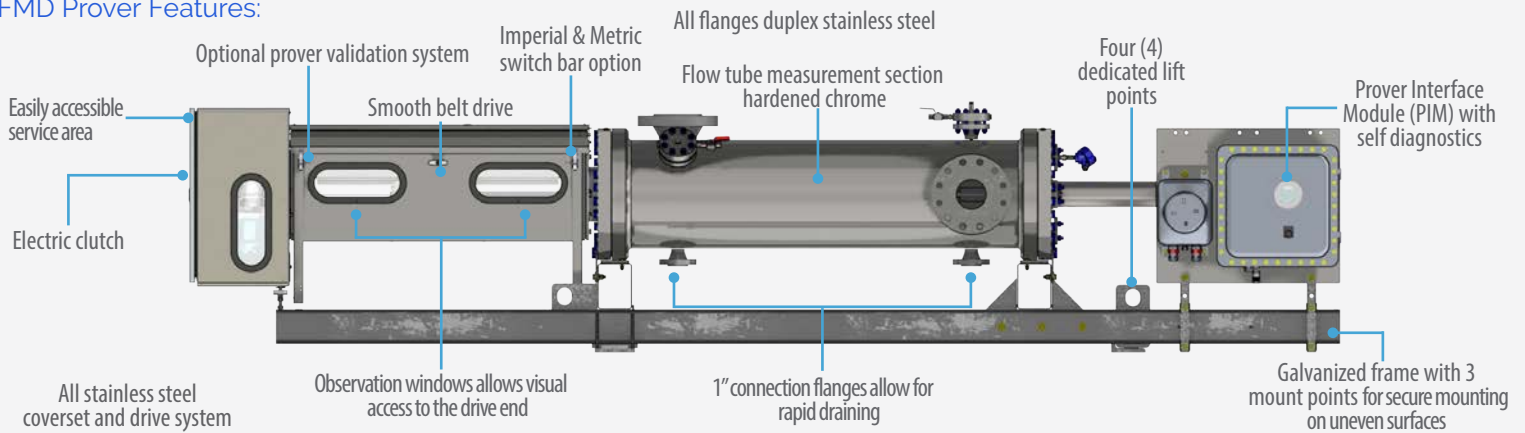
PDAQ Kit

Approvals & Certifications

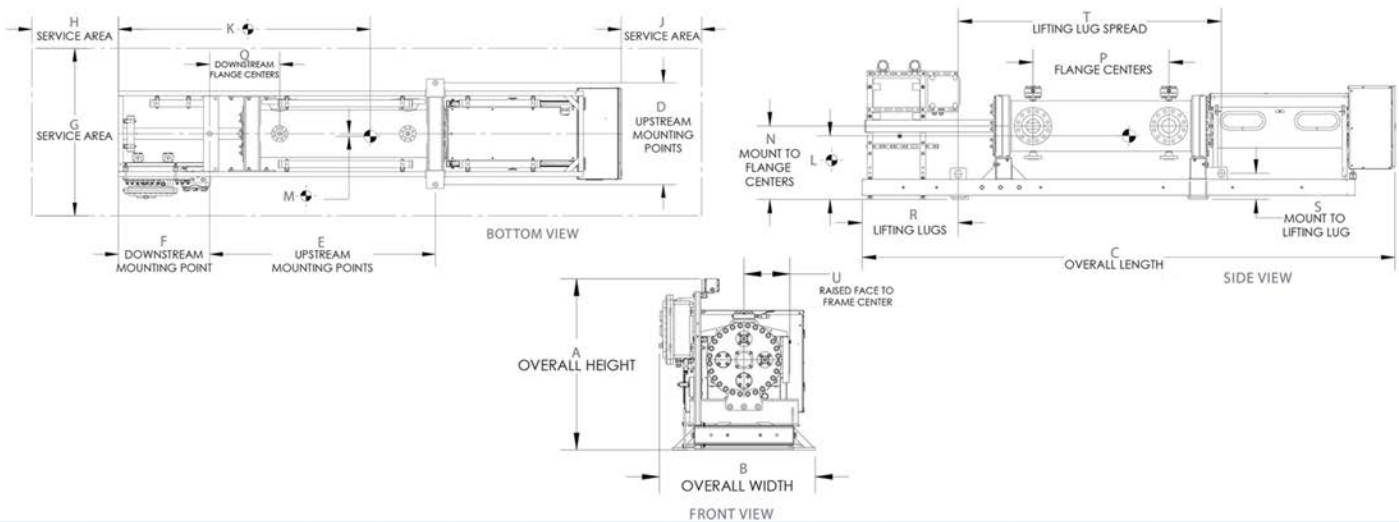
ISO	9001:2015, 17025:2005
EC	Mach Dir:2006/42/EC, EN 12100-2:2003, ATEX Directive 94/9/EC, EN 13463-1:2009, EN 13463-5:2003, EN 60079-0, EN 60079-7, EN 60079-11
CSA (US & Canada)	Class 3218 06, Class 1 Div 1 Group D; Class 1 Div 2 Group D / Clutch & Brake Assembly - EX m IIC T5
IECEX	USA /ETL/QAR 15.0014/00, 101653329CRT-002
ABSA	CRN: OF1072.2

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

FMD Prover Features:



FMD-035 Prover Dimensions:



FMD-035 Dimensions	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
Pressure Rating																			
150#	52.20	47.55	200	40.50	89.75	36.38	109	30	30	100	24	1	29.50	51	27.75	36	9.50	98.75	12.5
300#	52.20	47.55	200	40.50	89.75	36.38	109	30	30	100	24	1	29.50	51	27.75	36	9.50	98.75	12.88
600#	52.20	47.55	200	40.50	89.75	36.38	109	30	30	100	24	1	29.50	51	27.75	36	9.50	98.75	14
900#	52.20	47.55	200	40.50	89.75	36.38	109	30	30	96	27	1	30	51	26.88	36	9.75	98.75	15.50

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-035 Weights	Weight (+/- 5%)		Weight with Crate (+/- 5%)		Weight Filled w/ Water (+/- 5%)	
	LBS	KGS	LBS	KGS	LBS	KGS
ANSI Pressure - 150#	4,180	1,900	4,880	2,220	4,755	2,160
ANSI Pressure - 300#	4,280	1,945	4,980	2,260	4,875	2,220
ANSI Pressure - 600#	4,380	1,990	5,080	2,310	4,975	2,260
ANSI Pressure - 900#	5,600	2,540	6,300	2,860	6,195	2,810

Energy Consumption Motor Voltage / Phase Availability & Amperage Draw					
FMD-035 Motor Horsepower	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
1.0	40	13	6.5	2	1.6