Flow MD Small Volume Prover Data Sheet

FMD-035

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. FMD also offers the FMD-A35, which includes 8" inlet and outlet flanges, and is ideal for paring with 8" turbine meters. The FMD-035 is an excellent choice for your all your meter proving applications.

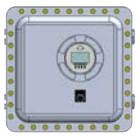
Flow Rates & Displaced Volumes:

FMD-035 Max Flow Rates*				
FMD-035	BPH	GPM	M^3H	*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	

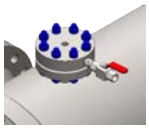
Displaced Volumes**					
FMD-035	Gallons		Liters*		**Please Note: Standard prover volume is in gallons, liters are optional. Prover requires non-standard switchbar for liters. Alternate displaced volumes are available for liters, please contact factory for additional information.
	Primary	Secondary	Primary	Secondary	
	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:

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

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

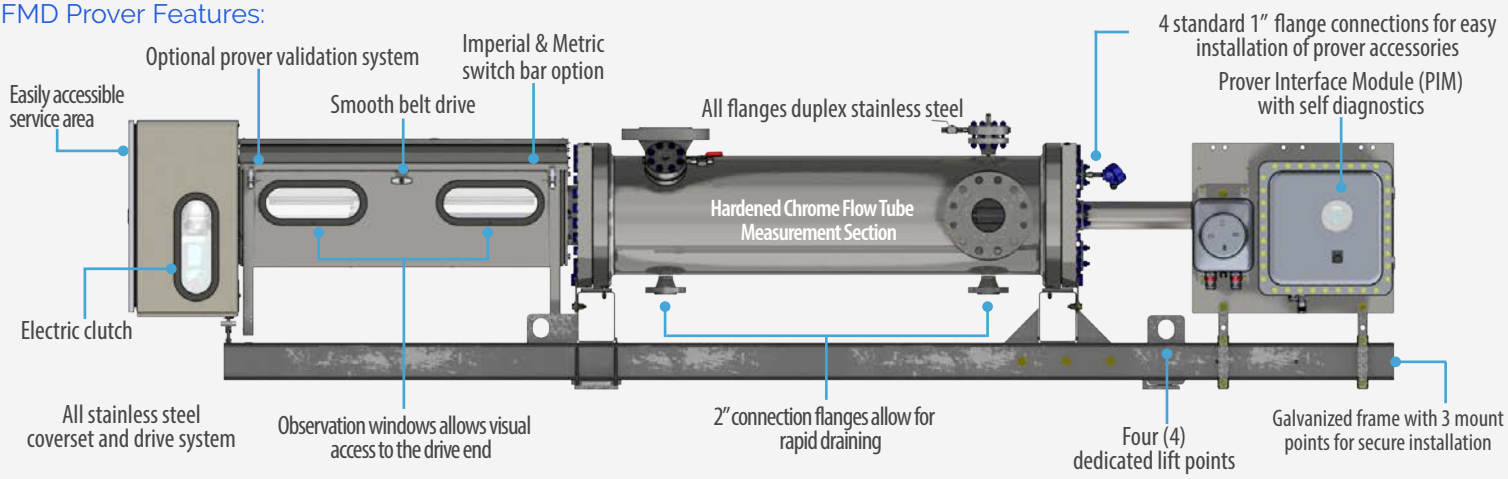
Seal Kits & Spare Parts	Drain Kit
Pressure Relief Valves	Internal Leak Detector Kit
Insulation Jacketing	External Leak Detector Kit
Shaft Seal Monitor Kit	Thermal Relief Kit
Mass Proving/Density Kit	Spectacle Blind Kit
PDAQ Kit	Prover Validation Kit
Spring Assist Kit	

Approvals & Certifications	
ISO	9001:2015, 17025:2017
CE	Mach Dir:2006/42/EC, EN 12100-2:2003
ATEX	2014/34/EU II 2(1)G Ex db mb [ia Ga] IIB T3 Gb -20 °C to + 40 °C Cert#: CSANe 25ATEX1007X
CSA (US & Canada)	Class I, Division 1, Groups C and D; Class I Division 2, Groups C and D; Maximum Operation Ambient 60°C Class I, Division 1, Group D; Class I, Division 2, Group D; Maximum Operation Ambient 40°C Cert#: 213767
IECEx	Ex db mb [ia Ga] IIB T3 Gb -20 °C to + 40 °C Cert#: IECEx CSA 25.0009X
ABSA	CRN: OF1072.2

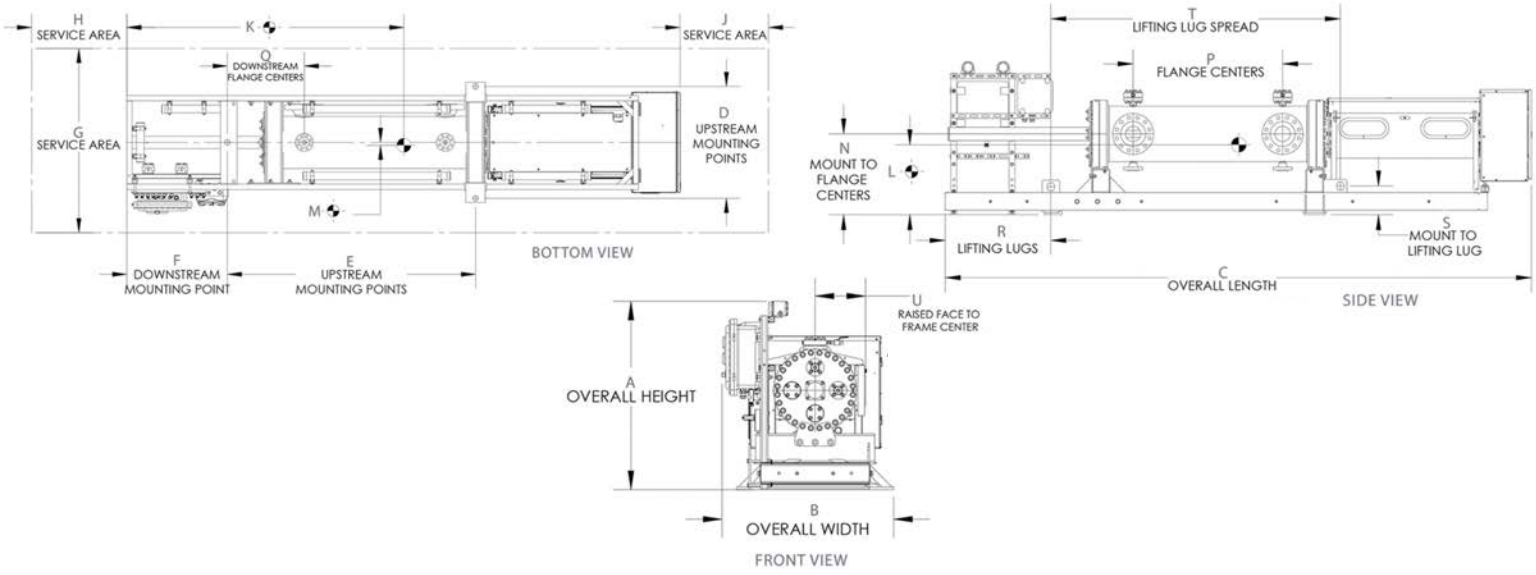
P: +1.602.233.9885 | E: fmd-sales@idexcorp.com | www.flowmd.com

FMD-035 Features & Technical Specifications

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
								Min	Max											
Pressure Rating																				
150#	52.20	47.55	200	40.50	89.75	36.38	109	32	82	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	32	82	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	32	82	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	32	83	30	96	27	1	30	51	26.88	36	9.75	98.75	15.50

Drawing Notes: All dimensions are shown in inches. 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" max 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-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

5225 S. 37th Street | Phoenix, AZ 85040 , USA | P:+1.602.233.9885 | E: fmd-sales@idexcorp.com.com | www.flowmd.com