Flow MD Small Volume Prover Data Sheet

FMD-015

SERVICE, EXPERIENCE, INNOVATION & EXCELLENCE

Flow MD is the leader in compact prover technology. With an innovative and patented design, the Flow MD line of meter provers provides superior performance, design, and functionality. All FMD Provers conform to API MPMS Chapter 4 Standards. The FMD-015 includes 4" ANSI B16.5 flanges on both the inlet and outlet, 1" drain flanges, and 2" vents with thermowell and ports for temperature and pressure verification. The FMD-015 is an excellent choice for your small volume meter proving application.

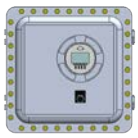
Flow Rates & Displaced Volumes:

FMD-015 Max Flow Rates*				
	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.
FMD-015	2,100	1,500	330	

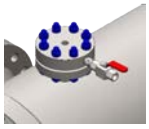
Displaced Volumes**					
	Gallons		Liters*		**Please Note: Standard prover volume is in gallons, liters are optional. Prover requires non-standard switchbar for liters. Alternate displaced volumes are available for liters, please contact factory for additional information.
	Primary	Secondary	Primary	Secondary	
FMD-015	10	8	40	30	

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 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 0.021% (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

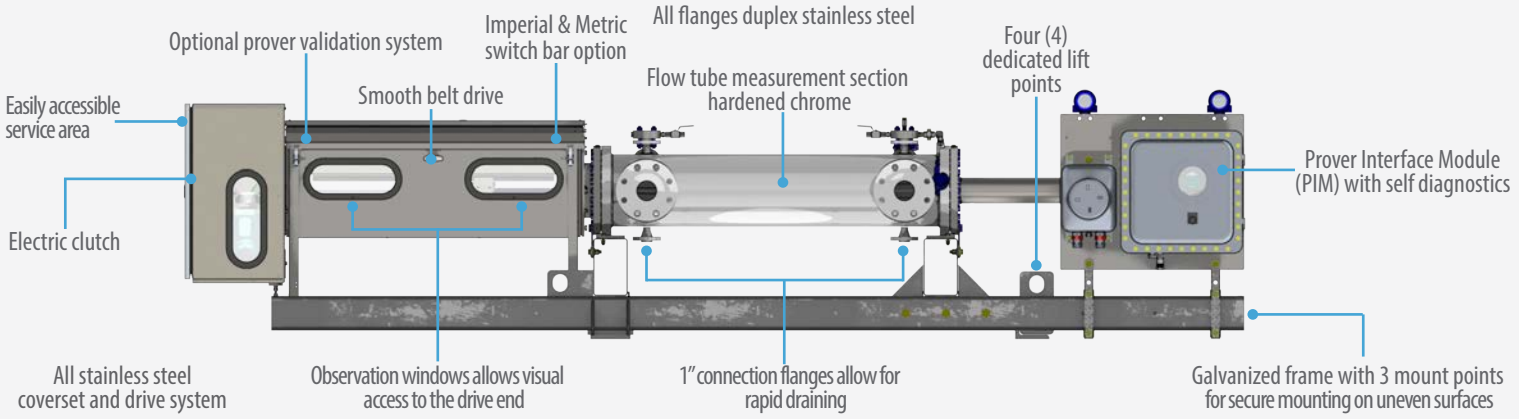
FMD Prover Spare Parts & Accessory Kits	
Seal Kits & Spare Parts	Drain Kit
Pressure Relief Valves	Internal or External Leak Detector Kit
Insulation Jacketing	Thermal Relief Kit
Shaft Seal Monitor Kit	Spectacle Blind Kit
Mass Proving/Denisty Kit Prover Validation Kit	PDAQ Kit
Spring Assist Kit	

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

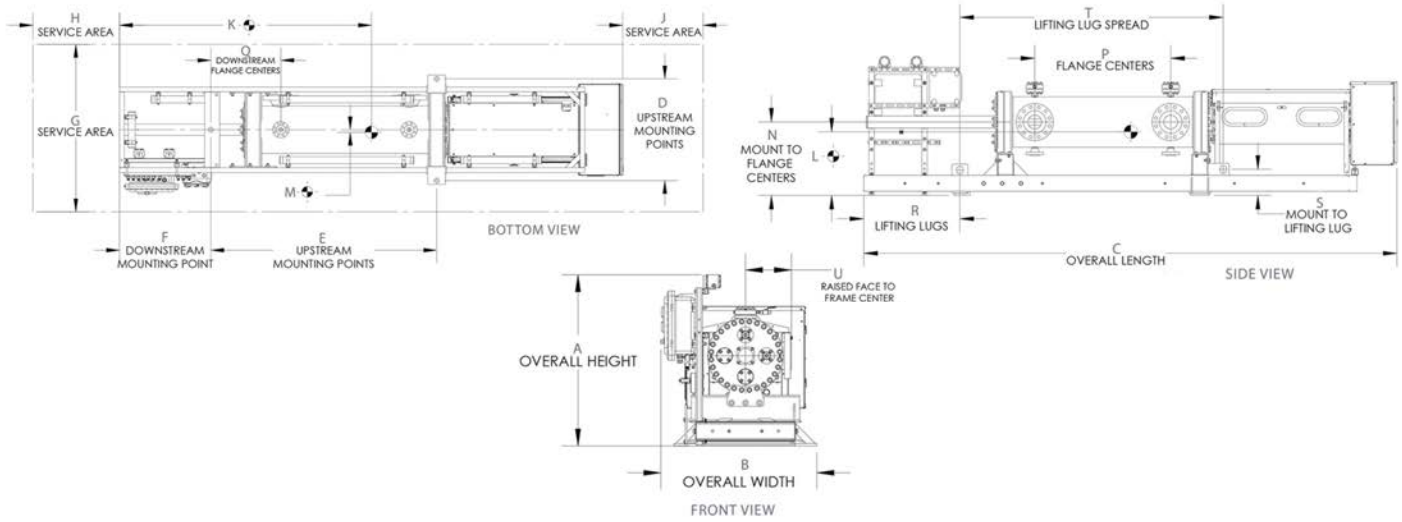
Contact us today to discuss the benefits provided by FMD Small Volume Provers

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

FMD Prover Features:



FMD Prover Dimensions:



FMD-015 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	184	40.50	73.75	36.31	109	30	30	95	21	3	25.75	44.75	22.75	36	9.75	82.75	9
300#	52.20	47.55	184	40.50	73.75	36.31	109	30	30	95	21	3	25.75	44.75	22.75	36	9.75	82.75	9.38
600#	52.20	47.55	184	40.50	73.75	36.31	109	30	30	95	21	3	25.75	44.75	22.75	36	9.75	82.75	10.25
900#	52.20	47.55	184	40.50	73.75	36.31	109	30	30	94	22	3	25.88	44.75	22.0	36	10	82.75	11.0

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-015 Weights	Weight (+/- 5%)		Weight with Crate (+/- 5%)		Weight Filled w/ Water (+/- 5%)	
	LBS	KGS	LBS	KGS	LBS	KGS
ANSI Pressure - 150#	2,805	1,275	3,435	1,560	3,015	1,370
ANSI Pressure - 300#	2,840	1,290	3,470	1,580	3,055	1,390
ANSI Pressure - 600#	2,880	1,310	3,510	1,600	3,090	1,410
ANSI Pressure - 900#	3,150	1,430	3,780	1,720	3,360	1,530

Energy Consumption Motor Voltage / Phase Availability & Amperage Draw					
FMD-015 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	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