

Flow MD Small Volume Prover Data Sheet

FMD-200



A Unit of IDEX Corporation



Flow MDs Small Volume Provers set the standard in small volume proving technology. With an innovative and patented design, the Flow MD line of provers provides superior performance, design, and functionality. All FMD Provers conform to API MPMS Chapter 4 Standards. The FMD-200 includes 20" 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-200 is an ideal choice for your small volume proving application.

Performance Specifications:

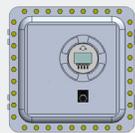
- Repeatability: < 0.02% - Exceeds API Standard
- Performance: Exceeds 0.02% (ISO17025 Calibration Lab)
- Uncertainty: Typically 0.005% (Water Draw)
- Pressure Drop: 5 psi at max flow rate of each prover (calculated with water)
- Turndown: 1200:1*

*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.

Included with Standard Prover Package:



Electrical Connections



P.I.M Electronics Module

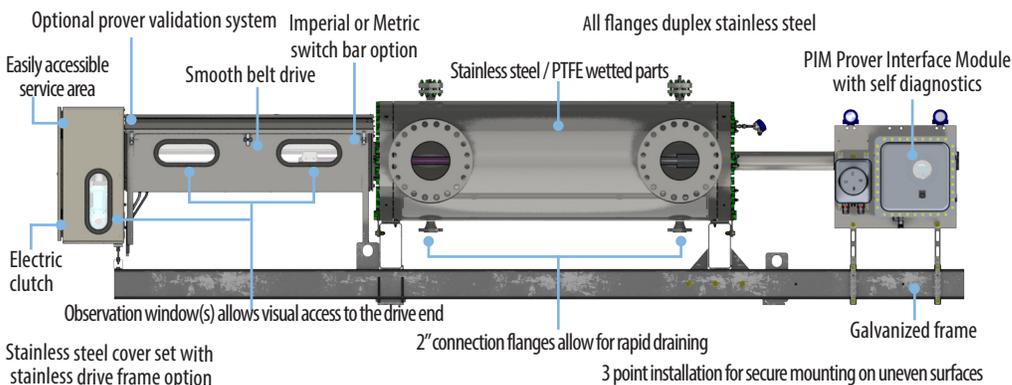


Vent Manifolds (2)

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

Other Available Options: Spare Parts Kit - Drain Kit - Insulation Kit - Thermal Relief Kit - Leak Detector Kit - Shaft Seal Monitor Kit - Spectacle Blind Kit - Density Kit - Prover Validation Kit - PDAQ Kit

FMD Prover Features:



“Continuously Improving Liquid Measurement Technology”

Flow Management Devices raises the bar in Small Volume Prover performance and design with our comprehensive line of Unidirectional Captive Displacement Provers.

Prover Specifications

* Max Flow Rate

BPH	GPM	M ³ H
28,500	20,000	4,500

*We want to ensure that you get the proper FMD Small Volume Prover for your application. FMD Provers are compatible with most meter types, including Coriolis, Turbine, Helical Turbine, Positive Displacement, and, Ultrasonic. Meter type, brand, operating conditions, and fluid characteristics will affect prover sizing. Please reach out to us to discuss your specific application and the optimal FMD Prover for your application.

**Displaced Volume

Gallons		*Liters	
Primary	Secondary	Primary	Secondary
140	100	530	378

**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.

* Liters are a direct conversion and not indicative of Seraphin can sizes.

Approvals & Certifications

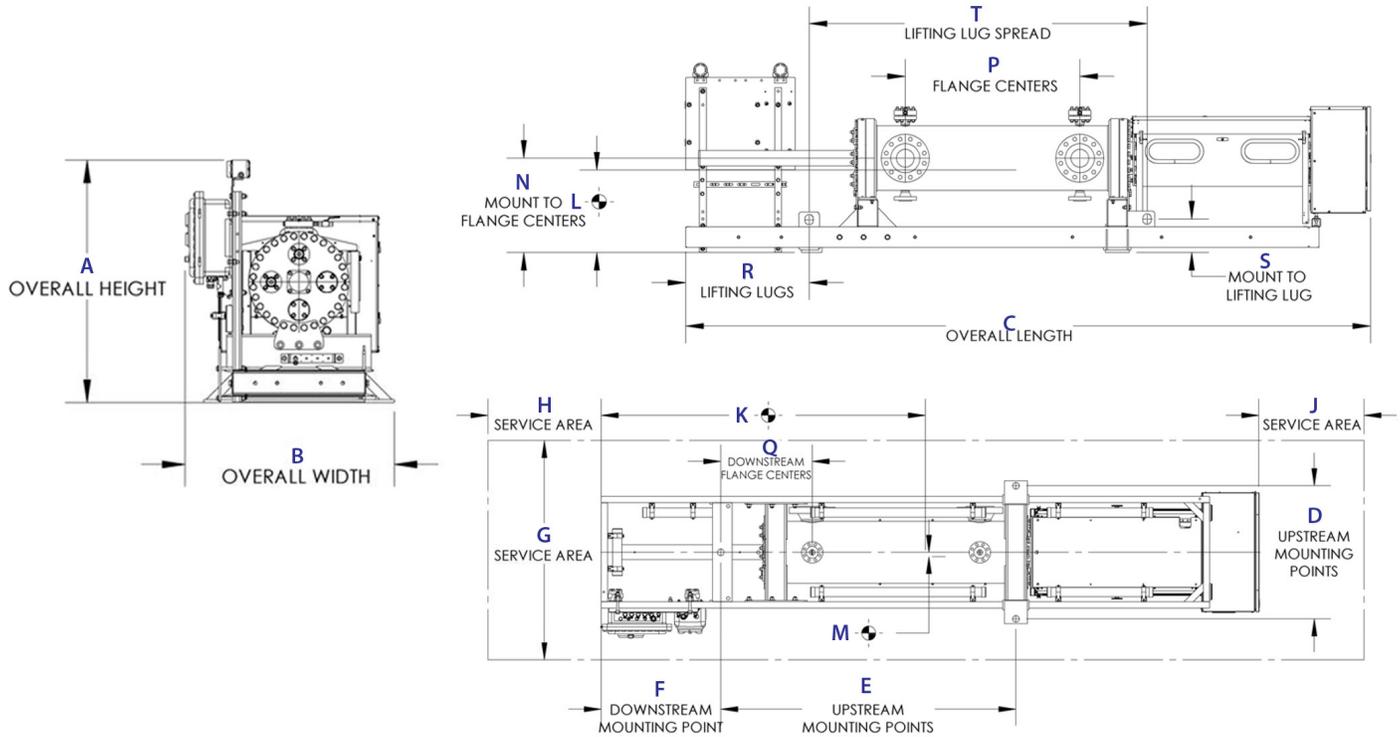
ISO	9001:2015 Cert# 0110-156-2, 17025:2005 Cert # L14240
EC	Mach Dir:2006/42/EC, EN 12100-2:2003, ATEX Directive 94/9/EC, EN 13463-1:2009, EN 13463-5:2003, EN 60079-0, EN 60079-7, EN 60079-11
CSA (US & Canada)	Class 3218 06, Class 1 Div 1 Group D; Class 1 Div 2 Group D / Clutch & Brake Assembly - EX m IIC T5
IECEx	USA /ETL/QAR 15.0014/00 , 101653329CRT-002
ABSA	CRN: 0F1072.2

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FMD-200 Dimensions	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
Pressure Rating																			
150#	72.50	72.25	293.75	64	108.13	86.50	132	30	30	152	39	1	45.38	80	14.13	75.63	15.75	126	25.75
300#	72.50	72.25	298.50	64	115.13	84.50	132	30	30	162	39	2	45.50	80	18.50	75.50	17.25	131	26.38
600#	72.50	72	307.50	64	121.13	87.50	132	30	30	163	42	2	46.75	79.50	21.75	81.25	17.63	134.38	29.60
900#	Please consult factory for dimensions																		

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.

FMD-200 - Weights	ANSI Pressure - 150#		ANSI Pressure - 300#		ANSI Pressure - 600#		ANSI Pressure - 900#	
	LBS	KGS	LBS	KGS	LBS	KGS	LBS	KGS
Weight (+/- 5%)	20,480	9,290	23,680	10,740	33,850	15,355	46,000	20,865
Weight with Crate (+/- 5%)	24,840	11,268	28,040	12,719	38,210	17,332	51,000	23,133
Weight Filled w/ Water (+/- 5%)	24,960	11,322	28,160	12,773	38,330	17,386	54,800	24,857

FMD-200 Energy Consumption	Motor Voltage / Phase Availability and Amperage Draw							
Motor Horsepower	220 VAC 3 Phase 50 or 60 Hz	240 VAC 3 Phase 50 or 60 Hz	380 VAC 3 Phase 50-60 Hz	400 VAC 3 Phase 50-60 Hz	460 VAC 3 Phase 50-60 Hz	480 VAC 3 Phase 50-60 Hz	208-230 VAC 3 Phase 50-60 Hz	440 VAC 3 Phase 50-60 Hz
7.50	19	19	11	11	9.5	9.5	19	9.5



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