

# Small Volume Provers For Cryogenic Applications



Designed for Liquid Cryogenic Butane, Propane, Ethane, Methane, (LNG), Propylene, and Ethylene Applications



Flow Management Devices offers a complete line of Unidirectional Captive Displacement Provers designed for proving flow meters in extremely low temperature process conditions. FMD's line of Cryogenic Provers are ideal for liquefied gas applications reaching temperatures as low as -320°F.

## Applications:

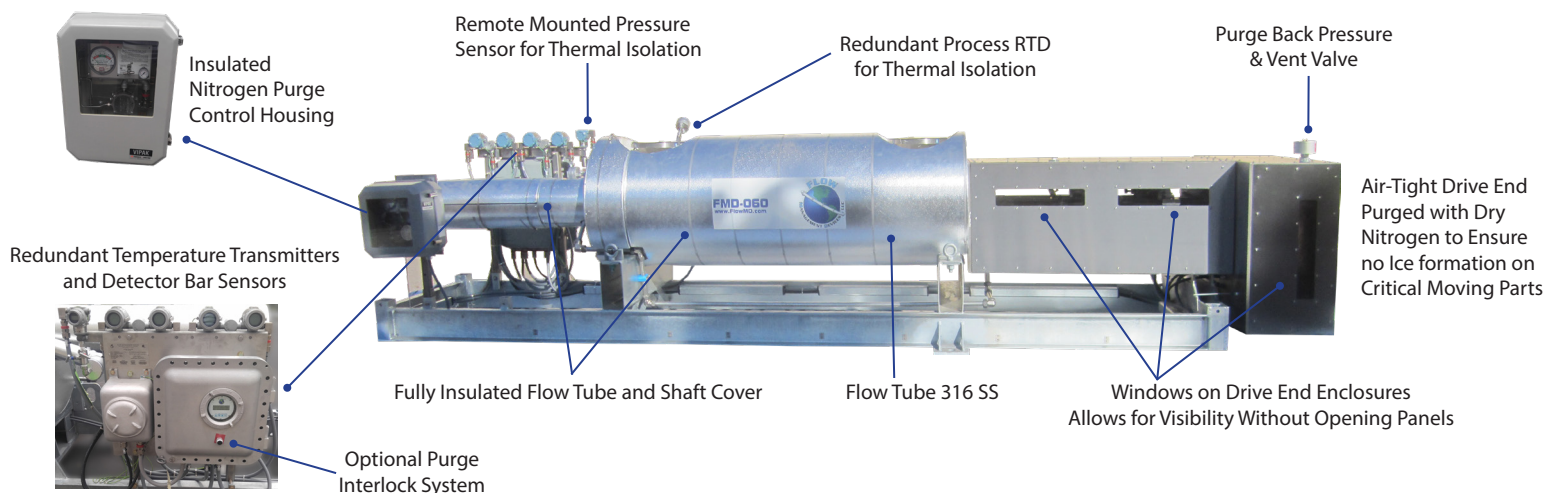
- > Cryogenic Fluid Allocation
- > Custody Transfer
- > Marine Loading Terminals
- > Truck Cargo Terminals

## Process Fluids:

- > Butane
- > Propane
- > Ethane
- > Methane
- > Propylene
- > Ethylene
- > LNG
- > NGLs

## Features:

- > Process temperature range:
  - to -320° F
  - to -196°C
- > 316L stainless wetted parts
- > Redundant temperature instrumentation
- > Thermal isolation of key components
- > Modified grounding system to eliminate static
- > Airtight dry nitrogen purge with optional smart lockout safety feature
- > Operates at ambient conditions for water draw



## Flow Management Devices, LLC

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"Always In pursuit of improving liquid and gas measurement technology"

# Unidirectional Captive Displacement Provers For Cryogenic Applications



## Specifications:

Sizes available:	FMD007 through FMD200 (700 gpm to 20,000 gpm)(see chart below)
Process Temperatures:	150°F to -320°F (66°C to -195°C)
Wetted Parts:	316L Stainless Steel
Pressure Containing Material :	316L Stainless Steel
Seal Material :	Proprietary Material Blend
Enclosure Type:	Nitrogen purged with smart lock out automatic shutoff switch*
Polyisocyanurate Insulation	
Redundant temperature instrumentation	
Temperature isolation	
Modified grounding system to reduce static	
Full material traceability for wetted parts	
Designed and manufactured per ASTM B31.3	
CSA / UL Class 1 Div 1 Groups C & D	

FMD Prover Model		FMD007	FMD015	FMD025	FMD035	FMD045	FMD060	FMD090	FMD130	FMD200
Max Flow Rate*	GPM	700	1,500	2,500	3,500	4,500	6,000	9,000	13,000	20,000
	BPH	1,000	2,100	3,570	5,000	6,400	8,500	12,850	18,500	28,500
	M3/HR	150	330	560	790	1,022	1,350	2,000	2,900	4,500

\*Please contact the FMD Sales or Applications Team to verify prover sizing. Meter type, process fluid and operating conditions must be considered to properly size a prover.



Three FMD130 Cryogenic Provers for liquid Propane staged for shipment to Houston, Texas.



Contact Us to Today Discuss your Cryogenic Proving Application

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