

NovoDoser®

M series



Engineered for maximum efficiency in modern production environments, this ultra-compact liquid nitrogen dosing system requires minimal installation space and offers exceptional mobility—making it ideal for micro-canning operations, small linear PET bottle lines, and even R&D use in laboratory environment. It delivers a stable 0.18 psi dosing pressure with outstanding accuracy for consistent, precise dosing across applications. The optimized vacuum system ensures best-in-class heat-leak performance, supported by a 2-year vacuum warranty for long-term reliability and operational excellence.

THE MOST COMPACT DOSER IN THE SERIES



Specifications

- LN₂ inlet pressure up to 100 psi (6.8 bar)
- Integrated inlet safety relief valve 150 psi (10.3 bar)
- Discrete dose is 250 CPM max, continuous dose 500 CPM
- Minimum dose duration 25 ms, incremental by 1 ms
- Dosing pressure 0.18 psi
- Dose accuracy +/- 4 %
- Electrical dosing valve, IP67 rated
- Dynamic dose settings allow up to 12 dose settings
- Multi-lingual HMI: English (US/UK), German, Spanish, Chinese, etc
- Controller with Siemens S7-1200 PLC, TFT color touchscreen HMI, NEMA 4X IP65-rated stainless steel enclosure

Ergonomic Features and Benefits

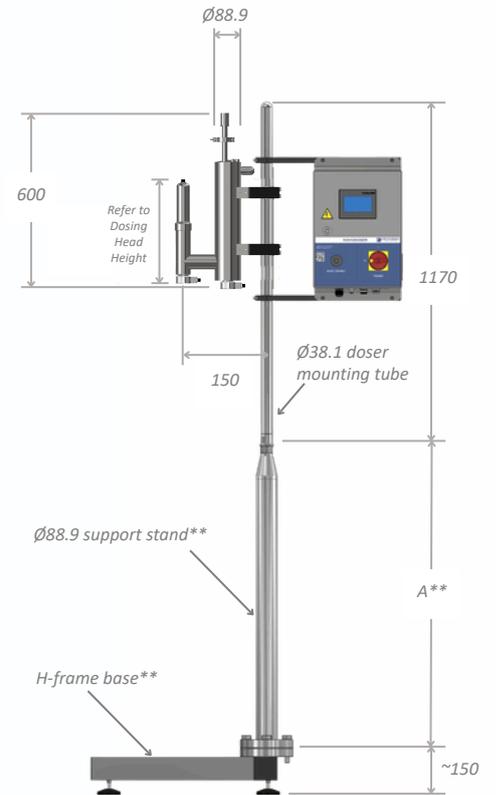
- **Lowest Dosing Pressure** – Eliminate product splashing during dosing
- **Lowest LN₂ Losses** – Proprietary vacuum insulation with heat leak less than 0.1 LPH
- **GentleDose** – Lowest dose pressure in its class, 0.18 psi
- **Sub-cooled LN₂** – Ensuring constant LN₂ density for accurate and repeatable dosing
- **Corrosion Resistant** – Stainless steel 300 series material grade
- **Highest Hygiene Design** – All external surface has rounded corners and sloped design for easy wash-down
- **Lowest Maintenance** – Ultra-long life cycle dosing valve, tested 30 million
- **Ultra-Compact** – The most compact design for the easiest installation in limited space
- **Applications Flexibility** – Compatible with GentleDose and micro-dose technology for hot fill, powder, and granular applications
- **2 Years Vacuum Warranty** – Lowest cost of ownership

NovoDoser[®] M series Dimensions

Material	Stainless Steel 300 series*
Head Pressure	0.18 psi
Steady State Consumption	< 0.023 gal (0.09 L) / hr
Body Dimension	23.6" H x 3.5" W (600 H x 88.9 W mm)
Dosing Head Dimension	<u>Standard Pneumatic (SB)</u> 10.2" H x 4.3" W (258 mm H x 110 mm W) <u>Optional: Electric (EA)</u> 13.8" H x 2.3" W (351.5 mm H x 57 mm W)
Dosing Head Arm Reach	6" (150 mm)
Weight	14 lbs (6.3 kg)
Utilities	Liquid Nitrogen LN ₂ : ≤ 100 psi Gaseous Nitrogen GN ₂ : 100 psi Electrical: 110-240 VAC

* SS316/316L for external material

** H-frame base and Ø88.9 support stand are available as options, customer to provide "A" dimension when ordering.



Controller Specifications

Model	150FD
PLC Platform	Siemens S7-1200
HMI (LCD touchscreen)	4.3" Color
Dose Duration, 1 ms interval	25 to 1500 ms
Dose Volume, mg/dose	15 to 1400
Dose Accuracy	± 4%
Max. Discrete Dosing	250 CPM
Continuous Dosing Line Speed	500 CPM
Dynamic Dose	✓
Fixed Delay	✓
Nozzle Pre-Cooling	Manual
Filler Command Signal	✓
Standard Actuator / <i>Optional</i>	Standard Pneumatic (SB) / <i>Electric (EA)</i>
Recipe Storage	1
Certifications	CE



All dimensions provided are for indication purposes only and may not accurately represent the actual product dimensions. Please contact us for updated and actual measurements.