

NovoDoser®

L series



The new generation of high-performance liquid nitrogen dosing. Designed with two controller options to accommodate diverse dosing needs, it delivers exceptional accuracy and operational excellence with 5 years vacuum warranty.

Specifications

- LN2 inlet pressure up to 100 psi (6.8 bar)
- Integrated inlet safety relief valve 150 psi (10.3 bar)
- Discrete dose is 600 CPM max*, continuous dose 2000 CPM
- Minimum dose duration 20 ms
- Dose accuracy +/- 3%
- Electrical dosing valve, IP67 rated
- Dose Timing Synchronization*
- Dose Volume Synchronization*
- Automatic nozzle defrost*
- Quick System Purging, Dry down & Warm-up*
- *Dynamic dose* settings allow up to 12 configurations for both dose duration and dose delay.
- Recipe storage up to 5 recipes
- Multi-lingual HMI: English (US/UK), German, Spanish, Chinese, etc.
- Controller with Siemens S7-1200 PLC, TFT color touch screen HMI, NEMA 4X IP65-rated stainless steel enclosure

*controller specific

Ergonomic Features and Benefits

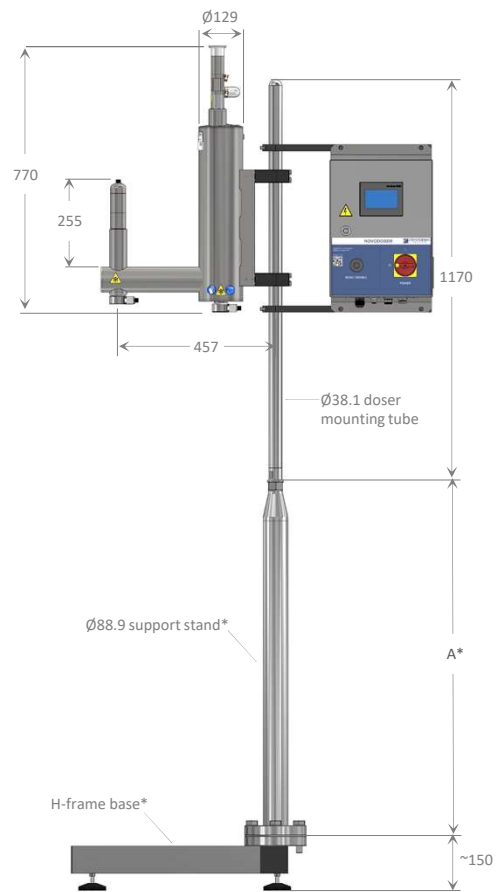
- **Frost-free Nozzle** – Self-generating GN2 for dosing head blanketing.
- **Lowest LN2 Losses** – Proprietary vacuum insulation with lowest heat leak 0.1 LPH.
- **High Dosing Speed** – Lower dose pressure in its class, 0.3 psi.
- **Sub-cooled LN2** – Ensuring constant LN2 density for accurate and repeatable 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 60 million.
- **Ease of Installation** – Compact size for easy installation in limited space.
- **Applications Flexibility** – Compatible with soft-dose and micro-dose technology for hot fill, powder, and granular applications.
- **5 Years Vacuum Warranty** – Lowest cost of ownership.

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Dimensions

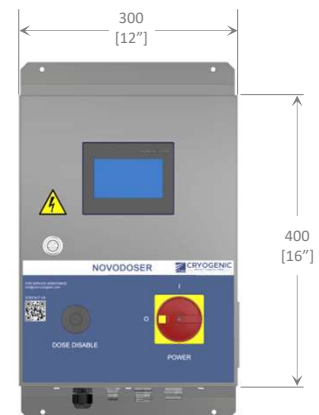
Material	Stainless Steel 300 series
Head Pressure	0.3 psi
Nozzle Blanketing	Self-Generated N2
Steady State Consumption	< 0.026 gal (0.10 liter) / hour
Body Dimension	30" H x 5" W (770 x 129 mm)
Dosing Head Dimension	EA Head 6.4" H x 2" W (255 x 50.8 mm)
Dosing Head Arm Reach	18" (457 mm)
Weight	30 lbs (14 kg)
Utilities	Liquid Nitrogen LN ₂ : ≤100 psi Gaseous N ₂ : 100 psi Electrical : 110-220 VAC

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



Controller Specifications

Model	250FD	500SC
PLC Platform	Siemens S7-1200	Siemens S7-1200
HMI (LCD touch screen)	4.3" Color	7.0" Color
Dose Duration, 1ms interval	25 to 1500 ms	20 to 1500 ms
Dose Volume, mg/dose	15 to 1400	10 to 1400
Dose Accuracy	± 3%	± 3%
Max. Discrete Dosing	250 CPM	600 CPM
Dynamic Dose	✓	
Fixed Delay	✓	✓
Nozzle Pre-Cooling	✓	✓
Speed Compensation		✓
Quick System Purging		✓
Rapid Nozzle Defrost		✓
Dosing Head	Electronic Actuator (EA)	Electronic Actuator (EA)
Recipe Storage	5	5
Certifications	CE	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.