



Herrdraulic™

HP Series Water Humidifier



engineered humidification systems

High-Pressure Humidification Clean and Simple

The NEW Herrdraulic high-pressure water humidifier from Herrmidifier is the latest innovation in atomizing systems. By employing a technically superior water-lubricated axial piston pump, the Herrdraulic produces the cleanest water vapor mist possible.

When supplied with deionized or reverse osmosis water, the Herrdraulic delivers pure mineral-free mist for the most sensitive applications, including microchip and pharmaceutical manufacturing. Besides providing humidification for people and processes, the Herrdraulic delivers the added benefit of evaporative cooling. Unlike other micro-mist humidifiers, the Herrdraulic does not use compressed air or ultrasonic vibrators. These clean, dependable and easy-to-maintain systems come in five sizes to produce capacities ranging from 300 to 2500 lbs/hr (136 kg/hr to 1134 kg/hr). A state-of-the-art micro-processor control ensures flexible operation and precise humidification. Coupled with the Herrmersion nozzle dispersion array, the humidifier offers unsurpassed dispersion in ducted systems.



Applications:

- Office Buildings
- Hospitals
- Schools and Colleges
- Research Facilities and Laboratories
- Pharmaceutical Industry
- Museums
- Manufacturing Plants
- Cleanrooms
- Semiconductor Manufacturing
- Printing Operations
- Indoor/Outdoor Evaporative Cooling
- Water Mist Clouds in Theme Parks, Exhibitions, etc.

Pump Assembly

Features

- Integral Pump Motor Assembly
- Direct Drive C-Face Motors (NEMA & IEC)
- Suitable for Tap, Softened, DI or RO Water
- Precision Water Lubricated Axial Piston Pumps
- Pump with Built-in Water Bypass
- 10-Micron (Beta >5,000) Final Filter for Water Pump
- Built in High-Temperature and Low Supply Water Safeties
- High-Pressure Water Safeties

Benefits

- Simplified Installation
- Constant Output, Excellent Pressure Stability and No Belt Maintenance
- Ultimate Flexibility for Sensitive Applications
- No Oil to Leak
- Integral Pump – System Safety
- Protects Pump Assembly and Humidification Nozzles

Nozzle Manifolds

Features

- 316 Stainless Steel Nozzles
- Internal Anti-Dripping Valve in Each Nozzle
- Nozzle Ports Factory Welded 316 SS

Benefits

- No Corrosion and Long Life
- No Dripping When Off
- No Leaks in Distribution Assembly

Herrdraulic Controller

Features

- Programmable Microprocessor Control
- Up to (4) Zone Control Valves
- Compatible with Any Standard Control Signal
- Capacities from 300 to 2,500 lbs/hr (136 to 1134 kg/hr)

Benefits

- Easy to Adjust – Precision Control
- Flexible Staging & Capacity Control
- Works with Most BMS Systems
- Serves a Wide Range of Humidification Requirements

Model Number, Output, Pump and Motor

Model #	Flow GPM (lbs/hr)	Qty. of Nozzle	Pump Model & RPM	Horse power	Pump Assembly Weight
HP-N-300	0.6 (300)	24	PAH 2 - 1725	1 - 56C	33lbs - 15kg
HP-N-600	1.2 (600)	48	PAH 4 - 1725	2 - 145TC	40lbs - 18kg
HP-N-1200	2.4 (1200)	96	PAH 6.3 - 1740	3 - 182TC	44lbs - 20kg
HP-N-2000	4.0 (2000)	160	PAH 10 - 1760	5 - 184TC	100lbs - 45kg
HP-N-2500	5.0 (2500)	200	PAH 12.5 - 1760	5 - 184TC	120lbs - 54kg

Model Number, Output, Pump and Motor

Model #	Flow L/M (kg/hr)	Qty. of Nozzle	Pump Model & RPM	Power kW	Pump Assembly Weight
HP-I-100	1.7 (102)	16	PAH 2 - 1380	0.75 kW - IEC80	15kg
HP-I-300	5.0 (299)	52	PAH 4 - 1390	1.5 kW - IEC90	18kg
HP-I-500	8.3 (497)	88	PAH 6.3 - 1400	2.2 kW - IEC100	20kg
HP-I-750	12.7 (760)	132	PAH 10 - 1420	3.0 kW - IEC 100	45kg
HP-I-1000	16.4 (982)	172	PAH 12.5 - 1430	4.0 kW - IEC 112	54kg

Unit Specifications

Unit Sizes

HP-N-300 to 2,500 (NEMA-US & Canada)	300-2500-lbs/hr (136 - 1,134 kg/hr)
HP-I-100 to 1,000 (IEC-European)	100-1,000 kg/hr (225 – 2,165 lb/hr)
Final Filter for Water Pump	10-inch Ametek Filter; 10-Micron (Beta >5,000)
Motor – Direct Drive Constant Speed	Voltages
	• 575v, 460v / 3ph / 60 Hz; NEMA
	• 400v / 3ph / 50 Hz; IEC
	• 330v / 3ph / 50 Hz; IEC
Speed	• 1725 – 1760 RPM; NEMA
	• 1380 – 1430 RPM; IEC
High-Pressure Pump Motor	1.0 to 5.0 HP (0.75 to 4.0 kw)
High-Pressure Manometer	Dual Scale 0-1450 psi (0-100 bar)
Pressure Relief Valve	Adjustable Range 360-1450 psi (25-100 bar)
Water Supply Fill Valve and Safety Switches	• High Temperature: Opens at 120°F (50°C) • Low Pressure: Opens at 23-psi (1.6 bar)
HP Microprocessor Control	• ON/OFF, Proportional, Proportional Plus Integral
	• Capable of Setting Humidity and Limit Set Point • Fault Indication
Input Devices	Control, High Limit, Air Proving
Humidity Sensors	0-10 VDC or 4-20 mA DC
Zone Control Valves	Up to (4) @ 24-volt AC
Zone Safety Switches	High-Pressure Switch
Nozzle Orifices	0.008 - 0.012-inches (0.2 - 0.3mm)
Gauges	Water Inlet & High Pressure
Custom Designed Nozzle Arrays	Nominal 10.0 - 12.5-lbs/hr (4.55 - 5.67-kg/hr) per nozzle at 1000-psi (69-bar)
Assembly Constructed	For Tap or DI/RO Water
Vapor Distribution System	Stainless Steel Pipes and Nozzles
Piping	1/2" Diameter (12.7 mm) 316 Stainless Steel
Control Cabinet Construction	16- and 18-gauge (1.52 and 1.21-mm) Powder-Coated Steel
Shipping Weight	HP-N-300 125-lbs (57-kg); HP-N-2,500 250-lbs (113.4-kg)
Inlet Water Supply Connection	3/4", Hose Fitting (Adaptor Available)



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FEDDERS ENGINEERED PRODUCTS



Trion Inc.
101 McNeill Road
Sanford, NC 27330, USA
Phone: 800-884-0002
Fax: 800-458-2379
www.trioninc.com
email: sales@trioninc.com

Trion, Ltd.
The Cavendish Centre
Winnall Close
Winchester, Hampshire,
SO23 0LB, UK
Phone: +44 (0) 1962 840465
Fax: +44 (0) 1962 828619
www.trion.co.uk
email: info@trion.co.uk

Trion Deutschland GmbH
Boschstr. 60
D - 50171 Kerpen
Phone: +49 (0) 2237 922-103
Fax: +49 (0) 2237 922-104
email: info@trion-deutschland.de

Fedders International Air Conditioning
A-30, Chintels House,
Kailash Colony
New Delhi
India 110048
Phone: 91 11 5173 0730
Fax: 91 11 5173 0743

Fedders International, Inc.
128 Joo Seng Road
#05-01
DP Computers Building
Singapore 368 356
Phone: (65) 6286 0995
Fax: (65) 6286 0859

Fedders International
No. 728 Fuzhou Road
Rm. 3002-3005
Raffles City Office Tower
Shanghai, P.R. China, 200001
Phone: (86-21) 6340 3232
Fax: (86-21) 6340 3867/6340 3868

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