

numatics®

Disposable In-Line Filters

High Efficiency Miniature Filtration Products



www.numatics.com

numatics®

Numatics, Inc. is a leading manufacturer of pneumatic products and motion control products. Our broad spectrum of standard, custom developed products and application components have made a significant impact on pneumatic innovation as well as pneumatic and motion control technology. Our company has an extensive history of generating innovative concepts and technological breakthroughs. Many of today's standard features in pneumatic technology were industry firsts from Numatics. We continue our innovative approach to product development by developing electric motion control solutions and enhancing our embedded Fieldbus and I/O products to continually meet and solve our customer's application requirements.



Today Numatics is proud to be a part of the Industrial Automation Division of Emerson Electric Co.

Emerson (NYSE:EMR), based in St. Louis, Missouri (USA), is a global leader in bringing technology and engineering together to provide innovative solutions for customers in industrial, commercial, and consumer markets through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. For more information, visit www.Emerson.com.



EMERSON™
Industrial Automation



Numatics Express Shipping Program guarantees[†] product shipment in two, three or five business days. Unlike most traditional quick ship programs, the Numatics Express Shipping Program includes the most comprehensive offering in the industry. This program encompasses the range and options that you require!

Numatics is committed to offering you the highest level of customer service, quality and performance.

2DAY

Numatics Express 2Day shipping program guarantees[†] product shipment in two business days. The program includes the most popular valve, air preparation and actuator products and includes applicable switches and mounting accessories.

Numatics guarantees[†] to ship any order received before 3 pm EST for up to 10 2Day products* in two business days.

3DAY

Numatics Express shipping program offers a 3Day shipping program that guarantees[†] product shipment of a fully assembled and tested valve manifold in 3 business days. The program includes the most popular manifold configurations of the 2000 and Mark series valves:

- Sub D, Terminal Strip and Fieldbus Electronic Options
- Can be configured for DIN Rail Mounting and Muffled Exhaust
- Shipped complete and 100% tested

The 3Day Express shipping program enables you to create a 2 to 8 station manifold assembly complete with any combination of valves, regulators, and blank stations that can be configured from the valve model charts in this catalog.

Numatics guarantees[†] to ship any order received before 3 pm EST for up to 5 manifold assemblies configured from this catalog in three business days or Numatics pays the shipping cost.

5DAY

We are pleased to expand Numatics Express to include a broad range of products in a 5Day shipping program. Numatics guarantees[†] to ship up to 10 of any 5Day product** for orders received before 3 pm EST in 5 business days or Numatics pays the shipping cost.

We are committed to providing you with an unmatched level of customer service, quality, and reliability. If you cannot locate the specific product for your application or need additional product specifications, visit www.numatics.com or call 888-686-2842. Numatics Express orders cannot be canceled or adjusted once entered. Saturdays, Sundays, and Holidays are excluded.

[†]As industry requirements change, Numatics reserves the right to modify the contents of this catalog and program without notification. Updates on this program can be obtained from the Numatics website www.numatics.com or by calling 888-686-2842, or by contacting your local Numatics representative or distributor and referencing the Numatics Express program.

***Sentronic[®] Proportional Valves, CGT Compact Slides, NR Series Rodless and Air Bellows are limited to orders up to 5.**

****A Series Large Bore NFPA, ASP Series Steel Body NFPA and G Series Guide Rail Rodless are limited to orders up to 5.**

Welcome to the World of Fluid Automation...

Since 1945, Numatics has emerged as the prominent specialist in developing and manufacturing pneumatic and fluid power components for a widely diverse field of automated industry. From idea to implementation, leading engineers choose Numatics as their single source for:

- Quality Fluid Power components
- Technologically advanced design resources
- Quick response time in delivery and service from around the world



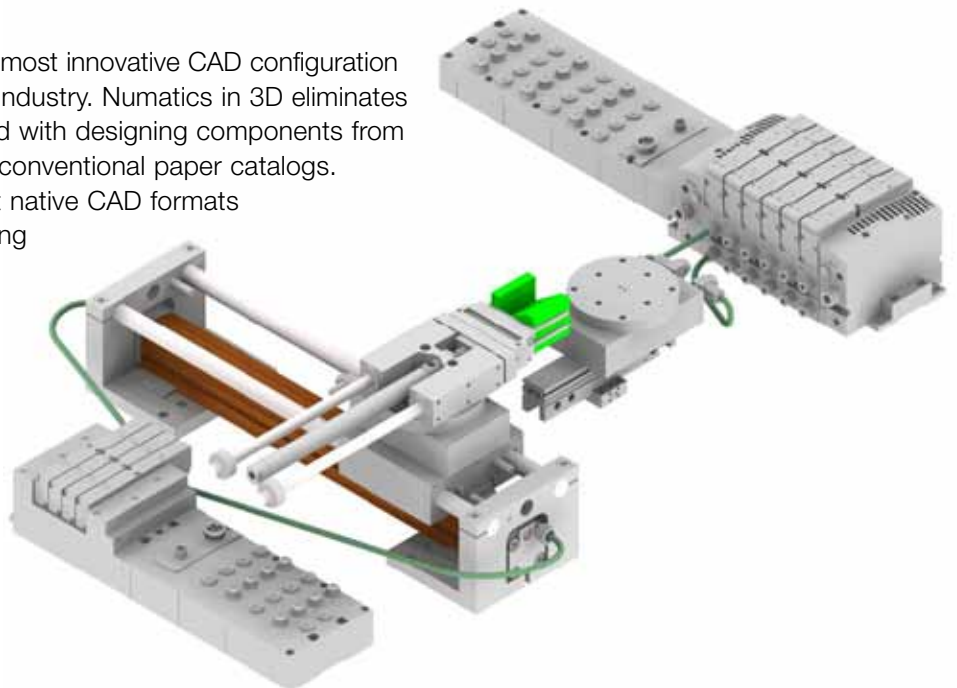
Numasizing®

Developed by Numatics, Numasizing® offers a whole new level of fluid power system optimization. Compare large amounts of component and process data against user objectives and industry benchmarks for the best possible size, pneumatic pressure, actuator stroke velocities and other part and process variable determinations.

CAD Modeling

Save critical development time with the most innovative CAD configuration program in the pneumatic component industry. Numatics in 3D eliminates the time consuming process associated with designing components from scratch based on information found in conventional paper catalogs.

The models are available in 85 different native CAD formats in 2D drawings and 3D models, including all the popular formats including Catia, I-DEAS, Pro/Engineer, SolidWorks, Unigraphics and more.



Features - Dual Barbed and Straight Type

- Max pressure at 125 PSI (8.6 BAR)
- Max temperature at 125°F (52° C)
- Rugged polyurethane housing with dual barb style
- Rugged nylon housing with straight style
- Compatible with many chemicals
- Depth-loading coalescing media provides long life.
- Dual barb for 1/4 and 1/8 ID soft tubing
- Straight tang for push-on fittings
- Oil indicating dye – turns red with oil present (See option "D.")
- Epoxy element binder – standard – grades R, S, T, U
- PTFE element binder (See option "T.")
- Flow outside to inside element (Cap to body)

Applications

- Sensor Protection
- Pneumatic Logic
- Exhaust Muffler
- Medical/ Pharmaceutical
- Instrumentation
- Gas Sampling

Flow Rates for PLS-B

Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)	125 (8.6)
*Flow	SCFM (lpm)	1.1 (31.1)	1.3 (36.8)	1.8 (51.0)	2.1 (59.5)	2.4 (67.9)	2.6 (73.6)	2.8 (79.3)

* Based on a 1.5 psid pressure drop

Flow Rates for PLS-T

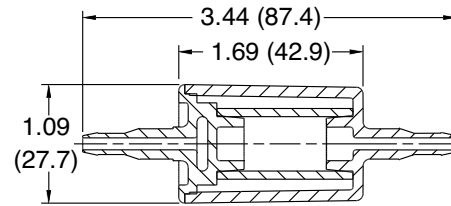
Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)	125 (8.6)
*Flow	SCFM (lpm)	1.6 (45.3)	2.1 (59.5)	2.8 (79.3)	3.6 (102.0)	3.9 (110.4)	4.4 (124.6)	4.9 (138.8)

* Based on a 1.5 psid pressure drop

PL Series - Dual Barbed



PLS-B pictured

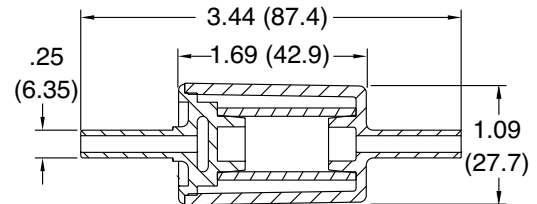


Dimensions in inches (mm)

PL Series - Straight



PLS-T pictured



Dimensions in inches (mm)

How To Order

PL S - B D

Series

PL = Plastic Inline

Element Grades

- R = 0.01 Micron - 99.99% efficiency
- S = 0.3 Micron - 99.975% efficiency
- T = 0.5 Micron
- U = 1 Micron
- P = 5 Micron (Particulate)
- F = Activated Carbon
- X = Silica Gel

Options

- **D = Oil Indicating Dye (F, D and C approved)***
- T = PTFE Binder Grades R, S, T & U

Port Option

- B = Dual Barbed
- T = 1/4" Straight

** Not available on grades P, F, and X

*** F, D and C = Food, Drug & Cosmetic

Features - Straight and Elbow Fitting Type

- Max pressure at 35 PSI (2.4 BAR)
- Max temp at 125° F (52° C)
- Rugged blue tinted nylon housing
- Straight barb option
- Right angle barb option
- Depth-loading coalescing media provides long life.
- Element binder is epoxy - Standard for grades R, S, T, U.
- PTFE binder optional for elements (See option "T.")
- Flow outside to inside element (Cap to body)

Applications

- Protection of miniature pneumatic components
- Sampling devices
- Small design areas
- Exhaust muffler
- Instrumentation
- Gas sampling

Flow Rates for PTS-B

Pressure	PSIG (Bar)	5 (0.35)	10 (0.7)	20 (1.4)	35 (2.4)
*Flow	SCFH (lpm)	19 (9.0)	22 (10.4)	26 (12.3)	34 (16.1)

* Based on a 1.5 psid pressure drop

Flow Rates for PTS-BN

Pressure	PSIG (Bar)	5 (0.35)	10 (0.7)	20 (1.4)	35 (2.4)
*Flow	SCFH (lpm)	17 (8.0)	18 (8.5)	21 (9.9)	23 (10.9)

* Based on a 1.5 psid pressure drop

How To Order

PT S - B D

Series

PT = Plastic Inline

Element Grades

- R = 0.01 Micron - 99.99% efficiency
- S = 0.3 Micron - 99.975% efficiency
- T = 0.5 Micron
- U = 1 Micron

Options (Specify Alphabetically as Required)

- D = Oil Indicating Dye (F, D and C approved)**
- T = PTFE Binder Grades R, S, T & U

Port Option

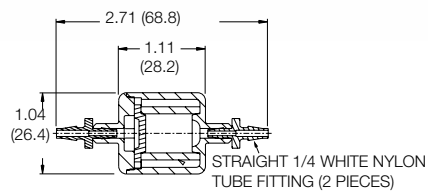
- B = Straight 1/8" tube fitting
- T = 90 Degree 1/8" tube fitting

** F, D and C = Food, Drug & Cosmetic

PT Series - Straight Fitting



PTS-B pictured

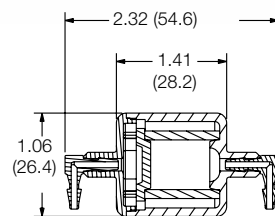


Dimensions in inches (mm)

PT Series - Elbow Fitting



PTS-BN pictured



Dimensions in inches (mm)

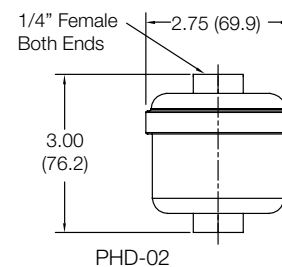
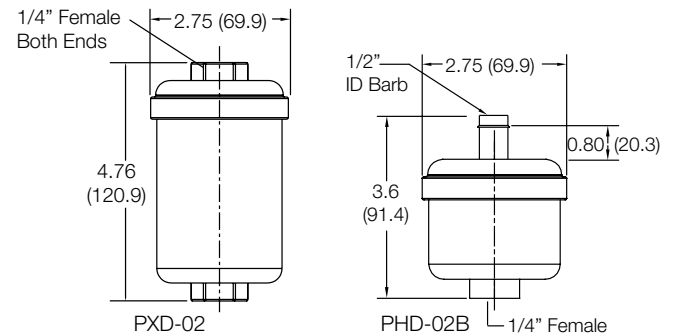
Features - PH Series Filters

- Max pressure 100 PSIG (6.9 BAR)
- Max temp 200°F (93°C)
- 300°F at 60 PSIG 4.1 BAR / 149°C
- Rugged polyester housing
- Brass inserts
- Inner support core which protects element from collapsing
- Spin welded seal - no adhesives or chemicals
- Thermally bonded end caps on elements
- Extended version for longer filter life
- HEPA – High Efficiency Particulate Air
- ULPA – Ultra Low Particulate Air

Applications

- Medical concentrators
- Intake filter
- After filter for miniature desiccant beds
- High flow pneumatic tools
- Critical instrumentation protection

PH Series Filters



Flow Rates for PHD							
Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)
*Flow	SCFM (lpm)	14 (396.4)	17.5 (495.5)	22.4 (634.3)	26.8 (758.9)	30.8 (872.2)	34.3 (971.3)

* Based on a 1.5 psid pressure drop

Flow Rates for PXD							
Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)
*Flow	SCFM (lpm)	17.5 (495.5)	20.7 (586.2)	26.4 (747.6)	31 (877.8)	35.3 (1000.0)	39.3 (1113.0)

* Based on a 1.5 psid pressure drop

How To Order

PH D - 0 2 B

Series

PH = Plastic High Flow Housing
PX = Plastic Extended Housing

Option

B = 1/2" barb on outlet only

Element Grades

B = 3.0 Micron Pleat
D = 0.3 Micron Pleated HEPA – 99.97% Efficiency
E = 0.3 Micron Pleated ULPA – 99.999% Efficiency

Port Tap Size

02 = 1/4 NPT

Features - PH Series Desiccant Dryers

- In-Line Desiccant Dryers - 30°F dew point
- Max pressure 100 PSIG (6.9 BAR)
- Max temp 150°F (66°C)
- Rugged clear polycarbonate housing
- Integral 3µ filter paper inlet and outlet – blue silica gel turns pink when saturated indicating replacement
- Brass inserts
- Spin welded seal - no adhesives or chemicals

Applications

- Critical instrumentation protection
- Parts blow off
- Paint spray

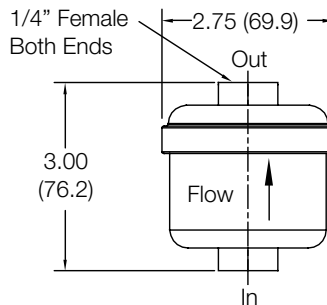
Flow Rates for PHS							
Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)
Flow	SCFM (lpm)	5.5 (155.7)	7.0 (198.2)	10.0 (283.2)	12.5 (354.0)	14.5 (410.6)	15.5 (438.9)

* Based on a 1.5 psid pressure drop

PH Series Desiccant Dryers



PHS-02
Pictured



PHS-02

Dimensions in inches (mm)

How To Order

PHS - 02

Series

PH = Plastic High Flow Housing

Element Grades

S = Silica Gel

Port Tap Size

02 = 1/4 NPT

Features - MF Series Miniature In-Line Filters

- Max pressure 150 PSIG (10 BAR)
- Max temp 200°F (93°C)
- Aluminum construction
- Replaceable element
- Compact design
- Miniature coalescing capability

Applications

- Miniature air tools
- Control panels
- Outdoor applications

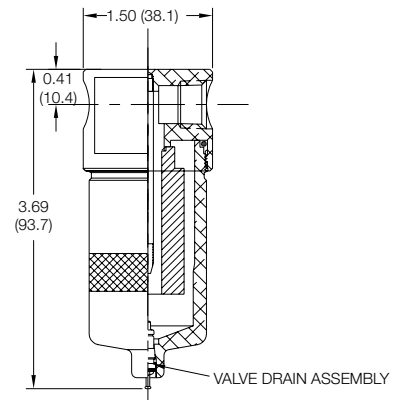
Flow Rates for MF05S								
Pressure	PSIG (Bar)	10 (0.7)	20 (1.4)	40 (2.8)	60 (4.1)	80 (5.5)	100 (6.9)	150 (10.3)
*Flow	SCFM (lpm)	1.5 (42.5)	2.1 (59.5)	3.3 (93.4)	4.6 (130.3)	5.8 (164.2)	7 (198.2)	10 (283.1)

* Based on a 1.5 psid pressure drop

MF Series Miniature In-Line Filters



MF05D-02 pictured



Dimensions in inches (mm)

How To Order

MF 05 B - 02

Series

MF = Metal Filter

Series

05 = Miniature Series

Element Grades

B = 5 Micron (Particulate)

R = 0.01 Micron

S = 0.3 Micron

T = 0.5 Micron

U = 1 Micron

Port Option

02 = 1/4" NPT In/Out



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