

# **FRL Accessories and Options**

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# FRL Accessories and Options

Digital Pressure Sensor/Digital Vacuum Sensor	
PS180 Pressure Switches	
PS181 Economy Series Pressure Switches	
PS182 Pressure Switches	
Reclassifiers	
Tank Drain Trap	
Electronic Drain Valves	
Inline Disposable Filter	
Miniature Manifold Regulator	
Oxygen Concentrator Regulator	
Gauges	





## Digital Pressure Sensor/Digital Vacuum Sensor



DPS-180N (left) and DPSG180P (right) pictured

#### Application

Numatics DPS and DVS is a line of digital pressure sensors designed for extremely accurate indication that proper system pressure is being achieved. Available for either vacuum (DVS model) or pressure (DPS model) applications, its highly visible LED display makes it easy to read in either dark or light areas. Other features include quick response (within 2.5ms or less), high repeatability (within 0.2% full scale 1 digit), easy pushbutton setup, and four output process modes which enable versatile pressure level control.

Applications include securing chip-component carriages on a suction hand, controlling of clamp forces, controlling the edge of winding film, verification of frame uniformity, and many more.

SPECIFICATIONS			
Pressure scale:	Gauge pressure		
Rated pressure range:	Pressure sensor: 0 - 145 PSI; Vacuur	n sensor: 0 - 14.7 PSI	
Setting pressure range:	Pressure sensor: -0.050 to 1.000 MPa; Vacuum sensor:5.1 to -101.3 kPa		
Pressure resistance:	Pressure sensor: 1.47 MPa; Vacuum s	sensor: 490 kPa	
Applicable fluid:	Non-corrosive gas		
Selectable units:		uum sensor: kgf/cm <sup>2</sup> , bar, PSI, mmHg, InchH	
Supply voltage:	12 to 24V DC (+10%/-15%) Ripple P-	P 10% or less	
Current consumption:	50mA or less		
Comparative output:	NPN open-collector transistor	PNP open-collector transistor	
	Max. sink current: 100mA	Max. source current: 100mA	
	<ul> <li>Applied voltage: 30V DC or less</li> <li>Residual voltage:</li> </ul>	<ul> <li>Applied voltage: 30V DC or less</li> <li>Residual voltage:</li> </ul>	
	1V or less (@ 100mA sink current)	2V or less (@ 100mA source current)	
	0.4V or less (@ 16mA sink current)		
Utilization category:	DC-12 or DC-13		
Output pressure mode:		sis mode, window comparator mode, dual	
Calpar prossure mode.	output mode, or automatic setting mod		
Hysteresis:	1 digit (2 digits when using PSI unit, v		
Repeatability:	Within $\pm 0.2\%$ F.S. $\pm 1$ digit		
Response time:	2.5 ms or less		
Short circuit protection:	Incorporated		
Analog voltage output:	Output voltage: 1 to 5V (with rated pre	essure gauge)	
	Zero-point: Within 1V ± 5%F.S.		
	Span: Within $4V \pm 5\%$ F.S.		
	Linearity: Within ± 1% F.S.		
Diantau	Output impedance: App. 1kW		
Display:	Red LED display, 3 1/2 digits (samplin		
Pressure display range: Analog bar display:	Pressure sensor: -0.050 to 1.000 MPa LED-bar step indication every app. 10	,	
Operation indicator		/01.0.	
comparative output 1:	Orange LED (lights up when the comp	parative output 1 is activated)	
comparative output 2:	Green LED (lights up when the compa		
Environmental resistance			
Pollution degree:	3 (Industrial environment)		
Protection:	IP40 (IEC)		
Ambient temperature:		condensation or icing), Storage: 14º to 140º	
	<b>`</b>	o +60ºC)	
Ambient humidity:	35-85% RH, Storage: 35-8% RH		
EMC:	Emmision: EN50081-2, Immunity: EN		
Voltage withstandability:	1,000V AC for 1 minute between all te		
Insulation resistivity:		tween all terminals connected and enclosu	
Vibration proof:	hours (unenergized)	mplitude, and X,Y,& Z directions each for 2	
Shock proof:	100m/s <sup>2</sup> acceleration (app. 10G), and	X V & 7 directions each for three	
	times (unenergized)		
Temperature characteristic:		at 68°F (20°C) in 14°-122°F (-10°-+50°C)	
	temp. range		
Material:		taining glass fiber); display surface: acrylic;	
	press. port attachment: die-cast zinc a		
		n) long w/ 5 0.15mm <sup>2</sup> conductors	
Cable:	On resistant ouslyre ousle old leet (21	Max. extension is 328 feet (100m) overall with an equivilant cable with	
Cable: Cable extension:			
		rall with an equivilant cable with	





## Digital Pressure Sensor/Digital Vacuum Sensor - Model Selection

## 2 Meter Pigtail Cable

PRESSURE SEN	SOR (0-145PSI;0-1.000MPa)	VACUUM SENS	OR (0 to -14.5PSI;0 to -101.3 kPa)
MODEL	DESCRIPTION	MODEL	DESCRIPTION
DPS-180N	NPN (sinking) 1/8 NPTF Base	DVS-180N	NPN (sinking) 1/8 NPTF Base
DPS-180P	PNP (sourcing) 1/8 NPTF Base	DVS-180P	PNP (sourcing) 1/8 NPTF Base
DPSG180N	NPN (sinking) 1/8 BSPP Base	DVSG180N	NPN (sinking) 1/8 BSPP Base
DPSG180P	PNP (sourcing) 1/8 BSPP Base	DVSG180P	PNP (sourcing) 1/8 BSPP Base
DPSR180N	NPN (sinking) 1/8 BSPT Base	DVSR180N	NPN (sinking) 1/8 BSPT Base
DPSR180P	PNP (sourcing) 1/8 BSPT Base	DVSR180P	PNP (sourcing) 1/8 BSPT Base

## 8 Inch Lead, 8 mm Pico Connector

	SOR (0-145PSI;0-1.000MPa)		DR (0 to -14.5PSI;0 to -101.3 kPa)
MODEL	DESCRIPTION	MODEL	DESCRIPTION
DPS-180N-1	NPN (sinking) 1/8 NPTF Base	DVS-180N-1	NPN (sinking) 1/8 NPTF Base
DPS-180P-1	PNP (sourcing) 1/8 NPTF Base	DVS-180P-1	PNP (sourcing) 1/8 NPTF Base
DPSG180N-1	NPN (sinking) 1/8 BSPP Base	DVSG180N-1	NPN (sinking) 1/8 BSPP Base
DPSG180P-1	PNP (sourcing) 1/8 BSPP Base	DVSG180P-1	PNP (sourcing) 1/8 BSPP Base
DPSR180N-1	NPN (sinking) 1/8 BSPT Base	DVSR180N-1	NPN (sinking) 1/8 BSPT Base
DPSR180P-1	PNP (sourcing) 1/8 BSPT Base	DVSR180P-1	PNP (sourcing) 1/8 BSPT Base

### 8 Inch Lead, 12 mm Micro Connector

PRESSURE SEN	ISOR (0-145PSI;0-1.000MPa)	VACUUM SENSO	R (0 to -14.5PSI;0 to -101.3 kPa)
MODEL	DESCRIPTION	MODEL	DESCRIPTION
DPS-180N-2	NPN (sinking) 1/8 NPTF Base	DVS-180N-2	NPN (sinking) 1/8 NPTF Base
DPS-180P-2	PNP (sourcing) 1/8 NPTF Base	DVS-180P-2	PNP (sourcing) 1/8 NPTF Base
DPSG180N-2	NPN (sinking) 1/8 BSPP Base	DVSG180N-2	NPN (sinking) 1/8 BSPP Base
DPSG180P-2	PNP (sourcing) 1/8 BSPP Base	DVSG180P-2	PNP (sourcing) 1/8 BSPP Base
DPSR180N-2	NPN (sinking) 1/8 BSPT Base	DVSR180N-2	NPN (sinking) 1/8 BSPT Base
DPSR180P-2	PNP (sourcing) 1/8 BSPT Base	DVSR180P-2	PNP (sourcing) 1/8 BSPT Base

Note: See accessories on page 5-6.

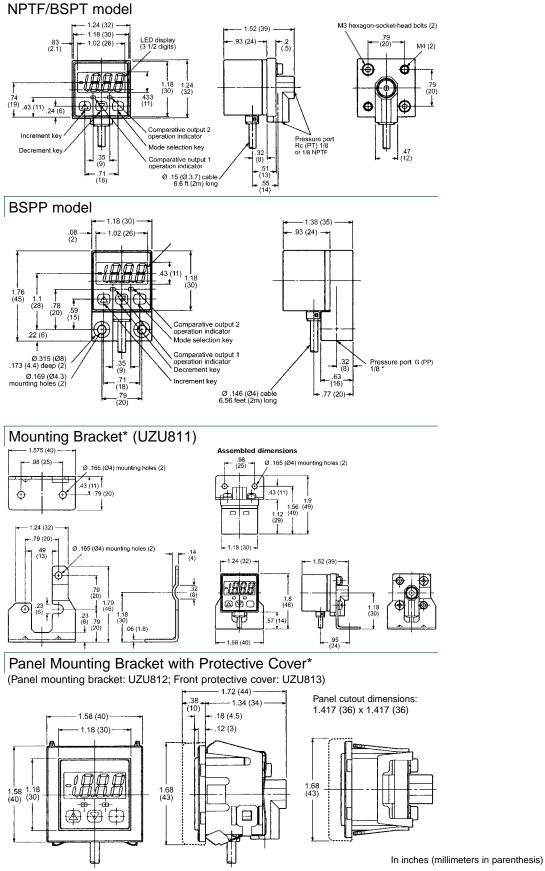
## Female Single Ended Cordset

CONNECTOR TYPE	CONNECTOR STYLE	CONNECTOR LENGTH	MODEL NUMBER
M8 Pico	Straight	2 Meters	DPS-08-02-ST
M8 Pico	Straight	5 Meters	DPS-08-05-ST
M12 Micro	Straight	2 Meters	DPS-12-02-ST
M12 Micro	Straight	5 Meters	DPS-12-05-ST





## Digital Pressure Sensor/Digital Vacuum Sensor Dimensions



\* available only on NPTF/BSPT model

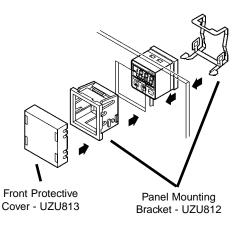
Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.



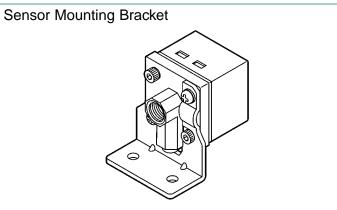


## Digital Pressure Sensor/Digital Vacuum Sensor - Options (NPTF & BSPT models only)

Panel Mounting Bracket and Front Protective Cover



NOTE: Front protective cover used with panel mounting bracket cannot be used alone.



Part # UZU811 Two M4 pan head screwes and two spring washers included.

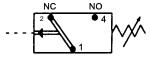


#### Numatics FRL Accessories and Options



## PS180 Pressure Switches





ANSI SYMBOL

#### Application

Numatics PS180 is a line of pressure switches designed for accurate indication that proper system pressure is being achieved. Available in 1/8 or 1/4 threads, it is easily incorporated into an air system using a **FLEXIBLOK**  $^{\circ}$  diverter plate of other manifold.

Featuring a rugged housing made from zinc coated steel, the PS180 is designed for industrial multi-million cycle life applications. The four pin connector plug is included and contains a key way preventing accidental misconnection. Pressure adjustment is tamper resistant, hindering unauthorized changes. It can be wired in either normally open or normally closed configurations and includes a case ground pin.

#### **Specifications**

Contact Rating: 4A @ 250 V AC Protection: IP 65, terminals IP00 Maximum Operation: 200/min Temperature Range: 0° F to 190° F (-15° C to 85° C) Maximum Pressure: 300 PSI (20 bar) Maximum Voltage: 250 V AC (200 DC) Hysteresis Adjustment: 15% Connector Material: polyamid Diaphragm Material: Buna N Housing Material: zinc plated steel

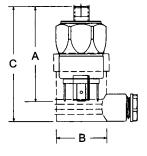
Dimensions in inches (millimeters in parenthesis)

#### NPTF Thread Dimensions

MODEL	А	В	С	
PS180BAN01	2.5 (64)	1.0 (27)	3.1 (79)	
PS180CAN01	2.5 (64)	1.0 (27)	3.1 (79)	
PS180BAN02	2.5 (64)	1.0 (27)	3.1 (79)	
PS180CAN02	2.5 (64)	1.0 (27)	3.1 (79)	

#### **BSPP** Thread Dimensions

MODEL	А	В	С
PS180BAG01*	2.5 (64)	1.0 (27)	3.1 (79)
PS180CAG01*	2.5 (64)	1.0 (27)	3.1 (79)
PS180BAG02	2.3 (58)	1.0 (27)	2.9 (74)
PS180CAG02	2.3 (58)	1.0 (27)	2.9 (74)



\* = consists of an NPTF pressure switch with an NPTF to BSPP adapter (part number N2GC; adds app. 13/16" to overall height)

#### NPTF Thread Model Selection

NPTF	MODEL	PSIG (BAR)
1/8	PS180BAN01	4-20 (.3-1.5)
1/8	PS180CAN01	14-150 (1-10)
1/4	PS180BAN02	4-20 (.3-1.5)
1/4	PS180CAN02	14-150 (1-10)

#### BSPP Thread Model Selection

BSPP	MODEL	PSIG (BAR)
1/8	PS180BAG01	4-20 (.3-1.5)
1/8	PS180CAG01	14-150 (1-10)
1/4	PS180BAG02	4-20 (.3-1.5)
1/4	PS180CAG02	14-150 (1-10)

Use "G" suffix for gold plated terminals (for applications below 50 mA), i.e.PS180BAN02G  $\,$ 





## PS181 Economy Series Pressure Switches

#### Application

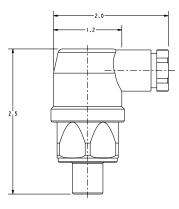
Numatics PS181 is the most economical of the Numatics Pressure Switch line. Available in 1/8 or 1/4 NPT and BSPP threads, it is easily incorporated into an air system using a FlexiBlok diverter plate or diverter block.

Unlike the PS180 Switch, which uses a plug mount for the electrical connection, the PS181 directly connects to the body mounted terminals. Pressure adjustment is tamper resistant, hindering unauthorized changes. It can be wired in either a normally open or normally closed configuration.

#### Specifications

Hysteresis Adjustment Pressure Ranges: Max Pressure: Set Point Tolerance: \*Contact Rating: Diaphragm Material: Max Operating Cycles: Temperature Range: Maximum Voltage: Sealing/Protection: Housing Material: Connector Material: 15% 4 - 20, 14-150 psi 300 psi +/- 1 Psi or 5% 4A @ 250 V AC Buna N 200/min 0 to 190 F (-15 to 85 C) 250 V AC IP 65, terminals IP 00 Zinc Plated Steel Polyamide

#### Dimensions in inches (millimeters in parenthesis)



#### NPTF Thread Model Selection

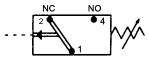
NPTF	MODEL	PSIG (BAR)
1/8	PS181BAN01	4-20 (0.3-1.5)
1/8	PS181CAN01	14-150 (1-10)
1/4	PS181BAN02	4-20 (0.3-1.5)
1/4	PS181CAN02	14-150 (1-10)

#### **BSPP** Thread Model Selection

-		
BSPP	MODEL	PSIG (BAR)
1/8	PS181BAG01*	4-20 (0.3-1.5)
1/8	PS181CAG01*	14-150 (1-10)
1/4	PS181BAG02	4-20 (0.3-1.5)
1/4	PS181CAG02	14-150 (1-10)
		( -/

\*Consists of an NPT pressure switch with an NPTF to BSPP Adapter (part number N2GC; adds app. 13/16" to overall height).





ANSI SYMBOL

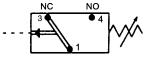


#### **Numatics FRL Accessories and Options**



## **PS182** Pressure Switches





ANSI SYMBOL

#### Application

Numatics PS182 is the most rugged of the Numatics Pressure Switches. Available in 1/8 or 1/4 NPT and BSPP threads, it is easily incorporated into an air system using a FlexiBlok diverter plate or diverter block.

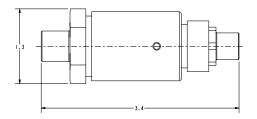
The unique 12 mm, micro connector makes it simple for electrical connection. The knurled knob with tamper resistant hex screw makes it the easiest pressure adjustment on the market. It can be wired in either a normally open or normally closed configuration.

#### Specifications

Hysteresis Adjustment Pressure Ranges: Max Pressure: Set Point Tolerance: \*Contact Rating: Diaphragm Material: Max Operating Cycles: Temperature Range: Voltage Range: Sealing/Protection: Housing Material: Electrical Connection: \*Comes standard with gold plated contacts.

10% 2-10, 6-30, 20-130 600 psi +/- 1 Psi or 5% 4A Buna N 200/min -40 to 250 F (-40 to 121 C) 12 V DC to 250 V AC IP 65 Brass 3-Pin Micro (12 mm)

Dimensions in inches (millimeters in parenthesis)



#### NPTF Thread Model Selection

NPTF	MODEL	PSIG (BAR)
1/8 NPT	PS182AAN01	2-10 (0.14-0.69)
1/8 NPT	PS182BAN01	6-30 (0.40-2.07)
1/8 NPT	PS182CAN01	20-130 (1.38-8.96)
1/4 NPT	PS182AAN02	2-10 (0.14-0.69)
1/4 NPT	PS182BAN02	6-30 (0.40-2.07)
1/4 NPT	PS182CAN02	20-130 (1.38-8.96)

#### **BSPP** Thread Model Selection

BSPP	MODEL	PSIG (BAR)
1/8 BSPP	PS182AAG01	2-10 (0.14-0.69)
1/8 BSPP	PS182BAG01	6-30 (0.40-2.07)
1/8 BSPP	PS182CAG01	20-130 (1.38-8.96)
1/4 BSPP	PS182AAG02	2-10 (0.14-0.69)
1/4 BSPP	PS182BAG02	6-30 (0.40-2.07)
1/4 BSPP	PS182CAG02	20-130 (1.38-8.96)

#### Female Single Ended Cordset

CONNECTOR TYPE	CONNECTOR LENGTH	MODEL NUMBER
90° Elbow	5 Meters	PS182-5-90
Straight	5 Meters	PS182-5-ST



### **Numatics FRL** Accessories and Options



## Reclassifiers



H40-08 pictured

#### Application

The Numatics Reclassifier is an exhaust coalescing filter/silencer. Its design removes oil mist and reduces noise from exhaust ports on pneumatic air valves, cylinders, and air control systems at extremely high flow rates

The Numatics Reclassifier can be mounted to exhaust ports on any valve or manifold using a common exhaust base or by combining exhaust ports. Mounting it vertically fully utilizes the oil-catching sump surrounding the filter element and provides easy draining.

#### Features

- 99% oil removal efficiencies
- 25 dBA noise reduction
- high exhaust flow rates
- low differential back pressures

#### Specifications

Maximum temperature: 125° F (52° C) CV rating (30 Series): 6 Maximum pressure: 100 PSIG (7 bar) CV rating (40 Series): 10

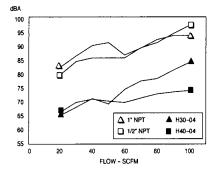
#### Air Flow vs. Back Pressure

#### PSIG 5 4 3 2 H30 Series H40 Series 0 50 150 200 250 100 FLOW - SCFM Flow Rate Based on 100 PSIG Inlet

#### • top performer in automated paint systems

- 1 micron filtration
- manual or continuous drain option
- metric threads available

#### Air Flow vs. Sound Level



#### Reclassifiers

#### ► Element Replacement Kits

includes filter element only				
kit #	description			
EKF30H	30 Series, 1 micron coalescer			
EKF40H	40 Series, 1 micron coalescer			

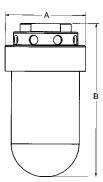
#### ➤ Bowl Replacement Kits

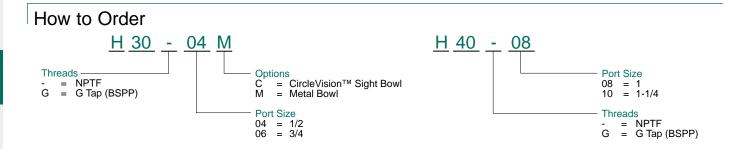
includes bowl and o-ring				
kit # description				
BKF30	30 Series, polycarbonate bowl			
BKF30C	30 Series, CircleVision <sup>™</sup> bowl			
BKF30M	30 Series, metal bowl			
BKC40 40 Series, polycarbonate bowl				

## Dimensions

top dimensions = inches bottom dimensions (in parenthesis) = millimeters

MODEL	А	В
H30-04	2.5 (64)	7 (178)
H30-06	2.5 (64)	7 (178)
H40-08	3.75 (95)	7.245 (184)
H40-10	3.75 (95)	7.245 (184)







## Tank Drain Trap



J30-06CH pictured



#### Application

The Numatics Heavy Duty Tank Drain Trap is designed to automatically expel condensed moisture and compressor carryover liquids with a float design from compressed air systems, without the use of electricity, whenever liquids accumulate.

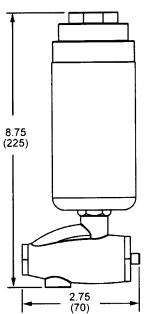
#### Features

- CircleVision<sup>™</sup> bowl allows 360<sup>o</sup> view
- Heavy duty drain prevents clogging
- Pushbutton manual override

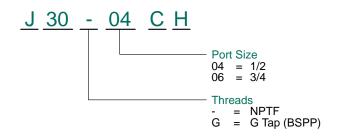
#### Specifications

Maximum Pressure: Minimum Pressure: Bowl Capacity: 250 PSIG (17 bar) 30 PSIG (2 bar) 8.5 oz

#### Dimensions



## How to Order







## **Electronic Drain Valves**



EDV-04-110AC pictured

#### Application

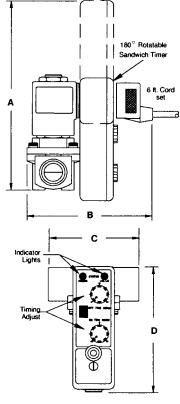
Eliminate the manual draining of air lines with the EDV Series Electronic Drain Valve from Numatics. The EDV Series valve is designed to remove condensation from filters, receiver tanks, separators, drip legs, drain traps, and dryers in electronically controlled intervals. The EDV valve is available in 1/4, 3/8, and 1/2 sizes. The large orifice allows even the largest rust and pipe scale particles to be easily expelled. Standard model includes a 110 volt AC solenoid, 6 ft (2 m) power cord, and grounded plug. An EDV valve can be installed virtually anywhere.

#### Specifications

#### Valve

- Function: 2 way, NC, solenoid valve
- Valve Design: pilot operated diaphragm valve
- Port Sizes: 1/4, 3/8
- Orifice: 5/16" (8mm) 1.12 Cv 1/2" (12mm) 2.45 Cv
- Operating Pressure: 20-300 PSIG (1.3-20 bar)
- Solenoid: continuous duty
- Mounting: any position
- Body Material: brass
- Timer
- Material: plastic polyamid
- Interval Timer: 1-45 sec
- 'On' Timer: .25-25 sec
- Voltage: 12-230 V AC/DC
- Frequency: 50/60 Hz
- Power Rating: 10 watt
- Enclosure: NEMA 4 / IP65
- Ambient Temp: 130° F (55° C)
- Lights
- Left Indicator: power on
- Right Indicator: solenoid engineered

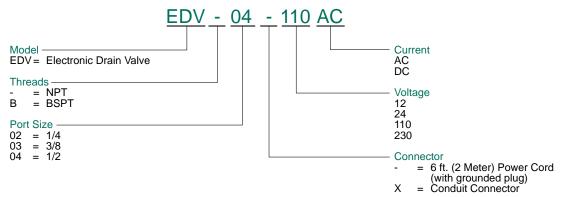
#### Dimensions



PORT SIZ	ZE A	В	С	D
1/4,3/8	5.75	3.5	2.25	3.75
	(146)	(89)	(57)	(95)
1/2	6.0	3.5	2.75	3.75
	(152)	(89)	(70)	(95)

dimensions in inches (millimeters in parentheses)

## How to Order







## Inline Disposable Filter



PHD-02 (left) and PLS-B (right) pictured

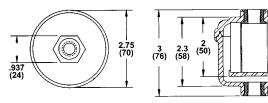
#### Application

The Inline Disposable Filter Combines a rugged compact housing with the low-cost advantages of a disposable filter. The Valox housing provides a long-life and trouble-free application and the disposable nature of the element makes disassembly and cleaning unnecessary. Available in HEPA or particulate grade media. The Mini-Inline Disposable Filter is equipped with dual barbs which fit most applications. It is perfectly suited for point-of-use filtration and monitoring of instruments, combining a rugged compact housing with a low-cost micro-pore filter. The element housing provides a durable and trouble-free application and its disposable nature makes disassembly and cleaning unnecessary. Available in two different particulate grades.

#### Features

- Inline Disposable Filter
- Rugged Valox housing
- Brass inserts
- Inner support core which protects element from collapse
- Spin welded seal no adhesives or chemicals
- Thermally bonded end caps on elements
- Miniature Inline Disposable Filter
- Dual barb sizes (1/4 and 11/64)
- Rated burst pressure at 125 PSI
- Rated temperature at 125° F (52° C)
- Rugged polyurethane housing
- Compatible with many chemicals
- Depth-loading media provides long life

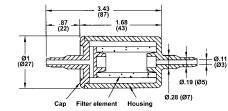
## PH Series Dimensions (millimeters in parenthesis)



### PH Series Flow Rates

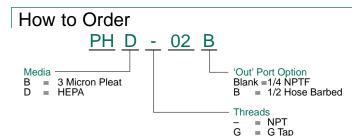
MODEL	PSI	PSID	SCFM
		0.5	20.5
PH*-O2*	30	1.0	25.0
		1.5	32.0
PH*-02*	50	0.5	22.0
		1.0	30.0
		1.5	41.0





## PL Series Flow Rates

PRESSURE PSIG	PLS-B FLOW (SCFH) @ 1.5 PSID	PLU-B FLOW (SCFH) @ 1.5 PSID
1	33	43
20	61	71
40	80	90
60	95	105
80	110	120
100	134	144
120	172	182





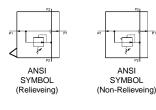




## Miniature Manifold Regulator MR02 Series



MR02R-01G pictured shown assembled and individually



#### Application

The MR02 Series Miniature Manifold Regulator offers the flexibility necessary for many of today's applications. The MR02 Series allows several regulators to be chained together while maintaining a constant primary pressure to each regulator.

A system equipped with the Miniature Manifold Regulator can help reduce operation costs by reducing unnecessary downstream pressures and improve efficiencies by keeping them in one, convenient location for easy adjustment.

#### Features

- · Can be installed as an individual or manifold unit
- Standard output pressure 0 -125 PSIG
- 3 available outlet/gauge ports (one in front, one in back, and one in the bottom)
- · Integral mounting holes allow for easy panel mounting
- Connects easily without adapters or independent manifold system
- Standard 5 mm tamper resistant adjustment
- High flow capability in relation to compact size (2.7" height x 1" square)
- Relieving or non-relieving models

#### Specifications

P1 Ports: 1/8 NPTF Outlet/Gauge Ports: 10-32 UNF Temperature Range: 40 -120 F (4-50 C) Max Inlet Pressure: 200 PSIG (14 Bar) Weight: .15 lbs (68 grams) \*\*SCFM w/100 PSI inlet set @ 75: 5 scfm \*\*SCFM w/100 PSI inlet set @ 60: 4 scfm \*\*SCFM w/100 PSI inlet set @ 40: 3 scfm Body material: Aluminum

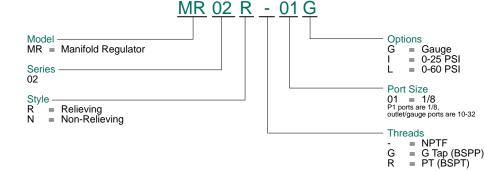
\*\* based on a 25% pressure drop from set

#### **Optional Accessories**

ITEM	PART NO.
23mm Gauge "G" Option	NG23-M
10-32 - 1/8 NPTF Adapter	134-034
10-32 - 1/8 O.D Barb Fitting	134-236
10-32 - 1/4 O.D Barb Fitting	134-234

Each Regulator includes an R02K assembly kit which includes (1) 10-32 pipe plug, (1) 1/8 pipe plug, (1) P1 port o-ring, (2) connector screws

## How to Order



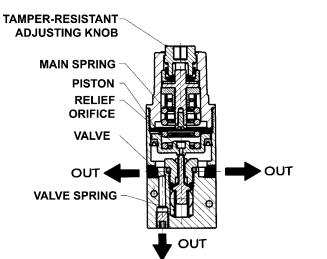


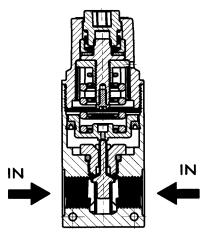


## Miniature Manifold Regulator

MR02 Series

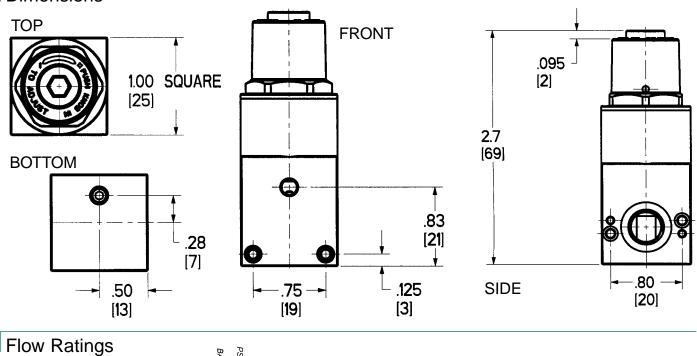
Product Cross Section

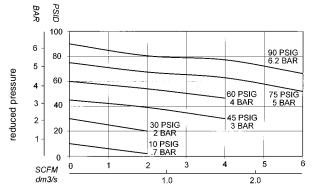




air flow

Dimensions









## **Oxygen Concentrator Regulator**

#### Application

The 03 series specialty miniature regulator is designed for applications requiring precision control at a very low cost. Used primarily in OEM applications, the 03 series can be applied in applications using air, nitrogen, oxygen, water, and other inert gases/fluids. Its lightweight all plastic design allows use in many specialty environments. This regulator has been applied successfully in many different markets including:

Oxygen: concentrators, analyzers, anesthesia

Adhesive: Applicators, metering equipment

Paint: spray systems, head control

Water service: filtration, control, aeration

Test equipment: leak test, air gauging, flow test

#### Features

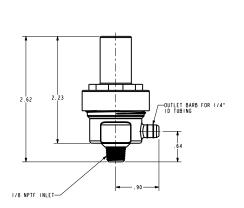
- Flows accurate to 0.1 psi in low flow applications
- Four spring ranges available as a standard. 0-15 psi, 0-30 psi, 0-60 psi, 0-100psi.
- Relieving or non relieving models.
- Tamper-resistant or adjustable designs available.
- Body Design Features
   101 /102 series
- Barb fitting outlet designed for use with 1/4 inch id tubing allows fast assembly.
- Threaded 1/8 supply is male eliminates extra fitting.
- Tamperproof or preset knob. 201 / 202 series
- Barb fitting outlet designed for use with 1/8 inch id tubing allows fast assembly.
- Manifold inlet and outlet ports.
- Quick assembly with fixed height dimension.
- Tamperproof or preset knob.

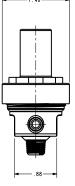
#### **Specifications**

Temperature Range:40-120F (4-50C)Max inlet Pressure:150 PSIG (10bar)Weight:SCFM with 100psi inlet set at 75 psi: 70 lpmSCFM with 100psi inlet set at 60 psi: 50 lpmSCFM with 100psi inlet set at 40 psi: 30 lpmSCFM with 100psi inlet set at 10 psi: 10 lpmBody Material:Delrin

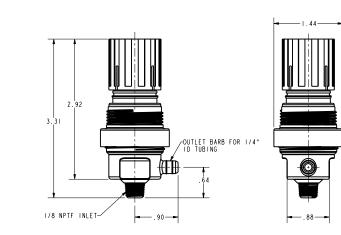
Dimensions in inches (millimeters in parenthesis)

#### R03N-101





## R03N-102





R03N-202



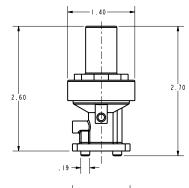
## Oxygen Concentrator Regulator

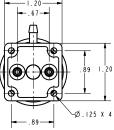
Dimensions in inches (millimeters in parenthesis)

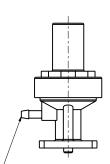




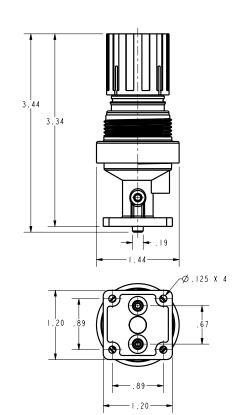
ZTRIANGULAR TAMPER RESISTANCE SOCKET

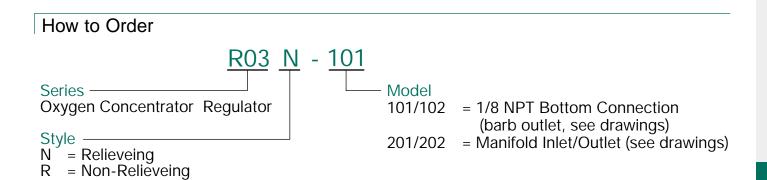






BARB FOR 1/8" ID TUBING







## Gauges



GA300 pictured



214-194 pictured



Numatics FRL Accessories and Options



#### Application

Numatics gauges are widely used on compressors, filter/regulators ('piggybacks'), water pumps, paint sprayers, and a variety of other applications for measuring the pressure of the air passing through the component.

Numatics Liquid Filled pressure gauges provide maximum service life for your pneumatic gauge applications. Each glycerine filled model is designed to prevent harmful environments or severe vibration from causing premature gauge failure.

#### Features

 Utilizes a Power Flex movement with polyester segment, contributing to longer gauge life.

• ABS (Acrylonitrile, Butadiene, Styrene) casing is ideal for rugged applications and harsh environmental conditions

• Full view polycarbonate window for better dial visibility.

#### Specifications

All Numatics Gauges Sizes: 1.5", 2" Case: Black ABS Composite Ring: None Window: Polycarbonate Dial: Green, Red, and Black on White Background Pointer: Black Aluminum Socket: Brass Liquid Filled Gauges Liquid Used: Glycerine Connection: Center Back Mount

#### Available Models

Numatics Gauges

MODEL	FACE	THREAD	PRESSURE RANGE	PRESSURE RANGE
	DIAMETER	SIZE	(PSIG)	(BAR)
GB005	2.0"	1/4 NPT	0-5	0-0.5
RB005	2.0"	1/4 BSPT	0-5	0-0.5
GB015	2.0"	1/4 NPT	0-15	0-1.0
RB015	2.0"	1/4 BSPT	0-15	0-1.0
GA030	1.5"	1/8 NPT	0-30	0-2.0
RA030	1.5"	1/8 BSPT	0-30	0-2.0
GA060	1.5"	1/8 NPT	0-60	0-4.0
RA060	1.5"	1/8 BSPT	0-60	0-4.0
GA100	1.5"	1/8 NPT	0-100	0-7.0
RA100	1.5"	1/8 BSPT	0-100	0-7.0
GA160	1.5"	1/8 NPT	0-160	0-11.0
RA160	1.5"	1/8 BSPT	0-160	0-11.0
GA300	1.5"	1/8 NPT	0-300	0-20.0
RA300	1.5"	1/8 BSPT	0-300	0-20.0
GB030	2.0"	1/4 NPT	0-30	0-2.0
RB030	2.0"	1/4 BSPT	0-30	0-2.0
GB060	2.0"	1/4 NPT	0-60	0-4.0
RB060	2.0"	1/4 BSPT	0-60	0-4.0
GB100	2.0"	1/4 NPT	0-100	0-7.0
RB100	2.0"	1/4 BSPT	0-100	0-7.0
GB160	2.0"	1/4 NPT	0-160	0-11.0
RB160	2.0"	1/4 BSPT	0-160	0-11.0
GB300	2.0"	1/4 NPT	0-300	0-20.0
RB300	2.0"	1/4 BSPT	0-300	0-20.0

#### Numatics 14 Series Manifold Regulator Gauges

MODEL	FACE	THREAD	PRESSURE RANGE	PRESSURE RANGE
	DIAMETER	SIZE	(PSIG)	(BAR)
GB060A	1.5"	1/4 NPT	0-60	0-4.0
RB060A	1.5"	1/4 BSPT	0-60	0-4.0
GB160A	1.5"	1/4 NPT	0-160	0-11.0
RB160A	1.5"	1/4 BSPT	0-160	0-11.0

#### Numatics Liquid-Filled Gauges

Hamaloo Elquia Finoa Odagoo				
MODEL	FACE	THREAD	PRESSURE RANGE	PRESSURE RANGE
	DIAMETER	SIZE	(PSIG)	(BAR)
214-194	1.5"	1/8	0-160	0-11
214-195	2.0"	1/4	0-160	0-11
214-196	1.5"	1/8	0-60	0-4



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