

High-Flow VANGUARD Externally Piloted Regulators

PR180M Models Port Sizes: 3/4, 1, 1-1/4, 1-1/2



Model Shown: PR180M-6G

- ◆ Inline mounting.
- ◆ Diaphragm-type design.
- ◆ Self-relieving.
- ◆ Pressure gauge.
- ◆ **NPTF** port threads; optional **SAE** or **BSPP** threads.
- ◆ @ 80 psi with 15 psi back pressure the relief is 6.25 scfm - Needs control regulator that relieves more than this.

Note: Pilot (control) regulators (order seperately).

- ◆ General purpose applications order R56M-2, R60-2, R67-2, R100-2, or R380-3
- ◆ Precision applications order IR100-2, R57M-2, IR380-3 or ER valve

SPECIFICATIONS

Ambient/Media Temperature:

40° to 175°F (4° to 79°C).

Body: Aluminum.

Dome: Zinc.

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: 0 to 200 psig (0 to 14 bar).

NOTE: Outlet pressure depends on the selection of the pilot regulator.

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (14 bar); 1/4 NPT gauge ports front and rear.

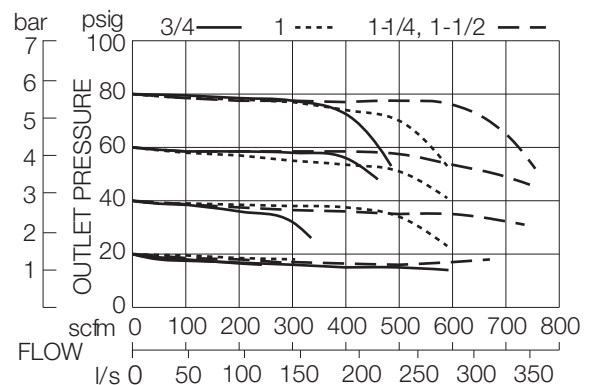
Seals: Nitrile.

Valve: Aluminum.

Valve Cap: Nylon.

FLOW CHART

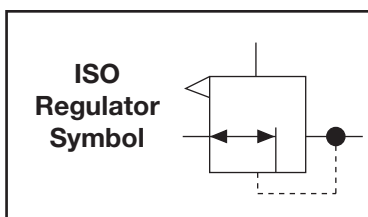
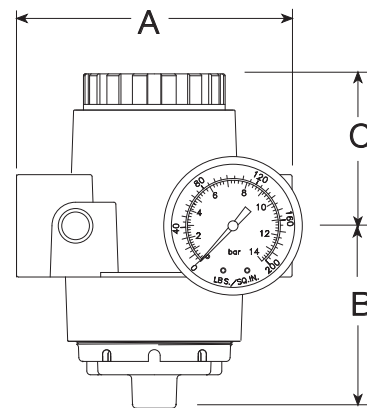
Inlet Pressure: 100 psig (7 bar)



DIMENSIONS inches (mm)

Ports	A	B	C	Depth †	Weight † lb (kg)
3/4 1	4.4 (111)	2.9 (74)	2.4 (62)	2.8 (71)	1.88 (0.85)
1-1/4 1-1/2	4.9 (124)	3.2 (81)	2.1 (54)	2.8 (71)	2.25 (1.02)

† Less gauge.



ORDERING INFORMATION

Change the letters in the sample model number below to specify the regulator you want.

NOTE: Order a pilot operator such as **R55-2**, **R56-2**, or **IR100-2** separately.

PR180M - 6 Y G W

<p>PORT SIZE</p> <p>3/4 NPTF 6</p> <p>1 NPTF 8</p> <p>1-1/4 NPTF 10*</p> <p>1-1/2 NPTF 12*</p> <p>1-1/16-12 UNF SAE S12</p> <p>1-5/16-12 UNF SAE S16</p> <p>1-5/8-12 UNF SAE S20</p> <p>1-7/8-12 UNF SAE S24</p>	<p>Y</p>	<p>G</p>	<p>W</p>	<p>PORT TYPE</p> <p>NPTF threads Leave Blank</p> <p>BSPP threads W</p> <p>OPTION</p> <p>None Leave Blank</p> <p>0-200 PSI Gauge G</p> <p>OPTION</p> <p>None Leave Blank</p> <p>Non-relieving A</p>
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* No mounting bracket available.

High-Flow VANGUARD External Relief Piloted Regulator

PRH180M Models Port Sizes: 3/4, 1, 1-1/4, 1-1/2



Model Shown: PRH180M-8G

SPECIFICATIONS

Ambient/Media Temperature:

40° to 175°F (4° to 79°C).

Body: Aluminum.

Dome: Zinc.

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: 0 to 200 psig (0 to 14 bar).

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (14 bar); 1/4 NPT gauge ports front and rear.

Seals: Nitrile.

Valve: Aluminum.

Valve Cap: Nylon.

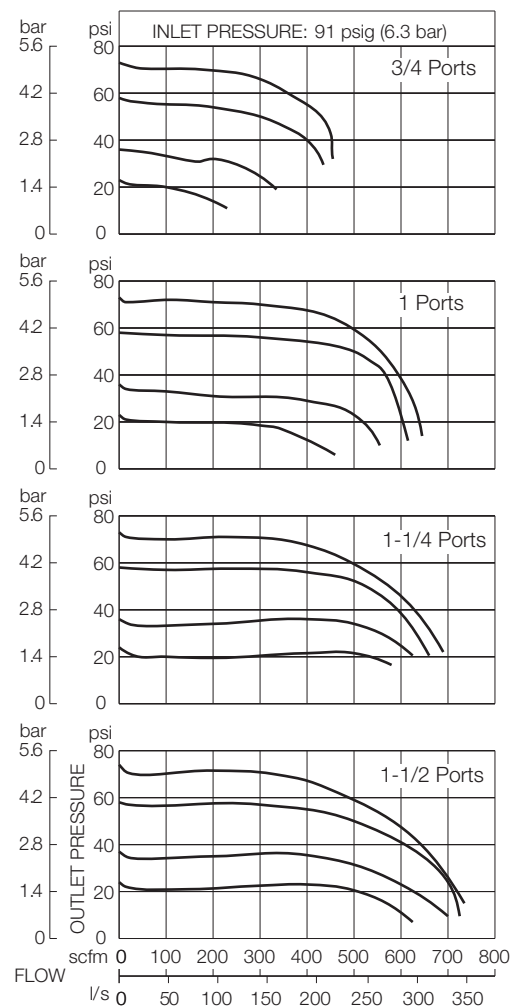
Note: Pilot (control) regulators (order separately).

- ◆ General purpose applications order R56M-2, R60-2, R67-2, R100-2, or R380-3
- ◆ Precision applications order IR100-2, R57M-2, IR380-3 or ER valve

High-Flow external relief piloted regulator separate control air from exhaust air.

- ◆ Inline mounting.
- ◆ Diaphragm-type design.
- ◆ Self-relieving.
- ◆ Pressure gauge.
- ◆ **NPTF** port threads; optional **SAE** or **BSP** threads.
- ◆ @ 80 psi with 15 psi back pressure the relief is 10 scfm.

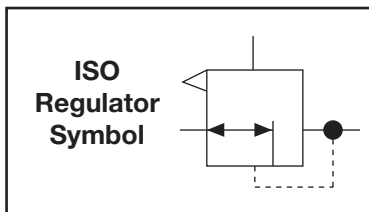
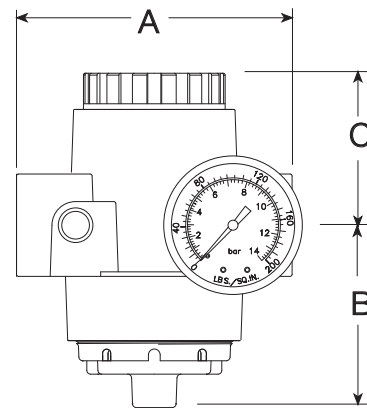
FLOW CHARTS



DIMENSIONS inches (mm)

Ports	A	B	C	Depth †	Weight †
					lb (kg)
3/4	4.4	2.9	2.4	2.8	1.88
1	(111)	(74)	(62)	(71)	(0.85)
1-1/4	4.9	3.2	2.1	2.8	2.25
1-1/2	(124)	(81)	(54)	(71)	(1.02)

† Less gauge.



ORDERING INFORMATION

Change the letters in the sample model number below to specify the regulator you want.

NOTE: Order a pilot operator such as **R55-2, R56-2,** or **IR100-2** separately.

PRH180M - 6 G W

PORT SIZE

- 3/4 NPTF..... 6
- 1 NPTF 8
- 1-1/4 NPTF10*
- 1-1/2 NPTF12*
- 1-1/16-12 UNF SAE S12
- 1-5/16-12 UNF SAE S16
- 1-5/8-12 UNF SAE S20
- 1-7/8-12 UNF SAE S24

PORT TYPE

- NPTF threads Leave Blank
- BSPP threads W

OPTION

- None Leave Blank
- 0-200 PSI Gauge G

* No mounting bracket available.

High-Flow VANGUARD High-Relief Externally Piloted Regulator

HPR180 Models Port Sizes: 3/4, 1 & 1-1/4



Model Shown: HPR180-8G

SPECIFICATIONS

Ambient/Media Temperature:

0° to 158°F (-18° to 70°C).

Body and Dome: Zinc.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Glass filled Nylon.

Fluid Media: Compressed air.

Inlet Pressure:

10 psig (0.7 bar) minimum.

400 psig (27.6 bar) maximum.

Outlet Pressure: 0 to 250 psig (0 to 17.3 bar).

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar);

Optional 0 to 600 psig (0 to 41.4 bar).

3/4-NPTF Inlet/Outlet ports, 1/2-NPTF gauge ports.

1-NPTF Inlet/Outlet ports, 1/2-NPTF gauge ports.

1-1/4-NPTF Inlet/Outlet ports, 1/2-NPTF gauge ports.

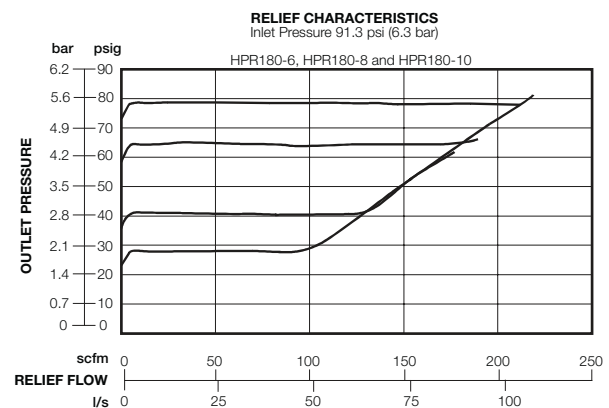
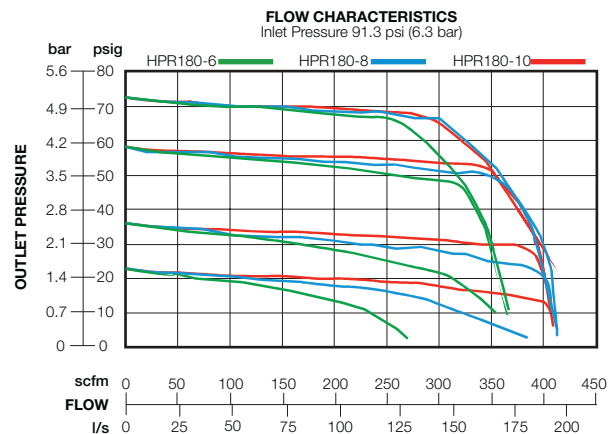
Designed for systems that require high flow, relief and pressure regulation. Can be installed in an inaccessible location with a control regulator in an accessible location.

- ◆ Inline mounting.
- ◆ Diaphragm-type design.
- ◆ Optional pressure gauges.
- ◆ Flow rates exceed 400 scfm.
- ◆ NPTF port threads; optional BSPP threads.
- ◆ High relief characteristics up-to 200 scfm.

Note: Pilot (control) regulators (ordered separately).

- ◆ General purpose applications order **R56M-2, R60-2, R67-2, R100-2, or R380-3**
- ◆ Precision applications order **IR100-2, R57M-2, IR380-3 or ER valve.**

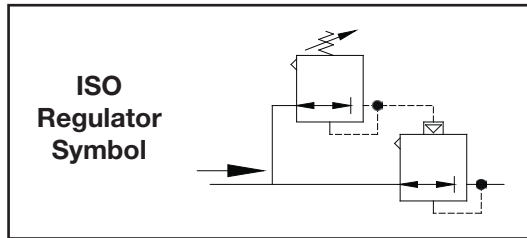
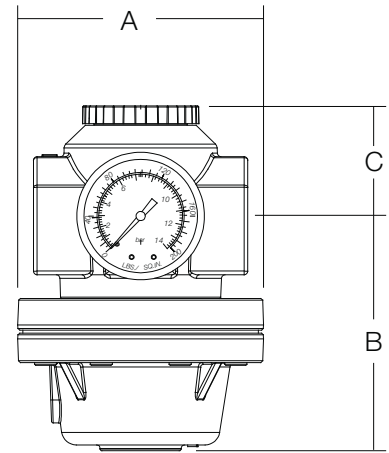
FLOW CHARTS



DIMENSIONS inches (mm)

A	B	C	Depth †	Weight † lb (kg)
4.18 (106.0)	3.99 (101.3)	1.87 (47.5)	4.18 (106)	6.44 (3.0)

† Less gauge.



ORDERING INFORMATION

Change the letters in the sample model number below to specify the regulator you want.

NOTE: Order a pilot operator such as **R55-2**, **R56-2**, or **IR100-2** separately.

HPR180 - 10 G W

PORT and GAUGE PORT SIZE

- 3/4 NPTF Inlet/Outlet 6
1/2-NPTF gauge ports.
- 1 NPTF Inlet/Outlet 8
1/2-NPTF gauge ports.
- 1-1/4 NPTF Inlet/Outlet 10
1/2-NPTF gauge ports.

PORT TYPE

- NPTF threads Leave Blank
- BSP threads W

OPTION

- None Leave Blank
- 0-200 PSI Gauge * G
- 0-600 PSI Gauge * G1

* = Reducing bushings are used in any gauge ports other than 1/4".