

**Pilot Operated Regulator
1/4", 3/8", 1/2", 3/4", 1" and 1-1/4" Port Sizes**

- Designed for systems that require high flow or pressure regulation at an inaccessible location.
- A pilot regulator (ordered separately) controls the outlet pressure of the pilot operated regulator.
- For general purpose applications, order an R72 or R07 pilot regulator.
- For precision applications, order an R40, R41, or 11-104 pilot regulator.
- Exceptionally high relief flow.


11-042 Pilot Operated Regulator Ordering Information

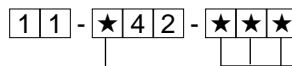
Models listed include relieving diaphragm and PTF threads. Also order a pilot regulator.

Port Size	Model	Flow* scfm (dm ³ /s)	Weight lb (kg)
1/4"	11-042-001	120 (57)	2.8 (1.3)
3/8"	11-042-002	120 (57)	2.7 (1.2)
1/2"	11-042-003	120 (57)	2.6 (1.2)
3/4"	11-042-007	300 (142)	4.8 (2.2)
1"	11-042-008	300 (142)	4.6 (2.1)
1-1/4"	11-042-009	300 (142)	4.3 (2.0)

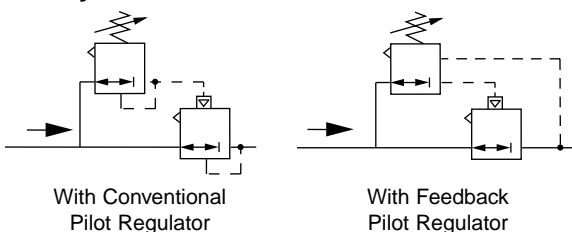
* Typical flow with 100 psig (0.7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 5 psig (0.35 bar) from set.

11-042 Alternative Models

Threads	Substitute
PTF	0
ISO G parallel	8
ISO G Rc	9



With Gauge	Substitute
1/4" main ports	004
3/8" main ports	005
1/2" main ports	006
3/4" main ports	010
1" main ports	011
1-1/4" main ports	012

ISO Symbols

Warning - Feedback Pilot Regulators

The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If it is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot operator is turned clockwise.

See Section ALE-24 for Accessories



Technical Data

Fluid: Compressed air

Inlet pressure range: 10 psig (0.7 bar) to 400 psig (27.6 bar) *

* For best performance, inlet pressure should be at least 10 psig (0.7 bar) greater than the desired regulated pressure, but must not exceed the specified maximum.

Operating temperature: 0° to 175°F (-20° to 80°C) **

** Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Typical flow with a conventional pilot regulator at 100 psig (6.9 bar) inlet pressure,

90 psig (6.3 bar) set pressure, and a droop of 5 psig (0.35 bar) from set:

1/2" ports: 120 scfm (57 dm³/s)

1" ports: 300 scfm (142 dm³/s)

Port sizes:

Main	Gauge	Pilot	Exhaust
1/4"	1/4"	1/4"	3/4"
3/8"	3/8"	1/4"	3/4"
1/2", 3/4", 1", 1-1/4"	1/2"	1/4"	3/4"

Thread type

Main and gauge ports: PTF, ISO G, or ISO Rc

Pilot port: PTF with PTF main ports, ISO G with ISO G and ISO Rc main ports

Exhaust port: PTF with PTF main ports, ISO G with ISO G and ISO Rc main ports

Materials

Body: Zinc

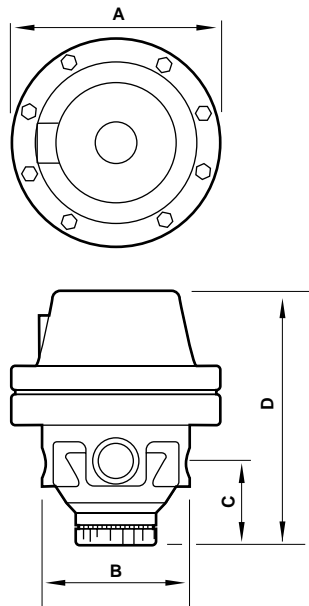
Bonnet: Aluminum

Bottom plug: Acetal

Valve: Brass

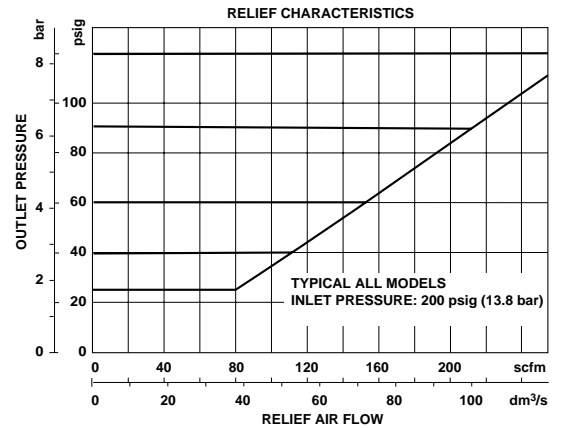
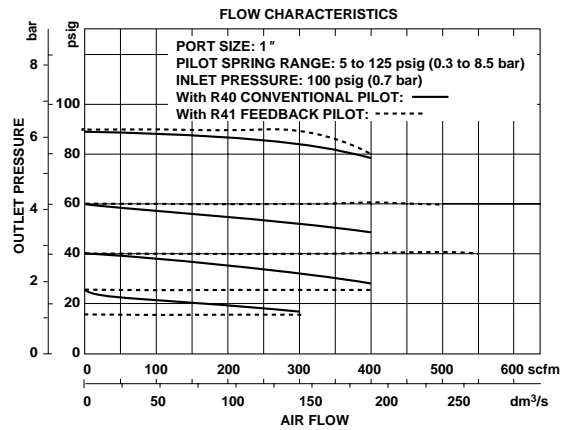
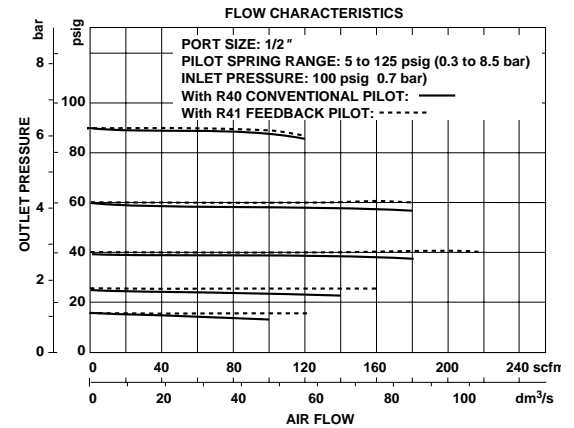
Elastomers: Nitrile

All Dimensions in Inches (mm)



Port Size	A	B	C	D
1/4", 3/8", 1/2"	4.16 (106)	2.71 (69)	1.48 (38)	5.07 (129)
3/4", 1", 1-1/4"	4.16 (106)	3.65 (93)	1.86 (47)	5.97 (152)

Typical Performance Characteristics



Service Kits

Type	Part number
Major kit for 1/4", 3/8", 1/2" ported units	4158-01
Major kit for 3/4", 1", 1-1/4" ported units	4158-02
O-ring kit for 1/4", 3/8", 1/2" ported units	4158-03
O-ring kit for 3/4", 1", 1-1/4" ported units	4158-04

Major kit contains filter screen, diaphragm, and all o-rings.
 O-ring kit contains filter screen and all o-rings.