

## 11-018 Precision Air Pressure Regulator 1/4" Port Size

- Fast response
- Minimum overshoot during flow changes
- Constant bleed feature provides maximum sensitivity to system changes
- Relieving feature allows reduction of downstream pressure when the system is dead-ended



### Technical data

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**Fluid:** Compressed air, neutral gases

NOTE: Contact technical support for use with other media.

**Note: 5 micron prefiltration and oil-free air required.**

#### Inlet pressure range\*

Low Pressure Models: 8 to 150 psig (0.55 to 10.3 bar)

High Pressure Models: 10 to 200 psig (0.7 to 13.8 bar)

\* Inlet pressure must be at least 7 psig (0.5 bar) greater than the adjusted outlet pressure for proper operation.

#### Operating temperature\*\*:

32° to 160°F (0° to 70°C)

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

#### Repeatability

Low Pressure Models: 0.02 psig (0.001 bar) for flow change;

0.05 psig (0.004 bar) when turning supply off and on

High Pressure Models: 0.08 psig (0.006 bar) for flow change;

0.16 psig (0.011 bar) when turning supply off and on

Constant bleed feature: Under dead-end conditions, a small, constant bleed of pilot air will escape thru the relief passage in the bottom plug. This will be accompanied by a slight residual outlet pressure of 1 to 4 inches H<sub>2</sub>O (2.5 to 10 millibar).

#### Gauge ports:

1/4" PTF

#### Materials

Body and bonnet: zinc

Main valve: polycarbonate

Main valve seat: PTFE

Pilot valve: stainless steel

Pilot valve seat: aluminum

Main diaphragm: nitrile

Pilot diaphragm

Low Pressure Models: 302 SS

High Pressure Models: nitrile

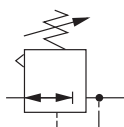
Bottom plug: brass

Elastomers: nitrile,

chloroprene, polyurethane

### Ordering information

Models listed have PTF threads, hand wheel adjustment, and relieving diaphragm. A gauge is not included.

ISO Symbol	Port Size	Outlet Pressure Adjustment Range*	Model Number	Flow scfm (dm <sup>3</sup> /s)	Weight lbs (kg)
 Relieving	1/4"	0.4 to 10 psig (0.03 to 0.69 bar)	11-018-146 (low pressure)	12 (5.66)†	1.4 (0.64)
	1/4"	1.0 to 60 psig (0.1 to 4.1 bar)	11-018-100 (low pressure)	12 (5.66)†	1.4 (0.64)
	1/4"	3 to 150 psig (0.2 to 10.3 bar)	11-018-110 (high pressure)	12 (5.66)††	1.4 (0.64)

\* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

† Typical flow with 100 psig (7 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.125 psig (0.009 bar) droop from set.

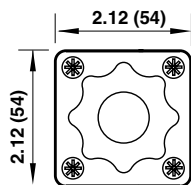
†† Typical flow with 200 psig (14 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.250 psig (0.017 bar) droop from set.

### Service Kits

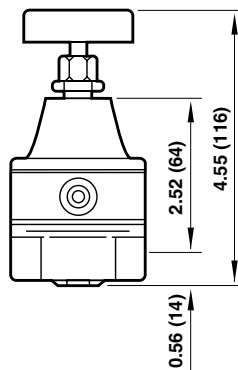
Type	Part number
Low Pressure Models	2787-01
High Pressure Models	2787-02

Service kit includes o-rings, seals, pilot diaphragm, pilot spring, main diaphragm, main valve, main valve seat, diffuser screen, constant bleed orifice and orifice filter

Panel mounting hole diameter: 0.47" (12 mm)  
Maximum panel thickness: 0.094" (2.4 mm)



Dimensions in  
inches (mm)



## Typical Performance Characteristics

