

filters

pilots



accessories

**PILOTS, FILTERS & ACCESSORIES**

# flowgrid

## Mooney® Pilots Series 20™, 20H, and 20L

The Series 20™ Flowgrid® pilot is a reversible pressure-control regulator designed primarily for use as a control pilot with unloading-type pilot systems for pressure-reducing (PRV), backpressure (BPV or Relief), and differential-pressure (DPV) applications. The Series 20 pilot is designed for both gas and liquid applications.



Series 20HS Pilot



Series 20 Pilot



Series 20L-B Pilot



Series 20L-A Pilot

Series 20 Brass construction with 3 to 450 psig control pressure range

Series 20H High pressure brass construction with a 200 to 900 psig control pressure range

Series 20S Stainless steel construction with a 3 to 450 psig control pressure range














Series 20HS High pressure, stainless steel construction with a 200 to 900 psig control pressure range.

Series 20L-B Bronze construction with 5 i.w.c. to 8 psig control pressure range

Series 20L-A Aluminum construction with 5 i.w.c. to 8 psig control pressure range

Other features include:

- Easy removal of the cartridge permits quick disassembly and assembly which is universal to all pilots.
- Reversing valve stem converts pressure reducing to back pressure
- Pressure boost feature
- Ease of spring change
- Cap cover protects adjusting screw
- Sealed spring case
- Flexibility with six different springs to cover pressure settings from 3 psi to 900 psig
- Convert Series 20 to 20H with a high pressure diaphragm kit

Spring Color	Type 20™ Pilot	Outlet Pressure Range
 WHITE	20L	5-15 i.w.c
 BROWN	20L	10-40 i.w.c.
 YELLOW	20L	1-3 psig
 ORANGE	20L	2-5 psig
 GRAY	20L	4-8 psig
 RED	20	3-12 psig
 CADMIUM	20	10-40 psig
 BLUE	20	25-90 psig
 PURPLE	20	60-200 psig
 BLACK	20	100-260 psig
 WHITE/GREEN	20	200-450 psig
 BLACK	20HP	200-520 psig
 WHITE/GREEN	20HP	400-900 psig



*Pilot available in:*  
 20L Aluminum & Bronze, 20 Brass and SST,  
 20H Brass and SST

## SPECIFICATIONS

	20 & 20H Pilot	
<b>Max Inlet Pressure</b>	1,500 psig	
<b>Max Loading Connection Pressure</b>	1,500 psig	
<b>Max Outlet Pressure</b>	1,500 psig	
<b>Set Pressure Range</b> Standard Pilot HP Pilot	3 psi - 450 psig 200 - 900 psig	
<b>Max Emergency Sensing Pressure</b>	1,000 psig	
<b>Max Spring Housing Pressure</b>	1,000 psig	
<b>Port Size</b>	0.15 inches 0.17 inches	
<b>Temperature Range</b>	-20°F to 150°F	
<b>Capacity</b>	<b>0.17</b>	<b>0.15</b>
C <sub>g</sub> max	11.2	9.6
C <sub>v</sub> max	0.29	0.25
C <sub>1</sub>	38	38

## Mooney® Filters

### Type 30™, 30A, 30S

The Mooney® filter is designed to remove particulates in the pilot supply that could effect the restrictor or variable orifice in the pilot. The filter can be used in a variety of gas and liquid applications.



## Mooney® Restrictor

### Type 24™ and 24S

The Mooney® restrictor is an integral part of a pilot system for the Flowgrid® regulator. It is usually located in the pilot supply and affects the response rate, stability, and sensitivity of the regulator. The restrictor is available in both steel and stainless steel construction with a stainless steel rotor. The Type 24™ and 24S restrictor can be used in many liquid and gas applications.



## Mooney® Inspirator

### Type 26™ Inspirator

The use of the Type 26™ inspirator in place of the Type 24™ restrictor maximizes flow through the Flowgrid valve at times when the pressure differential across the valve falls below the published valve minimum differential pressure for full capacity.

The Type 26 inspirator incorporates a special nozzle design that reduces the loading (spring case) pressure to a value below the outlet pressure allowing the valve to fully open even when the pressure differential is very small. The inspirator acts like a differential amplifier with a gain of approximately 3.



	Type 24™ Restricting Valve	Type 30™ Filter	Type 26™ Inspirator
<b>Pressure Rating</b>	1,500 psig	1,500 psig	1,500 psig
<b>Temperature Range</b>	-20°F to 150°F	-40°F to 175°F	-20°F to 150°F
<b>Max Differential</b>	1,500 psig	1,500 psig	1,500 psig
<b>Flow Coefficient</b>	<b>Large</b> <b>Std.</b>		
C <sub>g</sub> min	1.60	.75	4.0
C <sub>g</sub> max	7.3	5.8	
C <sub>g</sub>		19	
C <sub>1</sub>		35	
C <sub>v</sub>	0.18	.54	
<b>Filter Element</b>		10 Micron	
<b>Material</b>	SST & Steel	Alum., Steel & SST	Steel

# filters accessories

# pilots

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