



# Mastic Regulators

## Features and Benefits

- The air pilot regulator can be mounted directly onto the diaphragm actuator or remotely, as most convenient to the operation.
- Controls the pressure to dispensing devices or protects the components from excessive pressure which may be developed by the supply pumps.
- Accepts up to 5000 psi (345 bar; 34.5 MPa) upstream pressure and will regulate from 500 to 3500 psi (34 to 241 bar; 3.4 to 24.1 MPa) downstream pressure.
- Provides simple on-off robotic interface with constant flow rate.
- Ambient and heated models available

## Typical Applications

- Body Shop - Structural Adhesive Bonding, Body Sealing
- Stamping Plant – Anti-Flutter (extrude or mastic drop), Hem Flange Bonding
- Paint Shop – Seam sealing – Underbody, Interior, Exterior, Underbody Deadener Spray, Anti-Chip Spray
- Industrial

## Application Methods

- Extrude
- Stream
- Spray
- Shower
- Swirl

## Typical Fluids Handled

- Silicone
- PVC
- Epoxy



**961635  
Ambient Mastic  
Regulator**



**918447  
Heated Mastic  
Regulator**

# Regulators

## Technical Data

### Stainless Steel, Waterbase-Compatible, High Pressure Fluid Regulators

	<b>Models: 238890, 238889</b>	<b>Models: 238892, 238891</b>	<b>Models: 238894, 248090, 238893</b>	<b>Model: 244734</b>
Type	238890: spring-operated with fluid pressure gauge 238889: spring-operated with EZ Flush plug	238892: spring-operated with fluid pressure gauge 238891: spring-operated with EZ Flush plug	238894 and 248090: air-operated with fluid gauge 238893: air-operated with EZ Flush plug	Air-operated with pressure sensor ports
Maximum fluid inlet pressure	6000 psi (41 MPa, 414 bar)	6000 psi (41 MPa, 414 bar)	6000 psi (41 MPa, 414 bar)	6000 psi (41 MPa, 414 bar)
Regulated fluid outlet pressure range	500–3000 psi (3.4–21 MPa, 34–207 bar)	3000–5000 psi (21–34 MPa, 207–345 bar)	500–4000 psi (3.4–28 MPa, 34–276 bar)	500–4000 psi (3.4–28 MPa, 34–276 bar)
Maximum inbound air pressure	-	-	100 psi (0.7 MPa, 7 bar)	100 psi (0.7 MPa, 7 bar)
Maximum operating temperature	120° F (50° C)	120° F (50° C)	120° F (50° C)	120° F (50° C)
Wetted Parts	238889 – 304, 316, 17-4 passivated stainless steel, nickel- and cobalt-bound tungsten carbide, PTFE 248090 - ceramic	304, 316, 17-4 passivated stainless steel, nickel- and cobalt-bound tungsten carbide, PTFE	304, 316, 17-4 passivated stainless steel, nickel- and cobalt-bound tungsten carbide, PTFE	304, 316, 17-4 passivated stainless steel, nickel- and cobalt-bound tungsten carbide, PTFE
Inlet/outlet	3/8 npt (f)	3/8 npt (f)	3/8 npt (f) 1/2 npt (f) for 248090	3/8 npt (f)
Fluid pressure gauge (models 238890, 238892, and 238894)	0–3000 psi (0-21 MPa, 0-207 bar)	0–5000 psi (0-34 MPa, 0-345 bar)	0–5000 psi (0-34 MPa, 0-345 bar)	-
Maximum flow in 65 cp material	2 gpm (7.6 lpm)	2 gpm (7.6 lpm)	2 gpm (7.6 lpm)	2 gpm (7.6 lpm)
Maximum fluid viscosity	Up to 15,000 cp	Up to 15,000 cp	Up to 15,000 cp	Up to 15,000 cp
Weight	7.0 lb (3.2 kg)	7.0 lb (3.2 kg)	11.7 lb (5.3 kg)	11.7 lb (5.3 kg)
Adjustment tool	6 mm hex wrench	6 mm hex wrench	-	-
Instruction Manual	308647	308647	308647	308647

### Air Requirements for Air-Operated Regulators (Models 238893, 238894 and 248090)

The following table shows the approximate air pressure needed to regulate the air-operated regulator to a given fluid outlet pressure.

AIR PRESSURE REGULATED			FLUID OUTLET PRESSURE		
psi	MPa	bar	psi	MPa	bar
28	0.19	1.9	1000	7	69
49	0.34	3.4	2000	14	138
70	0.48	4.8	3000	21	207
90	0.62	6.2	4000	28	276

# Regulators

## Technical Data

### Air- and Spring-Operated, High Pressure Mastic Fluid Regulators

	<b>Models: 961635, C58318, 244740</b>	<b>Models: 243700, C07220, 918447</b>	<b>Models: 246642, 246687</b>	<b>Models: 246643, 246688</b>	<b>Model: 903958</b>
Type	ambient, air-operated	246700 & 918447: temperature conditioned/ heated, air-operated C07220: ambient, air-operated	ambient, air-operated	temperature conditioned/ heated, air-operated	ambient, spring- operated high range
Regulated fluid pressure range	250 – 4500 psi (1.7 – 31.0 Mpa, 17 – 310 bar)	250 – 3500 psi (1.7 – 24.1 Mpa, 17 – 241 bar)	100 – 4500 psi (0.7 – 31.0 Mpa, 7 – 310 bar)	100 – 3500 psi (0.7 – 24.1 Mpa, 7 – 241 bar)	High range (standard): 1000 to 4500 psi (70 to 310 bar) with low range spring kit: 400 to 1000 psi (28 to 70bar)
Maximum fluid inlet pressure	5000 psi (34.4 MPa, 344 bar)	5000 psi (34.4 MPa, 344 bar)	5000 psi (34.4 MPa, 344 bar)	5000 psi (34.4 MPa, 344 bar)	5000 psi (34.4 MPa, 344 bar)
Maximum fluid temperature	140° F (60° C)	400° F (202° C)	140° F (60° C)	400° F (202° C)	140° F (60° C)
Pressure drop (at 400 psi inlet pressure and 1.5 gpm)	Viscosity of 25,000 CPS, 10 PSID Viscosity of 80,000 CPS, 10 PSID	Viscosity of 25,000 CPS, 10 PSID Viscosity of 80,000 CPS, 10 PSID	Viscosity of 25,000 CPS, 10 PSID Viscosity of 80,000 CPS, 10 PSID	Viscosity of 25,000 CPS, 10 PSID Viscosity of 80,000 CPS, 10 PSID	Viscosity of 25,000 CPS, 10 PSID Viscosity of 80,000 CPS, 10 PSID
Wetted parts	961635, 244740 – zinc-plated carbon steel, brass, stainless steel, Viton, tungsten carbide C58318: 303, 304, 316 stainless steel, tungsten carbide, UHMWPE, ethylene propylene, PTFE	zinc-plated carbon steel, brass, stainless steel, Viton, tungsten carbide	zinc-plated carbon steel, brass, stainless steel, Buna-N, urethane tungsten carbide	zinc-plated carbon steel, brass, stainless steel, Viton, tungsten carbide	zinc-plated carbon steel, brass, stainless steel, Buna-N, urethane tungsten carbide
Inlet (one)	3/4 npt (f) at side	3/4 npt (f) at side	3/4 npt (f) at side	3/4 npt (f) at side	3/4 npt (f) at side
Outlet	3/4 npt (f) at side and bottom	3/4 npt (f) at side and bottom	3/4 npt (f) at side only	3/4 npt (f) at side only	3/4 npt (f) at side and bottom
Weight	17.75 lb (7.9 kg)	17.75 lb (7.9 kg)	17.75 lb (7.9 kg)	17.75 lb (7.9 kg)	13.5 lb (6.1)
Instruction Manual	307517	307517	307517	307517	307517