

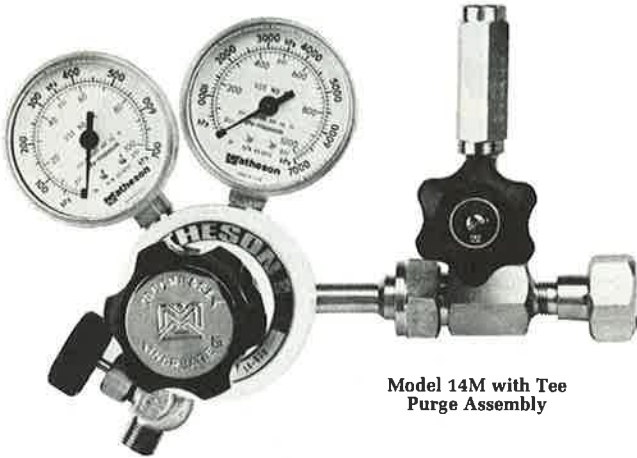
# Models 11-14 Series

## Corrosion Resistant Regulators

### DESCRIPTION

Matheson has established two basic regulators for handling corrosive gases. One style is constructed of an anodized aluminum body, 316 stainless steel internal parts, and resistant plastics for the diaphragm and seating surfaces. This style regulator, represented by Models 11, 12, 13 and 14. This series includes the Model 14M, which is designed for use with gas mixtures. These regulators provide excellent pressure control, high flow and sensitive operation even at low inlet pressure, and trouble-free mechanical operation. The body will not tarnish in laboratory atmospheres.

All Models 11 through 14 regulators have specially vented bonnets with hose or tubing connection available for venting hazardous materials safely in case of diaphragm failure.



Model 14M with Tee Purge Assembly

### DESIGN FEATURES

- **Anodized Aluminum Body** . . . Good corrosion resistance at a reasonable price.
- **FEP Teflon coated neoprene diaphragm** . . . Affords sensitive pressure control with good corrosion resistance.
- **Stainless Steel outlet valve** . . . Allows shut-off or flow control at no extra cost.
- **Vented Bonnet design** . . . Allows the venting of hazardous material to a safe location in the unlikely event of a diaphragm failure.

### MATERIALS OF CONSTRUCTION

Body:	Anodized aluminum
Diaphragm:	FEP Teflon on Neoprene
Seat:	Teflon
Nozzle:	316 stainless steel
Bonnet:	Aluminum-epoxy coated
Inlet:	303 stainless steel
Gauge(s):	2½" dial stainless steel Bourdon tube
Outlet:	303 stainless steel needle valve (103), ¼" NPT male Hose connection supplied

### SPECIFICATIONS

Maximum inlet pressure:	11, 12, 13: 400 psi (2,760 kPa) 14: 1000 psi (6,900 kPa) 14M: 2400 psi (16,560 kPa)
Temperature range:	-20 to 120°F (-30 to 50°C)
Flow:	11, 12, 14: 400 lpm (840 cfh) 13: 200 lpm (420 cfh)
Inlet port in body:	½"-27
Vent port in bonnet:	5/16"-32
Shipping weight:	4 lbs. 8 oz. (2 kg)
Overall dimensions:	8" w x 7½" h x 6" d (20 x 19 x 15 cm)

### APPLICATIONS

Corrosive Gas Service	Normal Inlet Pressure (psig)	Model Recommendation
Ammonia	114	12-240*
Carbonyl Sulfide	160	11-330*
Dimethylamine	15	13-240
Hydrogen Sulfide	250	11-330
Methyl Mercaptan	15	13-330
Mixtures	2000	14M-CGA
Monomethylamine	20	13-240
Nitric Oxide	500	14-660
Sulfur Dioxide	35	13-660*
Trimethylamine	20	13-240
Vinyl Chloride	30	13-290*
Vinyl Fluoride	355	12-320
Vinyl Methyl Ether	28	13-290

\*For low delivery pressure requirements, refer to Model 3710 Series regulators on page 133.

### MODELS & PRICES

Model	Delivery Pressure Range	Gauge Pressure Ranges		Purge Assembly Recommendation	Price
		Delivery	Inlet		
11-CGA	0-100	4-80	None +	4744	\$215.00
12-CGA	0-100	4-80	None +	4744**	215.00
13-CGA	0-100	4-35	None +	4744	215.00
14-CGA	0-100	4-80	0-1000	4754-CGA*	287.00
14M-CGA	0-100	4-80	0-3000	4754-CGA*	287.00

+ Cylinder Pressure Gauge for up to 600 PSIG Available

\*\*4744A Recommended for Ammonia or Amine Service

\*Shipped separately unassembled to regulator

### OPTIONS

Prices

Stainless Steel Purge Assembly (for details see page 183).

For regulators without a cylinder pressure gauge

Model 4744 . . . . . \$125.00

For regulators with a cylinder pressure gauge use

Tee Purge Assembly Model 4754 (CGA) . . . . . 183.00

Check Valve (see page 169).

For Models 11, 13, 14, 14M, use Model 401V . . . . . 38.00

For Model 12 use Model 401N . . . . . 38.00

Cylinder Pressure Gauge — Model 63-3262 range 0-600 psig. 65.00

Ultrasonic Cleaning . . . . . 23.00