

# Fisher™ High capacity industrial regulators



## FISHER™ Types MR105 and MR108



### Description

Types MR105 and MR108 regulators provide fast, accurate and reliable pressure control for a variety of liquid and gas applications. A simple and durable design is utilized to withstand dirt and debris common in many liquid applications without sticking and without compromising shut-off performance. Applications include boiler feed water, cooling water, lubrication oil and any critical service where the fluid is not free of impurities.

### Product Advantages

- Available constructions to meet NACE MR0175-2003 and NACE MR0103 requirements for Sour Gas Service Capability
- ANSI/FCI 70-3-2004 Class VI Shutoff
- Large flow
- Travel indicator for Type MR105
- Fast response
- Multiple end connection options
- Suitable for high-temperature applications up to 250°F / 121°C

### Features

- **Actuator Type and Maximum Emergency Casing Pressure:**  
Low Pressure Actuator: 70 psig / 4.8 bar  
High Pressure Actuator: 400 psig / 27.6 bar<sup>(1)</sup>
- **Outlet Pressure Ranges:**  
5 to 300 psig / 0.35 to 20.7 bar<sup>(2)</sup>
- **Temperature Capabilities:**  
Nitrile (NBR): -20 to 180°F / -29 to 82°C  
Fluorocarbon (FKM): 20 to 250°F / -7 to 121°C  
EPDM<sup>(3)</sup>: -20 to 225°F / -29 to 107°C
- **Downstream Control Line Connection Size:** 1/2 NPT
- **Maximum Pressure Over Setpoint to Avoid Internal Parts Damage:**  
Low Pressure Actuator: 20 psig / 1.4 bar  
High Pressure Actuator: 120 psig / 8.3 bar

1. For constructions with Fluorocarbon (FKM) diaphragm, maximum outlet and emergency casing pressures are limited to 230 psig / 15.8 bar or the body rating limit, whichever is lower.
2. For high-pressure actuator constructions with Fluorocarbon (FKM) diaphragm, maximum set pressure is limited to 150 psig / 10.3 bar.
3. EPDM is limited to 20 to 250°F / -7 to 121°C when used with Low Pressure Actuator.



# Industrial regulating solutions

Emerson pressure reducing and backpressure regulators are available in a wide range of sizes and constructions to satisfy your application requirements.

## Pressure Reducing



### Model: Type MR105

- **Body Size:** NPS 1, 2, 3 and 4
- **Outlet Pressure Range:** 5 to 300 psig / 0.34 to 20.7 bar<sup>(2)</sup>
- **Maximum Inlet Pressure:** 400 psig / 27.6 bar
- **Operation Method:** Direct-Operated
- **Body Material:** Cast Iron, Steel, Stainless Steel
- **Bulletin No.:** 71.1:MR105



### Model: MR95 Series

- **Body Size:** NPS 1/4, 1/2, 3/4, 1, 1-1/2 and 2
- **Outlet Pressure Range:** 2 to 400 psig / 0.14 to 27.6 bar
- **Maximum Inlet Pressure:** 600 psig / 41.4 bar
- **Operation Method:** Direct-Operated
- **Body Material:** Cast Iron, Steel, Stainless Steel, Hastelloy® C, Monel®
- **Bulletin No.:** 71.1:95



### Model: Type 1098-EGR

- **Body Size:** NPS 1, 2, 3, 4, 6, 8 x 6, 12 x 6
- **Outlet Pressure Range:** 14 in. w.c. to 300 psig / 35 mbar to 20.7 bar
- **Maximum Inlet Pressure:** 400 psig / 27.6 bar
- **Operation Method:** Pilot-Operated
- **Body Material:** Cast Iron, Steel, Stainless Steel
- **Bulletin No.:** 71.1:1098-EGR

## Backpressure



### Model: Type MR108

- **Body Size:** NPS 1, 2, 3 and 4
- **Control Pressure Range:** 5 to 300 psig / 0.34 to 20.7 bar<sup>(2)</sup>
- **Maximum Inlet Pressure:** 400 psig / 27.6 bar<sup>(1)</sup>
- **Operation Method:** Direct-Operated
- **Body Material:** Cast Iron, Steel, Stainless Steel
- **Bulletin No.:** 71.4:MR108



### Model: MR98 Series

- **Body Size:** NPS 1/4, 1/2, 3/4, 1, 1-1/2 and 2
- **Relief Pressure Range:** 2 to 375 psig / 0.14 to 25.9 bar
- **Maximum Inlet Pressure:** 400 psig / 28 bar
- **Operation Method:** Direct-Operated
- **Body Material:** Cast Iron, Steel, Stainless Steel, Hastelloy® C, Monel®
- **Bulletin No.:** 71.4:98



### Model: Type 63EG-98HM

- **Body Size:** NPS 2, 3, 4, 6 and 8 x 6
- **Relief Pressure Range:** 15 to 375 psig / 1.0 to 25.9 bar
- **Maximum Inlet Pressure:** 450 psig / 31.0 bar
- **Operation Method:** Pilot-Operated
- **Body Material:** Steel, Stainless Steel, Hastelloy® C, Monel® and Alloy 20
- **Bulletin No.:** 71.4:63EG-98HM

1. For high-pressure actuator constructions with Fluorocarbon (FKM) diaphragm, maximum outlet and emergency casing pressures are limited to 230 psig / 15.8 bar or the body rating limit, whichever is lower.  
2. For high-pressure actuator constructions with Fluorocarbon (FKM) diaphragm, maximum set pressure is limited to 150 psig / 10.3 bar.

Hastelloy® C is a mark owned by Haynes International, Inc.  
Monel® is a mark owned by Special Metals Corporation

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