



MEGR-2104 AND 2106 GAS REGULATORS

Instruction Manual- Look Inside For:

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ATTENTION:

The installation of this device must be in accordance with NFPA standards No. 54 & 58, along with all federal, state, and local codes. All personnel installing this device should be trained on the hazards associated with combustible gases and fluids. MEC assumes no responsibility from damage or injury that may result from servicing or the improper installation of this regulator.



WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm.

OPERATION:

The MEGR-2104 and MEGR-2106 are high capacity, pounds to pounds, industrial gas regulators. They are designed to conform to UL Standard 144 for use with LP Gas. The maximum supply pressure is 250 PSIG. The maximum output pressure is printed on the regulator nameplate. This regulator is not intended for use in pressure applications below 3 PSIG. The operating temperature range is subject to the style of regulator that is used (Standard, NH3, or High Temp version).

INSTALLATION:

WARNING: Relieve system pressure prior to maintenance.

Ensure all gas lines are free from dirt and scale. Shut off the gas. The MEGR-2104 and MEGR-2106 can be mounted at any angle without affecting operation. Install the regulator as close as possible to the instrument that it is to supply. Avoid using undersized fittings that will limit the flow through the regulator and cause downstream pressure drop. Apply a minimum amount of pipe compound to the male threads of the inlet and outlet piping. The regulator must be oriented in the correct flow direction or internal damage to the regulator may occur. The two side NPT gauge ports marked "GA" can also be used as optional output ports, but with decreased flow delivery.

CAUTION:

The MEGR-2104 and MEGR-2106 are non-relieving regulators and thus cannot exhaust excess pressure at the regulator. In order to establish an accurate output pressure it may be necessary to cycle the downstream flow or to set the regulator at a slight flow.

MAINTENANCE:

Because the MEGR-2104 and MEGR-2106 are assembled and tested at the factory to conform to UL Standard 144, any maintenance or repair should be in accordance with this listing as well as any other applicable regulations. Regulator parts showing wear should be replaced as necessary. The procedure below describes how to disassemble the MEGR-2104 and MEGR-2106 for parts replacement and inspection. Assembly is the reverse of this procedure.

1. Turn the Adjustment Screw counterclockwise to remove spring tension.
2. Loosen the Bonnet Screws and separate the Bonnet from the Body.
3. Remove the Spring Guide and Spring.
4. Unhook the Diaphragm Assembly from the Poppet Stem.
5. Loosen Bottom Plug by turning counterclockwise, and remove the O-Ring and Bottom Plug.
6. Remove Poppet Spring and Poppet Assembly.

HIGH PRESSURE REGULATORS

MEGR-2104 AND MEGR-2106 SERIES

APPLICATION:

The MEGR-2104 and MEGR-2106 Series adjustable high-pressure regulators offer a wide selection of available pressure ranges. High pressure regulators are typically used to reduce tank pressure to an intermediate pressure for use by another regulator. They may be used as high-pressure regulators on distribution systems when used in conjunction with first-stage downstream regulators.

It may be used as a first-stage regulator when set at 10 PSIG (0.69 bar) or less. The FNPT tapped side outlets can be used to install a pressure gauge. This series contains the "T" version, which contain materials that are compatible with anhydrous ammonia service.



MEGR-2104

MEGR-2106

| Part No. | Service | Inlet & Outlet Connections | Recommended Delivery Pressure Range (PSIG) | Capacity determined @ set pressure of PSIG* | Flow Capacity** |
|---------------|---------------------|----------------------------|--|---|----------------------------|
| MEGR-2104NL/4 | LP-Gas | 1/2" F. NPT | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2104NM/4 | | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |
| MEGR-2104NH/4 | | | 45-125 | 60 | 14,500,000 BTU/hr. LPG |
| MEGR-2104VL/4 | LP-Gas | | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2104VM/4 | (High Temp) | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |
| MEGR-2104TL/4 | NH ₃ *** | | 3-25 | 20 | 7,000 CFH NH ₃ |
| MEGR-2104TM/4 | | | 25-50 | 30 | 8,000 CFH NH ₃ |
| MEGR-2104TH/4 | | | 45-125 | 60 | 9,300 CFH NH ₃ |
| MEGR-2106NL/6 | LP-Gas | 3/4" F. NPT | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2106NM/6 | | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |
| MEGR-2106NH/6 | | | 45-125 | 60 | 14,500,000 BTU/hr. LPG |
| MEGR-2106VL/6 | LP-Gas | | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2106VM/6 | (High Temp) | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |
| MEGR-2106TL/6 | NH ₃ *** | | 3-25 | 20 | 7,700 CFH NH ₃ |
| MEGR-2106TM/6 | | | 25-50 | 30 | 7,700 CFH NH ₃ |
| MEGR-2106TH/6 | | | 45-125 | 60 | 10,000 CFH NH ₃ |
| MEGR-2106NL/8 | LP-Gas | 1" F. NPT | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2106NM/8 | | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |
| MEGR-2106NH/8 | | | 45-125 | 60 | 14,500,000 BTU/hr. LPG |
| MEGR-2106VL/8 | LP-Gas | | 3-30 | 20 | 11,000,000 BTU/hr. LPG |
| MEGR-2106VM/8 | (High Temp) | | 25-50 | 30 | 14,000,000 BTU/hr. LPG |

*Set pressure is established with 100 PSIG inlet pressure and a flow of 500,000 BTU/hr. propane for LPG service and 180 CFH NH₃

**Capacity determined at 100 PSIG inlet; set pressure noted on chart at 20% droop

***Not CSA Listed

MEGR-2104 AND MEGR-2106 SPECIFICATIONS

Type: Adjustable/PSI
 Max. Inlet Pressure: 250 PSI
 Inlet Connection: 1/2", 3/4", or 1" FNPT
 Outlet Connection: 1/2", 3/4", or 1" FNPT
 Exterior Bonnet Finish: Red Urethane: Standard/High Temp Models; Green Urethane: NH₃ Models
 Exterior Body Finish: Gray Urethane
 Regulator Spring: Steel / Stainless Steel
 Stem Guide/Disk Holder: Stainless Steel
 Diaphragm: Fabric Reinforced Nitrile (NBR) for standard, FKM for High Temp., NBR with PTFE for NH₃
 Bonnet/Body Material: Die Cast Aluminum
 Vent: Non-Relieving
 Listings: CSA Listed



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