

## MR Series Central Systems

### PRODUCT DATA



#### Information

In enterprises where the central system is installed and available, the pressure of the gas coming from the source (fixed or mobile, tube pallets, cylinders or special containers) is reduced to the pressure level required by the central system with the high-pressure manifold with a regulator.

#### Features:

- It offers high compressed gas (Inert Gases) up to 600 Nm<sup>3</sup> /h and up to 230 bar inlet pressure.
- A maximum inlet pressure of 230 bar is reduced to outlet levels of 10 bar, 20 bar, or 40 bar.
- Equipped with 2 cylinder connections with valves, suitable for use with individual cylinders or cylinder bundles.
- Extension connections on both inlet sides allow additional cylinders or bundles to be connected to the system by purchasing extra cylinder valve connections.
- These are central systems equipped with two pressure regulators, two solenoid valves, pressure transmitters, and a control unit with alarm functions.
- The pressure values supplied to the left and right manifolds can be digitally monitored via the control unit.
- Thanks to the colored cylinder indicators on the control unit, the cylinder fill levels and which side is active can be monitored remotely.
- The system continuously monitors the cylinder pressure level; when the pressure drops to a critical point, the alarm alerts the user and automatically activates the other line, ensuring uninterrupted and safe gas flow.
- All components of the system are mounted on a high-strength stainless steel sheet.
- In oxygen systems, a flashback arrestor is installed before the ball valve on the outlet line.
- Check valves located at both cylinder connection valves prevent gas backflow, thereby enhancing system safety.
- Thanks to its compact design, it occupies minimal space.
- The safety relief devices located in the pressure regulators ensure safe venting of excess pressure in case of malfunction.

## Materials

Body: Brass (Forged)  
 Diaphragm: Stainless Steel (10-20 Bar Outlet) / Piston Type (40 Bar Outlet)  
 Cover: Brass (Forged)  
 Pressure-adjusting screw: Stainless Steel  
 Inlet Filter: Bronze & Sintered Stainless Steel  
 Connectors and Fittings: Brass, Stainless Steel  
 Plate: Stainless steel  
 Ball Valve: Stainless Steel

## Reference Standards

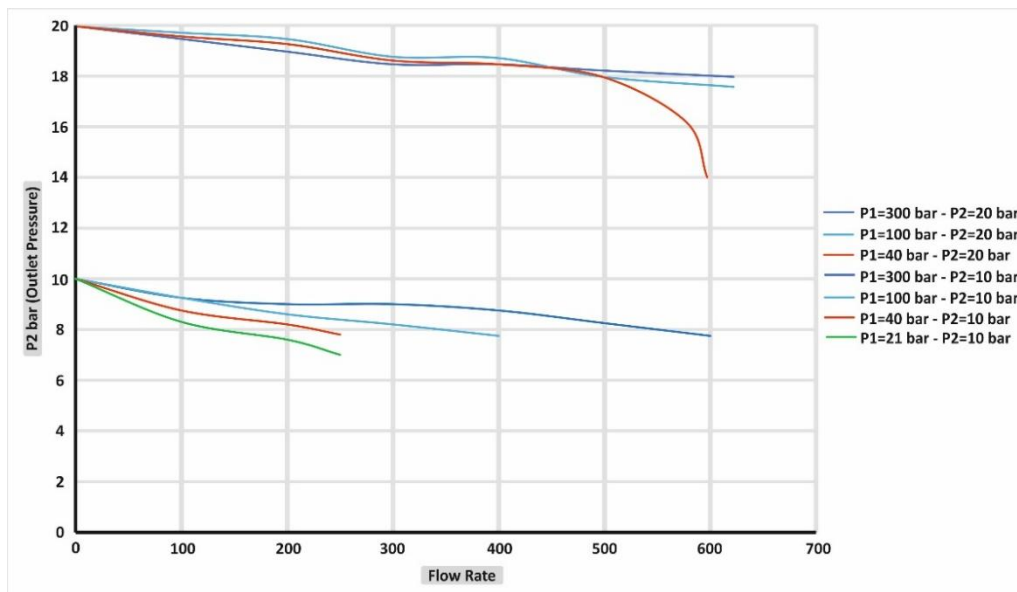
**ISO 7291:** Gas welding equipment - Pressure regulators for manifold systems used in welding, cutting and allied processes up to 300 bar  
**ISO 5171:** Gas welding equipment – Pressure gauges used in welding, cutting and allied processes  
**ISO 9539:** Gas welding equipment - Materials for equipment used in gas welding, cutting and allied processes  
**ISO 9090:** Gas tightness of equipment for gas welding and allied processes.

## Technical Specifications

Product	Gas Type	Standard	Inlet Connection	Outlet Connection	Inlet Pressure	Outlet Pressure	Flow Rate (Q1)
MR1100TO-10	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	0-10 bar	300 m <sup>3</sup> /h
MR1100TO-20	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	0-20 bar	420 m <sup>3</sup> /h
MR1100TO-40	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	0-40 bar	500 m <sup>3</sup> /h
MR1101TO-10	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	0-10 bar	285 m <sup>3</sup> /h
MR1101TO-20	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	0-20 bar	400 m <sup>3</sup> /h

**\*Q1= minimum inlet pressure – working pressure – (P1= 2P2+1-P2)**

## Flow Characteristics



## Certificates

- CE (Conformity Europe)



*\*You can reach our certificates from our website [www.yildizgaz.com.tr/en-US](http://www.yildizgaz.com.tr/en-US)*

## Cautions

Without our company's control or information, any changes should not be done on the pressure regulator. Please read the user manual carefully before using the product.