

# **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 (O, D, N, CO2) up to 600 Nm3 /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.
- While one side of the system is operating, the other side remains on standby. When the cylinder or bundle is emptied, the gas flow automatically switches to the other side, ensuring uninterrupted operation.
- The central lever can be turned upward or downward to select the active gas line.
- All components of the system are mounted on a high-strength stainless steel sheet.
- Thanks to the vent valves located on the inlet sides, the gas inside the system can be safely discharged before cylinder replacement or maintenance.
- 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 while its cost-effective structure reduces investment expenses.
- 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

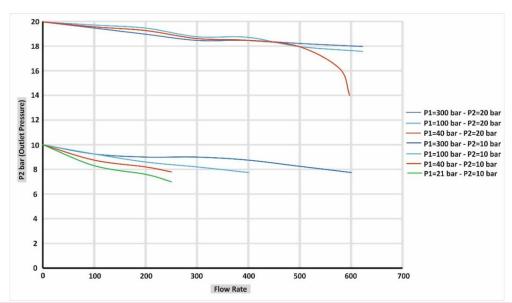
**ISO 9090:** Gas tightness of equipment for gas welding and allied processes.

## **Technical Specifications**

Product	Gas Type	Standard	Inlet Connection	Outlet	Inlet	Outlet	Flow Rate
				Connection	Pressure	Pressure	(Q1)
MR1100CO-10	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	10 bar	300 m <sup>3</sup> /h
MR1100CO-20	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	20 bar	420 m <sup>3</sup> /h
MR1100CO-40	Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	40 bar	500 m <sup>3</sup> /h
MR1101CO-10	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	10 bar	285 m <sup>3</sup> /h
MR1101CO-20	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	20 bar	400 m <sup>3</sup> /h
MR1101CO-40	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	40 bar	475 m <sup>3</sup> /h

<sup>\*</sup>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

## **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.