

YM Series - 5040

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, M, H) up to 550 Nm³ /h and up to 300 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 the inlet side allow additional cylinders or bundles to be connected to the system by purchasing extra cylinder valve connections.
- 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 backflow of gas, thereby enhancing system safety.
- Thanks to its compact design, it occupies minimal space while its cost-effective structure reduces investment expenses.
- Safety relief devices located in and after the pressure regulator ensure that any excess pressure is safely vented 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

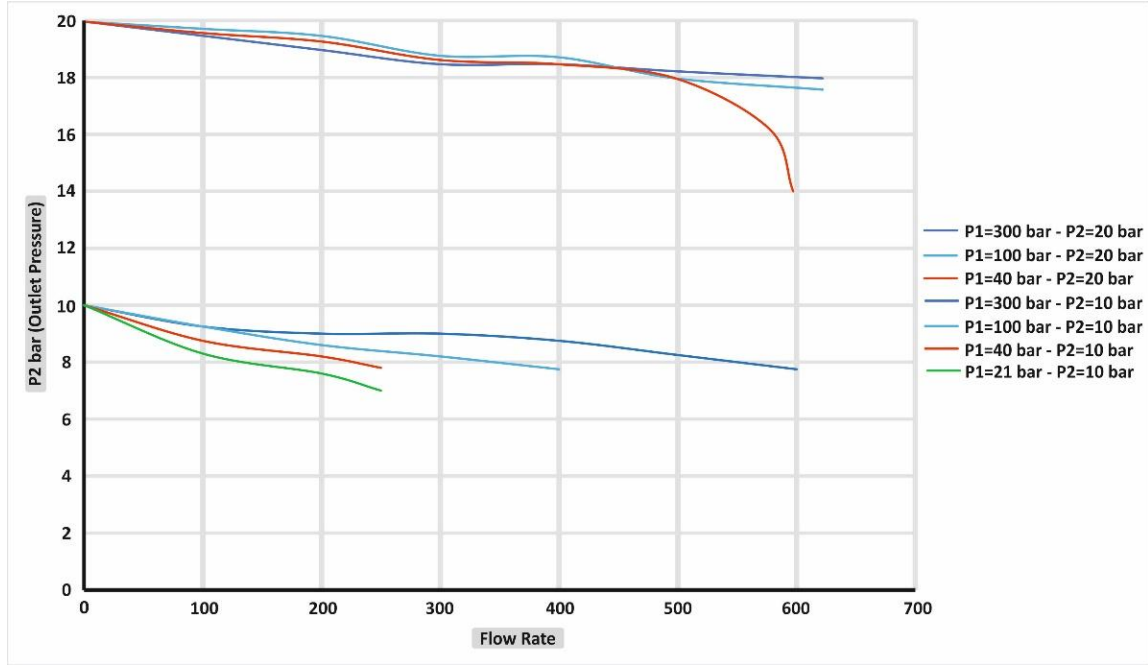
ISO 7291: Gas welding equipment - Pressure regulators for manifold systems used in welding, cutting and allied processes up 300 bar
ISO 5171: Gas welding equipment – Pressure gauges used in welding, cutting and allied processes
ISO 9539: Gas welding equipment - Materials for equipment used in gas welding, 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)
YM1100-410	Oxygen/Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	10 bar	300 m ³ /h
YM1100-420	Oxygen/Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	20 bar	420 m ³ /h
YM1100-440	Oxygen/Inert	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	40 bar	500 m ³ /h
YM1101-410	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	10 bar	285 m ³ /h
YM1101-420	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	20 bar	400 m ³ /h
YM1101-440	Oxygen	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	40 bar	475 m ³ /h
YM1111-4	Acetylene	EN ISO 7291	W21,80x1/14" LH	G 3/4" Male	0-25 bar	1,5 bar	22 m ³ /h
YM1120-4	Propane	EN ISO 7291	W21,80x1/14" LH	G 3/4" Male	0-25 bar	4 bar	45 m ³ /h
YM1142-410	Mix Gas/CO2	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	10 bar	242 m ³ /h
YM1142-420	Mix Gas/CO2	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	20 bar	340 m ³ /h
YM1142-440	Mix Gas/CO2	EN ISO 7291	W21,80x1/14"	G 3/4" Male	0-230 bar	40 bar	404 m ³ /h
YM1170-410	Hydrogen	EN ISO 7291	W21,80x1/14" LH	G 3/4" Male	0-230 bar	10 bar	1100 m ³ /h
YM1170-420	Hydrogen	EN ISO 7291	W21,80x1/14" LH	G 3/4" Male	0-230 bar	20 bar	1600 m ³ /h
YM1170-440	Hydrogen	EN ISO 7291	W21,80x1/14" LH	G 3/4" Male	0-230 bar	40 bar	1900 m ³ /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*

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.