

Smart Indicating Products Airgas® LaserPLUS™ Series Gas Panels

- Purifier Panels
- Line Regulator Panels
- PRP Laser Panels

Description: These unique, patented Smart Indicating products are specifically designed for the laser market. They protect resonator optics and help the laser maintain the top productivity. Airgas Smart Indicating products protect laser optics by maintaining gas stream purity and providing a visual indication of a problem when contaminants enter the gas stream. With a clean gas stream, the laser can generate an optimal beam and operate at peak performance and efficiency.

The Purifier and Pressure Regulation and Purification Panels (PRP Series) remove contaminants that enter the system during cylinder change out. They also prevent damage to the resonator if a wrong grade of gas is connected to the system. The Laser Indicating Purifiers are specifically designed for the high-purity laser gases required for these applications. They provide triple protection, indicating the removal moisture, oxygen and hydrocarbons.

These purifiers specifically address the potential damaging volume of hydrocarbons sometimes found in CO₂.

Gas Panels

AIRGAS® LASERPLUS™



Line Regulator Panel



Purification Panel



Premix Gas Pressure Regulation and Purification Panel

Purifier Materials	
Base Plate	Nickel-Plated Brass
Cartridge	Internal Structure: Borosilicate Glass & Aluminum Post
Housing	Polycarbonate Sleeve
Locking Ring	Chrome-plated Aluminum
O-Ring	Viton®

Regulator Materials	
Body	Nickel-Plated Brass
Bonnet	Nickel-Plated Brass
Seat	PCTFE and Teflon®
Diaphragm	316 Stainless Steel
Gauges	2½" Nickel-Plated Brass
Filter	316 Stainless Steel
Outlet Valve	Nickel-Plated Brass
Trim	Nickel-Plated Brass

Specifications for Regulators	
Weight	4 lbs
Maximum Rated Inlet Pressure	1,200 PSIG
Outlet Pressure Ranges	0-25, 0-50, 0-100 PSIG
Flow Capacity	7 Lt/Minute
Ambient Operating Temperature	-40° F to +165° F
Ports (3)	¼" FNPT
Inlet	¼" Compression Fitting
Outlet	¼" Compression Fitting
Decay Inlet Characteristic	0.04/100 PSI
Designed Leak Rate	2 x 10 ⁻⁸ ccs (helium)

Design Features

Safeguards Purity of Resonator Optics

provides protection of your optics from being contaminated by an improper cylinder of a lower grade of gas being connected
removes contaminants that can enter a system during cylinder change out

Maintains Laser Beam Quality

maintains constant beam after cylinder change out; no need to purge for hours after cylinder change out

Premix and Individual Gas Models

can be used for either premixed gases or individual gases; Single and triple base plates

Just One Purifier Needed to Purify Lasing Gases for Hydrocarbons, Oxygen, and Moisture.

saves time and money; assures best lasing performance; prevents laser optics from clouding, resulting in reduced beam quality

Fast, Easy Cartridge Exchange During Laser Operation

patented, quick-change base prevents contaminants from entering gas stream

Visual Indication of Presence of Oxygen, Moisture and Hydrocarbons

gives visual indication of contaminants in gas stream; color change indicates when cartridge needs to be replaced

Maintains Gas at 6.0 Grade or Higher; Protects Laser Power Output

increases productivity; lowers troubleshooting and maintenance costs
completely inert and diffusion-proof; eliminates laser beam degradation

Removes high levels of hydrocarbon contaminants sometime found in CO₂

Line regulator panel

provides final pressure regulation

AIRGAS® LASERPLUS™

Gas Panels

Smart Indicating Products Airgas® LaserPLUS™ Series Gas Panels Cont.

- Purifier Panels
- Line Regulator Panels
- PRP Laser Panels

Ordering Information Pressure Reducing and Purifier Panels

Product Number	Material	Gas Legs	Max Inlet Press. (psig)	Max Outlet Press. (psig)	Capacity (scfh @ Max Del. Press.)	Inlet Gauge Range (psig)	Shut Off Valve
Y40-L1D1GP	Brass	1	1200	100	190	0-400	Yes
Y40-L1D2GP	Brass	2	1200	100	190	0-400	Yes
Y40-L1D3GP	Brass	3	1200	100	190	0-400	Yes

Available Options Pressure Reducing and Purifier Panels

Product Number	Description
Y40-RES0303	Smart Purifier Replacement Cartridges 3/PKG
Y40-RES0301	Smart Purifier Replacement Cartridge 1/PKG
Y40-5004	Replacement 1/4" Tube Compression Fitting Brass / 2 Pack
Y40-5006	Replacement 1/4" Tube Compression Fitting SS / 2 Pack
Y40-5002	Replacement Purge Cap Set / 2 Pack

Ordering Information Purifier Panels

Product Number	Description	Material
Y40-LPP1	Single Regulator	Brass
Y40-LPP3	Three Gas Purifier Panel	Brass
Y40-RES0303	Smart Purifier Replacement Cartridges 3/PKG	
Y40-RES0301	Smart Purifier Replacement Cartridge 1/PKG	
Y40-B0050	Wall or Panel Mounting Bracket Set 2/PKG	

Ordering Information Line Regulator Panel

Product Number	Material	Gas Legs	Max Inlet Press. (psig)	Max Outlet Press. (psig)	Capacity (scfh @ Max Del. Press.)	Inlet Gauge Range (psig)	Shut Off Valve
Y40-L1D1G	Brass	1	1200	100	190	0-400	Yes
Y40-L1D2G	Brass	2	1200	100	190	0-400	Yes
Y40-L1D3G	Brass	3	1200	100	190	0-400	Yes