

# **Chem Master SGS620 Series**

6.0 Purity Single Stage Stainless Steel Piston Cylinder Regulator



The Chem Master SGS620 single stage piston cylinder regulators are designed for primary pressure gas control of corrosive, toxic and high purity gases up to grade 6.0 purity (99.9999%), on applications where slight pressure variation from decreasing cylinder pressure is acceptable.

- SGS621 Series | Single Stage Piston Cylinder Regulator, FKM Seal
- SGS622 Series | Single Stage Piston Cylinder Regulator, EPDM Seal



- Six port configuration
- Front and rear panel mounting capabilities
- Encapsulated seat design
- Low wetted surface area
- Full range of inlet and outlet fittings
- Side entry

Seal

#### MATERIAL

■ Body 316L Stainless Steel

■ Bonnet Nickel Plated Brass Barstock

■ Piston 316L Stainless Steel

■ Valve Seat PCTFE

■ Filter 10 Micron 316L Stainless Steel

\* Subject to cylinder connection – \*\* Cylinder Connection not included \*\*\* NACE and 3.1 material certificates available on request, please contact the sales office for further information.

FKM / EPDM

#### **SPECIFICATION**

■ Maximum Inlet Pressure 60 bar (870 PSI)

300 bar (4350 PSI) \*

■ Delivery Pressure Range 20 bar (300 PSI)

50 bar (725 PSI) 100 bar (1450 PSI) 200 bar (2900 PSI)

250 bar (3625 PSI)

Gauges

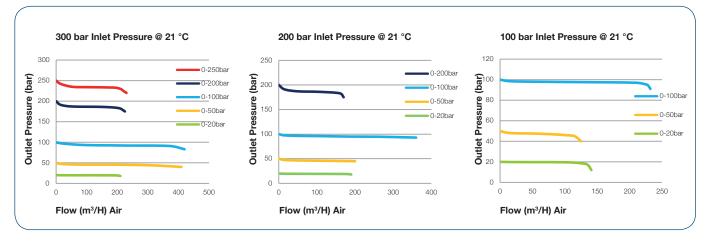
50mm (2") Diameter

1/4" NPT Female

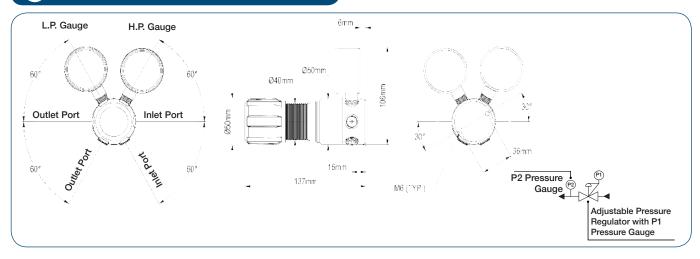
■ **Temperature Range** -20° C to +60° C (-4° F to +140° F)

■ Helium Leak Integrity 1 x 10<sup>-9</sup> mbar l/s
■ Weight 1.4 kg (3.1 lb) \*\*

## FLOW PERFORMANCE



## (I) DRAWINGS



# MODEL NO. SELECTOR GUIDE

#### Example for a Model No. for SGS620 Series

| SGS621-         | - 02-                              |               | 02-                              |                     | 00-                        |                    | 00-                         |                    | 001-             |   | 01-                  |   | A |                                       |
|-----------------|------------------------------------|---------------|----------------------------------|---------------------|----------------------------|--------------------|-----------------------------|--------------------|------------------|---|----------------------|---|---|---------------------------------------|
| Product<br>Type | Inlet<br>Pressure<br>Bar<br>[Psig] |               | Outlet<br>Pressure<br>Bar [Psig] |                     | Inlet<br>Pressure<br>Gauge |                    | Outlet<br>Pressure<br>Gauge |                    | Inlet Connection |   | Outlet<br>Connection |   |   | Options                               |
| SGS621          | 02                                 | 60<br>[870]   | 07                               | 0 bis 20<br>[300]   | 00                         | No Gauge<br>Fitted | 00                          | No Gauge<br>Fitted | 000              | 1/4" NPT Female   | 00                   | 1/4" NPT Female   | Α | No Options Selected                   |
| SGS622          | 04                                 | 300<br>[4350] | 10                               | 0 bis 50<br>[725]   | 01                         | bar/PSI            | 01                          | bar/PSI            | 001              | 1/8 Stainless Steel<br>Compression  | 01                   | 1/8 Stainless Steel<br>Compression                                | В | Regulator Tee Purge FKM               |
|                 |                                    |               | 11                               | 0 bis 100<br>[1450] | 10                         | Plugged<br>port    | 10                          | Plugged<br>port    | 002              | 1/4 Stainless Steel<br>Compression  | 02                   | 1/4 Stainless Steel<br>Compression                                | С | Regulator Tee Purge EPDM              |
|                 |                                    |               | 12                               | 0 bis 200<br>[2900] |                            |                    |                             |                    | 003              | 6mm Stainless Steel<br>Compression  | 03                   | 6mm Stainless Steel<br>Compression                                | D | Regulator Deep Purge FKM              |
|                 |                                    |               | 13                               | 0 bis 250<br>[3625] |                            |                    |                             |                    | 004              | 1/4 NPT Male  | 04                   | 1/4 NPT Male  | Е | Regulator Deep Purge EPDM             |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 010              | BS341 No.3  | 09                   | Isolation Valve, 1/4 NPT<br>Female, FKM Seal                      | F | Bonnet Vent Capture Kit               |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 012              | BS341 No.4  | 10                   | Isolation Valve, 1/4 NPT<br>Female, EPDM Seal                     | G | Helium Test Certificate               |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 019              | BS341 No.14   | 11                   | Isolation Valve, 1/8 Stainless<br>Steel Compression, FKM Seal     | н | 3.1 Material Certificate***           |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 030              | DIN477 No.6   | 12                   | Isolation Valve, 1/8 Stainless<br>Steel Compression, EPDM<br>Seal | J | NACE Certificate***                   |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 033              | DIN477 No.9   | 13                   | Isolation Valve, 1/4 Stainless<br>Steel Compression, FKM Seal     | K | Certificate of Conformity (CoC)       |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 034              | DIN477 No.10  | 14                   | Isolation Valve, 1/4 Stainless<br>Steel Compression, EPDM<br>Seal | L | Panel Mount Locking Nut Kit           |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 045              | CGA320  | 15                   | Isolation Valve, 6 mm<br>Stainless Steel Compression,<br>FKM Seal | P | Calibration/Pressure Test certificate |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 052              | CGA540  | 16                   | Isolation Valve, 6mm<br>Stainless Steel Compression,<br>EPDM Seal | X | Special Instruction                   |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | 053              | CGA580  | 17                   | Isolation Valve, 1/4 NPT Male, FKM Seal                           |   |                                       |
|                 |                                    |               |                                  |                     |                            |                    |                             |                    | conr             | our complete range of cylinder<br>nections refer to 'Chem Master<br>der Connections Data Sheet' | 18                   | Isolation Valve, 1/4 NPT Male,<br>EPDM Seal                       |   |                                       |