

# GASARC™

AN ESAB® BRAND



## CHEM MASTER SGS620 SERIES

### 6.0 Purity Single Stage Stainless Steel Piston Cylinder Regulator

Chem Master SGS620 series single stage piston cylinder regulators are designed for primary pressure gas control of corrosive, toxic or high purity gases up to grade 6.0 purity (99.9999%), on applications where slight 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

### ★ FEATURES

- 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

### 🔧 MATERIALS

Body	316L Stainless Steel
Bonnet	Nickel Plated Brass Barstock
Piston	316L Stainless Steel
Seal	FKM / EPDM
Seat	PCTFE
Filter	10 Micron 316L Stainless Steel

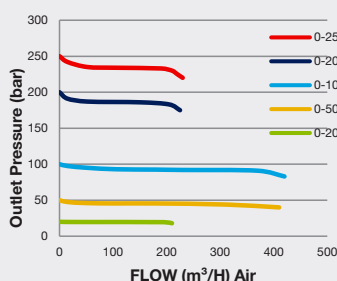
### 👍 SPECIFICATION

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 (3630 PSI)
Gauges	50mm (2") Diameter
Ports	1/4" NPT Female
Temperature Range	-20° C to +60° C (-4° F to +140° F)
Flow Coefficient (Cv)	0.1
Helium leak Integrity	1 x 10 <sup>-9</sup> mbar l/s
Weight	1.4 kg (3.1 lb)**

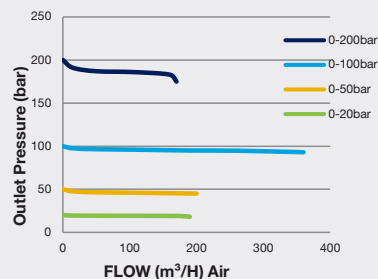
\* Subject to cylinder connection \*\* Cylinder connection not included \*\*\* NACE and 3.1 material certificates available on request, please contact the sales office for further information

### ✓ FLOW PERFORMANCE

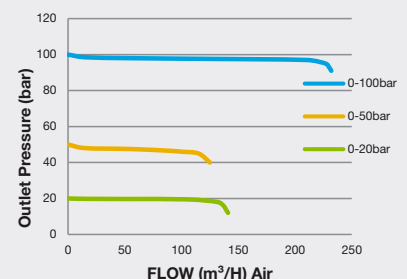
300 bar Inlet Pressure @ 21° C



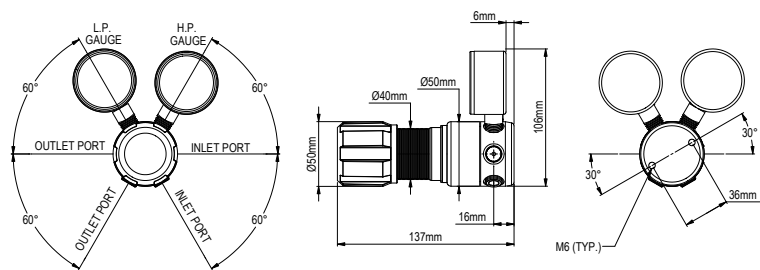
200 bar Inlet Pressure @ 21° C



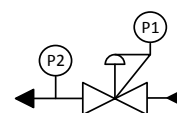
100 bar Inlet Pressure @ 21° C



# DIMENSIONS



# PROCESS & INSTRUMENTATION



- Adjustable Pressure Regulator with P1 Pressure Gauge



- P2 Pressure Gauge

## Model No. Selector Guide

Product Type	Inlet Pressure	Outlet Pressure	Inlet Pressure Gauge	Outlet Pressure Gauge	Inlet/Cylinder Connection	Outlet Connection	Options
<b>SGS621</b>	<b>02</b> 60 bar / 870 PSI	<b>07</b> -1 - 20 bar / 300 PSI	<b>00</b> No Gauge Fitted	<b>00</b> No Gauge Fitted	<b>000</b> No Inlet Fitted	<b>00</b> No Outlet Fitted	<b>A</b> No Options Selected
<b>SGS622</b>	<b>04</b> 300 bar / 4350 PSI	<b>10</b> -1 - 50 bar / 725 PSI	<b>01</b> bar / PSI	<b>01</b> bar/PSI	<b>001</b> 1/8 Stainless Steel Compression	<b>01</b> 1/8 Stainless Steel Compression	<b>B</b> Regular Tee Purge FKM
		<b>11</b> 0 - 100 bar / 1450 PSI	<b>02</b> bar / PSI Inc. 3.1 Cert (stainless steel only)***	<b>02</b> bar / PSI Inc. 3.1 Cert (stainless steel only)***	<b>002</b> 1/4 Stainless Steel Compression	<b>02</b> 1/4 Stainless Steel Compression	<b>C</b> Regular Tee Purge EPDM
		<b>12</b> 0 - 200 bar / 2900 PSI	<b>10</b> Plugged Port	<b>10</b> Plugged Port	<b>003</b> 6mm Stainless Steel Compression	<b>03</b> 6mm Stainless Steel Compression	<b>D</b> Regular Tee Deep Purge FKM
		<b>13</b> 0 - 250 bar / 3630 PSI			<b>004</b> 1/4 NPT Male	<b>04</b> 1/4 NPT Male	<b>E</b> Regular Tee Deep Purge EPDM
					<b>010</b> BS341 No.3	<b>07</b> Isolation Valve, 1/4 NPT Female, FKM Seal	<b>F</b> Bonnet Vent Capture Kit
					<b>012</b> BS341 No.4	<b>08</b> Isolation Valve, 1/4 NPT Female, EPDM Seal	<b>G</b> Helium Test Certificate
					<b>019</b> BS341 No.14	<b>09</b> Isolation Valve, 1/8 Stainless Steel Compression, FKM Seal	<b>H</b> 3.1 Material Certificate***
					<b>030</b> DIN477 No.6	<b>10</b> Isolation Valve, 1/8 Stainless Steel Compression, EPDM Seal	<b>J</b> NACE Certificate***
					<b>033</b> DIN477 No.9	<b>11</b> Isolation Valve, 1/4 Stainless Steel Compression, FKM Seal	<b>K</b> Certificate of Conformity
					<b>034</b> DIN477 No. 10	<b>12</b> Isolation Valve, 1/4 Stainless Steel Compression, EPDM Seal	<b>L</b> Panel Mount Locking Nut Kit
					<b>045</b> CGA320	<b>13</b> Isolation Valve, 6mm Stainless Steel Compression, FKM Seal	<b>P</b> Calibration / Pressure Test Certificate
					<b>052</b> CGA540	<b>14</b> Isolation Valve, 1/4 Stainless Steel Compression, EPDM Seal	<b>X</b> Special Instruction
					<b>053</b> CGA580	<b>15</b> Isolation Valve, 6mm Stainless Steel Compression, FKM Seal	
				<b>16</b> Isolation Valve, 6mm Stainless Steel Compression, EPDM Seal			
				<b>17</b> Isolation Valve, 1/4 NPT Male, FKM Seal			
				<b>18</b> Isolation Valve, 1/4 NPT Male, EPDM seal			

For our complete range of cylinder connections refer to "Cylinder Connections Data"