

# GASARC™

AN ESAB® BRAND



## SPEC MASTER HPS600 SERIES

### 6.0 Purity Single Stage Nickel Plated Brass Barstock Diaphragm Cylinder Regulator

Spec Master HPS600 series single stage diaphragm cylinder regulators are designed for primary pressure gas control of non-corrosive or toxic, high purity gases up to grade 6.0 purity (99.9999%), on applications where slight variation from decreasing cylinder pressure is acceptable.

- **HPS600 Series** | Single Stage Diaphragm Cylinder Regulator, FFKM Pressure Relief Valve

### ★ FEATURES

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

### 📄 MATERIALS

|           |                                |
|-----------|--------------------------------|
| Body      | Nickel Plated Brass Barstock   |
| Bonnet    | Nickel Plated Brass Barstock   |
| Diaphragm | 316L Stainless Steel           |
| Seal      | PTFE                           |
| Seat      | PCTFE                          |
| Filter    | 10 Micron 316L Stainless Steel |

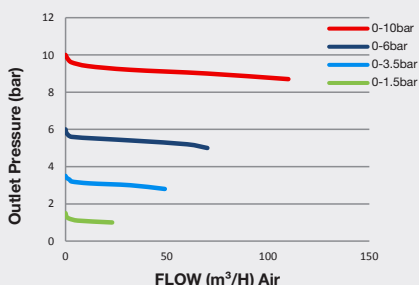
\* Subject to cylinder connection \*\* Cylinder connection not included

### 👍 SPECIFICATION

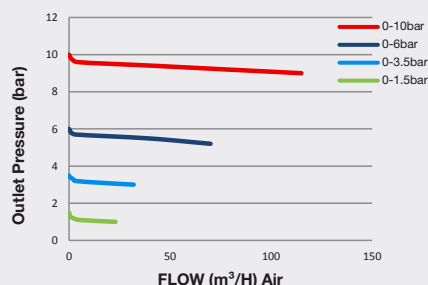
|                         |   |
|-------------------------|---|
| Maximum Inlet Pressure  | 60 bar (870 PSI) / 300 bar (4350 PSI)*                                  |
| Delivery Pressure Range | 1.5 bar (22 PSI) / 3.5 bar (50 PSI) / 6 bar (90 PSI) / 10 bar (150 PSI) |
| Gauges                  | 50mm (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                  | 1.2 kg (2.7 lb)**   |

### ✓ FLOW PERFORMANCE

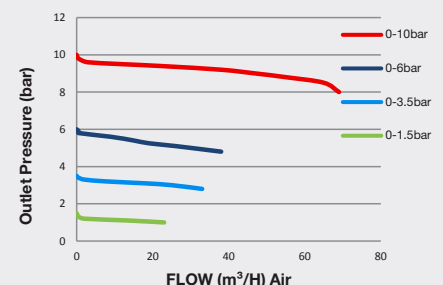
300 bar Inlet Pressure @ 21° C



200 bar Inlet Pressure @ 21° C

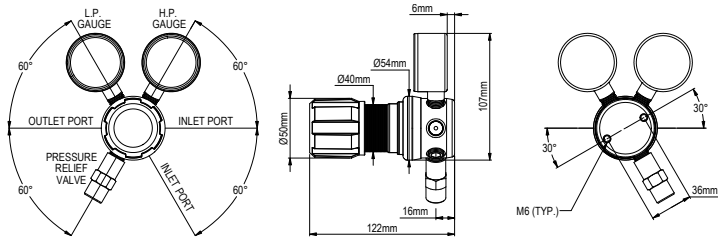


60 bar Inlet Pressure @ 21° C

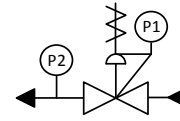




## DIMENSIONS



## PROCESS & INSTRUMENTATION



- Adjustable Pressure Regulator with P1 Pressure Gauge



- Pressure Relief Valve



- 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                                   |
|--------------|-----------------------|---|-------------------------------|-------------------------------|-------------------------------------|--|---|
| HPS600       | 02 60 bar / 870 PSI   | 02 -1 - 1.5 bar / 22 PSIG   | 00 No Gauge Fitted            | 00 No Gauge Fitted            | 000 No Inlet Fitted                 | 00 No Outlet Fitted  | A No Options Selected                     |
|              | 04 300 bar / 4350 PSI | 03 -1 - 3.5 bar / 50 PSIG<br>04 -1 - 6 bar / 90 PSIG<br>05 -1 - 10 bar / 150 PSIG | 01 bar/PSI<br>10 Plugged Port | 01 bar/PSI<br>10 Plugged Port | 001 1/8 Stainless Steel Compression | 01 1/8 Stainless Steel Compression                             | B Regular Tee Purge FKM                   |
|              |                       |   |                               |                               | 002 1/4 Stainless Steel Compression | 02 1/4 Stainless Steel Compression                             | C Regular Tee Purge EPDM                  |
|              |                       |   |                               |                               | 003 6mm Stainless Steel Compression | 03 6mm Stainless Steel Compression                             | F Bonnet Vent Capture Kit                 |
|              |                       |   |                               |                               | 004 1/4 NPT Male                    | 04 1/4 NPT Male  | G Helium Test Certificate                 |
|              |                       |   |                               |                               | 007 G3/8 BSP R/H Brass Male         | 07 G3/8 BSP R/H Brass Male                                     | K Certificate of Conformity               |
|              |                       |   |                               |                               | 008 G3/8 BSP L/H Brass Male         | 08 G3/8 BSP L/H Brass Male                                     | L Panel Mount Locking Nut Kit             |
|              |                       |   |                               |                               | 010 BS341 No.3                      | 09 Isolation Valve, 1/4 NPT Female, FKM Seal                   | P Calibration / Pressure Test Certificate |
|              |                       |   |                               |                               | 012 BS341 No.4                      | 10 Isolation Valve, 1/4 NPT Female, EPDM Seal                  | X Special Instruction                     |
|              |                       |   |                               |                               | 015 BS341 No.8                      | 11 Isolation Valve, 1/8 Stainless Steel Compression, FKM Seal  |   |
|              |                       |   |                               |                               | 030 DIN477 No.6                     | 12 Isolation Valve, 1/8 Stainless Steel Compression, EPDM Seal |   |
|              |                       |   |                               |                               | 033 DIN477 No.9                     | 13 Isolation Valve, 1/4 Stainless Steel Compression, FKM Seal  |   |
|              |                       |   |                               |                               | 034 DIN477 No. 10                   | 14 Isolation Valve, 1/4 Stainless Steel Compression, EPDM Seal |   |
|              |                       |   |                               |                               | 045 CGA320                          | 15 Isolation Valve, 6mm Stainless Steel Compression, FKM Seal  |   |
|              |                       |   |                               |                               | 052 CGA540                          | 16 Isolation Valve, 6mm Stainless Steel Compression, EPDM Seal |   |
|              |                       |   |                               |                               | 053 CGA580                          | 17 Isolation Valve, 1/4 NPT Male, FKM Seal                     |   |
|              |                       |   |                               |                               |                                     | 18 Isolation Valve, 1/4 NPT Male, EPDM seal                    |   |
|              |                       |   |                               |                               |                                     | 19 Isolation Valve, G3/8 BSP R/H Brass Male, FKM Seal          |   |
|              |                       |   |                               |                               |                                     | 20 Isolation Valve, G3/8 BSP R/H Brass Male, EPDM Seal         |   |
|              |                       |   |                               |                               |                                     | 21 Isolation Valve, G3/8 BSP L/H Brass Male, FKM Seal          |   |
|              |                       |   |                               |                               |                                     | 22 Isolation Valve, G3/8 BSP L/H Brass Male, EPDM Seal         |   |

For our full range of cylinder connections refer to 'Cylinder Connections Data'