



**ROTAREX**  
EQUIPMENT



**PRESSURE REGULATORS**



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All Rotarex regulators are produced in Europe in accordance with international standards (ISO; CGA....) and are guaranteed to provide safe and reliable performance in operation. All locations are ISO 9001.

## SINGLE STAGE HIGH PRESSURE REGULATORS


**SERIES S 215** P. 016

|                                                       |                                                   |
|-------------------------------------------------------|---------------------------------------------------|
| <b>Technology</b>                                     | Diaphragm                                         |
| <b>Inlet Pressure</b>                                 | 200/300 bar<br>2900/4350 psi                      |
| <b>Outlet Pressure</b>                                | 1/3/8/16/35/50 bar<br>14.5/44/116/232/508/725 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 0,5/1,6/13,6/15/20                                |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel            |


**SERIES S 220** P. 018

|                                                       |                                      |
|-------------------------------------------------------|--------------------------------------|
| <b>Technology</b>                                     | Diaphragm                            |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi                  |
| <b>Outlet Pressure</b>                                | 3/15/25/50 bar<br>44/218/360/725 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 5/25/50/50                           |
| <b>Material</b>                                       | Stainless steel                      |


**SERIES S 225** P. 020

|                                                       |                                            |
|-------------------------------------------------------|--------------------------------------------|
| <b>Technology</b>                                     | Diaphragm                                  |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi                        |
| <b>Outlet Pressure</b>                                | 3/8/16/35/50 bar<br>44/116/232/508/725 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 2/10/14/25/25                              |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel     |


**SERIES S 250** P. 022

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Piston                                 |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi                    |
| <b>Outlet Pressure</b>                                | 60 bar<br>870 psi                      |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 10                                     |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES S 400** P. 024

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Piston                                 |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi                    |
| <b>Outlet Pressure</b>                                | 200 bar<br>2900 psi                    |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 30                                     |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES S 800** P. 026

|                                                       |                                                     |
|-------------------------------------------------------|-----------------------------------------------------|
| <b>Technology</b>                                     | Diaphragm + Balanced-Valve                          |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi                                 |
| <b>Outlet Pressure</b>                                | 10/16/25/50 bar<br>145/232/363/725 psi              |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 50/50/50/100                                        |
| <b>Material</b>                                       | Raw brass<br>Chrome plated brass<br>Stainless steel |


**SERIES S 810** P. 028

|                                                       |                                   |
|-------------------------------------------------------|-----------------------------------|
| <b>Technology</b>                                     | Diaphragm + Balanced-Valve        |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi               |
| <b>Outlet Pressure</b>                                | 10/16/25 bar<br>145/232/362.5 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 50/50/50                          |
| <b>Material</b>                                       | Raw brass                         |


**SERIES GD 100** P. 030

|                                                       |                     |
|-------------------------------------------------------|---------------------|
| <b>Technology</b>                                     | Diaphragm           |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi |
| <b>Outlet Pressure</b>                                | 10 bar<br>145 psi   |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 100                 |
| <b>Material</b>                                       | Raw brass           |


**SERIES TGD 250** P. 032

|                                                       |                     |
|-------------------------------------------------------|---------------------|
| <b>Technology</b>                                     | Diaphragm           |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi |
| <b>Outlet Pressure</b>                                | 20 bar<br>290 psi   |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 250                 |
| <b>Material</b>                                       | Raw brass           |

## DUAL STAGE HIGH PRESSURE REGULATORS


**SERIES D 215** P. 034

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Diaphragm/Diaphragm                    |
| <b>Inlet Pressure</b>                                 | 200/300 bar<br>2900/4350 psi           |
| <b>Outlet Pressure</b>                                | 1/3/8/16 bar<br>14.5/44/116/232 psi    |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 0,4/1,2/2,9/3,5                        |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES D 230** P. 036

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Piston/Bellow                          |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi                    |
| <b>Outlet Pressure</b>                                | 1/3/10 bar<br>14.5/44/145 psi          |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 2/2,5/3,5                              |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES D 230-0.1** P. 038

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Piston/Diaphragm                       |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi                    |
| <b>Outlet Pressure</b>                                | 0,01-0,1 bar<br>0.14-1.4 psi           |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 0,5                                    |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES D 235** P. 040

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| <b>Technology</b>                                     | Diaphragm/Bellow                       |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi                    |
| <b>Outlet Pressure</b>                                | 1/3/10 bar<br>14.5/44/145 psi          |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 1/2/5,5                                |
| <b>Material</b>                                       | Chrome plated brass<br>Stainless steel |


**SERIES D 235-0.1** P. 042

|                                                       |                              |
|-------------------------------------------------------|------------------------------|
| <b>Technology</b>                                     | Diaphragm/Diaphragm          |
| <b>Inlet Pressure</b>                                 | 300 bar<br>4350 psi          |
| <b>Outlet Pressure</b>                                | 0,01-0,1 bar<br>0.14-1.4 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 0,5                          |
| <b>Material</b>                                       | Chrome plated brass          |



## LOW PRESSURE REGULATORS



**SERIES S 10** P. 044

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Diaphragm + Balanced-Valve             |
| <b>Inlet Pressure</b>                      | 25 bar<br>362.5 psi                    |
| <b>Outlet Pressure</b>                     | 3/8 bar<br>44/116 psi                  |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 4,5/12                                 |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**SERIES S 15** P. 046

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Diaphragm + Balanced-Valve             |
| <b>Inlet Pressure</b>                      | 25 bar<br>362.5 psi                    |
| <b>Outlet Pressure</b>                     | 10 bar<br>145 psi                      |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 50                                     |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**SERIES S 20** P. 048

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Bellow                                 |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                      |
| <b>Outlet Pressure</b>                     | 1/3/10 bar<br>14.5/44/145 psi          |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2/2,5/3,5                              |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**SERIES S 20-0.1** P. 050

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Diaphragm                              |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                      |
| <b>Outlet Pressure</b>                     | 0,01-0,1 bar<br>0.14-1.4 psi           |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 0,5                                    |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**SERIES S 55** P. 052

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| <b>Technology</b>                          | Diaphragm                                  |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                          |
| <b>Outlet Pressure</b>                     | 3/8/10/16/35 bar<br>44/116/145/323/508 psi |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2,5/3/3,5/5,5/10                           |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel     |



**SERIES DC 50** P. 054

|                                            |                                  |
|--------------------------------------------|----------------------------------|
| <b>Technology</b>                          | Diaphragm + Balanced-Valve       |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                |
| <b>Outlet Pressure</b>                     | 8/15/40 bar<br>116/217/580 psi   |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 150/300/300                      |
| <b>Material</b>                            | Raw brass<br>Chrome plated brass |

## POINT OF USE REGULATORS



**SERIES S 21** P. 056

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Bellow                                 |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                      |
| <b>Outlet Pressure</b>                     | 1/3/10 bar<br>14.5/44/116 psi          |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2/2,5/3,5                              |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**LABLINE 22** P. 058

|                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <b>Technology</b>                          | Bellow                                 |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi                      |
| <b>Outlet Pressure</b>                     | 1/3/10 bar<br>14.5/44/116 psi          |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2/2,5/3,5                              |
| <b>Material</b>                            | Chrome plated brass<br>Stainless steel |



**MONO  
SERIES S 15** P. 060

|                                            |                             |
|--------------------------------------------|-----------------------------|
| <b>Technology</b>                          | Diaphragm + Balanced-Valve  |
| <b>Inlet Pressure</b>                      | 25 bar<br>362.5 psi         |
| <b>Outlet Pressure</b>                     | 10 bar<br>145 psi           |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 50                          |
| <b>Material</b>                            | Aluminum<br>Stainless steel |



**MONO  
SERIES S 20** P. 062

|                                            |                               |
|--------------------------------------------|-------------------------------|
| <b>Technology</b>                          | Bellow                        |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi             |
| <b>Outlet Pressure</b>                     | 1/3/10 bar<br>14.5/44/145 psi |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2/2,5/3,5                     |
| <b>Material</b>                            | Aluminum<br>Stainless steel   |



**MONO  
SERIES S 40** P. 064

|                                            |                               |
|--------------------------------------------|-------------------------------|
| <b>Technology</b>                          | Bellow                        |
| <b>Inlet Pressure</b>                      | 50 bar<br>725 psi             |
| <b>Outlet Pressure</b>                     | 1/3/10 bar<br>14.5/44/145 psi |
| <b>Flow Rate<br/>Nm³/h (N<sub>2</sub>)</b> | 2/2,5/3,5                     |
| <b>Material</b>                            | Aluminum<br>Stainless steel   |

## ACETYLENE APPLICATION REGULATORS



**SERIES S 20 AD** P. 066

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Chrome plated brass  |



**SERIES S 25 AD** P. 068

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Chrome plated brass  |



**SERIES S 21 AD** P. 056

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Chrome plated brass  |



**SERIES LABLINE 22 AD** P. 058

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Chrome plated brass  |



**MONO SERIES S 20 AD** P. 062

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 50 bar<br>725 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Aluminum             |



**MONO SERIES S 40 AD** P. 064

|                                                                    |                      |
|--------------------------------------------------------------------|----------------------|
| <b>Technology</b>                                                  | Bellow               |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi    |
| <b>Outlet Pressure</b>                                             | 1,5 bar<br>21.75 psi |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 1                    |
| <b>Material</b>                                                    | Aluminum             |



**SERIES DC 50 AD** P. 054

|                                                                    |                                  |
|--------------------------------------------------------------------|----------------------------------|
| <b>Technology</b>                                                  | Diaphragm + Balanced-Valve       |
| <b>Inlet Pressure</b>                                              | 20 bar<br>290 psi                |
| <b>Outlet Pressure</b>                                             | 0,8 bar<br>12 psi                |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 10                               |
| <b>Material</b>                                                    | Raw brass<br>Chrome plated brass |



**SERIES GD 100 AD** P. 030

|                                                                    |                                  |
|--------------------------------------------------------------------|----------------------------------|
| <b>Technology</b>                                                  | Diaphragm                        |
| <b>Inlet Pressure</b>                                              | 25 bar<br>362.5 psi              |
| <b>Outlet Pressure</b>                                             | 1,2 bar<br>17.4 psi              |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (C<sub>2</sub>H<sub>2</sub>)</b> | 10                               |
| <b>Material</b>                                                    | Raw brass<br>Chrome plated brass |

## FLOW REGULATORS



**SERIES S 20 FM** P. 070

|                                                       |                     |
|-------------------------------------------------------|---------------------|
| <b>Technology</b>                                     | Bellow              |
| <b>Inlet Pressure</b>                                 | 50 bar<br>725 psi   |
| <b>Outlet Pressure</b>                                | 3,5 bar<br>50 psi   |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 5 or 15 lpm         |
| <b>Material</b>                                       | Chrome plated brass |



**SERIES S 225 FM** P. 071

|                                                       |                     |
|-------------------------------------------------------|---------------------|
| <b>Technology</b>                                     | Diaphragm           |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi |
| <b>Outlet Pressure</b>                                | 3,5 bar<br>50 psi   |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 5 or 15 lpm         |
| <b>Material</b>                                       | Chrome plated brass |



**SERIES D 230 FM** P. 072

|                                                       |                     |
|-------------------------------------------------------|---------------------|
| <b>Technology</b>                                     | Piston/Bellow       |
| <b>Inlet Pressure</b>                                 | 200 bar<br>2900 psi |
| <b>Outlet Pressure</b>                                | 3,5 bar<br>50 psi   |
| <b>Flow Rate<br/>Nm<sup>3</sup>/h (N<sub>2</sub>)</b> | 5 or 15 lpm         |
| <b>Material</b>                                       | Chrome plated brass |

## CONSTANT FLOW REGULATORS


**SERIES S 70**

P. 073

|                                 |                                        |
|---------------------------------|----------------------------------------|
| <b>Technology</b>               | Piston                                 |
| <b>Inlet Pressure</b>           | 200 bar<br>2900 psi                    |
| <b>Outlet Pressure</b>          | 4,13/2,06 bar<br>30/60 psi             |
| <b>Flow Rate<br/>Nm³/h (N₂)</b> | 0,25-7 lpm                             |
| <b>Material</b>                 | Nickel plated brass<br>Stainless steel |


**SERIES S 75**

P. 074

|                                 |                                        |
|---------------------------------|----------------------------------------|
| <b>Technology</b>               | Piston                                 |
| <b>Inlet Pressure</b>           | 200 bar<br>2900 psi                    |
| <b>Outlet Pressure</b>          | 3,5/6 bar<br>50/87 psi                 |
| <b>Flow Rate<br/>Nm³/h (N₂)</b> | 0,3-15 lpm                             |
| <b>Material</b>                 | Nickel plated brass<br>Stainless steel |


**DEI 10**

P. 076

|                                 |                                |
|---------------------------------|--------------------------------|
| <b>Technology</b>               | Diaphragm                      |
| <b>Inlet Pressure</b>           | 1 - 15 bar<br>14.5 - 217.5 psi |
| <b>Pressure Set</b>             | 7/15 bar<br>101.5/217.5 psi    |
| <b>Flow Rate<br/>Nm³/h (N₂)</b> | 26/80                          |
| <b>Material</b>                 | Stainless steel                |

## VALVES


**SERIES VP 300**

P. 077

|                  |                                  |
|------------------|----------------------------------|
| <b>Pressure</b>  | 300 bar                          |
| <b>CV</b>        | 0.30                             |
| <b>Material</b>  | Raw brass<br>Chrome plated brass |
| <b>Type</b>      | O-Ring                           |
| <b>Handwheel</b> | Multi-turn                       |


**SERIES VM 200**

P. 078

|                  |                                        |
|------------------|----------------------------------------|
| <b>Pressure</b>  | 200 bar                                |
| <b>CV</b>        | 0.12                                   |
| <b>Material</b>  | Chrome plated brass<br>Stainless steel |
| <b>Type</b>      | Diaphragm                              |
| <b>Handwheel</b> | ¼ turn/Multi-turn                      |


**SERIES VM 50**

P. 079

|                  |                                        |
|------------------|----------------------------------------|
| <b>Pressure</b>  | 50 bar or 200 bar                      |
| <b>CV</b>        | 0.12                                   |
| <b>Material</b>  | Chrome plated brass<br>Stainless steel |
| <b>Type</b>      | Diaphragm                              |
| <b>Handwheel</b> | ¼ turn/Multi-turn                      |


**SERIES VM 20**

P. 080

|                  |                                        |
|------------------|----------------------------------------|
| <b>Pressure</b>  | 50 bar                                 |
| <b>CV</b>        | 0.14                                   |
| <b>Material</b>  | Chrome plated brass<br>Stainless steel |
| <b>Type</b>      | Diaphragm                              |
| <b>Handwheel</b> | ¼ turn/Multi-turn                      |


**SERIES VM 45**

P. 082

|                  |                                        |
|------------------|----------------------------------------|
| <b>Pressure</b>  | 45 bar                                 |
| <b>CV</b>        | 0.58                                   |
| <b>Material</b>  | Chrome plated brass<br>Stainless steel |
| <b>Type</b>      | Diaphragm                              |
| <b>Handwheel</b> | ¼ turn/Multi-turn                      |


**SERIES RD 10**

P. 083

|                  |                                        |
|------------------|----------------------------------------|
| <b>Pressure</b>  | 60 bar                                 |
| <b>CV</b>        | 0.116                                  |
| <b>Material</b>  | Chrome plated brass<br>Stainless steel |
| <b>Type</b>      | Needle valve                           |
| <b>Handwheel</b> | Multi-turn                             |

## ACCESSORIES


**PRESSURE  
GAUGES**

P. 084


**CYLINDER  
CONNECTORS**

P. 090


**SV 10 SAFETY  
RELIEF VALVE**

P. 092


**GAS CYLINDER  
HOLDER**

P. 095

## TECHNOLOGY OVERVIEW

Rotarex uses 4 main technologies to achieve a stable and reliable pressure regulation:

### DIAPHRAGM

- Our most-used technology (cylinder regulation, line, supply panel...)
- Compact design
- Good precision

### BELLOW

- High precision of outlet pressure
- Less sensitive to the pressure increase at the outlet
- Mainly used for applications like chromatography

### PISTON

- Stable outlet flow
- Used for regulator where the pressure outlet is close to the inlet pressure
- Used as the 1<sup>st</sup> stage for a dual stage regulator
- Used for calibration regulator

### BALANCED-VALVE

- Best-in-class pressure stability
- Minimizes the effect of inlet pressure fluctuations on outlet pressure
- Increases regulator lifetime and reduces cost of ownership by reducing seat effort
- Diaphragm technology only

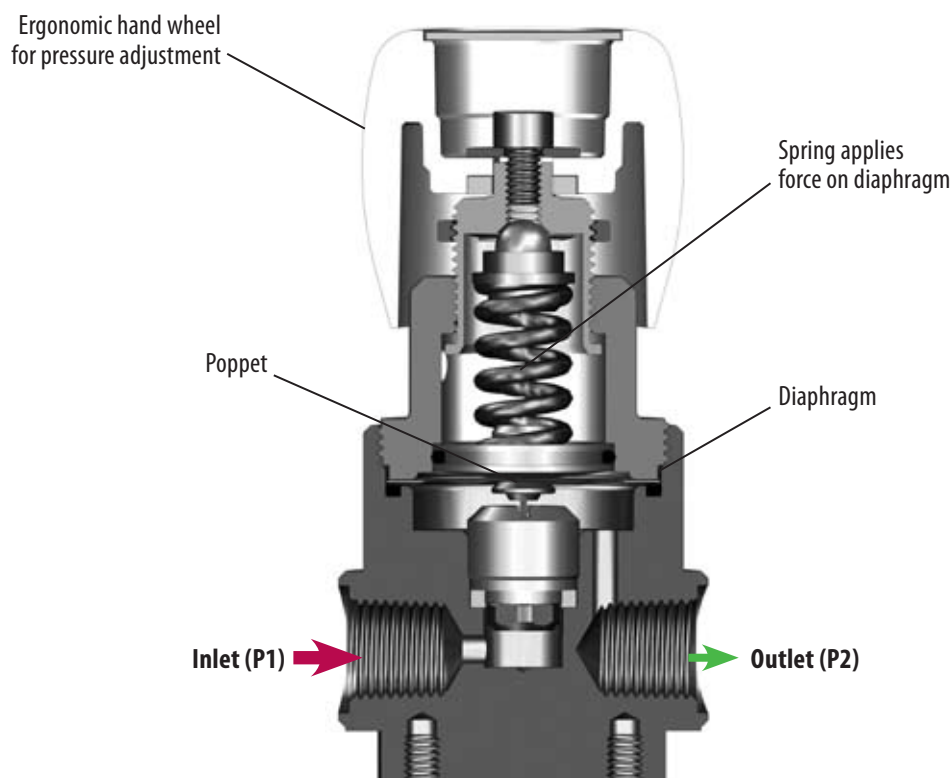
## SINGLE STAGE REGULATOR

A **single stage regulator** will reduce the inlet pressure to the outlet pressure in one step. By turning the hand wheel we can adjust the outlet pressure. Due to the design of single stage regulators, the outlet pressure increases as cylinder pressure decreases. The outlet pressure can be re-adjusted by the hand wheel.

Because of this small pressure rise, single stage regulators are recommended for applications that do not require a constant outlet pressure.

Single stage regulators are also recommended for liquefied gas service such as CO<sub>2</sub>, Propane, LPG, cryogenic gases and other gases that are liquid in the cylinder.

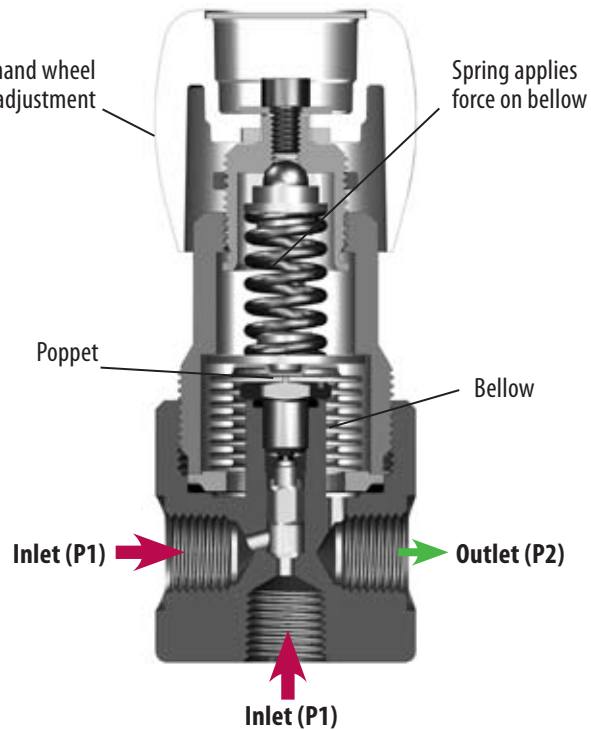
## DIAPHRAGM REGULATOR



| PRODUCT FINDER               |        |
|------------------------------|--------|
| ROTAREX diaphragm regulators |        |
| Series S 215                 | P. 016 |
| Series S 220                 | P. 018 |
| Series S 225                 | P. 020 |
| Series GD 100                | P. 030 |
| Series TGD 250               | P. 032 |
| Series S 20-0.1              | P. 050 |
| Series S 55                  | P. 052 |
| Series S 225 FM              | P. 071 |

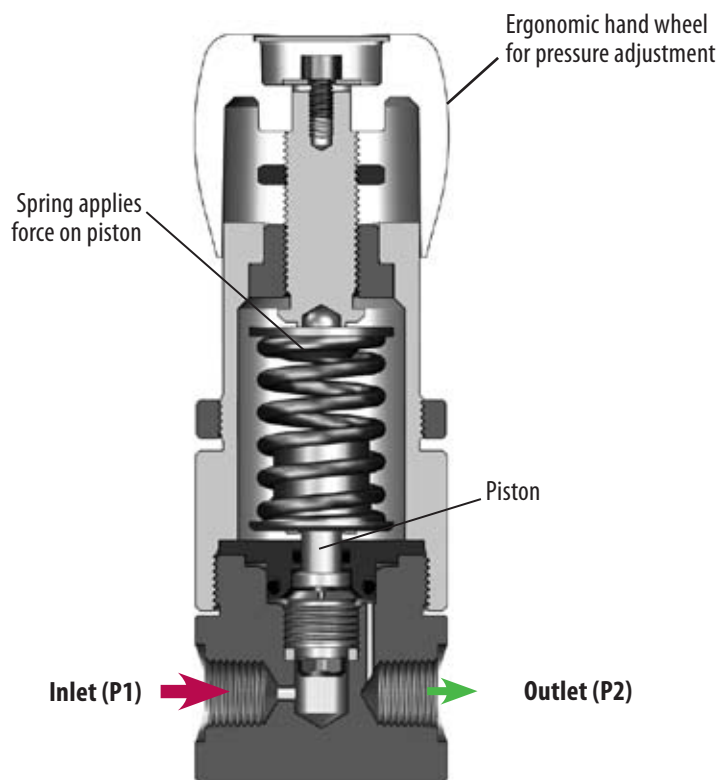
## TECHNOLOGY OVERVIEW (continued)

### BELLOW REGULATOR



| PRODUCT FINDER            |        |
|---------------------------|--------|
| ROTAREX bellow regulators |        |
| Series S 20               | P. 048 |
| Series S 21               | P. 056 |
| Labline 22                | P. 058 |
| Mono Series S 20          | P. 062 |
| Mono Series S 40          | P. 064 |
| Series S 20 AD            | P. 066 |
| Series S 21 AD            | P. 056 |
| Series S 25 AD            | P. 068 |
| Labline 22 AD             | P. 058 |
| Series S 20 FM            | P. 070 |

### PISTON REGULATOR



| PRODUCT FINDER            |        |
|---------------------------|--------|
| ROTAREX piston regulators |        |
| Series S 250              | P. 022 |
| Series S 400              | P. 024 |

# TECHNOLOGY OVERVIEW (continued)

## DUAL STAGE REGULATORS

A **dual stage regulator** is basically two single stage regulators in a single body. This dual configuration provides superior pressure and flow stability vs. single stage regulators.

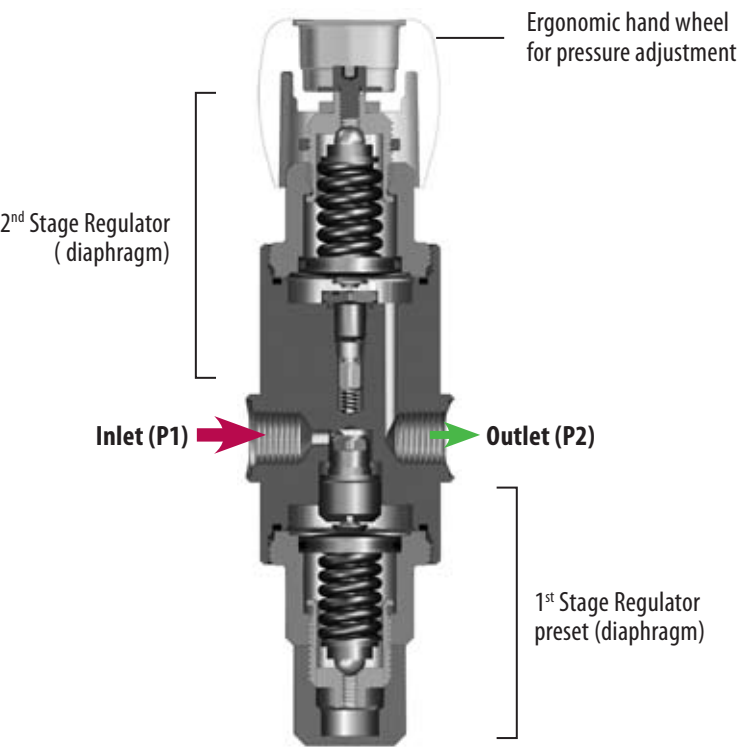
The first stage is preset to an intermediate pressure. This intermediate pressure acts as the inlet pressure to the second stage, which is adjustable.

Because the pressure has been reduced to the intermediate pressure by the first stage, the pressure feeding the second stage of the regulator

remains constant, thereby insuring a constant outlet pressure to the application regardless of cylinder pressure. This technology avoids having to frequently adjust the outlet pressure as the cylinder pressure drops.

Applications would be laboratory, gas chromatography but also in the industry for precision welding.

## DIAPHRAGM/DIAPHRAGM REGULATOR

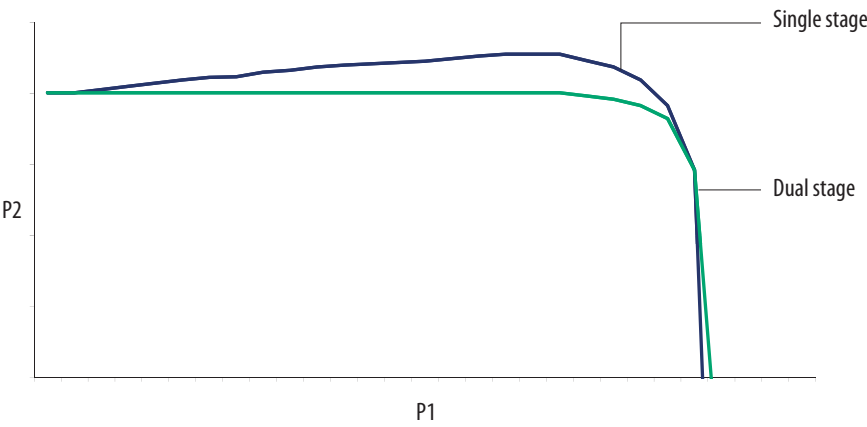


**PRODUCT FINDER**

**ROTAREX**  
diaphragm / diaphragm regulators

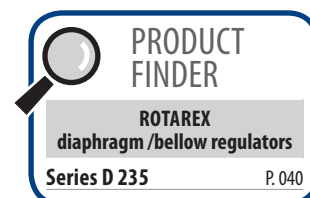
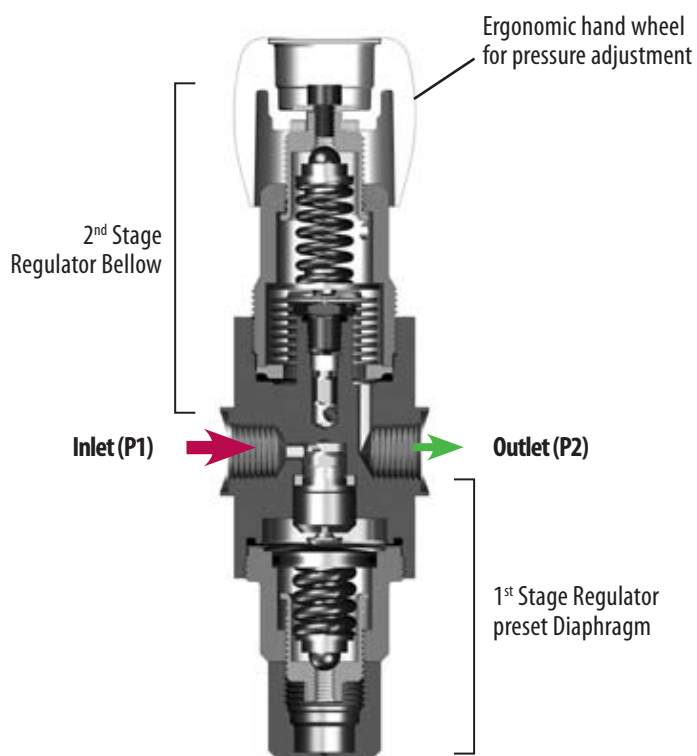
|                  |        |
|------------------|--------|
| Series D 215     | P. 034 |
| Series D 235-0.1 | P. 042 |

## COMPARISON OF DUAL STAGE VS. SINGLE STAGE REGULATOR

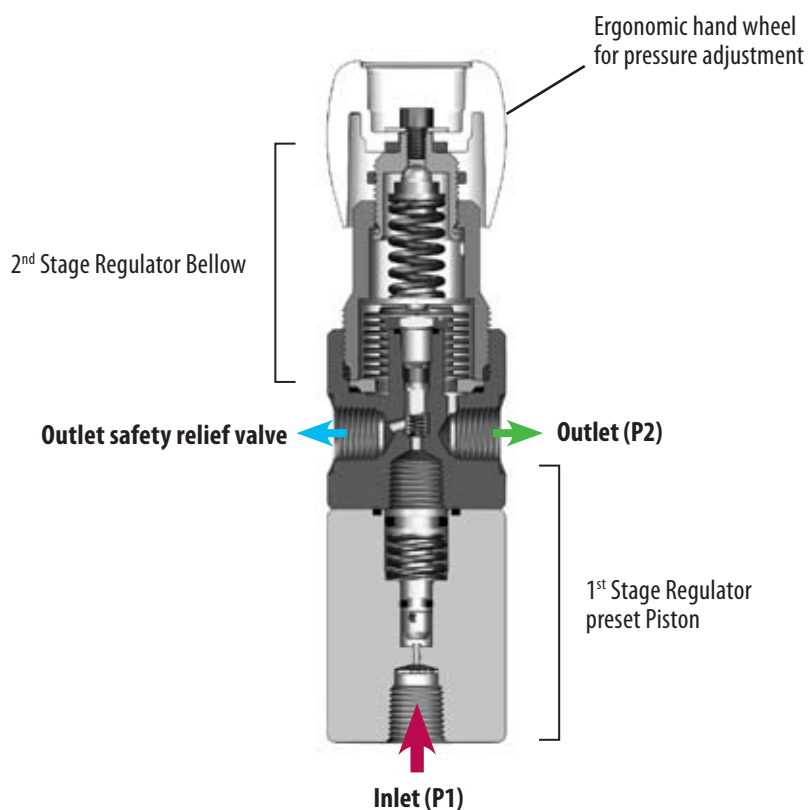


## TECHNOLOGY OVERVIEW (continued)

### DIAPHRAGM/BELLOW REGULATOR



### PISTON/BELLOW REGULATOR





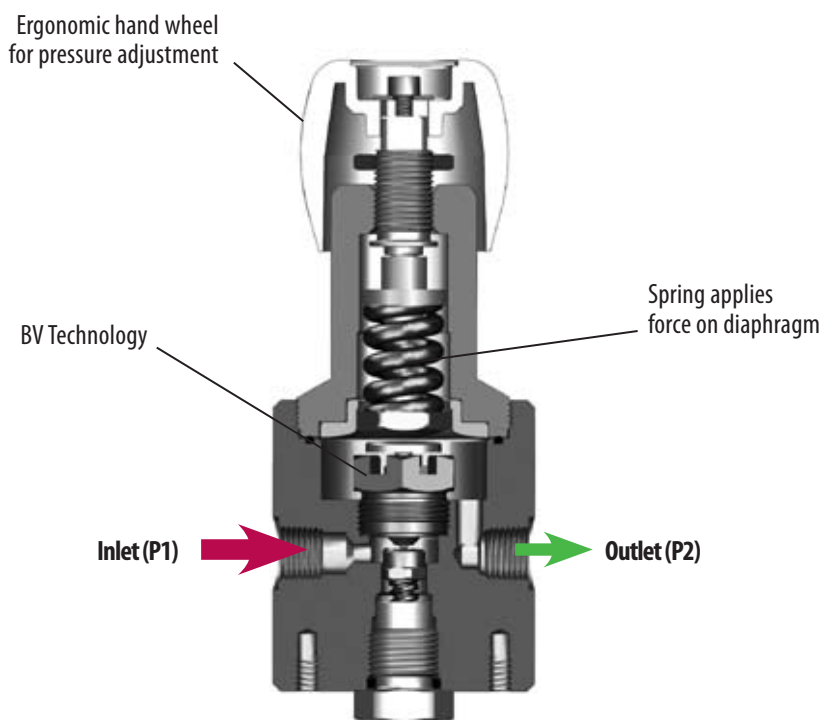
TECHNOLOGY OVERVIEW (continued)

BALANCED-VALVE TECHNOLOGY

**Balanced-Valve (BV-technology) regulator** gives best-of-class pressure stability due to its proprietary design of components in the high pressure zone. It is able to balance the internal forces within the regulator and virtually eliminate the effects of decreasing inlet pressure on the outlet pressure. This means that the regulator balances and compensates for any pressure fluctuation on the inlet and provides a constant outlet pressure like a dual stage regulator.

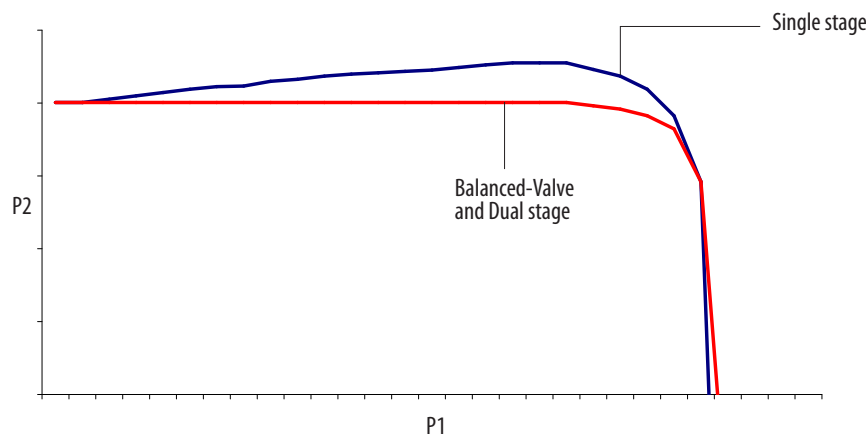
This regulator type also functions as a LINE REGULATOR for a 2<sup>nd</sup> regulation and can equip our switch over boards. Switch over boards equipped with this technology don't need any line regulator afterwards and can be connected directly to the application.

BALANCED-VALVE TECHNOLOGY



| PRODUCT FINDER                    |        |
|-----------------------------------|--------|
| ROTAREX balanced-valve regulators |        |
| Series S 800                      | P. 026 |
| Series S 810                      | P. 028 |
| Series S 10                       | P. 044 |
| Series S 15                       | P. 046 |
| Series DC 50                      | P. 054 |

COMPARISON OF BALANCED-VALVE TECHNOLOGY VS. DUAL AND SINGLE STAGE REGULATORS



| TECHNICAL PARAMETER            | EXAMPLES                                                                     |
|--------------------------------|------------------------------------------------------------------------------|
| Gas                            | Inert, flammable, oxidizing, corrosive, toxic                                |
| Purity                         | UHP, HP, industrial, medical, diving                                         |
| Nominal inlet pressure         | bar or psi                                                                   |
| Nominal outlet pressure        | bar or psi                                                                   |
| Nominal flow (N <sub>2</sub> ) | Nm <sup>3</sup> /h or Nlpm                                                   |
| Single stage or dual stage ?   | Dual stage or BV Technology are needed where pressure stability is essential |
| Product                        | Regulator, point of use, supply board, switch over board                     |
| Material                       | Brass, chrome plated brass, stainless steel                                  |
| Inlet connection               | Country of use, standard, connection                                         |
| Outlet connection              | G ¾, ¼ NPT, male, female                                                     |
| Gauges                         | Low pressure, high pressure                                                  |
| Safety device                  | Yes / no                                                                     |
| Vacuum                         | Yes / no                                                                     |
| Application                    | Food, electronic, medical, welding, industrial, diving. . .                  |
| Outdoor or indoor use          | Environment                                                                  |
| Temperature range              | -20°C to + 60°C / -4°F to + 140°F                                            |
| Atex use                       | Yes / no                                                                     |
| Preset outlet pressure         | If yes, which pressure ?                                                     |
| Marking                        | CE, TPED, PI                                                                 |

[illegible]

# SELECTING THE RIGHT REGULATOR (continued)

## BODY MATERIALS

Most Rotarex pressure regulators are available in stainless steel 316L or chrome plated brass, and on some models, raw brass or aluminum. Which material is best for your installation?

**Stainless steel 316L:** The recommended option for corrosive gases and high to ultra high purity applications due to its superior resistance, non-reactivity, exceptional durability and high-surface finish properties. It is compatible with most gas types and low-velocity oxygen applications.

Rotarex uses Stainless steel type 316L, an austenitic chromium nickel stainless steel containing Molybdenum. It offers:

- Exceptional corrosion resistance - particularly against sulfuric, hydrochloric; acetic, formic and tartaric acids, acid sulfates and alkaline chlorides;
- resistance to pitting from chloride-ion solutions; and
- outstanding strength even at elevated temperatures

**Chrome plated or Raw brass:** The most commonly used material for industrial and high velocity oxygen applications due to its cost effectiveness versus stainless steel, good strength, resistance and low-friction flow properties.

Need more information? You can find more detail about optional materials on our website: [www.rotarex.com](http://www.rotarex.com). Additionally, one of our material engineers would be happy to discuss the pros and cons of each option to help you choose the best solution.



Gas Compatibility: make sure the body material is compatible with the gas type you will be using. Consult the gas compatibility reference chart on page 96.

## O-RING MATERIALS

For many regulators, a choice of O-ring seal materials is available:

EPDM: Ethylene Propylene Rubber  
NBR: Nitrile Butadiene Rubber  
FPM: Fluorocarbon Rubber (VITON®)



Gas Compatibility: make sure the O-ring material is compatible with the gas type you will be using. Consult the gas compatibility reference chart on page 96.

## INLET / OUTLET PRESSURE

Different models are designed for different inlet and outlet pressure performance. The available options are clearly indicated on each product page. Please specify required inlet and outlet pressures when ordering. We can also accommodate special requests.

## CYLINDER CONNECTORS

Specific cylinder valve connections are required for each gas type. The standard available connections are NPT 1/4" male and 16 x 1.336 male which represent the most common connection types. Other standards and dimensions are available on request.

SELECTING THE RIGHT REGULATOR (continued)

GAUGES

Most Rotarex regulators are equipped with pressure gauges. However, you can specify with or without gauges when ordering. Check the product configurator table on each product page.

SAFETY RELIEF VALVE

Safety relief valves are standard on most Rotarex regulators as a best practice.

OTHER PRODUCT OPTIONS

Some product solutions have additional options specific to its unique application, such as mounting options, flow scale, valve type, etc. These options are clearly indicated on the product configuration table on each product page.

16 SINGLE STAGE HIGH-PRESSURE REGULATORS

SERIES S 215 | SINGLE STAGE HP REGULATOR

Diaphragm single stage

Purity up to 6.0

Inlet pressure: 200 bar (2900 psi) or 300 bar (4350 psi)

Outlet pressure: 1/3, 8/16, 35/50 bar 14.5/45/116/232/508/725 psi

Compact and lightweight design

1 inlet / 1 outlet

Rear thread for front panel mounting

O<sub>2</sub> applications: compatible up to 16 bar (232 psi)

Inlet/outlet gauge

Special requirements on request

APPLICATIONS

Designed for cylinder regulator applications

Ideally suited for pure, inert and mildly corrosive gas applications such as analytical instrumentation

Also used to create a controlled atmosphere in laboratories

The Series 215 L is developed for liquid gas applications

GENERAL

Compact, ergonomic and lightweight design makes this regulator suitable for many applications.

Accurate pressure control for reliable service.

105 mm x (4.13")

113 mm x (4.45")

19 mm x (0.75")

60 mm x (1.97")

127 mm x (5.00")

2 x M8 / 2 x 10-32 UNF

20.5 mm x (1.12")

16 SINGLE STAGE HIGH-PRESSURE REGULATORS 17

SPECIFICATIONS

Female ports: 16 x 1.336 (inlet) - G 1/4 (outlet) or 1/4 NPT (inlet/outlet)

Seat seal: PTFE

O-ring: EPDM - Standard NBR - FPM

Diaphragm: ACS 304 (3.0/10 version) Hastelloy® (35/50 version)

Weight: ± 1.5 kg ± 3.3 lbs

Leak rate: 10<sup>-4</sup> mbar L/s He

Temperature range: -20°C to +60°C -4°F to +140°F

Gauges: High and low pressure (M10 x 1 or 1/4 NPT)

Inlet pressure: 200 bar / 2900 psi or 300 bar / 4350 psi

Outlet pressure: 1/3, 8/16, 35/50 bar 14.5/45/116/232/508/725 psi

Nominal Flow: 0.5/1.6/6/13.6/15/20 Nm³/h (SL)

Oxygen use: OK for brass and stainless steel except 35 bar and 50 bar outlet pressure versions

FLOW CURVES

FLOW CURVE S 215-9 REGULATOR

SET: 9 bar / 130 psi

1/3 bar / 20 psi

FLOW CURVE S 215-16 REGULATOR

SET: 16 bar / 232 psi

8 bar / 116 psi

2 bar / 29 psi

FLOW CURVE S 215-35 REGULATOR

SET: 35 bar / 508 psi

16 bar / 232 psi

8 bar / 116 psi

FLOW CURVE S 215-50 REGULATOR

SET: 50 bar / 725 psi

35 bar / 508 psi

16 bar / 232 psi

8 bar / 116 psi

PRODUCT CONFIGURATOR

| Body Material       | Inlet Pressure   | Outlet Pressure  | Parts          | End Connections | O-ring Material    | Gauges          | Parts Configuration           |
|---------------------|------------------|------------------|----------------|-----------------|--------------------|-----------------|-------------------------------|
| Chrome-plated brass | 200 bar 2900 psi | 200 bar 2900 psi | 1 bar 14.5 psi | 5 ports         | 16 x 1.336 - G 1/4 | EPDM - Standard | Without 0 Standard A          |
| Stainless steel     | 300 bar 4350 psi | 300 bar 4350 psi | 3 bar 44 psi   | 6 ports         | 1/4 NPT - 1/4 NPT  | NBR             | With 1 Reverse Inlet/outlet B |
|                     |                  | 8 bar 116 psi    | 8              |                 | FPM                |                 |                               |
|                     |                  | 16 bar 232 psi   | 16             |                 |                    |                 |                               |
|                     |                  | 35 bar 508 psi   | 35             |                 |                    |                 |                               |
|                     |                  | 50 bar 725 psi   | 50             |                 |                    |                 |                               |

CLEANING

All products, regardless of gas application, are cleaned to remove all traces of residue and grease using the same procedures as for O<sub>2</sub> use. There is no need to specify special cleaning when ordering.

ALL RIGHTS OF CHANGE RESERVED

ROTAREX EQUIPMENT

# SERIES S 215 | SINGLE STAGE HP REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)  
or 300 bar (4350 psi)
- Outlet pressure:  
1/3/8/16/35/50 bar  
14.5/45/116/232/508/725 psi

- ★ Compact and lightweight design
- ★ 1 inlet / 1 outlet
- ★ Rear thread for front panel mounting
- ★ O<sub>2</sub> applications compatible up to 16 bar (232 psi)
- ★ Inlet/outlet gauge

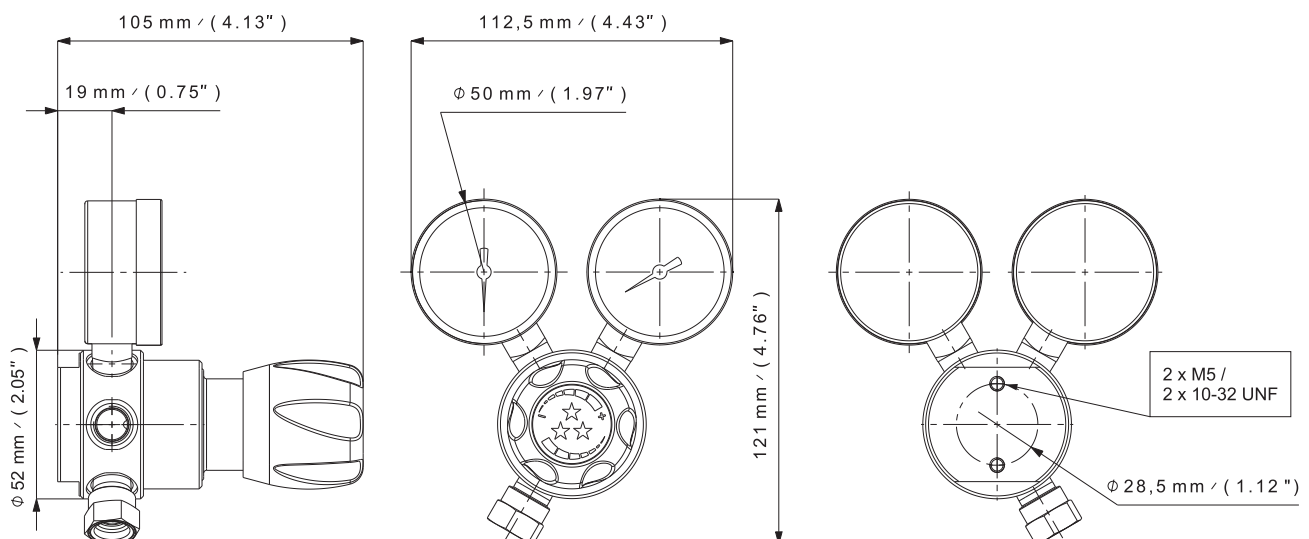
Special requirements on request

## APPLICATIONS

- Designed for cylinder regulator applications
- Ideally suited for pure, inert and mildly corrosive gas applications such as analytical instrumentation
- Also used to create a controlled atmosphere in laboratories
- The Series 215 L is developed for liquid gas applications

## KEY FEATURES

- Compact, ergonomic and lightweight design makes this regulator suitable for many applications.
- Accurate pressure control for reliable service.

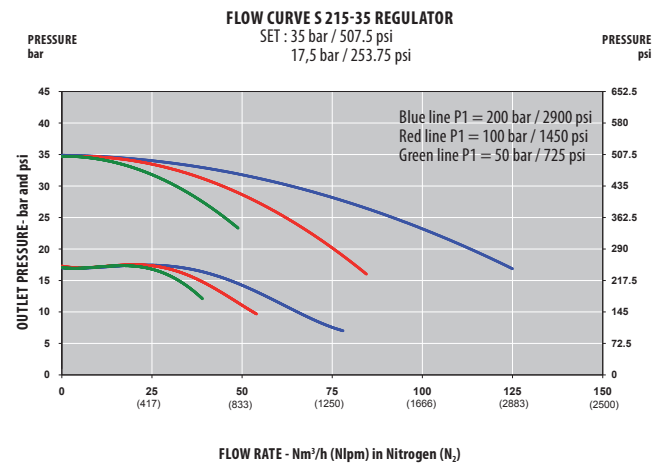
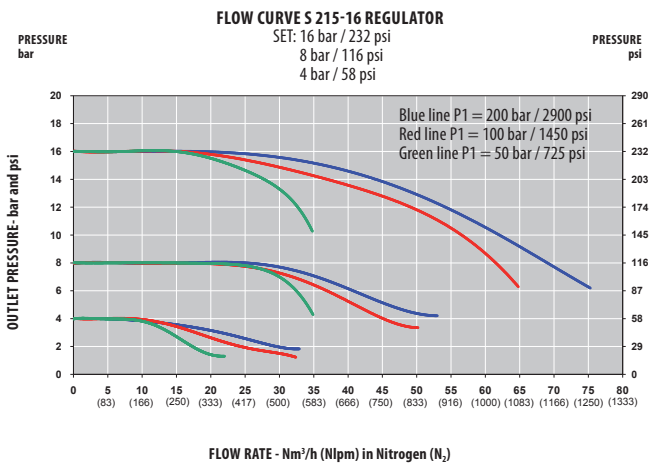
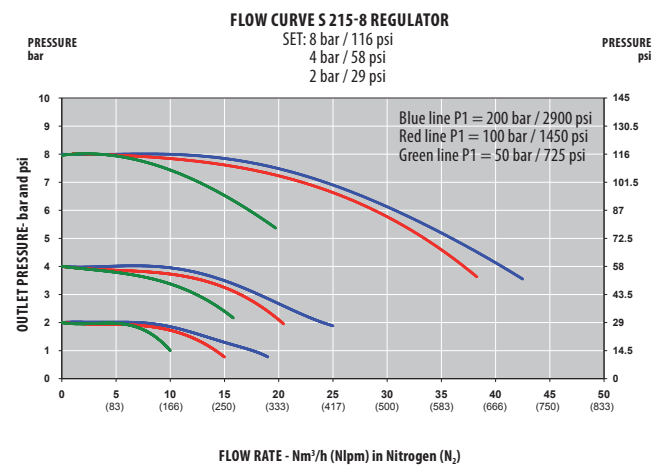
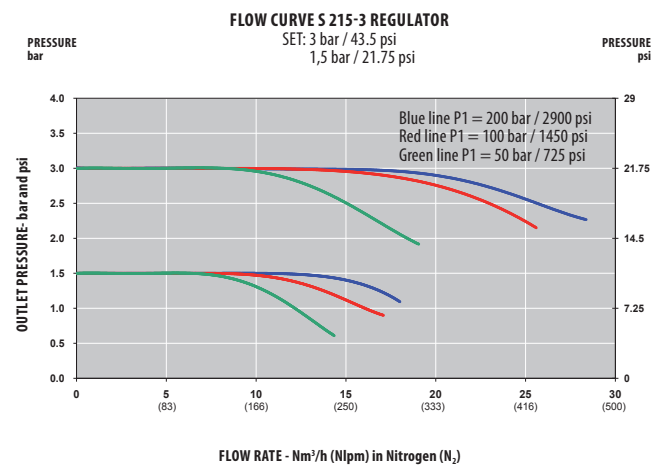


## SPECIFICATIONS

|                     |                                                                      |                          |                                               |                        |                                                                                          |
|---------------------|----------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|------------------------------------------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)*<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 0,9 kg<br>± 2.0 lbs                         | <b>Inlet pressure</b>  | 200 bar / 300 bar<br>2900 psi / 4350 psi                                                 |
| <b>Seat seal</b>    | PCTFE                                                                | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 1/3/8/16/35/50 bar<br>14.5/45/116/232/508/725 psi                                        |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                        | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 0,5/1,6/6/13,6/15/20<br>Nm³/h (N₂)                                                       |
| <b>Diaphragm</b>    | AlSi 304 (3/8/16 version)<br>Hastelloy® (35/50 version)              | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | OK for brass and stainless steel<br>except 35 bar and 50 bar<br>outlet pressure versions |

## FLOW CURVES

\*Only available in 300 bar



## PRODUCT CONFIGURATOR

| Body Material       |   | Inlet Pressure     |     | Outlet Pressure  |    | Ports   |   | End Connections    |    | O-ring Material | Gauges  |   | Ports Configuration  |   |
|---------------------|---|--------------------|-----|------------------|----|---------|---|--------------------|----|-----------------|---------|---|----------------------|---|
| S                   | L | 215                | 200 | 16               | 1  | 5       | 5 | N                  | 16 | EPDM            | 1       | 0 | A                    | A |
| Chrome plated brass | L | 200 bar / 2900 psi | 200 | 1 bar / 14.5 psi | 1  | 5 ports | 5 | 16 x 1.336 - G 3/8 | 16 | EPDM - Standard | Without | 0 | Standard             | A |
| Stainless steel     | I | 300 bar / 4350 psi | 300 | 3 bar / 44 psi   | 3  | 6 ports | 6 | 1/4 NPT - 1/4 NPT  | N  | NBR             | With    | 1 | Reverse Inlet/outlet | R |
|                     |   |                    |     | 8 bar / 116 psi  | 8  |         |   |                    |    | FPM             |         |   |                      |   |
|                     |   |                    |     | 16 bar / 232 psi | 16 |         |   |                    |    |                 |         |   |                      |   |
|                     |   |                    |     | 35 bar / 508 psi | 35 |         |   |                    |    |                 |         |   |                      |   |
|                     |   |                    |     | 50 bar / 725 psi | 50 |         |   |                    |    |                 |         |   |                      |   |

# SERIES S 220 | SINGLE STAGE HP REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
3/15/25/50 bar  
44/218/360/725 psi

- ★ 1 Inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible (with inlet pressure max 30 bar)
- ★ Inlet/outlet pressure gauges

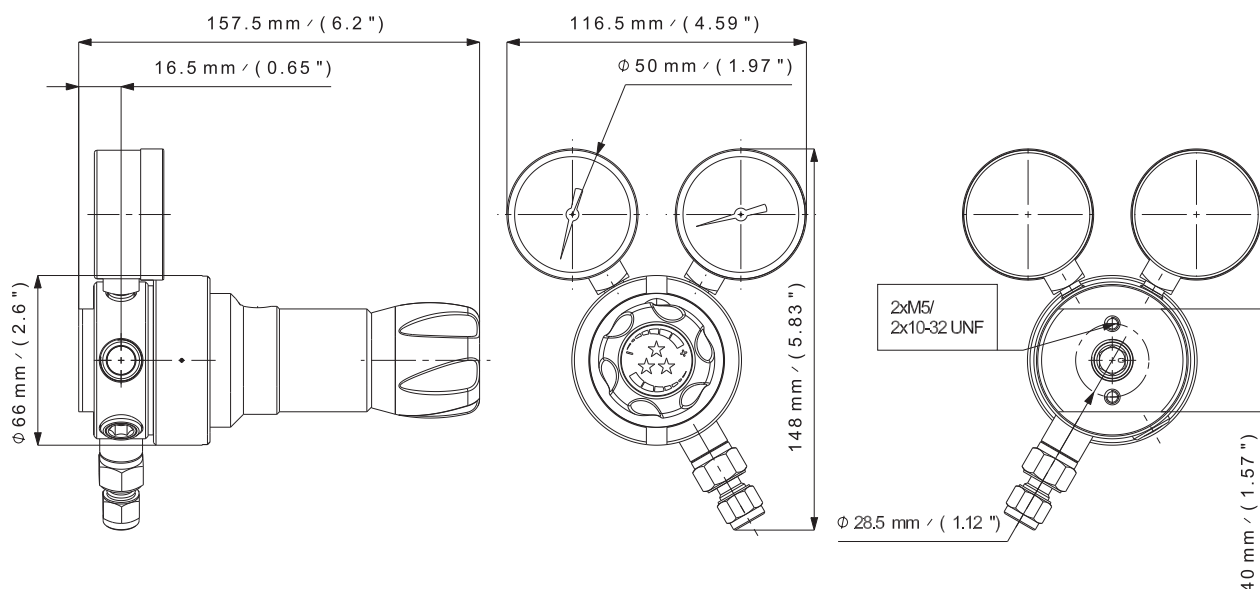
Special requirements on request

## APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for corrosive gases in ultra high purity applications and for fundamental research laboratories.
- Suitable for corrosive liquid gases.

## KEY FEATURES

- No contamination risk due to its threadless and springless design.
- Low dead volume, which guarantees a good purge of the regulator.
- Ergonomic handwheel for exceptional control.
- Panel mounting possible due the rear threads.
- Can also be equipped with a shut off or needle valve at the outlet.





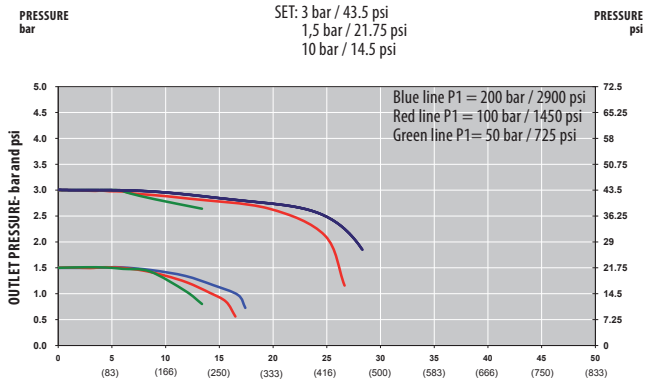
## SPECIFICATIONS

|                     |                                                                     |                          |                                               |                        |                                                    |
|---------------------|---------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|----------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 2,0 kg<br>± 4.4 lbs                         | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                                |
| <b>Seat seal</b>    | PCTFE                                                               | <b>Leak rate</b>         | 3.10 <sup>-9</sup> mbar ℓ/s He                | <b>Outlet pressure</b> | 3/15/25/50 bar<br>44/218/360/725 psi               |
| <b>O-ring</b>       | FPM - Standard<br>EPDM<br>NBR                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 5/25/50/50<br>Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | Hastelloy®                                                          | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | OK with inlet pressure ≤ 30<br>bar max             |

## FLOW CURVES

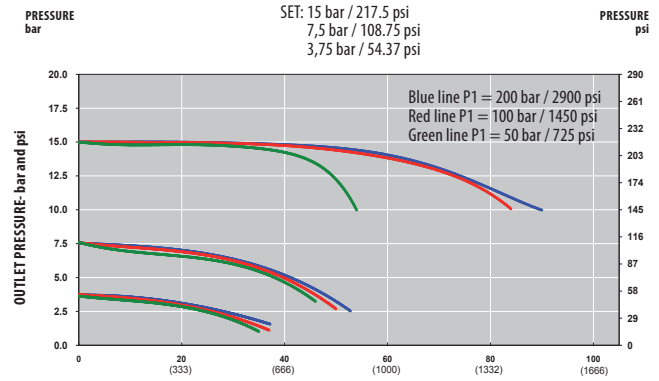
FLOW CURVE S 220-3 REGULATOR

SET: 3 bar / 43.5 psi  
1,5 bar / 21.75 psi  
10 bar / 14.5 psi

FLOW RATE - Nm<sup>3</sup>/h (Nlpm) in Nitrogen (N<sub>2</sub>)

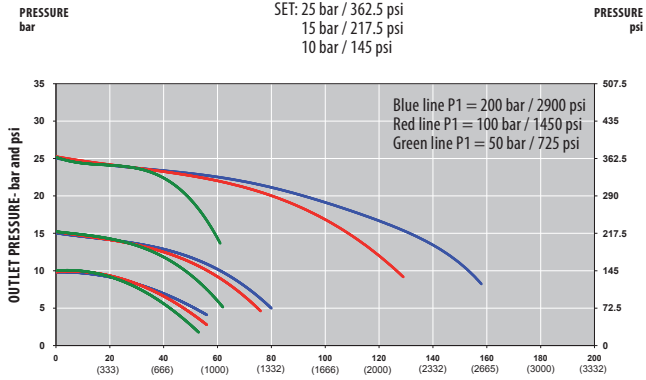
FLOW CURVE S 220-15 REGULATOR

SET: 15 bar / 217.5 psi  
7,5 bar / 108.75 psi  
3,75 bar / 54.37 psi

FLOW RATE - Nm<sup>3</sup>/h (Nlpm) in Nitrogen (N<sub>2</sub>)

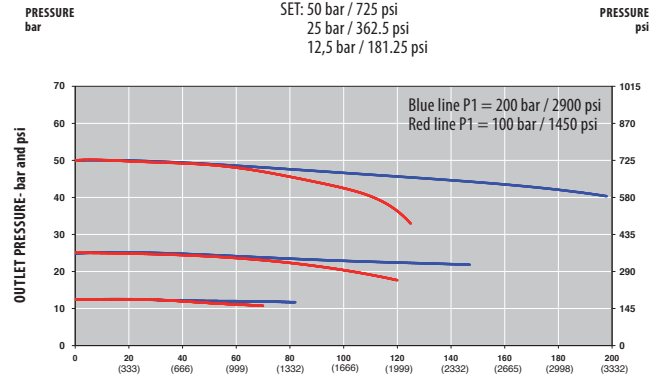
FLOW CURVE S 220-25 REGULATOR

SET: 25 bar / 362.5 psi  
15 bar / 217.5 psi  
10 bar / 145 psi

FLOW RATE - Nm<sup>3</sup>/h (Nlpm) in Nitrogen (N<sub>2</sub>)

FLOW CURVE S 220-50 REGULATOR

SET: 50 bar / 725 psi  
25 bar / 362.5 psi  
12,5 bar / 181.25 psi

FLOW RATE - Nm<sup>3</sup>/h (Nlpm) in Nitrogen (N<sub>2</sub>)

## PRODUCT CONFIGURATOR

|   | Body Material   |     | Outlet Pressure   |    | End Connections    |    | O-ring Materials<br>(safety relief valve) |         | Gauges |                          | Ports Configuration |
|---|-----------------|-----|-------------------|----|--------------------|----|-------------------------------------------|---------|--------|--------------------------|---------------------|
| S | I               | 220 | 15                |    | N                  |    | FPM                                       |         | 1      |                          | A                   |
|   | Stainless steel | I   | 3 bar<br>44 psi   | 3  | 16 x 1.336 - G 3/8 | 16 | FPM - Standard                            | Without | 0      | Standard                 | A                   |
|   |                 |     | 15 bar<br>218 psi | 15 | 1/4 NPT - 1/4 NPT  | N  | EPDM                                      | With    | 1      | Reverse<br>Inlet/outlet* | R                   |
|   |                 |     | 25 bar<br>360 psi | 25 |                    |    | NBR                                       |         |        |                          |                     |
|   |                 |     | 50 bar<br>725 psi | 50 |                    |    |                                           |         |        |                          |                     |

\*Only available for NPT version

# SERIES S 225 | SINGLE STAGE HP REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
3/8/16/35/50 bar  
44/116/232/508/725 psi

- ★ 1 inlet / 1 outlet
- ★ Rear inlet (standard version)
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible up to 16 bar/232 psi
- ★ Inlet/outlet gauge
- ★ 1 safety relief valve

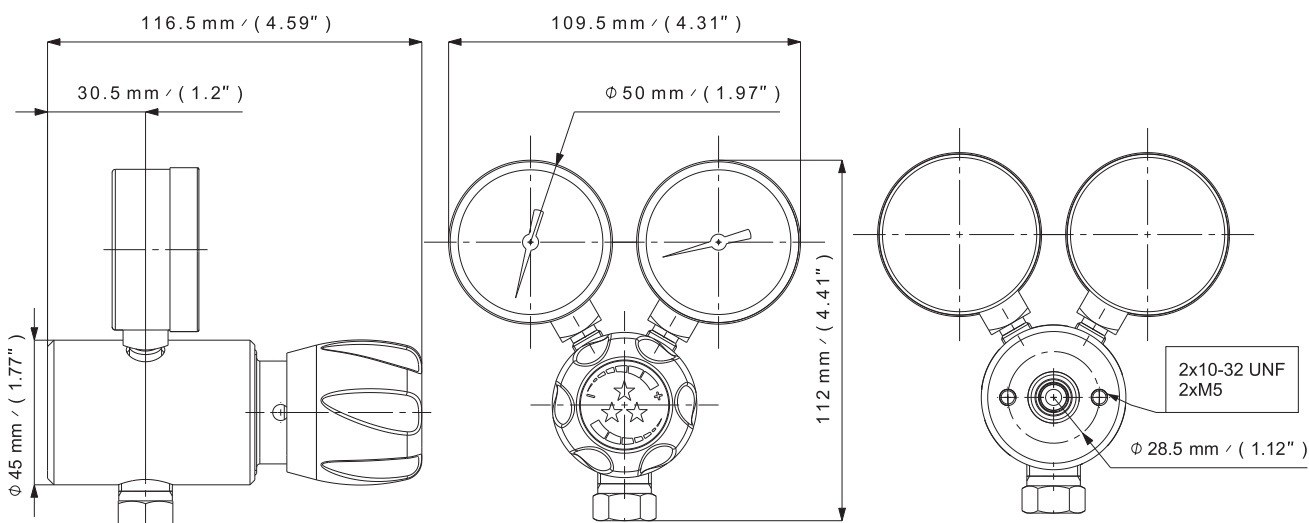
Special requirements on request

## APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications such as analytical instrumentation.
- Also used to create a controlled atmosphere in laboratories.

## KEY FEATURES

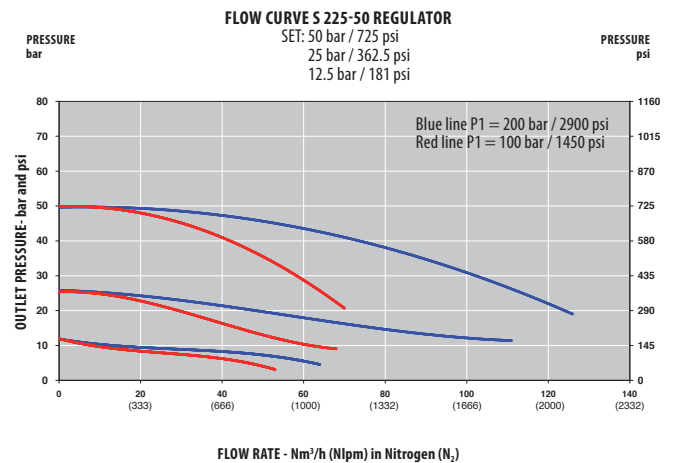
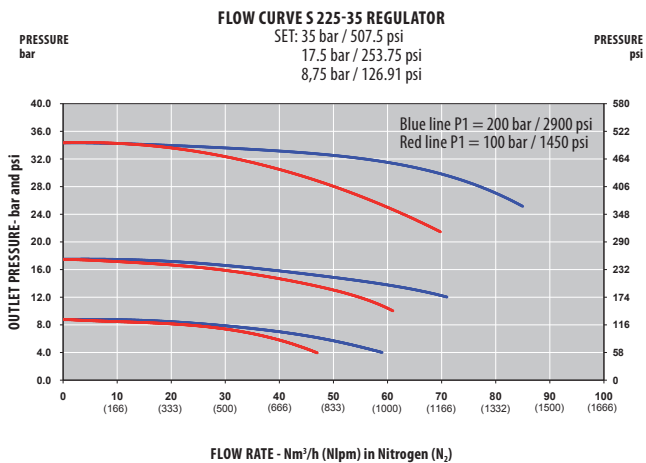
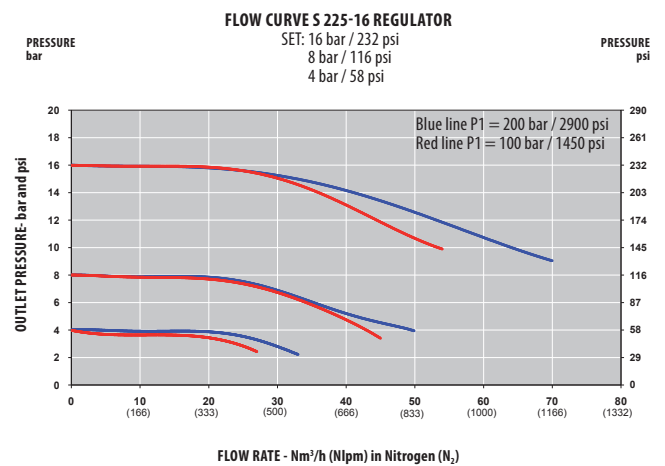
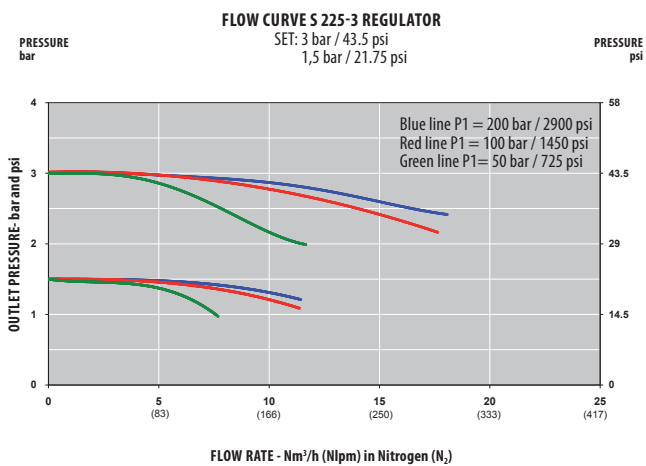
- Compact design suitable for multiple applications.
- Accurate pressure control for reliable service.
- Ergonomic handwheel for exceptional control.
- The Series 225 exists also with a side inlet ("EL" version).
- Wall mounting possible due to rear threads.
- Could be also equipped with a needle or shut off valve at the outlet.
- Fixed outlet pressure version available.



## SPECIFICATIONS

|                     |                                                                     |                          |                                      |                        |                                                                             |
|---------------------|---------------------------------------------------------------------|--------------------------|--------------------------------------|------------------------|-----------------------------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,0 kg brass<br>± 2.2 lbs          | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                                                         |
| <b>Seat seal</b>    | PCTFE                                                               | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 3/8/16/35/50 bar<br>44/116/232/508/725 psi                                  |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 2/10/14/25/25<br>Nm <sup>3</sup> /h (N <sub>2</sub> )                       |
| <b>Diaphragm</b>    | AlSi 304 (3/8/16 version)<br>Hastelloy® (35/50 version)             | <b>Gauges</b>            | High and low pressure<br>(M10 x 1)   | <b>Oxygen use</b>      | OK for brass and stainless steel<br>only for outlet pressure:<br>3/8/16 bar |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material |                     |   | Outlet Pressure |                   | End Connections |                    | O-ring Material | Gauges         |         | Handwheel |                                 | Ports Configuration |                       |    |  |
|---------------|---------------------|---|-----------------|-------------------|-----------------|--------------------|-----------------|----------------|---------|-----------|---------------------------------|---------------------|-----------------------|----|--|
| S             | L                   |   | 225             | 16                |                 | N                  |                 | EPDM           |         | 1         |                                 | H                   |                       | A  |  |
|               | Chrome plated brass | L |                 | 3 bar<br>44 psi   | 3               | 16 x 1.336 - G 3/8 | 16              | EPDM- Standard | Without | 0         | With (standard)                 | H                   | Rear inlet (standard) | A  |  |
|               | Stainless steel     | I |                 | 8 bar<br>116 psi  | 8               | 1/4 NPT - 1/4 NPT  | N               | NBR            | With    | 1         | Without (fixed outlet pressure) | FX                  | Lateral inlet         | EL |  |
|               |                     |   |                 | 16 bar<br>232 psi | 16              |                    |                 | FPM            |         |           |                                 |                     |                       |    |  |
|               |                     |   |                 | 35 bar<br>508 psi | 35              |                    |                 |                |         |           |                                 |                     |                       |    |  |
|               |                     |   |                 | 50 bar<br>725 psi | 50              |                    |                 |                |         |           |                                 |                     |                       |    |  |

## SERIES S 250 | SINGLE STAGE HP REGULATOR

- Piston single stage
- Purity up to 6.0
- Inlet pressure:  
300 bar (4350 psi)
- Outlet pressure:  
60 bar (870 psi)

- ★ 1 inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible with brass version only
- ★ Inlet/outlet pressure gauges

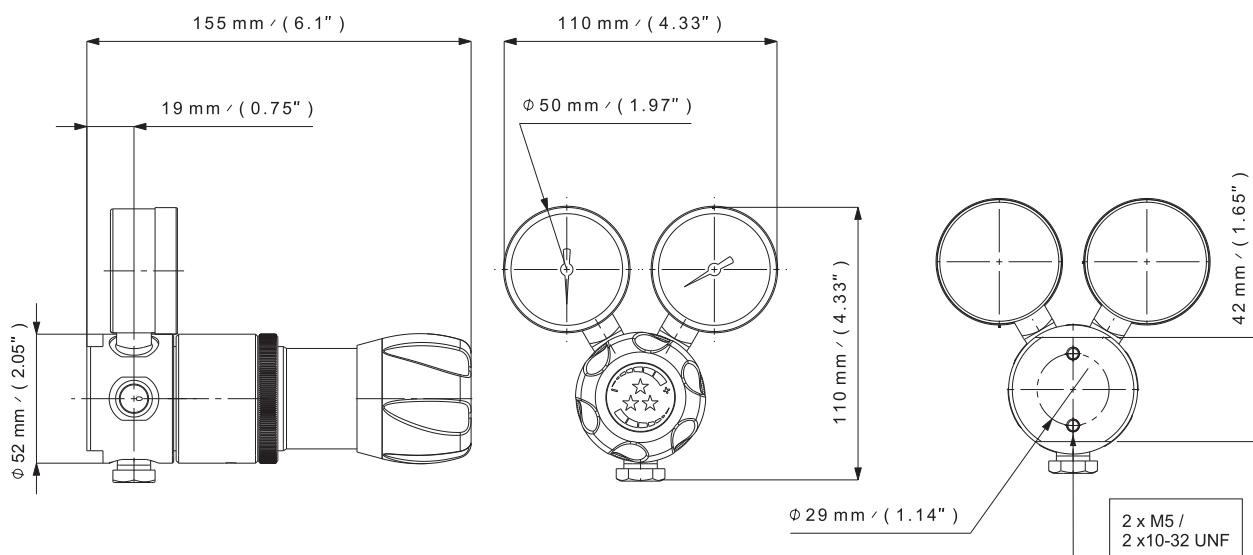
Special requirements on request

### APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited to put vessels under pressure, such as for leak detection and purge of pipe work.

### KEY FEATURES

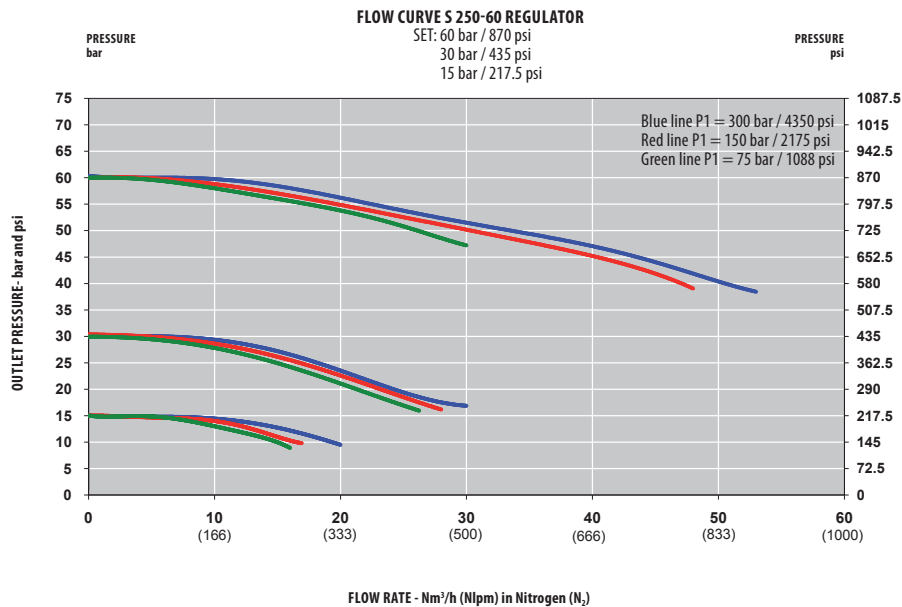
- Decompression of the downstream regulation system by turning the hand wheel counter-clockwise (SL 250).
- Accurate pressure control for reliable service.
- The SLS 250 version has a connection available so that a safety relief valve can be installed.
- Panel mounting possible due the rear threads.
- Can also be equipped with a needle or shut off valve at the outlet.



## SPECIFICATIONS

|                     |                                                               |                          |                                               |                        |                     |
|---------------------|---------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|---------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet) or 1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,6 kg<br>± 3.5 lbs                         | <b>Inlet pressure</b>  | 300 bar<br>4350 psi |
| <b>Seat seal</b>    | PCTFE                                                         | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 60 bar<br>870 psi   |
| <b>O-ring</b>       | NBR - Standard<br>EPDM<br>FPM                                 | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 10 Nm³/h (N₂)       |
| <b>Piston</b>       | AISI 316L                                                     | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass only          |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   | Body Material       |   | Safety Relief Valve Configuration        |   |     | End Connection     | O-ring Material | Gauges         |         |   |
|---|---------------------|---|------------------------------------------|---|-----|--------------------|-----------------|----------------|---------|---|
| S | L                   |   | -                                        |   | 250 | N                  | NBR             | 1              |         |   |
|   | Chrome plated brass | L | With decompression system                | - |     | 16 x 1.336 - G 3/8 | 16              | NBR - Standard | Without | 0 |
|   | Stainless steel     | I | With a safety valve connection available | S |     | 1/4 NPT - 1/4 NPT  | N               | EPDM           | With    | 1 |
|   |                     |   |                                          |   |     |                    | FPM             |                |         |   |

# SERIES S 400 | SINGLE STAGE HP REGULATOR

- Piston single stage
- Purity up to 6.0
- Inlet pressure:  
300 bar (4350 psi)
- Outlet pressure:  
200 bar (2900 psi)

- ★ 1 inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible with brass version only
- ★ Inlet/outlet pressure gauges

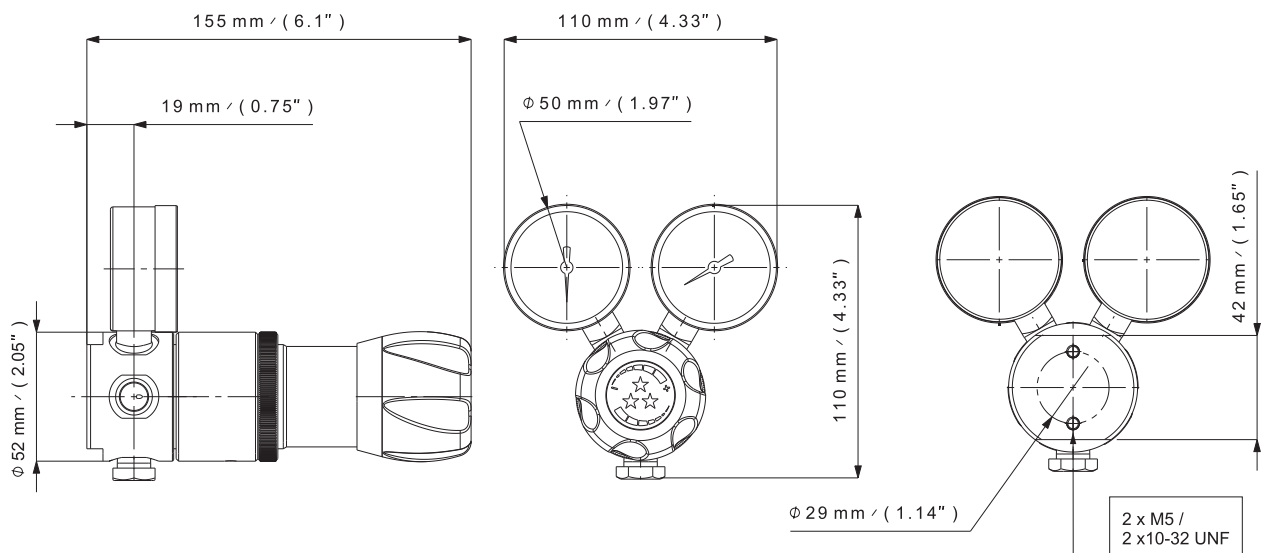
Special requirements on request

## APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited to put vessels under pressure, leak detection and purge of pipe work.

## KEY FEATURES

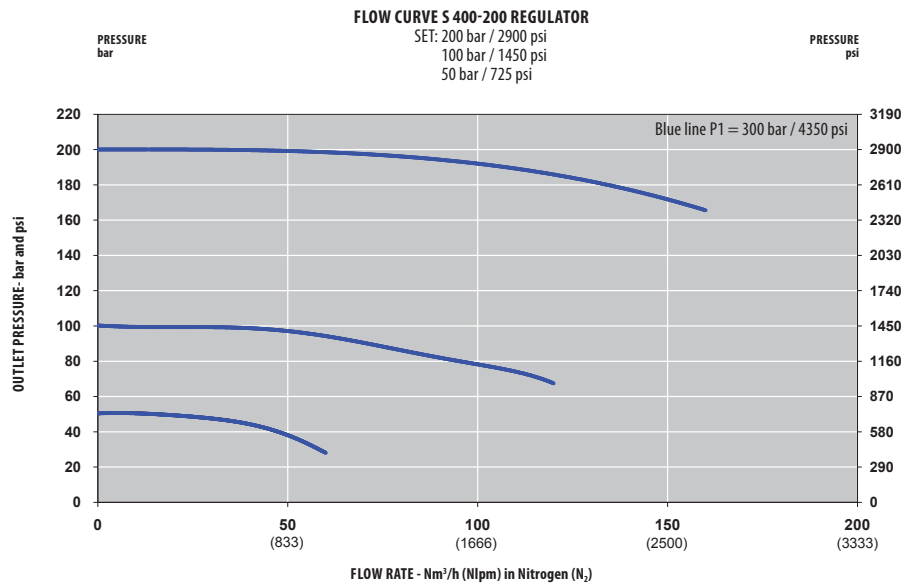
- Similar to the series S250 but with a higher possible outlet pressure (200 bar)
- Decompression of the downstream regulation system possible by turning the hand wheel counter-clockwise (SL 400).
- Accurate pressure control for reliable service.
- The SLS 400 version has a connection available so that a safety relief valve can be installed.
- Panel mounting possible due the rear threads.
- Can also be equipped with a shut off valve at the outlet.



## SPECIFICATIONS

|                     |                                                               |                          |                                               |                        |                     |
|---------------------|---------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|---------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet) or 1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,6 kg<br>± 3.5 lbs                         | <b>Inlet pressure</b>  | 300 bar<br>4350 psi |
| <b>Seat seal</b>    | PCTFE                                                         | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 200 bar<br>2900 psi |
| <b>O-ring</b>       | NBR - Standard<br>EPDM<br>FPM                                 | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 30 Nm³/h (N₂)       |
| <b>Piston</b>       | AISI 316L                                                     | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass only          |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|          | Body Material       |          | Safety Relief Valve Configuration        |          | End Connections    |           | O-ring Material | Gauges   |          |
|----------|---------------------|----------|------------------------------------------|----------|--------------------|-----------|-----------------|----------|----------|
| <b>S</b> | <b>L</b>            |          | <b>-</b>                                 |          | <b>400</b>         | <b>N</b>  | <b>NBR</b>      | <b>1</b> |          |
|          | Chrome plated brass | <b>L</b> | With decompression system                | <b>-</b> | 16 x 1.336 - G 3/8 | <b>16</b> | NBR - Standard  | Without  | <b>0</b> |
|          | Stainless steel     | <b>I</b> | With a safety valve connection available | <b>S</b> | 1/4 NPT - 1/4 NPT  | <b>N</b>  | EPDM            | With     | <b>1</b> |
|          |                     |          |                                          |          |                    |           | FPM             |          |          |



## SERIES S 800 | SINGLE STAGE HP REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 6.0
- Inlet pressure:  
300 bar (4350 psi)
- Outlet pressure:  
10/16/25/50 bar  
145/232/363/725 psi

- ★ Reduce ownership cost
- ★ 1 inlet / 1 outlet
- ★ Rear thread for front panel mounting
- ★ O<sub>2</sub> application compatible, up to 200 bar inlet pressure for stainless steel version
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

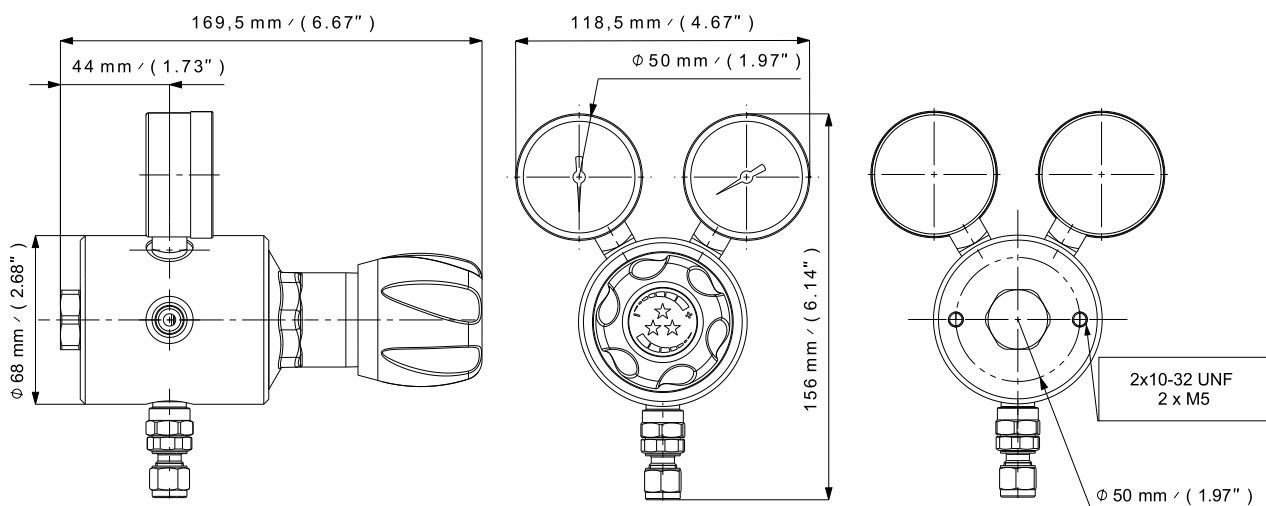
Special requirements on request

### APPLICATIONS

- Designed for application as a cylinder regulator.
- Ideally suited for high purity gases and high-pressure applications requiring high flow and precise outlet pressure, such as for laser applications.
- Used also in nuclear research department where the precision of the outlet pressure and high flow are essential.

### KEY FEATURES

- Best-in-class pressure control with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. The BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow.
- BV Technology also increases the useful lifetime of the regulator and reduces ownership cost.

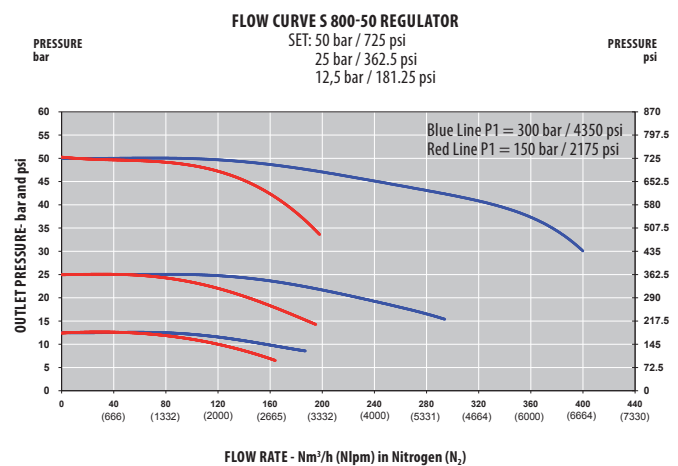
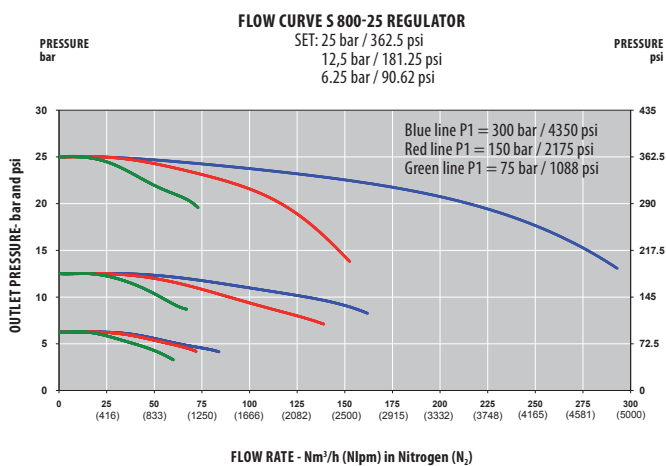
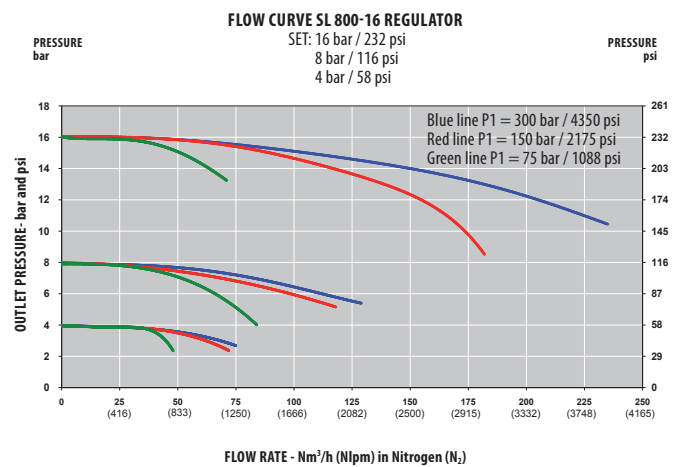
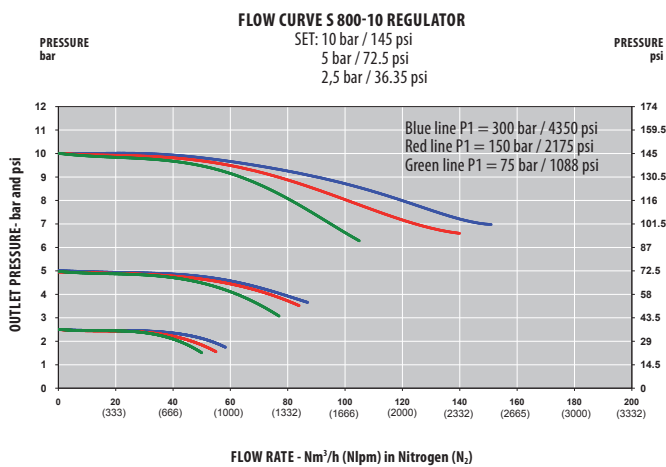




## SPECIFICATIONS

|                     |                                                                     |                          |                                               |                        |                                                                           |
|---------------------|---------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|---------------------------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 2,4 kg<br>± 5.3 lbs                         | <b>Inlet pressure</b>  | 300 bar<br>4350 psi                                                       |
| <b>Seat seal</b>    | PCTFE                                                               | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 10/16/25/50 bar<br>145/232/363/725 psi                                    |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 50/50/50/100 Nm <sup>3</sup> /h (N <sub>2</sub> )                         |
| <b>Diaphragm</b>    | AISI 304<br>Hastelloy® (25/50 bar)                                  | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass version: OK<br>Stainless steel version: inlet<br>pressure ≤ 200 bar |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   | Body Material       |    |     | Outlet Pressure     |    | End Connections    |    | O-ring Material | Gauges  |   |
|---|---------------------|----|-----|---------------------|----|--------------------|----|-----------------|---------|---|
| S | L                   |    | 800 | 16                  |    | N                  |    | EPDM            | 1       |   |
|   | Raw brass           | LB |     | 10 bar<br>145 psi   | 10 | 16 x 1.336 - G 3/8 | 16 | EPDM - Standard | Without | 0 |
|   | Chrome plated brass | L  |     | 16 bar<br>232 psi   | 16 | 1/4 NPT - 1/4 NPT  | N  | NBR             | With    | 1 |
|   | Stainless steel     | I  |     | 25 bar<br>362.5 psi | 25 |                    |    | FPM             |         |   |
|   |                     |    |     | 50 bar<br>725 psi   | 50 |                    |    |                 |         |   |

## SERIES S 810 | SINGLE STAGE HP REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 6.0
- Inlet pressure:  
300 bar (4350 psi)
- Outlet pressure:  
10/16/25 bar  
145/232/362.5 psi

- ★ Reduce ownership cost
- ★ 1 inlet / 2 outlets
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible
- ★ Outlet pressure gauge

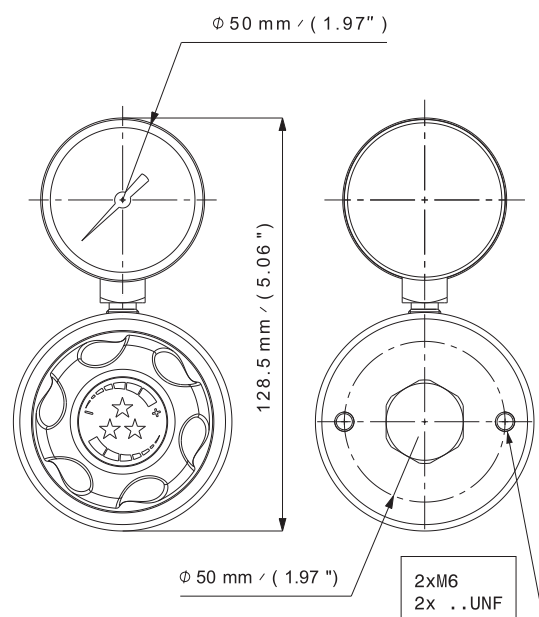
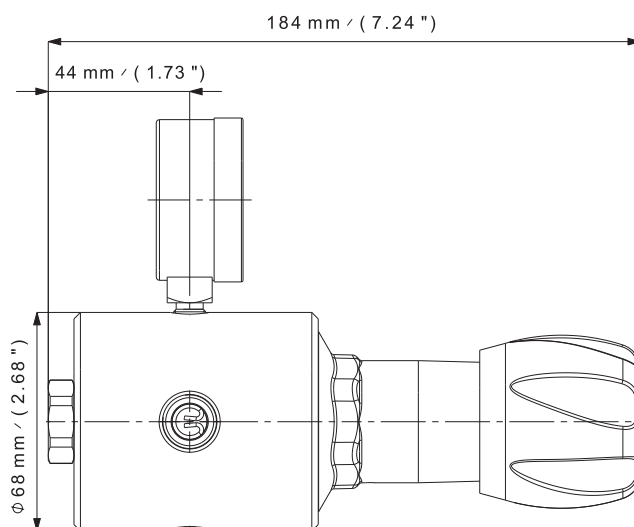
Special requirements on request

### APPLICATIONS

- Designed for application as line regulator; for many applications that need a high flow.
- Ideally suited for high purity gases and high-pressure applications requiring high flow and precise outlet pressure, such as for laser applications.
- Also used for industrial applications as a line regulator

### KEY FEATURES

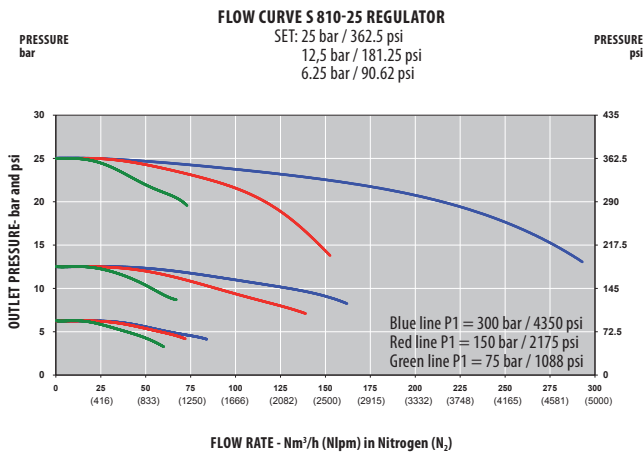
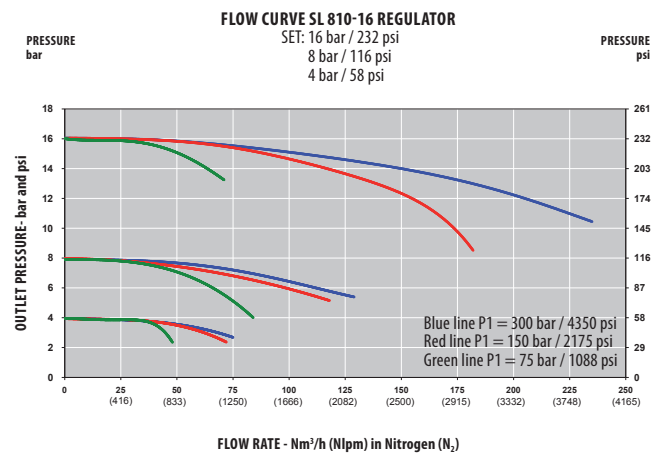
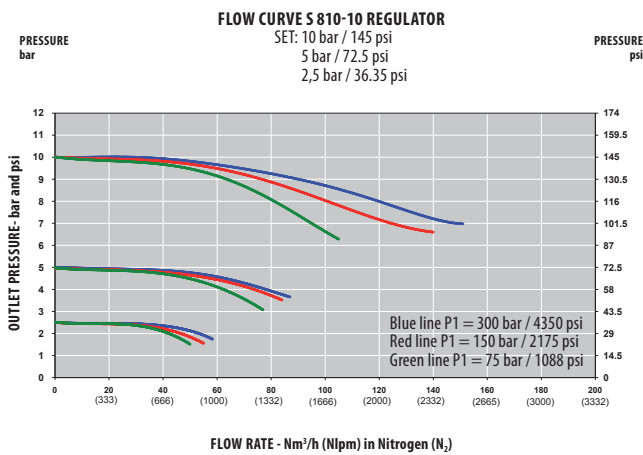
- Best-in-class pressure control with Balanced Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. The BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow.
- BV Technology also increases useful lifetime of the regulator and reduces the ownership cost.



## SPECIFICATIONS

|                     |                                                      |                          |                                      |                        |                                               |
|---------------------|------------------------------------------------------|--------------------------|--------------------------------------|------------------------|-----------------------------------------------|
| <b>Female ports</b> | G 3/8 (inlet/outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 2,4 kg<br>± 5.3 lbs                | <b>Inlet pressure</b>  | 300 bar<br>4350 psi                           |
| <b>Seat seal</b>    | PCTFE                                                | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 10/16/25 bar<br>145/232/362.5 psi             |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                        | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 50/50/50 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | Hastelloy® (25/50 bar)<br>AISI 304                   | <b>Gauges</b>            | low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | OK                                            |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|          | Body Material |            | Outlet Pressure     |           | End Connections   |          | O-ring Material | Gauges   |          |
|----------|---------------|------------|---------------------|-----------|-------------------|----------|-----------------|----------|----------|
| <b>S</b> | <b>LB</b>     | <b>810</b> | <b>16</b>           | <b>10</b> | <b>G</b>          | <b>G</b> | <b>EPDM</b>     | <b>1</b> | <b>0</b> |
|          | Raw brass     | LB         | 10 bar<br>145 psi   | 10        | G 3/8 - G 3/8     | G        | EPDM - Standard | Without  | 0        |
|          |               |            | 16 bar<br>232 psi   | 16        | 1/4 NPT - 1/4 NPT | N        | NBR             | With     | 1        |
|          |               |            | 25 bar<br>362.5 psi | 25        |                   |          | FPM             |          |          |

## SERIES GD 100 | SINGLE STAGE HP HIGH FLOW REGULATOR

- Diaphragm single stage
- Purity up to 5.5
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
10 bar (145psi)
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1= 25 bar (362.5 psi)  
P2=1,2 bar (17.4 psi)

- ★ High flow regulator
- ★ 1 inlet / 1 outlet
- ★ O<sub>2</sub> application compatible
- ★ Inlet/outlet pressure gauges
- ★ Acetylene version available (AD)

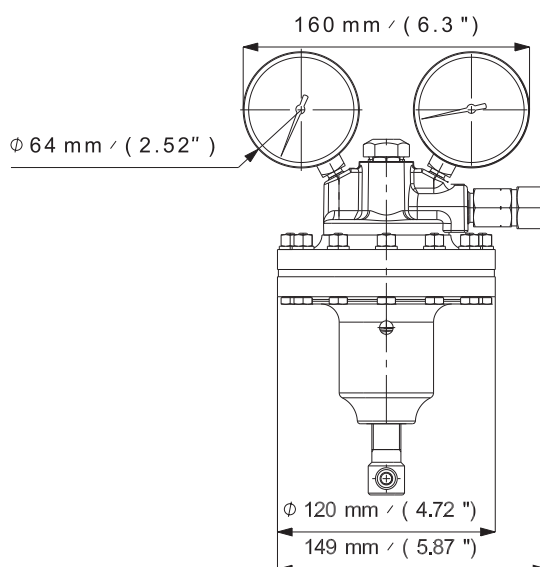
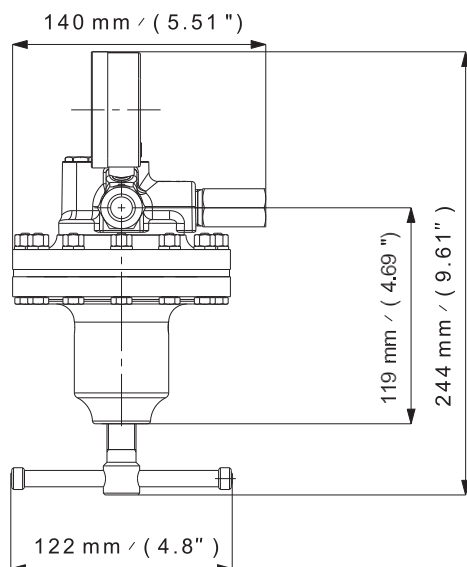
Special requirements on request

### APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally used in industrial applications requiring high flow - particularly to supply gas to welding machines.

### KEY FEATURES

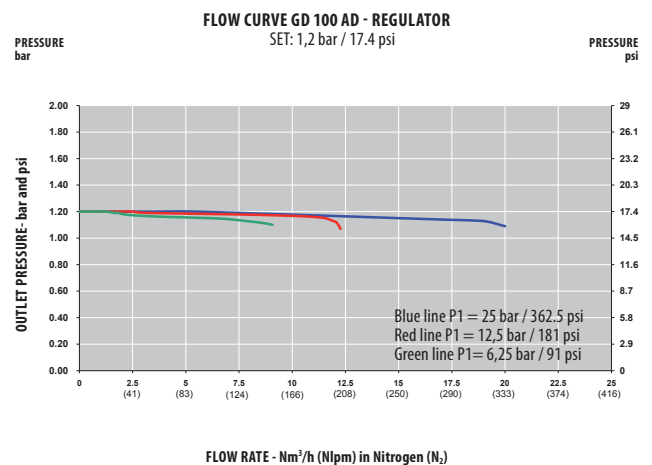
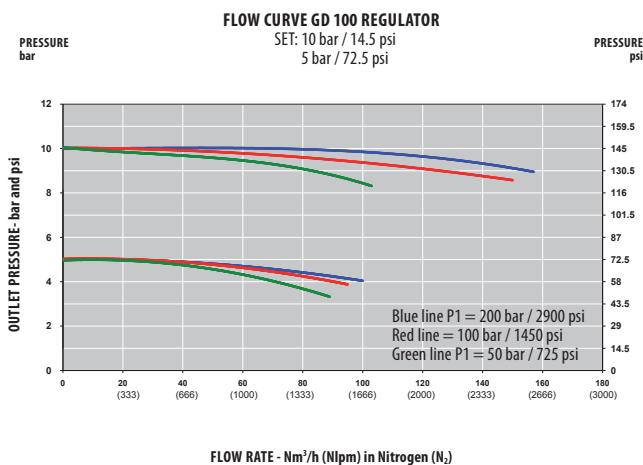
- Exceptionally durable
- Acetylene version available:  
P1=25 bar / P2=1,2 bar / Q=10 Nm<sup>3</sup>/h.
- If used with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.
- Medical CE version available (see Meditec catalogue).



## SPECIFICATIONS

|                      |                                                        |                          |                                      |                        |                                                                       |
|----------------------|--------------------------------------------------------|--------------------------|--------------------------------------|------------------------|-----------------------------------------------------------------------|
| <b>Ports</b>         | inlet: 16 x 1.336 (Female)<br>outlet: M20 x 1,5 (Male) | <b>Weight</b>            | ± 4,6 kg<br>± 10.1 lbs               | <b>Inlet pressure</b>  | 200 bar (2900 psi)<br>AD: 25 bar / 362.5 psi                          |
| <b>Seat seal</b>     | PA 6.6                                                 | <b>Leak rate</b>         | 10 <sup>-3</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 10 bar / 145 psi<br>AD: 1,2 bar / 17 psi                              |
| <b>Diaphragm</b>     | Butyl                                                  | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 100 Nm <sup>3</sup> /h (N <sub>2</sub> )<br>AD: 10 Nm <sup>3</sup> /h |
| <b>Body Material</b> | Raw brass                                              | <b>Gauges</b>            | High and low pressure<br>(M10 x 1)   | <b>Oxygen use</b>      | OK                                                                    |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|    | Type              | Inlet Connection | Gauges    |
|----|-------------------|------------------|-----------|
| GD | 100               | 16               | 1         |
|    | Standard version  | 100 16 x 1.336   | Without 0 |
|    | Acetylene version | 100 AD           | With 1    |

## SERIES TGD 250 | SINGLE STAGE HP HIGH FLOW REGULATOR

- Diaphragm single stage
- Purity up to 5.5
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
20 bar (290psi)

- ★ High flow regulator
- ★ 1 inlet / 1 outlet
- ★ O<sub>2</sub> application compatible
- ★ Inlet/outlet pressure gauges

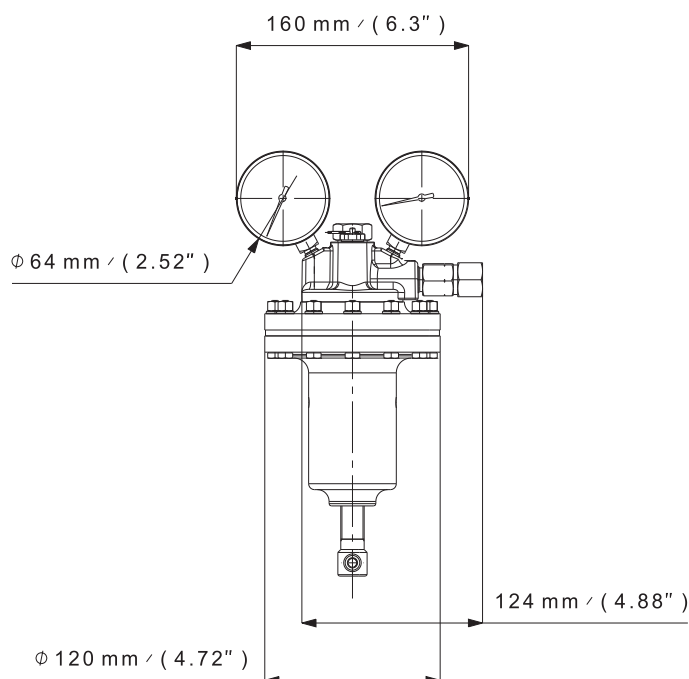
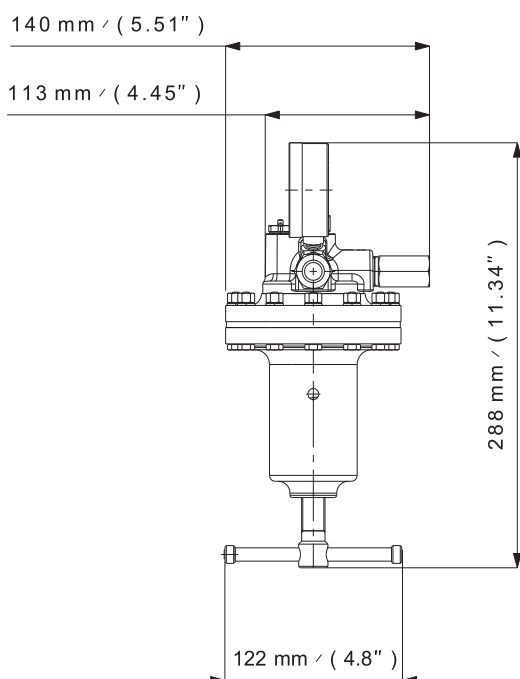
Special requirements on request

### APPLICATIONS

- Ideally suited for distribution of gases in industrial applications requiring very high flow like feeding of welding machines

### KEY FEATURES

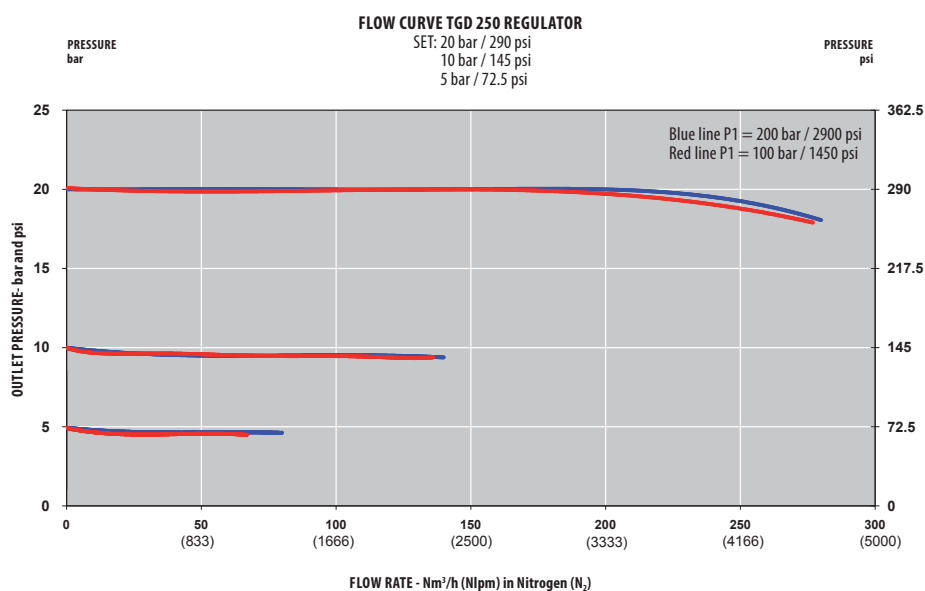
- Exceptionally durable
- Medical CE version available (see Meditec catalogue).



## SPECIFICATIONS

|                      |                                                        |                          |                                      |                        |                                          |
|----------------------|--------------------------------------------------------|--------------------------|--------------------------------------|------------------------|------------------------------------------|
| <b>Ports</b>         | inlet: 16 x 1.336 (Female)<br>outlet: M20 x 1,5 (Male) | <b>Weight</b>            | ± 4,6 kg<br>± 10.1 lbs               | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                      |
| <b>Seat seal</b>     | PCTFE                                                  | <b>Leak rate</b>         | 10 <sup>-3</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 20 bar<br>290 psi                        |
| <b>Diaphragm</b>     | Butyl                                                  | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 250 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Body Material</b> | Raw brass                                              | <b>Gauges</b>            | High and low pressure<br>(M10 x 1)   | <b>Oxygen use</b>      | OK                                       |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| TGD | 250 | Inlet Connection |    | Gauges  |   |
|-----|-----|------------------|----|---------|---|
|     |     | 16               | 16 | Without | 0 |
|     |     | 16 x 1.336       |    | With    | 1 |

## SERIES D 215 | DUAL STAGE HP REGULATOR

- Diaphragm dual stage
- Purity up to 6.0
- Inlet pressure:  
200 (2900 psi)  
or 300 bar (4350 psi)
- Outlet pressure:  
1/3/8/16 bar  
14.5/44/116/232 psi

- ★ Compact and light-weight design
- ★ 1 inlet / 1 outlet
- ★ O<sub>2</sub> application compatible
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

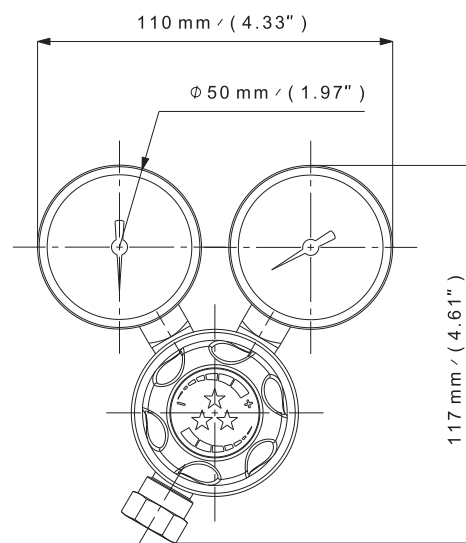
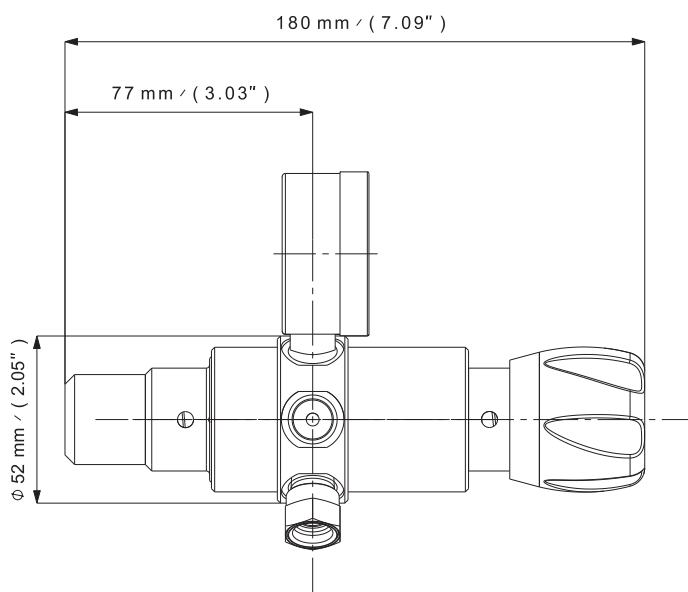
Special requirements on request

### APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable outlet pressure.

### KEY FEATURES

- The D 215 regulator is based on the high-performing S 215 technology but delivers superior outlet pressure stability.
- Accurate pressure control for reliable service and guarantees a stable outlet pressure.
- Compact, ergonomic and lightweight.

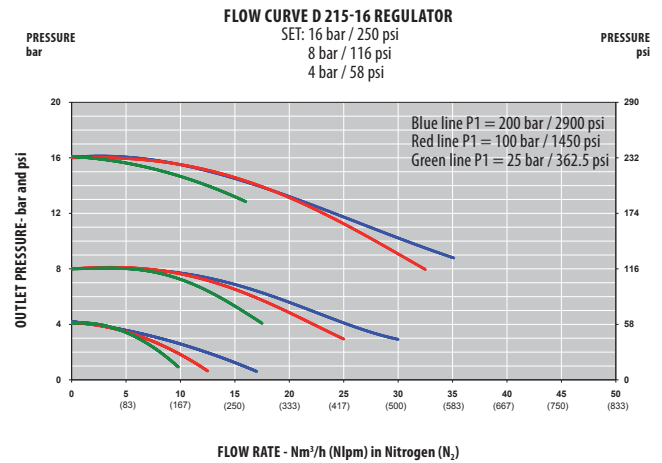
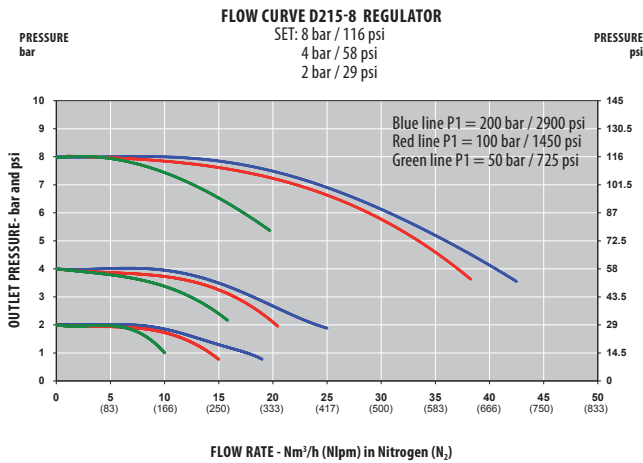
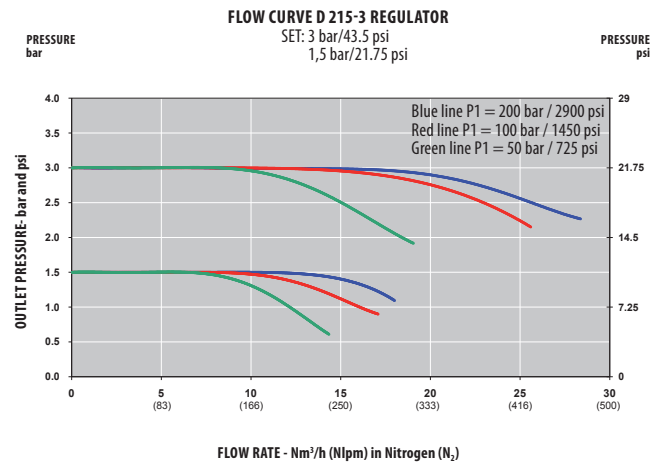
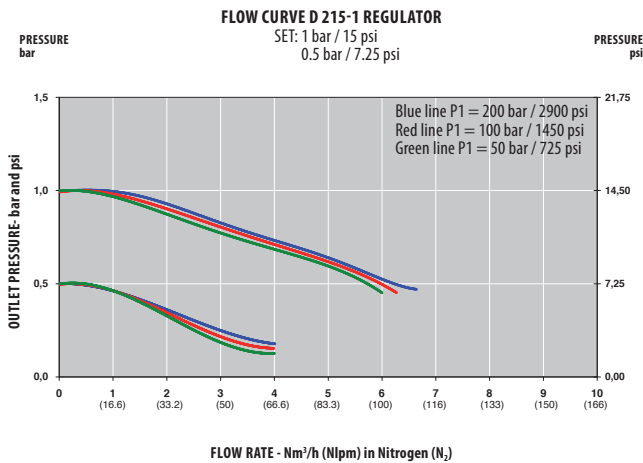




# SPECIFICATIONS

|                     |                                                                     |                          |                                               |                        |                                                         |
|---------------------|---------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|---------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,45 kg<br>± 3.2 lbs                        | <b>Inlet pressure</b>  | 200 bar / 300 bar<br>2900 psi / 4350 psi                |
| <b>Seat seal</b>    | PCTFE                                                               | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 1 / 3 / 8 / 16 bar<br>14.5/44/116/232 psi               |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 0,4/1,2/2,9/3,5<br>Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | AISI 304                                                            | <b>Gauges</b>            | High and low pressure<br>(1/4 NPT or M10 x 1) | <b>Oxygen use</b>      | OK for brass and stainless steel                        |

# FLOW CURVES



# PRODUCT CONFIGURATOR

| Body Material |                     |   | Inlet Pressure |                     | Outlet Pressure |                   | Ports |         | End Connections |                       | O-ring Material | Gauges          |  | Ports Configuration |   |                         |   |
|---------------|---------------------|---|----------------|---------------------|-----------------|-------------------|-------|---------|-----------------|-----------------------|-----------------|-----------------|--|---------------------|---|-------------------------|---|
| D             | L                   |   | 215            | 200                 |                 | 8                 |       | 5       |                 | N                     |                 | EPDM            |  | 1                   |   | A                       |   |
|               | Chrome plated brass | L |                | 200 bar<br>2900 psi | 200             | 1 bar<br>14.5 psi | 1     | 5 ports | 5               | 16 x 1.336<br>- G 3/8 | 16              | EPDM - Standard |  | Without             | 0 | Standard                | A |
|               | Stainless steel     | I |                | 300 bar<br>4350 psi | 300             | 3 bar<br>44 psi   | 3     | 6 ports | 6               | 1/4 NPT - 1/4<br>NPT  | N               | NBR             |  | With                | 1 | Reverse<br>inlet/outlet | R |
|               |                     |   |                |                     |                 | 8 bar<br>116 psi  | 8     |         |                 |                       |                 | FPM             |  |                     |   |                         |   |
|               |                     |   |                |                     |                 | 16 bar<br>232 psi | 16    |         |                 |                       |                 |                 |  |                     |   |                         |   |

## SERIES D 230 | DUAL STAGE HP REGULATOR

- Piston/bellow dual stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
1/3/10 bar  
14.5/44/145psi

- ★ Compact and light-weight design
- ★ 1 inlet / 2 outlets
- ★ O<sub>2</sub> application compatible (brass only)
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

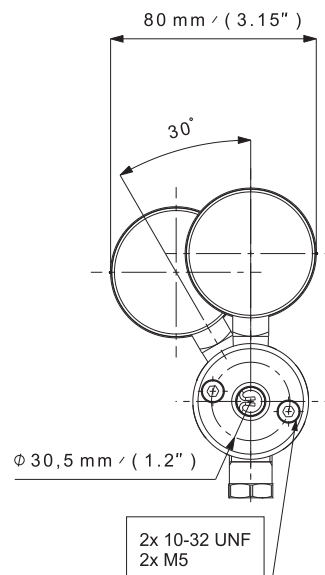
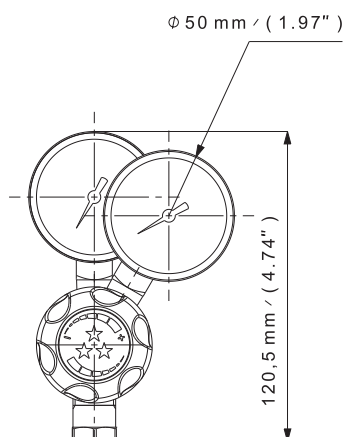
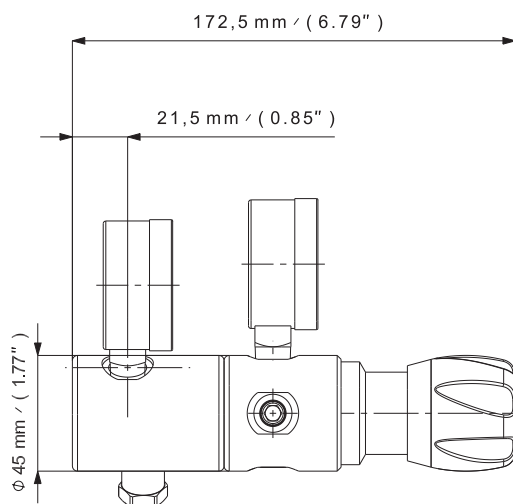
Special requirements on request

### APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable outlet pressure together with a very sensitive set up of this outlet pressure.

### KEY FEATURES

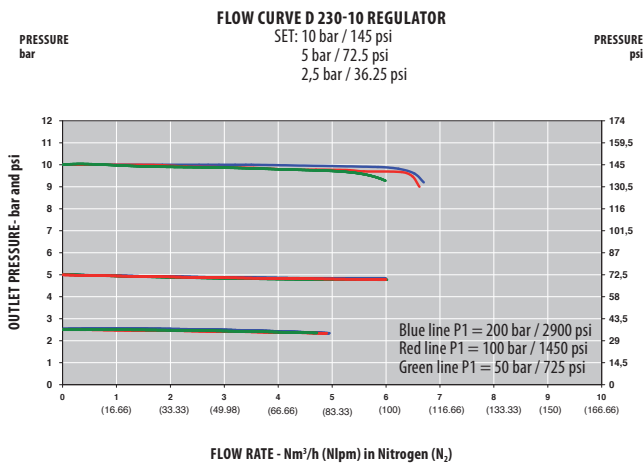
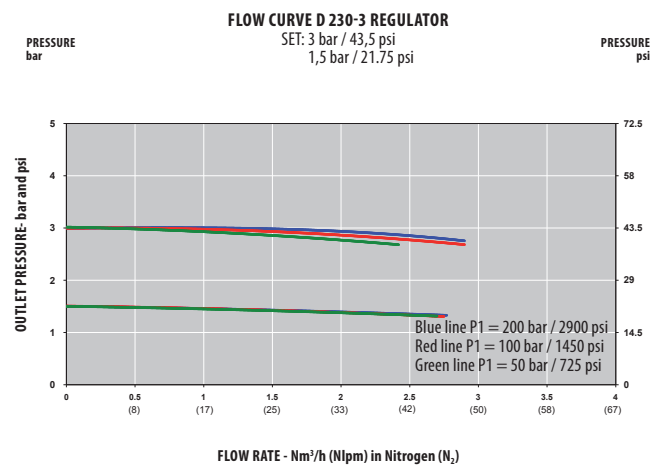
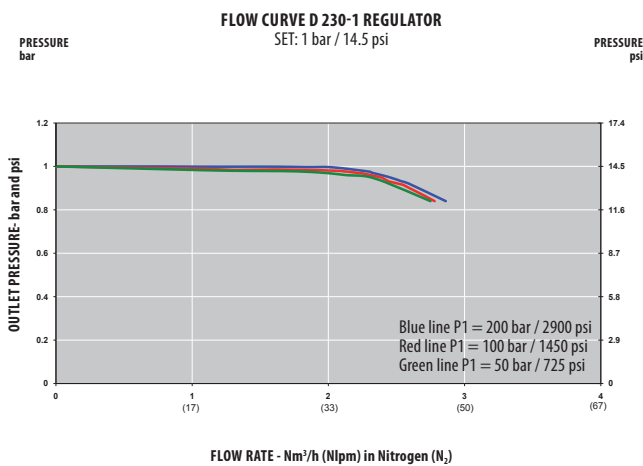
- The D 230 regulator is based on the S 20 proven bellow technology.
- Accurate pressure control for reliable service and guarantees a stable outlet pressure due to the combination of the piston and bellow technology.
- Compact and lightweight design.
- Fixed outlet pressure version available.



## SPECIFICATIONS

|                     |                                                                     |                          |                                               |                        |                                                   |
|---------------------|---------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|---------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,6 kg<br>± 3.5 lbs                         | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                               |
| <b>Seat seal</b>    | PTFE                                                                | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145 psi                     |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 2/2,5/3,5<br>Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Piston</b>       | Brass (Brass version)<br>AISI 316L (SS version)                     | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass only                                        |
| <b>Below</b>        | Bronze or<br>AISI 316L (SS version)                                 |                          |                                               |                        |                                                   |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   | Body Material       |   |     | Outlet Pressure   |    | End Connections              |    | O-ring Material |         | Gauges |                                 | Handwheel |  |
|---|---------------------|---|-----|-------------------|----|------------------------------|----|-----------------|---------|--------|---------------------------------|-----------|--|
| D | L                   |   | 230 | 10                |    | N                            |    | EPDM            |         | 1      |                                 | H         |  |
|   | Chrome plated brass | L |     | 1 bar<br>14.5 psi | 1  | In: 16 x 1.336<br>Out: G 3/8 | 16 | EPDM - Standard | Without | 0      | With - standard                 | H         |  |
|   | Stainless steel     | I |     | 3 bar<br>44 psi   | 3  | In: NPT 1/4<br>Out: G 3/8    | NG | NBR             | With    | 1      | Without (fixed outlet pressure) | FX        |  |
|   |                     |   |     | 10 bar<br>145 psi | 10 | NPT 1/4<br>(inlet/Outlet)    | N  | FPM             |         |        |                                 |           |  |

## SERIES D 230-0.1 | DUAL STAGE HP REGULATOR

- Piston/diaphragm dual stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
0,01 - 0,1 bar  
0.14 - 1.45 psi

- ★ Compact and lightweight design
- ★ 1 inlet / 2 outlets
- ★ O<sub>2</sub> application compatible (brass only)
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

Special requirements on request



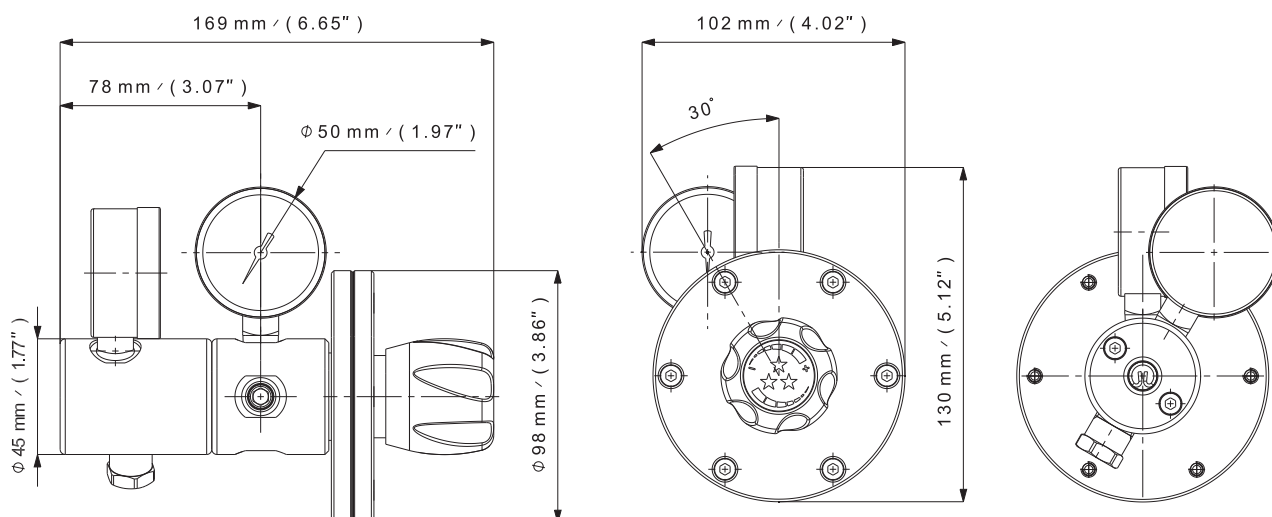
Rear inlet view - with cylinder connector

### APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable, very sensitive and very low outlet pressure.

### KEY FEATURES

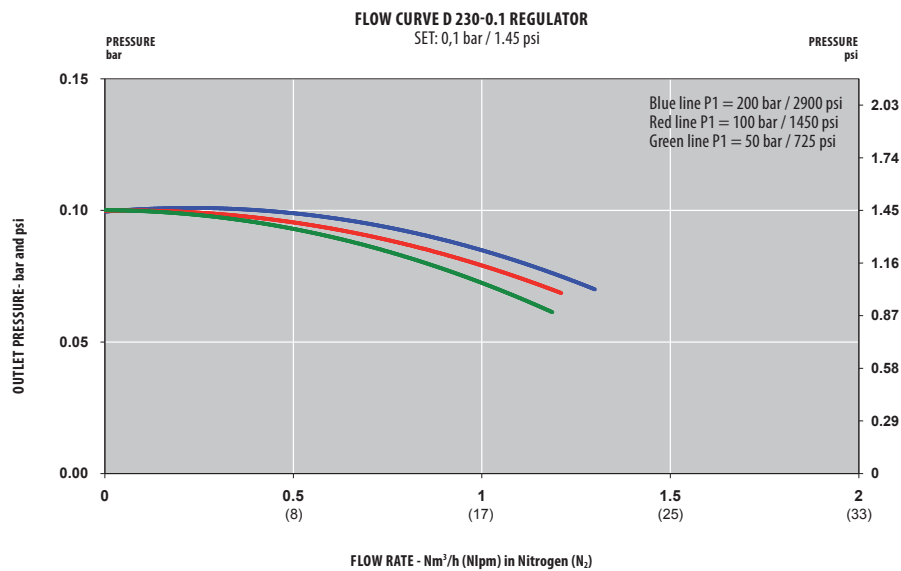
- The DL 230-0.1 regulator is based on the SL 20-0.1 proven low pressure regulator.
- Guarantees a stable low flow due to the combination of the piston and diaphragm technologies.
- The rear threads can be used for wall mounting.
- Can also be equipped with a needle or shut off valve at the outlet.



## SPECIFICATIONS

|                     |                                                                                                   |                          |                                               |                        |                                          |
|---------------------|---------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>1/4 NPT (inlet) - G 3/8 (outlet)<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,5 kg<br>± 3.3 lbs                         | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                      |
| <b>Seat seal</b>    | PTFE                                                                                              | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 0,01/0,1 bar<br>0.14/1.45 psi            |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                                                     | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 0,5 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Piston</b>       | Brass (Brass version)<br>AISI 316L (SS version)                                                   | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass only                               |
| <b>Diaphragm</b>    | AISI 304                                                                                          |                          |                                               |                        |                                          |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| D | Body Material       |   | 230 | 0.1 | End Connections              |    | O-ring Material | Gauges  |   |
|---|---------------------|---|-----|-----|------------------------------|----|-----------------|---------|---|
|   | L                   |   |     |     | N                            |    | EPDM            | 1       |   |
|   | Chrome plated brass | L |     |     | In: 16 x 1.336<br>Out: G 3/8 | 16 | EPDM - standard | Without | 0 |
|   | Stainless steel     | I |     |     | In: NPT 1/4<br>Out: G 3/8    | NG | NBR             | With    | 1 |
|   |                     |   |     |     | NPT 1/4 (inlet/outlet)       | N  | FPM             |         |   |

## SERIES D 235 | DUAL STAGE HP REGULATOR

- Diaphragm/bellow dual stage
- Purity up to 6.0
- Inlet pressure: 300 bar (4350 psi)
- Outlet pressure: 1/3/10 bar (14.5/44/145 psi)

- ★ Compact and lightweight design
- ★ 1 inlet / 2 outlets
- ★ O<sub>2</sub> application compatible
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

Special requirements on request

### APPLICATIONS

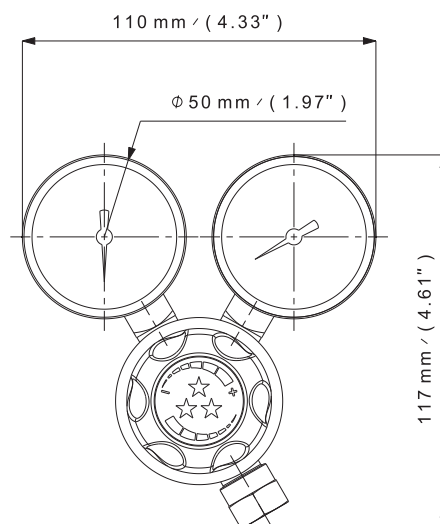
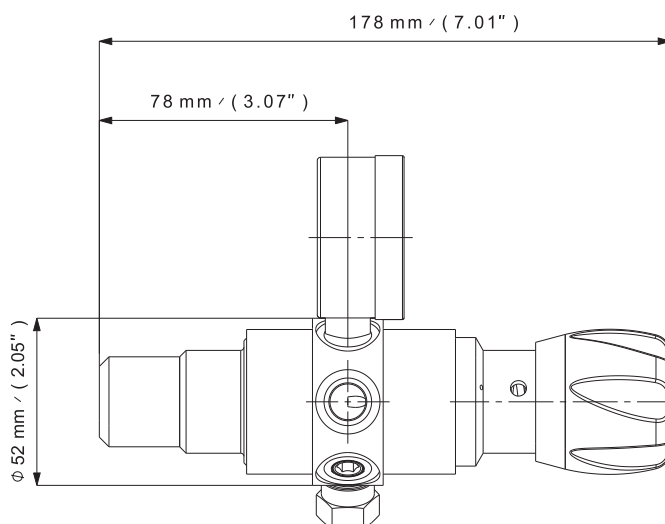
- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable outlet pressure together with a very sensitive set up of this outlet pressure.

### KEY FEATURES

- The D 235 regulator is based on the S 20 proven bellow technology.
- Accurate pressure control for reliable service and guarantees a stable outlet pressure due to the combination of the diaphragm and bellow technology.
- Compact and lightweight design.
- Can also be equipped with a needle or shut off valve at the outlet.



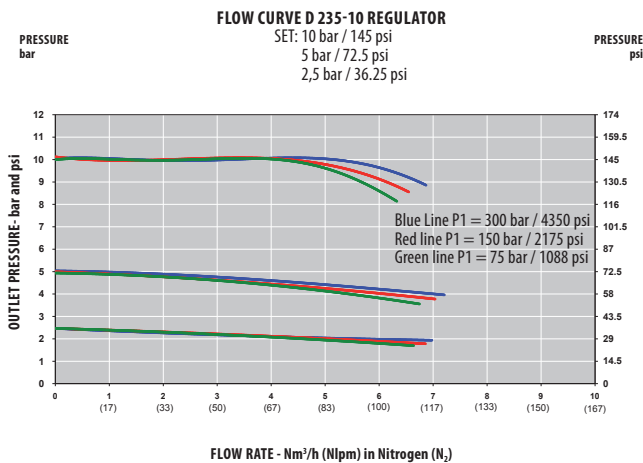
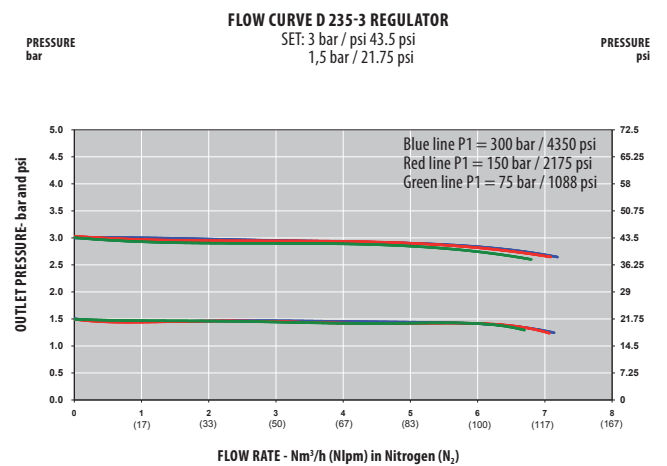
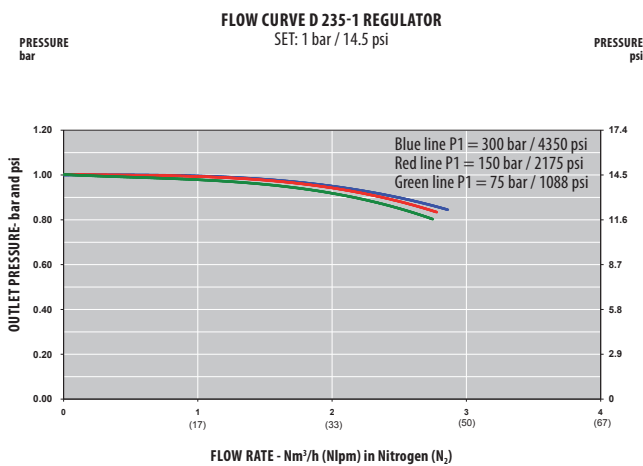
Front view



# SPECIFICATIONS

|                     |                                                                     |                          |                                               |                        |                                              |
|---------------------|---------------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|----------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,4 kg<br>± 3.0 lbs                         | <b>Inlet pressure</b>  | 300 bar<br>4350 psi                          |
| <b>Seat seal</b>    | PTFE (1 <sup>st</sup> stage)<br>EPDM (2 <sup>nd</sup> stage)        | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 1 / 3 / 10 bar<br>14.5/44/145 psi            |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 1/2/5,5 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | AISI 304                                                            | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | OK for brass and stainless steel             |
| <b>Bellow</b>       | Bronze (Brass version)<br>AISI 316L (SS version)                    |                          |                                               |                        |                                              |

# FLOW CURVES



# PRODUCT CONFIGURATOR

|   | Body Material       |   |     | Outlet Pressure   |    | End Connections              |   | O-ring Material | Gauges  |   |
|---|---------------------|---|-----|-------------------|----|------------------------------|---|-----------------|---------|---|
| D | L                   |   | 235 | 3                 |    | G                            |   | EPDM            | 1       |   |
|   | Chrome plated brass | L |     | 1 bar<br>14.5 psi | 1  | In: 16 x 1.336<br>Out: G 3/8 | G | EPDM - Standard | Without | 0 |
|   | Stainless steel     | I |     | 3 bar<br>44 psi   | 3  | 1/4 NPT - 1/4 NPT            | N | NBR             | With    | 1 |
|   |                     |   |     | 10 bar<br>145 psi | 10 |                              |   | FPM             |         |   |



## SERIES D 235-0.1 | DUAL STAGE HP REGULATOR

- Diaphragm dual stage
- Purity up to 6.0
- Inlet pressure:  
300 bar (4350 psi)
- Outlet pressure:  
0,1 bar (1.45 psi)

- ★ Compact and light-weight design
- ★ 1 inlet / 2 outlets
- ★ O<sub>2</sub> application compatible (brass only)
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

Special requirements on request

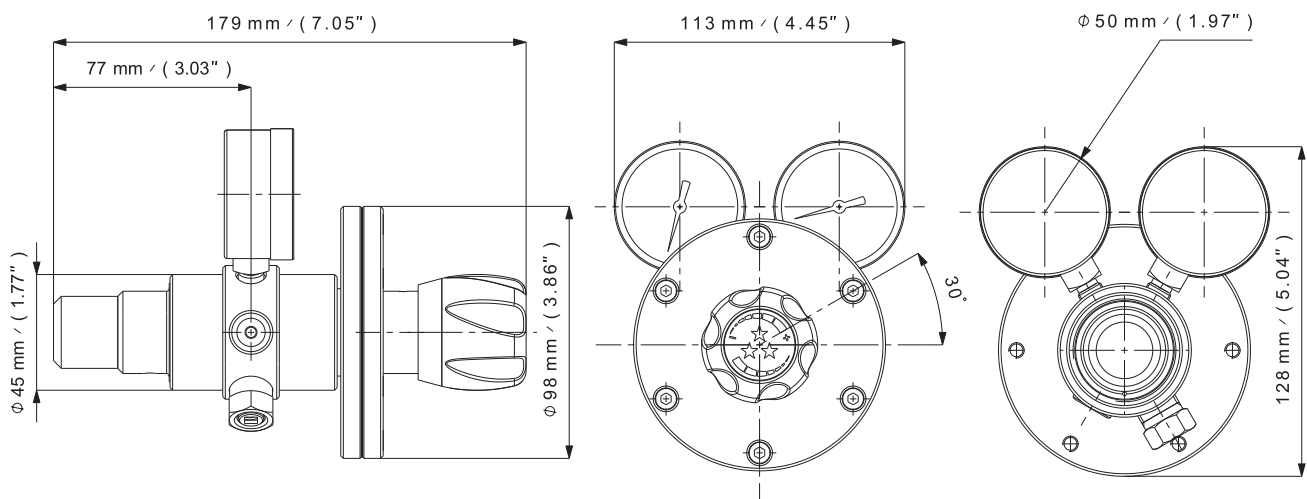


## APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable, very sensitive and very low outlet pressure.

## KEY FEATURES

- The DL 235-0.1 regulator is based on the SL 20-0.1 proven low pressure regulator.
- Guarantees a stable low flow due to the large diaphragm.
- Could be also equipped with a needle or shut off valve at the outlet.

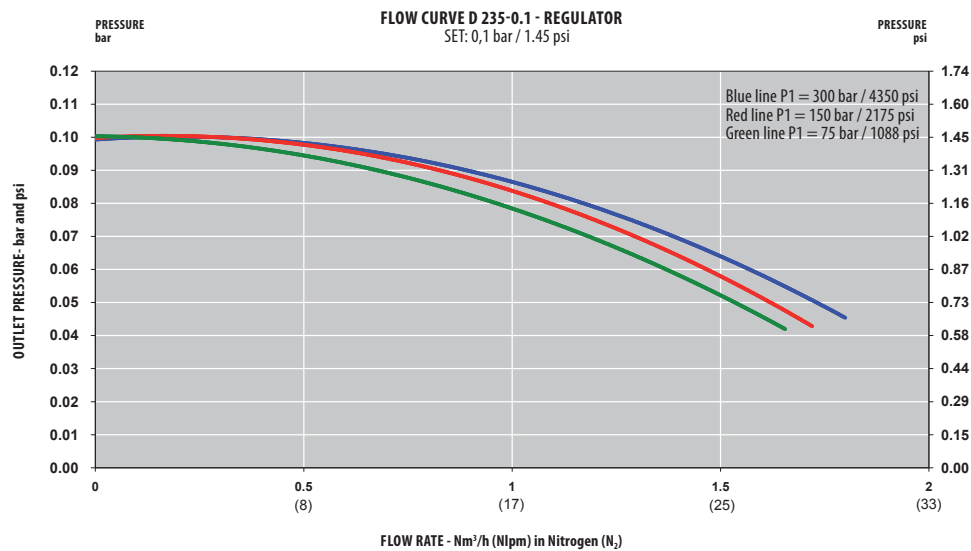




## SPECIFICATIONS

|                     |                                                               |                          |                                               |                        |                                          |
|---------------------|---------------------------------------------------------------|--------------------------|-----------------------------------------------|------------------------|------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 (inlet) - G 3/8 (outlet) or 1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 1,45 kg<br>± 3.2 lbs                        | <b>Inlet pressure</b>  | 300 bar<br>4350 psi                      |
| <b>Seat seal</b>    | PCTFE                                                         | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                  | <b>Outlet pressure</b> | 0,1 bar<br>1.4 psi                       |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                 | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F          | <b>Nominal Flow</b>    | 0,5 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | AISI 304                                                      | <b>Gauges</b>            | High and low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | Brass only                               |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material |                     |     |     | End Connections                                        |         | O-ring Material               | Gauges          |        |
|---------------|---------------------|-----|-----|--------------------------------------------------------|---------|-------------------------------|-----------------|--------|
| D             | L                   | 235 | 0.1 | N                                                      |         | EPDM                          | 1               |        |
|               | Chrome plated brass | L   |     | In: 16 x 1.336<br>Out: G 3/8<br>NPT 1/4 (inlet/outlet) | 16<br>N | EPDM - Standard<br>NBR<br>FPM | Without<br>With | 0<br>1 |

## SERIES S 10 | LINE REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 6.0
- Inlet pressure:  
25 bar (360 psi)
- Outlet pressure:  
3 bar (44 psi)  
or 8 bar (116 psi)

- ★ Compact design
- ★ Reduce the ownership cost
- ★ Front panel mounting
- ★ O<sub>2</sub> application compatible

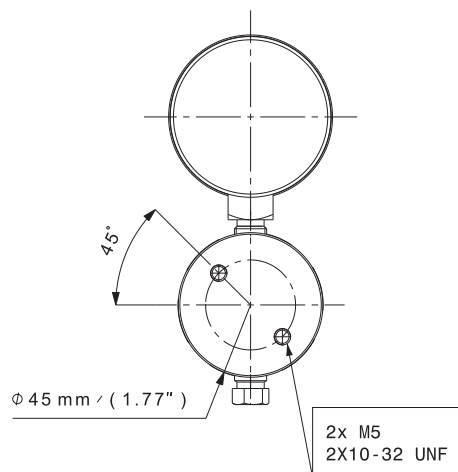
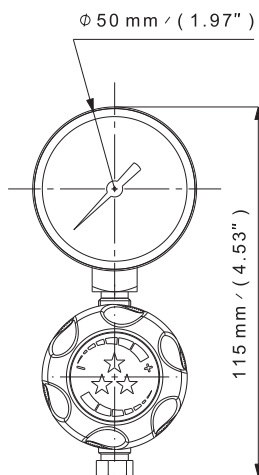
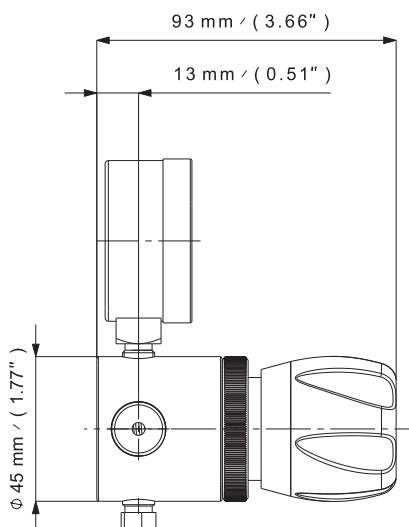
Special requirements on request

### APPLICATIONS

- Designed as a second stage line regulator for laboratory applications such as: gas delivery to inductive plasma spectrometer, protection and support gas for chromatograph, environmental emission monitoring, industrial hygiene or safety monitors and trace impurity analyzers.
- Ideally suited as a NH<sub>3</sub> line regulator (EPDM stainless steel version).

### KEY FEATURES

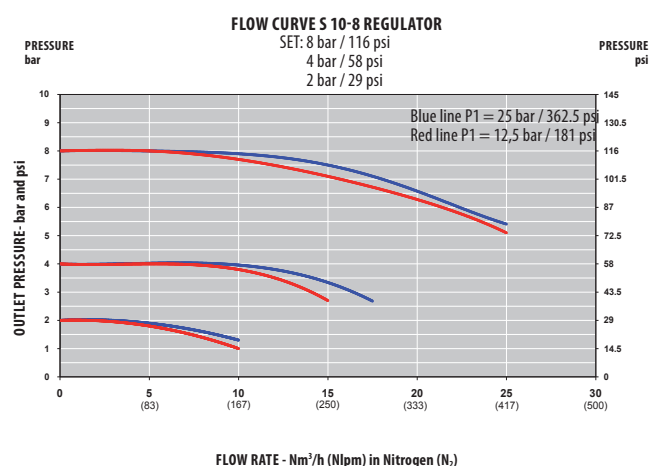
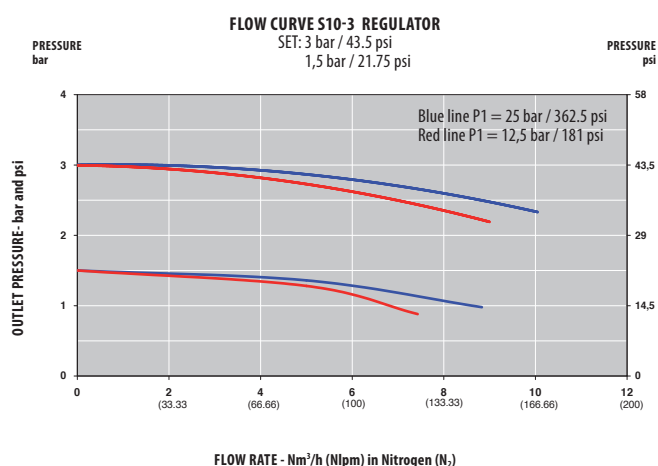
- As a second level of regulation, the SL 10 will supply a precise outlet pressure to the process. It can be used for many applications that need a high flow.
- Flexible wall or panel mounting possible with its compact design, the rear threads and fixing ring.
- Best-in-class pressure control with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. BV-technology delivers an exceptionally stable outlet pressure and flow even with high flow line regulators.
- Longer useful regulator lifetime and lower total ownership cost.



# SPECIFICATIONS

|                     |                                                     |                          |                                      |                           |                                  |
|---------------------|-----------------------------------------------------|--------------------------|--------------------------------------|---------------------------|----------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet)                     | <b>Weight</b>            | ± 0,6 kg<br>± 1.32 lbs               | <b>Inlet pressure max</b> | 25 bar<br>360 psi                |
| <b>Seat seal</b>    | NBR (brass version)<br>FPM (SS version)             | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b>    | 3/8 bar<br>44/116 psi            |
| <b>O-ring</b>       | NBR (brass version)<br>FPM (SS version)<br>EPDM     | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>       | 4,5/12 Nm³/h (N₂)                |
| <b>Diaphragm</b>    | AlSi 304 (brass version)<br>Hastelloy® (SS version) | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>         | OK for brass and stainless steel |

# FLOW CURVES



# PRODUCT CONFIGURATOR

|      | Body Material       |   |    |                  | Outlet Pressure |               | End Connections |     | O-ring Material                             |         | Gauges |                     | Mounting |                          | Ports Configuration |  |
|------|---------------------|---|----|------------------|-----------------|---------------|-----------------|-----|---------------------------------------------|---------|--------|---------------------|----------|--------------------------|---------------------|--|
| S    | L                   |   | 10 | 8                |                 | G             |                 | NBR |                                             | 1       |        | FR0                 |          | A                        |                     |  |
|      | Chrome plated brass | L |    | 3 bar<br>44 psi  | 3               | G ¾ - G ¾     |                 | G   | NBR - Standard with brass version           | Without | 0      | Without Fixing Ring | FR0      | Standard Configuration   | A                   |  |
|      | Stainless steel     | I |    | 8 bar<br>116 psi | 8               | ¼ NPT - ¼ NPT |                 | N   | FPM - Standard with stainless steel version | With    | 1      | With Fixing Ring    | FR1      | Reverse inlet/<br>outlet | R                   |  |
| EPDM |                     |   |    |                  |                 |               |                 |     |                                             |         |        |                     |          |                          |                     |  |

## SERIES S 15 | LINE REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 6.0
- Inlet pressure:  
25 bar (360 psi)
- Outlet pressure:  
10 bar (145 psi)

- ★ Reduce the ownership cost
- ★ Front panel mounting
- ★ O<sub>2</sub> application compatible

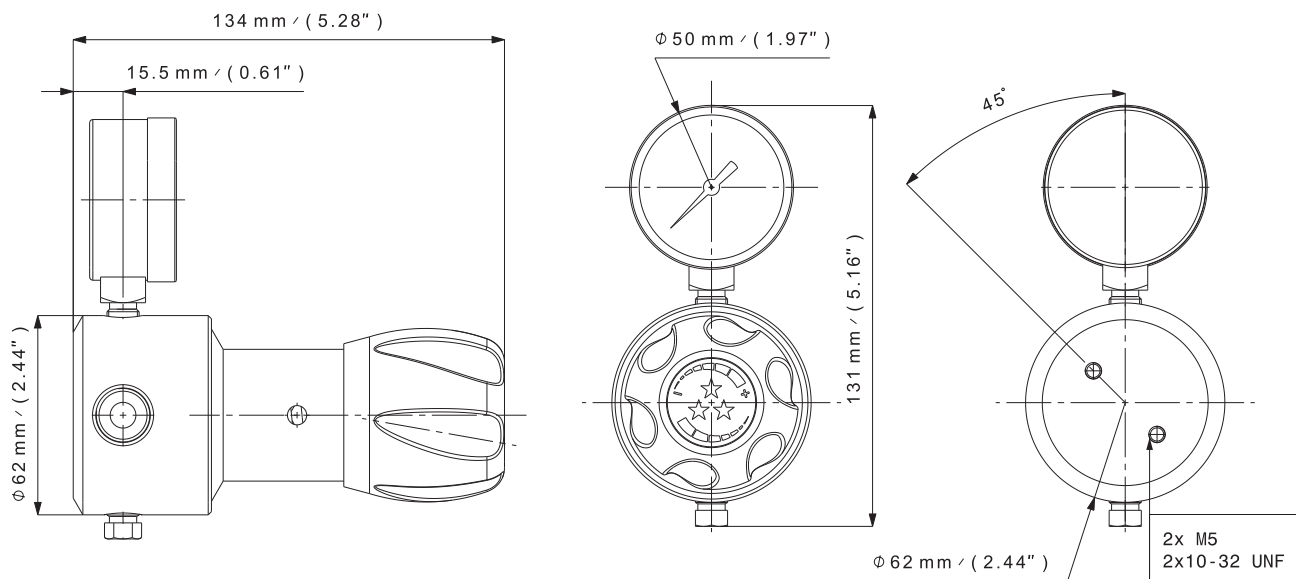
Special requirements on request

### APPLICATIONS

- Used as a line regulator for high-flow industrial or lab applications.

### KEY FEATURES

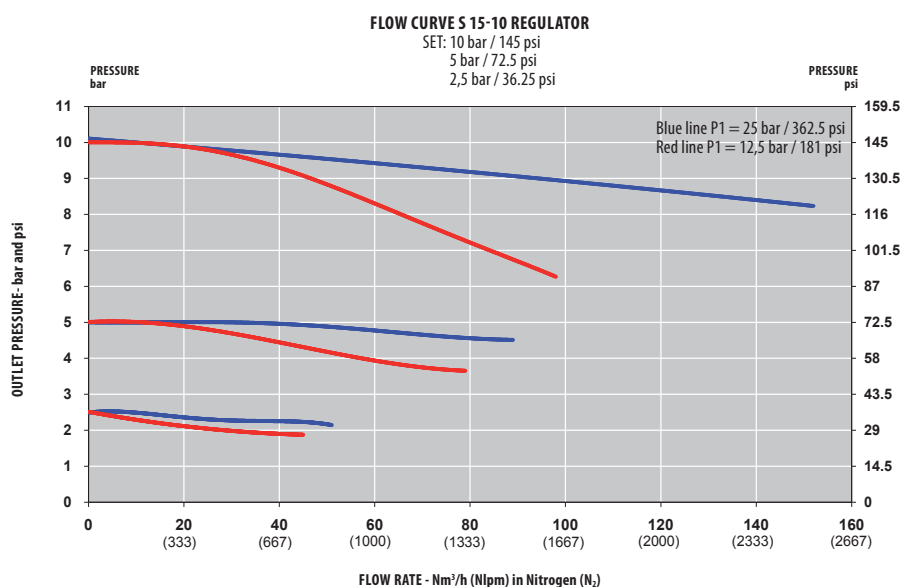
- As a second level of regulation the S 15 will supply a precise outlet pressure to the process.
- Can be used for wall or panel mounting with its compact design, the rear threads and fixing ring.
- Best-in-class pressure stability with Balanced-Valve Technology (Balanced-Valve Technology): the effect of inlet pressure fluctuations on outlet pressure are minimized. BV-technology delivers an exceptionally stable outlet pressure and flow even with high flow line regulators.
- Longer useful regulator lifetime and lower total ownership cost.



## SPECIFICATIONS

|                     |                                                     |                          |                                      |                        |                                         |
|---------------------|-----------------------------------------------------|--------------------------|--------------------------------------|------------------------|-----------------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet)                     | <b>Weight</b>            | ± 1,2 kg<br>± 2.64 lbs               | <b>Inlet pressure</b>  | 25 bar<br>360 psi                       |
| <b>Seat seal</b>    | NBR (brass version)<br>FPM (SS version)             | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 10 bar<br>145 psi                       |
| <b>O-ring</b>       | NBR (brass version)<br>FPM (SS version)<br>EPDM     | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 50 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | AlSi 304 (brass version)<br>Hastelloy® (SS version) | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | OK for brass and stainless steel        |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|          | Body Material       |           | Outlet Pressure   |           | End Connections   | O-ring Material | Gauges   | Ports Configuration |                        |
|----------|---------------------|-----------|-------------------|-----------|-------------------|-----------------|----------|---------------------|------------------------|
| <b>S</b> | <b>L</b>            | <b>15</b> | <b>10</b>         | <b>10</b> | <b>G</b>          | <b>NBR</b>      | <b>1</b> | <b>A</b>            |                        |
|          | Chrome plated brass | <b>L</b>  | 10 bar<br>145 psi |           | G 3/8 - G 3/8     | G               | Without  | 0                   | Standard Configuration |
|          | Stainless steel     | <b>I</b>  |                   |           | 1/4 NPT - 1/4 NPT | N               | With     | 1                   | Reverse inlet/outlet   |
|          |                     |           |                   |           |                   | EPDM            |          |                     |                        |

## SERIES S 20 | LINE REGULATOR

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
1/3/10 bar  
14.5/44/145 psi

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 2 inlets / 2 outlet
- ★ Rear Inlet for panel mounting
- ★ O<sub>2</sub> application compatible  
(see technical data)

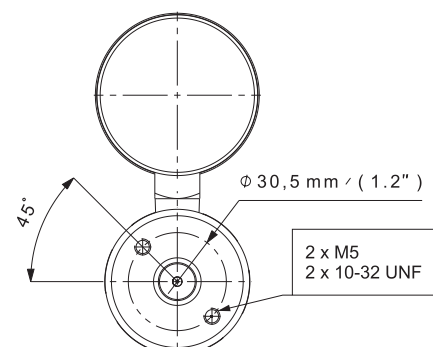
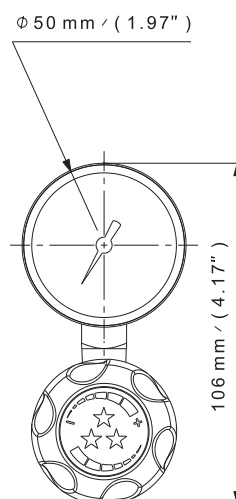
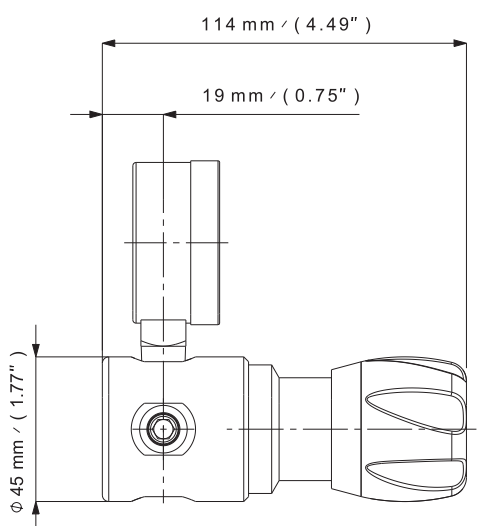
Special requirements on request

### APPLICATIONS

- Used as a line or point of use regulator for specialty gas applications requiring very precise repeatability and a high precision of outlet pressure
- Ideally suited for laboratory applications like: gas delivery to inductive plasma spectrometer, protection and support gas for chromatograph.

### KEY FEATURES

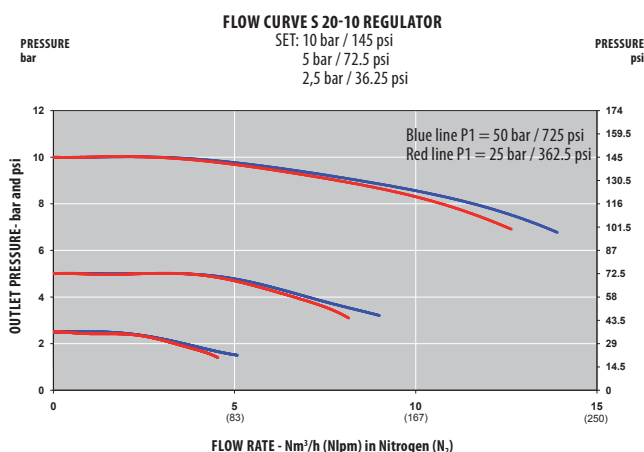
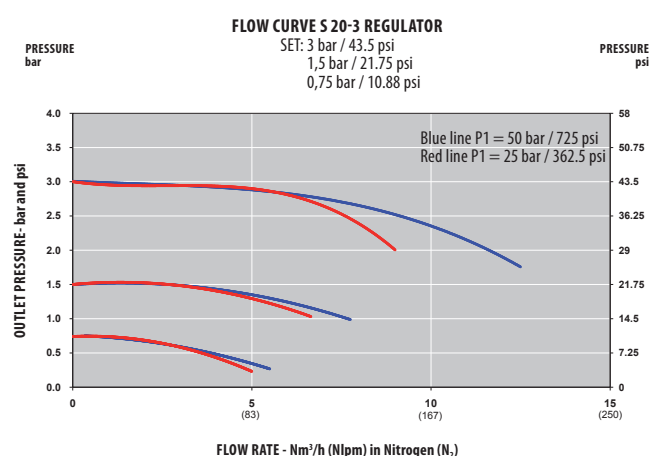
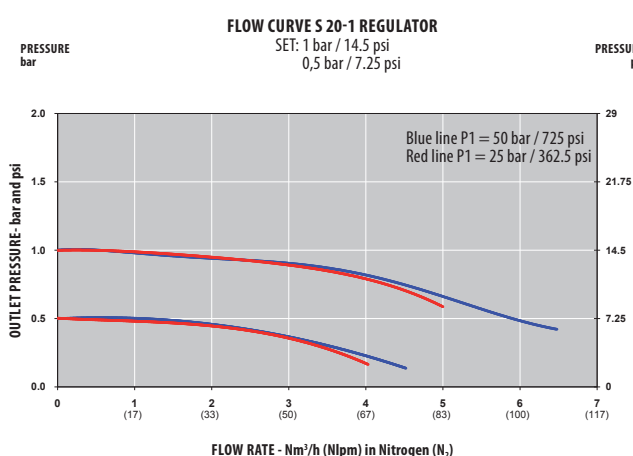
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- With its compact design, the rear threads and its fixing ring (option) it can be used for wall or panel mounting.
- Acetylene version available: Series S 20 AD & S 25 AD (See pages 66 and 68)



# SPECIFICATIONS

|                     |                                     |                          |                                      |                        |                                                               |
|---------------------|-------------------------------------|--------------------------|--------------------------------------|------------------------|---------------------------------------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet)     | <b>Weight</b>            | ± 0,5 kg<br>± 1.1 lbs                | <b>Inlet pressure</b>  | 50 bar<br>725 psi                                             |
| <b>Seat seal</b>    | EPDM                                | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145 psi                                 |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM       | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 2/2,5/3,5 Nm³/h (N₂)                                          |
| <b>Bellow</b>       | Bronze or<br>AISI 316L (SS version) | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel |

# FLOW CURVES



# PRODUCT CONFIGURATOR

| Body Material |                     |   | Outlet Pressure |                   | End Connections |               | O-ring Material |                 | Gauge   |   | Mounting            |     | Ports Configuration    |   |  |
|---------------|---------------------|---|-----------------|-------------------|-----------------|---------------|-----------------|-----------------|---------|---|---------------------|-----|------------------------|---|--|
| S             | L                   |   | 20              | 10                |                 | G             |                 | EPDM            |         | 1 |                     | FR0 |                        | A |  |
|               | Chrome plated brass | L |                 | 1 bar<br>14.5 psi | 1               | G ¾ - G ¾     | G               | EPDM - Standard | Without | 0 | Without Fixing Ring | FR0 | Standard Configuration | A |  |
|               | Stainless steel     | I |                 | 3 bar<br>44 psi   | 3               | ¼ NTP - ¼ NPT | N               | NBR             | With    | 1 | With Fixing Ring    | FR1 | Reverse inlet/outlet   | R |  |
|               |                     |   |                 | 10 bar<br>145 psi | 10              | FPM           |                 |                 |         |   |                     |     |                        |   |  |

## SERIES S 20-0.1 | LINE REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
0,01 - 0,1 bar  
0.14 - 1.45 psi

- ★ Very low outlet pressure
- ★ 2 inlets / 2 outlet
- ★ Rear inlet
- ★ Rear threads for panel mounting
- ★ High accuracy due to large diaphragm
- ★ O<sub>2</sub> application compatible (see technical data)

Special requirements on request



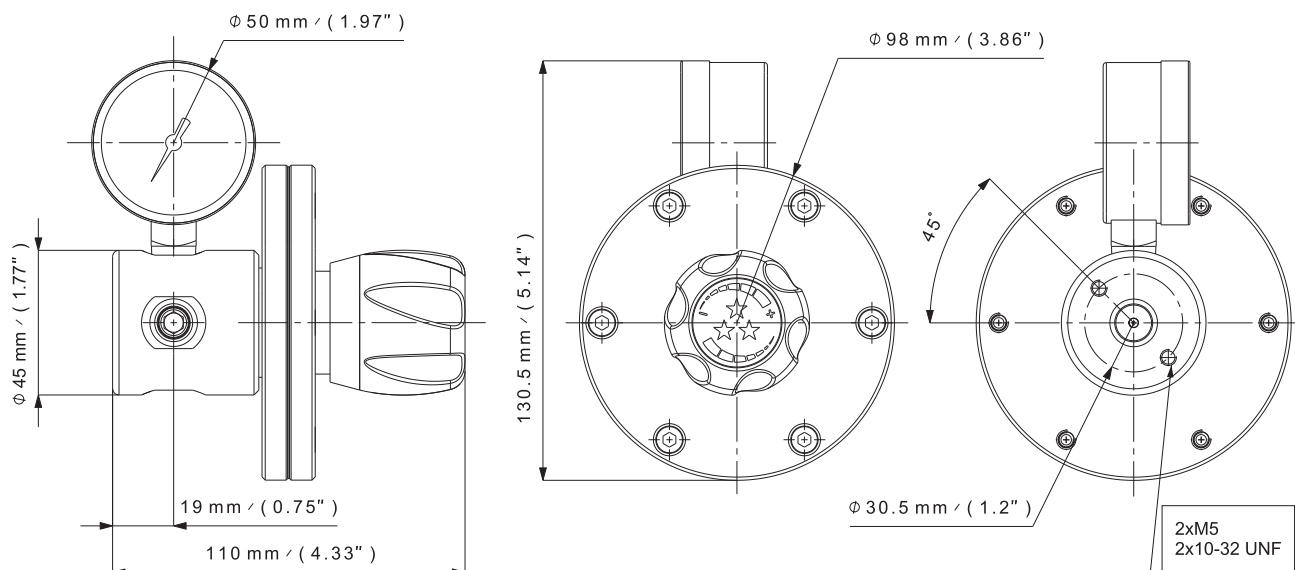
Rear inlet view

### APPLICATIONS

- The Series S 20-0.1 is used as a line regulator for lab applications requiring a low outlet pressure less than 10 mbar (1.45 psi).

### KEY FEATURES

- With the rear threads, it can be used for wall mounting.

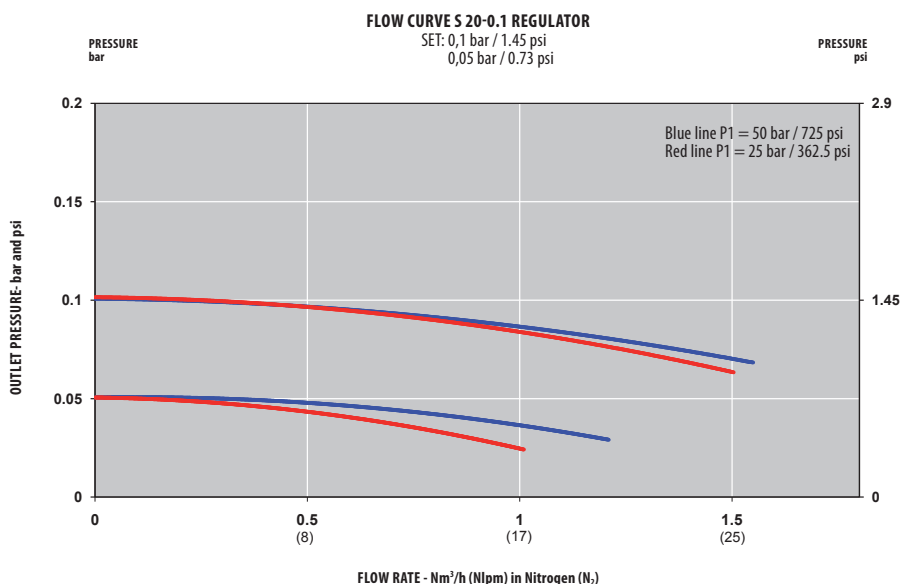




## SPECIFICATIONS

|                     |                                 |                          |                                      |                        |                                                               |
|---------------------|---------------------------------|--------------------------|--------------------------------------|------------------------|---------------------------------------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 0,6 kg<br>± 1.32 lbs               | <b>Inlet pressure</b>  | 50 bar<br>725 psi                                             |
| <b>Seat seal</b>    | EPDM                            | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 0,01 - 0,1 bar<br>0.14 - 1.45 psi                             |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM   | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 0,5 Nm <sup>3</sup> /h (N <sub>2</sub> )                      |
| <b>Diaphragm</b>    | AISI 304                        | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material |                     |    |     | End Connections   |   | O-ring Material | Gauges  |   | Ports Configuration    |   |
|---------------|---------------------|----|-----|-------------------|---|-----------------|---------|---|------------------------|---|
| S             | L                   | 20 | 0.1 | G                 | G | EPDM            | 1       | 0 | A                      | A |
|               | Chrome plated brass | L  |     | G 3/8 - G 3/8     | G | EPDM - Standard | Without | 0 | Standard Configuration | A |
|               | Stainless steel     | I  |     | 1/4 NPT - 1/4 NPT | N | NBR             | With    | 1 | Reverse inlet/outlet   | R |
|               |                     |    |     |                   |   | FPM             |         |   |                        |   |

## SERIES S 55 | LINE REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
3/8/10/16/35 bar  
44/116/145/232/508 psi

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 2 inlets / 2 outlets
- ★ Rear Inlet for panel mounting
- ★ O<sub>2</sub> applications compatible (see technical data)

Special requirements on request

### APPLICATIONS

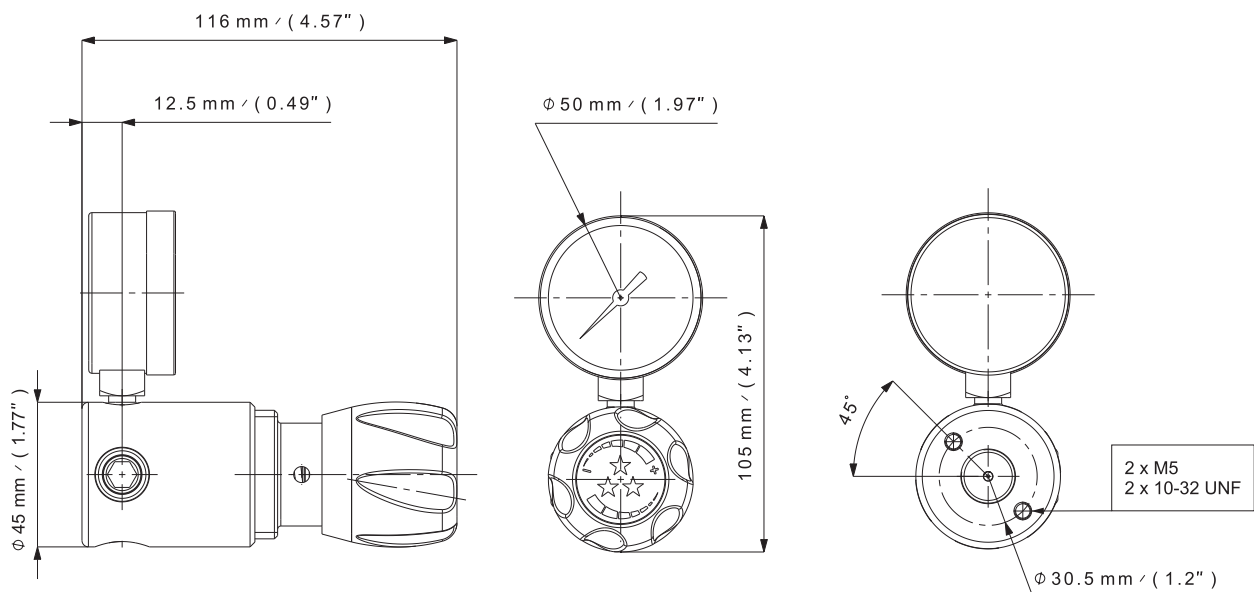
- Designed for line regulator applications in petrochemical, industrial and laboratory environments.
- Used in calibration gas mixtures for petrochemical industry; environmental emission monitoring, industrial hygiene or safety monitors and trace impurity analyzers.
- Also commonly used to oxygenate fish-breeding tanks.

### KEY FEATURES

- With its compact design, the rear threads and its fixing ring it can be used for wall or panel mounting.
- Multiple mounting possibilities due to its inlet/outlet.



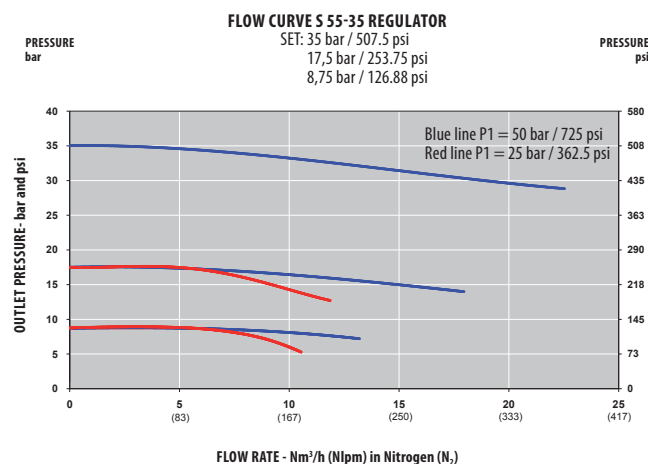
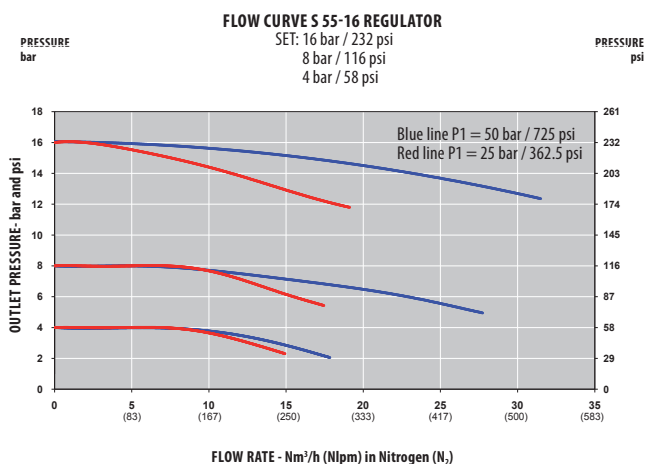
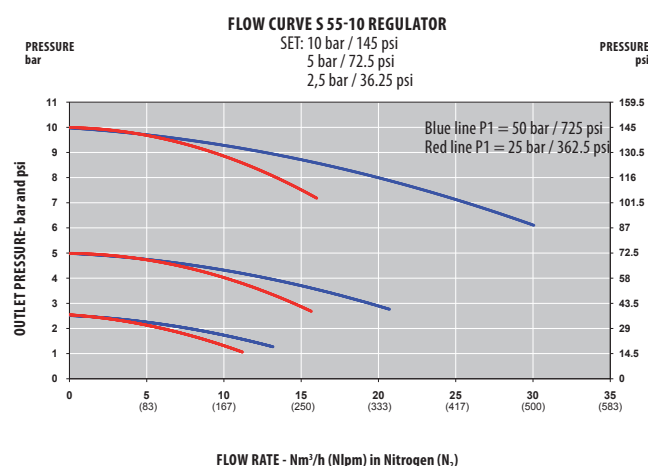
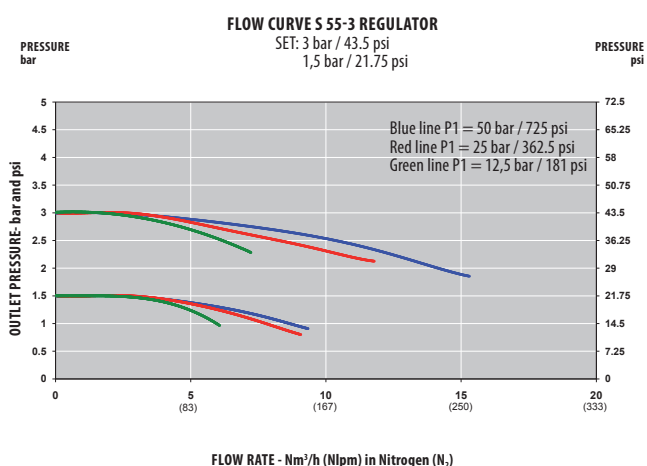
Rear inlet view



## SPECIFICATIONS

|                     |                                                 |                          |                                      |                        |                                                               |
|---------------------|-------------------------------------------------|--------------------------|--------------------------------------|------------------------|---------------------------------------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet)                 | <b>Weight</b>            | ± 0,8 kg<br>± 1.8 lbs                | <b>Inlet pressure</b>  | 50 bar<br>725 psi                                             |
| <b>Seat seal</b>    | EPDM                                            | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 3/8/10/16/35 bar<br>44/116/145/232/508 psi                    |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                   | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 2,5/3/3,5/5,5/10 Nm³/h (N₂)                                   |
| <b>Diaphragm</b>    | AISI 304 (3/8/10 bar)<br>Hastelloy® (16/35 bar) | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material |                     |   | 55                | Outlet Pressure |               | End Connections |                 | O-ring Material | Gauges |                     | Mounting |                        | Ports Configuration |  |
|---------------|---------------------|---|-------------------|-----------------|---------------|-----------------|-----------------|-----------------|--------|---------------------|----------|------------------------|---------------------|--|
| S             | L                   |   |                   | 35              |               | G               |                 | EPDM            | 1      |                     | FR1      |                        | A                   |  |
|               | Chrome plated brass | L | 3 bar<br>44 psi   | 3               | G ¾ - G ¾     | G               | EPDM - Standard | Without         | 0      | Without Fixing Ring | FR0      | Standard configuration | A                   |  |
|               | Stainless steel     | I | 8 bar<br>116 psi  | 8               | ¼ NPT - ¼ NPT | N               | NBR             | With            | 1      | With Fixing Ring    | FR1      | Reverse inlet/outlet   | R                   |  |
|               |                     |   | 10 bar<br>145 psi | 10              |               |                 | FPM             |                 |        |                     |          |                        |                     |  |
|               |                     |   | 16 bar<br>232 psi | 16              |               |                 |                 |                 |        |                     |          |                        |                     |  |
|               |                     |   | 35 bar<br>508 psi | 35              |               |                 |                 |                 |        |                     |          |                        |                     |  |

## SERIES DC 50 | HIGH FLOW LINE REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 5.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
8/15/40 bar  
116/217/580 psi
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1=20 bar (290 psi)  
P2=0,8 bar (12 psi)

- ★ 1 inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O<sub>2</sub> application compatible
- ★ High flow

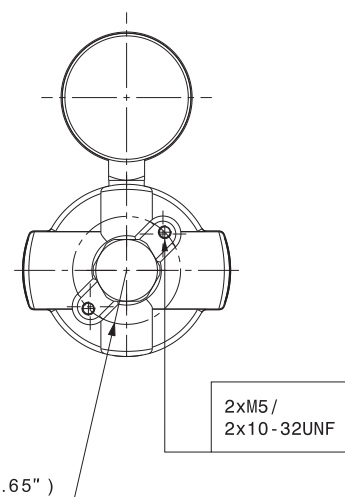
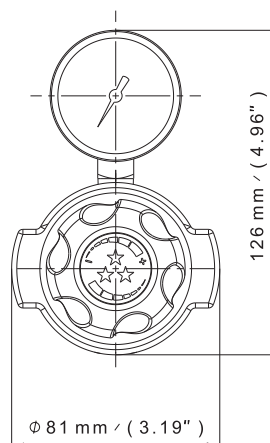
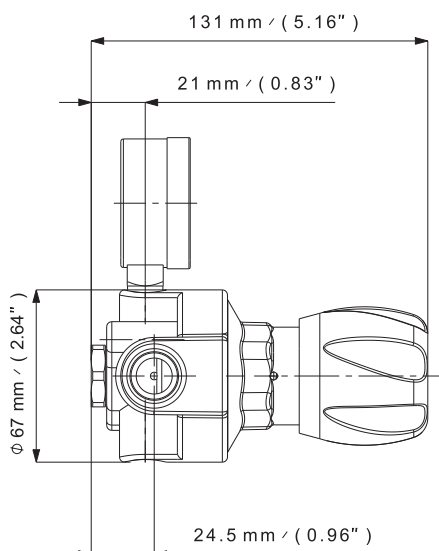
Special requirements on request

### APPLICATIONS

- For all applications requiring a low pressure with high flow.
- Ideally suited as line regulator in combination either with MOD supply board or CEN switch over board.

### KEY FEATURES

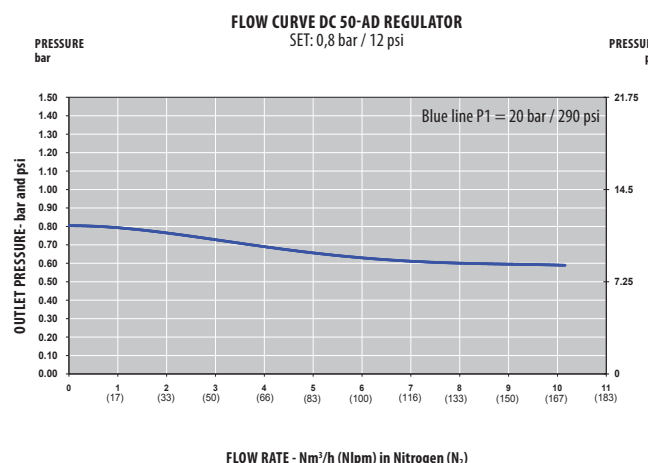
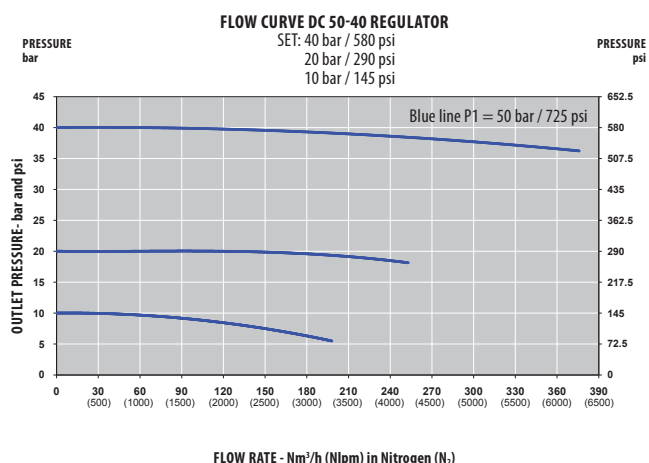
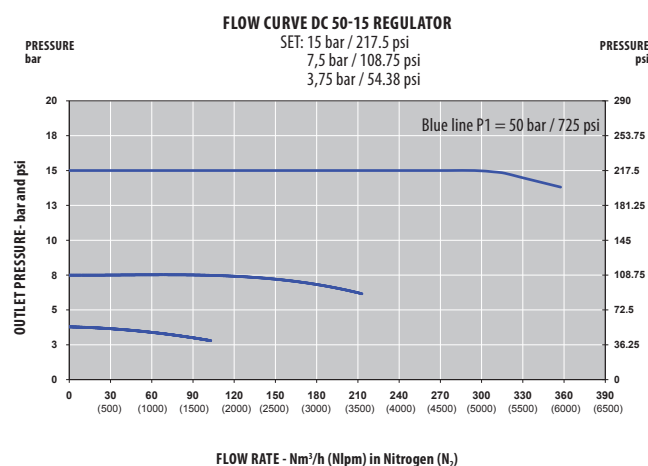
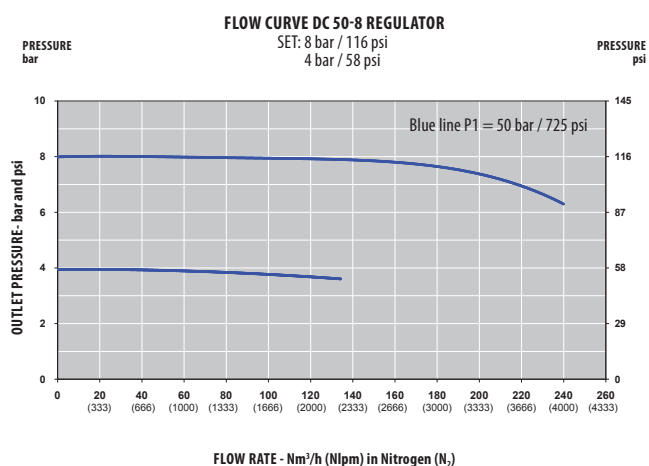
- Low pressure regulator with high flow, without vibration.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure is minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- reduced strain on the seat increases regulator life and reduces the ownership cost.
- Acetylene version available:  
P1=20 bar/P2=0,8 bar/Q=10 Nm<sup>3</sup>/h
- For use with acetylene this product must be installed with a flash back arrestor complying with the standard EN 730 located downstream.



## SPECIFICATIONS

|                     |                               |                          |                                      |                        |                                                     |
|---------------------|-------------------------------|--------------------------|--------------------------------------|------------------------|-----------------------------------------------------|
| <b>Female ports</b> | G ½ or ½ NPT (inlet/outlet)   | <b>Weight</b>            | ± 1,4 kg<br>± 3.1 lbs                | <b>Inlet pressure</b>  | 50 bar (725 psi)<br>AD: 20 bar (290 psi)            |
| <b>Seat seal</b>    | EPDM                          | <b>Leak rate</b>         | 10 <sup>-3</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 8/15/40 - 0,8 bar (AD)<br>116/217/580 - 12 psi (AD) |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 150/300/300 Nm³/h (N₂)<br>10 Nm³/h (AD)             |
| <b>Diaphragm</b>    | EPDM                          | <b>Gauges</b>            | Low pressure<br>(G ¼ or ¼ NPT)       | <b>Oxygen use</b>      | OK                                                  |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   |   |    | Outlet Pressure                       |    | End Connections |   | O-ring Material | Body Material          |    | Gauges  |   |
|---|---|----|---------------------------------------|----|-----------------|---|-----------------|------------------------|----|---------|---|
| D | C | 50 | 40                                    |    | G               |   | EPDM            | L                      |    | 1       |   |
|   |   |    | 8 bar<br>116 psi                      | 8  | G ½ - G ½       | G | EPDM - Standard | Chrome plated<br>brass | L  | Without | 0 |
|   |   |    | 15 bar<br>217 psi                     | 15 | ½ NPT - ½ NPT   | N | NBR             | Raw brass              | LB | With    | 1 |
|   |   |    | 40 bar<br>580 psi                     | 40 |                 |   | FPM             |                        |    |         |   |
|   |   |    | Acetylene version<br>0,8 bar (12 psi) | AD |                 |   |                 |                        |    |         |   |

## SERIES S 21 | POINT OF USE

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
1/3/10 bar  
14.5/44/145 psi
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1 = 20 bar (290 psi)  
P2 = 1,5 bar (21.75 psi)

- ★ Precise pressure delivery
- ★ Compact design
- ★ 2 inlets / 1 outlet
- ★ Rear Inlet for panel mounting
- ★ Integrated ¼ or multi-turn shutoff valve
- ★ O<sub>2</sub> applications compatible (see technical data)

Special requirements on request

### APPLICATIONS

- Used as a line regulator or point of use for specialty gas applications.

### KEY FEATURES

- Based on the Series S 20 technology.
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- With the rear threads and fixing ring (option) it can be used for wall or panel mounting.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.
- The inlet shut off valve reduces the risk of gas dispersion when closed.



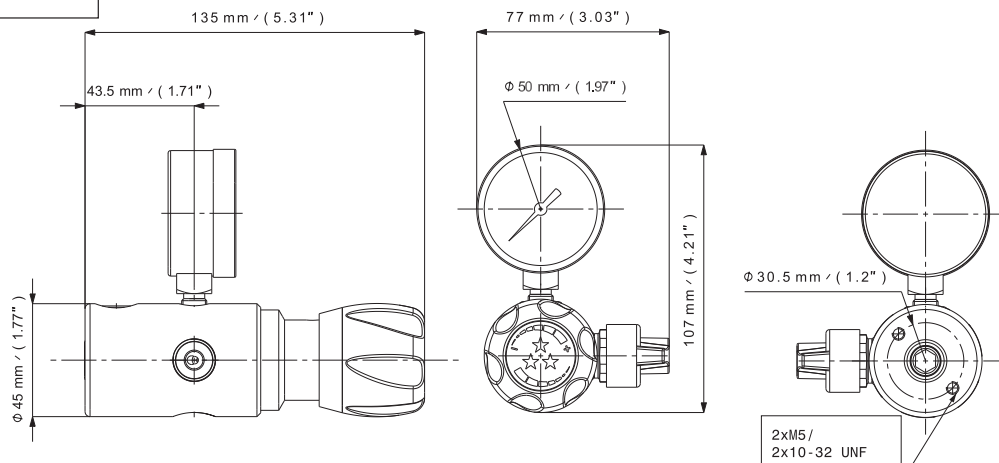
¼ turn valve



Multi-turn valve



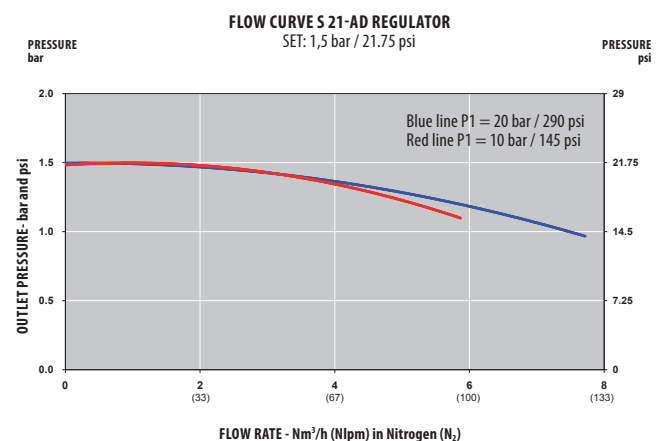
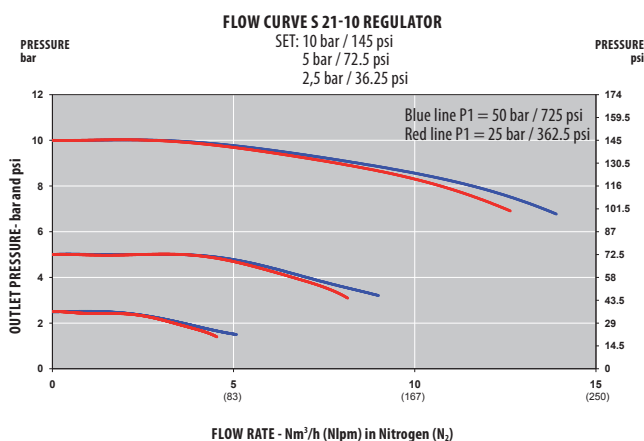
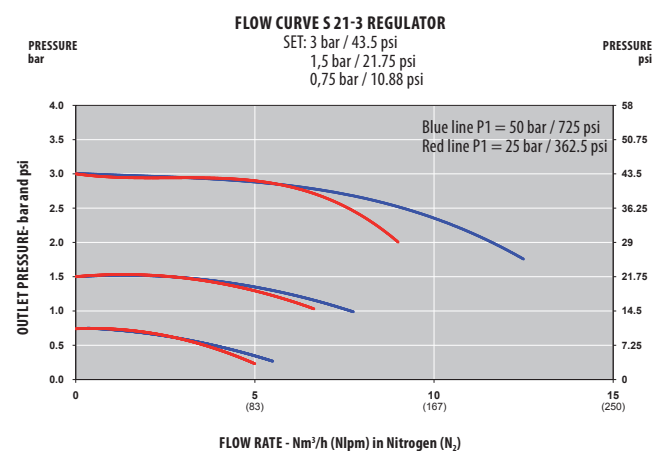
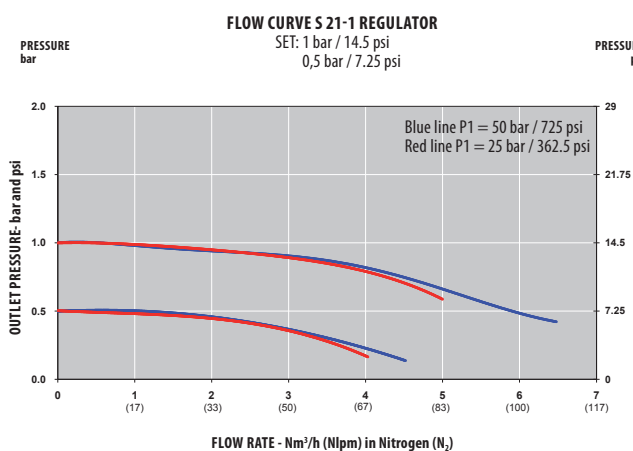
RD10 needle valve



## SPECIFICATIONS

|                          |                                                      |                          |                                      |                        |                                                                            |
|--------------------------|------------------------------------------------------|--------------------------|--------------------------------------|------------------------|----------------------------------------------------------------------------|
| <b>Female ports</b>      | G 3/8 (inlet/outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 0,9 kg<br>± 2.0 lbs                | <b>Inlet pressure</b>  | 50 bar (725 psi)<br>AD: 20 bar (290 psi)                                   |
| <b>Seat seal</b>         | EPDM                                                 | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145 psi<br>AD: 1,5 bar (21.75 psi)                   |
| <b>O-ring</b>            | EPDM - Standard<br>NBR<br>FPM                        | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F   | <b>Nominal Flow</b>    | 2/2,5/3,5 Nm <sup>3</sup> /h (N <sub>2</sub> )<br>AD: 1 Nm <sup>3</sup> /h |
| <b>Diaphragm (Valve)</b> | Hastelloy®                                           | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel              |
| <b>Bellow</b>            | Bronze (Brass version)<br>AISI 316L (SS version)     |                          |                                      |                        |                                                                            |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material       |   |  | Outlet Pressure                          |    | End Connections   | O-ring Material | Gauge           | Shut-off valve |   | Plate            |                              |
|---------------------|---|--|------------------------------------------|----|-------------------|-----------------|-----------------|----------------|---|------------------|------------------------------|
| S                   | L |  | S 21                                     | 10 | G                 | EPDM            | 1               | 1/4 V          |   | STD              |                              |
| Chrome plated brass | L |  | 1 bar<br>14.5 psi                        | 1  | G 3/8 - G 3/8     | G               | EPDM - standard | Without        | 0 | 1/4 turn valve   | Without plate                |
| Stainless steel     | I |  | 3 bar<br>44 psi                          | 3  | 1/4 NPT - 1/4 NPT | N               | NBR             | With           | 1 | Multi-turn valve | Mounted on an aluminum stand |
|                     |   |  | 10 bar<br>145 psi                        | 10 |                   | FPM             |                 |                |   |                  | With metal plate             |
|                     |   |  | Acetylene version<br>1,5 bar (21.75 psi) | AD |                   |                 |                 |                |   |                  |                              |

# LABLINE 22 | MODULAR POINT OF USE

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
1/3/10 bar  
14.5/44/145 psi
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1 = 20 bar (290 psi)  
P2 = 1,5 bar (21.75 psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 1 inlet / 2 outlets
- ★ Modular concept
- ★ O<sub>2</sub> applications compatible  
(see technical data)

Special requirements on request

## APPLICATIONS

- A terminal point of use for specialty gas applications in a laboratory or in a workshop.

## KEY FEATURES

- Based on the Series 20 platform
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.
- With the inlet shut off valve the regulator is independent from the installation and can be easily removed.



SLS22-EMB-10-G-EPDM-1-MV version



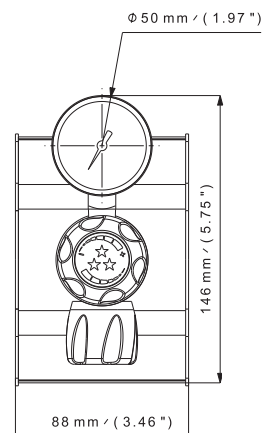
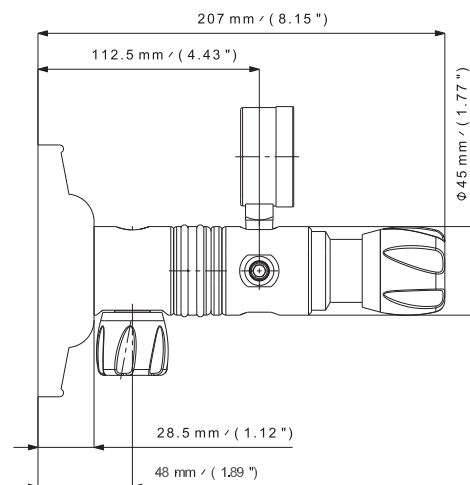
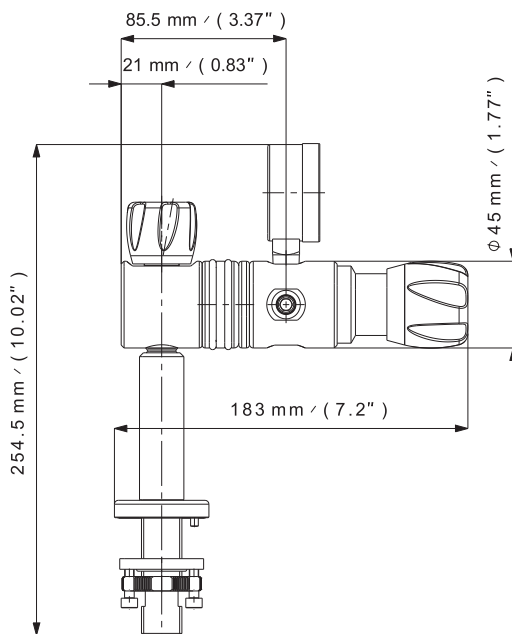
EMB version w/ MV valve



M version w/ 1/4V valve



COL version w/ MV valve

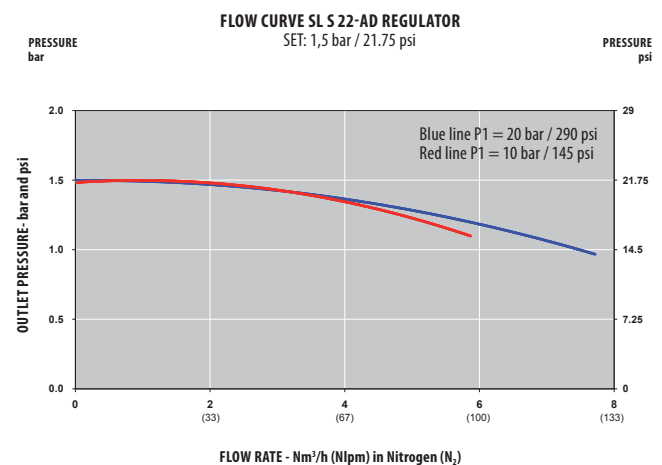
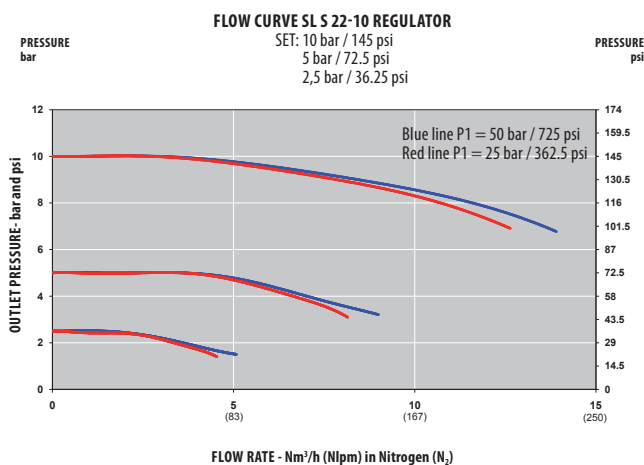
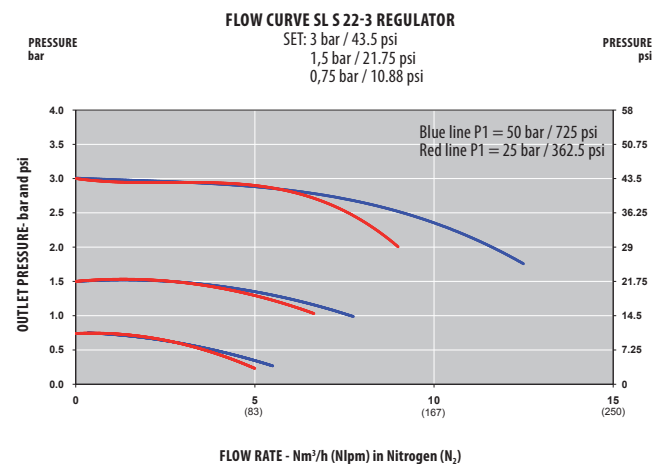
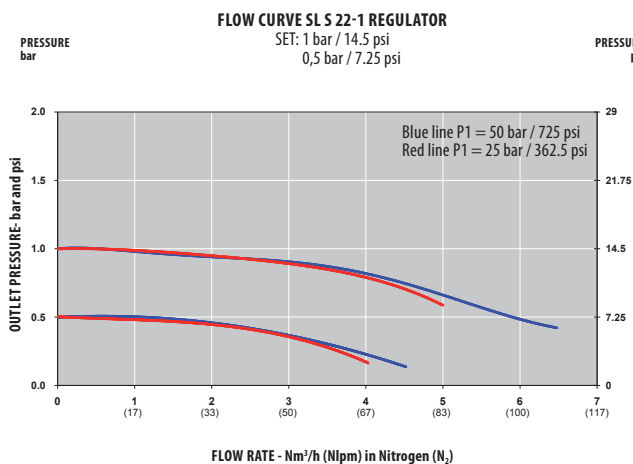




## SPECIFICATIONS

|                     |                                                                             |                          |                                    |                        |                                                               |
|---------------------|-----------------------------------------------------------------------------|--------------------------|------------------------------------|------------------------|---------------------------------------------------------------|
| <b>Female ports</b> | F: G ¼ (inlet-COL version)<br>G ¾ or ¼ NPT (inlet)<br>G ¾ or ¼ NPT (outlet) | <b>Weight</b>            | ± 1,5 kg<br>± 3.3 lbs              | <b>Inlet pressure</b>  | 50 bar (725 psi)<br>AD: 20 bar (290 psi)                      |
| <b>Seat seal</b>    | EPDM                                                                        | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He       | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145<br>AD: 1,5 bar (21.75 psi)          |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                                               | <b>Temperature range</b> | -20°C to +60°C<br>-4°F to +140°F   | <b>Nominal Flow</b>    | 2/2,5/3,5 Nm³/h (N₂)<br>AD: 1 Nm³/h                           |
| <b>Diaphragm</b>    | Hastelloy®                                                                  | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or ¼ NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel |
| <b>Bellow</b>       | Bronze or<br>AISI 316L (SS version)                                         |                          |                                    |                        |                                                               |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| Body Material |                     |   | Version | Outlet Pressure     |                                        | End Connection |                                  | O-ring Material | Gauges  |   | Valve            |    |
|---------------|---------------------|---|---------|---------------------|----------------------------------------|----------------|----------------------------------|-----------------|---------|---|------------------|----|
| S             | L                   |   | S22     | EMB                 | 10                                     | G              | G                                | EPDM            | 1       | 0 | ¼V               | ¼V |
|               | Chrome plated brass | L |         | With Aluminum stand | 1 bar<br>14.5 psi                      | 1              | G ¾ - Female (outlet)            | EPDM - standard | Without | 0 | ¼ turn valve     | ¼V |
|               | Stainless steel     | I |         | With pillar         | 3 bar<br>44 psi                        | 3              | NPT ¼ (outlet)                   | NBR             | With    | 1 | Multi-turn valve | MV |
|               |                     |   |         | With Metal Plate    | 10 bar<br>145 psi                      | 10             | Note: inlet G ¼ with COL version | FPM             |         |   |                  |    |
|               |                     |   |         |                     | Acetylene version<br>1,5 bar 21.75 psi | AD             |                                  |                 |         |   |                  |    |

## MONO SERIES S 15 | COMPACT POINT OF USE

- Diaphragm single stage
- Balanced-Valve Technology
- Purity up to 6.0
- Inlet pressure:  
25 bar (360 psi)
- Outlet pressure:  
10 bar (145 psi)

- ★ Compact design
- ★ Reduction of connection (avoid leakage)
- ★ High Flow
- ★ 2 inlets/ 2 outlets
- ★ Rear inlet for front panel mounting
- ★ O<sub>2</sub> application compatible

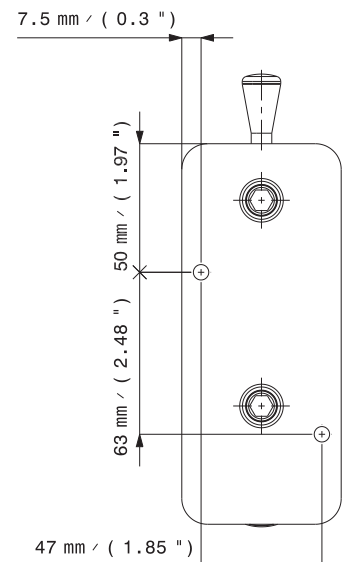
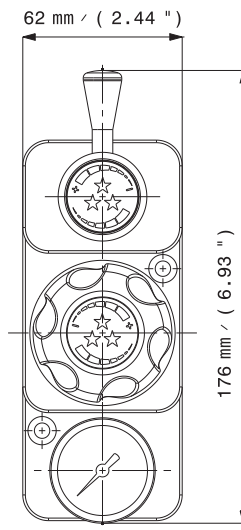
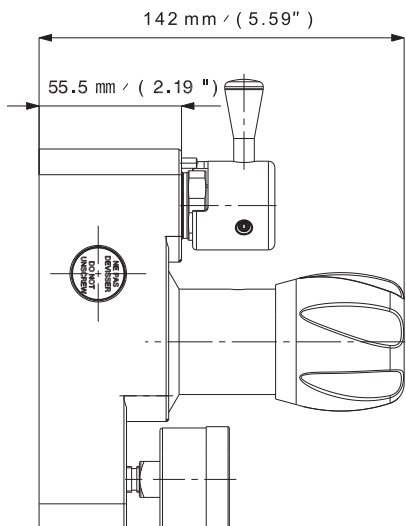
Special requirements on request

### APPLICATIONS

- A terminal point of use for specialty gas applications in a laboratory or in a workshop.

### KEY FEATURES

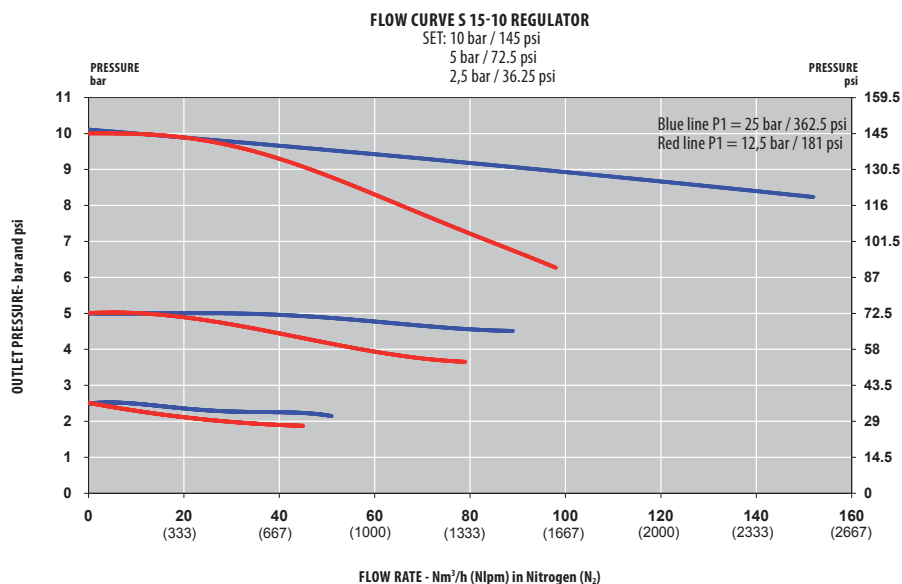
- Made up with a Series S 15 type regulator and a VLM 200 valve.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- Reduces the strain on the seat to increase regulator life and reduce the ownership cost.
- Compact outline dimensions and ergonomic design make this point of use suitable for laboratory furniture.



## SPECIFICATIONS

|                     |                                                        |                          |                                                                            |                        |                                         |
|---------------------|--------------------------------------------------------|--------------------------|----------------------------------------------------------------------------|------------------------|-----------------------------------------|
| <b>Female ports</b> | G 3/8 (inlet/outlet)<br>or<br>1/4 NPT (inlet/outlet)   | <b>Weight</b>            | Aluminum: ± 1,86 kg (± 4.10 lbs)<br>Stainless steel: ± 3,8 kg (± 8.37 lbs) | <b>Inlet pressure</b>  | 25 bar<br>360 psi                       |
| <b>Seat seal</b>    | EPDM                                                   | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                                               | <b>Outlet pressure</b> | 10 bar<br>145 psi                       |
| <b>O-ring</b>       | EPDM - Standard<br>NBR<br>FPM                          | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F                                         | <b>Nominal Flow</b>    | 50 Nm <sup>3</sup> /h (N <sub>2</sub> ) |
| <b>Diaphragm</b>    | AISI 304 (aluminum version)<br>Hastelloy® (SS version) | <b>Gauges</b>            | Low pressure<br>(M10 x 1)                                                  | <b>Oxygen use</b>      | OK                                      |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   |   | Body Material   |    | Outlet Pressure   |    | End Connections   |   | O-ring Material | Configuration          |   |
|---|---|-----------------|----|-------------------|----|-------------------|---|-----------------|------------------------|---|
| M | S | A               | 15 | 10                | 10 | G                 | G | EPDM            | A                      | A |
|   |   | Aluminum        | A  | 10 bar<br>145 psi |    | G 3/8 - G 3/8     | G | EPDM - standard | Standard configuration | A |
|   |   | Stainless steel | I  |                   |    | 1/4 NPT - 1/4 NPT | N | NBR             | reverse gauge (180°)*  | R |
|   |   |                 |    |                   |    |                   |   | FPM             |                        |   |

\*Inlet Down - outlet Top

## MONO SERIES S 20 | COMPACT POINT OF USE

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
1/3/10 bar (14.5/44/145 psi)
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1 = 20 bar (290 psi)  
P2 = 1,5 bar (21.75 psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 2 inlets / 2 outlets
- ★ Rear inlet for front panel mounting
- ★ O<sub>2</sub> application compatible (see technical data)

Special requirements on request



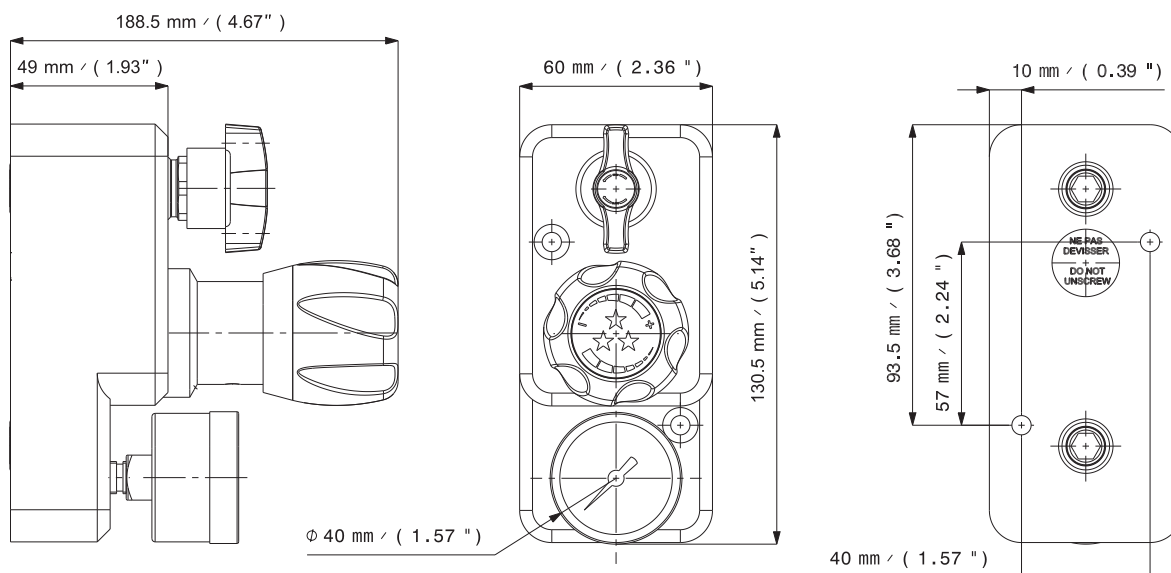
Acetylene version

### APPLICATIONS

- A terminal point of use for specialty gas applications in a laboratory or a workshop.

### KEY FEATURES

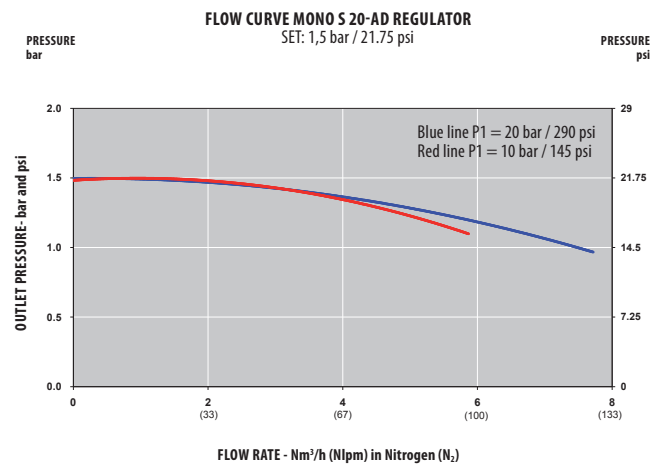
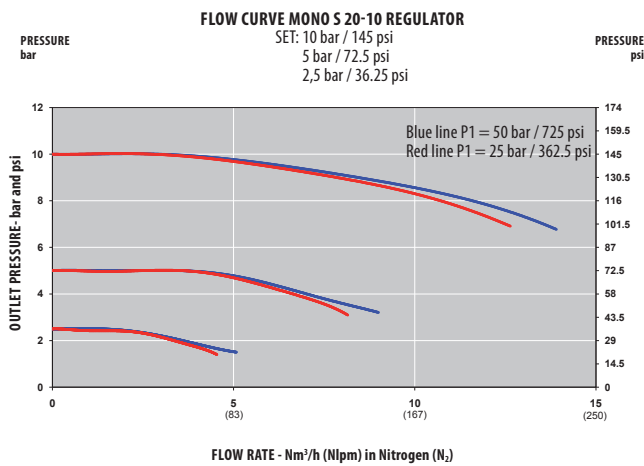
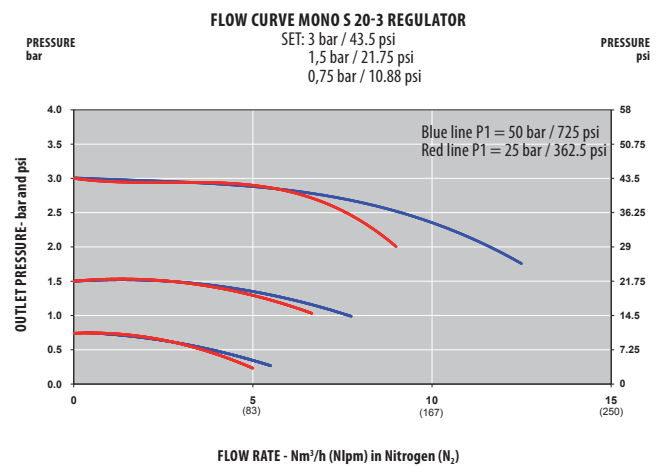
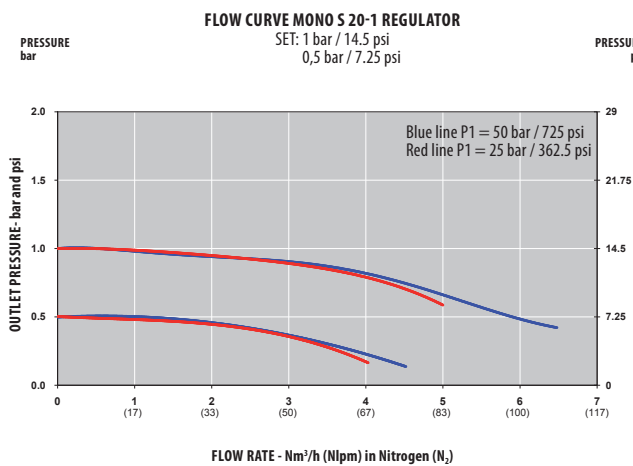
- Made up with a Series S 20 type regulator and a VM 20 valve.
- Compact outline dimensions and ergonomic design make this point of use suitable for laboratory furniture.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.
- The Mono S 20 can be integrated easily on furniture due to its compact design



## SPECIFICATIONS

|                          |                                                      |                          |                                                                          |                        |                                                                  |
|--------------------------|------------------------------------------------------|--------------------------|--------------------------------------------------------------------------|------------------------|------------------------------------------------------------------|
| <b>Female ports</b>      | G 3/8 (inlet/outlet)<br>or<br>1/4 NPT (inlet/outlet) | <b>Weight</b>            | Aluminum: ± 1,25 kg (± 2.75 lbs)<br>Stainless steel: ± 2,75 (± 6.06 lbs) | <b>Inlet pressure</b>  | 50 bar (725 psi)<br>AD: 20 bar (290 psi)                         |
| <b>Seat seal</b>         | EPDM                                                 | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                                             | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145 psi<br>AD: 1,5 bar (21.75 psi)         |
| <b>O-ring</b>            | EPDM - Standard<br>NBR<br>FPM                        | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F                                       | <b>Nominal Flow</b>    | 2/2,5/3,5 Nm³/h (N₂)<br>AD: 1 Nm³/h                              |
| <b>Diaphragm (valve)</b> | Hastelloy®                                           | <b>Gauges</b>            | Low pressure<br>(M10 x 1)                                                | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max. for<br>aluminum and stainless steel |
| <b>Bellow</b>            | Bronze or<br>AISI 316L (SS version)                  |                          |                                                                          |                        |                                                                  |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   |   | Body Material   |   | Outlet Pressure                          |    | End Connections   |   | O-ring Material | Configuration            |   |
|---|---|-----------------|---|------------------------------------------|----|-------------------|---|-----------------|--------------------------|---|
| M | S | A               |   | 8                                        |    | G                 |   | EPDM            | A                        |   |
|   |   | Aluminum        | A | 1 bar<br>14.5 psi                        | 1  | G 3/8 - G 3/8     | G | EPDM - standard | Standard configuration   | A |
|   |   | Stainless steel | I | 3 bar<br>44 psi                          | 3  | 1/4 NPT - 1/4 NPT | N | NBR             | reverse gauge<br>(180°)* | R |
|   |   |                 |   | 10 bar<br>145 psi                        | 10 |                   |   | FPM             |                          |   |
|   |   |                 |   | Acetylene version<br>1,5 bar (21.75 psi) | AD |                   |   |                 |                          |   |

\*Inlet Down - outlet Top

# MONO SERIES 40 | COMPACT POINT OF USE

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
1/3/10 bar (14.5/44/145 psi)
- Acetylene version (AD - C<sub>2</sub>H<sub>2</sub>):  
P1 = 20 bar (290 psi)  
P2 = 1,5 bar (21.75 psi)

- ★ Precise pressure delivery
- ★ Compact design
- ★ 3 inlets / 3 outlets
- ★ 1 integrated needle valve
- ★ Rear Inlet for panel mounting
- ★ O<sub>2</sub> application compatible (see technical data)

Special requirements on request



Acetylene version

## APPLICATIONS

- Used as a point of use for laboratory applications
- Suitable for all applications requiring the regulation of flow.

## KEY FEATURES

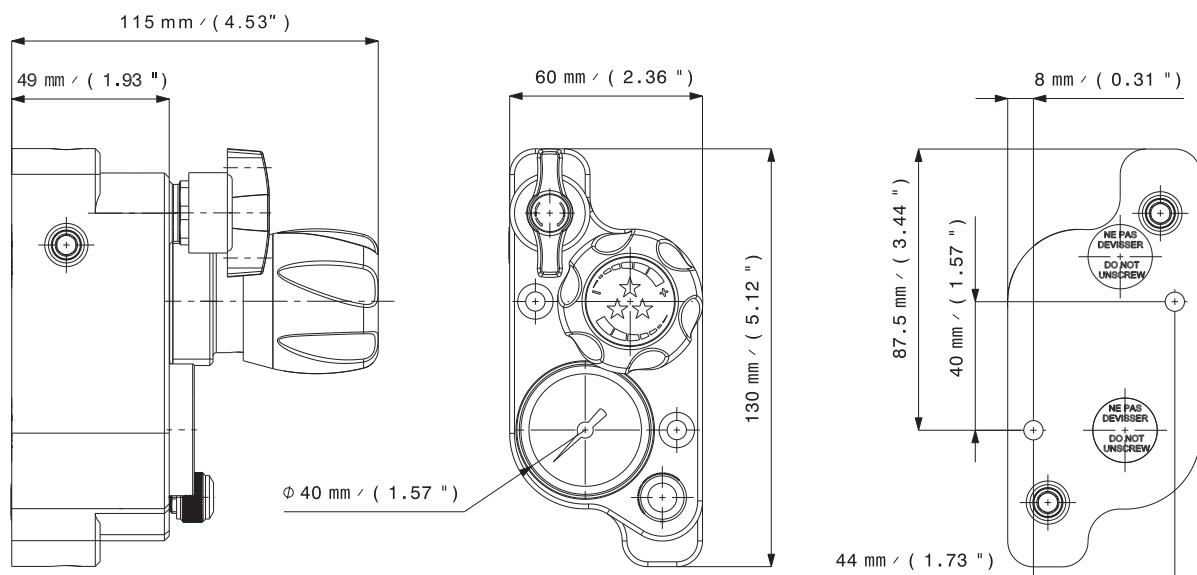
- Made up with a Series S 20 type regulator, a VM 20 valve and a RDL 10 regulation needle valve.
- Compact outline dimensions and ergonomic design make this point of use suitable for laboratories furniture.
- Vertical or horizontal orientation.
- Acetylene version available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.



Horizontal version



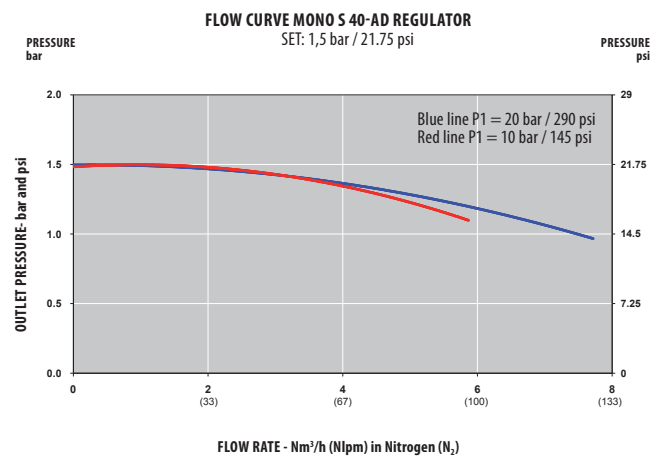
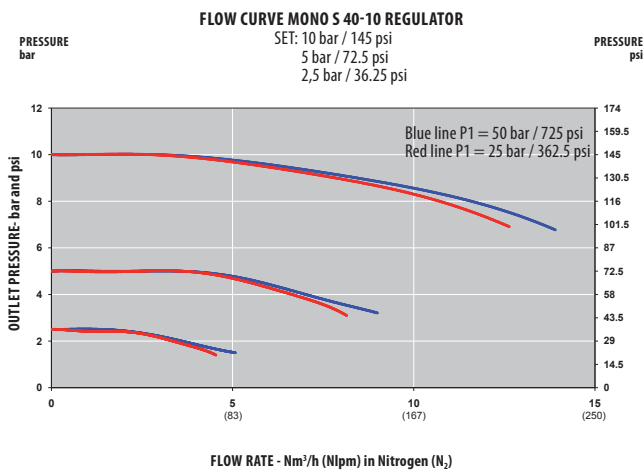
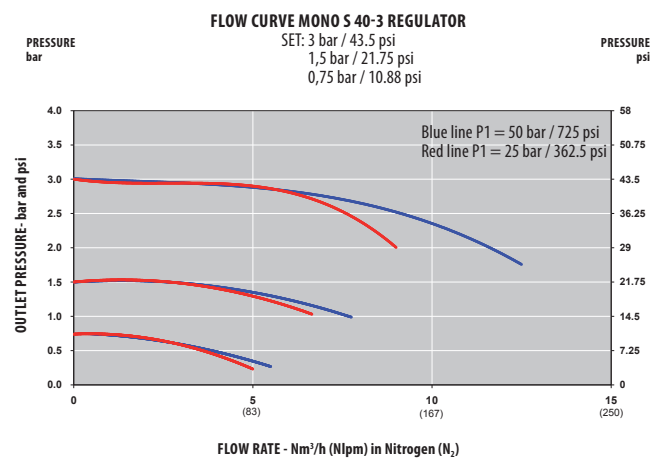
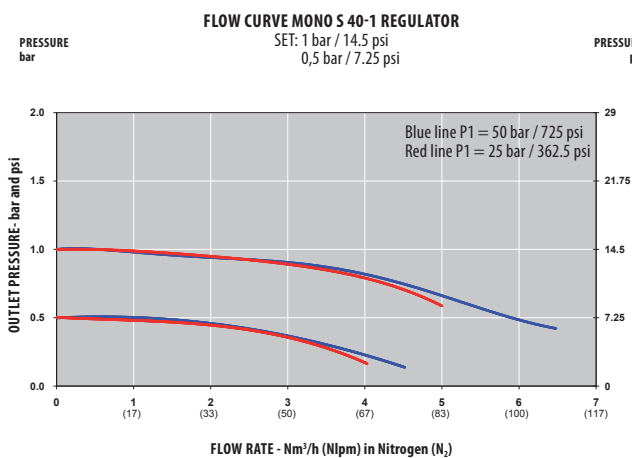
Vertical version



## SPECIFICATIONS

|                              |                                                   |                          |                                                                       |                        |                                                                  |
|------------------------------|---------------------------------------------------|--------------------------|-----------------------------------------------------------------------|------------------------|------------------------------------------------------------------|
| <b>Female ports</b>          | G ¼ (inlet/outlet)<br>or<br>¼ NPT (inlet/outlet)  | <b>Weight</b>            | Aluminum: ± 1 kg (± 2.20 lbs)<br>Stainless steel: ± 2 kg (± 4.40 lbs) | <b>Inlet pressure</b>  | 50 bar (725 psi)<br>AD: 20 bar (290 psi)                         |
| <b>Seat seal</b>             | EPDM (Alu version)<br>FPM (SS version)            | <b>Leak rate</b>         | 10 <sup>-7</sup> mbar ℓ/s He                                          | <b>Outlet pressure</b> | 1/3/10 bar<br>14.5/44/145 psi<br>AD: 1,5 bar (21.75 psi)         |
| <b>O-ring</b>                | EPDM (Alu version)<br>FPM (SS version)<br>NBR     | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F                                    | <b>Nominal Flow</b>    | 2/2,5/3,5 Nm³/h (N₂)<br>AD: 1 Nm³/h                              |
| <b>Valve Dia-<br/>phragm</b> | Hastelloy®                                        | <b>Gauges</b>            | Low pressure<br>(M10 x 1)                                             | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max. for<br>aluminum and stainless steel |
| <b>Bellow</b>                | Bronze (Alu version) or<br>AISI 316L (SS version) |                          |                                                                       |                        |                                                                  |

## FLOW CURVES



## PRODUCT CONFIGURATOR

|   |   | Body Material   |    | Outlet Pressure                           |    | End Connections |   | O-ring Material                       | Mounting Options            |   | Orientation |   |
|---|---|-----------------|----|-------------------------------------------|----|-----------------|---|---------------------------------------|-----------------------------|---|-------------|---|
| M | S | A               | 40 | 10                                        |    | G               | G | EPDM                                  | A                           | A | V           | V |
|   |   | Aluminum        | A  | 1 bar<br>14.5 psi                         | 1  | G ¼ - Female    | G | EPDM - standard<br>(Aluminum version) | Without plate -<br>standard | A | Vertical    | V |
|   |   | Stainless steel | I  | 3 bar<br>44 psi                           | 3  | ¼ NPT - Female  | N | FPM - standard<br>(SS version)        | With plate                  | P | Horizontal  | H |
|   |   |                 |    | 10 bar<br>145 psi                         | 10 |                 |   | NBR                                   |                             |   |             |   |
|   |   |                 |    | Acetylene<br>version 1,5 bar<br>21.75 psi | AD |                 |   |                                       |                             |   |             |   |



## SERIES S 20 AD | LINE REGULATOR FOR ACETYLENE (C<sub>2</sub>H<sub>2</sub>)

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
20 bar (290 psi)
- Outlet pressure:  
1,5 bar (21.75 psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 2 inlets / 2 outlets
- ★ Rear inlet  
for panel mounting
- ★ Acetylene applications

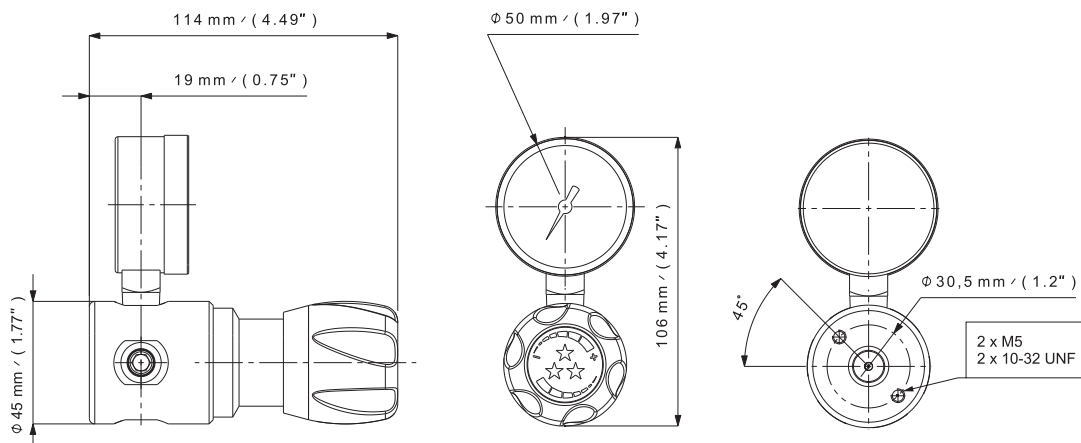
Special requirements on request

### APPLICATIONS

- The Series S 20 AD is used as line regulator or point of use for acetylene applications such as atomic absorption analyzers.

### KEY FEATURES

- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- With its compact design, the rear threads and its fixing ring (option) it can be used for wall or panel mounting.
- Multiple mounting positions possible due to multiple inlet ports.
- For use with acetylene: this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.

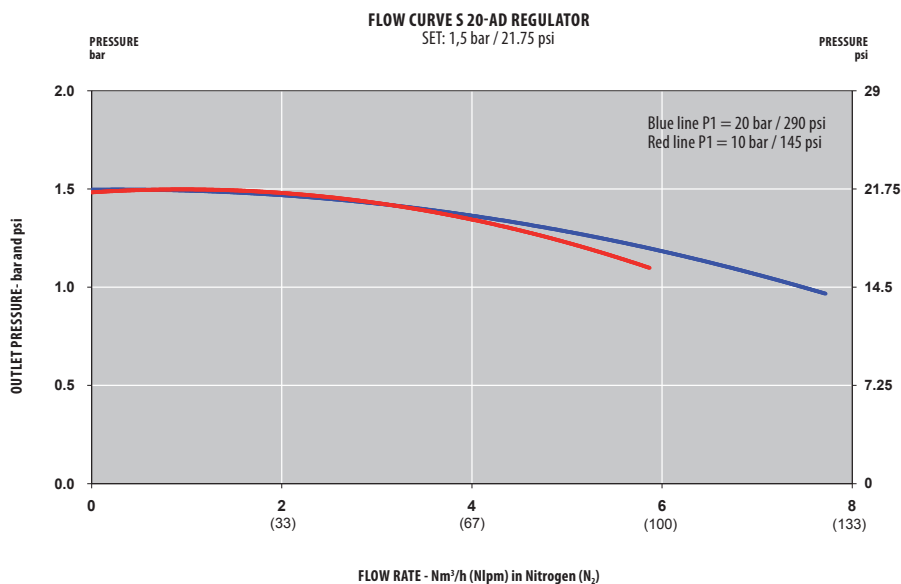




## SPECIFICATIONS

|                     |                                 |                          |                                      |                        |                                                         |
|---------------------|---------------------------------|--------------------------|--------------------------------------|------------------------|---------------------------------------------------------|
| <b>Female ports</b> | G 3/8 or 1/4 NPT (inlet/outlet) | <b>Weight</b>            | ± 0,5 kg<br>± 1.1 lbs                | <b>Inlet pressure</b>  | 20 bar<br>290 psi                                       |
| <b>Seat seal</b>    | EPDM                            | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He         | <b>Outlet pressure</b> | 1,5 bar<br>21.75 psi                                    |
| <b>O-ring</b>       | EPDM                            | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Nominal Flow</b>    | 1,5 Nm <sup>3</sup> /h (C <sub>2</sub> H <sub>2</sub> ) |
| <b>Bellow</b>       | AISI 316L                       | <b>Gauges</b>            | Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | No                                                      |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| S | Body Material       |   | 20 | AD | End Connections   |   | EPDM | Gauges  |   | Ports Configuration    |   | Mounting            |     |
|---|---------------------|---|----|----|-------------------|---|------|---------|---|------------------------|---|---------------------|-----|
|   | L                   | L |    |    | G                 | G |      | 1       | 0 | A                      | A | FR0                 | FR0 |
|   | Chrome plated brass | L |    |    | G 3/8 - G 3/8     | G |      | Without | 0 | Standard Configuration | A | Without Fixing Ring | FR0 |
|   |                     |   |    |    | 1/4 NPT - 1/4 NPT | N |      | With    | 1 | Reverse inlet/outlet   | R | With Fixing Ring    | FR1 |

## SERIES S 25 AD | CYLINDER REGULATOR FOR ACETYLENE (C<sub>2</sub>H<sub>2</sub>)

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
20 bar (290 psi)
- Outlet pressure:  
1,5 bar (21.75psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 1 inlet / 2 outlets
- ★ Rear Inlet with cylinder connection
- ★ Acetylene applications

Special requirements on request

### APPLICATIONS

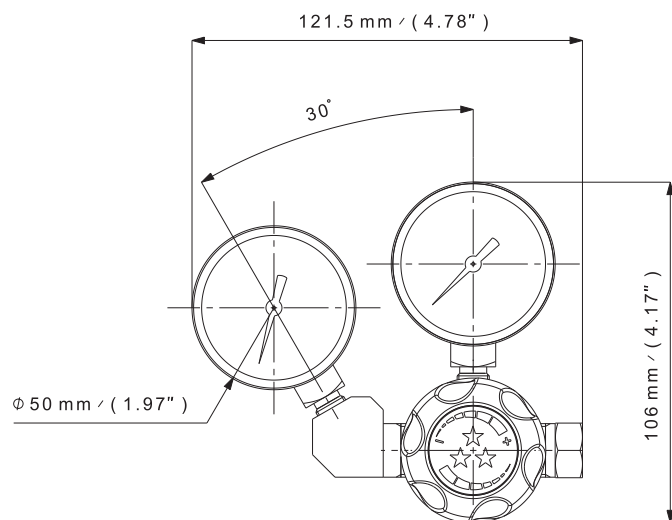
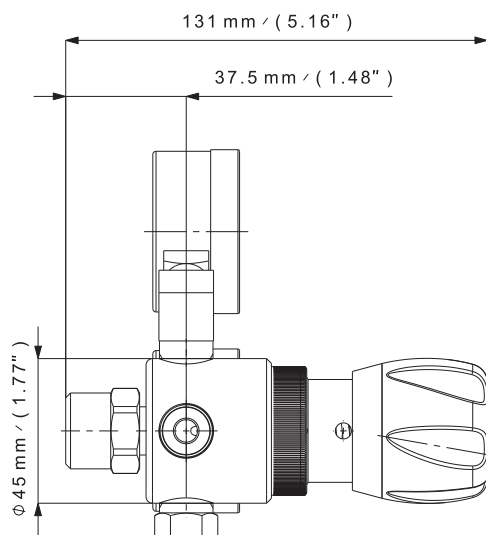
- Used as a cylinder regulator for acetylene applications such as atomic absorption analyzers.

### KEY FEATURES

- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- The Series S 25 could be equipped with several cylinder connection types.
- 2 gauges for high and low pressure.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.



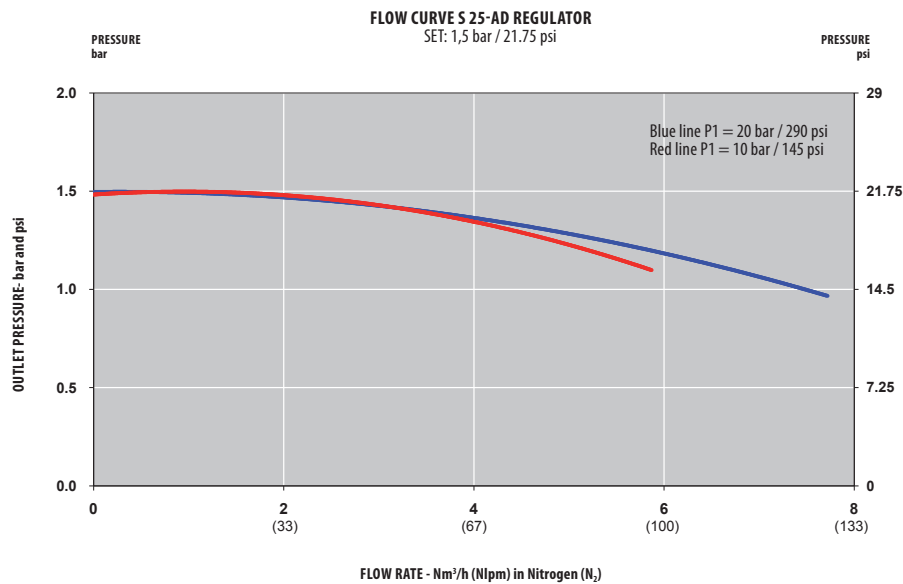
Right view



## SPECIFICATIONS

|                     |                                                                             |                          |                                             |                        |                                                         |
|---------------------|-----------------------------------------------------------------------------|--------------------------|---------------------------------------------|------------------------|---------------------------------------------------------|
| <b>Inlet ports</b>  | C <sub>2</sub> H <sub>2</sub> Cylinder connection in accordance to standard | <b>Weight</b>            | ± 0,5 kg<br>± 1.1 lbs                       | <b>Inlet pressure</b>  | 20 bar<br>290 psi                                       |
| <b>Outlet ports</b> | G 3/8 or 1/4 NPT                                                            | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He                | <b>Outlet pressure</b> | 1,5 bar<br>21.75 psi                                    |
| <b>Seat seal</b>    | EPDM                                                                        | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F        | <b>Nominal Flow</b>    | 1,5 Nm <sup>3</sup> /h (C <sub>2</sub> H <sub>2</sub> ) |
| <b>O-ring</b>       | EPDM                                                                        | <b>Gauges</b>            | High / Low pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | No                                                      |
| <b>Bellow</b>       | AISI 316L                                                                   |                          |                                             |                        |                                                         |

## FLOW CURVES



## PRODUCT CONFIGURATOR

| S | L | 25 | AD | Inlet Connection                |        | Outlet Connection |   | EPDM | Gauges                               |   | Mounting            |     |
|---|---|----|----|---------------------------------|--------|-------------------|---|------|--------------------------------------|---|---------------------|-----|
|   |   |    |    | H                               |        | G                 |   |      | 1                                    |   | FR0                 |     |
|   |   |    |    | AFNOR H Type (cylind. connect.) | H      | G 3/8 - G 3/8     | G |      | Without high and low pressure gauges | 0 | Without Fixing Ring | FR0 |
|   |   |    |    | British Standard                | BS4    | 1/4 NPT - 1/4 NPT | N |      | With high and low pressure gauges    | 1 | With Fixing Ring    | FR1 |
|   |   |    |    | CGA Standard                    | 510    |                   |   |      |                                      |   |                     |     |
|   |   |    |    | DIN Standard                    | 477-12 |                   |   |      |                                      |   |                     |     |

## SERIES S 20 FM | FLOW METER REGULATOR

- Bellow single stage
- Purity up to 6.0
- Inlet pressure:  
50 bar (725 psi)
- Outlet pressure:  
3,5 bar fixed (50 psi)
- Rear inlet

- ★ Precise pressure delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ Gas-dedicated flow meter
- ★ O<sub>2</sub> application compatible (see technical data)

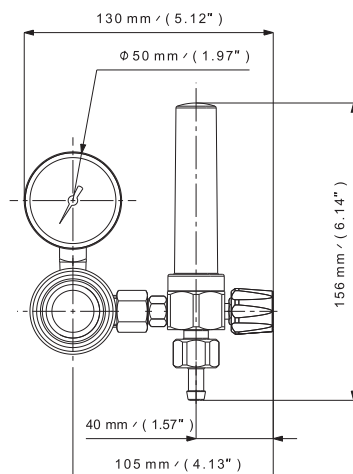
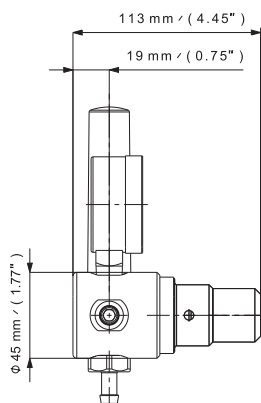
Special requirements on request

### APPLICATIONS

- Ideally suited for laboratory applications that require a very sensitive outlet flow adjustment with visual control of the flow.

### KEY FEATURES

- Based on the best-selling S 20 point of use.
- All flow meters have a preset outlet pressure at 3,5 bar.
- Equipped with one of two available versions of an adjustable flow meter: 0-5 lpm or 0-15 lpm.
- The flow meter is dedicated to a gas. Please indicate it when you order.
- Bellow technology provides a precise outlet pressure in a compact design.



### SPECIFICATIONS

|                     |                                                                     |                          |                                       |                        |                                                               |
|---------------------|---------------------------------------------------------------------|--------------------------|---------------------------------------|------------------------|---------------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 or G 3/8 or 1/4 NPT (inlet)<br>Hose barb 8.5 mm (outlet) | <b>Weight</b>            | ± 1,5 kg<br>± 3.3 lbs                 | <b>Inlet pressure</b>  | 50 bar<br>725 psi                                             |
| <b>Seat seal</b>    | PCTFE                                                               | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He          | <b>Outlet pressure</b> | 3,5 bar fixed<br>50 psi                                       |
| <b>O-ring</b>       | EPDM                                                                | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F    | <b>Nominal Flow</b>    | 5 or 15 lpm<br>(according to gas)                             |
| <b>Bellow</b>       | Bronze                                                              | <b>Gauges</b>            | High pressure<br>(M10 x 1 or 1/4 NPT) | <b>Oxygen use</b>      | inlet pressure ≤ 30 bar max.<br>for brass and stainless steel |

### PRODUCT CONFIGURATOR

| Body Material |                     | 20 | FM | End Connections     |    | Gas Type       |                | Flow Scale  |    |
|---------------|---------------------|----|----|---------------------|----|----------------|----------------|-------------|----|
| S             | L                   |    |    | G                   | G  | O <sub>2</sub> | N <sub>2</sub> | 15          | 15 |
|               | Chrome plated brass |    |    | G 3/8 - Female      | G  | Nitrogen       | N <sub>2</sub> | 0 to 15 lpm | 15 |
|               |                     |    |    | NPT 1/4 - Female    | N  | Argon          | Ar             | 0 to 5 lpm  | 5  |
|               |                     |    |    | 16 x 1.336 - Female | 16 | Helium         | He             |             |    |
|               |                     |    |    |                     |    | Oxygen         | O <sub>2</sub> |             |    |

# SERIES S 225 FM | FLOW METER REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
3,5 bar fixed (50 psi)
- Rear inlet

- ★ Precise pressure delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ Gas dedicated flow meter
- ★ O<sub>2</sub> application compatible (see technical data)

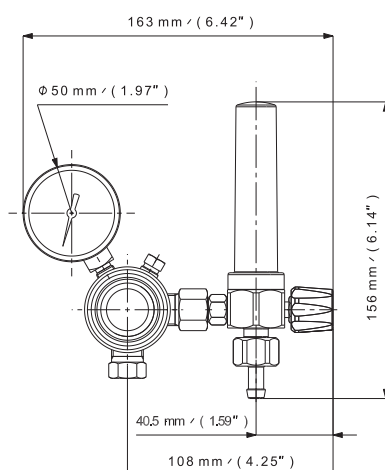
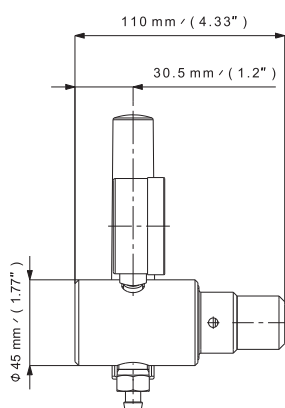
Special requirements on request

## APPLICATIONS

- Ideally suited for laboratory applications that require a very sensitive outlet flow adjustment with visual control of the flow.

## KEY FEATURES

- Based on the S 225.
- All flow meters have a preset outlet pressure at 3,5 bar.
- Equipped with one of two available adjustable flow meters: 0-5 lpm or 0-15 lpm.
- With our flow meters you have the advantage to have a very sensitive adjusted outlet flow.
- The flow meter is dedicated to a gas. Please indicate it when you order.



## SPECIFICATIONS

|                     |                                                         |                          |                                     |                        |                                   |
|---------------------|---------------------------------------------------------|--------------------------|-------------------------------------|------------------------|-----------------------------------|
| <b>Female ports</b> | 16 x 1.336 or ¼ NPT (inlet)<br>Hose barb 8,5mm (outlet) | <b>Weight</b>            | ± 1,5 kg<br>± 3.3 lbs               | <b>Inlet pressure</b>  | 200 bar<br>2900 psi               |
| <b>Seat seal</b>    | PCTFE                                                   | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He        | <b>Outlet pressure</b> | 3,5 bar fixed<br>50 psi           |
| <b>O-ring</b>       | EPDM                                                    | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F  | <b>Nominal Flow</b>    | 5 or 15 lpm<br>(according to gas) |
| <b>Diaphragm</b>    | AISI 304                                                | <b>Gauges</b>            | High pressure<br>(M10 x 1 or ¼ NPT) | <b>Oxygen use</b>      | OK                                |

## PRODUCT CONFIGURATOR

| Body Material |                     |     |    | End Connections   |    | Gas Type       |                | Flow Scale  |    |
|---------------|---------------------|-----|----|-------------------|----|----------------|----------------|-------------|----|
| S             | L                   | 225 | FM | 16                | 16 | O <sub>2</sub> | N <sub>2</sub> | 15          | 15 |
|               | Chrome plated brass |     |    | 16 x 1.336 Female | N  | Argon          | Ar             | 0 to 15 lpm | 15 |
|               |                     |     |    | NPT ¼ - Female    |    | Helium         | He             | 0 to 5 lpm  | 5  |
|               |                     |     |    |                   |    | Oxygen         | O <sub>2</sub> |             |    |

## SERIES D 230 FM | FLOW METER REGULATOR

- Piston / Bellow dual stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
3,5 bar fixed (50 psi)
- Rear inlet

- ★ Precise pressure delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ Gas-dedicated flow meter
- ★ O<sub>2</sub> application compatible

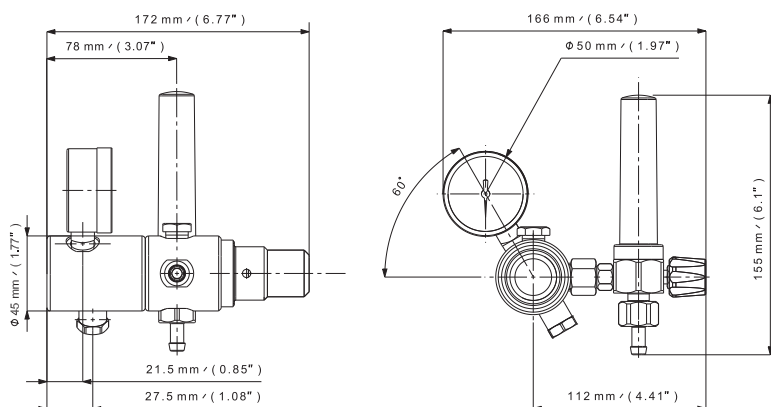
Special requirements on request

### APPLICATIONS

- Ideally suited for laboratory applications that require a very sensitive outlet flow adjustment with visual control of the flow.

### KEY FEATURES

- Based on the D 230.
- All flow meters have a preset outlet pressure at 3,5 bar.
- Equipped with one of two available adjustable flow meters: 0-5 lpm or 0-15 lpm.
- With our flow meters you have the advantage to have a very sensitive adjusted outlet flow.
- The flow meter is dedicated to a gas. Please indicate it when you order.



### SPECIFICATIONS

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| <b>Female ports</b> | 16 x 1.336 or ¼ NPT (inlet)<br>Hose barb 8,5 mm (outlet) |
| <b>Seat seal</b>    | PTFE                                                     |
| <b>O-ring</b>       | EPDM                                                     |
| <b>Piston</b>       | Brass                                                    |
| <b>Bellow</b>       | Bronze                                                   |

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Weight</b>            | ± 1,5 kg<br>± 3.3 lbs              |
| <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He       |
| <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F |
| <b>Gauges</b>            | High pressure<br>M10 x 1 or ¼ NPT  |

|                        |                                   |
|------------------------|-----------------------------------|
| <b>Inlet pressure</b>  | 200 bar<br>2900 psi               |
| <b>Outlet pressure</b> | 3,5 bar fixed<br>50 psi           |
| <b>Nominal Flow</b>    | 5 or 15 lpm<br>(according to gas) |
| <b>Oxygen use</b>      | OK                                |

### PRODUCT CONFIGURATOR

| Body Material |                     |     |    | End Connections   |    | Gas Type |                | Flow Scale  |    |
|---------------|---------------------|-----|----|-------------------|----|----------|----------------|-------------|----|
| D             | L                   | 230 | FM | 16                |    | O2       |                | 15          |    |
|               | Chrome plated brass |     |    | 16 x 1.336 Female | 16 | Nitrogen | N <sub>2</sub> | 0 to 15 lpm | 15 |
|               |                     |     |    | NPT ¼ - Female    | N  | Argon    | Ar             | 0 to 5 lpm  | 5  |
|               |                     |     |    |                   |    | Helium   | He             |             |    |
|               |                     |     |    |                   |    | Oxygen   | O <sub>2</sub> |             |    |

# SERIES S 70 / D 70 | CONSTANT FLOW REGULATOR

- Piston single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
4,13 bar (60 psi)
- 1 inlet / 1 outlet
- Rear inlet

- ★ Extreme accurate flow delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ O<sub>2</sub> application compatible

Special requirements on request

## APPLICATIONS

- Designed for calibration applications where predetermined pressure and flow are required, and for portable cylinder use.

## KEY FEATURES

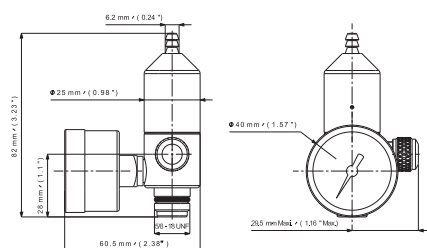
- This piston regulator has 1 inlet/1 outlet.
- Exist as single (S 70) or dual stage (D 70 special version).
- Compact, light weight design, ideal for portability.
- Hand tightened assembly to cylinder is excellent for field applications.
- Actuation with control knob or push button.
- Please indicate, on any order, the maximum inlet pressure, the setting pressure and the set flow.



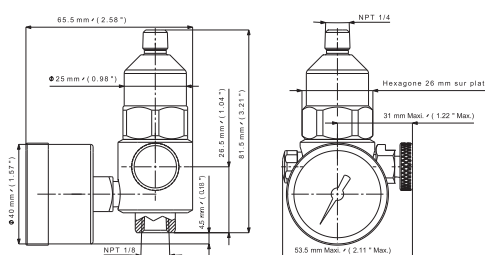
S70 single stage

D70 dual stage

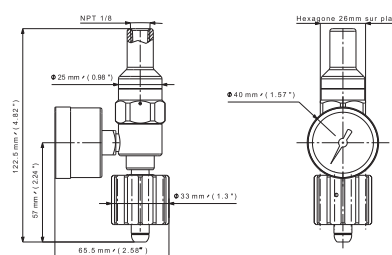
## CK - CONTROL KNOB



## PB - PUSH BUTTON



## NV - NO VALVE



## SPECIFICATIONS

|                     |                                                       |                          |                                    |                        |                                                            |
|---------------------|-------------------------------------------------------|--------------------------|------------------------------------|------------------------|------------------------------------------------------------|
| <b>Female ports</b> | Inlet: C10 or 1/8 NPT<br>Outlet: Hose barb or 1/8 NPT | <b>Weight</b>            | ± 0,31 kg<br>± 0.83 lbs            | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                                        |
| <b>Seat seal</b>    | PCTFE                                                 | <b>Leak rate</b>         | 1.10 <sup>-4</sup> mbar l/s He     | <b>Outlet pressure</b> | 4,13 bar (60 psi) - standard<br>2,06 bar (30 psi) - option |
| <b>O-ring</b>       | FPM - Standard<br>EPDM<br>NBR                         | <b>Temperature range</b> | -20°C to + 60°C<br>-4°F to + 140°F | <b>Nominal Flow</b>    | preset from 0,25 to 7 lpm                                  |
| <b>Piston</b>       | Brass (brass version)<br>AISI 303 (SS version)        | <b>Gauges</b>            | High pressure<br>1/8 NPT           | <b>Oxygen use</b>      | OK for brass and stainless steel                           |
| <b>Actuation</b>    | Control knob<br>or Push button                        |                          |                                    |                        |                                                            |

## PRODUCT CONFIGURATOR

|   | Body Material       |   |    | Outlet Pressure              |    | Inlet Connection |     | Outlet Connection |    | Actuation             |    | O-ring Material | Gauge         |   |
|---|---------------------|---|----|------------------------------|----|------------------|-----|-------------------|----|-----------------------|----|-----------------|---------------|---|
| S | L                   |   | 70 | 60                           |    | C10              |     | HB                |    | CK                    |    | FPM             | 1             |   |
|   | Nickel plated brass | L |    | 4,13 bar (60 psi) - standard | 60 | 5/8" x 18 UNF    | C10 | Hose barb         | HB | Control Knob standard | CK | FPM standard    | Without       | 0 |
|   | Stainless steel     | I |    | 2,06 bar (30 psi)            | 30 | NPT 1/8 - Female | N   | NPT 1/8 - Female  | N1 | Push Buton            | PB | EPDM            | With 1000 psi | 1 |
|   |                     |   |    |                              |    |                  |     | NPT 1/8 - Male    | N2 | No valve              | NV | NBR             | With 3000 psi | 2 |
|   |                     |   |    |                              |    |                  |     |                   |    |                       |    |                 | With 4000 psi | 3 |
|   |                     |   |    |                              |    |                  |     |                   |    |                       |    |                 | With 315 bar  | 4 |



## SERIES S 75 | CONSTANT FLOW REGULATOR

- Piston single stage
- Purity up to 6.0
- Inlet pressure:  
200 bar (2900 psi)
- Outlet pressure:  
3,5/6 bar (50/87 psi)
- Rear inlet
- Flow selector (0,3 - 15 lpm)

- ★ Extremely accurate flow delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ O<sub>2</sub> application compatible (brass only)

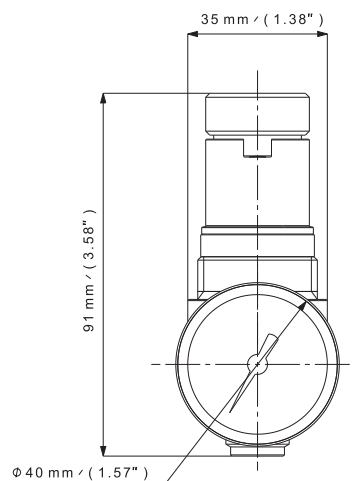
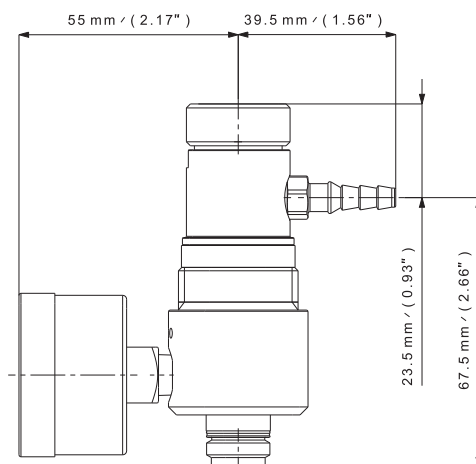
Special requirements on request

### APPLICATIONS

- Designed for calibration applications where predetermined pressure and adjustable flow are required, and for portable cylinder use.

### KEY FEATURES

- Piston technology allows having a very stable flow outlet pressure.
- Equipped with a flow selector (10 positions) with 3 different maximum outlet flows (3 - 5 - 15 lpm).
- Compact, light weight design, ideal for portability.
- Integrated safety relief valve.





## SPECIFICATIONS

|                     |                                                                      |                          |                                  |                        |                                                        |
|---------------------|----------------------------------------------------------------------|--------------------------|----------------------------------|------------------------|--------------------------------------------------------|
| <b>Female ports</b> | Inlet: C 10 or ¼ NPT<br>Outlet: Hose barb or DR 6 or ¼" tube fitting | <b>Weight</b>            | ± 0,70 kg<br>± 1.54 lbs          | <b>Inlet pressure</b>  | 200 bar<br>2900 psi                                    |
| <b>Seat seal</b>    | PCTFE                                                                | <b>Leak rate</b>         | 10 <sup>-4</sup> mbar ℓ/s He     | <b>Outlet pressure</b> | 3,5 bar (50 psi) - standard<br>6 bar (87 psi) - option |
| <b>O-ring</b>       | FPM - Standard<br>EPDM<br>NBR                                        | <b>Temperature range</b> | -20°C to +60°C<br>-4°F to +140°F | <b>Nominal Flow</b>    | Preset from<br>0,3 to 15 lpm                           |
| <b>Piston</b>       | Brass (brass version)<br>AISI 316L (SS version)                      | <b>Gauges</b>            | High pressure<br>(⅛ NPT)         | <b>Oxygen use</b>      | Brass only                                             |

## NOMINAL FLOW SETTINGS (lpm)

| B03 | B05  | B15 |
|-----|------|-----|
| 0,3 | 0,5  | 1   |
| 0,5 | 0,75 | 1,5 |
| 0,7 | 1    | 2   |
| 0,9 | 1,5  | 3   |
| 1,2 | 2    | 4   |
| 1,5 | 2,5  | 5   |
| 2   | 3    | 8   |
| 2,5 | 4    | 10  |
| 3   | 5    | 15  |



## PRODUCT CONFIGURATOR

| S | Body Material       |   | 75 | Outlet Pressure              |     | Inlet Connection |     | Outlet Connection    |      | Flow Selector    |     | O-ring Material | Gauge         |   |
|---|---------------------|---|----|------------------------------|-----|------------------|-----|----------------------|------|------------------|-----|-----------------|---------------|---|
|   | L                   |   |    | 3.5                          |     | C10              |     | HB                   |      | B05              |     | FPM             | 1             |   |
|   | Nickel plated brass | L |    | 3.5 bar<br>50 psi - standard | 3.5 | 5/8" x 18 UNF    | C10 | Hose barb (standard) | HB   | 3 lpm            | B03 | FPM - standard  | Without       | 0 |
|   | Stainless steel     | I |    | 6 bar<br>87 psi              | 6   | NPT ¼ - Female   | N   | NPT ⅛ - Female       | N1   | 5 lpm - standard | B05 | EPDM            | With 4000 psi | 1 |
|   |                     |   |    |                              |     |                  |     | 6 mm tube fitting    | DB6  | 15 lpm           | B15 | NBR             | With 315 bar  | 2 |
|   |                     |   |    |                              |     |                  |     | ¼ tube fitting       | DB ¼ |                  |     |                 |               |   |

## DEI 10 | BACK PRESSURE REGULATOR

- Diaphragm single stage
- Purity up to 6.0
- Inlet pressure:  
1 - 15 bar (14.5 - 217.5 psi)

- ★ Protection device
- ★ Also for liquid application
- ★ Compact design
- ★ 2 Inlet / 1 outlet
- ★ Rear threads for front panel mounting

Special requirements on request

### APPLICATIONS

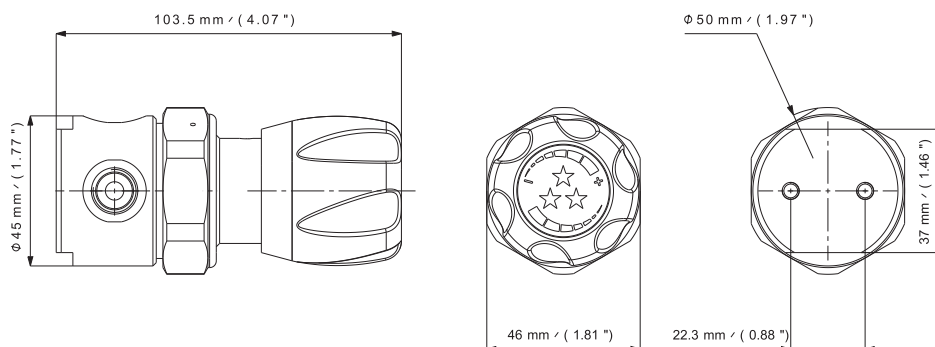
- Designed either for liquid or gas applications
- Back pressure regulators are often used for:
  - control of pressure in recirculation loops
  - relief of excess system pressure
  - vacuum regulation

### KEY FEATURES

- Back pressure regulators work just like relief valves, but the emphasis is on steady state pressure control instead of on/off pressure protection or pressure reduction.
- Regulates the higher inlet (upstream) pressure by opening up only as much as necessary to hold back the desired pressure at the inlet (upstream).



Do not use the back Pressure Regulator as a shutoff device



### SPECIFICATIONS

|                         |                      |                          |                                      |                                         |                                  |
|-------------------------|----------------------|--------------------------|--------------------------------------|-----------------------------------------|----------------------------------|
| <b>Female ports</b>     | ¼ NPT (inlet/outlet) | <b>Weight</b>            | ± 0,65 kg<br>± 1.43 lbs              | <b>Inlet pressure</b>                   | 1 to 15 bar<br>14.5 to 217.5 psi |
| <b>Seat seal</b>        | PFA                  | <b>Leak rate</b>         | 3.10 <sup>-9</sup> mbar l/s He       | <b>Flow P1 = 10 bar, Pset = 7 bar</b>   | 26 Nm³/h (N₂)                    |
| <b>Flow coefficient</b> | CV 0.38<br>KV 0,33   | <b>Temperature range</b> | - 20°C to + 60°C<br>- 4°F to + 140°F | <b>Flow P1 = 21,5 bar Pset = 15 bar</b> | 80 Nm³/h (N₂)                    |
| <b>Diaphragm</b>        | Hastelloy®           | <b>Gauges</b>            | No                                   | <b>Oxygen use</b>                       | No                               |

### PRODUCT CONFIGURATOR

| Body Material   | Pressures set       | End Connections | Gauges  |
|-----------------|---------------------|-----------------|---------|
| DEI             | 10                  | N               | 0       |
| Stainless steel | 7 bar<br>101.5 psi  | NTP ¼ - Female  | Without |
|                 | 15 bar<br>217.5 psi |                 | With    |
|                 |                     |                 | 1       |

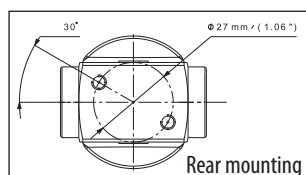
# SERIES VP 300 | LINE VALVE

- 300 bar line valve
- Multi-turn, non-turning seat disc for various pure gases (special oxygen version available)

## LINE VALVE

- ★ 300 bar
- ★ Multi-turn
- ★ Special oxygen version

Special requirements on request

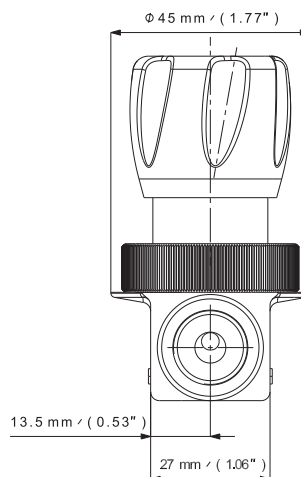
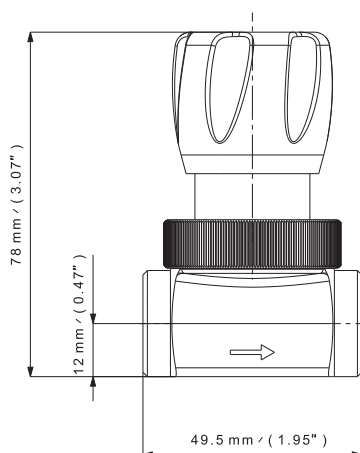


## KEY FEATURES

- Purity up to 5.5
- Multi-turn version
- Raw brass or chrome plated brass
- Special oxygen version
- Standard inlet/outlet: G 3/8 - Female
- Fixing ring for flush-mounting in panel
- Rear thread for panel mounting

## OPTIONS

- Various inlet/outlet connections including F: 3/8 NPT, double ring 6 mm
- Many inlet/outlet fittings available



## SPECIFICATIONS

|                       |                                                |                          |                                  |                             |                                |
|-----------------------|------------------------------------------------|--------------------------|----------------------------------|-----------------------------|--------------------------------|
| <b>Female ports</b>   | G 3/8 (inlet/outlet) or 3/8 NPT (inlet/outlet) | <b>Leak rate</b>         | 1.10 <sup>-4</sup> mbar l/s He   | <b>Inlet pressure</b>       | 300 bar<br>4350 psi            |
| <b>Seat seal</b>      | Polyamide                                      | <b>Temperature range</b> | -20°C to +50°C<br>-4°F to +122°F | <b>Flow coefficient</b>     | Cv 0.30<br>Kv 0.26             |
| <b>O-ring</b>         | EPDM                                           | <b>Seat orifice size</b> | Ø 4 mm                           | <b>1/4 turn handwheel</b>   | No                             |
| <b>Bottom tapered</b> | OK                                             |                          |                                  | <b>Multi-turn handwheel</b> | OK                             |
| <b>Weight</b>         | ± 0.38 kg<br>± 0.84 lbs                        |                          |                                  | <b>Oxygen use</b>           | Special O <sub>2</sub> version |

## PRODUCT CONFIGURATOR

| V | P | Body Material       |    | 300 | End Connections  |   | Oxygen Version |                |
|---|---|---------------------|----|-----|------------------|---|----------------|----------------|
|   |   | L                   | LB |     | G                | G | STD            | STD            |
|   |   | Raw brass           | LB |     | G 3/8 - Female   | G | Standard       | STD            |
|   |   | Chrome plated brass | L  |     | NPT 3/8 - Female | N | Oxygen use     | O <sub>2</sub> |

# SERIES VM 200 | LINE VALVE

- High-pressure line valve for various pure gases.
- High leak tightness through diaphragm sealing.

## SHUT-OFF VALVE

- ★ High-pressure
- ★ Diaphragm seal
- ★ Multi-turn or ¼ turn
- ★ Special O<sub>2</sub> version

Special requirements on request

## KEY FEATURES

- Purity up to 6.0
- Multi-turn version or ¼ turn version
- Chrome plated brass or stainless steel
- Standard inlet/outlet: G ¾ - Female
- Fixing ring for flush-mounting in panel
- Rear thread for panel mounting

## OPTIONS

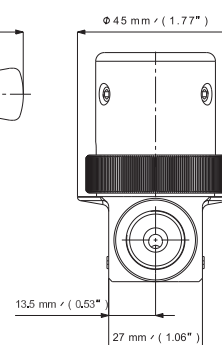
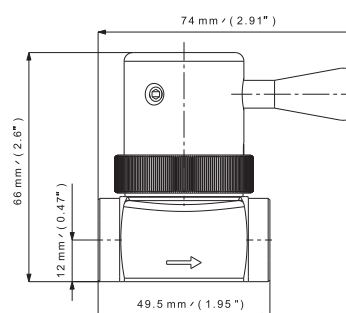
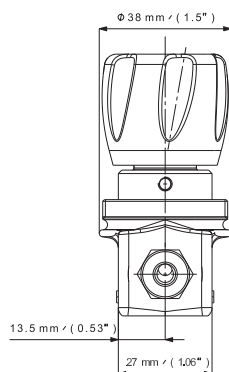
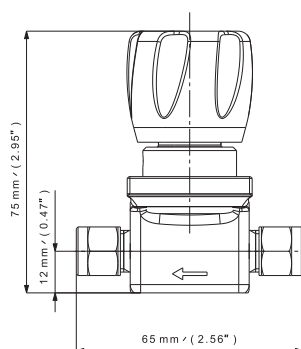
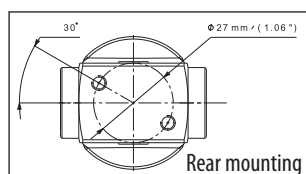
- Many inlet/outlet fittings available
- Special stainless steel, oxygen version



Multi-turn version



¼ turn version



## SPECIFICATIONS

|                       |                             |                          |                                    |                              |                                                                                            |
|-----------------------|-----------------------------|--------------------------|------------------------------------|------------------------------|--------------------------------------------------------------------------------------------|
| <b>Female ports</b>   | G ¾ or ¼ NPT (inlet/outlet) | <b>Weight</b>            | ± 0,5 kg<br>± 1.10 lbs             | <b>Inlet pressure</b>        | 200 bar<br>2900 psi                                                                        |
| <b>Seat seal</b>      | PCTFE                       | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar.l/s He       | <b>Flow coefficient (Kv)</b> | 0,04 (brass)<br>0,12 for ¼ turn (stainless steel)<br>0,21 for multi-turn (stainless steel) |
| <b>Diaphragm</b>      | Hastelloy®                  | <b>Temperature range</b> | -20°C to + 50°C<br>-4°F to + 122°F | <b>Oxygen use</b>            | special part number for O <sub>2</sub> application.                                        |
| <b>Bottom tapered</b> | OK                          | <b>Seat orifice size</b> | Ø 4 mm                             |                              |                                                                                            |

## PRODUCT CONFIGURATOR

| V | Body Material       |   | M | 200 | Version  |   | End Connections    |      | Hand wheel |     | Oxygen version |                |
|---|---------------------|---|---|-----|----------|---|--------------------|------|------------|-----|----------------|----------------|
|   | L                   |   |   |     | D        |   | G                  |      | ¼ T        |     | STD            |                |
|   | Chrome plated brass | L |   |     | straight | D | G ¾ - Female       | G    | ¼ turn     | ¼ T | standard       | STD            |
|   | Stainless steel     | I |   |     |          |   | NPT ¼ - Female     | N    | Multi-tum  | MT  | oxygen use     | O <sub>2</sub> |
|   |                     |   |   |     |          |   | 6 mm tube fitting  | DB6  |            |     |                |                |
|   |                     |   |   |     |          |   | 10 mm tube fitting | DB10 |            |     |                |                |

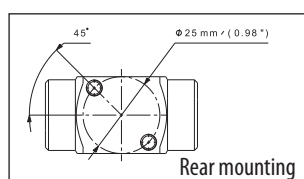
## SERIES VM 50 | LINE VALVE

- Low pressure line valve for various pure gases.
- High leak tightness through diaphragm sealing.

### SHUT-OFF VALVE

- ★ Low-pressure
- ★ Diaphragm seal
- ★ Multi-turn or ¼ turn
- ★ O<sub>2</sub> application compatible (see technical data)

Special requirements on request



### KEY FEATURES

- Purity up to 6.0
- Multi-turn version
- or ¼ turn version
- Nickel plated brass or stainless steel
- Rear thread for panel mounting

### OPTIONS

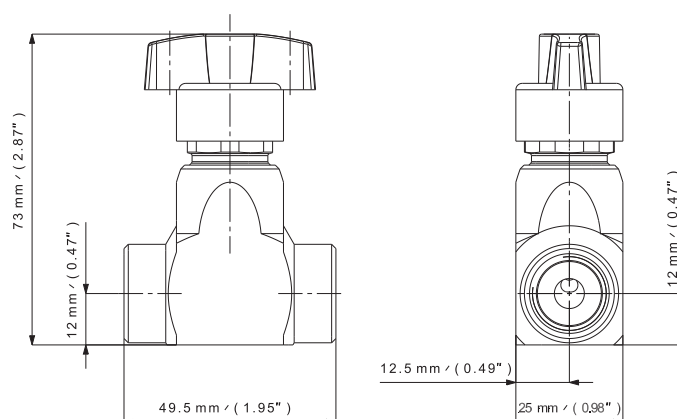
- Various inlet/outlet connections
- Many inlet/outlet fittings available



¼ turn version



Multi-turn version



### SPECIFICATIONS

|                       |                             |                          |                                  |                              |                                                                                            |
|-----------------------|-----------------------------|--------------------------|----------------------------------|------------------------------|--------------------------------------------------------------------------------------------|
| <b>Female ports</b>   | G ¾ or ¼ NPT (inlet/outlet) | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He     | <b>Inlet pressure</b>        | 50 bar<br>725 psi                                                                          |
| <b>Seat seal</b>      | PCTFE                       | <b>Temperature range</b> | -20°C to +50°C<br>-4°F to +122°F | <b>Flow coefficient (Kv)</b> | 0,04 (brass)<br>0,12 for ¼ turn (stainless steel)<br>0,21 for multi-turn (stainless steel) |
| <b>Diaphragm</b>      | Hastelloy®                  | <b>Seat orifice size</b> | Ø 4 mm                           | <b>Oxygen use</b>            | Brass only, pressure ≤ 30 bar                                                              |
| <b>Bottom tapered</b> | OK                          |                          |                                  |                              |                                                                                            |
| <b>Weight</b>         | ± 0,3 kg<br>± 0.66 lbs      |                          |                                  |                              |                                                                                            |

### PRODUCT CONFIGURATOR

| Body Material |                     |   |    | End Connections |   | Hand wheel |     |
|---------------|---------------------|---|----|-----------------|---|------------|-----|
| V             | L                   | M | 50 | G               |   | ¼ T        |     |
|               | Chrome plated brass | L |    | G ¾ - Female    | G | ¼ Turn     | ¼ T |
|               | Stainless steel     | I |    | NPT ¼ - Female  | N | Multi-turn | MT  |

## SERIES VM 20 | LINE VALVE

- Low-pressure shut off valve for various pure gases.
- High leak tightness through diaphragm sealing.

### SHUT-OFF VALVE

- ★ Low-pressure
- ★ Diaphragm seal
- ★ Straight or 90° version
- ★ O<sub>2</sub> application compatible (see technical data)

Special requirements on request

### KEY FEATURES

- Purity up to 6.0
- «Straight» version (VLM 20 D / VIM 20 D)
- «Right-angle» version (VLM 20 E / VIM 20 E)
- «Wall-mounted» version (VLM 20 M / VIM 20 M)
- «Panel» version (VLM 20 T / VIM 20 T)
- Rear thread for panel mounting (VLM 20 E / VIM 20 E)

### OPTIONS

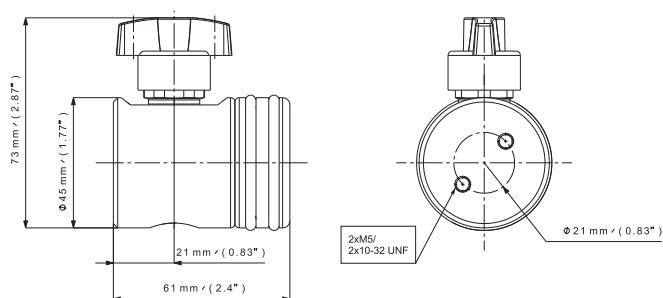
- ¼ turn version
- M: G ¾" inlet (VLM 20 D / VIM 20 D)
- Panel mounting board
- Point of use regulator
- Many inlet / outlet fittings available



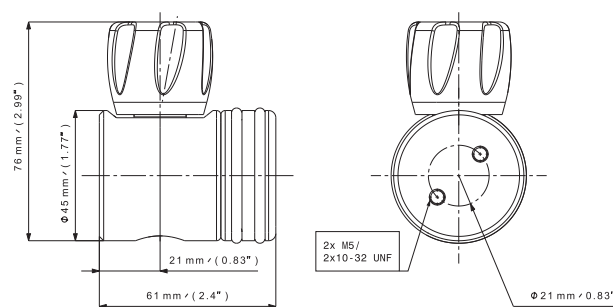
VLM 20 E ¼ turn



VLM 20 E Multi-turn



VLM 20 E ¼ turn



VLM 20 E Multi-turn

## SPECIFICATIONS

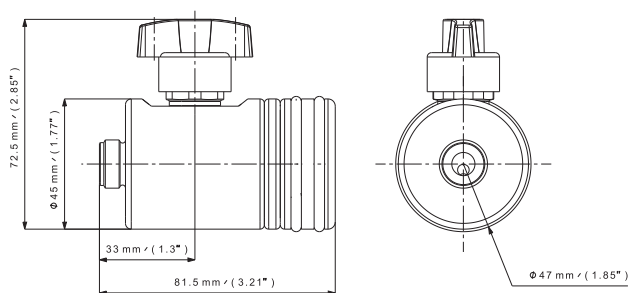
|                       |                               |                          |                                    |                         |                                                                      |
|-----------------------|-------------------------------|--------------------------|------------------------------------|-------------------------|----------------------------------------------------------------------|
| <b>Seat seal</b>      | PCTFE / EPDM                  | <b>Weight</b>            | ± 0,95 kg<br>± 2.10 lbs            | <b>Flow coefficient</b> | Cv 0.14<br>Kv 0,12                                                   |
| <b>O-ring</b>         | EPDM - Standard<br>NBR<br>FPM | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He       | <b>Inlet pressure</b>   | 50 bar<br>725 psi                                                    |
| <b>Bottom tapered</b> | OK                            | <b>Temperature range</b> | -20°C to + 50°C<br>-4°F to + 122°F | <b>Ports</b>            | G 3/8<br>(inlet/outlet)                                              |
| <b>Diaphragm</b>      | Hastelloy®                    | <b>Seat orifice size</b> | Ø 4 mm                             | <b>Oxygen use</b>       | Brass: OK<br>Stainless steel: only E / M<br>versions with side inlet |



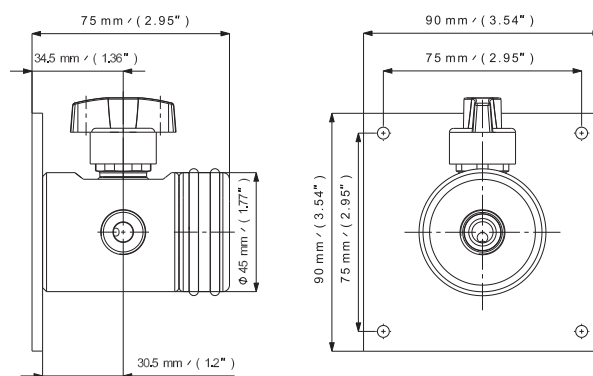
VLM 20 D 1/4 turn



VLM 20 M 1/4 turn



VLM 20 D 1/4 turn



VLM 20 M 1/4 turn

## PRODUCT CONFIGURATOR

|          | Body Material       |             | Version     | End Connections |                   | O-ring Material | Hand wheel      |            |
|----------|---------------------|-------------|-------------|-----------------|-------------------|-----------------|-----------------|------------|
| <b>V</b> | <b>LM20</b>         |             | <b>M</b>    | <b>G</b>        |                   | <b>EPDM</b>     | <b>1/4 T</b>    |            |
|          | Chrome plated brass | <b>LM20</b> | straight    | <b>D</b>        | G 3/8             | <b>G</b>        | EPDM - standard | 1/4 turn   |
|          | Stainless steel     | <b>IM20</b> | right angle | <b>E</b>        | NPT 1/4 on demand | <b>N</b>        | NBR             | Multi-turn |
|          |                     |             | with plate  | <b>M</b>        |                   | FPM             |                 |            |

## SERIES VM 45 | LINE VALVE

- Low-pressure line valve for various pure gases.
- High leak tightness through diaphragm sealing and high flow through 8mm orifice.

### SHUT-OFF VALVE

- ★ Low-pressure
- ★ High flow
- ★ Diaphragm seal
- ★ Multi-turn or ¼ turn
- ★ O<sub>2</sub> application compatible

Special requirements on request

### KEY FEATURES

- Purity up to 6.0
- Multi-turn or ¼ turn versions
- Chrome plated brass or stainless steel
- Standard inlet/outlet: G ¾ - Female
- Fixing ring for flush-mounting in panel
- Rear thread for panel mounting

### OPTIONS

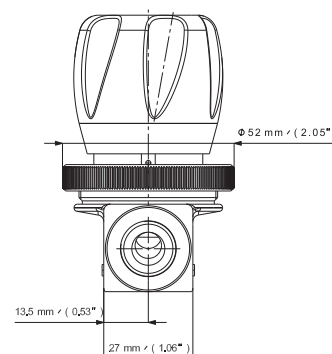
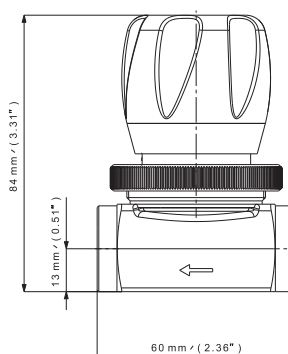
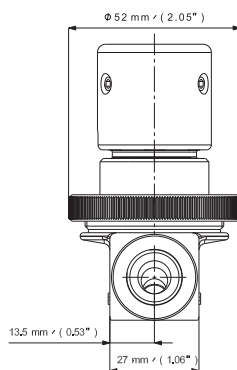
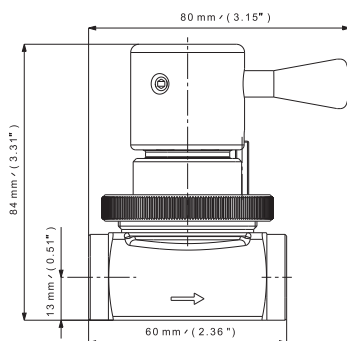
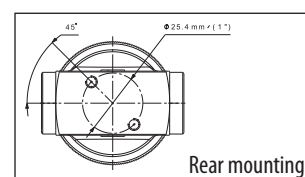
- Choice of two inlet/outlet connections available (see configurator)



¼ turn version



Multi-turn version



### SPECIFICATIONS

|                       |                             |                          |                                  |                         |                                  |
|-----------------------|-----------------------------|--------------------------|----------------------------------|-------------------------|----------------------------------|
| <b>Female ports</b>   | G ¾ or ¼ NPT (inlet/outlet) | <b>Leak rate</b>         | 10 <sup>-8</sup> mbar ℓ/s He     | <b>Inlet pressure</b>   | 45 bar<br>650 psi                |
| <b>Seat seal</b>      | PCTFE                       | <b>Temperature range</b> | -20°C to +50°C<br>-4°F to +122°F | <b>Flow coefficient</b> | Cv 0.58<br>Kv 0.50               |
| <b>Diaphragm</b>      | Hastelloy®                  | <b>Seat orifice size</b> | Ø 8 mm                           | <b>Oxygen use</b>       | OK for brass and stainless steel |
| <b>Bottom tapered</b> | OK                          |                          |                                  |                         |                                  |
| <b>Weight</b>         | ± 0.75 kg<br>± 1.65 lbs     |                          |                                  |                         |                                  |

### PRODUCT CONFIGURATOR

| Body Material |                     |   |    | End Connections |   | Hand wheel |     |
|---------------|---------------------|---|----|-----------------|---|------------|-----|
| V             | L                   | M | 45 | G               | T | ¼ T        | MT  |
|               | Chrome plated brass | L |    | G ¾ - Female    | G | ¼ turn     | ¼ T |
|               | Stainless steel     | I |    | NPT ¼ - Female  | N | Multi-turn | MT  |



# RD 10 | METERING VALVE

- Needle valve for various pure gases.
- This metering valve has a very precise flow setting and is ideally suited for use on regulators outlet.

## NEEDLE VALVE

- ★ Low-pressure
- ★ With needle
- ★ Multi-turn

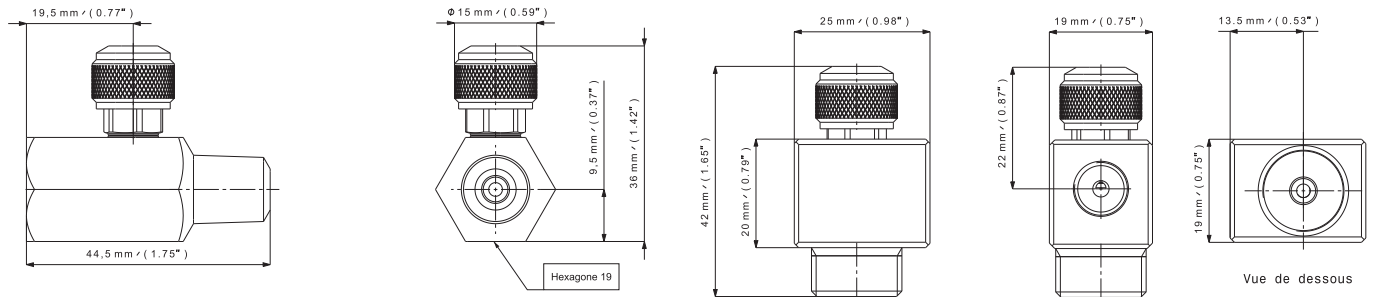
Special requirements on request

## KEY FEATURES

- Purity up to 6.0
- Multi-turn version
- Straight or right angle versions
- Chrome plated brass or stainless steel
- Small size
- Low torque operation
- Very precise setting
- Delivered with light grey handwheel
- Not to be used as a shut off valve

## OPTIONS

- Many inlet/outlet fittings available
- NBR or FPM O-ring
- For acetylene use, this valve must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream



## SPECIFICATIONS

|                       |                                                                  |                                       |                                    |                         |                                                         |
|-----------------------|------------------------------------------------------------------|---------------------------------------|------------------------------------|-------------------------|---------------------------------------------------------|
| <b>Ports</b>          | Male inlet : G 3/8 or 1/4 NPT<br>Female outlet: G 1/8 or 1/4 NPT | <b>Max of turns open for max flow</b> | 3 turns                            | <b>Inlet pressure</b>   | 60 bar<br>870 psi                                       |
| <b>Seat seal</b>      | Metal / metal                                                    | <b>Weight</b>                         | ± 0,085 kg<br>± 0.19 lbs           | <b>Flow coefficient</b> | Cv 0.116. Kv 0,10 (straight)<br>Cv 0.174. Kv 0,15 (90°) |
| <b>O-ring</b>         | EPDM - Standard<br>NBR<br>FPM                                    | <b>Temperature range</b>              | -20°C to + 50°C<br>-4°F to + 122°F | <b>Oxygen use</b>       | OK with P1=30 bar max                                   |
| <b>Bottom tapered</b> | No                                                               | <b>Seat orifice size</b>              | Ø 2,5 mm                           |                         |                                                         |

## PRODUCT CONFIGURATOR

| RD | Body Material       |   | 10 | End Connections                             |    | Version     |   | O-ring Material |
|----|---------------------|---|----|---------------------------------------------|----|-------------|---|-----------------|
|    | L                   |   |    | G                                           |    | D           |   | EPDM            |
|    | Chrome plated brass | L |    | In: G 3/8 - Male<br>Out: G 1/8 - Female     | G  | Straight    | D | EPDM - standard |
|    | Stainless steel     | I |    | In: 1/4 NPT - Male<br>Out: 1/4 NPT - Female | N  | Right angle | E | NBR             |
|    |                     |   |    | In: G 3/8 - Male<br>Out: 1/4 NPT - Female   | GN |             |   | FPM             |
|    |                     |   |    | In: 1/4 NPT - Male<br>Out: G 1/8 - Female   | NG |             |   |                 |

## PRESSURE GAUGES

Spare part pressure gauges for ROTAREX regulators, points of use, supply boards or switch over boards

### PRESSURE GAUGES

- ★ Standard or contact versions available
- ★ Vertical or rear mounting connections

Special requirements on request

### KEY FEATURES

- Standard or contact gauge
- Vertical (6 o'clock) or rear mounting
- Connections:
  - M10 x 1 - Male, 1/4 NPT - Male or G 1/4 - Male
- Many pressure ranges available
- Material: cuprous alloy or stainless steel
- Accuracy class: 1,6 (standard gauge)
- Nominal diameter: Ø 63/50/40/36 mm

### OPTIONS

- Different connections
- Different diameters

#### Sliding contact gauge

- Normally Open (NO)
- Accuracy class: 2,5
- Adjustment of switching point with a key
- Contact load ≤ 10 Watt / 10 VA.
- Switching current min. 20 mA, max. 500 mA.
- Cable length 2 m, cable outlet left-hand
- Cannot be used with explosive or combustive gases

#### Inductive contact gauge

- Normally Open (NO)
- Accuracy class: 2,5
- Adjustment by twisting of contact hood
- Contact-free "contact release" without wear
- Cable length 2 m, cable outlet right-hand
- Compatible with explosive or combustive gases

### CONTACT VERSION



Available with vertical or rear mounting connections (normally open)

### VERTICAL MOUNTING CONNECTION (6 o'clock)



### REAR MOUNTING CONNECTION



## STANDARD PRESSURE GAUGES

### Ø63

| Diameter | Scale               | Material        | Connection | Male thread | Contact | KIT part number |
|----------|---------------------|-----------------|------------|-------------|---------|-----------------|
| Ø63      | 0 + 1,5 + 2,5 bar   | Cuprous alloy   | Vertical   | M10 x 1     | No      | 33333333756     |
| Ø63      | 0 + 10 + 16 bar     | Cuprous alloy   | Vertical   | M10 x 1     | No      | 290002990001    |
| Ø63      | 0 + 10 + 16 bar     | Cuprous alloy   | Vertical   | M10 x 1     | No      | 33333333757     |
| Ø63      | 0 + 27 + 40 bar     | Cuprous alloy   | Vertical   | M10 x 1     | No      | On demand       |
| Ø63      | 0 + 200 + 315 bar   | Cuprous alloy   | Vertical   | M10 x 1     | No      | 290002990000    |
| Ø63      | 0 + 200 + 315 bar   | Cuprous alloy   | Vertical   | M10 x 1     | No      | On demand       |
| Ø63      | 0 + 0,6 bar         | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 1,5 + 2,5 bar   | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 4,2 + 6 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 4,2 + 6 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | 292800990003    |
| Ø63      | 0 + 10 + 16 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | 292822990000    |
| Ø63      | 0 + 10 + 16 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | 290204990001    |
| Ø63      | 0 + 27 + 40 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 27 + 40 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 27 + 40 bar     | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 200 + 315 bar   | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 200 + 315 bar   | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 27 + 40 bar     | Cuprous alloy   | Vertical   | M10 x 1     | No      | On demand       |
| Ø63      | 0 + 10 + 16 bar     | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø63      | 0 + 0,4 bar         | Stainless steel | Vertical   | G ¼         | No      | On demand       |
| Ø63      | 0 + 0,14 + 0,20 bar | Stainless steel | Vertical   | ¼ NPT       | No      | 33333334547     |

### Ø50 M10 X 1 MALE VERTICAL FOR BRASS REGULATOR

| Diameter | Scale              | Material      | Connection | Male thread | Contact | KIT part number |
|----------|--------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 0,1 + 0,16 bar | Cuprous alloy | Vertical   | M10 x 1     | No      | 360025990000    |
| Ø50      | -1 + 1 + 1,5 bar   | Cuprous alloy | Vertical   | M10 x 1     | No      | 320000990020    |
| Ø50      | -1 + 1,5 + 2,5 bar | Cuprous alloy | Vertical   | M10 x 1     | No      | 360026990000    |
| Ø50      | -1 + 3 + 5 bar     | Cuprous alloy | Vertical   | M10 x 1     | No      | 360003990002    |
| Ø50      | -1 + 4 + 6 bar     | Cuprous alloy | Vertical   | M10 x 1     | No      | 33333334879     |
| Ø50      | -1 + 8 + 12 bar    | Cuprous alloy | Vertical   | M10 x 1     | No      | 299121990000    |
| Ø50      | -1 + 10 + 15 bar   | Cuprous alloy | Vertical   | M10 x 1     | No      | 299108990002    |
| Ø50      | 0 + 16 + 25 bar    | Cuprous alloy | Vertical   | M10 x 1     | No      | 299091990001    |
| Ø50      | 0 + 30 + 40 bar    | Cuprous alloy | Vertical   | M10 x 1     | No      | 320203990000    |
| Ø50      | 0 + 40 + 60 bar    | Cuprous alloy | Vertical   | M10 x 1     | No      | 301200990002    |
| Ø50      | 0 + 70 + 100 bar   | Cuprous alloy | Vertical   | M10 x 1     | No      | 300602990003    |
| Ø50      | 0 + 200 + 315 bar  | Cuprous alloy | Vertical   | M10 x 1     | No      | 360000990007    |
| Ø50      | 0 + 300 + 400 bar  | Cuprous alloy | Vertical   | M10 x 1     | No      | 350000990004    |

### Ø50 M10 X 1 MALE VERTICAL FOR STAINLESS STEEL REGULATOR

| Diameter | Scale             | Material        | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|-------------|---------|-----------------|
| Ø50      | -1 + 1 + 1,5 bar  | Stainless steel | Vertical   | M10 x 1     | No      | 360031990000    |
| Ø50      | -1 + 2 + 3 bar    | Stainless steel | Vertical   | M10 x 1     | No      | 33333332860     |
| Ø50      | -1 + 3 + 5 bar    | Stainless steel | Vertical   | M10 x 1     | No      | 320200990004    |
| Ø50      | -1 + 4 + 6 bar    | Stainless steel | Vertical   | M10 x 1     | No      | 300800990004    |
| Ø50      | -1 + 6 + 9 bar    | Stainless steel | Vertical   | M10 x 1     | No      | 33333332665     |
| Ø50      | -1 + 8 + 12 bar   | Stainless steel | Vertical   | M10 x 1     | No      | 360029990000    |
| Ø50      | -1 + 10 + 15 bar  | Stainless steel | Vertical   | M10 x 1     | No      | 299174990002    |
| Ø50      | 0 + 16 + 25 bar   | Stainless steel | Vertical   | M10 x 1     | No      | 360030990000    |
| Ø50      | 0 + 30 + 40 bar   | Stainless steel | Vertical   | M10 x 1     | No      | 299108990000    |
| Ø50      | 0 + 40 + 60 bar   | Stainless steel | Vertical   | M10 x 1     | No      | 33333333637     |
| Ø50      | 0 + 70 + 100 bar  | Stainless steel | Vertical   | M10 x 1     | No      | 300600990012    |
| Ø50      | 0 + 200 + 315 bar | Stainless steel | Vertical   | M10 x 1     | No      | 300600990005    |
| Ø50      | 0 + 300 + 400 bar | Stainless steel | Vertical   | M10 x 1     | No      | 300600990011    |

## STANDARD PRESSURE GAUGES (continued)

### Ø50 M10 X 1 MALE WITH REAR CONNECTION FOR BRASS PANEL

| Diameter | Scale              | Material      | Connection | Male thread | Contact | KIT part number |
|----------|--------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 0,1 + 0,16 bar | Cuprous alloy | Rear       | M10 x 1     | No      | On demand       |
| Ø50      | -1 + 1 + 1,5 bar   | Cuprous alloy | Rear       | M10 x 1     | No      | 333333334018    |
| Ø50      | -1 + 1,5 + 2,5 bar | Cuprous alloy | Rear       | M10 x 1     | No      | On demand       |
| Ø50      | -1 + 3 + 5 bar     | Cuprous alloy | Rear       | M10 x 1     | No      | 320200990006    |
| Ø50      | -1 + 10 + 15 bar   | Cuprous alloy | Rear       | M10 x 1     | No      | 390000990030    |
| Ø50      | 0 + 16 + 25 bar    | Cuprous alloy | Rear       | M10 x 1     | No      | 360015990001    |
| Ø50      | 0 + 30 + 40 bar    | Cuprous alloy | Rear       | M10 x 1     | No      | 299178990025    |
| Ø50      | 0 + 30 + 40 bar    | Cuprous alloy | Rear       | M10 x 1     | No      | 390093990001    |
| Ø50      | 0 + 70 + 100 bar   | Cuprous alloy | Rear       | M10 x 1     | No      | 360015990000    |
| Ø50      | 0 + 200 + 315 bar  | Cuprous alloy | Rear       | M10 x 1     | No      | 299178990024    |
| Ø50      | 0 + 300 + 400 bar  | Cuprous alloy | Rear       | M10 x 1     | No      | 299216990005    |

### Ø50 M10 X 1 MALE WITH REAR CONNECTION FOR STAINLESS STEEL PANEL

| Diameter | Scale             | Material        | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|-------------|---------|-----------------|
| Ø50      | -1 + 1 + 1,5 bar  | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø50      | -1 + 3 + 5 bar    | Stainless steel | Rear       | M10 x 1     | No      | 333333332251    |
| Ø50      | -1 + 8 + 12 bar   | Stainless steel | Rear       | M10 x 1     | No      | 299182990003    |
| Ø50      | -1 + 10 + 15 bar  | Stainless steel | Rear       | M10 x 1     | No      | 390000990031    |
| Ø50      | 0 + 16 + 25 bar   | Stainless steel | Rear       | M10 x 1     | No      | 390000990019    |
| Ø50      | 0 + 30 + 40 bar   | Stainless steel | Rear       | M10 x 1     | No      | 299111990002    |
| Ø50      | 0 + 70 + 100 bar  | Stainless steel | Rear       | M10 x 1     | No      | 333333334599    |
| Ø50      | 0 + 200 + 315 bar | Stainless steel | Rear       | M10 x 1     | No      | 390000990020    |

### Ø50 ¼ NPT MALE VERTICAL FOR BRASS REGULATOR

| Diameter | Scale               | Material      | Connection | Male thread | Contact | KIT part number |
|----------|---------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 0,10 + 0,16 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 0,14 + 0,20 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | -1 + 1 + 1,5 bar    | Cuprous alloy | Vertical   | ¼ NPT       | No      | 320000990023    |
| Ø50      | -1 + 1,5 + 2,5 bar  | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | -1 + 3 + 5 bar      | Cuprous alloy | Vertical   | ¼ NPT       | No      | 320401990000    |
| Ø50      | -1 + 8 + 15 bar     | Cuprous alloy | Vertical   | ¼ NPT       | No      | 320401990000    |
| Ø50      | -1 + 10 + 15 bar    | Cuprous alloy | Vertical   | ¼ NPT       | No      | 33333333279     |
| Ø50      | 0 + 16 + 25 bar     | Cuprous alloy | Vertical   | ¼ NPT       | No      | 333333333469    |
| Ø50      | 0 + 30 + 40 bar     | Cuprous alloy | Vertical   | ¼ NPT       | No      | 333333333513    |
| Ø50      | 0 + 40 + 60 bar     | Cuprous alloy | Vertical   | ¼ NPT       | No      | 293500990001    |
| Ø50      | 0 + 70 + 100 bar    | Cuprous alloy | Vertical   | ¼ NPT       | No      | 333333333514    |
| Ø50      | 0 + 200 + 315 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | 360001990003    |
| Ø50      | 0 + 300 + 400 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | 350002990001    |

### Ø50 ¼ NPT MALE VERTICAL FOR STAINLESS STEEL REGULATOR

| Diameter | Scale             | Material        | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|-------------|---------|-----------------|
| Ø50      | 1 + 1 + 1,5 bar   | Stainless steel | Vertical   | ¼ NPT       | No      | 333333334261    |
| Ø50      | -1 + 3 + 5 bar    | Stainless steel | Vertical   | ¼ NPT       | No      | 320301990000    |
| Ø50      | -1 + 8 + 15 bar   | Stainless steel | Vertical   | ¼ NPT       | No      | 320501990001    |
| Ø50      | -1 + 10 + 15 bar  | Stainless steel | Vertical   | ¼ NPT       | No      | 333333334160    |
| Ø50      | 0 + 16 + 25 bar   | Stainless steel | Vertical   | ¼ NPT       | No      | 330011990000    |
| Ø50      | 0 + 30 + 40 bar   | Stainless steel | Vertical   | ¼ NPT       | No      | 330012990000    |
| Ø50      | 0 + 40 + 60 bar   | Stainless steel | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 70 + 100 bar  | Stainless steel | Vertical   | ¼ NPT       | No      | 330013990001    |
| Ø50      | 0 + 200 + 315 bar | Stainless steel | Vertical   | ¼ NPT       | No      | 330013990000    |
| Ø50      | 0 + 300 + 400 bar | Stainless steel | Vertical   | ¼ NPT       | No      | On demand       |

## STANDARD PRESSURE GAUGES (continued)

### Ø50 ¼ NPT MALE VERTICAL FOR BRASS REGULATOR

| Diameter | Scale             | Material      | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 1,5 + 2,5 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | 292900990010    |
| Ø50      | 0 + 1,6 + 2,5 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 6 + 10 bar    | Cuprous alloy | Vertical   | ¼ NPT       | No      | 33333333447     |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | 292800990015    |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 16 + 25 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | 333333334343    |
| Ø50      | 0 + 27 + 40 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 27 + 40 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 40 + 60 bar   | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 70 + 100 bar  | Cuprous alloy | Vertical   | ¼ NPT       | No      | 333333334344    |
| Ø50      | 0 + 240 + 315 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 300 + 400 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 300 + 400 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 300 + 400 bar | Cuprous alloy | Vertical   | ¼ NPT       | No      | 299174990008    |

### Ø50 M10 X 1 MALE WITH REAR CONNECTION FOR BRASS PANEL

| Diameter | Scale             | Material      | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 1,5 + 2,5 bar | Cuprous alloy | Rear       | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 1,6 + 2,5 bar | Cuprous alloy | Rear       | ¼ NPT       | No      | 299178990032    |
| Ø50      | 0 + 4 + 6 bar     | Cuprous alloy | Rear       | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 10 + 16 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | 299157990012    |
| Ø50      | 0 + 16 + 25 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | 202511990002    |
| Ø50      | 0 + 30 + 40 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | 333333332373    |
| Ø50      | 0 + 30 + 40 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | On demand       |
| Ø50      | 0 + 40 + 60 bar   | Cuprous alloy | Rear       | ¼ NPT       | No      | 33333333804     |
| Ø50      | 0 + 70 + 100 bar  | Cuprous alloy | Rear       | ¼ NPT       | No      | 299170990006    |
| Ø50      | 0 + 200 + 315 bar | Cuprous alloy | Rear       | ¼ NPT       | No      | 202520990028    |
| Ø50      | 0 + 240 + 315 bar | Cuprous alloy | Rear       | ¼ NPT       | No      | On demand       |

### Ø50 ¼ FEMALE METAL FACE SEAL VERTICAL FOR STAINLESS STEEL REGULATOR

| Diameter | Scale             | Material        | Connection | Female thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|---------------|---------|-----------------|
| Ø50      | -1 + 11 + 15 bar  | Stainless steel | Vertical   | ¼ face seal   | No      | On demand       |
| Ø50      | 0 + 187 + 250 bar | Stainless steel | Vertical   | ¼ face seal   | No      | 33333333875     |

### Ø50 ¼ MALE METAL FACE SEAL REAR CONNECTION FOR STAINLESS STEEL PANEL

| Diameter | Scale             | Material        | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 10 + 14 bar   | Stainless steel | Rear       | ¼ face seal | No      | On demand       |
| Ø50      | 0 + 16 + 25 bar   | Stainless steel | Rear       | ¼ face seal | No      | On demand       |
| Ø50      | 0 + 310 + 414 bar | Stainless steel | Rear       | ¼ face seal | No      | On demand       |

### Ø50 ⅜ NPT MALE REAR CONNECTION FOR BRASS PANEL

| Diameter | Scale               | Material      | Connection | Male thread | Contact | KIT part number |
|----------|---------------------|---------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 800 psi         | Cuprous alloy | Rear       | ⅜ NPT       | No      | On demand       |
| Ø50      | 0 + 27 + 36 psi     | Cuprous alloy | Rear       | ⅜ NPT       | No      | On demand       |
| Ø50      | 0 + 440 + 580 psi   | Cuprous alloy | Rear       | ⅜ NPT       | No      | 33333333499     |
| Ø50      | 0 + 3400 + 4568 psi | Cuprous alloy | Rear       | ⅜ NPT       | No      | On demand       |
| Ø50      | 0 + 200 + 315 bar   | Cuprous alloy | Rear       | ⅜ NPT       | No      | 390087990005    |

## STANDARD PRESSURE GAUGES (continued)

## Ø50 ½ NPT MALE REAR CONNECTION FOR STAINLESS STEEL PANEL

| Diameter | Scale             | Material        | Connection | Male thread | Contact | KIT part number |
|----------|-------------------|-----------------|------------|-------------|---------|-----------------|
| Ø50      | 0 + 200 + 315 bar | Stainless steel | Rear       | ½ NPT       | No      | 33333333434     |

## Ø40

| Diameter | Scale              | Material        | Connection | Male thread | Contact | KIT part number |
|----------|--------------------|-----------------|------------|-------------|---------|-----------------|
| Ø40      | 0 + 240 + 315 bar  | Cuprous alloy   | Vertical   | G ¼         | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Vertical   | G ⅛         | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Vertical   | G ⅛         | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Vertical   | G ⅛         | No      | 33333333881     |
| Ø40      | 0 + 300 + 400 bar  | Cuprous alloy   | Vertical   | G ⅛         | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Vertical   | M10 x 1     | No      | 299090820903    |
| Ø40      | 0 + 10 + 15 bar    | Cuprous alloy   | Vertical   | M10 x 1     | No      | 299001990005    |
| Ø40      | 0 + 16 + 25 bar    | Cuprous alloy   | Vertical   | M10 x 1     | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Vertical   | M10 x 1     | No      | On demand       |
| Ø40      | 0 + 175 bar        | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø40      | 0 + 240 + 315 bar  | Cuprous alloy   | Rear       | G ¼         | No      | On demand       |
| Ø40      | 0 + 240 + 315 bar  | Cuprous alloy   | Rear       | G ¼         | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Cuprous alloy   | Rear       | G ⅛         | No      | On demand       |
| Ø40      | 0 + 300 + 400 bar  | Cuprous alloy   | Rear       | G ⅛         | No      | On demand       |
| Ø40      | 0 + 300 + 400 bar  | Cuprous alloy   | Rear       | G ⅛         | No      | On demand       |
| Ø40      | -1 + 1 + 1,5 bar   | Cuprous alloy   | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 1,5 + 2,5 bar | Cuprous alloy   | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 2,5 + 5 bar   | Cuprous alloy   | Rear       | M10 x 1     | No      | 333333334833    |
| Ø40      | -1 + 3 + 5 bar     | Cuprous alloy   | Rear       | M10 x 1     | No      | 390000990032    |
| Ø40      | -1 + 4 + 6 bar     | Cuprous alloy   | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 8 + 12 bar    | Cuprous alloy   | Rear       | M10 x 1     | No      | 33333333000     |
| Ø40      | -1 + 10 + 15 bar   | Cuprous alloy   | Rear       | M10 x 1     | No      | 390000990037    |
| Ø40      | -1 + 1 + 1,5 bar   | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 1,5 + 2,5 bar | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 2,5 + 5 bar   | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 3 + 5 bar     | Stainless steel | Rear       | M10 x 1     | No      | 299303990000    |
| Ø40      | -1 + 4 + 6 bar     | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 5 + 8 bar     | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | -1 + 8 + 12 bar    | Stainless steel | Rear       | M10 x 1     | No      | 33333333906     |
| Ø40      | -1 + 10 + 15 bar   | Stainless steel | Rear       | M10 x 1     | No      | 333333334834    |
| Ø40      | 1 + 12 + 16 bar    | Stainless steel | Rear       | M10 x 1     | No      | 33333333944     |
| Ø40      | 0 + 40 + 60 bar    | Stainless steel | Rear       | M10 x 1     | No      | On demand       |
| Ø40      | 0 + 50 + 70 bar    | Stainless steel | Rear       | ½ NPT       | No      | 33333333145     |
| Ø40      | 0 + 160 + 205 bar  | Stainless steel | Rear       | ½ NPT       | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Stainless steel | Rear       | ½ NPT       | No      | On demand       |
| Ø40      | 0 + 200 + 315 bar  | Stainless steel | Rear       | G ⅛         | No      | On demand       |

## Ø36

| Diameter | Scale               | Material        | Connection | Male thread | Contact | KIT part number |
|----------|---------------------|-----------------|------------|-------------|---------|-----------------|
| Ø36      | 0 + 750 + 1000 psi  | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø36      | 0 + 2250 + 3000 psi | Cuprous alloy   | Rear       | ½ NPT       | No      | On demand       |
| Ø36      | 0 + 207 + 275 bar   | Stainless steel | Rear       | ½ NPT       | No      | On demand       |

## CONTACT PRESSURE GAUGES

### NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 M10 X 1 MALE VERTICAL CONNECTION

| Diameter | Scale             | Material      | Connection | Male thread | Contact   | KIT part number |
|----------|-------------------|---------------|------------|-------------|-----------|-----------------|
| Ø50      | 0 + 16 bar        | Cuprous alloy | Vertical   | M10 x 1     | Inductive | On demand       |
| Ø50      | 0 + 300 + 400 bar | Cuprous alloy | Vertical   | M10 x 1     | Inductive | 360021990001    |
| Ø50      | 0 + 400 bar       | Cuprous alloy | Vertical   | M10 x 1     | Sliding   | 390000990013    |

### NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 M10 X 1 MALE REAR CONNECTION

| Diameter | Scale       | Material        | Connection | Male thread | Contact   | KIT part number |
|----------|-------------|-----------------|------------|-------------|-----------|-----------------|
| Ø50      | 0 + 16 bar  | Cuprous alloy   | Rear       | M10 x 1     | Inductive | 390001990004    |
| Ø50      | 0 + 40 bar  | Cuprous alloy   | Rear       | M10 x 1     | Inductive | 299178990028    |
| Ø50      | 0 + 100 bar | Cuprous alloy   | Rear       | M10 x 1     | Inductive | On demand       |
| Ø50      | 0 + 100 bar | Cuprous alloy   | Rear       | M10 x 1     | Sliding   | On demand       |
| Ø50      | 0 + 250 bar | Cuprous alloy   | Rear       | M10 x 1     | Sliding   | 390000990011    |
| Ø50      | 0 + 250 bar | Cuprous alloy   | Rear       | M10 x 1     | Inductive | 390000990012    |
| Ø50      | 0 + 400 bar | Cuprous alloy   | Rear       | M10 x 1     | Inductive | 390003990002    |
| Ø50      | 0 + 400 bar | Cuprous alloy   | Rear       | M10 x 1     | Sliding   | On demand       |
| Ø50      | 0 + 250 bar | Cuprous alloy   | Rear       | M10 x 1     | Sliding   | On demand       |
| Ø50      | 0 + 16 bar  | Stainless steel | Rear       | M10 x 1     | Inductive | On demand       |
| Ø50      | 0 + 40 bar  | Stainless steel | Rear       | M10 x 1     | Inductive | 33333334560     |
| Ø50      | 0 + 100 bar | Stainless steel | Rear       | M10 x 1     | Sliding   | On demand       |
| Ø50      | 0 + 100 bar | Stainless steel | Rear       | M10 x 1     | Inductive | On demand       |
| Ø50      | 0 + 250 bar | Stainless steel | Rear       | M10 x 1     | Sliding   | 390014990002    |
| Ø50      | 0 + 250 bar | Stainless steel | Rear       | M10 x 1     | Inductive | 390014990003    |
| Ø50      | 0 + 400 bar | Stainless steel | Rear       | M10 x 1     | Sliding   | On demand       |
| Ø50      | 0 + 400 bar | Stainless steel | Rear       | M10 x 1     | Inductive | 33333334568     |

### NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 ¼ FEMALE METAL FACE SEAL VERTICAL CONNECTION

| Diameter | Scale       | Material        | Connection | Female thread | Contact   | KIT part number |
|----------|-------------|-----------------|------------|---------------|-----------|-----------------|
| Ø50      | -1 + 9 bar  | Stainless steel | Vertical   | ¼ face seal   | Inductive | On demand       |
| Ø50      | 0 + 16 bar  | Stainless steel | Vertical   | ¼ face seal   | Inductive | On demand       |
| Ø50      | 0 + 40 bar  | Stainless steel | Vertical   | ¼ face seal   | Inductive | On demand       |
| Ø50      | 0 + 100 bar | Stainless steel | Vertical   | ¼ face seal   | Sliding   | On demand       |
| Ø50      | 0 + 250 bar | Stainless steel | Vertical   | ¼ face seal   | Sliding   | On demand       |

### NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 M: ¼ METAL FACE SEAL REAR CONNECTION

| Diameter | Scale       | Material        | Connection | Male thread | Contact   | KIT part number |
|----------|-------------|-----------------|------------|-------------|-----------|-----------------|
| Ø50      | 0 + 40 bar  | Stainless steel | Rear       | ¼ face seal | Sliding   | On demand       |
| Ø50      | 0 + 250 bar | Stainless steel | Rear       | ¼ face seal | Sliding   | On demand       |
| Ø50      | 0 + 250 bar | Stainless steel | Rear       | ¼ face seal | Inductive | On demand       |



## CYLINDER CONNECTORS

Connects regulators, supply boards or switch over boards to gas cylinders directly, or via a flexible hose or pigtail

### CYLINDER FITTINGS

- ★ High pressure
- ★ 200 bar or 300 bar version
- ★ Chrome plated brass or stainless steel

Special requirements on request



### KEY FEATURES

- Cylinder connector according to the following standards: AFNOR, DIN, BS, CGA, NEN, UNI, FTSC 300 bar ...
- Other connections on demand
- Outlet connection: 16 x 1.336 - Male or 1/4 NPT - Male
- Material: chrome plated brass or stainless steel

### OPTIONS

- 300 bar (FTSC) version
- Raw brass version
- Mounted on flexible hose or pigtail



### CYLINDER CONNECTIONS BS 341

| PART No.     | TYPE (INLET)       | MATERIAL            | MALE OUTLET THREAD |
|--------------|--------------------|---------------------|--------------------|
| 381040990000 | <b>BS 3</b>        | Chrome plated brass | 16 x 1.336         |
| 360232990000 |                    |                     | 1/4 NPT            |
| 360137990000 |                    | Stainless steel     | 16 x 1.336         |
| 360232990300 |                    |                     | 1/4 NPT            |
| 360048990000 | <b>BS 2 / BS 4</b> | Chrome plated brass | 16 x 1.336         |
| 360234990000 |                    |                     | 1/4 NPT            |
| 360138990000 |                    | Stainless steel     | 16 x 1.336         |
| 360234990300 |                    |                     | 1/4 NPT            |
| 360139990000 | <b>BS 6</b>        | Stainless steel     | 16 x 1.336         |
| 360136990000 | <b>BS 8</b>        | Stainless steel     | 16 x 1.336         |
| 360014990300 | <b>BS 13</b>       | Stainless steel     | 16 x 1.336         |
| 381041990000 | <b>BS 14</b>       | Stainless steel     | 16 x 1.336         |

### CYLINDER CONNECTIONS UNI 11144

| PART No.     | TYPE (INLET)        | MATERIAL            | MALE OUTLET THREAD |
|--------------|---------------------|---------------------|--------------------|
| 300819990000 | <b>UNI 1 - 4405</b> | Chrome plated brass | 16 x 1.336         |
| 300640990300 |                     | Stainless steel     |                    |
| 300815990000 | <b>UNI 2 - 4406</b> | Chrome plated brass | 16 x 1.336         |
| 300639990300 |                     | Stainless steel     |                    |
| 300638990300 | <b>UNI 3 - 4407</b> | Stainless steel     | 16 x 1.336         |
| 300812990000 | <b>UNI 5 - 4409</b> | Chrome plated brass | 16 x 1.336         |
| 300813990000 | <b>UNI 6 - 4410</b> | Chrome plated brass | 16 x 1.336         |
| 300811990000 | <b>UNI 8 - 4412</b> | Chrome plated brass | 16 x 1.336         |

OTHERS: ON DEMAND



**CYLINDER CONNECTIONS DIN477-1**

| PART No.     | TYPE (INLET)  | MATERIAL            | MALE OUTLET<br>THREAD |
|--------------|---------------|---------------------|-----------------------|
| 300601990000 | <b>DIN 1</b>  | Chrome plated brass | 16 x 1.336            |
| 300618990000 |               | Stainless steel     | 1/4 NPT               |
| 300615990300 |               | Stainless steel     | 16 x 1.336            |
| 300632990300 | <b>DIN 5</b>  | Chrome plated brass | 16 x 1.336            |
| 300609990000 |               | Stainless steel     | 16 x 1.336            |
| 300629900000 | <b>DIN 6</b>  | Chrome plated brass | 16 x 1.336            |
| 300619990000 |               | Stainless steel     | 1/4 NPT               |
| 300617990300 |               | Stainless steel     | 16 x 1.336            |
| 300633990300 | <b>DIN 7</b>  | Chrome plated brass | 16 x 1.336            |
| 300603990000 |               | Stainless steel     | 1/4 NPT               |
| 300618990300 |               | Stainless steel     | 16 x 1.336            |
| 300610990000 | <b>DIN 8</b>  | Chrome plated brass | 16 x 1.336            |
| 300624990300 |               | Stainless steel     | 16 x 1.336            |
| 300600990007 | <b>DIN 9</b>  | Chrome plated brass | 16 x 1.336            |
| 300605990000 |               | Stainless steel     | 1/4 NPT               |
| 300605990001 |               | Stainless steel     | 16 x 1.336            |
| 300606990000 | <b>DIN 10</b> | Chrome plated brass | 16 x 1.336            |
| 300646990000 |               | Stainless steel     | 1/4 NPT               |
| 300620990300 |               | Stainless steel     | 16 x 1.336            |
| 300646990300 | <b>DIN 13</b> | Chrome plated brass | 16 x 1.336            |
| 300607990000 |               | Stainless steel     | 1/4 NPT               |
| 300621990300 | <b>DIN 14</b> | Chrome plated brass | 16 x 1.336            |
| 300600990000 |               | Stainless steel     | 1/4 NPT               |
| 300620990000 |               | Stainless steel     | 16 x 1.336            |
| 300604990302 |               | Stainless steel     | 16 x 1.336            |
| 300604990304 |               | Stainless steel     | 1/4 NPT               |

OTHERS: ON DEMAND

**CYLINDER CONNECTIONS DIN477-5 (300 bar)**

| PART No.     | TYPE (INLET)      | MATERIAL            | MALE OUTLET<br>THREAD |
|--------------|-------------------|---------------------|-----------------------|
| 350000990003 | <b>DIN 5 - 54</b> | Chrome plated brass | 16 x 1.336            |
| 300641990300 |                   | Stainless steel     | 16 x 1.336            |
| 350000990002 | <b>DIN 5 - 56</b> | Chrome plated brass | 16 x 1.336            |
| 300642990300 |                   | Stainless steel     | 16 x 1.336            |
| 350000990001 | <b>DIN 5 - 57</b> | Chrome plated brass | 16 x 1.336            |
| 300644990300 |                   | Stainless steel     | 16 x 1.336            |
| 350000990000 | <b>DIN 5 - 59</b> | Chrome plated brass | 16 x 1.336            |
| 300643990300 |                   | Stainless steel     | 16 x 1.336            |

OTHERS: ON DEMAND

**CYLINDER CONNECTIONS NEN 3268**

| PART No.     | TYPE (INLET) | MATERIAL            | MALE OUTLET<br>THREAD |
|--------------|--------------|---------------------|-----------------------|
| 381013990000 | <b>LU1</b>   | Chrome plated brass | 16 x 1.336            |
| 381012990000 | <b>RU1</b>   |                     |                       |
| 381015990000 | <b>RU6</b>   |                     |                       |
| 381016990000 | <b>RI2</b>   |                     |                       |

OTHERS: ON DEMAND

**CYLINDER CONNECTIONS CGA -V1**

| PART No.      | TYPE (INLET)   | MATERIAL            | MALE OUTLET<br>THREAD |
|---------------|----------------|---------------------|-----------------------|
| 360140990000  | <b>CGA 320</b> | Chrome plated brass | 16 x 1.336            |
| 360132990000  |                | Stainless Steel     | 16 x 1.336            |
| 360147990000  | <b>CGA 330</b> | Chrome plated brass | 16 x 1.336            |
| 3601024990000 |                | Stainless Steel     | 16 x 1.336            |
| 360135990000  | <b>CGA 350</b> | Chrome plated brass | 16 x 1.336            |
| 360141990000  |                | Stainless Steel     | 16 x 1.336            |
| 360133990000  | <b>CGA 510</b> | Chrome plated brass | 16 x 1.336            |
| 360144990000  |                | Stainless Steel     | 16 x 1.336            |
| 360145990000  | <b>CGA 540</b> | Chrome plated brass | 16 x 1.336            |
| 381025990000  |                | Stainless Steel     | 16 x 1.336            |
| 360134990000  | <b>CGA 580</b> | Chrome plated brass | 16 x 1.336            |
| 299164990000  |                | Stainless Steel     | 16 x 1.336            |
| 360146990000  | <b>CGA 590</b> | Chrome plated brass | 16 x 1.336            |
| 360143990000  |                | Stainless Steel     | 16 x 1.336            |
| 299165990000  | <b>CGA 660</b> | Chrome plated brass | 16 x 1.336            |
|               |                | Stainless Steel     | 16 x 1.336            |

OTHERS: ON DEMAND

**CYLINDER CONNECTIONS AFNOR NFE 29-650**

| PART No.     | TYPE (INLET)  | MATERIAL            | MALE OUTLET<br>THREAD |
|--------------|---------------|---------------------|-----------------------|
| 300805990000 | <b>TYPE A</b> | Chrome plated brass | 16 x 1.336            |
| 300806990000 | <b>TYPE B</b> | Chrome plated brass | 16 x 1.336            |
| 300800990000 | <b>TYPE C</b> | Chrome plated brass | 16 x 1.336            |
| 300800990002 |               | Stainless steel     | 1/4 NPT               |
| 300602990302 |               | Stainless steel     | 16 x 1.336            |
| 300600990302 | <b>TYPE D</b> | Chrome plated brass | 16 x 1.336            |
| 360062990000 |               | Stainless steel     | 16 x 1.336            |
| 360062990001 | <b>TYPE E</b> | Chrome plated brass | 16 x 1.336            |
| 300801990000 |               | Stainless steel     | 1/4 NPT               |
| 300801990002 |               | Stainless steel     | 16 x 1.336            |
| 300603990302 | <b>TYPE F</b> | Chrome plated brass | 16 x 1.336            |
| 300601990302 |               | Stainless steel     | 16 x 1.336            |
| 300802990000 | <b>TYPE G</b> | Chrome plated brass | 16 x 1.336            |
| 300629990300 |               | Stainless steel     | 16 x 1.336            |
| 300803990000 | <b>TYPE H</b> | Chrome plated brass | 16 x 1.336            |
| 300803990001 |               | Stainless steel     | 16 x 1.336            |
| 300804990000 | <b>TYPE J</b> | Chrome plated brass | 16 x 1.336            |
| 300637990300 |               | Stainless steel     | 16 x 1.336            |
| 300636990300 | <b>TYPE L</b> | Chrome plated brass | 16 x 1.336            |
| 360059990000 |               | Stainless steel     | 16 x 1.336            |
| 360059990001 | <b>TYPE M</b> | Chrome plated brass | 16 x 1.336            |
| 360060990001 |               | Stainless steel     | 16 x 1.336            |
| 360061990001 | <b>TYPE N</b> | Chrome plated brass | 16 x 1.336            |
|              |               | Stainless steel     | 16 x 1.336            |

OTHERS: ON DEMAND

## SV 10 SAFETY RELIEF VALVE

- Equipped with a valve opening at the set up value to evacuate the over pressure build in the process

### SAFETY RELIEF VALVE

- ★ Connectable
- ★ CE marked (97/23/CE)
- ★ AISI 303 or AISI 316L

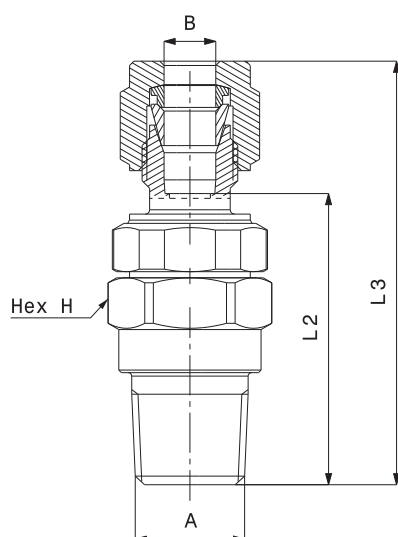
Special requirements on request

### KEY FEATURES

- CE marked according to the European Directive 97/23/CE.
- Compatible with all Rotarex regulators, supply boards and switch over boards.
- Setup value defined.
- Small dimensions.
- Compatible with many gases (see table).
- Delivered with a P.A flat seal for the chrome-plated brass version and a PCTFE flat seal for the AISI 316L version.
- Delivered with the user manual.

### OPTIONS

- The safety relief valve must be dimensioned in such a way that the pipe pressure will under no circumstances surpass the conception pressure of pipes, even when the safety valve is venting.
- The pressure in the pipe must not exceed the calculated value even when the device is open.



A : M: G 3/8, M: 1/4 NPT  
 B : Ø 6 mm or Ø 1/4"  
 H : hexagon of 17 mm on flats  
 L1 : 27 mm  
 L2 : approx. 37 mm  
 L3 : approx. 51 mm



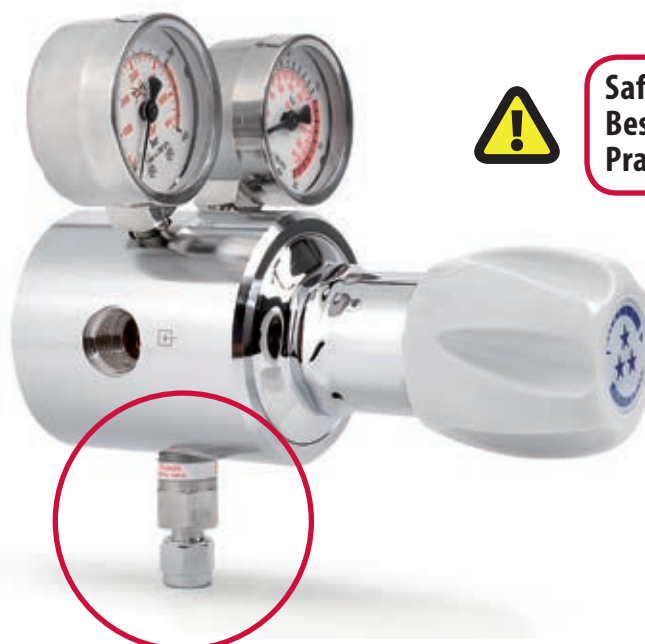
### A FEW FLOW VALUES OF THE SAFETY SV 10 AT A PRESSURE 1,25 TIMES THE TIGHTNESS PRESSURE

| Tightness pressure (marked on the body) In bar                                   | 2 bar | 4 bar | 5 bar | 9 bar | 11 bar | 12 bar | 16 bar | 22 bar | 24 bar | 35 bar | 50 bar | 62 bar |
|----------------------------------------------------------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Minimum flow for 1.25 x tightness pressure in m <sup>3</sup> /h - N <sub>2</sub> | *     | 7.6   | 9.8   | 17    | 21.4   | 23     | 30.2   | 38.1   | 43.4   | 57.5   | 77.4   | 107.1  |

\*Minimum flow Q = 5,2 m<sup>3</sup>/h - N<sub>2</sub> with 3 bar inlet pressure

## SPECIFICATIONS

|                                             |                                                                                                                                      |                                              |                                                                                                                                                   |                          |                                              |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------|
| <b>Gasket</b>                               | PA 6.6 (brass/AISI 303 version)<br>PCTFE (AISI 316L version)                                                                         | <b>Gas with EPDM<br/>and stainless steel</b> | CO <sub>2</sub> , CO, He, N <sub>2</sub> , Air, Ne, Kr, Xe,<br>C <sub>2</sub> H <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub>                   | <b>Ports (inlet)</b>     | G 3/8 - Male or 1/4 NPT - Male               |
| <b>O-ring</b>                               | EPDM<br>FPM<br>NBR                                                                                                                   | <b>Gas with FPM and<br/>stainless steel</b>  | Ar, He, N <sub>2</sub> , H <sub>2</sub> , Air, Ne, Kr, Xe,<br>C <sub>4</sub> H <sub>10</sub> , CH <sub>4</sub> , C <sub>12</sub> , O <sub>2</sub> | <b>Ports (outlet)</b>    | DR 6 mm or 1/4"                              |
| <b>Gas with NBR<br/>and brass</b>           | Ar, CO, He, N <sub>2</sub> , H <sub>2</sub> , Air, Ne, Kr,<br>Xe, C <sub>4</sub> H <sub>10</sub> , CH <sub>4</sub>                   | <b>Oxygen use</b>                            | OK                                                                                                                                                | <b>Body</b>              | Chrome-plated brass/AISI 303<br>or AISI 316L |
| <b>Gas with NBR<br/>and stainless steel</b> | Ar, CO, He, N <sub>2</sub> , H <sub>2</sub> , Air, Ne, Kr,<br>Xe, NH <sub>3</sub> , C <sub>4</sub> H <sub>10</sub> , CH <sub>4</sub> | <b>Tightness pressure</b>                    | 2 to 62 bar<br>(29 to 900 psi)                                                                                                                    | <b>Leak rate</b>         | 10 <sup>-7</sup> mbar ℓ/s He                 |
| <b>Gas with EPDM<br/>and brass</b>          | Ar, CO <sub>2</sub> , CO, He, N <sub>2</sub> , H <sub>2</sub> , Air, Ne,<br>Kr, Xe, C <sub>2</sub> H <sub>2</sub>                    | <b>Seat orifice size</b>                     | Hexagonal Ø 2 mm                                                                                                                                  | <b>Temperature range</b> | -20°C to +65°C<br>-4°F to +149°F             |



**Safety  
Best  
Practice**

## SV10 (cont'd)

## CONNECTABLE SAFETY RELIEF VALVE - CE marked (97/23/CE)

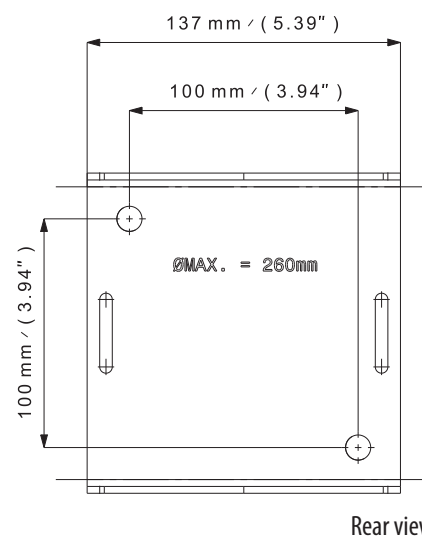
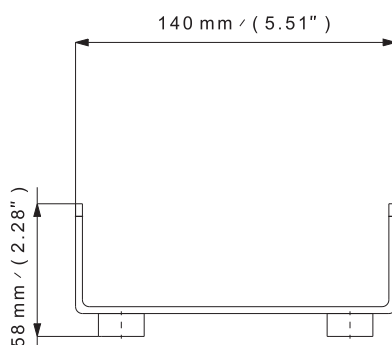
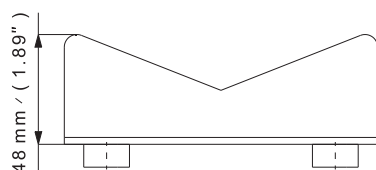
| Tightness pressure   | Material                                               | Inlet connection                                      | Outlet connection (tube fitting) | O-Ring         | Rotarex designation                                       | Kit part number                                       |
|----------------------|--------------------------------------------------------|-------------------------------------------------------|----------------------------------|----------------|-----------------------------------------------------------|-------------------------------------------------------|
| 2 bar                | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 2 bar \ G 3/8 \ LT \ EPDM \ DB6       | 380001990001                                          |
|                      | Stainless steel 316L                                   |                                                       |                                  |                | KIT \ SOUP \ SV10 \ 2 bar \ G 3/8 \ 316L \ EPDM \ DB6     | 380001990301                                          |
| 4 bar                | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 4 bar \ G 3/8 \ LT \ EPDM \ DB6       | 380001990003                                          |
|                      | Stainless steel 316L                                   |                                                       |                                  |                | KIT \ SOUP \ SV10 \ 4 bar \ G 3/8 \ 316L \ EPDM \ DB6     | 380001990302                                          |
| 5 bar                | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 5 bar \ G 3/8 \ LT \ EPDM \ DB6       | 380001990004                                          |
|                      | KIT \ SOUP \ SV10 \ 5 bar \ G 3/8 \ 316L \ EPDM \ DB6  |                                                       |                                  |                | 380001990303                                              |                                                       |
|                      | Stainless steel 316L                                   |                                                       |                                  | FPM            | KIT \ SOUP \ SV10 \ 5 bar \ G 3/8 \ 316L \ EPDM \ DB6     | 380001990304                                          |
| 9 bar                | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 9 bar \ G 3/8 \ LT \ EPDM \ DB6       | 380001990005                                          |
|                      | KIT \ SOUP \ SV10 \ 9 bar \ G 3/8 \ 316L \ EPDM \ DB6  |                                                       |                                  |                | 380001990305                                              |                                                       |
|                      | Stainless steel 316L                                   |                                                       |                                  | FPM            | KIT \ SOUP \ SV10 \ 9 bar \ G 3/8 \ 316L \ FPM \ DB6      | 380001990306                                          |
| 11 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 11 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990059                                          |
| 12 bar               | Stainless steel 316L                                   | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 12 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990307                                          |
| 16 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990006                                          |
|                      |                                                        |                                                       | DB 1/4"                          |                | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ LT \ EPDM \ DB1/4    | 380001990007                                          |
|                      |                                                        |                                                       | DB 6mm                           | NBR            | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ LT \ NBR \ DB6       | 380001990014                                          |
|                      | Stainless steel 316L                                   |                                                       | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990308                                          |
|                      |                                                        |                                                       | DB 1/4"                          |                | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ 316L \ EPDM \ DB1/4  | 380001990358                                          |
|                      |                                                        |                                                       | DB 6mm                           | FPM            | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ 316L \ FPM \ DB6     | 380001990309                                          |
|                      |                                                        |                                                       | DB 1/4"                          |                | KIT \ SOUP \ SV10 \ 16 bar \ G 3/8 \ 316L \ FPM \ DB1/4   | 380001990310                                          |
|                      |                                                        |                                                       | 22 bar                           | Brass + SS 303 | M: G 3/8                                                  | DB 6mm                                                |
| Stainless steel 316L | KIT \ SOUP \ SV10 \ 22 bar \ G 3/8 \ 316L \ EPDM \ DB6 | 380001990311                                          |                                  |                |                                                           |                                                       |
|                      | FPM                                                    | KIT \ SOUP \ SV10 \ 22 bar \ G 3/8 \ 316L \ FPM \ DB6 |                                  | 380001990313   |                                                           |                                                       |
| 24 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 24 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990008                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 24 bar \ 1/4 NPT \ LT \ EPDM \ DB6    | 380001990013                                          |
|                      | Stainless steel 316L                                   | M: G 3/8                                              |                                  |                | KIT \ SOUP \ SV10 \ 24 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990320                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 24 bar \ 1/4 NPT \ 316L \ EPDM \ DB6  | 380001990319                                          |
|                      |                                                        | M: G 3/8                                              |                                  | FPM            | KIT \ SOUP \ SV10 \ 24 bar \ G 3/8 \ 316L \ FPM \ DB6     | 380001990356                                          |
| 35 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 35 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990009                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 35 bar \ 1/4 NPT \ LT \ EPDM \ DB6    | 380001990011                                          |
|                      | Stainless steel 316L                                   | M: G 3/8                                              |                                  |                | KIT \ SOUP \ SV10 \ 35 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990314                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 35 bar \ 1/4 NPT \ 316L \ EPDM \ DB6  | 380001990317                                          |
|                      |                                                        | M: G 3/8                                              |                                  | FPM            | KIT \ SOUP \ SV10 \ 35 bar \ G 3/8 \ 316L \ FPM \ DB6     | 380001990315                                          |
| 50 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 50 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990060                                          |
|                      | Stainless steel 316L                                   |                                                       |                                  |                | KIT \ SOUP \ SV10 \ 50 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990369                                          |
| 62 bar               | Brass + SS 303                                         | M: G 3/8                                              | DB 6mm                           | EPDM           | KIT \ SOUP \ SV10 \ 62 bar \ G 3/8 \ LT \ EPDM \ DB6      | 380001990010                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 62 bar \ 1/4 NPT \ LT \ EPDM \ DB6    | 380001990012                                          |
|                      | Stainless steel 316L                                   | M: 1/4 NPT                                            |                                  | FPM            | KIT \ SOUP \ SV10 \ 62 bar \ 1/4 NPT \ 316L \ FPM \ DB6   | 380001990318                                          |
|                      |                                                        | M: G 3/8                                              |                                  | EPDM           | KIT \ SOUP \ SV10 \ 62 bar \ G 3/8 \ 316L \ EPDM \ DB6    | 380001990357                                          |
|                      |                                                        |                                                       |                                  |                | FPM                                                       | KIT \ SOUP \ SV10 \ 62 bar \ G 3/8 \ 316L \ FPM \ DB6 |
| 320 psi              | Stainless steel 316L                                   | M: G 3/8                                              | DB 1/4"                          | FPM            | KIT \ SOUP \ SV10 \ 320 psi \ G 3/8 \ 316L \ FPM \ DB1/4  | 380001990365                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 320 psi \ 1/4 NPT \ 316 \ FPM \ DB1/4 | 380001990370                                          |
| 507 psi              | Stainless steel 316L                                   | M: G 3/8                                              | DB 1/4"                          | FPM            | KIT \ SOUP \ SV10 \ 507 psi \ G 3/8 \ 316L \ FPM \ DB1/4  | 380001990366                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 507 psi \ 1/4 NPT \ 316 \ FPM \ DB1/4 | 380001990371                                          |
| 725 psi              | Stainless steel 316L                                   | M: G 3/8                                              | DB 1/4"                          | FPM            | KIT \ SOUP \ SV10 \ 725 psi \ G 3/8 \ 316L \ FPM \ DB1/4  | 380001990367                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 725 psi \ 1/4 NPT \ 316 \ FPM \ DB1/4 | 380001990372                                          |
| 900 psi              | Stainless steel 316L                                   | M: G 3/8                                              | DB 1/4"                          | FPM            | KIT \ SOUP \ SV10 \ 900 psi \ G 3/8 \ 316L \ FPM \ DB1/4  | 380001990368                                          |
|                      |                                                        | M: 1/4 NPT                                            |                                  |                | KIT \ SOUP \ SV10 \ 900 psi \ 1/4 NPT \ 316 \ FPM \ DB1/4 | 380001990373                                          |

## GAS CYLINDER HOLDER

Designed for the storage of one or large number of gas cylinders in an appropriate area

- ★ Can be fixed permanently to the wall
- ★ Securely holds cylinder in place
- ★ Allows permanent designation of appropriate cylinder storage area
- ★ Delivered with a fixing belt
- ★ Many cylinder holders can be used together, side by side
- ★ Part number: 202500000007

Special requirements on request



## GAS COMPATIBILITY

### KEY TO GAS COMPATIBILITY:

Locate your gas type in the below chart and see the gas compatibility of each standard material type. Only select materials that are compatible with your gas type.

### GAS COMPATIBILITY WITH MATERIALS

| GAS                  |             | B or SS 316L | PA 6.6 | PTFE                                                            | PCTFE | NBR | FPM (VITON®) | EPDM |
|----------------------|-------------|--------------|--------|-----------------------------------------------------------------|-------|-----|--------------|------|
| Acetylene            | $C_2H_2$    | B            |        | OK                                                              | OK    |     |              |      |
| Argon                | Ar          | B            | OK     | OK                                                              | OK    | OK  | OK           | OK   |
| Butane               | $C_4H_{10}$ | B            | OK     | OK                                                              | OK    | OK  | OK           |      |
| Carbon dioxide       | $CO_2$      | B            | OK     | OK                                                              | OK    | OK  |              | OK   |
| Carbon monoxide      | CO          | B            | OK     | OK                                                              | OK    | OK  |              | OK   |
| Ethane               | $C_2H_6$    | B            | OK     | OK                                                              | OK    | OK  | OK           |      |
| Helium               | He          | B            | OK     |                                                                 | OK    | OK  | OK           | OK   |
| Hydrogen             | $H_2$       | B            | OK     |                                                                 | OK    | OK  | OK           | OK   |
| Krypton              | Kr          | B            | OK     | OK                                                              | OK    | OK  | OK           |      |
| Methane              | $CH_4$      | B            | OK     | OK                                                              | OK    | OK  | OK           |      |
| Nitric Oxide         | NO          | SS 316L      |        | Please consult - depends on proportion of NO in the mixture     |       |     |              |      |
| Nitrogen             | $N_2$       | B            | OK     | OK                                                              | OK    | OK  | OK           | OK   |
| Nitrous Oxide        | $N_2O$      | SS 316L      |        | Please consult - depends on proportion of $N_2O$ in the mixture |       |     |              |      |
| Oxygen               | $O_2$       | B            |        |                                                                 |       |     | OK           | OK   |
| Propane              | $C_3H_8$    | B            | OK     | OK                                                              | OK    | OK  |              |      |
| Silane               | $SiH_4$     | SS 316L      |        | OK                                                              | OK    |     | OK           |      |
| Ammonia              | $NH_3$      | SS 316L      | OK     | OK                                                              | OK    |     |              | OK   |
| Ethylene             | $C_2H_4$    | B            | OK     | OK                                                              | OK    |     |              |      |
| Hydrogen Sulfide     | $H_2S$      | SS 316L      | OK     | OK                                                              | OK    |     | OK           | OK   |
| Sulphur Dioxide      | $SO_2$      | SS 316L      |        | OK                                                              | OK    |     |              | OK   |
| Sulphur Hexafluoride | $SF_6$      | B            | OK     | OK                                                              | OK    | OK  | OK           | OK   |

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Hastelloy® is a registered trademark of HAYNES INTERNATIONAL Inc.

# CONVERSION CHARTS

## FLOW CONVERSION

|                        | m <sup>3</sup> /h      | l/h                     | foot <sup>3</sup> /min   | l/s                      | cm <sup>3</sup> /s |
|------------------------|------------------------|-------------------------|--------------------------|--------------------------|--------------------|
| m <sup>3</sup> /h      | 1                      | 1 x 10 <sup>3</sup>     | 0.589                    | 0,2778                   | 277,78             |
| l/h                    | 1 x 10 <sup>-3</sup>   | 1                       | 5.885 x 10 <sup>-4</sup> | 2,778 x 10 <sup>-4</sup> | 0,2778             |
| foot <sup>3</sup> /min | 1,69                   | 1,699 x 10 <sup>3</sup> | 1                        | 0,4719                   | 471,95             |
| l/s                    | 3,6                    | 3,6 x 10 <sup>3</sup>   | 2.119                    | 1                        | 10 <sup>3</sup>    |
| cm <sup>3</sup> /s     | 3,6 x 10 <sup>-3</sup> | 3,6                     | 2.119 x 10 <sup>-3</sup> | 10 <sup>-3</sup>         | 1                  |

## PRESSURE CONVERSION

|      | bar                     | mbar            | kPa             | MPa                      | atm                      | psi                     |
|------|-------------------------|-----------------|-----------------|--------------------------|--------------------------|-------------------------|
| bar  | 1                       | 10 <sup>3</sup> | 100             | 0,1                      | 0,987                    | 14.5                    |
| mbar | 10 <sup>-3</sup>        | 1               | 0,1             | 10 <sup>-4</sup>         | 9,869 x 10 <sup>-4</sup> | 14.5 x 10 <sup>-3</sup> |
| kPa  | 10 <sup>-2</sup>        | 10              | 1               | 10 <sup>-3</sup>         | 9,869 x 10 <sup>-3</sup> | 0.145                   |
| MPa  | 10                      | 10 <sup>4</sup> | 10 <sup>3</sup> | 1                        | 9,869                    | 145                     |
| atm  | 1,013                   | 1013            | 101,3           | 1,013 x 10 <sup>-1</sup> | 1                        | 14.69                   |
| psi  | 6,89 x 10 <sup>-2</sup> | 68,9            | 6,89            | 6,89 x 10 <sup>-3</sup>  | 6,8 x 10 <sup>-2</sup>   | 1                       |

## TEMPERATURE

| °C   | °F   | K°   | R°   |
|------|------|------|------|
| -20  | -4   | 253  | 456  |
| -10  | 14   | 263  | 474  |
| 0    | 32   | 273  | 492  |
| 10   | 50   | 283  | 510  |
| 20   | 68   | 293  | 528  |
| 30   | 86   | 303  | 546  |
| 40   | 104  | 313  | 564  |
| 50   | 122  | 323  | 582  |
| 60   | 140  | 333  | 600  |
| 70   | 158  | 343  | 618  |
| 80   | 176  | 353  | 636  |
| 90   | 194  | 363  | 654  |
| 100  | 212  | 373  | 672  |
| 200  | 392  | 473  | 852  |
| 300  | 572  | 573  | 1032 |
| 400  | 752  | 673  | 1212 |
| 500  | 932  | 773  | 1392 |
| 600  | 1112 | 873  | 1572 |
| 700  | 1292 | 973  | 1752 |
| 800  | 1472 | 1073 | 1932 |
| 900  | 1652 | 1173 | 2112 |
| 1000 | 1832 | 1273 | 2292 |

## DIMENSION

| metric | inches | inch fractional | inch decimal | metric (mm) |
|--------|--------|-----------------|--------------|-------------|
| 3      | 0.135  | 1/16"           | 0.063        | 1,59        |
| 6      | 0.270  | 1/8"            | 0.125        | 3,18        |
| 8      | 0.360  | 3/16"           | 0.188        | 4,76        |
| 10     | 0.450  | 1/4"            | 0.250        | 6,35        |
| 12     | 0.540  | 5/16"           | 0.313        | 7,94        |
| 14     | 0.630  | 3/8"            | 0.375        | 9,53        |
| 16     | 0.720  | 1/2"            | 0.500        | 12,70       |
| 18     | 0.810  | 7/16"           | 0.438        | 11,11       |
| 20     | 0.900  | 5/8"            | 0.625        | 15,88       |
| 22     | 0.990  | 3/4"            | 0.750        | 19,05       |
| 25     | 1.125  | 7/8"            | 0.875        | 22,23       |
|        |        | 1"              | 1.000        | 25,40       |



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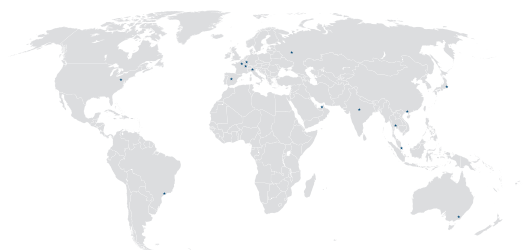
**EQUIPMENT**

**FIRETEC**

**AUTOMOTIVE**

**LPG/SRG**

**MEDITEC**

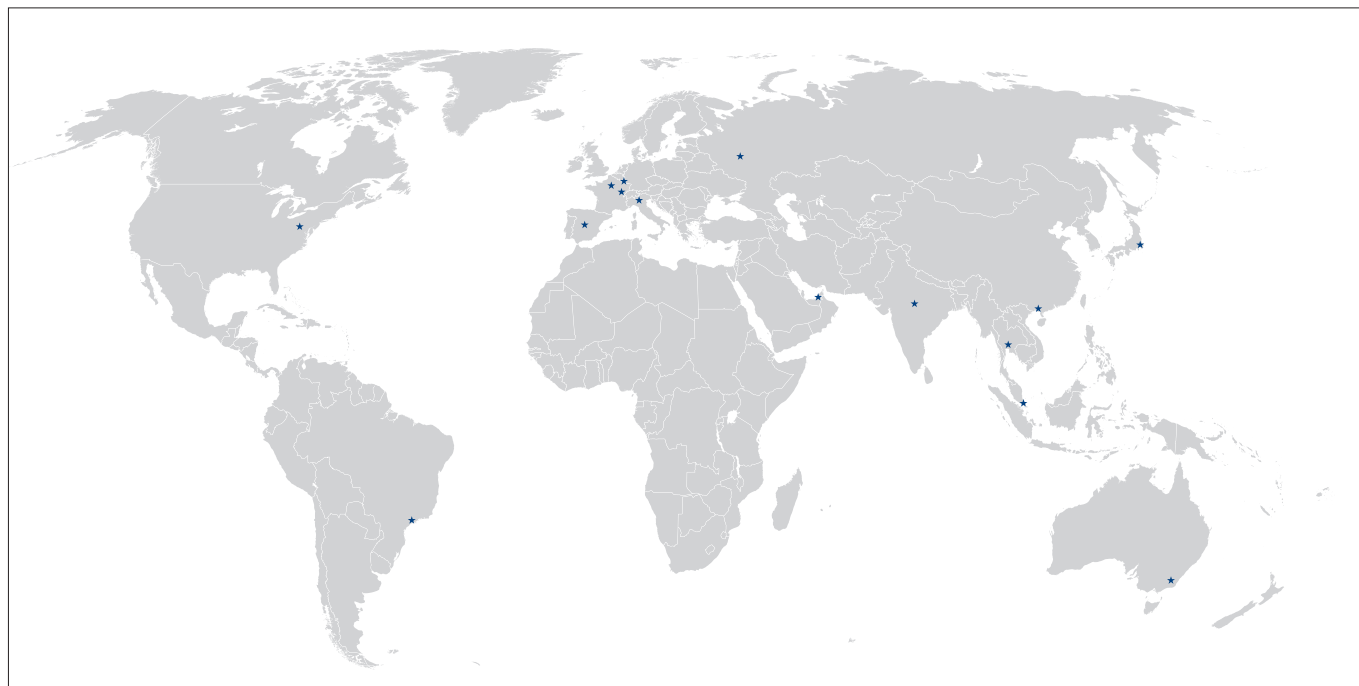


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