

TEESING

WE MAKE YOUR TECHNOLOGY WORK



ROTAREX

VALVES - FITTINGS - REGULATORS



**PRESSURE REGULATORS
EUROPE**

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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.

SPECIALTY GASES

SINGLE STAGE HIGH PRESSURE REGULATORS



SERIES SC 280 - SC 380 P. 018

Technology	Diaphragm + cartridge
Inlet Pressure	200/300 bar 2900/4350 psi
Outlet Pressure	1,5/4/10/16/35/50 bar 21.75/58/150/250/508/725 psi
Flow Rate Nm³/h (N₂)	1/2/10/20/30
Material	Chrome-plated brass Stainless steel



SERIES S 220 P. 020

Technology	Diaphragm
Inlet Pressure	200 bar 2900 psi
Outlet Pressure	3/15/25/50 bar 44/218/360/725 psi
Flow Rate Nm³/h (N₂)	5/25/50/50
Material	Stainless steel



SERIES S 400 P.022

Technology	Piston
Inlet Pressure	300 bar 4350 psi
Outlet Pressure	60/200 bar 870/2900 psi
Flow Rate Nm³/h (N₂)	10/30
Material	Chrome plated brass Stainless steel



SERIES S 800 P. 024

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	300 bar 4350 psi
Outlet Pressure	10/16/25/50 bar 145/232/363/725 psi
Flow Rate Nm³/h (N₂)	50/50/50/100
Material	Raw brass Chrome plated brass Stainless steel

DUAL STAGE HIGH PRESSURE REGULATORS



SERIES DC 280 - DC 380 P. 26

Technology	Diaphragm + cartridge
Inlet Pressure	200/300 bar 2900/4350 psi
Outlet Pressure	1,5/4/10/16/35 bar 21.75/58/145/232/508 psi
Flow Rate Nm³/h (N₂)	1/2/10/20/30
Material	Chrome-plated brass Stainless steel



SERIES D 230 P. 028

Technology	Piston/Bellow
Inlet Pressure	200 bar 2900 psi
Outlet Pressure	1/3/10 bar 14.5/44/145 psi
Flow Rate Nm³/h (N₂)	2/2,5/3,5
Material	Chrome plated brass Stainless steel



SERIES D 230-0.1 P. 030

Technology	Piston/Diaphragm
Inlet Pressure	200 bar 2900 psi
Outlet Pressure	0,01-0,1 bar 0.14-1.4 psi
Flow Rate Nm³/h (N₂)	0,5
Material	Chrome plated brass Stainless steel

SPECIALTY GASES

LOW PRESSURE REGULATORS



SERIES S 10 P. 032

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	25 bar 362.5 psi
Outlet Pressure	3/8 bar 44/116 psi
Flow Rate Nm³/h (N₂)	4,5/12
Material	Chrome plated brass Stainless steel



SERIES S 15 P. 034

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	25 bar 362.5 psi
Outlet Pressure	10 bar 145 psi
Flow Rate Nm³/h (N₂)	50
Material	Chrome plated brass Stainless steel



SERIES S 20 P. 036

Technology	Bellow
Inlet Pressure	50 bar 725 psi
Outlet Pressure	1/3/10 bar 14.5/44/145 psi
Flow Rate Nm³/h (N₂)	2/2,5/3,5
Material	Chrome plated brass Stainless steel



SERIES S 20-0.1 P. 038

Technology	Diaphragm
Inlet Pressure	50 bar 725 psi
Outlet Pressure	0,01-0,1 bar 0.14-1.4 psi
Flow Rate Nm³/h (N₂)	0,5
Material	Chrome plated brass Stainless steel



SERIES S 55 P. 040

Technology	Diaphragm
Inlet Pressure	50 bar 725 psi
Outlet Pressure	3/8/10/16/35 bar 44/116/145/323/508 psi
Flow Rate Nm³/h (N₂)	2,5/3/3,5/5,5/10
Material	Chrome plated brass Stainless steel



SERIES DC 50 P. 042

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	50 bar 725 psi
Outlet Pressure	8/15/40 bar 116/217/580 psi
Flow Rate Nm³/h (N₂)	150/300/300
Material	Raw brass Chrome plated brass

POINT OF USE REGULATOR | MOUNTED VERSION



SERIES S 21 P. 044

Technology	Bellow
Inlet Pressure	50 bar 725 psig
Outlet Pressure	1/3/10 bar 14.5/44/116 psig
Flow Rate Nm³/h (N₂)	2/2,5/3,5
Material	Chrome plated brass Stainless steel



LABLINE 22 P. 046

Technology	Bellow
Inlet Pressure	50 bar 725 psi
Outlet Pressure	1/3/10 bar 14.5/44/116 psi
Flow Rate Nm³/h (N₂)	2/2,5/3,5
Material	Chrome plated brass Stainless steel

SPECIALTY GASES

POINT OF USE REGULATOR | INTEGRATED VERSIONS



LINESTAR C795 P. 048

Technology	Diaphragm
Inlet Pressure	50bar (725 psi) C ₂ H ₂ : 20 bar (290 psi)
Outlet Pressure	1,5 / 5,5 / 10 bar 21.75 / 79.75 / 145 psi C ₂ H ₂ : 1,5 bar (21.75 psi)
Flow Rate Nm³/h (N₂)	1,2 / 2 / 9
Material	Body: brass Cover: resistant plastic



MONO SERIES S 15 P. 050

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	25 bar 362.5 psi
Outlet Pressure	10 bar 145 psi
Flow Rate Nm³/h (N₂)	50
Material	Aluminum Stainless steel



MONO SERIES S 20 P. 052

Technology	Bellow
Inlet Pressure	50 bar 725 psi
Outlet Pressure	1/3/10 bar 14.5/44/145 psi
Flow Rate Nm³/h (N₂)	2/2,5/3,5
Material	Aluminum Stainless steel

ON DEMAND!

SPECIAL APPLICATION | CALIBRATION GAS REGULATORS



SERIES S 75 P. 054

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



SERIES S 70 P. 056

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

TECHNICAL GASES

SINGLE STAGE HIGH PRESSURE REGULATORS



SERIES S 800 P. 058

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	300 bar 4350 psi
Outlet Pressure	10/16/25/50 bar 145/232/363/725 psi
Flow Rate Nm³/h (N₂)	50/50/50/100
Material	Raw brass Chrome plated brass Stainless steel



SERIES TGD 250 P. 060

Technology	Diaphragm
Inlet Pressure	200 bar 2900 psi
Outlet Pressure	20 bar 290 psi
Flow Rate Nm³/h (N₂)	250
Material	Raw brass

ACETYLENE APPLICATION REGULATORS



SERIES S 20 AD P. 054

Technology	Bellow
Inlet Pressure	20 bar 290 psi
Outlet Pressure	1,5 bar 21.75 psi
Flow Rate Nm³/h (C₂H₂)	1
Material	Chrome plated brass



SERIES S 25 AD P. 056

Technology	Bellow
Inlet Pressure	20 bar 290 psi
Outlet Pressure	1,5 bar 21.75 psi
Flow Rate Nm³/h (C₂H₂)	1
Material	Chrome plated brass



SERIES LABLINE 22 AD P. 058

Technology	Bellow
Inlet Pressure	20 bar 290 psi
Outlet Pressure	1,5 bar 21.75 psi
Flow Rate Nm³/h (C₂H₂)	1
Material	Chrome plated brass



MONO SERIES S 20 AD P. 060

Technology	Bellow
Inlet Pressure	50 bar 725 psi
Outlet Pressure	1,5 bar 21.75 psi
Flow Rate Nm³/h (C₂H₂)	1
Material	Aluminum



SERIES DC 50 AD P. 070

Technology	Diaphragm + Balanced-Valve
Inlet Pressure	1,5 bar 21.75 psi
Outlet Pressure	0,8 bar 12 psi
Flow Rate Nm³/h (C₂H₂)	10
Material	Raw brass Chrome plated brass

LINE VALVES



SERIES VD P. 072

Pressure	50/200/300 bar
CV	0.12
Material	Chrome plated brass Stainless steel
Type	Diaphragm
Handwheel	¼ turn



SERIES VM 20 P. 073

Pressure	50 bar
CV	0.14
Material	Chrome plated brass Stainless steel
Type	Diaphragm
Handwheel	¼ turn/Multi-turn



SERIES VM 45 P. 074

Pressure	45 bar
CV	0.58
Material	Chrome plated brass Stainless steel
Type	Diaphragm
Handwheel	¼ turn/Multi-turn



SERIES RD 10 P. 075

Pressure	60 bar
CV	0.116
Material	Chrome plated brass Stainless steel
Type	Needle valve
Handwheel	Multi-turn

ACCESSORIES



CYLINDER CONNECTORS P. 076



GAS CYLINDER HOLDER P. 078

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 1st 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

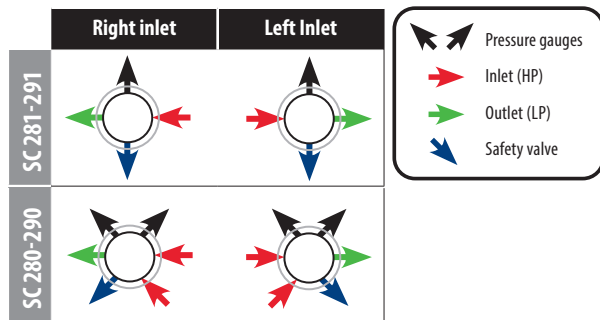
SINGLE STAGE REGULATOR

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.

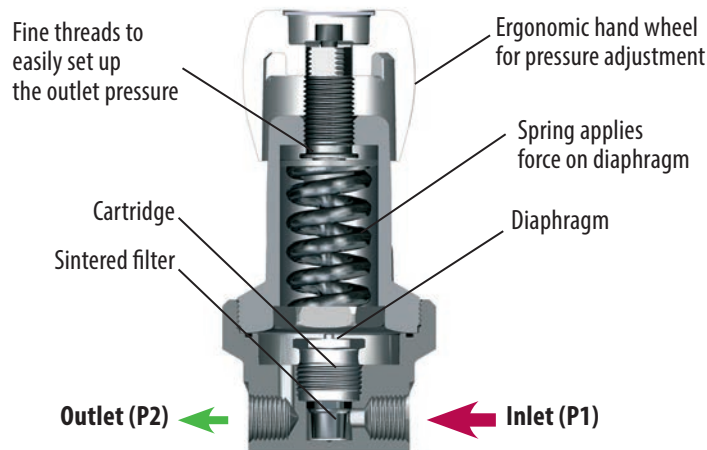
Single stage regulators are also recommended for liquefied gas service such as CO₂, Propane, LPG, cryogenic gases and other gases that are liquid in the cylinder.

CARTRIDGE REGULATOR



Superior technical performance with cartridge technology:

- Better outlet pressure stability due to the cartridge design. Outlet pressure remains stable despite any fluctuation of inlet pressure.
- Longer product life due to less impingement on the diaphragm.
- Compact design with reduction of dead volume (minimal purge requirements)
- Sintered inlet filter provides better filtration without restricting flow.



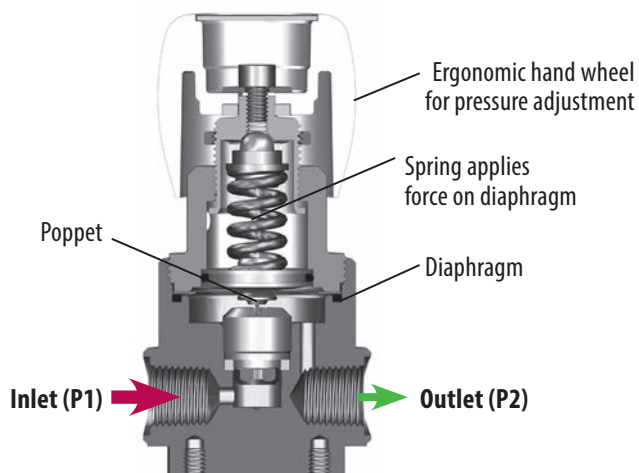
PRODUCT FINDER

ROTAREX
single stage regulators

Series SC 280/380 P. 018

TECHNOLOGY OVERVIEW (continued)

DIAPHRAGM REGULATOR

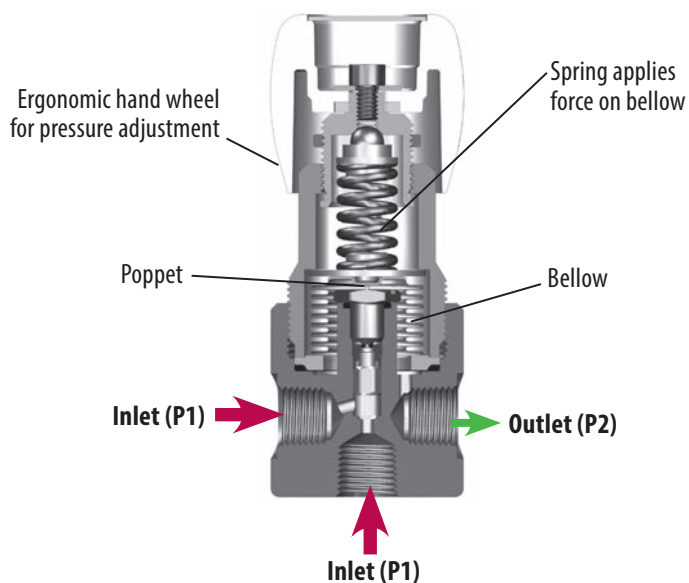


PRODUCT FINDER

ROTAREX diaphragm regulators

Series S 220	P. 020
Series TGD 250	P. 062
Series S 20-0.1	P. 038
Series S 55	P. 040

BELLOW REGULATOR

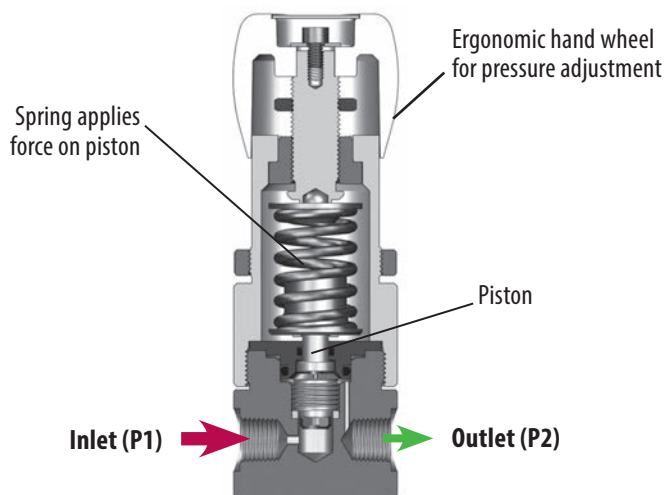


PRODUCT FINDER

ROTAREX bellow regulators

Series S 20	P. 036
Labline 22	P. 048
Mono Series S 20	P. 054
Series S 20 AD	P. 064
Series S 25 AD	P. 066
Labline 22 AD	P. 068

PISTON REGULATOR



PRODUCT FINDER

ROTAREX piston regulators

Series S 400	P. 022
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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.

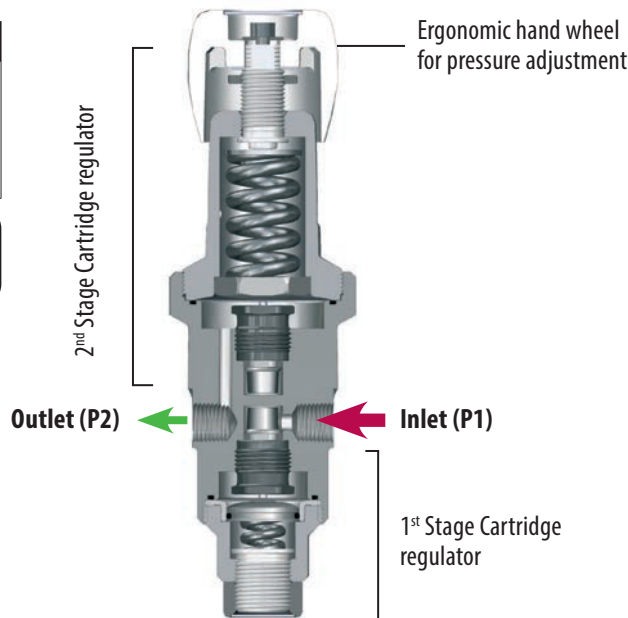
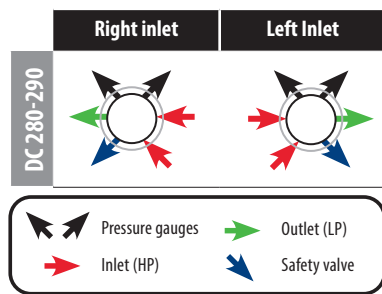
The first stage is preset to an intermediate pressure. This intermediate pressure acts as the inlet pressure to the second stage, which is adjustable.

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.

CARTRIDGE REGULATOR

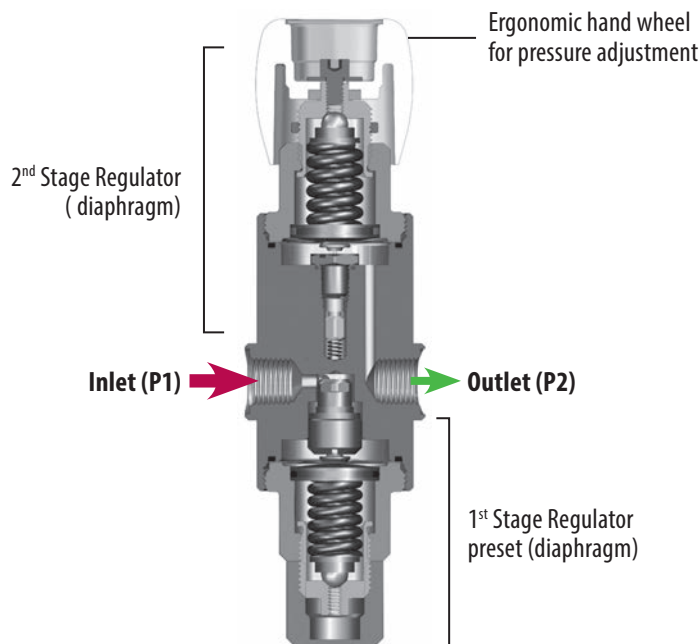


PRODUCT FINDER

ROTAREX
dual stage regulators

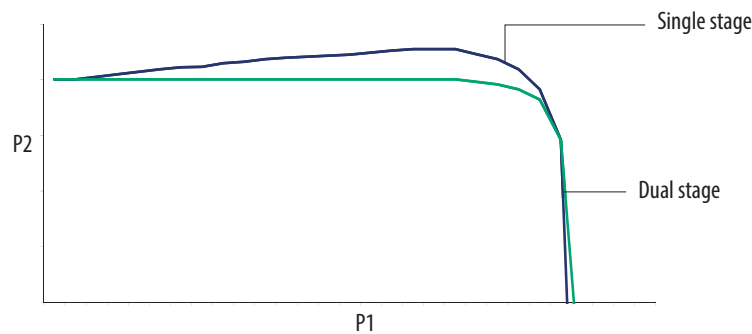
Series DC 280/380 P. 026

DIAPHRAGM/DIAPHRAGM REGULATOR

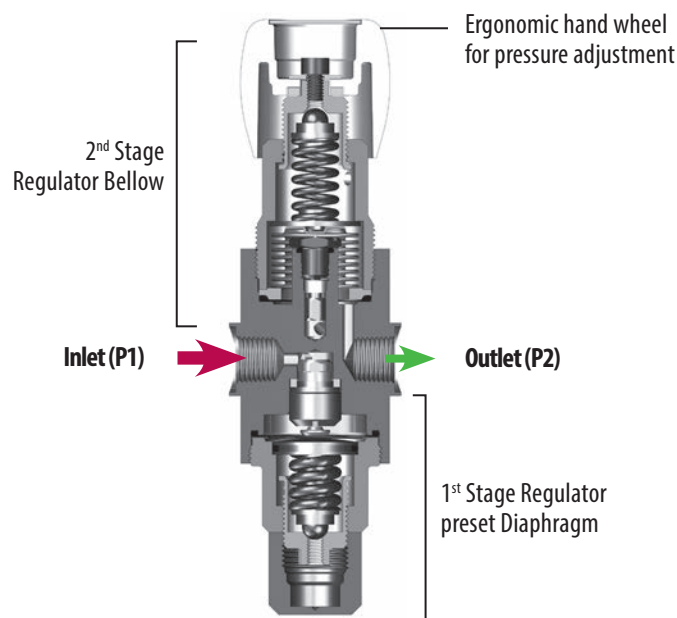


TECHNOLOGY OVERVIEW (continued)

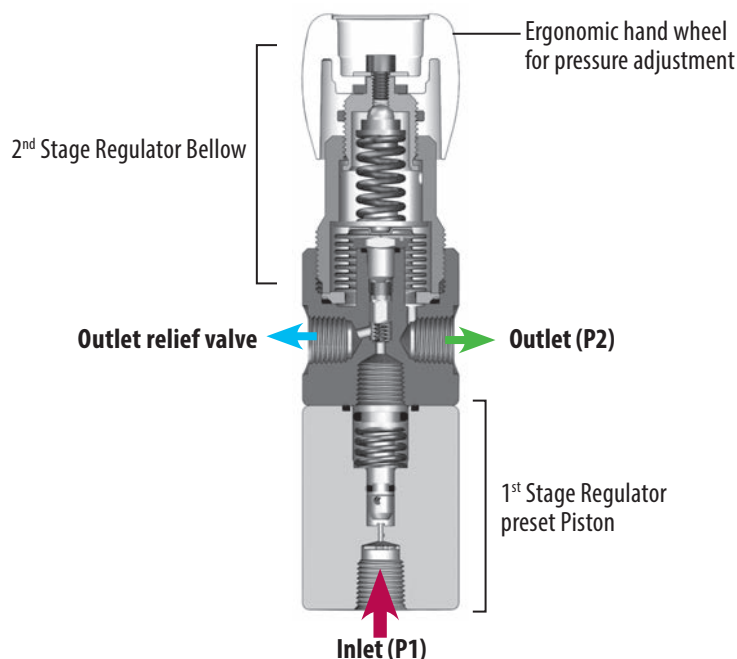
COMPARISON OF DUAL STAGE VS. SINGLE STAGE REGULATOR



DIAPHRAGM/BELLOW REGULATOR



PISTON/BELLOW REGULATOR



PRODUCT FINDER

ROTAREX
piston /bellow regulators

Series D 230 P. 028

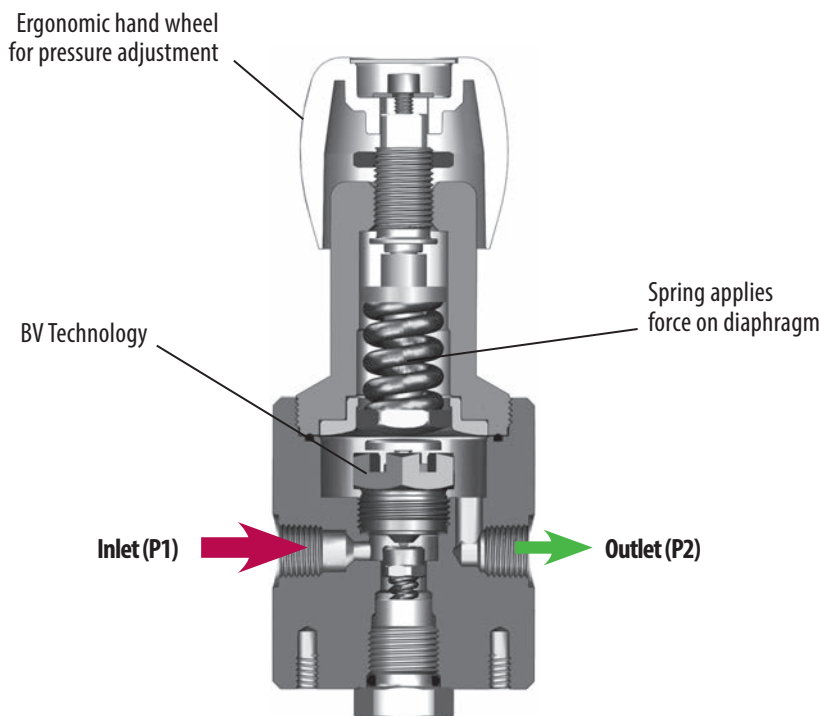
TECHNOLOGY OVERVIEW (continued)

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.

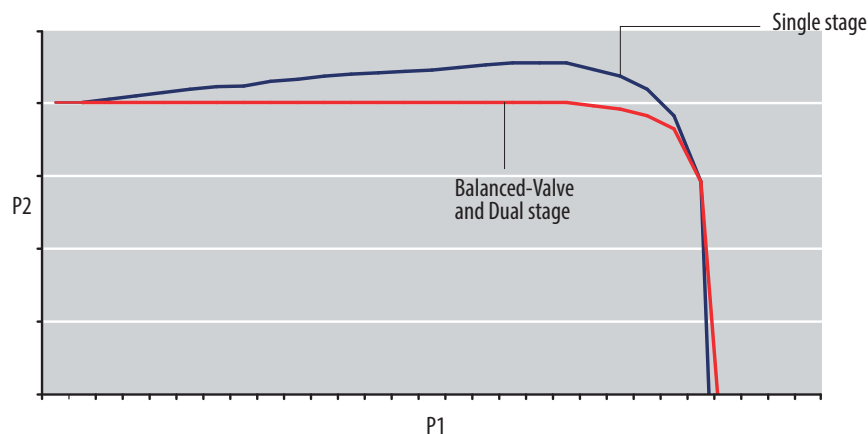
This regulator type also functions as a LINE REGULATOR for a 2nd regulation and can equip our switch over boards. Switch over boards equipped with this technology don't need any line regulator afterwards and can be connected directly to the application.

BALANCED-VALVE TECHNOLOGY



PRODUCT FINDER	
ROTAREX balanced-valve regulators	
Series S 800	P. 024
Series S 10	P. 032
Series S 15	P. 034
Series DC 50	P. 042

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



SELECTING THE RIGHT REGULATOR

To choose the right regulator for your application, and to get the best results, you should identify the following technical parameters:

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 ₂)	Nm ³ /h, Nlpm Slpm or SCFM
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 3/8, 1/4 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

Each product page is designed to provide you the essential technical information at a glance :

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. 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®)

For Cartridge:

PTFE: Polytetrafluoroéthylène



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.

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. Pressure Gauges are in accordance with EN837.

SELECTING THE RIGHT REGULATOR (continued)

RELIEF VALVE

Relief valves are standard on most Rotarex regulators and adapted to the gas type.

SEAL MATERIAL

For all cartridge regulators the seat seal is PCTFE which provides a wide chemical compatibility, good temperature resistance, and better dimensional stability than traditional seals.

DIAPHRAGM MATERIAL

All cartridge regulators are equipped with a Hastelloy® diaphragm, which is ideally adapted to high purity applications and is compatible with all types of gases, and has exceptional elasticity and high corrosion

resistance. Consequently, this diaphragm outperforms traditional stainless steel diaphragms in terms of pressure stability and long cycle lifetime.

FILTER MATERIAL

Rotarex cartridge regulators employ a Sintered Filter in 316L for the stainless steel and bronze for brass version.

- The function of this filter is to protect the regulator against foreign particle coming from the gas or during installation. In any case a filter has to be installed on the line based on your cleanliness requirements.

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 SC 280 - SC 380 | SINGLE STAGE HP CARTRIDGE REGULATOR

APPLICATIONS

- Designed for cylinder regulator applications
- Ideally suited for pure, inert and corrosive gas
- High purity gas carrying

KEY FEATURES

- This single stage regulator is based on the Cartridge seat technology
- Compact, ergonomic and lightweight design makes the regulator suitable for many applications
- Accurate pressure control for reliable work
- Resistant to contamination with PCTFE regulator and seat in direct contact
- Cartridge equipped with a sintered filter
- Stainless Steel FPM

Specifications

Seals: PCTFE	Material: 316L	Material: 316L
Body: FPM	Temperature range: -40°C to +60°C	Material: 316L
Diaphragm: Hastelloy®	Range: High and low pressure (20MPa)	Response: All with stainless steel and

Flow Curves

PRODUCT CONFIGURATION

Back Pressure	Set Pressure	Flow Coefficient	Valve Position	Seat Connection	Filter Connection	Range	Val Type
0.1 MPa	0.1 MPa	1.0	Open	1/2"	1/2"	0.1 - 1.0 MPa	Ball
0.1 MPa	0.1 MPa	1.0	Open	1/2"	1/2"	0.1 - 1.0 MPa	Ball
0.1 MPa	0.1 MPa	1.0	Open	1/2"	1/2"	0.1 - 1.0 MPa	Ball

CLEANING

All products, regardless of gas application, are cleaned to remove all traces of residue and grease using the same procedures as for O₂ use. There is no need to specify special cleaning when ordering.

SERIES SC 280 - SC 380 | SINGLE STAGE HP CARTRIDGE REGULATOR

- Diaphragm Single Stage
- Purity up to 6.0
- Inlet Pressure:
200 bar (2900 psi)
300 bar (4350 psi)
- Outlet Pressure:
1,5/4/10/16/35/50 bar
21.75/58/145/232/508/
725 psi

- ★ Compact and lightweight design
- ★ 1 Inlet / 1 Outlet
- ★ O₂ application compatible (see technical data)
- ★ Inlet / Outlet pressure gauge
- ★ Rear threads for panel mounting
- ★ 1 relief valve

Special requirements on request

APPLICATIONS

- Designed for cylinder regulator applications
- Ideally suited for pure, inert and corrosive gas
- Applications such as:
 - Calibration gases
 - Controlled atmosphere
 - High purity gas carrying

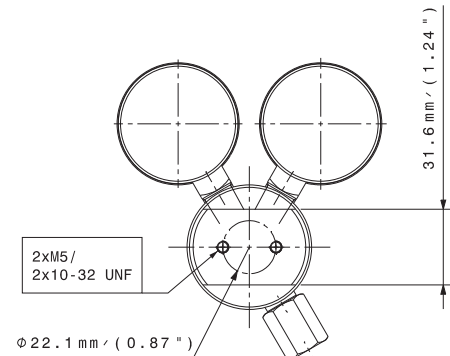
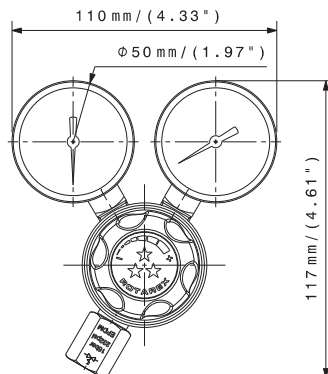
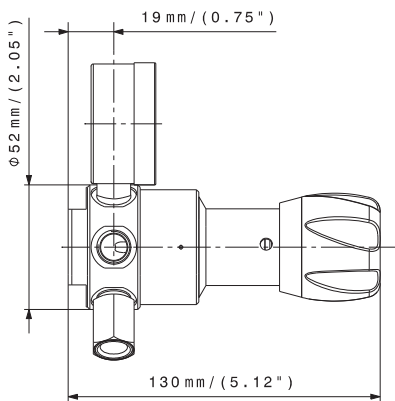
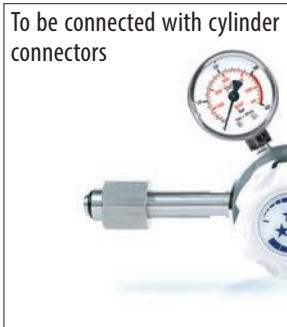
KEY FEATURES

- This single stage regulator is based on the Cartridge seat Technology.
- Compact, ergonomic and lightweight design makes this regulator suitable for many applications.
- Accurate pressure control for reliable service.
- Handwheel in compliance with ATEX regulation and easy to clean
- Could be equipped with a shut off valve
- Relief valve seat seals material*
 - Brass Version: EPDM
 - Stainless Steel: FPM

*Other on demand



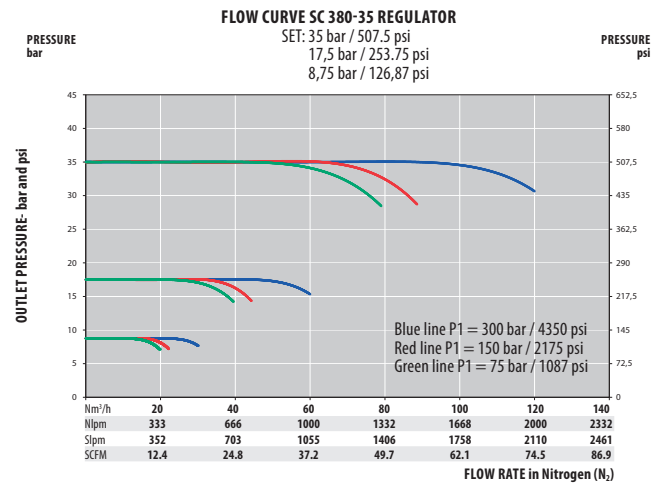
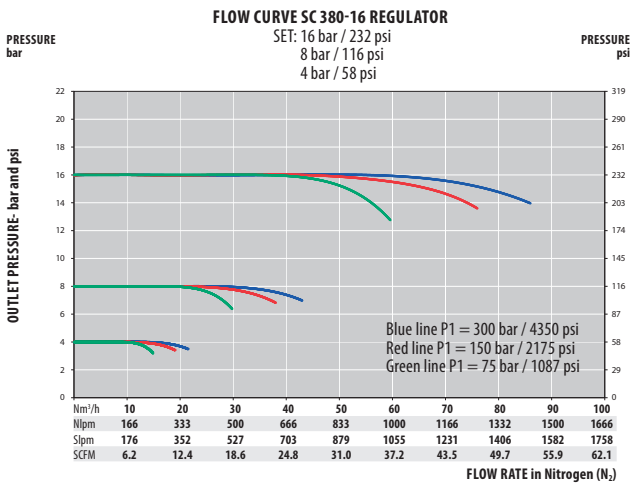
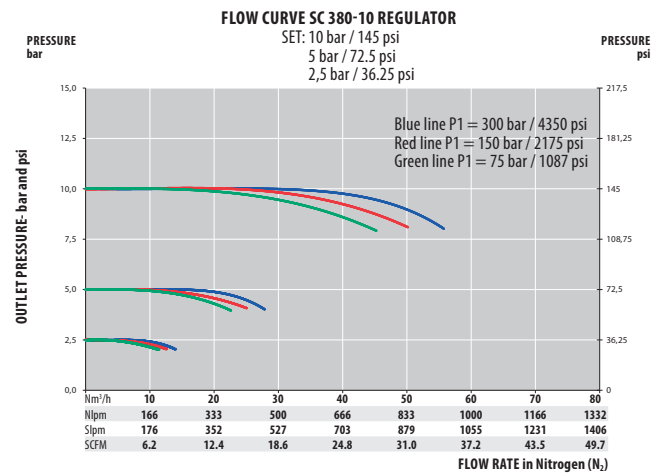
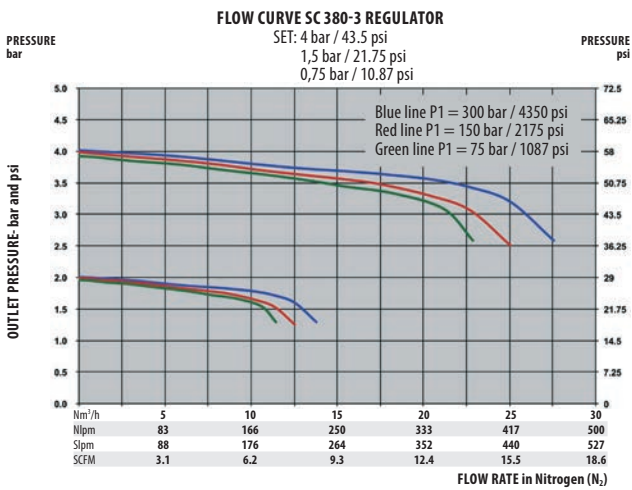
To be connected with cylinder connectors



SPECIFICATIONS

Female ports	¼" NPT (inlet / outlet)	Weight	± 1,1 kg ± 2.4 lbs	Inlet pressure	200/300 bar 2900/4350 psi
Valve seal	PCTFE	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	1,5/4/10/16/35/50 bar 21.75/58/145/232/508/725 psi
O-ring	PTFE	Temperature range	- 40°C to + 60°C - 40°F to + 140°F	Nominal Flow Cv	1/2/10/20/30 Nm ³ /h (N ₂) 0.1
Diaphragm	Hastelloy®	Gauges	High and low pressure (¼ NPT)	Oxygen use	OK with brass and stainless steel

FLOW CURVES



PRODUCT CONFIGURATOR

	Body Material	Inlet Pressure	Port Configuration	Outlet pressure	Inlet Connection	Outlet Connection	Gauges	Gas Type
SC	L	280	R	10	N	N	1	N2
	Chrome plated brass	L 200 bar 2900 psi	280 Right inlet	R 1,5 bar 21.75 psi	¼ NPT	N ¼ NPT	N With 1	
	Stainless steel	I 300 bar 4350 psi	380 Left inlet	L 4 bar 58 psi				
				10 bar 145 psi				
				16 bar 232 psi				
				35 bar 508 psi				
				50 bar 725 psi				

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
- ★ O₂ application compatible (with inlet pressure max 30 bar)
- ★ Inlet/outlet pressure gauges

Special requirements on request

To be connected with cylinder connectors



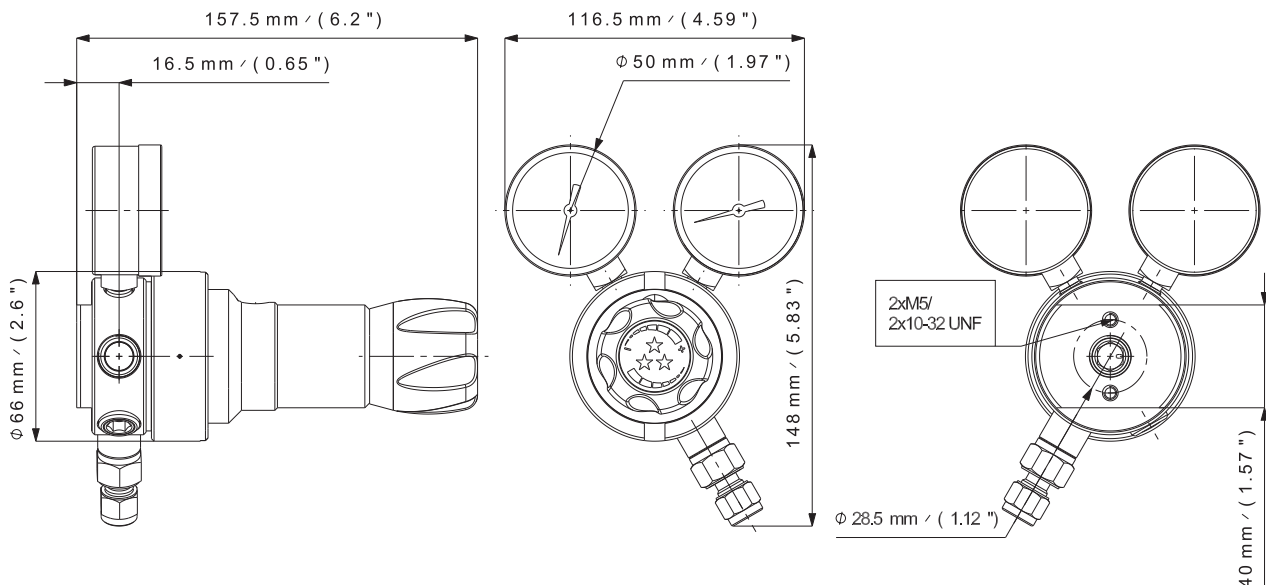
Refer to page 90

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

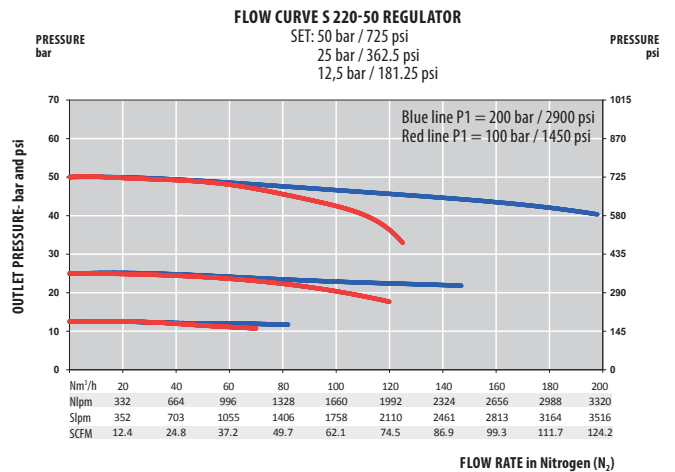
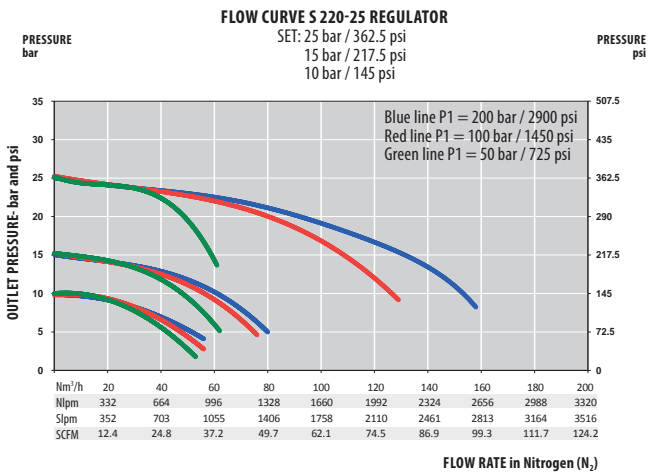
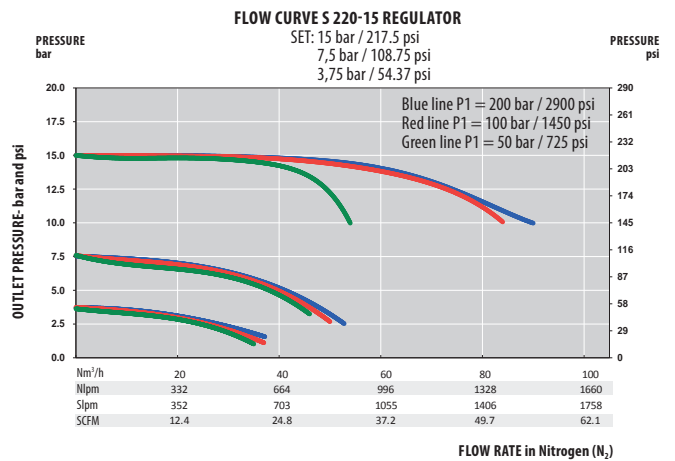
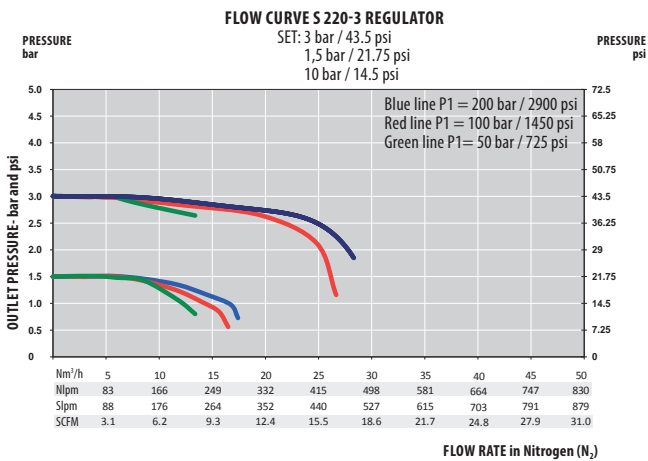
- No contamination risk due to its threadless and springless design.
- Low dead volume, which guarantees a good purge of the regulator.
- Ergonomic handwheel for exceptional control.
- Panel mounting possible due the rear threads.
- Can also be equipped with a shut off or needle valve at the outlet.



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

Body Material		Outlet Pressure	End Connections	O-ring Materials (relief valve)	Gauges	Ports Configuration
S	I	220	N	FPM	1	A
	Stainless steel	3 bar 44 psi	16 x 1.336 - G 3/8	FPM - Standard	With	Standard
	I	15 bar 218 psi	1/4 NPT - 1/4 NPT	EPDM	1	Reverse Inlet/outlet*
		25 bar 360 psi				
		50 bar 725 psi				

*Only available for NPT version

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
- ★ O₂ 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.

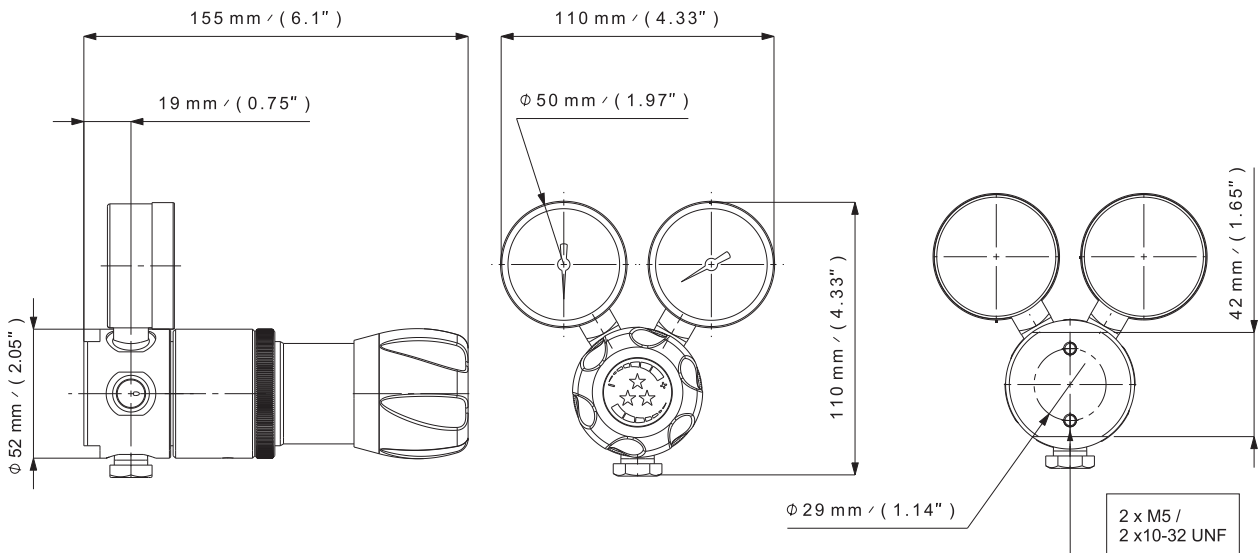
KEY FEATURES

- 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 relief valve can be installed.
- Panel mounting possible due the rear threads.
- Can also be equipped with a shut off valve at the outlet.

To be connected with cylinder connectors



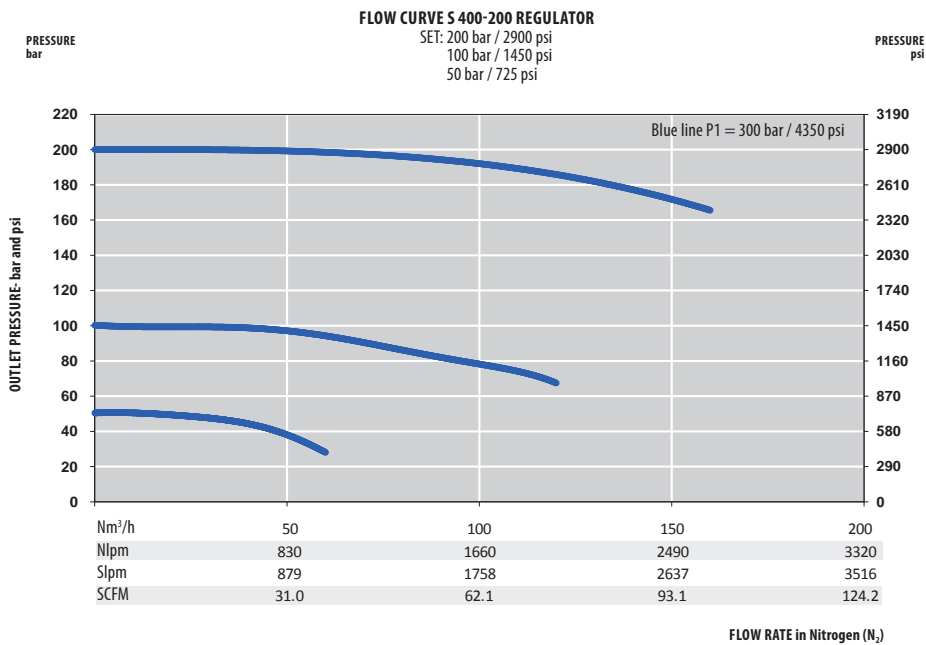
Refer to page 90



SPECIFICATIONS

Female ports	16 x 1.336 (inlet) - G 3/8 (outlet) or 1/4 NPT (inlet/outlet)	Weight	± 1,6 kg ± 3.5 lbs	Inlet pressure	300 bar 4350 psi
Seat seal	PCTFE	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	200 bar 2900 psi
O-ring	NBR EPDM - Standard FPM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	30 Nm ³ /h (N ₂)
Piston	AISI 316L	Gauges	High and low pressure (M10 x 1 or 1/4 NPT)	Oxygen use	Brass only

FLOW CURVES



PRODUCT CONFIGURATOR

	Body Material	Safety Relief Valve Configuration		End Connections	O-ring Material	Gauges
S	L	-	400	N	NBR	1
	Chrome plated brass	L With decompression system		16 x 1.336 - G 3/8	16 NBR	With
	Stainless steel	I With a safety valve connection available		1/4 NPT - 1/4 NPT	N EPDM - Standard	1
					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
- ★ O₂ application compatible, up to 200 bar inlet pressure for stainless steel version
- ★ Inlet/outlet pressure gauges
- ★ 1 relief valve

Special requirements on request

To be connected with cylinder connectors



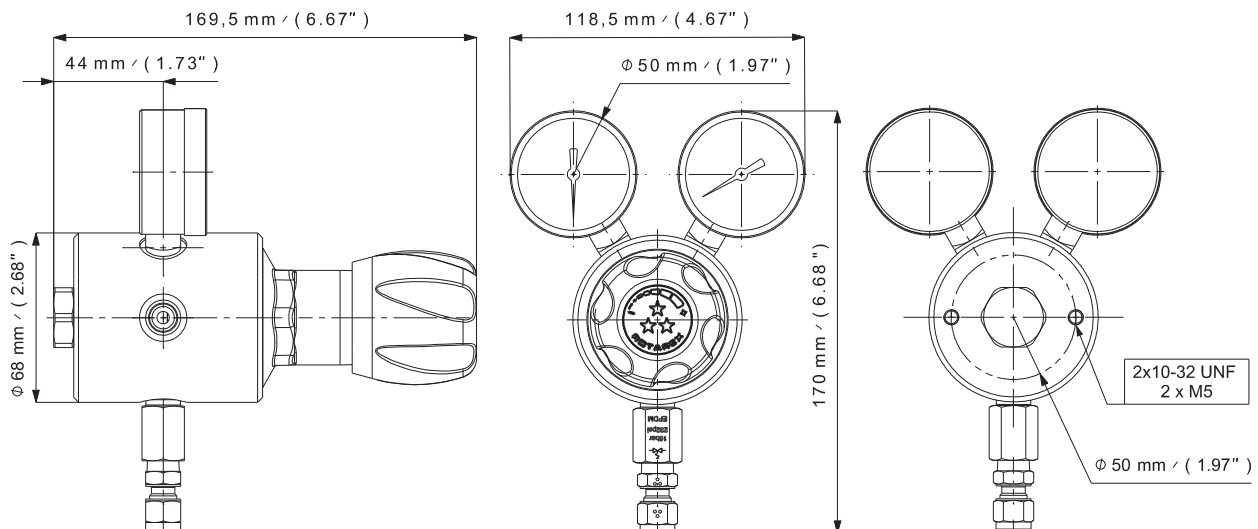
Refer to page 90

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

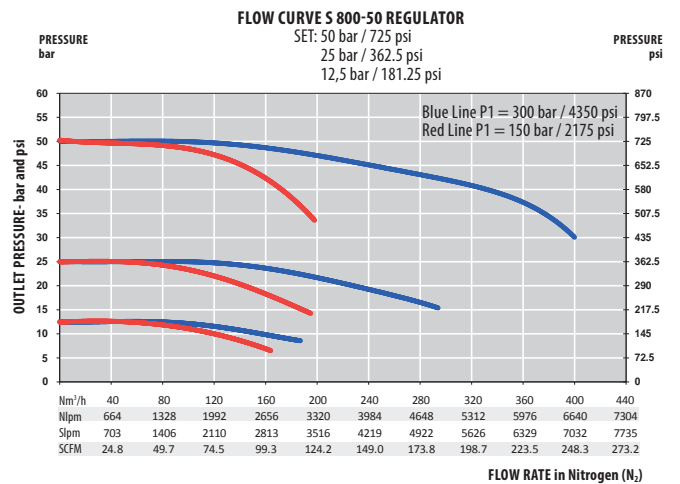
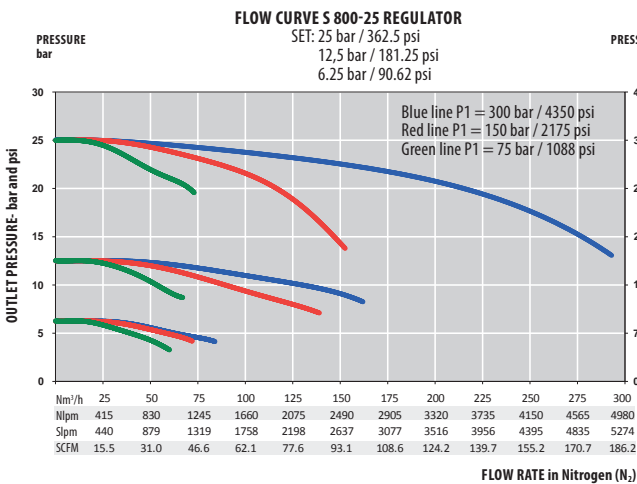
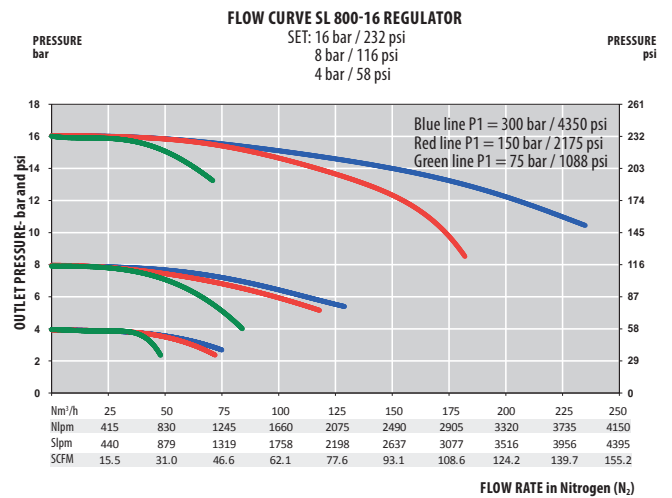
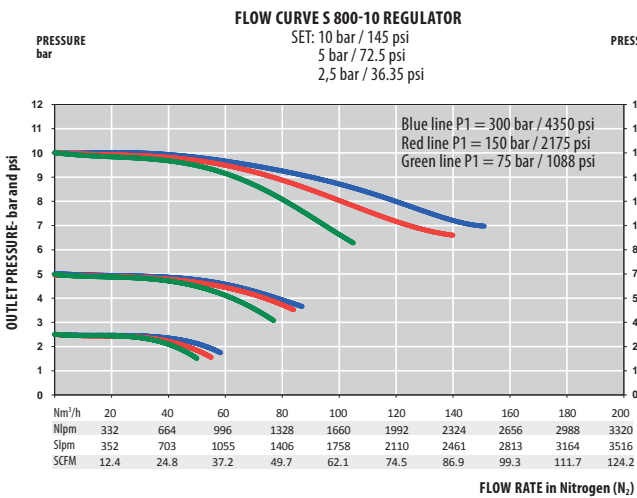
- Best-in-class pressure control with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. The BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow.
- BV Technology also increases the useful lifetime of the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



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

S	Body Material		800	Outlet Pressure		End Connections		O-ring Material		Gauges	
	L	LB		16	10	N	16	EPDM	With	1	
	Raw brass	LB		10 bar 145 psi	10	16 x 1.336 - G 3/8	16	EPDM - Standard	With	1	
	Chrome plated brass	L		16 bar 232 psi	16	1/4 NPT - 1/4 NPT	N	FPM			
	Stainless steel	I		25 bar 362.5 psi	25						
				50 bar 725 psi	50						

SERIES DC 280 - DC 380 | DUAL STAGE HP CARTRIDGE REGULATOR

- Diaphragm Dual Stage
- Purity up to 6.0
- Inlet Pressure:
200 bar (2900 psi)
300 bar (4350 psi)
- Outlet Pressure:
1,5/4/10/16/35 bar
21.75/58/145/232/508 psi

- ★ Compact and lightweight design
- ★ 1 Inlet / 1 Outlet
- ★ O₂ application compatible (see technical data)
- ★ Inlet / Outlet pressure gauge
- ★ 1 relief valve

Special requirements on request

To be connected with cylinder connectors



Refer to page 90

APPLICATIONS

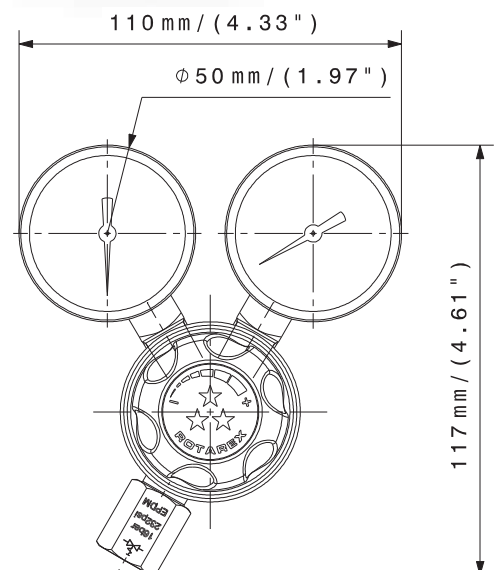
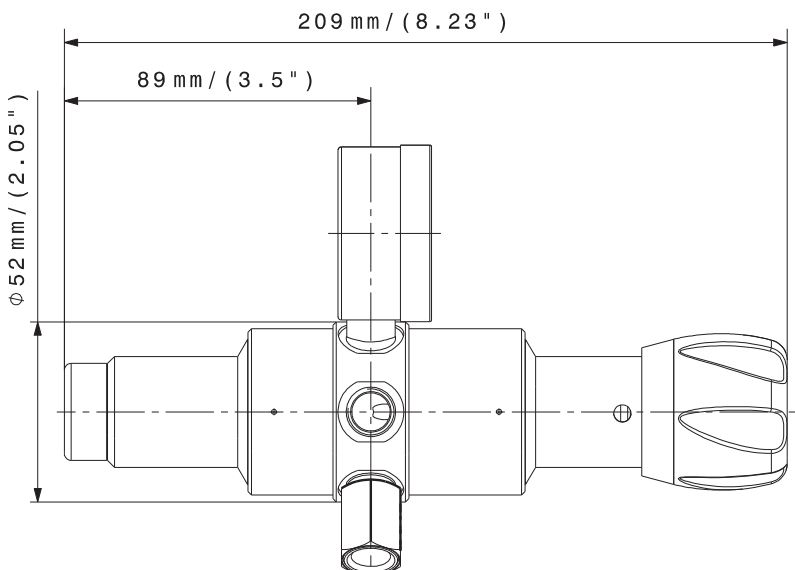
This regulator is ideally suited as cylinder regulator for pure, inert and corrosive gas applications such as analytical instrumentation.

- Gas Chromatograph
- Carrying gas
- Calibration gas

GENERAL

- This dual stage regulator is based on the Cartridge seat Technology.
- Compact, ergonomic and lightweight design makes this regulator suitable for many applications.
- Accurate pressure control for reliable service.
- Handwheel in compliance with ATEX regulation and easy to clean
- Could be equipped with a shut off valve
- Relief valve seat seals material*
 - Brass Version: EPDM
 - Stainless Steel: FPM

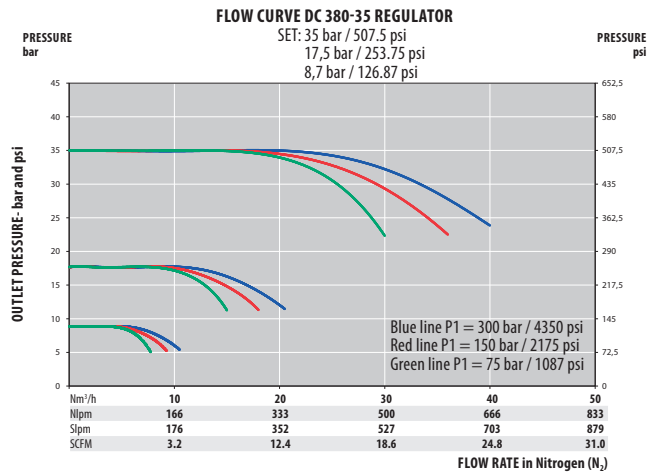
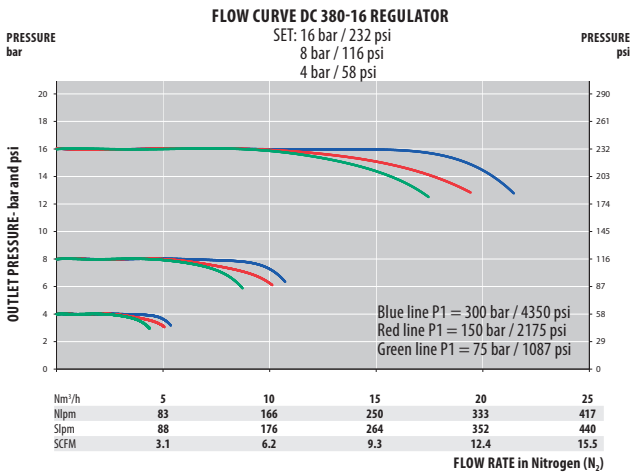
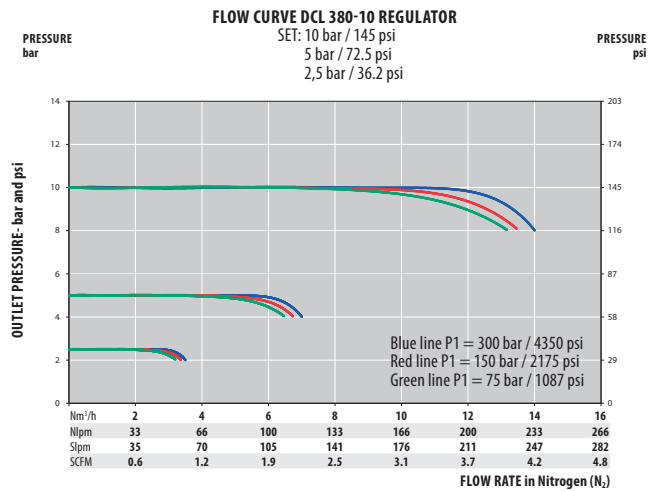
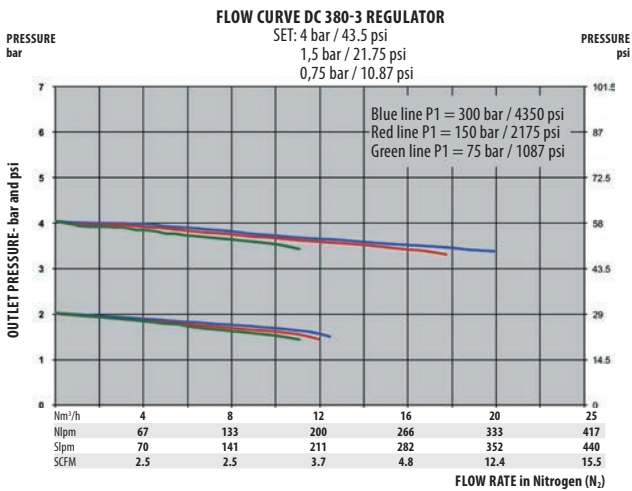
*Other on demand



SPECIFICATIONS

Female ports	¼" NPT (Inlet/Outlet)	Weight	± 1,5 kg ± 3.3 lbs	Inlet pressure	200/300 bar 2900/4350 psi
Valve seal	PCTFE	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	1,5/4/10/16/35 bar 21.75/58/145/232/508 psi
O-ring	PTFE	Temperature range	- 40°C to + 60°C - 40°F to + 140°F	Nominal Flow Cv	1/2/10/20/30 Nm ³ /h (N ₂) 0.06
Diaphragm	Hastelloy®	Gauges	High and low pressure (¼ NPT)	Oxygen use	OK with brass and stainless steel

FLOW CURVES



PRODUCT CONFIGURATOR

	Body Material	Inlet Pressure	Port Configuration	Outlet pressure	Inlet Connection	Outlet Connection	Gauges	Gas Type
DC	L	280	R	10	N	N	1	N2
	Chrome plated brass	L 200 bar / 2900 psi	280 Right inlet	R 1,5 bar / 21.75 psi	¼ NPT	N ¼ NPT	With 1	
	Stainless steel	I 300 bar / 4350 psi	380 Left inlet	L 4 bar / 58 psi				
				10 bar / 145 psi				
				16 bar / 232 psi				
				35 bar / 508 psi				

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
- ★ O₂ application compatible (brass only)
- ★ Inlet/outlet pressure gauges
- ★ 1 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

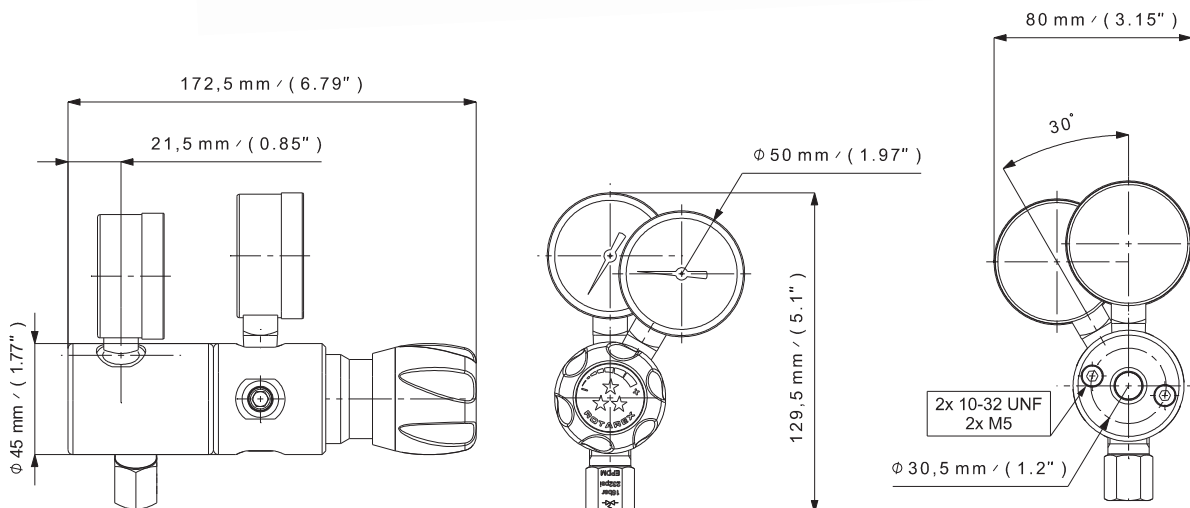
- The D 230 regulator is based on the S 20 proven bellow technology.
- Accurate pressure control for reliable service and guarantees a stable outlet pressure due to the combination of the piston and bellow technology.
- Compact and lightweight design.
- Fixed outlet pressure version available.



To be connected with cylinder connectors



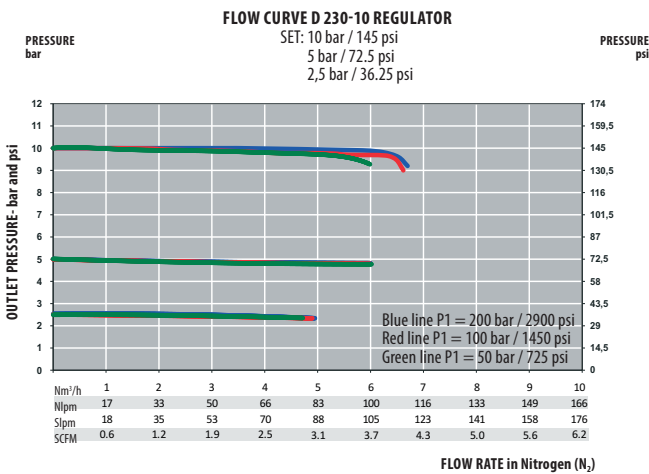
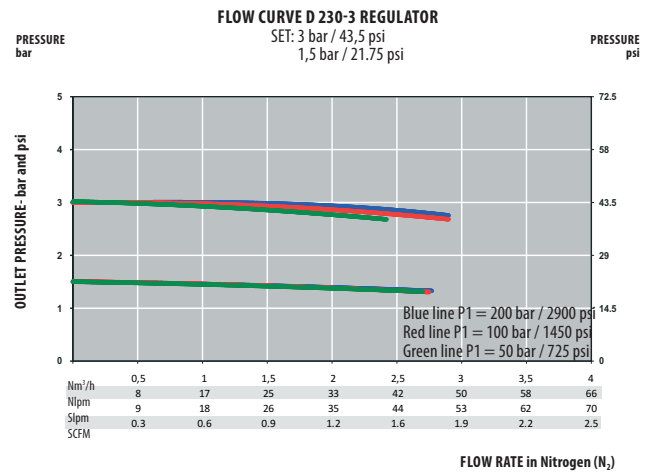
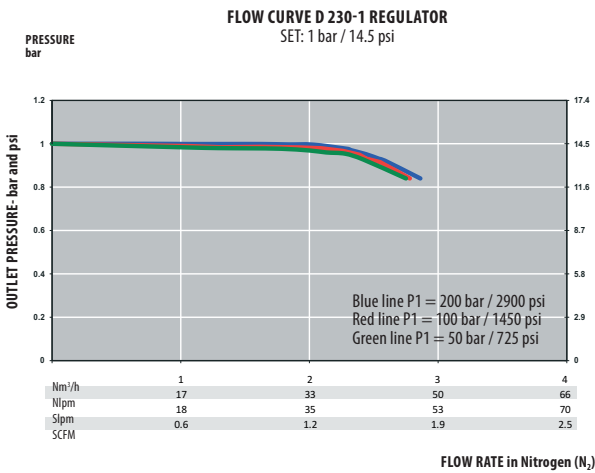
Refer to page 90



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

Body Material		Outlet Pressure	End Connections	O-ring Material	Gauges	Handwheel				
D	L	230	10	N	1	H				
	Chrome plated brass	1 bar 14.5 psi	1	In: 16 x 1.336 Out: G 3/8	16	EPDM - Standard	With	1	With - standard	H
	Stainless steel	3 bar 44 psi	3	1/4 NPT	N	FPM				
		10 bar 145 psi	10							

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
- ★ O₂ application compatible (brass only)
- ★ Inlet/outlet pressure gauges
- ★ 1 safety relief valve

Special requirements on request

APPLICATIONS

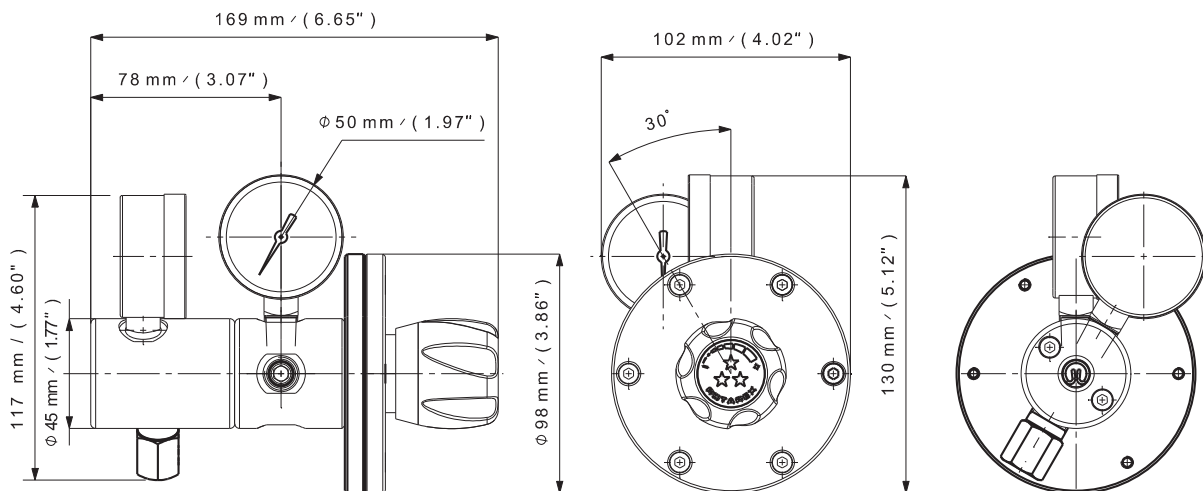
- Designed for cylinder regulator applications.
- Ideally suited for pure, inert and mildly corrosive gas applications requiring a very stable, very sensitive and very low outlet pressure.

KEY FEATURES

- The DL 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.



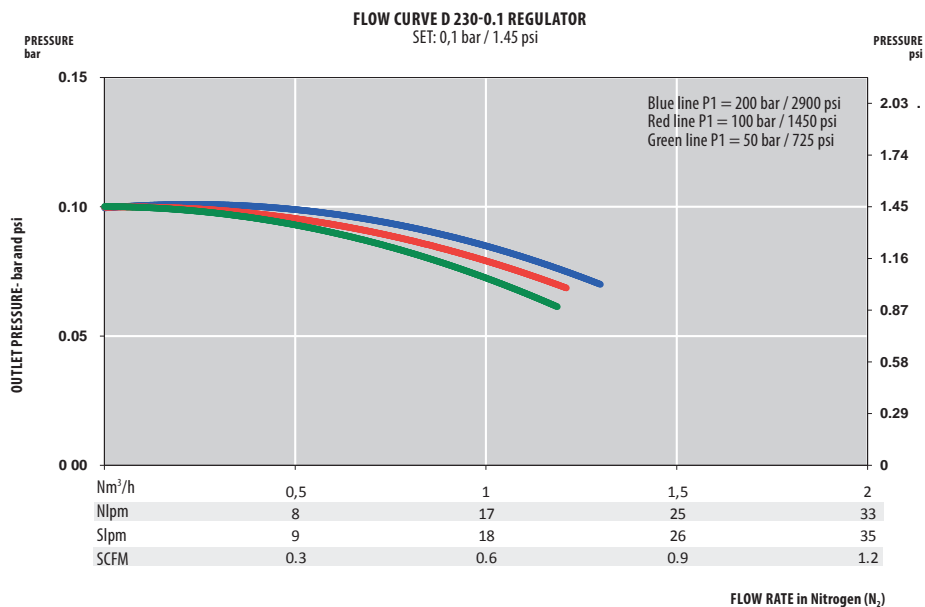
Rear inlet view - with cylinder connector



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

D	Body Material		230	0.1	End Connections		O-ring Material	Gauges	
	L	I			N	16	N	EPDM	With
	Chrome plated brass	L			In: 16 x 1.336 Out: G 3/8	16	EPDM - standard	With	1
	Stainless steel	I			NPT 1/4 (inlet/outlet)	N	FPM		

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
- ★ O₂ application compatible

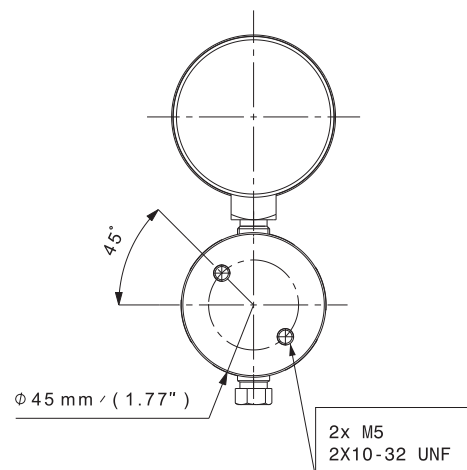
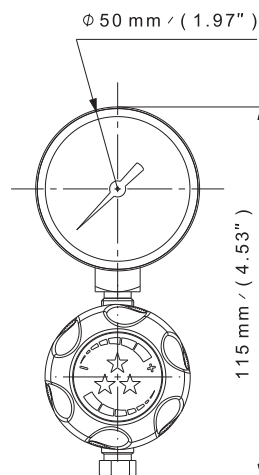
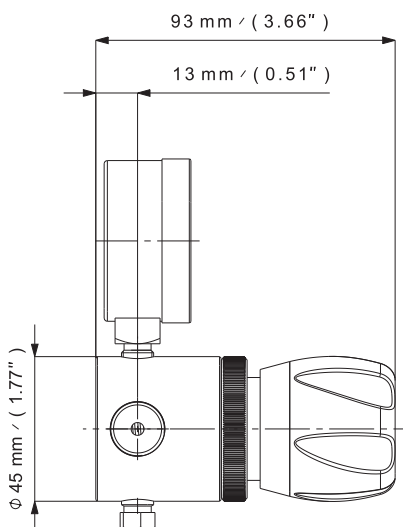
Special requirements on request

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 NH₃ line regulator (EPDM stainless steel version).

KEY FEATURES

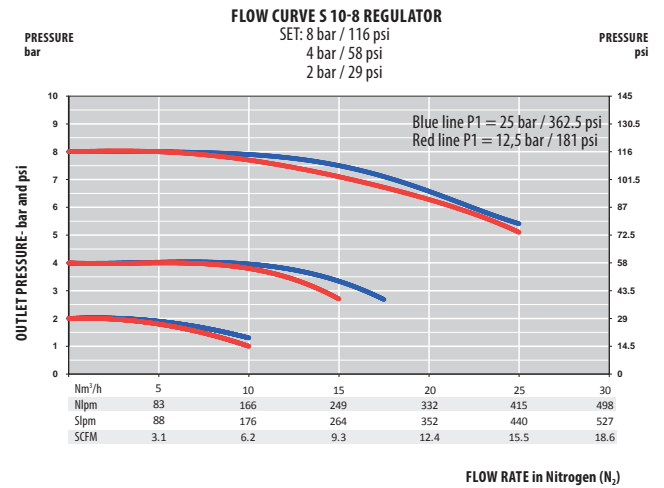
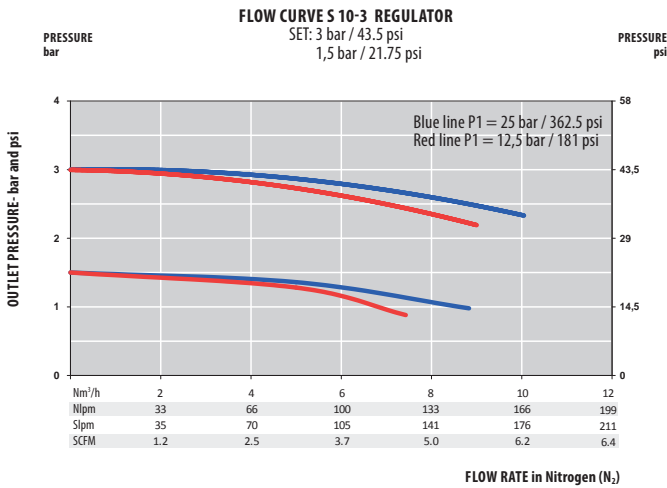
- As a second level of regulation, the SL 10 will supply a precise outlet pressure to the process. It can be used for many applications that need a high flow.
- Flexible wall or panel mounting possible with its compact design, the rear threads and fixing ring.
- Best-in-class pressure control with Balanced-Valve 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

Female ports	G 3/8 or 1/4 NPT (inlet/outlet)	Weight	± 0,6 kg ± 1.32 lbs	Inlet pressure max	25 bar 360 psi
Seat seal	FPM EPDM	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	3/8 bar 44/116 psi
O-ring	FPM EPDM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	4,5/12 Nm ³ /h (N ₂)
Diaphragm	AISI 304 (brass version) Hastelloy® (SS version)	Gauges	Low pressure (M10 x 1 or 1/4 NPT)	Oxygen use	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	1	FR0	A				
	Chrome plated brass	3 bar 44 psi	3	G 3/8 - G 3/8	G	EPDM - Standard	With 1	Without Fixing Ring	FR0	Standard Configuration	A
	Stainless steel	8 bar 116 psi	8	1/4 NPT - 1/4 NPT	N	FPM		With Fixing Ring	FR1	Reverse inlet/outlet	R

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
- ★ O₂ application compatible

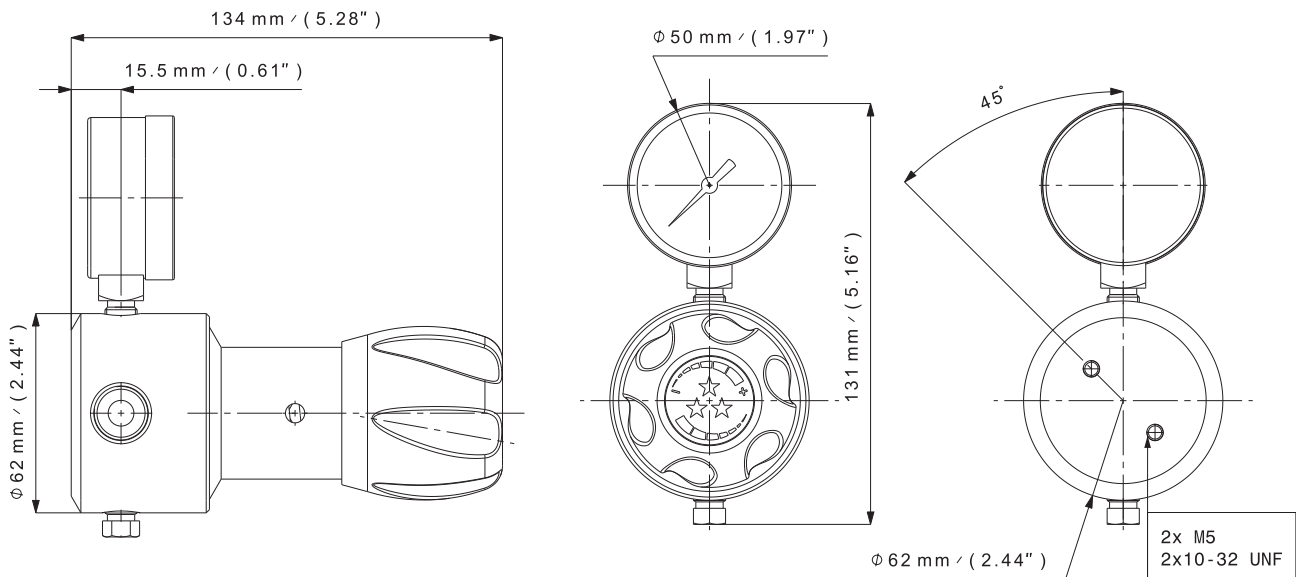
Special requirements on request

APPLICATIONS

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

KEY FEATURES

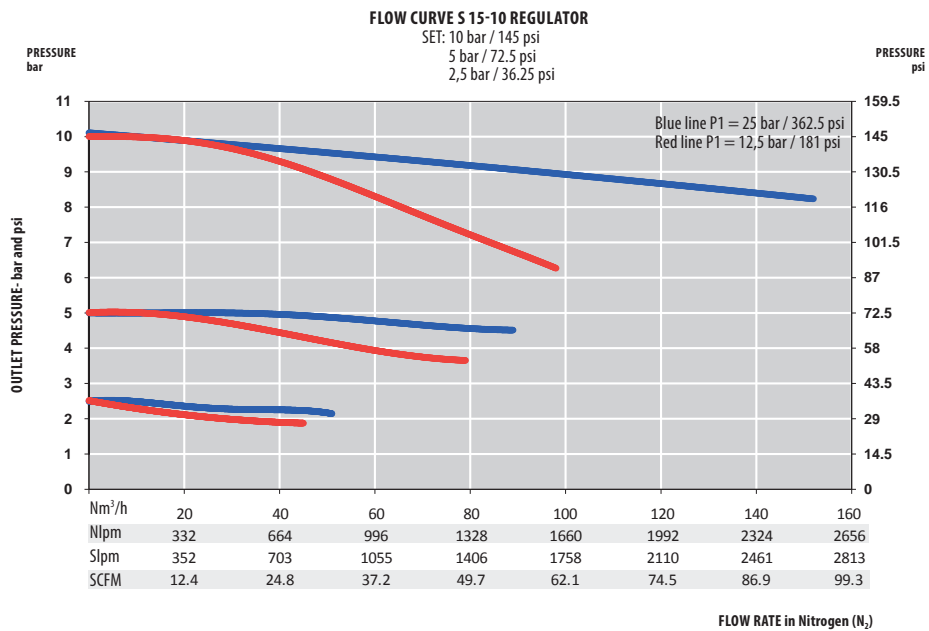
- As a second level of regulation the S 15 will supply a precise outlet pressure to the process.
- Can be used for wall or panel mounting with its compact design, the rear threads and fixing ring.
- Best-in-class pressure stability with Balanced-Valve Technology (Balanced-Valve Technology): the effect 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

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

FLOW CURVES



PRODUCT CONFIGURATOR

Body Material		Outlet Pressure	End Connections	O-ring Material	Gauges	Ports Configuration					
S	L	15	10	G	EPDM	1					
	Chrome plated brass	L	10 bar 145 psi	10	G 3/8 - G 3/8	G	EPDM - Standard	With	1	Standard Configuration	A
	Stainless steel	I			1/4 NPT - 1/4 NPT	N	FPM			Reverse inlet/outlet	R

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
- ★ O₂ application compatible
(see technical data)

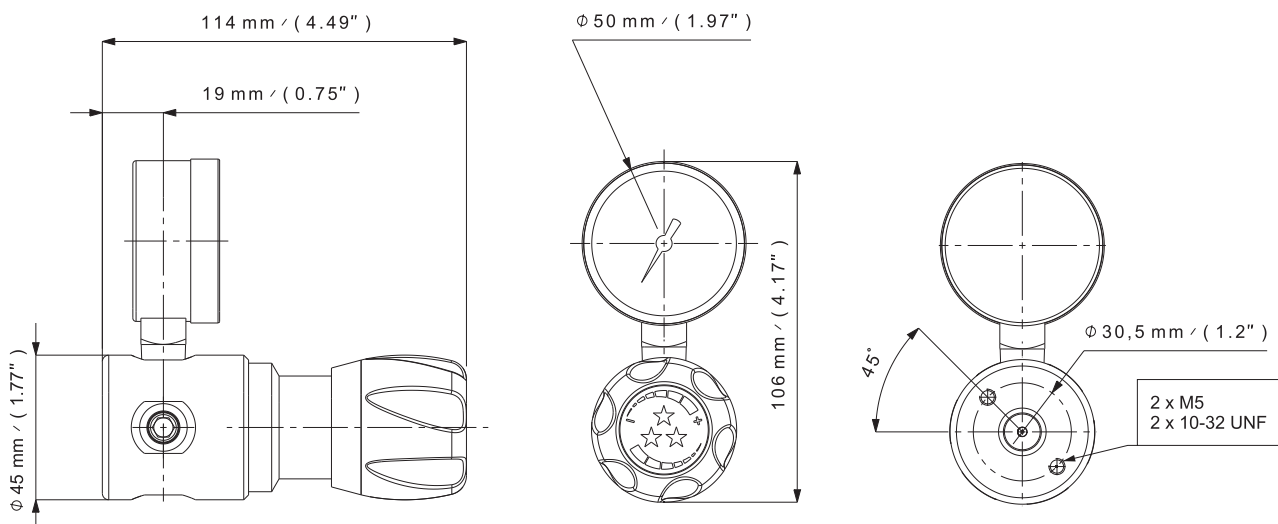
Special requirements on request

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)

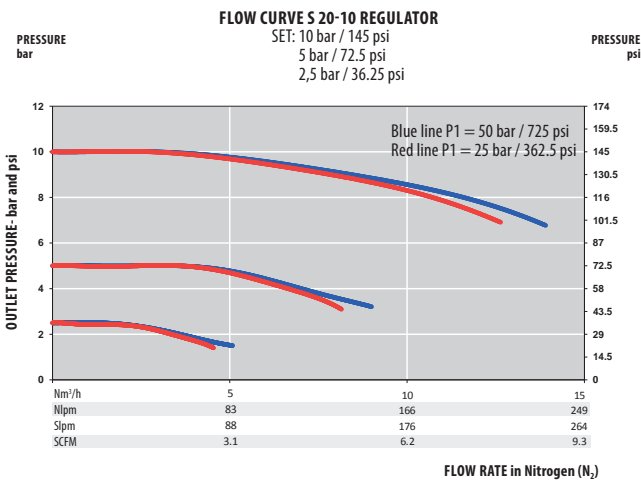
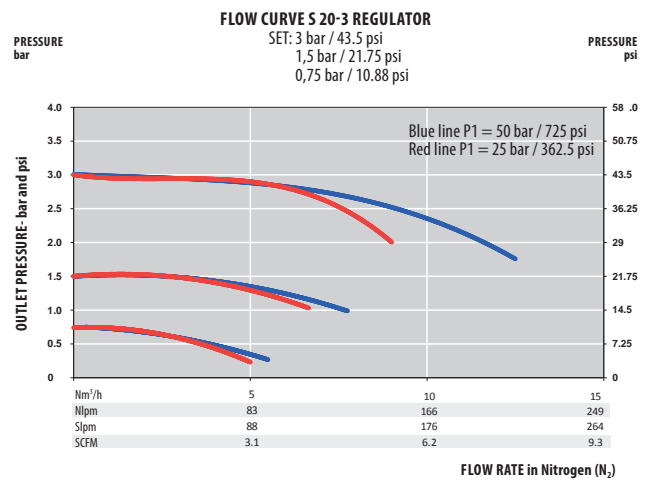
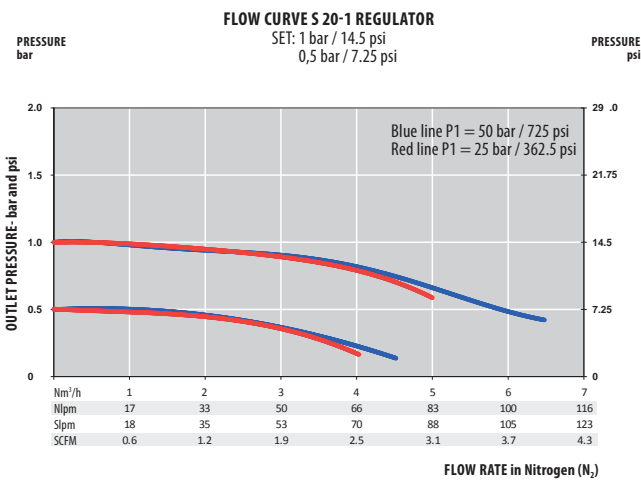


Drawing for 1/4 NPT version

SPECIFICATIONS

Female ports	G 3/8 or 1/4 NPT (inlet/outlet)	Weight	± 0,5 kg ± 1.1 lbs	Inlet pressure	50 bar 725 psi
Seat seal	EPDM	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	1/3/10 bar 14.5/44/145 psi
O-ring	EPDM - Standard FPM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	2/2,5/3,5 Nm ³ /h (N ₂)
Bellow	Bronze or AISI 316L (SS version)	Gauges	Low pressure (M10 x 1 or 1/4 NPT)	Oxygen use	inlet pressure ≤ 30 bar max. 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	A			
	Chrome plated brass		1	G 3/8 - G 3/8	G	EPDM - Standard	With 1	FR0	Standard Configuration	A
	Stainless steel		3	1/4 NPT - 1/4 NPT	N	FPM		FR1	Reverse inlet/outlet	R
			10							

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
- ★ O₂ application compatible (see technical data)

Special requirements on request



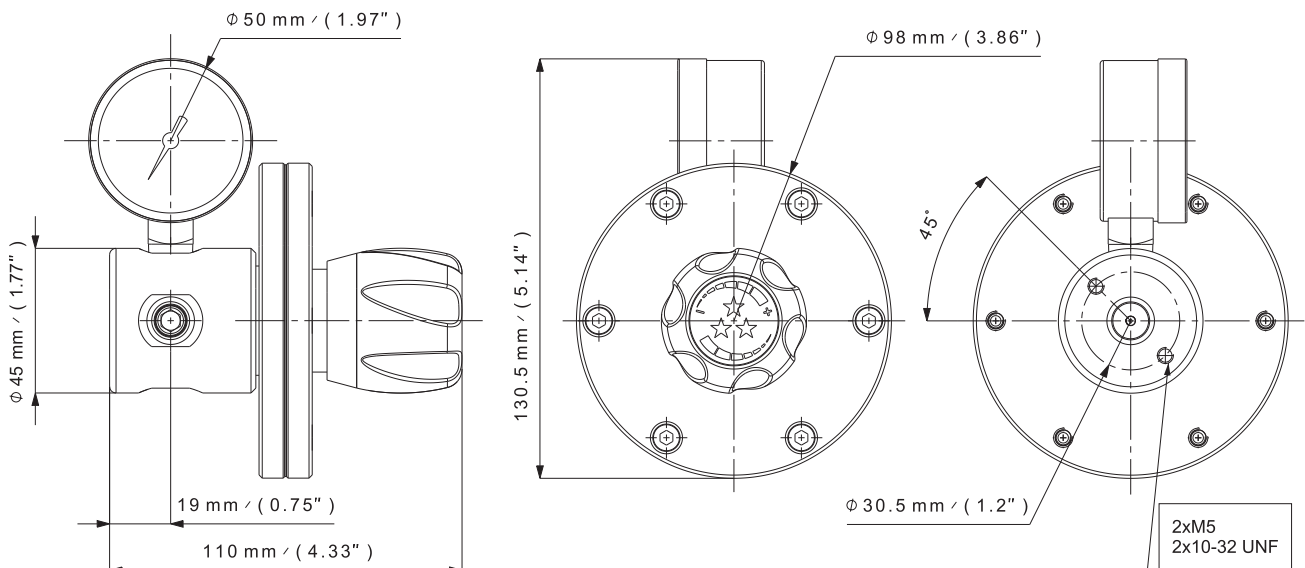
Rear inlet view

APPLICATIONS

- The Series S 20-0.1 is used as a line regulator for lab applications requiring a low outlet pressure less than 100 mbar (1.45 psi).

KEY FEATURES

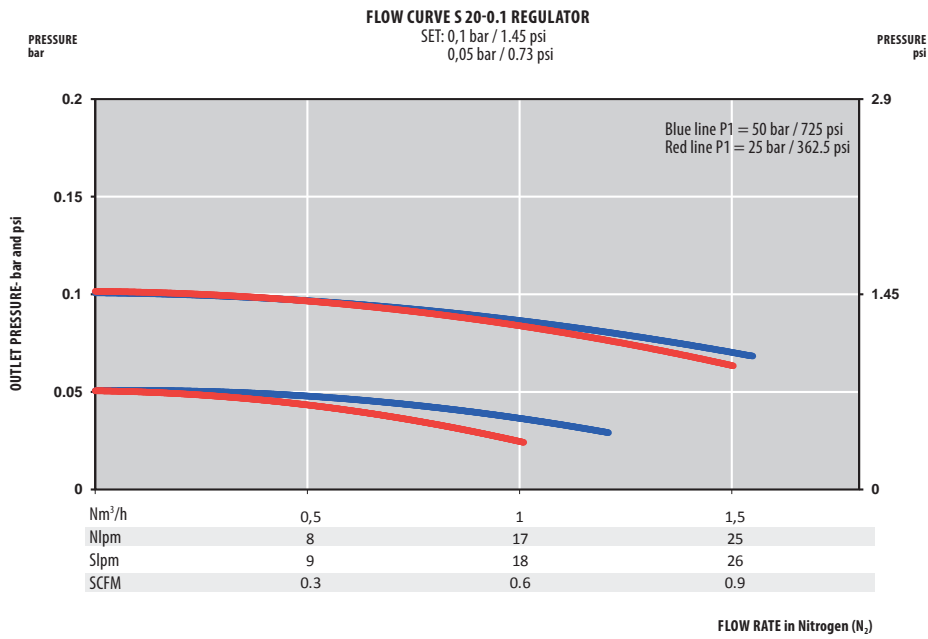
- With the rear threads, it can be used for wall mounting.



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

S	Body Material		End Connections		O-ring Material	Gauges	Ports Configuration		
	L	20	0.1	G	EPDM	1	A		
	Chrome plated brass	L		G 3/8 - G 3/8	EPDM - Standard	With	1	Standard Configuration	A
	Stainless steel	I		1/4 NPT - 1/4 NPT	FPM			Reverse inlet/outlet	R

SERIES S 55 | LINE REGULATOR

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

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 2 inlets / 2 outlets
- ★ Rear Inlet for panel mounting
- ★ O₂ applications compatible (see technical data)

Special requirements on request

APPLICATIONS

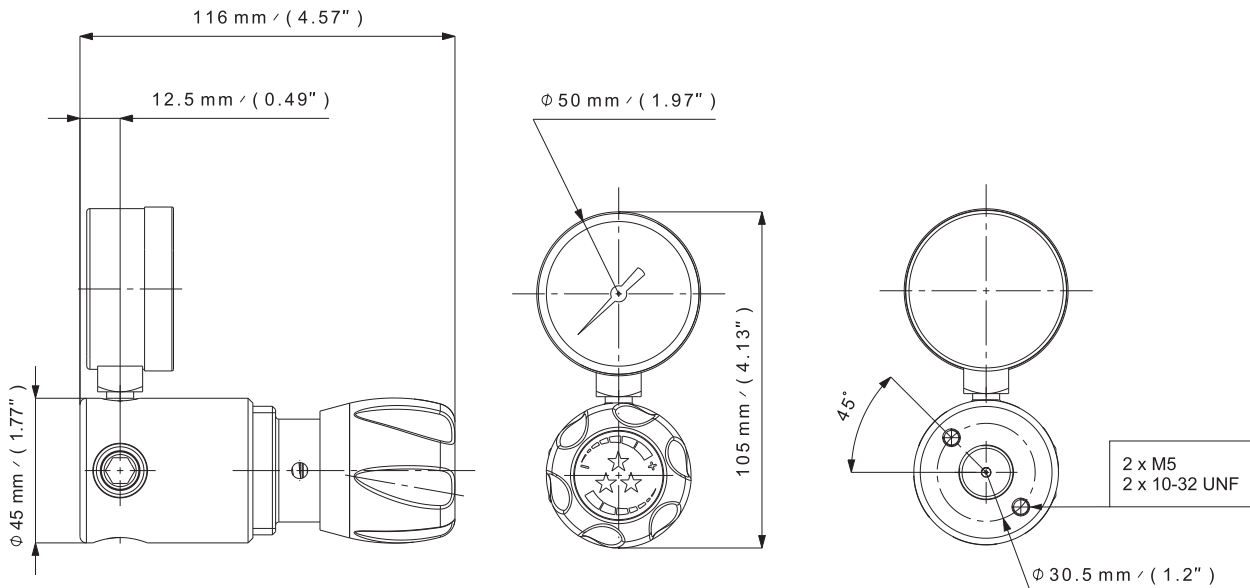
- Designed for line regulator applications in petrochemical, industrial and laboratory environments.
- Used in calibration gas mixtures for petrochemical industry; environmental emission monitoring, industrial hygiene or safety monitors and trace impurity analyzers.
- Also commonly used to oxygenate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



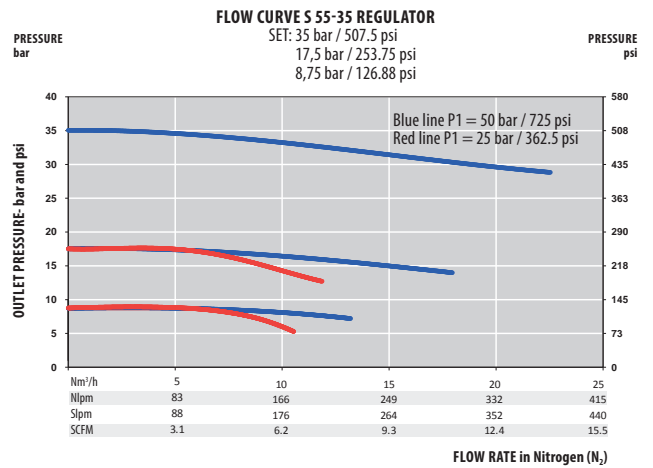
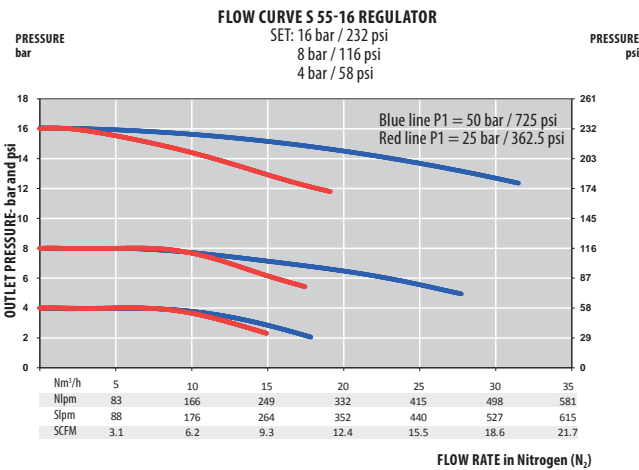
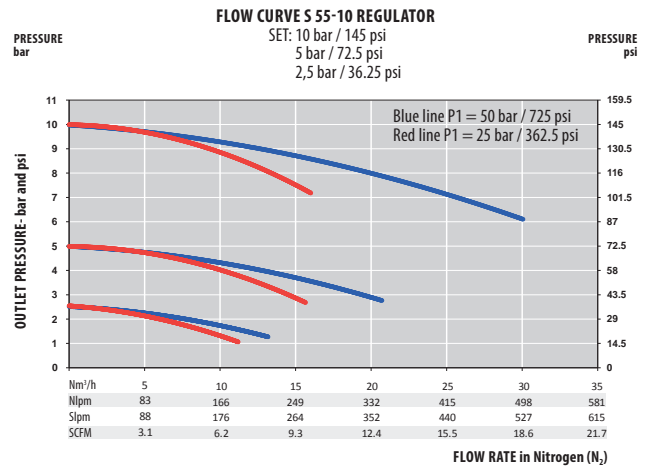
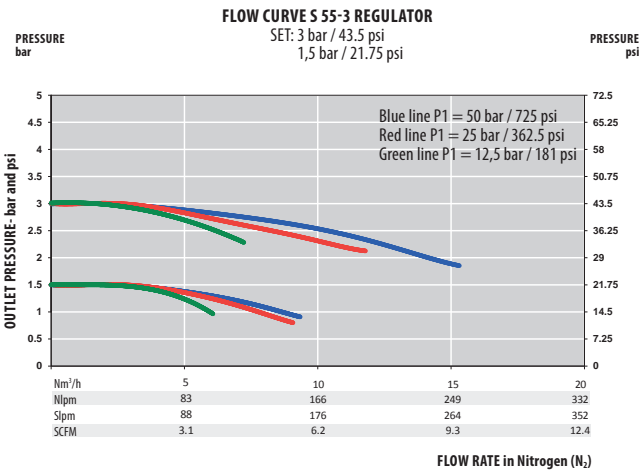
Rear inlet view



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

S	Body Material		55	Outlet Pressure		End Connections		O-ring Material	Gauges		Mounting		Ports Configuration	
	L			35	3	G	G	EPDM	1	1	FR1	A		
	Chrome plated brass	L		3 bar 44 psi	3	G 3/8 - G 3/8	G	EPDM - Standard	With	1	Without Fixing Ring	FR0	Standard configuration	A
	Stainless steel	I		10 bar 145 psi	10	1/4 NPT - 1/4 NPT	N	FPM			With Fixing Ring*	FR1	Reverse inlet/outlet	R
				16 bar 232 psi	16									
				35 bar 508 psi	35									

* FR1 not available with the 35 bar version

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 - C₂H₂):
P1=1,5 bar (21.75 psi)
P2=0,8 bar (12 psi)

- ★ 1 inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O₂ application compatible
- ★ High flow

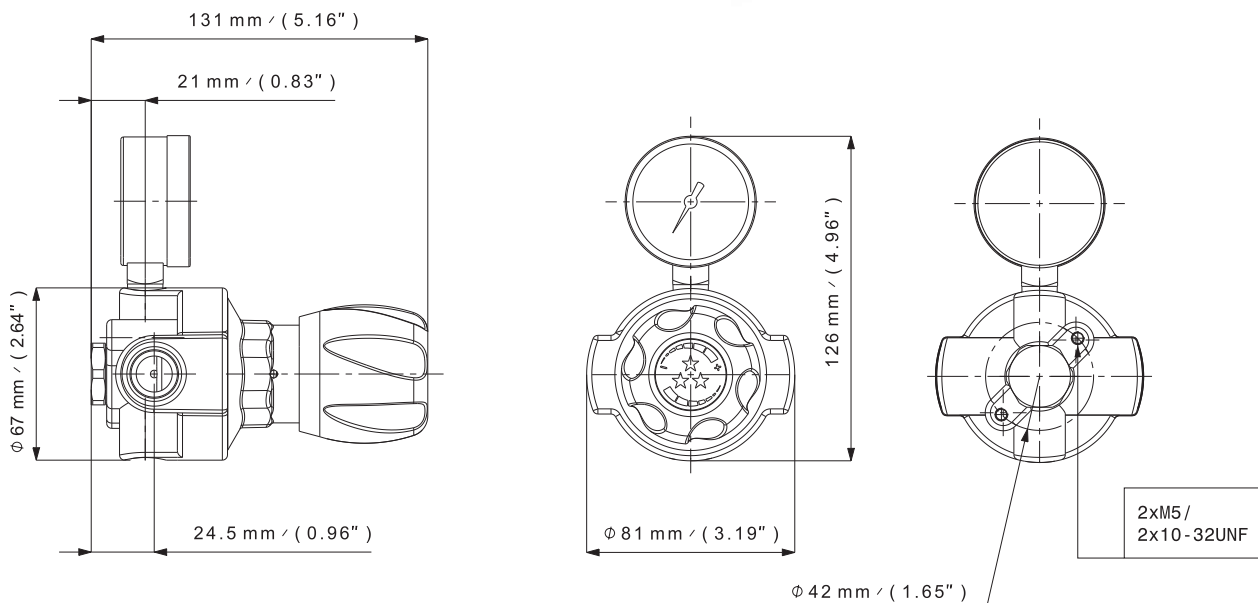
Special requirements on request

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

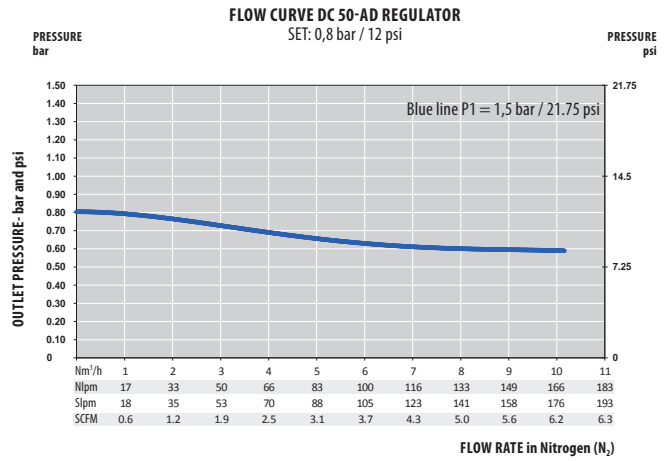
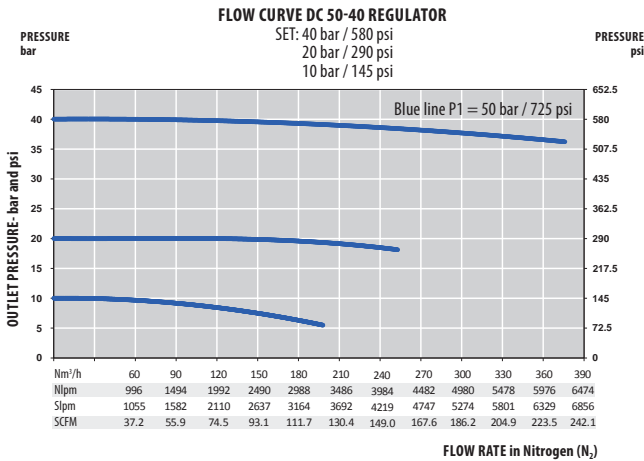
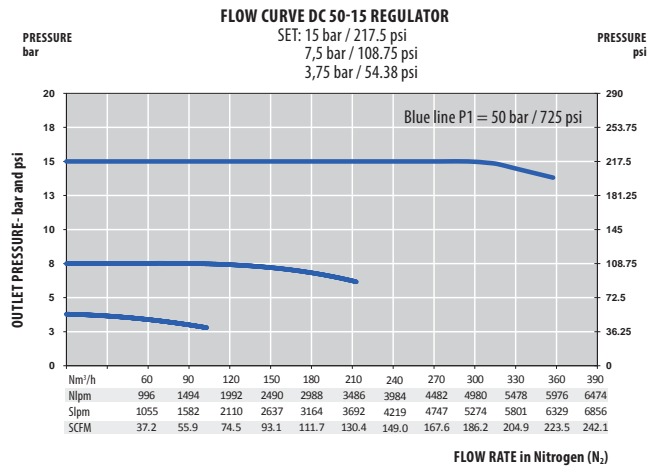
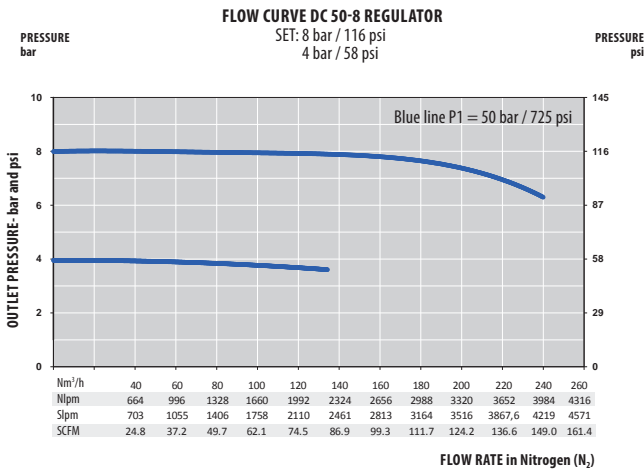
- Low pressure regulator with high flow, without vibration.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure is minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- reduced strain on the seat increases regulator life and reduces the ownership cost.
- Acetylene version available:
P1=1,5 bar/P2=0,8 bar/Q=10 Nm³/h
- For use with acetylene this product must be installed with a flash back arrestor complying with the standard EN 730 located downstream.



SPECIFICATIONS

Female ports	G ½ or ½ NPT (inlet/outlet)	Weight	± 1,4 kg ± 3.1 lbs	Inlet pressure	50 bar (725 psi) AD: 1,5 bar (21.75 psi)
Seat seal	EPDM	Leak rate	10 ⁻³ mbar ℓ/s He	Outlet pressure	8/15/40 - 0,8 bar (AD) 116/217/580 - 12 psi (AD)
O-ring	EPDM - Standard FPM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	150/300/300 Nm ³ /h (N ₂) 10 Nm ³ /h (AD)
Diaphragm	EPDM	Gauges	Low pressure (G ¼ or ¼ NPT)	Oxygen use	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 116 psi	8	G ½ - G ½	G	EPDM - Standard	Chrome plated brass	L	With	1
			15 bar 217 psi	15	½ NPT - ½ NPT	N	FPM	Raw brass	LB		
			40 bar 580 psi	40							
			Acetylene version 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 - C₂H₂):
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 turn shutoff valve
- ★ O₂ 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.



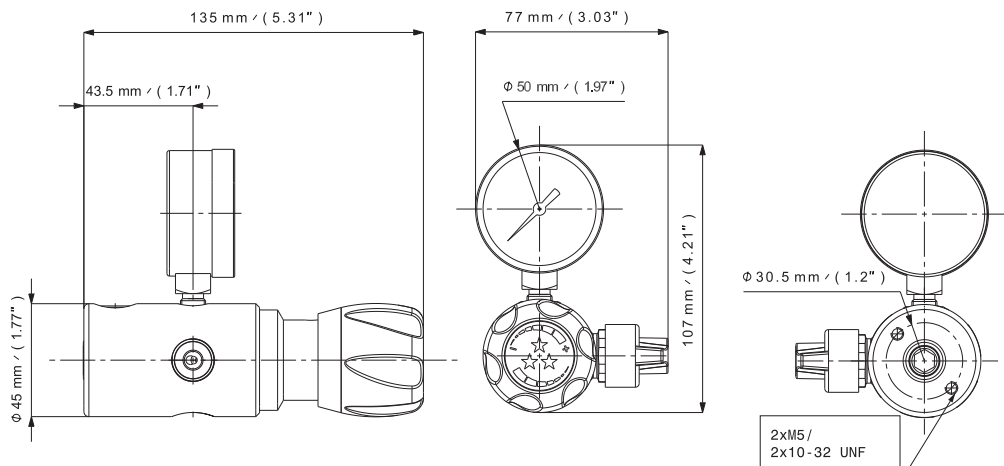
Acetylene version



¼ turn valve



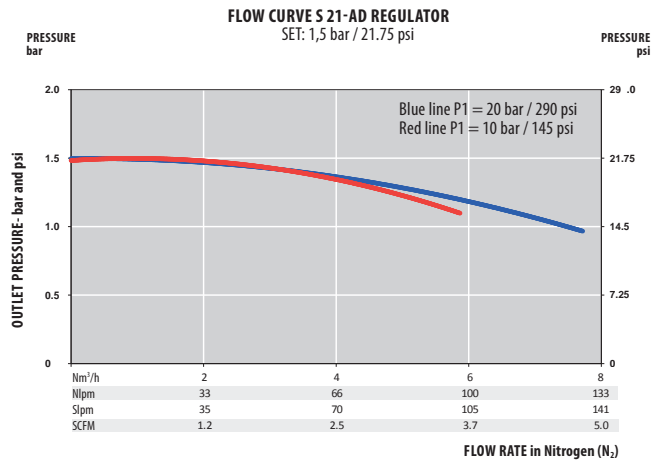
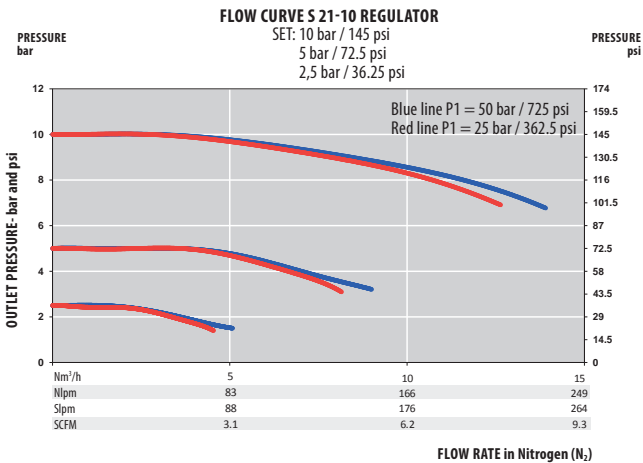
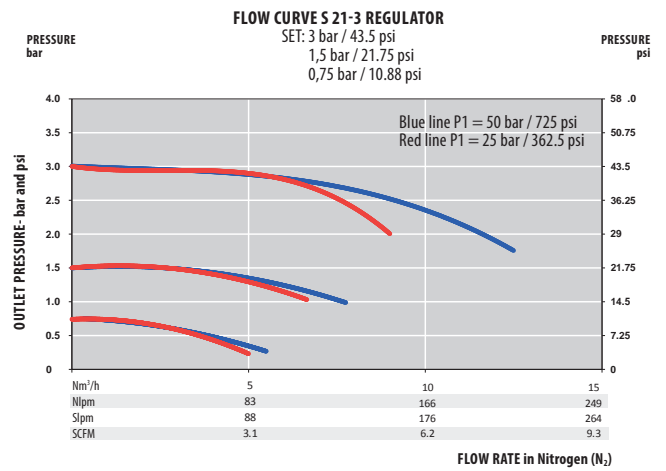
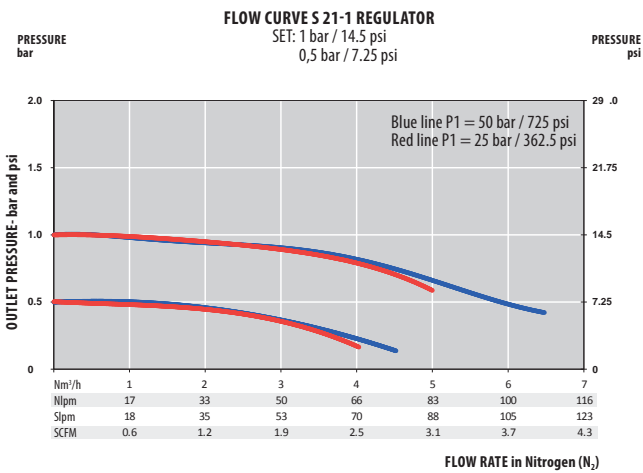
RD10 needle valve



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

Body Material		Outlet Pressure	End Connections	O-ring Material	Gauge	Plate					
S	L	S 21	10	G	EPDM	1	STD				
	Chrome plated brass	L	1 bar 14.5 psi	1	G 3/8 - G 3/8	G	EPDM - standard	Without	0	Without plate	STD
	Stainless steel	I	3 bar 44 psi	3	1/4 NPT - 1/4 NPT	N	FPM	With	1	With metal plate	M
			10 bar 145 psi	10							
			Acetylene version 1,5 bar (21.75 psi)	AD							

LABLINE S 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 - C₂H₂): P1 = 20 bar (290 psi) P2 = 1,5 bar (21.75 psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 1 inlet / 2 outlets
- ★ Modular concept
- ★ O₂ applications compatible (see technical data)

Special requirements on request



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



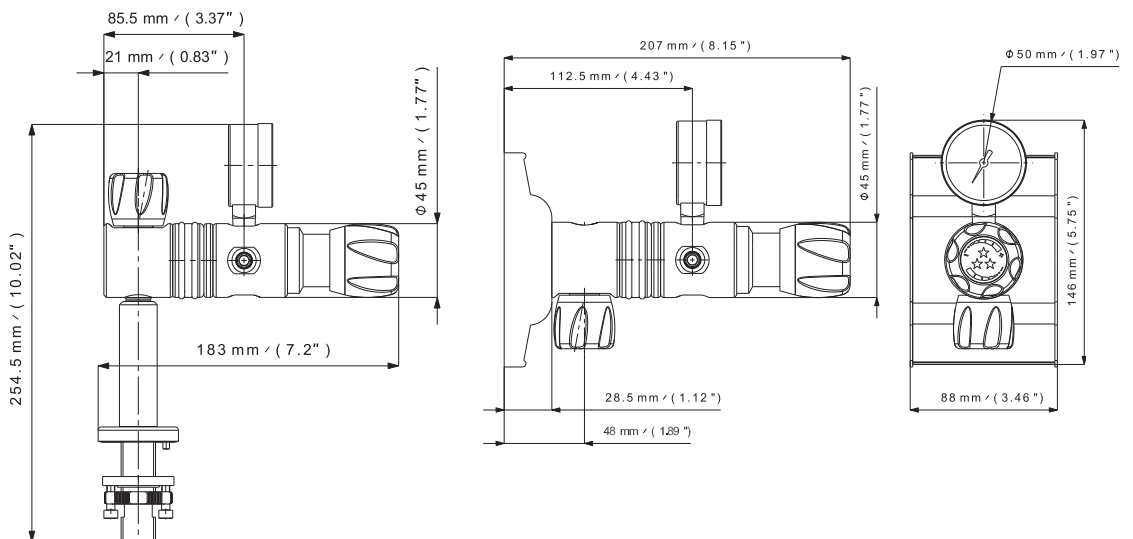
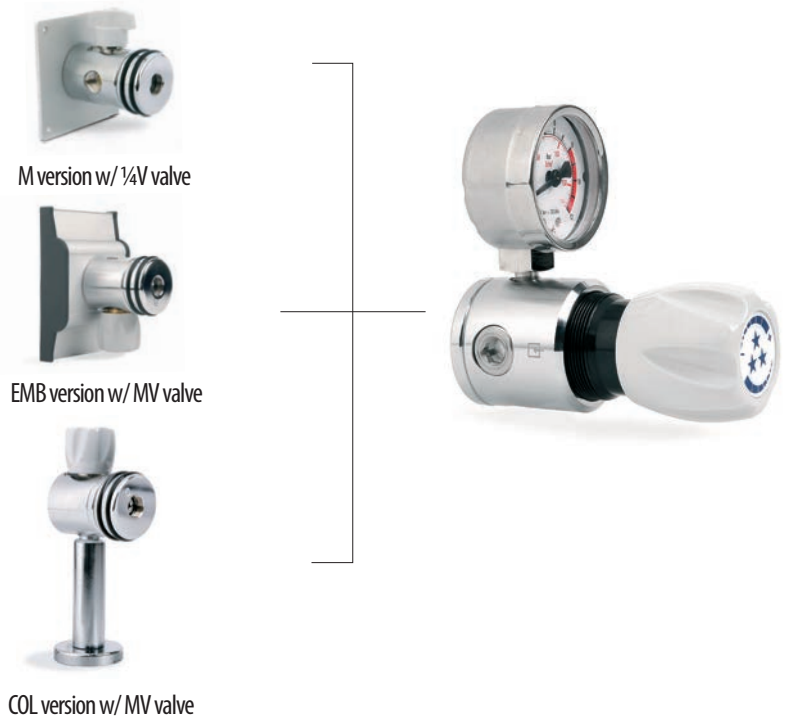
Acetylene version

APPLICATIONS

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

KEY FEATURES

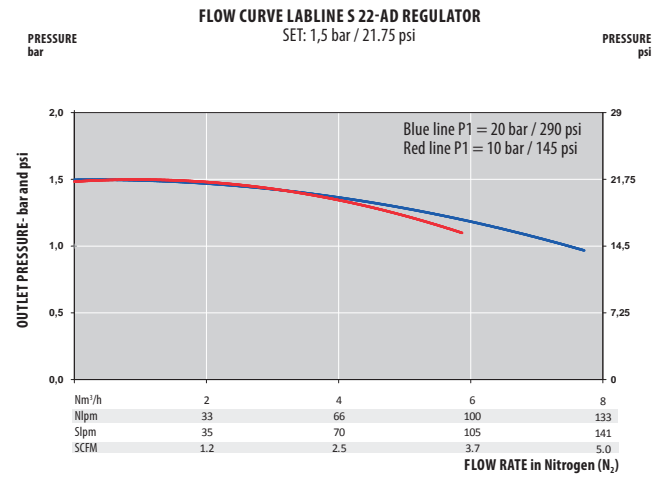
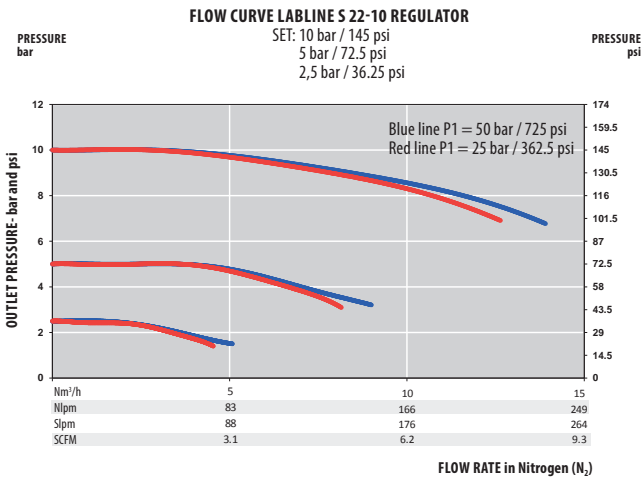
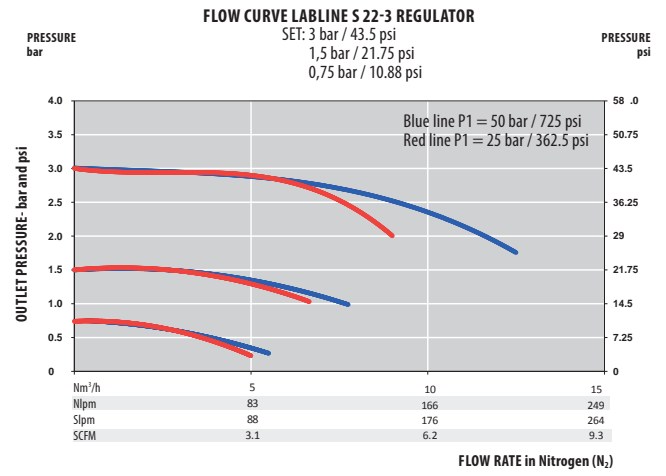
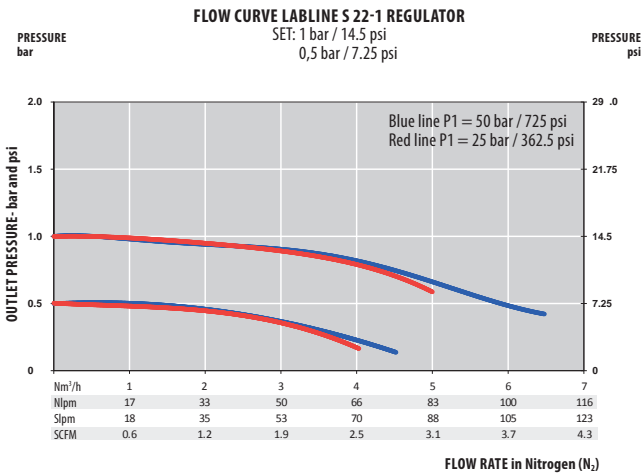
- Based on the Series 20 platform
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor complying with standard EN 730 located downstream.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



SPECIFICATIONS

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

FLOW CURVES



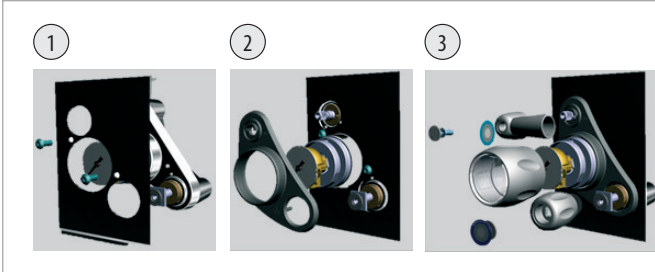
PRODUCT CONFIGURATOR

Body Material		Version	Outlet Pressure	End Connection	O-ring Material	Gauges	Valve						
S	L	S22	EMB	10	G	1	¼V						
	Chrome plated brass		With Metal Plate	M	1 bar / 14.5 psi	1	G ¾ - Female (outlet)	G	EPDM - standard	With	1	¼ turn valve	¼V
	Stainless steel		With Aluminum stand	EMB	3 bar / 44 psi	3	¼ NPT (outlet)	N	FPM			Multi-turn valve	MV
			With pillar*	COL	10 bar / 145 psi	10	Note: inlet G ¼ with COL version						
			Acetylene version	AD	1,5 bar / 21.75 psi								

*only with multi-turn valve

SPECIFICATIONS

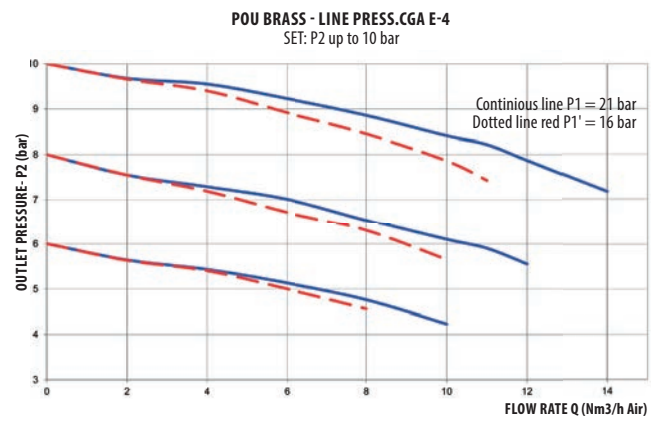
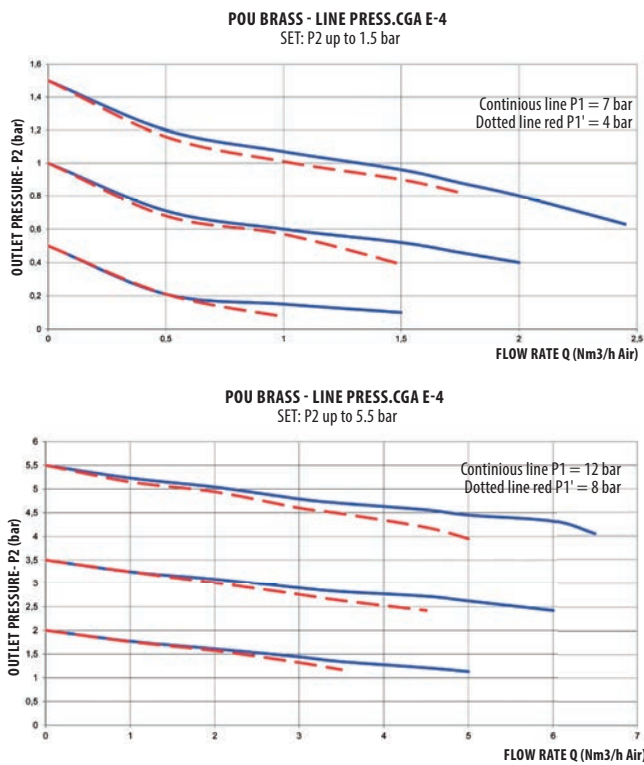
Female ports	Inlet : 1/4"NPT Outlet : G1/4 / 1/4"NPT w/adaptor	Plastic parts body	PP	Inlet pressure	50bar (725 psi) C ₂ H ₂ : 20 bar (290 psi)
Seat seal	PCTFE	Weight	900g (Brass or 316L)	Outlet pressure	1,5 / 5,5 / 10 bar 21.75 / 79.75 / 145 psi C ₂ H ₂ : 1,5 bar (21.75 psi)
O-ring	EPDM (brass) FPM (316L)	Leak rate	10 ⁻⁸ mbar l/s He	Nominal Flow	1,2 / 2 / 9 m ³ /h Air
Diaphragm (valve)	HASTELLOY®	Temperature range	-20°C to +60°C -4°F to +140°F	Oxygen use	Inlet pressure ≤ 30 bar (max for brass only)



EASY INSTALLATION:

- ① **SCREW THE LINESTAR CORE BEHIND THE FRONT PANEL**
- ② **ADD THE COVER PLATE AND HANDWHEELS ON FRONT SIDE**
- ③ **ADD THE 3 LABELS TO FINALISE**

FLOW CURVES



PRODUCT CONFIGURATOR

Version name	Material	Outlet Pressure	Needle valve	Fixation plate	Inlet & outlet connection
C795	B	1,5	1	1	G
Integrated valve version	C795 Brass	B 1,5 1,5	With needle valve 1	With fixation plate 1	G1/4" G
	Stainless Steel (pending)	SS 5,5 5,5		Without fixation plate 0	1/4"NPT N
		10 10			



GAS TYPES PRECISION*

AR							
AR	HE	O ₂	C ₂ H ₂	N ₂	CA	CO ₂	H ₂ RTX

*Always order together: 1 regulator + Gas types precision for stickers

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
- ★ O₂ application compatible

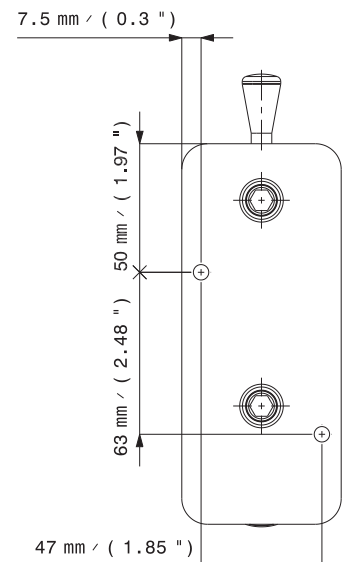
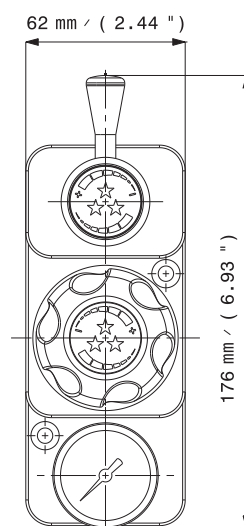
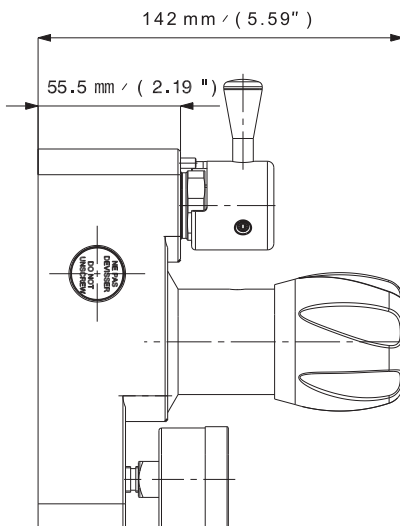
Special requirements on request

APPLICATIONS

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

KEY FEATURES

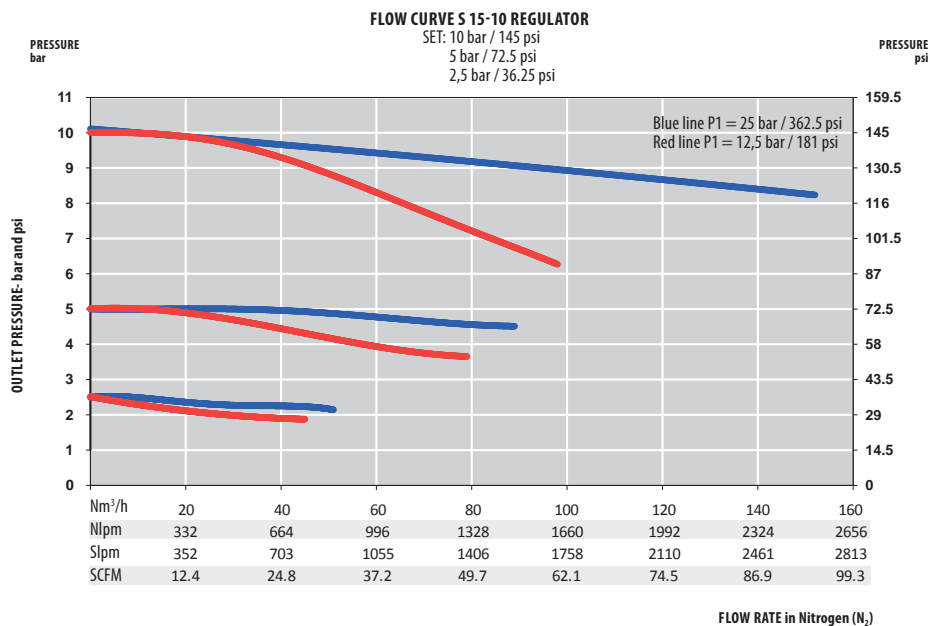
- Made up with a Series S 15 type regulator and a VLM 200 valve.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow 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

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

FLOW CURVES



PRODUCT CONFIGURATOR

M	S	Body Material		15	Outlet Pressure		End Connections		O-ring Material	Configuration	
		A	I		10	10	G	G	EPDM	A	A
		Aluminum	A		10 bar 145 psi		G 3/8 - G 3/8	G	EPDM - standard	Standard configuration	A
		Stainless steel	I				1/4 NPT - 1/4 NPT	N	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 - C₂H₂):
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
- ★ O₂ application compatible (see technical data)

Special requirements on request



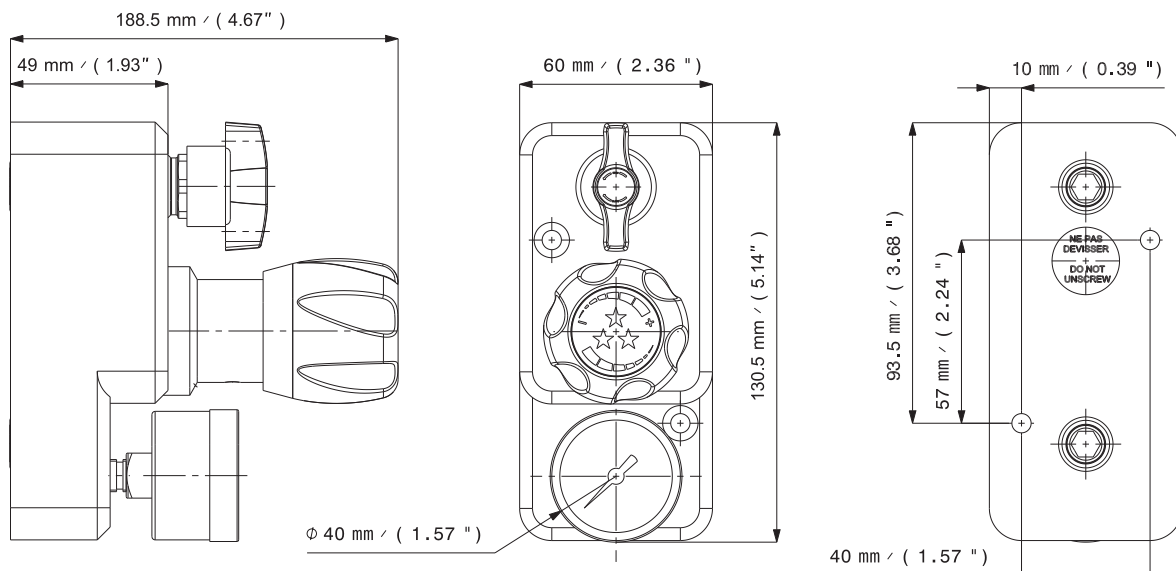
Acetylene version

APPLICATIONS

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

KEY FEATURES

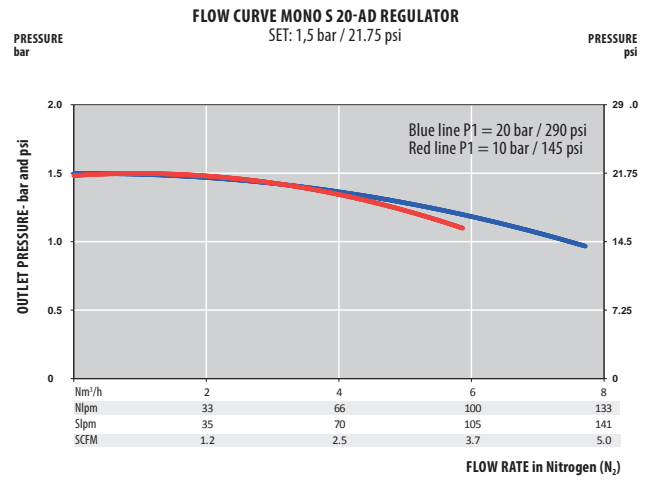
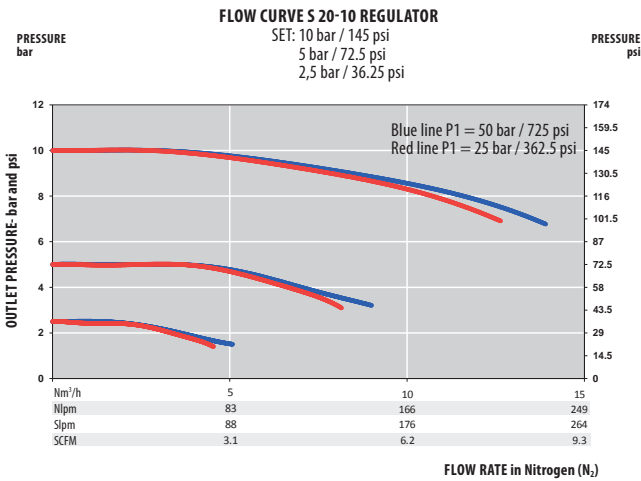
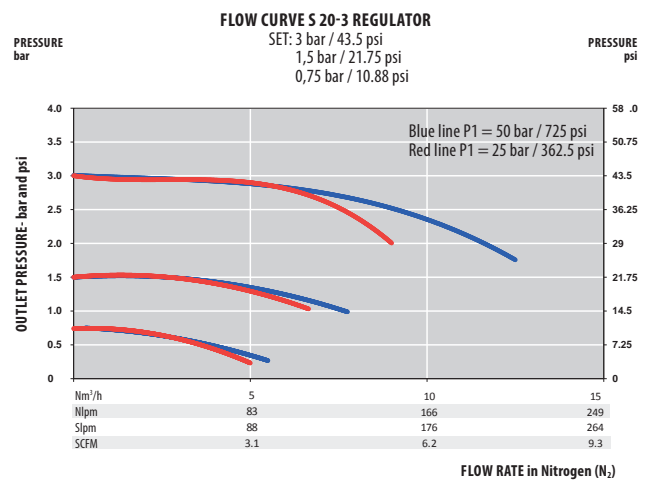
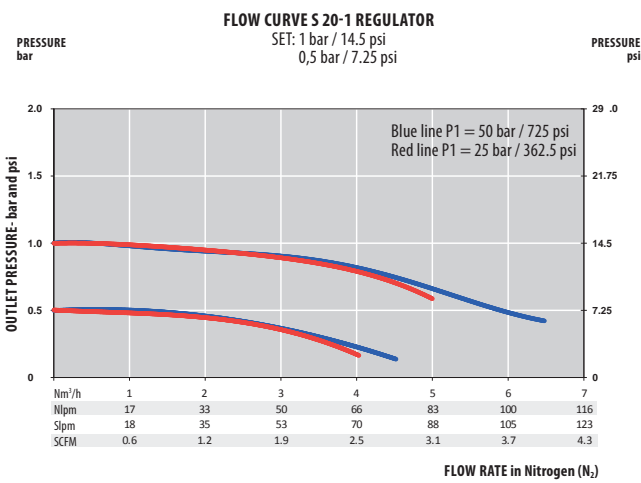
- Made up with a Series S 20 type regulator and a VM 20 valve.
- Compact outline dimensions and ergonomic design make this point of use suitable for laboratory furniture.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor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



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

Body Material		Outlet Pressure	End Connections	O-ring Material	Configuration
M	S	20	G	EPDM	A
	A	10	G	EPDM - standard	A
	A	1 bar 14.5 psi	1 G 3/8 - G 3/8		Standard configuration
	I	3 bar 44 psi	3 1/4 NPT - 1/4 NPT	FPM	
		10 bar 145 psi	10		
		Acetylene version 1,5 bar (21.75 psi)	AD		

*Inlet Down - outlet Top

SERIES S 75 | CONSTANT FLOW REGULATOR

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

- ★ Extremely accurate flow delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ O₂ application compatible (brass only)

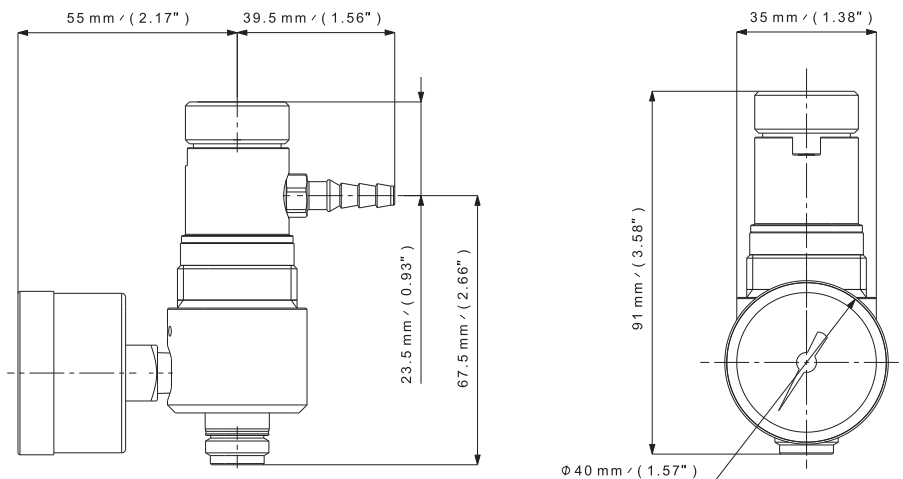
Special requirements on request

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 relief valve.



SPECIFICATIONS

Female ports	Inlet: C 10 or ¼ NPT Outlet: Hose barb or DR 6 or ¼" tube fitting	Weight	± 0,70 kg ± 1.54 lbs	Inlet pressure	200 bar 2900 psi
Seat seal	PCTFE	Leak rate	10 ⁻⁴ mbar ℓ/s He	Outlet pressure	3,5 bar (50 psi) - standard
O-ring	FPM - Standard EPDM	Temperature range	-20°C to +60°C -4°F to +140°F	Nominal Flow	Preset from 0,3 to 15 lpm
Piston	Brass (brass version) AISI 316L (SS version)	Gauges	High pressure (⅛ NPT)	Oxygen use	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	3.5	C10		HB		B05	FPM	2		
	Nickel plated brass	L		3.5 bar 50 psi - standard	3.5	5/8" x 18 UNF	C10	Hose barb (standard)	HB	3 lpm	B03	FPM - standard	With 315 bar	2
	Stainless steel	I				¼ NPT	N	6 mm tube fitting	DB6	5 lpm - standard 15 lpm	B05 B15	EPDM		

SERIES S 70 | CALIBRATION GAS REGULATORS

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

- ★ Extreme accurate flow delivery
- ★ Compact design
- ★ 1 inlet / 1 outlet
- ★ O₂ application compatible

Special requirements on request

APPLICATIONS

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

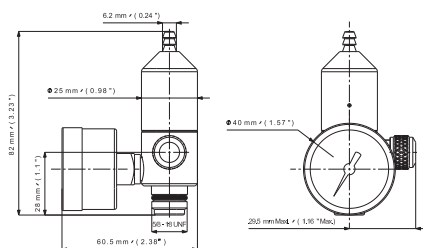
KEY FEATURES

- This piston regulator has 1 inlet/1 outlet.
- Exist as single (S 70)
- 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.

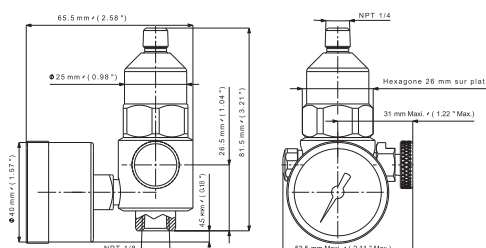


S 70 single stage

CK - CONTROL KNOB



PB - PUSH BUTTON



SPECIFICATIONS

Female ports	Inlet: C10 or 1/8 NPT Outlet: Hose barb or 1/8 NPT	Weight	± 0,31 kg ± 0.83 lbs	Inlet pressure	200 bar 2900 psi
Seat seal	PCTFE	Leak rate	1.10 ⁻⁴ mbar ℓ/s He	Outlet pressure	4,13 bar (60 psi) - standard 2,06 bar (30 psi) - option
O-ring	FPM - Standard EPDM	Temperature range	-20°C to + 60°C -4°F to + 140°F	Nominal Flow	preset from 0,25 to 7 lpm
Piston	Brass (brass version) AISI 303 (SS version)	Gauges	High pressure 1/8 NPT	Oxygen use	OK for brass and stainless steel
Actuation	Control knob 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		4,13 bar (60 psi) - standard	60	5/8" x 18 UNF	C10	Hose barb	HB	Control Knob standard	CK	FPM standard	With 1000 psi	1
	Stainless steel		2,06 bar (30 psi)	30	1/8 NPT - Female	N	1/8 NPT - Female	N1	Push Buton	PB	EPDM	With 3000 psi	2
							1/8 NPT - Male	N2				With 4000 psi	3
												With 315 bar	4

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
- ★ O₂ application compatible, up to 200 bar inlet pressure for stainless steel version
- ★ Inlet/outlet pressure gauges
- ★ 1 relief valve

Special requirements on request

To be connected with cylinder connectors



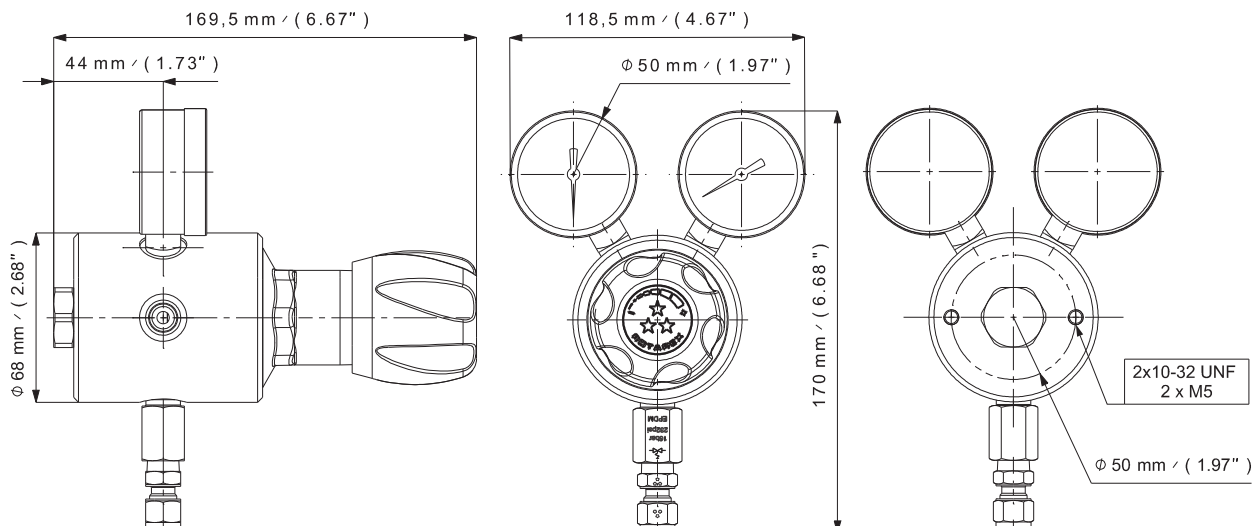
Refer to page 90

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

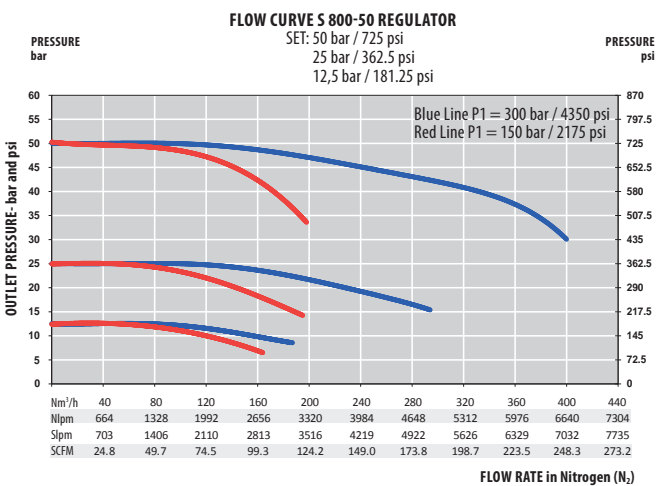
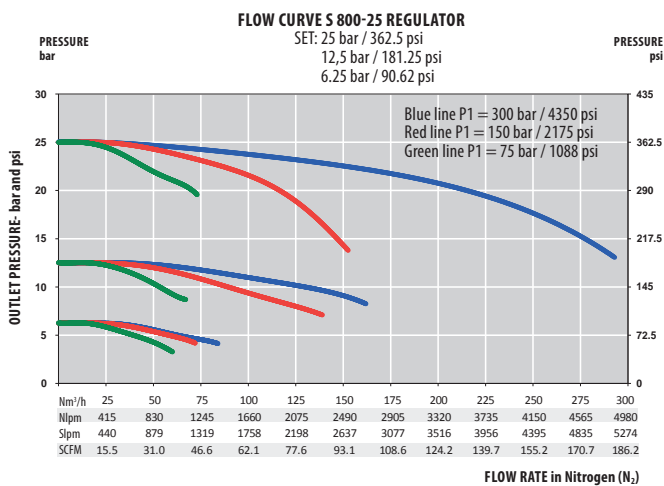
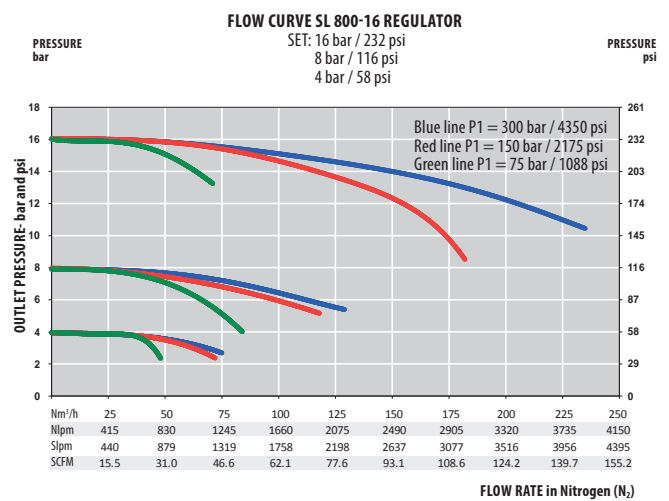
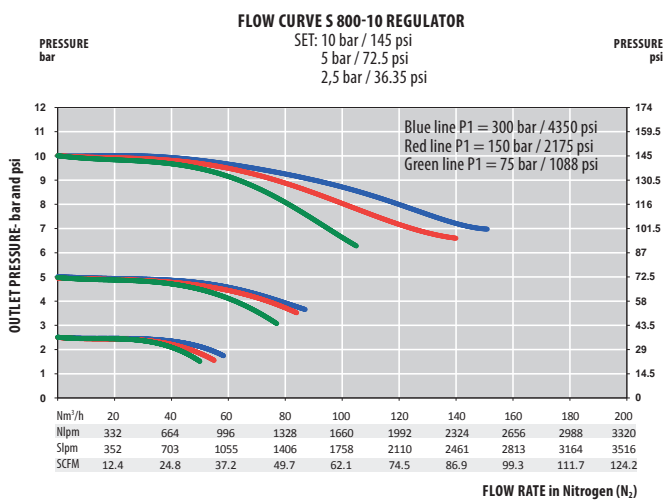
- Best-in-class pressure control with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. The BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow.
- BV Technology also increases the useful lifetime of the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



SPECIFICATIONS

Female ports	16 x 1.336 (inlet) - G 3/8 (outlet) or 1/4 NPT (inlet/outlet)	Weight	± 2,4 kg ± 5.3 lbs	Inlet pressure	300 bar 4350 psi
Seat seal	PCTFE	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	10/16/25/50 bar 145/232/363/725 psi
O-ring	EPDM - Standard FPM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	50/50/50/100 Nm ³ /h (N ₂)
Diaphragm	AISI 304 Hastelloy® (25/50 bar)	Gauges	High and low pressure (M10 x 1 or 1/4 NPT)	Oxygen use	Brass version: OK Stainless steel version: inlet 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 145 psi	10	16 x 1.336 - G 3/8	16	EPDM - Standard	With	1
	Chrome plated brass	L	16 bar 232 psi	16	1/4 NPT - 1/4 NPT	N	FPM		
	Stainless steel	I	25 bar 362.5 psi	25					
			50 bar 725 psi	50					

SERIES TGD 250 | SINGLE STAGE HP HIGH FLOW REGULATOR

- Diaphragm single stage
- Purity up to 5.5
- Inlet pressure: 230 bar (3336 psi)
- Outlet pressure: 20 bar (290psi)

- ★ High flow regulator
- ★ 1 inlet / 1 outlet
- ★ O₂ 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

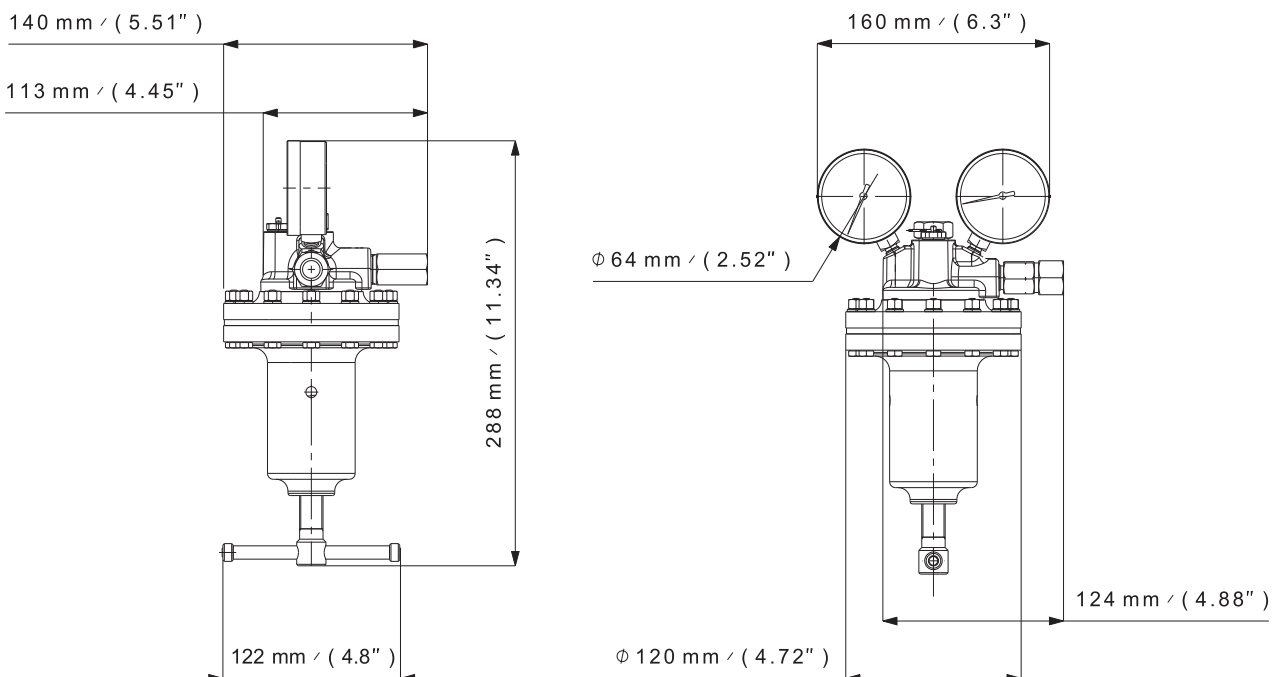
- Exceptionally durable
- Medical CE version available (see Meditec catalogue).



To be connected with cylinder connectors



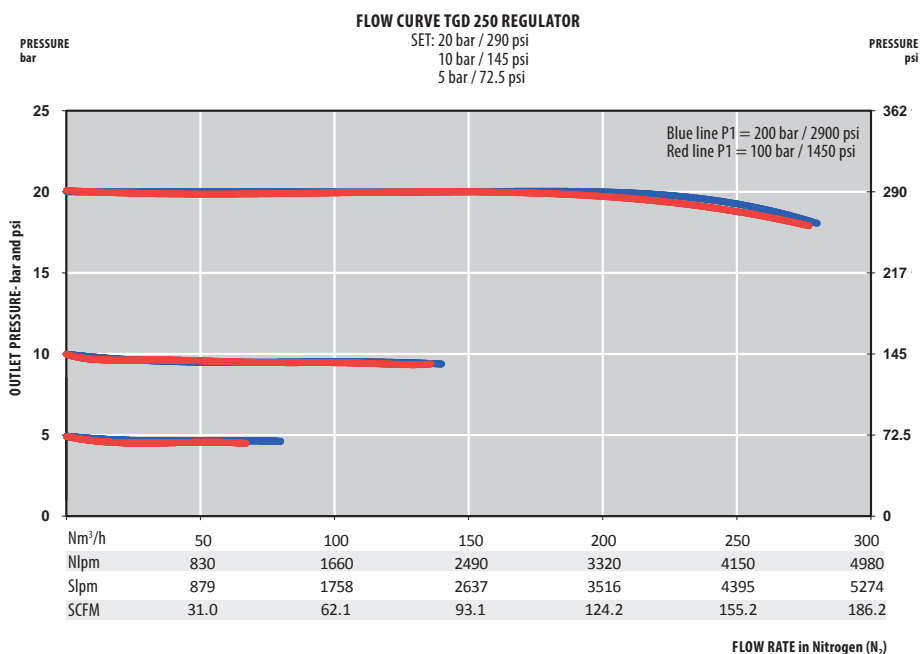
Refer to page 90



SPECIFICATIONS

Ports	inlet: 16 x 1.336 (Female) outlet: M20 x 1,5 (Male)	Weight	± 4,6 kg ± 10.1 lbs	Inlet pressure	230 bar 3336 psi
Seat seal	PCTFE	Leak rate	10 ⁻³ mbar ℓ/s He	Outlet pressure	20 bar 290 psi
Diaphragm	Butyl	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	250 Nm ³ /h (N ₂)
Body Material	Raw brass	Gauges	High and low pressure (M10 x 1)	Oxygen use	OK

FLOW CURVES



PRODUCT CONFIGURATOR

		Inlet Connection	Gauges	
TGD	250	16	1	
		16 x 1.336	16	With 1

SERIES S 20 AD | LINE REGULATOR FOR ACETYLENE (C₂H₂)

- 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

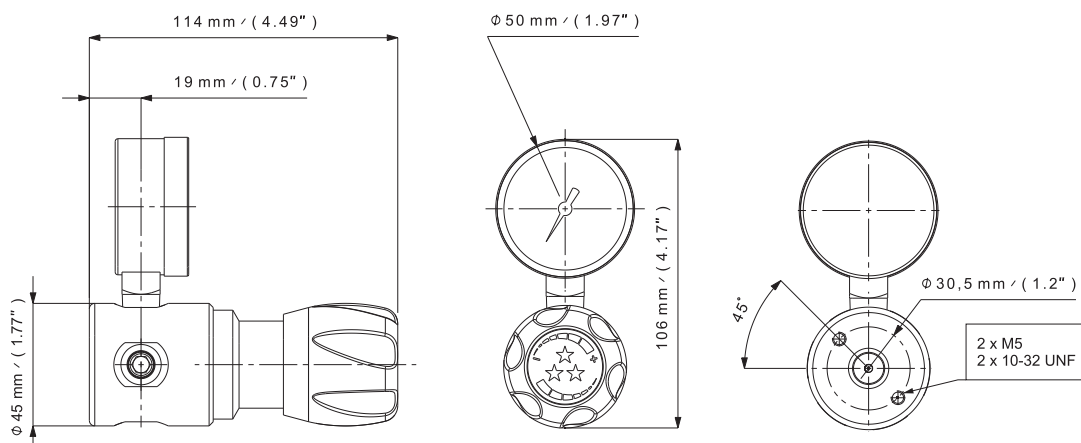
Special requirements on request

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

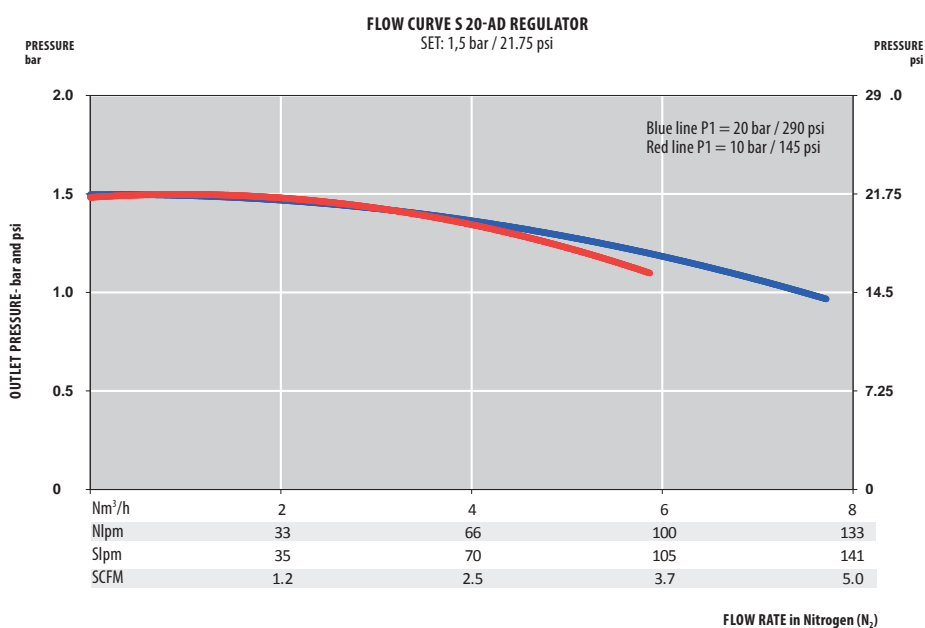
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- With its compact design, the rear threads and its fixing ring (option) it can be used for wall or panel mounting.
- Multiple mounting positions possible due to multiple inlet ports.
- For use with acetylene: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



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

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

SERIES S 25 AD | CYLINDER REGULATOR FOR ACETYLENE (C₂H₂)

- 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



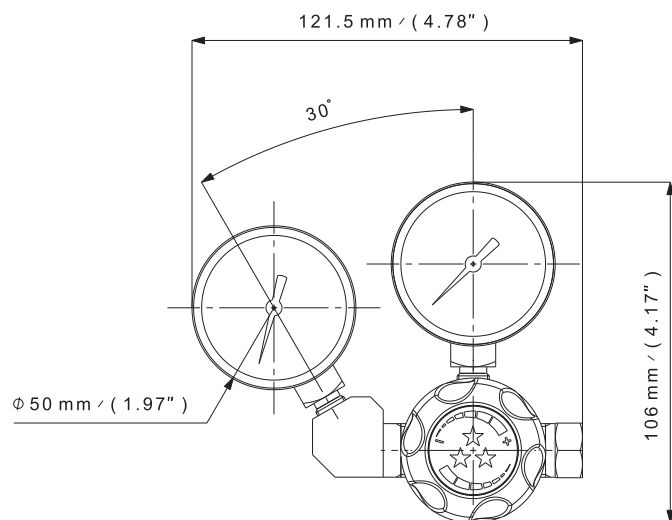
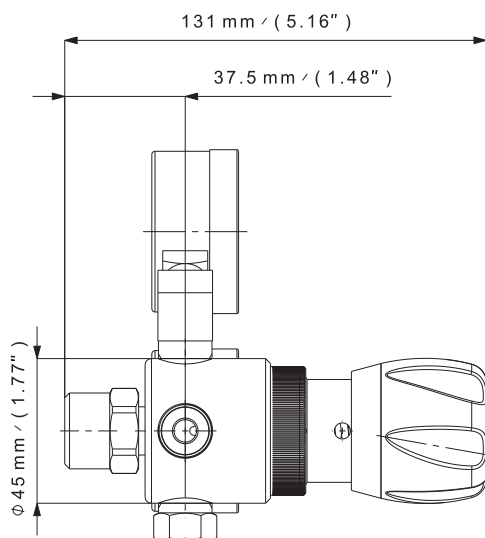
Right view

APPLICATIONS

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

KEY FEATURES

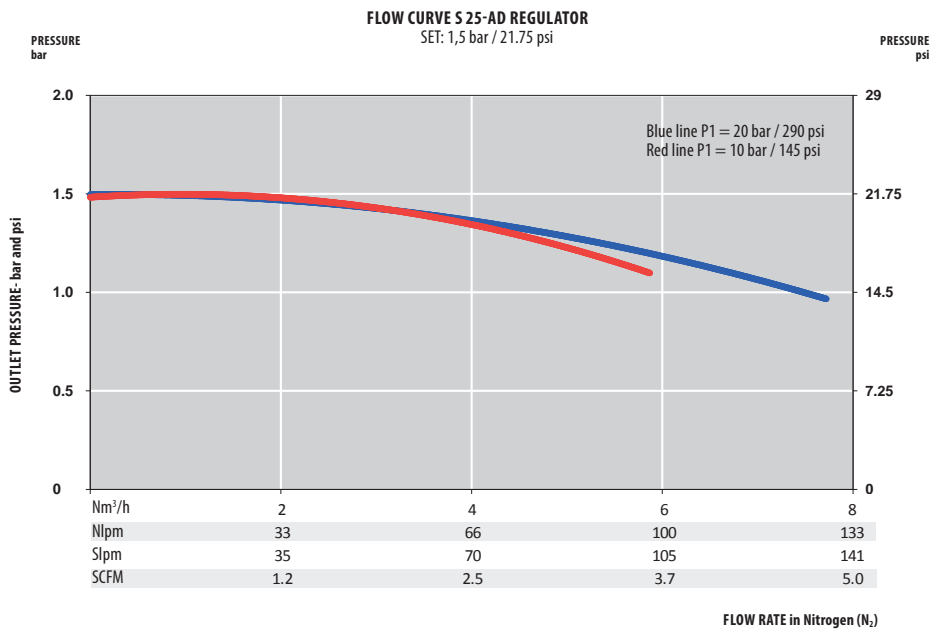
- Bellow technology provides a large range of accurate outlet pressures in a compact design.
- The Series S 25 could be equipped with several cylinder connection types.
- 2 gauges for high and low pressure.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor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



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

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

LABLINE S 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 - C₂H₂): P1 = 20 bar (290 psi) P2 = 1,5 bar (21.75 psi)

- ★ Accurate pressure delivery
- ★ Compact design
- ★ 1 inlet / 2 outlets
- ★ Modular concept
- ★ O₂ 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



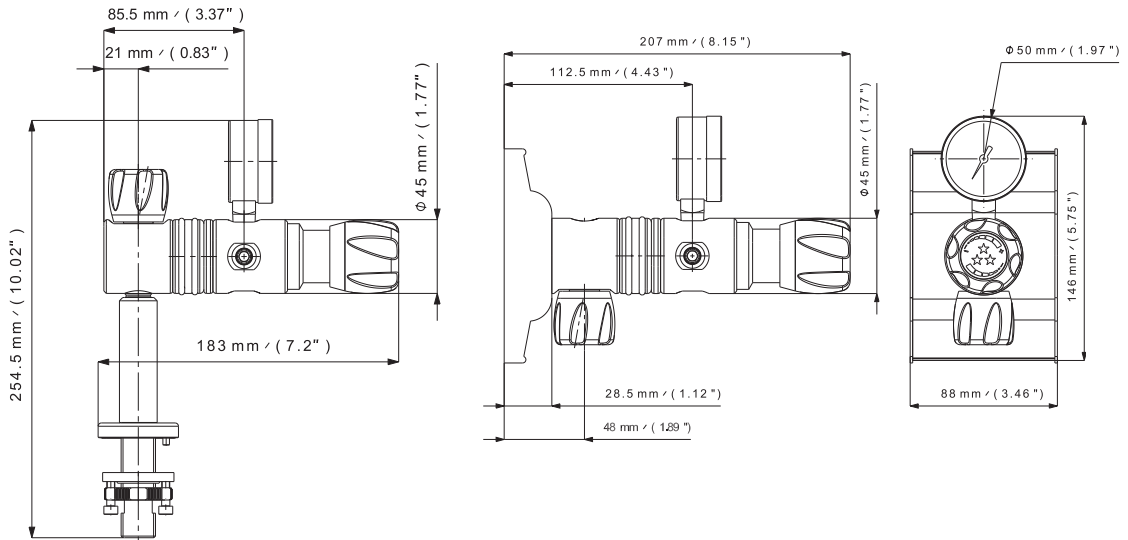
Acetylene version



M version w/ 1/4V valve

EMB version w/ MV valve

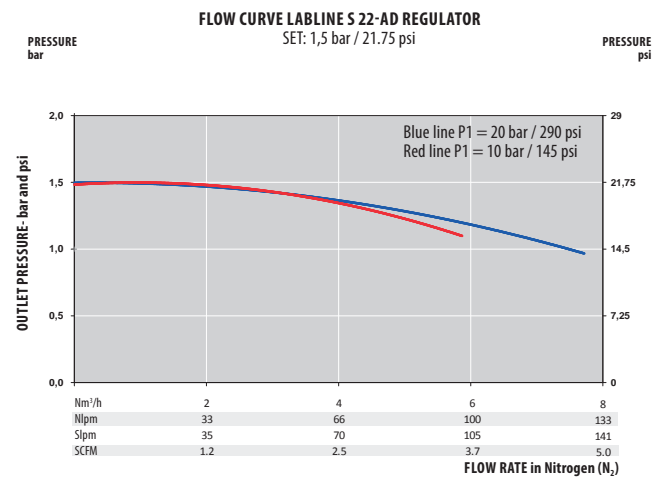
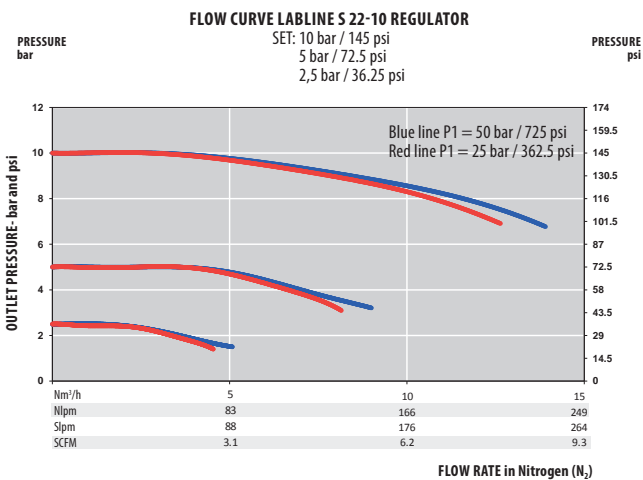
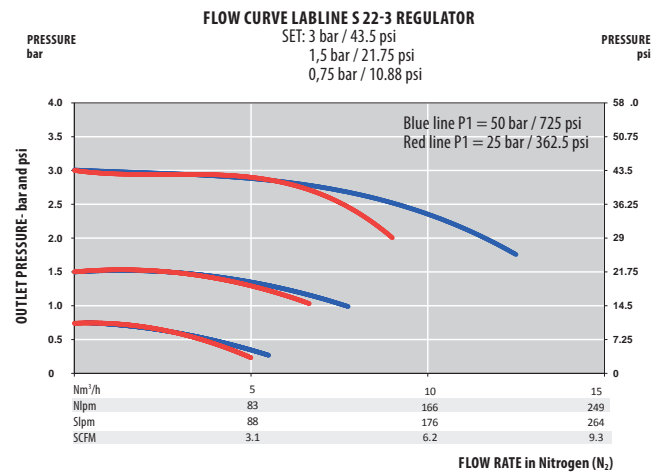
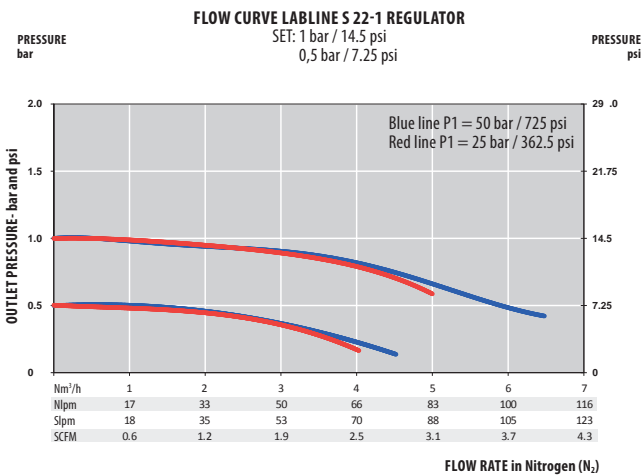
COL version w/ MV valve



SPECIFICATIONS

Female ports	F: G ¼ (inlet-COL version) G ¾ or ¼ NPT (inlet) G ¾ or ¼ NPT (outlet)	Weight	± 1,5 kg ± 3.3 lbs	Inlet pressure	50 bar (725 psi) AD: 20 bar (290 psi)
Seat seal	EPDM	Leak rate	10 ⁻⁸ mbar ℓ/s He	Outlet pressure	1/3/10 bar 14.5/44/145 AD: 1,5 bar (21.75 psi)
O-ring	EPDM - Standard FPM	Temperature range	-20°C to + 60°C -4°F to + 140°F	Nominal Flow	2,2,5/3,5 Nm ³ /h (N ₂) AD: 1 Nm ³ /h
Diaphragm	Hastelloy®	Gauges	Low pressure (M10 x 1 or ¼ NPT)	Oxygen use	inlet pressure ≤ 30 bar max. for brass and stainless steel
Bellow	Bronze or 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	1	¼V
	L		With Metal Plate	M	G	1	¼ turn valve
	L		1 bar / 14.5 psi	G ¾ - Female (outlet)	EPDM - standard	1	¼V
	I		With Aluminum stand	EMB	N		Multi-turn valve
	I		3 bar / 44 psi	¼ NPT (outlet)	FPM		MV
			With pillar*	COL			
			10 bar / 145 psi				
			Acetylene version	AD			
			1,5 bar / 21.75 psi	Note: inlet G ¼ with COL version			

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 - C₂H₂):
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
- ★ O₂ application compatible (see technical data)

Special requirements on request



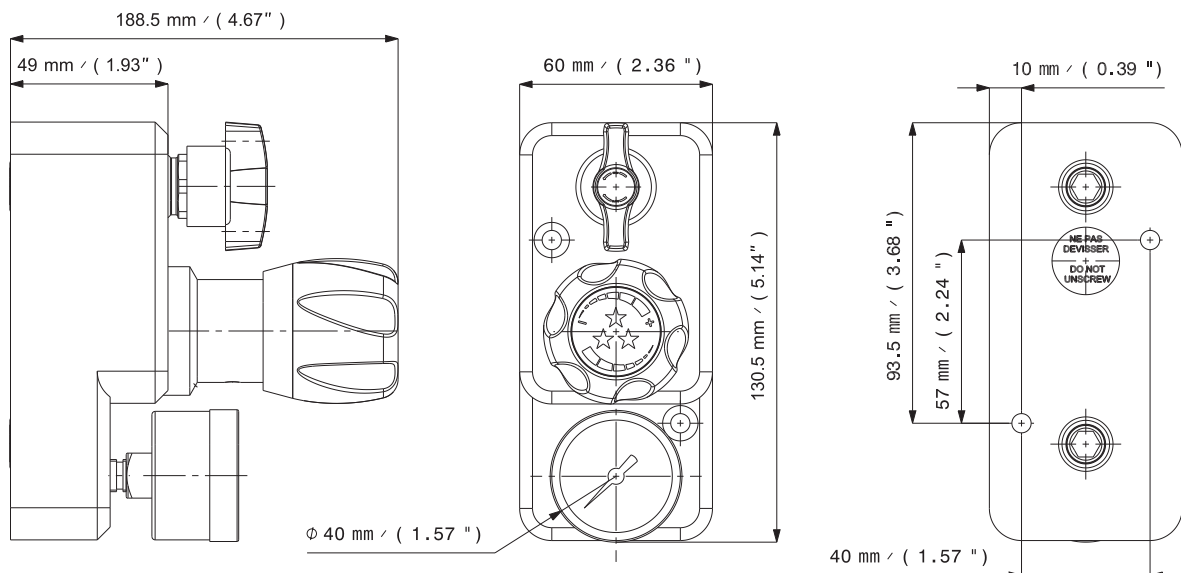
Acetylene version

APPLICATIONS

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

KEY FEATURES

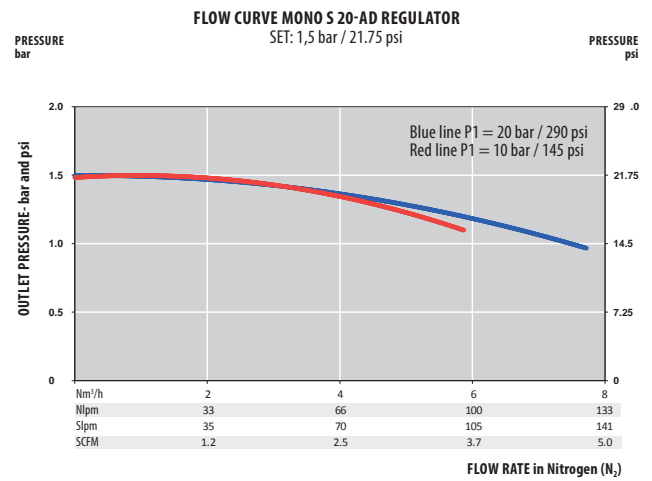
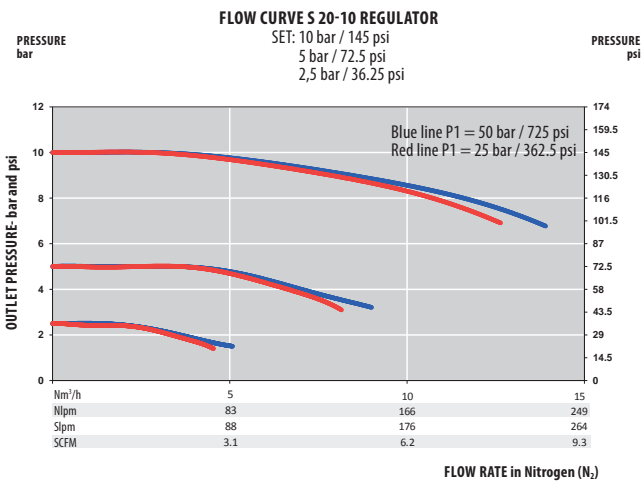
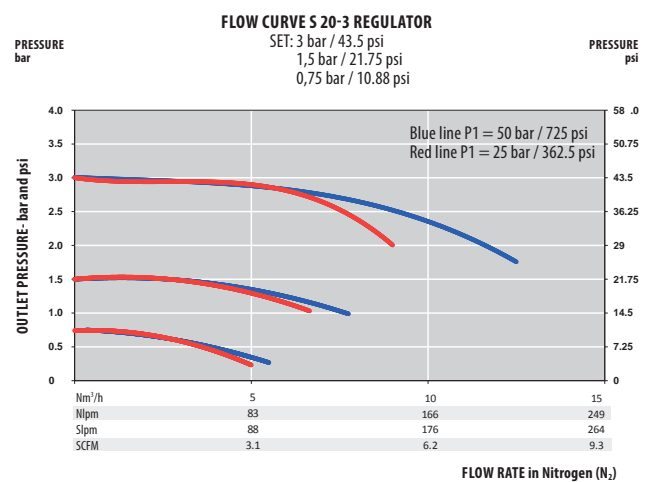
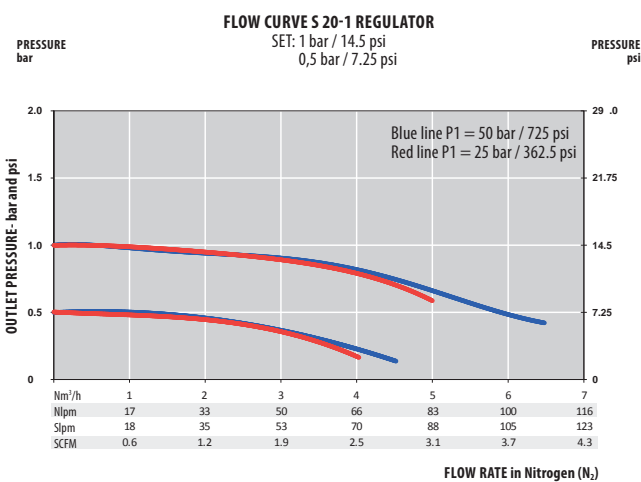
- Made up with a Series S 20 type regulator and a VM 20 valve.
- Compact outline dimensions and ergonomic design make this point of use suitable for laboratory furniture.
- Acetylene version also available.
- For use with acetylene, this product must imperatively be installed with a flash back arrestor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



SPECIFICATIONS

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

FLOW CURVES



PRODUCT CONFIGURATOR

M		S		Body Material		Outlet Pressure	End Connections		O-ring Material	Configuration		
		A	A	20	10	10	G	G	EPDM	A	A	
		Aluminum	A			1 bar 14.5 psi	1	G 3/8 - G 3/8	G	EPDM - standard	Standard configuration	A
		Stainless steel	I			3 bar 44 psi	3	1/4 NPT - 1/4 NPT	N	FPM		
						10 bar 145 psi	10					
						Acetylene version 1,5 bar (21.75 psi)	AD					

*Inlet Down - outlet Top

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 - C₂H₂):
P1=1,5 bar (21.75 psi)
P2=0,8 bar (12 psi)

- ★ 1 inlet / 1 outlet
- ★ Rear thread for panel mounting
- ★ O₂ application compatible
- ★ High flow

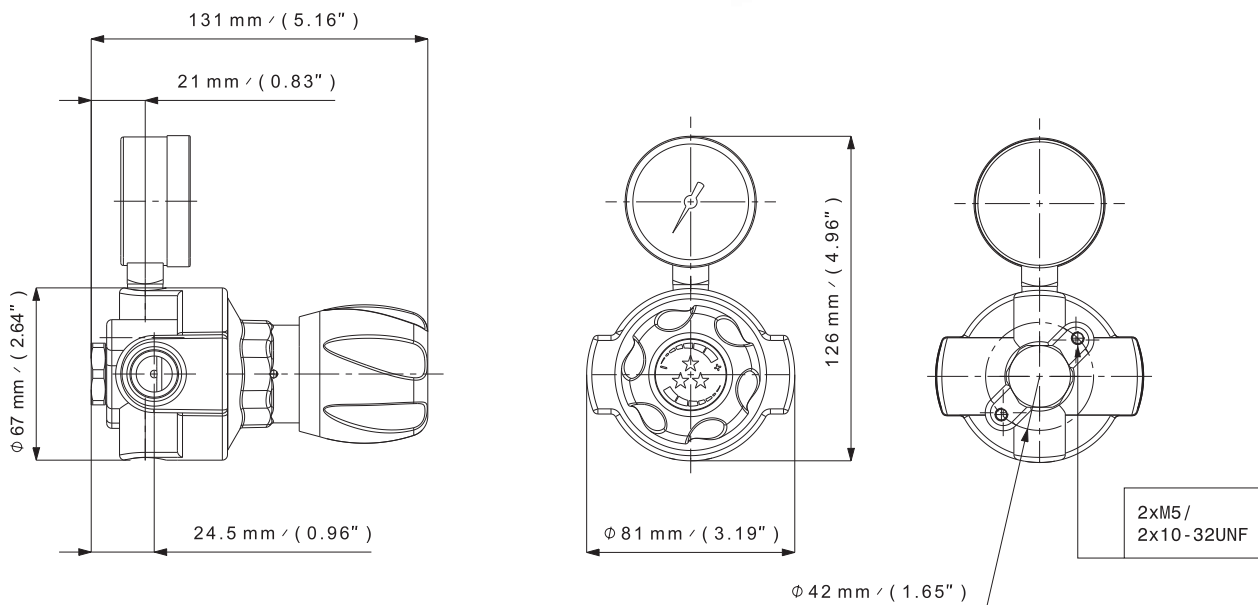
Special requirements on request

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

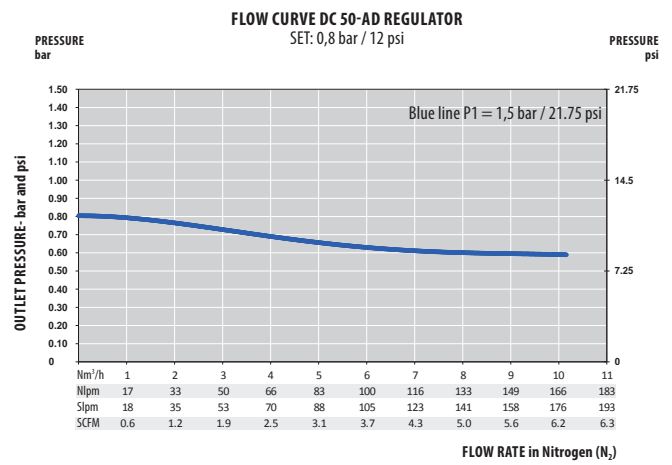
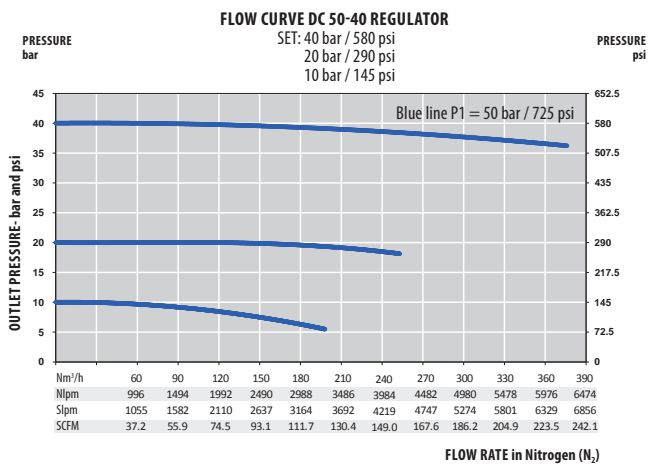
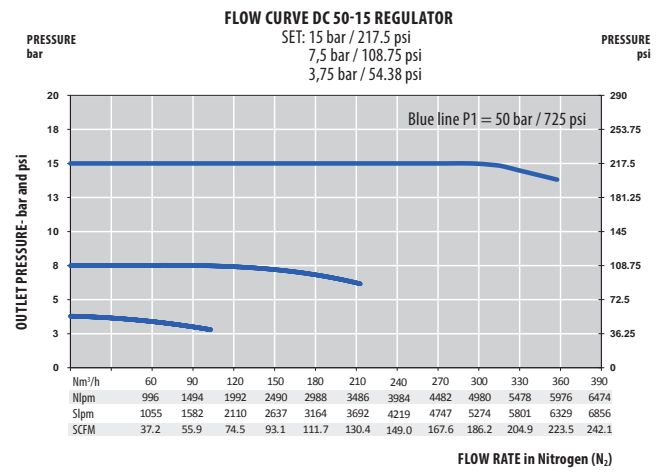
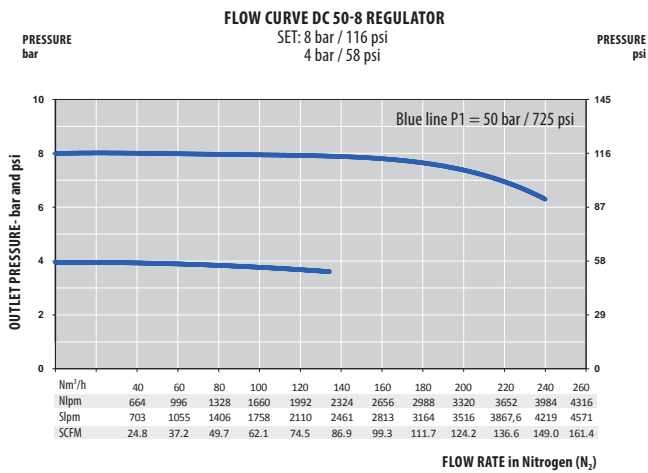
- Low pressure regulator with high flow, without vibration.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure is minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- reduced strain on the seat increases regulator life and reduces the ownership cost.
- Acetylene version available:
P1=1,5 bar/P2=0,8 bar/Q=10 Nm³/h
- For use with acetylene this product must be installed with a flash back arrestor complying with the standard EN 730 located downstream.



SPECIFICATIONS

Female ports	G ½ or ½ NPT (inlet/outlet)	Weight	± 1,4 kg ± 3.1 lbs	Inlet pressure	50 bar (725 psi) AD: 1,5 bar (21.75 psi)
Seat seal	EPDM	Leak rate	10 ⁻³ mbar ℓ/s He	Outlet pressure	8/15/40 - 0,8 bar (AD) 116/217/580 - 12 psi (AD)
O-ring	EPDM - Standard FPM	Temperature range	- 20°C to + 60°C - 4°F to + 140°F	Nominal Flow	150/300/300 Nm ³ /h (N ₂) 10 Nm ³ /h (AD)
Diaphragm	EPDM	Gauges	Low pressure (G ¼ or ¼ NPT)	Oxygen use	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 116 psi	8	G ½ - G ½	G	EPDM - Standard	Chrome plated brass	L	With	1
			15 bar 217 psi	15	½ NPT - ½ NPT	N	FPM	Raw brass	LB		
			40 bar 580 psi	40							
			Acetylene version 0,8 bar (12 psi)	AD							

SERIES VD | DIAPHRAGM LINE VALVE

- Low to high-pressure line valves for various pure gas
- High leak tightness through diaphragm sealing
- a consistent design for all versions

SHUT-OFF VALVE

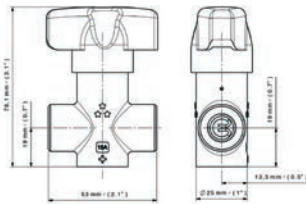
- ★ From 50 to 300 bar inlet pressure
- ★ Diaphragm seal
- ★ ¼ turn handwheel
- ★ O₂ compatible (only with Brass version)

KEY FEATURES

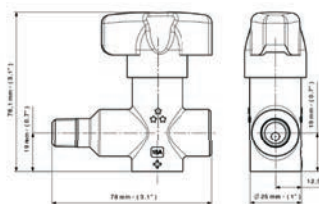
- For gas purity up to 6.0
- Hastelloy® diaphragm for tightness and gas compatibility
- ¼ turn ergonomic handwheel
- Chrome-plated brass or stainless steel
- 3 versions : 50, 200 and 300bar inlet working pressure
- 3 orientations : female-female, male-female, female-male
- Available with 1/4NPT or G3/8 connections
- With rear threads for panel mounting



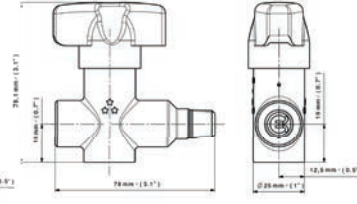
¼ NPT FF & G³/₈" FF



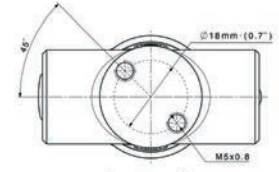
¼ NPT MF



¼ NPT FM



REAR MOUNTING



SPECIFICATIONS

Ports	¼ NPT : FF, MF or FM G ³ / ₈ : FF	Weight	310g	Inlet pressure	50 / 200 / 300 bar
Seat seal	PCTFE	Leak rate	10 ⁻⁸ mbar l/s He	Flow coefficient (Kv)	0,17 Kv / 0,2 Cv
Diaphragm	Hastelloy®	Temperature range	-20° to +60 °C	Oxygen use	Ok up to 310 bar (brass version only)
Bottom tapered	OK 2x M5 at Ø18mm	Seat orifice size	Ø 4mm		

PRODUCT CONFIGURATOR

V	D	Body Material		Inlet Pressure		Orientation		Connection		Handwheel	
		B	S	50	200 / 310	FF	MF / FM	N	G	¼T	¼T
		Chrome plated brass	B	50 bar	50	Female:Female	FF	¼NPT	N	¼ turn	¼T
		Stainless steel	S	200 bar	200	Male - Female (only with ¼NPT)	MF	G ³ / ₈	G		
				310 bar	310	Female - Male (only with ¼NPT)	FM				

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
- ★ O₂ application compatible (see technical data)

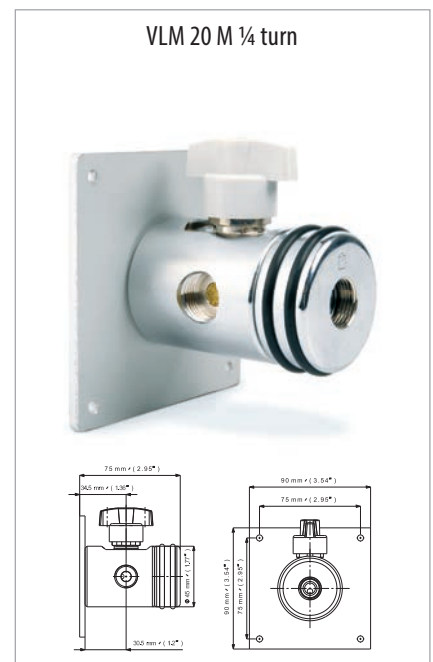
Special requirements on request

KEY FEATURES

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

OPTIONS

- ¼ turn version
- M: G ¾" inlet
- Panel mounting board
- Point of use regulator
- Many inlet / outlet fittings available



SPECIFICATIONS

Seat seal	PCTFE / EPDM	Weight	± 0,95 kg ± 2.10 lbs	Flow coefficient	Cv 0.14 Kv 0,12
O-ring	EPDM - Standard FPM	Leak rate	10 ⁻⁸ mbar ℓ/s He	Inlet pressure	50 bar 725 psi
Bottom tapered	OK	Temperature range	-20°C to + 50°C -4°F to + 122°F	Ports	G ¾" (inlet/outlet)
Diaphragm	Hastelloy®	Seat orifice size	Ø 4 mm	Oxygen use	Brass: OK Stainless steel: only E / M versions with side inlet

PRODUCT CONFIGURATOR

V	Body Material		Version		End Connections		O-ring Material	Hand wheel					
	LM20	IM20	right angle	with plate	E	M	G	N	EPDM	FPM	¼ T	MT	
	Chrome plated brass	Stainless steel	right angle	with plate	E	M	G ¾"	¼ NPT on demand	G	N	EPDM - standard	¼ turn	Multi-turn

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
- ★ O₂ 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

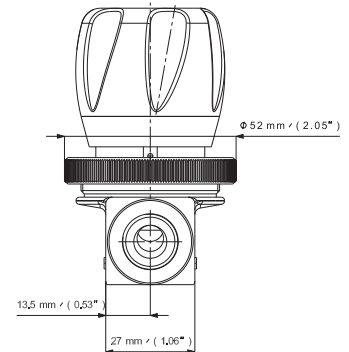
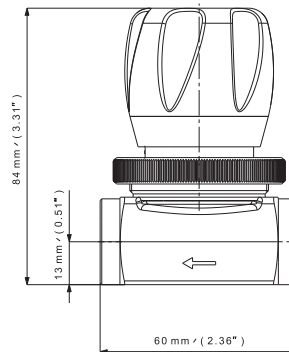
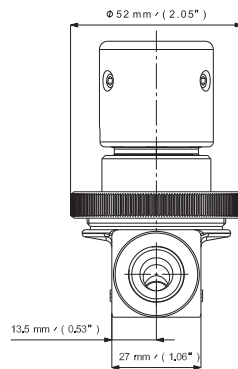
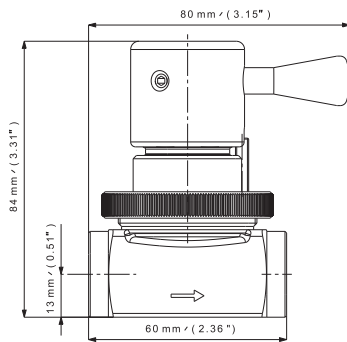
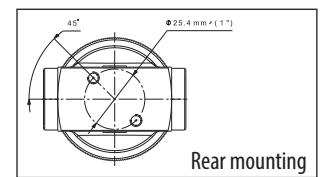
- Choice of two inlet/outlet connections available (see configurator)



¼ turn version



Multi-turn version



SPECIFICATIONS

Female ports	G ¾ or ¼ NPT (inlet/outlet)	Leak rate	10 ⁻⁸ mbar ℓ/s He	Inlet pressure	45 bar 650 psi
Seat seal	PCTFE	Temperature range	-20°C to +50°C -4°F to +122°F	Flow coefficient	Cv 0.58 Kv 0.50
Diaphragm	Hastelloy®	Seat orifice size	Ø 8 mm	Oxygen use	OK for brass and stainless steel
Bottom tapered	OK				
Weight	± 0,75 kg ± 1.65 lbs				

PRODUCT CONFIGURATOR

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

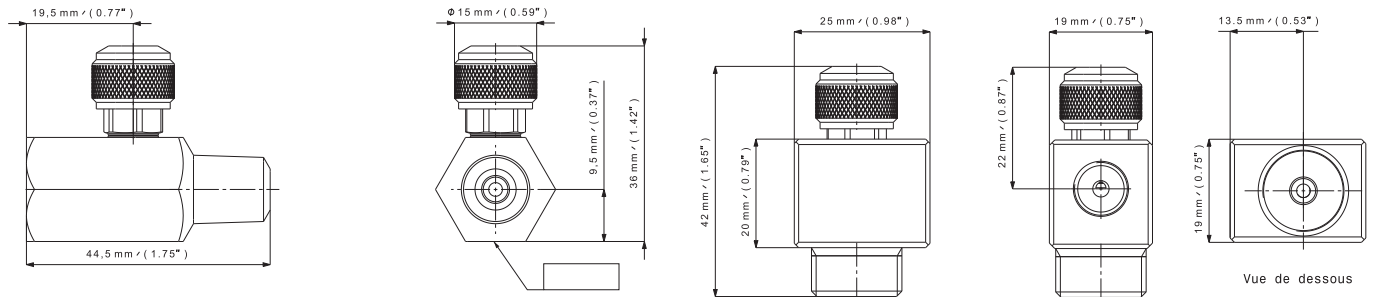
Special requirements on request

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

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

PRODUCT CONFIGURATOR

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

*Only available with end connections "G"

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

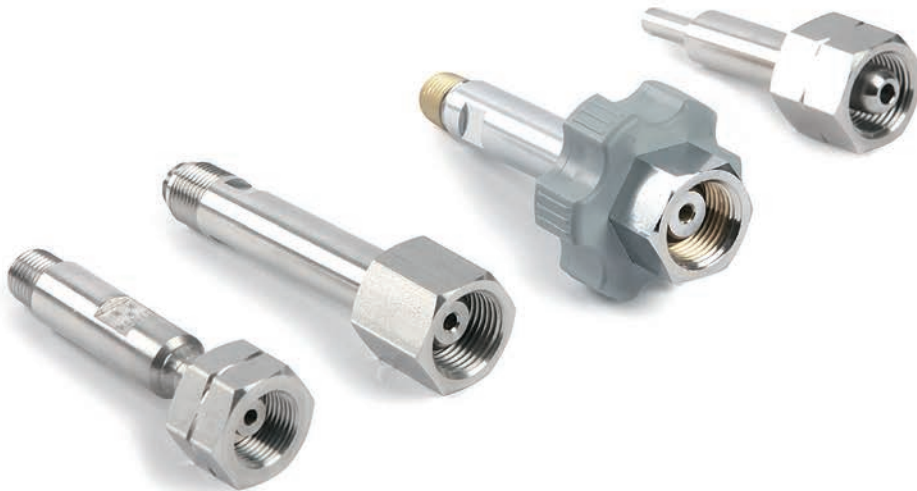


KEY FEATURES

- 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
- Mounted on flexible hose or pigtail

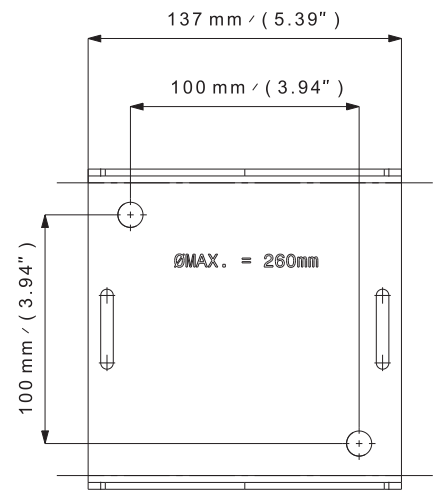
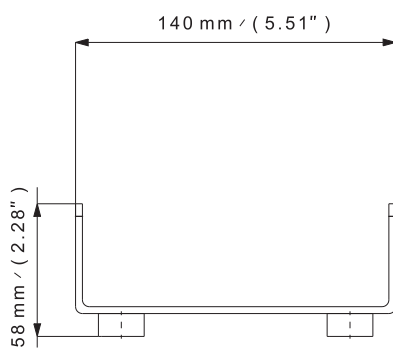
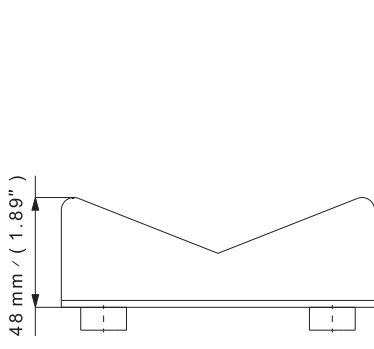


GAS CYLINDER HOLDER

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



Rear view

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 (AT 20°C ROOM TEMPERATURE)

GAS	B or SS 316L	PA 6.6	PTFE	PCTFE	NBR	FPM (VITON®)	EPDM	
Acetylene	C_2H_2	B		OK	OK		OK	
Argon	Ar	B	OK	OK	OK	OK	OK	
Butane	C_4H_{10}	B	OK	OK	OK	OK		
Carbon dioxide	CO_2	B	OK	OK	OK		OK	
Carbon monoxide	CO	B	OK	OK	OK		OK	
Ethane	C_2H_6	B	OK	OK	OK	OK		
Helium	He	B	OK		OK	OK	OK	
Hydrogen	H_2	B	OK		OK	OK	OK	
Krypton	Kr	B	OK	OK	OK	OK		
Methane	CH_4	B	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	
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	

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Hastelloy® is a registered trademark of HAYNES INTERNATIONAL Inc.

CONVERSION CHARTS

FLOW CONVERSION

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

PRESSURE CONVERSION

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

LEAK RATE

	Atm.cc/sec	mbar.l/sec	Atm.mm ³ /sec	Atm.cc/min	Atm.L/min	Atm.m ³ /min	Atm.cu.ft/yr	torr.l/sec
Atm.cc/sec	1	1.013	1000	60	0.06	6.00E-05	1116	0.759
mbar.l/sec	0.987	1	987	59.23	0.059	5.90E-05	1101	0.75
Atm.mm ³ /sec	0.001	0.001	1	0.06	6.00E-05	6.00E-08	1.116	0.0007
Atm.cc/min	0.0167	0.017	16.67	1	0.001	1.00E-06	18.6	0.012
Litre/min	16.67	16.88	16667	1000	1	0.001	18601	12.67
Atm.m ³ /min	16667	16883	16666667	1000000	1000	1	18601190	12664
cu ft/yr	0.0009	0.0009	0.896	0.054	5.37E-05	5.37E-08	1	0.0007
torr.l/sec	1.316	1.33	1316	78.96	0.0789	7.89E-05	1468	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

A FULL LINE OF GAS CONTROL SOLUTIONS



COMPLETE SOLUTIONS FROM SOURCE TO PROCESS.

ROTAREX is helping engineers worldwide to get better gas results: from ultra high purity production and medical care facilities to industrial and LPG applications, as well as alternative energy vehicles, fire suppression, diving, aerospace, cryogenics, laboratory, petro-chemical and welding. ROTAREX applies almost 100 years of know-how and experience to custom design, develop and manufacture the high performance valves, regulators and fittings to suit your needs, all in one hand. Discover the difference ROTAREX can make in your world.

CYLINDER VALVES

EQUIPMENT

FIRETEC

AUTOMOTIVE

LPG/SRG

MEDITEC



ULTRA HIGH PURITY VALVES



MEDICAL VALVES & EQUIPMENT



INDUSTRIAL CYLINDER VALVES



REFRIGERANT CYLINDER VALVES



PRESSURE REGULATORS



SUPPLY & SWITCH OVER BOARDS



LINE VALVES



FITTINGS & ADAPTORS



**FIXED INSTALLATION
FIRE SYSTEMS**



**OBJECT FIRE SUPPRESSION
SYSTEMS**



**AUTOMOTIVE VALVES
& REGULATORS**



WATER CARBONATION



**LPG CYLINDER VALVES
& REGULATORS**



**DIGITAL MEASUREMENT
SYSTEMS**

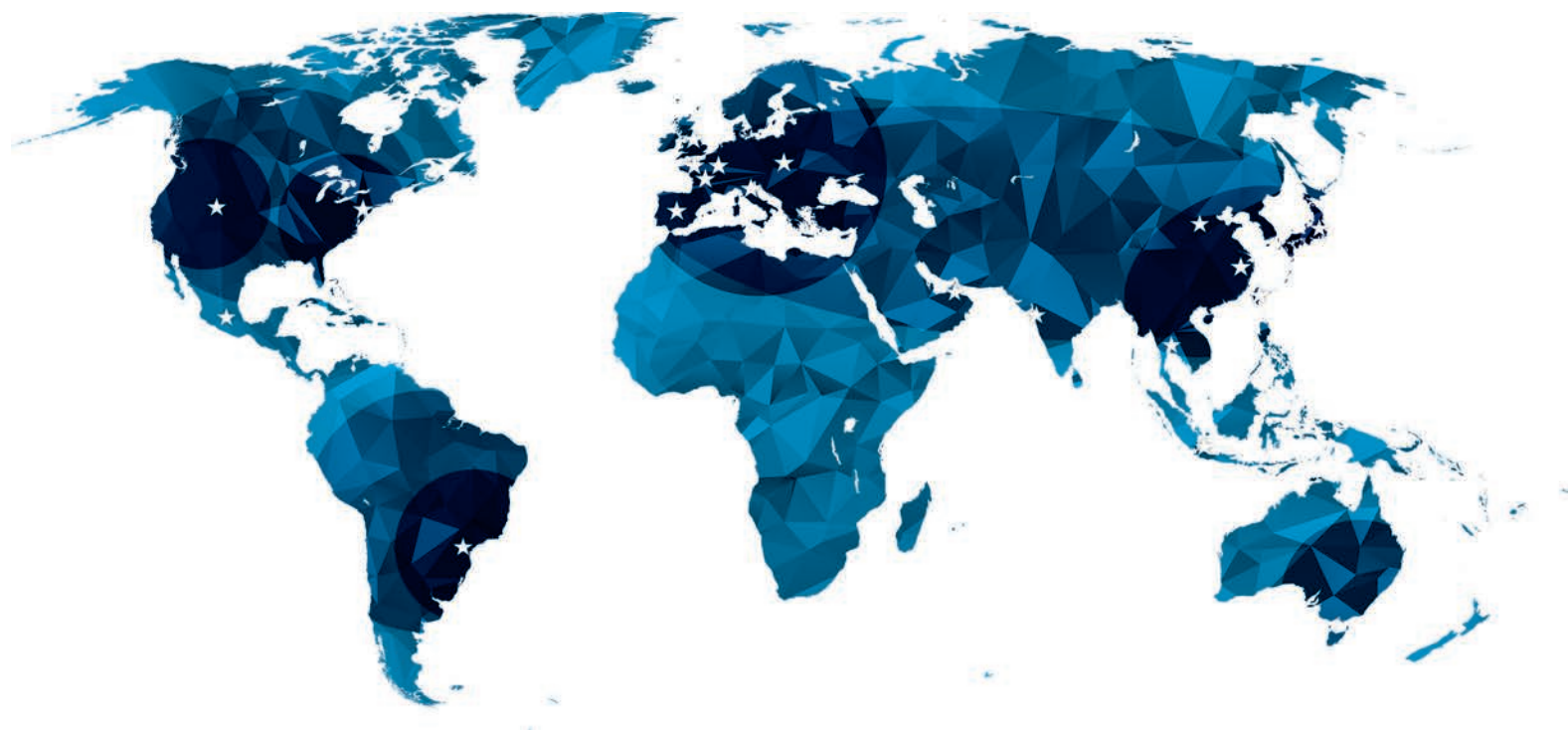


PLASTIC INJECTION MOULDING



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