

The model S-500 is a gas or air pressure reducer-regulator for a variety of applications.

It features a protection system to keep the outlet pressure regulated by a shutoff (SSV) system that can be reseted manually (only for models 527 and 525). This system is used in cases where it isn't possible to install a vent for safety relief.

This is a pilot-operated valve that uses fluid to operate.

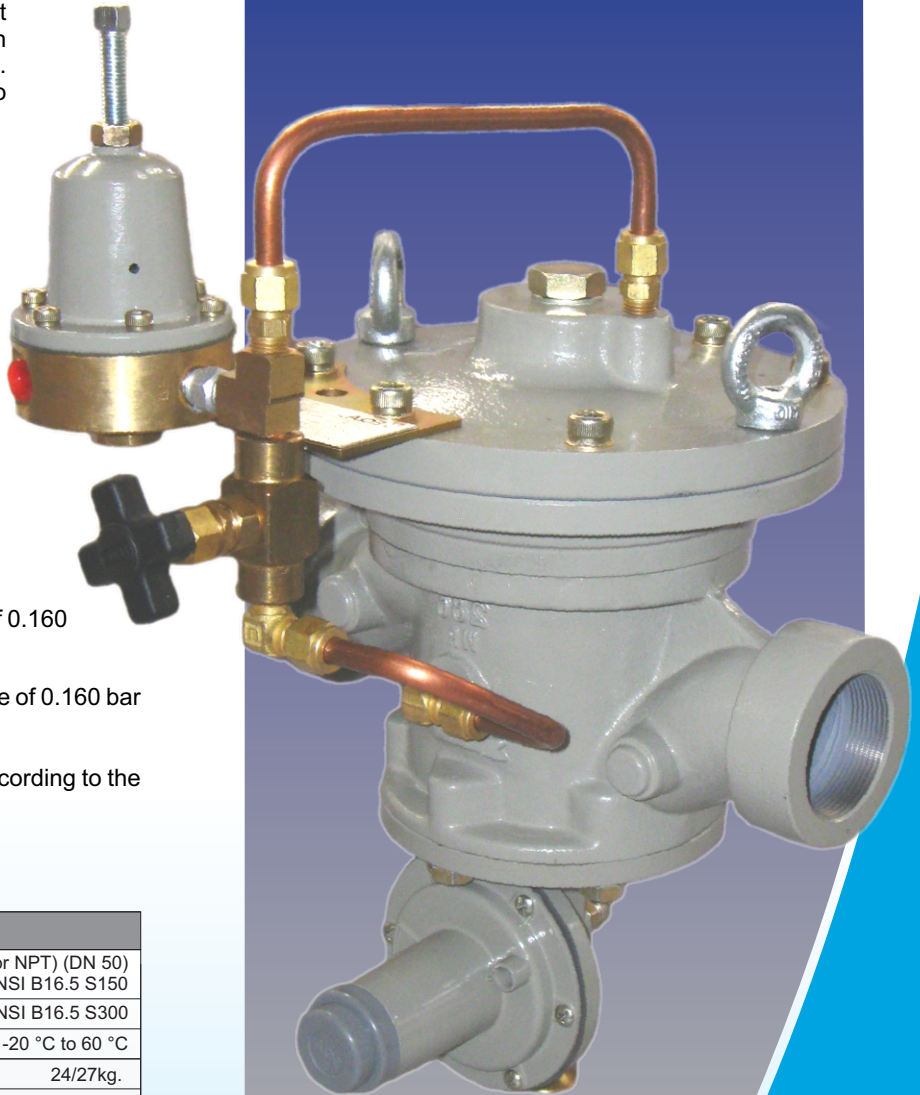
To cover all regulated outlet pressure ranges, the pilot is used according to the following characteristics:

- Low pressure from 0.160 bar to 0.5 bar.
(For outlet pressures less than 0.160 bar consult sales personnel)
- Medium pressure from 0.5 bar to 7 bar.
- High pressure from 7 bar to 40 bar.

Regulators with SSV (527 and 525) work in a range of 0.160 bar to 4 bar outlet pressure.

Regulators without SSV (502 and 503) work in a range of 0.160 bar to 40 bar outlet pressure.

If required, a silencer may be added to the system according to the acoustic pressure generated by the valve.



TECHNICAL DATA

Connections	Models 527 / 502	Threaded 2" (BSP or NPT) (DN 50) Flange 2" ANSI B16.5 S150			
	Models 525 / 503	Flange 2" ANSI B16.5 S300			
Operating Temperature	-20 °C to 60 °C				
Weight	Model 527	25/28 kg.	Model 502	24/27kg.	
	Model 525	36 kg.	Model 503	36 kg.	
WORKING RANGE					
		527	525	502	503
Máx. Inlet Pressure (bar)		19	36	19	50
Máx. Outlet Pressure (bar)		4	4	15	40
MATERIALS					
Body	(502/527) Nodular cast iron ASTM A 536 GR. 65-45-12 (IRAM 700 42012). (503/525) Cast steel ASTM A-216 WCB.				
Diaphragm	NBR				
Seats	AISI 410 Stainless steel				
Seals and gaskets	NBR				

Pressure Regulator

EQA 502/503/527/525

Note: Consult flow rates for high outlet pressures greater than 8 Bar.

CAPACITY CHART (Nm³/h). (Calculated for Natural Gas with relative density 0.6) (mínimum ΔP 1 bar.)

Inlet Pressure (bar)	Regulated Pressure (bar)															
	0,16	0,2	0,3	0,4	0,5	0,7	1	1,5	2	2,5	3	4	5	6	7	8
1,5	1749	1749	1749	1737	1715											
1,75	1924	1924	1924	1925	1917	1870										
2	2099	2099	2099	2099	2099	2081	1980									
2,5	2449	2449	2449	2449	2449	2449	2425	2214								
3	2799	2799	2799	2799	2799	2799	2799	2711	2425							
4	3499	3499	3499	3499	3499	3499	3499	3499	3429	3208	2800					
5	4199	4199	4199	4199	4199	4199	4199	4199	4199	4141	3960	3130				
7	5598	5598	5598	5598	5598	5598	5598	5598	5598	5598	5598	5422	4850	3704		
10	7698	7698	7698	7698	7698	7698	7698	7698	7698	7698	7698	7698	7668	7408	6858	5940
15	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11197	11112
20	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696	14696
25	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195	18195

Regulator with and without SSV

Regulator without SSV

To calculate capacity for other gases, multiply the value on the table by the K factor.

GAS	DENSITY	K FACTOR
BUTANE	2	0.55
PROPANE (LPG)	1.5	0.63
ANHYDRIDE CARBON	1.5	0.63
OXYGEN	1.1	0.74
AIR	1	0.77
NITROGEN	0.97	0.79
ACETYLENE	0.9	0.82
AMMONIA	0.59	1.02
HYDROGEN	0.07	3

Installation

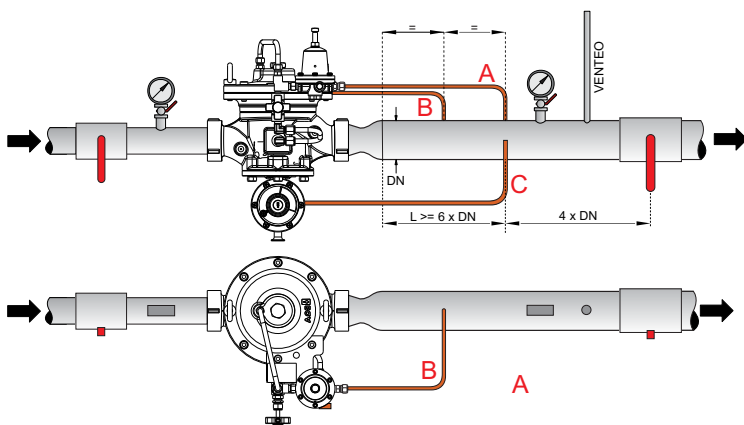
The installation position is as indicated in the installation diagram.

Make sure that the flow follows the direction indicated by the arrow on the body.

Connections **A**, **B** and **C** are to be installed by the user.

The tube diameter for connections **A** and **B** is 3/8" x 1 mm, the tube for SSV connection **C** is 1/4" x 0.8 mm.

Ensure minimum distances as per the installation diagram.



General Dimensions

Height (h) S502-503 (no SSV): 340 mm.
Height (h) S527-525 (SSV): 460 mm.

S502-527 (threaded):

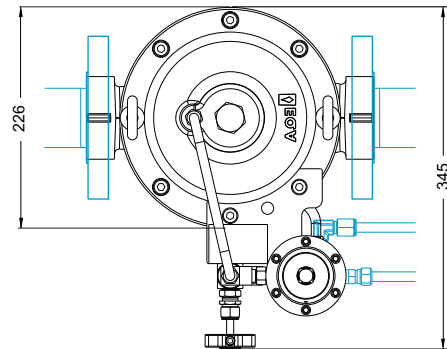
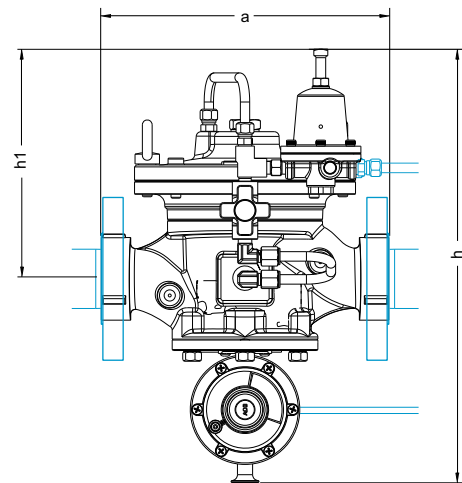
Width (a) 294 mm and High (h1) 250 mm

S502-527 (threaded):

Width (a) 254 mm and High (h1) 250 mm

S503-525 (threaded):

With (a) 267 mm and High (h1) 250 mm



DISTRIBUTOR

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