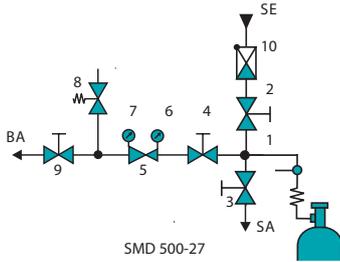


## GAS SUPPLY PANELS SMD 500/530-27



FLOW SCHEMATIC



- 1 Inlet connection
- 2 Purge inlet valve
- 3 Purge outlet valve
- 4 Upstream shut-off valve
- 5 Pressure regulator
- 6 Upstream pressure gauge
- 7 Downstream pressure gauge
- 8 Relief valve
- 9 Downstream shut-off valve
- 10 Check valve
- SE Purge inlet
- SA Purge outlet
- BA Process gas outlet

**Single-stage, with inert gas purging, for reactive, toxic, oxidizing and corrosive (optional Hastelloy inner parts) gas and gas mixtures, no oxygen purity max. 6.0, inlet pressure 230/315 bar / 3300/4500 psi, downstream pressure range 0.5 - 200 bar / 7 - 2900 psi**

### SPECIAL FEATURES

- With inert gas purging
- Optimum purge conditions with purge valve block
- Inlet and outlet shut-off valve
- Optional Hastelloy inner parts for corrosive gases

### DESCRIPTION

The SMD 500-27 is mounted on a stainless steel panel and consists of a purge valve block with check valve, a purge inlet and purge outlet valves, pressure regulator, inlet and outlet pressure gauges, a relief valve and inlet and outlet shut-off valves for in- and outlet of the process gas. Stainless steel coils for connection to the gas cylinders are available. The use of contact gauge (accessories) in conjunction with alarm box (accessories) facilitates the monitoring of gas reserves. Vent gas piping for attachment to the relief valve can be ordered as an optional extra (by downstream pressure of >50bar RV on request).

### APPLICATION

Gas panels are permanently installed in the cylinder stock room or cabinet near the point of use and reduce the cylinder pressure to a lower line pressure. Through the subsequent piping system the gas is taken to the point of use. The positioning of the purge block on the inlet side reduces the purge volume to a minimum (only with cylinder connection) and allows for a separate discharge for the purge gases. The SMD 500-27 guarantees optimum purge conditions even when using toxic gases and so offers maximum safety for the user and the application.

This design with external gas purging offers the following advantages:

1. Purging the residual gas in the system before a cylinder change improves personnel safety levels.
2. Maintaining gas purity by purging the atmospheric air which has penetrated the system during cylinder changing.
3. Purging with dry inert gas reduces humidity and extends the expected live span when corrosive gases are used.

### TECHNICAL DATA

Body:	stainless steel 316L (1.4404) specially cleaned and electro-polished
Relief valve:	Outlet NPT 1/4"f, downstream pressure > 50 bar RV *
Seat seals:	PCTFE
Relief valve seat seals:	FKM, (EPDM, FFKM) *
Performance data:	see chapter 5
Basic design aspects:	see page 13
Pressure gauge range:	-1 - 10 bar (-15 - 145 psi), 0 - 25 bar (0 - 365 psi) 0 - 40 bar (0 - 600 psi), 0 - 80 bar (0 - 1150 psi) 0 - 315 bar (0 - 4500 psi)
Weight:	approx. 4.0 kg
Dimensions (w×h×d):	approx. 305×235×185 mm
Purge inlet:	check valve, Tube fitting 6 mm
Purge outlet:	NPT 1/4"f, optional tube fitting
Inlet:	NPT 1/4"f, M 14×1,5 (optional)
Outlet:	NPT 1/4"f, optional Tube fitting

\*on request

### ORDER CODE

Type	Material	Upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Vent piping	Gas type
<b>SMD 500-27</b>	<b>SS</b>	<b>F</b>	<b>6</b>	<b>N14</b>	<b>CL6 SS</b>	<b>Ki</b>	<b>A</b>	<b>GAS</b>
SMD 500-27	SS = stainless steel	F = 230 bar /3300 psi	6 = 0.5 - 6 bar / 7 - 85 psi 14 = 1 - 14 bar /15 - 200 psi	N14 = NPT 1/4"f M14×1.5 (optional)	0=NPT 1/4"f CL6** CL8 CL10 CL12 SS = stainless steel	0 = without Ki = with	0 = without A = with (Only in conjunction with RV)	Please specify (no O2)
SMD 530-27		G = 315 bar /4500 psi	50 = 2.5 - 50 bar /35 - 720 psi 200 = 10 - 200 bar /145 - 2900 psi					

Subject to change without notice

It is necessary to have a gas specific connection to the gas supply for an efficient installation and use of this station, see accessories chapter "cylinder connection FA 500". \*\*Outlet: CL6 = tube fitting for tube 6 mm (0 = without). Please note the "burst rate chart" when choosing the tube fittings in chapter 5.