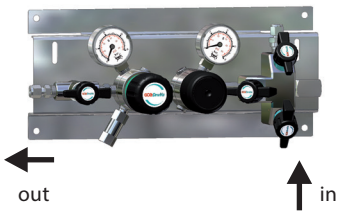
GAS SUPPLY PANELS SMD 502/532-27

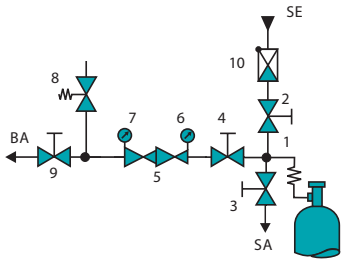


Dual-stage,
with inert gas purging,
for reactive, toxic, highly corrosive, oxidizing and corrosive gases and corrosive gas and gas and gas mixtures, no oxygen
purity max. 6.0,
inlet pressure 230/315 bar / 3300/4500 psi,
downstream pressure range 0.2 - 10.5 bar / 1 - 150 psi

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

FLOW SCHEMATIC



1 Inlet connection
2 Purge inlet valve
3 Purge outlet valve
4 Upstream shut-off valve
5 Cylinder 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

DESCRIPTION

These gas supply panels are mounted onto a stainless steel console and consist of a purge valve block with a check valve, purge inlet and outlet valves, pressure regulator, upstream and downstream gauges, a relief valve and shut-off valve for in- and outlet of the process gas.
Stainless steel coils are available for the connection to the gas cylinder. 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.

APPLICATION

Dual station pressure regulators are permanently installed in the cylinder stock room or cabinet near the point of use and reduce the cylinder pressure to a lower pressure for the user. 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 and allows for a separate discharge for the purge gases. These pressure regulators guarantees optimum purge conditions even when using toxic gases and so offers maximum safety for the user and the application.

This design with inert gas purging offers the following advantages:
1. Purging the residual gas remaining 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 life 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
Seat seals 1st stage:	PCTFE
Seat seals 2nd stage:	PTFE
Body seals:	PCTFE
Performance data:	see chapter 5
Basic design aspects:	see page 13
Relief valve seat seals:	FKM, (EPDM, FFKM) *
Pressure gauge range:	-1 - 5 bar (-15 - 75 psi), -1 - 10 bar (-15 - 145 psi)
	0 - 315 bar (0 - 4500 psi)
Dimensions (w×h×d):	approx. 400×235×185 mm
Weight:	approx. 5.1 kg
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
SMD 502-27	**SS**	**F**	**3**	**N14**	**CL6**	**Ki**	**A**	**GAS**
SMD 502-27 SMD 532-27	SS = stainless steel	F = 230 bar /3300 psi G = 315 bar /4500 psi	3 = 0.2 - 3 bar/ 3 - 45 psi 6 = 0.5 - 6 bar/ 7 - 85 psi 10.5 = 0.5 - 10.5 bar/ 7 - 145 psi	N14 = NPT 1/4"f M14×1.5 (optional)	0=NPT 1/4"f CL6** CL8 CL10 CL12	0 = without Ki = with	0 = without A = with (Only in conjunction with AV)	Please specify (no O2)

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.