



- 1 pressure regulator
- 2 inlet pressure gauge
- 3 outlet pressure gauge
- 4 process gas valve
- 5 purge gas outlet valve (only 500-35)
- 6 safety relief valve
- 7 spiral connection tube
- 8 metal- mesh filter
- A, B gas cylinders
- H lever

**Double-stage,
for inert, reactive, flammable and oxidizing gas and gas mixtures,
purity max. 6.0,
inlet pressure 230 bar/ 3300 psi,
outlet pressure range 0,2 -10,5 bar/ 3 - 150 psi**

Highlights

- ▲ **Uninterrupted gas supply with semiautomatic change over**
- ▲ **Outlet pressure virtually independent of the inlet pressure level**
- ▲ **Definite indication of active cylinder**
- ▲ **Low pressure warning by means of contact pressure gauges (optionally available)**
- ▲ **Extendable to max. 2 x 5 cylinders**

Features

Pressure decrease of the active cylinder (or bundle) below a preset level causes semi-automatic switch over to the full cylinder side. This is achieved by 2 integrated regulators (factory-set to slightly different delivery pressure levels), connected at their outlet ports.

Moving the lever towards the full battery side, this allows to disconnect and replace the empty cylinder without interrupting gas supply. The lever position always indicates cylinder priority in being discharged.

Optional contact pressure gauges, connected to an alarm box, indicate optical and audible alarm in case of pressure drop below a preset level. That ensures empty tanks to be replaced in time.

Application

This gas panel is necessary component, wherever a low and constant pressure level independent of the inlet pressure, and uninterrupted gas flow with semi-automatic change-over is needed.

Technical data

Body:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Seat sealing 1st stage:	PCTFE
Seat sealing 2nd stage:	PTFE
Body sealing material:	PCTFE (SS), PTFE (brass)
Relief valve seat material:	stainless steel: FKM, (EPDM, FFKM)* brass: EPDM, (FKM)* *on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Pressure gauge range:	-1 - 5 bar (-15 - 75 psi) -1 - 10 bar (-15 - 145 psi) -1 - 18 bar (-15 - 260 psi) 0 - 315 bar (0 - 4500 psi)
Dimensions: (wxhxd):	300 x 155 x 240 mm
Weight:	5.4 kg (BMD 500-35)
Flow:	25 Nm ³ /h N ₂ (12 bar - type at 25 bar inlet press.) 14 SCFM N ₂ (12 bar - type at 360 psi inlet press.)
Purge inlet and outlet:	tube fitting 6 mm (BMD 502-34)
Connection:	2 x 1 to 2 x 5 cylinders
Inlet:	M 14 x 1,5 (standard) NPT 1/4" f (optional)

Order code

Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Contact press. gauge	Gas type
BMD 502-35	BC	F	3	N14	CL6 BC	Ki	Gas
BMD 502-34 (with external gas purging)	BC = brass	F = 230 bar /3300 psi	3 = 0,1 - 3 bar/ 1,5 - 45 psi	N14 = NPT 1/4"	0 CL6, CL8	0 = without Ki = with	Specification of used gas
BMD 502-35 (with internal gas purging)	SS = stainless steel		6 = 0,5- 6 bar/ 7 - 85 psi		CL10, CL12 BC = brass		
BMD 502-39 (without purging)			10 = 1 - 10,5 bar /15 - 150 psi		SS = stainless steel		

For proper installation and service of this panel a gas specific spiral connection tube is necessary. See in chapter Accessory page 94.
Outlet: (expl.: CL6=tube fitting with outer diameter 6 mm, 0 = without).