

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Единый адрес: gec@nt-rt.ru | http://gec.nt-rt.ru

Gas supply panels SMD 500-16/-24/-25

GCE DruVa



**Single-stage,
for inert, reactive, flammable and oxidizing gas (type -25) and gas mixtures,
purity max. 6.0,
inlet pressure 230 bar / 3300 psi,
outlet pressure range
SMD 500-16: 1 - 50 bar / 14 - 720 psi
SMD 500-24/25: 1 - 200 bar / 14 - 2900 psi**



Highlights

- ▲ Gas supply panel for standard applications (type -16)
- ▲ Internal gas purging (type -24)
- ▲ Internal gas purging and process gas outlet shut-off valve (type -25)



Features

These gas panels are mounted on a stainless steel panel and consist of a pressure regulator, inlet and outlet pressure gauges, a relief valve and shut-off valves (type -16 at the outlet, type -24 at the inlet, type -25 at inlet and outlet) for the process gas. A choice of stainless steel coils or flexible high pressure hoses is available for the connection to the gas cylinder. The use of contact pressure gauges (accessories) facilitates monitoring of the gas reserves.

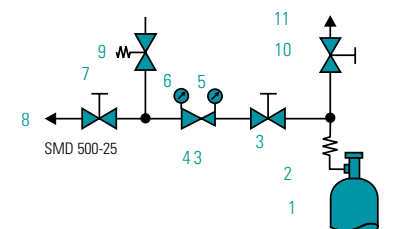
Application

Gas panels are permanently installed in the cylinder stock room or cabinet and reduce the cylinder pressure to a lower line pressures. The gas is guided to the point of use via the subsequent piping system.

This SMD 500-24 design allows purging to be carried out with internal gas while cylinders are being changed. This flushes the atmospheric air from the system; gas purity is maintained. The SMD 500-25 design allows shutting-off of gas flow during cylinder change with the panel itself. Standard application for these panels: centralized or decentralized gas supply for highly sensitive analysis devices.

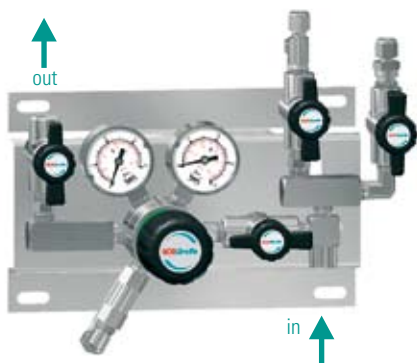
Technical data

Body material:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Seat sealing:	PCTFE
Body sealings:	PCTFE (SS), PVDF (brass)
Relief valve seat material	FKM, (EPDM, FFKM)*, EPDM, (FKM)* *on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
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)
Relief valve:	version 10 - 200 bar without
Weight:	0,73 / 0,74/ 0,75 kg
Dimensions (wxhxd):	250 x 155 x 185 mm
Purge gas inlet:	NPT 1/4" f (optional)
Inlet:	M 14 x 1,5 (standard)



- 1 Cylinder connection
- 2 Connection spirals
- 3 Process gas inlet shut-off valve (type -24 + type 25)
- 4 Pressure regulator - single-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet shut-off valve (type -16 + type 25)
- 8 Process gas outlet
- 9 Relief valve
- 10 Purge gas outlet valve (type -24 + type 25)
- 11 Purge gas outlet

Order code



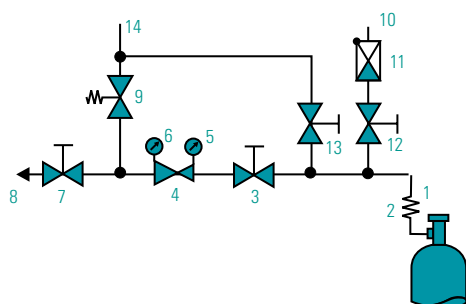
Single-stage, for reactive, toxic, oxidizing and corrosive (option Hastelloy internals) gas and gas mixtures, purity max. 6.0, inlet pressure 230 bar/ 3300 psi, outlet pressure range 0,5 - 50 bar / 7 - 725 psi

Highlights

- ▲ With external gas purging device
- ▲ Inlet and outlet shut-off valve

Features

This gas panel reduces the cylinder pressure of 230 bar to outlet pressure values ranging from 1 to 14 bar or 2.5 to 50 bar (option 10 to 230 bar). The SMD 500-27 is mounted on a stainless steel panel and consists of a pressure regulator, inlet and outlet pressure gauges, a relief valve and inlet and outlet shut-off valves for the purge and the process gas. A choice of stainless steel coils or flexible high pressure hoses is available for the connection to the gas cylinder. The use of contact pressure gauges (accessories) facilitates monitoring of the gas reserves.



- 1 Cylinder connection
- 2 Connection spiral
- 3 Process gas inlet shut-off valve
- 4 Pressure regulator - single-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet shut-off valve
- 8 Process gas outlet
- 9 Relief valve
- 10 Purge gas inlet
- 11 Non-return valve
- 12 Purge gas inlet valve
- 13 Purge gas outlet valve
- 14 Purge gas outlet

Application

Gas supply panels are installed in the gas centre (cylinder stock room or gas cabinet). They reduce the cylinder pressure to the line pressure. Via the subsequent piping system the gas will be guided to the point of use.

This design with external gas purging offers the following advantages:

1. Purging the gas rest remaining in the system before cylinder changing improves the personal safety level.
2. Maintaining gas purity by purging the atmospheric air which has penetrated the system after cylinder changing.
3. Purging with dry inert gas reduces humidity and extends the expected live span when corrosive gases are used.

Technical data

Body material:	stainless steel 316L (1.4404) specially cleaned and electro-polished
Relief valve:	10 - 200 bar version without
Body sealings:	PCTFE
Relief valve seat material	FKM, (EPDM, FFKM) on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
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:	1,1 kg
Dimensions (wxhxd):	ca. 305 x 235 x 185 mm
Pressure gauge range:	-1 - 18, 0 - 80, (optional 0 - 315) bar -14,5 - 261, 0 - 1161, (optional 0 - 4572) psi
Purge inlet:	tube fitting 6 mm with integrated check valve
Purge outlet:	tube fitting 6 mm
Inlet:	M 14 x 1,5 (standard) NPT 1/4" f (optional)

Order code

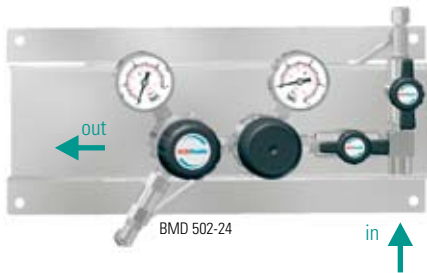
Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Contact pressure gauge	Gas type
SMD 500-27	SS	F	6	N14	CL6 SS	Ki	Gas
SMD 500-27	SS = stainless steel	F = 230 bar/3300 psi	6 = 0,5 - 6 bar/ 7 - 85 psi 14 = 1 - 14 bar/ 15 - 200 psi 50 = 2,5 - 50 bar/ 35 - 720 psi	N14 = NPT 1/4"	0 CL6 CL8 CL10 CL12 SS = stainless steel	0 = without Ki = with	Specification of used gas

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).



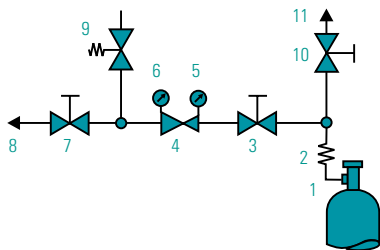
BMD 502-16



BMD 502-24



BMD 502-25



- 1 Cylinder connection
- 2 Connection spirals
- 3 Process gas inlet shut-off valve (type -24 + type 25)
- 4 Pressure regulator - double-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet shut-off valve (type -16 + type 25)
- 8 Process gas outlet
- 9 Relief valve
- 10 Purge gas outlet valve (type -24 + type 25)
- 11 Purge gas outlet

**Double-stage,
for inert and flammable gases 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

- ▲ **Outlet pressure virtually independent of inlet pressure due to double-stage design**
- ▲ **Gas supply panel for standard applications (type -16)**
- ▲ **Internal gas purging (type -24)**
- ▲ **Internal gas purging and process gas outlet shut-off valve (type -25)**

Features

These gas panels are mounted on a stainless steel panel and consist of a pressure regulator, inlet and outlet pressure gauges, a relief valve and shut-off valves (type -16 at the outlet, type -24 at the inlet, type -25 at inlet and outlet) for the process gas. A choice of stainless steel coils or flexible high pressure hoses is available for the connection to the gas cylinder. The use of contact pressure gauges (accessories) facilitates monitoring of the gas reserves.

Application

Twin-stage station pressure regulators are usually installed peripherally in the cylinder cabinet near the point of use and reduce the cylinder pressure to the operating pressure of the secondary consumers. This SMD 502-24 design allows purging to be carried out with internal gas while cylinders are being changed. This flushes the atmospheric air from the system; gas purity is maintained. The SMD 502-25 design allows shutting-off of gas flow during cylinder change with the panel itself. Standard application for these panels: centralized or decentralized gas supply for highly sensitive analysis devices.

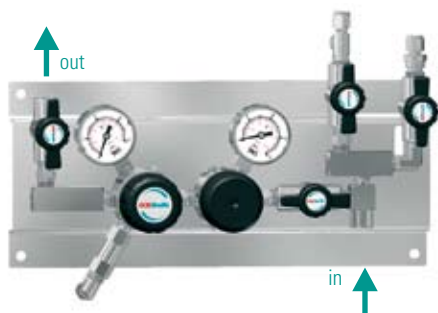
Technical data

Body Material:	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 (w x h d d):	400 x 155 x 160 mm
Weight:	1,0 kg
Inlet connection:	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
SMD 502-16	BC	F	3	N14	CL6 BC	Ki	Gas
SMD 502-16	BC = brass	F = 230 bar	3 = 0,1 - 3 bar/1,5 - 45 psi	N14 =	0	0 = without	Specification of used gas
SMD 502-24	SS = stainless steel	/3300 psi	6 = 0,5 - 6 bar/7 - 85 psi	NPT 1/4"	CL6	Ki = with	
SMD 502-25	steel		10 = 1 - 10,5 bar/15 - 150 psi		CL8 CL10 CL12 BC = brass SS = stainless steel		

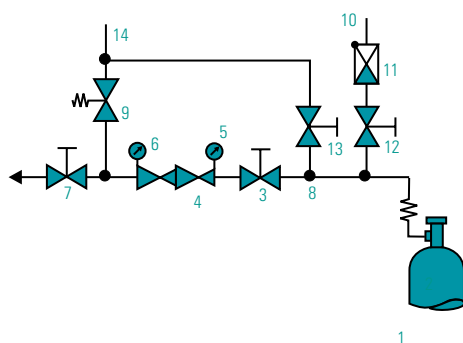
For proper installation and service of this panel a gas specific spiral connection tube is necessary. See in chapter Accessory page 94.
Outlet: (expl.: CL6=tube fitting with outer diameter 6 mm, 0 = without).



Double-stage, for reactive, toxic, slight corrosive, oxidizing and corrosive (option Hastelloy internals) 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

- ▲ External gas purging device
- ▲ Hastelloy-internals for corrosive gases as option



- 1 Cylinder connection
- 2 Connection spiral
- 3 Process gas inlet shut-off valve
- 4 Pressure regulator, double-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet shut-off valve
- 8 Process gas inlet
- 9 Relief valve
- 10 Purge gas inlet
- 11 Non-return valve
- 12 Purge gas inlet valve
- 13 Purge gas outlet valve
- 14 Purge gas outlet

Features

The SMD 502-27 is mounted on a stainless steel panel and consists of a pressure regulator, inlet and outlet pressure gauges, a relief valve and inlet and outlet shut-off valves for the purge and the process gas. A choice of stainless steel coils or flexible high pressure hoses is available for the connection to the gas cylinder. The use of contact pressure gauges (accessories) facilitates monitoring of the gas reserves.

Application

Double-stage,s are installed in the gas cabinet near to the point of use. They reduce the cylinder supply pressure to the operating pressure of the succeeding consumers.

This design with external gas purging offers the following advantages:

1. Purging the gas rest remaining in the system before cylinder changing improves the personal safety level.
2. Maintaining gas purity by purging the atmospheric air which has penetrated the system after cylinder changing.
3. Purging with dry inert gas reduces humidity and extends the expected live span when corrosive gases are used.

Technical data

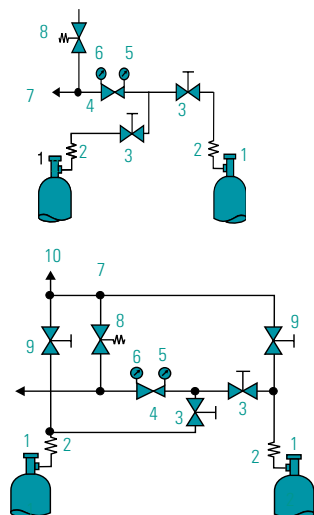
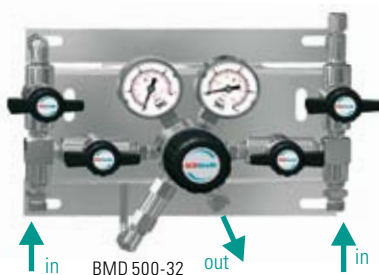
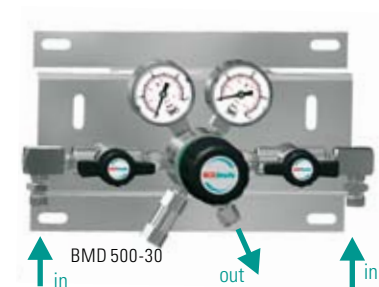
Body material:	stainless steel 316L (1.4404) specially cleaned and electro-polished
Seat sealing 1st stage:	PCTFE
Seat sealing 2nd stage:	PTFE
Body sealing material:	PCTFE
Relief valve seat material:	FKM, (EPDM, FFKM) on request
Pressure gauge range:	-1 - 5 bar (-15 - 75 psi) -1 - 10 bar (-15 - 145 psi) 0 - 315 bar (0 - 4500 psi)
Dimensions (wxhxd)	400 x 235 x 210 mm / 12" x 9,25" x 8,27"
Weight:	1,2 kg
Purge inlet:	tube fitting 6 mm with integrated check valve
Purge gas outlet:	tube fitting 6 mm
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 pressure gauge	Gas type
SMD 502-27	SS	F	3	N14	CL6	Ki	Gas
SMD 502-27	SS = stainless steel	F = 230 bar/3300 psi	3 = 0,1 - 3 bar/ 1,5 - 45 psi 6 = 0,5 - 6 bar/ 7 - 85 psi 10,5 = 0,5 - 10,5 bar/ 7 - 145 psi	N14 = NPT 1/4"	0 CL6 CL8 CL10 CL12	0 = without Ki = with	Specification of used gas

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).



- 1 Cylinder connection
- 2 Connection spiral
- 3 Process gas inlet shut-off valve
- 4 Pressure regulator - single-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet
- 8 Relief valve
- 9 Purge gas outlet valve
- 10 Purge gas outlet

**Single-stage,
for inert, reactive, flammable and oxidizing gas and gas mixtures,
purity max. 6.0,
inlet pressure 230 bar / 3300 psi,
outlet pressure range 1 - 50 (option 200) bar / 14 - 725 (3300) psi**

Highlights

- ▲ Continuous gas supply even during cylinder change
- ▲ Fast manual switch-over to the reserve gas
- ▲ Optional contact pressure gauges for gas supply failure monitoring
- ▲ Internal gas purging (BMD 500-32)
- ▲ Connection for 2 x 1 cylinders, extension for 2 x 4 cylinders,

Features

These gas panels reduce the inlet pressure of maximum 230 bar to pressure levels of 1 to 50 bar (optional 200 bar). The BMD 500 is mounted on a stainless steel panel and consists of a pressure regulator and inlet and outlet pressure gauges. Process gas shut-off valves are located on the inlet side.

Due to switching over from the empty cylinder to the full one manually by opening/closing the shut-off valves the gas supply must not be interrupted during cylinder change. The use of contact pressure gauges (accessories) monitors the minimum reserves for switching over in time. The internal gas purging of BMD 500-32 gives the opportunity of purity level constancy during cylinder change.

Application

The BMD 500-30/32 are gas panels for continuous gas supply and are applied at the first pressure level. The benefit of this gas panel: fast switch-over to the reserve cylinders and the maintaining of gas supply (BMD 500-32: and purity) during cylinder change. Standard application: centralized or decentralized gas supply for highly sensitive analysis device.

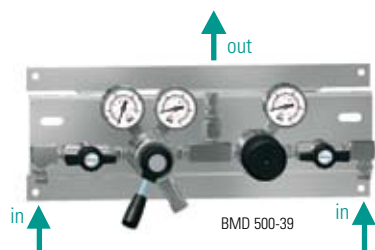
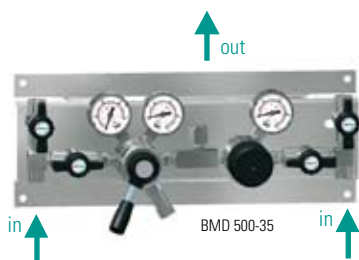
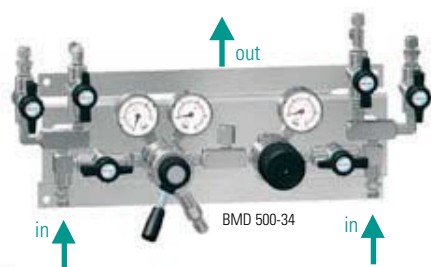
Technical data

Body material:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Seat sealing:	PCTFE
Body sealings:	PCTFE (SS), PVDF (brass)*
Relief valve seat material	FKM, (EPDM, FFKM)*, EPDM, (FKM)* *on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Pressure gauge range:	-1 - 18 bar (-15 - 260 psi) 0 - 80 bar (0 - 1150 psi) 0 - 315 bar (0 - 4500 psi)
Relief valve:	10 - 200 bar version without
Weight:	1,3 / 1,5 kg
Dimensions: (wxhxd):	BMB 500-32: 400 x 200 x 185 mm BMB 500-32: 440 x 200 x 185 mm
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 pressure gauge	Gas type
BMD 500-30	BC	F	14	N14	CL6 BC	Ki	Gas
BMD 500-30	BC = brass	F = 230 bar/3300 psi	14 = 1 - 14 bar/ 15 - 200 psi	N14 = NPT 1/4"	0 CL6	0 = without Ki = with	Specification of used gas
BMD 500-32	SS = stainless steel		50 = 2,5 - 50 bar/ 36 - 720 psi (Optional: 230 = 10 - 200 bar/ 145 - 2900 psi)		CL8 CL10 CL12 BC = brass 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).



Single-stage, for inert, reactive, flammable and oxidizing gas and gas mixtures, purity max. 6.0, inlet pressure 230 bar/ 3300 psi, outlet pressure preset 14 bar/ 200 psi

Highlights

- ▲ **Uninterrupted gas supply with semiautomatic change over**
- ▲ **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.

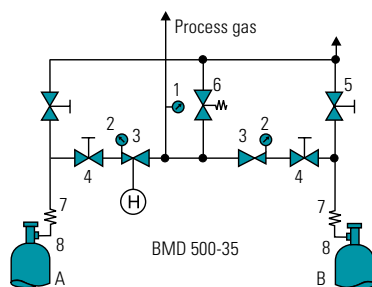
Optional contact pressure gauges, connected to an alarm box, indicate optical and audible alarm in case of pressure drop below a preset level. That ensures empty tanks to be replaced in time.

Application

This gas panel supplying is necessary component, wherever uninterrupted process gas supply 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:	PCTFE
Body sealings:	PCTFE (SS), PVDF (brass)
Relief valve seat material	FKM, (EPDM, FFKM)*, EPDM, (FKM)* *on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Pressure gauge range:	-1 - 18 bar (-15 - 260 psi) 0 - 315 bar (0 - 4500 psi)
Dimensions: (wxhxd):	300 x 155 x 240 mm
Weight:	5.2 kg (BMD 500-35)
Preset outlet pressure:	14 bar +/- 2 bar ; 200 +/- 30 psi
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 500-34)
Connection:	2 x 1 to 2 x 5 cylinders
Inlet:	M 14 x 1,5 (standard) NPT 1/4" f (optional)



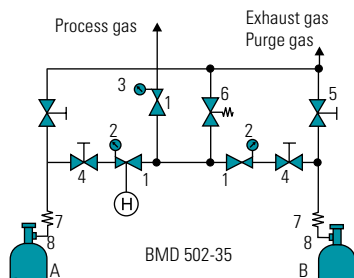
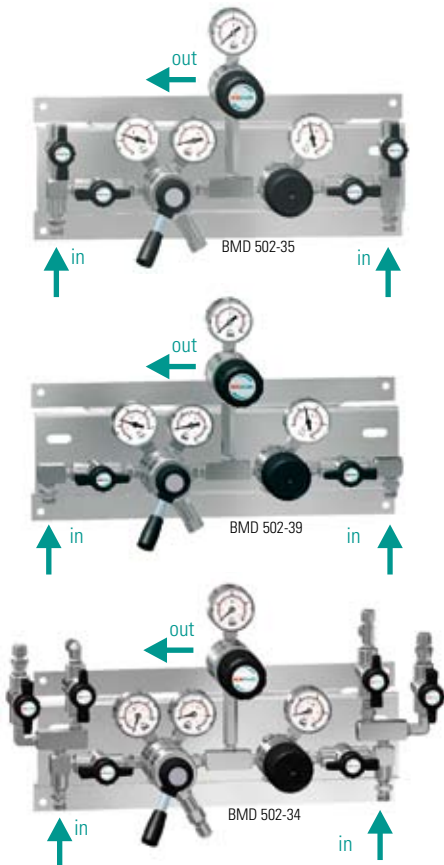
- 1 pressure regulator
- 2 inlet pressure gauge
- 3 outlet pressure gauge
- 4 process gas valve
- 5 purge gas outlet valve
- 6 safety relief valve
- 7 spiral connection tube
- 8 metal- mesh filter
- A, B gas cylinders
- H lever

Order code

Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Gas type
BMD 500-35	BC	F	14	N14	CL6 BC	Gas
BMD 500-34	BC = brass	F = 230 bar	14 = 14 bar/	N14 =	0	Specification
(with external gas purging)	SS = stainless	/3300 psi	200 psi	NPT 1/4"	CL6, CL8	of used gas
BMD 500-35	steel				CL10, CL12	
(with internal gas purging)					BC = brass	
BMD 500-39					SS = stainless	
(without purging)					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).



- 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

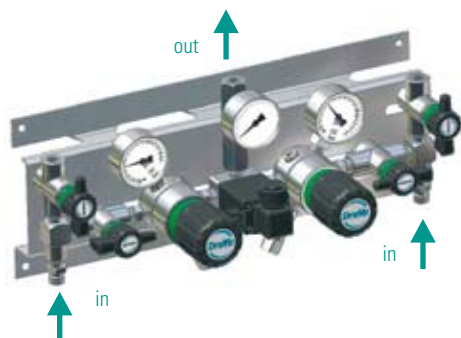
Body:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Seat sealing 1st stage:	PCTFE
Seat sealing 2nd stage:	PTFE
Body sealing material:	PCTFE (SS), PTFE (brass)
Relief valve seat material:	stainless steel: FKM, (EPDM, FFKM)* 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

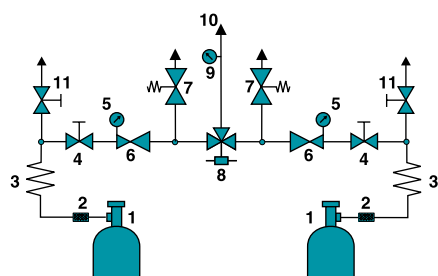
Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Contact press. gauge	Gas type
BMD 502-35	BC	F	3	N14	CL6 BC	Ki	Gas
BMD 502-34 (with external gas purging)	BC = brass SS = stainless steel	F = 230 bar /3300 psi	3 = 0,1 - 3 bar/ 1,5 - 45 psi	N14 = NPT 1/4"	0 CL6, CL8 CL10, CL12	0 = without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



Control unit



- 1 Cylinder connection
- 2 Flexible hose filters
- 3 Flexible hose
- 4 Process gas valve
- 5 Inlet gauge
- 6 Pressure regulator
- 7 Relief valves
- 8 3/2 way solenoid valve
- 9 Outlet gauge
- 10 Process gas outlet
- 11 Exhaust gas valve

Ex - Version on request

Single-stage, for inert, reactive and oxidizing gas and gas mixtures, purity max. 5.0, inlet pressure 230 bar/ 3300 psi, outlet pressure setting 3 - 12 bar / 50 - 175 psi

Highlights

- ▲ Uninterrupted gas supply with full automatic change over
- ▲ No differential pressure needed for change over
- ▲ Floating ground contact for alarm transmission
- ▲ Independent adjustable pressure regulator levels
- ▲ Audible and optical gas lack monitoring with adjustable contact gauges
- ▲ Extendable max. 2 x 5 cylinders

Features

Consisting of two single-stage pressure regulators with inlet pressure gauges, the outlet pressure level is left and right individually adjustable and monitored at an outlet pressure gauge. A solenoid valve and a control unit allows individual change over to the remaining full cylinder by adjusting contact gauges to preset pressure levels. An 3/2-way pure gas solenoid valve prevents the gas reflux to the preempted cylinder.

Application

This gas panel supplying is necessary component, wherever uninterrupted process gas supply with full automatic change over is needed.

Technical data Gas panel

Housing:	brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Seat sealing:	PCTFE
Body sealing:	PVDF (brass), FPM (3-2 way valve)
Relief valve seat material	FKM, (EPDM, FFKM)*, EPDM, (FKM)*
	*on request
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Pressure gauge range:	-1 - 18 bar (-15 - 260 psi), 0 - 315 bar (0 - 4500 psi)
Dimensions (WxHxD):	400 x 155 x 160 mm
Weight:	6,0 kg
Purge gas outlet:	NPT 1/4" female
Inlet:	M 14 x 1,5

Gauges and valves

Switch over voltage gauges:	12 V
Switch over voltage sol. valves:	230 V AC
Electrical connection valves:	Putting flag acc. DIN 43650A for equipment plug socket

Control Unit

Power supply:	230 V, 50 Hz
Working temperature:	0 to 55 °C
Dimension LxBxH:	200 x 120 x 95 mm
Weight:	1,2 kg
Signal lamps:	yellow: the actual selected cylinder, red: cylinder empty, green: power supply OK
Buttons:	manual selection cylinder A, manual selection cylinder B, alarm acknowledging

Order code

Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Control Unit	Gas type
BMD 500-35 DS	BC	F	12	N14	CL6 BC	SE500	Gas
BMD 500-35 DS	BC = brass	F = 230 bar/3300 psi	12 = 3 - 12 bar/ 45 - 175 psi individual settings between 3 and 12 bar possible	N14 = NPT 1/4"	0 = without CL6, CL8, CL10, CL12, BC = brass, SS = stainless steel	without SE500	Specification of used gas

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).



Single-stage, for inert, reactive, flammable and oxidizing gas and gas mixtures, purity max. 6.0, inlet pressure 40 bar/ 600 psi, outlet pressure range 0,1 bar abs. - 10,5 bar / 1,4 psi abs. - 145 psi

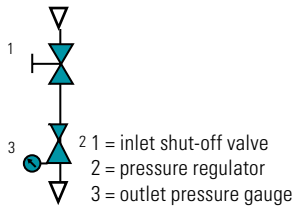
Highlights

- ▲ Inlet valve with 90° shut-off function
- ▲ Clear open/closed position of shut-off valve

Features

The EMD 500-06 consists of inlet shut-off valve, pressure regulator, outlet pressure gauge and panel for wall mounting and mounted on aluminium panel,

Flow scheme



Application

The EMD 500/510-06 is designed for the second pressure stage inside of a central gas supply system to reduce line pressure to a certain supply pressure level required at the point of use. The pressure regulator MD 510 reduces to very low pressure levels down to 0,1 bar absolute and is also suitable for vacuum dosing.

Technical data

Body material:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated , 4 in-/outlet borings
Seat sealing:	PTFE
Body sealings:	PCTFE (SS), PVDF (brass)
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Pressure gauge range:	-1 - 1,5 bar (-30inHg - 40 psi) -1 - 5 bar (-15 - 75 psi) -1 - 10 bar (-15 - 145 psi) -1 - 18 bar (-15 - 260 psi)
Weight:	0,8 kg
Dimensions (wxhxd):	90 x 260 x 135 mm
Inlet/Outlet:	NPT 1/4" f

Order code

Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Gas type
EMD 500-06	BC	E	1	CL6 BC	CL6 BC	Gas
EMD 500-06	BC = brass	EMD 500-06: E = 40 bar/600 psi	EMD 500-06: 1 = 0,1 - 1 bar/1,5 - 15 psi	0 CL6, CL8	0 CL6, CL8	Specification of used gas
EMD 510-06	SS = stainless steel	EMD 510-06: 12 bar / 175 psi	6 = 0,5 - 6 bar/7 - 85 psi 10 = 1 - 10 bar/ 15 - 145 psi EMD 510-06: 2 = 0,1 - 1 bar abs. / 1,5 - 15 psi abs. 3 = 0,1 - 2 bar abs. / 1,5 - 30 psi abs.	CL10, CL12 BC = brass SS = stainless steel	CL10, CL12 BC = brass SS = stainless steel	

Outlet: (expl.: CL6=tube fitting with outer diameter 6 mm, 0 = without)



For pure gases and mixtures, no oxygen, purity max. 6.0, for manual operated purging, nominal pressure 230 bar / 3300 psi

Highlights

- ▲ Maintaining gas purity close to the gas stock
- ▲ No contamination with atmosphere
- ▲ Fast operating by quarter turn shut-off function
- ▲ Clearly visible open/closed position
- ▲ Increase of durability due to fine adjusting of closing pressure
- ▲ Optimal purge conditions
- ▲ Wide range of applications

Features

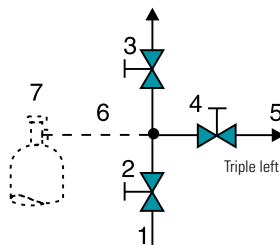
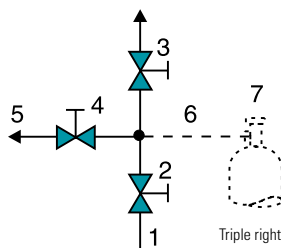
This valve block purging device consists of process gas shut-off valve, purge gas inlet and outlet valves, cylinder connection, 2 outlet and one inlet connections. Surface cleaning and quality control minimize the potential for adsorption of contamination. The left and a mirror/inverted right triple fit any application demand.

Application

These triple valve blocks, used for purging of ultra pure, toxic or corrosive gases, are fundamental for conservation of gas purity during cylinder change to maintain the purity and even the safety level using toxic gases. Benefit of this design with its high functionality is a optimal security for personnel and installation.

Technical data

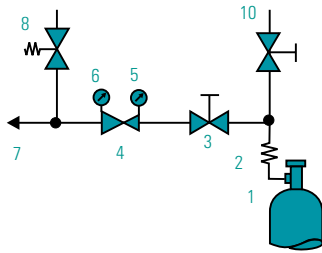
Body material:	stainless steel 1.4404 specially cleaned
Diaphragm:	Hastelloy, Elgiloy
Sealing material:	PCTFE
Performance data:	see chapter 5.1
Basic design aspects:	see page 10
Nominal width:	DN 5
KV-value:	0,25 (straight-type)
Inlet filter:	100 µm mesh
Inlets/outlets:	G 1/4" f



- 1 = purge gas inlet
- 2 = purge gas inlet shut-off valve
- 3 = purge gas outlet shut-off valve
- 4 = process gas outlet shut-off valve
- 5 = process gas outlet
- 6 = cylinder connection
- 7 = cylinder

Order code

Type	Material	Inlet pressure	Cyl. conn.	Outlet conn.	Gas type
DPS L	SS	F	DIN	CL6	Gas
DPB-L = triple left	SS = stainless steel	F = 230 bar/3300 psi	DIN	0	Specification of used gas
DPB-R = triple right			ANSI	CL6	
			AFNOR	CL8	
			NBN	CL10	
			BS 341	CL12	
			CGA		
			NEN		
			UNI		



- 1 Cylinder connection
- 2 Connection spirals
- 3 Inlet shut-off valve
- 4 Regulator single-stage
- 5 Inlet pressure gauge
- 6 Outlet pressure gauge
- 7 Process gas outlet
- 8 Relief valve
- 10 Purge gas outlet

**Single-stage,
for inert, flammable gases and gas mixtures and oxygen,
purity max. 5.0
inlet pressure 300 bar/ 4300 psi,
outlet pressure range 1 - 20 bar / 15 - 290 psi**

Highlights

- ▲ With internal gas purging,
- ▲ Process gas and purge gas shut-off valve
- ▲ Pressure regulator with SS diaphragm 1.4404

Features

The SMD 230-24 is mounted on a stainless steel panel and consists of a pressure regulator, inlet and outlet pressure gauges, relief valve and shut off valves for the process gas and for purge gas.

Application

Gas panels are usually installed in the cylinder room or cabinet and reduce the cylinder pressure to a lower line pressure. This design allows purging with internal gas after cylinders are being changed. This flushes the atmospheric air from the system; gas purity is maintained. Standard application: centralized or decentralized gas supply.

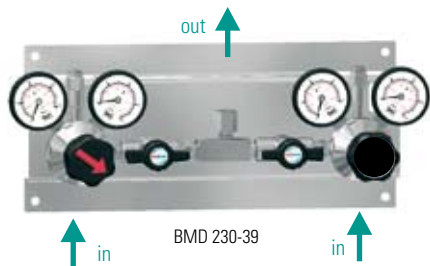
Technical data

Body:	brass CW 617 CuZn40 Pb2, chrome-plated
Seat seal:	Polyamid 6.6, Zytel 103
Sealing material:	NBR 70°- 80°SH
Sealing relief valve seat:	EPDM 70° Sh - Rubber
Weight:	appr.. 2,6 kg
Performance data:	see chapter 5.1
Basic design aspects:	see page 35
Range inlet gauge:	0 – 400 bar / 6000 psi
Range outlet gauge:	0 - 16 bar (0 - 230 psi) 0 - 40 bar (0 - 480 psi)
Dimensions:	250 x 155 x 185

Order code

Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Contact press. gauge	Gas type
SMD 230-24	BC	G	10	N14	N14	Ki	Gas
SMD 230-24	BC = brass	G = 300 bar /4300 psi	10 = 1 - 10 bar/15 -145 psi 20 = 2 - 20 bar/30 -290 psi	N14 = NPT 1/4"	N14 = NPT 1/4"	0 = without Ki = with	specification of used gas

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)

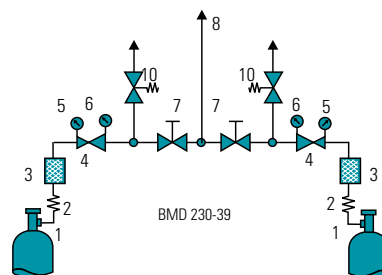
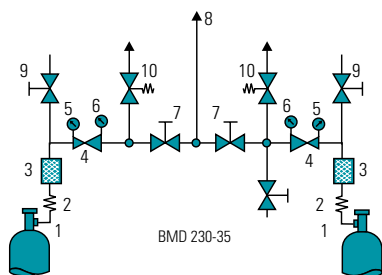


**Single-stage,
for inert, flammable gas and gas mixtures and oxygen,
purity max. 5.0
inlet pressure 300 bar / 4300 psi,
outlet pressure 14 bar / 200 psi**

Highlights

- ▲ Continuous gas supply by automatic switch over
- ▲ Definite indication of active cylinder
- ▲ Process gas purging (version -35)
- ▲ Extendable max. 2 x 5 cylinders
- ▲ Low pressure warning by means of contact pressure gauges (optionally available)

Flow schemes



- | | |
|------------------------|-------------------------|
| 1 Cylinder connection | 6 Outlet pressure gauge |
| 2 Connection spirals | 7 Shut-off valve |
| 3 Inlet filter | 8 Valve purge |
| 4 Pressure regulator | 9 Purge shut-off valve |
| 5 Inlet pressure gauge | 10 Relief valve |

Features

The BMD 230-39/-35 is a one-stage gas manifold for 2 (max. 2 x 5) gas cylinders. A pressure decrease of the active cylinder (or bundle) below a preset level causes a pressure-activated, automatic switch over to the full cylinder side. This is achieved by 2 integrated regulators, the first factory preset and the second adjustable (+/-2 bar resp. 30 psi).

Before replacing the empty cylinder, the lever has to be moved towards the full battery side, this allows to disconnect and replace the empty cylinder without interrupting gas supply. After emptying the second battery side, this procedure can be repeated, now switching to the prior active side. The lever always indicates, which cylinder has priority in being discharged. Contact pressure gauges (Ki) (optionally available), connected to the low pressure alarm box, indicate optical and audible alarm in case of decreasing manifold pressure. That ensure that empty tanks will be replaced in time.

Technical data

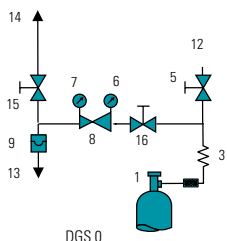
Body:	brass CW 617 CuZn40 Pb2, chrome-plated
Seat seal:	Polyamid 6.6, Zytel 103
Sealing material:	NBR 70°- 80°SH
Sealing relief valve seat:	EPDM 70° Sh - Rubber
Performance data:	see chapter 5.1
Basic design aspects:	see page 35
Preset outlet pressure:	14 bar / 200 psi
Weight (230-35):	ca. 1,4 kg
Inlet gauge ind. range:	0 – 400 bar / 0 - 5800 psi
Outlet gauge ind. range:	0 – 40 bar / 430 psi

Order code

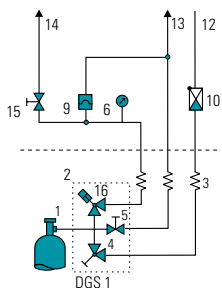
Type	Material	Inlet pressure	Outlet pressure	Inlet conn.	Outlet conn.	Contact pressure gauge	Gas type
BMD 230-39	BC	G	14	N14	N14	Ki	Gas
BMD 230-39	BC = brass	G = 300 bar/4300 psi	14 = 14 bar/ 0 - 200 psi	N14 = NPT 1/4"	N14 = NPT 1/4"	0 = without Ki = with	Specification of used gas
BMD 230-35							

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)



DGS 0



- 1 Cylinder valve
- 2 Purge valve block
- 3 Connecting hose
- 4 Purge inlet valve
- 5 Purge outlet valve
- 6 Inlet pressure gauge
- 7 Outlet pressure gauge
- 8 Pressure regulator
- 9 Rupture disk
- 10 Check valve
- 11 Relief valve
- 12 Purge inlet
- 13 Purge outlet
- 14 Process gas outlet
- 15 Process gas outlet shut-off valve
- 16 Process gas inlet shut-off valve

Single-stage, for low flow of non corrosive special gases (hydrogen on request), purity max. 7.0, inlet pressure 230 bar / 3300 psi, outlet pressure adjustable 0,7 - 7 bar / 2 - 100 psi

Highlights DGS 0

- ▲ Internal gas purging
- ▲ All connections welded or VCR
- ▲ Regulator with tied diaphragm
- ▲ Spring less diaphragm valves with 1/4 turn lever
- ▲ Rupture disk limits pressure level
- ▲ Safety gauges RM 63
- ▲ Regulator and valve material 316L/AOD/VAR

Features

This single stage gas supply panel is assembled onto a stainless steel panel. Consisting of a Single-stage pressure regulator with inlet and outlet pressure gauge, shut-off valves and a rupture disk.

Application

This gas panel, completely assembled, is used for low flow non corrosive pure gases special or high purity non corrosive gases.

Technical data

Flow coefficients:	regulator 0,09, valve 0,29
Reg. diaphragm:	316L
Seat:	PCTFE
Process gas outlet:	VCR 1/4"m
Purge outlet:	VCR 1/4" f
Operating temperature:	-40 °C to +70 °C / 40 °F - 158 °F
Surface finish:	0,4 µm / 15 µin. Ra max. standard
Outboard leakage:	2 x 10 ⁻⁹ cm ³ /sec He at 100 bar/1500 psig
Seat leakage:	4 x 10 ⁻⁸ cm ³ /sec He at 70 bar/1000 psig

For low flow, low pressure special gases (hydrogen on request), purity max. 7.0, inlet pressure vacuum to 17 bar / 250 psi, outlet pressure vacuum to inlet pressure

Highlights DGS 1

- ▲ For low pressure low flow applications
- ▲ External gas purging with FAV 903
- ▲ Spring less diaphragm valve with 1/4 turn lever
- ▲ Rupture disk limits improper pressure level increase
- ▲ Valve material 316L/AOD/VAR

Features

This gas supply panel is assembled onto a stainless steel panel. Consisting of a pressure gauge, shut-off valve and a rupture disk and connected to the gas stock via purgeable cylinder valve

Application

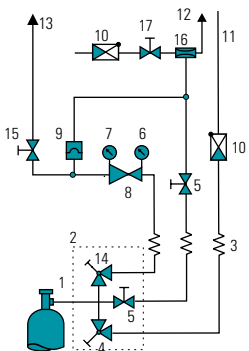
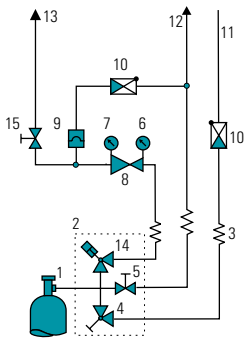
This gas panel, completely assembled, is used for low flow low pressure special or high purity gases.

Technical data

Flow coefficient, valve:	0,5
Seat :	PCTFE
Diaphragm:	Elgiloy
Inlet/outlets:	VCR 1/4"m
Operating temperature:	-40 °C to +70 °C / 40 °F - 158 °F
Surface finish:	0,4 µm / 15 µin. Ra max. standard

Order code

Type	Gas type
DGS 0	Gas
DGS 0	Specification of used gas



- 1 Process gas inlet
- 2 Purge valve block
- 3 Connecting hose
- 4 Purge inlet valve
- 5 Purge outlet valve
- 6 Inlet pressure gauge
- 7 Outlet pressure gauge
- 8 Pressure regulator
- 9 Rupture disk
- 10 Check valve
- 11 Purge inlet
- 12 Purge outlet
- 13 Process gas outlet
- 14 Process gas inlet shut-off valve
- 15 Process gas outlet shut-off valve
- 16 Vacuum generator
- 17 Vacuum generator valve

Order code

Type	Gas type
DGS 2	Gas
DGS 2	Specification
DGS 3	of used gas

Single-stage, with external purging, for low flow reactive and corrosive special gases (hydrogen on request), purity max. 7.0, inlet pressure 230 bar / 3300 psi, outlet pressure adjustable 0,15 - 10 bar / 2 - 145 psi

Highlights DGS 2

- ▲ Regulator with tied diaphragm
- ▲ Spring less valves with 1/4 turn lever
- ▲ Rupture disk limits improper pressure level increase
- ▲ Safety gauges RM 63
- ▲ Regulator and valve material 316L/AOD/VAR

Features

This gas supply panel is assembled onto a stainless steel panel. Consisting of pressure regulator with inlet and outlet pressure gauge, outlet shut-off valve, rupture disk and connected to the gas stock via purgeable cylinder valve, the panel may be purged with external gas.

Application

This gas panel is used for low flow low pressure reactive or corrosive gases.

Technical data

Flow coefficients:	regulator 0,09, valves 0,29
Seat:	PCTFE
Reg. diaphragm:	Hastelloy C22
Process gas outlet:	VCR 1/4" f
Purge inlet + outlet:	VCR 1/4" m
Operating temperature:	-40 °C to +70 °C / 40 °F - 158 °F
Surface finish:	0,4 µm / 15 µin. Ra max. standard
Outboard leakage:	2 x 10 ⁻⁹ cm ³ /sec He at 100 bar/1500 psig inlet pressure
Seat leakage:	4 x 10 ⁻⁸ cm ³ /sec He at 70 bar/1000 psig inlet pressure

Single-stage, with external purging, for low flow low pressure special gases (hydrogen on request), purity max. 7.0, inlet pressure 230 bar / 3300 psi, outlet pressure adjustable 0,15 - 10 bar / 2 - 145 psi

Highlights DGS 3

- ▲ Vacuum generation with VG 80 at the purge outlet
- ▲ Regulator with tied diaphragm
- ▲ Spring less valves with 1/4 turn lever
- ▲ Rupture disk limits improper pressure level increase
- ▲ Safety gauges RM 63
- ▲ Regulator and valve material 316L/AOD/VAR

Features

This gas supply panel is assembled onto a stainless steel panel. Consisting of pressure regulator with inlet and outlet pressure gauge, outlet shut-off valve, rupture disk and connected to the gas stock via purgeable cylinder valve, the panel may be evacuated by a vacuum generator for maximum purging effectivity.

Application

This gas panel is used for low flow low pressure reactive or corrosive gases.

Technical data

Flow coefficients:	regulator 0,09, valves 0,29
Seat:	PCTFE
Reg. diaphragm:	Hastelloy C22
Process gas outlet/ purge inlet:	VCR 1/4"m
Vacuum generator	outlet: VCR 1/4"m, inlet: VCR or tube weld
Operating temperature:	-40 °C to +70 °C / 40 °F - 158 °F
Surface finish:	0,4 µm / 15 µin. Ra max. standard
Outboard leakage:	2 x 10 ⁻⁹ cm ³ /sec He at 100 bar/1500 psig inlet pressure
Seat leakage:	4 x 10 ⁻⁸ cm ³ /sec He at 70 bar/1000 psig inlet pressure



For Acetylene of medium purity,
connection for 1 or 2 x 1 cylinders.

Highlights

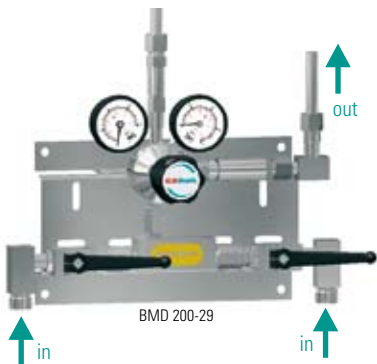
- ▲ Single-stage version for common max. medium gas consumption
- ▲ Gas failure monitoring via contact pressure gauges and signal boxes
- ▲ Single components with type approval

Features

Panels to connect to 1 cylinder (SMD) or 2 cylinders (BMD). With emergency shut-off valve and flame arrestor.

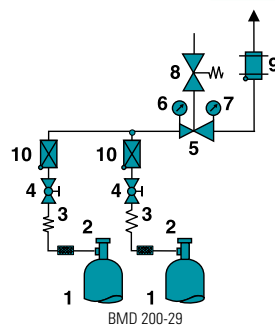
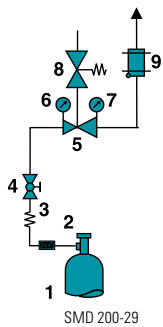
Application

Serving as a first pressure stage of a central gas supply these gas panels together with contact gauges and signalling device allow an interruption free gas supply. The change over from the emptied cylinder to the full one has to be done manually indicated by the alarm box acoustic/optic signal.



Technical data

Housing:	brass 2.0401.26
Diaphragm:	rubber
Flow:	up to 11 m ³ /h (pa = 1,26 bar)
Working temperature:	-20 to +60 °C / -4 to 140 °F
Dimensions (wxhxd):	app. 300 x 155 x app. 160 mm
Weight:	4,6 kg
Inlet pressure gauge:	RM or KI
Press. gauge range:	0 - 40 bar, 0 - 580 psi (inlet), 0 - 2,5 bar, 0 - 36 psi (outlet)
Outlet safety valve:	G 3/8" I



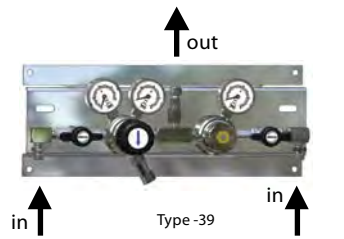
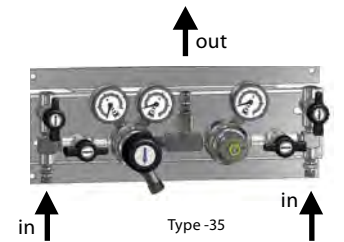
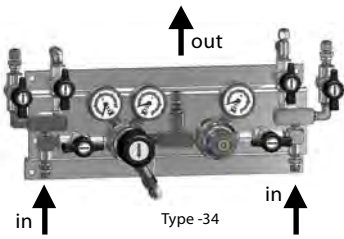
- 1 Cylinder
- 2 Cylinder valve
- 3 Hose connection
- 4 Ball valve
- 5 Pressure regulator
- 6 Inlet pressure gauge
- 7 Outlet pressure gauge
- 8 Relief valve
- 9 Safety valve acc. to german TRAC
- 10 Non return valve

Order code

Type	Material	Outlet pressure	Inlet conn.	Outlet conn.	Gas type
SMD 200-29	BC	1,5	DIN	12	Gas
SMD 200-29	BC = brass	1,5 = 1,5 bar/22 psi	DIN, ANSI AFNOR, NBN BS 341, CGA NEN, UNI	12 = tube with 12 mm outer diameter	Specification of used gas
BMD 200-29					

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).

GAS SUPPLY MANIFOLDS BMD 320-39



Single-stage, for inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 5.0, inlet pressure 230 bar / 3300 psi, preset downstream pressure 14 bar - 200 psi

SPECIAL FEATURES

- Uninterrupted gas supply with semiautomatic switch over
- Indicator for active cylinder
- Low gas alarm signal with contact gauges (optional)
- Upgradable to max. 2x4 cylinders

DESCRIPTION

Pressure decreases in the active cylinder (or bundle) below a preset level which causes a semi-automatic switch to switch over to the full cylinder. This is achieved by two integrated pressure regulators (preset to slightly different delivery pressure levels), connected at their outlet ports. Moving the lever towards the full bank allows for the disconnection and replacement of empty cylinders without interruption to the gas flow. The use of contact gauge (accessories) in conjunction with alarm box (accessories) facilitates the monitoring of gas reserves.

APPLICATION

These gas supply panels, with semi-automatic switch over, are optimally used when it is when uninterrupted gas supply is required.

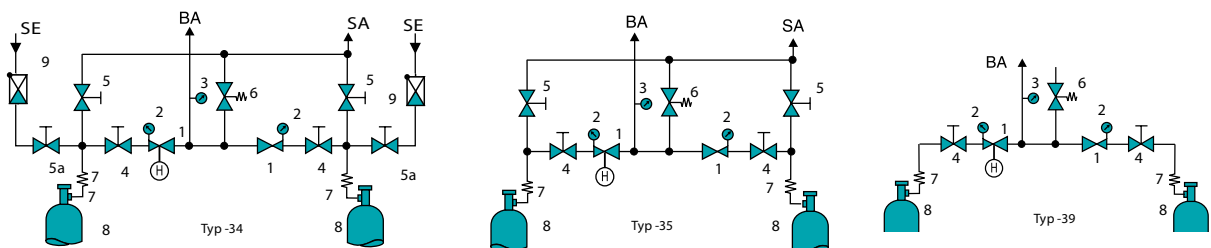
TECHNICAL DATA

Body:	stainless steel 316L (1.4404) specially cleaned or brass CW614 (CuZn39Pb3) specially cleaned, nickel-plated and chrome-plated
Relief valve:	Outlet NPT 1/4" f
Body seals:	PCTFE (SS), PVDF (Brass)
Seat seals:	PCTFE
Relief valve seat seals:	FKM, (EPDM, FFKM)*, EPDM, (FKM)*
Pressure gauge range:	-1 - 18 bar (-15 - 260 psi) / 0 - 315 bar (0 - 4500 psi)
Dimensions (wxhxd):	approx. 400x155x200 mm
Weight:	approx. 5.0 kg (BMD 320-39)
Preset downstream pressure:	14 bar +/- 2 bar ; 200 +/- 30 psi
Flow rate:	20 Nm ³ /h N ₂ , (14 bar - type at 29 bar inlet pressure.)
Inlet:	NPT 1/4" f, M 14x1.5 (optional)
Outlet:	NPT 1/4" f, optional tube fitting

*on request

FLOW SCHEMATIC

- 1 Pressure regulator
- 2 Upstream pressure gauge
- 3 Downstream pressure gauge
- 4 Process gas valve
- 5 Purge gas outlet valve
- 5a Purge gas inlet valve
- 6 Relief valve
- 7 Connection spirals
- 8 Gas cylinder
- 9 Check valve
- H Change over hand wheel
- BA Process gas outlet
- SA Purge gas outlet
- SE Purge gas inlet



ORDER CODE

Type	Material	Upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Extension Mfold	Gas type
BMD 320-39	BC	F	14	N14	CL6 BC	Ki	M	GAS
BMD 320-34	BC = brass	F = 230 bar	14 = 14 bar/	N14 =	0=NPT 1/4" f	0 =	0 = without	Please specify
BMD 320-35	chrome-plated	/3300 psi	200 psi	NPT 1/4" f	CL6, CL8**	without	M2 = 2x2	
BMD 320-39	SS = stainless steel			M14x1.5 (optional)	CL10, CL12	Ki = with	Cylinder	
					BC = brass chrome-plated		M3 = 2x3	Cylinder
							M4 = 2x4	Cylinder

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.

GAS SUPPLY MANIFOLDS BMD 322-39 SEMI-AUTOMATIC - DUAL STAGE



Dual-stage, for inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 5.0, inlet pressure 230 bar / 3300 psi, preset downstream pressure 14 bar - 200 psi

SPECIAL FEATURES

- Uninterrupted gas supply with semiautomatic switch over
- Indicator for active cylinder
- Low gas alarm signal with contact gauges (optional)
- Upgradable to max. 2x4 cylinders

DESCRIPTION

Pressure decreases in the active cylinder (or bundle) below a preset hand wheel which causes a semi-automatic switch to switch over to the full cylinder. This is achieved by two integrated pressure regulators (preset to slightly different delivery pressure levels), connected at their outlet ports. Rotation by hand wheel with the arrow to direction of full bank allows for the disconnection and replacement of empty cylinders without interruption to the gas flow. The use of contact gauge (accessories) in conjunction with alarm box (accessories) facilitates the monitoring of gas reserves.

APPLICATION

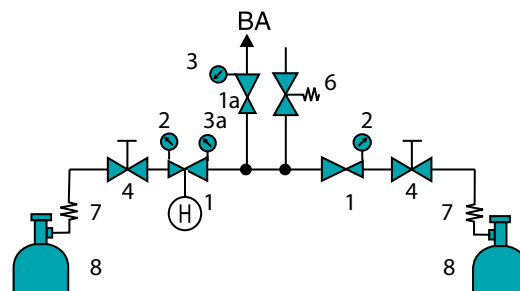
These gas supply panels, with semi-automatic switch over, are optimally used when it is uninterrupted gas supply is required.

TECHNICAL DATA

Body:	stainless steel 316L (1.4404) specially cleaned or brass CW614 (CuZn39Pb3) specially cleaned, nickel-plated and chrome-plated
Relief valve:	Outlet NPT 1/4" f
Body seals:	PCTFE (SS), PVDF (Brass)
Seat seals:	PCTFE
Relief valve seat seals:	FKM, (EPDM, FFKM)*, EPDM, (FKM)*
Pressure gauge range:	-1 - 10 bar (15 - 145 psi) / -1 - 18 bar (-15 - 260 psi) / 0 - 315 bar (0 - 4500 psi)
Dimensions (w×h×d):	approx. 400×155×200 mm
Weight:	approx. 6.0 kg (BMD 322-39)
Flow rate:	10 Nm ³ /h N ² (10 bar - type at 21 bar inlet pressure)
Inlet:	NPT 1/4" f, M 14×1.5 (optional)
Outlet:	NPT 1/4" f, optional tube fitting

*on request

FLOW SCHEMATIC



- 1 Pressure regulator 1st stage
- 1a Pressure regulator 2nd stage
- 2 Upstream pressure gauge
- 3 Downstream pressure gauge
- 3a Middle pressure gauge
- 4 Process gas valve
- 6 Relief valve
- 7 Connection spirals
- 8 Gas cylinder
- H Change over hand wheel
- BA Process gas outlet

ORDER CODE

Type	Material	Upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Extension MFold	Gas type
BMD 322-39	BC	F	MSD10	N14	CL6 BC	Ki	M2	Gas
BMD 322-39	BC = brass chrome-plated SS = stainless steel	F = 230 bar / 3300 psi	MSD6 = 6 bar/ 85 psi MSD10 = 10,5 bar/ 150 psi	N14 = NPT 1/4" f M14×1.5 (optional)	0 = NPT 1/4" f CL6, CL8** CL10, CL12 BC = brass chrome-plated	0 = without Ki = with	0 = without M2 = 2×2 Cylinder M3 = 2×3 Cylinder M4 = 2×4 Cylinder	Please specify

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.



Single cylinder station

Single or double cylinder stations, for propane gas cylinders up to 33 kg, inlet pressure 1 - 16 bar downstream pressure 50 mbar

SPECIAL FEATURES

- Individual parts DIN-DVGW tested
- Double cylinder station with semi-automatic switch-over valve
- Low gas pressure alarm (optional)

DESCRIPTION

The single cylinder station consists of a low pressure regulator, 400 mm medium pressure hose with a safety shut-off valve and a safety relief valve. The double cylinder station consists of a low pressure regulator, a safety shut-off valve (connected upstream) and safety relief valve, 2 high pressure hoses with cylinder connections, a support rail, semi-automatic switch-over valve PN 16, the extraction is rotationally achieved. Both stations conform to the requirements of the TRF 1996 and/or the BGV D 34§11 para. 4.



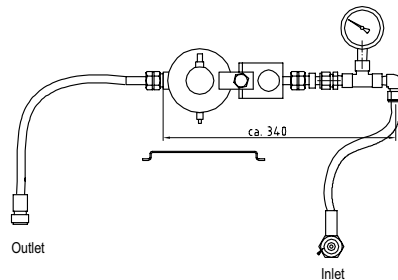
Double cylinder station fully mounted



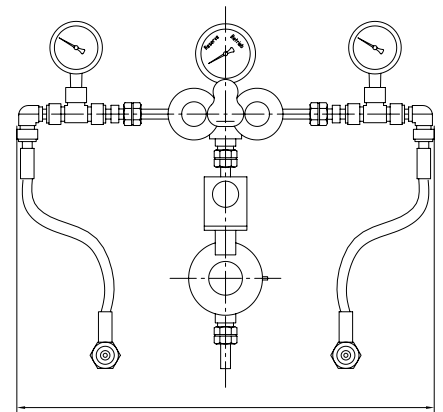
Propane hose

TECHNICAL DATA

Upstream pressure:	16 bar
Downstream pressure:	0.05 bar
Flow rate:	max. 4 kg/h
Inlet:	Single cylinder station: cylinder connection
Double cylinder station:	hose
Outlet:	Single cylinder station: medium pressure hose
Double cylinder station:	hose connection tube Ø 12 mm



Example configuration: single cylinder station with contact gauges



Example configuration: double cylinder station with contact gauges

ORDER CODE

Type	Material	Upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Gas type
SMD 090	B	D	0.05	DIN1	CL12	Ki	GAS
SMD 090 BMD 092	B = brass	D = 16 bar	0.05 = 0.05 bar	DIN1 = D477#1	CL12 = CL12	0 = without Ki = with	C3H8

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Единый адрес: gec@nt-rt.ru | http://gce.nt-rt.ru