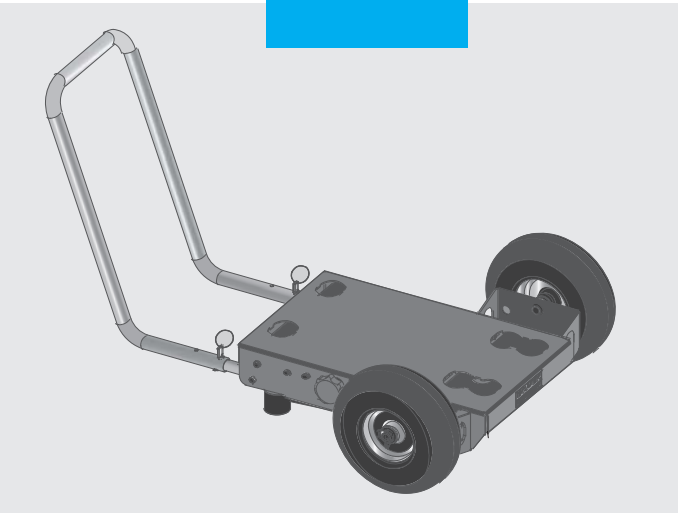
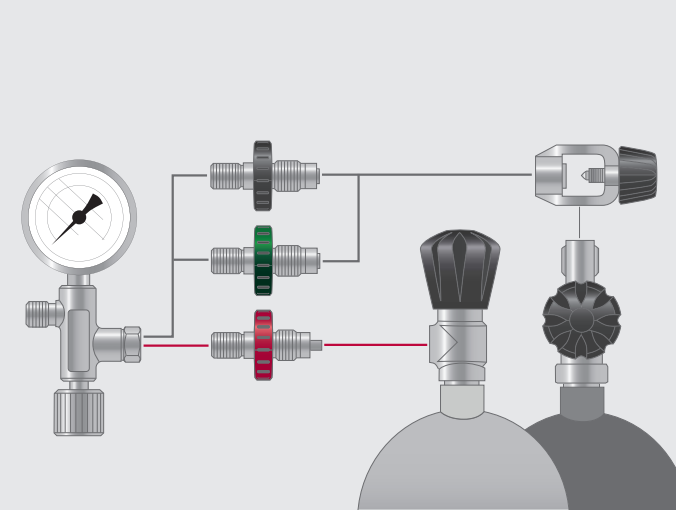
BAUER KOMPRESSOREN

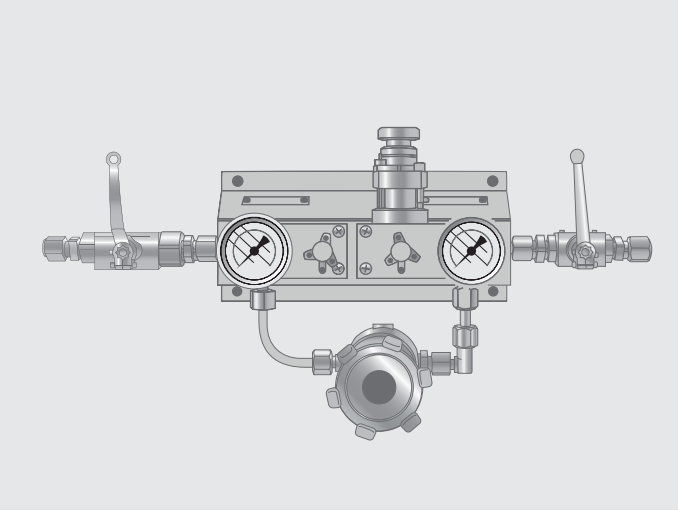
Quality. Our DNA

HIGH-PRESSURE ACCESSORIES CATALOGUE

2017 | 2018







SAFETY PRECISION INDEPENDENCE WORLDWIDE

1946 2016

70 BAUER KOMPRESSOREN

2330 NW 102nd Ave Unit # 3
Doral, FL. 33172

Environmental Global Solutions

305.909.7860

QUALITY IS THE FOUNDATION OF OUR BUSINESS

FURTHER INFORMATION

about a product range and the product shown here can also be found on our website:
www.bauer-kompressoren.de

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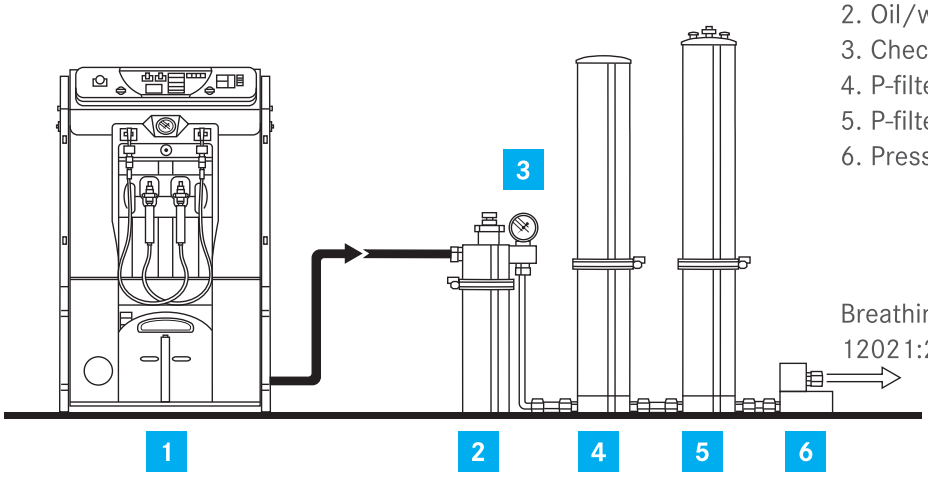
PURIFICATION SYSTEMS

BAUER-P SYSTEM: PURIFICATION OF AIR, HE, AR, N_2

The quality of the highly compressed gases does not meet most requirements, because they may be saturated with up to 100% water vapour, contain oil and particles from the compressor unit, as well as being polluted with odours and flavourings. In addition, purification is also important to avoid corrosion, contamination, icing and the growth of microorganisms. BAUER-P systems adsorb residual moisture, oil vapour, traces of gas on the basis of hydrocarbons and carbon monoxide, depending on the selection of cartridge; for more information, see "Filter cartridges".
BAUER-P systems meet all requirements of DIN EN 12021:2014 for breathing air, or undershoot the limit values by far.*

The compressed medium is first passed through the mechanically operating oil and water separator. Pre-condensed constituents are separated from the air or gas flow in this case. The 100%-saturated medium containing oil vapours now flows through a check valve into the adsorber. Here, in the first layer, the molecular sieve, water vapour and some oil aerosols are removed from the medium by adsorption.
The subsequent activated carbon removes the remaining oil constituents from the air/gas flow, as well as the odours and flavourings. Another molecular sieve as well as a particulate filter purifies the medium further before it leaves the filter cartridge. A pressure retention check valve connected to the outlet piping of the purification system ensures there is always a constant minimum pressure in the system, for optimum purification.



1. Compressor
2. Oil/water separator
3. Check valve
4. P-filter system
5. P-filter system with SECURUS
6. Pressure retention check valve

Breathing air according to DIN EN 12021:2014

* If the units are maintained and installed correctly as described in the user manual and subject to the BAUER AERO-GUARD being used if CO_2 concentration in the intake air exceeds prescribed standard values.
Local TLV values are not considered.

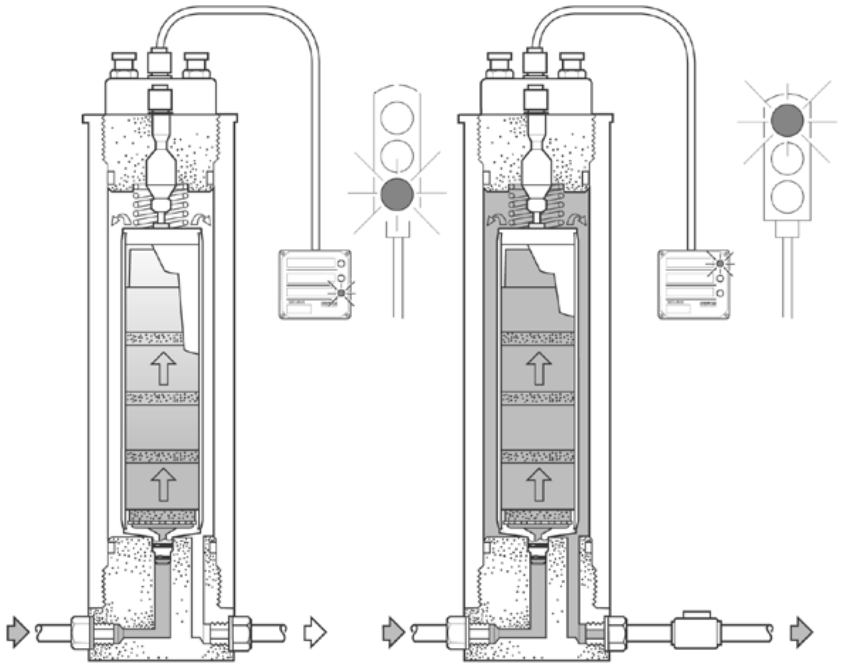
SECURUS SAFETY SYSTEM

FOR YOUR SAFETY

All purifications systems from P41/42* onwards can optionally be equipped with our SECURUS safety system (for P21 and P31, we recommend the B-Timer).
The SECURUS system monitors the H_2O saturation of the filter cartridges by measuring the moisture in the molecular sieve and shows this on the display of the BAUER controller as an advance warning in good time; this allows a new cartridge to be inserted at the optimum time.

If the cartridge is saturated and is not changed in good time, SECURUS automatically switches the compressor unit off, and also displays this visually.
SECURUS guarantees optimum dryness of the breathing air according to DIN/EN 12021 and 100% utilisation of the filter cartridge.

The SECURUS system is not suitable for petrol and diesel-operated systems.



* B-Timer is recommended for purification systems P21 and P31; see page 15.

P80 TO P140 PURIFICATION SYSTEMS

FOR SUBSEQUENT UPGRADING OF YOUR COMPRESSOR SYSTEM.

STANDARD SCOPE OF DELIVERY

- Oil and water separator with cyclone separator and type-tested safety valve as well as manual condensate drain valve. (Automatic condensate drainage at extra cost)
- System pressure gauge with bleed valve
- Filter circuit with pressure vessels made of steel or aluminium.
- Acceptance according to pressure equipment directive.
- 1 set of filter cartridges
- Filter key for opening the filter head (cartridge change).
- Pressure retention check valve. (stainless) with output pressure gauge.
- All components are mounted on a console and fully piped up.

The size depends on the particular purification system. (P60 – P140)

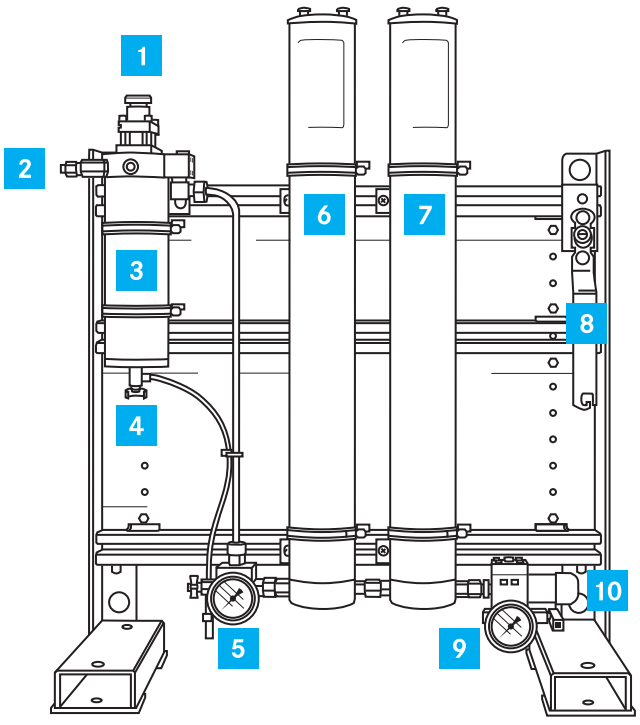
SECURUS MONITORING UNIT

Optional special accessories: For monitoring the moisture content of the dryer cartridges. Displayed messages and actions: System in operation advance warning shut-off

SCOPE OF DELIVERY

- SECURUS filter housing with measuring head.
- Connection cable for head and monitoring device
- 5m N21762-S01 or 10m N21762-S02
- SECURUS monitoring device

Monitoring device is not required with existing compressor controllers! (COMP-TRONIC or B-CONTROL).



1. Safety valve
2. Pressure input
3. Oil/water separator
4. Condensate drain valve
5. System pressure gauge with bleed valve
6. Drying filter
7. Fine post-cleaner
8. Filter key
9. Pressure retention check valve with output pressure gauge
10. Pressure output

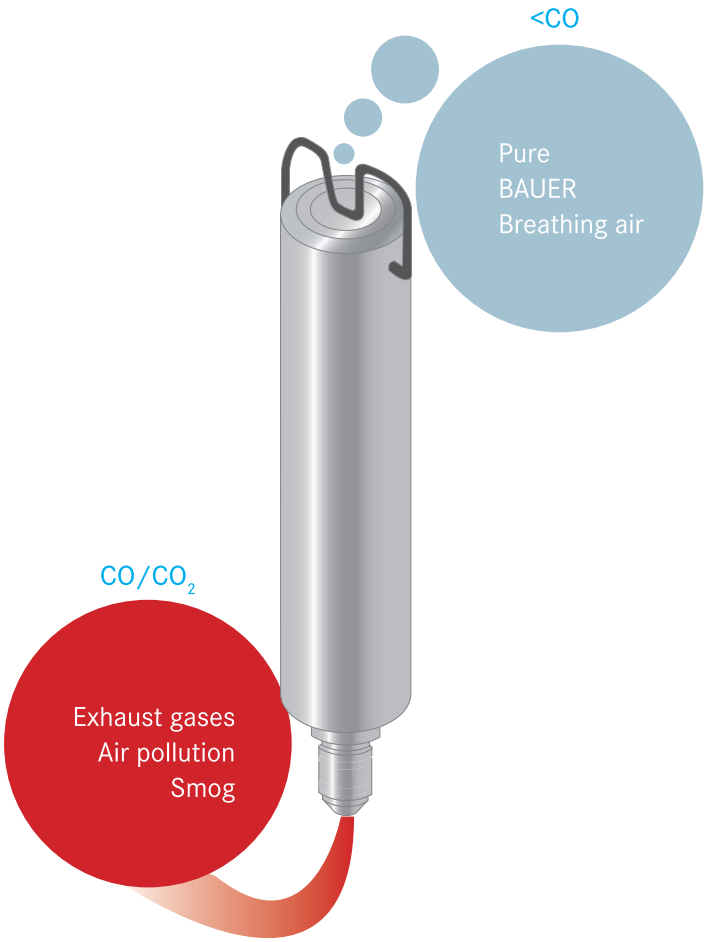
PURIFICATION SYSTEMS

CO CONVERSION

The purity of the air is increased by converting some of the CO into CO_2. This additional catalysis is particularly recommended if you operate your compressor with an internal combustion engine or, due to the location, air contaminated with CO could be drawn in.

The purification systems P21/31/41/42 - P 61 use a special catalyst filter cartridge for this purpose (see also the Replacement cartridges point).
From purification system P 80 onwards, there is an additional filter on the output.

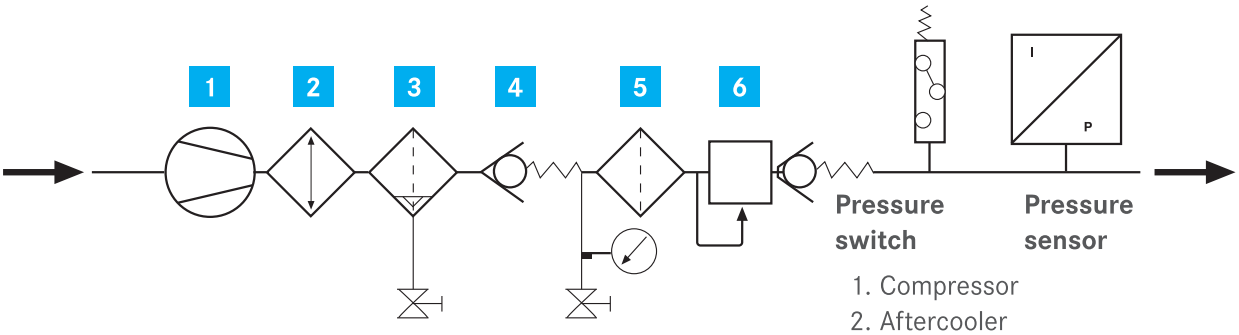
FILTER CARTRIDGES FROM BAUER – THE GENUINE ARTICLES!



PURIFICATION SYSTEMS

PRESSURE SWITCH / PRESSURE SENSORS

As a separate unit for installation in the output line of the P-system after the pressure retention valve, for switching off the compressor when the final pressure is reached.



1. Compressor
2. Aftercooler
3. Final separator
4. Check valve
5. Filter cartridge
6. Pressure retention check valve

APPLICATION RANGES

- **Pressure switch:** HardWired controllers
- **Pressure sensor:** Electronic controls (e.g. B-Control)

P-PURIFICATION SYSTEMS CONSTRUCTION KIT FOR INSTALLATION

Loose components without fastening and piping material.
P-purification systems with special equipment on request.

Please tell us what you need.
We will be happy to advise you.

FILTER CARTRIDGES

All purification systems meet or undershoot the limits of DIN EN 12021:2014 and the European Pharmacopoeia.

The gas is purified in the following sequence, depending on the cartridge type used:

- Coarse removal of oil/ and water droplets: with oil and water separator.
- Removal of water vapour H_2O: with molecular sieve, MS
- Removal of oil vapour and odours C_xH_y: with activated carbon, AC also optional or standard with breathing air
- Conversion of carbon monoxide CO into CO_2: with hopcalite (optional)
- Remove of coarse particles: with the filter discs of the filter cartridges

TECHNICAL DATA*

- **Oil/aerosols:** < 0.1 mg/m³ (according to new DIN EN 12021:2014 max. 0.5 mg/m³)
- **Carbon monoxide (CO):** < 5 ml/m³ (according to new DIN EN 12021:2014 max. 5 ppm)
- **Carbon dioxide (CO_2):** < 500 ppm (V/V)
- **Water vapour:** < 10 mg/m³ (according to new DIN EN 12021:2014 max. 25 mg/m³)
- **Odour/flavour:** odourless and flavourless

The purification systems and corresponding individual cartridges are presented below. We will be happy to advise you on cartridges for special applications.

* If the units are maintained and installed correctly as described in the user manual and subject to the BAUER AERO-GUARD being used if CO2 concentration in the intake air exceeds prescribed standard values.
Local TLV values are not considered.

P-SYSTEMS FILTER CARTRIDGES

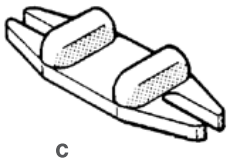
Purification systems	Air purification					
	DIN EN 12021:2014	CO converter DIN EN 12021:2014	with SECURUS + CO converter DIN EN 12021:2014	with SECURUS DIN EN 12021:2014	Industrial without SECURUS	Industrial with SECURUS
	AC/MS drying / oil removal	AC/MS-CO breathing air / CO	AC/MS-CO-SEC breathing air / CO	AC/MS-SEC breathing air	AC/MS oil removal / drying	AC/MS-SEC oil removal / drying
P21	1x057679	059183	–	–	–	–
P31	1x 80100	80114	–	–	–	–
P40	1x062565	067224	1x061687	1x061686	–	–
P41	1x062565	067224	1x061687	1x061686	–	–
P42	1x 062565	067224	1x061687	1x061686	–	–
P60	1x058826	058827	1x060037	1x060036	1x068622	1x090984
P61	1x058826	058827	1x060037	1x060036	1x068622	1x090984
P80	1x058825 1x058826	058825 058827	1x058825 1x060036 1x063282	1x058825 1x060036	1x058823 1x068622	1x058823 1x090984
P81	1x058825 1x058826	058825 058827	1x 058825 1x060036 1x063282	1x058825 1x060036	1x058823 1x068622	1x058823 1x090984
P 100	2x 058825 1x058826	–	2x058825 1x060036 1x063282	2x058825 1x060036	2x058823 1x068622	2x058823 1x090984
P 101	2x 058825 1x058826	–	2x058825 1x060036 1x063283	1x058825 1x060036	2x058823 1x068622	2x058823 1x090984
P 120	1x067099 1x067867	–	1x067099 1x067097 1x065562	1x067099 1x067097	1x067812 1x067867	1x067812 1x068067
P 140	2x067099 1x067867	–	2x067099 1x067097 1x065562	2x067099 1x067097	2x067812 1x067867	2x067812 1x067097

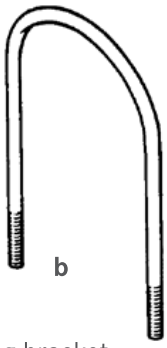
AC...activated carbon | MS...molecular sieve | CO...carbon monoxide | SEC...Securus connector

NOTES

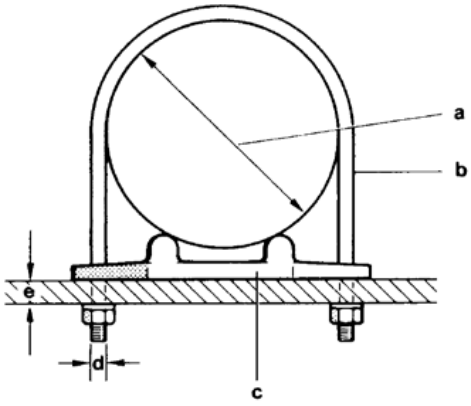
CLAMPING BRACKET

CLAMPING BRACKET FOR ATTACHING SEPARATOR AND FILTER HOUSINGS:





Clamping bracket



Self-locking M8 nut Order no. N 370
U-washer Order no. N 58
2 of each are required.

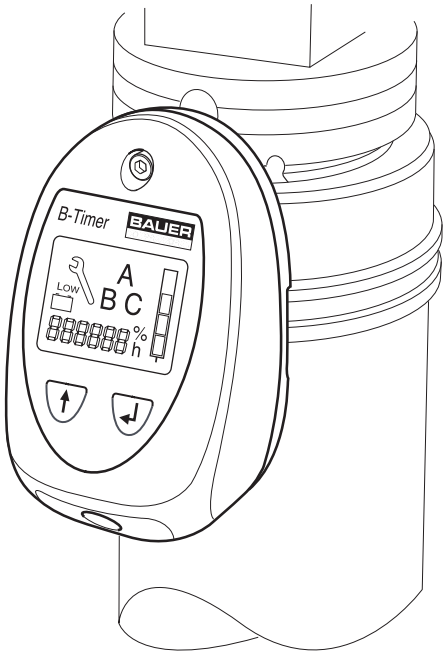
Internal diameter	Thread diameter	Wall thickness	Clamping bracket	filter support for this
mm	mm	mm	Order number	Order number
(a)	(d)	(e)	(b)	(c)
76	M8	1 - 8	14584	12917-M
80	M8	1 – 8	14946	12917-M
97	M8	1 – 20	61544	63599-M
110	M8	1 - 5	68817	63599-M
117	M8	1 - 5	65831	63599-M

P-FILTER MONITORING/B-TIMER

The filter cartridge change with the B-Timer is safe, easy and economical.

The minicomputer counts the operating hours and reliably shows the cartridge service life. Clear signals are output when cartridges need to be changed or maintenance is due.

The B-Timer can be fitted or retrofitted to all mobile BAUER compressors.
Easiest possible installation – a screwdriver is all it takes.



TECHNICAL DATA

- monitoring: P21 and P31 purification systems for 200 bar and 300 bar in Compact Line, Profi Line (II) and PE-HE and -TE -TE models
- Battery service life: approx. 3 years at 500 hours/year
- Operating hours counter: integrated
- Display: Maintenance, maintenance kit, cartridge saturation level, cartridge number, starts and stops automatically
- Properties: protection against dust and water spray, insensitive to strong sunshine, high air humidity and sand

Designation	Order number
B-Timer	N27286
Replacement battery	82743
Hose clamp P21 / P31 (80-100 mm)	166310
Hose clamp P41 (90-110 mm)	N15499
Hose clamp P61 / P101 (100-120 mm)	82649

CO_2 REMOVAL / AERO-GUARD

FOR REDUCING THE CO_2 CONTENT IN COMPRESSED BREATHING AIR.

CO_2 pollution is increasing steadily in our environment. BAUER compressors offer an efficient way to clean CO_2 out of the breathing air.

An ingenious bypass system passes the drawn-in air through the AERO-GUARD. Only about two thirds of the air flows through the filter cartridge, which adsorbs the CO_2. In this way, the CO_2 content is reduced to one third of the value in the drawn-in air – far below the strict limits of DIN 12021. At the same time, the AERO-GUARD achieves long filter service lives.

TECHNICAL DATA

- **For delivery rates:** from 100-680 l/min in Aero-Guard-Duo up to 1000 l/min
- **Input concentration:** max. 1000 ppm-vol. CO_2
- **Output concentration:** max. 330 ppm-vol. CO_2 = approx. 1/3 of the input concentration
- **Service life:** min. 50 hrs. at (600 l/min and 1000 ppm-vol.), correspondingly longer with lower delivery rate
- **Rel. humidity:** 0 - 100% of the drawn-in air
- **Temperature range:** +5 °C - +45 °C
- **Dimensions:** WxDxH 50x46x72
- **Operating weight:** 26 kg

Filter can be changed without tools.

SCOPE OF DELIVERY INCLUDES

With Aero-Guard S-XXL:
1x filter cartridge (9kg special carbon dioxide absorbency)
10x Micropur sterilisation tablets

With Aero-Guard-Duo1000:
2x filter cartridge (9 kg special carbon dioxide absorbency)
20x Micropur sterilisation tablets

Please order appropriate connecting hoses separately.
(see accessories)

Designation/Size	suitable for free air deliveries	Dimensions (W x D x H)	Operating weight incl. filter and water
	l / min.*	cm	Litre/bar
Aero-Guard-S	100 – 150		
Aero-Guard-M	160 – 230		
Aero-Guard-L	240 – 320	50 x 46 x 72	26
Aero-Guard-XL	330 – 450		
Aero-Guard-XXL	460 – 680		
Aero-Guard DUO-1000	650 – 1000	85 x 63 x 87	approx. 55

Accessories	Hose internal diameter LP / LP	Application range	Order number
Intake hose, input side	IN / OUT		
Intake hose cpl.	60/60		79377
intake piece with sleeve[1)]	100/60		79423
Intake hose to intake piece 79423[1)]			N25150
Intake hose, output side			
Intake hose cpl.	60/40	open systems	83336
Intake hose cpl.	60/60	IK100II - IK120II,	79377
Intake hose cpl.	60/40	IK12.14II	83337
Intake hose cpl.	60/60	open systems	79378
Intake hoses, output side, for older compressor models			
Intake hose cpl.	60/32	open systems K100 - K120 (with intake filter 013758); produced before July 2004, K15 (with intake filter 056372)	79376
Intake hose cpl.	60/25	K100 - K120 (with intake filter 013758); produced before July 2004,	79422
Replacement filter cartridge			
Filter cartridge incl. 10x water disinfection tablets for every 10 litres of water			79050

* Delivery quantity of the connected compressor measured with cylinder filling from 0 – 200 bar ±5%.
1) Order hose ND 100 separately; length as required, however not more than 20m; order no. N25150

B-KOOL

A long filter service life or capacity is decisive for cost-effective operation of professional diving stations. The temperature of the compressed medium has a significant influence on this.
Our B-Kool extends the service life of filter cartridges many times over, it is equipped with an integrated separator as well as automatic condensate drain and removes a large proportion of the humidity before it can get into the filter system.

TECHNICAL DATA

- **Medium:** Air
- **Operating temperature:** + 5 - + 45 °C
- **Input temperature:** max. + 60 °C
- **Maximum operating pressure:** 350/500 bar
- **Minimum operating pressure:** 100 bar
- **Delivery quantity range:** 200 - 700 l/min
- **Power consumption:** max. 550 W at 50 Hz

Options	PROFI-LINE	MV III	KAP	PE TE/HE	PE VE/ OPEN	VERTICUS 5	PE VE/SILENT
Model			B-KOOL 680s[1]			B-KOOL 680i[2] /B-KOOL 680s[1]	
P41 filter system	●	●	●			●	
P61 filter system		●	●		●	●	●

● ex-works or can be retrofitted | ○ Only ex-works, no retrofitting possible

Operating pressure PN-max	Voltage range	Frequency
B-Kool 680i Use V5,PE,VE | Weight 50 kg | Dimensions 75x35x53 cm (WxHxD)		
350 bar	200-240 VAC	50/60 Hz
500 bar	200-240 VAC	50/60 Hz
B-Kool 680s Use Profi Line, PE HE, PE Ve, MV, V5 | Weight 48 kg | Dimensions 38.5x70,53.5 cm (WxHxD)		
350 bar	200-240 VAC	50/60 Hz
500 bar	200-240 VAC	50/60 Hz

1) No retrofit possible with the PE-series with P42 filter system | 2) Integrated in the system by the client 3) Only with PE 250 HE and PE 300 TE/HE

INSTALLATION MATERIAL			B-KOOL 680i integrated	B-KOOL 680s (stand-alone)
for compressor units:	Filter system	Pressure range	Order no.	Order no.
VERTICUS / PE-VE	P 41/ P 61	350 bar	129016	129018
VERTICUS	P 81	350 bar	129017	129019
VERTICUS PE-VE	P 41 / P 61	420 bar	129056	129060
VERTICUS	P 81	420 bar	162246	
MINI-VERTICUS III	P 41 / P 61	350 bar		160028
MARINER 200/250/320	P 41	350 bar		129021
VERTICUS	P 61	500 bar	172323	172324

AEROTEST-SIMULTAN HP

Increasing damage to the environment and enforced regulations for breathing air quality such as DIN EN 12021:2014 mean that the requirements to be met by the operators of filling stations are getting stricter all the time. With the portable AEROTEST Simultan HP, you will always be on the safe side.
The test tubes used make it possible to check compliance with the limit values for CO, CO_2, water vapour and oil vapour simultaneously (using the new "Impactor"), and reliably in the compressed air. The device is designed so that incorrect measurement results due to mishandling are practically ruled out. Preliminary calibration is no longer required. The pressure reducer and the special nozzles in the test tube adaptor provide a constant flow and consistent measuring accuracy.

TECHNICAL DATA

- **Input pressure:** 10 to 300 bar
- **Test time:** 5 min
- **Flow rate:** 0.2 and 0.4 l/min
- **Connection:** G 5/8"
- **Weight:** approx. 3kg
- **Case dimensions:** 35x30x8cm (WxDxH)

PRODUCT INFORMATION

The AEROTEST-SIMULTAN HP is suitable for a pressure range from 10 to 300 bar. The AEROTEST-ALPHA LP is designed for the pressure range up to max. 15 bar. An Impactor adapter with an inserted impactor is used for measuring the remaining oil content.

Article	Order number
AEROTEST-SIMULTAN HP (complete in test case with all accessories)	N31565
AEROTEST-ALPHA LP (complete in test case with all accessories)	N25537
Replacement article	
Test tubes for CO (box with 10 tubes)	N15523
Test tubes for CO_2 (box with 10 tubes)	N15522
Test tubes for H_2O (box with 10 tubes)	N25535
Impactors for oil (box with 10 impactors)	N31173
Test tubes for oil (box with 10 tubes)	N15521
Impactor adapter	N31184
Test tube opener	N25813
Pressure reducer with G 5/8" hand connector	N25815

B-DETECTION PLUS

The B-DETECTION PLUS is designed as a permanently installed measurement system for online monitoring of CO_2, CO, O_2, absolute humidity and VOCs (oil) in compressed breathing air. If limits are exceeded, the control system shows a visual warning signal an alarm on the display and automatically shuts off the system. The system is available in two versions:
The B-DETECTION PLUS i, integrated into a MINI-VERTICUS or VERTICUS, and the B-DETECTION PLUS s, a standalone version suitable for all other BAUER compressors with control units and for retrofitting to other existing systems. The measurements can be saved in the B-CONTROL MICRO data logger, simply transferred to a computer using a SD card and read in Excel format.

- **Alarm and fault warnings when limits specified in EN 12021:2014 are exceeded**[1]
- **Direct connection to compressor control unit (B-CONTROL MICRO or B-CONTROL II) possible**
- **Available integrated into the compressor or standalone version**

TECHNICAL DATA SENSOR MODULE

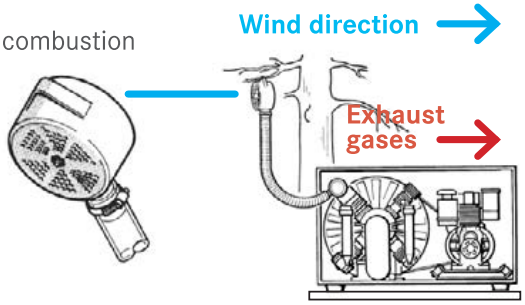
B-DETECTION PLUS	Integrated	Standalone
Medium	Air; nitrox (max. 40% O_2)	
Permissible operating pressure (inlet AIRBOX)	Max. 350 bar (higher pressures on request)	
Permissible charging rate (inlet AIRBOX)	Max. 850l/min (higher charging rates on request)	
Permissible operating temperature	+5°C ... +45°C	
Permissible storage temperature	-10°C ... +50°C	
Max. permissible impact stress	2 g	
Operating pressure (sensors)	Ambient air pressure (approx. 1013mbar)	
Maximum permissible ambient humidity	0 to 90% non-condensing	
Permissible operating environment	Non-explosive	
Operating voltage / frequency	24 VDC	100 - 250 VAC, 50/60 Hz
Power consumption	Connection via compressor	Max. 50 W
Flow rate (compressed air flow)	1.0 ... 3.0 l/min	
Outputs	-	3 relay outputs
Serial connection	Modbus RS485 (internally used)	CAN-Bus, Profibus DB optional with gateway, ethernet interface
Gas intake connector	6 mm	
Weight	3 kg	8.5 kg
Dimensions (H x W x D)	160 x 260 x 92 mm	462 x 354 x184 mm

1) Humidity and VOC measurement (volatile organic compounds) as option

NOTES

INTAKE PRE-FILTER

Intake pre-filters are connected to the existing intake filter on the compressor by means of a hose. They are provided for keeping away coarse impurities such as leaves, paper or other foreign bodies as well as for positioning the intake point where the intake air is cleaner.
Particularly important in breathing air-compressors with an internal combustion engine!



TECHNICAL DATA

- **Filter fineness of the pre-filter:** approx. 3 mm Ø
- **Air flow rate:** up to 600 l/min

FOR COMPRESSOR TYPES: UTILUS, CAPITANO, MARINER, KAP14, K100, K120, K12.14 UP TO YEAR OF MANUFACTURE 2004

Designation	Order number
intake pre-filter complete with hose and clamp	014539-KD
Scope of delivery	
Pre-filter	057691
Intake hose 3 m length, internal diameter 25 mm	N1005
Hose clamp	N2011

FOR COMPRESSOR TYPES: KAP 15, K150, K180

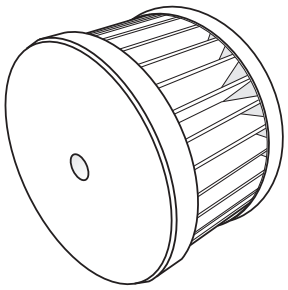
Designation	Order number
intake pre-filter complete with hose and clamp	014663
Scope of delivery	
Pre-filter	057692
Intake hose 3 m length, internal diameter 30 mm	N3034
Hose clamp	N2011

FOR COMPRESSOR TYPES: UTILUS-II, CAPITANO-II, MARINER-II, K100-II, K120-II, K12.14, KAP15, K150, K180 (FROM 03/2004 ONWARDS)

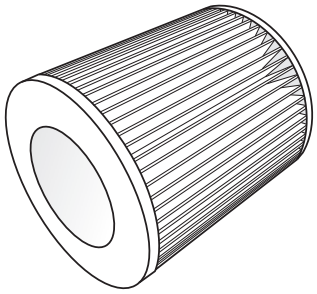
Designation	Order number
intake pre-filter complete with hose and clamp	82946
Scope of delivery	
Pre-filter	057691
Intake hose 3 m length, internal diameter 40 mm	N27481
Hose clamp	N27540
Reduction adapter (only for K150/K180)	82814

INTAKE FILTER INSERTS

- **Function:** Cleaning the intake air
- **Dimensions:** Diameter: 67 mm to 124 mm, length: 72 mm to 320 mm
- **Change frequency:** According to local conditions



N4823



N25950

Use	Order number
Small systems (Junior, Oceanus, S30)	N4823
IK100 – IK12.14 up to 6.2004	N70
IK100 – IK12.14 from 6.2004 onwards	N25950
IK150 – IK22.0 up to 2001	N3029
K23.0 before 2009	N18906
IK150 – IK18.1 from 2001 onwards IK150 – IK23 up to 2001	N25886
Large blocks / medium pressure (K28.3, 21.0, 25.0, 23.1, 25.4, K28.0, K28.2)	N7698
New large blocks from 2008 onwards (K23.0, K24.4)	N29569

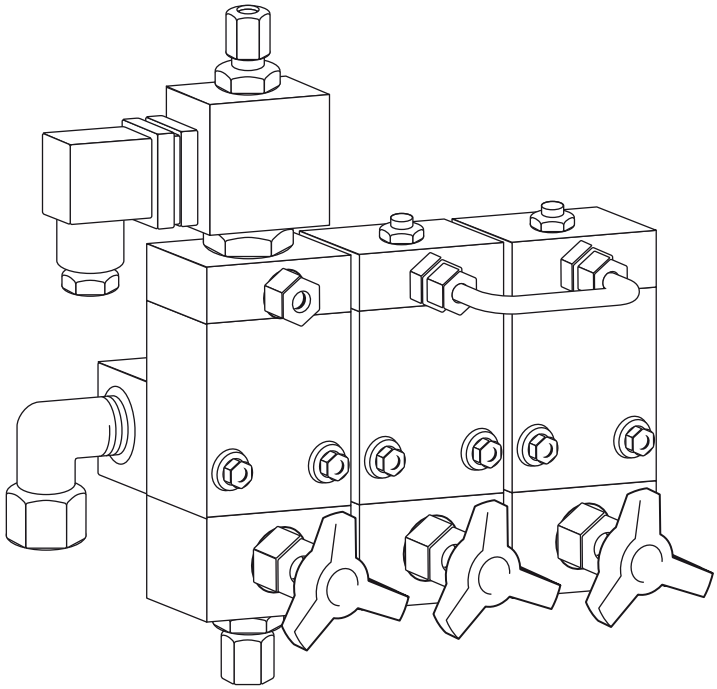
AUTOMATIC CONDENSATE DRAIN

Whether for air, He, Ar, N_2 - regular condensate drainage is required for your compressor too.

COMPRISING

- Condensate drain valve group with solenoid valve and coil
- Timer installed in protective housing or compressor controller
- Pressure reducer for control air supply
- Cycle counter to measure the condensate drain cycles

If required, contact us specifying your compressor model and operating conditions. We will prepare a corresponding offer for you immediately.



Kondensatablassautomatik

In crash frame	Filter system P21	Filter system P31	Filter system P41
Capitano 140 E	122400	122638	
Mariner 320 E		122500	122500
Mariner 200 E	122682	122683	122683
Mariner 250 E	122681	122675	122673
Mariner 320 B*		123054	123054

* Systems with a petrol engine can only be retrofitted if there is an existing electric generator.

CONDENSATE COLLECTION VESSEL

The condensate collection system provides a central means of collecting the condensate produced during the compression process and separates condensate and air.
The condensate collecting tank is equipped with a mechanical level display for visual advance warning when emptying is due, with corresponding control. In addition when the tank is full, a maximum contact can switch off the compressor automatically or trigger an alarm system at the client.

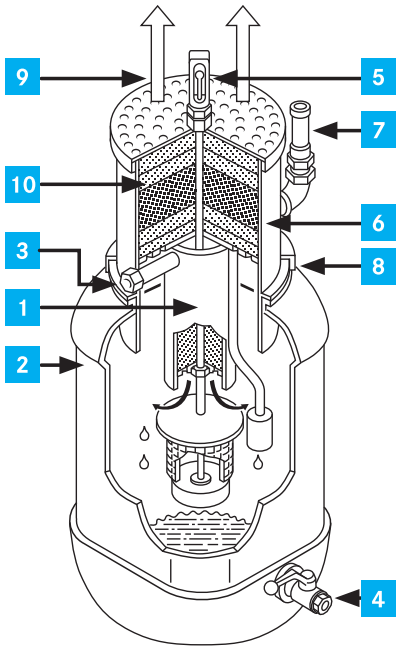
The separated air is channelled through an activated carbon bed so that only clean and odourless exhaust air flows out according to TRG regulations.

The condensate tank is connected to the condensate drain connector of the system by means of a hose.

RETROFIT KIT

For subsequent installation on your KAP or VERTICUS system.

Version/ compressor series	Tank content	Condensate capacity	Activated carbon content	Pipe fitting on hose	Inlet fitting	Connection hose	Dimensions (W x D x H)	Order number
	Litre	Litre	Gram	Ø mm		Ø mm	mm	
Verticus KAP up to K180	approx. 60	approx. 40	3700 g	15	G ½	1150	410 x 330 x 1000	072787
K22 to K28	approx. 60	approx. 40	3700 g	28	G1	1500	410 x 330 x 1000	072788



1 Condensate separator
2 Plastic collection vessel, 60 l
3 Condensate inlet G¾ or G1
4 Condensate drain valve G½
5 Mechanical level indicator
6 Filter housing
7 Safety valve
8 Clamping ring
9 Cleaned and odourless exhaust air
10 Activated carbon fill

OVERVIEW OF COMBINATION POSSIBILITIES

STORAGE BOTTLE BATTERY 330 BAR

Storage system	Pressure	Order number
B 80S with console	330 bar	B 80
B 80B without console	330 bar	B 80
Accessories		
Connecting line for B 80 S with console		076387
Connecting line for B 80 S without console		076363
Safety valve		059410
Wall attachment		076355
B 160 S standard module		B 160
B 160 A add-on module		B 160

STORAGE BOTTLE BATTERY 360 BAR (SYSTEM OPERATION UP TO 350 BAR)

Storage system	Volume	Weight	Order number
	Litre	kg / approx.:	
B 50 S	50	120	B 50
B 50 A	50	120	B 50
B 100 S	100	225	B 100
B 100 A	100	225	B 100

STORAGE BOTTLE BATTERY 420 BAR (SYSTEM OPERATION UP TO 410 BAR)

Storage system	Pressure	Order number
B 50 S standard module	420 bar	B 50
B 50 A add-on module	420 bar	B 50
B 100 S standard module	420 bar	B 100
B 100 A add-on module	420 bar	B 100

RACK OF PRESSURE VESSELS CNG 330 BAR

Storage system	Number of cylinders	geometr. Total volume	Pmax.	Design		
			bar	1-rack	2-rack	3-rack
B800	10	800	330	X	X	X
B960	12	960	330	X	X	X
B1920	24	1920	330	X	X	X
B2000	25	2000	330	X	X	X
B2400	30	2400	330	X	X	X

B 80 S, with console
Upright pressure vessel mounted on console; connection at bottom, with condensate drain valve and air outlet valve; for mounting several storage bottles, connecting line 076387 is required for each additional storage bottle.
Option: installed safety valve (max. 330 bar setting value), at bottom of console.

B 80 B, without console
Storage bottle, with cylinder valve; without condensate drain valve.
Option: clamp for wall mounting.
Connecting cable 076363 is required for each additional storage bottle when adding multiple storage bottles.

B 160 S – standard module
Upright storage bottle, mounted on console; connection at bottom, with condensate drain valve, air outlet valve and safety valve.

B 160 A – add-on module
To expand the standard modules above in any size for increased volume.
Scope of delivery according to standard module, but without safety valve; a connecting line is required for this.

B 50 S / B 100 S – standard module
Upright storage bottle(s), mounted on console; connection at top, with pressure gauge, shut-off valve, bleed valve and safety valve.

-B 50 A / B 100 A – add-on module
To expand the standard modules above in any size for increased volume.
Scope of delivery as per standard module but without pressure gauge and safety valve.

PRESSURE VESSEL, SINGLE MODULE

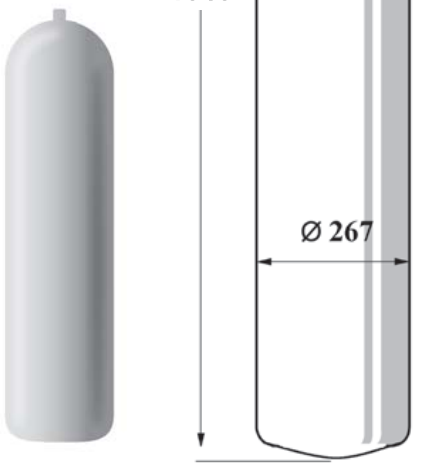
TECHNICAL DATA

- **Volume:** 80 litre
- **Medium:** Compressed air, dry; nitrogen and noble gases
- **Operating temperature:** -20 °C to +50 °C
- **Surface:** inside untreated, outside primed
- **Number of load cycles according to AD-S1:** at 70 up to 250 bar = 74,300 cycles*
- **Material:** 34 Cr Mo 4 pipe external diameter 8 mm

SCOPE OF DELIVERY

- Cylinder without connectors and accessories

Attention! The tanks are delivered filled with nitrogen!



Rated pressure	Volume	Weight	Storage capacity	Test pressure	Connection	Order number
bar	Litre	kg	Litre/bar	bar	acc. to DIN 477	
330	80	approx. 129	24,000/300	472	W28.8x1/14	N33284

* Calculation according to AD codes of practice with TÜV acceptance according to Pressure Equipment Directive.

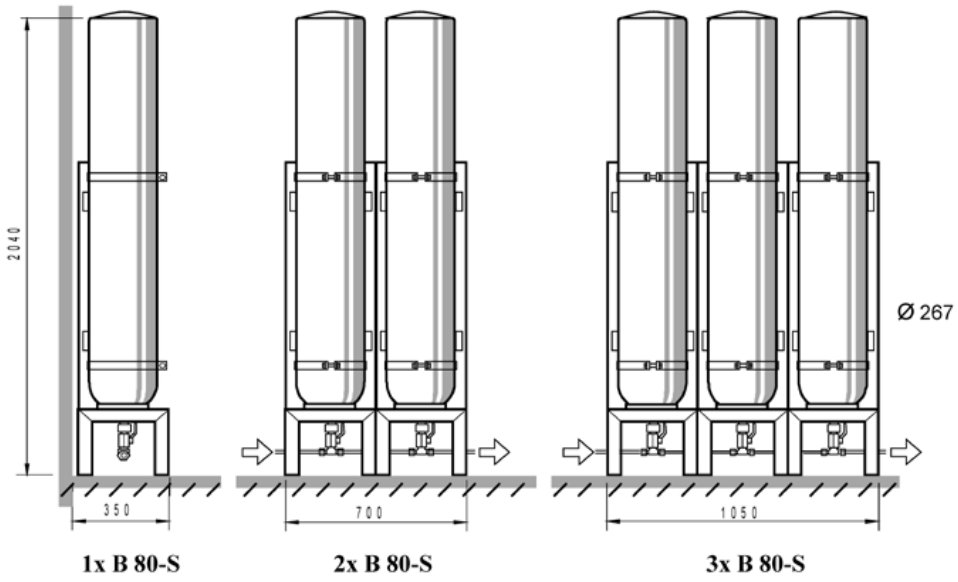
STORAGE BOTTLE BATTERY, B80-S

The modules are intended for operation without safety valve and without pressure gauge. The storage bottle battery is supplied with a console and condensate drain, and must be protected via the system.

THE PRESSURE VESSELS MEET THE REQUIREMENTS OF GERMAN REGULATIONS GOVERNING STATIONARY INSTALLATION.

TECHNICAL DATA

- **Volume:** 80-litre upright with console and connection at bottom, condensate drain and outlet valve
- **Pressure:** 330 bar
- **Pipe connector:** for lines with ø 8 mm



Storage volume	Rated pressure	Weight	Storage capacity	Order number
Litre	bar	kg	Litre/bar	
80	330	approx. 145	24,000/300	076053
Optional				
Connecting line				076387

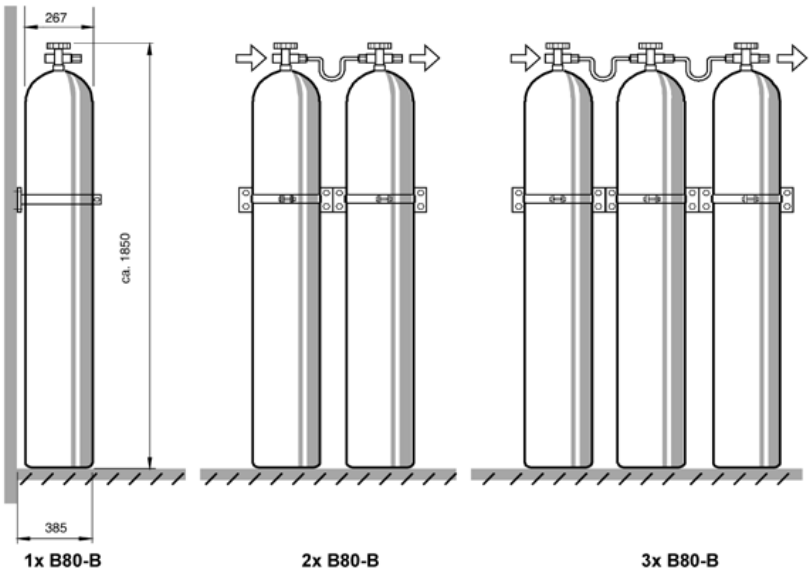
STORAGE BOTTLE BATTERY, B80-B

The modules are intended for operation without safety valve, without pressure gauge, without console and without condensate drain.

THE PRESSURE VESSELS MEET THE REQUIREMENTS OF GERMAN REGULATIONS GOVERNING STATIONARY INSTALLATION.

TECHNICAL DATA

- **Volume:** 80-litre upright modules with connection at top, without console and without condensate drain
- **Pressure:** 330 bar
- **Pipe connector:** for lines with ø 8 mm
- **Connection dimension in:** R 3/8
- **Connection dimension out:** M 16 x 1.5



Storage volume	Rated pressure	Weight	Storage capacity	Order number
Litre	bar	kg	Litre/bar	
80	330	approx. 125	26,400/330	076356
Optional				
Wall attachment				076355
Connecting line				076363

FILLING VALVES

Our filling valves ensure the greatest possible operational safety, ease of use and long service life.
The lever filling valves as well as rotary wheel valves are safety filling valves. They prevent uncontrolled whipping around of the filling hose if the cylinder is not connected and the filling valve is opened inadvertently. This significantly reduces the risk of accident!
There is no possibility of mixing up the 200 and 300 bar connectors, because: 200 bar connectors are marked in black and do not have a pin on the pressure outlet! 300 bar connectors are marked in red and have a pin on the pressure outlet!

HAND WHEEL VERSION

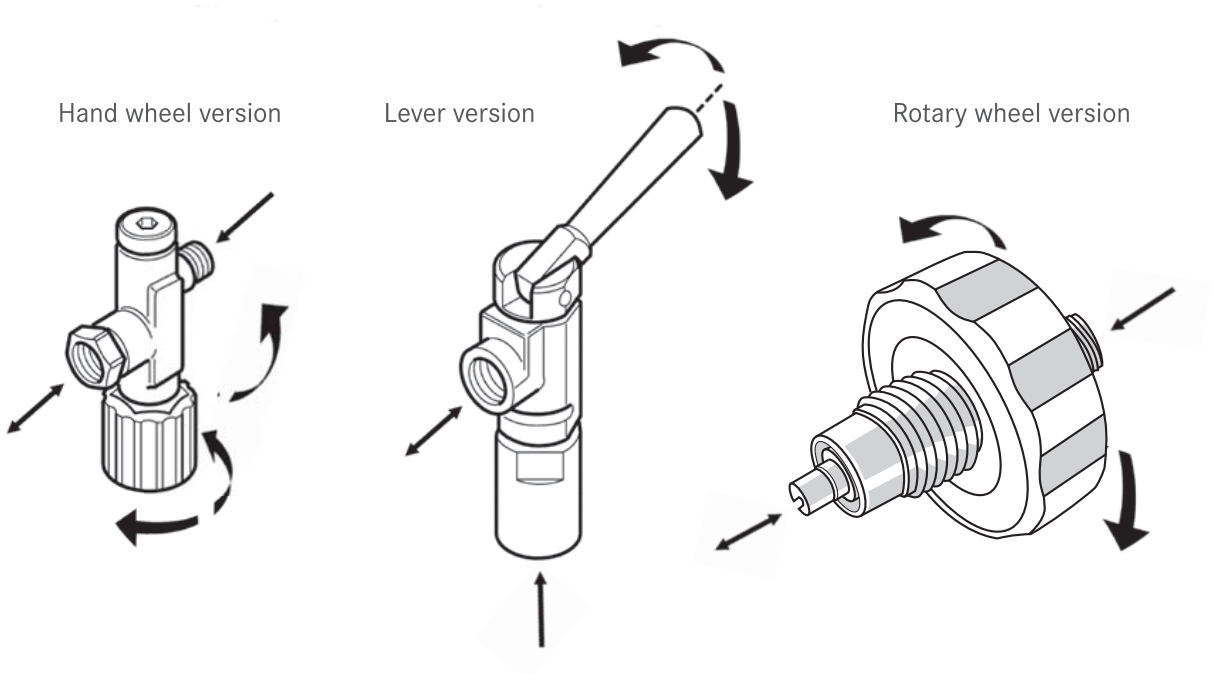
Opening and venting with one handwheel (internal venting). Valve seat is protected against damage caused by overtightening when closing. Particularly well-suited for mobile use. The complete valve is resistant to corrosion.

LEVER VERSION

Safety filling connection. Unparalleled quality, reliability and operating comfort. Recommended for stationary use, above all on filling panels. Unambiguous lever position OPEN and CLOSED. Integrated silencer. Quieter venting of the valve when removing the compressed air cylinder. The complete valve is resistant to corrosion.

ROTARY WHEEL VERSION

Safety filling connection. Filling valve with integrated check valve. This prevents the residual gas from flowing back into another connected compressed air cylinder. This is advantageous, particularly in precisely calculated NITROX mixtures. When the valve is removed after filling, it is vented automatically by opening the rotary wheel (internal venting). This ensures reliable decoupling from the connected compressed air cylinder. The ergonomic advantages were the main aspect in developing this variant.

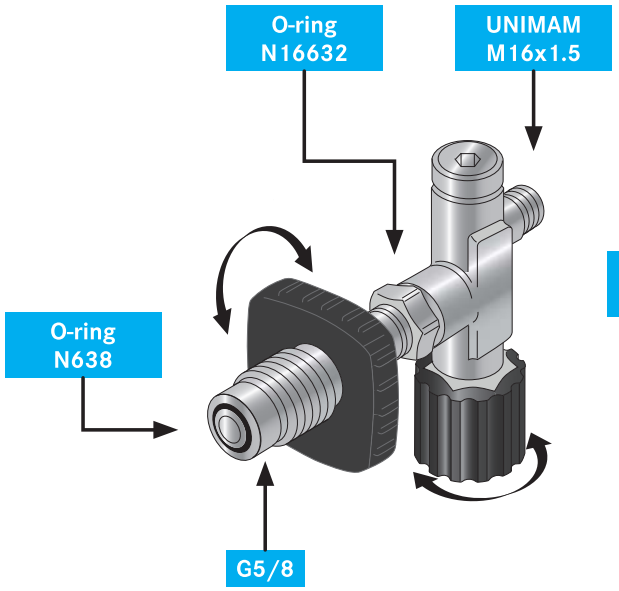


FILLING VALVES

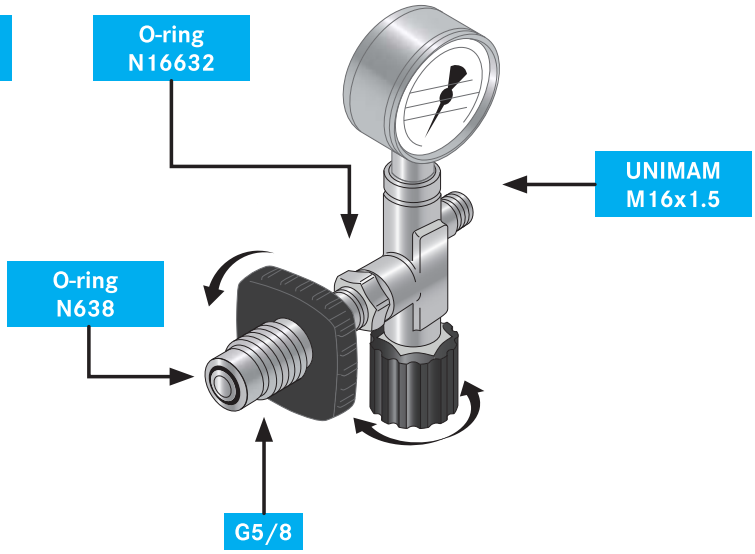
THE ADVANTAGES OF THE NEW LEVER FILLING VALVES

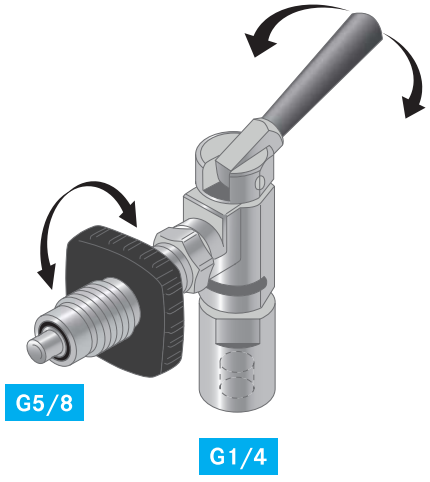
The pressure release reduces the noise by more than half (16 dBA). The frequency of the blow-off sound is low, more pleasant and tolerable for the human ear. In addition, the low residual noise and the surplus air are channelled to the outside via a G1/8 connection. Completely reverse-compatible, it can be exchanged for older versions without difficulty. Many spare parts can be obtained separately, as can the appropriate maintenance kits. Absolutely rust-free. Suitable for continuous use.

without pressure gauge



with pressure gauge





FLLING CONNECTORS

The standardised filling connections (EN 144-2) are available in the variants PN200 bar and PN300 bar for breathing air and as Nitrox version.

FILLING CONNECTION IN RED

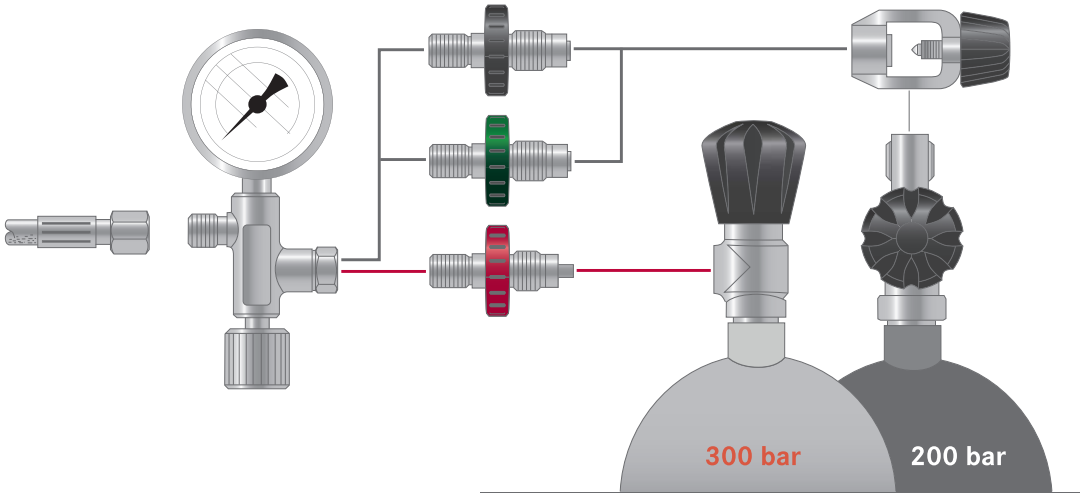
- for 300 bar (330 bar) breathing air

FILLING CONNECTION IN BLACK

- for 200 bar (225 bar) breathing air

FILLING CONNECTION IN GREEN

- for 200 bar (225 bar) Nitrox

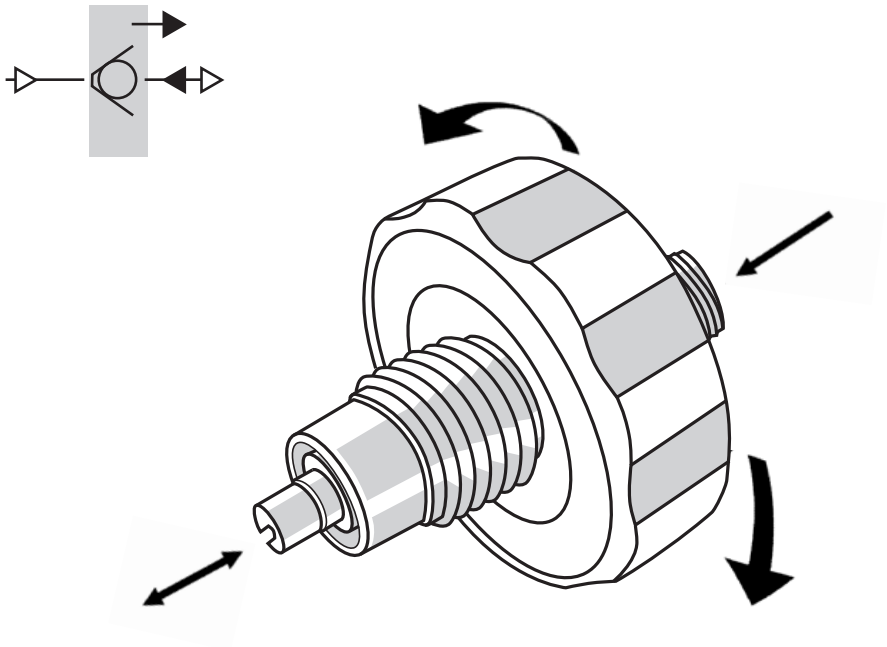


CYLINDER CONNECTOR WITH SPIN VALVE

› A filling valve with integrated check valve prevents the residual gas in the compressed air cylinder from flowing back into other connected cylinders. This is advantageous especially with precisely calculated Nitrox mixtures.

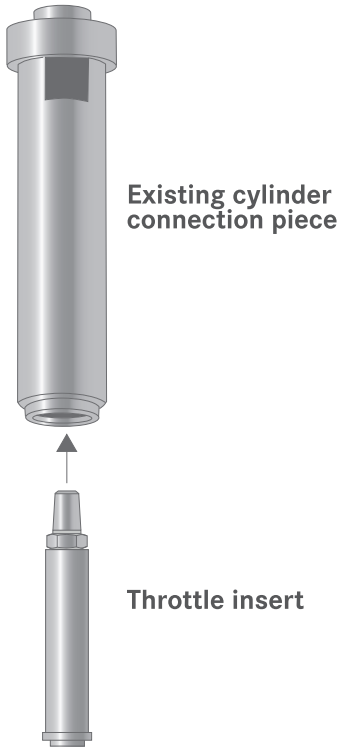
FILLING CONNECTION WITH SIMPLE VENT FUNCTION

› When the valve is removed after filling, the valve is automatically vented by turning the valve, and safe removal of the filling valve from the cylinder is possible.



FILLING VALVE THROTTLE INSERT

To meet the requirements of manufacturers of composite cylinders (CFP), installing the throttle insert limits the filling speed when filling breathing air cylinders to approx. 30 bar/min. This reduces the heating of the cylinders being filled.

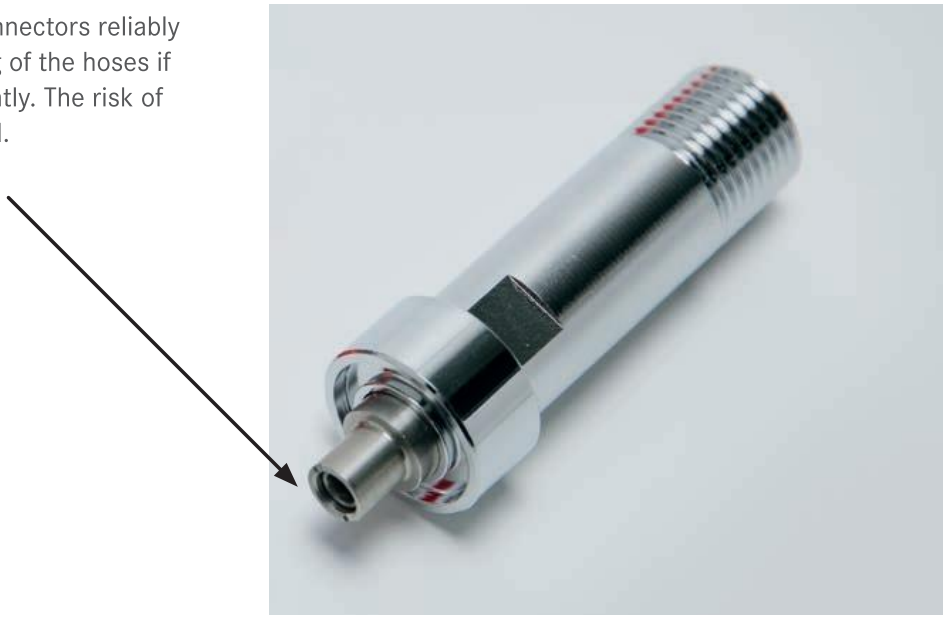


TECHNICAL DATA PN 200

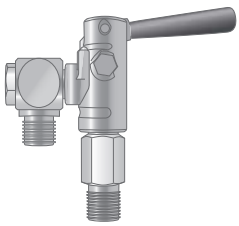
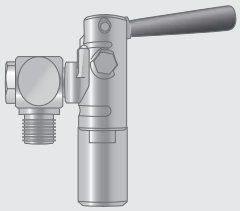
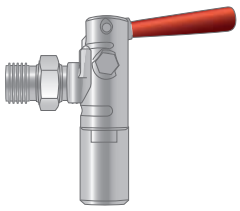
- **Permitted operating pressure:** PS 350 bar
- **Testing over-pressure** PT 500 bar
- **Permitted operating temperature:** TS 5-50 °C
- **Medium:** Air
- **Filling speed 200 bar:** V 30-35 l/min at 200 bar (into a 7 l cylinder)
- **Filling speed 300 bar:** V 30-35 l/min at 300 bar (into a 7 l cylinder)

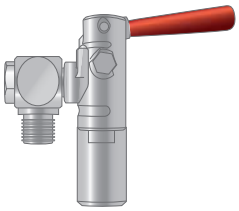
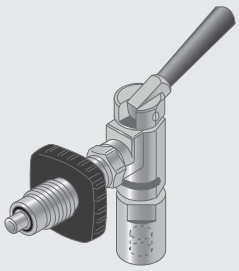
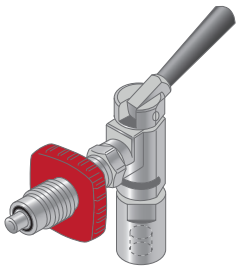
SAFETY CYLINDER CONNECTORS

The BAUER safety cylinder connectors reliably prevent uncontrolled whipping of the hoses if the valve is opened inadvertently. The risk of accident is effectively reduced.

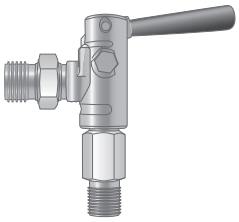
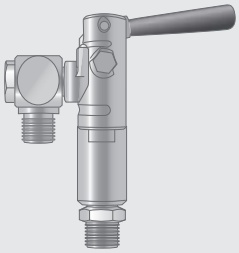
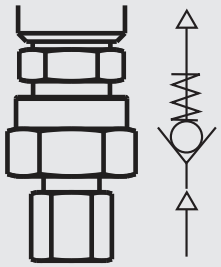
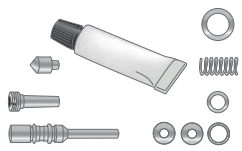


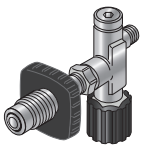
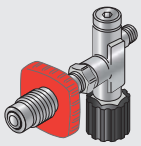
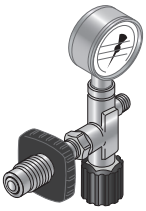
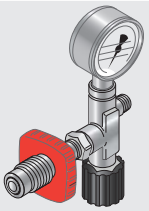
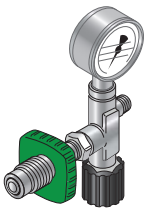
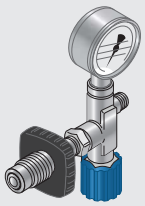
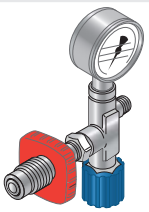
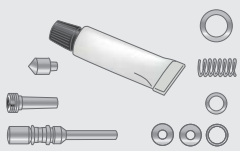
FLLING VALVES

Product reference	Toggle filling valve (stationary) Connector piece thread in valve M16x1.5	Appropriate accessories or spare part	Order number	Fig. on page 45
86327-F03 	200/300bar for filling hose, with silencer, moveable angle piece, input 3/8" external thread, Black lever	Angle piece	072539	6
		Angle piece with nozzle	72539-S01	6
		O-ring between angle piece/valve	N3355	26
		O-ring in angle piece 2x	N18334	25
		Sinter silencer	N29042	29
		Black lever	11322	
		Double nipple, 3/8" external thread	11321	17
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	23
		Nut	N57	24
		Sinter filter for 11347	63832	
		O-ring	N3331	
86102-F03 	200/300bar for filling hose, with moveable angle piece, input 1/4" internal thread, Black lever	Angle piece	072539	6
		Angle piece with nozzle	72539-S01	6
		O-ring between angle piece/valve	N3355	26
		O-ring in angle piece 2x	N18334	25
		Sinter silencer	N29042	29
		Black lever	11322	
		Screw piece 1/4" internal thread (IG)	11347	15
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	23
		Nut	N57	24
		Sinter filter for 11347	63832	
		O-ring	N3331	
122361-F03 	200/300bar for filling hose, with connector, input 1/4" internal thread, Red lever	Straight connector with filter	076421	13
		Straight connector with filter + nozzle	85971	13
		Sinter filter in connector	76386	
		O-ring to valve	N3355	
		Sinter silencer	N29042	29
		Red lever	11322-S01	
		Screw-in part 1/4" internal thread	11347	15
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	23
		Nut	N57	24
		Sinter filter for 11347	63832	
		O-ring	N3331	

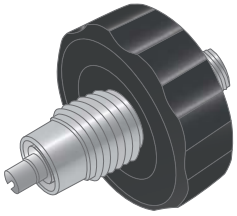
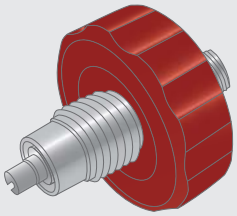
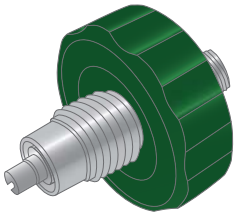
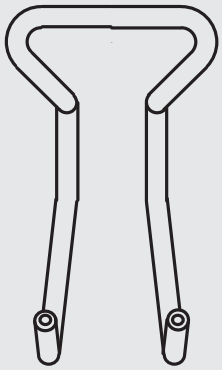
Product reference	Toggle filling valve (stationary) Connector piece thread in valve M16x1.5	Appropriate accessories or spare part	Order number	Fig. on page 45
072832-S01 	200/300bar for filling hose, with moveable angle piece, input 1/4" internal thread, Red lever	Angle piece	072539	6
		Angle piece with nozzle	72539-S01	6
		O-ring between angle piece/valve	N3355	26
		O-ring in angle piece 2x	N18334	25
		Sinter silencer	N29042	29
		Red lever	11322-S01	
		Screw-in part 1/4" internal thread	11347	15
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	23
		Nut	N57	24
		Sinter filter for 11347	63832	
		O-ring	N3331	
85877-F03 	200Bar with silencer, input 1/4" internal thread, Non-return function, Black handwheel **5/8"** Black lever	Cap, 5/8"	63592	
		Retainer chain for cap	063691	
		Connection fitting	077445	1
		Handwheel black	10859	
		O-ring to bottle	N638	
		O-ring to valve	N3355	
		Sinter silencer	N29042	29
		Screw-in part 1/4" internal thread	11347	15
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	23
		Nut	N57	
		Sinter filter for 11347	63832	
		O-ring	N3331	
		Counternut M16x1.5	64279	
85878-F03 	300bar with silencer, input 1/4" internal thread, Non-return function, Red handwheel **5/8"** Black lever	Cap, 5/8"	63592	
		Retainer chain for cap	063691	
		Connection fitting	077441	2
		Handwheel, red	11355	
		O-ring to bottle	N638	
		O-ring to valve	N3355	
		Sinter silencer	N29042	29
		Screw-in part 1/4" internal thread	11347	15
		Clamping bracket	6942	21
		Washer	N2862	22
		Spring washer	N108	32
		Nut	N57	24
		Sinter filter for 11347	63832	
		O-ring	N3331	
		Counternut M16x1.5	64279	

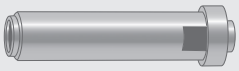
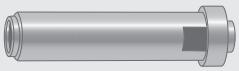
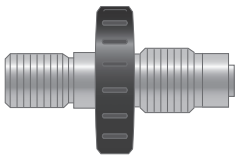
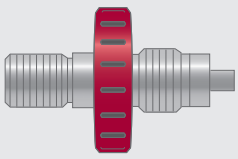
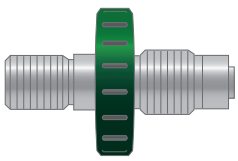
FILLING VALVES

Product reference	Toggle filling valve (stationary) Connector piece thread in valve M16x1.5	Appropriate accessories or spare part	Order number	Fig. on page 45
86615-F03 	200/300bar for filling hose, with straight connector, conic intake R3/8" external thread, Black lever Use specifically for: Verticus and Mini Verticus	Straight connector with filter Straight connector with filter + nozzle O-ring to valve Sinter silencer Black lever Screw-in unit R3/8" external thread Teflon sealing strip	076421 85971 N3355 N29042 11322 86616 N19943	13 13 29
85622-F03 	200/300bar for filling hose, with moveable angle piece, input with check valve for 6mm pipe inlet M14x1.5 (6S), Check valve is screwed in underneath on inlet piece 11347 	Identical accessories as e.g. for 86102-F03 Otherwise, e.g. also: Check valve Adjustable T-piece M14x1.5 Union nut 6S = M14x1.5 Cutting ring 6S CFA pipe 6x1 **Useful information: CFA** **Cold-finished, bright annealed** **Cold-finished, bright annealed**	 N29420 N20019 N3610 N3663 N3616	13 13 29
85622-F03 		**Repair or maintenance kit:** until 2006 2007 or later From 2007 for **NITROX**	 N6676 N29617 N30890	20

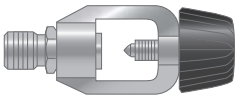
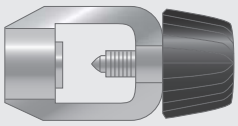
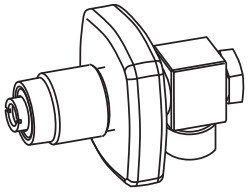
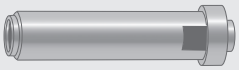
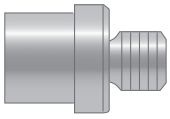
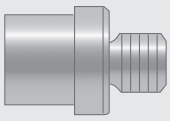
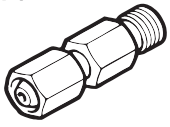
Product reference	Filling valve (mobile) with UNIMAM input Connector piece thread in valve 1/4”	Appropriate accessories or spare part	Order number	Fig. on page 45
071744 	200bar without pressure gauge, black handwheel **5/8"**	Connector piece with black handwheel O-ring to bottle O-ring to valve Counternut 1/4”	064698 N638 N16632 64289	19
071743 	300bar without pressure gauge, Red handwheel **5/8"**	Connector piece with red handwheel O-ring to bottle O-ring to valve Counternut 1/4”	064699 N638 N16632 64289	18
071343 	200bar with pressure gauge, black handwheel **5/8"**	Connector piece with black handwheel O-ring to bottle O-ring to valve Pressure gauge Rubber protection Counternut 1/4” Replacement glass	064698 N638 N16632 N1315 N15985 64289 N19954	19
071344 	300bar with pressure gauge, Red handwheel **5/8"**	Connector piece with red handwheel O-ring to bottle O-ring to valve Pressure gauge Rubber protection Counternut 1/4” Replacement glass	064699 N638 N16632 N4101 N15985 64289 N19954	18
83935 	200bar with pressure gauge, Green handwheel **M26x2 NITROX**	Connector piece with green handwheel O-ring to bottle O-ring to valve Pressure gauge Rubber protection Counternut 1/4” Replacement glass	83870 N16057 N16632 N1315 N15985 64289 N19954	
79193 	200bar with pressure gauge, Without venting, blue control valve, black handwheel **5/8"** **Shooting sports**	Connector piece with black handwheel O-ring to bottle O-ring to valve Pressure gauge Rubber protection Counternut 1/4” Replacement glass	064698 N638 N16632 N1315 N15985 64289 N19954	19
79197 	300bar with pressure gauge, Without venting, blue control valve, Red handwheel **5/8"** **Shooting sports**	Connector piece with red handwheel O-ring to bottle O-ring to valve Pressure gauge Rubber protection Counternut 1/4” Replacement glass	064699 N638 N16632 N4101 N15985 64289 N19954	18
		**Repair or maintenance kit:** until approx. 1993 from approx. 1993 only **shooting sports**	 N5051 072349 164816	20

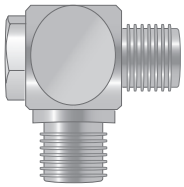
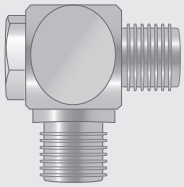
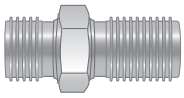
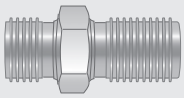
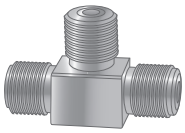
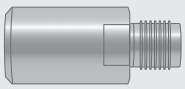
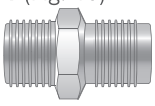
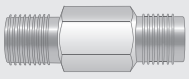
FILLING VALVES

Product reference	Filling valve (mobile) with UNIMAM input	Appropriate accessories or spare part	Order number
125085 (Fig. 28) 	200bar quick-venting, black handwheel **5/8"**	Locking ring O-ring to bottle O-ring in valve 2x	N38010 N638 N25452
125083 (Fig. 28) 	300bar quick-venting, Red handwheel **5/8"**	Locking ring O-ring to bottle O-ring in valve 2x	N38010 N638 N25452
125087 (Fig. 28) 	200bar quick-venting, Green handwheel **M26x2 NITROX**	Locking ring O-ring to bottle O-ring in valve 2x	N38010 N16057 N25452
73945  NIRO	Hanging bracket for filling connection. Attached by means of 2 screws to filling panels present, or to other adequate locations. **Only suitable for filling connectors with handwheels!**	Hexagonal bolt M8x20 Hexagonal bolt M8x25 Nut U-washer, small U-washer, large U-washer, thick Spring washer	N19505 N19506 N57 N58 N2460 N2862 N108

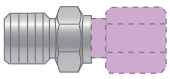
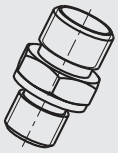
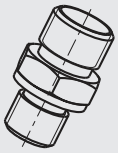
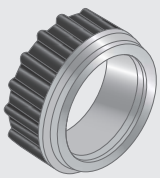
Product reference	Diverse filling connectors	Appropriate accessories or spare part	Order number
129092 (Fig. 27) 	200bar cylinder connection piece for all lever filling valves, with including throttle insert for CFK cylinders, Non-return function, without handwheel Connector piece thread M16x1.5	Black handwheel O-ring to bottle O-ring to valve Counternut M16x1.5	10859 N638 N3355 64279
128452 (Fig. 27) 	300bar cylinder connection piece for all lever filling valves, with including throttle insert for CFK cylinders, Non-return function, without handwheel Connector piece thread **M16x1.5**	Red handwheel O-ring to bottle O-ring to valve Counternut M16x1.5	11355 N638 N3355 64279
077445  **064689**	200bar cylinder connection piece for all lever filling valves, with non-return function, without handwheel Connector piece thread **M16x1.5** 064689 As above but **without** non-return function	Black handwheel O-ring to bottle O-ring to valve Counternut M16x1	10859 N638 N3355 64279
077441  **064699**	300bar cylinder connection piece for all lever filling valves, with non-return function, without handwheel Connector piece thread **M16x1.5** 064699: As above but **without** non-return function	Red handwheel O-ring to bottle O-ring to valve Counternut M16x1.5	11355 N638 N3355
07756 (Fig. 8) 	200bar cylinder connector **5/8”** with M16x1.5 UNIMAM hose intake, with non-return function, black handwheel	Black handwheel O-ring to bottle O-ring on UNIMAM hose	10859 N638 N16632
010912 (Fig. 9) 	300bar cylinder connector **5/8”** with M16x1.5 UNIMAM hose intake, with non-return function, Red handwheel	Red handwheel O-ring to bottle O-ring on UNIMAM hose	11355 N638 N16632
83974 (Fig. 10) 	200bar cylinder connector **M26x2** with M16x1.5 UNIMAM hose intake, with non-return function, Green handwheel **NITROX**	Green handwheel O-ring to bottle O-ring for UNIMAM	83867 N16057 N16632

FILLING VALVES

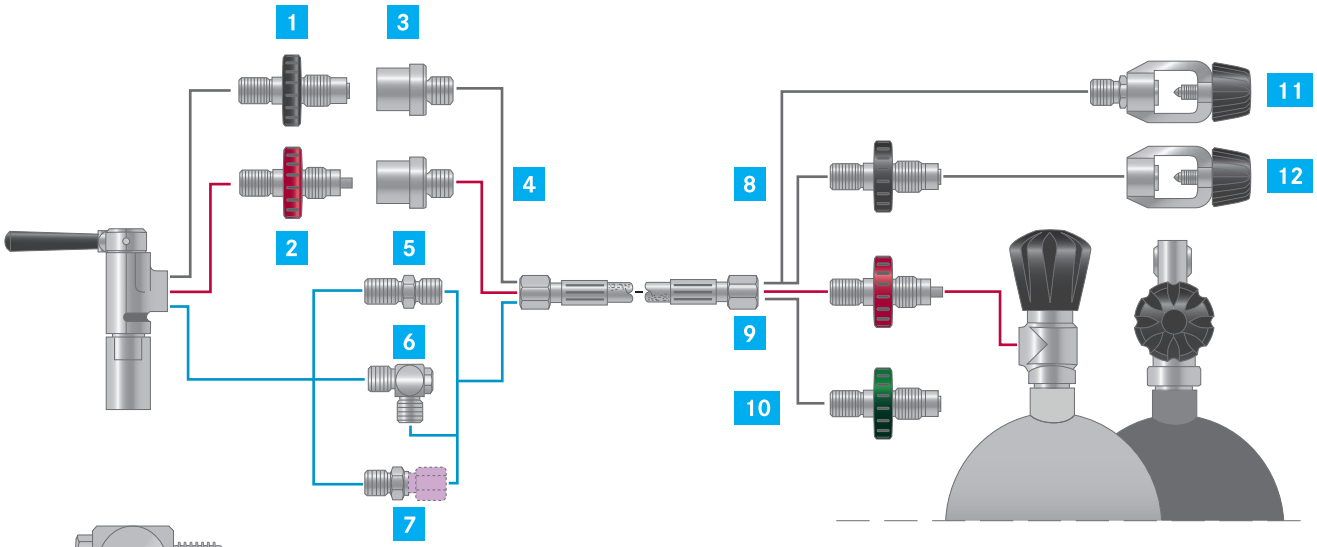
Product reference	Diverse filling connectors	Appropriate accessories or replacement part	Order number
03147 (Fig. 11) 	200bar international flange connection, 16x1.5 UNIMAM hose	O-ring in connector UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	N638 e.g. 1m N2817 2m N2818
79375 (Fig. 12) 	200bar international flange connection, **5/8”** internal thread input	O-ring in connector UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	N638 e.g. 1m N2817 2m N2818
83799 	300bar cylinder connection piece, UNIMAM hose input angled 90°, only for **Interspiro breathing air cylinders**! Red handwheel	O-ring to bottle O-ring in connector O-ring in connector 2x Red handwheel UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	N638 N2814 N1338 11355 e.g. 1m N2817 2m N2818
83225 	300bar cylinder connector piece, UNIMAM hose input, Non-return function, only for **Interspiro breathing air cylinders without** handwheel Connector piece thread **M16x1.5**	O-ring Red handwheel Counternut M16x1.5 UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	N638 11355 64279 e.g. 1m N2817 2m N2818
5951 (Fig. 3) 	200bar adapter UNIMAM hose on 5/8” internal thread	UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	e.g. 1m N2817 2m N2818
11255 (Fig. 4) 	300bar adapter UNIMAM hose on 5/8” internal thread	UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	e.g. 1m N2817 2m N2818
068870 	300bar adapter UNIMAM hose on M16x1.5 old 60º filling connector	UNIMAM filling hoses in diverse lengths. From 0.5 to 80 metres. In different metre-based lengths	e.g. 1m N2817 2m N2818

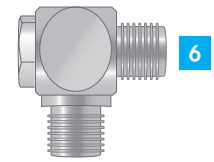
Product reference	Diverse filling connectors	Appropriate accessories or spare part	Order number
072539 (Fig. 6) 	200/300bar, moveable angle connector, for lever filling valve UNIMAM outlet	O-ring to valve O-ring in connector 2x	N3355 N18334
72539-S01 (Fig. 6) 	200/300bar, moveable angle connector, for lever filling valves, UNIMAM outlet, with throttle nozzle for CFK bottles	O-ring to valve O-ring in connector 2x Sinter filter	N3355 N18334 76386
076421 (Fig. 13) 	200/300bar, straight connector, for lever filling valves, UNIMAM outlet	O-ring to valve Counternut M16x1.5	N3355 64279
85971 (Fig. 13) 	200/300bar, straight connector, for lever filling valves, UNIMAM outlet, with throttle nozzle for CFK bottles	O-ring to valve Counternut M16x1.5	N3355 64279
171894 (Fig. 14) 	200/300bar, T-piece, central thread R1/4”, external thread 2x M14x1.5, for lever filling valve, with throttle nozzle for CFK bottles, Connection of WEH couplings	Teflon sealing strip	N19943
11347 (Fig. 15) 	200/300bar, Input piece for lever filling valve, without sinter filter, Internal thread IG=G1/4”, external thread AG=G3/8”	O-ring to valve Sinter filter	N3331 63832
75311 (Fig. 16) 	200/300bar, conical input piece for lever filling valve, external thread AG=R3/8”, external thread AG=G3/8” to valve	O-ring to valve Teflon sealing strip	N3331 N19943
11321 (Fig. 17) 	200/300bar, Input piece for lever filling valve, external thread AG=G3/8”, external thread AG=G3/8”	O-ring to valve	N3331
63596 (Fig. 5) 	200/300bar, straight connection with conical hose outlet 60º for lever filling valves, no UNIMAM	O-ring to valve	N3355

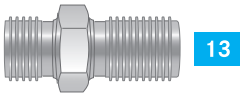
FLLING VALVES

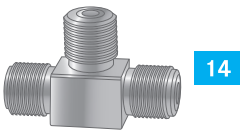
Product reference		Diverse filling connectors	Appropriate accessory or replacement part	Order number
Fig. 7		**Custom-made products** 200/300bar, customer-specific screw connections, on request.	**Notes:**	
86616		Connecting nipple, Thread to filling valve G3/8" below, on other side R3/8" **NIRO**	Teflon sealing strip **Useful information!** Thread designation G = straight Thread designation R = conical	N19943
79330		200bar adapter 5/8" to 5/8" internal thread		
66939		300bar adapter 5/8" to 5/8" internal thread		
160728		200/300bar, hose manifold single, also called a Y-piece, **2x 60°** hose connector, 1x M16x1.5 counternut fitting 78801	Y-piece and 58036 (nipple with seal, complete)	 073080-KD
78801		200/300bar, Hose nipple, single, G1/4" external thread on **60°** Hose connection, **non-** UNIMAM	ED seal Nipple 78801 and seal N25108, complete Y-piece and 58036 (nipple with seal, complete)	N25108 58036 073080-KD
78803		200/300bar, Hose nipple, single, G1/4" external thread on UNIMAM hose connection	ED seal Nipple 78803 and seal, complete	N25108 65363 N25108
N1315		200bar pressure gauge with R1/4" thread below, without glycerine filling, 64mmØ Red marking at 225bar	Teflon sealing strip Replacement glass	N19943 N19954
N4101		300bar pressure gauge with R1/4" thread below, without glycerine filling, 64mmØ Red marking at 330bar	Teflon sealing strip Replacement glass	N19943 N19954
N15985		Black rubber protector cap for filling valves with 63Ø thread below		

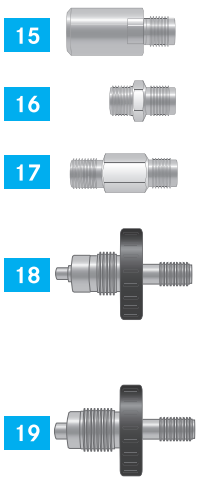
Attention! All images are for illustrative purposes only and may differ from the original!

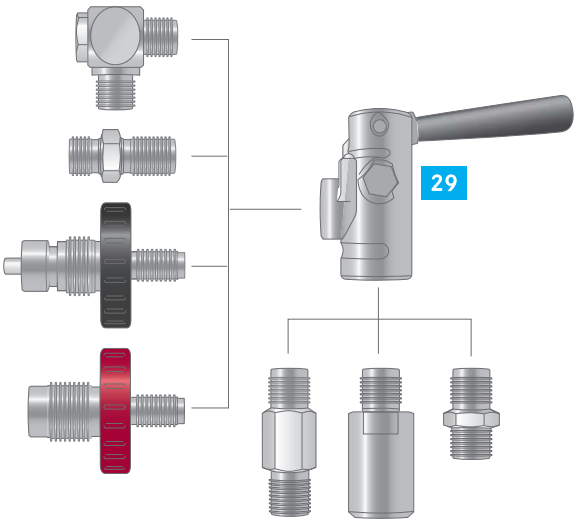


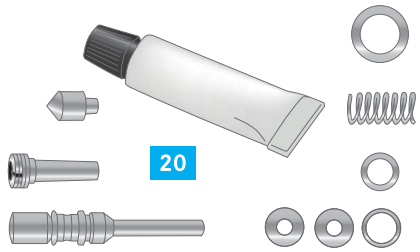




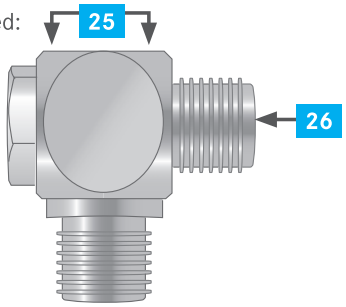




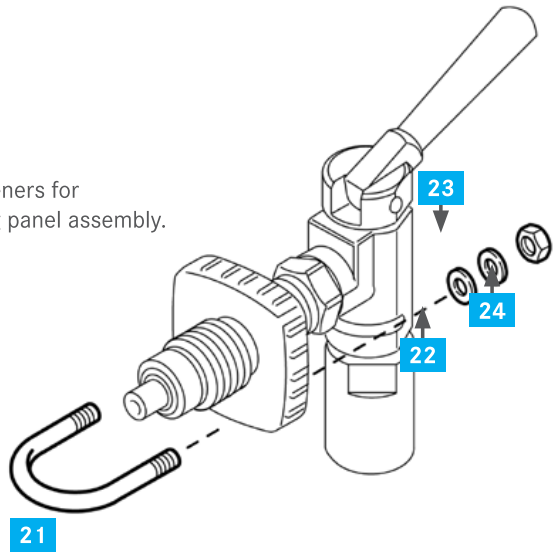




Repair, maintenance, angled connection
O-rings required:
25=N18334
26=N3355

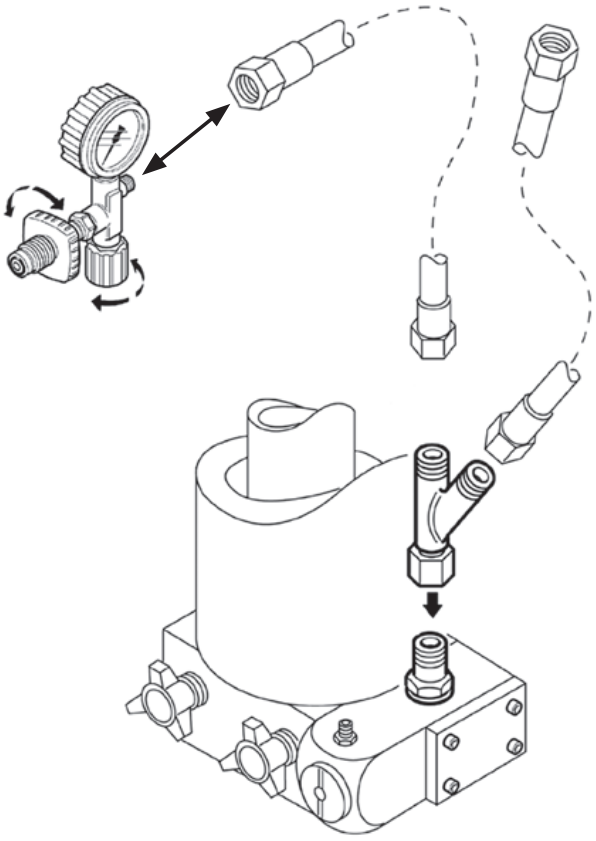


Fasteners for filling panel assembly.



DISTRIBUTION CONNECTORS

Required if the compressor is only equipped with one filling connector and a further filling possibility is required.

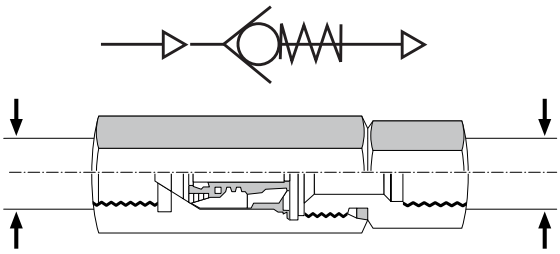


TECHNICAL DATA

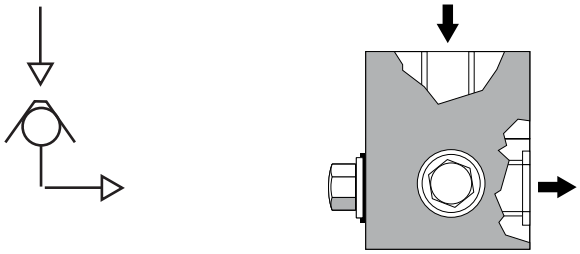
- Maximum pressure: 350 bar

NOTES

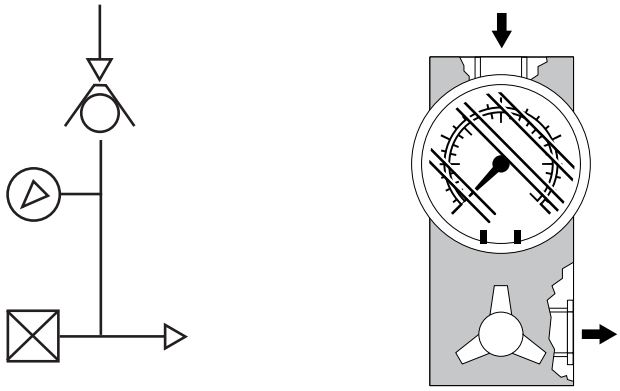
CHECK VALVES



Designation	Operating pressure	Connections	Nominal width	Air flow rate*	Order number
	bar / max.		mm	m³/min.	
Check valve	450	2 x G ¼	6	1	N1463



Designation	Operating pressure	Connections	Nominal width	Air flow rate*	Order number
	bar / max.		mm	m³/min.	
Check valve	350	2 x pipe ø 12	5	3	061843

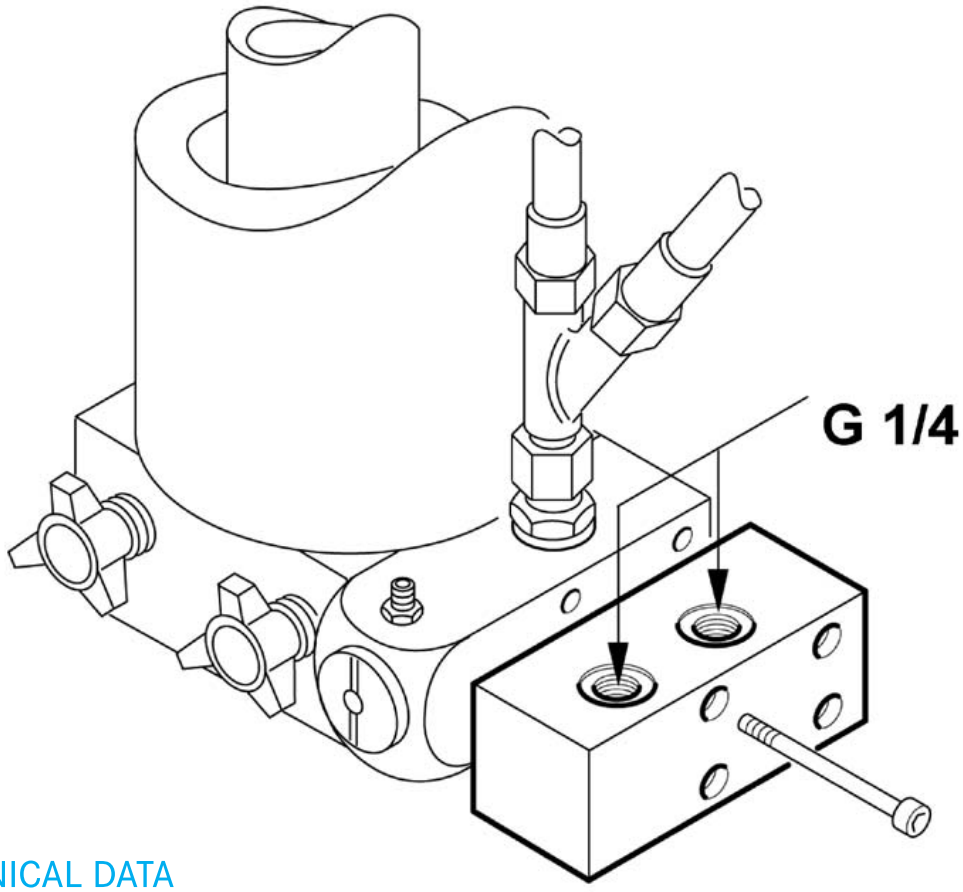


Designation	Operating pressure	Connections	Nominal width	Air flow rate*	Order number
	bar / max.		mm	m³/min.	
Check valve with pressure gauge and bleed	350	2 x G ⅜	5	3	064547

* The specified air flow rate relates to a flow speed of 15 m².

DISTRIBUTION CONNECTORS EXPANSION

Distribution connector for two further connection/filling possibilities.
Installation on pressure retention/check valve



TECHNICAL DATA

- Maximum pressure: 350 bar

SCOPE OF DELIVERY

- Distributor piece
- 4 Allen screws M 6 x 80

Designation	Order number
Distributor block complete, for 2 additional connectors	58968-KD

FILLING STATIONS

Filling stations are used for quick and economical filling of breathing air tanks. The modular design of all panels, the controls and even the filling connectors mean that BAUER KOMPRESSOREN can provide a tailor-made solution for any situation and adapt to your particular requirements.

Please observe the relevant installation regulations!

The filling panel is installed separately from the system. In "open" systems – ones without acoustic insulation – and when spatial separation is required, i.e. the filling panel is in a separate room such as in the sales room or at the testing point.

Selection of alternative models of BAUER filling panels
Whichever filling panel you choose, the BAUER filling station consists of tried-and-tested components that offer you the greatest possible safety and a particularly high level of convenience. We will be happy to help you assemble your filling station according to your individual wishes.
Not only the delivery rate of your compressor but also the amount of filling, speed and space required are important design parameters.

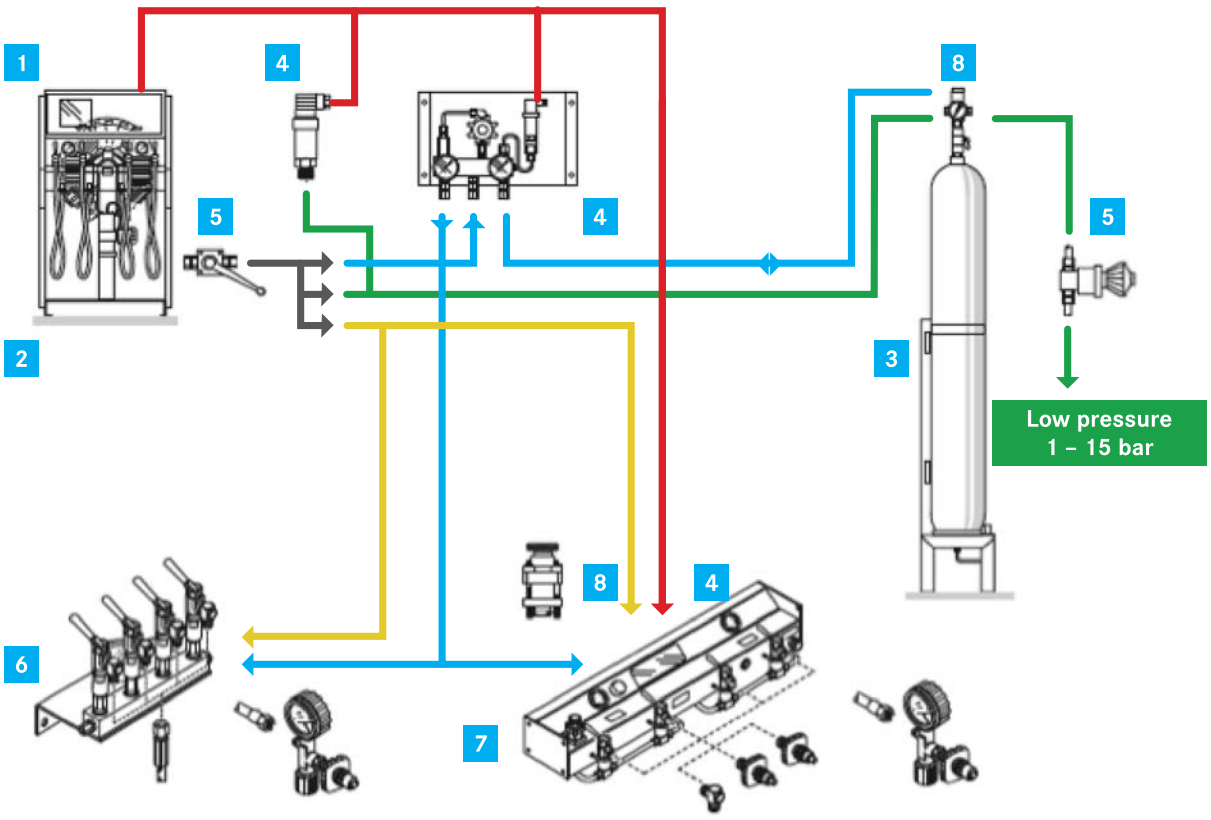
BAUER KOMPRESSOREN has the optimum solution ready for every requirement.

On the following pages, you can find an overview of the installation possibilities and main components from the compressor and purification through to storage and distribution.

A detailed description of the possible combinations of control modules and filling panels is presented for you on the following pages.

EXAMPLES OF COMPRESSED AIRLINES

The corresponding compressed airlines show you alternative installation possibilities.
The item numbers refer to the description on the following pages.



1. Compression
2. Treatment
3. Storage
4. Controlling
5. Regulating manually
6. Distributing compact
7. Distributing convenience
8. Safety valve

Automatic selector unit

Pressure regulator

Direct filling

Controlling, regulating, monitoring

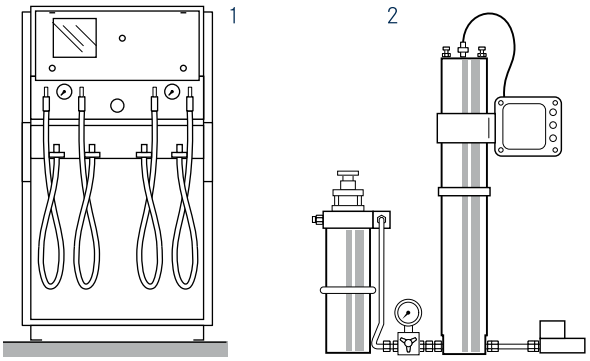
FILLING STATIONS

OVERVIEW: THE COMPONENTS OF THE SYSTEM, THE CONTROL AND ALTERNATIVELY COMBINABLE MODELS OF FILLING PANELS.

COMPRESSING AND PURIFYING

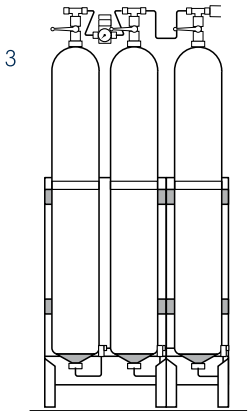
High-pressure compressor unit (1) complete with filter system (2) and safety valve.

We recommend the system with automatic condensate drain and compressor control so that unsupervised compressor operation is possible.



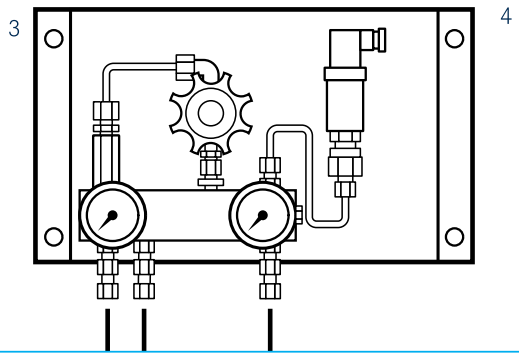
STORAGE

Rack of cylinders (3) to provide an adequate amount of compressed air, see Storage chapter.



CONTROLLING, AUTOMATICALLY

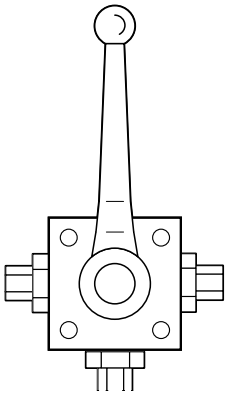
Automatic selector unit (4) or switch-over valve (5). The advantage of storage bottles can only be used optimally in this way. The automatic unit consists of a pressure retention and check valve with integrated pressure switch or pressure sensor that switches the compressor unit on or off in each case. Using this automatic unit makes a cascade filling connection superfluous



CONTROLLING, MANUALLY

Switch-over valve (5): In this case, it is necessary to switch over the valve manually between the rack of cylinders and the cylinder to be filled after the pressure equalisation has been reached, and for the compressor to be switched on manually. This version is only to be recommended if the system will be operated by trained personnel!

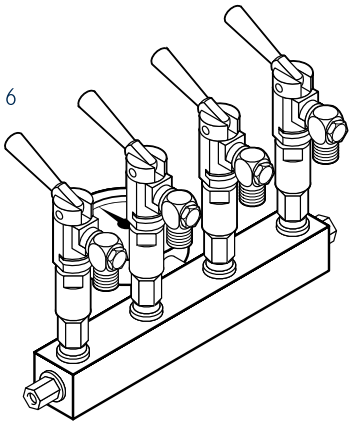
5



DISTRIBUTION

Distribution panel (6) compact filling panel for mounting on system housings or crash frame. From 1-4 filling connectors can be supplied.

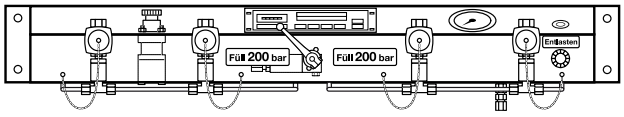
6



DISTRIBUTION

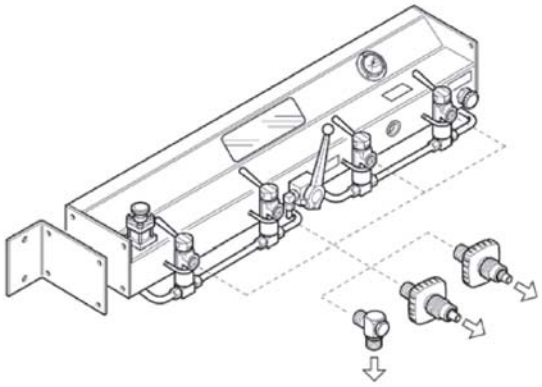
External filling panel (7): Filling panel with direct connection* for breathing air cylinders or for filling with hose connection possible. Four-way or also six-way connectors available. Optionally, the filling panels are available with safety valve and pressure reducer.

7



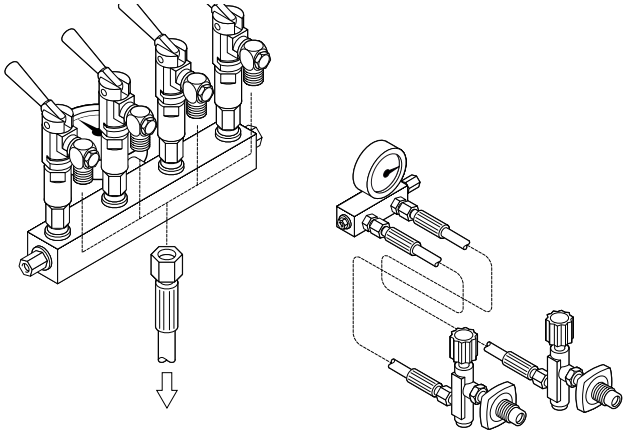
OVERVIEW OF FILLING PANELS – FOR WALL MOUNTING

- Filling pressure 200 and / or 300 bar
- Lever filling valves
- 4 - 6-way filling connectors
- Connection of filling hoses or direct connection for cylinders (max. 15 kg)
- Maximum dimensions: 1200 x 138 x 300 mm (with six-way direct connection)
- Application range for all free air deliveries
- Application temperature from +5 to +45 °C,
- compatible with all units



Panel

- Filling pressure 200 or 300 bar
- Lever or handwheel filling valves
- 1 - 4-way filling connectors
- Connection of filling hoses
- Maximum dimensions: 239 x 150 x 150 mm (in four-way hose connection with lever filling valves)
- Safety equipment (see table)
- Application range for all free air deliveries
- Application temperature from +5 to +45 °C,
- compatible with all units



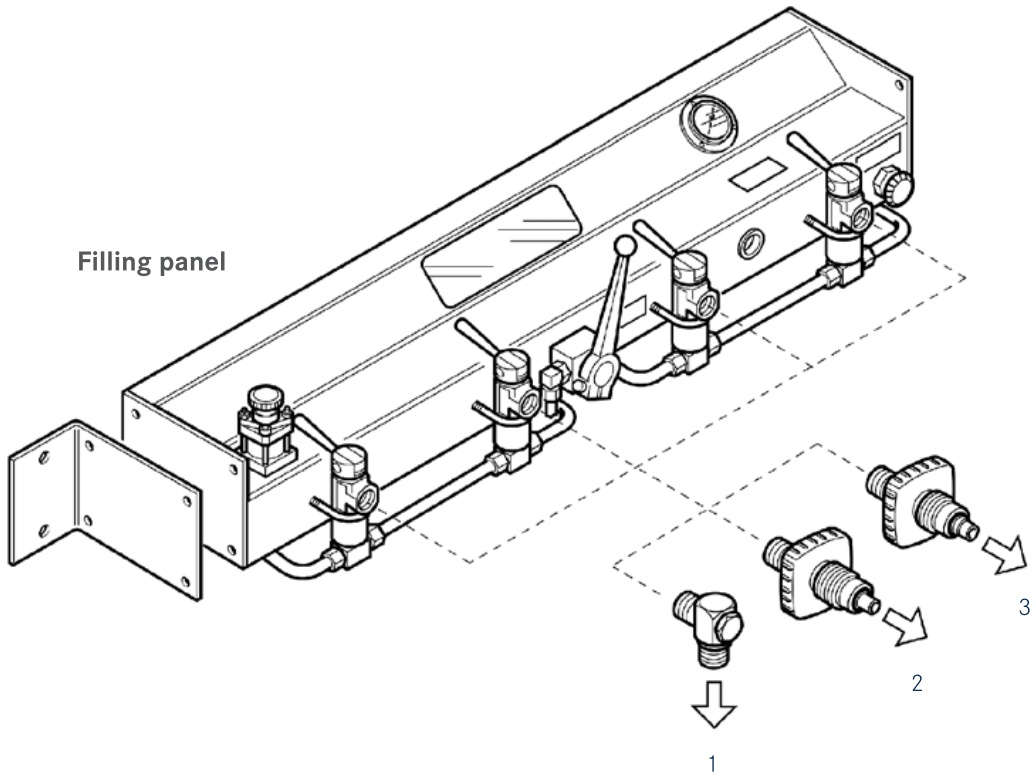
DISTRIBUTION PANEL

TYPE SERIES 'EXTERNAL FILLING PANEL'

Complete filling stations are used for quick and efficient filling of breathing air cylinders. The main components are the compressor unit, rack of cylinders, automatic selector unit or switch-over valve and the filling panel (for a detailed description of function, refer to the 'filling stations' chapter).

The external filling panel can be mounted on the wall as a separate filling panel and is also suitable for installation in another room, equipped with remote control.

Please note the various combination options with the automatic selector unit as well as the BAUER B-CONTROL. Refer to the descriptions in the corresponding chapters.



1 Hose connector with angle piece
2 Cylinder direct connection PN200
3 Cylinder direct connection PN300

SELECTION CRITERIA

filling valves	› Lever
Dimensions	**with hose connection** › 4-way 1140 x 138 x 250 mm › 6-way 1200 x138 x 250 mm **with direct connection** › 4-way 1140 x 138 x 300 mm › 6-way 1200 x 138 x 300 mm
Safety equipment	› Safety valve › Pressure sensor › Locking › Pressure reducer or switch-over valve optionally with or without B-CONTROL or pressure gauge
Area of application	› irrespective of the free air delivery › Compatible with all units › Ambient temperature from +5 to +65 °C

PRODUCT ADVANTAGES

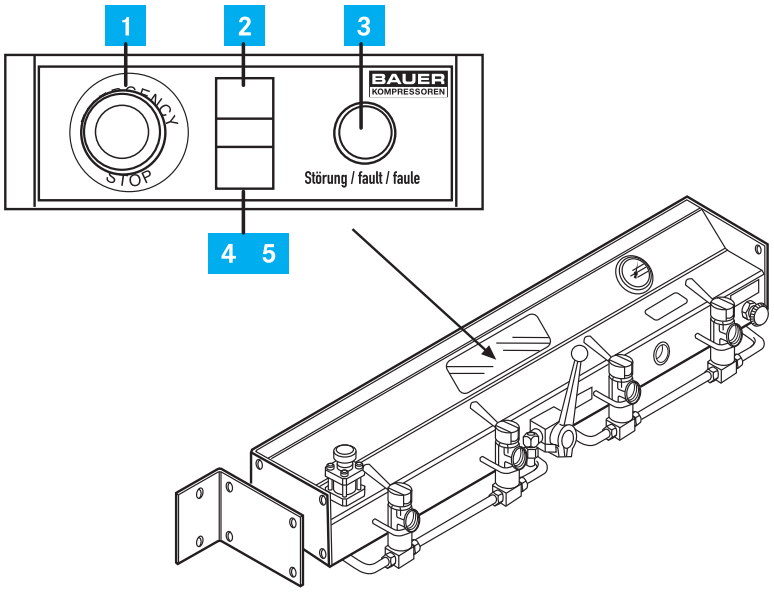
Design	› Extraordinary quality of the panel and the filling valves
Ergonomics	› Tried-and-tested system
Range of models	› Can be expanded as required with additional panels (see table)
Quality and safety	› CE standard › Material protected against corrosion › Possibility of fitting safety valves and pressure reducer
Combination with filling valves	› Large number of different options (see product information for filling valves) › wide range of models for any application

B-CONTROL OPERATING UNIT

With the B-CONTROL operating unit, it is possible to control and monitor the compressor over length distances. (BAUERHardWired)

THE FOLLOWING FUNCTIONS ARE AVAILABLE

- Compressor START
- Compressor STOP
- Emergency off of the entire system
- Status display compressor operation
- Fault display compressor (group fault)



1. Emergency off
2. Start button
3. Malfunction light
4. Stop button
5. Status light

Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
Without B-Control operating panel with 4 connections						
200 bar, 4x, direct						075026
300 bar, 4x, direct						075030
200 bar, 4x, direct	X					075027
200 bar, 4x, direct	X	X				75028-BC
200/300 bar, 4x, direct	X			X		075005
200/300 bar, 4x, direct	X	X		X		75004-BC
200/300 bar, 4x, direct	X				X	075007

EXTERNAL FILLING PANELS WITH DIRECT CYLINDER CONNECTOR

Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
Without B-Control operating panel with 6 connections						
200 bar, 6x, direct						075040
300 bar, 6x, direct						073740
200 bar, 6x, direct	X					075041
200 bar, 6x, direct	X	X				75050-BC
200/300 bar, 6x, direct	X			X		075008
200/300 bar, 6x, direct	X	X		X		75009-BC
200/300 bar, 6x, direct	X				X	075011
With B-Control operating panel*[3] with 4 connectors						
200 bar, 4x, direct			X			75029-BC
300 bar, 4x, direct			X			73235-BC
200 bar, 4x, direct	X	X	X			73232-BC
200/300 bar, 4x, direct	X	X	X	X		73236-BC
200/300 bar, 4x, direct	X		X		X	75006-BC
With B-Control operating panel*[3] with 6 connectors						
200 bar, 6x, direct			X			75043-BC
300 bar, 6x, direct			X			73231-BC
200 bar, 6x, direct	X	X	X			73237-BC
200/300 bar, 6x, direct	X	X	X	X		73228-BC
200/300 bar, 6x, direct	X		X		X	75010-BC

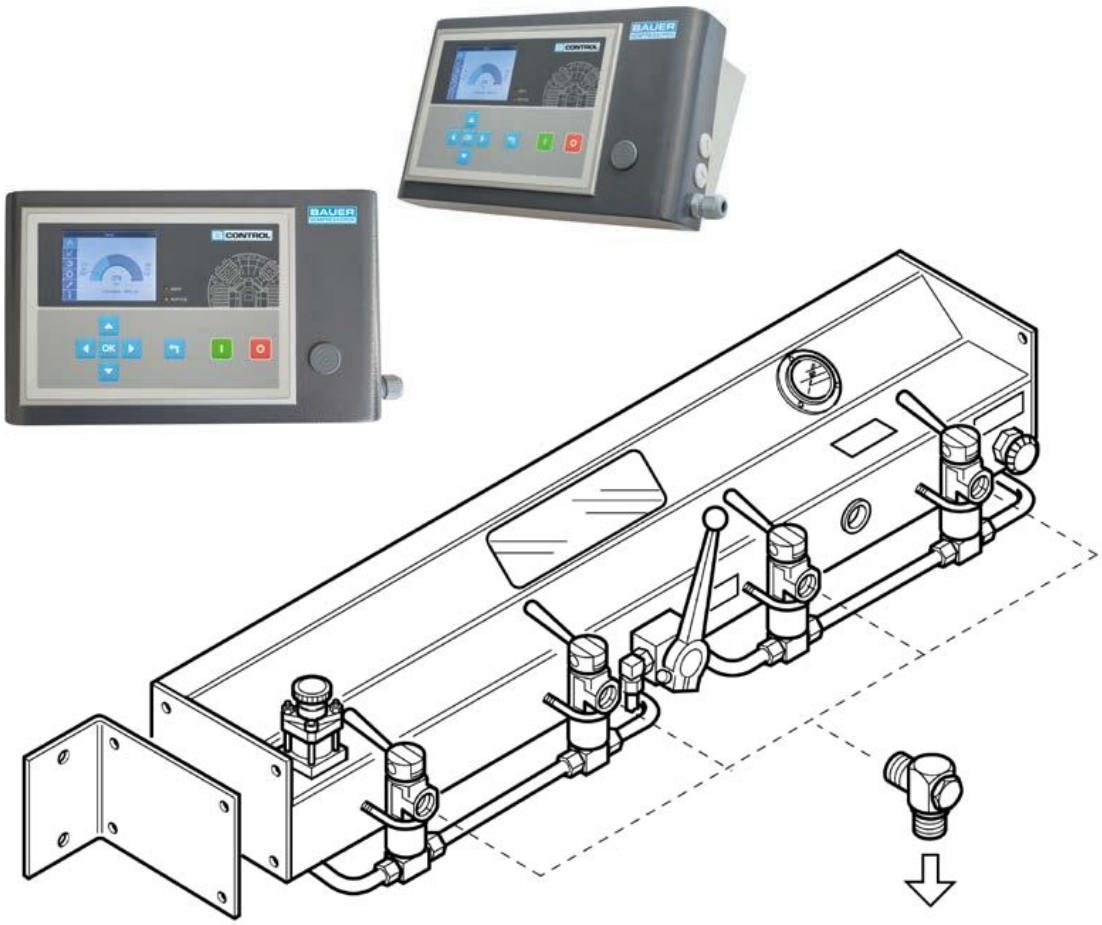
Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
With B-Control operating panel*3 with 10 connectors						
200/300 bar, 10x, direct	X		X		X	76769-BC
Without BHW*2 switching panel with 4 connectors						
200 bar, 4x, direct	X	X				75028-BHW
200/300 bar, 4x, direct	X	X		X		75004-BHW
without BHW*2 switching panel with 6 connectors						
200 bar, 6x, direct	X	X				75050-BHW
200/300 bar, 6x, direct	X	X		X		75009-BHW
With BHW*2 switching panel with 4 connectors						
200 bar, 4x, direct			X			75029-BHW
300 bar, 4x, direct			X			73235-BHW
200 bar, 4x, direct	X	X	X			73232-BHW
200/300 bar, 4x, direct	X	X	X	X		73236-BHW
200/300 bar, 4x, direct	X		X		X	75006-BHW
With BHW switching panel*2 with 6 connectors						
200 bar, 6x, direct			X			75043-BHW
300 bar, 6x, direct			X			73231-BHW
200 bar, 6x, direct	X	X	X			73237-BHW
200/300 bar, 6x, direct	X	X	X	X		73228-BHW
200/300 bar, 6x, direct	X		X		X	75010-BHW
With BHW switching panel*2 with 10 connectors						
200/300 bar, 10x, direct	X		X		X	76769-BHW
Without operating panel with 10 connectors						
200/300 bar, 10x, direct	X				X	76769

* 2 BHW = BAUERHardWired –> possible for systems with conventional control, e.g. Mini-Verticus

EXTERNAL FILLING PANEL WITH HOSE CONNECTION

EXTERNAL FILLING PANELS WITH HOSE CONNECTION FOR WALL MOUNTING

Fitting the BAUER B-CONTROL remote control enables you to control operation from another room at a distance. The individual function messages and malfunction warnings are transferred and shown on the display*. For more details about the B-CONTROL, please refer to the sales documents.



* External display - see price list

Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
Without B-Control operating panel with 4 connections						
200 bar, 4x, hose						068019
300 bar, 4x, hose						068020
200 bar, 4x, hose	●					072590
200 bar, 4x, hose	●	●				72597-BC
200/300 bar, 4x, hose	●			●		068023
200/300 bar, 4x, hose	●	●		●		72598-BC
200/300 bar, 4x, hose	●				●	068025
Without B-Control operating panel with 6 connections						
200 bar, 6x, hose						075031
300 bar, 6x, hose						075035
200 bar, 6x, hose	●					066721
200 bar, 6x, hose	●	●				073587
200/300 bar, 6x, hose	●			●		075037
200/300 bar, 6x, hose	●	●		●		75038-BC
200/300 bar, 6x, hose	●				●	075039

* 2 BHW = BAUER HardWired. Only possible for systems with conventional control

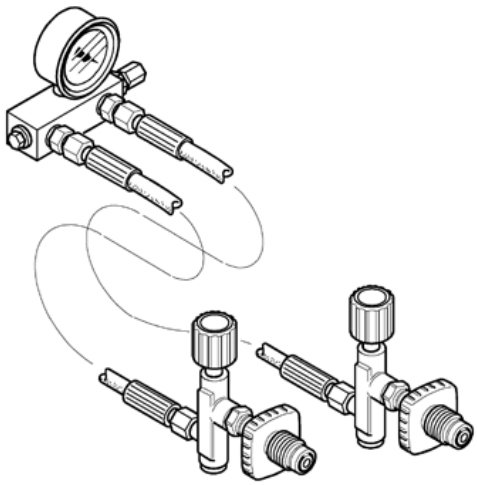
EXTERNAL FILLING PANEL WITH HOSE CONNECTION

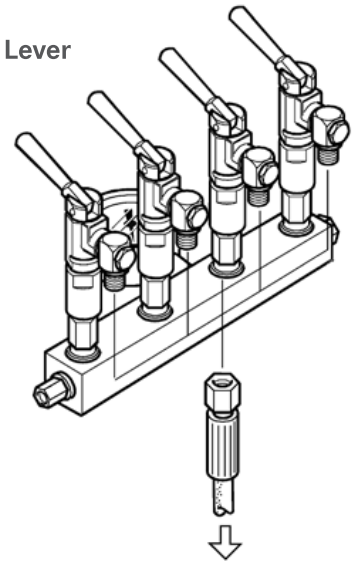
Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
With B-Control operating panel*3 with 4 connectors						
200 bar, 4x, hose			●			73083-BC
300 bar, 4x, hose			●			73084-BC
200 bar, 4x, hose	●	●	●			72591-BC
200/300 bar, 4x, hose	●	●	●	●		73085-BC
200/300 bar, 4x, hose	●		●		●	73086-BC
With B-Control operating panel*3 with 6 connectors						
200 bar, 6x, hose			●			75033-BC
300 bar, 6x, hose			●			75036-BC
200 bar, 6x, hose	●	●	●			75034-BC
200/300 bar, 6x, hose	●	●	●	●		73625-BC
200/300 bar, 6x, hose	●		●		●	73153-BC
Without BHW*2 switching panel with 4 connectors						
200 bar, 4x, hose	●	●				72597-BHW
200/300 bar, 4x, hose	●	●		●		72598-BHW
Without BHW*2 switching panel with 6 connectors						
200/300 bar, 6x, hose	●	●				75038-BHW
With BHW*2 switching panel with 4 connectors						
200 bar, 4x, hose			●			73083-BHW
300 bar, 4x, hose			●			73084-BHW
200 bar, 4x, hose	●	●	●			72591-BHW
200/300 bar, 4x, hose	●	●	●	●		73085-BHW
200/300 bar, 4x, hose	●		●		●	73086-BHW

* 2 BHW = BAUER HardWired, possible for systems with conventional control, e.g. Mini-Verticus

Design	SIV 225 bar	Pressure sensor	B-Control	Sw.-over valve	Press. red.	Order number
With BHW switching panel*2 with 6 connectors						
200 bar, 6x, hose			●			75033-BHW
300 bar, 6x, hose			●			75036-BHW
200 bar, 6x, hose	●	●	●			75034-BHW
200/300 bar, 6x, hose	●	●	●	●		73625-BHW
200/300 bar, 6x, hose	●		●		●	73153-BHW

DISTRIBUTION PANELS COMPACT





- **Design:** Compact. Ideal for subsequent installation on compressors, mobile devices or also on ships, because of the low space requirement.
- **Models:** 1 - 4-way filling connections optionally with handwheel valves or lever.
- **Quality:** CE standard, corrosion-resistant material.
- **Filling pressure:** 225 or 330 bar
- **Safety:** All panels are equipped with a 600 bar pressure gauge for quick checking.
- **Area of application:** Irrespective of the delivery rate, compatible with all compressors, temperature range +5 °C to +45 °C
- **Dimensions:** Handwheel version from 109x150x80 mm to 239x115x80 mm (LxHxD) lever version from 109x150x150 mm to 239x150x150 mm (LxHxD)
- **Installation:** The panels have internal threads on the back (M8). This means they can be mounted on system housings, crash frames or any suitable points.
- **Pressure inlet:** ¼" internal thread provided with a screw-in fitting for 8mm pipe Ø.
- **Scope of delivery:** All distribution panels are supplied with distributor block, filling valves, pressure gauge and UNIMAM filling hoses (1000 mm).
- **Flexibility:** Can be expanded with other Bauer-Kompressoren products.

Article order number for the 16 available products: see table

YOUR PRODUCT ADVANTAGES AT A GLANCE

DESIGN

- Simplest possible design
- Compact, especially for subsequent mounting on systems
- Ideal for ships and other mobile stations where space is at a premium

RANGE OF MODELS

- Large number of different equipment variants (see table)

QUALITY AND SAFETY

- Extraordinary quality of the filling valves (see table)
- Material protected against corrosion
- CE standard
- Equipment with safety valves
- and pressure reducer

COMBINATION WITH FILLING VALVES

- Large number of different options (see product information on filling valves)
- wide range of models for any application

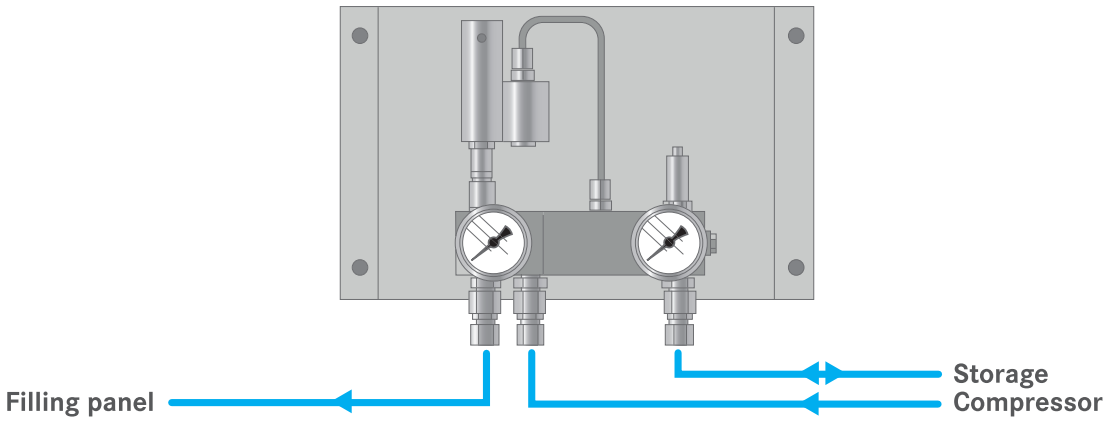
DISTRIBUTION PANEL WITH HOSE CONNECTION

for mounting on portable breathing air compressors (with crash frame)

Filling pressure	System pressure	Type of filling valve	Order numbers			
bar	bar / max.		With one filling connector	With 2 filling connectors	With 3 filling connectors	With 4 filling connectors
200	225	Lever	073519	073520	073208	073521
300	330	Lever	073956	073957	073958	073959
200	225	Handwheel	074962	074963	074964	074965
300	330	Handwheel	074966	074967	074968	074969

Equipment: All distribution panels consist of distributor block, filling valve, filling hose and pressure gauge.

AUTOMATIC SELECTOR UNIT



BENEFITS TO YOU

The automatic selector unit permits fast automatic filling of one or more pressure vessels on filling panels from an intermediate unit and simultaneously from the compressor. One pressure vessel always has priority, i.e. the storage unit and the compressor always fill the pressure vessel first. When this is full, the intermediate storage unit is automatically replenished by the compressor until a new empty cylinder is connected to the filling panel.

FUNCTION

Once the pressure vessel has been connected to the filling panel and the cylinder and filling valves have been opened, air flows out of the intermediate storage unit into the cylinder. This takes place until pressure equalisation, for example between the diving cylinders and intermediate storage unit. The compressor switches on automatically and fills the cylinder first up to the maximum filling pressure. Once this is full, the compressor automatically replenishes the intermediate storage unit, and switches off automatically when the maximum filling pressure is reached.

The automatic selector unit performs 3 important functions:

- Pre-filling of the cylinders from the storage bottle battery by overflow until pressure equilibrium
- Filling of the diving cylinders up to the filling pressure directly from the compressor
- Refilling the storage bottle battery to the max. storage pressure

The automatic unit consists of a pressure retention and check valve with integrated pressure sensor that switches off the compressor unit on or off in each case. When this automatic unit is used, a cascade filling connection is superfluous. The two pressure gauges are used for checking the preliminary and back pressure. The pressure sensor is used for controlling the compressors.

AUTOMATIC SELECTOR UNIT WITH PRESSURE SWITCH OR PRESSURE SENSOR FOR COMP-TRONIC / B-CONTROL.

TECHNICAL DATA

- **Transition:** DN4
- **Operating pressure:** PN350 bar
- **Adjustment range:** Pressure relief valve / pressure retention valve: 100 - 350 bar
- **Dimensions:** W x H x D: 400 x 250 x 150 mm

CONNECTIONS:

- **Input:** G $^{3}/_{8}$, connection for either Ø 8 mm or Ø 10 mm pipe
- **Output:** Ø 8 or Ø 10 mm

SCOPE OF DELIVERY

- The unit is completely piped up and ready to connect

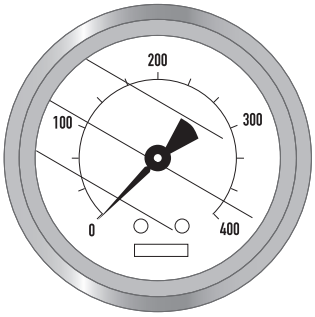
Designation	Order number
Automatic selector unit with pressure sensor N25421, up to 350 bar, B-Control and pressure retention valve 80751	82116-KD
Automatic selector unit with pressure switch N4526, up to 350 bar, BC2/BC6 or MV (without B-Control/Comptronic) and pressure retention valve 80751	82116-S02
Automatic selector unit with pressure sensor N25421, up to 350 bar, B-Control and pressure retention valve 80751, stainless steel	82116-S03
Automatic selector unit with B-Control pressure sensor, up to 420 bar	82117
Automatic selector unit with pressure switch, up to 350 bar and Tescom pressure retention valve	062796
Automatic selector unit with pressure sensor N19999 for Comp-Tronic, up to 350 bar and Tescom pressure retention valve	072862
Automatic selector unit with 2 Comp-Tronic pressure sensors, up to 350 bar	074875

PRESSURE GAUGE

The pressure gauges operate according to the Bourdon tube principle. They are hermetically sealed, filled with glycerine and have internal pressure compensation. We recommend these pressure gauges if there are high dynamic loads, pressure peaks, vibrations and pulsations. The glycerine fill considerably reduces the effects of loads. High display accuracy, stable pointer position and a long service life are the result. The hermetically sealed design prevents condensation from forming on the inside, as well as the penetration of aggressive atmosphere that can lead to corrosion damage. The sturdy stainless steel housing made of CrNi steel has a pressure release opening that is closed with a plastic cap.

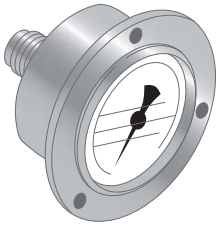
TECHNICAL DATA

- **Pressure range:** from -1 to 600 bar, depending on version
- **Pressure display:** in bar and psi
- **Accuracy class:** 1.6
- **Medium:** Air, gases and oils
- **Temperature range:** from -25 to +60 °C
- **Pressure connection:** R 1/4"
- **Safety version:** DIN 16007
- **For front panel mounting (with front ring) required hole diameter:** 63 mm Ø



MATERIAL

- **Connection:** Brass
- **Housing:** Cr Ni steel
- **Front ring:** Cr Ni steel
- **Measuring device:** Cu alloy



Connection rear

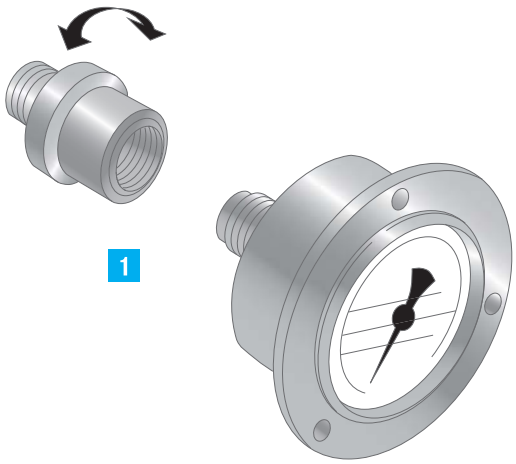
Connection at bottom

The pressure gauges can be used for air, methane, noble gases as well as for suitable oils. INFO for pressure gauge selection! The pressure to be measured should be in the range from 10-70% of the final scale value!

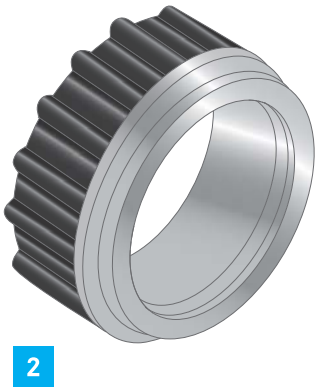
PRESSURE GAUGE SELECTION

Pressure range	Connection		Front ring	Glycerine fill	Order number
bar	bottom	rear		Damping	
-1 to 1.5	-	yes	yes	yes	N3865
0-10	-	yes	yes	yes	N16758
0-16	-	yes	yes	yes	N1269
0-16	-	yes	-	yes	N22331
0-25	-	yes	yes	yes	N1270
0-40	-	yes	yes	yes	N18041
0-60	-	yes	yes	yes	N15543
0-100	-	yes	yes	yes	N1271
0-160	-	yes	yes	yes	N1273
0-250	-	yes	yes	yes	N7673
0-315	yes	-	-	-	N1315
0-400	-	yes	-	yes	N22330
0-400	-	yes	yes	yes	N2623
0-400	yes	-	-	-	N4101
0-600	yes	-	-	yes	N16872
0-600	-	yes	-	yes	N17062
0-600	-	yes	yes	yes	N17351

SCREWED FITTING FOR PRESSURE GAUGE



Designation	Order number
Screwed fitting for pressure gauge 63	N3569



Designation	Order number
1. Female fitting R 1/4" to 6 mm Ø pipe connection	N3569
Plastic cap for pressure release opening	N26664-KD
2. Rubber protection cap only for pressure gauges with connection at bottom!	N15985

NOTES

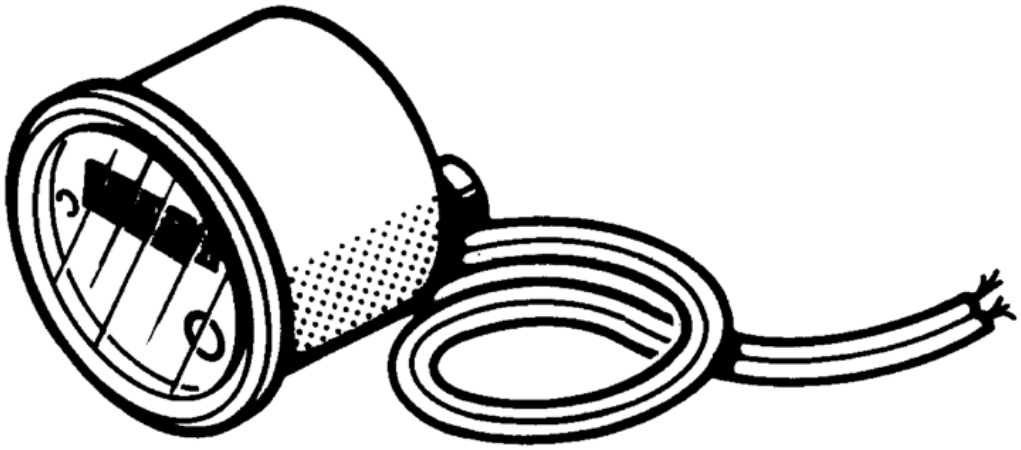
OPERATING HOURS COUNTER

OPERATING HOURS COUNTER, ELECTRIC

Operating hours counter, recommended for electrically operated compressor units.

SCOPE OF DELIVERY

› Counter with clamping bracket for front plate mounting.



Designation	Dimensions	Order number
Operating hours counter 230 V, 60 Hz	50.2 x 25.2 mm	N21791
Operating hours counter 24 VDC	92 x 92 mm	N20785
Operating hours counter 230 V, 50 Hz	Ø 61 mm	N3263
Operating hours counter 230 V, 60 Hz	Ø 61 mm	N3264
Operating hours counter 115 V, 60 Hz	Ø 61 mm	N3265
Operating hours counter 12/24 V, direct current	Ø 60 mm	N1734
Operating hours counter 24 V, 50/60 Hz	56 x 56 mm	N23853
Operating hours counter 230 V 60 Hz	Ø 50 mm	N22338
Operating hours counter 230 V	50.2 x 25.2 mm	N21791
Operating hours counter 230 V	45 x 45 mm or Ø 50 mm	N16208
Operating hours counter 230 V	45 x 45 mm or Ø 50 mm	N16625
Operating hours counter 12 VDC	48 x 24 mm	N18345
Operating hours counter 24 V 50 Hz	52 x 52 mm	N18365

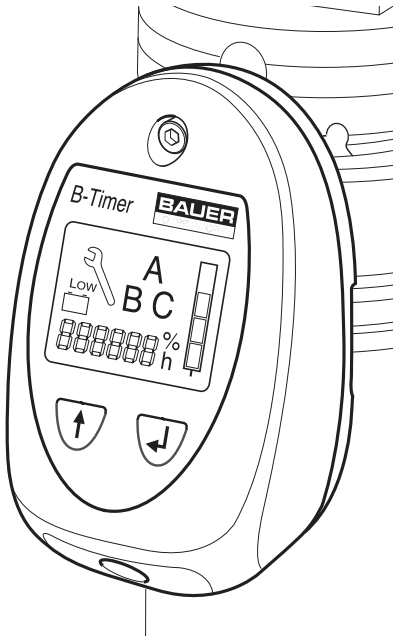
OPERATING HOURS COUNTER, MECHANICAL

Vibration counter, recommended for compressor units with petrol or diesel engines without electrical power supply as well as for explosion-proof compressor units.

Designation	Order number
Vibration counter petrol/diesel engines, 60 mm diameter	N3475

OPERATING HOURS COUNTER – CARTRIDGE MONITORING, BATTERY-OPERATED

Electronic operating hours counter including cartridge monitoring, recommended in the breathing air application. Suitable for compressors with petrol/diesel and electric drive.



TECHNICAL DATA

- **Monitoring:** from P21 to P41
- **Battery service life:** 3 years at 500 operating hours/year
- **Operating hours counter:** integrated
- **Display:** Maintenance, maintenance kit, flashing sign, saturation bar, cartridge number
- **Properties:** Protected against dust and water spray, insensitive to dust, strong sunshine, high air humidity and sand, starts and stops automatically

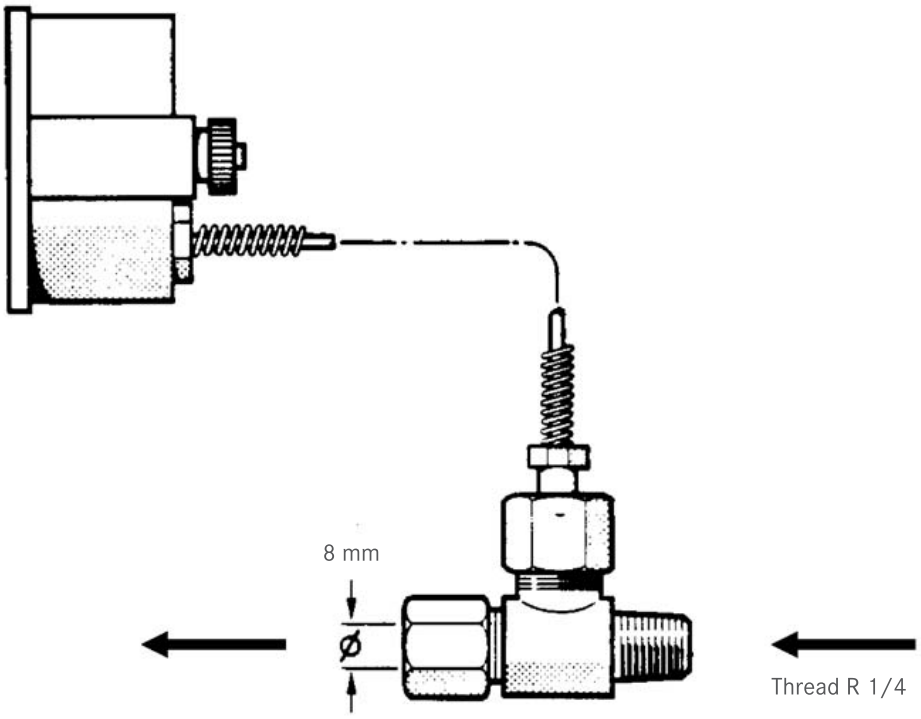
Designation	Order number
B-Timer	N27286
Replacement battery	82743

TEMPERATURE GAUGE

Remote temperature gauge for displaying the compression temperature of the last stage (for BAUER UTILUS models up to KAP 180). Application range on the aftercooler with a pipe Ø 8 mm.

TECHNICAL DATA

- **Housing:** Ø 60 mm flush-mounted with clamping bracket
- **Measuring range:** 0 - 200 °C
- **Length of capillary tube:** 1.5 m
- **Connection:** Thread R ¼



Designation	Order number
Remote temperature gauge	059125

PRESSURE MONITORING

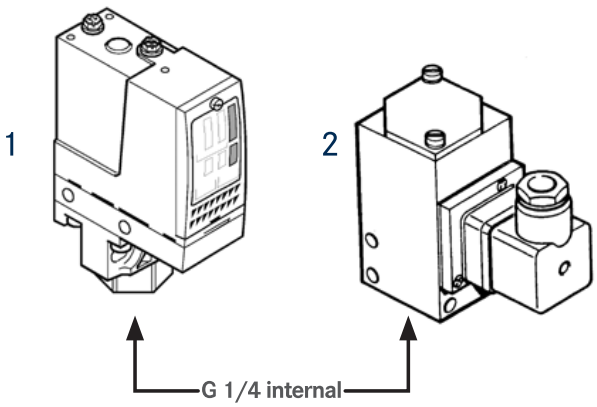
PRESSURE MONITORS

Pressure monitors are devices for automatic pressure monitoring on compressors and pressure accumulators. They monitor oil pressure, intermediate and final pressure, for example. When the set pressures are reached, the electrical contact switches over.

The compact pressure monitor used for typical filling operation is a piston pressure switch. It is used for monitoring the final pressure during filling (breathing air systems) in conjunction with a semi-automatic control. Switch-off pressure can be adjusted.

TECHNICAL DATA

- **Switching frequency:** maximum 60 / min.
- **Contiguous load:** with alternating voltage max. 250 V / 5 A with direct current voltage max. 30 V / 5 A
- **Index of protection:** IP65
- **Switching accuracy:** +/-3% of the setting range
- **Temperature range:** -40 °C to +80 °C
- **Material of the contacts:** Silver
- **Working contact:** 1 changeover contact



	Adjustment range		Hysteresis	Voltage	Max. permitted pressure		Order number
	bar / min.	bar / max.	bar	max. volt	continuous bar	intermittent bar	
1	7	70	4.7 to 50	500	90	160	N15014
	10	160	9.3 to 100	500	200	360	N16361
	22	300	19.4 to 200	500	375	675	N4527
	30	500	23.0 to 300	500	625	1125	N4526
2	220	350	30 fixed	250	400	400	N1010

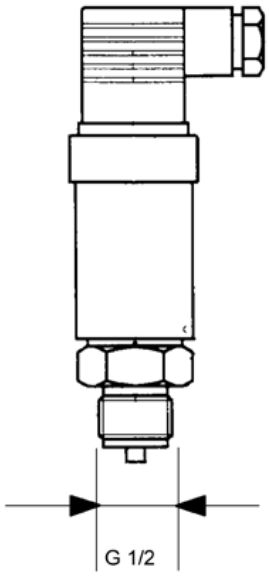
PRESSURE TRANSDUCER

PRESSURE TRANSDUCER FOR COMP-TRONIC

Pressure transducers are used instead of pressure switches in electronic controls with analogue inputs. The sensors are adapted to our COMP-TRONIC. The measured values of the pressure transducers are shown on the display in "bar" or "psi g", and can be evaluated as operating, maintenance, advance warning or fault messages.

TECHNICAL DATA

- **Medium:** Air, gases
- **Material of the housing and parts in contact with the medium:** DIN17440-1.4404 (AISI 316 L)
- **Weight:** 0.3 kg
- **Linearity deviation (minimum value setting):** +/-0.2% FS
- **Hysteresis and reproducibility:** +/-0.1 % FS
- **Nominal output signal:** 1-5 VDC; 3-wire version
- **Supply voltage:** 10-30 VDC
- **Current consumption:** < 5 mA
- Connection type: Plug DIN43650
- **Cable version:** IP 67 – IEC 529
- **Temperature range:** -40 °C to +85 °C
- **EMC emission:** EN 50081-1
- **Accuracy:** typ. +/-0.3% FS; max. +/-1% FS



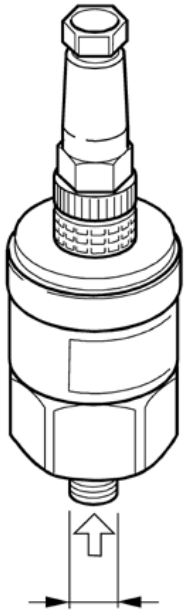
Designation	Order number
Measuring range 0 - 25 bar	N19997
Measuring range 0 – 100 bar	N19998
Measuring range 0 – 400 bar	N19999
Measuring range 0 – 600 bar	N20813
Female fitting with pipe connection 6 mm	N20176
Seal-edge ring (seal between sensor and connector)	N3081

PRESSURE TRANSDUCER FOR B-CONTROL

The following pressure transducers are available for B-Control: (Output signal 4-20 mA)

TECHNICAL DATA

- **Medium:** Air, gases
- **Material of the housing and parts in contact with the medium:** DIN17440-1.4404 (AISI 316 L)
- **Weight:** 0.2 kg
- **Linearity deviation (minimum value setting):** +/-0.1% FS
- **Hysteresis and reproducibility:** +/-0.1 % FS
- **Nominal output signal:** 4-20 mA
- **Supply voltage**: 12.5-28 VDC
- **Current consumption:** < 28 mA
- **Connection type:** Plug IEC 947-5-2 M12x1
- **Cable version:** IP 67 – IEC 529
- **Temperature range:** -40 °C to +85 °C
- **EMC emission:** EN 50081-1
- **Accuracy:** typ. +/-0.1% FS max. +/-5% FS



Designation	Order number
Pressure transducer measuring range 0 to 10 bar	N25419
Pressure transducer measuring range 0 to 25 bar	N35655
Pressure transducer measuring range 0 to 100 bar	N25420
Pressure transducer measuring range 0 to 400 bar	N25421
Pressure transducer measuring range 0 to 600 bar	N25422
Pressure transducer measuring range -1 to +1.5 bar	N25418
Seal CU 1/4	N4051

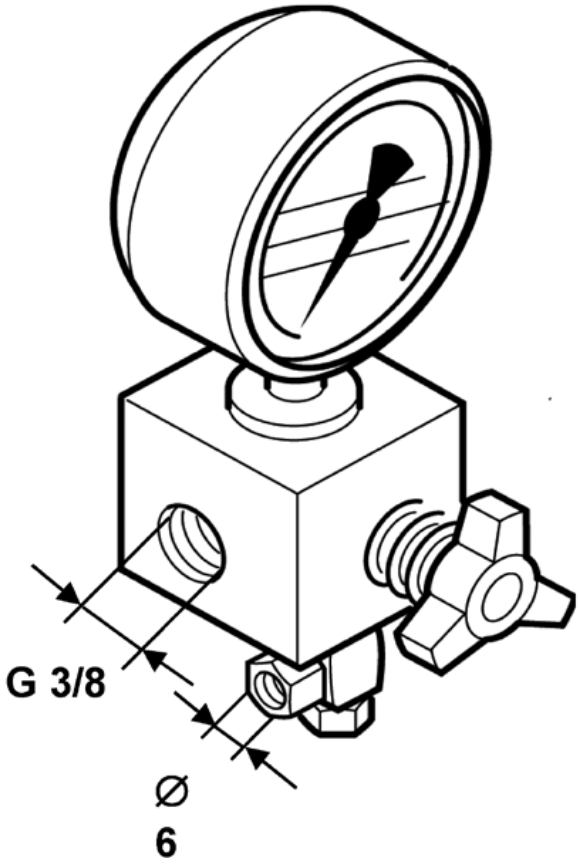
VALVES

BLEED VALVES

These assemblies are provided for installation in the main air flow. This makes it possible to depressurise pressurised filter housings so as to allow the system to be serviced.

SCOPE OF DELIVERY

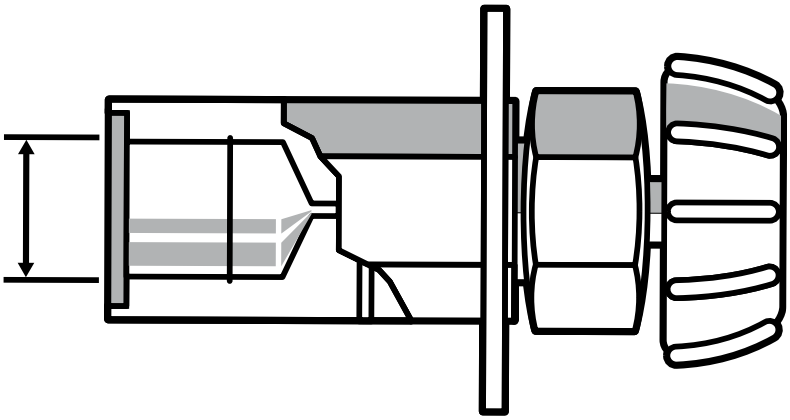
- Bleed valve complete with pressure gauge



Designation	Operating pressure	Pressure gauge	Order number
	bar / max.	bar	
Bleed valve with pressure gauge	420	0 – 600	064566
Bleed valve with pressure gauge and check valve	420	0 – 600	065839

SCOPE OF DELIVERY

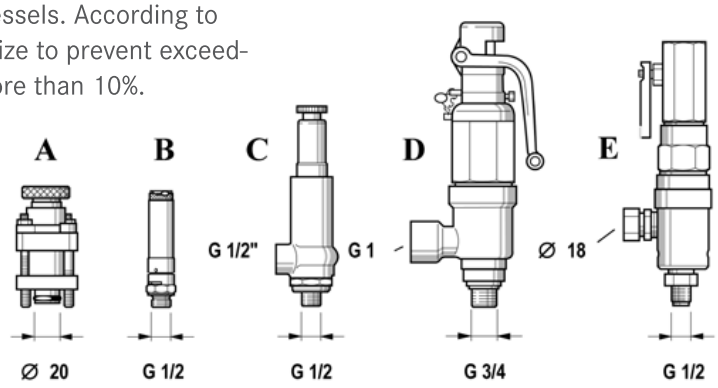
› Bleed valve only for bleeding, attachment to a covering



Designation	Operating pressure	Connection thread	Bleed hole	Order number
	bar / max.	max. bar	mm	
Bleed valve for covering	350	G ⅜ internal	1.5	061650
Bleed valve with pressure gauge and check valve	350	G ¼ internal	1.5	060374

SAFETY VALVES, TYPE-TESTED WITH TÜV

BAUER safety valves monitor the pressure absolute reliability – for your safety. Safety valves are used according to TRB403 regulations to monitor pressure overshoots in pressure vessels. According to these regulations, they must be of sufficient size to prevent exceeding the permitted working overpressure by more than 10%.

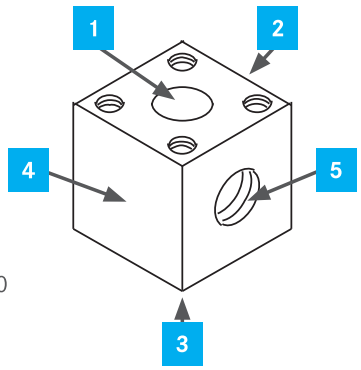


Operating pressure	Nominal size	Draining output	Connection	Figure/ version	CE acc, to PED	Order no, + pressure indication
bar	mm	m^3/h	ein - aus		97/23EU	
100-365	3	6	G⅜	A – ventable	—	120541
100-365	5	60	20 mm Ø		CE	059410
8	10	250	G½	B – ventable	CE	N19349
20	10	520	G½		CE	N1671
40	8	485	G½		CE	N18505
2,6 – 4,5	10	105 – 160	G½ - G½	C – gas-tight ventable	CE	N26256
4,6 – 7	10	160 – 233	G½ - G½		CE	N26257
7,1 – 11	10	233 – 348	G½ - G½		CE	N26258
11,1 – 17	10	348 – 527	G½ - G½		CE	N26259
17,1 – 25	10	527 – 762	G½ - G½		CE	N26254
25,1 – 35	10	762 – 1,056	G½ - G½		CE	N26174
35,1 – 54	10	1,056 – 1,615	G½ - G½		CE	N26175
54,1 – 68	10	1,615 – 2,025	G½ - G½		CE	N26160
68,1 – 93	10	2,025 – 2,764	G½ - G½		CE	N26253
93,1 – 121	10	2,764 – 3,588	G½ - G½		CE	N26252
121,1 – 180	10	3,588 – 5,324	G½ - G½		CE	N26233
180,1 – 215	6	2,760 – 3,294	G½ - G½		CE	N27387
215,1 – 330	6	3,294 – 5,048	G½ - G½		CE	N27394
330,1 – 370	6	5,042 – 5,779	G½ - G½		CE	N27846
4,1 – 5,8	15	395 – 537	G¾ - G1	D – gas-tight ventable	CE	N26261
20,5 – 31	15	1,723 – 2,563	G¾ - G1		CE	N26262
31,1 – 44	15	2,563 – 3,620	G¾ - G1		CE	N26263
135,1 – 170	15	10,998 – 13,728	G¾ - G1		CE	N26264
175,1 – 200	15	13,700 – 16,100	G¾ - G1		CE	N26265
200,1 – 230	15	7,780 – 8,940	G¾ - G1		CE	N26820
230,1 - 250	15	8,940 – 9,720	G¾ - G1		CE	N26821
245 – 315	6	1,200 – 1,550	G½	E – gas-tight ventable	CE	N17067
190 – 245	6	950 – 1,150	G½		CE	N17068
315 – 390	6	1,550 – 1,900	G½		CE	N16778
390 – 525	6	1,900 – 2,200	G½		CE	N17066

When ordering, please specify the pressure setting and state whether TÜV acceptance is required.

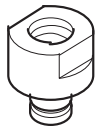
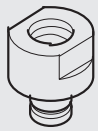
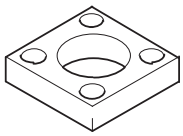
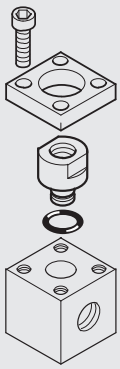
NOTES

SAFETY VALVE ADAPTER



20 mm is the lower pin diameter of the 059410 safety valve

Safety valve adapter	1	2	3	4	5	Top thread or hole	Bottom thread or hole	Notice	Accessories	Order number
63325  **300bar**	20 mm Ø	1/4 IT	1/4 IT	X	X	2xM8 diagonal	2xM6 diagonal	only for 059410 safety valve	M8x60 socket head screw for 059410 O-ring	N19555 N4882
67798  **500bar**	20 mm Ø	1/4 IT	X	1/4 IT	X	4xM8	4xM8			
68520  **420bar**	20 mm Ø	3/8 IT	X	3/8 IT	X	4xM8	4xM8			
72341  **360bar**	20 mm Ø	3/8 IT	3/8 IT	3/8 IT	1/4	2xM8 diagonal	X	only for 059410 safety valve	M8x60 socket head screw for 059410 O-ring	N19555 N4882
128182  **500bar**	20 mm Ø	1/4 IT	1/4 IT	1/4 IT	X	4xM8	4xM8			
75282 NIRO!  **365bar**	20 mm Ø	X	3/8 ET	X	X	2xM8 diagonal	X	only for 059410 safety valve NIRO !	M8x60 socket head screw for 059410 O-ring	N19555 N4882
64013  **350bar**	3/8 IT	X	20 mm Ø	X	X	2x8,5Ø diagonal	X	For safety valve with 3/8" external thread to 20 mm	M8x25 socket head screw O-ring	N19548 N4882
064038-KD Like 64013, only complete with O-ring N4882 and 2 socket head screws N19548	3/8 IT	X	20 mm Ø	X	X	2x8,5Ø diagonal	X	For safety valve with 3/8" external thread to 20 mm	M8x25 socket head screw O-ring	N19548 N4882
90237  **350bar**	X	X	20 mm Ø	X	X	2x8,5Ø diagonal	X	Blind flange	M8x25 socket head screw O-ring	N19548 N4882
090318 Like 64013, only complete with O-ring N4882 and 2 socket head screws N19548	X	X	20 mm Ø	X	X	2x8,5Ø diagonal	X	Blind flange	M8x25 socket head screw O-ring	N19548 N4882

Adapter ø 20 mm	1		3			Hole	Examples	Note	Accessories	Order number
67797  **350bar**	1/2 IT	X	20 mm Ø	X	X	X	Hofer 	Mainly used for Hofer valves	O-Ring	N4882
64118  **350bar**	3/4 IT	X	20 mm Ø	X	X	X	Leser 	Mainly used for Leser Ventile valves	O-Ring	N4882
64119 	X	X	X	X	X	4x8,5Ø	X	Mainly used for Hofer and Leser Ventile valves	M8x25 socket head screw	N19548
N4882 								O-ring, also for 059410 safety valve		
N19548 								M8x60 socket head screw		
Montage 								Important! Always use 4 screws for assembly.		

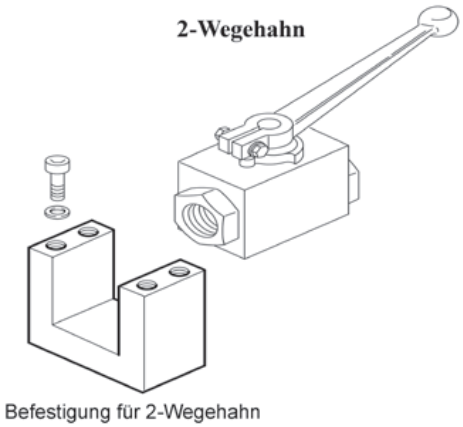
IT = Internal thread, ET = External thread. Attention! All images are for illustrative purposes only and may differ from the original!

BALL VALVES

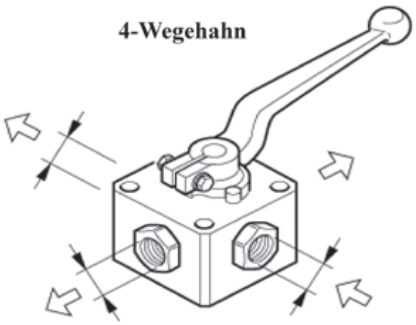
SHUT-OFF BALL VALVES

Ball valves are characterised by their favourable, linear flow, and permit high flow rates. The seals are also suitable for oil-free and dry air. The switching handle makes the OPEN-CLOSED position visible and is easy to operate. The switching handle is supplied.
Temperature of the medium: -20 °C to +100 °C.

If shut-off valves have developed a leakage over time, they can be repaired using the repair kits described below.



Befestigung für 2-Wegehahn

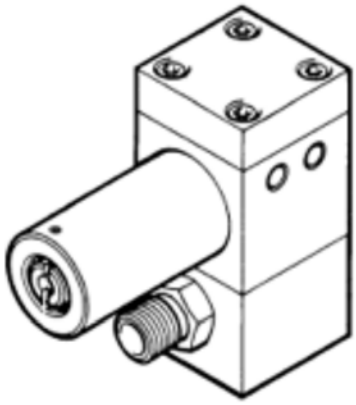


Designation	Thread	DN		L	B	Repair kits	Order number
Block ball valve		mm	bar	mm	mm		
2-way valve	G 3⁄8	10	350				N26450
2-way valve	G ¼	6	350				N26449
4-way valve with X-hole	G 1⁄8	3	400	55	45	N6452	N3352
3-way valve with L-hole	G ¼	6	400	82	70	N6485	N3045
4-way valve with X-hole	G ¼	6	400	70	55	N6486	55241
2-way valve	G ¼	6	500	50	25		N26462
2-way valve	G 3⁄8	10	500	60	30		N26463
2-way valve	G ½	12	500	75	35		N4027
Optional							
Fastening bracket for two-way valve N26462 (G¼) 500 bar							87476
Fastening bracket for two-way valve N26449 (G¼) 350 bar							12546

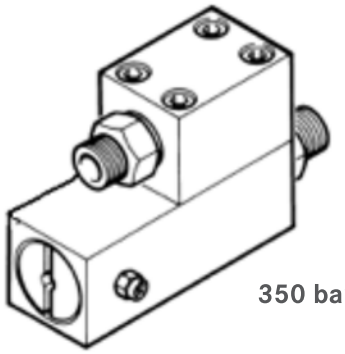
PRESSURE RETENTION VALVES

The pressure retention valves provide for correct and operationally safe function of the air and gas compressors as well as the air and gas purification systems.
Furthermore, these reduce the dynamic pressure load on the fine post-cleaner pressure vessels.
We recommend pressure retention valves should be checked every 500 operation hours or once a year to ensure they are functioning correctly. Every 1000 operating hours or every 2 years, renew the internal components (e.g. seals, sleeves, O-rings and pistons).

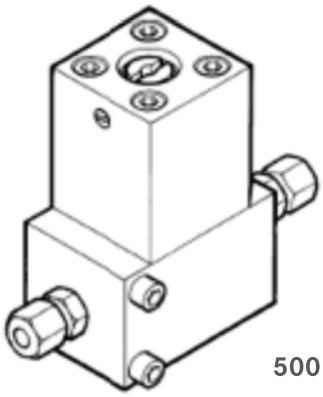
Please also refer to our maintenance kits.



400 bar



350 bar



500 bar

PRESSURE RETENTION VALVES

The pressure retention valves provide for correct and operationally safe function of the air and gas compressors as well as the air and gas purification systems.
Furthermore, these reduce the dynamic pressure load on the fine post-cleaner pressure vessels.
We recommend pressure retention valves should be checked every 500 operation hours or once a year to ensure they are functioning correctly. Every 1000 operating hours or every 2 years, renew the internal components (e.g. seals, sleeves, O-rings and pistons).

Please also refer to our maintenance kits.

Operating pressure	Setting range	Outlet pipe	Remarks	Order number
bar / max.	bar	mm		
150	100	8 mm		062516
150	100	8 mm		071043-KD
350	240	8 mm		063838-KD
350	240	8 mm	AMAG	065469-KD
350	240	10 mm	Japan	068385
350	240	8 mm		075330
350	240	8 mm	only oxygen	075413-KD
350	240	8 mm	AMAG	090062-KD
350	240		P-filter	80751
350	240		CNG	81401
350	240	¼ NPT	NPT vers.	057351
350	240		Diving	80760
350	240		Japan	80804
350	240			80815
400	270	10 mm		056705
400	270	12 mm		060510
500	340	6 mm	PURE AIR	071386
500	340	8 mm		068275

PRESSURE REDUCER

BAUER pressure reducers achieve excellent control precision in high-pressure technology for medium and relatively high flow rates, because of the valve design with pressure relief.

The regulators are characterised by a lag-free response, they are largely insensitive to intake pressure fluctuations, leak-tight on zero flow rate, have a high wear resistance and thus guarantee a long service life. All other possible changes to the material such as corrosion are avoided. In this way, you maintain the precision and function without impairment. The control is not dependent on temperature, because spring-loaded pressure reducers are used. An integrated overflow valve allows the secondary pressure to be reduced in the closed pressure system.
Pressure reducers are used for reducing the pressure of the medium from a higher to a lower level, as a result of which a corresponding flow rate is set based on the particular valve structure; furthermore, they reduce the pilot pressure from a monitoring unit for controlling a dome pressure reducer (secondary pressure).

DESIGN:

The housing and spring housing are produced from Dural or aluminium bronze; the valve spindle and valve seat are stainless steel. A grippy dial is used for infinitely variable pressure setting.

NOTE:

To safeguard the secondary pressure, we recommend a BAUER safety valve should be installed in the pressure line without fail; refer to the 'Safety' chapter for the product description and order numbers. The pressure setting must be to the nominal pressure of the consumer, e.g. the distributor station. To avoid damage by particles, we recommend fitting a suitable particulate filter ≤ 20 µm on the inlet side e.g. order number 060490.

EXPLANATION:

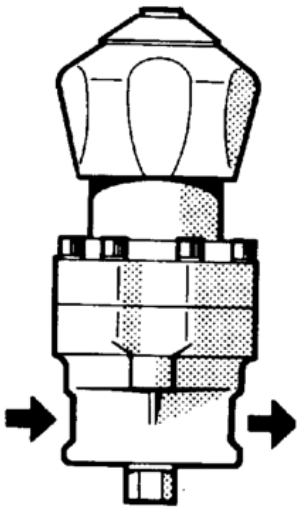
Primary pressure is the inlet pressure before the pressure reducer. Secondary pressure is the outlet pressure after the pressure reducer. This information is necessary to identify the correct article in your order.

PRESSURE REDUCER

Pressure reducer for installation in lines and control panels. High control accuracy. When ordering, please specify the required primary and secondary pressure as well as the order number. Generally, it is essential to fit a particulate filter at the inlet of the pressure reducer. Recommended filter: Particulate filter N3635.

TECHNICAL DATA

- **Medium:** Air, non-aggressive gases (N2 + noble gases)
- **Design:** Housings and spring housings are made of Dural or aluminium bronze produced, the piston rings from aluminium bronze. The valve spindle and valve seat are from stainless steel. A grippy dial is used for infinitely variable pressure setting.
- **Temperature range of the medium:** -10 °C to +100 °C
- **Pressure range:** Primary pressure: 250 or 420 bar
  Secondary pressure: 0.1 to 280 bar
- **Connection:** G 3⁄8 internal primary and secondary sides
- **Dimensions:** Height: 200 mm, Ø: 80 mm



Connection	Primary pressure	Secondary pressure	Air flow rate*	Repair kits	Order number
	bar / max.	bar	m^3/min		
G 3⁄8	250	0.1 – 50	7.4	On request	N4795
G 3⁄8	250	0.1 – 105	14.5	On request	N4794
G 3⁄8	420	0.1 – 11	1.6	On request	N4796
G 3⁄8	420	0.1 – 50	7	N 6487	N4797
G 3⁄8	420	0.5 – 140	16	On request	N4798
G 3⁄8	420	28 – 280	32	N6292	N3967
Optional					
Particulate filter					N17325
Pressure reducer for breathing air systems					N21826

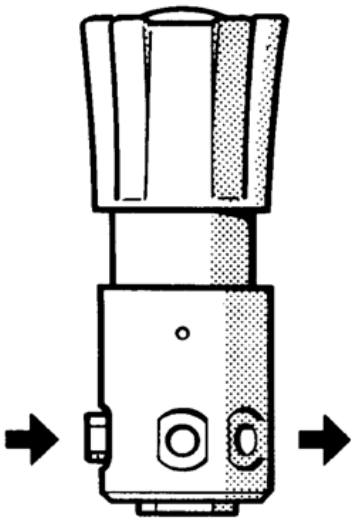
* At max. primary pressure and max. secondary pressure, in relation to +20 °C and 1 bar absolute

PRESSURE REDUCER AIR, GASES

Pressure reducer for installation in lines and control panels. High control accuracy. When ordering, please specify the required primary and secondary pressure as well as the order number.
Recommended filter: We recommend the BAUER particulate filter, N3635, which has a filter fineness of 20 µm and reliably traps particles, thereby ensuring a long service life of the pressure reducer.

TECHNICAL DATA

- **Medium:** Air, gases
- **Design:** Housing and spring housing made of aluminium alloy. Pistons made of aluminium bronze, membrane of metal.
- **Pressure release valve, valve seat:** Soft plastic (Peek). The version with a dial is recommended for infinitely variable pressure setting with sealed secondary pressure, available at extra cost.
- **Temperature range of the medium:** -20 °C to +70 °C
- **Pressure range:** Primary pressure: 465 bar Secondary pressure: 1.5 to 410 bar
- **Connection:** G 3⁄8 internal primary and secondary sides
- **Dimensions:** Height: 200 mm, Ø: 70 mm, Ø: 90 mm (handwheel)



Primary pressure	Secondary pressure	Air flow rate*	Repair kits	Order number
bar / max.	bar	m^3/min		
465	1.5 – 52	approx. 7.5	N24264	N15859
465	34 - 240	approx. 6.1	N21795	N15860
465	207 – 410	approx. 4.4	N24265	N15861

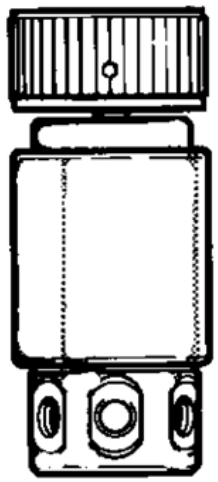
* At 420 bar primary pressure and max. secondary pressure in relation to +20 °C and 1 bar absolute

PISTON PRESSURE REDUCER AIR

The valve seats are protected by a 20 µ particulate filter. A grippy dial for infinitely variable pressure setting. A mounting is required for installation in control panels. When ordering, please specify the required primary and secondary pressure as well as the order number.

TECHNICAL DATA

- **Medium:** Air
- **Design:** Housing made of anodised aluminium, valve seat of bronze and stainless steel. Seals made of Viton.
- **Temperature range of the medium:** -10 °C to +100 °C
- **Pressure range:** Primary pressure: max. 420 bar
- **Secondary pressure:** 0.1 to 350 bar
- **Air flow rate:** 155Nm³/h, 420 bar
- **Connection:** ¼ NPT primary and secondary sides
- **Dimensions:** Height: 140 mm, Ø: 57 mm



Designation	Air flow rate*	Order number
	m³/hrs.	
Pressure reducer	155	N21826
Mounting for pressure reducer		74039
Repair kit for pressure reducer		N23086

Optional: Designation	Number of	Pipe diam-eter	Connection thread	Order number
Straight male connector	2	6 S	¼NPT	N20264
Union nut	2	6 S		N3610
Cutting ring	2	6 S		N3663
Straight male connector	2	8 S	¼ NPT	N20266
Union nut	2	8 S		N3608
Cutting ring	2	8 S		N3609
Screw plug	2		¼ NPT	N4472

MEMBRANE PRESSURE REDUCER

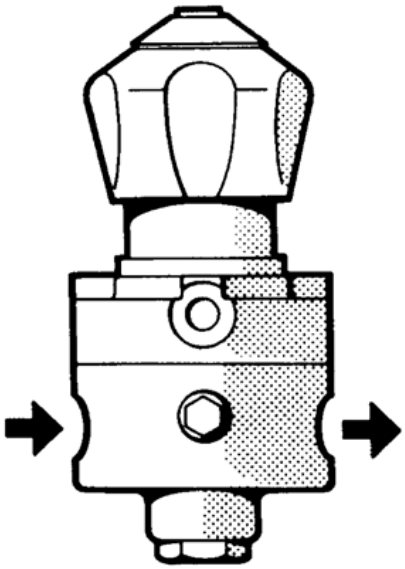
Pressure reducer for installation in lines and control panels. High control accuracy and grippy dial for infinitely variable pressure setting. Recommended filter: Particulate filter N3635. When ordering, please specify the required primary and secondary pressure as well as the order number.

TECHNICAL DATA

- **Medium:** Air, gases
- **Design:** Housing made of Dural aluminium,

  Spring housing of aluminium,
  Valve seat and cone made of stainless steel with
  Teflon coating, membrane of Dural / Perbunan

- **Temperature range of the medium:** -10 °C to +100 °C
- **Connection:** G ¾ internal primary and secondary sides
- **Dimensions:** Height: 200 mm, Ø: 83 mm
- **Weight:** approx. 1.8 kg



Primary pressure	Secondary pressure	Air flow rate*	Repair kits	Order number
bar / max.	bar	m^3/min		
25	0.1 – 1	0.75		N22531
42	0.1 - 1			N23296 (CNG)
42	0.3 – 5	3.5		N17612
42	0.5 – 11	6.0		On request
42	0.5 – 25	14.0		N21940
42	10 – 31	11.0		N21106
60	0.1 – 1	1.0	N6291	N3632

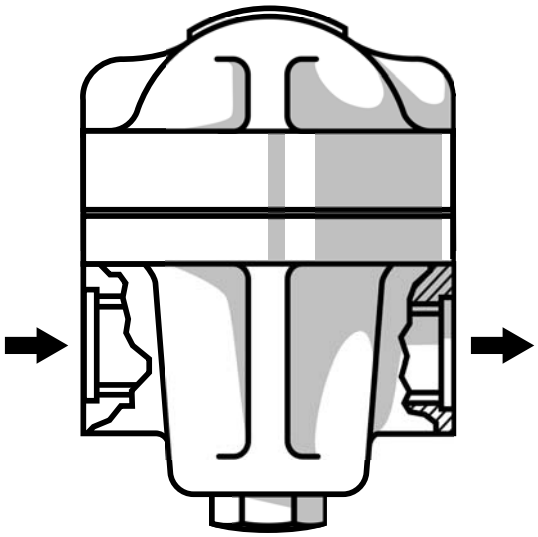
DOME PRESSURE REDUCER

Direct-action dome pressure reducer for installation in lines. Soft-skin seal – tight closing at zero flow rate. Recommended filter: N4817 for PN420. We recommend the BAUER particulate filter N4817; with its filter fineness of 20 µm, it reliably traps particles and thus guarantees the long service life of the pressure reducer.

When ordering, please specify the required primary and secondary pressure as well as the order number.

TECHNICAL DATA

- **Medium:** Air, gases
- **Design:** Housing and dome made of forged aluminium bronze. Valve spindle and valve seat made of stainless steel
- **Ambient temperature:** +5 °C to +45 °C
- **Temperature range of the medium**: -20 °C to +100 °C, in special version down to -50 °C



Primary pressure	Secondary pressure	Air flow rate	Height	Diameter	Screw-in thread	Repair kits	Order number
bar / max.	bar	m^3/min	mm	mm	inch		
420	0.1 – 280	160	160	120	G 1	N6294	N25191

* At max. secondary pressure in relation to +20 °C and 1 bar absolute

HIGH-PRESSURE REDUCING UNIT

Pressure reduction on outlet side
For wall mounting
For stationary applications
Dimensions with ball valves: approx. 580 mm x 250 mm x 224 mm (WxHxD)

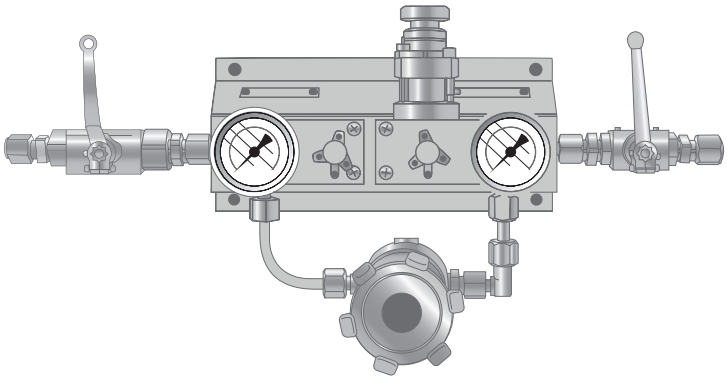
SCOPE OF DELIVERY (COMPLETELY MOUNTED ON WALL PANEL)

- 2x ball valves
- 1x pressure gauge on inlet side
- 1x pressure gauge on outlet side
- 1x pressure reducer
- 1x safety valve (setting value depends on required outlet pressure!)
- 2x bleed valve
- 1x panel for wall mounting

These high-pressure reducing stations cannot be used for intake pressure reduction because of the technical configuration! The outlet pressure setting should only be adjusted rarely! (Not intended for continuous adjustment).

Permitted for the following media
Air, nitrogen, helium, argon.

AIR N2 HE AR

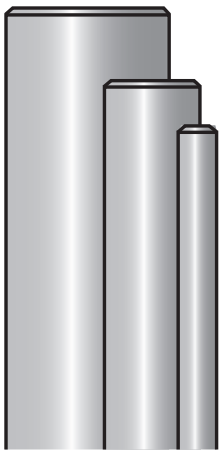


Input pressure	Output pressure	Comment	Order number
bar / max.	from / to	mm	
365	365	5-40	077838-V001
365	365	41-100	077838-V002
365	365	101-220	077838-V003
365	365	221-350	077838-V004
365	365	41-100	077838-V005
365	365	41-230	077838-V006

When ordering, you must specify the required maximum outlet pressure!

PRECISION STAINLESS STEEL PIPE

Stainless steel pipes offer the best protection against corrosion in the piping system.



TECHNICAL DATA

- **External diameter:** from 6 – 42 mm
- **Internal diameter:** from 3 – 38 mm
- **Lengths:** 3 m standard, 6 m on request
- **Wall thickness tolerance:** Class T1 acc. to DIN 2462
- **Material:** 1.4541
- **Available lengths:** Standard 3 m
  6 m on request (minimum order 15 pipes)

IMPORTANT INFORMATION

The pressure information in the table below (page 95) has been calculated acc. to DIN 2413 application range I for 20 °C room temperature. At higher temperatures, only a reduced pressure loading is permitted, which can be calculated by means of a calculation factor.
The guidance value for the flow speed in pipes is 6 – 15 m/s
Material coefficient: K = 235 N/mm² safety factor: S 1.5

Example with 50 °C pipe temperature and 200 bar pressure:
Factor = 0.945, which means: 200 bar x 0.945 = **189 bar max. pressure**

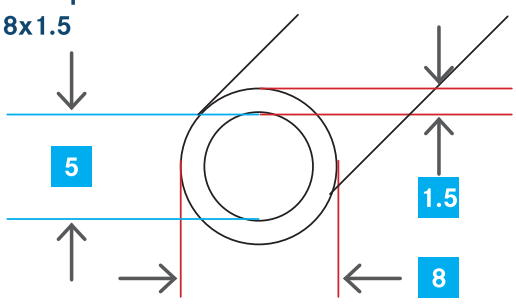
Example with 100 °C pipe temperature and 200 bar pressure:
Factor = 0.885, which means: 200 bar x 0.885 = **177 bar max. pressure**
See DIN 17440 for the exact calculation

PRECISION STAINLESS STEEL PIPES

mm/bar Ø/max.	120	135	140	165	170	180	205	220	297	345	385	425	450	540
6x1.0											N3616			
6x1.5														N3617
8x1.0									N3618					
8x1.5												N3619		
8x2.0														N18356
10x1.0							N3620							
10x1.5										N4699				
10x2.0													N17973	
12x1.0							N15098							
12x1.5									N3621					
12x2.0											N16242			
12x3.0														N17118
15x1.0				N15130										
15x1.5							N3622							
16x2.0									N15504					
18x1.0			N15934											
18x1.5							N15467							
20x2.5									N20942					
20x3.0										N23672				
22x1.5					N15466									
22x2.0								N16255						
28x1.5		N15836												
28x2.0						N18278								
42x2.0	N17878													

Max. pressure values at 20 °C

Example:
8x1.5



Please note the correction calculation of the pressure based on the temperature.
See (Important information!) on page 94.

PIPE CLAMPS

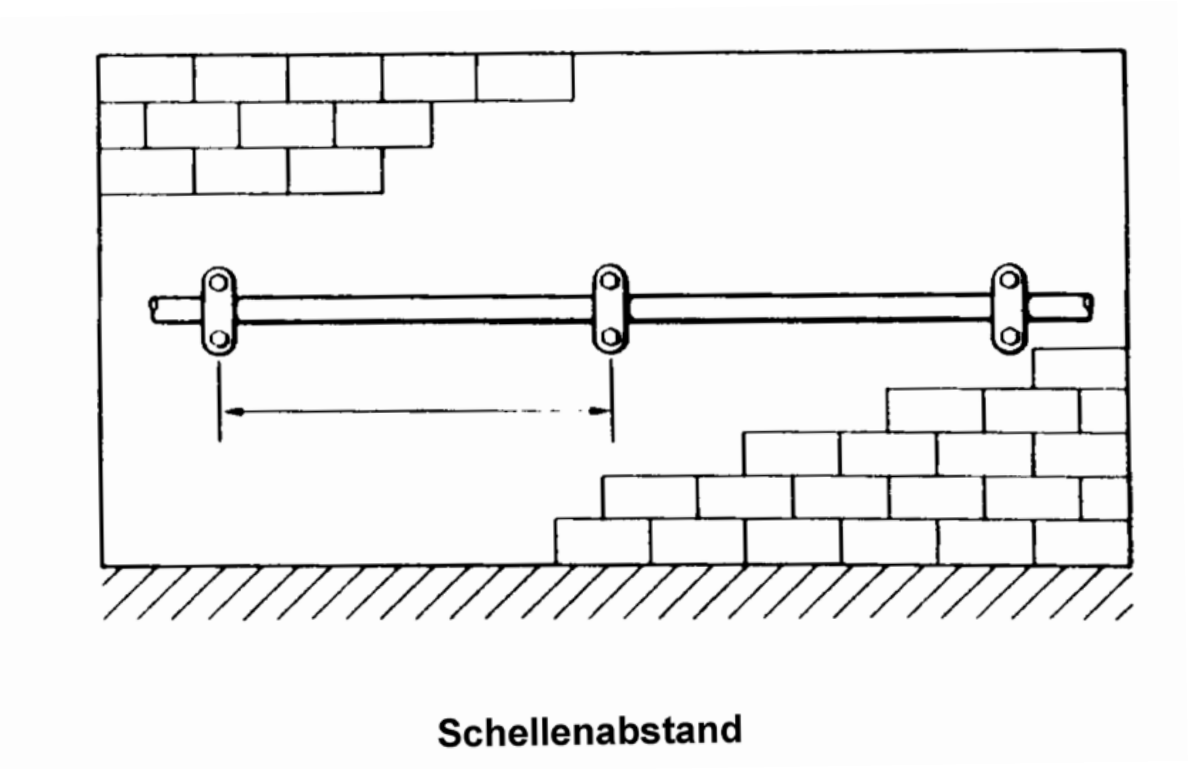
These parts are fastening elements for the piping to be routed.
The following versions can be used.

Recommended clamp spacing for attachment to an immobile base:

Designation	Clamp spacing
Pipe Ø 6-12 mm	0.9 m
Pipe Ø 15-22 mm	1.2 m

Recommended clamp spacing for attachment to a vibrating base:

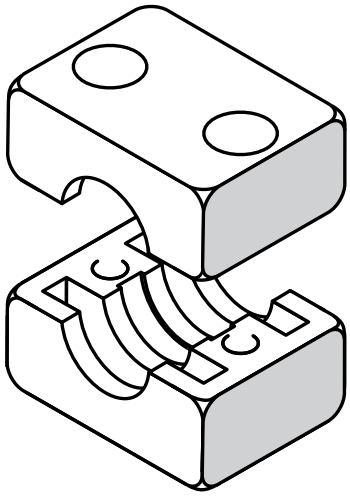
Designation	Clamp spacing
Pipe Ø 6-12 mm	0.45 m
Pipe Ø 15-22 mm	0.6 m



NOTES

PLASTIC CLAMPS

For attaching individual pipes. Recommended for below 60 °C operating temperature.

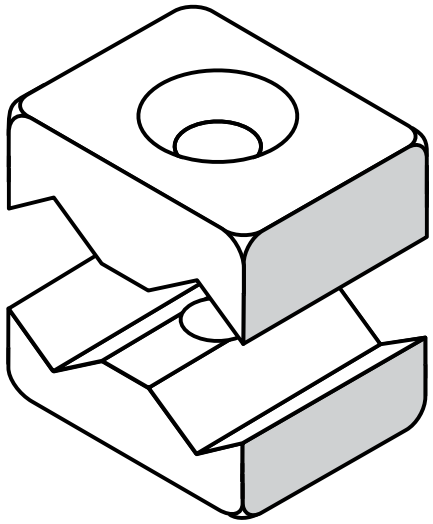


Designation	Order number*
Plastic clamp for pipe Ø 6 mm	N27858
Plastic clamp for pipe Ø 8 mm	N17270
Plastic clamp for pipe Ø 10 mm	N17271
Plastic clamp for pipe Ø 12 mm	N17272
Plastic clamp for pipe Ø 15 mm	N15075
Plastic clamp for pipe Ø 16 mm	N17577
Plastic clamp for pipe Ø 18 mm	N17273
Plastic clamp for pipe Ø 20 mm	N17274
Plastic clamp for pipe Ø 22 mm	N17275
Plastic clamp for pipe Ø 28 mm	N23679
Mounting rail / C-rail	N23614
Rail nut (M6)	N23613
Screw M6 x 30 mm for N17269/N17270/N17271/N17272	N19536
Screw M6 x 35 mm for N15075/N17577/N17273	N19537
Screw M6 x 40 mm for N17274/N17275	N19538
Screw M6 x 45 mm for N23679	N19539

* You require two clamps in each case

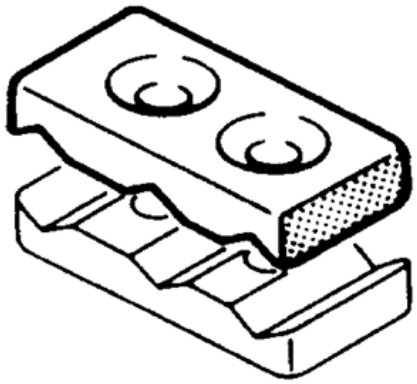
ALUMINIUM CLAMPS

For attaching 2 pipes:



Designation	Order number*
Pipe external Ø 6-10 mm	13967

For attaching 3 pipes:

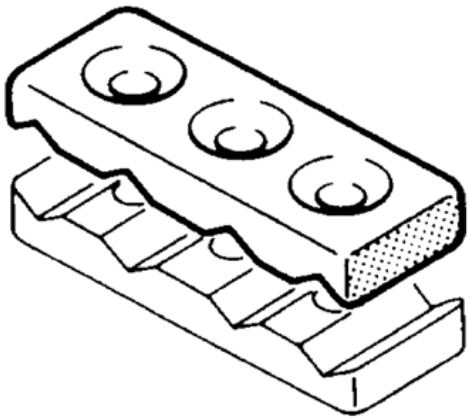


Designation	Order number*
Pipe external Ø 6 - 10 mm	55579

* You require two clamps in each case

ALUMINIUM CLAMPS

For attaching 4 pipes:



Designation	Order number*
Pipe external Ø 6 - 10 mm	55589

Dowel for wall fastening:

Designation	Order number
Dowel Ø 6, L 30	N24430
Dowel Ø 8, L 40	N24654
Dowel Ø 10, L 50	N3766
Dowel Ø 12, L 60	N24339
Dowel Ø 14, L 75	N17056

HOSES

ATTENTION: MAXIMUM OPERATING PRESSURE

Hoses are available for various pressure ranges, and also with different connectors.

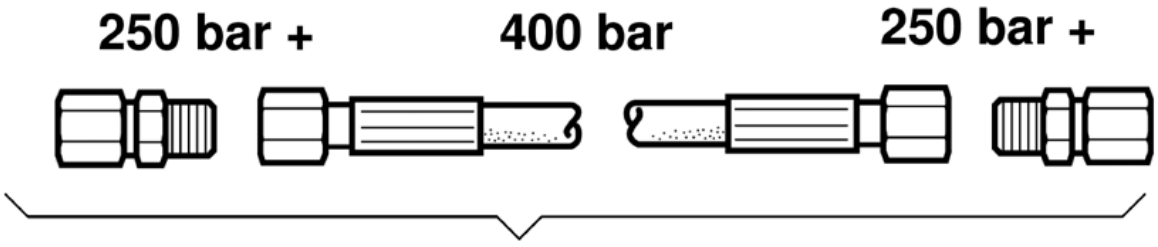
Please note that the maximum permitted operating pressure depends on the individual part with the lowest pressure range.

Please comply with the specified application data!

Temperature range: -10 °C / 14 °F to +50 °C / 122 °F.
Ambient temperature: +60 °C / 140 °F up to +80 °C / 176 °F permitted for short periods.
Flow speed: max. 10 m/s. For guidance values, see the tables section.

ATTENTION

Constant pressure and continuous load cycles in the hoses reduce the service life considerably. This application cannot be recommended. Please note that the application and test regulations are subject to the various regulations in the country where the hoses are used



Permitted maximum pressure: 250 bar max.

HOSE BREAK PROTECTION

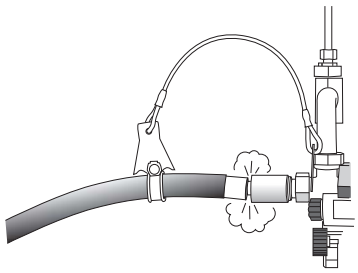
Filling hoses are often exposed to harsh conditions which can significantly increase their durability, such as: Excessively high or low temperatures,
moisture, salty air, contamination of all kinds
(e.g.: substances containing oil or solvents)

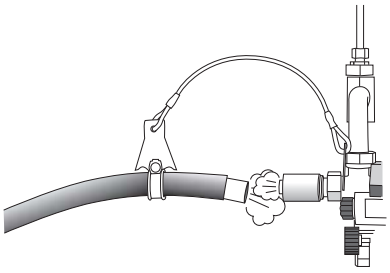
Incorrect or inadvertent handling such as:
kinking, stretching, incorrect handling of the screwed fittings.
Incorrect handling of breathing air cylinders.
(e.g.: by allowing unsecured cylinders to fall over)

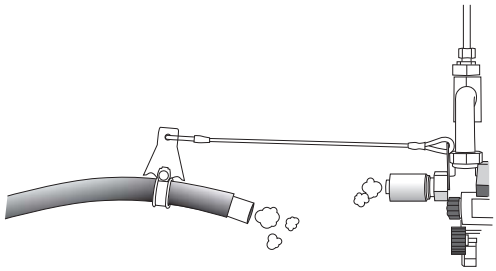
Everyone must be aware of the consequences of such a hose break. The sudden emergence of air and the whipping movements of the hose can cause very severe injuries! Danger of fatal injury!

Our robust hose break protection can be fitted in a matter of moments and offers additional safety.
The 5 mm thick steel cable makes it flexible, and allows it to be attached to the existing hose easily. For protection and better securing, the hose clamp is additionally provided with a protective rubber pad.

The system has been optimised for our current UNIMAM filling hoses, but is also suitable for other hose types with the same diameters.







TECHNICAL DATA

- **Length of wire rope:** 300 mm
- **Eye diameter:** 12 mm
- **For hose diameters from:** 10-13 mm
- **Spanner size for mounting the clamp:** 10 mm

SCOPE OF DELIVERY FOR PROTECTING ONE HOSE

Two wire ropes with mounting accessories.
Order number: N39197

Prefabricated Full protection hose	Part no.
EXISTING HOSE WILL BE REPLACED	
LENGTH: 1.00 METER	N2817-S07
LENGTH: 1.50 METER	N3351-S02

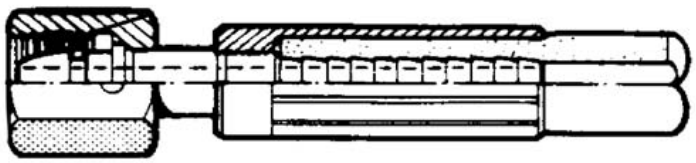
FILLING HOSES

BAUER Kompressoren high-pressure connecting hoses are suitable for breathing air, flexible, have a hose protector and handle on the pressure gauge side, as well as being equipped with fittings made of stainless steel. All hoses and fittings are 100% pressure-tested, are subjected to a 20,000 cycle test and are certified accordingly. BAUER Kompressoren filling hoses have a very high permitted temperature range. Optionally available with pressure test certificate 10204-3.1B.

TECHNICAL DATA

- **External diameter:** approx. 10 mm
- **Exterior coating:** perforated
- **Suitable for:** Air, helium, nitrogen, noble gases, Unimam hoses expressly suitable for breathing air
- **Resistant to ambient influences:** salty air, seawater, sunshine and fuels such as petrol, diesel oil
- **Material:** Fluoropolymer (FEP)
- **Temperature:** -40 °C to +100 °C
- **Length:** see table
- **Colour:** black
- **Permitted operating pressure:** 425 bar at 45 °C

M16x1.5



Unimam Anschluß

FILLING HOSES WITH UNIMAM CONNECTOR, SWIVELLING NON-PRESSURISED

Length	Operating pressure	Connection thread	DN	Order number
mm	bar / max.		mm	
500	425	M 16 x 1,5	5	N4216
800	425	M 16 x 1,5	5	N41090
1,000	425	M 16 x 1,5	5	N2817
1,500	425	M 16 x 1,5	5	N3351
2,000	425	M 16 x 1,5	5	N2818
3,000	425	M 16 x 1,5	5	N2819
5,000	425	M 16 x 1,5	5	N18397
6,000	425	M 16 x 1,5	5	N3657
9,000	425	M 16 x 1,5	5	N20724
10,000	425	M 16 x 1,5	5	N24614
12,000	425	M 16 x 1,5	5	N21707
15,000	425	M 16 x 1,5	5	N22730
20,000	425	M 16 x 1,5	5	N23084
25,000	425	M 16 x 1,5	5	N23146
30,000	425	M 16 x 1,5	5	N23147
50,000	425	M 16 x 1,5	5	N23396
O-ring for UNIMAM			6L-6S	N20755
O-ring for UNIMAM			8L-8S	N20756
O-ring for UNIMAM		M 16 x 1,5		N16632

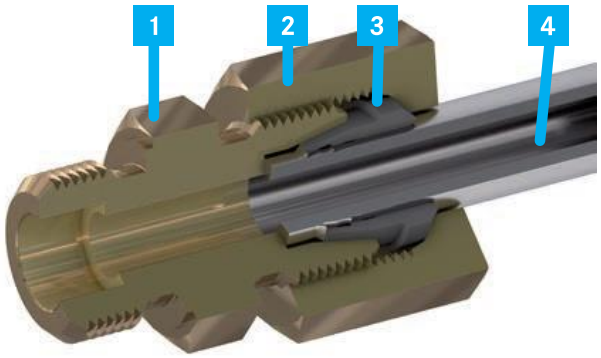
HIGH-PRESSURE HOSES

Length	Operating pressure	Connection thread	DN	Union nut	Order number
mm	bar / max.		mm		
320	315	M 12 x 1.5	4	6L/6L	N20743
500	315	M 12 x 1.5	4	6L/6L	N3253
800	315	M 12 x 1.5	4	6L/6L	N20744
320	315	M 14 x 1.5; M 12 x 1.5	4	6S/6L	N20745
500	315	M 14 x 1.5; M 12 x 1.5	4	6S/6L	N18319
800	315	M 14 x 1.5; M 12 x 1.5	4	6S/6L	N18321
630	425	M 16 x 1.5	5		N30443
320	450	M 14 x 1.5	4	6S/6S	N18323
500	450	M 14 x 1.5	4	6S/6S	N18320
800	450	M 14 x 1.5	4	6S/6S	N18322
100	450	M 14 x 1.5	4	6S/6S	N4822
500	450	M 16 x 1.5	6	8S/8S	N3864
500			6	8L/8L	N19347

Explanation: L = light series, S = heavy series

NOTES

CUTTING RING SCREWED FITTING



1 Screwed fitting
2 Union nut
3 Cutting ring
4 Pipe

THE APPLICATION RANGE FOR THE CUTTING RING SCREWED FITTINGS THAT WE USE:

- **Pipe diameter:** from 6 to 42 mm
- **Pipe material:** steel, aluminium, stainless steel
- **Pressure range:** 0 to 630 bar
- **Medium:** Air, gases, oils, suitable liquids
- **DIN:** always correspond to the latest regulations

QUALITY FEATURES

We exclusively use screwed fittings from leading manufacturers. Screwed fittings, nuts and cutting rings are supplied as standard in a steel version with phosphate coating, to protect against corrosion. Stainless steel version at extra cost. Please specify in your order!

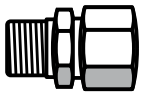
INSTALLATION

Saw off the pipe at right angles, then slightly deburr the cut end and clean it. Push the union nut and cutting ring onto the pipe, insert into the cone of the screwed fitting, push up against the pipe and then tighten the union nut. Check the cutting of the cut edge following installation.

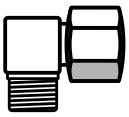
IMPORTANT!
Some of the pressures can be in excess of 600 bar, so incorrect installation represents a risk of fatal injury! Please comply with the precise installation instructions in our workshop manual! This also contains additional helpful tips and information about compressor technology.

	Order number
	N26979

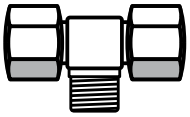
OVERVIEW OF THE MOST COMMONPIPE FITTINGS



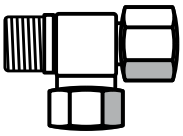
STRAIGHT MALE CONNECTOR (GES)



ANGLE MALE CONNECTOR (WES)

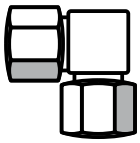


T-MALE CONNECTOR (TES)

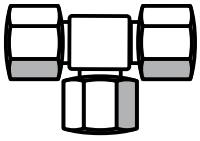


L-MALE CONNECTOR (LES)

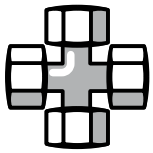
STRAIGHT PIPE CONNECTOR (GS)



ANGLE PIPE CONNECTOR (WS)

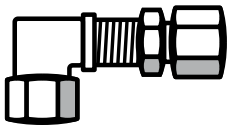


T-PIPE CONNECTOR (TS)

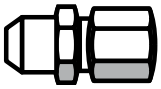


CROSS PIPE CONNECTOR (KV)

STRAIGHT BULKHEAD CONNECTOR (GSS)

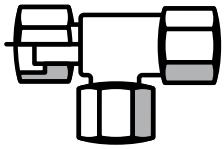


ANGLE BULKHEAD CONNECTOR (WSS)

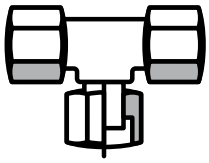


WELD-ON PIPE CONNECTOR (ASS)

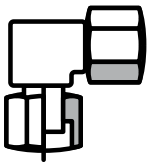
WELD-IN BULKHEAD CONNECTOR (ESS)



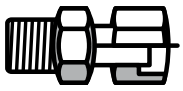
ADJUSTABLE L-PIPE CONNECTOR (ELS)



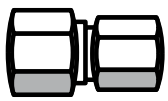
ADJUSTABLE T-PIPE CONNECTOR (ETS)



ADJUSTABLE ANGLE PIPE CONNECTOR (EWS)

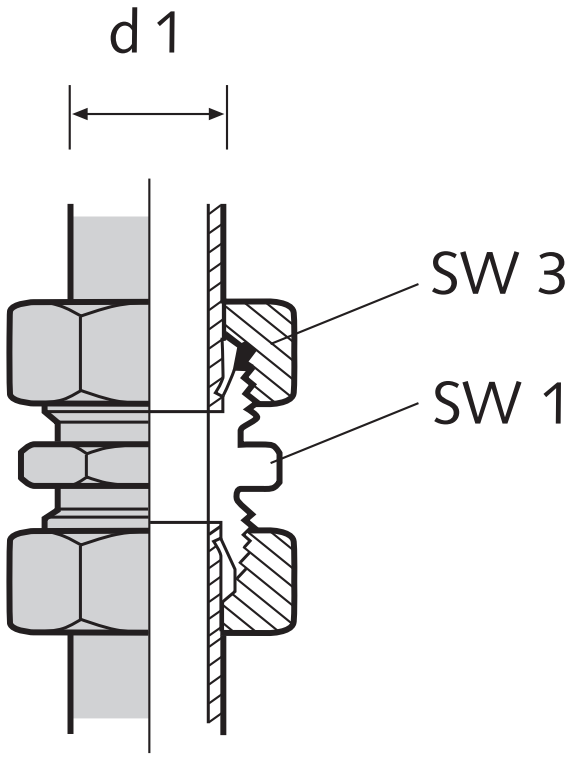


ADJUSTABLE STRAIGHT PIPE CONNECTOR (EGES)



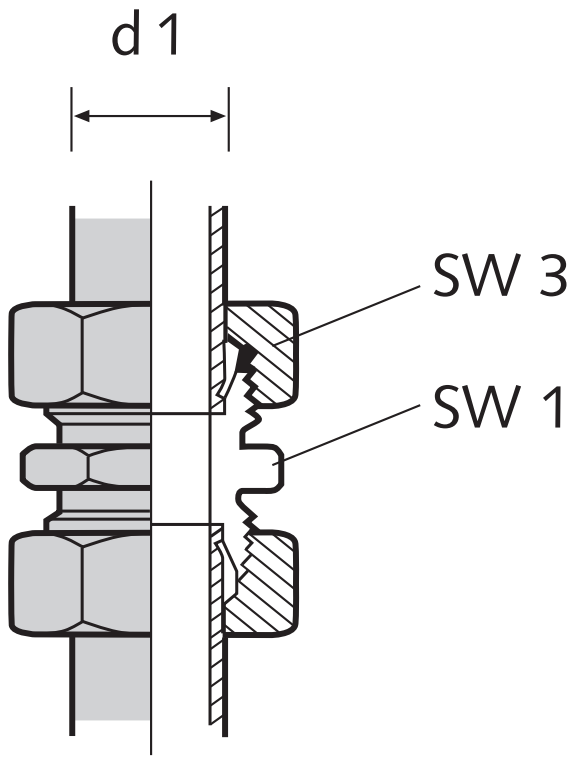
REDUCTION PIPE CONNECTOR (RED)

STRAIGHT PIPE CONNECTORS (GS) NORMAL VERSION



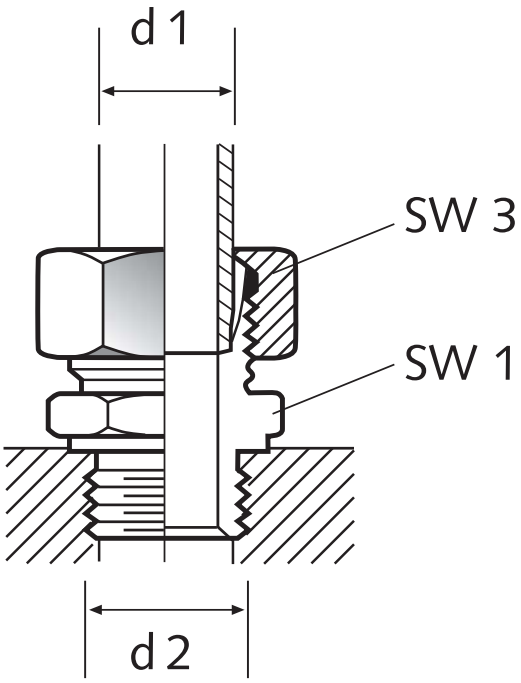
PN	Pipe external Ø d1	SW1	SW3	Order number
bar	mm	mm	mm	
100	28	41	41	N22487
160	18	27	32	N20312
160	22	32	36	N20313
250	6	12	14	N20157
250	8	14	17	N20379
250	10	17	19	N20309
250	12	19	22	N20310
250	15	24	27	N20311
400	16	27	30	N20347
400	20	32	36	N20348
630	6	14	17	N20168
630	8	17	19	N20208
630	10	19	22	N20190
630	12	22	24	N20101

STRAIGHT PIPE CONNECTORS (GS) STAINLESS STEEL VERSION



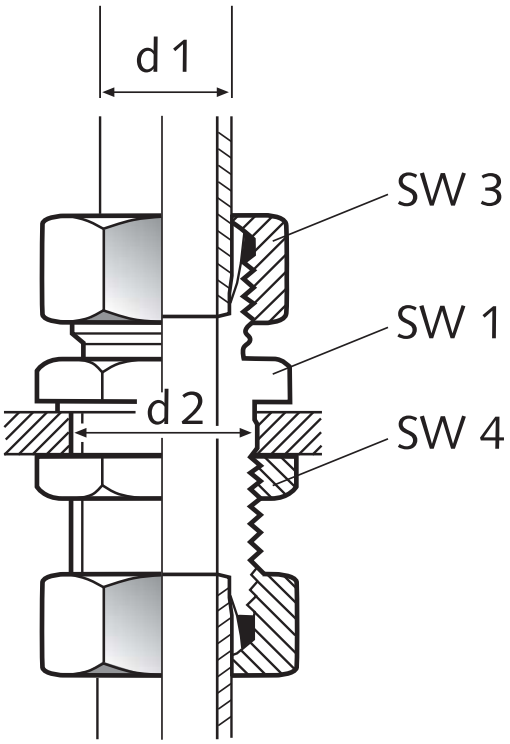
PN	Pipe external Ø d1	SW1	SW3	Order number
bar	mm	mm	mm	
40	20	32	36	N24424
100	28	41	41	N23640
160	18	27	32	N20433
160	22	32	36	N20426
250	6	12	14	N20442
250	10	17	19	N20584
250	12	19	22	N20140
250	15	24	27	N20436
630	6	14	17	N20499
630	8	17	19	N20585
630	10	19	22	N23394
630	12	22	24	N23387

STRAIGHT MALE CONNECTORS (GES)



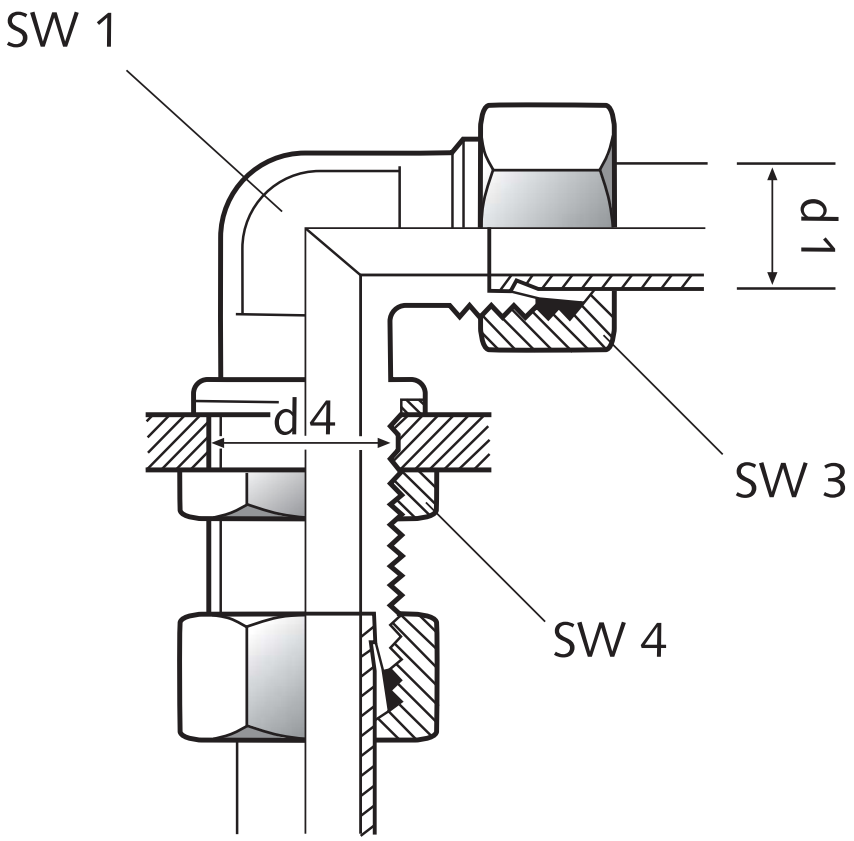
PN	Pipe external Ø d1	d2	SW1	SW3	Order number for screwed fitting with integrated soft seal	Order number for screwed fitting without seal
bar	mm		mm	mm		
100	28	G 1	41	41	N20030	N20308
160	18	G ½	27	32	N20075	N20013
160	22	G ¾	32	36	N20098	N20230
250	6	G ⅛	19	14	N20237	N20002
250	8	G ¼	19	17	N20065	N20014
250	10	G ¼	19	19	N20017	N20188
250	12	G ⅜	22	22	N20043	N20009
250	15	G ½	27	27	N20018	N20231
400	16	G ½	27	30	N20224	N18244
400	20	G ¾	32	36	N20032	N20351
630	6	G ¼	19	19	N20211	N20195
630	8	G ¼	19	19	N20287	N20209
630	8	G ⅜	19	19	N20404	N20551
630	10	G ⅜	22	22	N20228	N20229
630	12	G ⅜	22	24	N20721	N20011

STRAIGHT BULKHEAD CONNECTORS (GSV)



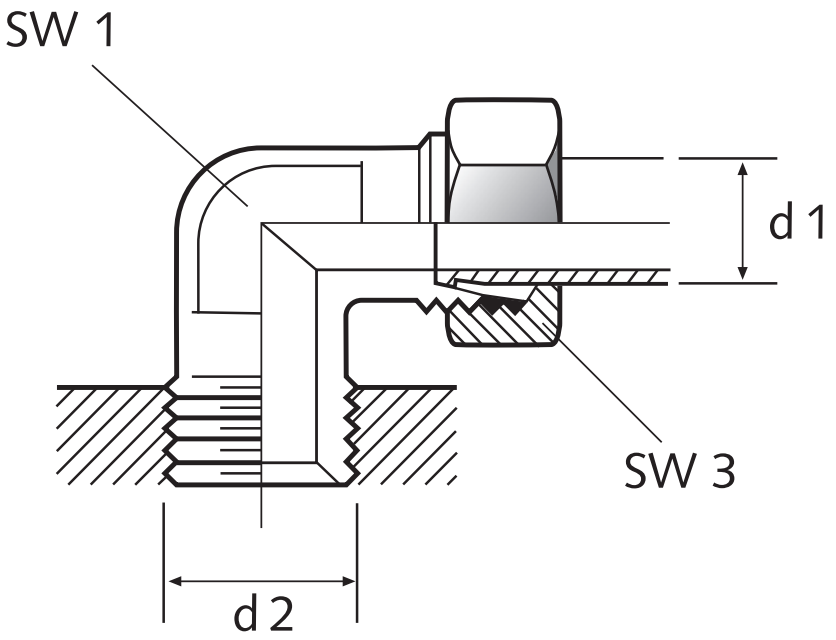
PN	Pipe external Ø d1	d4	SW1	SW3	SW4	Order number
bar	mm	mm	mm	mm	mm	
160	18	28	32	32	36	N15537
160	22	32	36	36	41	N4582
250	6	14	17	14	17	N3995
250	8	16	19	17	19	N3172
250	10	18	22	19	22	N4659
250	12	20	24	22	24	N4338
250	15	24	27	27	30	N4619
400	16	26	32	30	32	N15505
400	20	32	41	36	41	N15854
630	6	16	19	17	19	N3083
630	8	18	22	19	22	N3300
630	10	20	24	22	24	N4168
630	12	22	27	24	27	N4683

ANGLE BULKHEAD CONNECTORS (WSV)



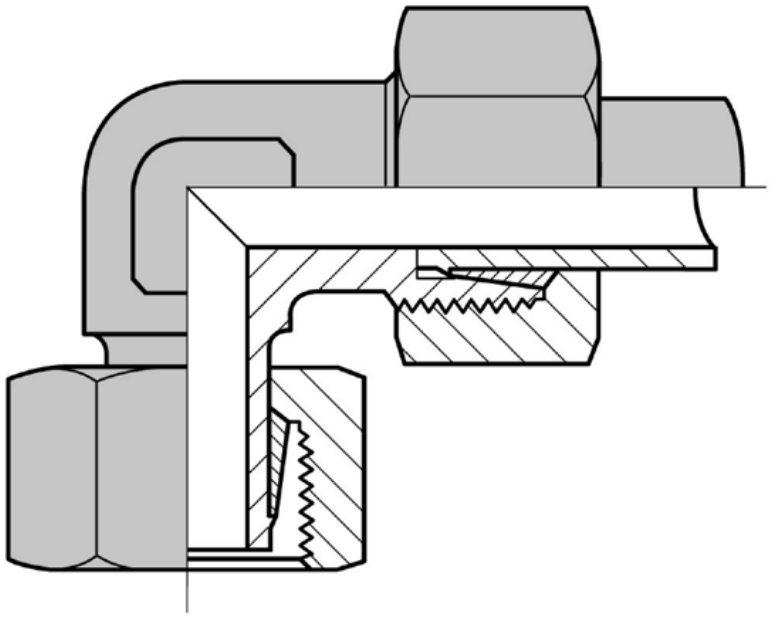
PN	Pipe external Ø d1	d4	SW1	SW3	SW4	Order number
bar	mm	mm	mm	mm	mm	
160	18	28	24	32	36	N18147
160	22	32	27	36	41	N18155
250	8	16	12	17	19	N2787
250	10	18	14	19	22	N15202
250	12	20	17	22	24	N16271
250	15	24	19	27	30	N3171
400	16	26	24	30	32	N18148
400	20	32	27	36	41	N4932
630	6	16	12	17	19	N4477
630	8	18	14	19	22	N4322
630	10	20	17	22	24	N4658
630	12	22	17	24	27	N4684

ANGLE MALE CONNECTORS (WEV)



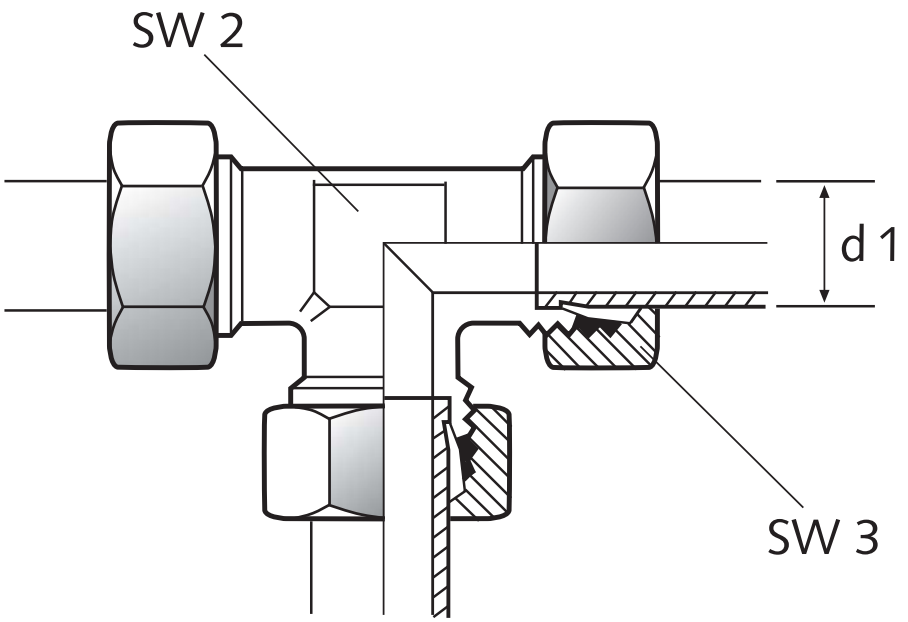
PN	Pipe external Ø d1	d4	SW1	SW3	Order number
bar	mm		mm	mm	
160	18	G ½	24	32	N 661
160	22	G ¾	27	36	N 7403
250	6	G ⅛	12	14	N 1057
250	8	G ¼	14	17	N 1536
250	10	G ¼	17	19	N 1065
250	12	G ⅜	19	22	N 2917
250	15	G ½	19	27	N 1856
400	16	G ½	24	30	N 8011
400	20	G ⅜	27	36	N 8026
630	6	G ¼	14	17	N 1048
630	8	G ¼	17	19	N 3044
630	10	G ⅜	19	22	N 7727
630	12	G ⅜	22	24	N 4681

ADJUSTABLE ANGLE SCREW CONNECTOR (EWS)



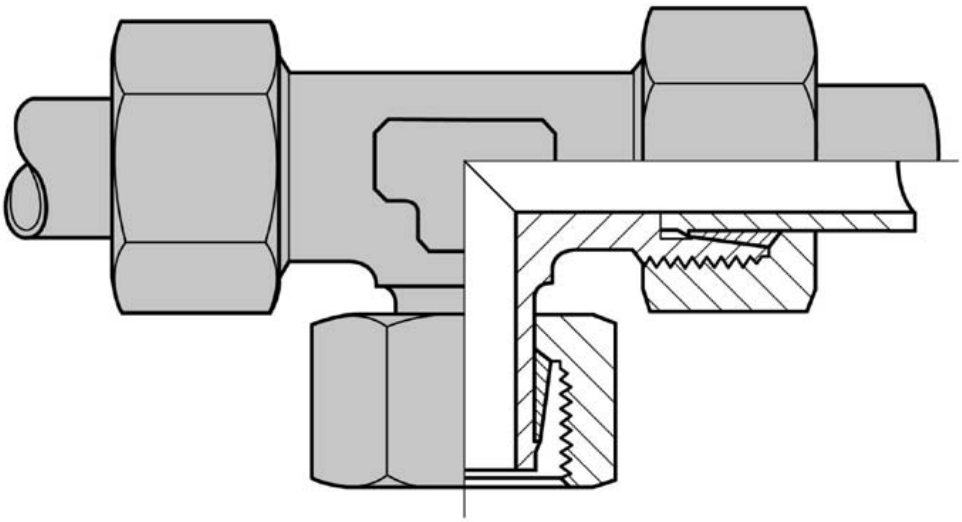
PN	Pipe external Ø d1	Series	Order number
bar	mm		
250	6	L	N20186
250	8	L	N20152
250	10	L	N20160
250	12	L	N20200
250	15	L	N20257
400	16	S	N20225
400	20	S	N20031
630	6	S	N20187
630	8	S	83220
630	10	S	N20154
630	12	S	N20282

T-CONNECTORS (TV)



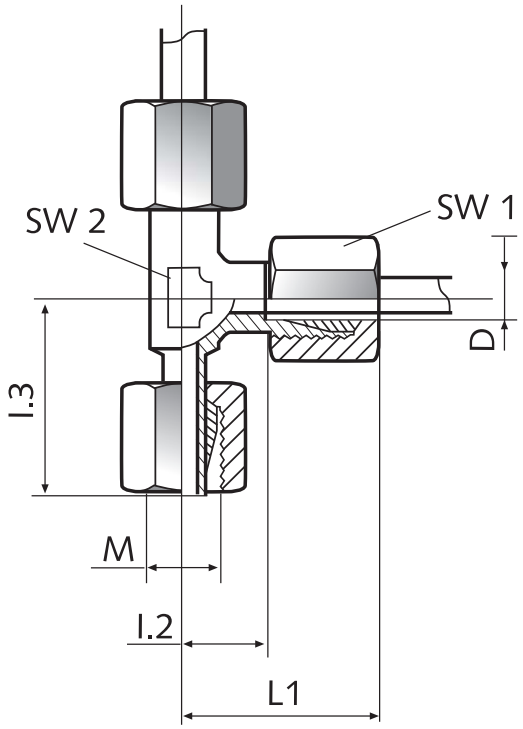
PN	Pipe external Ø d1	SW2	SW3	Order number
bar	mm	mm	mm	
100	28	36	41	N 7513
160	18	24	32	N7428
160	22	27	36	N7429
250	6	12	14	N3134
250	8	14	17	N3025
250	10	17	19	N3010
250	12	19	22	N7426
250	15	19	27	N7427
400	16	24	30	N 8022
400	20	27	36	N18149
630	6	14	17	N3968
630	8	17	19	N3710
630	10	19	22	N4922
630	12	22	24	N17924

ADJUSTABLE T-CONNECTORS (ETS)



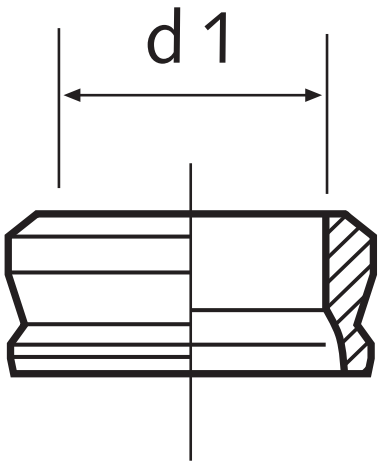
PN	Pipe external Ø d1	Series	Order number
bar	mm		
250	6	L	N20238
250	8	L	N20155
250	10	L	N20068
250	12	L	N20051
250	15	L	N20029
400	16	S	N20419
400	20	S	N20259
630	6	S	N20019
630	8	S	N20206
630	10	S	N20064
630	12	S	N20057

ADJUSTABLE L-CONNECTORS (ELS)



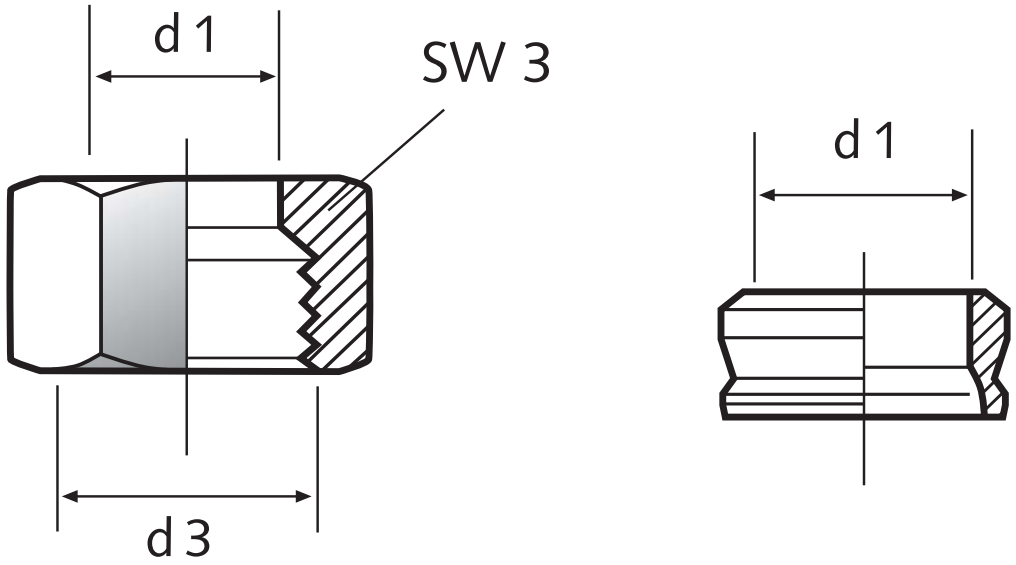
PN	Pipe external Ø d1	Series	Order number
bar	mm		
250	6	L	N20167
250	8	L	N20219
250	10	L	N20213
250	12	L	N20289
250	15	L	N20052
400	16	S	N20422
400	20	S	N23503
630	6	S	N20185
630	8	S	N20175
630	10	S	N20276
630	12	S	N20055

CUTTING RINGS



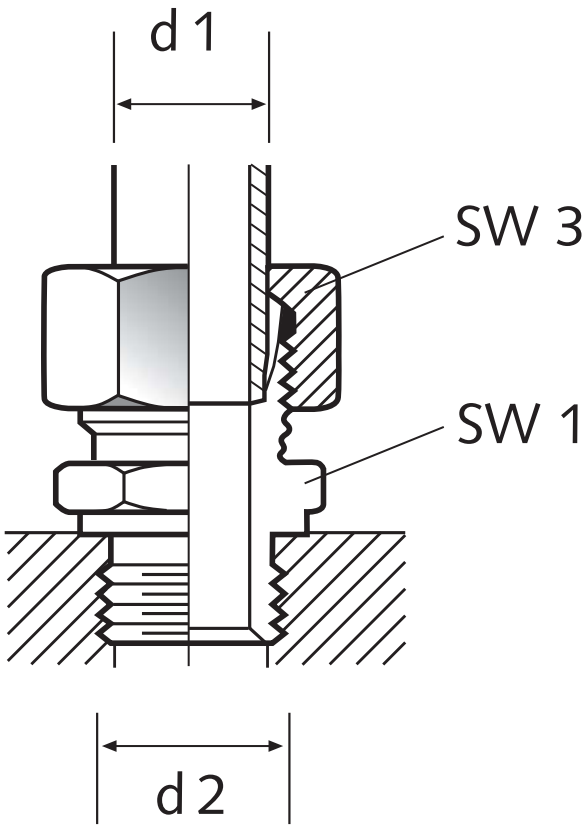
PN	Pipe external Ø d1	Series	Order number
bar	mm		
100	28	L	N7445
160	18	L	N7443
160	22	L	N7444
250	6	L	N3663
250	8	L	N3609
250	10	L	N4011
250	12	L	N7441
250	15	L	N3614
400	16	S	N4009
400	20	S	N18154
630	6	S	N3663
630	8	S	N3609
630	10	S	N4011
630	12	S	N7441

UNION NUTS



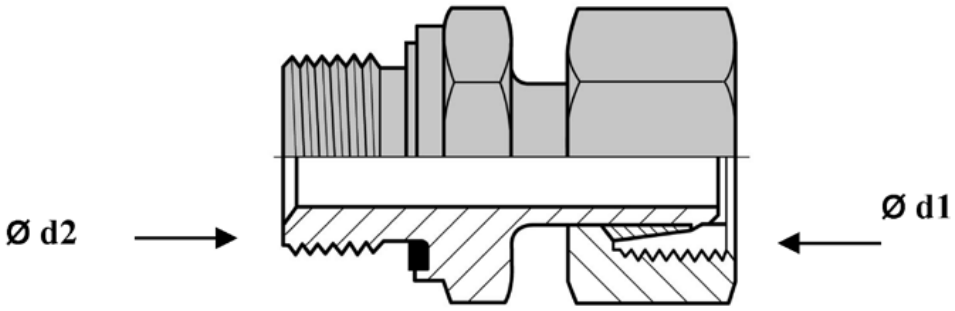
PN	Pipe external Ø d1	d3	SW3	Series	Order number
bar	mm		mm		
100	28	M 36 x 2	41	L	N7437
160	18	M 26 x 1.5	32	L	N7435
160	22	M 30 x 2	36	L	N7436
250	6	M 12 x 1.5	14	L	N7430
250	8	M 14 x 1.5	17	L	N1049
250	10	M 16 x 1.5	19	L	N7432
250	12	M 18 x 1.5	22	L	N7433
250	15	M 22 x 1.5	27	L	N3613
400	16	M 24 x 1.5	30	S	N4008
400	20	M 30 x 2	36	S	N18153
630	6	M 14 x 1.5	17	S	N3610
630	8	M 16 x 1.5	19	S	N3608
630	10	M 18 x 1.5	22	S	N4010
630	12	M 20 x 1.5	24	S	N15599

STRAIGHT MALE CONNECTORS (GEV)



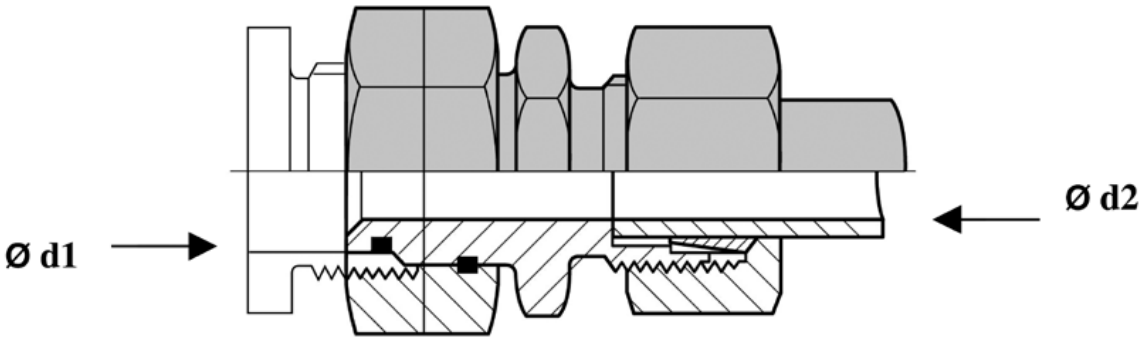
PN	Pipe external Ø d1	d2	SW1	SW3	Order number
bar	mm		mm	mm	
250	6	G ⅛	14	14	N 1051
250	8	G ¼	14	17	N1063
250	10	G ¼	17	19	N2166
250	12	G ⅜	19	22	N1443
250	15	G ½	24	27	N1509
630	6	G ¼	19	17	N 902
630	8	G ¼	19	19	N2466
630	10	G ⅜	22	22	N3983
630	12	G ½	27	24	N4022

STRAIGHT MALE CONNECTORS (GES)



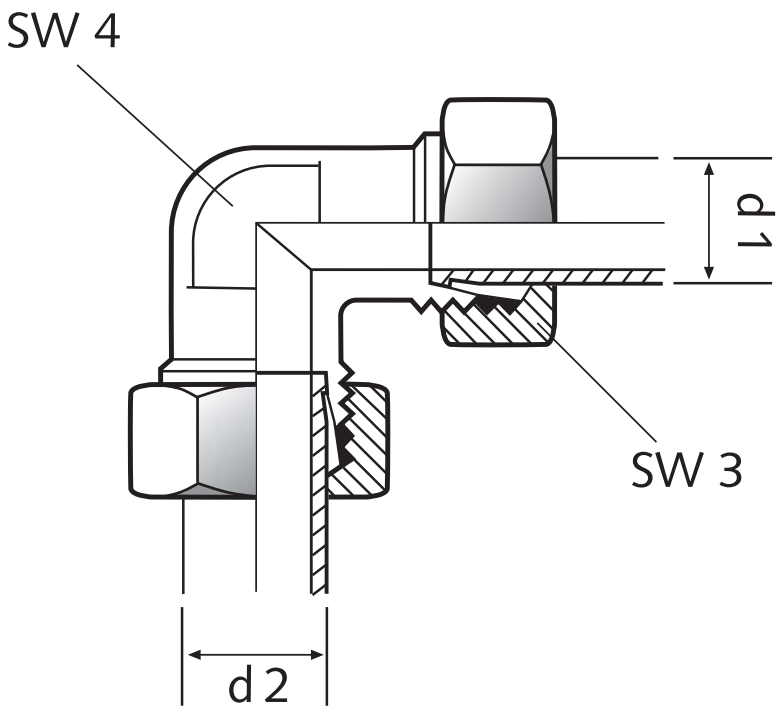
PN	Pipe external Ø d1	Ø d1	Series	Order number
bar	mm	mm		
250	8	G ¼	L	N17233
250	10	G ¼	L	N15128
250	12	G ⅜	L	N17252
400	16	G ½	S	N4977
400	20	G ¾	S	N4318
630	6	G ¼	S	N4498
630	8	G ¼	S	N15600
630	10	G ⅜	S	N15501
630	12	G ⅜	S	N15922

REDUCTION ADAPTERS (RED)



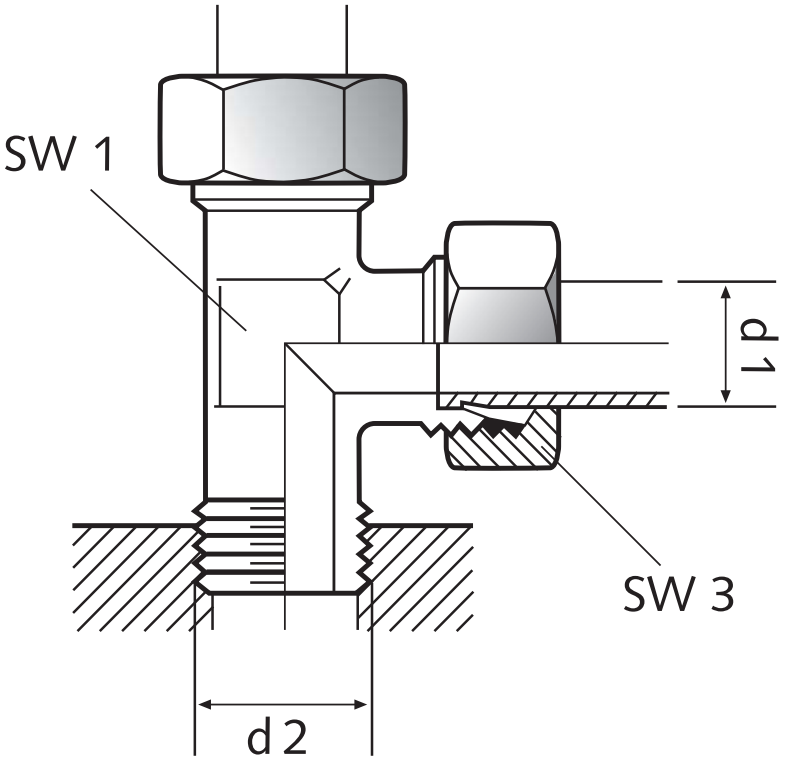
PN	Pipe external Ø d1	Pipe external Ø d2	Series	Order number
bar	mm	mm		
250	8	6	L	N20234
250	10	8	L	N20067
250	12	8	L	N20112
250	12	10	L	N20396
400	20	16	S	N23118
400	16	12	S	N20071
630	8	6	S	N20184
630	10	8	S	N20069
630	12	8	S	N20286
630	12	10	S	N20244

ANGLE SCREW CONNECTORS (WV)



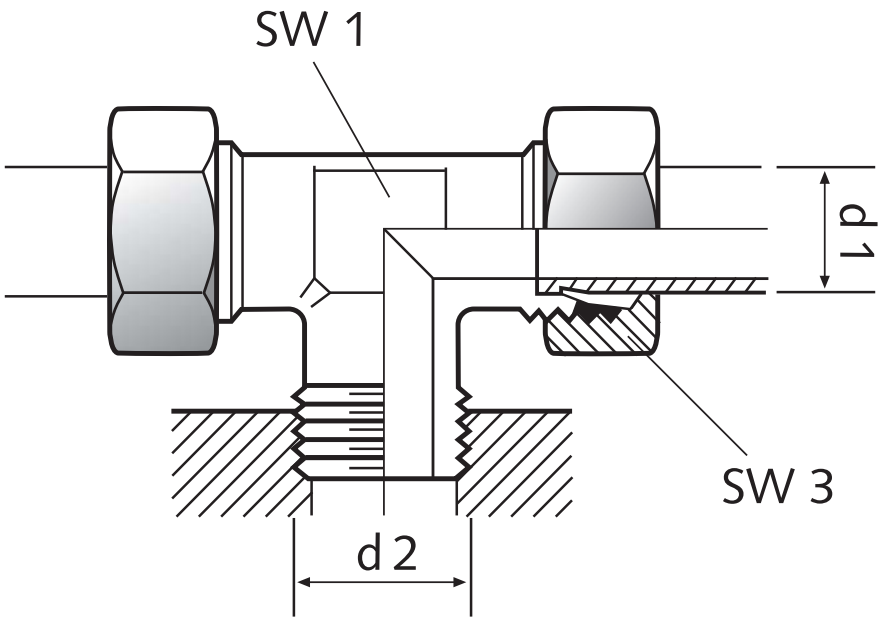
PN	Pipe external Ø d1	SW4	SW3	Order number
bar	mm	mm	mm	
160	18	24	32	N17646
160	22	27	36	N4843
250	6	12	14	N7405
250	8	14	17	N18643
250	10	17	19	N18635
250	12	19	22	N18150
250	15	19	27	N 9227
400	16	24	30	N15511
400	20	27	36	N18152
630	6	14	17	N3012
630	8	17	19	N3946
630	10	19	22	N 7728
630	12	22	24	N18151

L-MALE CONNECTORS (LEV)



PN	Pipe external Ø d1	d2	SW1	SW3	Order number
bar	mm		mm	mm	
160	18	G ½	24	32	N7415
160	22	G ¾	27	36	N15015
250	6	G ⅛	12	14	N7410
250	8	G ¼	14	17	N2902
250	10	G ¼	17	19	N7412
250	12	G ⅜	19	22	N7413
250	15	G ½	19	27	N7414
400	16	G ½	24	30	N4023
400	20	G ¾	27	36	N18156
630	6	G ¼	14	17	N2903
630	8	G ¼	17	19	N3069
630	10	G ⅜	19	22	N3142
630	12	G ⅜	22	24	N3985

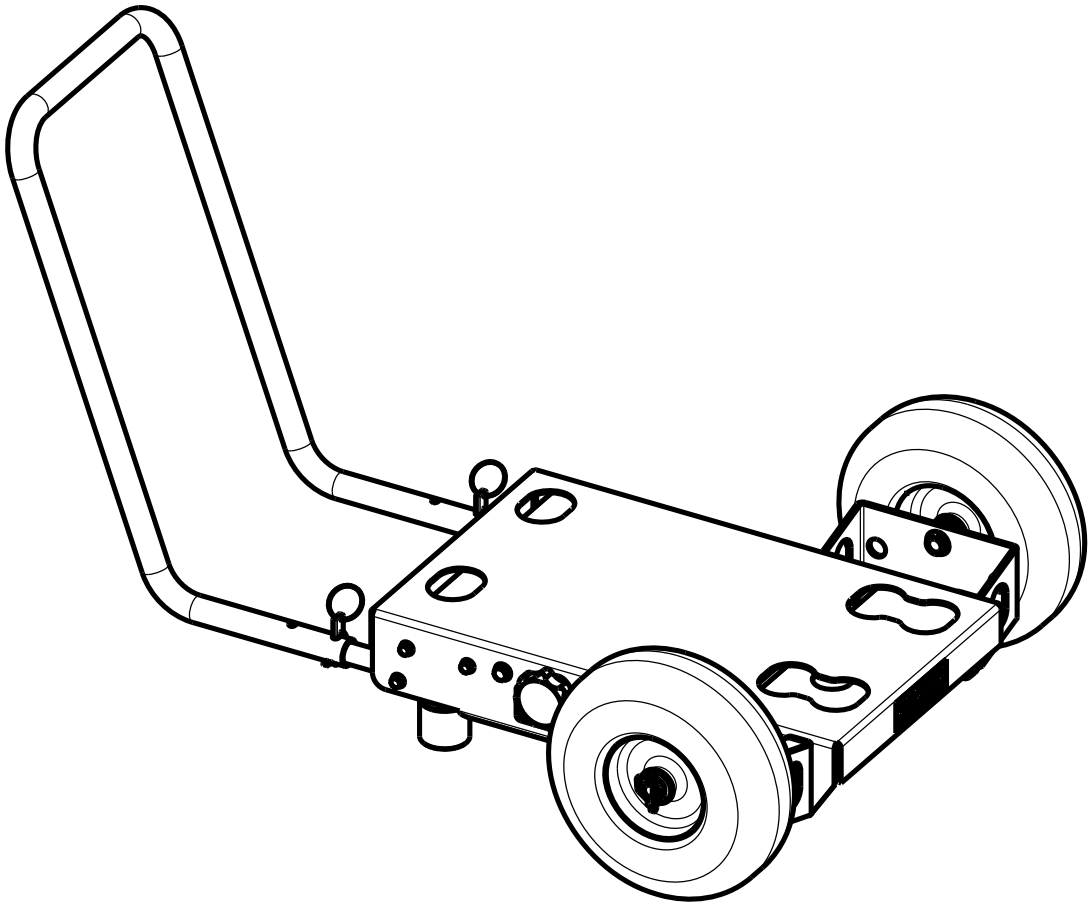
T-MALE CONNECTORS (TEV)



PN	Pipe external Ø d1	d2	SW1	SW3	Order number
bar	mm		mm	mm	
160	18	G ½	24	32	N18564
160	22	G ¾	27	36	N7422
250	6	G ⅛	12	14	N1106
250	8	G ¼	14	17	N1062
250	10	G ¼	17	19	N1064
250	12	G ⅜	19	22	N3580
250	15	G ½	19	27	N7420
400	16	G ½	24	30	N 8012
400	20	G ¾	27	36	N18157
630	6	G ¼	14	17	N2157
630	8	G ¼	17	19	N3068
630	10	G ⅜	19	22	N3984
630	12	G ⅜	22	24	N17945

TROLLEY

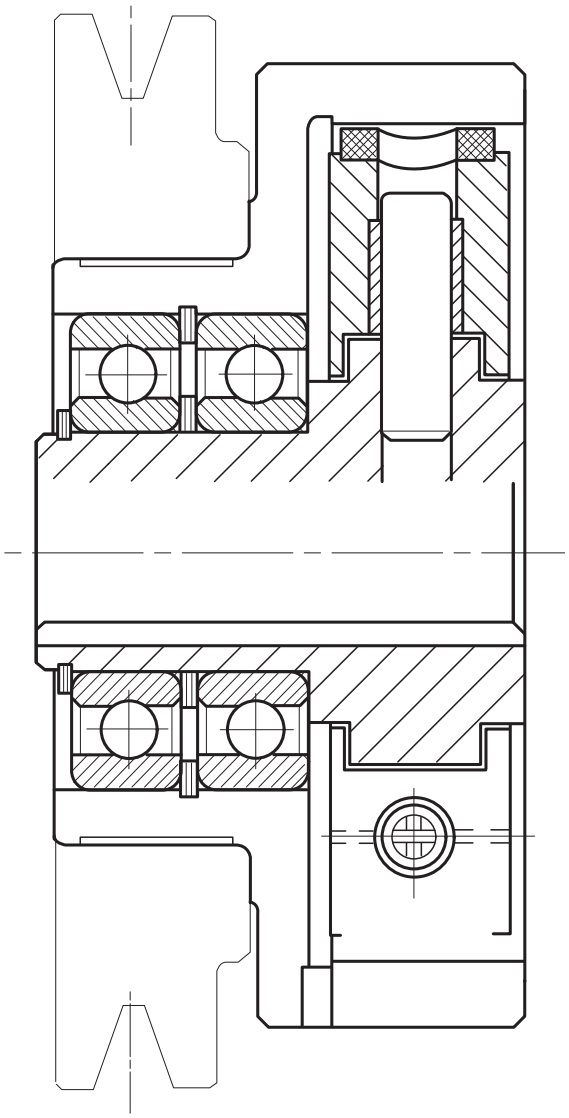
Our Junior II, Oceanus and PE100 compressors can be equipped with a trolley for easier transport.



Designation	Order number
Junior II, Oceanus, PE100	168013

CENTRIFUGAL CLUTCH

To facilitate starting a compressor with low force and also at relatively low temperatures, centrifugal clutches are used. Available for the compressor types Junior and Oceanus. Only for systems with Honda engine.



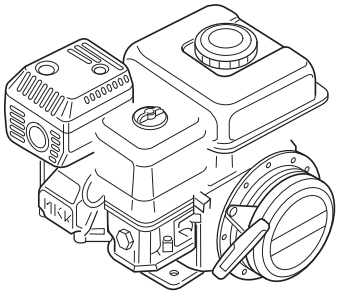
TECHNICAL DATA

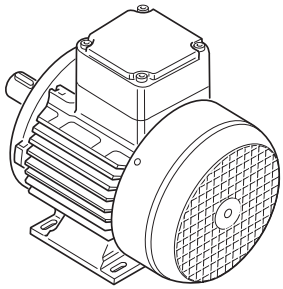
- Maximum speed: 3,600 rpm
- Lock-in speed: 2,100 rpm
- Max. torque: 30 Nm
- Connector type: V-belt

Designation	Order number
Centrifugal clutch	N26326
Installation kit	79716

CONVERSION KITS JUNIOR

For changing the drive type of a compressor to petrol or electric drive.





Designation	Order number
Conversion kit to Junior with petrol drive	075794
Scope of delivery	
Petrol engine 4 kW	N20703
Motor accessories consisting of V-belt N16620, V-belt pulley 62114, intake telescope 062080, screws	071622
Conversion kit to Junior with electric drive 440 V / 50 Hz	075793-V001
Conversion kit to Junior with electric drive 440 V / 60 Hz	075793-V002
Scope of delivery	
Three-phase motor	N3388
Motor accessories consisting of V-belt N16620, V-belt pulley N15001 or 56880, screws	071263
Optional and not included in the kit:	
Motor protection switch 6.0 to 10 A	N22525
Connection cable up to 5 kW	059187
Undervoltage trip 440 V / 60 Hz	N24129
Auxiliary switch	N18426
Conversion kit to Junior with AC drive 230 V / 50 Hz	075793-V003
Conversion kit to Junior with AC drive 230 V / 60 Hz	075793-V002
Scope of delivery	
Electric motor, motor protection switch and connection cable with plug	N19108
Motor accessories consisting of V-belt N16620, V-belt pulley N15001 or 56880, screws	071263

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS UTILUS

Designation	Order number
Conversion kit to Utilus with petrol drive	072749
Scope of delivery	
Petrol engine 4 kW	N20703
Motor accessories comprising V-belt N2585, V-belt pulley 14403, hinged motor plate, anti-vibration mount, screws	064717
Intake filter with intake hose	014539
Conversion kit to Utilus with electric drive 440 V / 50 Hz	072747-V001
Conversion kit to Utilus with electric drive 440 V / 60 Hz	072747-V002
Scope of delivery	
Three-phase motor 2.2 kW	N3388
Motor accessories consisting of cover N2585, V-belt 14386 or 11832, screws	014714
Cover	14446
Optional and not included in the kit:	
Motor protection switch 6.0 to 10 A	N22525
Connection cable up to 5 kW	059187
Undervoltage trip 440 V / 60 Hz	N24129
Auxiliary switch	N18426
Conversion kit to Utilus with AC drive 230 V / 50 Hz	072748-V001
Conversion kit to Utilus with AC drive 230 V / 60 Hz	072748-V002
Scope of delivery	
Electric motor, motor protection switch and connection cable with plug	N19108
Motor accessories consisting of V-belt N2585, V-belt pulley 14386 or 11832, screws	014714
Cover	14446

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS CAPITANO

Designation	Order number
Conversion kit to Capitano with petrol drive	072751
Scope of delivery	
Petrol engine 4 kW	N20703
Motor accessories consisting of V-belt N3185, V-belt pulley 14300, hinged motor plate, anti-vibration mount, screws	064718
Intake filter with intake hose	014539
Conversion kit to Capitano with electric drive 440 V / 50 Hz	072750-V001
Conversion kit to Capitano with electric drive 440 V / 60 Hz	072750-V002
Scope of delivery	
Three-phase motor 3 kW	N2774
Motor accessories consisting of V-belt N2585, V-belt pulley 14386 or 11832, screws	014359
Cover	14446
Optional and not included in the kit:	
Motor protection switch 6.0 to 10 A	N22525
Connection cable up to 5 kW	059187
Undervoltage trip 440 V / 60 Hz	N24129
Auxiliary switch	N18426

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS JUNIOR II

Designation	Order number
Conversion kit to Junior II with petrol drive	79191-JII-B
Scope of delivery	
Petrol engine 4.2 kW	N30368
Motor accessories consisting of V-belt N15426, V-belt pulley 62114, screws	077236
Intake telescope	077323
Conversion kit to Junior II with electric drive 440 V / 50-60 Hz	79191-JII-E
Scope of delivery	
Three-phase motor 2.2 kW	N3388
Motor accessories consisting of V-belt N15426, V-belt pulley 62114, screws	077236
Motor protection switch	077956
Connection cable	077240
Conversion kit to Junior II with AC drive 230 V / 50-60 Hz	79191-JII-W
Scope of delivery	
Electric motor 230 V, motor protection switch and connection cable with plug	N19108
Motor accessories consisting of V-belt N24960, V-belt pulley N15001 or 56880, screws	077237
Optional and not included in the kit:	
Motor 110 V / 50 Hz / 2.2 kW	N19111
Motor 110 V / 60 Hz / 2.2 kW	N19112
Motor 230 V / 60 Hz / 2.2 kW	N19110
Auxiliary switch	N18426

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS UTILUS II

Designation	Order number
Conversion kit to Utilus II with petrol drive	79191-UII-B
Scope of delivery	
Petrol engine 4 kW	N20703
Motor accessories for carrying frame consisting of V-belt N2594, V-belt pulley N25707, hinged motor plate, screws	78862
Intake filter with intake hose	014539
Optional and not included in the kit:	
Motor accessories for crash frame consisting of V-belt N2597, V-belt pulley N25707, hinged motor plate, screws	78863
Conversion kit to Utilus II with electric drive 440 V / 50 Hz	79191-UII-E
Scope of delivery	
Three-phase motor 2.2 kW	N3388
Motor accessories for carrying frame consisting of V-belt N2594 or N2403, V-belt pulley N17847 or N17848, hinged motor plate, screws	78859
Optional and not included in the kit:	
Motor accessories for crash frame consisting of V-belt N2597 or N2595, V-belt pulley N17847 or N17848, hinged motor plate and screws	78861
Motor protection switch 2.2 kW / 440 V / 50 Hz	073186-V001
Motor protection switch 2.2 kW / 440V / 60 Hz	073186-V002
Connection cable up to 5.5 kW	073182-V001
Undervoltage trip 440 V / 60 Hz	N24129
Auxiliary switch	N18426
Conversion kit to Utilus II with AC drive 230 V / 50 Hz	79191-UII-W
Scope of delivery	
Electric motor, motor protection switch and connection cable with plug	N19108
Motor accessories for carrying frame consisting of V-belt N2594 or N2403, V-belt pulley N17847 or N1 7848, hinged motor plate, screws	78859
Optional and not included in the kit:	
Motor 230 V / 60 Hz	19110

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS CAPITANO II

Designation	Order number
Conversion kit to Capitano II with petrol drive	79191-UII-B
Scope of delivery	
Petrol engine 4 kW	N20703
Motor accessories for carrying frame consisting of V-belt N3185, V-belt pulley 14300, hinged motor plate, anti-vibration mount and screws	78883
Intake filter with intake hose	014539
Optional and not included in the kit:	
Motor accessories for crash frame consisting of V-belt N17232, V-belt pulley 14300, hinged motor plate, anti-vibration mount and screws	78884
Conversion kit to Capitano II with electric drive 440V / 50Hz	79191-CII-E
Scope of delivery	
Three-phase motor 3 kW	N2774
Motor accessories for carrying frame consisting of V-belt N2595 or N3336, V-belt pulley 6637 or 55456 and screws	78885
Optional and not included in the kit:	
Motor protection switch 3 kW	073184
Connection cable up to 5.5 kW	073182-V001
Undervoltage trip 440V / 60Hz	N24129
Auxiliary switch	N18426

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS MARINER II

Designation	Order number
Conversion kit to Mariner II with petrol drive	79191-MII-B
Scope of delivery	
Petrol engine 6.6 kW	N19887
Motor accessories consisting of V-belt N17232, V-belt pulley 58209 and screws	78887
Intake filter with intake hose	14539
Conversion kit to Mariner II with electric drive 440 V / 50 Hz	79191-MII-E
Scope of delivery	
Three-phase motor 4.0 kW	N3390
Motor accessories consisting of V-belt N2598 or N2597, V-belt pulley 6637 or 55456 and screws	78889
Optional:	
Motor protection switch 3 kW	073184
Motor protection switch 3 kW	073310
Connection cable up to 5.5 kW	073182-V001
Undervoltage trip 440 V / 60 Hz	N24129
Auxiliary switch	N18426
Conversion kit to Mariner 200 with petrol drive	79191-M200-B
Scope of delivery	
Petrol engine 8.8 kW	N32539
Motor accessories consisting of V-belt N2598, V-belt pulley 125195, screws and filter cartridge with CO conversion, depending on selection, matching the existing filter system	78887
Intake filter with intake hose	14539
Conversion kit to Mariner 200 with electric drive 440 V / 50 Hz	79191-M200-E
Scope of delivery	
Petrol engine 8.8 kW	N32539
Motor accessories consisting of V-belt N2598, V-belt pulley 125195, screws and filter cartridge with CO conversion, depending on selection, matching the existing filter system	78887
Intake filter with intake hose	14539

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS MARINER II

Designation	Order number
Conversion kit to Mariner 250 with petrol drive	79191-M250-B
Scope of delivery	
Petrol engine 8.8 kW	N32539
Motor accessories consisting of V-belt N2598, V-belt pulley 125195, screws and filter cartridge with CO conversion, depending on selection, matching the existing filter system	78887
Intake filter with intake hose	14539
Conversion kit to Mariner 250 with electric drive 440 V / 50 Hz	79191-M250-E
Scope of delivery	
Petrol engine 8.8 kW	N32539
Motor accessories consisting of V-belt N2598, V-belt pulley 125195, screws and filter cartridge with CO conversion, depending on selection, matching the existing filter system	78887
Intake filter with intake hose	14539
Conversion kit to Mariner 320 with petrol drive	79191-M320-B
Scope of delivery	
Petrol engine 8.8 kW	N32539
Motor accessories consisting of V-belt N2598, V-belt pulley 125195, screws and filter cartridge with CO conversion, depending on selection, matching the existing filter system	78887
Intake filter with intake hose	14539
Conversion kit to Mariner 320 with electric drive 440 V 50 Hz	79191-M320-E
Scope of delivery	
Three-phase motor 7.5 kW	N25462
Motor accessories consisting of V-belt N18841, V-belt pulley N18496, screws, motor protection switch 80585 with connection cable 7.5 kW	80444

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

CONVERSION KITS OCEANUS

Designation	Order number
Conversion kit to Oceanus with petrol drive	79191-OCE-B
Scope of delivery	
Petrol engine 5.1 kW	N30869
Motor accessories consisting of V-belt N15748, centrifugal clutch N26326 and screws	78699
Intake filter with intake telescope	077323
Conversion kit to Oceanus with electric drive 440 V / 50 Hz	79191-OCE-E
Scope of delivery	
Three-phase motor 3.0 kW	N2774
Motor accessories consisting of V-belt N15725 or N15426, V-belt pulley N19248 or N25590 and screws	78614
Optional:	
Motor protection switch 3 kW / 50 Hz / 400 V incl. 5 m connection cable	78628
Motor protection switch 3 kW / 220 V incl. 5 m connection cable	077956-V003
Motor protection switch 3 kW / 60Hz / 400 V incl. 5 m connection cable	077956-V006
Undervoltage trip 440V / 60Hz	N24129
Auxiliary switch	N18426

Designation	Order number
Conversion kit to Oceanus with AC drive 230 V / 50-60 Hz	79191-OCE-W
Scope of delivery	
Electric motor 230V, motor protection switch and connection cable with plug	N25633
Motor accessories consisting of V-belt N15725, V-belt pulley N19248, screws	078614

If converting to petrol drive, the appropriate filter cartridge with CO converter is supplied.
Please specify the existing filter system in your order. (e.g. P21 or P31)

OPERATING PRESSURE CONVERSION KITS

Designation	Order number
Conversion kit from 225 bar to 330 bar	074051
Scope of delivery	
Switch-over device	073796-KD
Safety valve 330 bar	059410-330
Filling hose	N2817
Filling valve 330 bar	071344
Conversion kit from 330 bar to 225 bar	074052
Scope of delivery	
Switch-over device	073796-KD
Safety valve 225 bar	059410-225
Filling hose	N2817
Filling valve 225 bar	071343

Remark: Not possible with PE 100

CONVERSION KITS AUTOMATIC CONDENSATE DRAIN

Designation	Order number
Capitano 140 P21	122400
Capitano 140 P31	122638
Mariner 320 P31	122500
Mariner 200 P21	122682
Mariner 200 P31	122683
Mariner 250 P21	122681
Mariner 250 P31	122675

NOTES

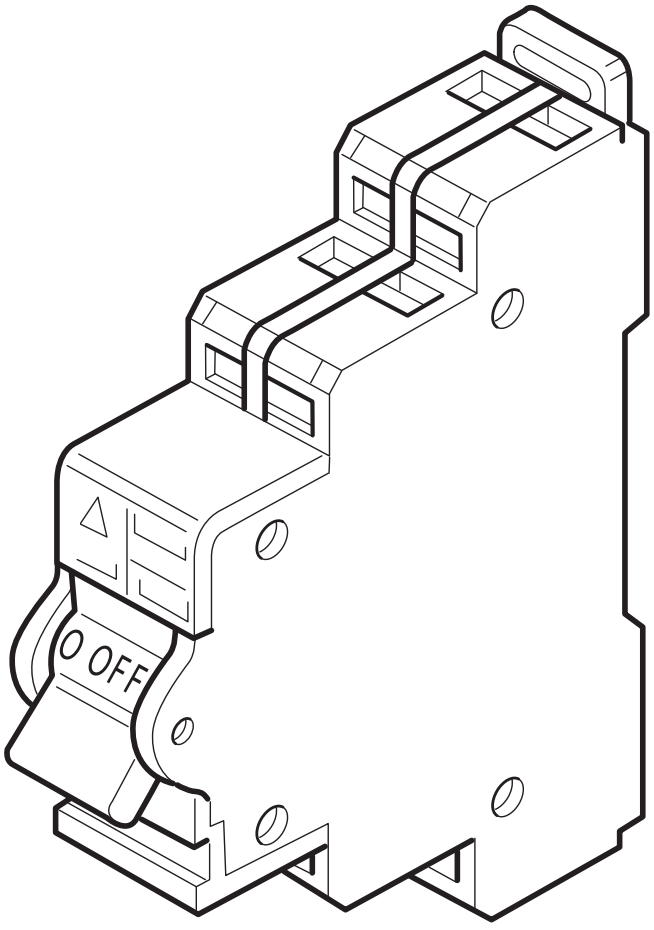
CIRCUIT BREAKERS / FI PROTECTION SWITCH

TECHNICAL DATA CIRCUIT BREAKERS:

- **Ampere:** from 1.0 to 35
- **Volt:** from 230 to 690
- **Pole number:** 1-pol.
  1-pol. with N
  3-pol.
  3-pol. with N

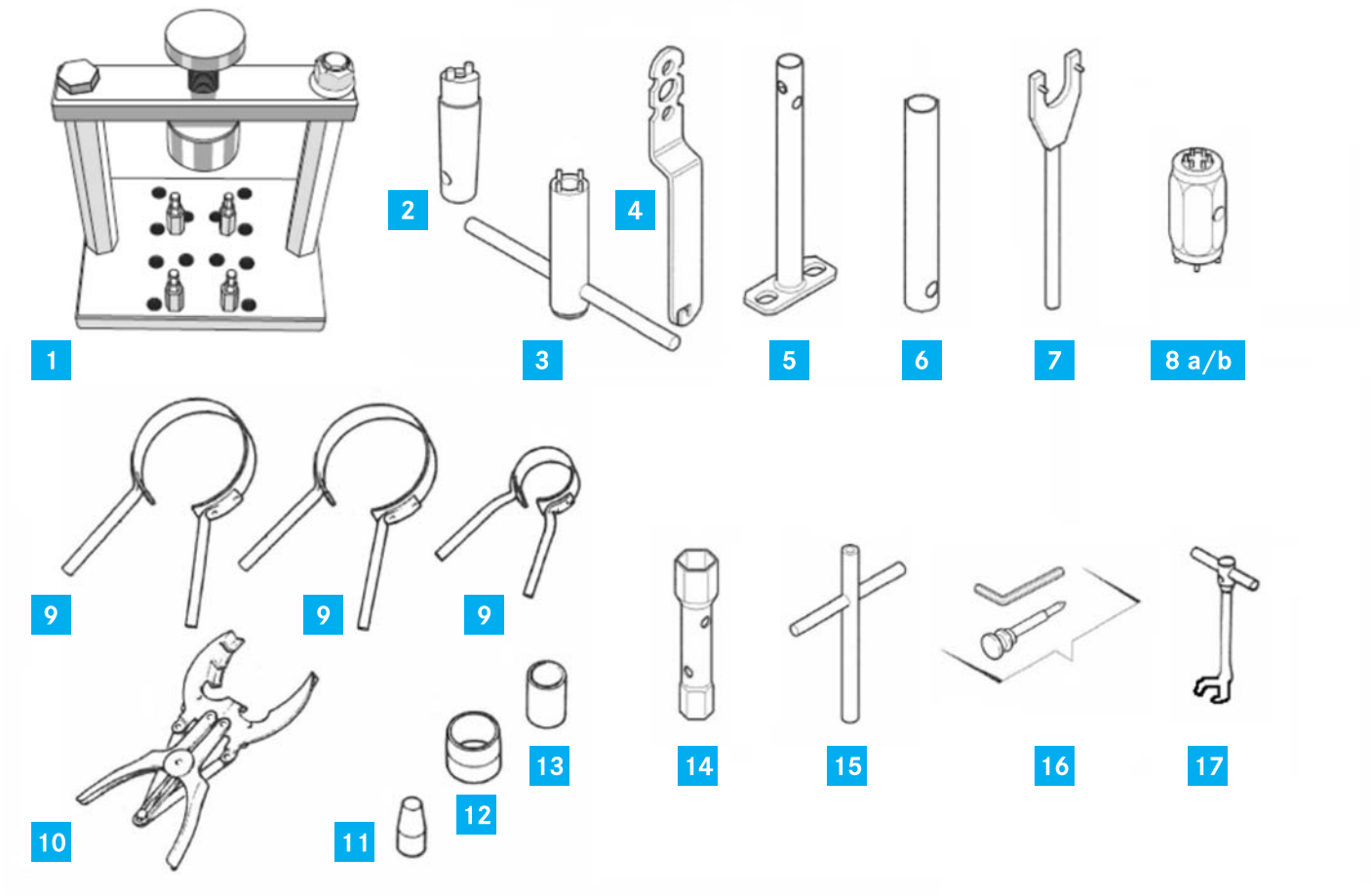
TECHNICAL DATA FI-PROTECTION SWITCH:

- **Ampere:** 16 to 63
- **Triggering mA:** 30
- **Volt:** 230 to 440
- **Pole number:** 1-pol. with N
  3-pol. with N



Type	Characteristics	Ampere	Volt	Order number
1-pol.	C	1	230	N24800
1-pol.	C	2	230	N24120
1-pol.	C	3	230	N24790
1-pol.	B	6	230	N20921
1-pol.	B	10	230	N25036
1-pol.	B	13	230	N27615
1-pol.	B	16	230	N26702
1-pol.+N	K	1.6	690	N24077
1-pol.+N	C	2	230	N27028
1-pol.+N	B	6	690	N25528
1-pol.+N	B	10	230	N27027
1-pol.+N	B	16	230	N27029
3-pol.	K	2	690	N26351
3-pol.	K	6	440	N26628
3-pol.	B	16	690	N26294
3-pol.	K	20	690	N24161
3-pol.	K	25	690	N24075
3-pol.	K	32	400	N26781
3-pol.	K	35	690	N25437
3-pol.+N	B	16	440	N27030
FI 1-pol+N	-	16/30mA	230	N25037
FI 3-pol+N	-	25/30mA	440	N25577
FI 3-pol+N	-	63/30mA	440	N24799

SPECIAL TOOLS



Type	Order number
1. Tool for valve installation. Makes the job significantly easier! Protects the valve head and valves! Simply clamp in the vice. Can be converted for various valve heads. (Compressor types) **Can only be used in conjunction with 8a or 8b!**	N32482
2. Pin spanner for pressure retention valve (repair and setting)	81193
3. 4 pin spanners for pressure retention valve (repair and setting)	85154
4. P-filter spanner (for opening cover and cartridge change)	60074
5. SECCANT filter spanner (for opening and cartridge change)	N29373
6. Separator spanner (for intermediate separator insert) on newer models	79846
7. Safety valve spanner (for older P21 filters with SV 061114) Repairs or settings on safety valves should only be entrusted to capable persons with up-to-date safety valve training!	57478
8. a) Valve spanner 24 mm, 7.6 mm hole circle Ø for older valves	04555
8. b) Valve spanner 24 mm, 8.5 mm hole circle Ø for newer valves	82048

Type	Order number
9. Piston ring band 160 mm Ø 50 mm wide	65039
Piston ring band 130mm Ø 50 mm wide	65901
Piston ring band 88mm Ø 12mm wide	67976
Piston ring band 88mm Ø 25mm wide	57494
Piston ring band 45mm Ø 30mm wide	57498
Piston ring band 36mm Ø 20mm wide	57499
Piston ring sleeve 22 mm Ø no band but sleeve	57406
10. Piston ring pliers small 55-100 mm cylinder diameter	N4452
Piston ring pliers medium 60-120 mm cylinder diameter	N4453
Piston ring pliers large 110-160 mm cylinder diameter	N16721
Piston ring pliers maxi 160-215 mm cylinder diameter	N39888
11. Piston ring mounting sleeve 22 mm Ø	57393
12. Piston ring mounting sleeve 45mm Ø	57643
13. Piston ring mounting sleeve 18mm Ø	64823
14. SECCANT filter spanner hexagon 32 mm (for opening cover)	N29373
15. T-spanner M12 for lifting and changing jumbo cartridges	067146
16. Tool kit for inserting the clamping spring on toggle screws	067458
17. Offset claw spanner 13 mm (e.g. for nuts on cylinder foot)	N3408
Flowmeter 0-50 l/min., e.g. checking the blow-by (piston ring wear)	81187-KD
Flowmeter 0-100 l/min., e.g. checking the blow-by (piston ring wear)	81218-KD
Complete test kit for intermediate pressures. Consisting of pressure gauge 0-16 bar, 0-100 bar and 0-400 bar, 3x connection hose with connectors (N1269, N1271, N2623, N3569, N18323, N3007)	On request
Silicone sealing compound, flexible sealant for metal on metal, high-temperature connections (e.g. valve heads)	N18247
Sealing tape 12 mm wide Teflon tape DIN-DVGW	N19943
Special grease for O-rings and oil seals	072500
High-temp. grease for threads exposed to high temperatures. -180 °C to +1200 °C (e.g. output of the last stage)	N19753
Universal grease, screwed fittings of all kinds in the industrial and breathing air sector (foodstuffs certification) -30 °C to +120 °C	N19752
Thread locking agent for gluing in threads (screws, staybolts)	N25834
Thread seal for sealing conical threaded fittings	N28220
Leak detector spray (with corrosion protection) 400 ml for detecting leaks	N25833
Spray paint silver grey RAL 9006 600 ml	N26255
Spray paint turquoise blue RAL 5018 600 ml	N28410-RAL5018

TOOL RECOMMENDATIONS

Double open-ended spanner	Type	Size	Kit	Qty.	Order number
Garant		5,5x7		1	N41832
		8x10		1	N41832-S01
		10x11		1	N41832-S02
		12x13		1	N41832-S03
		12x14		1	N41832-S04
		13x14		1	N41832-S05
		13x17		1	N41832-S06
		16x17		1	N41832-S07
		17x19		1	N41832-S08
		19x22		1	N41832-S09
		22x24		1	N41832-S10
		24x27		1	N41832-S11
		27x30		1	N41832-S12
		30x32		1	N41832-S13
		36x41		1	N41832-S14

Combination spanner long	Type	Size	Kit	Qty.	Order number
Garant		8		1	N41833
		10		1	N41833-S01
		11		1	N41833-S02
		12		1	N41833-S03
		13		1	N41833-S04
		14		1	N41833-S05
		16		1	N41833-S06
		17		1	N41833-S07
		19		1	N41833-S08
		22		1	N41833-S09
		24		1	N41833-S10
		27		1	N41833-S11
		30		1	N41833-S12
		32		1	N41833-S13

Socket-Set	Type	Size	Kit	Qty.	Order number
Hazet	Smart tool case with stand-up function		Kit	1	N41834
	9 Sockets 1/4 (hexagon) 5 - 13 mm				
	13 Sockets 1/2 (hexagon) 11 - 27 mm				
	5 bits (hexagon) 2 - 6 mm				
	3 bits (slotted) 4 - 8 mm				
	2 bits (PH) 1 - 2				
	2 bits (PZ) 1 - 2				
	5 bits (für Torx®) TX10 - TX30				
	1 Adapter 1/4 hexagon 1/4				
	3 extensions 1/4 + 1/2 101,5-248 mm				
	1 driver 1/4				
	2 ratchets 1/4 + 1/2				

Socket-Set	Type	Size	Kit	Qty.	Order number
Garant	3/8"	8-19	Kit	1	N41806
					

Hexagon-socket	Type		Size	Kit	Qty.	Order number
Holex 	hexagon	1/2"	30		1	N41807
	hexagon	1/2"	32		1	N41808
	hexagon lang	3/8"	5		1	N41809
Garant 	hexagon lang	3/8"	6		1	N41810

TOOL RECOMMENDATIONS

Hexagon key L-wrench	Type	Size	Kit	Qty.	Order number
Swiss Tools 		1.5-10	Kit	1	N41679

Hexagon screwdriver	Type	Size	Kit	Qty.	Order number
Holex. 		5		1	N41811
		6		1	N41812

Screwdriver-Set	Type	Size	Kit	Qty.	Order number
Holex 	slotted	3.5-5.5-7.8	Kit	1	N41827
	Phillips	1+2			
	Pozidriv	1+2			

Screwdriver-Set	Type	Size	Kit	Qty.	Order number
Swiss Tools 	short	4		1	N41828
Wera 	Wide/impact cap	14		1	N41829
Wera 	Micro	2.5		1	N41830

Pliers-Set	Type	Size	Kit	Qty.	Order number
Holex 		4	Kit	1	N41831
	Universal pliers				
	Angled long nose pliers				
	Water pump pliers.				
	Side cutter				

Pliers	Type	Size	Kit	Qty.	Order number
Knipex 	0-60mm SW	300		1	N41790

Adjustable spanner	Type	Size	Kit	Qty.	Order number
Holex 	0-34mm SW	300		1	N41791

Circlip pliers	Type	Size	Kit	Qty.	Order number
Holex 	45° angled Inside rings	Rings 12-25Ø Tips 1.3Ø		1	N41792
Holex 	Outside rings	Rings 10-25Ø Tips 1.3Ø		1	N41797

Torque wrench	Type	Size	Kit	Qty.	Order number
Garant 	3/8" 0-60 Nm	60		1	N41681

Pin punch set	Type	Size	Kit	Qty.	Order number
Rennsteig 	2-8mm	6	Kit	1	N41798

Centre punch	Type	Size	Kit	Qty.	Order number
Rennsteig 	5x120	120/10		1	N41799

Engineer´s hammer	Type	Size	Kit	Qty.	Order number
Garant 	200g	200		1	N41800
	400g	400		1	N41801

Soft mallet	Type	Size	Kit	Qty.	Order number
Garant 	269g	27		1	N41802
	578g	40		1	N41803

Hacksaw frame	Type	Size	Kit	Qty.	Order number
Bahco 	300mm			1	N41804

Engineer´s files-Set	Type	Size	Kit	Qty.	Order number
Holex 	Hieb 2 250mm	250	Kit	1	N41805

TOOL RECOMMENDATIONS

Fleece hand pad	Type	Size	Kit	Qty.	Order number
Holex 		220		1	N41777

Hand deburrer	Type	Size	Kit	Qty.	Order number
Garant 	90° HSS	12,4		1	N41682

Engineer´s scraper	Type	Size	Kit	Qty.	Order number
Rennsteig 	7x85mm			1	N41778

General knife	Type	Size	Kit	Qty.	Order number
Tajima 	18mm			1	N41779

Bending pliers	Type	Size	Kit	Qty.	Order number
Virax 	Niro max. 1.5mm	6		1	N41683
	Wall thickness	8		1	N41684

Try square, accuracy	Type	Size	Kit	Qty.	Order number
Garant 	150x100mm	150x100		1	N41780

Tape measure	Type	Size	Kit	Qty.	Order number
Holex 	5m	5		1	N41781

Vernier caliper	Type	Size	Kit	Qty.	Order number
Holex 	150mm	150		1	N41782

Angle scriber	Type	Size	Kit	Qty.	Order number
Holex 	230mm			1	N41783

Genaral hand brush	Type	Size	Kit	Qty.	Order number
Lessmann 	0.35mm Stainless steel wire			1	N41788

Pipe wrench	Type	Size	Kit	Qty.	Order number
VBW 	3" 106mm	3		1	N41789

LED torch	Type	Size	Kit	Qty.	Order number
Holex 	IPX4	155		1	N41771

Magnetic retriever	Type	Size	Kit	Qty.	Order number
Holex 	520mm 10N 12Ø	1000		1	N41685

Belt wrench	Type	Size	Kit	Qty.	Order number
Holex 		20/600		1	N41686

Oil can	Type	Size	Kit	Qty.	Order number
Mato 	300ml	300		1	N41772

Tool roll	Type	Size	Kit	Qty.	Order number
Holex 	15 compartments	680x320		1	N41773

Service tool case	Type	Size	Kit	Qty.	Order number
Holex 	Max. 25 kg, wheeled	465x352x215		1	N41774

Pneum. impact wrench	Type	Size	Kit	Qty.	Order number
Chicago Pneumatic 	3/8" 68-414 Nm max. Luftbedarf 564 l/min	7729		1	N41775

Pry bar with heel	Type	Size	Kit	Qty.	Order number
Heyco	14x14 390mm			1	N41687

Current clamp multim.	Type	Size	Kit	Qty.	Order number
Benning 	600V DC / 600V AC 10mA-300A DC 100mA-300A AC	CM2		1	N41776

Installation pliers	Type	Size	Kit	Qty.	Order number
Knipex 	Cutting edge -15Ø Stripper. -2.5mm² Crimper -2.5mm²	200		1	N41688

TOOL RECOMMENDATIONS

Valve mounting tool	Type	Size	Kit	Qty.	Order number
	Adjustable for different valve heads			1	N32482

2 bolt wrench	Type	Size	Kit	Qty.	Order number
	For PMV (repair and adjustment)			1	81193

4 bolt wrench	Type	Size	Kit	Qty.	Order number
	For PMV (repair and adjustment)			1	85154

P-filter wrench	Type	Size	Kit	Qty.	Order number
	To open cap for cartridge exchange			1	60074

SECCANT-hexagon wrench	Type	Size	Kit	Qty.	Order number
	To open cap for cartridge exchange			1	66690

SECCANT-hexagon wrench	Type	Size	Kit	Qty.	Order number
	Hexagon wrench to open SECANNT cap			1	N29373

T-wrench	Type	Size	Kit	Qty.	Order number
	"To lift and exchange ""Jumbo"" cartridge (M12 internal thread)"			1	067146

Valve wrench new	Type	Size	Kit	Qty.	Order number
	For new version valves with 8.5mm hole diameter			1	82048

Valve wrench old	Type	Size	Kit	Qty.	Order number
	For old version valves with 7.6mm hole diameter			1	04555

Separator wrench	Type	Size	Kit	Qty.	Order number
	To exchange the insert assy.from interfilter (new model)			1	79846

Piston ring tape	Type	Size	Kit	Qty.	Order number
		36mmØ 20mm wide		1	57499
		45mmØ 30mm wide		1	57498
		88mmØ 25mm wide		1	57494
		88mmØ 12mm wide		1	67976
		130mmØ 50mm wide		1	65901
		160mmØ 50mm wide		1	65039
		215mmØ 50mm wide		1	172596

Piston ring hull	Type	Size	Kit	Qty.	Order number
		18mmØ			64823
		22mmØ			57393
		45mmØ			57643

Piston ring pliers	Type	Size	Kit	Qty.	Order number
		55-100mmØ	small	1	N4452
		60-120mmØ	medium	1	N4453
		110-160mmØ	large	1	N16721
		160-215mmØ	maxi	1	N39888

Tommy screw tool	Type	Size	Kit	Qty.	Order number
	For mount spring with the tommy screw (e.g. P11 or P21)			1	067458

Claw wrench	Type	Size	Kit	Qty.	Order number
	For hard to reach places	SW 13		1	N3408

TOOL RECOMMENDATIONS

Flow-Meter	Type	Size	Kit	Qty.	Order number
		0-50 l/min		1	81187-KD
		0-100 l/min		1	81218-KD
	To check the blowby				

Silicone sealant	Type	Size	Kit	Qty.	Order number
				1	N18247
	Elastic saelant for high temperature metall to metall sealing				

Thread sealant	Type	Size	Kit	Qty.	Order number
				1	N28220
	For sealing conic thread			1	

Threadlooking glue	Type	Size	Kit	Qty.	Order number
				1	N25834
	For gluing threads (e.g. screws and bolts)				

Sealing tape	Type	Size	Kit	Qty.	Order number
				1	N19943
	Teflon tape 12mm wide				

Special grease	Type	Size	Kit	Qty.	Order number
				1	072500
	For O-ring and oil seal (small tube with 3g.)				

Universal grease	Type	Size	Kit	Qty.	Order number
				1	N19752
	All types of screw in the industrial and breathing zone.				

High-performance grease	Type	Size	Kit	Qty.	Order number
				1	N32562
	High-performance grease in a practical 100g tube				

High-temperature grease	Type	Size	Kit	Qty.	Order number
				1	N19753
	For threads exposed to high temperatures. (e.g. Outlet last stage)				

Leak-detection spray	Type	Size	Kit	Qty.	Order number
		400ml		1	N25833
	For easy to find leaks (with corrosion protection)				

Spray paint	Type	Size	Kit	Qty.	Order number
		600ml		1	N26255
	Silver gray				

Valve tool	Type	Size	Kit	Qty.	Order number
		SW 36		1	124999
	For mount valves in CEODEUX storage bottles				

OIL

Check the precise oil fill volumes using the dipstick or oil sight glass. For recommended oils, see the current oil list.

OIL QUANTITIES OF THE INDIVIDUAL COMPRESSOR TYPES

Compressor type	Oil	Oil	Top-up volume	Oil filter
	max. litres	min. litres	Litre*	(Litre)
U-10 JUNIOR JUNIOR II	0.35	0.28	-0.07	–
OCEANUS	01.30	01.10	-0.20	–
UTILUS CAPITANO MARINER	01.75	01.50	-0.25	–
UTILUS II CAPITANO II MARINER II	02.90	02.40	-0.50	Internal Internal Internal
IK 100 IK 120	02.80	02.40	-0.40	–
IK 100II IK 120II IK 12.14II	02.90	02.40	-0.50	Internal Internal Internal
K14 K14.11	02.80	02.20	-0.60	–
K15 K16 K150 K180 K18.1	04.40	04.10	-0.30	–
IK150II IK180II IK18.1 II	06.00	04.40	-1.60	Internal Internal Internal
IK22.0 IK22.5	08.50	06.75	-1.75	-0.50
IK23.0 IK23.4	10.50	08.30	-2.20	-0.50
IK25.0, IK25.4, IK25.5, IK25.9, IK25.18 IK28.0, IK28.2, IK28.3	34.00	25.00	-9.00	-1.00

* From max. to min.

OIL TYPES

Designation	Contents	Application type	Order number
Synthetic oil	1 litre	Breathing air, industrial air*	N28355-1
Synthetic oil	5 litre	Breathing air, industrial air*	N28355-5
Synthetic oil	20 litre	Breathing air, industrial air*	N28355-20
Mineral oil	1 litre	Breathing air, industrial air*	N22138-1
Mineral oil	5 litre	Breathing air, industrial air*	N22138-5
Mineral oil	20 litre	Breathing air, industrial air*	N22138-20
Synthetic oil	1 litre	Breathing air, industrial air*	N19745-1
Synthetic oil	5 litre	Breathing air, industrial air*	N19745-5
Synthetic oil	20 litre	Breathing air, industrial air*	N19745-20
Synthetic oil	1 litre	Natural gas*	N26303-1
Synthetic oil	5 litre	Natural gas*	N26303-5
Synthetic oil	20 litre	Natural gas*	N26303-20
Synthetic oil	1 litre	Industrial, nitrogen, helium, argon*	N18145-1
Synthetic oil	5 litre	Industrial, nitrogen, helium, argon*	N18145-5
Synthetic oil	20 litre	Industrial, nitrogen, helium, argon*	N18145-20
Synthetic oil	1 litre	Industrial, nitrogen*	N30387-1
Synthetic oil	5 litre	Industrial, nitrogen*	N30387-5
Synthetic oil	20 litre	Industrial, nitrogen*	N30387-20
Engine oil	1 litre	Honda engines	073266

Date of delivery	Oil used on first delivery for breathing air compressors	Number of the oil used for breathing air compressors
up to August 1992	Mineral oil	Shell Ensis
September 1992 to March 1999	Synthetic oil	N19745
from April 1999 onwards	Mineral oil	N22138
from August 2006 onwards	Synthetic oil	N28355
Mineral oil	5 litre	N22138-5
Mineral oil	20 litre	N22138-20

* Breathing air: approved for breathing air application in conjunction with BAUER air purification systems
* Industrial air: suitable for industrial air compressors
* Natural gas: suitable for natural gas compressor systems

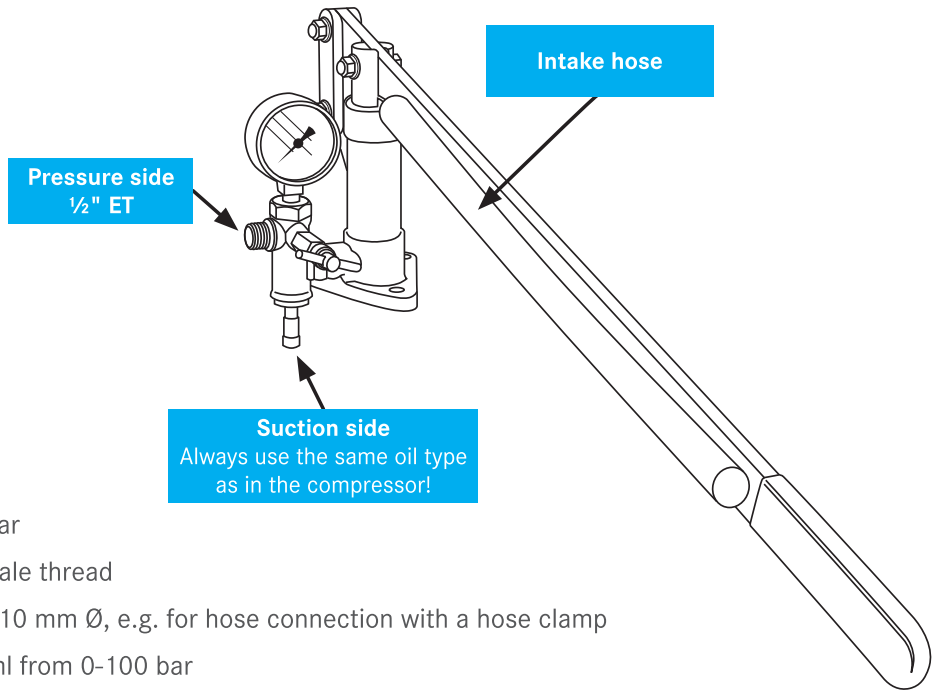
Oil for screw compressors (B-Trox) = N30543

PRELUBRICATION OIL PUMP

SUITABLE FOR LARGER COMPRESSORS WITH OIL PUMP LUBRICATION!

Especially when the compressors are subject to longer standstill times (more than 4 weeks), it is advisable to supply the entire lubrication system with oil before recommissioning. Prelubrication is extremely important, especially if the piston rods of the compressors are supported by bearing cups and bushes! The connection for prelubrication should be somewhere next to the oil pump. Due to the large variety of compressor types, the pump is delivered without the connecting hose to the compressor and oil reservoir (see photo)!

For more precise information, please refer to the documentation of your compressor unit!



PUMP DATA

- **Max. pump pressure:** 500 bar
- **Pressure side output:** ½" male thread
- **Suction side input:** Approx. 10 mm Ø, e.g. for hose connection with a hose clamp
- **Oil amount per stroke:** 35 ml from 0-100 bar
- **Design:** Pump and valve in non-ferrous metal, pump lever in iron.

SCOPE OF DELIVERY

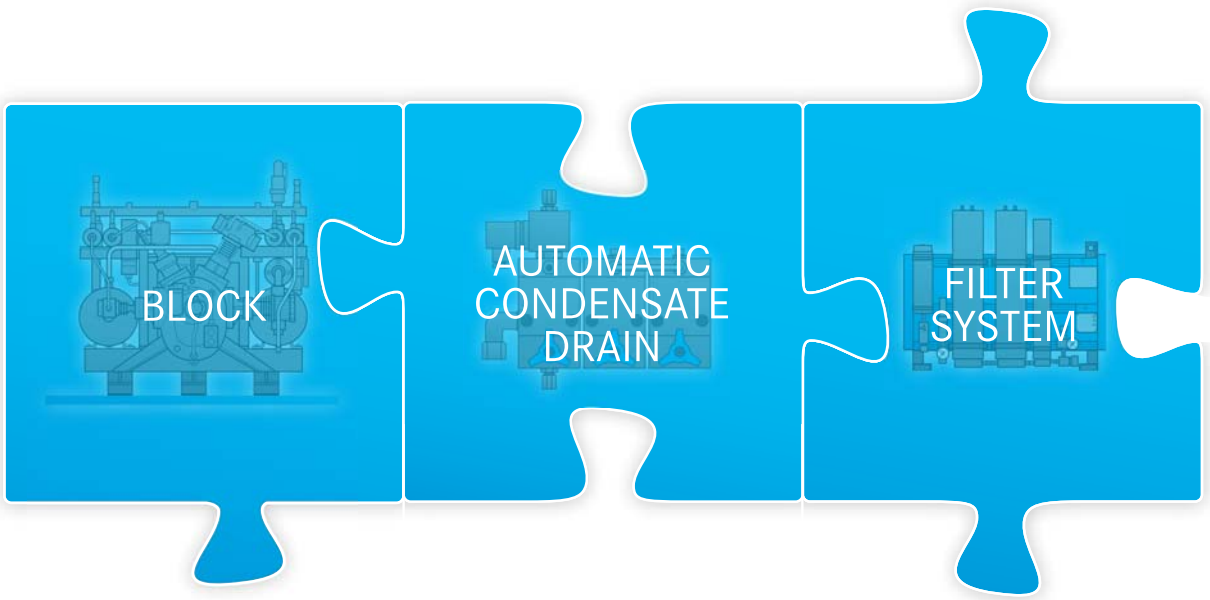
The pump is delivered with a pressure gauge and approx. 500 mm intake hose.

ORDER NUMBER

N33248

AVOIDING BREAKDOWNS:

BAUER KOMPRESSOREN MAINTENANCE KITS



THE ADVANTAGES OF OUR MAINTENANCE KITS

- High availability of your systems
- Prevents unexpected breakdowns and downtimes
- Ensuring the long service life of your compressors
- Low maintenance costs combined with high safety
- Maintenance kits offer a price advantage compared to buying the individual spare parts
- Reduction in repair and maintenance costs for your compressor
- Exclusive use of BAUER genuine spare parts in tried-and-tested BAUER quality

2330 NW 102nd Ave Unit # 3
Doral, FL. 33172

Environmental Global Solutions

305.909.7860

BAUER KOMPRESSOREN MAINTENANCE KITS

EXPLANATION OF TERMS

- **A** = Breathing air
- **I** = Industry air/dry gases old
- **D** = Dry gases
- **G** = Natural gas/dry gases old

Example: Spare parts list A1, IK100, production status 2, breathing air, appropriate maintenance kit = A-100-F2/3-abc1
In some old maintenance kits for GI systems, the "I" kit or the "G" kit may still be valid instead of the "D" kit. No new "D" kit is created for a small number of blocks with an old production status.

HOW DO I FIND THE RIGHT BLOCK MAINTENANCE KIT IN THE TABLE?

After how many operating hours do I require the maintenance kit?

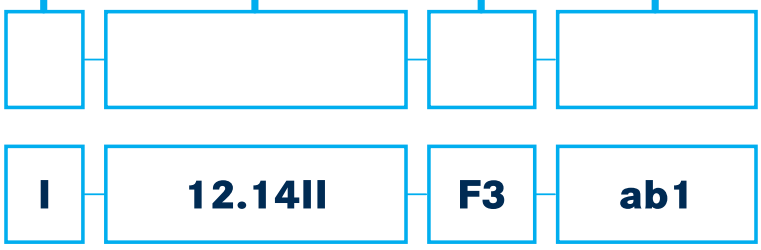
A Maintenance kits
500h = a1
1000h = ab1
2000h = abc1

I,D,G Maintenance kits
1000h = a1
2000h = ab1
4000h = abc1

Production status?
Depending on the year and month of manufacture

What compressor block do I have?

What is compressed?
A = Breathing air
I = Industrial air
D = Dry gases
G = Natural gas



AN EXAMPLE:

You own an **i**ndustrial air compressor, IK**12.14**, built in 01/2004, with production status **F3** and you want to carry out a **2000h** maintenance.
You would have to order the following maintenance kit: **I-12.14II-F3-ab1**

Block/A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
	PE100	Breathing air					A-PE100-F4 01/2011 - dato			
	Junior (+U10)	Breathing air		A-Junior-F1/3 02/1993 - 04/1998	A-Junior-F1/3 02/1993 - 04/1998	A-Junior-F1/3 02/1993 - 04/1998				
	Junior II	Breathing air				A-JuniorII-F3 05/1999 - 12/2001	A-JuniorII-F4 01/2001 - dato			
	Purus (+Varius / U10)	Breathing air		A-Purus-F1 - 02/86	A-Purus-F2 03/1986 - 01/1993					
A41.	IK80-G	No kit - low quantity of blocks		No kit - low quantity of blocks 27.05.1983						
A11.	Utilus, K13	Breathing air		No kit - low quantity of blocks 6.05.1972	No kit - low quantity of blocks 12.02.1973	No kit - low quantity of blocks 03.04.1973	No kit - low quantity of blocks 25.10.1973	No kit - low quantity of blocks 21.01.1974	A-Utilus-F6/7 01.01.1975	A-Utilus-F6/7 01.01.1976
A13.	K13/02	Breathing air								
A9.	Mariner	Breathing air		No kit - low quantity of blocks 06.06.1972	A-Mariner-F2/3 07.02.1973	A-Mariner-F2/3 25.10.1973				
A10.	Capitano	Breathing air		A-Cap-F1/7 06.06.1972	A-Cap-F1/7 07.02.1973	A-Cap-F1/7 25.10-1973	A-Cap-F1/7 01.01.1975	A-Cap-F1/7 01.01.1976	A-Cap-F1/7 01.01.1978	A-Cap-F1/7 01.01.1980
A125	Oceanus	Breathing air		A-Oceanus-F1						
A1.	IK100	Breathing air		A-100-F1 03.12.1984	A-100-F2/3 21.11.1986	A-100-F2/3 01.03.1996				
A1.	IK100	Industrial air		I-100-F1 03.12.1984	I-100-F2/3 21.11.1986	I-100-F2/3 01.03.1996				
A1.	IK100II	Breathing air					A-100II-F4 01.02.2000	A-100II-F5 01.01.2004	A-100II-F6 01.06.2004	A-100II-F7 01.08.2005
A1.	IK100II	Industrial air					I-100II-F4 01.02.2000	I-100II-F5 01.01.2004	I-100II-F6 01.06.2004	I-100II-F7 01.08.2005
A41.	IK100-C	Natural gas			I-100-F2/3 24.03.1987	I-100-F2/3 01.03.1996				
A41.	IK100II-C	Natural gas					I-100II-F4 01.02.2000	G-100II-F5/6 01.01.2004	G-100II-F5/6 01.08.2005	
A41.	IK100-GI	Dry gases			I-100-F2/3 24.03.1987	I-100-F2/3 01.03.1996				
A41.	IK100II-GI	Dry gases					I-100II-F4 01.02.2000	G-100II-F5/6 01.01.2004	D-100II-F6 01.06.2004	
A41.	IK100-G	Dry gases		No kit - low quantity of blocks 27.05.1983	I-100-F2/3 24.03.1987	I-100-F2/3 01.03.1996				
A41.	IK100II-G	Natural gas / Dry gases					I-100II-F4 01.02.2000	G-100II-F5/6 01.01.2004	D-100II-F6 01.06.2004	

8	9	10	11	12	13	14	15	16	17	18
A-Utilus-F8 01.01.1978	A-Utilus-F9 01.01.1980									
	A-Utilus-F9 01.01.1980									

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A1.-H	IK100II-420	Industrial air					I-100II-F4 01.08.2005			
A14.	IK11.0	No kit - low quantity of blocks		No kit - low quantity of blocks 14.06.1988	No kit - low quantity of blocks 01.03.1998	No kit - low quantity of blocks 25.09.2000				
A50.	IK11.0-G	No kit - low quantity of blocks		No kit - low quantity of blocks 29.11.1990	No kit - low quantity of blocks 01.08.1998					
A50.	IK11.0-C	No kit - low quantity of blocks		No kit - low quantity of blocks 29.11.1990	No kit - low quantity of blocks 01.03.1998					
A1.	IK120	Breathing air		A-120-F1 03.12.1984	A-120-F2 21.11.1986	A-120-F3 01.03.1996				
A1.	IK120	Industrial air		A-120-F1 03.12.1984	I-120-F2/3 21.11.1986	I-120-F/3 01.03.1996				
A1.	IK120II	Breathing air					A-120II-F4 01.02.2000	A-120II-F5 01.01.2004	A-120II-F6 01.06.2004	A-120II-F7 01.08.2005
A1.	IK120II	Industrial air					I-120II-F4 01.02.2000	I-120II-F5 01.01.2004	I-120II-F6 01.06.2004	I-120II-F7 01.08.2005
A41.	IK120-G	Dry gases		I-120-F1 27.05.1983	G-120-F2/3 24.03.1987	G-120-F2/3 01.03.1996				
A41.	IK120II-G	Dry gases					G-120II-F4 01.02.2000	D-120II-F5/7 01.01.2004	D-120II-F5/7 01.08.2005	
A54.	IK120-G-V009	Dry gases				G-120-F2/3 15.05.1997				
A41.	IK120-GI	Dry gases			G-120-F2/3 24.03.1987	G-120-F2/3 01.03.1996				
A41.	IK120II-GI	Dry gases					G-120II-F4 01.02.2000	D-120II-F5/7 01.01.2004	D-120II-F5/7 01.08.2005	
A41.	IK120-C	Natural gas			G-120-F2/3 24.03.1987	G-120-F2/3 01.03.1996				
A41.	IK120II-C	Natural gas					G-120II-F4 01.02.2000	G-120II-F5/7 01.01.2004	G-120II-F5/7 01.08.2005	
A41.	IK120II-GI-J	Dry gases							D-120II-F5/7 01.08.2005	
A92.	BK12.2	Breathing air			I-12.2-F2 12.08.1991	A-12.2-F3/4 01.01.1996	A-12.2-F3/4 01.04.1997			
A92.	BK12.2	Dry gases			I-12.2-F2 12.08.1991	I-12.2-.F3/4 01.01.1996	I-12.2-F3/4 01.04.1997			
A92.	BK12.2II	Industrial air						I-12.2II-F5/6 01.02.2000	I-12.2II-F5/6 01.01.2004	I-12.2II-F7 01.08.2005
A92.	BK12.2II	Dry gases						I-12.2II-F5/6 01.02.2000	I-12.2II-F5/6 01.01.2004	I-12.2II-F7 01.08.2005
A99.	BK12.3II	Dry gases		I-12.3II-F1/2 01.04.2005	I-12.3II-F1/2 01.06.2007	I-12.3II-F3 01.09.2008				
A25.	IK12.4	Industrial air - urgent IK is not BK!		I-12.4-F1 01.01.1986	I-12.4-F2/3 16.04.1987	I-12.4-F2/3 01.03.1996				

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A90.	BK12.4	Industrial booster - urgent BK is not IK!		G-12.4-F1 01.10.1989						
A62.	IK12.4-G	Natural gas / Dry gases - urgent IK is not BK!		I-12.4-F1 01.11.1986						
A25.	IK12.4II	Industrial air - urgent IK is not BK!					I-12.4II-F4 01.02.2000	I-12.4II-F5 01.01.2004	I-12.4II-F6/7 01.06.2004	
A62.	IK12.4-G	Natural gas / Dry gases - urgent IK is not BK!		I-12.4-F1 01.11.1986						
A62.	IK12.4II-G	Natural gas / Dry gases - urgent IK is not BK!							D-12.4II-F6 01.06.2004	
A73.	IK12.4II-GI	Dry gases - urgent IK is not BK!					I-12.4II-F4 01.02.2000			
A71.	IK12.4II-GI/ N2O	Dry gases - urgent IK is not BK!					I-12.4II-F4 01.02.2000			
A17.	IK12.14	Breathing air		A-12.14II-F1/2 01.02.2000	A-12.14II-F1/2 16.05.2002	A-12.14II-F3 01.01.2004	A-12.14II-F4/6 01.06.2004	Not manufac-tured	A-12.14II-F4/6 01.11.2005	
A17.	IK12.14	Industrial air		I-12.14II-F1/2 01.02.2000	I-12.14II-F1/2 16.05.2002	I-12.14II-F3 01.01.2004	I-12.14II-F4/6 01.06.2004	Not manufac-tured	I-12.14II-F4/6 01.11.2005	
A17.-OX	IK12.14-OX	B-Trox					No kit - low quantity of blocks 01.06.2004	Not manufac-tured	A-12.14OX4-F6 01.11.2005	
A55.	IK12.14-GI	Dry gases		D-12.14II-F1/2 01.02.2000	D-12.14II-F3 15.05.2002	D-12.14II-F4/6 01.01.2004	Not manufac-tured	D-12.14II-F4/6 01.11.2005		
A2.	K14	Breathing air		No kit - low quantity of blocks 01.01.1974	No kit - low quantity of blocks 01.01.1975	No kit - low quantity of blocks 13.03.1976	No kit - low quantity of blocks 10.01.1977	A-14-F5/6 01.01.1978	A-14-F5/6 01.01.1980	A-14-F7/8 02.05.1985
A2.	K14	Industrial air		No kit - low quantity of blocks 01.01.1974	No kit - low quantity of blocks 01.01.1975	No kit - low quantity of blocks 13.03.1976	No kit - low quantity of blocks 10.01.1977	A-14-F5/6 01.01.1978	A-14-F5/6 01.01.1980	I-14-F7/8 02.05.1985
A42.	IK14-G	Dry gases								I-14-F7/8 01.12.1987
A2.	IK140	Industrial air								I-140-F7/8 02.05.1985
A42.	IK140-GI	Dry gases								
A2.	IK14.11	Industrial air								A-14.11-F7 07.12.1988
A42.	IK14.11-G	Natural gas / Dry gases								A-14.11-F7 17.10.1989

8	9	10	11	12	13	14	15	16	17	18
A-14-F7/8 01.09.1997										
I-14-F7/8 01.09.1987										
I-140-F7/8 01.09.1987										
I-140-F7/8 01.09.1987										
A-14.11-F7 01.09.1997										
A-14.11-F7 01.09.1997										

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A42.	IK14.11-GI	Dry gases								
A3.	K15	Breathing air					A-15-F4/6 01.01.1975	A-15-F4/6 01.01.1976	A-15-F4/6 01.01.1980	
A3.	K15	Industrial air					A-15-F4/6 01.01.1975	A-15-F4/6 01.01.1976	A-15-F4/6 01.01.1980	
A18.	IK15.1II	Breathing air								
A18.	IK15.1II	Industrial air								
A18.-OX	IK15.1-OX	B-Trox								
A56.	IK15.1II-GI	Dry gases								
A43.	IK15.1-G/-C	Natural gas								
A56.	IK15.1II-G	Natural gas / Dry gases								
A56.	IK15.1II-C	Natural gas								
A19.	IK15.11II	Breathing air		A-15.11II-F1 12.03.2002	A-15.11II-F2/3 01.10.2006	A-15.11II-F2/3 01.06.2012				
A19.	IK15.11II	Industrial air		I-15.11II-F1 12.03.2002	I-15.11II-F2/3 01.10.2006	I-15.11II-F2/3 01.06.2012				
A57.	IK15.11II-GI	Dry gases		D-15.11II-F1 12.03.2002	D-15.11II-F2/3 01.10.2006	D-15.11II-F2/3 01.06.2012				
A59.	IK15.2II-C	Natural gas		G-15.2II-F1 01.10.2001	G-15.2II-F2 01.10.2006	G-15.2II-F3 01.06.2012				
A96.	BK15.3II	Industrial air / dry gases		I-15.3II-F1 01.03.2002	I-15.3II-F2/3 01.10.2006	I-15.3II-F2/3 01.10.2007	I-15.3II-F4 01.06.2012			
A97.	BK15.4II-C	Natural gas / dry gases		G-15.4II-F1 01.03.2002	G-15.4II-F2 01.10.2006	G-15.4II-F3 01.06.2012				
A3.	K150	Breathing air								A-150-F7/9 11.05.1982
A3.	K150	Industrial air								I-150-F7/9 11.05.1982
A3.	K150II	Breathing air								
A3.	K150II	Industrial air								
A43.	IK150-G	Natural gas								
A43.	IK150-G	Dry gases								I-150-F7/9 11.05.1982
A43.	IK150-GI	Dry gases								

8	9	10	11	12	13	14	15	16	17	18
A-14.11-F7 01.09.1997										
			A-15.1II-F11 12.03.2002	A-15.1II-F12/13 01.10.2006	A-15.1II-F12/13 01.06.2012					
			I-15.1II-F11 12.03.2002	I-15.1II-F12/13 01.10.2006	I-15.1II-F12/13 01.06.2012					
			A-15.1II- OX4-F11 12.03.2002	A-15.1OX-F12/13 01.10.2006	A-15.1OX-F12/13 01.06.2012					
			D-15.1II-F11 12.03.2002	D-15.1II-F12/13 01.10.2006	D-15.1II-F12/13 01.06.2012					
	No kit - low quantity of blocks 01.10.1992	G-15.1-F10 01.07.1997	Continued IK15.1-G/-C= A56							
			G-15.1II-F11/13 01.10.2001	G-15.1II-F11/13 01.10.2006	G-15.1II-F11/13 01.06.2012					
			G-15.1II-F11/13 01.10.2001	G-15.1II-F11/13 01.10.2006	G-15.1II-F11/13 01.06.2012					
A-150-F7/9 06.04.1990	A-150-F7/9 01.07.1997									
I-150-F7/9 06.04.1990	I-150-F7/9 01.07.1997									
		A-150II-F10 01.01.2001	A-150II-F11 01.10.2006	A-150II-F12 01.06.2012						
		I-150II-F10 01.01.2001	I-150II-F11 01.10.2006	I-150II-F12 01.06.2012						
	G-150-F9 1992									
I-150-F7/9 06.04.1990										
	I-150-F7/9 01.10.1992	Continued IK150 GI =A58								

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A58.	IK150II-GI	Dry gases								
A85.	BK150-CNG	No kit - low quantity of blocks		No kit - low quantity of blocks 15.08.1986						
A39.	IK15.7	Industrial air		I-15.7-F1 01.07.2012						
A117.	IK15.7-G	Natural gas		G-15.7-F1 01.07.2012						
A117.	IK15.7-GI	Dry gases		D-15.7-F1 01.07.2012						
A81.	BK15.9	No kit - low quantity of blocks		No kit - low quantity of blocks 01.10.1985						
A26.	IK17.0	No kit - low quantity of blocks		I-17-F1/2 15.11.1986	I-17-F1/2 13.12.1989					
A63.	IK17.0-G	No kit - low quantity of blocks		I-17-F1/2 15.11.1986						
A86.	BK17.2	No kit - low quantity of blocks		No kit - low quantity of blocks 22.06.1987						
A15.	IK18.1	Breathing air		A-18.1-F1 25.01.1990	A-18.1-F2/3 01.07.1997	A-18.1-F2/3 01.12.1998				
A15.	IK18.1II	Breathing air					A-18.1II-F4/5 01.10.2001	A-18.1II-F4/5 01.04.2005	A-18.1II-F6/7 01.10.2006	A-18.1II-F6/7 01.04.2011
A15.	IK18.1	Industrial air		I-18.1-F1 25.01.1990	I-18.1-F2/3 01.07.1997	I-18.1-F2/3 01.12.1998				
A15.	IK18.1II	Industrial air					I-18.1II-F4/5 01.10.2001	I-18.1II-F4/5 01.04.2005	I-18.1II-F6/7 01.10.2006	I-18.1II-F6/7 01.04.2011
A48.	IK18.1-G	Natural gas / Dry gases		I-18.1-F1 25.01.1990	I-18.1-F2/3 01.07.1997	I-18.1-F2/3 01.12.1998				
A48.	IK18.1-GI	Dry gases		D-18.1-F1 25.01.1990	D-18.1-F2/3 01.07.1997	D-18.1-F2/3 01.12.1998				
A75.	IK18.1II-G	Natural gas / Dry gases					G-18.1II-F4/5 01.10.2001	G-18.1II-F4/5 01.04.2005	G-18.1II-F6/7 01.10.2006	G-18.1II-F6/7 01.04.2011
A74.	IK18.1II-GI	Dry gases					D-18.1II-F4/5 01.10.2001	D-18.1II-F4/5 01.04.2005	D-18.1II-F6/7 01.10.2006	D-18.1II-F6/7 01.04.2011
A48.	IK18.1-C	Natural gas		I-18.1-F1 25.01.1990	I-18.1-F2/3 01.07.1997	G-18.1-F3 01.12.1998				
A20. (A3)	K180	Breathing air			A-180-F2 02.06.1982	A-180-F3/4 06.04.1990	A-180-F3/4 01.07.1997			
A20. (A3)	K180	Industrial air			I-180-F2 02.06..1982	I-180-F3/4 06.04.1990	I-180-F3/4 01.07.1997			
A20.	K180II	Breathing air						A-180II-F5/6 01.10.2001	A-180II-F5/6 01.10.2006	A-180II-F7 01.02.2012

8	9	10	11	12	13	14	15	16	17	18
		D-150II-F10/12 15.02.2002	D-150II-F10/12 01.10.2006	D-150II-F10/12 01.06.2012						
A-18.1II-F8 01.06.2012										
I-18.1II-F8 01.06.2012										
G-18.1II- F8abc1 01.06.2012										
D-18.1II- F8abc1 01.06.2012										

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A20.	K180II	Industrial air						I-180II-F5/6 01.10.2001	I-180II-F5/6 01.10.2006	I-180II-F7 01.02.2012
A43.	IK180-GI	Dry gases			I-180-F2 02.06..1982	I-180-F3/4 06.04.1990	I-180-F3/4 01.10.1992	Continued IK180 GI= A60		
A60.	IK180II-GI	Dry gases						D-180II-F5/6 01.10.2001	D-180II-F5/6 01.10.2006	D-180II-F7 01.02.2012
A43.	IK180-G	Natural gas				I-180-F3/4 06.04.1990				
A4.	K200	No kit - low quantity of blocks					No kit - low quantity of blocks 04.10.1982			
A5.	K21	Industrial air		No kit - low quantity of blocks 16.03.1977	No kit - low quantity of blocks 01.01.1978	Not manufac-tured	No kit - low quantity of blocks 15.02.1980	No kit - low quantity of blocks 05.05.1981	No kit - low quantity of blocks 05.05.1981	No kit - low quantity of blocks 05.10.1981
A44.	IK21-G	Natural gas						No kit - low quantity of blocks 05.10.1981	G-21.0-F6/7 01.05.1985	
A21.	IK21.4	No kit - low quantity of blocks		No kit - low quantity of blocks 16.07.1985						
A6.	K22.0	Breathing air		No kit - low quantity of blocks 28.0.01.1983	I-22.0-F2/3 25.01.1985	I-22.0-F2/3 01.03.1986	A-22.0-F4/5 09.01.1992	A-22.0-F4/5 01.01.1995	A-22.0-F6 22.04.2015	
A6.	K22.0	Industrial air			I-22.0-F2/3 25.01.1985	I-22.0-F2/3 01.03.1986	I-22.0-F4/5 09.01.1992	I-22.0-F4/5 01.01.1995	I-22.0-F6 22.04.2015	
	K22.0-420	Industrial air	420 Bar version	I-22.0-420-F1 22.04.2015						
A45.	IK22.0-G	Natural gas / Dry gases			D-22.0-F2/3 25.01.1985	D-22.0-F2/3 01.03.1986	D-22.0-F4/5 01.01.1992	D-22.0-F4/5 01.01.1995	D-22.0-F6 22.04.2015	
A45.	IK22.0-C	Natural gas				G-22.0-F2/3 01.03.1986	G-22.0-F4/5 01.01.1992	G-22.0-F4/5 1.01.1995	G-22.0-F6 22.04.2015	
A45.	IK22.0-GI	Dry gases					D-22.0-F4/5 01.01.1992	D-22.0-F4/5 01.01.1995	D-22.0-F6 22.04.2015	
A29.	IK22.2	Breathing air		A-22.2-F1 21.07.1992	A-22.2-F2 01.01.1995					
A22.	IK22.5	Industrial air		I-22.5-F1/2 18.01.1985	I-22.5-F1/2 09.01-1992	I-22.5-F3 01.01.1995				
A61.	IK22.5-G	Natural gas / dry gases		I-22.5-F1/2 18.01.1985	I-22.5-F1/2 09.01-1992	I-22.5-F3 26.10.1994				
A72.	IK22.5-GI/ N2O	Dry gases				I-22.5-F3 26.10.1994				
A89.	BK22.6	No kit - low quantity of blocks		No kit - low quantity of blocks 01.07.1989						
A101.	BK22.9-C	Natural gas		G-22.9-F01 01.03.2007						

8	9	10	11	12	13	14	15	16	17	18
I-21.0-F8 17.01.1984	I-21.0-F8 14.07.1987									

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A93.	BK22.10-C	Natural gas air-cooled and rare water-cooled possible		G-22.10-F1 01.12.1995 serial no. required!	G-22.10-F2 01.09.1997 serial no. required!					
A98.	BK22.10-C	Natural gas water-cooled		G-22.10-W-F1 01.07.2002 serial no. required!	G-22.10-W-F2 01.01-2006 serial no. required!					
A93.	BK22.11-C	Natural gas		No kit - low quantity of blocks 01.12.1995	G-22.11-F2. abc1 01.09.1997	G-22.11-F3. abc1 01.04.2015				
A98.	BK22.11-C	Natural gas water-cooled			G-22.11-F2. abc1 01.01.2006	G-22.11-F3. abc1 01.04.2015				
A93.	BK22.12-C	Natural gas		G-22.12-F1/2 01.12.1995	G-22.12-F1/2 01.09.1997	G-22.12-F3. abc1 01.04.2015				
A98.	BK22.12-C	Natural gas water-cooled			G-22.12-F1/2 01.01.2006	G-22.12-F3. abc1 01.04.2015				
A93.-GI	BK22.12-GI	Dry gases water-cooled			G-22.12-F1/2 01.06.2008	G-22.12-F3. abc1 01.04.2015				
A93.	BK22.13-C	Natural gas		G-22.13-F1/2 01.12.1995	G-22.13-F1/2 01.09.1997					
A98.	BK22.13-C	Natural gas water-cooled			G-22.13-F1/2 01.01.2006					
A93.	BK22.14-C	Natural gas		G-22.14-F1/2 1.12.1995	G-22.14-F1/2 01.08.1997					
A5.	K23.0	Breathing air - old design								
A5.	K23.0	Industrial air - old design								
A5.	K23.0-W	Industrial air water-cooled								
A5.	K23.0-W	Industrial air water-cooled new design modular								
A5.-W	K23.0-W-V/H	Industrial air water-cooled new design								
A5.-L	K23.0-L-V/H	Industrial air air-cooled new design modular								
A44.	IK23.0-G	Natural gas / Dry gases								G-23.0-F7/12 02.01.1989

8	9	10	11	12	13	14	15	16	17	18
	A-23.0-F11/13 07.06.1989	A-23.0-F11/13 02.04.1990	A-23.0-F11/13 20.01.1992	A-23.0-F11/13 26.10.1993	A-23.0-F11/13 31.01.1993	A-23.0-F14 01.04.2015 - Attention old design!				
	I-23.0-F11/13 07.06.1989	I-23.0-F11/13 02.04.1990	I-23.0-F11/13 20.01.1992	I-23.0-F11/13 26.10.1993	I-23.0-F11/13 31.01.1993	I-23.0-F14 01.04.2015 - Attention old design!				
						I-23.0-W-F14 01.01.2005				
							I-23.0-W-F15/16 01.10.2009			
								I-23.0-W-F15/16 01.03.2010		
							I-23.0-L-F15 01.12.2011			
G-23.0-F7/12 20.01.1992										

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A44.	IK23.0-C	Natural gas								G-23.0-F7/12 02.01.1989
A44.-C-L	IK23.0-C-L	Natural gas air-cooled new design								
A44.-C-W	IK23.0-C-W	Natural gas water-cooled new design								
A44.	IK23.0-GI	Dry gases - old design								
A44.-GI-W	IK23.0-GI-W	Dry gases watercoolded new design								
A44.-GI-L	IK23.0-GI	Dry gases air-cooled new design								
A52.	IK23.1-G	Natural gas / Dry gases - old design								
A52.	IK23.1-C	Natural gas - old design								
A52.	IK23.1-C	Natural gas water-cooled								
A77.	IK23.2	Industrial air water-cooled		I-23.2-W-F2 01.04.2008						
A77.	IK23.2-W-V/-H	Induistrial air water-cooled new design modular			I-23.2-W-F2 01.03.2010					
A77.	IK23.2-GI-W-V/-H	Dry gases water-cooled new design modular			D-23.2-W-F2 01.03.2010					
A77.	IK23.2-G-W-V/-H	Natural / dry gases water-cooled new design modular			D-23.2-W-F2 01.03.2010					
A77.-L	IK23.2-G-L-V/-H	Natural / dry gases air-cooled new design modular		D-23.2-L-F1 01.04.2008						
A78.	IK23.2-C-W-V/-H	Natural gas water-cooled new design modular		G-23.2-F01 01.04.2008	G-23.2-W-F2-abcd1 01.03.210					
A21.	IK23.4	Industrial air			I-23.4-F2/4 28.10.1987	I-23.4-F2/4 20.01.1992	I-23.4-F2/4 31.01.1994	I-23.4-F5 01.01.1995	I-23.4-F6 01.03.2013	
A64.	IK23.4-G	Natural gas / Dry gases			D-23.4-F2/4 28.10.1987	D-23.4-F2/4 20.01.1992	D-23.4-F2/4 31.01.1994	D-23.4-F5 01.01.1995		
A64.	IK23.4-GI	Dry gases						D-23.4-F5 01.01.1995		

8	9	10	11	12	13	14	15	16	17	18
G-23.0-F7/12 20.01.1992										
							G-23.0-F15 01.02.2009			
								G-23.0-W- F16-abcd1 01.03.2010		
				I-23.0-F11/13 26.10.1993	I-23.0-F11/13 31.01.1994	D-23.0-F14 01.04.2015 - Attention old design!				
							D-23.0- W-F15/16 01.02.2009	D-23.0- W-F15/16 01.03.2010		
							D-23.0-L-F15 01.02.2009			
	G-23.1-F10 01.10.1993	G-23.1-F10 31.01.1994	G-23.1-L-F114 01.04.2015 attention old design							
	G-23.1-F10 01.10.1993	G-23.1-F10 31.01.1994	G-23.1-L-F114 01.04.2015 attention old design							
			G-23.1-F11 01.06.2005							

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A114.	BK23.5-GI	Dry gases water-cooled	Swagelock	D-23.5-F1 01.12.2011						
A110.-W	BK23.7-C/-W-V/-H	Natural gas water-cooled		G-23.7-F1 01.07.2010						
A110.-W	BK23.7–GI/-G-W-V/-H	Dry gases water-cooled		D-23.7-W-F1 01.07.2010						
A-110-L	BK23.7–GI/-G-L-V/-H	Dry gases water-cooled		D-23.7-L-F1 01.07.2010						
A110.-L	BK23.7-C/-L-V/-H	Natural gas air-cooled		G-23.7-F1 01.07.2010						
	IK23.8	Industrial air		I-23.8-F1/2 12.2009	I-23.8-F1/2					
A109.-W	BK23.8-C-W-V/-H	Natural gas water-cooled		G-23.8-W-F1/2 01.12.2009	G-23.8-W-F1/2 01.03.2010					
A104.	BK23.10-C	Natural gas water-cooled		G-23.10-F1/3-abcd1 01.01.2008						
A104.-W	BK23.10-C-W-V/-H	Natural gas water-cooled modular			G-23.10-F1/3-abcd1 01.12.2009	G-23.10-F1/3-abcd1 01.03.2010				
A104.	BK23.10-G	Natural / Dry gases water-cooled modular		D-23.10-W-F1-abcd1 01.01.2008						
A104.-W	BK23.10-G-W-V/-H	Natural / Dry gases water-cooled modular			D-23.10-W-F2-abcd1 01.12.2009	D-23.10-W-F3-abcd1 01.03.2010				
A104.1-V003	BK23.10-C-F01-V003	Natural gas air-cooled		G-23.10-F1/3-abcd1 01.01.2008						
	BK23.10-GI-F01-V099	Dry gases air-cooled		D-23.10-L-F1 01.09.2009						
A104.	BK23.10-GI	Dry gases water-cooled		D-23.10-W-F1-abcd1 01.01.2008						
A104.-W	BK23.10-GI-W-V/-H	Dry gases water-cooled modular			D-23.10-W-F2-abcd1 01.12.2009	D-23.10-W-F3-abcd1 01.03.2010				
A105.	BK23.12-C	Natural gas water-cooled		G-23.12-W-F1 01.01.2008						
A105.-W	BK23.12-C-W-V/-H	Natural gas water-cooled modular			G-23.12-W-F2 01.02.2009	G-23.12-W-F3 01.03.2010				
A105.	BK23.12-G	Natural / Dry gases water-cooled		G-23.12-W-F1 01.01.2008						
A105.-W	BK23.12-G-W-V/-H	Natural / Dry gases water-cooled modular			G-23.12-W-F2 01.12.2009	G-23.12-W-F3 01.03.2010				
A105.	BK23.12-GI	Dry gases water-cooled		D-23.12-W-F1 01.01.2008						

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A105.-W	BK23.12-GI-W-V/-H	Dry gases water-cooled modular			D-23.12-W-F2 01.12.2009	D-23.12-W-F3 01.03.2010				
A105.-L	BK23.12-GI-L-V/-H	Dry gases air-cooled modular	Swagelock	D-23.12-L-F1 01.03.2012						
A106.	BK23.13-C	Natural gas water-cooled		G-23.13-F1/3 01.01.2008						
A106.-W	BK23.13-C-W-V/-H	Natural gas water-cooled modular			G-23.13-F1/3-abcd1 01.12.2009	G-23.13-F1/3-abcd1 01.03.2010				
A106.	BK23.13-G	Natural / Dry gases water-cooled		D-23.13-W-F1/3 01.01.2008						
A106.-W	BK23.13-G-W-V/-H	Natural / Dry gases water-cooled modular			D-23.13-W-F1/3 01.12.2009	D-23.13-W-F1/3 01.03.2010				
A106.	BK23.13-GI	Dry gases water-cooled		D-23.13-W-F1/3 01.01.2008						
A106.-W	BK23.13-GI-W-V/-H	Dry gases water-cooled modular			D-23.13-W-F1/3 01.12.2009	D-23.13-W-F1/3 01.03.2010				
A107.-W	BK23.14-C-W	Natural gas water-cooled		G-23.14-1/2-abcd1 01.12.2009	G-23.14-F1/2-abcd1 01.03.2010					
A107.	BK23.14-G	Natural / Dry gases		D-23.14-W-F1/2-abcd1 01.12.2009	D-23.14-W-F1/2-abcd1 01.03.2010					
A107.	BK23.14-GI	Dry gases		D-23.14-W-F1/2-abcd1 01.12.2009	D-23.14-W-F1/2-abcd1 01.03.2010					
A76.	IK24.0-C	Natural gas water-cooled		G-24.0-W-F1/3 01.05.2006	G-24.0-W-F1/3 01.04.2008	G-24.0-W-F1/3 15.10.2012				
A123.1s	IK24.0	Industrial air		I-24.0-W-F1 01.10.2013						
A37.	IK24.4	Watercooled		I-24.4-W-F1/2 01.09.2006	I-24.4-W-F1/2 01.04.2008					
A100.	BK24.11-C	Natural gas air-cooled / water-cooled		G-24.11-F1/2-abcd1 01.01.2006						
A100.	BK24.11-C-W/-L	Natural gas air-cooled / water-cooled			G-24.11-L-F2 01.04.2008					
A100.-W	BK24.11-C-W	Natural gas water-cooled		G-24.11-W-F1-abcd1 01.01.2006		G-24.11-W-F3-abcd1 01.03.2010				
A100.-L	BK24.11-C-L	Natural gas air-cooled		G-24.11-L-F1 01.01.2006						
A116.	BK24.12-C	Natural gas water-cooled	Swagelock			G-24.12-W-F3-abcd1 15.10.2012				

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A121	BK24.12-GI	Dry gases water-cooled		D-24.12-W-F1-abcd1 01.01.2013						
A102.	BK24.19-V001	Bin block		Kit not yet created 01.08.2007	Kit not yet created 01.04.2008					
A103.	BK24.20-V001	Bin block		I-24.20.F1/2 01.08.2007	I-24.20.F1/2 01.04.2008					
	BK24.20-C-V001	Natural gas water-cooled		G-24.20-W-F1 01.01.2013						
A119	BK24.20-GI	Dry gases water-cooled		D-24.20-W-F1 01.01.2013						
A7.	K25.0	Industrial air		No kit - low quantity of blocks 01.10.1982	I-25.0-F2/4 21.07.1983	I-25.0-F2/4 20.06.1986	I-25.0-F2/4 03.02.1994	I-25.0-F5 01.01.1996	I-25.0-F6 01.07.2011	
A46.	IK25.0-G	Natural / Dry gases		No kit - low quantity of blocks 01.10.1982	I-25.0-F2/4 21.07.1983	I-25.0-F2/4 01.10.1989	I-25.0-F2/4 03.02.1994			
A46.	IK25.0-C	Natural gas		No kit - low quantity of blocks 01.10.1982	I-25.0-F2/4 21.07.1983	I-25.0-F2/4 01.10.1989	I-25.0-F2/4 01.01.1996	G-25.0-F5 01.01.1996	G-25.0-F6 01.07.2004	
A46.	IK25.0-GI	Dry gases						D-25.0-F5 01.01.1996		
A23.	IK25.4	Industrial air		I-25.4-F1/2 09.07.1984	I-25.4-F1/2 02.02.1994	I-25.4-F3 01.06.2012				
A65.	IK25.4-GI	Dry gases		D-25.4-F1/2 09.07.1984	D-25.4-F1/2 01.02.1994					
A24.	IK25.5	No kit - low quantity of blocks		No kit - low quantity of blocks 14.01.1985	No kit - low quantity of blocks 02.02.1994					
A66.	IK25.5-GI	No kit - low quantity of blocks		No kit - low quantity of blocks 14.01.1985	No kit - low quantity of blocks 01.02-1994					
A16.	IK25.9	Industrial air		I-25.9-F1/3 18.11.1991	I-25.9-F1/3 03.02.1994	I-25.9-F1/3 20.02.2002				
A49.	IK25.9-G	Natural / Dry gases		I-25.9-F1/3 01.10.1991	I-25.9-F1/3 03.02.1994	I-25.9-F1/3 20.02.2002				
A49.-G	IK25.9-G	Natural / Dry gases water-cooled					D-25.9-W-F4 01.01.2006			
A49.	IK25.9-C	Natural gas				G-25.9-L-F3 21.03.2002				
A87.	BK25.12	No kit - low quantity of blocks		No kit - low quantity of blocks 01.11.1988						

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A88.	BK25.14	No kit - low quantity of blocks		No kit - low quantity of blocks 01.02.1989						
A12.	IK25.18	Industrial air		I-25.18-F1 14.07.1986	I-25.18-F2/3 03.02.1994	I-25.18-F2/3 20.03.2002				
A53.	IK25.18-G	Gas / Dry gases		I-25.18-F1 04.07.1986	I-25.18-F2/3 03.02.1994					
A53.	IK25.18-GI	Dry gases		I-25.18-F1 04.07.1986	I-25.18-F2/3 03.02.1994					
A84.	BK25.19	No kit - low quantity of blocks		No kit - low quantity of blocks 01.07.1986						
A91.	BK25.20	No kit - low quantity of blocks		No kit - low quantity of blocks 14.08.1990						
A80.	IK26.0-C	Natural gas water-cooled	Swagelock	G-26.0-W-F1-abcd1 01.06.2012 - modified 2nd stage!						
A118.	IK26.0	Industrial air water-cooled	Swagelock	I-26.0-W-F1-abcd1 01.01.2013						
A38.	IK26.4-GI	Dry gases water-cooled		D-26.4-W-F1-abcd1 01.08.2011						
A124.1s	IK26.4	Industrial air water-cooled	Swagelock	I-26.4-W-F1 01.10.2013						
A79.	IK26.4-C	Natural gas water-cooled	Swagelock	G-26.4-W-F1-abcd1 01.08.2011						
A120	BK26.7-GI	Dry gases water-cooled	Swagelock	D-26.7-W-F1 01.02.2013						
A115.	BK26.8-G/-GI	Dry gases water-cooled		D-26.8-W-F1 01.06.2012						
A115.	BK26.8-C	Natural gas water-cooled		G-26.8-W-F1 01.06.2012						
A111.	BK26.10-G	Dry gases water-cooled		D-26.10-W-F1 01.01.2011						
A108.	BK26.10-C	Natural gas water-cooled		G-26.10-W-F1-abcd1 01.06.2009	G-26.10-W-F2-abcd1 01.10.2010					
A112.	BK26.10-GI	Dry gases water-cooled		D-26.10-W-F1 01.01.2010						
A112.-V097	BK26.10-GI	Dry gases water-cooled	Swagelock	D-26.10-W-F1 01.11.2012						
A113.	BK26.12-GI	Dry gases water-cooled		I-26.12-F1-abcd1 01.07.2011						

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A113.-V097	BK26.12-GI	Dry gases water-cooled	Swagelock	I-26.12-F1-abcd1 01.02.2013						
A113.	BK26.12-GI-420-F01-V097	Dry gases water-cooled				D-26.12-W-F3-abcd1 01.07.2014				
A113	BK26.12-F03-V004	Industrial air				I-26.12-W-F3-abcd1 01.09.2014				
	BK26.13-C-F01-V097	Natural gas		G-26.13-W-F1-abcd1 09.2014						
A122	BK26.14-C	Natural gas water-cooled	Swagelock	G-26.14-W-F1-abcd1 01.09.2014						
A8.	K28.0	Industrial air		No kit - low quantity of blocks 01.12.1984	I-28.0-L-F2/3 01.01.1996	I-28.0-L-F2/3 01.01.1996	I-28.0-L-F4 01.06.2012			
A8.-W	K28.0	Industrial air water-cooled					I-28.0-W-F4 01.08.2008	I-28.0-W-F5 01.06.2012		
A47.	IK28.0-G	Natural / Dry gases		No kit - low quantity of blocks 02.03.1989	I-28.0-L-F2/3 02.02.1994					
A47.	IK28.0-C	Natural gas		No kit - low quantity of blocks 07.03.1989	I-28.0-L-F2/3 02.02.1994	G-28.0-F3 01.01.1996				
A47.-C	IK28.0-C	Natural gas water-cooled				G-28.0-F3 01.01.1996	G-28.0-W-F4-abcd1 01.04.2008	G-28.0-W-F5-abcd1 01.06.2012		
A47.-GI	IK28.0 GI	Dry gases			D-28.0-L-F2/3 02.02.1994	D-28.0-L-F2/3 01.07.2002	D-28.0-L-F4 01.06.2012			
A47.-GI	IK28.0 GI	Dry gases water-cooled					D-28.0-W-F4-abcd1 01.06.2012			
A27.	IK28.2	Industrial air		I-28.2-F1 09.07.1984	I-28.2-F2 02.02.1994	I-28.2-F3 01.06.2012				
A27.-W	IK28.2	Industrial air water-cooled				I-28.2-W-F3 01.02.2009	I-28.2-W-F4 01.06.2012			
A67.	IK28.2-GI	Dry gases		D-28.2-F1 09.07.1984	D-28.2-F2 01.02.1994					
A28.	IK28.3	Industrial air		No kit - low quantity of blocks 14.01.1985	I-28.3-F2 02.02.1994					
A68.	IK28.3-G	No kit - low quantity of blocks		No kit - low quantity of blocks 01.08.1990						
A68.	IK28.3-GI	Dry gases			I-28.3-F2 02.02.1994					

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A94.	BK28.21-C	Natural gas		G-28.21-F1-abcd1 01.01.1996						
A94.	BK28.21-C	Natural gas water-cooled					G-28.21-W-F4-abcd1 01.08.2008			
A94.	BK28.22-C	Natural gas		G-28.22-F1-abcd1 01.01.1996						
A94.	BK28.22-C	Natural gas water-cooled				G-28.22-W-F3-abcd1 01.08.2008				
A94.	BK28.23-C	Natural gas		G-28.23-F1-abcd1 01.01.1996						
A94.	BK28.23-C	Natural gas water-cooled				G-28.23-W-F3-abcd1 01.08.2008				
A94.	BK28.24-C	Natural gas		G-28.24-F1/2-abcd1 01.01.1996						
A94.	BK28.24-C	Natural gas water-cooled				G-28.24-F3-abcd1 01.08.2008				
A30.	D51.1	Oil free		No kit - low quantity of blocks 22.01.1992	No kit - low quantity of blocks 03.11.1993					
A30.	D51.2	Oil free		No kit - low quantity of blocks 22.01.1992	No kit - low quantity of blocks 03.11.1993					
A31.	D52.3	Oil free		No kit - low quantity of blocks 22.01.1992	No kit - low quantity of blocks 03.11.1993					
A126.1	BK52.12	Natural gas water-cooled		G-52.12-W-F1-abcd1 2014						
A127.1	BK52.13	Natural gas water-cooled		G-52.13-W-F1-abcd1 2014						
A31.	D52.4	Oil free		No kit - low quantity of blocks 22.01.1992	No kit - low quantity of blocks 03.11.1993					
A34.	IK930	Alup low pressure		Alup - no kit - low quantity of blocks 17.12.1990						
A35.	IK940	Alup low pressure		Alup - no kit - low quantity of blocks 17.12.1990						

8	9	10	11	12	13	14	15	16	17	18

Block / A-list	Block	Sector	Additional inf.	1	2	3	4	5	6	7
A36.	D81.2	No kit - low quantity of blocks		No kit - low quantity of blocks 20.02.1992	No kit - low quantity of blocks 20.08.1996					
A69.	SF6-20	No kit - low quantity of blocks		No kit - low quantity of blocks 01.05.1993						
A70.	D53.5-GI	Dry gases		I-53.5-F1 01.01.1995	I-53.5-F2 01.09.1999					
A82.	BK89	No kit - low quantity of blocks		No kit - low quantity of blocks 01.12.1985						
A83.	BK89.2	No kit - low quantity of blocks		No kit - low quantity of blocks 01.12.1985						
A95.	BDGI52.7-3	No kit - low quantity of blocks		No kit - low quantity of blocks 01.08.1996						
	EVO15 - Screw 26.12-SP	Industrial air		I-EVO15-F1-a1 13.10.2014						

8	9	10	11	12	13	14	15	16	17	18
	No kit - low quantity of blocks 05.05.1989									
										TKD UR 9/2019

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