
BAUER High Pressure Sports & Safety Compressor

Model PE 100 - TE / TW / TB

Charging Rate: 100 l/min

The mobile high pressure breathing air compressor PE100 - TE/TW/TB is used to fill pressure tanks for respiratory protection, diving and shooting sports and other applications.

The maximum allowable operating pressure (final stage safety valve setting) is for PE100 - TE/TW/TB units 225 bar or 330 bar.



PE100 -TE

General	
Medium :	air
Intake pressure :	atmospheric
Intake temperature :	+5 to +45°C
Ambient temperature :	+5 to +45°C
Setting of safety valve :	225 or 330 bar
Filling pressure :	PN 200 or PN 300

Compressor block	
Capacity	100 l/min Measured at bottle filling 0 to 200 bar Tolerance +/- 5% at +20°C ambient temperature
Speed	2300 1/min
Number of Compression stages	3
Number of Cylinders	3
Stroke	24 mm
Drive	V-belt

Three-phase AC motor	
Power	2,2 kW
Speed	2.850 1/min
Enclosure	IP55
Operating voltage	400 V ¹
Frequency	50 Hz ¹

Single-phase AC motor	
Power	2,2 kW
Speed	2.850 1/min
Enclosure	IP55
Operating voltage	230 V ¹
Frequency	50 Hz ¹

¹ Other voltages and frequencies available on request against additional price.

Petrol engine	
Type	4-tact-gas engine
Power	4.2 kW
Speed	3600 1/min

Dimensions/Weight:						
Model	Length	x	Width	x	Hight	Weight (approx.)
PE100 - TE	660 mm	x	350 mm	x	420 mm	44 kg
PE100 - TW	660 mm	x	350 mm	x	420 mm	44 kg
PE100 - TW Shooting version	660 mm	x	350 mm	x	420 mm	44 kg
PE100 - TB	740 mm	x	340 mm	x	420 mm	42 kg

Scope of supply:

COMPRESSOR BLOCK

- Splash lubrication
- Micronic intake filter: 10 µm
- Intermediate coolers, air cooled
- Aftercooler, air cooled, outlet temperature max. 10-15°C above cooling air temperature
- Intermediate separators after the 2nd stage
- Final separator for removal oil-/water condensate
- Safety valves after each stage, TÜV approved final pressure safety valve
- Pressure maintaining and check valve after the final stage



FILLING DEVICE PN 200

consisting of:

- 1x filling valve with integrated vent, complete with German filling connector G 5/8" DIN 477 and pressure gauge, PN 200
- 1x high pressure filling hose, 1 m length
- 1x international filling connector

or

FILLING DEVICE PN 300

consisting of:

- 1x filling valve with integrated vent, complete with German filling connector G 5/8" DIN 477 and pressure gauge, PN 300
- 1x high pressure filling hose, 1 m length



or

FILLING DEVICE FOR PE 100 - TW SHOOTING VERSION

consisting of:

- 1 filling hose, length 1 m,
- 1 filling valve and final pressure gauge,
- 1 adaptor 2x5/8" for connection of cartridge adapter, suitable for all manufacturing brands

FILTERSYSTEM P 11

- final mechanical separator for the removal of oil-/ water condensate
- TRIPLEX long-life filter cartridge processing in 3 stages (drying, neutralization, micro filtering)
- filling: MS-AC-MS
- air purification capacity approx. 90 m³ (at ambient temperature 20°C and 200 bar)
- final safety valve, fitted to filter housing
- back pressure / non return valve, fitted to filter housing



Technical data:

Operating pressure:	max. 330 bar
Operating pressure:	min. 90 bar

All filter housings comply with UVV standards, AD guidelines and German TÜV regulations. Other housing standard compliances can be provided at additional costs if required.

Air quality according to DIN/EN 12021

Contamination	Threshold value according to DIN EN 12021	Air quality due to application of BAUER purification system P 21
H ₂ O	25 mg/m ³	≤10 mg/m ³
CO	15 ppm(v)	Depending on filter cartridge ¹
CO ₂	500 ppm(v)	Depending on intake air ²
Öl	0,5 mg/m ³	≤0,1 mg/m ³

1 With BAUER filter cartridge MS/AC/MS/HP only.
Maximum concentration CO in intake air: 25 ppm.
The compressed and purified breathing air will then comprise ≤ 5 ppm CO (threshold limit European pharmaceutical book)

2 When the max. allowable concentration of CO₂ in the intake air is exceeded, the application of the additional purification system BAUER AERO-GUARD is **strongly recommended!**



OPTIONS:

ON/OFF SWITCH WITH MOTOR PROTECTION

consisting of:

- On/off switch
- Cable, length 5 m
- CEE – plug (only with operating voltage 400 V / 50 Hz)



SPECIAL VOLTAGE / FREQUENCY

The standard voltage and frequency is 400 V, 50 Hz three phase AC.
Other voltages and/or frequencies can be delivered upon request (add. price).

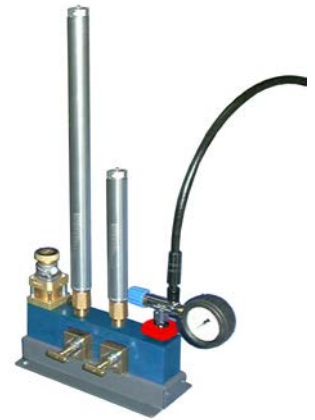
ADDITIONAL OPTIONS FOR PE 100 - TW SHOOTING VERSION

DISTRIBUTION PANEL

for the filling of 300 bar and 200 bar cartridge.

Filling panel with mounting rail complete with:

- 1x connection for the hose
- 1x cartridges connection G $\frac{5}{8}$ " DIN 477, PN 200 with shut-off valve
- 1x safety valve 225 bar
- 1x cartridges connection G $\frac{5}{8}$ " DIN 477, PN 300 with shut-off valve



FILLING BRIDGE

for the filling of 225 bar storage bottles, consisting of:

- 2x bottles connection G $\frac{5}{8}$ " DIN 477, PN 200
- 1x high pressure filling hose, 1 m length

MULTI-FILL

The Multi-Fill filling panel is available as optional extra. It is used to fill as many cartridges as needed, even different types, of one pressure range at the same time. The Multi-Fill panels are connected to each other by means of tube connector.



Service Material:

Maintenance kits	Order No.
Maintenance kit 500 hours	A-JuniorII-F4-a1
Maintenance kit 1000 hours	A-JuniorII-F4-ab1
Maintenance kit 2000 hours	A-JuniorII-F4-abc1

Spare Cartridges	Filling	Purification capacity ¹	Order No.
Standard	MS-AC-MS	130 m ³	057679
with CO-removal	MS-AC-MS-HP	110 m ³	059183

¹ referring to +20°C in the oil-/ water separator and processing pressure 300 bar

MS = Molecular Sieve = Drying
 AC = Activated Carbon = Oil removal
 HP = Hopcalite = CO-Removal

Documentation:

Standard units:

1x Instruction manual and parts list in English or German language

Special versions:

1x Instruction manual together with the unit, spare parts list 6-8 weeks after delivery.

Standards:

Manufacturing according to German regulations and standards

Testing:

Bauer standard according to DIN EN 10204-3.1B

All information is subject to change without notice.