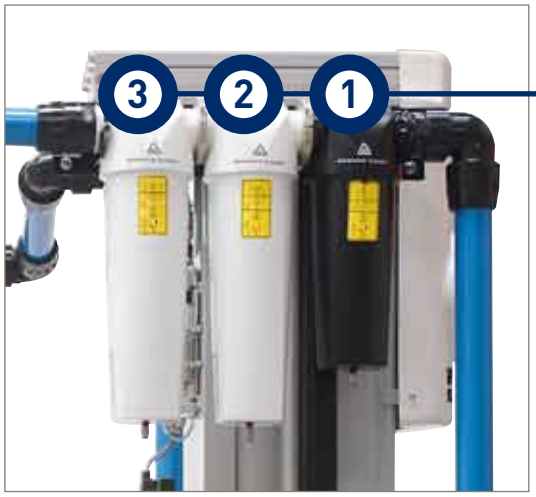
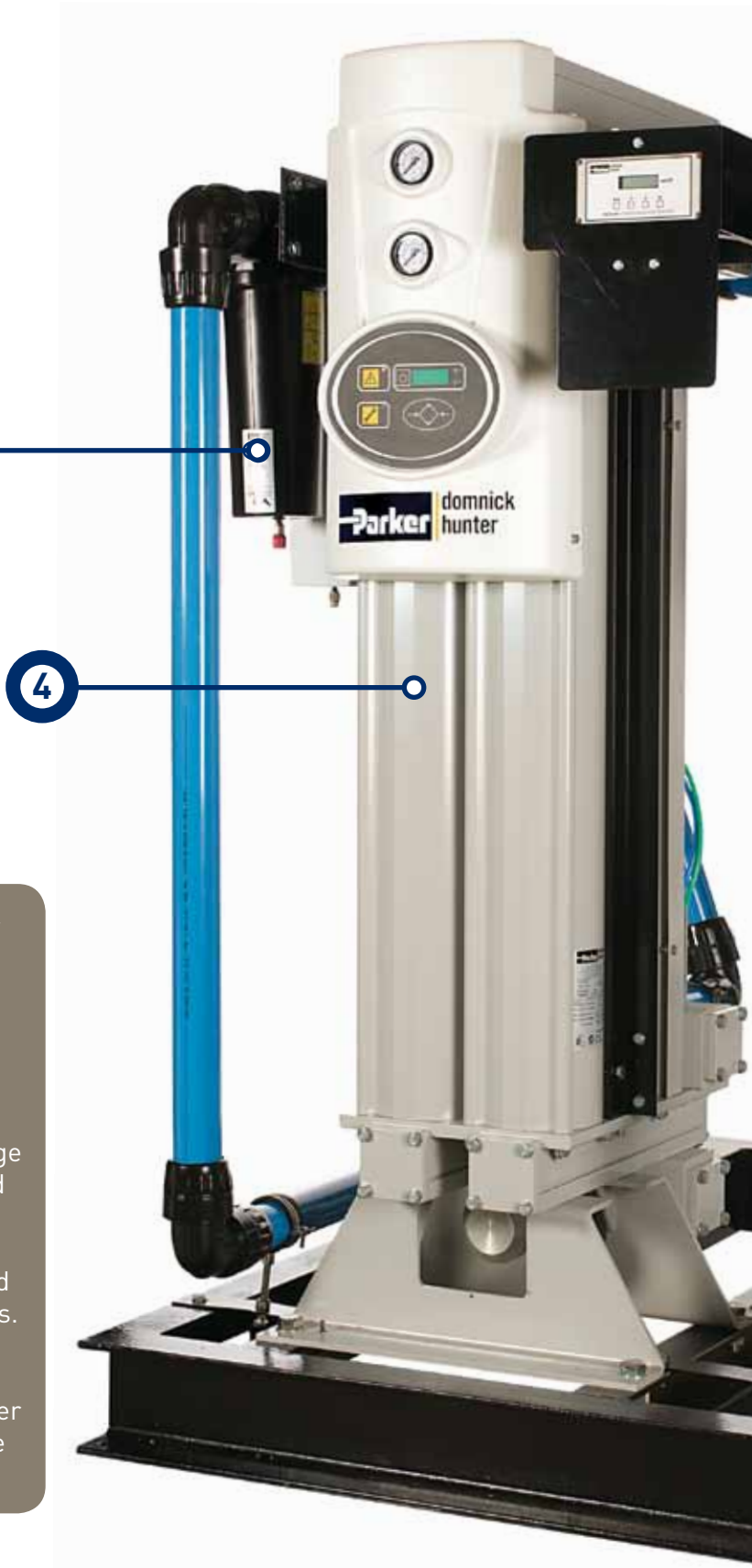
BAM 10 - 70
How it works





The Parker domnick hunter BAM Breathing Air Purifiers consist of six purification stages mounted on a portable skid for high-capacity multiple personnel breathing air applications. At the inlet, a first stage water separator removes bulk water, followed immediately by a second stage high efficiency coalescing filter to reduce oil and water content and a third stage activated carbon filter to remove oil vapour and odours. The fourth stage adsorption dryer, reduces the water vapour content of the compressed air (to -40°C pdp) and CO_2, NO and NO_2 levels to below the legal permissible limits. Downstream of the adsorption dryer, a catalyst converts carbon monoxide to carbon dioxide, again, to below the legal limits. A final dust filter captures any particulates carried over from the adsorption materials.

1

GRADE WS
Water Separator

REDUCES:

Liquid water and oil in heavily contaminated compressed air systems

2

GRADE AO
General Purpose Coalescing Filter

REDUCES:

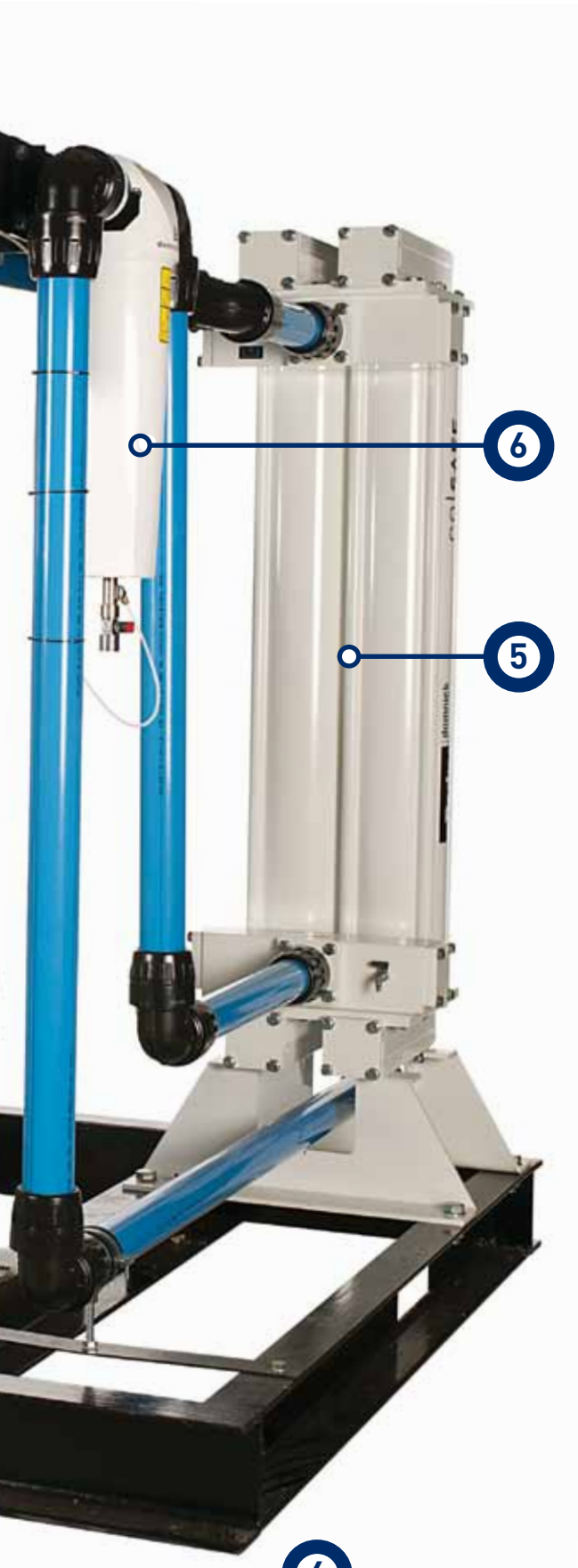
Particulate down to 1 micron, including water and oil aerosols

3

GRADE AA
Coalescing Filter

REDUCES:

Particulate down to 0.01 micron, including water and oil aerosols



Special Features

Guaranteed reliability

Built to exaction standards, the BAM series is engineered to exceed breathing air certified standards. As standard the BAM series are fitted with a CO monitor meaning that there are no high - priced additional expenses or delays to arrange external monitor fitting.

Certified air quality

The air quality produced by BAM series has been certified by a 3rd party independent authority test house. The air quality delivered by the BAM series is better than the European Pharmacopoeia standard, assuring guaranteed performance and reliability at all times.

Compact operation

The BAM series has a modular space saving footprint making it one of the most compact product series on the market. The BAM series has an energy management system fitted as standard, offering additional savings for running costs.

Simple maintenance and servicing

The BAM series has been designed with cartridges for the catalyst separation. This will ensure longer maintenance intervals which ultimately save time and servicing costs.

Ease of installation

The BAM series can be used with a general compressed air supply, and with most suitably rated compressors.

4
Adsorption Dryer
REDUCES:
Water Vapour, Carbon Dioxide (CO_2)

5
Catalyst Filter
REDUCES:
Carbon Monoxide (CO) by conversion into Carbon Dioxide (CO_2)

6
Dry Particulate Filter
REDUCES:
Particulates 99.9999% of Micro-organisms

Technical Specifications BAM

Flow Data

Model	Connections		Flowrate @ 7 bar g (100 psi g)				Dimensions						Weight (approx.)	
	Inlet	Outlet	Inlet		Outlet		Height		Width		Depth			
			l/s	cfm	l/s	cfm	mm	ins	mm	ins	mm	ins	kg	lbs
BAM10	G2"	G2"	113	240	90.4	192	1797	70.7	1260	49.6	1655	65.2	600	1322.8
BAM20	G2"	G2"	170	360	136	288	1797	70.7	1260	49.6	1655	65.2	700	1543.2
BAM30	G2"	G2"	213	450	170.4	360	2042	80.4	1260	49.6	1655	65.2	800	1763.7
BAM40	G2"	G2"	283	600	226.4	480	2042	80.4	1260	49.6	1655	65.2	900	1984.2
BAM50	G2½"	G2½"	354	750	283.2	600	2042	80.4	1260	49.6	1950	76.8	1100	2425.1
BAM70	G2½"	G2½"	496	1050	396.8	840	2042	80.4	1260	49.6	1950	76.8	1400	3086.5

Stated flows are for operation at 7 bar g (100 psi g / 0.7 MPa g) with reference to 20ºC, 1 bar a, 0% relative water vapour pressure.

Performance

Dryer Model	Pressure Dewpoint (Standard)		ISO 8573-1:2010 Water Classification
	°C	°F	(Standard)
All Models	-40	-40	Class 2

ISO 8573-1 classifications apply when the dryer is installed with the filtration supplied

Operating Data

Dryer Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp		Electrical supply (standard)	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F			dB (A)
BAM	4	58	13	188	5	41	30	86	85 - 265 V 1ph 50/60Hz	BSPP	<75

Selecting the correct purifier

Parker domnick hunter Breathing Air Purifiers are designed to reduce the concentration of potential contaminants, identified as hazardous to the human respiratory system, to acceptable levels (detailed in published International Breathing Air Standards).

Where a potential inhalation hazard exists, it is essential that a full assessment of the risk to the user is carried out. This should not only identify the risk of contamination to the breathing air supply, but also the level of contamination. In the event of being unable to either remove or control the contamination risk, it is the employers' responsibility to introduce measures to ensure that the breathing air supply complies with the required air quality standard. The air quality used in a breathing air system must be controlled under all operating conditions, including the possibility of a plant or process failure.

In addition to conforming with the required compressed air quality, the delivered air flow rate must be sufficient to meet the foreseeable needs of the total number of users at their maximum work rate consumption.

Peak Inhalation Rate

All peak inhalation rates are given as a guide only, the actual breathing air requirement should be calculated, where possible from the total requirement of the personal protection equipment, ie. mask/hood/suit.

In order to ensure that a suitably selected breathing air purifier is reliably operated and maintained, it is essential that correct training and supervision is provided to the user.

Work Rate	Peak Inhalation Rate	
	l/min	cfm
Low	100	3.6
Medium	150	5.3
High	200	7.1
Very High	250	8.9

Source BS4275 : 1997.