## **Air Amplifier / Pressure Booster**

Outlet pressure P<sub>2</sub> 4...16 bar

The pressure booster doubles the system pressure of e.g. 5 bar to an outlet pressure of 10 bar. The pumping force of two cylindrical chambers compresses the air down to the set outlet pressure within the third chamber while the fourth chamber is vented. Upon reaching the outlet pressure it is turned off, when falling below it is turned on automatically. Pressure boosters are used for occasional demand of compressed air. Description

lubricated and 50 µm filtered compressed air

Mounting position any double piston intensifier, ratio 1:2 Drive Reversing, check and swichting valves provide for automatic

control. Life time approx. 20 million switching cycles. 2...8 bar

are recommended. They compensate pressure fluctuations and allow short-term high volume flows. See circuit below. Air tanks

is a measure of booster performance. To reduce the filling time of the tank, it has to be prefilled with input pressure P<sub>1</sub>. See circuit below. Tank filling time

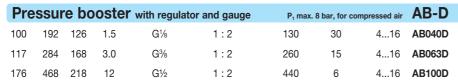
-5 °C to 50 °C / 23 °F to 122 °F Temperature range Material Cylinder: anodized aluminium seals: NBR/Buna-N



max. 4...20 bar transmission ratio 1:2

1	Dimensions		Weight	Connection	Transmission	Flow	Fill time	Pressure	Order	
	Α	В	С		thread	ratio	rate	10l-tank	range	number
	mm	mm	mm	kg	G	$P_A:P_2$	l/min*1	S	bar	

Pre	ssur	e bo	oste	r	P <sub>1</sub> max. 8	P <sub>1</sub> max. 8 bar, for compressed air			
100	192	70	1.5	G1//8	1:2	130	30	416	AB040
117	284	90	3.0	G3/8	1:2	260	15	416	AB063
176	468	155	12	G1/2	1:2	440	6	416	AB100





Media

Inlet pressure

BW00-49 Mounting plate made of steel, central attachment below for AB040 for AB063 BW00-50

Mounting bracket made of steel, mounting at the side, 1 piece for AB100



AB040



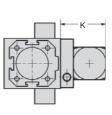
AB040D

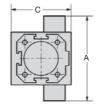
filling time 10 I tank

ure ratio P2/P

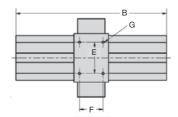
1.8

1.5





BW00-51



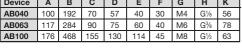
OUT

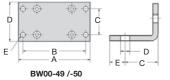
Φ

Ø 6

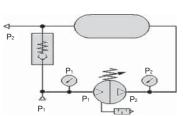
BW00-51

Device	Α	В	С	D	Е	F	G	Н	K
AB040	100	192	70	57	40	30	M4	G1//s	56
AB063	117	284	90	75	60	40	M6	G%	78
AB100	176	468	155	130	114	45	M8	G1/2	63

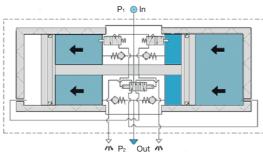




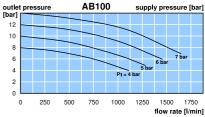
BW00-	Α	В	С	D	Е
49	82	72	30	45	5,5
50	110	98	53	70	M8
E4	G.E.	15	20	0	15



circuit with air tank



1.2 0.9 0.6 0.3 2 0 10 12 14 16 18 20 22 24 26 28 30 **AB040** supply pressure [bar] 12 10 flow rate [l/min] AB063 supply pressure [bar] outlet pressure [bar] 100 200 300 600 flow rate [l/min] AB100 supply pressure [bar]



Pressure booster with 2 I to 20 I tank on request

PDF CAD www.aircom.net



 $<sup>^{*1}</sup>$  at P<sub>2</sub> = 8 bar and 1 bar pressure drop