

Boxer Pumps > Products > Diaphragm Pump

3KD diaphragm pump with BLDC Motor.



Technical Data

Parallel Connection:

Free Flow	15.0 l/min
Max Pressure	2.0 bar
Max Vacuum	-75%
Power Consumption	11.0 to 30.0 W

Series Connection:

Free Flow	12.0 l/min
Max Pressure	2.0 bar
Max Vacuum	-94%
Power Consumption	11.0 to 30.0 W

Voltage Options	24 V DC
Max current (start-up or locked rotor), electronically limited	10.0 A
Speed	400 to 4000 rpm
Wiring Details / Speed Control	See next page
Wire Length	400 mm (5 mm stripped / tinned)
Wire Gauge	22 AWG
Max. Motor Surface Temperature	80 °C
Motor Insulation Class	B
Motor Thermal Protection	Internal / automatically re-setting

Max Ambient Operating Temperature	50 °C
Max Media Temperature	100 °C

Elastomer Options:

Diaphragm	EPDM / Nitrile / Viton / Silicone
Valves	EPDM / Nitrile / Viton / Silicone
O-Rings	EPDM / Nitrile / Viton / Silicone

Eccentric Options:	0.8 / 1.0 / 2.0 mm
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Other Wetted Parts	PPS (polyphenylene sulphide)
Mounting	Supplied with mounting bracket (see drawing, page 2)

Weight	385 g
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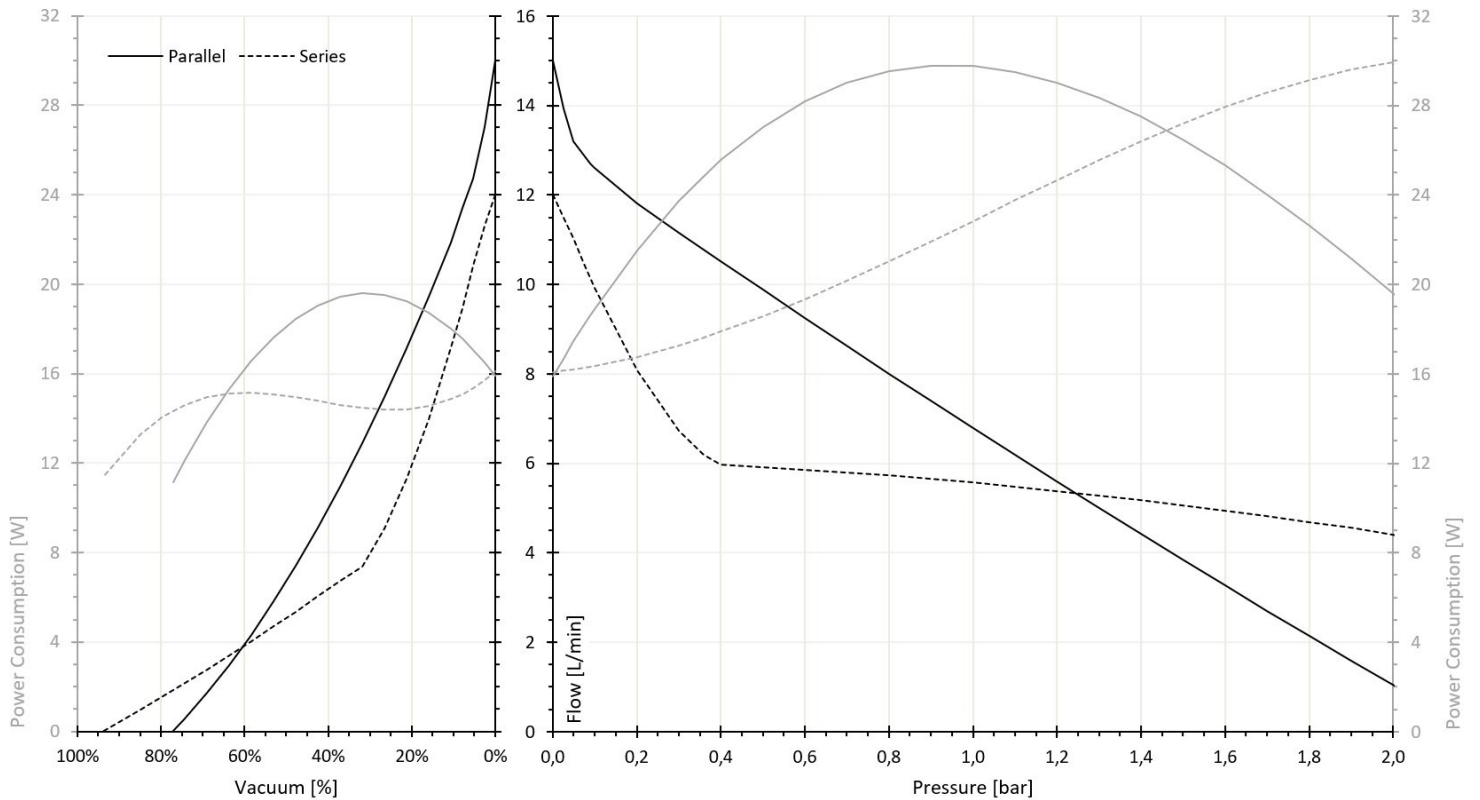
Bold indicates configuration applicable to this datasheet

Wiring Details / Speed Control

Wire:		
1	Red	24 V DC
2	Black	GND
3	Green	Speed control input: 0.5 to 4.5 V DC (or 5.0 V PWM with min. 15 kHz signal)
		Speed range: 445 to 4000 rpm
		Not recommended to run below 400 rpm (0.45 V)
		Green wire can be connected to +24 V supply for full speed (4000 rpm) operation
		Resolution: 10 bit
4	Yellow	Frequency (rpm) output, 1 pulse (+ 5.0 V) per revolution with 50% on time

Flow Curve

At max speed (Speed Input at 4.5 V DC / 4000 rpm)



Order Information

Part Number 3112.660 24 V BLDC / EPDM
 Part Number 3112.665 24 V BLDC / FKM

Part Number Explanation:
 3 1 1 2 . 6 [X] [X]
 motor type
 5: 12V BLDC
 6: 24V BLDC

wetted parts
 0: EPDM
 5: FKM / Viton

Dimensions (mm):
 Front view: 111 (total width), 41.9 (motor width), 9 (mounting bracket width), 4.0 (height), 12 (height), 8.1 (height), 21 (height), 36 (diameter), 47.9 (width), 35.9 (width).
 Top view: 74 (width), 42 (height), 14 (height), 45 (total height).
 Cable outlet may deviate ±45° from center position.

Labels:
 Inlet
 Outlet
 4x Lead Wires AWG24, length 530mm
 Ground (black)
 Supply (red)
 Speed Input (green) 0 to 5VDC
 Speed Output (yellow) 1 pulse/revolution

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BOXER		Surface Quality	Part Number	Default Tolerances	Material Colour	Format
Manufacturer: 9-47224 Odenkoven • Germany			3112.6[X][X]	ISO 2768-nK	---	A3
Rev.	Date (D.M.Y.)	ENG	APP			
01						
02						
03						
04						
05						
06						
07						
08						
09						
10	26.07.2023	ISZ	ISB	Fig. Name: 3112 for Any		
				Project		Sheet
				3K		1 of 1

DIMENSIONS STATED IN MM

All data is representative for initial selection purposes. It is the responsibility of the user to determine suitability for the intended use. Technical changes reserved.