

Boxer Pumps > Products > Diaphragm Pump

3K diaphragm pump with BLDC Motor.



Technical Data

Free Flow	7.3 l/min
Max Pressure	2.0 bar
Max Vacuum	-75%
<hr/>	
Voltage	24 V DC
Power Consumption	7.0 to 15.5 W
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
<hr/>	
Max Ambient Operating Temperature	50 °C
Max Media Temperature	100 °C
<hr/>	
Elastomer Options:	
Diaphragm	EPDM / Nitrile / Viton / Silicone
Valves	EPDM / Nitrile / Viton / Silicone
O-Rings	EPDM / Nitrile / Viton / Silicone
<hr/>	
Eccentric Options:	0.8 / 1.0 / 2.0 mm
<hr/>	
Other Wetted Parts	PPS (polyphenylene sulphide)
Mounting	Supplied with mounting bracket (see drawing, page 2)
<hr/>	
Weight	385 g

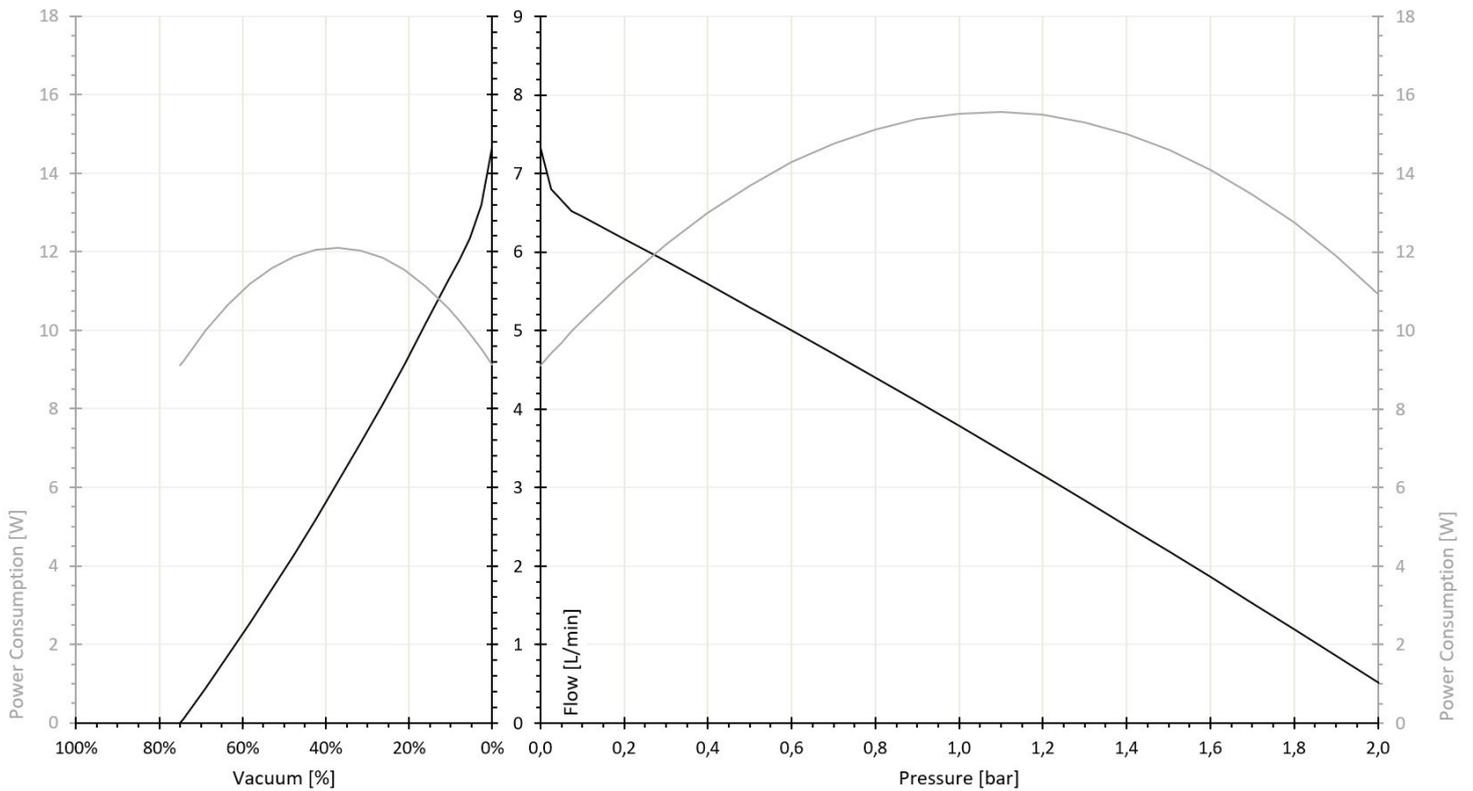
Bold indicates configuration applicable to this datasheet

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 and Power Consumption Curve

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



Order Information

Part Number 3111.660 24 V BLDC / EPDM
 Part Number 3111.665 24 V BLDC / FKM

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

wetted parts
 0: EPDM
 5: FKM / Viton

Dimensions:
 102 (total length), 38.0 (motor length), 12 (flange thickness), 6.9 (flange offset), 7.1 (flange hole offset), 23 (flange hole diameter), 102 (total length), 38 (motor length), 14 (flange diameter), 42 (total length), 38 (motor length), 14 (flange diameter), 76 (total length).

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, Cable outlet may deviate ±45° from center position.

Notes:
 2x Ø 3.5 for fixation with 2x M3 acc. to ISO7045 or similar

DISCLAIMER: ALL PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE. BOXER PUMPS AND ALL PERSONS ACTING ON THEIR BEHALF, DISCLAIM ANY AND ALL LIABILITY FOR ANY ERRORS, INACCURACIES OR INCOMPLETE INFORMATION CONTAINED IN ANY DRAWING OR ANY OTHER DISCLOSED RELATED TO ANY PRODUCT. THE CUSTOMER IS RESPONSIBLE TO VERIFY THE TECHNICAL SPECIFICATIONS DOES NOT EXCEED OR EXCEED BOXER PUMPS TERMS & CONDITIONS OF PURCHASE, INCLUDING BUT NOT LIMITED TO THE WARRANTY EXPRESSED WITHIN. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL, OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT OR BY ANY CONDUCT OF BOXER PUMPS.

BOXER
 Manufactured in Germany
 Rev. (Date, D.M.Y.) CBE CBE APP 3111.6[X][X]
 01 26.07.2023 RZA SCB SSB Fra Name: 3111.6xx_Any

Surface Quality
 Part Number: 3111.6[X][X]
 Tool Number: ---

Default Tolerances
 ISO 2768-mK

Material Colour

Part Name
 3K Gas

Project
 3K

Formal
 A3

Scale
 1:1

Sheet
 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.