# **3KQ Series - BLDC Motor**

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3KQ diaphragm pump with BLDC Motor.



## **Technical Data**

Free Flow	20.0 l/min
Max Intermittent Pressure / Max Continuous Pressure	2.0 / 0.4 bar
Max Intermittent Vacuum / Max Continuous Vacuum	-75% / -75%
Power Consumption	18.0 to 46.0 W
Series Connection:	
Free Flow	8.5 l/min
Max Intermittent Pressure / Max Continuous Pressure	2.0 / 1.6 bar
Max Intermittent Vacuum / Max Continuous Vacuum	-98% / -98%
Power Consumption	18.0 to 40.0 W
Voltage Options	24 V DC
Max current (start-up or locked rotor), electronically limited	10.0 A
Speed	400 to 3400 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	В
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 / <b>2.0</b> mm
Other Wetted Parts	PPS (polyphenylene sulphide)
Mounting	Supplied with 4 x mounting feet (see drawing, page 3)
Weight	385 g
	<b>Bold</b> indicates configuration applicable to this datasheet



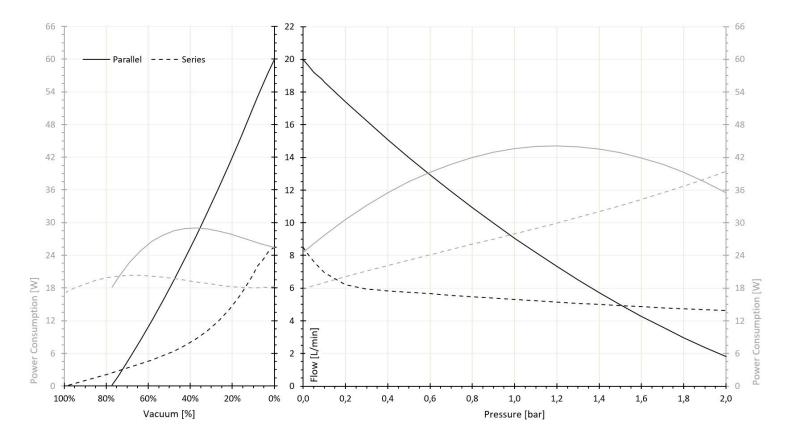
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## Wiring Details / Speed Control

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: 378 to 3400 rpm
		Not recommended to run below 400 rpm (0.53 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 / 3400 rpm)

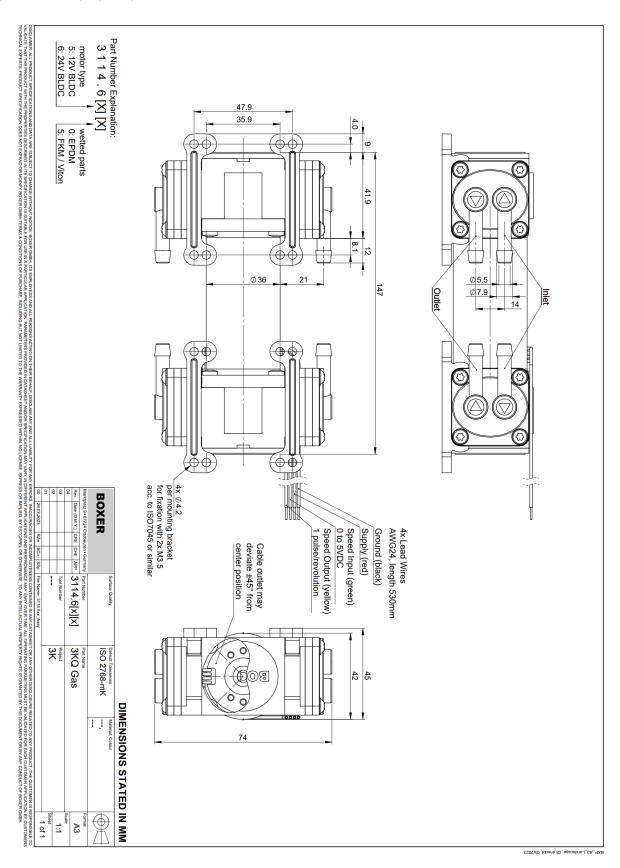


### **Order Information**

Part Number 3114.660 24 V BLDC / EPDM Part Number 3114.665 24 V BLDC / FKM



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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.

#### **BOXER**