

### FEATURES

- > Linear controllability of flow against pressure
- > Pump components are specially designed for maximum lifetime performance, even with higher pressures
- > Full compatibility with corrosive and abrasive media
- > Flexible design for customized solutions

### TYPICAL APPLICATIONS

- > Continuous Inkjet (CIJ)
- > Drop-on-Demand Inkjet (DOD)
- > In-vitro diagnostic analysis machines

### BASE MODEL

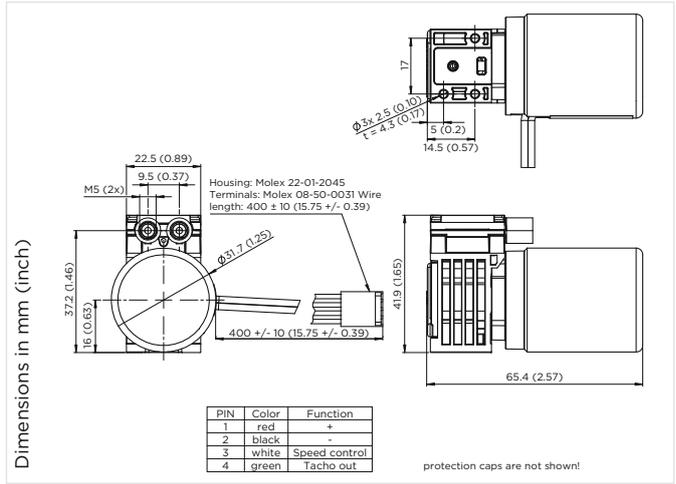
6311



Diaphragm

# Diaphragm Liquid Pump 6311

<b>Flow</b>	<b>190 ml/min</b>
<b>Pressure height</b>	<b>40 m H<sub>2</sub>O</b>
<b>Suction height</b>	<b>3 m H<sub>2</sub>O</b>



HYDRAULIC DATA		
Description	6311 BLDC HP PP/EPDM/EPDM	
Part number	12 V DC	6311 0001
	24 V DC	6311 0002
Free flow	190 ml/min	
Max. continuous pressure height	40 m H <sub>2</sub> O	
Max. suction height	3 m H <sub>2</sub> O	

WETTED PARTS	
Pump head	PPS
Diaphragm	EPDM
Valve plate	EPDM
Resonating diaphragm	EPDM

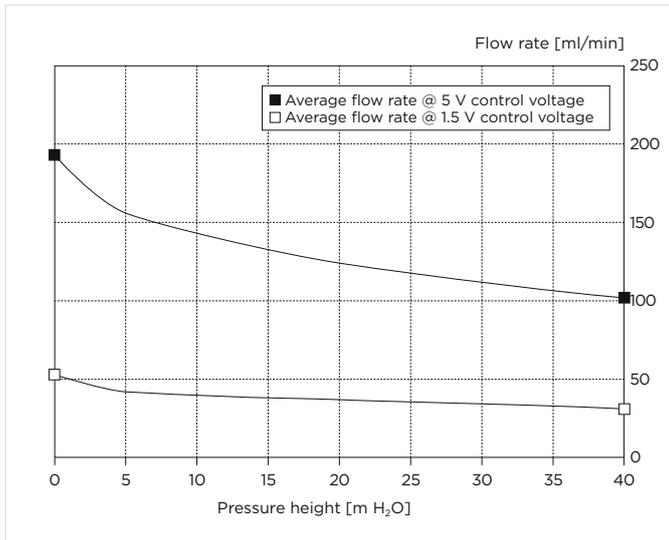
Please refer to the wiring diagram on page 3.

ELECTRICAL DATA		
Motor type	Brushless DC	
Nominal speed @ 10 m H <sub>2</sub> O	2800 rpm	
Nominal voltage	24 V DC	
Max. nominal power consumption @ 40 m H <sub>2</sub> O	2.8 W	
Motor insulation class	B	
Protection class	IP54	
EMC protection	Yes	
Connector	Housing	Molex KK 22-01-2045
	Terminal	Molex KK 08-50-0031

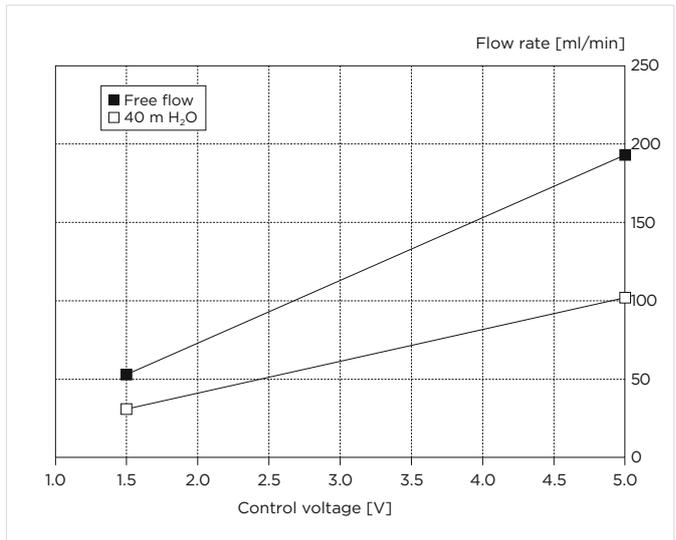
GENERAL DATA	
Ambient temperature	15 to 40 °C
Media temperature	5 to 55 °C
Weight	130 g
Pneumatic connection	thread size M5

The technical data is based on the use of PTFE measuring tubes Shore D 55, 6 x 1 mm (O.D. x wall thickness), 65 cm length / 8 x 1 mm, 15 cm length / 6 x 1 mm, 10 cm length. The use of a different tubing will change the flow.

## FLOW CURVES

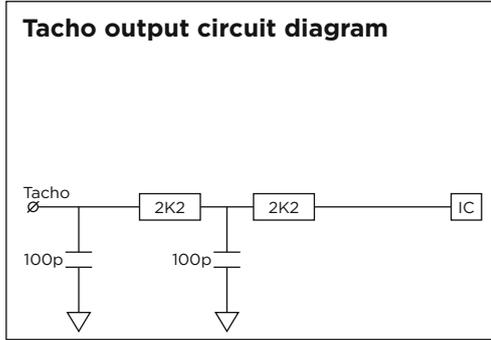
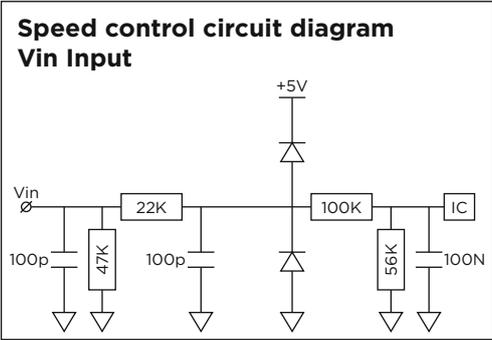


## CONTROLLABILITY

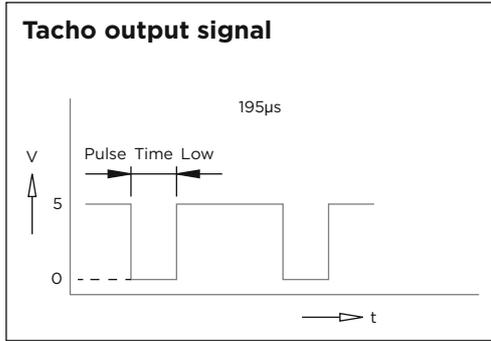


# Wiring diagram (BLDC High Performance)

	Function	Colour	Control
Pin 1	V Supply	Red	12 V DC (max. voltage range: 10..18 V DC) 24 V DC (max. voltage range: 10..28 V DC)
Pin 2	Ground	Black	Ground for Vsupply (PIN 1) and Speed Control (PIN 3) analog: 0.5 V DC PWM: 6..20kHz - 14..96% Speed voltage input threshold: 0.2 V
Pin 3	Speed Control	White	
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time „LOW“: 195 $\mu$ s Output level „LOW“: 0 / max. 0.5 V Output level „HIGH“: min. 4 V / max. 5 V



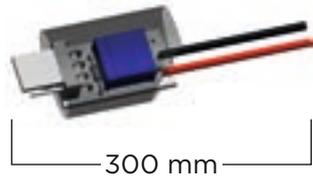
Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment



## Options / Accessories

29011932      **Adapter for BLDC motor**  
4-2 wire w/ manual speed control  
12 V DC      “red”

29011933      **Adapter for BLDC motor**  
4-2 wire w/ manual speed control  
24 V DC      “black”



96311001      **Hose barb connectors for M5 female thread**  
2x connectors / 2x O-rings

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