6311 Series



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



6311 BLDC





Diaphragm

Diaphragm Liquid Pump 6311 BLDC

Flow	190 ml/min
Pressure height	40 m H₂O
Suction height	3 m H₂O





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 ₂ O
Max. suction height		3 m H ₂ O

ELECTRICAL DATA

Motor type		Brushless DC
Nominal speed (a) 10 m H₂O	2800 rpm
Nominal voltage		24 V DC
Max. nominal power consumption @ 40 m H₂O		2.8 W
Motor insulation class		В
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



WETTED PARTS

Pump head	PPS
Diaphragm	EPDM
Valve plate	EPDM
Resonating diaphragm	EPDM

CONTROLLABILITY



Wiring diagram (Brushless DC motor)

	Function	Colour	Control
Pin 1	V Supply	Red	12 V DC (10 - 18 V, reverse polarity protected) 24 V DC (10 - 28 V, reverse polarity protected)
Pin 2	Ground	Black	Ground for V supply (PIN 1) and Speed Control (PIN 3)
Pin 3	Speed Control	White	Speed control range 0 - 5 V PWM: 6 - 20 kHz
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time "LOW": 195 μs 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



PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

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