

6311 Series

THOMAS
by Gardner Denver

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

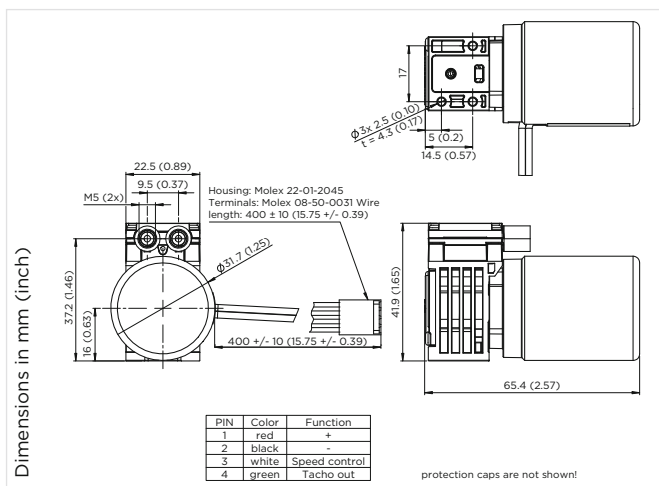
6311 BLDC



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	

WETTED PARTS

Pump head	PPS
Diaphragm	EPDM
Valve plate	EPDM
Resonating diaphragm	EPDM

ELECTRICAL DATA

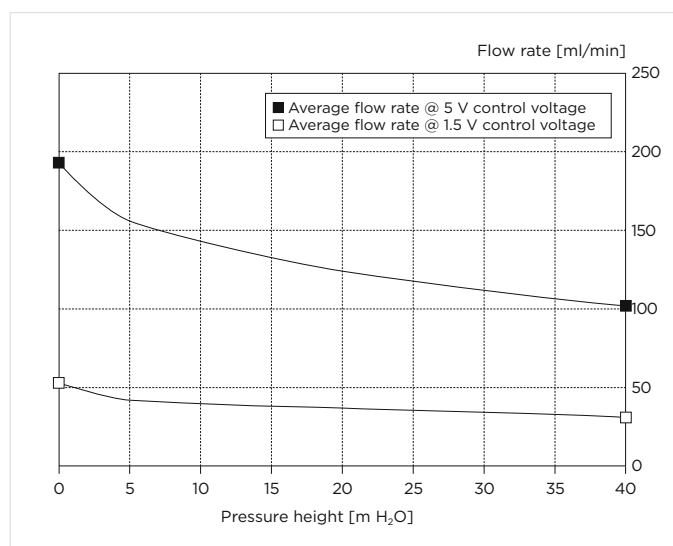
Motor type	Brushless DC	
Nominal speed @ 10 m H ₂ O	2800 rpm	
Nominal voltage	24 V DC	
Max. nominal power consumption @ 40 m H ₂ O	2.8 W	
Motor insulation class	B	
Protection class	IP54	
EMC protection	Yes	
Connector	Housing	Molex KK 22-01-2045
	Terminal	Molex KK 08-50-0031

GENERAL DATA

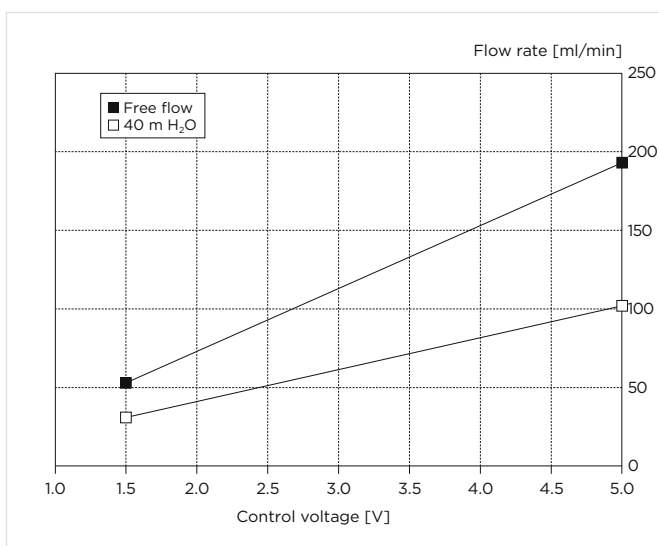
Ambient temperature	15 to 40 °C
Media temperature	5 to 55 °C
Weight	130 g
Pneumatic connection	thread size M5

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

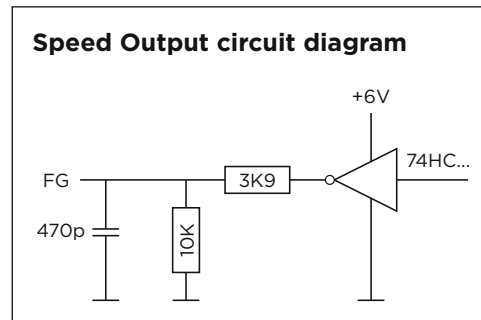
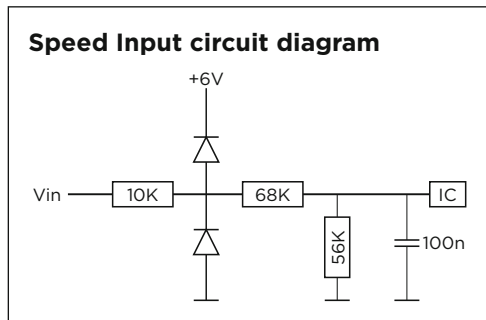


CONTROLLABILITY

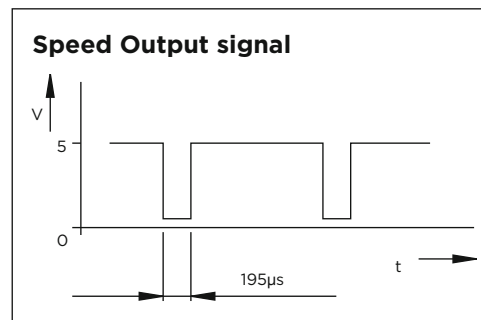


Wiring diagram (Brushless DC motor)

	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 μ s Output level "LOW": 0 / Max. 0.5 V Output level "HIGH": Min. 4 V / Max. 5 V



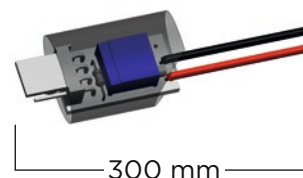
Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment



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

PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

gd-thomas.com



Gardner Denver Thomas GmbH

Livry-Gargan-Str. 10
82256 Fürstenfeldbruck
Germany
T +49 8141 2280 0
F +49 8141 8892136
thomas.de@gardnerdenver.com

Gardner Denver Hong Kong, Limited

Unit 1317-1318 Delta House, 3 On Yiu Street
Siu Lek Yuen, Shatin, New Territories
Hong Kong
T +852 26903502
F +852 27924598
thomas.hk@gardnerdenver.com

Gardner Denver Thomas, Inc.

1419 Illinois Avenue
Sheboygan, WI 53081
USA
T +1 920 4574891
F +1 920 4514276
td.usa@gardnerdenver.com

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