

6420 Series

THOMAS
by Gardner Denver

FEATURES

- > High efficiency
- > Smooth, continuous liquid flow with minimized pulses
- > Bubble-free transfer of media
- > Excellent reliability and durability even with corrosive and abrasive media
- > Flexible design for customized solutions

TYPICAL APPLICATIONS

- > Continuous Inkjet (CIJ)
- > Drop-on-Demand Inkjet (DOD)
- > In-Vitro Diagnostics (IVD)

BASE MODEL

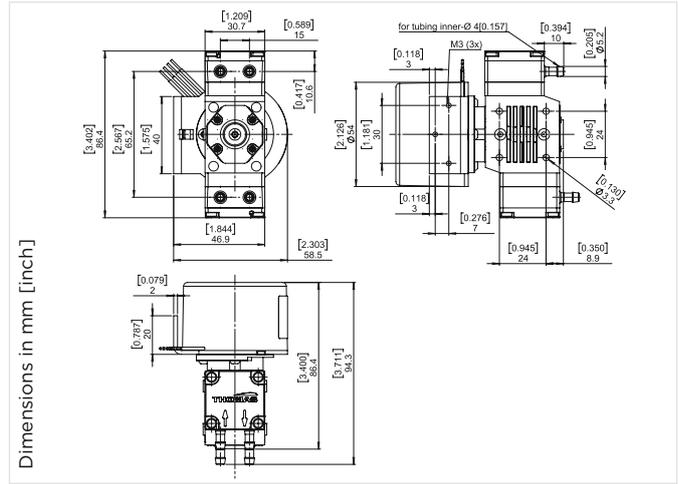
6420 BLDC



Diaphragm

Diaphragm Liquid Pump 6420 BLDC

Flow	1800 ml/min
Pressure height	10 m H₂O
Suction height	3 m H₂O



HYDRAULIC DATA

Description	6420 BLDC PP/EPDM/EPDM		6420 BLDC PP/PTFE/FFKM	
Part number	12 V DC	6420 0102	24 V DC	6420 0104
		6420 0002		6420 0004
Free flow	1800 ml/min		1700 ml/min	
Max. continuous pressure height	10 m H ₂ O		10 m H ₂ O	
Max. suction height	3 m H ₂ O		3 m H ₂ O	

ELECTRICAL DATA

Motor type	Brushless DC	Brushless DC
Nominal speed @ 10 m H ₂ O	3100 rpm	3100 rpm
Nominal voltage	12/24 V DC	12/24 V DC
Max. nominal power consumption @ 10 m H ₂ O	10 W	9 W
Motor insulation class	F	F
Protection class	IP30	IP30
EMC protection	Yes	Yes

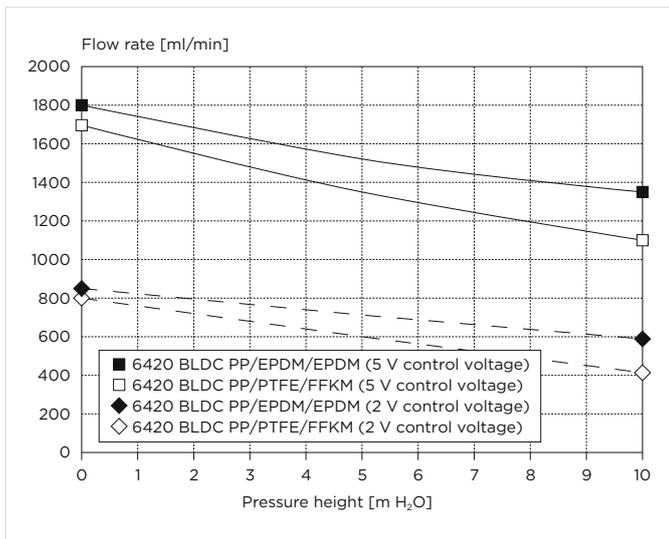
GENERAL DATA

Ambient temperature	5 to 40°C	5 to 40°C
Media temperature	5 to 80°C	5 to 80°C
Weight	390 g	390 g

WETTED PARTS

Pump head	PP with hose barbs	PP with hose barbs
Diaphragm	EPDM	PTFE
Valve plate	EPDM	FFKM
Resonating diaphragm	PTFE	PTFE

FLOW CURVES



ELECTRICAL MOTOR DATA

Pin	Function	Color	Control
1	V Supply	Red	12 V DC (10 - 15 V DC) 24 V DC (14 - 28 V DC)
2	Ground	Blue	Ground for V Supply (Pin 1) and speed control (Pin 3)
3	Speed control	White	Analogue: 0 - 5 V DC (max. 30 V) PWM: 6 - 20 kHz - 4 - 94 % Speed voltage input threshold: 1.0 V
4	Tacho out	Green	6 pulses per revolution Pulse time "HIGH": 33% duty cycle Output level "LOW": 0 / max. 0.5 V Output level "HIGH": min. 4.2 V / max. 5.5 V

OPTIONS

- Pump head with compression fittings (tubing ID 4 mm / OD 6 mm)
- Diaphragm FFKM
- Polypropylene pump head optimized for low UV-light transmittance

6420... Stock programme



PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

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