

FEATURES

- > Excellent aspiration performance
- > Valve system optimized for gas/liquid mixtures
- > High efficiency
- > Excellent reliability and durability even with corrosive and abrasive media
- > Flexible design for customized solutions

TYPICAL APPLICATIONS

- > In-vitro diagnostics
- > Inkjet printers
- > Condensate removal

BASE MODEL

6313 BLDC S



Diaphragm

Diaphragm Liquid Pump 6313 BLDC Standard

Max. liquid flow	0.35 l/min
Max. gas flow	2.3 l/min
Pressure height (liquid)	10.0 m H ₂ O
Final vacuum (gas)	70 %
Intended use	Aspiration of liquids



HYDRAULIC DATA*

Max. flow [l/min]	0.35
Max. cont. pressure [m H ₂ O]	10.0
Max. suction height [m H ₂ O]	7.0

PNEUMATIC DATA*

Max. flow [l/min]	2.3 (EPDM) / 1.6 (PTFE) l/min
Max. cont. pressure [mbar rel.]	1.100
Max. vacuum [%]	70

OPERATING CONDITIONS*

Media temperature (liquid) [°C]	5 to 80
Ambient temperature [°C]	5 to 40
Storage temperature [°C]	-30 to +70

*Part number 63130002 and 63130004 as reference

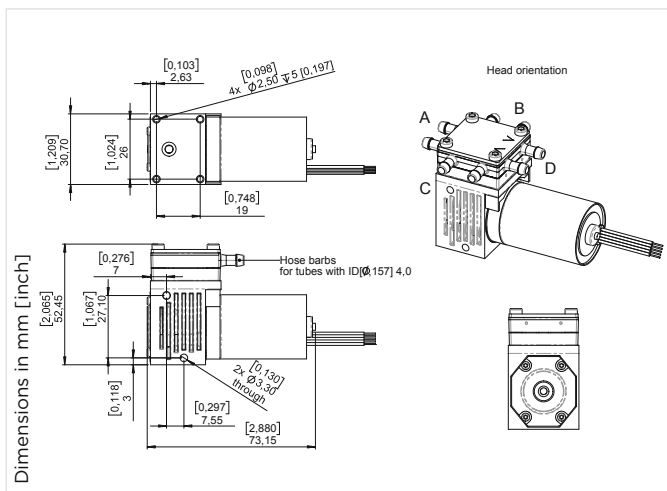
PHYSICAL DATA

Dimensions l x w x h [mm]	73 x 31 x 52
Weight [g]	150
Mounting on side [mm]	Through hole Ø 3.3

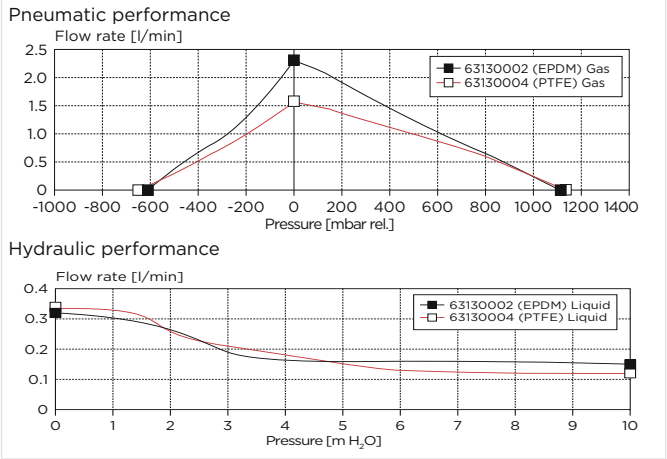
ELECTRICAL DATA

Motor type	Brushless DC
Nominal voltage	12/24 V DC
Max. power consumption [W]	5.2 (liquid operation)
Insulation class	A
Protection class	IP30
Drive electronics	Integrated

DIMENSIONAL DRAWING



FLOW CURVES



ELECTRICAL CONNECTION

Pin 1	V Supply	Red	12 V DC (max. range 8.0 - 14.0 V) 24 V DC (max. range 8.0 - 26.4 V)
Pin 2	Tacho out	Green	Output, signal current 2 mA 3 pulses / cycle ,Low': min. 0V / max. 0.5V ,High': min. 2V / max. 6V
Pin 3	Rot. direction	Yellow	Input DC Voltage - CW ,Low': min. 0V / max. 0.5V - CCW ,High': min. 2V / max. 5.5V or open
Pin 4	Ground	Black	Power Ground
Pin 5	Speed control	Blue	Input - PWM freq. 10 - 30 kHz - PWM duty cycle 4 - 100% (0% = max. rpm / 100% = 0 rpm) ,Low': min 0V / max. 0.5V ,High': min. 2V / max. 5.5V or open

MODEL KEY

6313 - F - O - D - 24V - BLDC S - 4200 - 13 - EE - PP - HB

Pos	Options	Description
1	6313	Product Line
2	F	Fluid operation
3	0	Tubing: no tubing included
4	A / B / C / D	Port position: standard D over motor
5	12V / 24V	Nominal voltage
6	BLDC S	Motor: BLDC Standard
7	4200	Nominal motor speed (motor dependent)
8	10 / 13	Eccentric: e.g. 13 → 1.3 mm
9	EE / PF	Diaphragm, valve material: EPDM / PTFE / FFKM
10	PP	Pump head material: Polypropylene
11	HB / DN	Hose Barbs / DN 4/6 compression fittings

ORDER INFORMATION

Part Number	Model Key
63130002	6313-F-0-D-24V-BLDC S-4200-13-EE-PP-HB
63130004	6313-F-0-D-24V-BLDC S-4200-10-PF-PP-HB
63130102	6313-F-0-D-12V-BLDC S-4200-13-EE-PP-HB
63130104	6313-F-0-D-12V-BLDC S-4200-10-PF-PP-HB
Other configurations	Upon request
To order call	ASIA +86 510 6878 2258
To order call	EMEA +49 8141 22800
To order call	USA +1 920 457 4891
Or go online @	www.gd-thomas.com

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