

6313 Series



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

6313 DC S



Diaphragm

Diaphragm Liquid Pump 6313 BLDC Standard

Max. liquid flow	350 ml/min
Max. gas flow	2.3 l/min
Pressure height (liquid)	1000 mbar (rel.)
Final vacuum (gas)	-700 mbar (rel.)

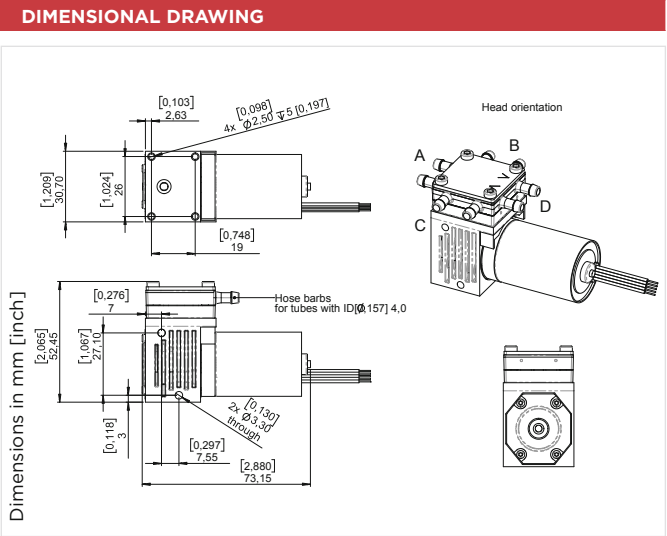


HYDRAULIC DATA	
Max. flow [ml/min]	350
Max. cont. pressure [mbar rel.]	1.000
Max. suction height [mbar rel.]	-700

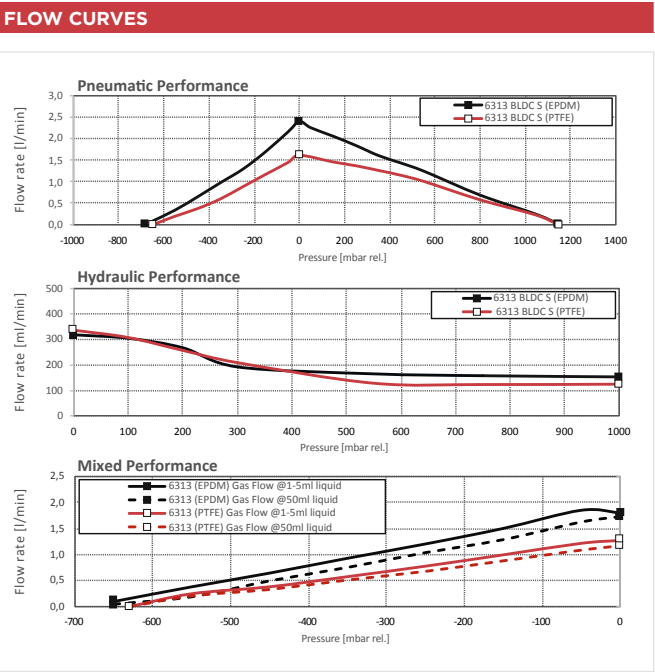
PNEUMATIC DATA	
Max. flow [l/min]	2.3 (EPDM) / 1.5 (PTFE)
Max. cont. pressure [mbar rel.]	1.100
Max. vacuum [mbar rel.]	-700

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

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



ORDER INFORMATION	
Part Number	Model Key
63130002	6313-F-O-D-24V-BLDC S-4200-13-EEE-PP-HB
63130004	6313-F-O-D-24V-BLDC S-4200-10-PFF-PP-HB
63130102	6313-F-O-D-12V-BLDC S-4200-13-EEE-PP-HB
63130104	6313-F-O-D-12V-BLDC S-4200-10-PFF-PP-HB
Other configurations	Upon request



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

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	3 pulses / cycle, signal current 2mA
	Output level		,Low': min. 0V / max. 0.5V
	Output level		,High': min. 2V / max. 6V
Pin 3	Rot. direction	Yellow	Input voltage range 0 - 5.5V
	Input level		,Low': min. 0V / max. 0.5V (CW)
	Input level		,High': min. 2V / or open (CCW)
Pin 4	Ground	Black	Power Ground
Pin 5	Speed control	Blue	Input voltage range 0 - 5.5V
	PWM freq.		10 - 30 kHz
	PWM ampl.		,Low': min 0V / max. 0.5V (ON)
	PWM ampl.		,High': min. 2V or open (OFF)

MODEL KEY		
6313 - F - O - D - 24V - BLDC S - 4200 - 13 - EEE - PP - HB		
Pos	Options	Description
1	6313	Product Line
2	F	Fluid operation
3	O	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	EEE / PFF	Diaphragm, valve / sealing: EPDM / PTFE / FFKM
10	PP	Pump head material: Polypropylene
11	HB / DN	Hose Barbs / DN 4/6 compression fittings

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. Thomas does not warrant, guarantee or assume any obligation or liability in connection with this information.

Diaphragm Liquid Pump 6313 DC Standard

Max. liquid flow	550 ml/min
Max. gas flow	2.3 l/min
Pressure height (liquid)	1000 mbar (rel.)
Final vacuum (gas)	-700 mbar (rel.)



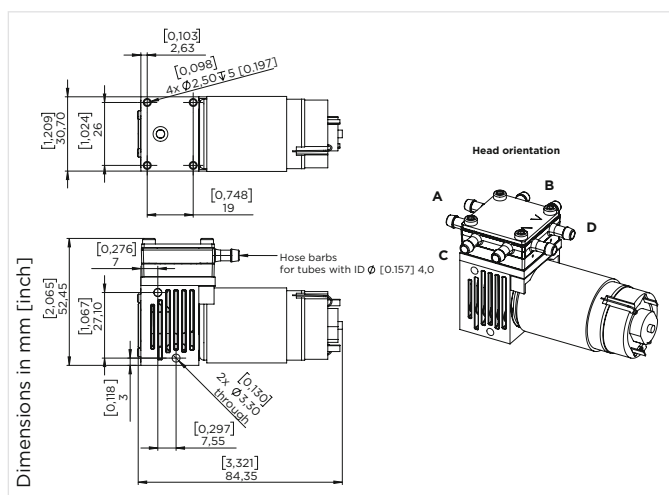
HYDRAULIC DATA	
Max. flow [ml/min]	550
Max. cont. pressure [mbar rel.]	1.000
Max. suction height [mbar rel.]	-700

PNEUMATIC DATA	
Max. flow [l/min]	2.2 (EPDM) / 1.4 (PTFE)
Max. cont. pressure [mbar rel.]	1.100
Max. vacuum [mbar rel.]	-700

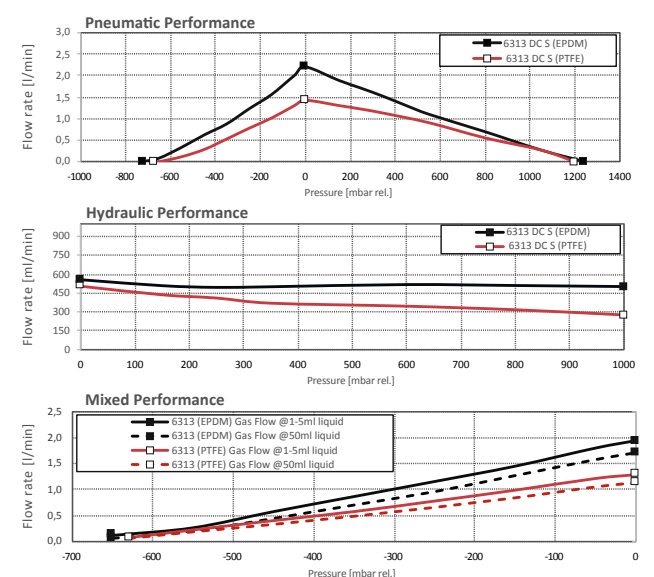
OPERATING CONDITIONS	
Media temperature (liquid) [°C]	5 to 80
Ambient temperature [°C]	5 to 40
Storage temperature [°C]	-30 to +70

PHYSICAL DATA	
Dimensions l x w x h [mm]	73 x 31 x 49
Weight [g]	150
Mounting on side [mm]	Through hole Ø 3.3

DIMENSIONAL DRAWING



FLOW CURVES



ELECTRICAL DATA

Motor type	Brushed DC
Nominal voltage	12/24 V DC
Max. power consumption [W]	9.2 (liquid operation)
Insulation class	F
Protection class	IP00

MODEL KEY

6313 - F - O - D - 24V - DC S - 3200 - 13 - EEE - PP - HB

Pos	Options	Description
1	6313	Product Line
2	F	Fluid operation
3	O	Tubing: no tubing included
4	A / B / C / D	Port position: standard D over motor
5	12V / 24V	Nominal voltage
6	DC S	Motor: DC Standard
7	3200	Nominal motor speed (motor dependent)
8	10 / 13	Eccentric: e.g. 13 ⇒ 1.3 mm
9	EEE / PFF	Diaphragm, valve / sealing: 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
63130005	6313-F-O-D-24V-DC S-3200-13-EEE-PP-HB
63130007	6313-F-O-D-24V-DC S-3200-10-PFF-PP-HB
63130105	6313-F-O-D-12V-DC S-3200-13-EEE-PP-HB
63130107	6313-F-O-D-12V-DC S-3200-10-PFF-PP-HB
Other configurations	Upon request

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