1610 Series

FEATURES

- > Oil-less, non lubricated
- > Comfortable sound emission: low sound and vibration throughout performance range
- > High evacuation speed: up to 30 % faster than industry standard
- > Unmatched performance stability
- > Excellent reliability over lifetime

TYPICAL APPLICATIONS

- >Medical Devices
- >Gas Detectors and Samplers
- >Laboratory Workstations and Analyzers



BASE MODEL

1610VD





Diaphragm

Diaphragm Pump 1610VD DC EPDM

Flow	8.0 I/min
Final Vacuum	90 %
Final Pressure	2.0 bar



PNEUMATIC DATA

Max. flow	8.0 l/min
Max. intermittent vacuum	90%
Max. continuous vacuum	90%
Max. restart vacuum	90%
Max. intermittent pressure	2.0 bar
Max. continuous pressure	1.0 bar
Max. restart pressure	application dependent

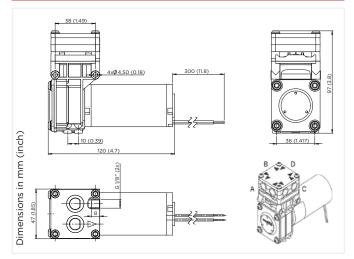
OPERATING CONDITIONS

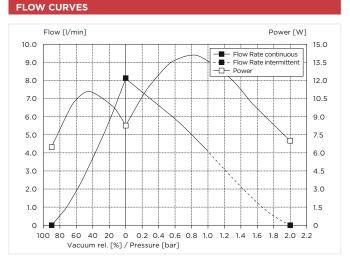
Media temperature	5 to 40 °C
Ambient temperature	5 to 40 °C
Storage temperature	-25 to 55 °C
Storage humidity	30 to 70% (no condensation)

PHYSICAL DATA

Dimensions I x w x h	120 x 47 x 97 mm
Weight	640 g
Pneumatic connection	thread size G1/8"
Mounting-base	self tapping screw ø 4 mm (4x)
Mounting-side	through hole ø 4.5 mm

DIMENSIONAL DRAWING





ELECTRICAL DATA

Motor type	DC brushed
Nominal voltage	12/24 V DC
Max. power consumption	14.5 W
Insulation class	E
Protection class	IP40

ELECTRICAL DATA	
Cable wire red	Plus
Cable wire black	Minus

мо	DEL KEY	
1610 - VD - 0 - D - 12V - DC - 2800 - 23 - EEE - PPS-T		
Pos	Options	Description
1	1610	Product Line
2	VD	Vacuum-Pressure
3	0	Without tubing
4	A/B/C/D	Port position: D (standard)
5	12 V/24 V	Nominal voltage
6	DC	Motor: Quality DC
7	2800	Nominal motor speed
8	23	Eccentric: e.g. 23 ⇔ 2.3 mm
9	EEE/FFF	Diaphragm, valve, seal material: EPDM/FKM
10	PPS-T	Pump head material: Ryton

ORDER INFORMATION

Part Number	Model Key	
16100000W	1610-VD-0-D-12V-DC-2800-23-EEE-PPS-T	
16100010W	1610-VD-0-D-24V-DC-2800-23-EEE-PPS-T	
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.trythomaspumps.com	
Or go online @	www.gardnerdenver.com/en-us/thomas	

Diaphragm Pump 1610VD DC FKM

Flow	7.9 l/min
Final Vacuum	90 %
Final Pressure	1.8 bar



PNEUMATIC DATA

Max. flow	7.91/min
Max. intermittent vacuum	90%
Max. continuous vacuum	90%
Max. restart vacuum	90%
Max. intermittent pressure	1.8 bar
Max. continuous pressure	1.0 bar
Max. restart pressure	application dependent

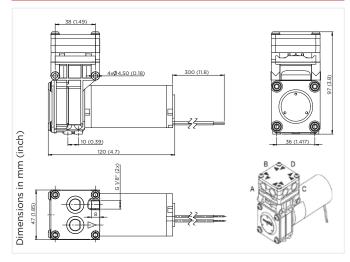
OPERATING CONDITIONS

Media temperature	5 to 40 °C
Ambient temperature	5 to 40 °C
Storage temperature	-25 to 55°C
Storage humidity	30 to 70% (no condensation)

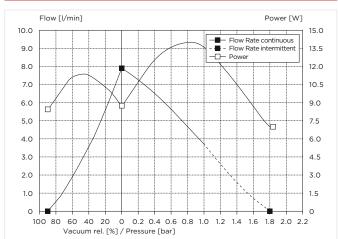
PHYSICAL DATA

Dimensions I x w x h	120 x 47 x 97 mm
Weight	648g
Pneumatic connection	thread size G1/8"
Mounting-base	self tapping screw ø 4 mm (4x)
Mounting-side	through hole ø 4.5 mm

DIMENSIONAL DRAWING



FLOW CURVES



ELECTRICAL DATA

Motor type	DC brushed
Nominal voltage	12/24 V DC
Max. power consumption	14.0 W
Insulation class	E
Protection class	IP40

ELECTRICAL DATA	
Cable wire red	Plus
Cable wire black	Minus

MODEL KEY				
1610 - VD - 0 - D - 12V - DC - 2800 - 23 - FFF - PPS-T				
Pos	Options		Description	
1	1610		Product Line	
2	VD		Vacuum-Pressure	
3	0		Without tubing	
4	A/B/C/D		Port position: D (standard)	
5	12 V/24 V		Nominal voltage	
6	DC		Motor: Quality DC	
7	2800		Nominal motor speed	
8	23		Eccentric: e.g. 23 ⇔ 2.3 mm	
9	EEE/FFF		Diaphragm, valve, seal material: EPDM/FKM	
10	PPS-T		Pump head material: Ryton	

ORDER INFORMATION Part Number Model Key 16101000W 1610-VD-0-D-12V-DC-2800-23-FFF-PPS-T 16101010W 1610-VD-0-D-24V-DC-2800-23-FFF-PPS-T Other configurations Upon request +86 510 6878 2258 ASIA To order call To order call EMEA +49 8141 22800 To order call USA +1 920 457 4891 Or go online @ www.trythomaspumps.com Or go online @ www.gardnerdenver.com/en-us/thomas

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