1620 Series



FEATURES

- > Oil-less, non lubricated
- > Comfortable sound emission: low sound and vibration throughout performance range
- > Unmatched performance stability
- > Excellent reliability over lifetime

TYPICAL APPLICATIONS

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



1620VD





Diaphragm Pump 1620VDP DC EPDM

Flow	16.5 I/min
Final Vacuum	87 %
Final Pressure	1.8 bar



FLOW CURVES Flow [I/min] 18.0 36.0 Flow Rate continuous Flow Rate intermittent Dower 32.0 16.0 14.0 28.0 24.0 12.0 10.0 20.0 16.0 8.0 6.0 12.0 4.0 8.0 4.0 2.0 0 100 80 60 40 20 0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 Vacuum rel. [%] / Pressure [bar]

PNEUMATIC DATA

Max. flow	16.5 l/min
Max. intermittent vacuum	87%
Max. continuous vacuum	87%
Max. restart vacuum	87%
Max. intermittent pressure	1.8 bar
Max. continuous pressure	1.0 bar
Max. restart pressure	application dependent

ELECTRICAL DATA

Motor type	DC brushed
Nominal voltage	12/24 V DC
Max. power consumption	26.5 W
Insulation class	E
Protection class	IP40

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)

ELECTRICAL DATA

Cable wire red	Plus
Cable wire black	Minus

PHYSICAL DATA

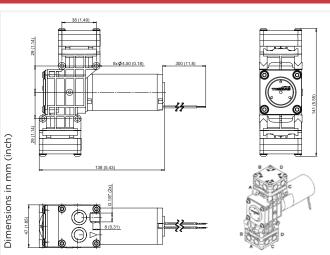
Dimensions I x w x h	138 x 47 x 141 mm
Weight	750 g
Pneumatic connection	thread size G1/8"
Mounting-side	through hole ø 4.5 mm

MODEL KEY

1620 - VD - 0 - DD - 12V - DC - 2800 - 22 - EEE - PPS-T

Pos	Options	Description
1	1620	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	22	Eccentric: e.g. 22 ⇒ 2.2 mm
9	EEE/FFF	Diaphragm, valve, seal material: EPDM/FKM
10	PPS-T	Pump head material: Ryton

DIMENSIONAL DRAWING



ORDER INFORMATION

Part Number	Model Key	Model Key	
16200000W	1620-VD-0	1620-VD-0-DD-12V-DC-2800-22-EEE-PPS-T	
16200010W	1620-VD-0-DD-24V-DC-2800-22-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 1620VDP DC FKM

Flow	16.0 I/min
Final Vacuum	87 %
Final Pressure	1.75 bar



FLOW CURVES Flow [I/min] 16.0 32.0 14.0 28.0 12.0 24.0 10.0 20.0 16.0 8.0 6.0 12.0 4.0 8.0 2.0 4.0 0 100 80 60 40 20 0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 Vacuum rel. [%] / Pressure [bar]

Max. flow Max. intermittent vacuum Max. continuous vacuum Max. restart vacuum Max. intermittent pressure Max. continuous pressure Max. continuous pressure Max. continuous pressure Max. continuous pressure Max. restart pressure Max. restart pressure Max. restart pressure Application dependent

Motor type	DC brushed
Nominal voltage	12/24 V DC
Max. power consumption	25.0 W
Insulation class	E
Protection class	IP40

ELECTRICAL DATA

MODEL KEY

10 PPS-T

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)

ELECTRICAL DATA	
Cable wire red	Plus
Cable wire black	Minus

PHYSICAL DATA	
Dimensions I x w x h	138 x 47 x 141 mm
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9	EEE/FFF	Diaphragm, valve, seal material: EPDM/FKM	

Pump head material: Ryton

1620 - VD - 0 - DD - 12V - DC - 2800 - 22 - FFF - PPS-T

DIMENSIONAL DRAWING	
(inch)	(8.83) A.A.
Dimensions in mm (inch)	

ORDER INFORMATION				
Part Number	Model Key			
16201000W	1620-VD-0-DD-12V-DC-2800-22-FFF-PPS-T			
16201010W	1620-VD-0-DD-24V-DC-2800-22-FFF-PPS-T			
Other configurations	Upon request			
To order call	ASIA	+86 510 6878 2258		
To order call	EMEA	+49 8141 22800		
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Or go online @	www.gardnerdenver.com/en-us/thomas			



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