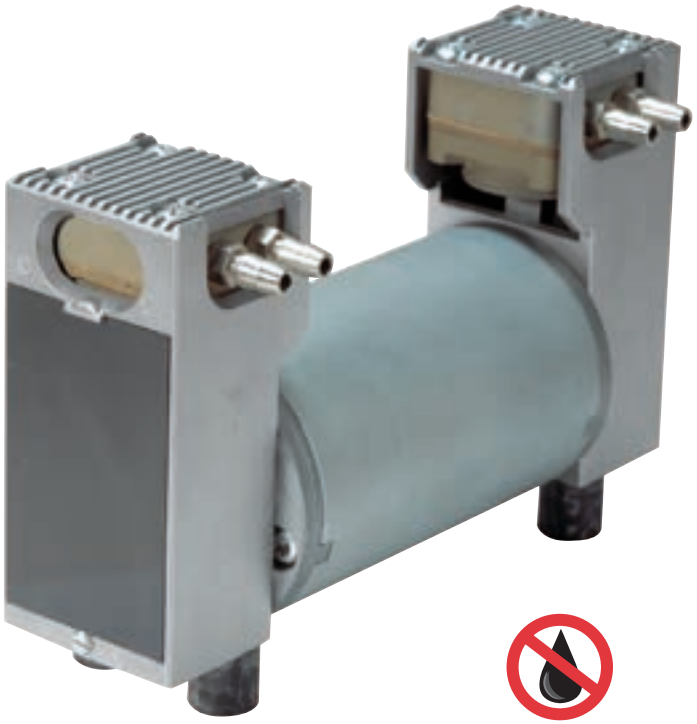
WOB-L™ Piston Air Compressors and Vacuum Pumps

MODELS

8003
8005
8006
8009



FEATURES

- Service free and oil-less
- Compact design
- Balanced for smooth, low vibration operation
- Suitable for continuous running
- Wetted parts
  - Series 8003/8005/8006 heat resistant high performance plastic, Elastomer valves
  - Series 8009 corrosion resistant aluminium parts, stainless steel valves
  - Long-life, high performance piston seal (PTFE compound)

TYPICAL APPLICATIONS

- Medical industry
- Laboratory and Analysis technology
- Automotive
- Equipment manufacturing

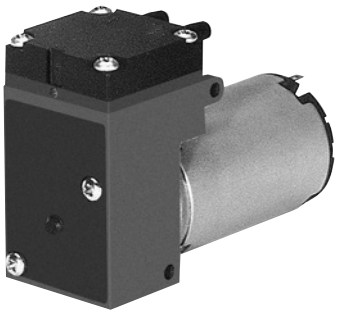
Consult factory for customized solutions

TÜV SÜD ISO 9001

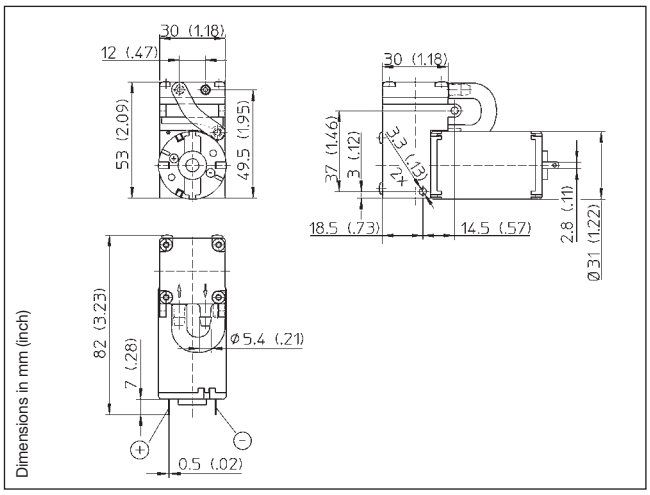
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8003D DC

Flow	**3,0 l/min**
Max. pressure	**2,0 bar**



OIL-LESS



Pneumatic Data

Description		8003D/22/1,2/E/DC	8003D/24/1,2/E/DC
	12 V DC	80030054	80030055
	24 V DC	80030057	80030058
Max. flow		2,5 l/min	3,0 l/min
Max. pressure		2,0 bar	2,0 bar
Max. continuous pressure		1,0 bar	0,8 bar
Max. restart pressure		1,0 bar	0,8 bar

Electrical Data

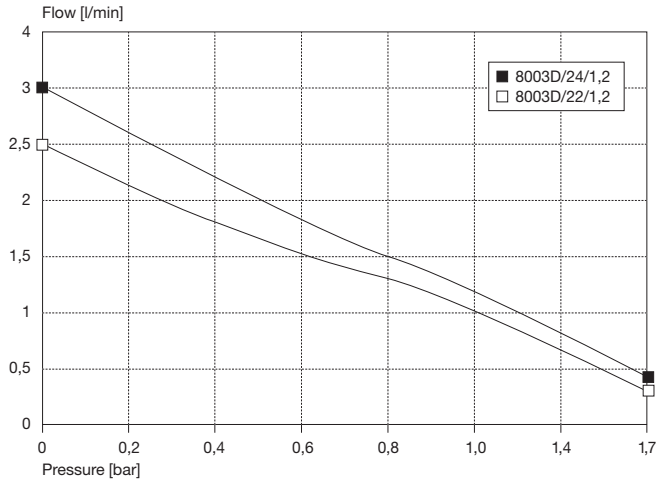
Motor type	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC
Nominal speed	3000 rpm	3000 rpm
Power consumption	7,5 W	8,5 W
Motor insulation class	A	A

General Data

Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	0,19 kg	0,19 kg
Port direction	D	D

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:

D = Pressure E = EPDM
Motor type
8003 D / 22 / 1,2 / E / DC
Series
Eccentric
Piston Ø

8003... Stock programme

Option:
Low cost DC-motor

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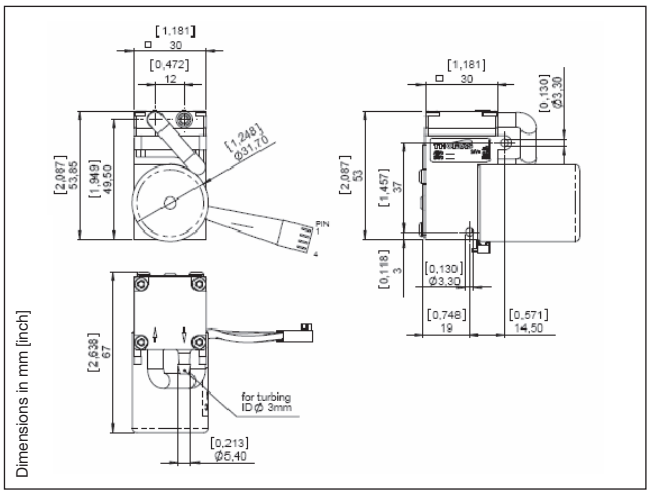
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8003D BLDC

Flow	**4,3 l/min**
Max. pressure	**2,0 bar**



OIL-LESS



Pneumatic Data

Description		8003D/24/1,2/E/BLDC
Part number	12 V DC	80030802
	24 V DC	80030803
Max. flow		4,3 l/min
Max. pressure		2,0 bar
Max. continuous pressure		1,0 bar
Max. restart pressure		2,0 bar

Electrical Data

Motor type		Brushless DC
Nominal speed		0..4.600 rpm
Nominal voltage		12/24 V DC
Drive electronics		integrated with reverse supply voltage protection
Max. power consumption		8,5 W
Motor insulation class		B
Protection class		IP20
Connector	Housing:	Molex KK 22-01-2045
	Terminal:	Molex KK 08-50-0031

Wiring diagram

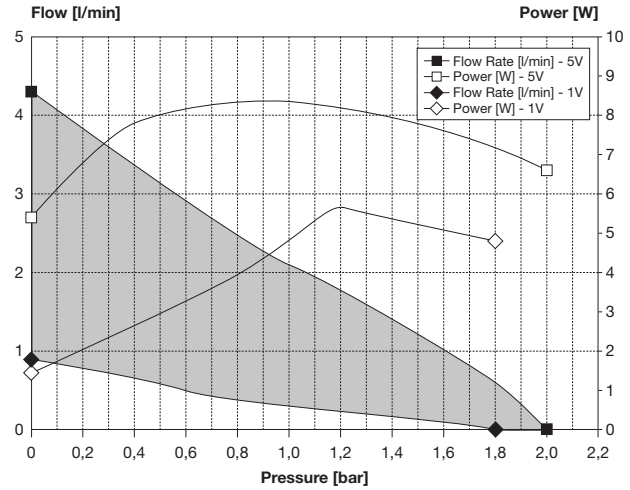
Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment

	Function	Colour	Control
Pin 1	V Supply	Red	12 VDC (max. voltage range: 10..18 VDC) 24 VDC (max. voltage range: 10..28 VDC)
Pin 2	Ground	Black	Ground for Vsupply (PIN 1) and Speed Control (PIN3)
Pin 3	Speed control	White	analog: 0..5 VDC (max. 28V) PWM: 6..20 kHz - 14..96% Speed voltage input threshold: 0,2 V
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time „LOW“: 195 µs Output level „LOW“: 0 / max. 0,5 V Output level „HIGH“: min. 4 V / max. 5 V

General Data

Ambient temperature	15..40°C
Media temperature	15..40°C
Weight	160 g
Port direction	D

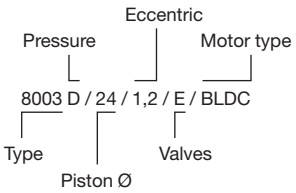
Flow Curves vs. Speed Control Input



Wetted Parts

Pump head	PAA (IXEF)
Cylinder sleeve	PPS
Piston sealing	PTFE
Valves	EPDM

Model key:

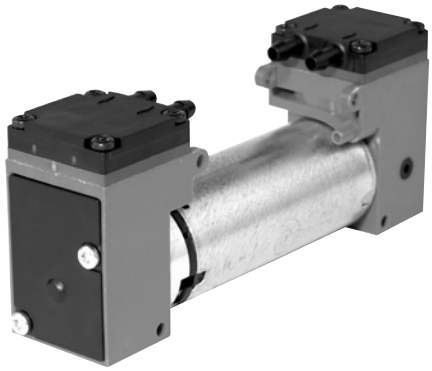


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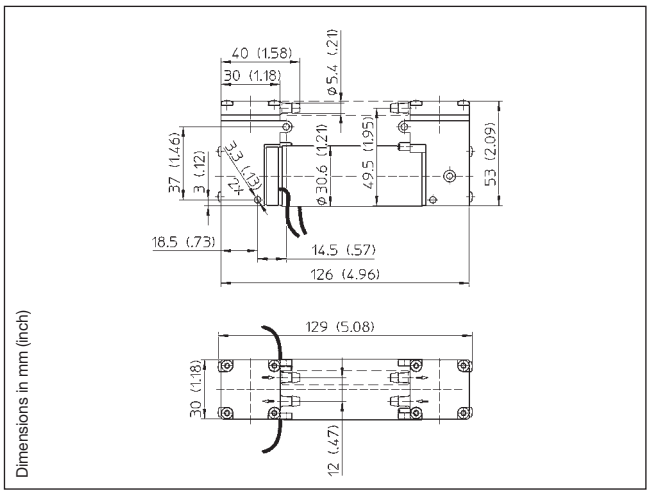
THOMAS by Gardner Denver

WOB-L Piston Compressor 8003ZDP DC

Flow	**5,4 l/min**
Max. pressure	**2,0 bar**



OIL-LESS



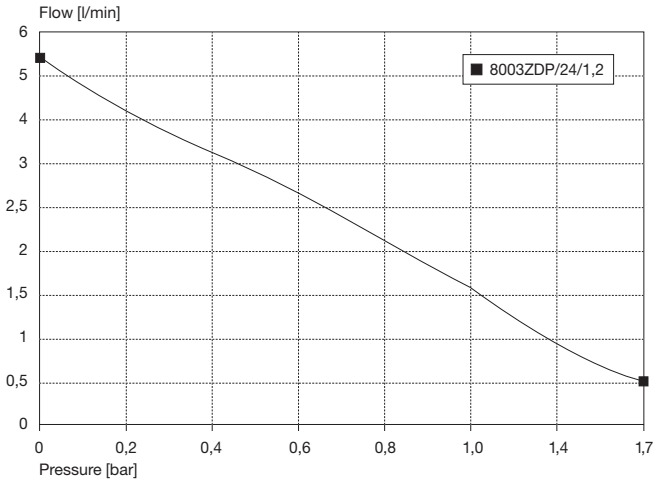
Pneumatic Data		
Description		8003ZDP/24/1,2/E/DC
Part number	12 V DC	80030300
Max. flow		5,4 l/min
Max. pressure		2,0 bar
Max. continuous pressure		0,3 bar
Max. restart pressure		0,5 bar

Electrical Data	
Motor type	Direct current
Nominal voltage	12 V DC
Nominal speed	2800 rpm
Power consumption	13 W
Motor insulation class	E

General Data	
Ambient temperature	10 to 40 °C
Media temperature	10 to 60 °C
Weight	0,35 kg
Port direction	CB
Configuration	Parallel

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:

Z = Double head
D = Pressure
P = Parallel

E = EPDM
Motor type

8003 ZDP / 24 / 1,2 / E / DC

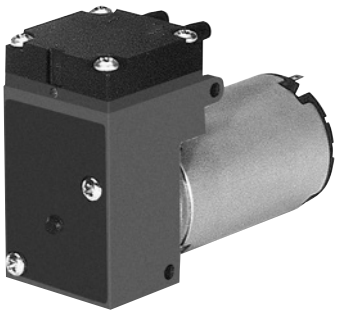
Series
Piston ø
Eccentric

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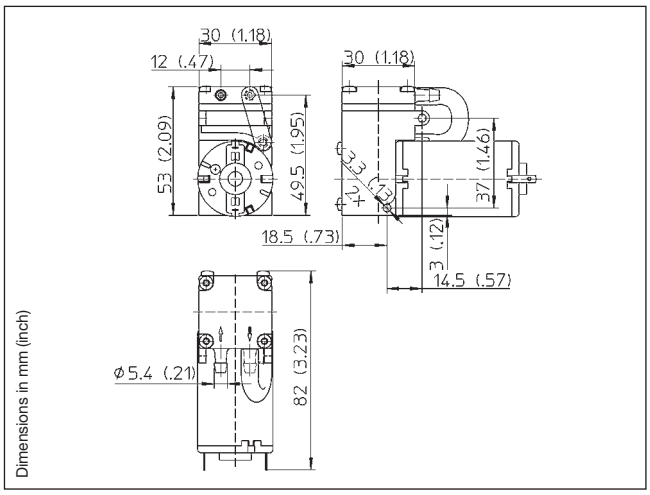
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8003V DC

Flow	**3,0 l/min**
Max. vacuum	**59 %**



OIL-LESS



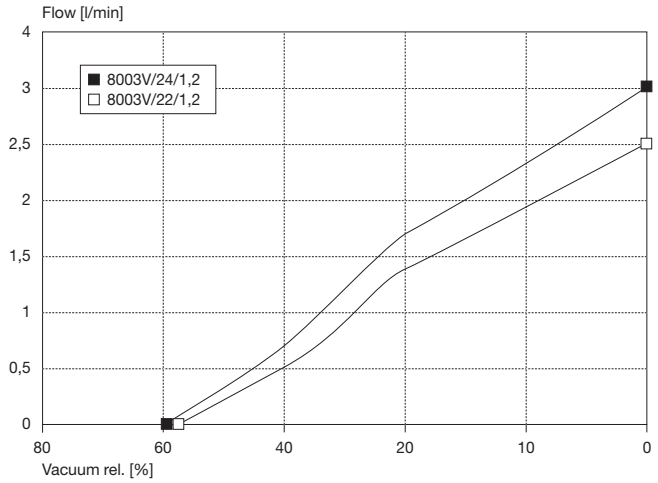
Pneumatic Data			
Description		8003V/22/1,2/E/DC	8003V/24/1,2/E/DC
	12 V DC	80030067	80030068
	24 V DC	80030071	80030072
Max. flow		2,5 l/min	3,0 l/min
Max. vacuum		58 %	59 %
Max. restart vacuum		58 %	59 %

Electrical Data		
Motor type	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC
Nominal speed	3000 rpm	3000 rpm
Power consumption	5,5 W	6 W
Motor insulation class	A	A

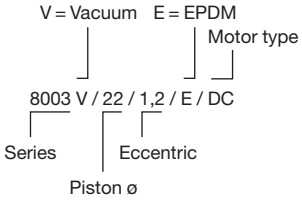
General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	0,19 kg	0,19 kg
Port direction	D	D

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



8003... Stock programme

Option:
Low cost DC-motor

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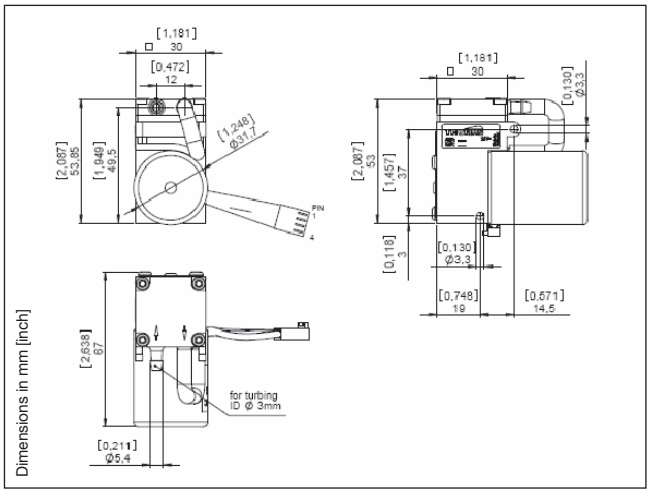
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8003V BLDC

Flow	**4,3 l/min**
Final Vacuum	**65 %**



OIL-LESS



Pneumatic Data

Description		8003V/24/1,2/E/BLDC
Part number	12 V DC	80030800
	24 V DC	80030801
Max. flow		4,3 l/min
Max. intermittent vacuum		65 %
Max. continuous vacuum		65 %
Max. restart vacuum		65 %

Electrical Data

Motor type		Brushless DC
Nominal speed		0..4.600 rpm
Nominal voltage		12/24 V DC
Drive electronics		integrated with reverse supply voltage protection
Max. power consumption		7 W
Motor insulation class		B
Protection class		IP20
Connector	Housing:	Molex KK 22-01-2045
	Terminal:	Molex KK 08-50-0031

Wiring diagram

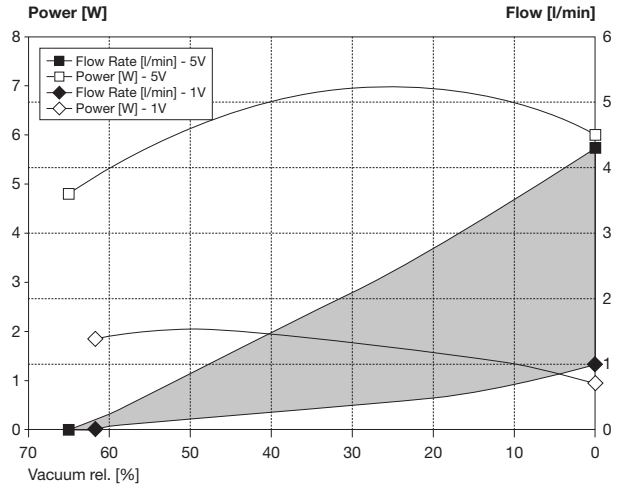
Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment

	Function	Colour	Control
Pin 1	V Supply	Red	12 VDC (max. voltage range: 10..18 VDC) 24 VDC (max. voltage range: 10..28 VDC)
Pin 2	Ground	Black	Ground for Vsupply (PIN 1) and Speed Control (PIN3)
Pin 3	Speed control	White	analog: 0..5 VDC (max. 28V) PWM: 6..20 kHz - 14..96% Speed voltage input threshold: 0,2 V
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time „LOW“: 195 µs Output level „LOW“: 0 / max. 0,5 V Output level „HIGH“: min. 4 V / max. 5 V

General Data

Ambient temperature	15..40°C
Media temperature	15..40°C
Weight	160 g
Port direction	D

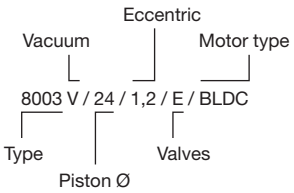
Flow Curves vs. Speed Control Input



Wetted Parts

Pump head	PAA (IXEF)
Cylinder sleeve	PPS
Piston sealing	PTFE
Valves	EPDM

Model key:

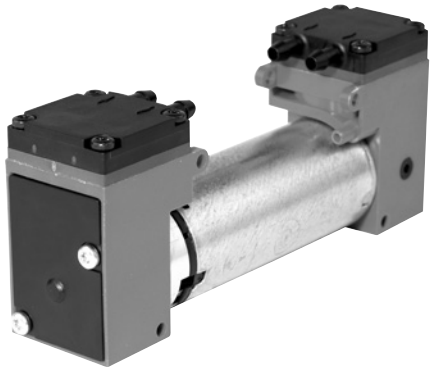


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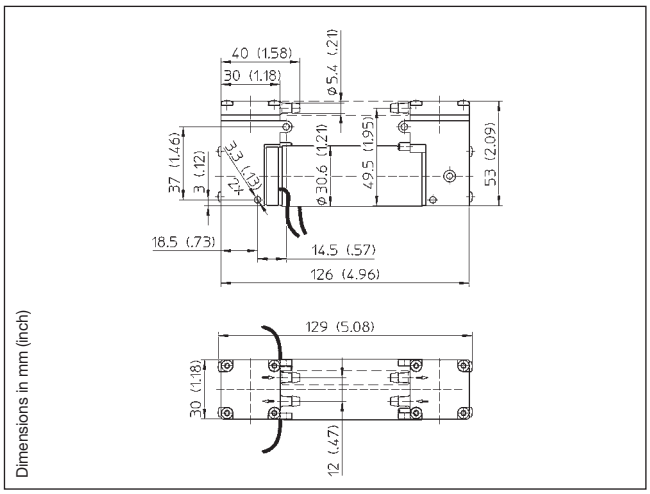
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8003ZVR/ZVP DC

Flow	**5,4 l/min**
Max. vacuum	**80 %**



OIL-LESS

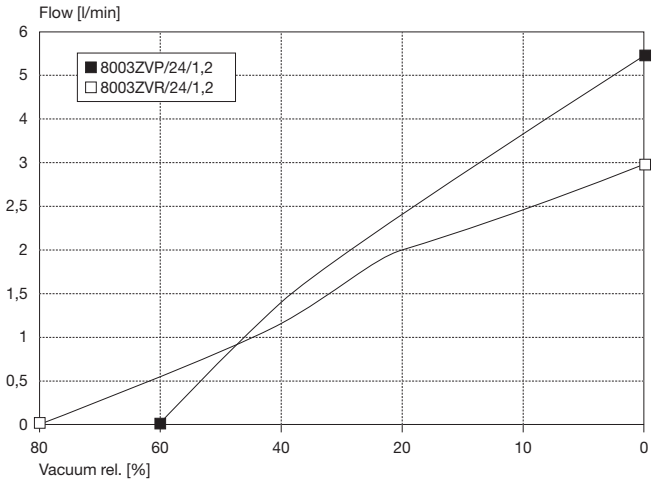


Pneumatic Data			
Description		8003ZVR/24/1,2/E/DC	8003ZVP/24/1,2/E/DC
Part number	12 V DC	80030321	80030320
Max. flow		2,9 l/min	5,4 l/min
Max. vacuum		80 %	59 %
Max. restart vacuum		80 %	59 %

Electrical Data		
Motor type	Direct current	Direct current
Nominal voltage	12 V DC	12 V DC
Nominal speed	2800 rpm	2800 rpm
Power consumption	11 W	11 W
Motor insulation class	E	E

General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	0,35 kg	0,35 kg
Port direction	DD	CB
Configuration	Series	Parallel

All listed values measured at standard atmospheric conditions.



Model key:

Z = Double head
V = Vacuum
R = Series

E = EPDM
Motor type

8003 ZVR / 24 / 1,2 / E / DC

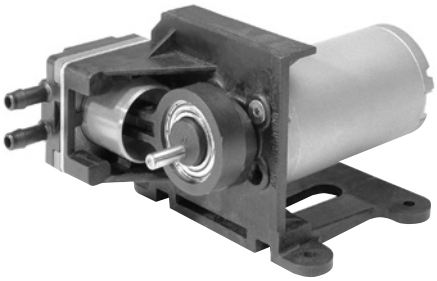
Series
Eccentric
Piston ø

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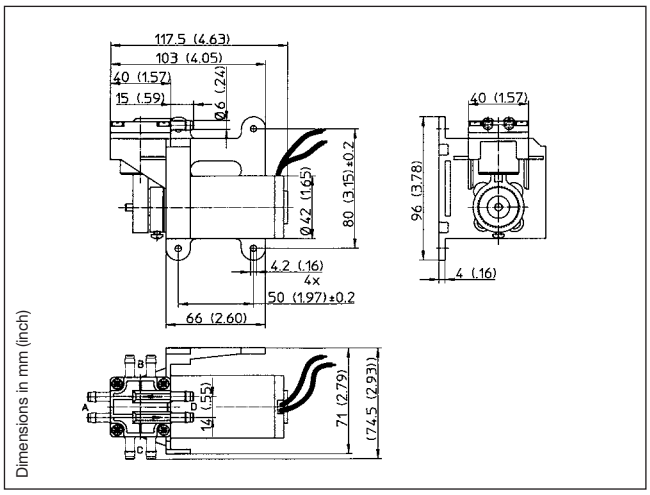
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8005D DC

Flow	**7,2 l/min**
Max. pressure	**2,5 bar**



OIL-LESS

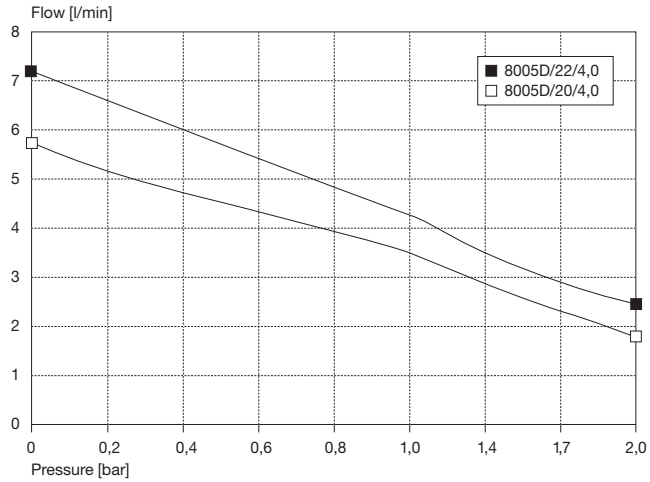


Pneumatic Data			
Description		8005D/20/4,0/V/DC	8005D/22/4,0/V/DC
Part number	12 V DC	80050062	80050077
	24 V DC*	80050064	80050079
Max. flow		5,8 l/min	7,2 l/min
Max. pressure		2,5 bar	2,5 bar
Max. continuous pressure		1,5 bar	1,5 bar
Max. restart pressure		2,5 bar	2,3 bar

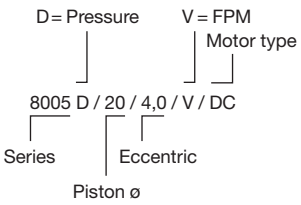
Electrical Data		
Motor type	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC
Nominal speed	3500/3200 rpm	3500/3200 rpm
Power consumption	26 W	32 W
Motor insulation class	E	E

General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	1,1 kg	1,1 kg
Port direction	D	D

* Due to a difference in nominal speeds the 24 V DC units have a 10 % reduced flow rate when compared to the 12 V DC units.
All listed values measured at standard atmospheric conditions.



Model key:



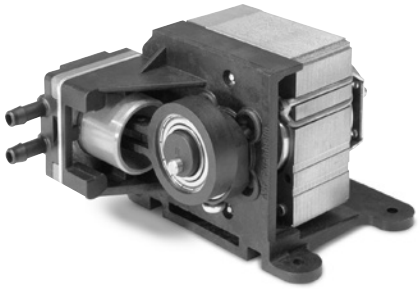
Option:
Noise reduced head
Brushless DC-motor

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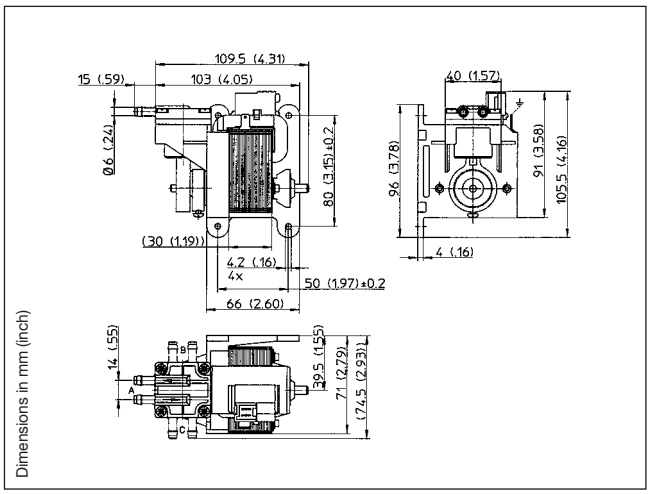
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8005D AC

Flow	**6,0 l/min**
Max. pressure	**2,5 bar**



OIL-LESS



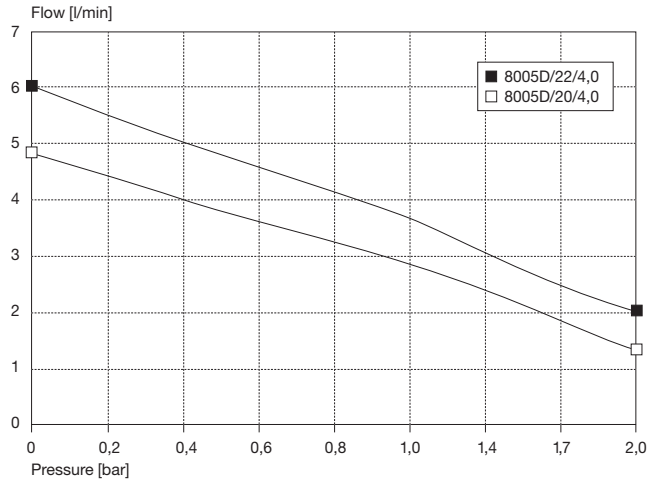
Pneumatic Data			
Description		8005D/20/4,0/V/AC	8005D/22/4,0/V/AC
Part number	230 V/50 Hz	80050063	80050078
Max. flow		4,8 l/min	6,0 l/min
Max. pressure		2,5 bar	2,5 bar
Max. continuous pressure		1,5 bar	1,5 bar
Max. restart pressure		0,5 bar	0,4 bar

Electrical Data		
Motor type	Shaded pole	Shaded pole
Nominal voltage	230 V/50 Hz	230 V/50 Hz
Nominal speed	2400 rpm	2400 rpm
Power consumption	135 W	135 W
Motor insulation class	F	F
Thermal switch	115 °C	115 °C

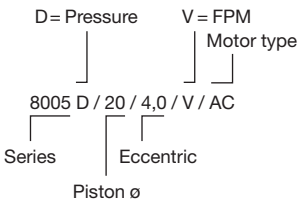
General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C
Weight	1,1 kg	1,1 kg
Port direction	A	A

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:

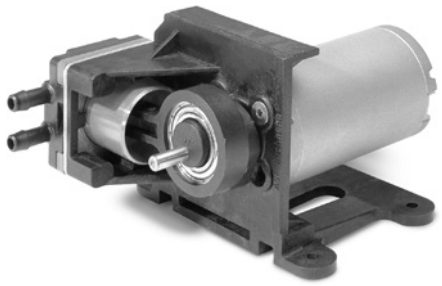


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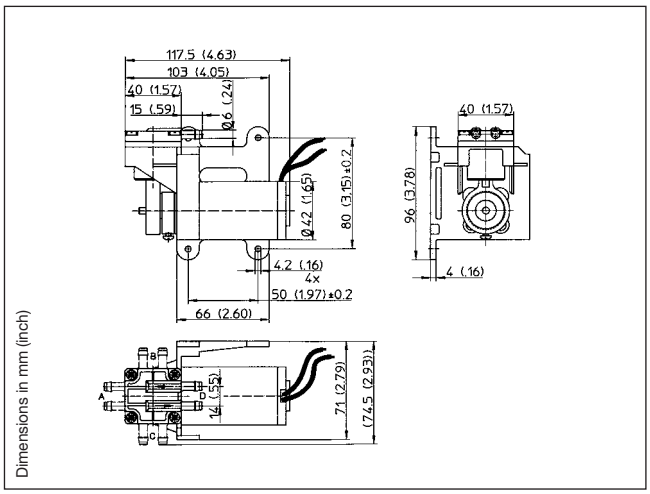
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8005V DC

Flow	**7,2 l/min**
Max. vacuum	**78 %**



OIL-LESS



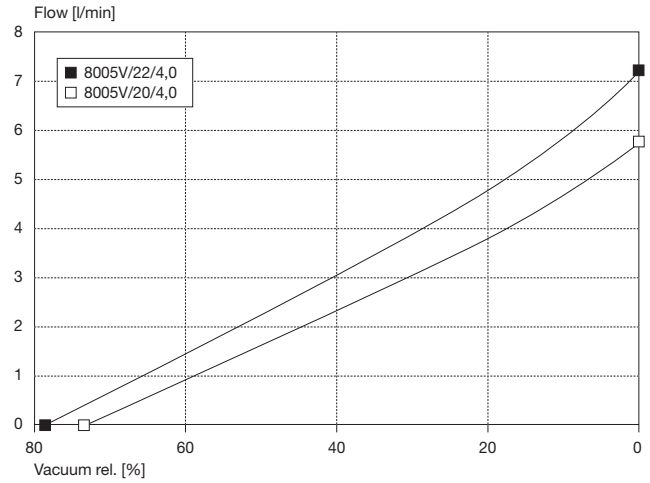
Pneumatic Data			
Description		8005V/20/4,0/V/DC	8005V/22/4,0/V/DC
Part number	12 V DC	80050034	80050039
	24 V DC*	80050044	80050049
Max. flow		5,8 l/min	7,2 l/min
Max. vacuum		73 %	78 %
Max. restart vacuum		73 %	78 %

Electrical Data		
Motor type	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC
Nominal speed	3500/3250 rpm	3500/3250 rpm
Power consumption	22 W	26 W
Motor insulation class	E	E

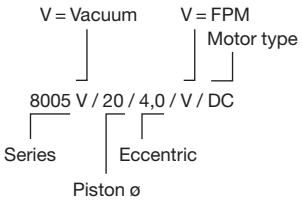
General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	1,1 kg	1,1 kg
Port direction	D	D

* Due to a difference in nominal speeds the 24 V DC units have a 10 % reduced flow rate when compared to the 12 V DC units.
All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



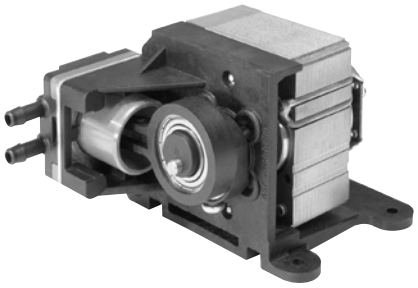
Option:
Noise reduced head
Brushless DC-motor

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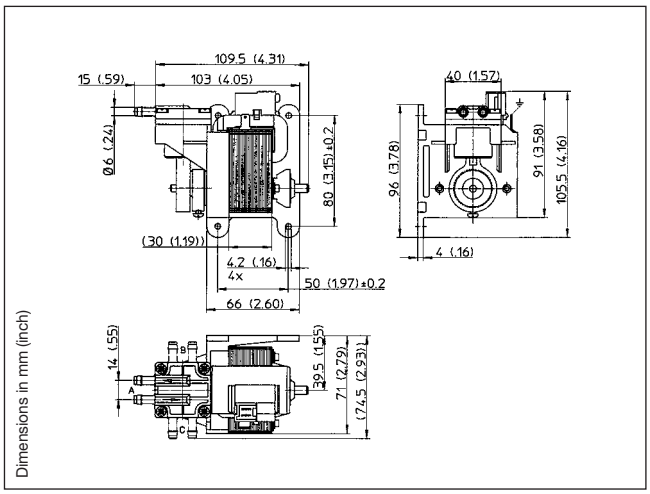
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8005V AC

Flow	**6,0 l/min**
Max. vacuum	**78 %**



OIL-LESS



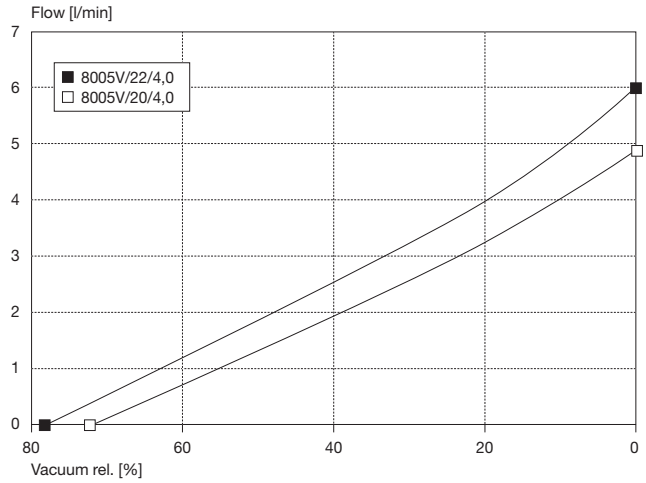
Pneumatic Data			
Description		8005V/20/4,0/V/AC	8005V/22/4,0/V/AC
Part number	230 V/50 Hz	80050017	80050022
Max. flow		4,8 l/min	6,0 l/min
Max. vacuum		73 %	78 %
Max. restart vacuum		Ambient pressure	Ambient pressure

Electrical Data		
Motor type	Shaded pole	Shaded pole
Nominal voltage	230 V/50 Hz	230 V/50 Hz
Nominal speed	2400 rpm	2400 rpm
Power consumption	135 W	135 W
Motor insulation class	F	F
Thermal switch	115 °C	115 °C

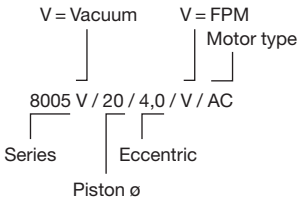
General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C
Weight	1,1 kg	1,1 kg
Port direction	A	A

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



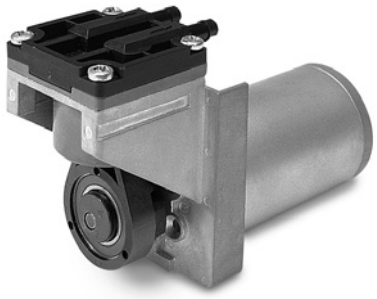
Option:
Noise reduced head

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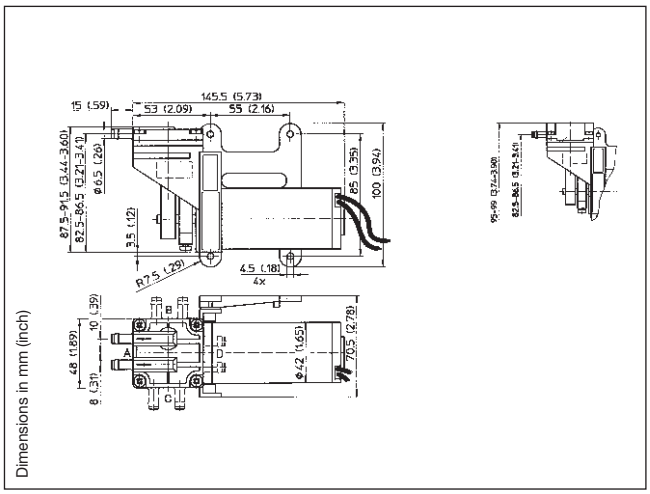
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8006D DC

Flow	**15,8 l/min**
Max. pressure	**3,0 bar**



OIL-LESS



Pneumatic Data

Description		8006D/27/4,5/V/DC	8006D/30/4,5/V/DC
Part number	12 V DC	80060057	80060071
	24 V DC	80060110	80060079
Max. flow		13,0 l/min	15,8 l/min
Max. pressure		3,0 bar	3,0 bar
Max. continuous pressure		1,0 bar	1,0 bar
Max. restart pressure		1,0 bar	0,4 bar

Electrical Data

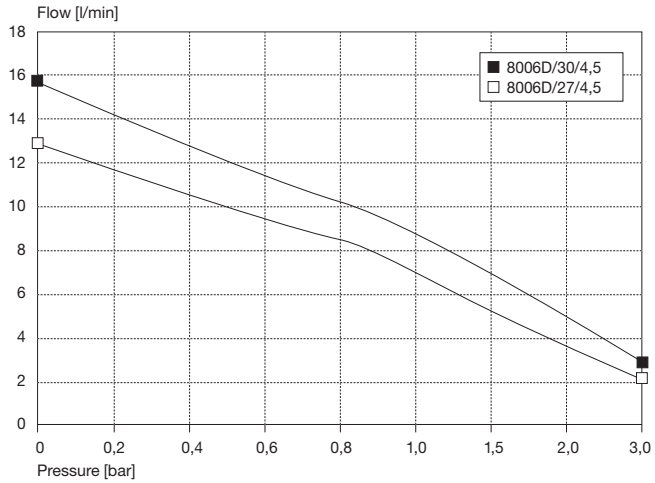
Motor type	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC
Nominal speed	2800 rpm	2800 rpm
Power consumption	40 W	46 W
Motor insulation class	E	E

General Data

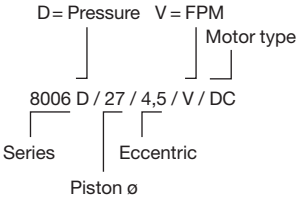
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	1,2 kg	1,2 kg
Port direction	D	D

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



8006... Stock programme

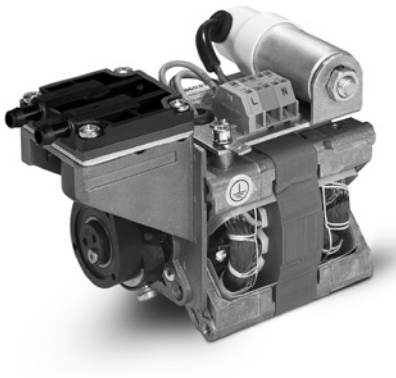
Option:
Noise reduced head
Brushless DC-motor
Con rod cover

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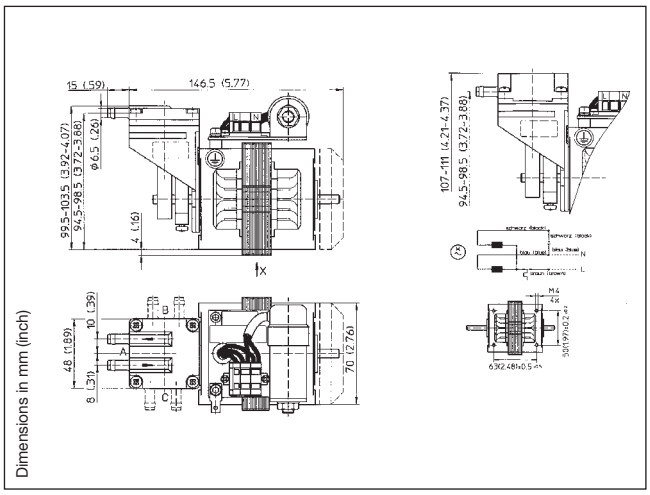
THOMAS by Gardner Denver

WOB-L Piston Compressor 8006D AC

Flow	**15,8 l/min**
Max. pressure	**3,0 bar**



OIL-LESS



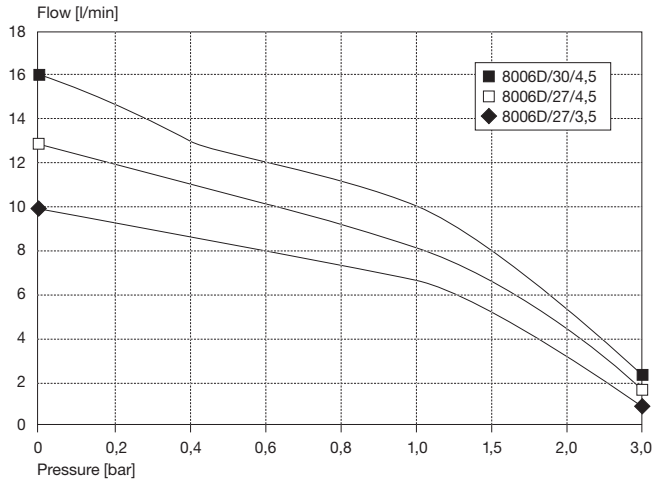
Pneumatic Data				
Description		8006D/27/3,5/V/AC	8006D/27/4,5/V/AC	8006D/30/4,5/V/AC
Part number	230 V/50 Hz	80060096	80060098	80060007
Max. flow		10,1 l/min	13,0 l/min	15,8 l/min
Max. pressure		3,0 bar	3,0 bar	3,0 bar
Max. continuous pressure		1,5 bar	1,2 bar	1,0 bar
Max. restart pressure		Ambient pressure	Ambient pressure	Ambient pressure

Electrical Data			
Motor type	Capacitor	Capacitor	Capacitor
Nominal voltage	230 V/50 Hz	230 V/50 Hz	230 V/50 Hz
Nominal speed	2800 rpm	2800 rpm	2800 rpm
Power consumption	80 W	80 W	80 W
Motor insulation class	F	F	F
Thermal switch	150° C	150° C	150° C

General Data			
Ambient temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Weight	1,5 kg	1,5 kg	1,5 kg
Port direction	A	A	A

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:

D = Pressure V = FPM

Motor type

8006 D / 27 / 3,5 / V / DC

Series

Eccentric

Piston ø

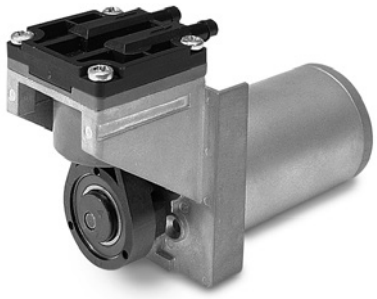
Option:
Noise reduced head
Con rod cover

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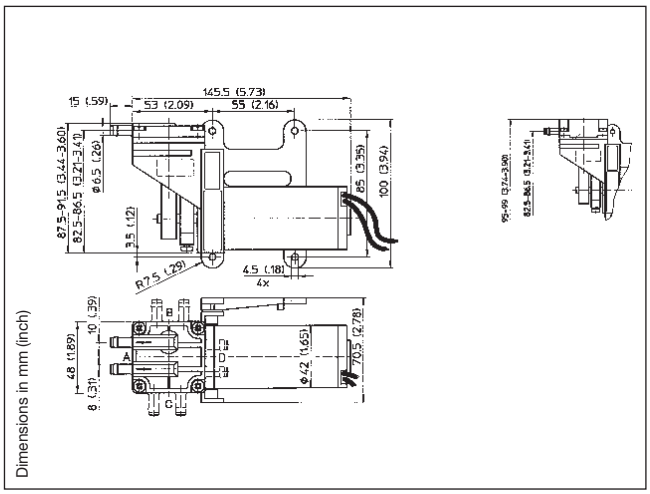
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8006V DC

Flow	**15,8 l/min**
Max. vacuum	**80 %**



OIL-LESS



Pneumatic Data

Description		8006V/30/4,5/V/DC
Part number	12 V DC	80061068
	24 V DC	80061075
Max. flow		15,8 l/min
Max. vacuum		80 %
Max. restart vacuum		Ambient pressure

Electrical Data

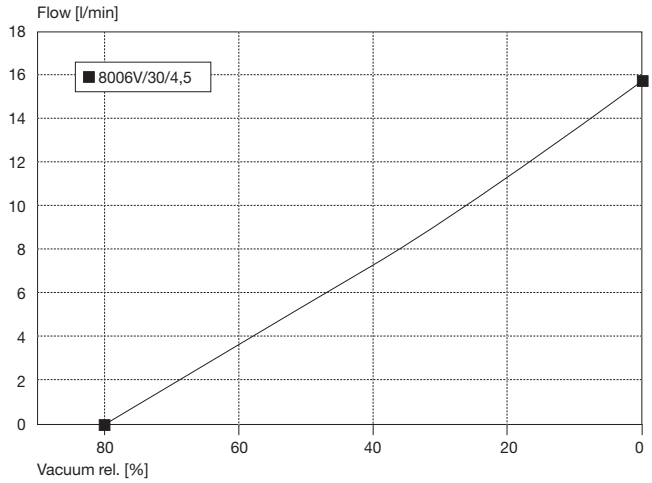
Motor type	Direct current
Nominal voltage	12 V/24 V DC
Nominal speed	2800 rpm
Power consumption	39 W
Motor insulation class	E

General Data

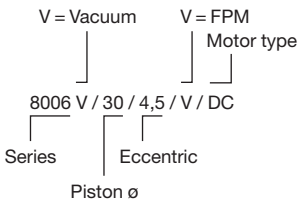
Ambient temperature	10 to 40 °C
Media temperature	10 to 60 °C
Weight	1,2 kg
Port direction	D

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



8006... Stock programme

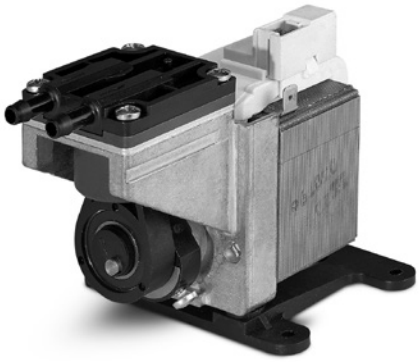
Option:
Noise reduced head
Brushless DC-motor
Con rod cover

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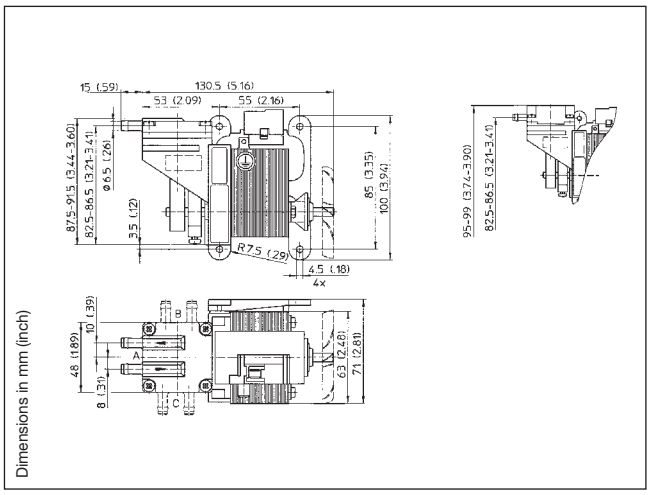
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8006V AC

Flow	**14,2 l/min**
Max. vacuum	**80 %**



OIL-LESS

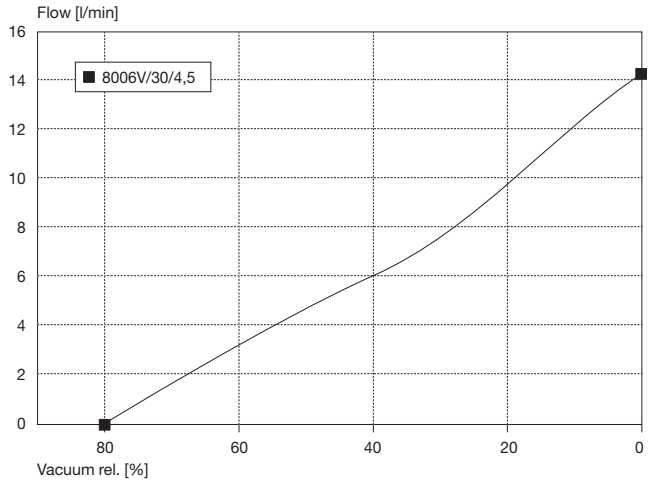


Pneumatic Data		
Description		8006V/30/4,5/V/AC
Part number	230 V/50 Hz	80060010
Max. flow		14,2 l/min
Max. vacuum		80 %
Max. restart vacuum		Ambient pressure

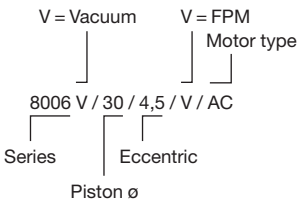
Electrical Data	
Motor type	Shaded pole
Nominal voltage	230 V/50 Hz
Nominal speed	2800 rpm
Power consumption	95 W
Motor insulation class	F
Thermal switch	150 °C

General Data	
Ambient temperature	10 to 40 °C
Media temperature	10 to 40 °C
Weight	1,5 kg
Port direction	A

All listed values measured at standard atmospheric conditions.



Model key:



8006... Stock programme

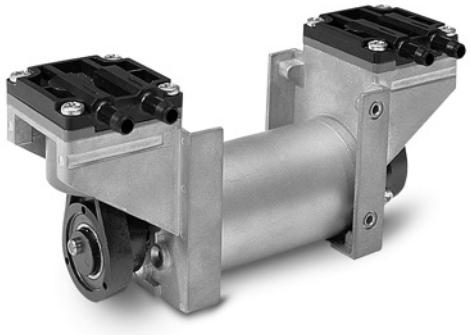
Option:
Noise reduced head
Con rod cover

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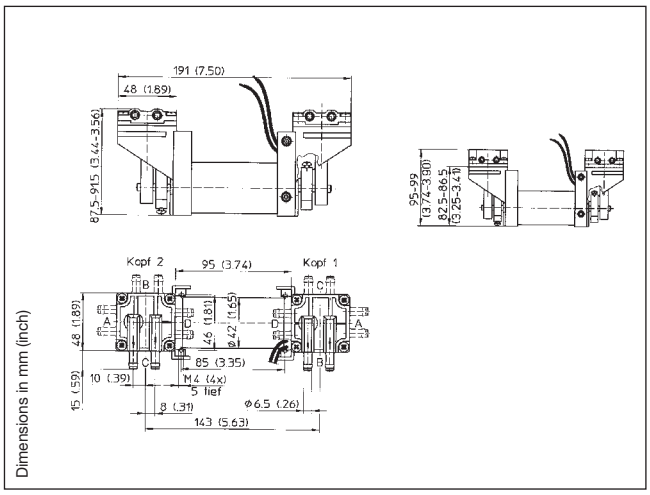
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8006ZV DC

Flow	**31,0 l/min**
Max. vacuum	**80 %**



OIL-LESS



Pneumatic Data

Description		8006ZV/30/4,5/V/DC
Part number	12 V DC	80060131
	24 V DC	80060135
Max. flow		31,0 l/min
Max. vacuum		80 %
Max. restart vacuum		Ambient pressure

Electrical Data

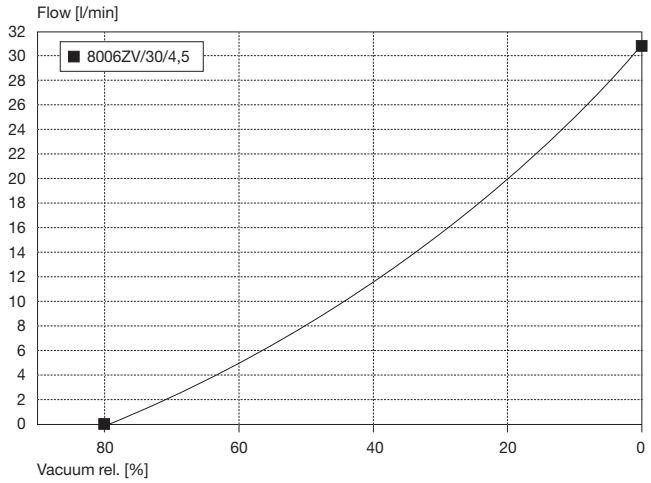
Motor type	Direct current
Nominal voltage	12 V/24 V DC
Nominal speed	2800 rpm
Power consumption	60 W
Motor insulation class	E

General Data

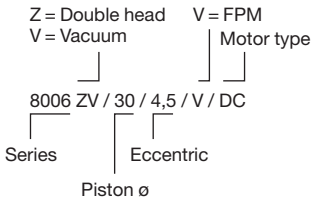
Ambient temperature	10 to 40 °C
Media temperature	10 to 60 °C
Weight	0,93 kg
Port direction	CB
Configuration	parallel

All listed values measured at standard atmospheric conditions.
Pneumatic data refer to parallel configuration.

Flow Curves



Model key:



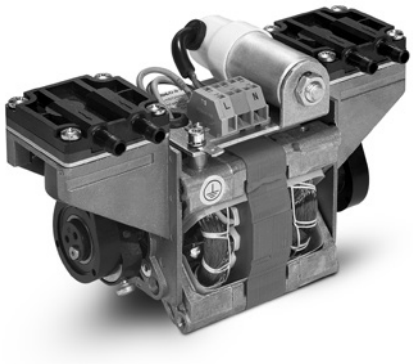
Option:
Noise reduced head
Brushless DC-motor
Con rod cover

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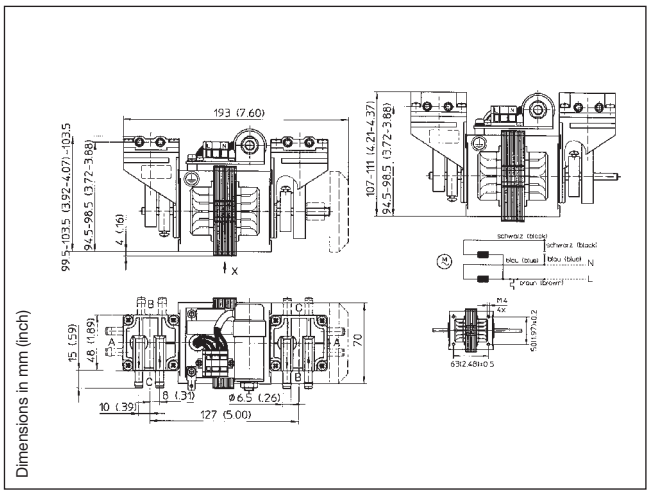
THOMAS
by Gardner Denver

WOB-L Piston Vacuum Pump 8006ZV AC

Flow	**29,0 l/min**
Max. vacuum	**95 %**



OIL-LESS



Pneumatic Data

Description		8006ZVR/30/4,5/V/AC	8006ZV/27/4,5/V/AC	8006ZV/30/4,5/V/AC
Part number	230 V/50 Hz	80060442	80060105	80060109
Max. flow		14,2 l/min	23,5 l/min*	29,0 l/min*
Max. vacuum		95 %	78 %*	80 %*
Max. restart vacuum		Ambient pressure	Ambient pressure*	Ambient pressure*

Electrical Data

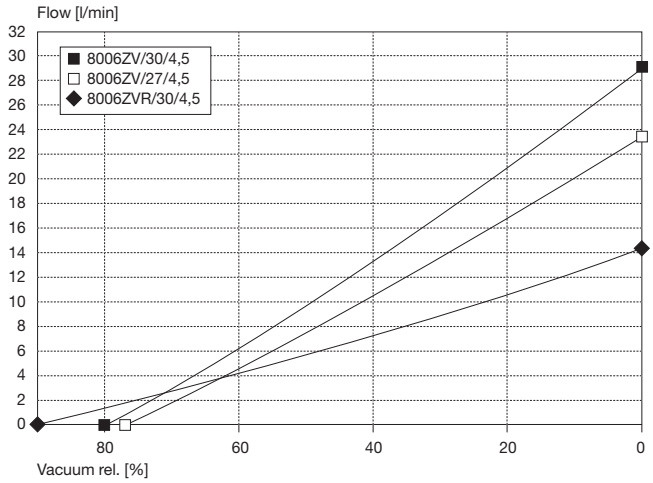
Motor type	Capacitor	Capacitor	Capacitor
Nominal voltage	230 V/50 Hz	230 V/50 Hz	230 V/50 Hz
Nominal speed	2800 rpm	2800 rpm	2800 rpm
Power consumption	85 W	85 W	85 W
Motor insulation class	F	F	F
Thermal switch	150 °C	150 °C	150 °C

General Data

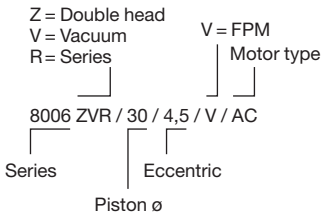
Ambient temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Weight	2,0 kg	2,0 kg	2,0 kg
Port direction	CB	CB	CB
Configuration	series	parallel	parallel

All listed values measured at standard atmospheric conditions.
*Pneumatic data refer to parallel configuration.

Flow Curves



Model key:



8006... Stock programme

Option:
Noise reduced head
Con rod cover

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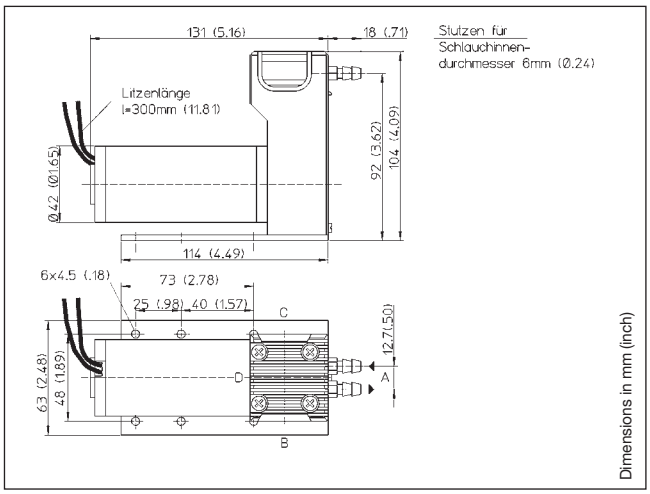
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8009D DC

Flow	**14,0 l/min**
Max. pressure	**7,0 bar**



OIL-LESS



Pneumatic Data

Description		8009-30/10/DC	8009-35/05/DC	8009-40/00/DC
Part number	12 V DC	80091019	80091020	80091021
	24 V DC	80091031	80091032	80091033
Max. flow		11,0 l/min	12,5 l/min	14,0 l/min
Max. pressure		7,0 bar	7,0 bar	7,0 bar
Max. continuous pressure		1,5 bar	1,2 bar	1,0 bar
Max. restart pressure		0,8 bar	0,6 bar	0,5 bar

Electrical Data

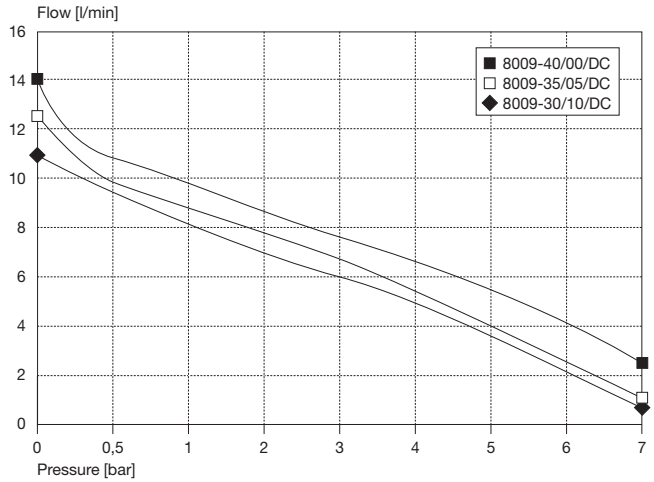
Motor type	Direct current	Direct current	Direct current
Nominal voltage	12 V/24 V DC	12 V/24 V DC	12 V/24 V DC
Nominal speed	2800 rpm	2800 rpm	2800 rpm
Power consumption	50 W	58 W	65 W
Motor insulation class	E	E	E

General Data

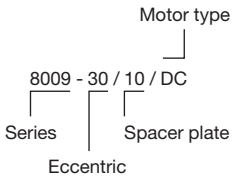
Ambient temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C	10 to 60 °C
Weight	1,1 kg	1,1 kg	1,1 kg
Port direction	A	A	A

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:



8009... Stock programme

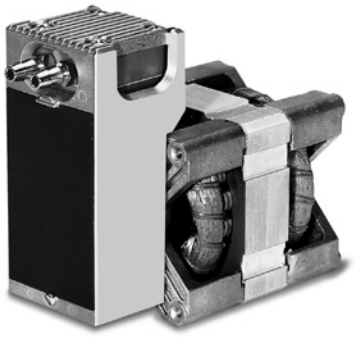
Option:
Different heads and outlet connectors

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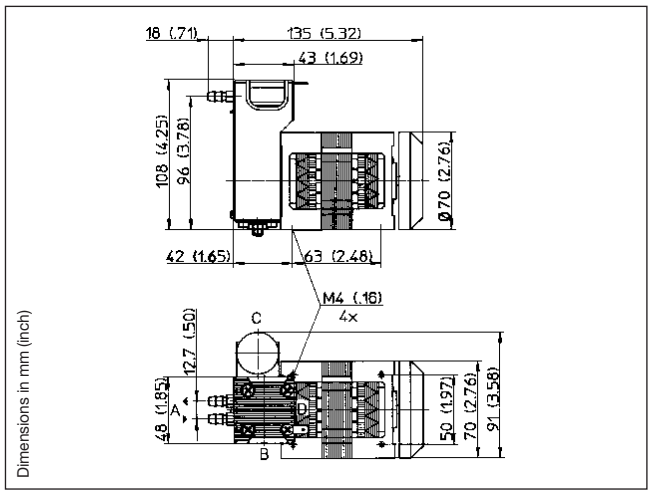
THOMAS by Gardner Denver

WOB-L Piston Compressor 8009D AC

Flow	**11,8 l/min**
Max. pressure	**7,0 bar**



OIL-LESS



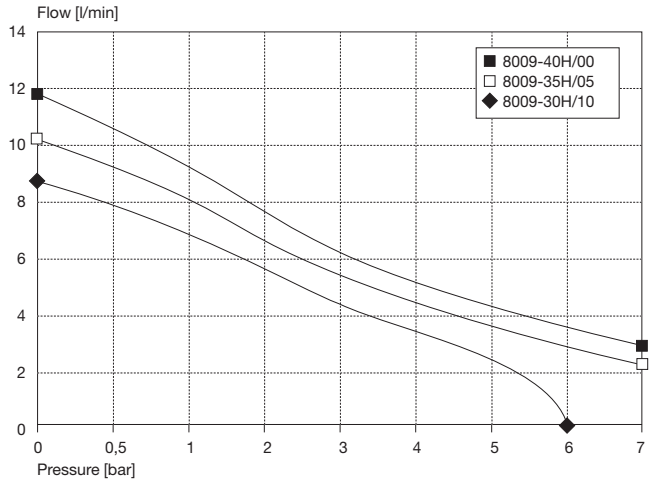
Pneumatic Data				
Description		8009-30H/10/AC	8009-35H/05/AC	8009-40H/00/AC
Part number	230 V/50 Hz	80091037	80091038	80091039
Max. flow		8,8 l/min	10,3 l/min	11,8 l/min
Max. pressure		6,0 bar	7,0 bar	7,0 bar
Max. continuous pressure		1,8 bar	1,4 bar	1,0 bar
Max. restart pressure		0,5 bar	Ambient pressure	Ambient pressure

Electrical Data			
Motor type	Capacitor	Capacitor	Capacitor
Nominal voltage	230 V/50 Hz	230 V/50 Hz	230 V/50 Hz
Nominal speed	2700 rpm	2700 rpm	2700 rpm
Power consumption	78 W	78 W	78 W
Motor insulation class	B	B	B
Thermal switch	130 °C	130 °C	130 °C

General Data			
Ambient temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C	10 to 40 °C
Weight	1,7 kg	1,7 kg	1,7 kg
Port direction	A	A	A

All listed values measured at standard atmospheric conditions.

Flow Curves



Model key:

H = Capacitor motor 230 V/50 Hz
Motor type

8009 - 30 H / 10 / AC

Series Eccentric Spacer plate

8009... Stock programme

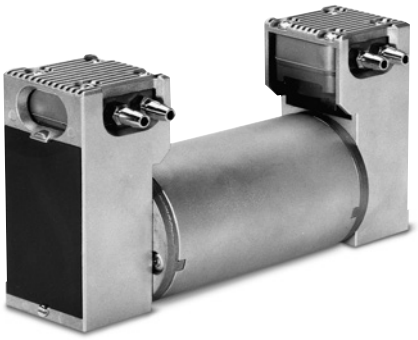
Option:
Different heads and outlet connectors

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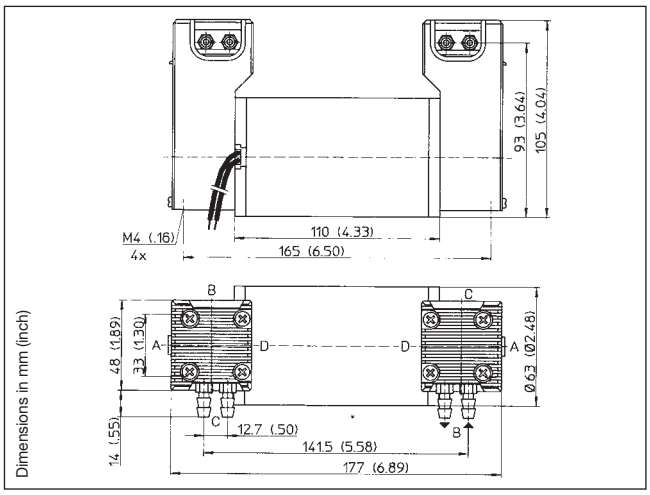
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8009ZD DC

Flow	**24,5 l/min**
Max. pressure	**7,0 bar**



OIL-LESS



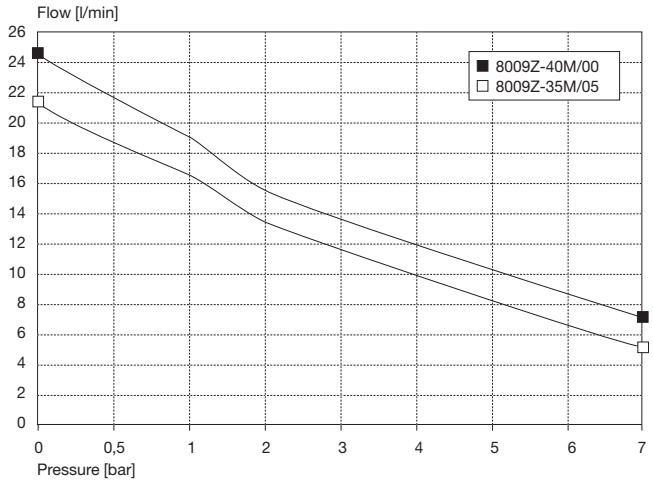
Pneumatic Data			
Description		8009Z-35M/05/DC	8009Z-40M/00/DC
Part number	24 V DC	80091066	80091067
Max. flow		21,4 l/min	24,5 l/min
Max. pressure		7,0 bar	7,0 bar
Max. continuous pressure		1,2 bar	1,0 bar
Max. restart pressure		2,5 bar	2,0 bar

Electrical Data		
Motor type	Direct current	Direct current
Nominal voltage	24 V DC	24 V DC
Nominal speed	2900 rpm	2900 rpm
Power consumption	115 W	150 W
Motor insulation class	E	E

General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 60 °C	10 to 60 °C
Weight	2,1 kg	2,1 kg
Port direction	CB	CB
Configuration	parallel	parallel

All listed values measured at standard atmospheric conditions.
Pneumatic data refer to parallel configuration.

Flow Curves



Model key:

Z = Double head
M = Direct current motor 24 V
Motor type

8009 Z - 35 M / 05 / DC

Series Eccentric Spacer plate

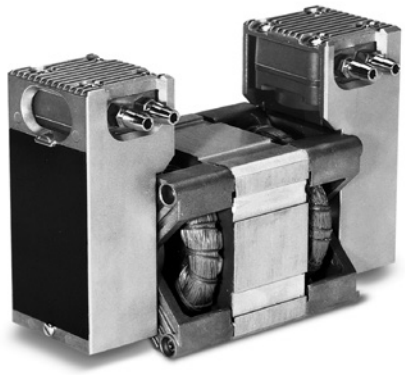
Option:
Different heads and outlet connectors

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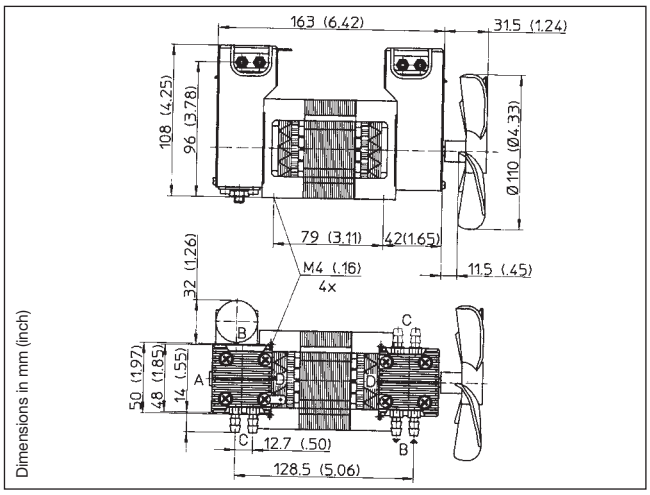
THOMAS
by Gardner Denver

WOB-L Piston Compressor 8009ZD AC

Flow	**22,4 l/min**
Max. pressure	**7,0 bar**



OIL-LESS



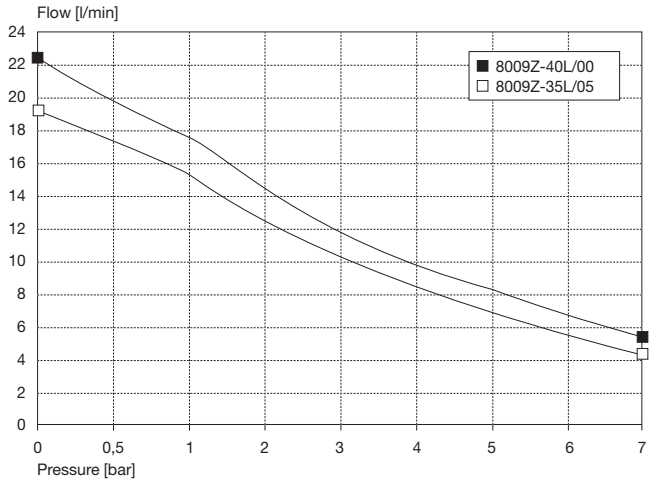
Pneumatic Data			
Description		8009Z-35L/05/AC	8009Z-40L/00/AC
Part number	230 V/50 Hz	80090378	80090435
Max. flow		19,6 l/min	22,4 l/min
Max. pressure		7,0 bar	7,0 bar
Max. continuous pressure		1,4 bar	1,0 bar
Max. restart pressure		Ambient pressure	Ambient pressure

Electrical Data		
Motor type	Capacitor	Capacitor
Nominal voltage	230 V/50 Hz	230 V/50 Hz
Nominal speed	2700 rpm	2700 rpm
Power consumption	138 W	138 W
Motor insulation class	B	B
Thermal switch	130 °C	130 °C

General Data		
Ambient temperature	10 to 40 °C	10 to 40 °C
Media temperature	10 to 40 °C	10 to 40 °C
Weight	2,5 kg	2,5 kg
Port direction	CB	CB
Configuration	parallel	parallel

All listed values measured at standard atmospheric conditions.
Pneumatic data refer to parallel configuration.

Flow Curves



Model key:

Z = Double head
L = Capacitor motor 230 V/50 Hz
Motor type

8009 Z - 35 L / 05 / AC

Series Eccentric Spacer plate

8009... Stock programme

Option:
Different heads and outlet connectors

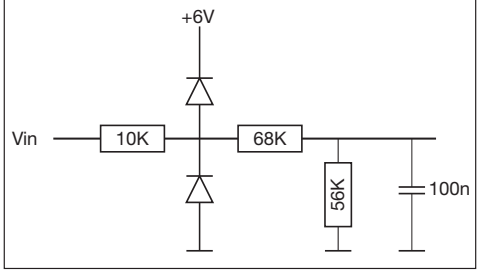
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THOMAS
by Gardner Denver

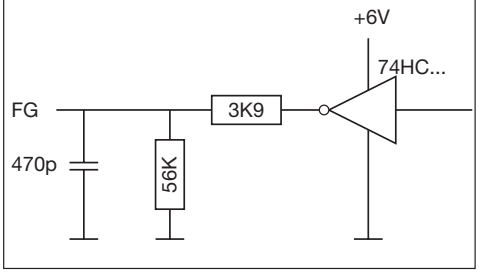
Wiring diagram (8003 BLDC)

	Function	Colour	Control
Pin 1	V Supply	Red	12 VDC (max. voltage range: 10..18 VDC) 24 VDC (max. voltage range: 10..28 VDC)
Pin 2	Ground	Black	Ground for Vsupply (PIN 1) and Speed Control (PIN3)
Pin 3	Speed control	White	analog: 0..5 VDC (max. 28V) PWM: 6..20 kHz - 14..96% Speed voltage input threshold: 0,2 V
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time „LOW“: 195 µs Output level „LOW“: 0 / max. 0,5 V Output level „HIGH“: min. 4 V / max. 5 V

Speed Input

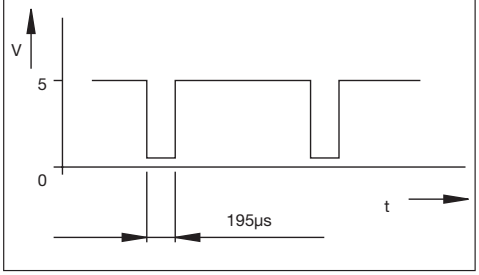


Speed Output



Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment

Speed Output signal



Options / Accessories

P/N 29011930 **Adapter for BLDC motor**
4-2 wire w/manual speed control
12VDC “red”

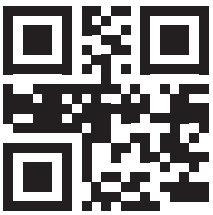
P/N 29011931 **Adapter for BLDC motor**
4-2 wire w/manual speed control
24VDC “black”



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Notes

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