

## FEATURES

- > Oil-less
- > Low vibration
- > Low sound level

## TYPICAL APPLICATIONS

- > Medical devices
- > Clinical analyzers
- > Air collector
- > Inhalators
- > Autoclaves

## BASE MODEL

- 7006 DC
- 7006 AC
- 7006 BLDC
- 7006Z DC
- 7006Z AC
- 7006Z BLDC



Diaphragm

# Diaphragm Pump 7006 DC

<b>Flow</b>	<b>7.5 l/min</b>
<b>Max. pressure</b>	<b>2.5 bar</b>
<b>Max. vacuum</b>	<b>85 %</b>



## PNEUMATIC DATA

Description	7006VD/2.3/E/DC
Part number	12 V DC <b>70060050</b> 24 V DC 70060052
Max. flow	7.5 l/min
Max. intermittent duty	2.5 bar
Max. continuous pressure	0.8 bar
Max. restart pressure	2.5 bar
Max. vacuum	85 %
Max. continuous vacuum	85 %
Max. restart vacuum	85 %

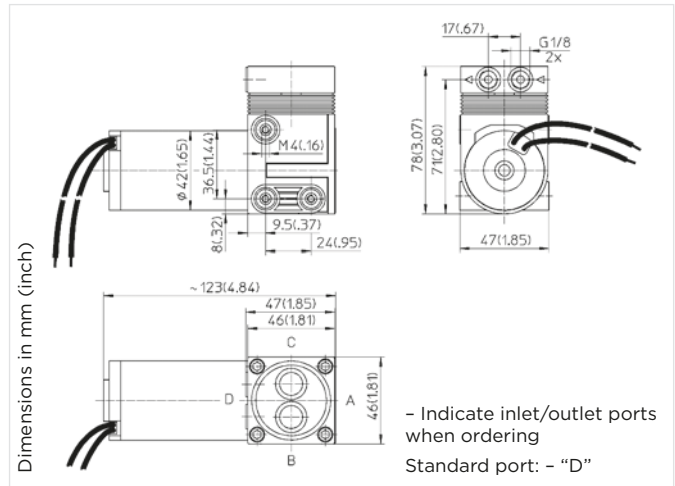
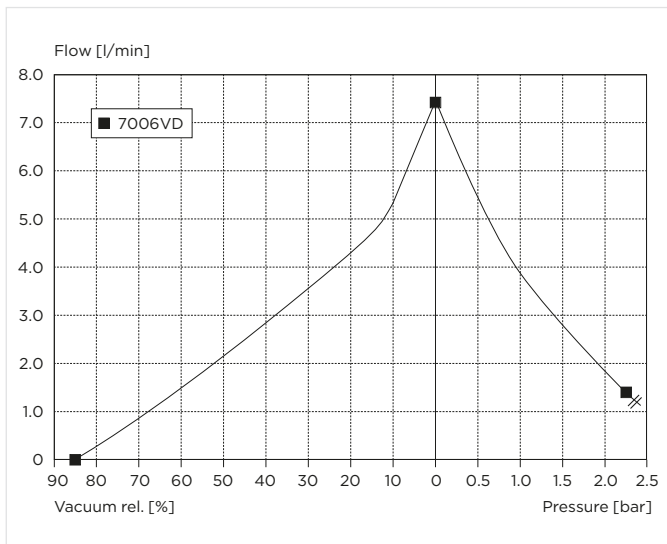
## ELECTRICAL DATA

Motor type	Permanent magnet
Nominal voltage	12/24 V DC
Nominal speed	2800 rpm
Current consumption	2.3/1.15 A
Starting current	5.4/2.7 A
Power consumption	28 W
Motor insulation class	B
Protection class	IP20

## GENERAL DATA

Ambient temperature	15 to 40 °C
Media temperature	15 to 60 °C
Weight	0.66 kg
Port direction	D

## FLOW CURVES



## WETTED PARTS

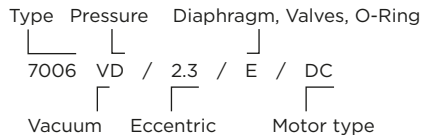
Pump chamber	PAA
Pump head	PAA
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

## OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM, PTFE (FFPM)

7006... Stock programme

Model key:



# Diaphragm Pump 7006 AC

Flow	7.5 l/min
Max. pressure	2.5 bar
Max. vacuum	85 %



## PNEUMATIC DATA

Description	7006VD/2.3/E/AC
Part number	230 V/50 Hz 70060053
Max. flow	7.5 l/min
Max. intermittent duty	2.5 bar
Max. continuous pressure	0.8 bar
Max. restart pressure	2.5 bar
Max. vacuum	85 %
Max. continuous vacuum	85 %
Max. restart vacuum	85 %

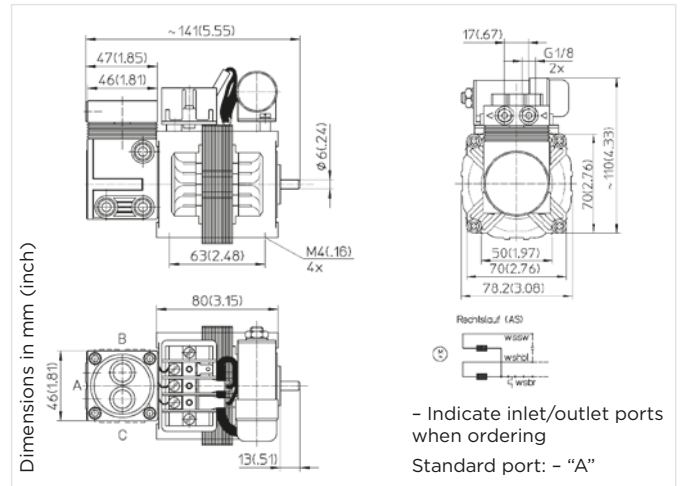
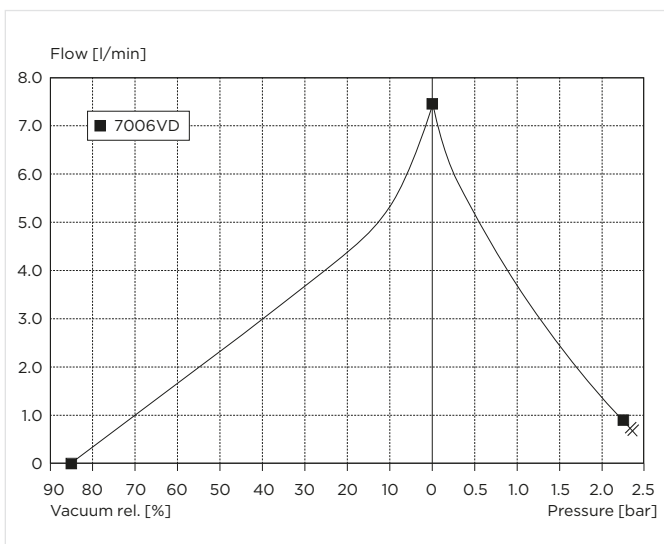
## ELECTRICAL DATA

Motor type	Capacitor
Nominal voltage	230 V/50 Hz
Nominal speed	2800 rpm
Current consumption	0.5 A
Starting current	0.7 A
Power consumption	20 W
Motor insulation class	F
Protection class	IP00
Thermal switch	150 °C

## GENERAL DATA

Ambient temperature	15 to 40 °C
Media temperature	15 to 60 °C
Weight	1.6 kg
Port direction	A

## FLOW CURVES



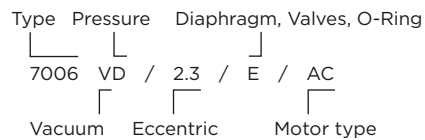
## WETTED PARTS

Pump chamber	PAA
Pump head	Polyarylamide
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

## OPTIONS

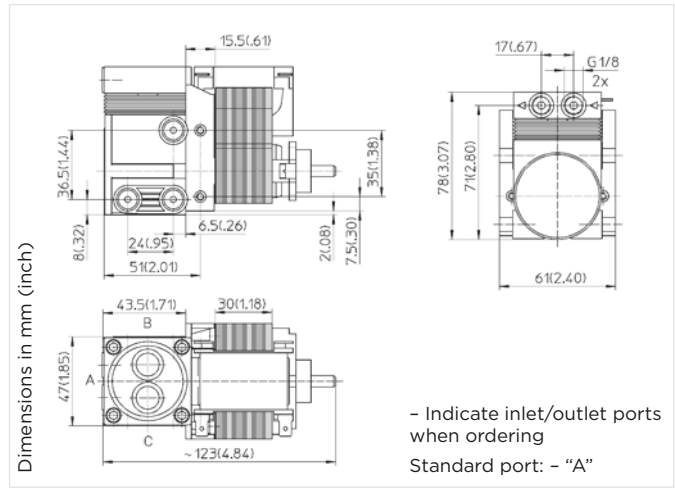
PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

Model key:



# Diaphragm Pump 7006 AC

<b>Flow</b>	<b>9.0 l/min</b>
<b>Max. pressure</b>	<b>2.5 bar</b>
<b>Max. vacuum</b>	<b>85 %</b>



## PNEUMATIC DATA

Description	7006VD/2.3/E/AC	7006VD/2.3/E/AC
Part number	115 V/60 Hz 230 V/50 Hz	70060063  <b>70060051</b>
Max. flow	9.0 l/min	7.5 l/min
Max. intermittent duty	2.5 bar	2.5 bar
Max. continuous pressure	0.8 bar	0.8 bar
Max. restart pressure	Ambient pressure*	Ambient pressure*
Max. vacuum	85 %	85 %
Max. continuous vacuum	85 %	85 %
Max. restart vacuum	Ambient pressure*	Ambient pressure*

## ELECTRICAL DATA

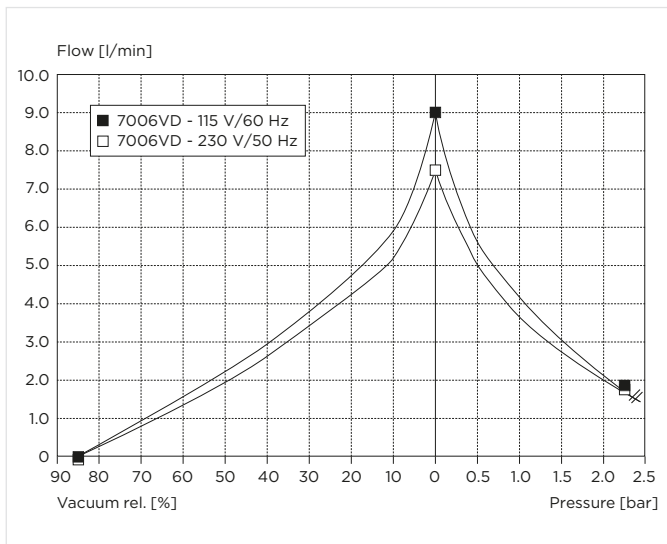
Motor type	Shaded pole	Shaded pole
Nominal voltage	115 V/60 Hz	230 V/50 Hz
Nominal speed	3300 rpm	2800 rpm
Current consumption	1.3 A	0.55 A
Starting current	1.7 A	0.7 A
Power consumption	67 W	62 W
Motor insulation class	H	F
Protection class	IP00	IP00
Thermal switch	150 °C	150 °C

## GENERAL DATA

Ambient temperature	15 to 40 °C	15 to 40 °C
Media temperature	15 to 40 °C	15 to 40 °C
Weight	1.1 kg	1.1 kg
Port direction	A	A

\* Part numbers change when restart is required with vacuum or pressure.

## FLOW CURVES



## WETTED PARTS

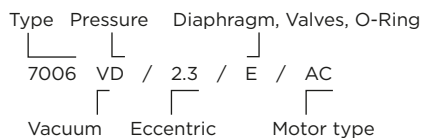
Pump chamber	PAA
Pump head	Polyarylamide
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

## OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

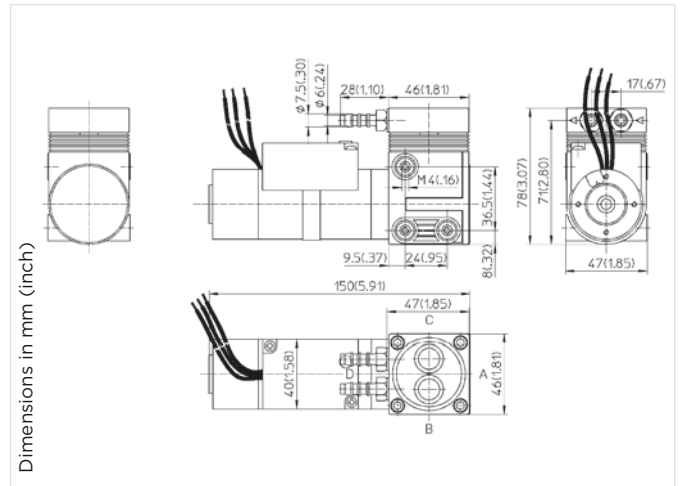
**7006...** Stock programme

Model key:



# Diaphragm Pump 7006 BLDC

Flow	10.0 l/min
Max. pressure	2.5 bar
Max. vacuum	85 %



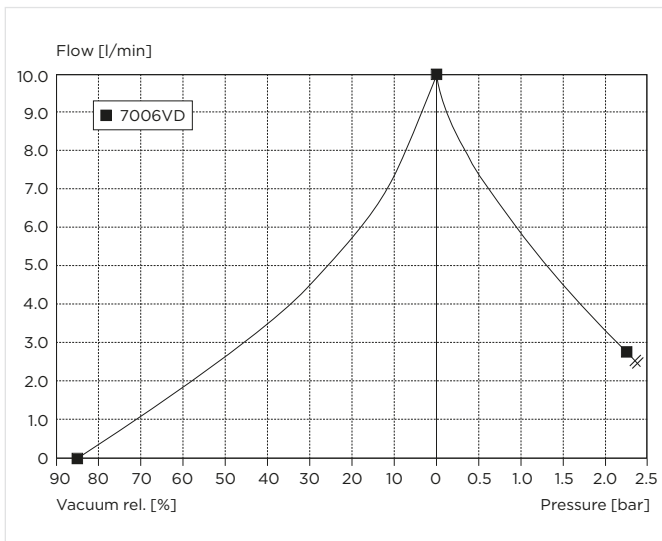
PNEUMATIC DATA	
Description	7006VD/2.3/E/BLDC
Part number	12 V DC: 70060200 24 V DC: 70060071
Max. flow	10.0 l/min <sup>(2)</sup>
Max. intermittent duty	2.5 bar
Max. continuous pressure	0.8 bar
Max. restart pressure	Ambient pressure*
Max. vacuum	85 %
Max. continuous vacuum	85 %
Max. restart vacuum	85 %

ELECTRICAL DATA	
Motor type	Brushless
Nominal voltage	12/24 V DC
Nominal speed	1000/3500 rpm <sup>(1)</sup>
Current consumption	3.9/2.1 A
Starting current	10.4 A
Power consumption	28 W
Motor insulation class	E
Protection class	IP20

GENERAL DATA	
Ambient temperature	15 to 40 °C
Media temperature	15 to 60 °C
Weight	0.66 kg
Port direction	D

<sup>(1)</sup> For external speed control 1 to 10 V.  
<sup>(2)</sup> Flow at 3500 rpm.  
 \* Part numbers change when restart is required with vacuum or pressure.

## FLOW CURVES



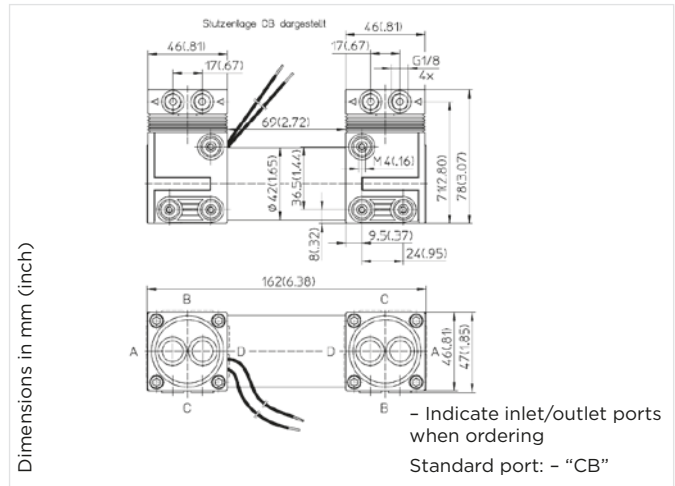
WETTED PARTS		OPTIONS	
Pump chamber	PAA	PPS	
Pump head	Polyarylamide	PPS	
Diaphragm	EPDM	FKM, PTFE (FKM)	
Valves	EPDM	FKM	
O-Ring	EPDM	FKM	

WIRING DIAGRAM			
Pin 1	V Supply	Red	12 V DC (max. voltage range: 10..16 V DC) 24 V DC (max. voltage range: 10..28 V DC)
Pin 2	Ground	Black	Ground
Pin 3	Speed Control	Brown	0..12 V DC (0..3500 rpm) 0..24 V DC (0..3500 rpm)

Model key:  
 Type Pressure Diaphragm, Valves, O-Ring  
 7006 VD / 2.3 / E / BLDC  
 Vacuum Eccentric Motor type

# Diaphragm Pump 7006ZP/ZVR DC

<b>Flow</b>	<b>15.0 l/min</b>
<b>Max. pressure</b>	<b>2.5 bar</b>
<b>Max. vacuum</b>	<b>95 %</b>



## PNEUMATIC DATA

Description	7006ZVDP/2.3/E/DC	7006ZVR/2.3/E/DC
Part number	12 V DC <b>70060054</b> 24 V DC 70060055	<b>70060057</b> 70060058
Max. flow	15.0 l/min	8.0 l/min
Max. intermittent duty	2.5 bar	
Max. continuous pressure	0.8 bar	
Max. restart pressure	2.5 bar	
Max. vacuum	85%	95%
Max. continuous vacuum	85%	95%
Max. restart vacuum	85%	95%

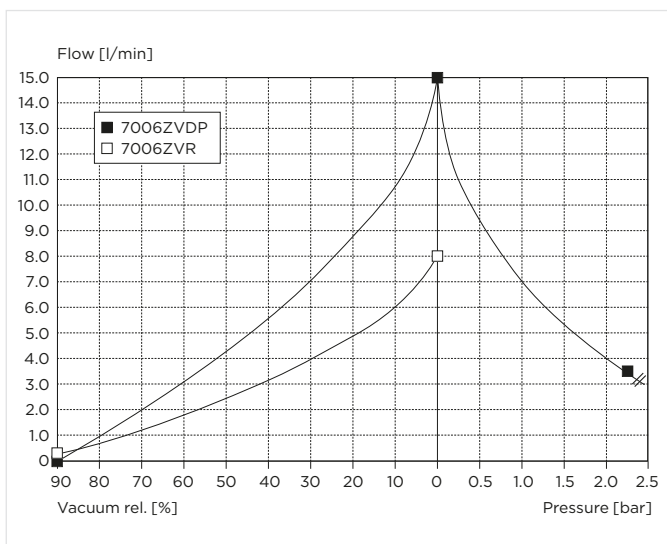
## ELECTRICAL DATA

Motor type	Permanent magnet	Permanent magnet
Nominal voltage	12/24 V DC	12/24 V DC
Nominal speed	2800 rpm	2800 rpm
Current consumption	4.0/2 A	3.7/2 A
Starting current	8.7/4.7 A	8.7/4.7 A
Power consumption	48 W	48 W
Motor insulation class	B	B
Protection class	IP20	IP20

## GENERAL DATA

Ambient temperature	15 to 40 °C	15 to 40 °C
Media temperature	15 to 60 °C	15 to 60 °C
Weight	0.9 kg	0.9 kg
Port direction	CB	DD
Configuration	Parallel	Series

## FLOW CURVES



## WETTED PARTS

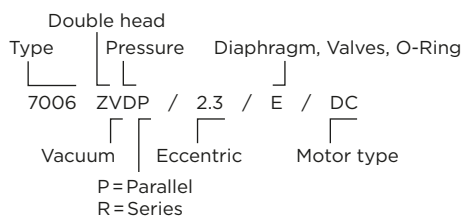
Pump chamber	PAA
Pump head	Polyarylamide
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

## OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

**7006...** Stock programme

Model key:



# Diaphragm Pump 7006ZP AC

Flow	14.0 l/min
Max. pressure	2.5 bar
Max. vacuum	85 %



## PNEUMATIC DATA

Description	7006ZVDP/2.3/E/AC
Part number	230 V/50 Hz 70060056
Max. flow	14.0 l/min <sup>(2)</sup>
Max. intermittent duty	2.5 bar
Max. continuous pressure	0.8 bar
Max. restart pressure	Ambient pressure*
Max. vacuum	85 %
Max. continuous vacuum	85 %
Max. restart vacuum	85 %

## ELECTRICAL DATA

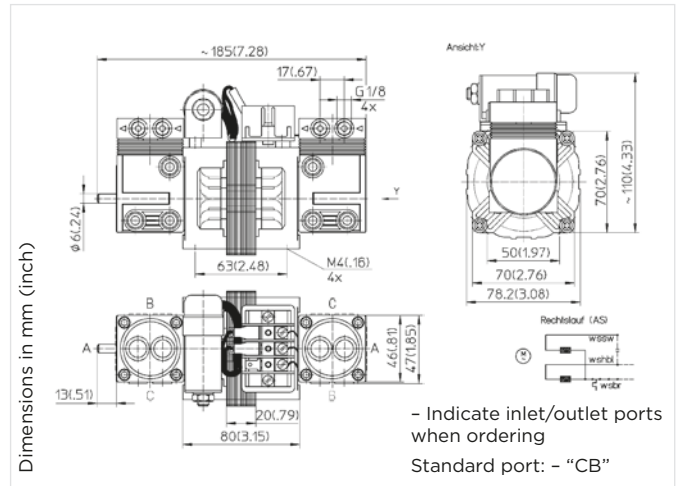
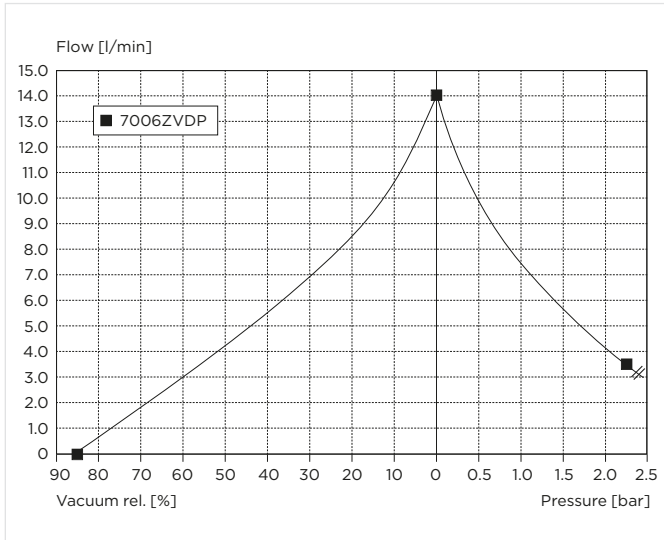
Motor type	Capacitor
Nominal voltage	230 V/50 Hz
Nominal speed	2800 rpm
Current consumption	0.5 A
Starting current	0.7 A
Power consumption	20 W
Motor insulation class	F
Protection class	IP00
Thermal switch	150 °C

## GENERAL DATA

Ambient temperature	15 to 40 °C
Media temperature	15 to 40 °C
Weight	1.8 kg
Port direction	CB
Configuration	Parallel

\* Part numbers change when restart is required with vacuum or pressure.  
Pneumatic data are measured at 50 Hz. At 60 Hz the performance is increased by 20 %.

## FLOW CURVES



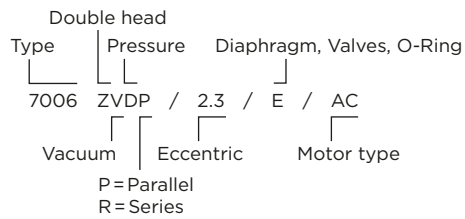
## WETTED PARTS

Pump chamber	PAA
Pump head	Polyarylamide
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

## OPTIONS

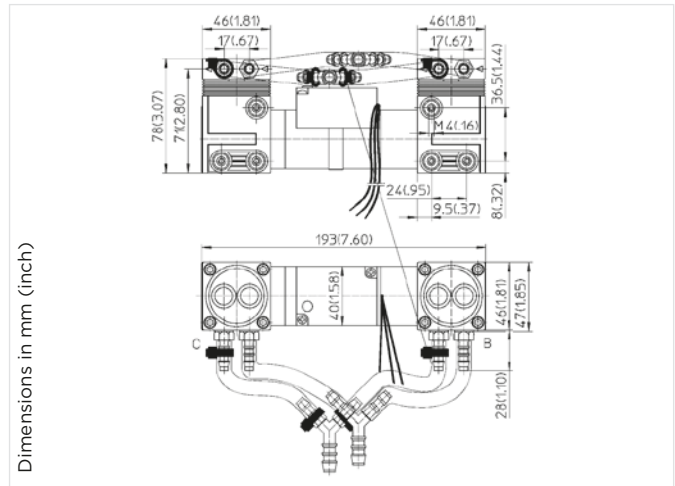
PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

Model key:



# Diaphragm Pump 7006ZP/ZVR BLDC

<b>Flow</b>	<b>18.0 l/min</b>
<b>Max. pressure</b>	<b>2.5 bar</b>
<b>Max. vacuum</b>	<b>95 %</b>



## PNEUMATIC DATA

Description	7006ZVDP/2.3/E/BLDC	7006ZVR/2.3/E/BLDC
Part number	12 V DC 70060201 24 V DC 70060016	70060074 70060073
Max. flow	18.0 l/min <sup>(2)</sup>	8.7 l/min <sup>(2)</sup>
Max. intermittent duty	2.5 bar	
Max. continuous pressure	0.5 bar	
Max. restart pressure	Ambient pressure*	
Max. vacuum	85%	95%
Max. continuous vacuum	85%	95%
Max. restart vacuum	Ambient pressure*	95%

## ELECTRICAL DATA

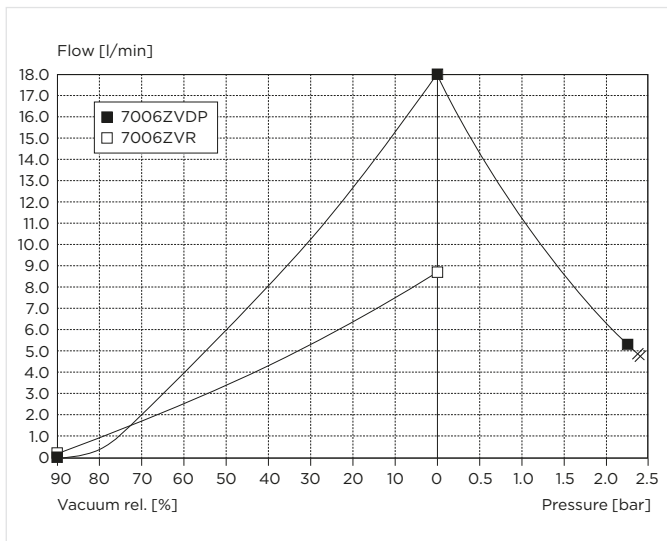
Motor type	Brushless	Brushless
Nominal voltage	12/24 V DC	12/24 V DC
Nominal speed	1000/3500 rpm <sup>(1)</sup>	1000/3500 rpm <sup>(1)</sup>
Current consumption	3.9/2.1 A	3.9/2.1 A
Starting current	10.5 A	10.5 A
Power consumption	50 W	30 W
Motor insulation class	E	E
Protection class	IP20	IP20

## GENERAL DATA

Ambient temperature	15 to 40 °C	15 to 40 °C
Media temperature	15 to 60 °C	15 to 60 °C
Weight	0.9 kg	0.9 kg
Port direction	CB	CB
Configuration	Parallel	Series

<sup>(1)</sup> For external speed control 1 to 10 V. <sup>(2)</sup> Flow at 3500 rpm. \* Part numbers change when restart is required with vacuum or pressure.

## FLOW CURVES



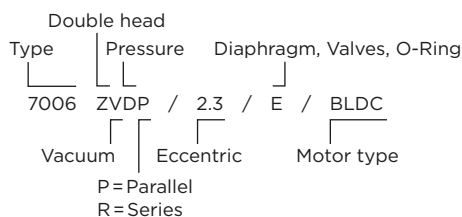
## WETTED PARTS

Wetted Part	Material	Options
Pump chamber	PAA	PPS
Pump head	Polyarylamide	PPS
Diaphragm	EPDM	FKM, PTFE (FKM)
Valves	EPDM	FKM
O-Ring	EPDM	FKM

## WIRING DIAGRAM

Pin	Function	Color	Voltage	Notes
Pin 1	V Supply	Red	12 V DC 24 V DC	(max. voltage range: 10..16 V DC) (max. voltage range: 10..28 V DC)
Pin 2	Ground	Black	Ground	
Pin 3	Speed Control	Brown	0..12 V DC 0..24 V DC	(0..3500 rpm) (0..3500 rpm)

Model key:







PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

[gd-thomas.com](http://gd-thomas.com)

The logo for THOMAS, featuring the word "THOMAS" in a bold, black, sans-serif font. Above the letters "O" and "M" is a red swoosh that starts under the "T", goes over the "O", and ends under the "S".



**Gardner Denver Thomas GmbH**

Livry-Gargan-Str. 10  
82256 Fürstenfeldbruck  
Germany

T +49 8141 2280 0  
F +49 8141 8892136

[thomas.de@gardnerdenver.com](mailto:thomas.de@gardnerdenver.com)

**Gardner Denver Thomas. Inc.**

1419 Illinois Avenue  
Sheboygan. WI 53081  
USA

T +1 920 4574891  
F +1 920 4514276

[td.usa@gardnerdenver.com](mailto:td.usa@gardnerdenver.com)

**Gardner Denver Thomas Pneumatic Systems (Wuxi) Co., Ltd.**

No. 1 New Dong An Road, Shuofang Town, Wuxi, Xinwu District  
Jiangsu 214142  
China

T +86 510 6878 2258  
F +86 510 6878 2200

[thomas.cn@gardnerdenver.com](mailto:thomas.cn@gardnerdenver.com)

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 in connection therewith. Thomas does not warrant, guarantee or assume any obligation or liability in connection with this information.

Models presented in this catalog are representative of the product family. Photos of products pictured in this catalog do not necessarily represent a specific model number. To obtain further information for custom options, contact your local Thomas office.

Printed in Germany Form No. 17007006 04/2022 © Gardner Denver Thomas GmbH. All rights reserved.