7006 Series

THOMAS
by Gardner Denver

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









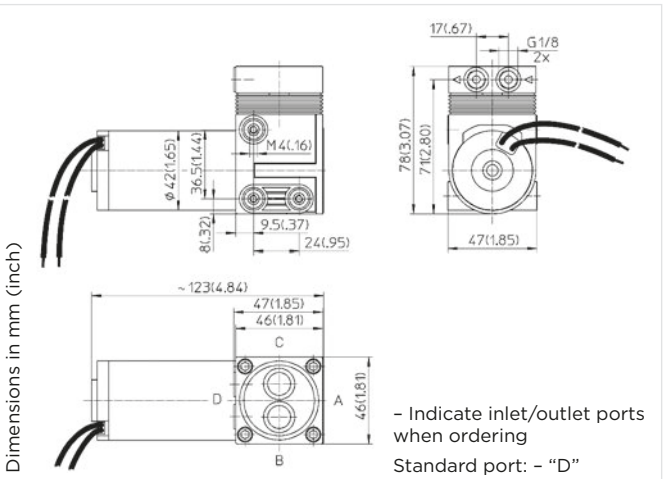


Diaphragm

Diaphragm Pump **7006 DC**

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





– Indicate inlet/outlet ports when ordering

Standard port: – "D"

PNEUMATIC DATA

Description		7006VD/2.3/E/DC
Part number	12 V DC	**70060050**
	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 %

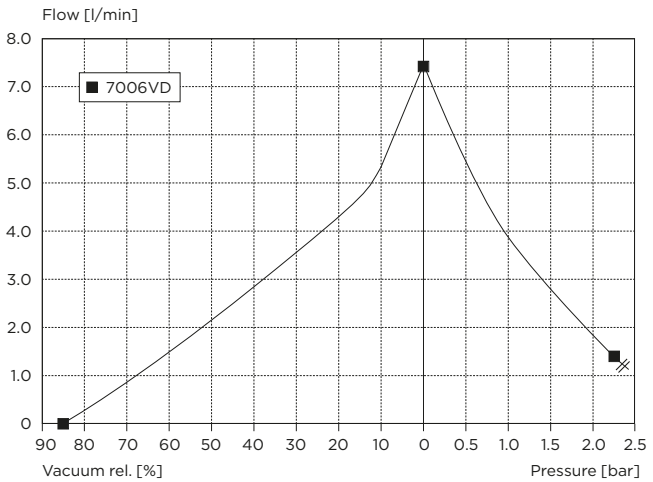
ELECTRICAL DATA

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

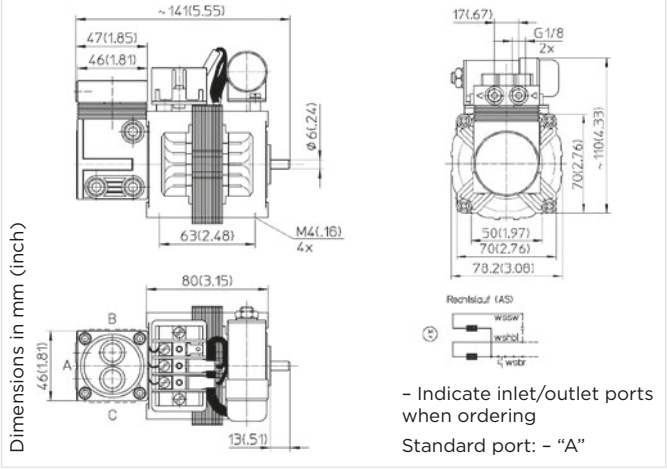
Model key:

Type	Pressure		Diaphragm, Valves, O-Ring		
7006	VD	/	2.3	/ E /	DC
	Vacuum		Eccentric		Motor type

Diaphragm Pump **7006 AC**

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





– Indicate inlet/outlet ports when ordering

Standard port: – "A"

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

WETTED PARTS

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

OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

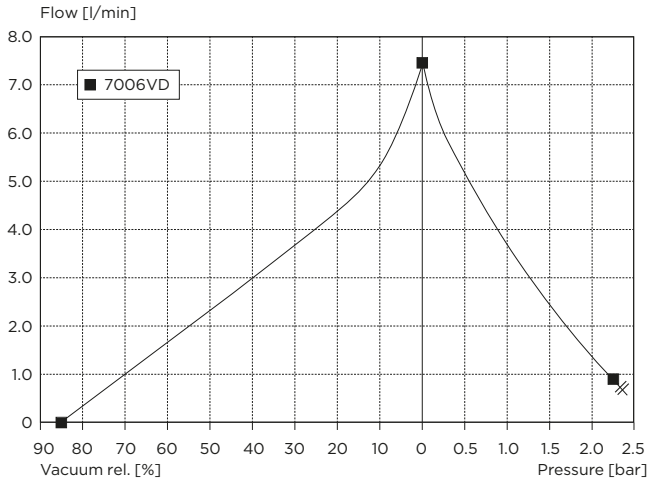
Model key:

Type Pressure Diaphragm, Valves, O-Ring

7006 VD / 2.3 / E / AC

Vacuum Eccentric Motor type

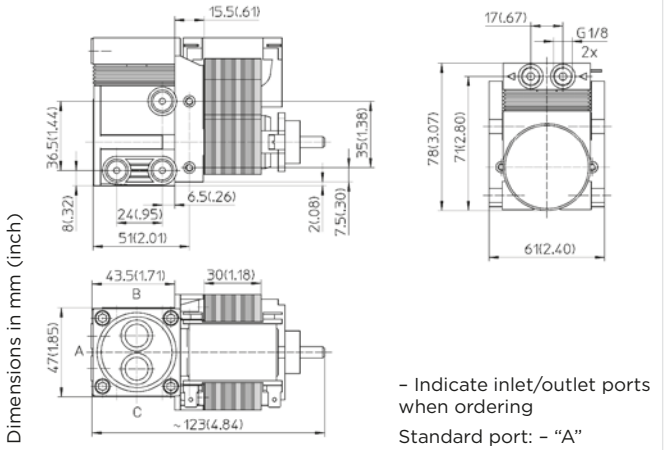
FLOW CURVES



Diaphragm Pump **7006 AC**

Flow	**9.0 l/min**
Max. pressure	**2.5 bar**
Max. vacuum	**85 %**





– Indicate inlet/outlet ports when ordering

Standard port: – "A"

PNEUMATIC DATA

Description		7006VD/2.3/E/AC	7006VD/2.3/E/AC
Part number	115 V/60 Hz	70060063	
	230 V/50 Hz		**70060051**
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

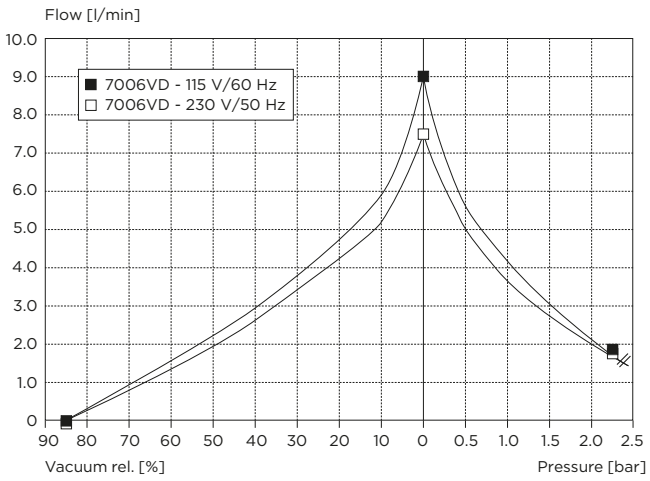
Motor type	Shaded pole	Shaded pole
Nominal voltage	115 V/60 Hz	230 V/50 Hz
Nominal speed	3300 rpm	2800 rpm
Current consumption	1.3 A	0.55 A
Starting current	1.7 A	0.7 A
Power consumption	67 W	62 W
Motor insulation class	H	F
Protection class	IP00	IP00
Thermal switch	150 °C	150 °C

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:

Type Pressure Diaphragm, Valves, O-Ring

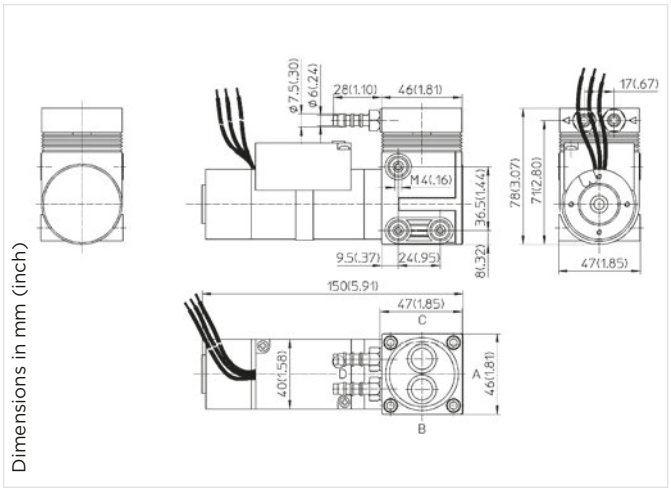
7006 VD / 2.3 / E / AC

Vacuum Eccentric Motor type

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(2)
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

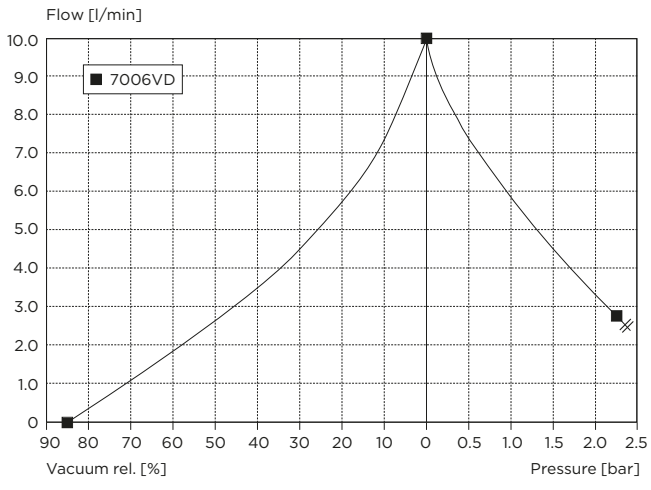
Motor type	Brushless
Nominal voltage	12/24 V DC
Nominal speed	1000/3500 rpm(1)
Current consumption	3.9/2.1 A
Starting current	10.4 A
Power consumption	28 W
Motor insulation class	E
Protection class	IP20

GENERAL DATA

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

(1) For external speed control 1 to 10 V.
(2) Flow at 3500 rpm.
* 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

WIRING DIAGRAM

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)

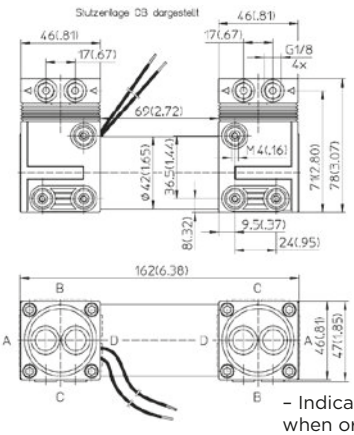
Model key:

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

Diaphragm Pump **7006ZP/ZVR DC**

Flow	**15.0 l/min**
Max. pressure	**2.5 bar**
Max. vacuum	**95 %**





Dimensions in mm (inch)

– Indicate inlet/outlet ports when ordering

Standard port: – "CB"

PNEUMATIC DATA

Description		7006ZVDP/2.3/E/DC	7006ZVR/2.3/E/DC
Part number	12 V DC	**70060054**	**70060057**
	24 V DC	70060055	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 %

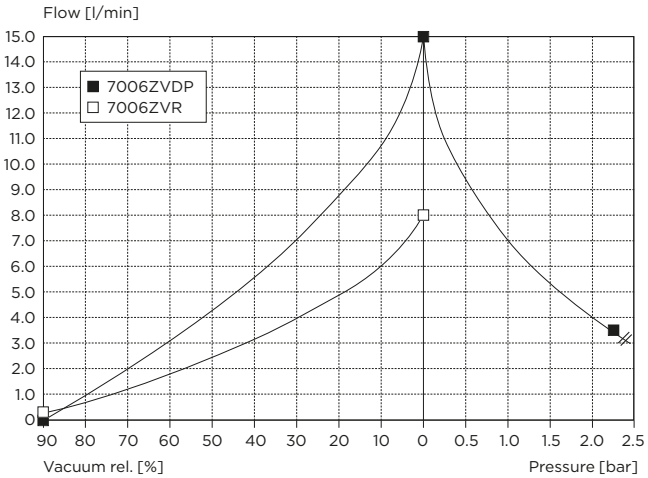
ELECTRICAL DATA

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

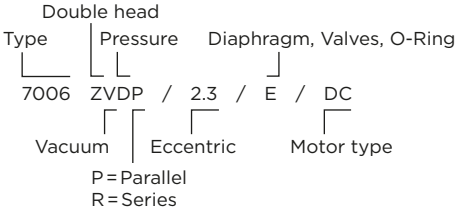
Pump chamber	PAA
Pump head	Polyarylamide
Diaphragm	EPDM
Valves	EPDM
O-Ring	EPDM

OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

7006... Stock programme

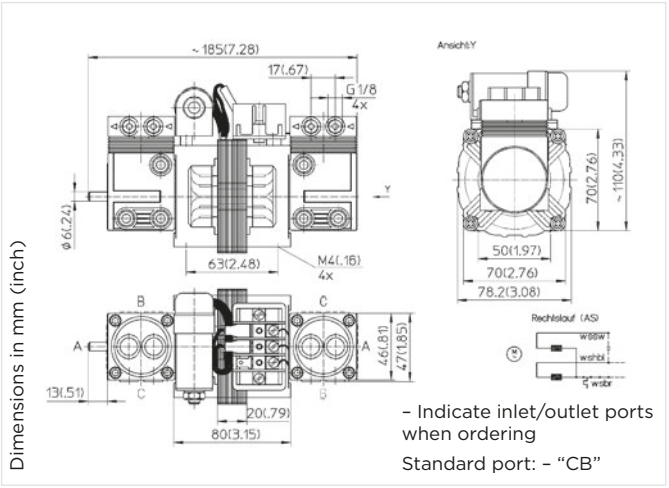
Model key:



Diaphragm Pump **7006ZP AC**

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





– Indicate inlet/outlet ports when ordering

Standard port: – "CB"

PNEUMATIC DATA

Description		7006ZVDP/2.3/E/AC
Part number	230 V/50 Hz	70060056
Max. flow		14.0 l/min(2)
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

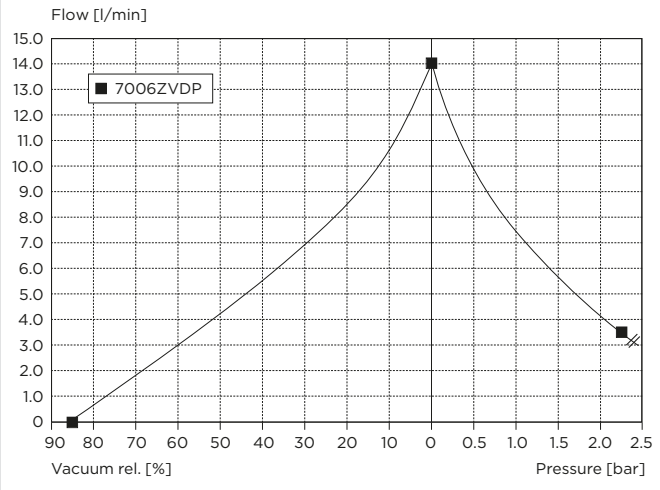
Motor type	Capacitor
Nominal voltage	230 V/50 Hz
Nominal speed	2800 rpm
Current consumption	0.5 A
Starting current	0.7 A
Power consumption	20 W
Motor insulation class	F
Protection class	IP00
Thermal switch	150 °C

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

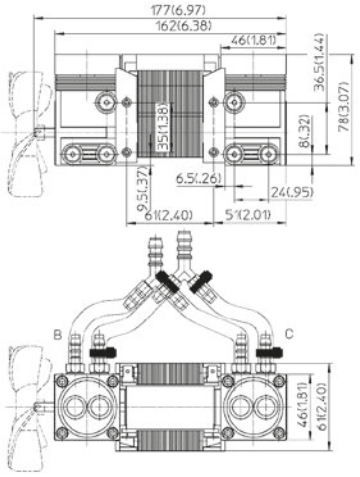
Model key:

Double head
Type | Pressure | Diaphragm, Valves, O-Ring
7006 ZVDP / 2.3 / E / AC
Vacuum | Eccentric | Motor type
P = Parallel
R = Series

Diaphragm Pump **7006ZP AC**

Flow	**13.5 l/min**
Max. pressure	**2.5 bar**
Max. vacuum	**95 %**





Dimensions in mm (inch)

PNEUMATIC DATA

Description	7006ZVDP/2.3/E/AC	7006ZVR/2.3/E/AC
Part number 230 V/50 Hz	70060075	70060076
Max. flow	13.5 l/min	7.5 l/min
Max. intermittent duty	2.5 bar	
Max. continuous pressure	0.8 bar	
Max. restart pressure	Ambient pressure	
Max. vacuum	85 %	95 %
Max. continuous vacuum	85 %	95 %
Max. restart vacuum	Ambient pressure	Ambient pressure

ELECTRICAL DATA

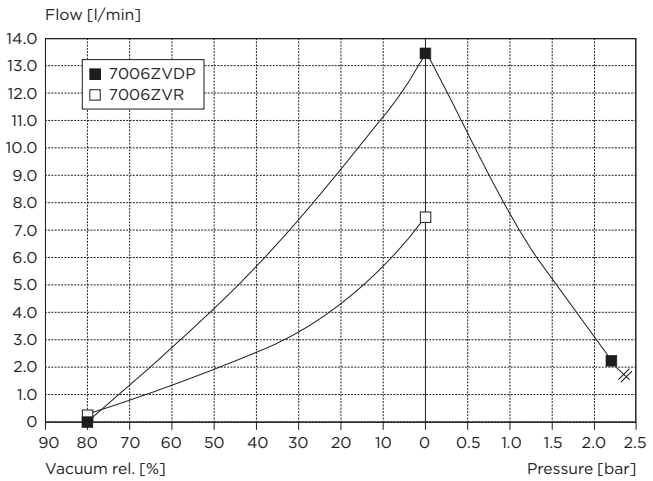
Motor type	Shaded pole	Shaded pole
Nominal voltage	230 V/50 Hz	230 V/50 Hz
Nominal speed	2500 rpm	2500 rpm
Current consumption	0.7 A	0.7 A
Starting current	1.1 A	1.1 A
Power consumption	180 W	180 W
Motor insulation class	H	H
Protection class	IP00	IP00
Thermal switch	180 °C	180 °C

GENERAL DATA

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

Pneumatic data are measured at 50 Hz. At 60 Hz the performance is increased by 20 %.

FLOW CURVES



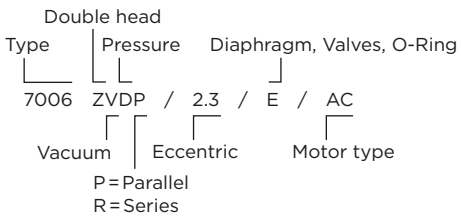
WETTED PARTS

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

OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

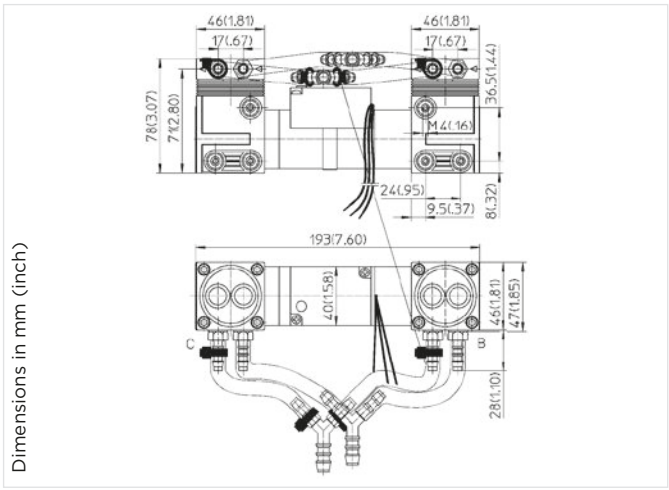
Model key:



Diaphragm Pump **7006ZP/ZVR BLDC**

Flow	**18.0 l/min**
Max. pressure	**2.5 bar**
Max. vacuum	**95 %**





PNEUMATIC DATA

Description		7006ZVDP/2.3/E/BLDC	7006ZVR/2.3/E/BLDC
Part number	12 V DC	70060201	70060074
	24 V DC	70060016	70060073
Max. flow		18.0 l/min(2)	8.7 l/min(2)
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

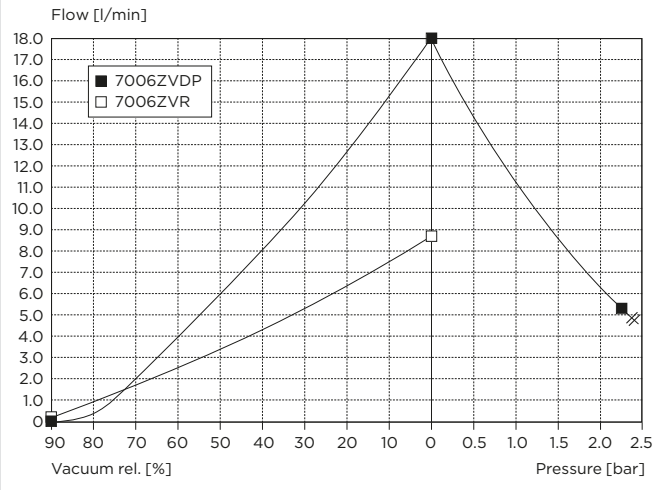
Motor type	Brushless	Brushless
Nominal voltage	12/24 V DC	12/24 V DC
Nominal speed	1000/3500 rpm(1)	1000/3500 rpm(1)
Current consumption	3.9/2.1 A	3.9/2.1 A
Starting current	10.5 A	10.5 A
Power consumption	50 W	30 W
Motor insulation class	E	E
Protection class	IP20	IP20

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

(1) For external speed control 1 to 10 V. (2) Flow at 3500 rpm. * 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

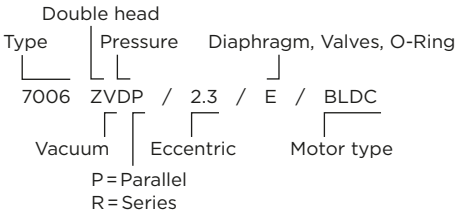
OPTIONS

PPS
PPS
FKM, PTFE (FKM)
FKM
FKM

WIRING DIAGRAM

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:



Notes

Notes

PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

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