



Diaphragm Pumps

MODELS

7006
7010
7011
7015



7006 DC



FEATURES

- Oil-less
- Maintenance free
- Smooth running
- Low sound level
- Long lifetime
- Sealed tight
- Large choice in material
- Pressure or vacuum

TYPICAL APPLICATIONS

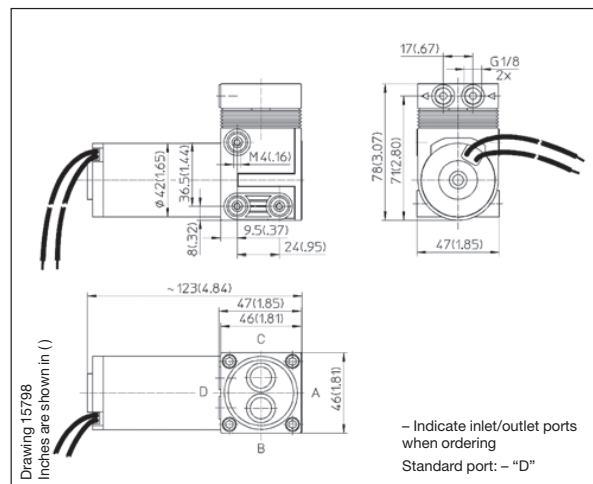
- Medical devices
- Analysis
- Air collector
- Inhalators
- Level surveillance
- Autoclaves



THOMAS
by Gardner Denver

Diaphragm Pump 7006 DC

| | |
|---------------|-----------|
| Flow | 7,5 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 85 % |



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 % |

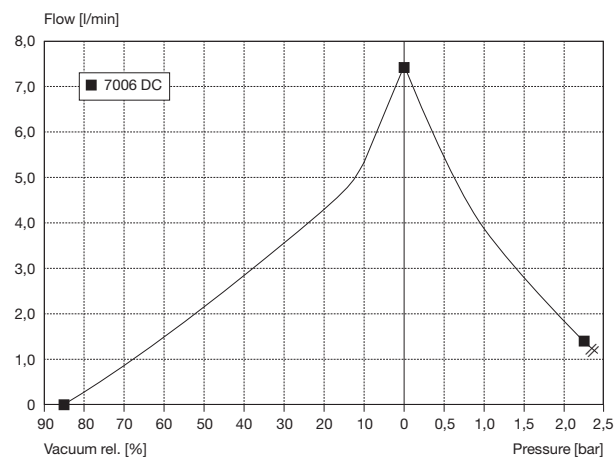
Electrical Data

| | |
|------------------------|------------------|
| 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

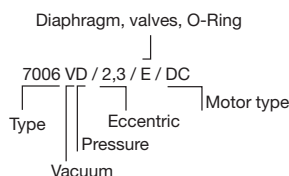
| | |
|---------------------------|---------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFPM) |

Model key:

7006... Stock programme

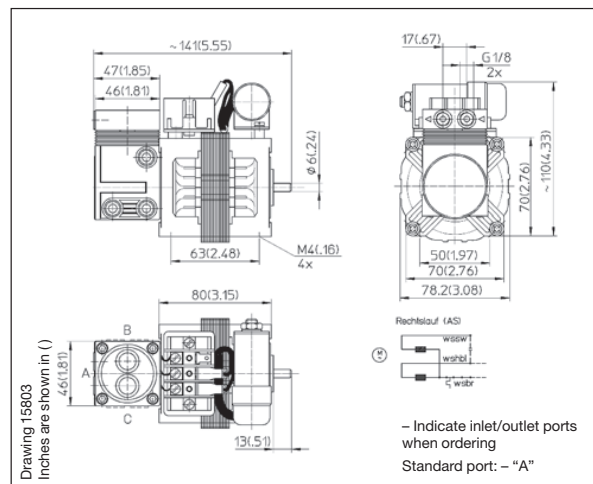


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THOMAS
by Gardner Denver

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 % |

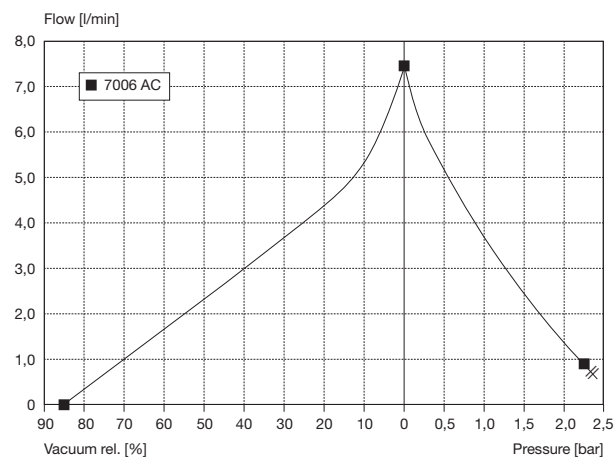
Electrical Data

| | |
|------------------------|-------------|
| 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 40 °C |
| Weight | 1,6 kg |
| Port direction | A |

Flow Curves



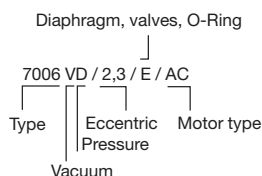
Wetted parts

| | |
|---------------------------|---------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFPM) |

Model key:

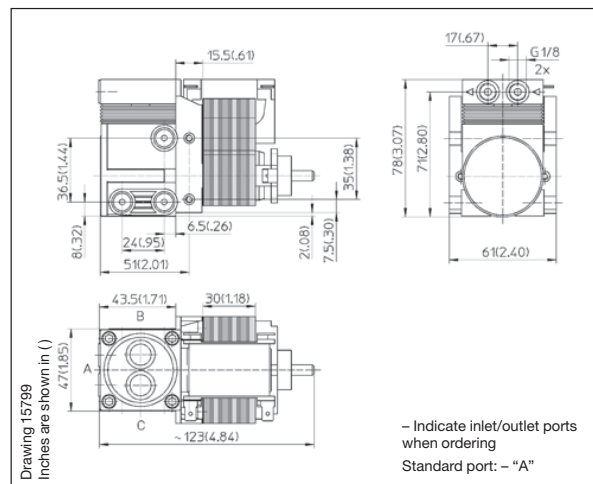


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THOMAS
by Gardner Denver

Diaphragm Pump 7006 AC

| | |
|---------------|-----------|
| Flow | 9,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 85 % |



Pneumatic Data

| | | |
|--------------------------|---|-------------------|
| Description | 7006VD/2,3/E/AC | 7006VD/2,3/E/AC |
| Part number | 115 V/60 Hz 230 V/50 Hz 70060063 | 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

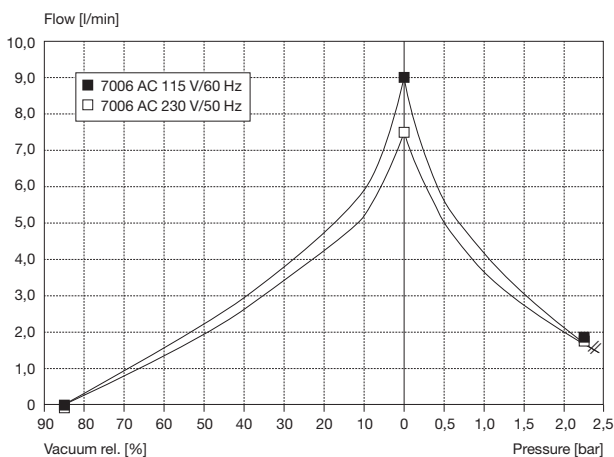
| | | |
|------------------------|-------------|-------------|
| Motor type | Shaded pole | Shaded pole |
| Nominal voltage | 115 V/60 Hz | 230 V/50 Hz |
| Nominal speed | 3300 rpm | 2800 rpm |
| Current consumption | 1,3 A | 0,55 A |
| Starting current | 1,7 A | 0,7 A |
| Power consumption | 67 W | 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



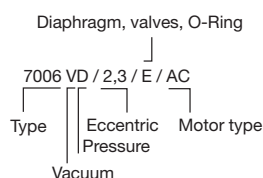
Wetted parts

| | |
|---------------------------|---------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFPM) |

Model key:



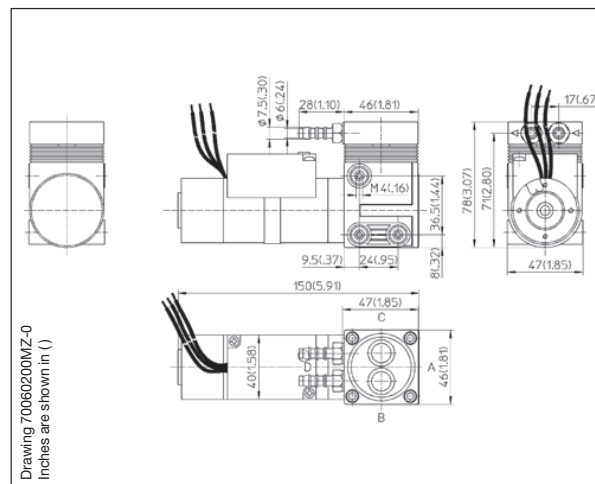
7006... Stock programme

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THOMAS
by Gardner Denver

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 | 70060200 |
| | 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 |

Wiring diagram

| Pin | Function | Colour | Control |
|-------|---------------|--------|--|
| Pin 1 | V Supply | Red | 12 VDC (max. voltage range: 10...16 VDC) 24 VDC (max. voltage range: 10...28 VDC) |
| Pin 2 | Ground | Black | Ground |
| Pin 3 | Speed Control | Brown | 0...12 VDC (0...3500 rpm) 0...24 VDC (0...3500 rpm) |

General Data

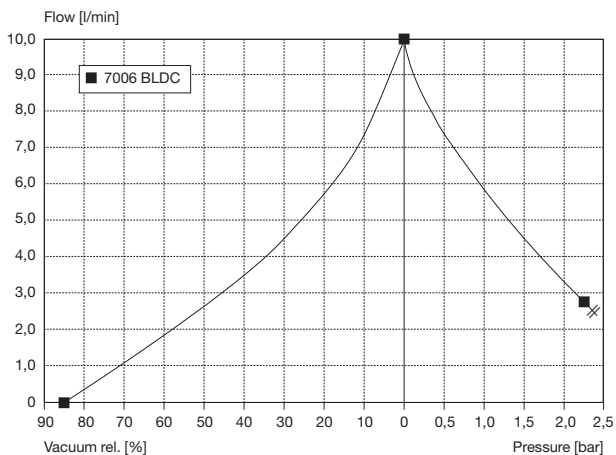
| | |
|---------------------|-------------|
| Ambient temperature | 15 to 40 °C |
| Media temperature | 15 to 60 °C |
| Weight | 0,66 kg |
| Port direction | D |

⁽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



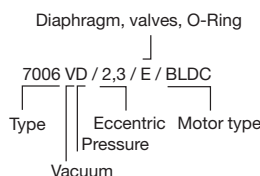
Wetted parts

| | |
|---------------------------|---------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFPM) |

Model key:

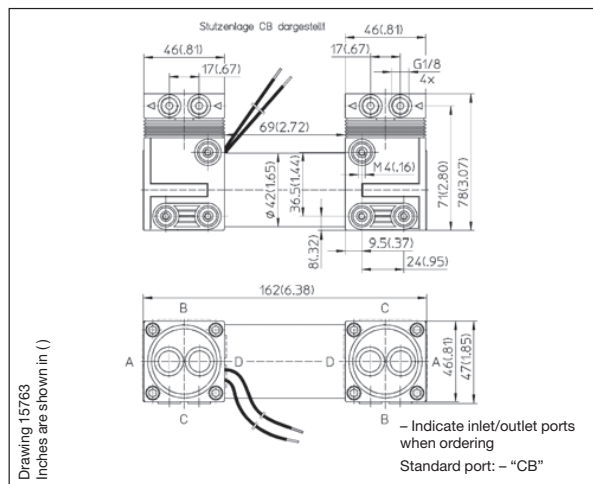


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THOMAS
by Gardner Denver

Diaphragm Pump 7006ZP/ZVR DC

| | |
|----------------------|-------------------|
| Flow | 15,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 95 % |



Pneumatic Data

| | | |
|--------------------------|----------------------|----------------------|
| Description | 7006ZVDP/2,3/E/DC | 7006ZVR/2,3/E/DC |
| Part number | 70060054 70060055 | 70060057 70060058 |
| 12 V DC | | |
| 24 V DC | | |
| 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 % |

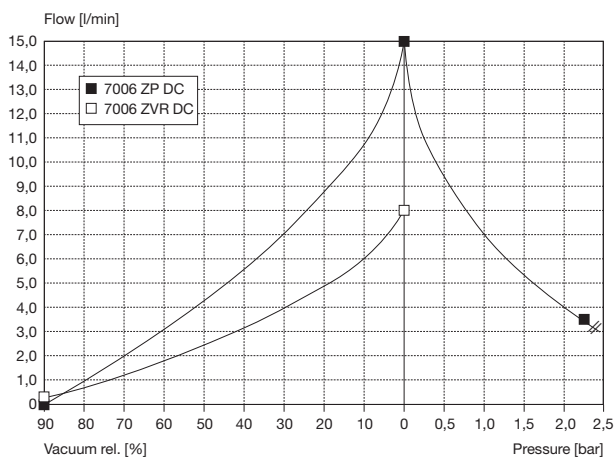
Electrical Data

| | | |
|------------------------|------------------|------------------|
| 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 head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFKM) |

Model key:

7006... Stock programme

Double head Diaphragm, valves, O-Ring

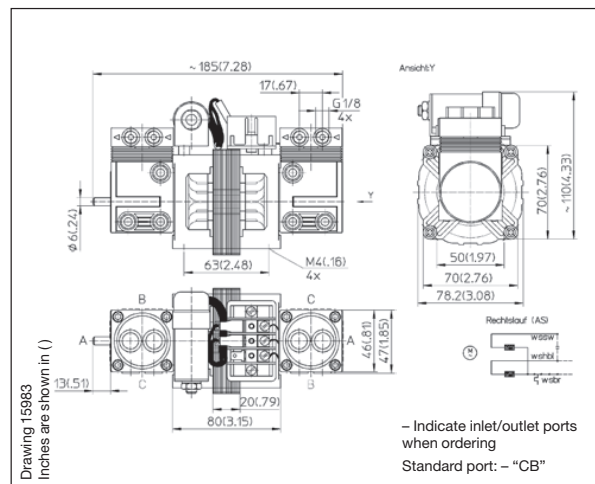
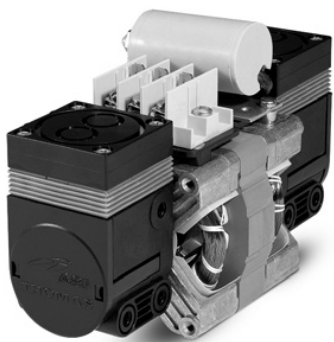
P = Parallel
 R = Series
 7006ZVDP / 2,3 / E / DC
 [Pressure] [Motor type]
 Type Vacuum Eccentric

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THOMAS
by Gardner Denver

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 | 70060056 |
| 230 V/50 Hz | |
| Max. flow | 14,0 l/min |
| 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

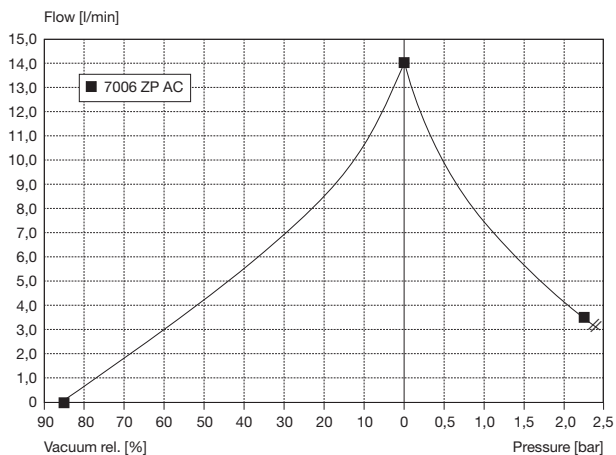
| | |
|------------------------|-------------|
| Motor type | Capacitor |
| Nominal voltage | 230 V/50 Hz |
| Nominal speed | 2800 rpm |
| Current consumption | 0,5 A |
| Starting current | 0,7 A |
| Power consumption | 20 W |
| Motor insulation class | F |
| Protection class | IP00 |
| Thermal switch | 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 head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFKM) |

Model key:

Double head Diaphragm, valves, O-Ring

P = Parallel
R = Series

7006ZVDP / 2,3 / E / AC

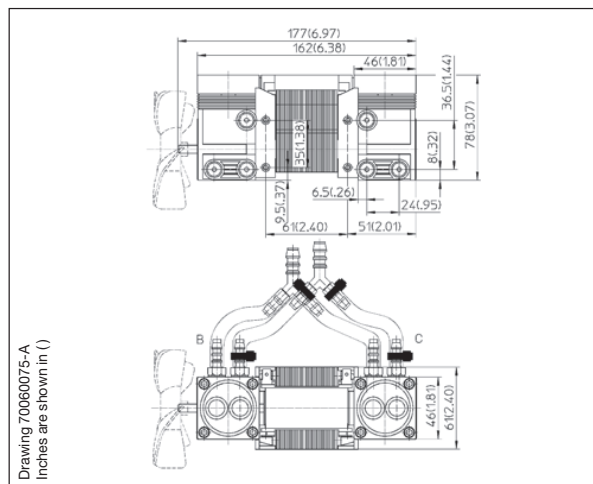
Pressure Motor type
Type Vacuum Eccentric

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THOMAS
by Gardner Denver

Diaphragm Pump 7006ZP AC

| | |
|---------------|------------|
| Flow | 13,5 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 95 % |



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

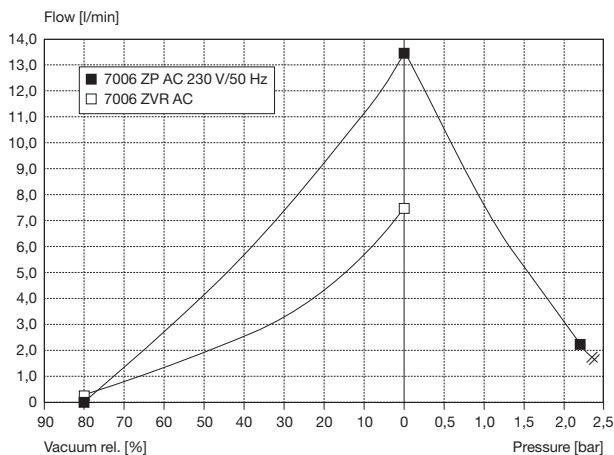
| | | |
|------------------------|-------------|-------------|
| Motor type | Shaded pole | Shaded pole |
| Nominal voltage | 230 V/50 Hz | 230 V/50 Hz |
| Nominal speed | 2500 rpm | 2500 rpm |
| Current consumption | 0,7 A | 0,7 A |
| Starting current | 1,1 A | 1,1 A |
| Power consumption | 180 W | 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 head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFKM) |

Model key:

Double head Diaphragm, valves, O-Ring

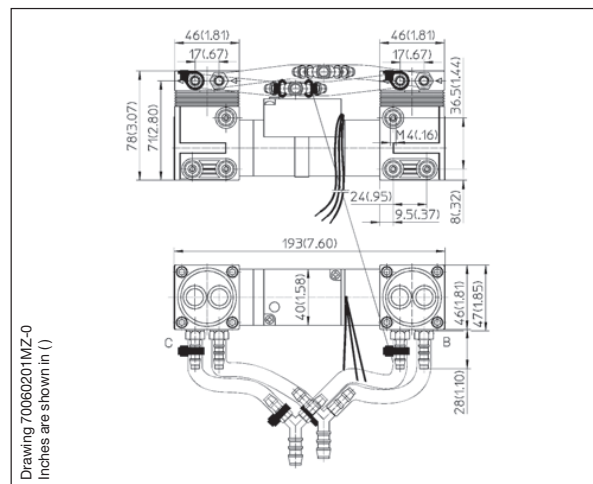
P = Parallel
 R = Series
 7006ZVDP / 2,3 / E / AC
 [Pressure] [Motor type]
 Type Vacuum Eccentric

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THOMAS
by Gardner Denver

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 | 70060201 70060016 | 70060074 70060073 |
| 12 V DC | | |
| 24 V DC | | |
| 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* | Ambient pressure* |

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 |

Wiring diagram

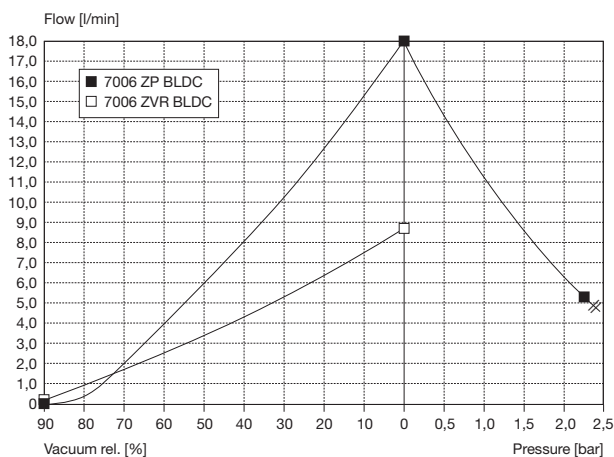
| Function | Colour | Control |
|---------------------|--------|--|
| Pin 1 V Supply | Red | 12 VDC (max. voltage range: 10..16 VDC) 24 VDC (max. voltage range: 10..28 VDC) |
| Pin 2 Ground | Black | Ground |
| Pin 3 Speed Control | Brown | 0..12 VDC (0..3500 rpm) 0..24 VDC (0..3500 rpm) |

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 head | Polyarylamide |
| Diaphragm, valves, O-Ring | EPDM |

Options

| |
|------------------|
| PPS |
| FPM, PTFE (FFKM) |

Model key:

Double head Diaphragm, valves, O-Ring

P = Parallel
R = Series

7006ZVDP / 2,3 / E / BLDC

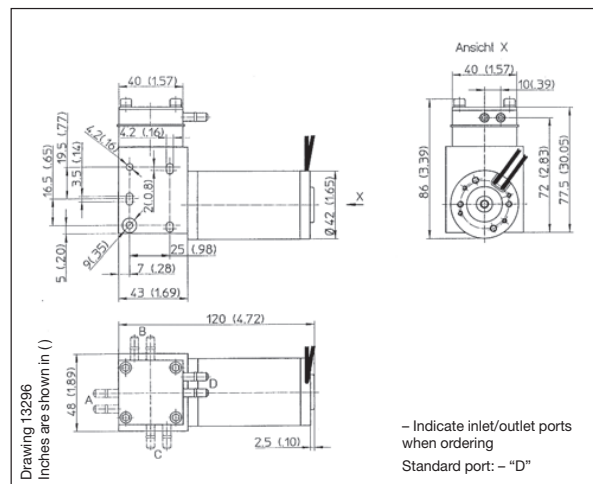
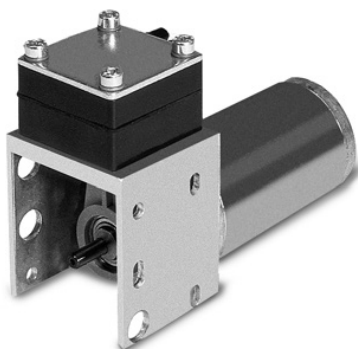
Pressure
Type Vacuum Eccentric Motor type

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THOMAS
by Gardner Denver

Diaphragm Pump 7010 DC

| | |
|---------------|-----------|
| Flow | 6,5 l/min |
| Max. pressure | 2,2 bar |
| Max. vacuum | 73 % |



Pneumatic Data

| | |
|--------------------------|---|
| Description | 7010VD/2,2/N/DC |
| Part number | 12 V DC 70102502 24 V DC 70102514 |
| Max. flow | 6,5 l/min |
| Max. intermittent duty | 2,2 bar |
| Max. continuous pressure | 1,0 bar |
| Max. restart pressure | 1,0 bar |
| Max. vacuum | 73 % |
| Max. continuous vacuum | 73 % |
| Max. restart vacuum | 73 % |

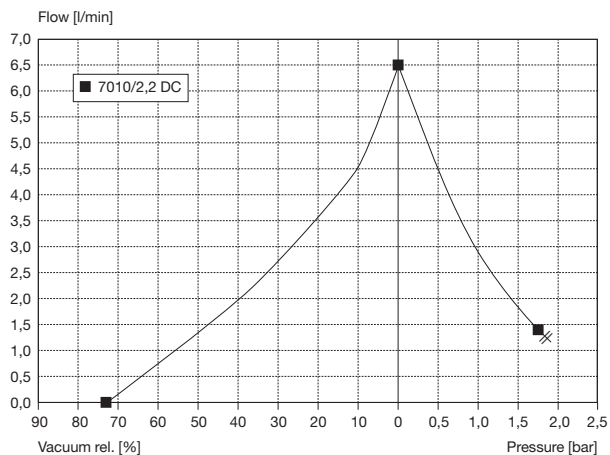
Electrical Data

| | |
|------------------------|------------------|
| Motor type | Permanent magnet |
| Nominal voltage | 12/24 V DC |
| Nominal speed | 2800 rpm |
| Current consumption | 1,3/0,65 A |
| Starting current | 5,9/3,4 A |
| Power consumption | 16 W |
| Motor insulation class | E |
| Protection class | IP00 |

General Data

| | |
|---------------------|-------------|
| Ambient temperature | 15 to 40 °C |
| Media temperature | 15 to 60 °C |
| Weight | 0,6 kg |
| Port direction | D |

Flow Curves



Wetted parts

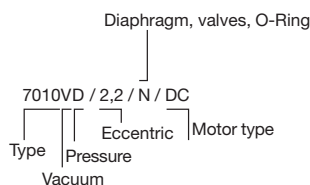
| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | NBR |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------------|
| PPS |
| PPS |
| FPM, EPDM (PTFE) |

Model key:

7010... Stock programme

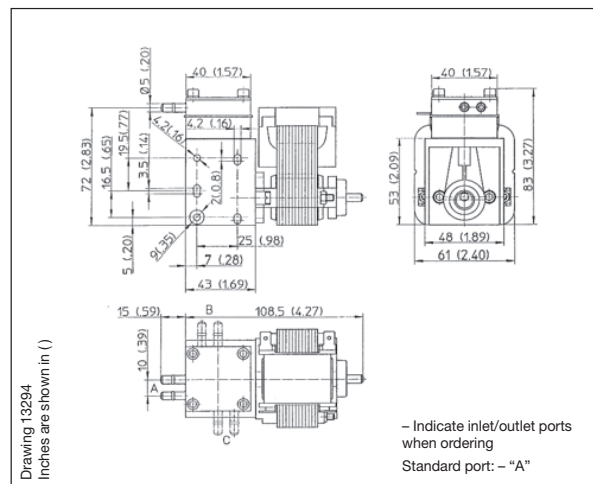
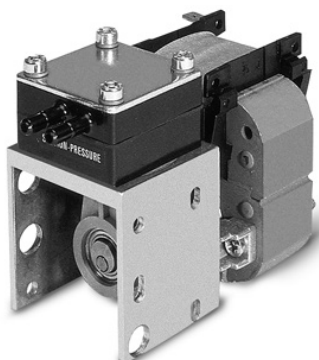


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THOMAS
by Gardner Denver

Diaphragm Pump 7010 AC

| | |
|---------------|-----------|
| Flow | 5,5 l/min |
| Max. pressure | 2,3 bar |
| Max. vacuum | 73 % |



Pneumatic Data

| | |
|--------------------------|-----------------------------|
| Description | 7010VD/2,2/V/AC |
| Part number | 230 V/50 Hz 70102532 |
| Max. flow | 5,5 l/min |
| Max. intermittent duty | 2,3 bar |
| Max. continuous pressure | 1,2 bar |
| Max. restart pressure | Ambient pressure* |
| Max. vacuum | 73 % |
| Max. continuous vacuum | 73 % |
| Max. restart vacuum | Ambient pressure* |

Electrical Data

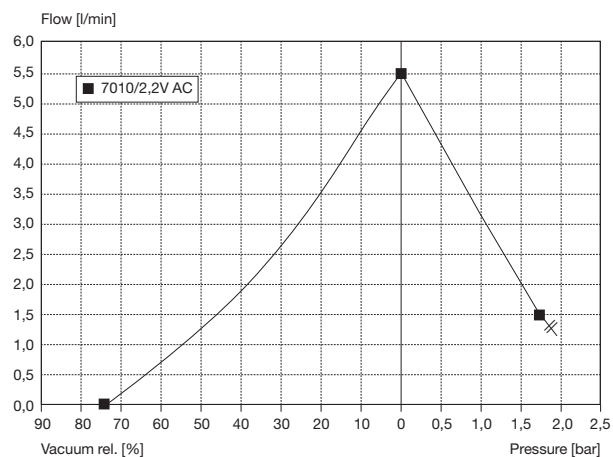
| | |
|------------------------|-------------|
| Motor type | Shaded pole |
| Nominal voltage | 230 V/50 Hz |
| Nominal speed | 2300 rpm |
| Current consumption | 0,54 A |
| Starting current | 0,62 A |
| Power consumption | 52 W |
| Motor insulation class | E |
| Protection class | IP00 |
| Thermal switch | no |

General Data

| | |
|---------------------|-------------|
| Ambient temperature | 15 to 40 °C |
| Media temperature | 15 to 40 °C |
| Weight | 0,95 kg |
| Port direction | A |

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

Flow Curves



Wetted parts

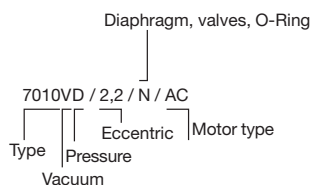
| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | FPM (V) |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------------|
| PPS |
| PPS |
| EPDM (PTFE), NBR |

Model key:

7010... Stock programme

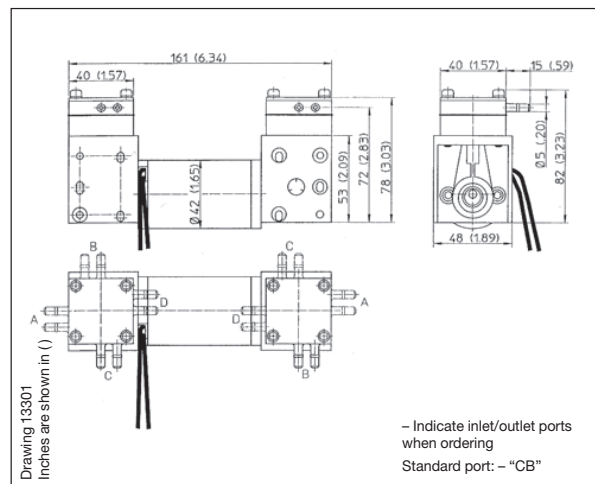
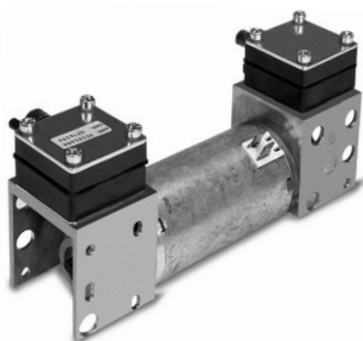


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THOMAS
by Gardner Denver

Diaphragm Pump 7010Z DC

| | |
|---------------|------------|
| Flow | 12,0 l/min |
| Max. pressure | 2,0 bar |
| Max. vacuum | 90 % |



Pneumatic Data

| | | |
|--------------------------|----------------------|--------------------|
| Description | 7010ZDP/2,2/NVN/DC | 7010ZVR/2,2/NVN/DC |
| Part number | 70102167 70102133 | 70100043 |
| 12 V | | |
| 24 V | | |
| Max. flow | 12,0 l/min | 6,0 l/min |
| Max. intermittent duty | 2,0 bar | |
| Max. continuous pressure | 0,8 bar | |
| Max. vacuum | 75 % | 90 % |
| Max. continuous vacuum | 75 % | 90 % |
| Max. restart vacuum | Ambient pressure* | 90 % |

Electrical Data

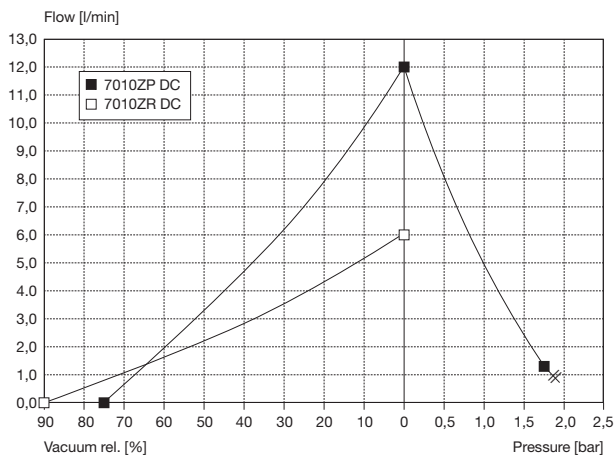
| | | |
|------------------------|----------------|----------------|
| Motor type | Direct current | Direct current |
| Nominal voltage | 12/24 V DC | 12/24 V DC |
| Nominal speed | 2800 rpm | 2800 rpm |
| Current consumption | 1,7/0,9 A | 0,9 A |
| Starting current | 4,5/3,5 A | 3,5 A |
| Power consumption | 20 W | 20 W |
| Motor insulation class | E | E |
| Protection class | IP00 | IP00 |

General Data

| | | |
|---------------------|-------------|-------------|
| Ambient temperature | 15 to 40 °C | 15 to 40 °C |
| Media temperature | 15 to 60 °C | 15 to 60 °C |
| Weight | 0,75 kg | 0,75 kg |
| Port direction | CB | CB |
| Configuration | Parallel | Series |

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

Flow Curves



Wetted parts

| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | FPM (V), NBR |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| PPS |
| EPDM, PTFE |

Model key:

Double head Diaphragm, valves, O-Ring

P = Parallel
R = Series

7010ZDP / 2,2 / NVN / DC

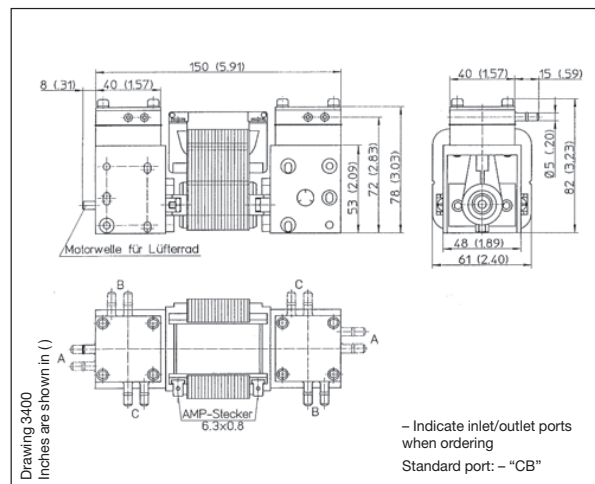
Type Pressure Eccentric Motor type

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THOMAS
by Gardner Denver

Diaphragm Pump 7010Z AC

| | |
|---------------|------------|
| Flow | 12,5 l/min |
| Max. pressure | 2,3 bar |
| Max. vacuum | 90 % |



Pneumatic Data

| | | | |
|--------------------------|-------------------|---------------------|--------------------|
| Description | 7010ZVDP/2,2/N/AC | 7010ZVDP/2,2/NVN/AC | 7010ZVR/2,2/NVN/AC |
| Part number | 70101813 | 70100196 | 70100448 |
| | 115 V/60 Hz | | |
| | 230 V/50 Hz | | |
| Max. flow | 12,5 l/min | 10,4 l/min | 5,3 l/min |
| Max. intermittent duty | 2,0 bar | 2,3 bar | |
| Max. continuous pressure | 0,8 bar | 0,8 bar | |
| Max. restart pressure | Ambient pressure* | Ambient pressure* | |
| Max. vacuum | 75 % | 75 % | 90 % |
| Max. continuous vacuum | 75 % | 75 % | 90 % |
| Max. restart vacuum | 75 % | Ambient pressure* | 90 % |

Electrical Data

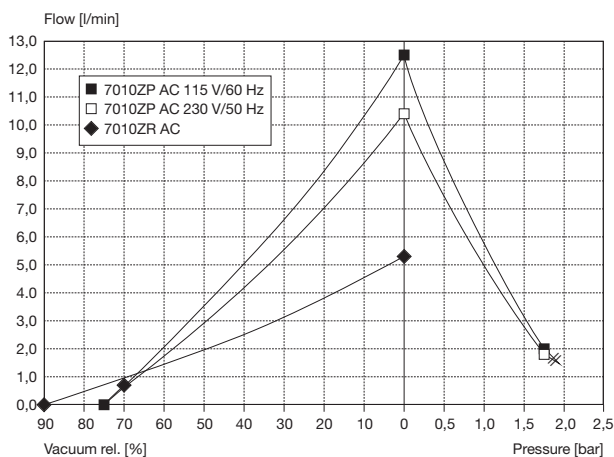
| | | | |
|------------------------|-------------|-------------|-------------|
| Motor type | Shaded pole | Shaded pole | Shaded pole |
| Nominal voltage | 115 V/60 Hz | 230 V/50 Hz | 230 V/50 Hz |
| Nominal speed | 2900 rpm | 2300 rpm | 2300 rpm |
| Current consumption | 0,9 A | 0,5 A | 0,38 A |
| Starting current | 1,1 A | 0,6 A | 0,6 A |
| Power consumption | 67 W | 60 W | 60 W |
| Motor insulation class | B | B | B |
| Protection class | IP00 | IP00 | IP00 |
| Thermal switch | 130 °C | no | no |

General Data

| | | | |
|---------------------|-------------|-------------|-------------|
| Ambient temperature | 15 to 40 °C | 15 to 40 °C | 15 to 40 °C |
| Media temperature | 15 to 40 °C | 15 to 40 °C | 15 to 60 °C |
| Weight | 1,45 kg | 1,45 kg | 1,45 kg |
| Port direction | CB | CB | CB |
| Configuration | Parallel | Parallel | Series |

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

Flow Curves



Wetted parts

| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | FPM (V), NBR |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| PPS |
| EPDM, PTFE |

Model key:

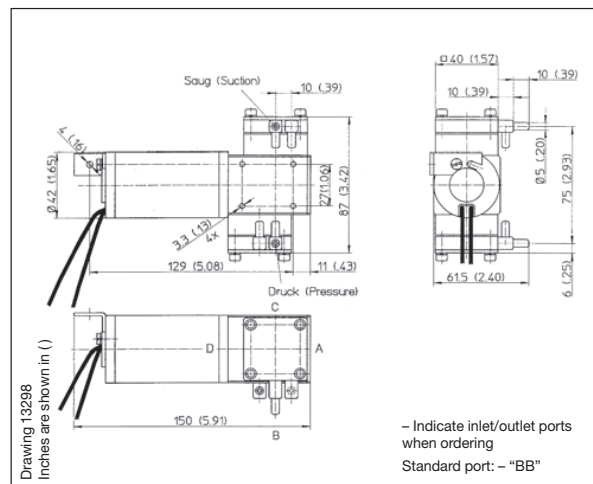
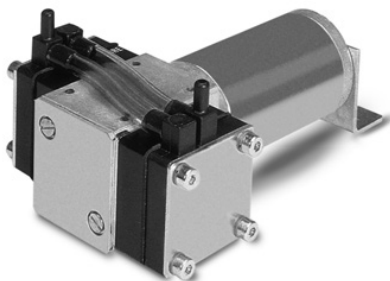
| | |
|---------------------------|-------------------------------|
| Double head | Diaphragm, valves, O-Ring |
| P = Parallel | |
| R = Series | |
| 7010ZVDP / 2,2 / NVN / AC | |
| Type | Pressure Eccentric Motor type |
| | Vacuum |

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THOMAS
by Gardner Denver

Diaphragm Pump 7011 DC

| | |
|---------------|------------|
| Flow | 11,0 l/min |
| Max. pressure | 2,3 bar |
| Max. vacuum | 90 % |



Pneumatic Data

| | | |
|--------------------------|--|-----------------|
| Description | 7011VDP/2,2/NVN/DC | 7011VR/2,2/N/DC |
| Part number | 12 V DC 24 V DC 70110008 70110042 | 70110252 |
| Max. flow | 11,0 l/min | 6,5 l/min |
| Max. intermittent duty | 2,3 bar | |
| Max. continuous pressure | 0,8 bar | |
| Max. restart pressure | Ambient pressure* | |
| Max. vacuum | 73 % | 90 % |
| Max. continuous vacuum | 73 % | 90 % |
| Max. restart vacuum | Ambient pressure* | 90 % |

Electrical Data

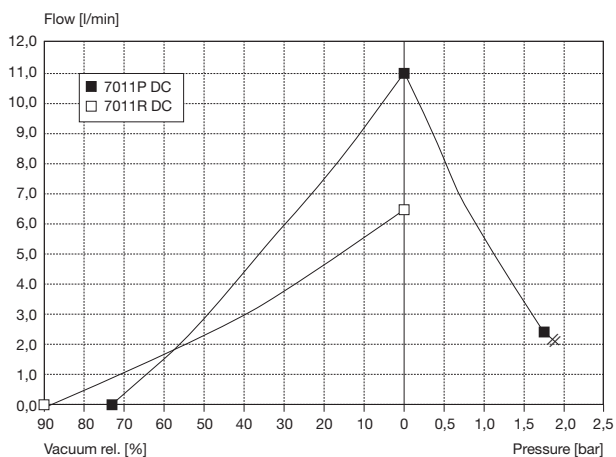
| | | |
|------------------------|----------------|----------------|
| Motor type | Direct current | Direct current |
| Nominal voltage | 12/24 V DC | 12/24 V DC |
| Nominal speed | 3100 rpm | 3100 rpm |
| Current consumption | 2,0/1,0 A | 1,7 A |
| Starting current | 4,5/3,5 A | 4,5 A |
| Power consumption | 24 W | 20 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 | 0,85 kg | 0,85 kg |
| Port direction | BB | BB |
| Configuration | Parallel | Series |

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

Flow Curves



Wetted parts

| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | FPM (V), NBR |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| PPS |
| EPDM, PTFE |

Model key:

7011... Stock programme

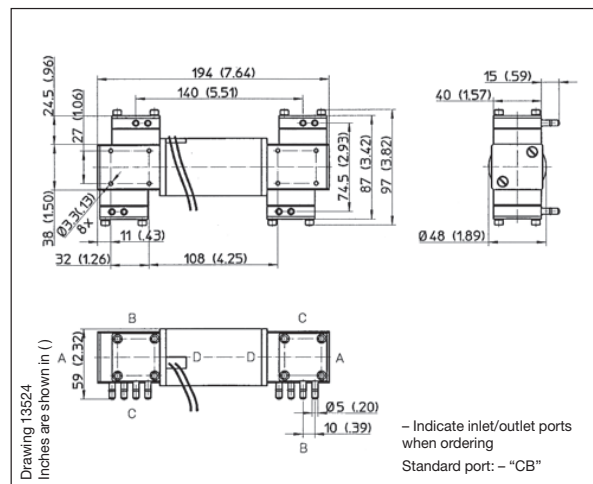
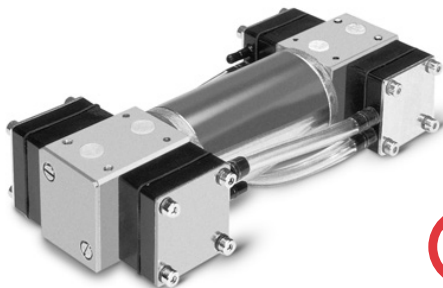
Vacuum Diaphragm, valves, O-Ring
P = Parallel
R = Series
7011VDP / 2,2 / NVN / DC
Type Pressure Eccentric Motor type

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THOMAS
by Gardner Denver

Diaphragm Pump 7011Z DC

| | |
|---------------|------------|
| Flow | 24,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 98 % |



Pneumatic Data

| | | |
|--------------------------|--|----------------------|
| Description | 7011ZVDP/2,2/VVN/DC | 7011ZVR/2,2/VVN/DC |
| Part number | 12 V DC 24 V DC 70110520 70110521 | 70110037 70110069 |
| Max. flow | 24,0 l/min | 7,5 l/min |
| Max. intermittent duty | 2,5 bar | |
| Max. continuous pressure | 0,5 bar | |
| Max. restart pressure | Ambient pressure* | |
| Max. vacuum | 73 % | 98 % |
| Max. continuous vacuum | 73 % | 98 % |
| Max. restart vacuum | Ambient pressure* | 98 % |

Electrical Data

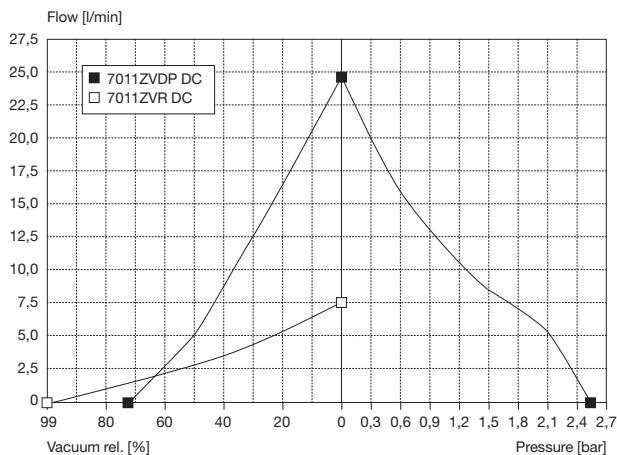
| | | |
|------------------------|----------------|----------------|
| Motor type | Direct current | Direct current |
| Nominal voltage | 12/24 V DC | 12/24 V DC |
| Nominal speed | 3200 rpm | 3200 rpm |
| Current consumption | 3,8/1,9 A | 3,8/1,9 A |
| Starting current | 11,7/8,2 A | 11,7/8,2 A |
| Power consumption | 46 W | 46 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 | 1,4 kg | 1,4 kg |
| Port direction | CB | CB |
| Configuration | Parallel | Series |

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

Flow Curves



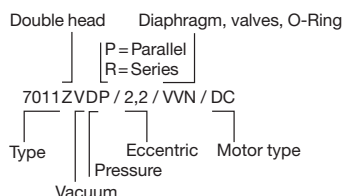
Wetted parts

| | |
|---------------------------|------------------|
| Pump chamber | Polyarylamide |
| Pump head | Polyamide |
| Diaphragm, valves, O-Ring | FPM (V), NBR |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| PPS |
| EPDM, PTFE |

Model key:

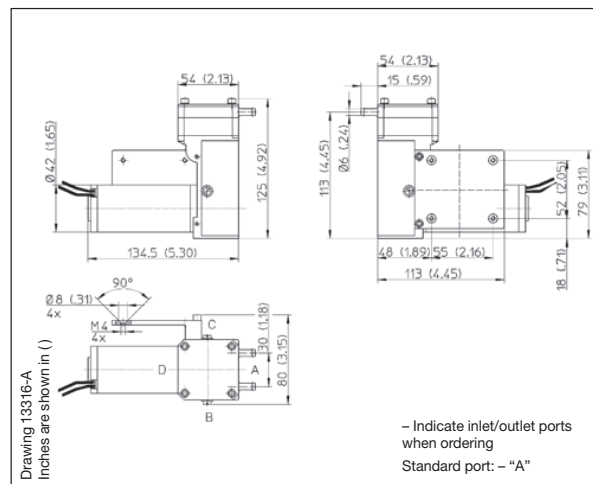
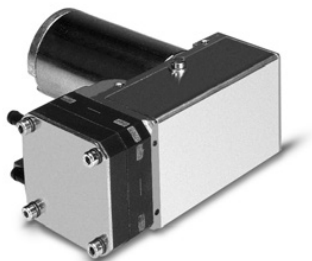


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THOMAS
by Gardner Denver

Diaphragm Pump 7015 DC

| | |
|---------------|------------|
| Flow | 14,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 80 % |



Pneumatic Data

| | | |
|--------------------------|-------------------|-------------------|
| Description | 7015VD/2,5/V/DC | 7015VD/2,5/V/DC |
| Part number | 70152005 | 70152006 |
| 12 V DC | | |
| 24 V DC | | |
| Max. flow | 14,0 l/min | 14,0 l/min |
| Max. intermittent duty | 2,5 bar | 2,5 bar |
| Max. continuous pressure | 1 bar | 1 bar |
| Max. restart pressure | Ambient pressure* | Ambient pressure* |
| Max. vacuum | 80 % | 80 % |
| Max. continuous vacuum | 80 % | 80 % |
| Max. restart vacuum | Ambient pressure* | 80 % |

Electrical Data

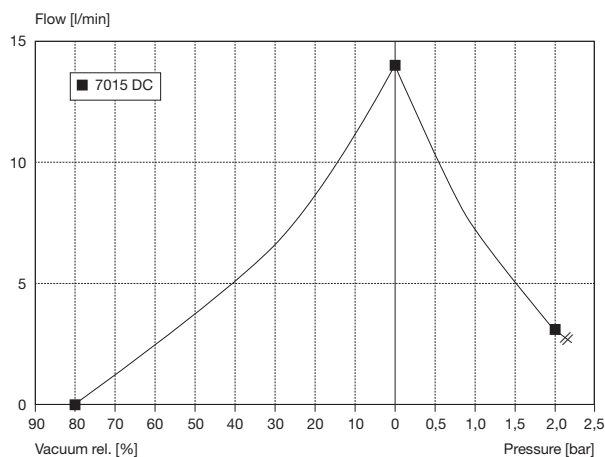
| | | |
|------------------------|----------------|----------------|
| Motor type | Direct current | Direct current |
| Nominal voltage | 12/24 V DC | 12/24 V DC |
| Nominal speed | 2800 rpm | 2800 rpm |
| Current consumption | 2,2/0,91 A | 2,2/0,91 A |
| Starting current | 8,7/5,3 A | 8,7/5,3 A |
| Power consumption | 27 W | 27 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 | 1,1 kg | 1,1 kg |
| Port direction | A | A |

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

Flow Curves



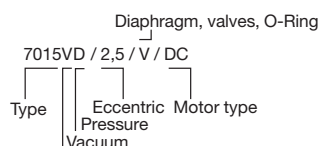
Wetted parts

| | |
|---------------------------|------------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | FPM (V) |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| EPDM, PTFE |

Model key:

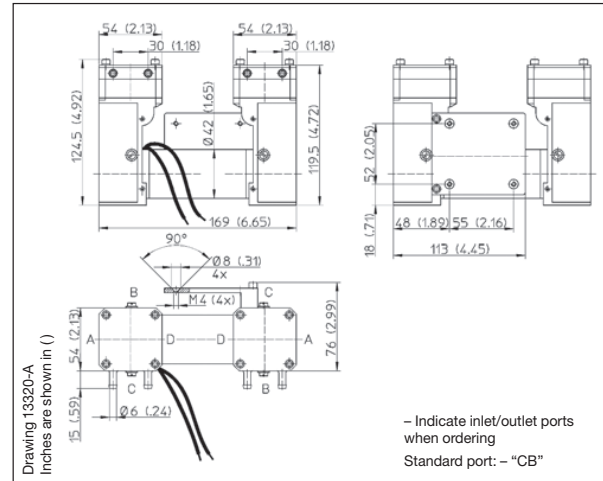
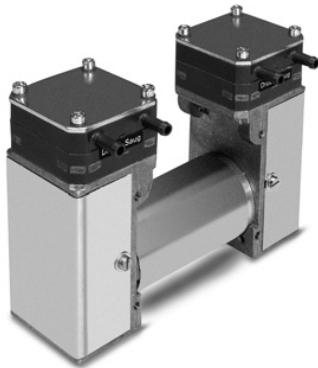


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THOMAS
by Gardner Denver

Diaphragm Pump 7015Z DC

| | |
|----------------------|-------------------|
| Flow | 25,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 95 % |



Pneumatic Data

| | | |
|--------------------------|----------------------|----------------------|
| Description | 7015ZVDP/2,5/V/DC | 7015ZVR/2,5/V/DC |
| Part number | 70152009 70152010 | 70152015 70152016 |
| 12 V DC | | |
| 24 V DC | | |
| Max. flow | 25,0 l/min | 12,0 l/min |
| Max. intermittent duty | 2,5 bar | |
| Max. continuous pressure | 1,0 bar | |
| Max. restart pressure | Ambient pressure* | |
| Max. vacuum | 80 % | 95 % |
| Max. continuous vacuum | 80 % | 95 % |
| Max. restart vacuum | 80 % | 95 % |

Electrical Data

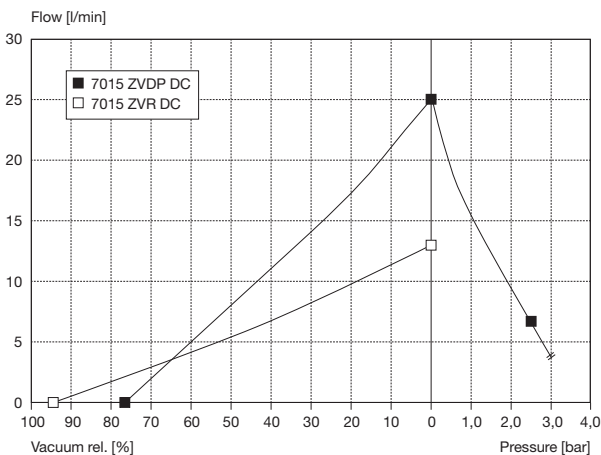
| | | |
|------------------------|----------------|----------------|
| Motor type | Direct current | Direct current |
| Nominal voltage | 12/24 V DC | 12/24 V DC |
| Nominal speed | 2800 rpm | 2800 rpm |
| Current consumption | 6,0/3,0 A | 6,0/3,0 A |
| Starting current | 18,0/9,0 A | 18,0/9,0 A |
| Power consumption | 72 W | 72 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 | 1,5 kg | 1,5 kg |
| Port direction | CB | CB |
| Configuration | Parallel | Series |

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

Flow Curves



Wetted parts

| | |
|---------------------------|------------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | FPM (V) |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------------|
| PPS |
| EPDM, PTFE |

Model key:

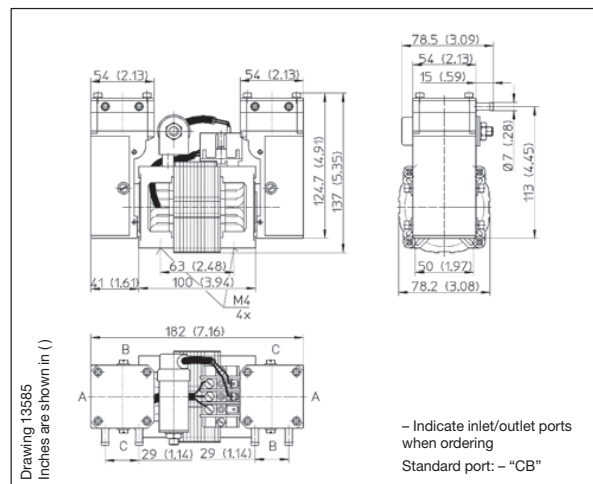
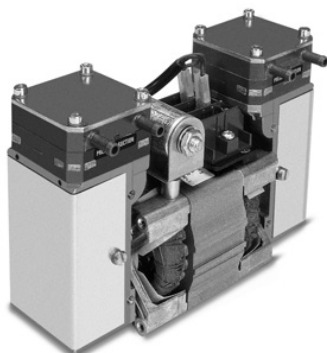
| | | |
|-------------|---------------------------|------------|
| Double head | P = Parallel | R = Series |
| | Diaphragm, valves, O-Ring | |
| | 7015ZVDP / 2,5 / V / DC | |
| Type | Eccentric | Motor type |
| | Pressure | |
| | Vacuum | |

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THOMAS
by Gardner Denver

Diaphragm Pump 7015Z AC

| | |
|---------------|------------|
| Flow | 22,0 l/min |
| Max. pressure | 2,5 bar |
| Max. vacuum | 90 % |



Pneumatic Data

| | | |
|--------------------------|----------------------|--------------------|
| Description | 7015ZVDP/2,5/V/AC | 7015ZVR/2,5/EVV/AC |
| Part number | 230 V/50 Hz 70152008 | 70150132 |
| Max. flow | 22,0 l/min | 12,0 l/min |
| Max. intermittent duty | 2,5 bar | |
| Max. continuous pressure | 1,0 bar | |
| Max. restart pressure | Ambient pressure* | |
| Max. vacuum | 80% | 90% |
| Max. continuous vacuum | 80% | 90% |
| Max. restart vacuum | Ambient pressure* | 90% |

Electrical Data

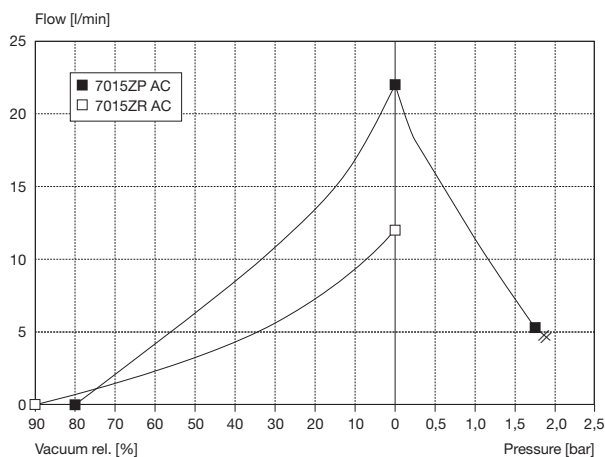
| | | |
|------------------------|-------------|-------------|
| Motor type | Capacitor | Capacitor |
| Nominal voltage | 230 V/50 Hz | 230 V/50 Hz |
| Nominal speed | 2700 rpm | 2700 rpm |
| Current consumption | 0,38 A | 0,38 A |
| Starting current | 0,5 A | 0,5 A |
| Power consumption | 67 W | 67 W |
| Motor insulation class | B | B |
| Protection class | IP00 | IP00 |

General Data

| | | |
|---------------------|-------------|-------------|
| Ambient temperature | 15 to 40 °C | 15 to 40 °C |
| Media temperature | 15 to 40 °C | 15 to 40 °C |
| Weight | 2,4 kg | 2,4 kg |
| Port direction | CB | CB |
| Configuration | Parallel | Series |

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

Flow Curves



Wetted parts

| | |
|---------------------------|------------------|
| Pump head | Polyarylamide |
| Diaphragm, valves, O-Ring | FPM (V), EPDM |
| Diaphragm, plate, screw | Galvanized steel |

Options

| |
|------|
| PPS |
| PTFE |

Model key:

| | |
|-------------------------|---------------------------|
| Double head | P = Parallel |
| | R = Series |
| | Diaphragm, valves, O-Ring |
| 7015ZVDP / 2,5 / V / AC | |
| Type | Eccentric |
| | Pressure |
| | Vacuum |
| | Motor type |

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

THOMAS
by Gardner Denver

References

Material choice for 7010 / 7011 / 7015 single and double head

| Diaphragm, valves, O-Rings | Abbreviation | Air inert gases | Air aggressive | Ozone | Gases Humid aggressive | Alcohols gas | Temperature limits °C |
|--|--------------|-----------------|----------------|-------|------------------------|--------------|-----------------------|
| NBR | N | + | 0 | – | – | – | -10/+90 |
| EPDM | E | + | +/0 | + | +/0 | +/0 | -20/+90 |
| FKM/FPM | V | + | + | 0 | +/0 | -/0 | +15/200 |
| FFKM/FFPM | K | + | + | + | + | + | 200 |
| PTFE | P | + | + | + | + | + | 250 |
| Pump chamber, Pump head, Fixating plate (Diaphragm plate) | | | | | | | |
| Polyarylamide | | + | 0 | 0 | 0 | + | 130 |
| PVDF | | + | + | + | + | + | 90 |
| PVC | | + | + | + | + | + | 80 |
| PA | | + | 0 | – | 0 | 0 | 90 |
| PPS | | + | + | + | + | + | 160 |
| Stainless steel 1.4571 | VA | + | + | + | 0 | + | |
| Aluminium (7015) | | + | 0/– | + | – | + | |

Exact data can be obtained on request. We recommend tests with materials in case of critical or unclear applications.

+ = good

0 = critical, tests necessary

– = not recommended

Abbreviations:

“P” = Parallel connections of several single heads

“R” = Serial connections of several single heads

“V” = Vacuum restart

“D” = Pressure restart

“Z” = Double head version (Note: type 7011 already has two heads, therefore type 7011Z is a 4 – headed pump)

Additional descriptions:

The additives “D” and “V” are only relevant for the restart against pressure/vacuum.

Every version can build pressure and vacuum restart against atmospheric pressure.