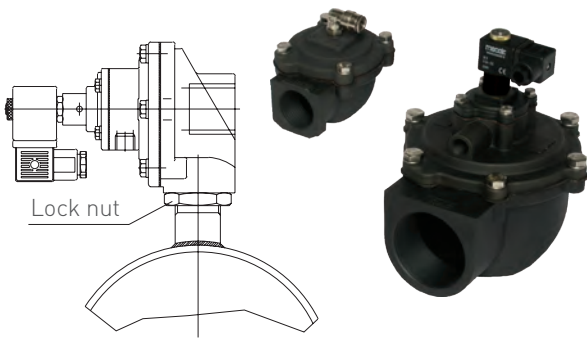




mecair 200 SERIES

THREADED VALVES

MECAIR THREADED VALVES 200 SERIES



CONSTRUCTION FEATURES – VALVE

| | |
|------------------------|------------------------------|
| Cover | Diecast aluminium (anodised) |
| Body | Diecast aluminium (anodised) |
| Pilot base | Aluminium (anodised) |
| Pilot | Stainless steel |
| Diaphragm | NBR |
| Bolts and screws | Stainless steel |
| Diaphragm backing disk | Stainless steel |
| Diaphragm spring | Stainless steel |

DESCRIPTION

The **200 SERIES** is a range of diaphragm valves suitable for dust collector applications, in particular for reverse pulse-jet filter cleaning of filter bags, cartridges, envelope filters, ceramic filters and sintered metal fibre filters. The 200 Series valve has the inlet port at 90° to the outlet port. The 200 Series range comprises 6 models, from 3/4" to 2 1/2", all with threaded female Gas connections. The 1 1/2" model is available in single and double diaphragm versions, while the 2" and 2 1/2" are all double diaphragm valves. The special design assures an extremely fast opening time, high flow rates and easy installation. The valves are constructed in diecast aluminium and have an anodised protection treatment which protect them from corrosive and environmental agents. Bolts and screws are in stainless steel.

The 200 Series is available in the following versions:

- **VNP**, with integrated solenoid pilot
- **VEM**, with remote pneumatic connection.

Upon request: Integral pilot valves with ATEX Certification:
 • ATEX II 3 D (94/9/CE); for the above approved model the correct code to use is VEM+PV 24V/DCX (solenoid coil is 24V-DC/18W and DIN connector in conformity with the ATEX Directive 94/9/CE) (PLG11-ATEX). Remote pilot valves meet the requirements of: • ATEX II 2 GD when mounted with PXA Pilot or CXD Enclosure (94/9/CE).

GENERAL CHARACTERISTICS

| | |
|----------------|---|
| Fluids | Filtered air and oil free |
| Diaphragm | Standard Nitrile: -20°C/+80°C Optional Viton: -30°C/+200°C |
| Pressure range | From 0.5 to 7.5 bar |

ELECTRICAL CHARACTERISTICS – SOLENOID

| | |
|----------------------------|---|
| Coil insulation | Class H |
| DIN socket connector | Pg9 connection (cable entry) |
| DIN socket standard | EN175301 - 803 (previously DIN 43650A) / A/ISO 4400 |
| DIN socket optional | 94/9/CE ATEX II 3GD T6 |
| Isolation class DIN socket | VDE 0110 - 1/89 |
| DIN socket protection | IP65 EN60529 |
| Voltage range | 12V DC (supply +10% max.) 18W 24V DC (supply +10% max.) 18W 48V DC (supply +10% max.) 18W 110V DC (supply +10% max.) 18W 24V 50/60 Hz (supply +10% max.) 38/31 VA 48V 50/60 Hz (supply +10% max.) 41/32 VA 115V 50/60 Hz (supply +10% max.) 63/53 VA 220/240V 50/60 Hz (supply +10% max.) 46/37 VA |
| Ambient temperature | -20°C/+60°C |

| TYPE | PORT SIZE Ø | No. DIAPH. | PRESSURE RANGE (BAR) | | WEIGHT kg | COIL | KV | CV |
|--------|-------------|------------|----------------------|------|-----------|------|----|------|
| | | | min. | max. | | | | |
| VNP206 | 3/4" | 1 | 0.5 | 7.5 | 0.55 | YES | 10 | 11.6 |
| VNP208 | 1" | 1 | 0.5 | 7.5 | 0.65 | YES | 21 | 24.4 |
| VNP212 | 1 1/2" | 1 | 0.5 | 7.5 | 1.4 | YES | 37 | 43.0 |
| VNP214 | 1 1/2" | 2 | 0.5 | 7.5 | 1.5 | YES | 44 | 51.2 |
| VNP216 | 2" | 2 | 0.5 | 7.5 | 2.5 | YES | 78 | 90.7 |
| VNP220 | 2 1/2" | 2 | 0.6 | 7.5 | 3.3 | YES | 96 | 112 |
| VEM206 | 3/4" | 1 | 0.5 | 7.5 | 0.25 | NO | 10 | 11.6 |
| VEM208 | 1" | 1 | 0.5 | 7.5 | 0.35 | NO | 21 | 24.4 |
| VEM212 | 1 1/2" | 1 | 0.5 | 7.5 | 1.1 | NO | 37 | 43.0 |
| VEM214 | 1 1/2" | 2 | 0.5 | 7.5 | 1.2 | NO | 44 | 51.2 |
| VEM216 | 2" | 2 | 0.5 | 7.5 | 2.2 | NO | 78 | 90.7 |
| VEM220 | 2 1/2" | 2 | 0.6 | 7.5 | 3 | NO | 96 | 112 |

HOW TO ORDER

Part Number Code: **VEM/VNP 2 08 110/50**

Valve

- N VNP – with integral pilot
- E VEM – without pilot

2

"200 Series"

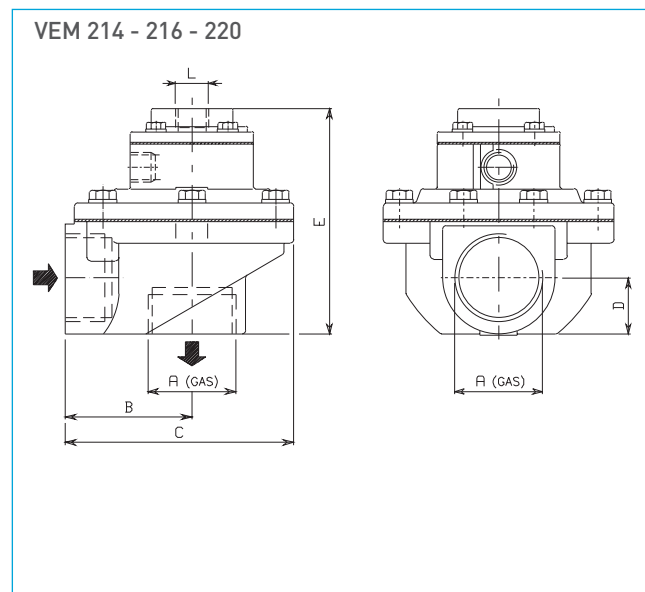
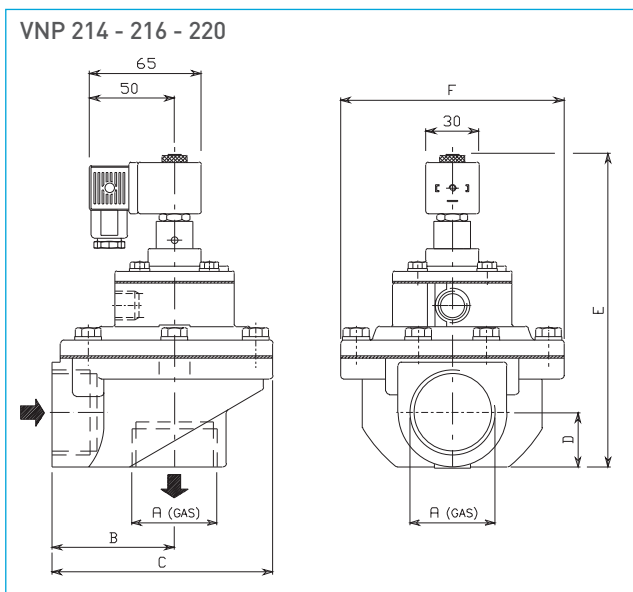
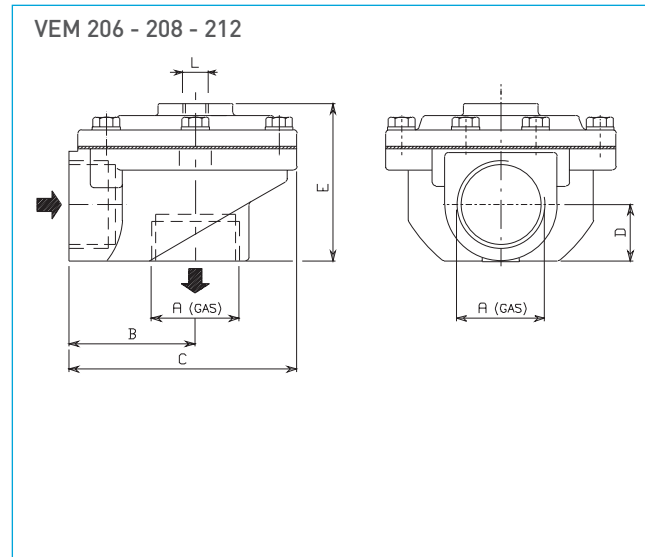
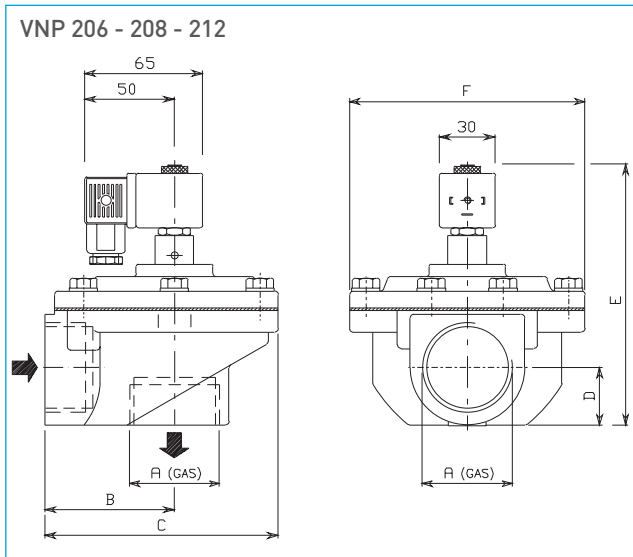
Voltage and frequency required

Valve connection diameter

- 06 = 3/4"
- 12 = 1 1/2" (single diaphragm)
- 14 = 1 1/2" (double diaphragm)
- 16 = 2"
- 08 = 1"
- 20 = 2 1/2"

MECAIR THREADED VALVES 200 SERIES

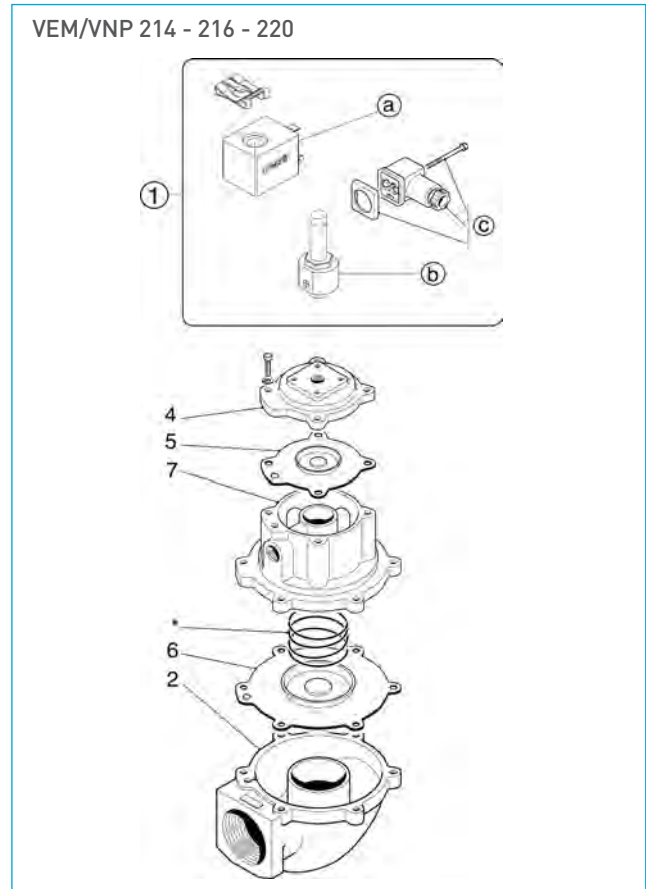
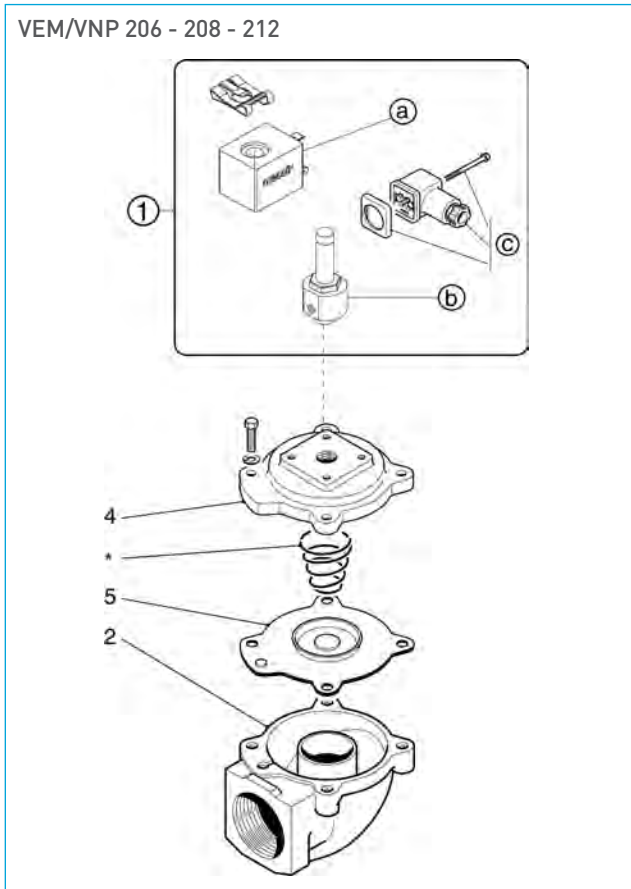
DIMENSIONS



| MODEL | Ø A | B | C | D | E | F | WEIGHT kg | MODEL | E | Ø L | WEIGHT kg | PRESSURE RANGE (BAR) | | No. DIAPH. |
|---------|--------|-----|-----|----|-----|-----|--------------|---------|-----|------|--------------|-------------------------|------|---------------|
| | | | | | | | | | | | | min. | max. | |
| VNP 206 | 3/4" | 41 | 75 | 18 | 119 | 60 | 0.55 | VEM 206 | 59 | 1/4" | 0.25 | 0.5 | 7.5 | 1 |
| VNP 208 | 1" | 52 | 90 | 23 | 123 | 74 | 0.65 | VEM 208 | 63 | 1/4" | 0.35 | 0.5 | 7.5 | 1 |
| VNP 212 | 1 1/2" | 72 | 130 | 31 | 153 | 135 | 1.40 | VEM 212 | 93 | 1/4" | 1.10 | 0.5 | 7.5 | 1 |
| VNP 214 | 1 1/2" | 72 | 130 | 31 | 186 | 135 | 1.50 | VEM 214 | 126 | 1/4" | 1.20 | 0.5 | 7.5 | 2 |
| VNP 216 | 2" | 90 | 165 | 35 | 206 | 160 | 2.50 | VEM 216 | 146 | 1/4" | 2.20 | 0.5 | 7.5 | 2 |
| VNP 220 | 2 1/2" | 116 | 199 | 47 | 226 | 190 | 3.30 | VEM 220 | 166 | 1/4" | 3.00 | 0.6 | 7.5 | 2 |

MECAIR THREADED VALVES 200 SERIES

SPARE PARTS



STANDARD VERSION

| POS | DESCRIPTION | CODE |
|---------------|---|-----------------------------|
| Standard 1 | a) Solenoid (*) | a) KIT SB4 - ../.. (*) -18W |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector PG9EN175301-803 IP65 | c) KIT PLG9 |

(*) Specify voltage and frequency.

OPTIONAL VERSION

| POS | DESCRIPTION | CODE |
|---------------|---|-----------------------|
| Optional 1 | a) Solenoid (*) | a) KIT SB4-24/DCX-18W |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector (3GD IP65 T6) | c) KIT PLG11 - ATEX |

(*) Specify voltage and frequency.

Version in conformity with European Directive 94/9/CE ATEX (cod. KIT PV-24/DCX)

| POS | DESCRIPTION | CODE | | | | | |
|------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | VEM/VNP206 | VEM/VNP208 | VEM/VNP212 | VEM/VNP214 | VEM/VNP216 | VEM/VNP220 |
| 1 | Pilot group complete with solenoid (*) and DIN connector | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) |
| a+b+4 | Pilot group complete with solenoid (*), top cover and screws | KIT PVM06 - ../.. (*) | KIT PVM08 - ../.. (*) | KIT PVM12 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) |
| 2 | Valve body | KIT M100201 | KIT M100204 | KIT M100211 | KIT M100211 | KIT M100218 | KIT M300222 |
| 7 | Intermediate cover (double diaphragm) | — | — | — | KIT M110098 | KIT M110100 | KIT M110101 |
| 4 | Top cover | KIT M110082 | KIT M110086 | KIT M110092 | KIT M110082 | KIT M110082 | KIT M110082 |
| 5 | Diaphragm | KIT DB 16/G | KIT DB 18/G | KIT DB 112/G | — | — | — |
| 5 | Viton Diaphragm | KIT DB 16V/S | KIT DB 18V/S | KIT DB 112V/S | — | — | — |
| 5+6+Spring | Diaphragm (main and secondary) | — | — | — | KIT DB 114/C | KIT DB 116/C | KIT DB 120/C |
| 5+6+Spring | Viton Diaphragm (main and secondary) | — | — | — | KIT DB 114V | KIT DB 116V | KIT DB 120V |

(*) Specify voltage and frequency.

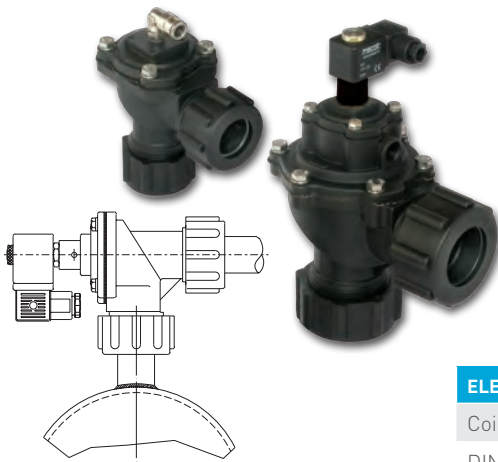




mecair 300 SERIES

DRESSER NUT VALVES

MECAIR DRESSER NUT VALVES 300 SERIES



DESCRIPTION

The **300 SERIES** is a range of diaphragm valves suitable for dust collector applications, in particular for reverse pulse jet filter cleaning of filter bags, cartridges, envelope filters, ceramic filters and sintered metal fibre filters. The 300 Series valve has the inlet port at 90° to the outlet port. These valves allow a very quick connection, by fitting directly to unthreaded pipes. These valves are available in three models: 3/4", 1", 1 1/2". The 1 1/2" model is available in single and double diaphragm versions. The valves are constructed in diecast aluminium and have an anodised protection treatment which protects them from corrosive and environmental agents. Bolts and screws are in stainless steel.

The 300 Series is available in the following versions:

- **VNP**, with integrated solenoid pilot
- **VEM**, with remote pneumatic connection.

Important: The installation of these valves should only be for pneumatic connection and not for mechanical fixing. We suggest that the pipe should butt up to the internal lip of the valve.

Upon request: Integral pilot valves with ATEX Certification:
 • ATEX II 3 D (94/9/CE); for the above approved model the correct code to use is VEM+PV 24V/DCX (solenoid coil is 24V-DC/18W and DIN connector in conformity to the ATEX Directive 94/9/CE) (PLG11-ATEX). Remote pilot valves meet the requirements of: • ATEX II 2 GD when mounted with PXA Pilot or CXD Enclosure (94/9/CE).

GENERAL CHARACTERISTICS

| | |
|----------------|---|
| Fluids | Filtered air and oil free |
| Diaphragm | Standard Nitrile: -20°C/+80°C Optional Viton: -30°C/+200°C |
| Pressure range | From 0.5 to 7.5 bar |

CONSTRUCTION FEATURES – VALVE

| | |
|------------------------|------------------------------|
| Cover | Diecast aluminium (anodised) |
| Body | Diecast aluminium (anodised) |
| Pilot base | Brass (chromed) |
| Pilot | Stainless steel |
| Diaphragm | NBR |
| Bolts and screws | Stainless steel |
| Diaphragm backing disk | Stainless steel |
| Diaphragm spring | Stainless steel |

ELECTRICAL CHARACTERISTICS – SOLENOID

| | |
|----------------------------|---|
| Coil insulation | Class H |
| DIN socket connector | Pg9 connection (cable entry) |
| DIN socket standard | EN175301 - 803 (previously DIN 43650A) / A/ISO 4400 |
| DIN socket optional | 94/9/CE ATEX II 3GD T6 |
| Isolation class DIN socket | VDE 0110 - 1/89 |
| DIN socket protection | IP65 EN60529 |
| Voltage range | 12V DC (supply +10% max.) 18W 24V DC (supply +10% max.) 18W 48V DC (supply +10% max.) 18W 110V DC (supply +10% max.) 18W 24V 50/60 Hz (supply +10% max.) 38/31 VA 48V 50/60 Hz (supply +10% max.) 41/32 VA 115V 50/60 Hz (supply +10% max.) 63/53 VA 220/240V 50/60 Hz (supply +10% max.) 46/37 VA |

Ambient temperature -20°C/+60°C

| TYPE | PORT SIZE Ø | No. DIAPH. | PRESSURE RANGE (BAR) | | WEIGHT kg | COIL | KV | CV |
|---------|-------------|------------|----------------------|------|-----------|------|----|------|
| | | | min. | max. | | | | |
| VNP306 | 3/4" | 1 | 0.5 | 7.5 | 0.9 | YES | 10 | 11.6 |
| VNP308 | 1" | 1 | 0.5 | 7.5 | 1.2 | YES | 21 | 24.4 |
| VNP312 | 1 1/2" | 1 | 0.5 | 7.5 | 2.2 | YES | 37 | 43.0 |
| VNP314 | 1 1/2" | 2 | 0.5 | 7.5 | 2.3 | YES | 47 | 54.6 |
| VEM306 | 3/4" | 1 | 0.5 | 7.5 | 0.6 | NO | 10 | 11.6 |
| VEM308 | 1" | 1 | 0.6 | 7.5 | 0.9 | NO | 21 | 24.4 |
| VEM312* | 1 1/2" | 1 | 0.5 | 7.5 | 1.9 | NO | 37 | 43.0 |
| VEM314 | 1 1/2" | 2 | 0.6 | 7.5 | 2 | NO | 47 | 54.6 |

HOW TO ORDER

Part Number Code: **VEM/VNP 3 06 110/50**

Valve

N VNP – with integral pilot
E VEM – without pilot

3

"300 Series"

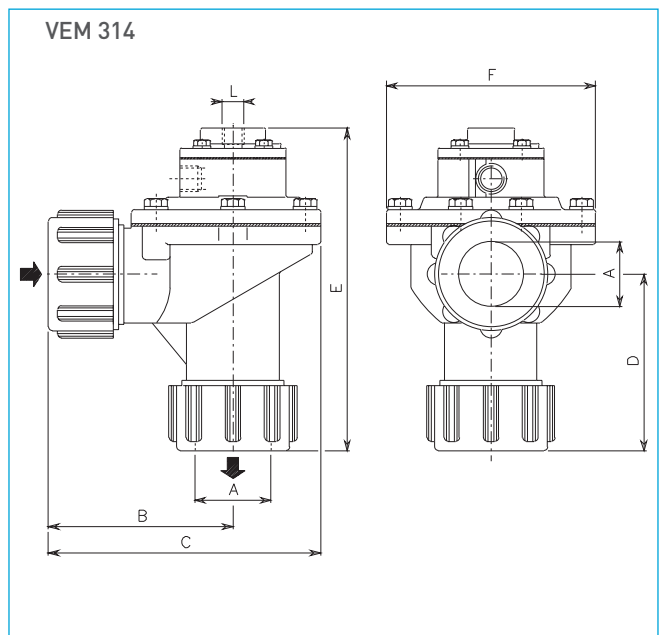
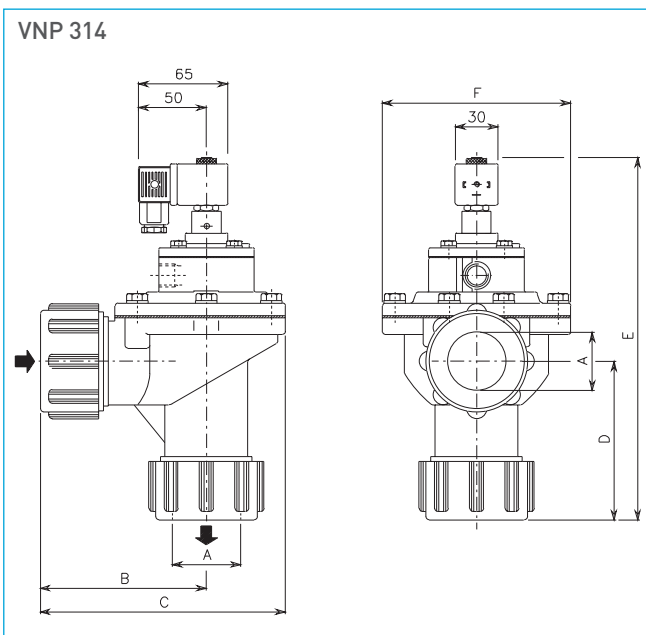
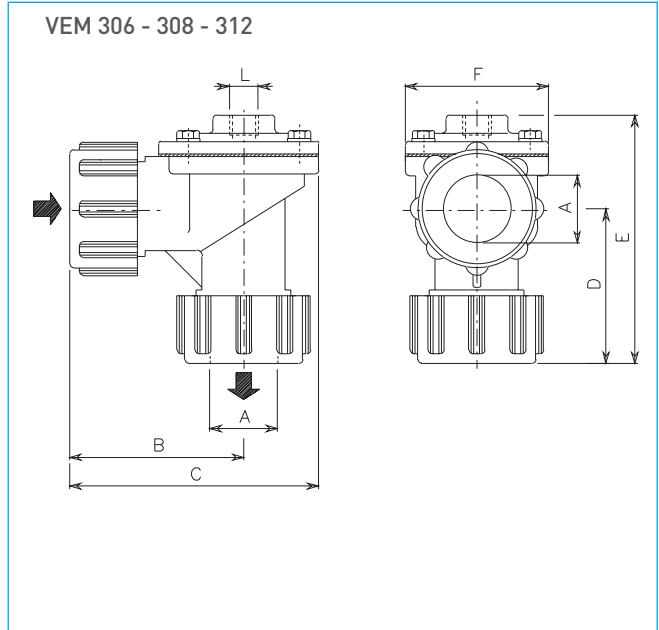
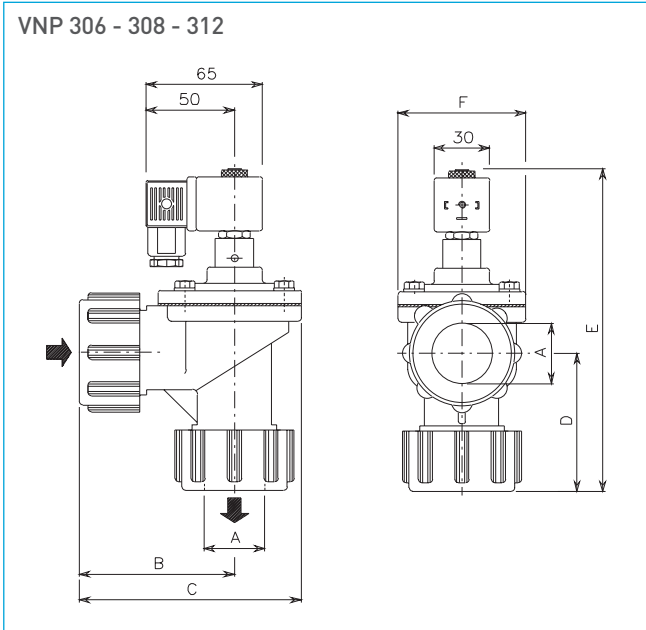
Voltage and frequency required

Valve connection diameter

- 06 = 3/4"
- 08 = 1"
- 12 = 1 1/2" (single diaphragm)
- 14 = 1 1/2" (double diaphragm)

MECAIR DRESSER NUT VALVES 300 SERIES

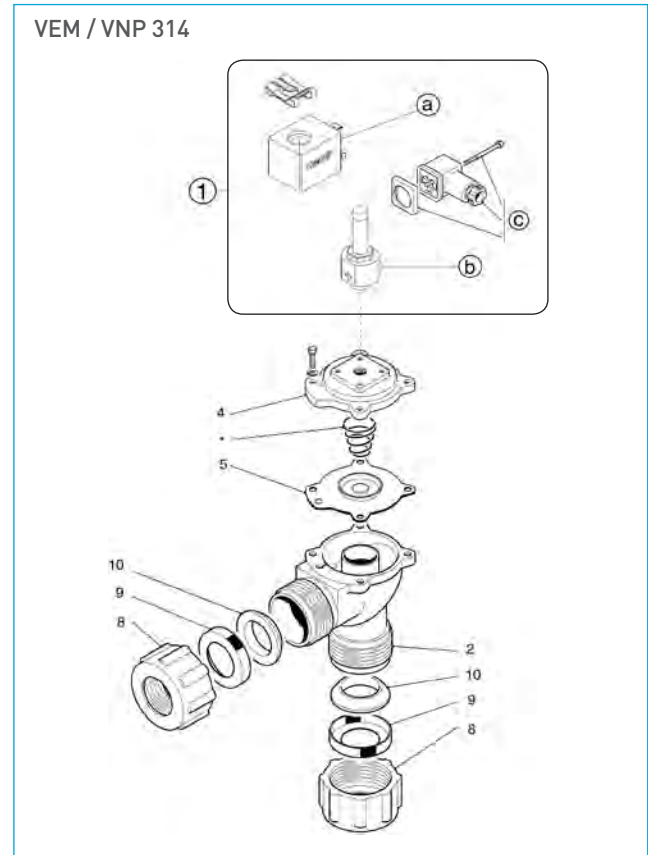
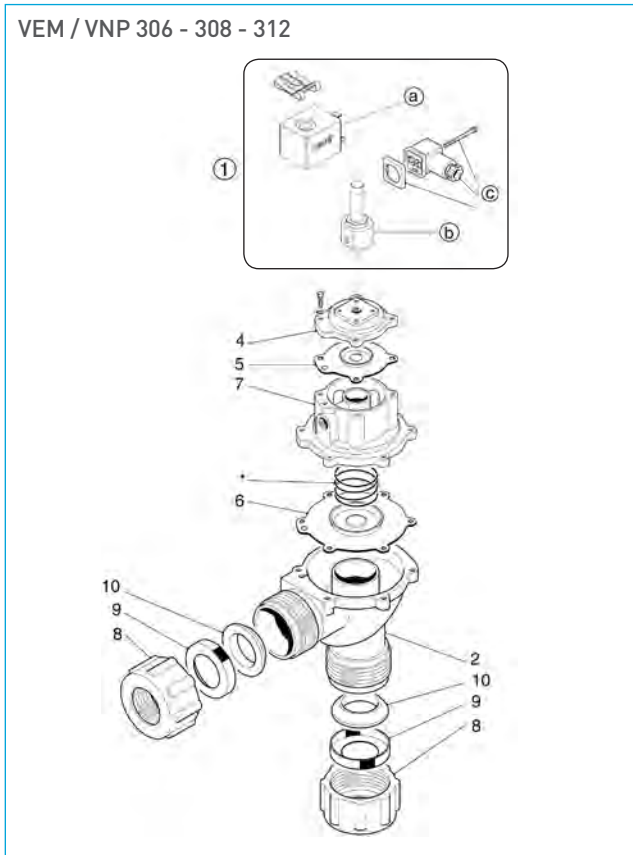
DIMENSIONS



| MODEL | Ø A | B | C | D | E | F | WEIGHT kg | MODEL | E | Ø L | WEIGHT KG | PRESSURE RANGE [BAR] | | No. DIAPH. |
|---------|--------|-----|-----|----|-----|-----|--------------|---------|-----|------|--------------|-------------------------|------|---------------|
| | | | | | | | | | | | | min. | max. | |
| VNP 306 | 3/4" | 77 | 108 | 67 | 167 | 60 | 0.90 | VEM 306 | 107 | 1/4" | 0.60 | 0.5 | 7.5 | 1 |
| VNP 308 | 1" | 90 | 128 | 80 | 183 | 74 | 1.20 | VEM 308 | 123 | 1/4" | 0.90 | 0.5 | 7.5 | 1 |
| VNP 312 | 1 1/2" | 114 | 176 | 99 | 220 | 135 | 2.20 | VEM 312 | 160 | 1/4" | 1.90 | 0.5 | 7.5 | 1 |
| VNP 314 | 1 1/2" | 114 | 176 | 99 | 252 | 135 | 2.30 | VEM 314 | 192 | 1/4" | 2 | 0.5 | 7.5 | 2 |

MECAIR DRESSER NUT VALVES 300 SERIES

SPARE PARTS



STANDARD VERSION

| POS | DESCRIPTION | CODE |
|---------------|---|------------------------|
| Standard 1 | a) Solenoid (*) | a) KIT SB4 - ../.. (*) |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector PG9EN175301-803 IP65 | c) KIT PLG9 |

(*) Specify Voltage and Frequency

OPTIONAL VERSION

| POS | DESCRIPTION | CODE |
|---------------|---|---------------------|
| Optional 1 | a) Solenoid (*) | a) KIT SB4 -24/DCX |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector (3GD IP65 T6) | c) KIT PLG11 - ATEX |

(*) Specify voltage and frequency.

Version in conformity to European Directive 94/9/CE ATEX (cod. KIT PV-24/DCX)

| POS | DESCRIPTION | CODE | | | |
|------------|--|-----------------------|-----------------------|-----------------------|-----------------------|
| | | VEM/VNP306 | VEM/VNP308 | VEM/VNP312 | VEM/VNP314 |
| 1 | Pilot group complete with solenoid (*) and DIN connector | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) |
| a+b+4 | Pilot group complete with solenoid (*), top cover and screws | KIT PVM06 - ../.. (*) | KIT PVM08 - ../.. (*) | KIT PVM12 - ../.. (*) | KIT PVM06 - ../.. (*) |
| 2 | Valve body | KIT M100203 | KIT M100206 | KIT M100213 | KIT M100213 |
| 7 | Intermediate cover (double diaphragm) | — | — | — | KIT M310098 |
| 4 | Top cover | KIT M110082 | KIT M110086 | KIT M110092 | KIT M110082 |
| 5 | Diaphragm | KIT DB 16/G | KIT DB 18/G | KIT DB 112/G | — |
| 5 | Viton Diaphragm | KIT DB 16V/S | KIT DB 18V/S | KIT DB 112V/S | — |
| 5+6+Spring | Diaphragm (main and secondary) | — | — | — | KIT DB 114/C |
| 5+6+Spring | Viton Diaphragm (main and secondary) | — | — | — | KIT DB 114V |
| 8 | Dresser nut | KIT M150022 | KIT M150024 | KIT M150026 | KIT M150026 |
| 9 | Dress nut insert | KIT M620013 | KIT M620014 | KIT M620015 | KIT M620015 |
| 10 | Conic seal for dresser nut | KIT M330202 | KIT M330203 | KIT M330204 | KIT M330204 |

(*) Specify voltage and frequency.





400 SERIES

MANIFOLD MOUNT VALVES

MECAIR - 400 SERIES MANIFOLD MOUNT VALVES

PRODUCT LEAFLET



DESCRIPTION

The 400 SERIES valves are suitable for low-pressure systems (0.5–1.5 bar), and high-pressure systems (0.5–7.5 bar). The Series 400 is a range of diaphragm valves suitable for dust collector applications, in particular for reverse pulse-jet filter cleaning of filter bags, cartridges, envelope filters, ceramic filters and sintered metal fibre filters. These valves have been designed to be installed on flat surfaces or square/ rectangular tanks. They are called “full immersion” because they draw the compressed air directly from the tank, with higher pneumatic performance. Upon request they can be supplied complete with the blowtube and counter flange. The valve is fixed to the tank with a special counter flange and fixing screws. The 2, 2½” and 3” are all double diaphragm valves; the 1½” model can be a single or double diaphragm valve. The valves are constructed in diecast aluminium and have an anodised protection treatment which protects them from corrosive and environmental agents. Bolts and screws are in stainless steel.

The 400 Series is available in the following versions:

- VNP, with integrated solenoid pilot
- VEM, with remote pneumatic connection.

GENERAL CHARACTERISTICS

| | |
|----------------|---|
| FLUIDS | Filtered air and oil free |
| DIAPHRAGM | Standard Nitrile: -20°C/+80°C Optional Viton: -30°C/+200°C |
| PRESSURE RANGE | From 0.5 to 7.5 bar |

CONSTRUCTION FEATURES - VALVE

| | |
|------------------------|------------------------------|
| COVER | Diecast aluminium (anodised) |
| BODY | Diecast aluminium (anodised) |
| PILOT | Stainless steel |
| DIAPHRAGM | NBR |
| BOLTS AND SCREWS | Stainless steel |
| DIAPHRAGM BACKING DISK | Stainless steel |
| DIAPHRAGM SPRING | Stainless steel |

ELECTRICAL CHARACTERISTICS - SOLENOID

| | |
|----------------------------|---|
| COIL INSULATION | Class H |
| DIN SOCKET CONNECTOR | Pg9 connection (cable entry) |
| DIN SOCKET STANDARD | EN175301 - 803 (previously DIN 43650A) / A/ISO 4400 |
| DIN SOCKET OPTIONAL | 94/9/CE ATEX II 3GD T6 |
| ISOLATION CLASS DIN SOCKET | VDE 0110 - 1/89 |
| DIN SOCKET PROTECTION | IP65 EN60529 |
| VOLTAGE RANGE | 12 V DC (supply +10% max.) 18 W 24 V DC (supply +10% max.) 18 W 48 V DC (supply +10% max.) 18 W 110 V DC (supply +10% max.) 18 W 24 V 50/60 Hz (supply +10% max.) 38/31 VA 48 V 50/60 Hz (supply +10% max.) 41/32 VA 115 V 50/60 Hz (supply +10% max.) 63/53 VA 220/240 V 50/60 Hz (supply +10% max.) 46/37 VA |
| AMBIENT TEMPERATURE | -20°C/+60°C |

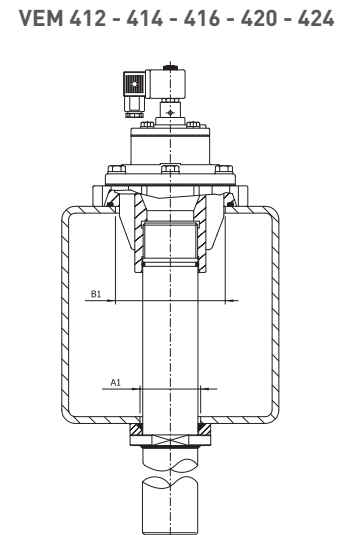
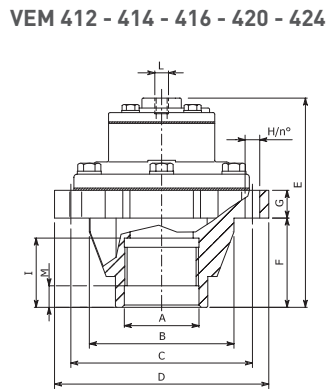
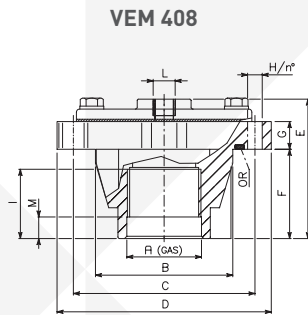
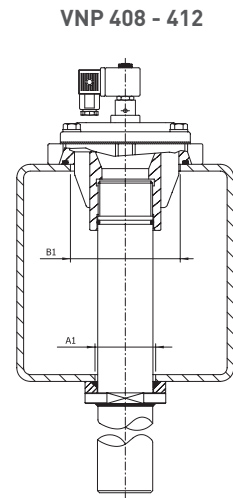
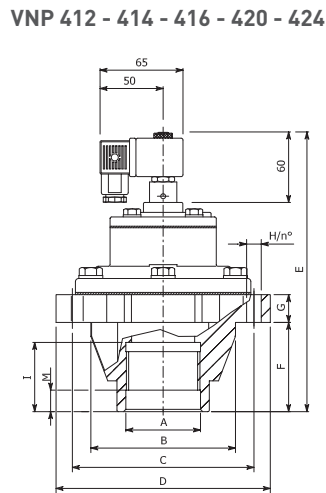
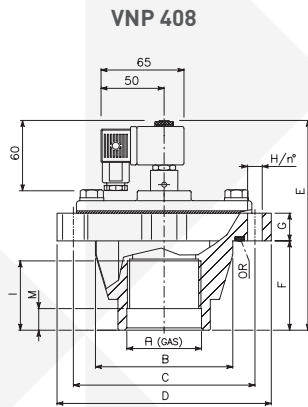
HOW TO ORDER

| | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------------------|---------------------------|---------------------|---|---------|---|----------------------------|---|----------------------------|---|---------|---|----------|---|---------|
| Part Number Code: | VEM/VNP 4 08 110/50 | | | | | | | | | | | | | | | | |
| Valve | <table border="1"> <tr> <td>N</td> <td>VNP - with integral pilot</td> </tr> <tr> <td>E</td> <td>VEM - without pilot</td> </tr> </table> | N | VNP - with integral pilot | E | VEM - without pilot | | | | | | | | | | | | |
| N | VNP - with integral pilot | | | | | | | | | | | | | | | | |
| E | VEM - without pilot | | | | | | | | | | | | | | | | |
| 4 | 400 Series | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td colspan="2">Voltage and frequency required</td> </tr> <tr> <td colspan="2">Valve connection diameter</td> </tr> <tr> <td>•</td> <td>08 = 1"</td> </tr> <tr> <td>•</td> <td>12 = 1½" (single diameter)</td> </tr> <tr> <td>•</td> <td>14 = 1½" (double diameter)</td> </tr> <tr> <td>•</td> <td>16 = 2"</td> </tr> <tr> <td>•</td> <td>20 = 2½"</td> </tr> <tr> <td>•</td> <td>24 = 3"</td> </tr> </table> | Voltage and frequency required | | Valve connection diameter | | • | 08 = 1" | • | 12 = 1½" (single diameter) | • | 14 = 1½" (double diameter) | • | 16 = 2" | • | 20 = 2½" | • | 24 = 3" |
| Voltage and frequency required | | | | | | | | | | | | | | | | | |
| Valve connection diameter | | | | | | | | | | | | | | | | | |
| • | 08 = 1" | | | | | | | | | | | | | | | | |
| • | 12 = 1½" (single diameter) | | | | | | | | | | | | | | | | |
| • | 14 = 1½" (double diameter) | | | | | | | | | | | | | | | | |
| • | 16 = 2" | | | | | | | | | | | | | | | | |
| • | 20 = 2½" | | | | | | | | | | | | | | | | |
| • | 24 = 3" | | | | | | | | | | | | | | | | |

MECAIR - 400 SERIES MANIFOLD MOUNT VALVES

PRODUCT LEAFLET

DIMENSIONS (MM)



Note: Fix the valve body to the tank using the appropriate eyelets in the valve body

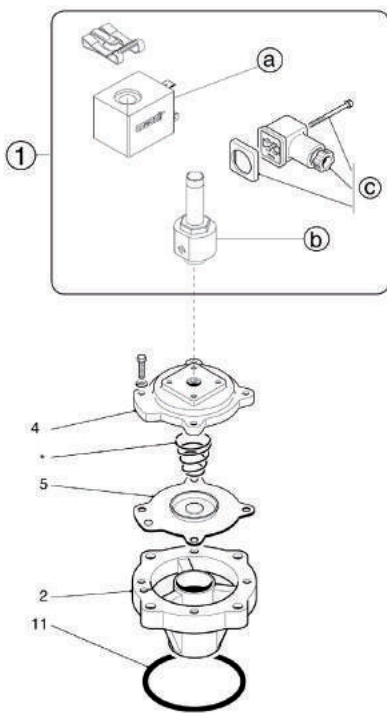
| MODEL | Ø A | B | C | D | E | F | G | I | Ø H | NO. | M | WEIGHT KG | MODEL | E | Ø L | A1 | B1 | WEIGHT KG | NO. DIAPH. | O-RING |
|---------|-----|-----|-----|-----|-----|----|----|----|-----|-----|----|-----------|---------|-----|-----|----|-----|-----------|------------|-------------|
| VNP 408 | 1" | 63 | 94 | 114 | 136 | 32 | 18 | 25 | 7 | 4 | 10 | 0.7 | VEM 408 | 76 | ¼" | 36 | 64 | 0.4 | 1 | KIT M330370 |
| VNP 412 | 1½" | 94 | 140 | 160 | 155 | 58 | 18 | 39 | 9 | 6 | 14 | 1.1 | VEM 412 | 95 | ¼" | 50 | 95 | 1.4 | 1 | KIT M330341 |
| VNP 414 | 1½" | 94 | 140 | 160 | 188 | 58 | 18 | 39 | 9 | 6 | 14 | 1.9 | VEM 414 | 128 | ¼" | 50 | 95 | 1.6 | 2 | KIT M330341 |
| VNP 416 | 2" | 105 | 175 | 195 | 210 | 62 | 18 | 45 | 11 | 6 | 0 | 2.3 | VEM 416 | 150 | ¼" | 63 | 107 | 2 | 2 | KIT M330342 |
| VNP 420 | 2½" | 128 | 200 | 220 | 228 | 80 | 20 | 40 | 11 | 6 | 0 | 3.3 | VEM 420 | 168 | ¼" | 78 | 130 | 3 | 2 | KIT M330343 |
| VNP 424 | 3" | 128 | 200 | 220 | 228 | 80 | 20 | 40 | 11 | 6 | 0 | 3.3 | VEM 424 | 168 | ¼" | 90 | 130 | 3 | 2 | KIT M330343 |

MECAIR - 400 SERIES MANIFOLD MOUNT VALVES

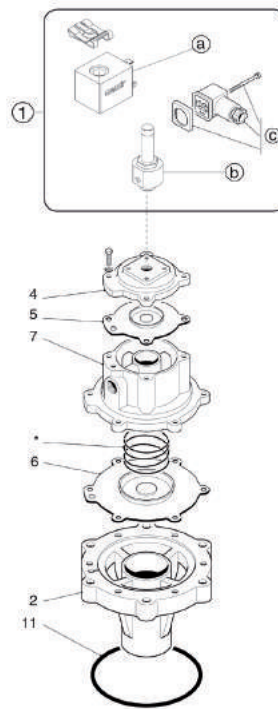
PRODUCT LEAFLET

SPARE PARTS

VEM/VNP 408



VEM/VNP 412 - 414 - 416 - 420 - 424



STANDARD VERSION

| POS. | DESCRIPTION | CODE |
|------|---|---------------------|
| 1 | a) Solenoid* | a) KIT SB4 - ../..* |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector PG9EN175301-803 IP65 | c) KIT PLG9 |

OPTIONAL VERSION

| POS. | DESCRIPTION | CODE |
|------|---|---------------------|
| 1 | a) Solenoid | a) KIT SB4 -24/DCX |
| | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | c) DIN connector (3GD IP65 T6) | c) KIT PLG11 - ATEX |

Version in conformity with European Directive 94/9/CE ATEX (cod. KIT PV-24/DCX)

| POS | DESCRIPTION | CODE | | | | | |
|------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | VEM/VNP408 | VEM/VNP412 | VEM/VNP414 | VEM/VNP416 | VEM/VNP420 | VEM/VNP424 |
| 1 | Pilot group complete with solenoid* and DIN connector | KIT PV - ../..* | KIT PV - ../..* | KIT PV - ../..* | KIT PV - ../..* | KIT PV - ../..* | KIT PV - ../..* |
| a+b+4 | Pilot group complete with solenoid*, top cover and screws | KIT PVM08 - ../..* | KIT PVM12 - ../..* | KIT PVM06 - ../..* | KIT PVM06 - ../..* | KIT PVM06 - ../..* | KIT PVM06 - ../..* |
| 2 | Valve body | KIT M100207 | KIT M100214 | KIT M100214 | KIT M100220 | KIT M100235 | KIT M100239 |
| 7 | Intermediate cover (double diaphragm) | - | - | KIT M1100098 | KIT M110100 | KIT M110101 | KIT M110101 |
| 4 | Top cover | KIT M110086 | KIT M110092 | KIT M110082 | KIT M110082 | KIT M110082 | KIT M110082 |
| 5 | Diaphragm | KIT DB 18/G | KIT DB 112/G | - | - | - | - |
| 5+6+Spring | Diaphragm (main and secondary) | - | - | KIT DB 114/C | KIT DB 116/C | KIT DB 120/C | KIT DB 120/C |
| 11 | O-rings | KIT M330370 | KIT M330341 | KIT M330341 | KIT M330342 | KIT M330343 | KIT M330343 |

* Specify voltage and frequency



MECAIR SRL

VIA BERTACCIOLA, 50, 20813 BOVISIO MASCIAGO (MB), ITALY WWW.GOYENMECAIR.PENTAIR.COM

Note: The information and data contained in this document are based on our general experience and are believed to be correct. They are given in good faith and are intended to provide a guideline for the selection and use of our products. Since the conditions under which our products may be used are beyond our control, this information does not imply any guarantee of final product performance and we cannot accept any liability with respect to the use of our products. The quality of our products is guaranteed under our conditions of sale. Existing industrial property rights must be observed.

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mecalr 600/700 SERIES

FLANGED VALVES

MECAIR FLANGED VALVES 600/700 SERIES



DESCRIPTION

The **600 and 700 SERIES** is a range of high-performance diaphragm valves, suitable for dust collector applications, in particular for reverse pulse-jet filter cleaning of filter bags, cartridges, envelope filters, ceramic filters and sintered metal fibre filters. These valves, due to their inlet port being larger than the outlet port, create a Venturi effect by causing a high flow rate at the outlet. The inlet is provided with a square flange designed for coupling with a counter flange (optional) and stub pipe which are welded directly to the tank. The outlet is equipped with a quick-connection fitting for the blowtube. The valves are constructed in diecast aluminium and have an anodised protection treatment which protects them from corrosive and environmental agents. Bolts and screws are in stainless steel.

The 600 and 700 Series are available in the following versions:

- **VNP**, with integrated solenoid pilot
- **VEM**, with remote pneumatic connection.

GENERAL CHARACTERISTICS

| | |
|----------------|---|
| Fluids | Filtered air and oil free |
| Diaphragm | Standard NBR: -20°C/+120°C Optional Viton: -30°C/+200°C Nitrile: -40°C/+120°C |
| Pressure range | From 0.5 to 7.5 bar |

CONSTRUCTION FEATURES – VALVE

| | |
|------------------------|------------------------------|
| Cover | Diecast aluminium (anodised) |
| Body | Diecast aluminium (anodised) |
| Pilot | Stainless steel |
| Diaphragm | NBR |
| Bolts and screws | Stainless steel |
| Diaphragm backing disk | Stainless steel |
| Diaphragm spring | Stainless steel |

ELECTRICAL CHARACTERISTICS – SOLENOID

| | |
|----------------------------|---|
| Coil insulation | Class H |
| DIN socket connector | Pg9 connection (cable entry) |
| DIN socket standard | EN175301 - 803 (previously DIN 43650A)/A/ISO 4400 |
| DIN socket optional | 94/9/CE ATEX II 3GD T6 |
| Isolation class DIN socket | VDE 0110 - 1/89 |
| DIN socket protection | IP65 EN60529 |
| Voltage range | 12V DC (supply +10% max.) 18W 24V DC (supply +10% max.) 18W 48V DC (supply +10% max.) 18W 110V DC (supply +10% max.) 18W 24V 50/60 Hz (supply +10% max.) 38/31 VA 48V 50/60 Hz (supply +10% max.) 41/32 VA 115V 50/60 Hz (supply +10% max.) 63/53 VA 220/240V 50/60 Hz (supply +10% max.) 46/37 VA |

Ambient temperature -30°C/+40°C

| TYPE | PORT SIZE Ø | | No. DIAPH. | PRESSURE RANGE (BAR) | | WEIGHT kg | COIL | KV | CV |
|--------|-------------|-----|------------|----------------------|------|-----------|------|-----|------|
| | IN | OUT | | min. | max. | | | | |
| VNP608 | 2" | 1" | 1 | 0.5 | 7.5 | 0.55 | YES | 10 | 11.6 |
| VNP708 | 2" | 1½" | 1 | 0.5 | 7.5 | 0.65 | YES | 21 | 24.4 |
| VNP614 | 2½" | 1½" | 2 | 0.5 | 7.5 | 1.4 | YES | 37 | 43.0 |
| VNP714 | 2½" | 2" | 2 | 0.5 | 7.5 | 1.5 | YES | 44 | 51.2 |
| VNP616 | 3" | 2" | 2 | 0.5 | 7.5 | 2.5 | YES | 78 | 90.7 |
| VNP716 | 3" | 2½" | 2 | 0.6 | 7.5 | 3.3 | YES | 96 | 112 |
| VNP720 | 3½" | 3" | 2 | 0.6 | 5 | 7.55 | YES | 308 | 358 |
| VEM608 | 2" | 1" | 1 | 0.5 | 7.5 | 0.25 | NO | 10 | 11.6 |
| VEM708 | 2" | 1½" | 1 | 0.5 | 7.5 | 0.35 | NO | 21 | 24.4 |
| VEM614 | 2½" | 1½" | 2 | 0.5 | 7.5 | 1.1 | NO | 37 | 43.0 |
| VEM714 | 2½" | 2" | 2 | 0.5 | 7.5 | 1.2 | NO | 44 | 51.2 |
| VEM616 | 3" | 2" | 2 | 0.5 | 7.5 | 2.2 | NO | 78 | 90.7 |
| VEM716 | 3" | 2½" | 2 | 0.6 | 7.5 | 3 | NO | 96 | 112 |
| VEM720 | 3½" | 3" | 2 | 0.6 | 5 | 7.2 | NO | 308 | 358 |

HOW TO ORDER

Part Number Code:

VEM/VNP 6 08 110/50

Valve

- N** VNP – with integral pilot
E VEM – without pilot

Series

- 6** 600 Series
7 700 Series

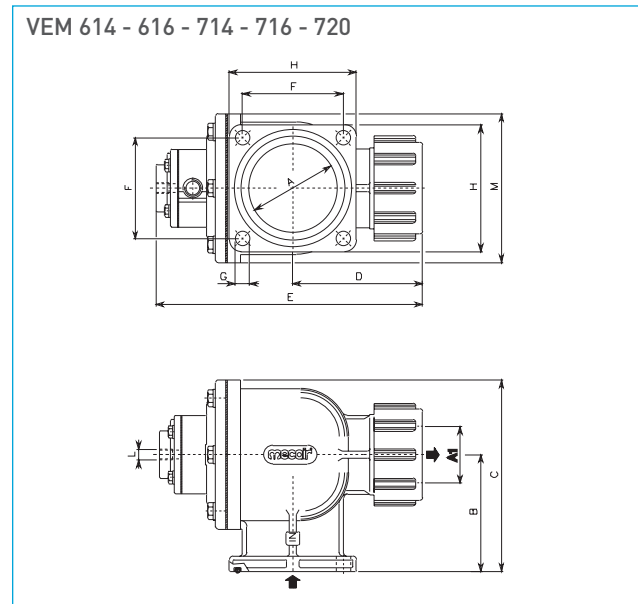
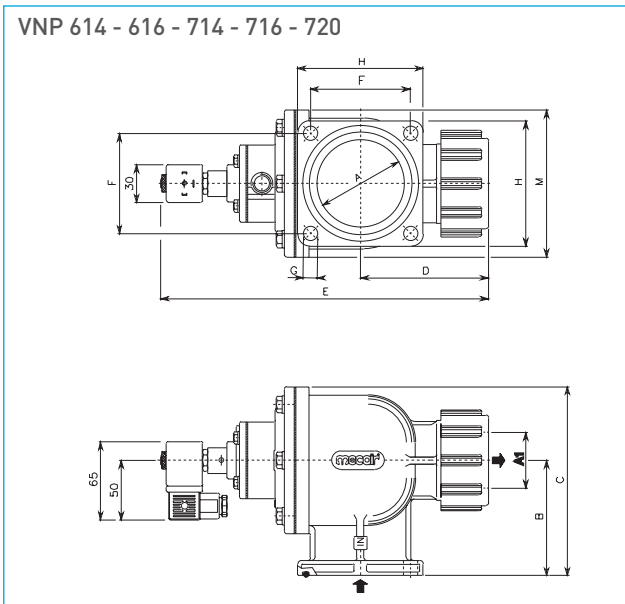
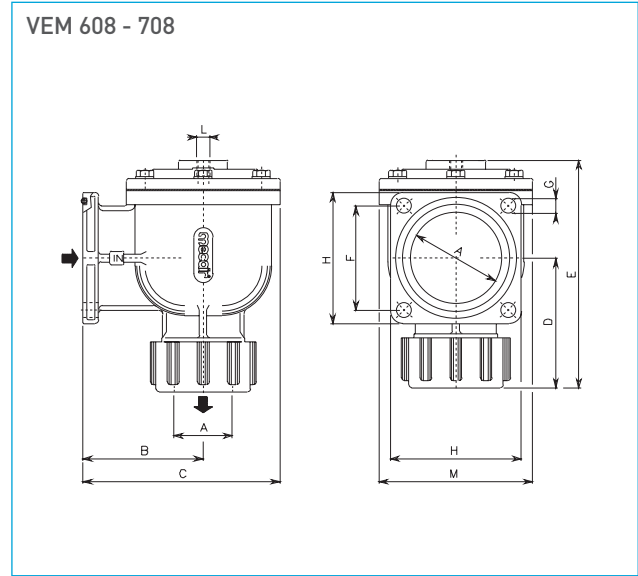
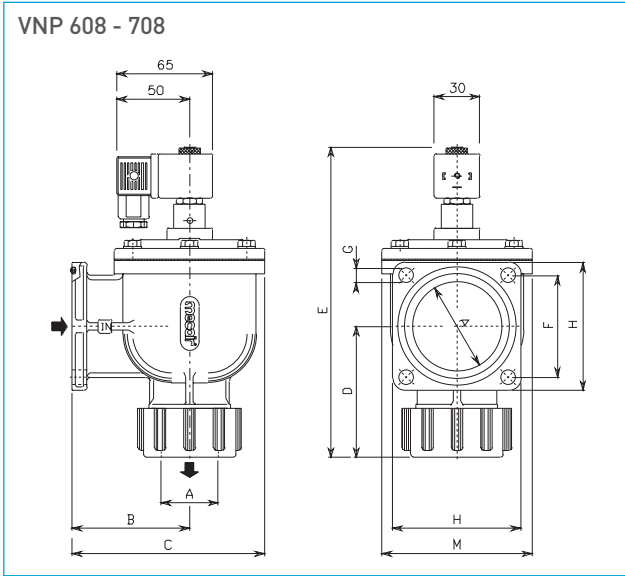
Voltage and frequency required

Valve connection diameter

- 08 = 1"-1½"
- 14 = 1½"-2"
- 16 = 2"-2½"
- 20 = 3"

MECAIR FLANGED VALVES 600/700 SERIES

DIMENSIONS

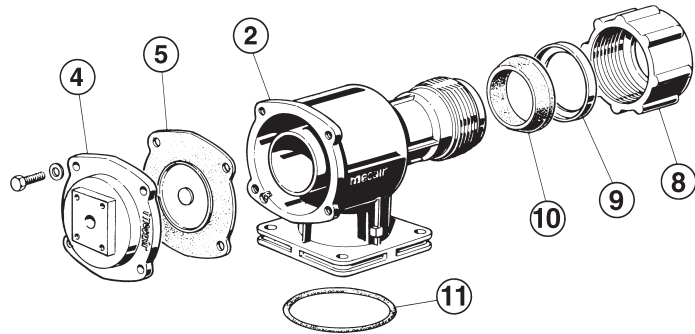
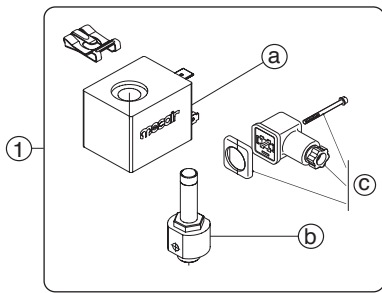


| MODEL | Ø A | Ø A1 | B | C | D | E | F | G | Ø H | M | WEIGHT kg | MODEL | E | Ø L | WEIGHT kg | No. DIAPH. | O-RING |
|---------|-----|------|-----|-----|-----|-----|----|------|-----|-----|-----------|---------|-----|-----|-----------|------------|--------|
| VNP 608 | 2" | 1" | 81 | 125 | 110 | 225 | 60 | 9 | 83 | 90 | 1.5 | VEM 608 | 180 | ¼" | 1.2 | 1 | OR6250 |
| VNP 614 | 2½" | 1½" | 96 | 160 | 130 | 305 | 72 | 11.5 | 95 | 140 | 2.2 | VEM 614 | 245 | ¼" | 1.9 | 2 | OR178 |
| VNP 616 | 3" | 2" | 110 | 185 | 140 | 330 | 85 | 13.5 | 110 | 165 | 2.8 | VEM 616 | 270 | ¼" | 2.5 | 2 | OR6350 |
| VNP 708 | 2" | 1½" | 81 | 125 | 110 | 255 | 60 | 11.5 | 83 | 90 | 1.5 | VEM 708 | 180 | ¼" | 1.2 | 1 | OR6250 |
| VNP 714 | 2½" | 2" | 96 | 160 | 130 | 305 | 72 | 13.5 | 95 | 140 | 2.2 | VEM 714 | 245 | ¼" | 1.9 | 2 | OR178 |
| VNP 716 | 3" | 2½" | 110 | 185 | 140 | 330 | 85 | 13.5 | 110 | 165 | 2.8 | VEM 716 | 270 | ¼" | 2.5 | 2 | OR6350 |
| VNP 720 | 3½" | 3" | 125 | 215 | 165 | 360 | 94 | 13.5 | 120 | 190 | 3.7 | VEM 720 | 300 | ¼" | 3.4 | 2 | OR189 |

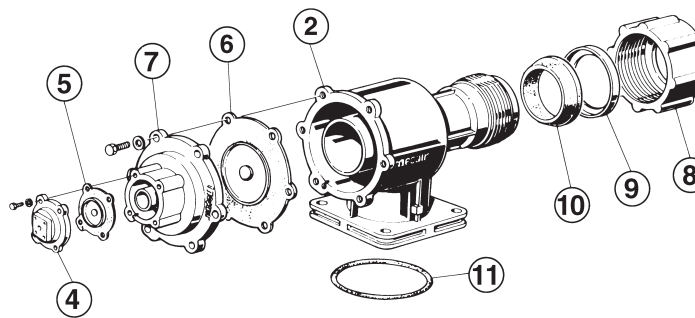
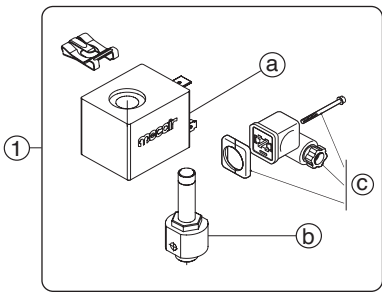
MECAIR FLANGED VALVES 600/700 SERIES

SPARE PARTS

VEM/VNP 608 - 708



VEM/VNP 614 - 714 - 616 - 716 - 720



STANDARD VERSION

| | POS | DESCRIPTION | CODE |
|----------|-----|---|------------------------|
| Standard | 1 | a) Solenoid (*) | a) KIT SB4 - ../.. (*) |
| | | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | | c) DIN connector PG9EN175301-803 IP65 | c) KIT PLG9 |

OPTIONAL VERSION

| | POS | DESCRIPTION | CODE |
|----------|-----|---|---------------------|
| Optional | 1 | a) Solenoid | a) KIT SB4 -24/DCX |
| | | b) Pilot group complete with base and ferrule | b) KIT CP1/4 |
| | | c) DIN connector (3GD IP65 T6) | c) KIT PLG11 - ATEX |

Version in conformity with European Directive 94/9/CE ATEX (cod. KIT PV-24/DCX)

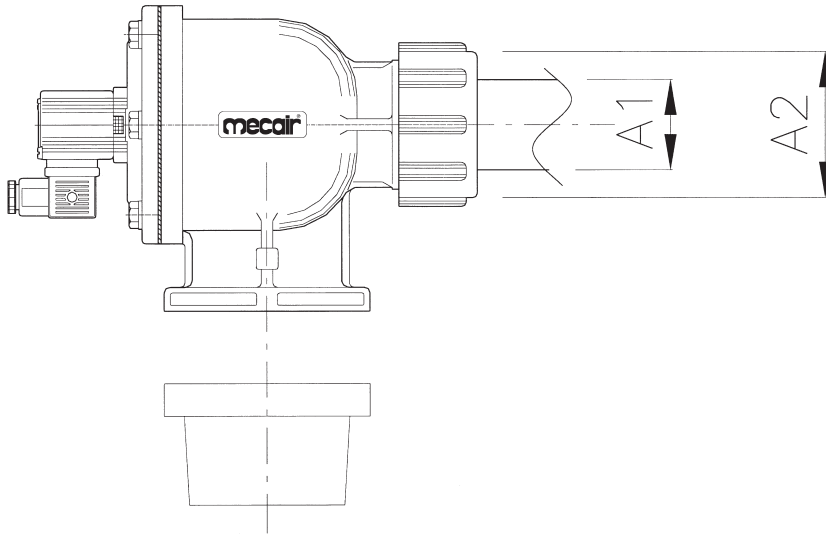
(*) Specify voltage and frequency.

| POS | DESCRIPTION | CODE | | | | | | |
|------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | VEM/VNP608 | VEM/VNP708 | VEM/VNP614 | VEM/VNP714 | VEM/VNP616 | VEM/VNP716 | VEM/VNP720 |
| 1 | Pilot group complete with solenoid (*) and DIN connector | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) | KIT PV - ../.. (*) |
| a+b+4 | Pilot group complete with solenoid (*), top cover and screws | KIT PVF08 - ../.. (*) | KIT PVF08 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) | KIT PVM06 - ../.. (*) |
| 2 | Valve body | KIT M100273 | KIT M100274 | KIT M100272 | KIT M100275 | KIT M100279 | KIT M100276 | KIT M100278 |
| 7 | Intermediate cover (double diaphragm) | — | — | KIT M110098 | KIT M110098 | KIT M110100 | KIT M110100 | KIT M110101 |
| 4 | Top cover | KIT M110142 | KIT M110142 | KIT M110082 | KIT M110082 | KIT M110082 | KIT M110082 | KIT M110082 |
| 5 | Diaphragm | KIT DB18M | KIT DB18M | — | — | — | — | — |
| 5+6+Spring | Diaphragm (main and secondary) | — | — | KIT DB114 | KIT DB114 | KIT DB116 | KIT DB116 | KIT DB120 |
| 8 | Dresser nut | KIT M150024 | KIT M150026 | KIT M150026 | KIT M150018 | KIT M150018 | KIT M150020 | KIT M150031 |
| 9 | Dresser nut insert | KIT M620014 | KIT M620015 | KIT M620015 | KIT M620023 | KIT M620023 | KIT M620033 | KIT M620032 |
| 10 | Conic seal for dresser nut | KIT M330203 | KIT M330204 | KIT M330204 | KIT M330292 | KIT M330292 | KIT M330310 | KIT M330305 |
| 11 | O-ring for flanged valve | KIT M330018 | KIT M330018 | KIT M330019 | KIT M330019 | KIT M330311 | KIT M330311 | KIT M330270 |

(*) Specify voltage and frequency.

MECAIR FLANGED VALVES 600/700 SERIES

FLANGED VALVE WITH INCREASED FLOW RATE



| VALVE | Ø A1 | Ø A2 | TOOL |
|-------|------|------|------|
| 608 | 1" | 61 | CH08 |
| 612 | 1½" | 82 | CH14 |
| 614 | 1½" | 82 | CH14 |
| 616 | 2" | 95 | CH16 |
| 620 | 2½" | 115 | CH20 |

| VALVE | Ø A1 | Ø A2 | TOOL |
|-------|------|------|------|
| 708 | 1½" | 82 | CH14 |
| 712 | 2" | 95 | CH16 |
| 714 | 2" | 95 | CH16 |
| 716 | 2½" | 115 | CH20 |
| 720 | 3" | 128 | CH24 |

MOUNTING TOOL "CH"

| MODEL | Ø A1 | Ø A2 | Ø B | C | D | E | WEIGHT KG |
|-------|------|------|-----|-----|-----|-----|-----------|
| CH08 | 1" | 61 | 100 | 250 | 350 | 68 | 0.44 |
| CH14 | 1½" | 82 | 130 | 300 | 430 | 85 | 0.7 |
| CH16 | 2" | 95 | 150 | 350 | 500 | 100 | 0.78 |
| CH20 | 2½" | 115 | 170 | 350 | 520 | 110 | 0.8 |

| MODEL | Ø A1 | Ø A2 | Ø B | C | D | E | WEIGHT KG |
|-------|------|------|-----|-----|-----|-----|-----------|
| CH14 | 1½" | 82 | 130 | 300 | 430 | 85 | 0.7 |
| CH16 | 2" | 95 | 150 | 350 | 500 | 100 | 0.78 |
| CH20 | 2½" | 115 | 170 | 350 | 520 | 110 | 0.8 |
| CH24 | 3" | 128 | 190 | 350 | 540 | 120 | 0.9 |

CH and PH

