



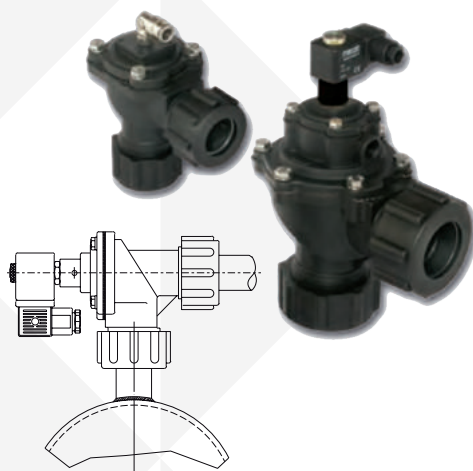
300 SERIES

# DRESSER NUT VALVES

# MECAIR - 300 SERIES

## DRESSER NUT VALVES

### PRODUCT LEAFLET



### 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 24 V/DCX (solenoid coil is 24 V-DC/18 W 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<br>Nitrile: -20°C/+80°C<br>Optional<br>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              | 12 V DC (supply +10% max.) 18 W<br>24 V DC (supply +10% max.) 18 W<br>48 V DC (supply +10% max.) 18 W<br>110 V DC (supply +10% max.) 18 W<br>24 V 50/60 Hz (supply +10% max.) 38/31 VA<br>48 V 50/60 Hz (supply +10% max.) 41/32 VA<br>115 V 50/60 Hz (supply +10% max.) 63/53 VA<br>220/240 V 50/60 Hz (supply +10% max.) 46/37 VA |
| AMBIENT TEMPERATURE        | -20°C/+60°C                                                                                                                                                                                                                                                                                                                         |

| MODEL   | 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: |   | <b>VEM/VNP</b>                   | <b>3</b> | <b>06</b> | <b>110/50</b> |
| 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) |          |           |               |

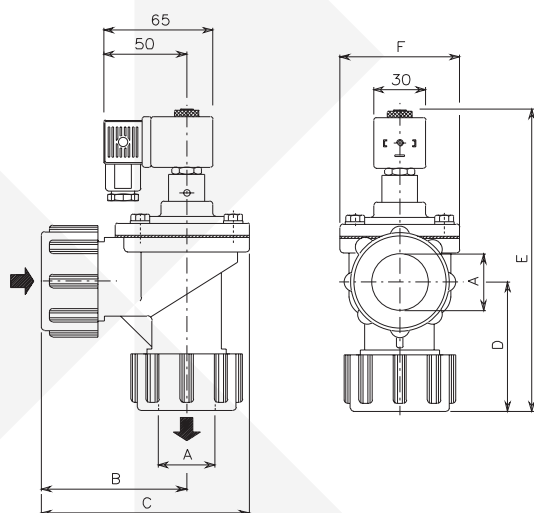
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## DRESSER NUT VALVES

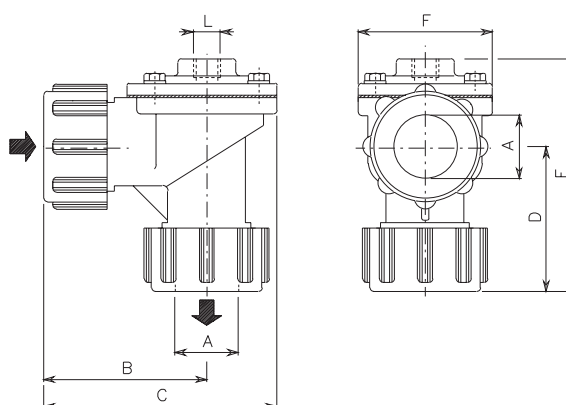
PRODUCT LEAFLET

### DIMENSIONS (MM)

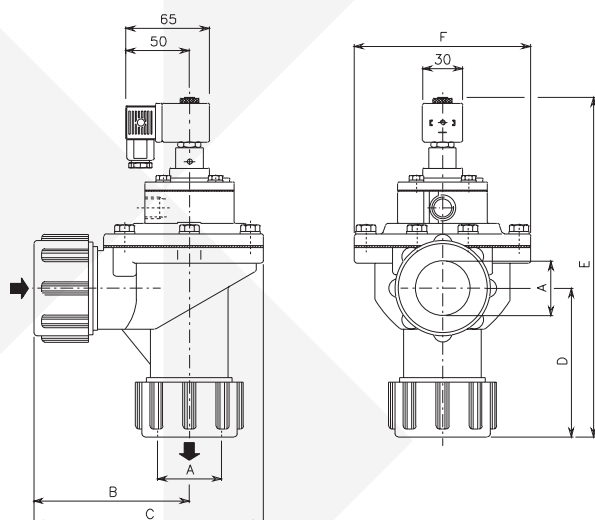
VNP 306 - 308 - 312



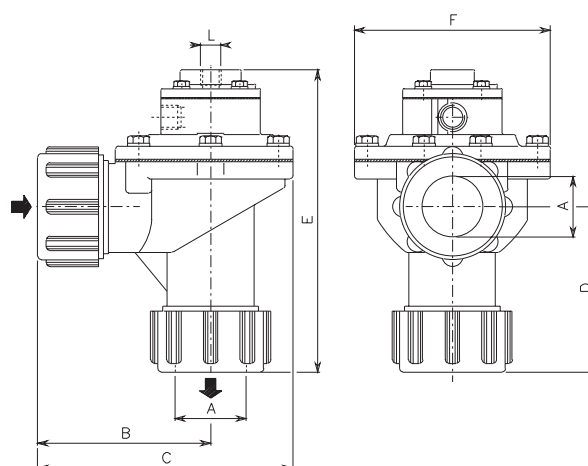
VEM 306 - 308 - 312



VNP 314



VEM 314



| MODEL  | Ø A | B   | C   | D  | E   | F   | WEIGHT<br>KG | MODEL   | E   | Ø L | WEIGHT<br>KG | PRESSURE RANGE (BAR) |      | NO.<br>DIAPH. |
|--------|-----|-----|-----|----|-----|-----|--------------|---------|-----|-----|--------------|----------------------|------|---------------|
|        |     |     |     |    |     |     |              |         |     |     |              | MIN.                 | MAX. |               |
| VNP306 | ¾"  | 77  | 108 | 67 | 167 | 60  | 0.90         | VEM 306 | 107 | ¼"  | 0.60         | 0.5                  | 7.5  | 1             |
| VNP308 | 1"  | 90  | 128 | 80 | 183 | 74  | 1.20         | VEM 308 | 123 | ¼"  | 0.90         | 0.5                  | 7.5  | 1             |
| VNP312 | 1½" | 114 | 176 | 99 | 220 | 135 | 2.20         | VEM 312 | 160 | ¼"  | 1.90         | 0.5                  | 7.5  | 1             |
| VNP314 | 1½" | 114 | 176 | 99 | 252 | 135 | 2.30         | VEM 314 | 192 | ¼"  | 2            | 0.5                  | 7.5  | 2             |

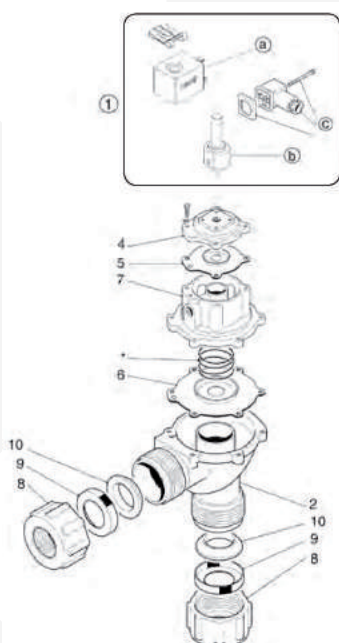
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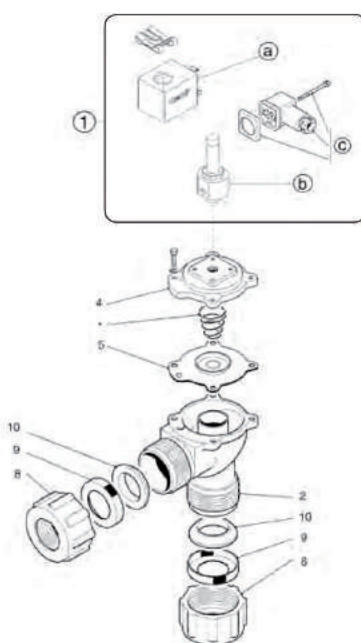
PRODUCT LEAFLET

### SPARE PARTS

#### VEM / VNP 306 - 308 - 312



#### VEM / VNP 314



#### 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 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



**MECAIR SRL**

VIA BERTACCIOLA, 50, 20813 BOVISIO MASCIAGO (MB), ITALY [WWW.GOYENMECAIR.PENTAIR.COM](http://WWW.GOYENMECAIR.PENTAIR.COM)

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