

# piCOMPACT®10X Bi03-2 x2



- Configurable vacuum ejector based on COAX® technology with integrated controls.
- Optimized design for high reliability and fast cycle times.
- High Speed valves with adaptive PWM (Pulse Width Modulation) to reduce heat generation and further improve reliability.
- Slim package (10mm width) and lightweight thanks to high-performance plastic parts.
- ▶ High operational reliability in case of fluctuating or low compressed-air pressure.
- ▶ Vacuum level to 82 -kPa at extremely low feed pressure.
- Energy Saving (ES) function.
- ACM Automatic Condition Monitoring (ES mode active or not).
- ALD -Automatic Level Determination (ES shut-off level and Hyst).
- Vacuum non-return valve included.
- Userfriendly GUI (Graphical User interface), no risk for setting up part present signal, ES level and hysteresis wrong.
- Cleanable and replaceable filter element
- Low noise level

#### **Technical data**

| Description         | Unit | Value |
|---------------------|------|-------|
| Feed pressure, max. | MPa  | 0.7   |



| Temperature range              | °C  | -10-50                            |
|--------------------------------|-----|-----------------------------------|
| Total weight                   | g   | 104                               |
| Material                       | -   | PA, NBR, SS, TPE, POM, CuZn, PVC, |
|                                |     | PC, LCP                           |
| Noise level range 1-8 channels | dBA | 56-68                             |
| Connection, compressed air     | -   | ø6 push-in connector(s)           |
| Connection, vacuum             | -   | ø6 push-in connector(s)           |
| Supply voltage                 | VDC | 24 (21.6 - 26.4)                  |
| Electrical input/output        | -   | PNP                               |
| Electrical connection          | -   | Connector double-row, 6 pole male |
| Switch output 1, max           | mA  | 100                               |
| Analog output                  | V   | 1-5                               |

# Technical data, valve module

| Description                 | Unit | Value                       |  |  |
|-----------------------------|------|-----------------------------|--|--|
| Current consumption         | mA   | 100/63                      |  |  |
| Manual override             | -    | Yes, non-locking push style |  |  |
| Function, Vacuum / Blow-off | -    | NC vacuum + NC blow off     |  |  |
| Response time               | ms   | 2.8                         |  |  |
| Pressure drop               | MPa  | 0.038                       |  |  |
| Blow-off flow at 0.5 MPa    | NI/s | 0-1.01                      |  |  |

# Vacuum flow

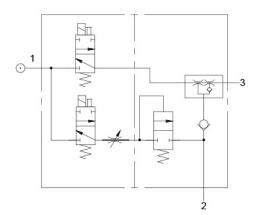
| Feed pressure<br>pump / nozzle | Air<br>Consumption<br>per<br>pump/nozzle | Vacuum flow (NI/s) at different vacuum levels (-kPa) |      |      |       |       | Max<br>vacuum |       |       |      |
|--------------------------------|--|--|------|------|-------|-------|---------------|-------|-------|------|
| MPa                            | NI/s                                     | 0  | 10   | 20   | 30    | 40    | 50            | 60    | 70    | -kPa |
| 0.24 / 0.20                    | 0.28                                     | 0.34   | 0.22 | 0.10 | 0.042 | 0.033 | 0.027         | 0.014 | 0.008 | 82   |

### **Evacuation time**

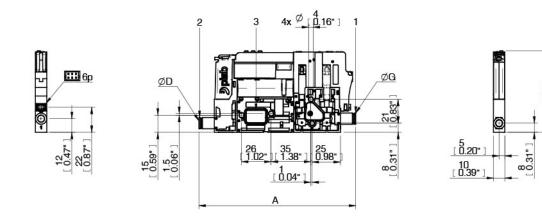
| Feed<br>pressure<br>pump / nozzle | Air<br>Consumption<br>per<br>pump/nozzle | Evacuation time (ms) of 5 ml to reach different vacuum levels (-kPa) |      |    |    |    |     | Max<br>vacuum |     |     |      |
|-----------------------------------|--|--|------|----|----|----|-----|---------------|-----|-----|------|
| MPa                               | NI/s                                     | 10   | 20   | 30 | 40 | 50 | 60  | 70            | 80  | 82  | -kPa |
| 0.24 / 0.20                       | 0.28                                     | 7.4  | 14.0 | 32 | 55 | 90 | 142 | 274           | 536 | 596 | 82   |



# **Dimensional drawing**



| A | 138.0 [5.43"] |
|---|---------------|
| D | ø6            |
| G | 0             |
| N | 0             |



## **Ordering information**

| Description   | Product code                    |
|---|---------------------------------|
| piCOMPACT®10X Bi03-2 x2 Low feed pressure, MICRO (14-19 NI/min),              | PC.L.MC2.S.AAA.S16.1X.6.EI.CCP6 |
| Double, Standard, Electrical ES, vac and blow off, , , With non-return valve, |                                 |
| Display, analog and digital output, 1 vacuum port, ø6 push-in connector(s), 1 |                                 |
| channel, No split, ø6 push-in connector(s), Ejector(s) for individual mounts, |                                 |
| NC vacuum + NC blow off, PNP, 6p connector(s)                                 |                                 |
| NC vacuum + NC blow off, PNP, 6p connector(s)                                 |                                 |

# Ordering information, accessories

| Description                                 | Art. No. |
|---|----------|
| Filter element FM10-50, 5 pcs               | 0201747  |
| Cable L=2.5m, conn 6p Torsional PUR         | 0210398  |
| Cable L=5m, conn 6p Torsional PUR           | 0210397  |
| Cable L=0.3m, conn 6p/M12 8p male PVC       | 0201750  |
| Central exhaust kit piCOMPACT®10x/piPUMP10x | 0202067  |
| Silencer kit piCOMPACT®10x/piPUMP10x        | 0202068  |
| Mounting bracket                            | 0200735  |

#### Values specified in data sheet are tested at:

- Room temperature (20°C [68°F] ± 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 0-100%.
- Compressed air quality, DIN ISO 8573-1 class 4.