

piCOMPACT®10X Bi03-2 x1



- ▶ 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
- ▶ For cleanroom environment
- ▶ Low noise level
- ▶ Central silencer or central exhaust for lowest possible sound level and possibility to pipe away exhaust air.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-50
Total weight	g	382
Material	-	PA, NBR, SS, TPE, POM, Al, PU, CuZn, PVC, PC, LCP
Noise level range 1-8 channels	dBA	50 - 65

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 2/2 vacuum + NC 2/2 blow off
Response time	ms	2.8
Pressure drop	MPa	0.015
Blow-off flow at 0.5 MPa	NI/s	0-1.01

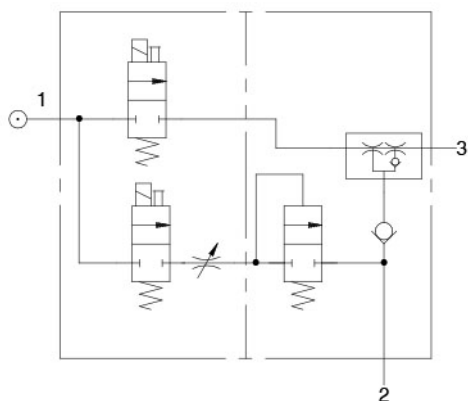
Vacuum flow

Feed pressure pump / nozzle MPa	Air Consumption per pump/nozzle NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum -kPa
		0	10	20	30	40	50	60	70	
0.22 / 0.20	0.14	0.21	0.14	0.063	0.021	0.016	0.014	0.007	0.004	82

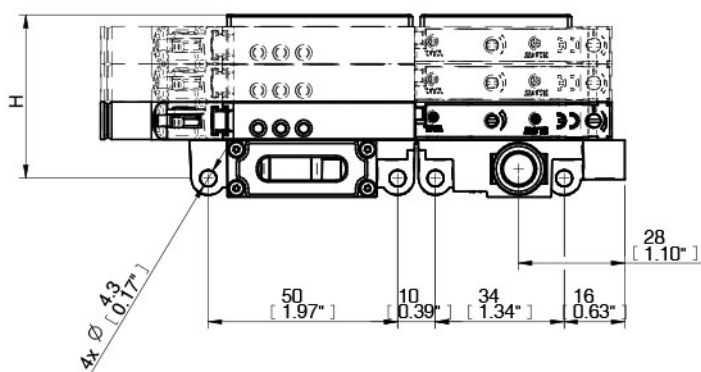
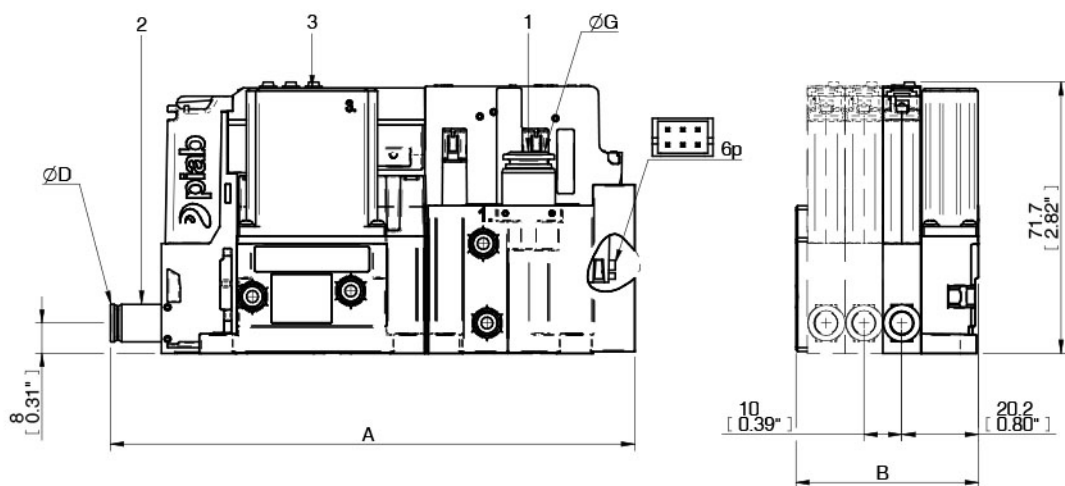
Evacuation time

Feed pressure pump / nozzle MPa	Air Consumption per pump/nozzle NI/s	Evacuation time (ms) of 5 ml to reach different vacuum levels (-kPa)									Max vacuum -kPa
		10	20	30	40	50	60	70	80	82	
0.22 / 0.20	0.14	9.9	20.4	53	99	153	228	354	552	652	82

Dimensional drawing



A	138.5 [5.45"]
B	48.2 [1.90"]
D	ø6
G	ø6
H	43.2 [1.70"]
N	0



Ordering information

Description	Product code
piCOMPACT®10X Bi03-2 x1 Low feed pressure, MICRO (14-19 NI/min), Single, Standard, Electrical ES, vac and blow off, , , With non-return valve, Display, analog and digital output, 1 vacuum port, ø6 push-in connector(s), 3 channels, No split, ø6 push-in connector(s), Ejectors stacked with central silencer, NC 2/2 vacuum + NC 2/2 blow off, PNP, 6p connector(s)	PC.L.MC1.S.AAA.S16.3X.6.EN.RCP6

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

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.