piCOMPACT®10X
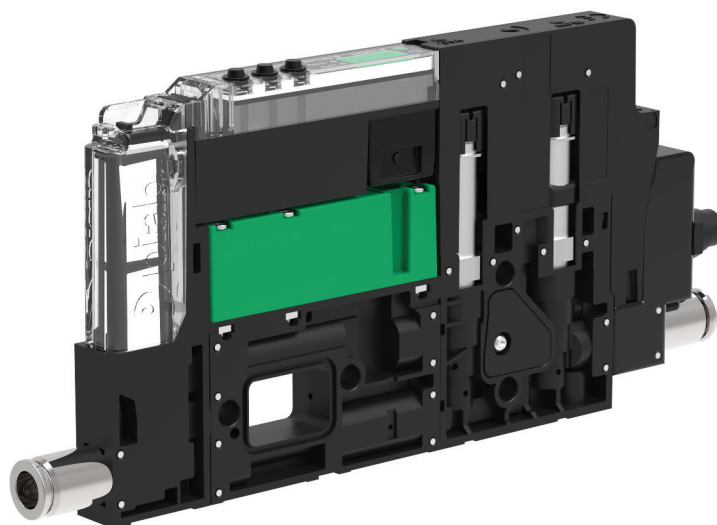
piCOMPACT® is an ejector family with integrated controls, so called compact or "all-in-one" ejector unit. It is a stackable platform with the possibility to mount several units in the same manifold and have common pneumatic and electrical connections. The focus during development has been on the most significant "key criteria" for these types of pumps, reliability and speed, as well as introducing some brand new attractive features/functions. That in combination with our state-of-the-art vacuum engine, COAX®, the product is outstanding. By working at low feed pressure and maximizing the utilization rate of the compressed air, the COAX® ejectors reduce energy consumption for manufacturers while increasing productivity and reliability. Its vacuum response to 50–60 -kPa is typically 30–50% faster compared to single stage technology. The piCOMPACT® is only 10 mm wide with a large 6 mm vacuum connection for maximum performance.

VACUUM FLOW

COAX® Cartridge	Feed pressure	Air consumption	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
	MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
MICRO Bi03-2	0.22/0.2*	0.14	0.21	0.14	0.063	0.021	0.016	0.014	0.007	0.004	82
MICRO Si02-2	0.604/0.6*	0.11	0.26	0.18	0.095	0.053	0.045	0.038	0.027	0.019	75
MICRO Ti05-2	0.43/0.4*	0.23	0.31	0.28	0.22	0.16	0.088	0.063	0.045	0.023	84
MICRO Xi2.5-2	0.51/0.5*	0.13	0.23	0.15	0.079	0.044	0.036	0.03	0.023	0.013	91

* Pump/nozzle.

EVACUATION TIMES

COAX® Cartridge	Feed pressure	Air consumption	Evacuation time (ms) of 5 ml to reach different vacuum levels (-kPa)											Max	Max vacuum
	MPa	Nl/s	0	10	20	30	40	50	60	70	75	80	90	Max	-kPa
MICRO Bi03-2	0.22/0.2*	0.14	5	9.9	20.4	53	99	153	228	354	—	552	—	652**	82
MICRO Si02-2	0.604/0.6*	0.11	5	8.9	16.2	31	48	68	95	136	185	—	—	185**	75
MICRO Ti05-2	0.43/0.4*	0.23	5	6.7	10.2	14.8	23	35	50	70	—	114	—	159**	84
MICRO Xi2.5-2	0.51/0.5*	0.13	5.1	8.9	16.2	35	59	87	121	169	—	250	421	464**	91

* Pump/nozzle, ** Evacuation time (ms) to max vacuum level (-kPa).
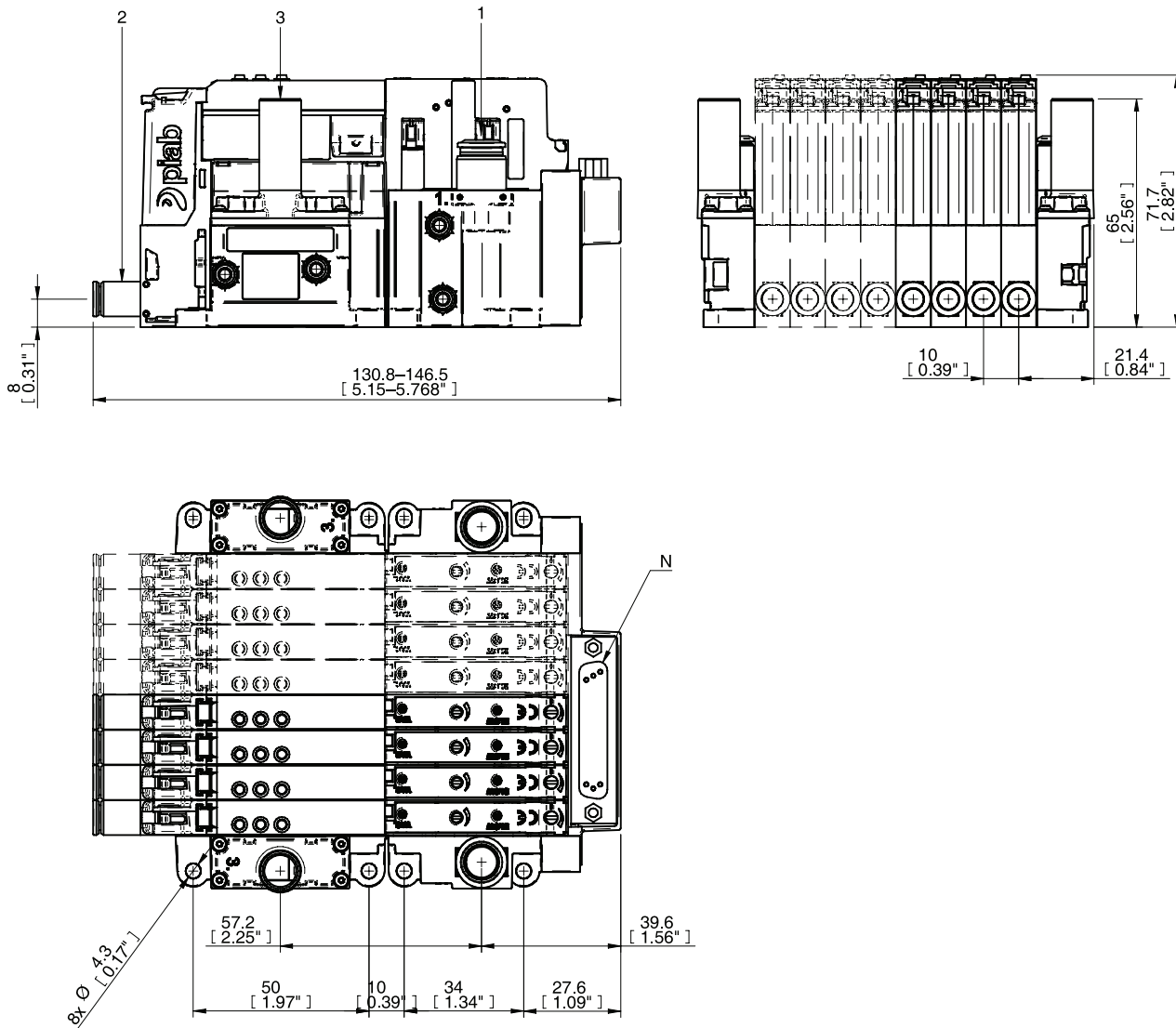
DIMENSIONAL DRAWING

ORDERING INFORMATION

For a complete list of available pumps and combinations with further information visit **piab.com**. On our webpage you will also be able to find dimensional drawings, CAD-drawings and much more. Register and get full access to all resources available.
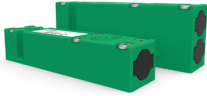
CUSTOMER CODE

For the configuration tables of piCOMPACT®10X go to page 232.

piCOMPACT®10X – CUSTOMER CODE

piCOMPACT®		Ejector performance			Ejector performance			Working enviroment	
Code		**Code**	**Vacuum characteristics**		**Code**	**Nozzle model**		**Code**	**Chemical resistance**
PC		L	Low feed pressure		MC	MICRO (14–19 Nl/min)		S	Standard
		S	High vacuum flow		**Code**	**Nozzle rows**			
		X	Extra vacuum level		1	Single			
		T	Extra high vacuum flow		2	Double			
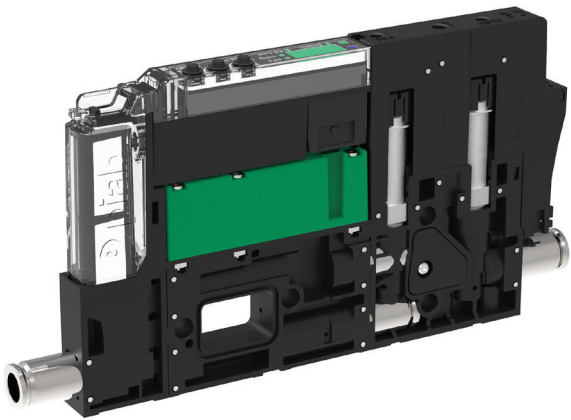
PC . S . MC2 . S . AAA . S16 . 1X . 6 . EI . CCP6

PC . S . MC2 . S . AAA . S16 . 1X . 6 . EI . CCP6
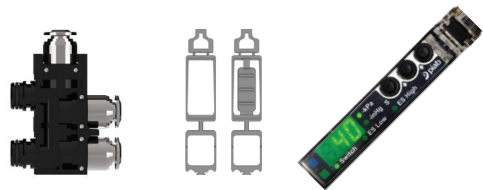
Functionality

Code	Control functions
A	Electrical ES, vac and blow off
B	Electrical ES, vac and automatic blow off
C	Vac and blow off
D	Vac and automatic blow off (ATBO)
E	Vacuum on/off (vac)

Code	Non-return valve
B	Without non-return valve
A	With non-return valve

Code	Vacuum sensing
A	Display, analog and digital output
X	No vacuum sensing
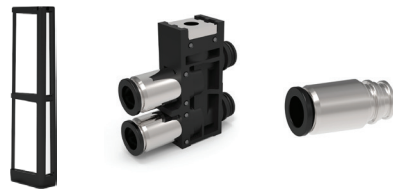
Vacuum connect module

Code	Vacuum filter
S	Vacuum filter 50 µm
X	No vacuum filter

Code	Vacuum port(s)/channel
1	1 vacuum port
2	2 vacuum ports
3	3 vacuum ports

Code	Vacuum connection(s)
4	Ø4 (5/32") push-in connector(s)
6	Ø6 push-in connector(s)
14	Ø1/4" push-in connector(s)

Single unit or manifold mount

Code	Number of channels
1	1 channel
2	2 channels
3	3 channels
4	4 channels
5	5 channels
6	6 channels
7	7 channels
8	8 channels

Code	Split control from vacuum
X	No split
A	Split Ø4
B	Split Ø6
C	Split Ø1/4"

Air supply

Code	Air connections
4	Ø4 (5/32") push-in connector
6	Ø6 push-in connector
14	Ø1/4" push-in connector
8	Ø8 (5/16") push-in connector
26	2 x Ø6 push-in connectors
214	2 x Ø1/4" push-in connectors
28	2 x Ø8 (5/16") push-in connectors

Mounting

Code	Options
EC	Ejectors stacked with central exhaust
EN	Ejectors stacked with central silencer
EI	Ejector(s) for individual mounts

Electrical properties

Code	Valve configuration
CC	NC vacuum + NC blow off
OC	NO vacuum + NC blow off
RC	NC 2/2 vacuum + NC 2/2 blow off
C	NC vacuum
O	NO vacuum
R	NC 2/2 vacuum

Code	Electrical input/output
P	PNP
N	NPN

Code	Electrical interface
6	6p connector(s)
A	M8 6p connector(s)
26	HD D-sub 26p connector
44	HD D-sub 44p connector

piPUMP10X
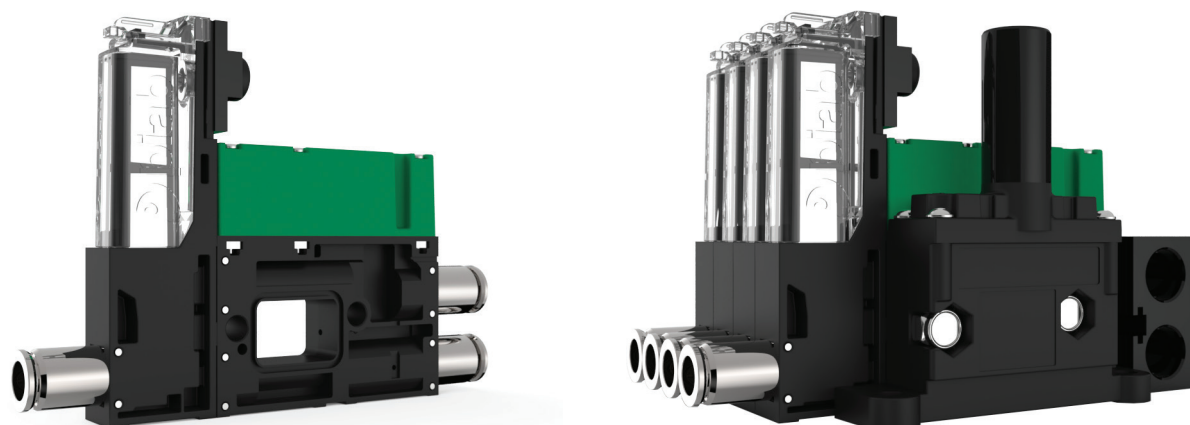
Compact/stackable vacuum pumps are air-driven multistage ejector families, based on COAX® technology, It provides a high operational reliability, in case of fluctuating or low compressed-air pressure. Excellent performance when a quick response time when deep vacuum is needed. There is also a quick vacuum non-return valve as an option.

VACUUM FLOW

COAX® Cartridge	Feed pressure	Air consumption	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
	MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
MICRO Bi03-2	0.2	0.14	0.21	0.14	0.063	0.021	0.016	0.014	0.007	0.004	82
MICRO Si02-2	0.6	0.11	0.26	0.18	0.095	0.053	0.045	0.038	0.027	0.019	75
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MICRO Xi2.5-2	0.5	0.13	0.23	0.15	0.079	0.044	0.036	0.03	0.023	0.013	91

EVACUATION TIMES

COAX® Cartridge	Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)											Max vacuum
	MPa	Nl/s	0	10	20	30	40	50	60	70	80	90	Max	-kPa
MICRO Bi03-2	0.2	0.14	5	9.9	20.4	53	99	153	228	354	552	—	652*	82
MICRO Si02-2	0.6	0.11	5	8.9	16.2	31	48	68	95	136	—	—	185*	75
MICRO Ti05-2	0.4	0.23	5	6.7	10.2	14.8	23	35	50	70	114	—	159*	84
MICRO Xi2.5-2	0.5	0.13	5.1	8.9	16.2	35	59	87	121	169	250	421	464*	91

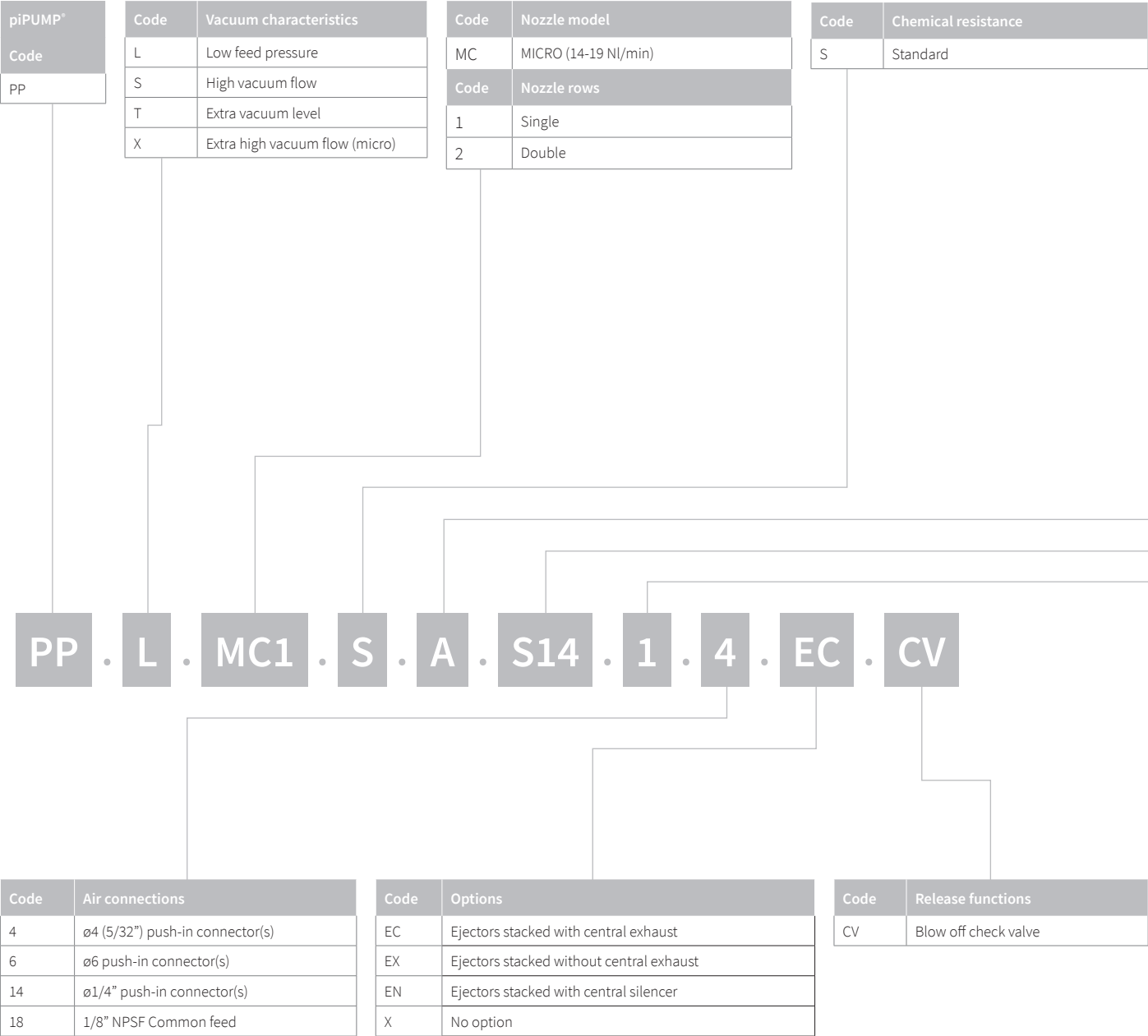* Evacuation time (ms) at max vacuum level (-kPa).
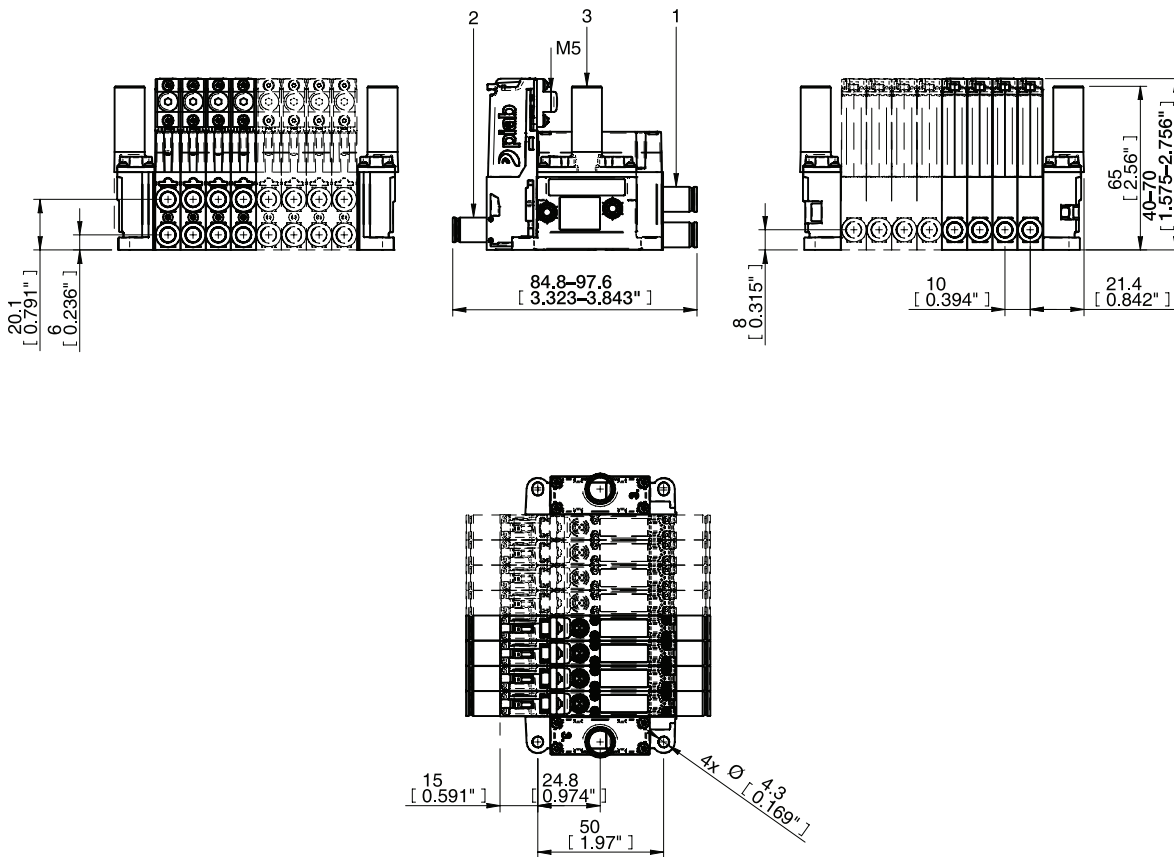
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ORDERING INFORMATION

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piPUMP10X – CUSTOMER CODE

piPUMP®
Code
PP

Code	Vacuum characteristics
L	Low feed pressure
S	High vacuum flow
T	Extra vacuum level
X	Extra high vacuum flow (micro)

Code	Nozzle model
MC	MICRO (14-19 Nl/min)
Code	Nozzle rows
1	Single
2	Double

Code	Chemical resistance
S	Standard

PP . L . MC1 . S . A . S14 . 1 . 4 . EC . CV

Code	Air connections
4	ø4 (5/32") push-in connector(s)
6	ø6 push-in connector(s)
14	ø1/4" push-in connector(s)
18	1/8" NPSF Common feed

Code	Options
EC	Ejectors stacked with central exhaust
EX	Ejectors stacked without central exhaust
EN	Ejectors stacked with central silencer
X	No option

Code	Release functions
CV	Blow off check valve

Code	Additional function
A	With non-return valve
B	Without non-return valve

Code	Vacuum filter
S	Vacuum filter 50 µm
X	No vacuum filter

Code	Vacuum port(s)/channel
1	1 vacuum port
2	2 vacuum ports
3	3 vacuum ports

Code	Vacuum connection(s)
4	ø4 (5/32") push-in connector(s)
6	ø6 push-in connector(s)
14	ø1/4" push-in connector(s)

Code	Number of channels
1	1 channel
2	2 channels
3	3 channels
4	4 channels
5	5 channels
6	6 channels
7	7 channels
8	8 channels

Specifications subject to change without notice.