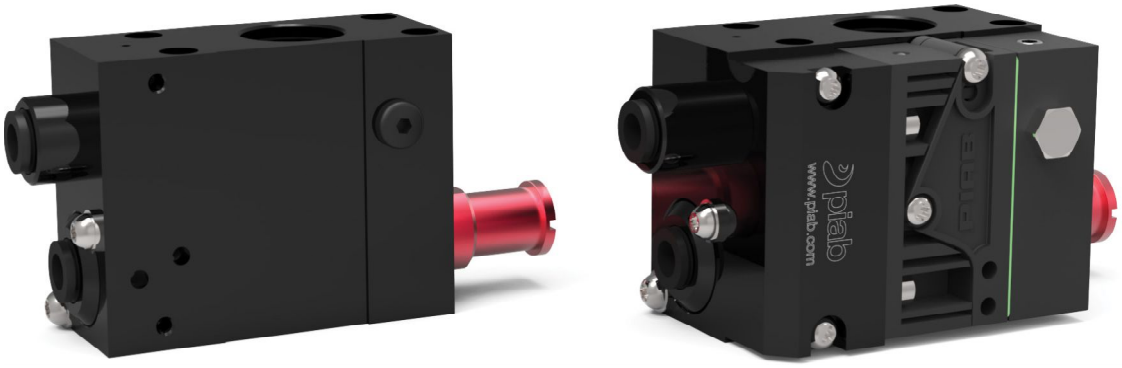
piSECURE



This vacuum pump combines high security and the most energy-efficient solution for sealed material, COAX® technology with automatic air-saving function. It has a check valve that traps vacuum in sealed applications and an integrated energy saving device that results in virtually no energy consumption. It is an excellent product when working with vacuum handling devices that have to comply and fulfil legislated lifting norms for handling devices, for example (DIN/SS) – EN 13155, ASME Standard B30.20, etc.

As the piSECURE uses the two stage COAX® MINI Xi10-2 ejector it will provide a fast evacuation to 94 -kPa. It is suitable to use as decentralized (one per cup) for maximum safety. It also has an integrated blow-off release valve for fast and reliable release of object. The optional air saving function (piSECURE ES) can save up to 99% of consumption.

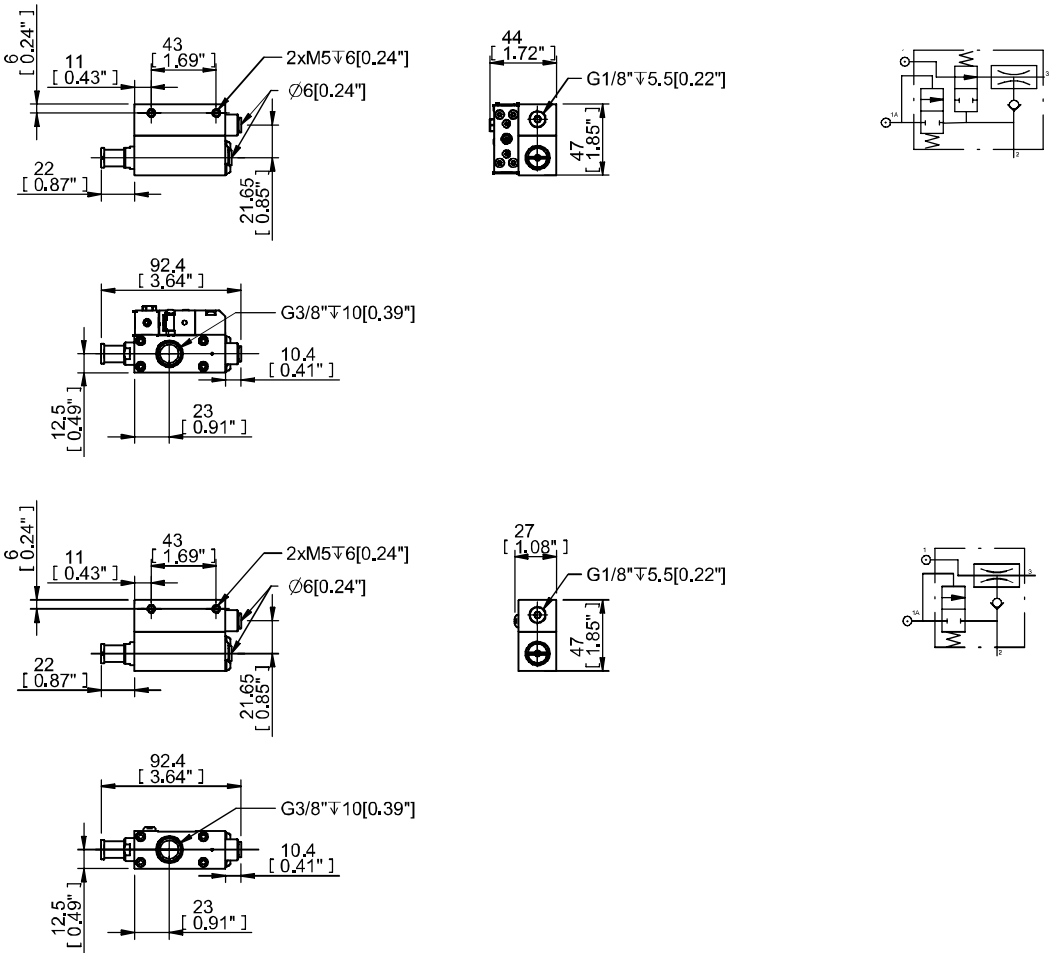
Vacuum flow

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	80	90	-kPa
MINI Xi10-2	0.45	0.42	0.75	0.61	0.45	0.28	0.19	0.15	0.11	0.07	0.043	0.003	92
MINI Xi10-2	0.5	0.46	0.75	0.63	0.49	0.33	0.19	0.15	0.11	0.07	0.045	0.011	94
MINI Xi10-2	0.6	0.54	0.74	0.63	0.53	0.42	0.3	0.16	0.11	0.08	0.041	0.01	93

Evacuation times

COAX® cartridge	Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)									Max vacuum
	MPa	Nl/s	10	20	30	40	50	60	70	80	90	-kPa
MINI Xi10-2	0.45	0.42	0.15	0.3	0.6	1.1	1.6	2.3	3.5	5.3	9.6	92
MINI Xi10-2	0.5	0.46	0.14	0.3	0.6	1	1.6	2.3	3.5	5.3	8.9	94
MINI Xi10-2	0.6	0.54	0.15	0.3	0.5	0.8	1.3	2	3.1	4.8	8.7	93

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.

Vacuum Check Valve VT-1H with COAX®

This vacuum pump combines high security and the most energy-efficient solution for sealed material, COAX® technology with automatic air-saving function. It has a check valve that traps vacuum in sealed applications and an integrated energy saving device that results in virtually no energy consumption. It is an excellent product when working with vacuum handling devices that have to comply and fulfil legislated lifting norms for handling devices, for example (DIN/SS) – EN 13155, ASME Standard B30.20, etc.

It has the two-stage COAX® cartridge MINI Pi12-2 integrated and is available in lock pin 16, 19 or ball joint mountings, industry standard. It is also available with level compensator to compensate for differences in level of object.

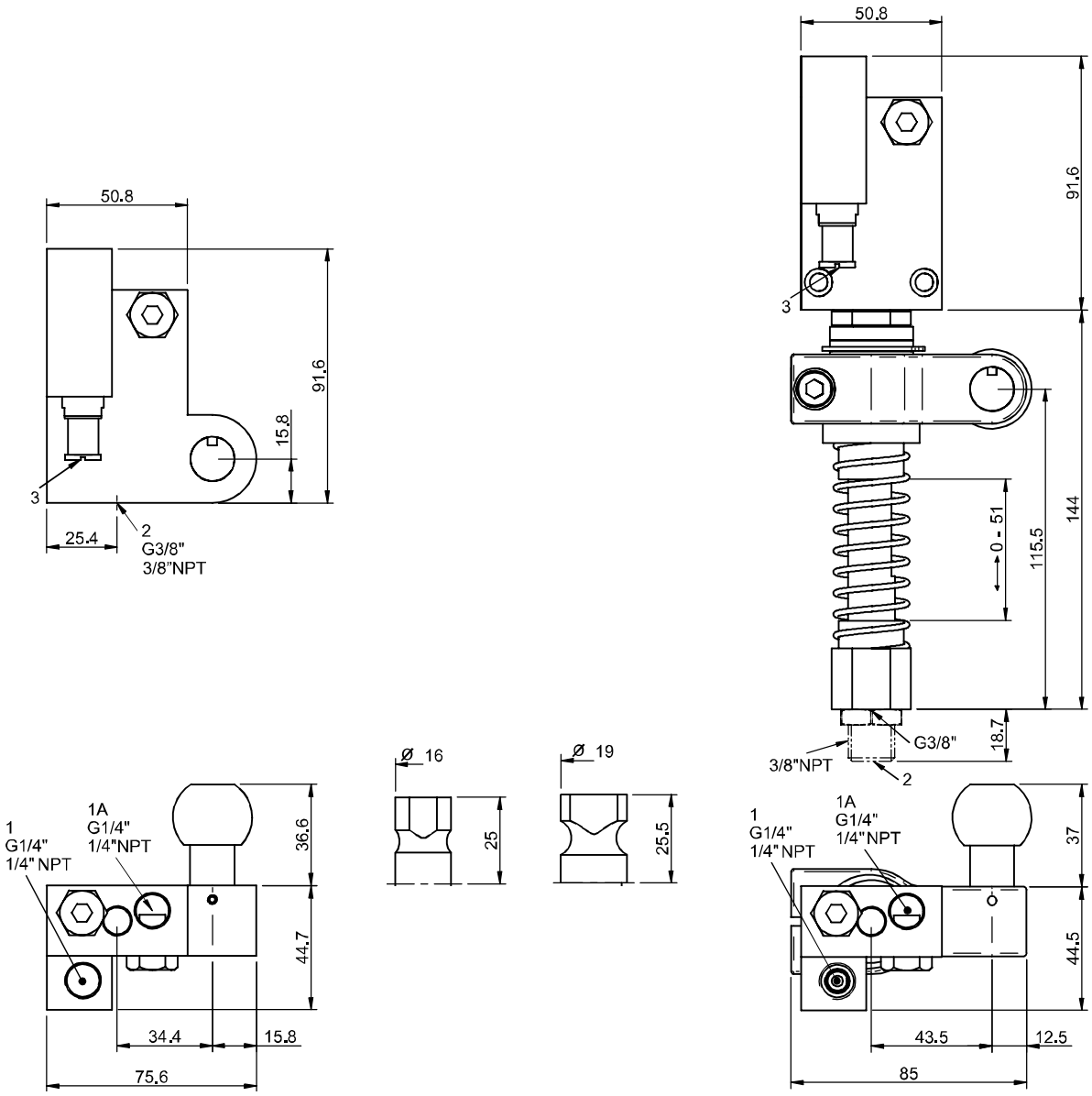
Vacuum flow

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	80	-kPa
MINI Pi12-2	0.32	0.44	0.68	0.6	0.44	0.27	0.19	0.14	0.1	0.06	0.03	90

Evacuation times

COAX® cartridge	Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)								Max vacuum
	MPa	Nl/s	10	20	30	40	50	60	70	80	-kPa
MINI Pi12-2	0.32	0.44	0.17	0.32	0.58	1.1	1.8	2.7	4	6.4	90

Dimensional drawing



Ordering information

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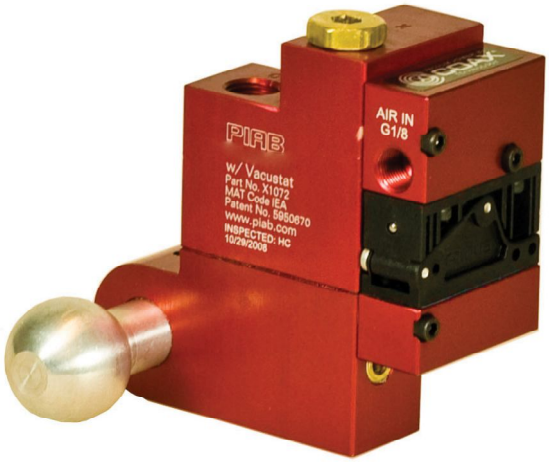
Vacuum Check Valve VT-1H Vacustat with COAX®



This vacuum pump combines high security and the most energy-efficient solution for sealed material, COAX® technology with automatic air-saving function. It has a check valve that traps vacuum in sealed applications and an integrated energy saving device that results in virtually no energy consumption. It is an excellent product when working with vacuum handling devices that have to comply and fulfil legislated lifting norms for handling devices, for example (DIN/SS) – EN 13155, ASME Standard B30.20, etc.

It has the two-stage COAX® cartridge MINI Pi12-2 integrated and is available in lock pin 16, 19 or ball joint mountings, industry standard. It is also available with level compensator to compensate for differences in level of object. This pump has an integrated energy-saving device, Vacustat that results in virtually no air consumption in sealed applications.

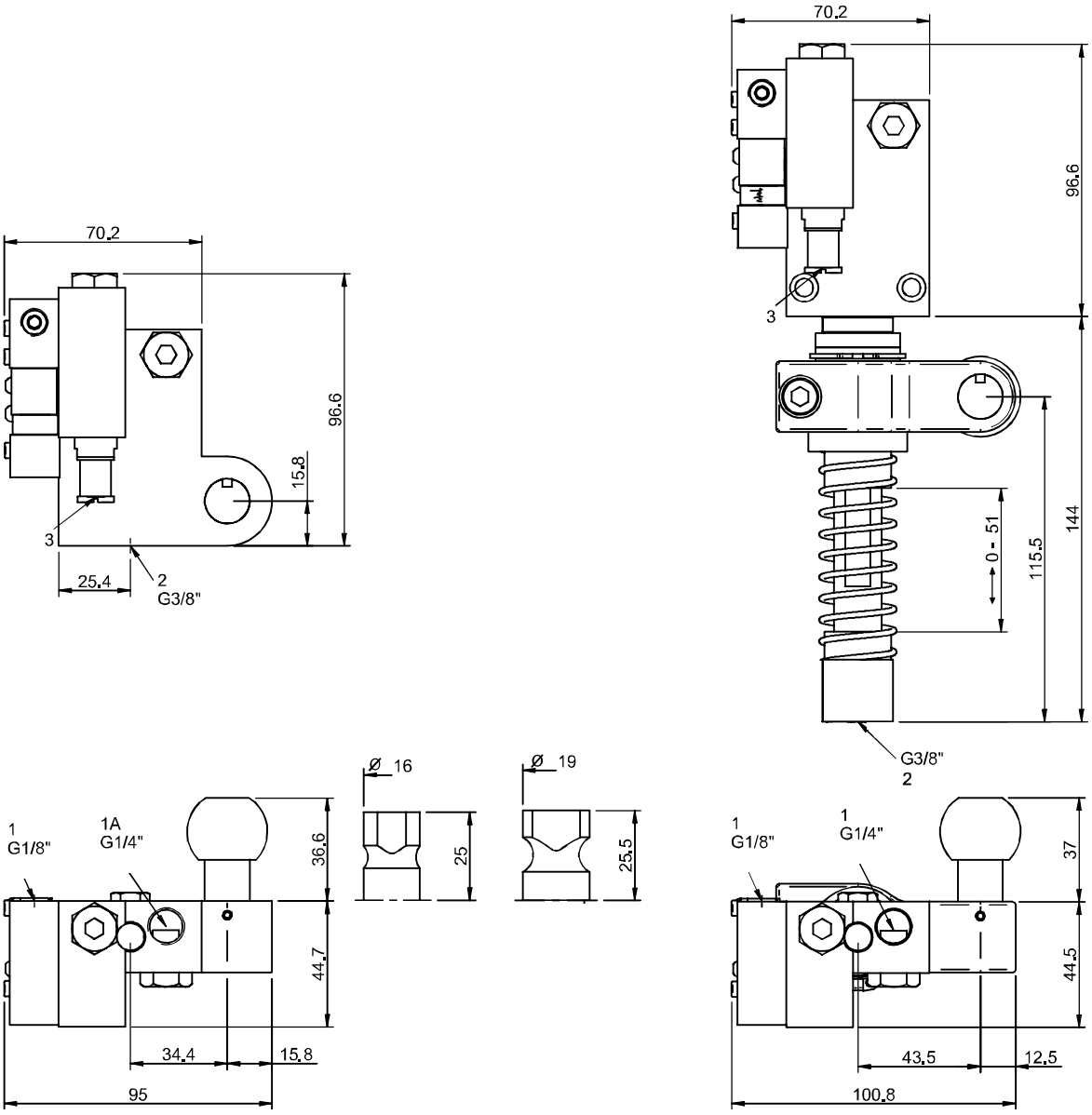
Vacuum flow

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	80	-kPa
MINI Pi12-2	0.32	0.44	0.68	0.6	0.44	0.27	0.19	0.14	0.1	0.06	0.03	90

Evacuation times

COAX® cartridge	Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)								Max vacuum
	MPa	Nl/s	10	20	30	40	50	60	70	80	-kPa
MINI Pi12-2	0.32	0.44	0.17	0.32	0.58	1.1	1.8	2.7	4	6.4	90

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.

Vacuum Check Valve VT1

- Check valve that traps vacuum in sealed applications for safe operation.
- Built-in blow off check valve for fast release of object.
- Optional two-stage COAX® cartridge MINI Pi12-2 integrated.
- Optional integrated energy-saving device, Vacustat results in virtually no air consumption in sealed applications.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, min. breakaway blow-off	MPa	0.25
Material		Al, Steel, Ceramic

Technical data, specific

Description	Unit	Value		
		0109233/0121236	0110456/0121237	0120323/0121238
Weight	g	272	390	650
Temperature range	°C	-30-70	-10-80	-10-80
Noise level	dBA	–	66-68	66-68
Signal	-kPa	–	–	65
Function		–	–	2/2 NO
Hysteresis	kPa	–	–	8
Vacuum flow, max.	Nl/s	–	0.68	0.68

Vacuum flow

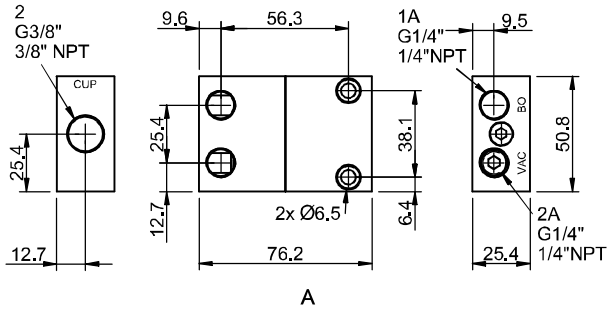
Feed pressure	Air consumption	Vacuum flow (Nl/s) at different vacuum levels (-kPa)									Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	80	-kPa
0.17	0.29	0.57	0.40	0.22	0.15	0.070	–	–	–	–	49
0.22	0.34	0.64	0.48	0.29	0.20	0.14	0.080	0.020	–	–	64
0.314	0.44	0.68	0.60	0.44	0.27	0.19	0.14	0.10	0.060	0.030	90
0.40	0.53	0.66	0.60	0.52	0.39	0.24	0.12	0.10	0.060	0.020	84

Evacuation time

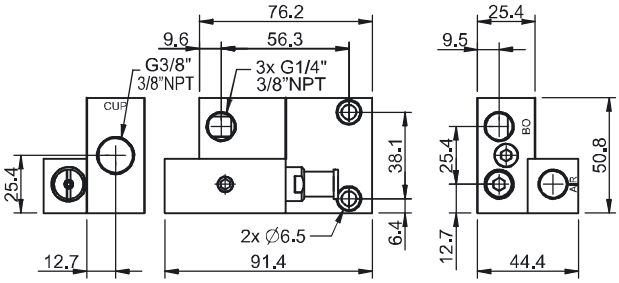
Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	10	20	30	40	50	60	70	80	-kPa
0.17	0.29	0.28	0.56	1.13	2.13	–	–	–	–	49
0.22	0.34	0.20	0.42	0.85	1.5	2.3	3.0	–	–	64
0.314	0.44	0.17	0.32	0.58	1.1	1.8	2.7	4.0	6.4	90
0.40	0.53	0.18	0.33	0.54	0.85	1.5	2.5	3.8	7.1	84

Ordering information

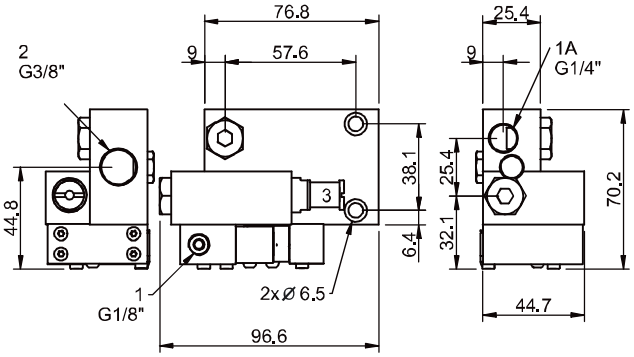
	Description	PMAT No.	Art. No.
A	Vacuum Check Valve VT1 G3/8"-G1/4"	X1000	0109233
A	Vacuum Check Valve VT1 3/8"NPT-1/4"NPT	1000	0121236
B	Vacuum Check Valve VT1 COAX® cartridge MINI Pi12-2, non-return valve G3/8"-G1/4"	X1041	0110456
B	Vacuum Check Valve VT1 COAX® cartridge MINI Pi12-2, 3/8"NPT-1/4"NPT	1041	0121237
C	Vacuum Check Valve VT1 Vacustat COAX® cartridge MINI Pi12-2, G3/8"-G1/4"	X2098	0120323



A



B



C