

## Blow-off Check valve G1/8"



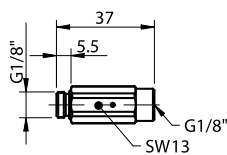
- ▶ Prevents vacuum from being pulled through the blow-off lines, which means faster response time and completely independent vacuum units.
- ▶ Reliable quick-release function even in larger systems with several units, due to the very low feed pressure required to break away for blow-off.
- ▶ Suitable in applications where cleaning of the suction cup filters or cooling of the object to be picked is important.

### Technical data

Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Feed pressure, minimum to break away for blow-off	MPa	0.1
Material		AL, CuZn, SS, NBR
Temperature range	°C	-10–80
Weight	g	12.4
Flow, rate @ 0.3-0.7 MPa	NI/s	1.5–2.8
Connection, compressed air		G1/8"
Connection, vacuum		G1/8"
Dimension, WxDxH	mm	14x14x31,5

### Ordering information

Description	Art. No.
Blow-off Check valve G1/8"	0115314



## AQR 02 (Atmospheric Quick-Release Valve)



- ▶ Equalises pressure in the suction cups to provide fast release of the product.
- ▶ Extra fast release by accumulating and utilising the feed-air pressure as a boost.
- ▶ ON/OFF activated simultaneously with the ejector.
- ▶ No additional controls required — use a single 3/2 control valve for the ejector and AQR 02.

### Technical data

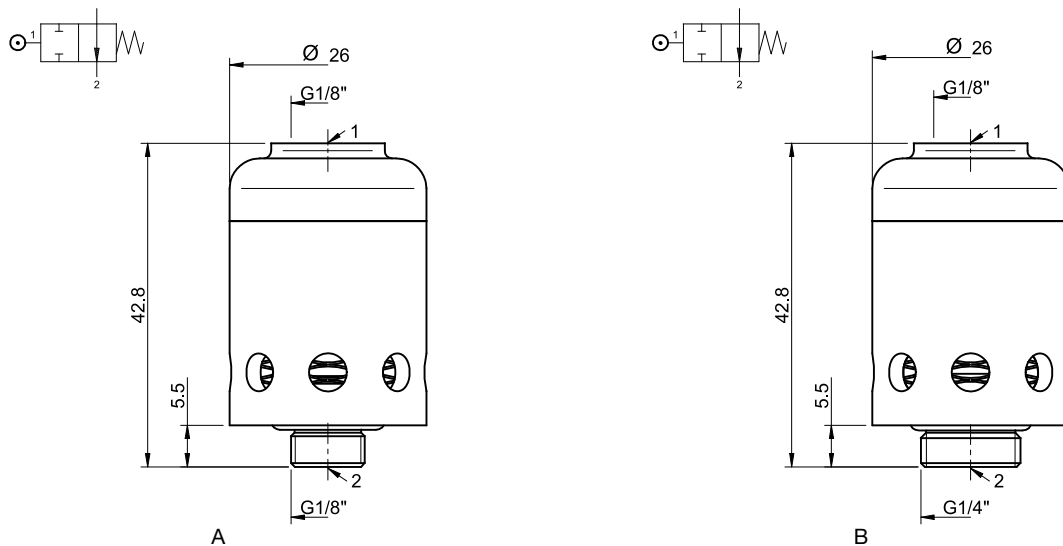
Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Material		Al, SS, NBR
Temperature range	°C	0–50
Weight	g	47
Connection, compressed air		G1/8"
Dimension, WxDxH	mm	26x26x37,3

### Technical data, specific

Description	Unit	Value	
		0119721	0119720
Connection, vacuum		G1/8"	G1/4"
Flow, atmospheric	NI/s	3.85	7.85

### Ordering information

	Description	Art. No.
A	Atmospheric quick-release valve – AQR 0207, G1/8"	0119721
B	Atmospheric quick-release valve – AQR 0210, G1/4"	0119720



## AQR (Atmospheric Quick-Release Valve)



- ▶ Equalises pressure in vacuum gripper systems to provide fast release of product.
- ▶ Consumes no additional compressed air.
- ▶ ON/OFF activated simultaneously with the ejector.
- ▶ No additional controls required — use a single 3/2 control valve for the ejector and AQR.
- ▶ Optional with fitting kit containing straight connector G1/8" and nylon tube.

### Technical data

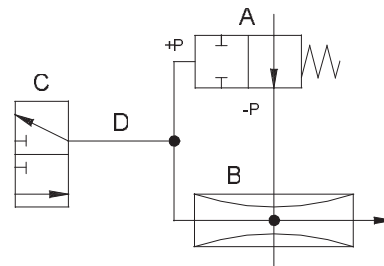
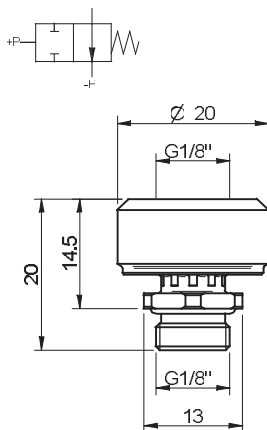
Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Temperature range	°C	10–50
Connection, compressed air		G1/8"
Connection, vacuum		G1/8"
Flow, atmospheric	NI/s	3.3
Dimension, WxDxH	mm	20x20x14,5

### Technical data, specific

Description	Unit	Value	
		0111236	0117156
Material		CuZn, PUR, NBR	CuZn, NBR, Ni, PA, PUR, SS
Weight	g	20	36

### Ordering information

Description	Art. No.
Atmospheric quick-release valve – AQR	0111236
Atmospheric quick-release valve – AQR, including fitting kit	0117156



A=AQR, B=Vacuum pump, C=Control valve, D=Rec. max. 1.5m

## QR (Quick-Release valve)



- ▶ For vacuum pump P3010.
- ▶ Quick release by accumulating and utilising the feed-air pressure as a boost.
- ▶ ON/OFF activated simultaneously with the P3010
- ▶ Three sizes for optimising release volume with system volume.

### Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		Al, SS,PPS, NBR, PA
Temperature range	°C	-10-50
Volume, Quick-Release	cm <sup>3</sup>	3

For dimensions, please go to data sheet for vacuum pump P3010.

### Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pump P3010.

### Technical data, accessories

Description	Unit	Value	
		0104272	0104273
Weight	g	72	118
Volume, Quick-Release tank	cm <sup>3</sup>	30	60
Dimension, WxDxH	mm	57,5x16x52	120x16x52

### Ordering information, accessories

Description	Art. No.
Quick-Release tank module P3010, 30 cm <sup>3</sup>	0104272
Quick-Release tank module P3010, 60 cm <sup>3</sup>	0104273

## Solenoid valve DS 23



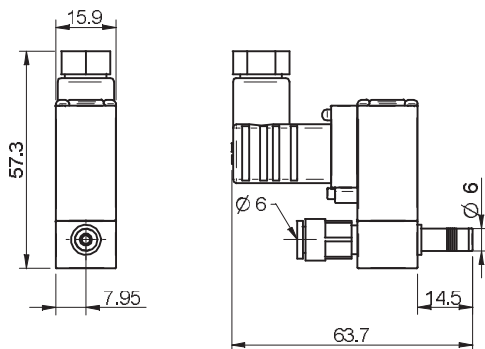
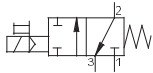
- ▶ Electric 3/2 valve with manual override.
- ▶ Quick and easy mounting with push-in connections.
- ▶ Body with 3 M5 ports.
- ▶ Suitable for compressed air, filtration 40µ.

### Technical data

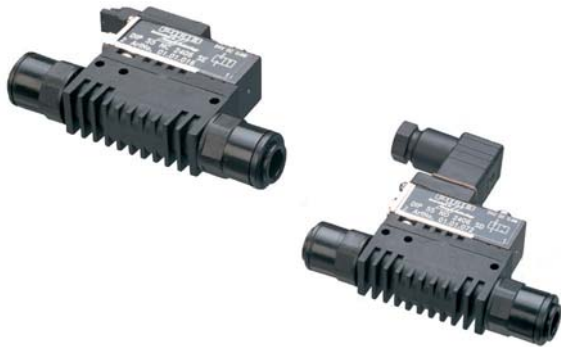
Description	Unit	Value
Feed pressure, range	MPa	0.2-0.7
Material		Ni, Al, SS, POM, CuZn, NBR
Temperature range	°C	-18-50
Weight	g	100
Connection, compressed air	mm	2 x Ø6
Voltage	VDC	24 (22-28)
Safety classification		IP65
Current consumption	mA	100
Display		LED indicator
Flow @ P <sub>1</sub> =6 bar and Δp=1 bar	l/s	1.3
Life span, mechanical	cycles	100,000,000
Ratings, load time	%	100
Electrical connection		DIN (c)
Dimension, WxDxH	mm	49,7x15,9x57,3

### Ordering information

Description	Art. No.
Solenoid valve DS 23 for control ON/OFF	0104274



## Electrically controlled 2/2 valves DIP 55



- ▶ On/off valve
- ▶ 1/8" NPSF ports
- ▶ 0.6 W solenoid
- ▶ Electrical connections: plug-in contacts and DIN (c)
- ▶ Suitable for PIAB vacuum pumps up to Classic size.
- ▶ Manual override

### Technical data

Description	Unit	Value
Feed pressure, range	MPa	0.4–0.7 MPa
Material		PPS, PA, TPU, AI, NBR, CuZn, PUR
Temperature range	°C	0–60
Weight	g	102
Connection compressed air		2 x NPSF 1/8"
Function		NC
Supply voltage	VDC	24
Display		LED
Flow, nominal	NI/s	8.6
Kv		7.8
Lifespan, mechanical	cycles	10,000,000
Power consumption	W	0.6
Load time rating	%	100
Bore-through diameter, nominal	mm	3.7

*Electrical connections are included.*

Compressed air, filtration 40µm, non-lubricated.

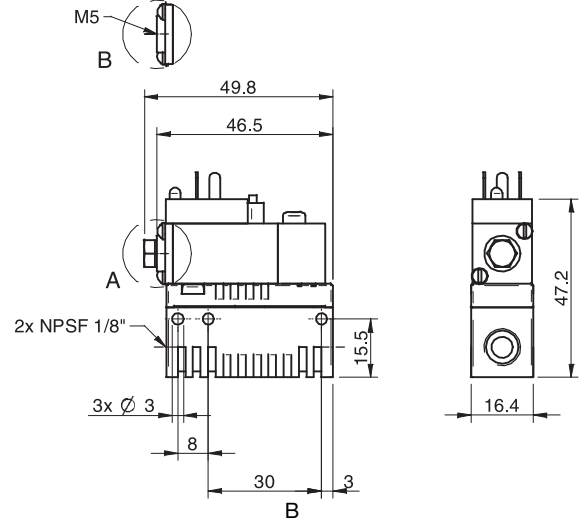
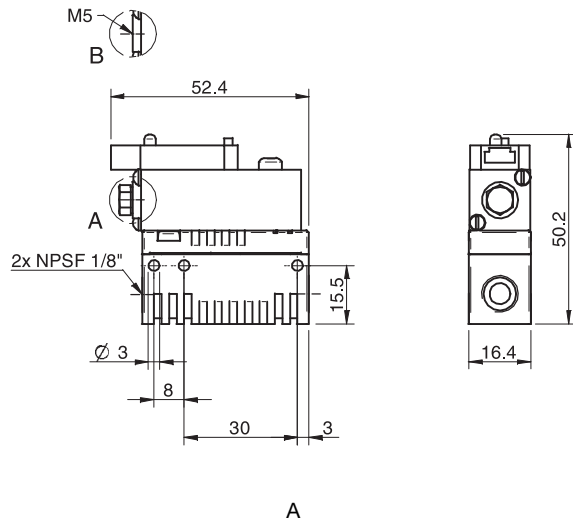
### Technical data, specific

Description	Value			
	0101016 DIP 55 NC 2406SE	0101071 DIP55 NC 2406 SD	0101017 DIP 55 NO 2406 SE	0101072 DIP 55 NO 2406 SD
Electrical connection	Plug-in connection *	DIN (c) *	Plug-in connection *	DIN (c) *
Safety specification	—	IP65	—	IP65

*\*) Electrical connections are included. \* Electrical connections are to be ordered separately.*

## Ordering information

	Description	Art. No.
A	Electrically controlled 2/2 valve DIP55 NC 2406 SE	0101016
A	Electrically controlled 2/2 valve DIP55 NO 2406 SE	0101017
B	Electrically controlled 2/2 valve DIP55 NC 2406 SD	0101071
B	Electrically controlled 2/2 valve DIP55 NO 2406 SD	0101072



## 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.	NI/s	—	0.68	0.68

### Vacuum flow

Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80		
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

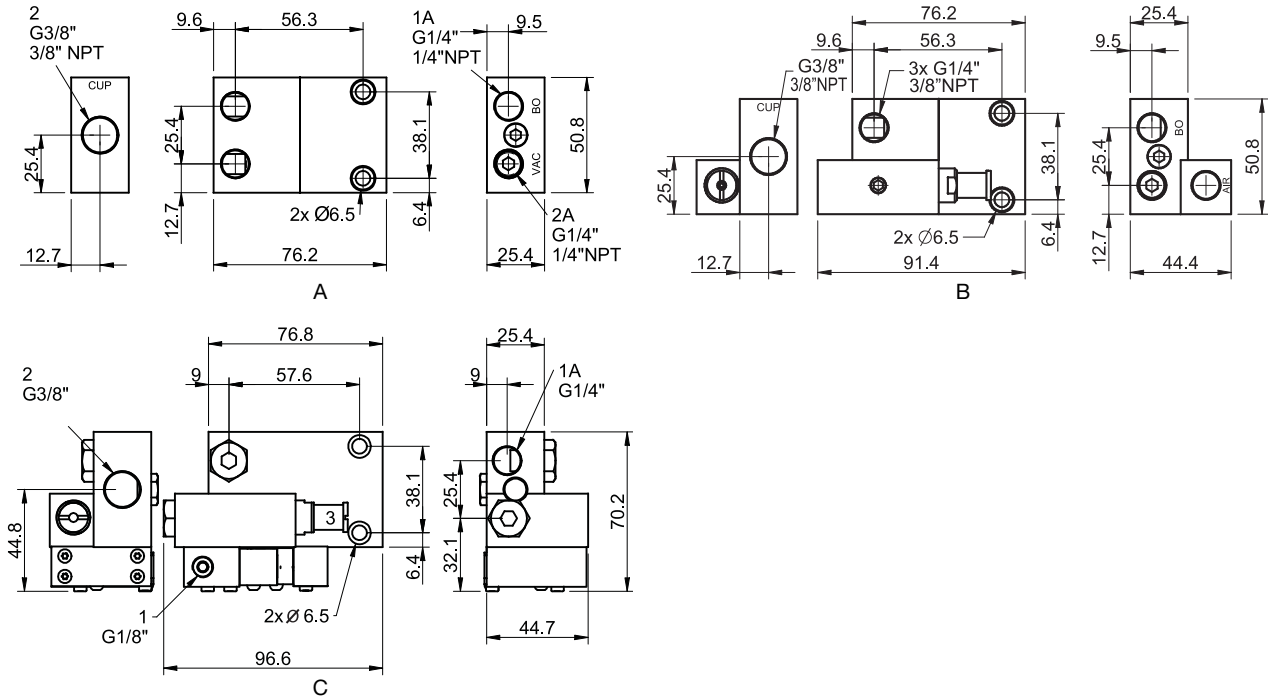
### Evacuation time

Feed pressure MPa	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								Max vacuum -kPa
		10	20	30	40	50	60	70	80	
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



## CU (Control Unit) P3010, P5010 & P6010



- ▶ For vacuum pumps P3010, P5010 and P6010.
- ▶ CU with electric valves for vacuum on/off and blow-off.
- ▶ Mechanical valve for blow-off flow adjustment.
- ▶ Special M12 4-pin cable assembly with LED for status of valve signal.

### Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		PA, NBR, AI, SS, PMMA
Temperature range	°C	0–50
Function, on/off		NC
Voltage	VDC	24 (22–28)
Safety classification		IP65 [NEMA 4]
Humidity	%RH	90
Current consumption	mA	60
Ripple, max.	V <sub>rms</sub>	1
Electric connection		M 12 4-pin

For dimensions, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

### Technical data, specific

Description	Unit	Value		
		P3010	P5010	P6010
Flow, blow-off @ P <sub>1</sub> =6 bar and Δp=0.5 bar	NI/s	0–7.5	0–7.5	0–7.5

### Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

### Ordering information, accessories

Description	Art. No.
Cable M12 4-pin female, LED indicator, PUR, L=5m	0118013