

Vacuum Automation 2.1

The future depends on good product choices





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Best to use a decentralized vacuum system

A decentralized system with the vacuum pump/cartridge placed directly at the point of suction eliminates the risk of loss in the vacuum piping and the need for expensive, oversized components. The response time will be reduced substantially without unnecessary volume to be evacuated. In addition, each cup is independent, so a pressure loss in one cup will not affect the others.

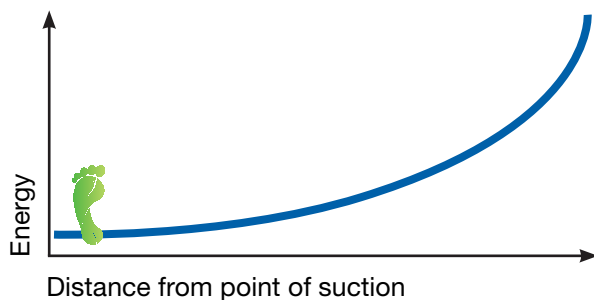


Typical decentralized vacuum system. Vacuum gripper VGS™3010 with suction cup FC75P.

Red tubing = Compressed air

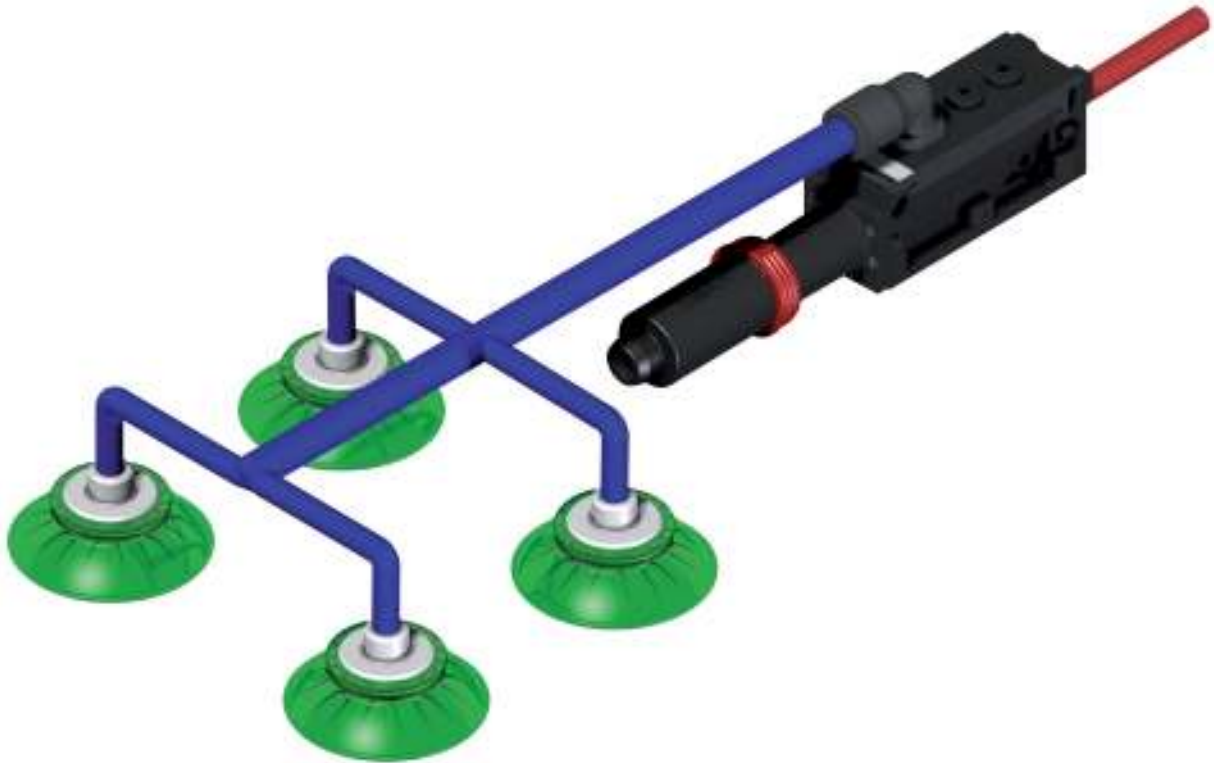
Decentralized system (VGS™) - Best option!

- ▶ Lowest energy
- ▶ Fastest cycle time
- ▶ Safest product handling
- ▶ Most flexible design for zoning
- ▶ Easiest troubleshooting
- ▶ Most consistent /even performance



If not, design a centralized vacuum system

A centralized vacuum system is designed to have one vacuum source for multiple suction points. With the vacuum source located further from the cup, system performance loss increases due to restrictions in tubing fittings and manifolds. More energy needs to be expended to overcome these losses and achieve required system performance.



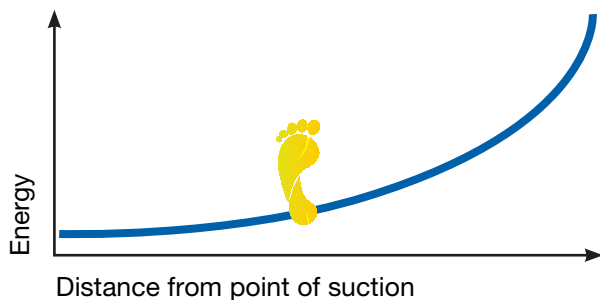
Typical centralized vacuum system. Vacuum pump P5010 with suction cup FC75P.

Red tubing = Compressed air

Blue tubing = Vacuum

Centralized system

- ▶ Easy installation
- ▶ Easy vacuum sensing and controls
- ▶ Light end of arm tooling
- ▶ Easy filtration options



VGS™2010



Dimension and connection			W mm	D mm	H mm	Feed pressure	Vacuum	Exhaust/blow
1	Housing	VGS2010		20	19 ^a	Ø4 mm		
2	COAX® cartridge	2:1 No COAX® cartridge	49					
		2:2 COAX® cartridge 2-stage	55					Ø7 mm
3	Mounting / orientation	3:1 4 x M3 top, flush mount					2x M5	
		3:2 M6 19 mm, profile kit		20	20		2x M5	
4	Suction cup	No suction cup					G1/8"	
		Suction cup	b	b	b			

For complete dimensions add the measurements from all selected modules or visit www.piab.com and download your configuration in the CAD download centre.

^a For suction cups OF10x30P 50° Shore A add an extra 3 mm to account for the bushing.

^b For suction cup dimensions, see suction cup data sheet.

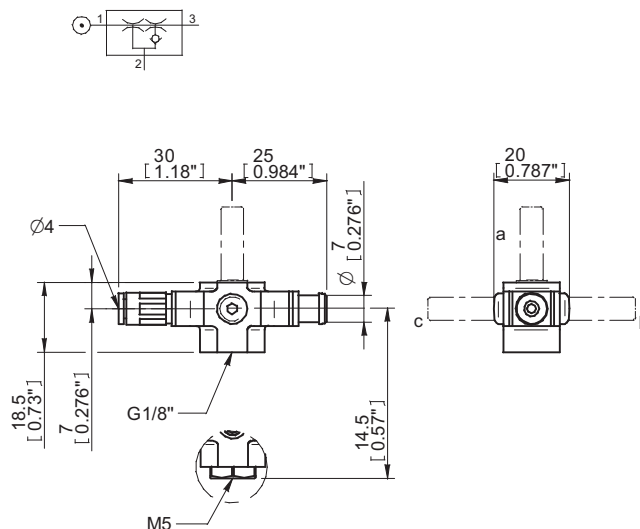
Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level	dBA	55–61
Temperature range	°C	10–50
Material		Al, SS, NBR, TPE, PA, PU

For more technical information about the COAX® cartridges, please go to the data sheet for the COAX® cartridge MICRO.

Ordering information

1. Select housing			VGS™2010 code	
Housing			VGS2010	
2. Select COAX® cartridge module	Initial flow NI/s	Evacuation time to reach 60 - kPa s/l	COAX® cartridge	VGS™2010 code
			No COAX® cartridge (slave unit)	AA
Bi	0.23	16.0	COAX® cartridge MICRO Bi03-2	AB
Si	0.28	6.90	COAX® cartridge MICRO Si02-2	AF
Xi	0.24	11.3	COAX® cartridge MICRO Xi2.5-2	AJ
Ti	0.32/0.31	5.00/4.20	COAX® cartridge MICRO Ti05-2	AN
3. Select mounting/orientation			VGS™2010 code	
4x M3 top, flush mount			00	
a	M6 19 mm top, profile kit		01	
b	M6 19 mm right, profile kit		02	
c	M6 19 mm left, profile kit		03	
4. Select suction cup with fitting			VGS™2010 code	
No suction cup			BA	
BX25P 30°/60° Shore A			DA	
BX25P 60° Shore A			DB	
FC20P 50° Shore A			DC	
FC25P 50° Shore A			DD	
OB20x60P 60° Shore A			DE	
OF10x30P 50° Shore A			DF	
OF15x45P 50° Shore A			DG	
Example			Ordering number	
VGS™2010 BX25P – Bi03-2, M6 19 mm top, profile kit, BX25P 30°/60° Shore A			VGS2010.AB.01.DA	



VGS™3010



Dimension and connection			W mm	D mm	H mm	Feed pressure	Vacuum	Exhaust/blow
1	Housing	VGS3010		23	30	Ø6 mm, 3x G1/8", M5		
2	COAX® cartridge	2:1 No COAX® cartridge	65					
		2:2 COAX® cartridge 2-stage	88					Ø11 mm
		2:3 COAX® cartridge 3-stage	111					Ø11 mm
3	Mounting / orientation	3:1 4 x M4 top, flush mount						2x G1/8"
		3:2 M8 16 mm		16	16			2x G1/8"
		3:3 M8 27 mm, profile kit		27	27			2x G1/8"
		3:4 M6 22 mm, profile kit		22	22			2x G1/8"
		3:5 Ball joint		40				2x G1/8"
		3:6 Lock-pin 19 mm		32				2x G1/8"
		3:7 Level compensator LC30	a	a	81			3x G1/8"
4	Suction cup	No suction cup					G3/8"	
		Suction cup	b	b	b			

For complete dimensions add the measurements from all selected modules or visit www.piab.com and download your configuration in the CAD download centre.

a For complete dimensions, configure your CAD model at www.piab.com

b For suction cup dimensions see suction cup data sheet.




Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level	dBA	60–74
Temperature range	°C	10–50
Material		PP, PA, NBR, AL, SS, PU

For more technical information about the COAX® cartridges, please go to the data sheet for the COAX® cartridge MINI.

Ordering information

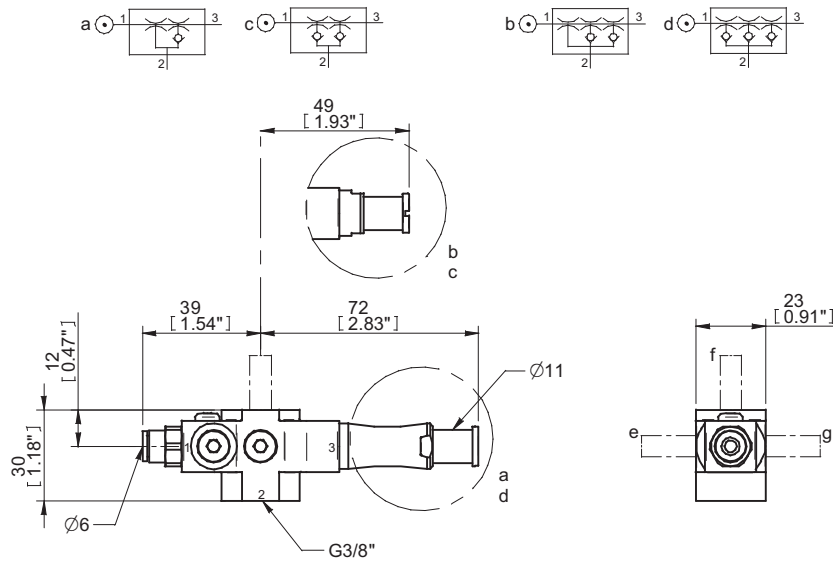
1. Select housing	VGS™3010 code
Housing	VGS3010

	2. Select COAX® cartridge module	Initial flow NI/s	Evacuation time to reach 60 -kPa s/l	COAX® cartridge	VGS™3010 code
				No COAX® cartridge (slave unit)	AA
a	Pi 	0.68	2.7	COAX® cartridge MINI Pi12-2	AB
c		0.68	2.7	COAX® cartridge MINI Pi12-2, non-return valve	AD
b		1.4	2.6	COAX® cartridge MINI Pi12-3	AC
d		1.4	2.6	COAX® cartridge MINI Pi12-3, non-return valve	AE
a	Si 	0.77	2.1	COAX® cartridge MINI Si08-2	AF
c		0.77	2.1	COAX® cartridge MINI Si08-2, non-return valve	AH
b		1.34	2.0	COAX® cartridge MINI Si08-3	AG
d		1.34	2.0	COAX® cartridge MINI Si08-3, non-return valve	AI
a	Xi 	0.75	2.3	COAX® cartridge MINI Xi10-2	AJ
c		0.75	2.3	COAX® cartridge MINI Xi10-2, non-return valve	AL
b		1.43	2.2	COAX® cartridge MINI Xi10-3	AK
d		1.43	2.2	COAX® cartridge MINI Xi10-3, non-return valve	AM

	3. Select mounting/orientation	VGS™3010 code
	4x M4 top, flush mount	00
f	M8 16 mm top	01
g	M8 16 mm right	02
e	M8 16 mm left	03
f	M8 27 mm top, profile kit	04
g	M8 27 mm right, profile kit	05
e	M8 27 mm left, profile kit	06
f	M6 22 mm top, profile kit	07
g	M6 22 mm right, profile kit	08
e	M6 22 mm left, profile kit	09
g	Ball joint VGS™3010 right	11
e	Ball joint VGS™3010 left	12
g	Lock-pin VGS™3010, right	13
e	Lock-pin VGS™3010, left	14
	Level compensator LC30	15

4. Select suction cup with fitting	VGST TM 3010 code
No suction cup	BA
B75P 30°/60° Shore A	BB
B75P 60° Shore A	BC
BF80P 30°/50° Shore A	BD
BF80P 60° Shore A	BE
BF110P 30°/60° Shore A	CO
BF110P 60° Shore A	CP
BL30-3P 30°/70° Shore A	CS
BL40-3P 30°/70° Shore A	CT
BL40-4 Silicone	CU
BL40-5 Silicone	CV
BX35P 30°/60° Shore A	BF
BX35P 60° Shore A	BG
BX52P 30°/60° Shore A	BH
BX52P 60° Shore A	BI
BX75P 30°/60° Shore A	BJ
BX75P 60° Shore A	BK
BX110P 30°/60° Shore A	CQ
BX110P 60° Shore A	CR
F75P 30°/60° Shore A	BL
F75P 60° Shore A	BM
F110P 30°/60° Shore A	BN
F110P 60° Shore A	BO
FC50P 40° Shore A	BP
FC50P 60° Shore A	BQ
FC75P 40° Shore A	BR
FC75P 60° Shore A	BS
FC100P 40° Shore A	BT
FC100P 60° Shore A	BU
OB35X90P PU30°/60° Shore A	CA
OB35X90P PU60° Shore A	CB
OB50X140P PU30°/60° Shore A	CC
OB50X140P PU60° Shore A	CD
OB65X170P PU30°/60° Shore A	CE
OB65X170P PU60° Shore A	CF
OBL40x90P 70° Shore A	BV
OF25X70P PU40° Shore A	CG
OF25X70P PU60° Shore A	CH
OF40X110P PU40° Shore A	CI
OF40X110P PU60° Shore A	CJ
OF55X150P PU40° Shore A	CK
OF55X150P PU60° Shore A	CL
OF70X175P PU40° Shore A	CM
OF70X175P PU60° Shore A	CN

Example	Ordering number
VGS™3010 B75P – Pi12-3, M8 27 mm top including profile kit, B75P 30/60° Shore A	VGS3010.AC.04.BB



VGS™3040



- ▶ COAX® cartridge integrated.
- ▶ Available in lock pin 16, 19 or ball joint mountings, industry standard.
- ▶ Available with level compensator to compensate for differences in level of object.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level, range	dB(A)	65-74
Material		Al, NBR, PA, Steel
Temperature range	°C	-10-80
Weight, range	g	204-264

Vacuum flow

COAX® cartridge	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	90	
Si08-2	0.60	0.44	0.77	0.67	0.51	0.33	0.23	0.16	0.12	0.08	—	—	75
Si08-3	0.60	0.44	1.34	0.73	0.55	0.35	0.23	0.17	0.13	0.08	—	—	75
Xi10-2	0.50	0.46	0.75	0.63	0.49	0.33	0.19	0.15	0.11	0.07	0.05	0.011	94
Xi10-3	0.50	0.46	1.43	0.70	0.50	0.33	0.19	0.15	0.11	0.07	0.05	0.011	94
Pi12-2	0.314	0.44	0.68	0.60	0.44	0.27	0.19	0.14	0.10	0.06	0.03	—	90
Pi12-3	0.314	0.44	1.40	0.60	0.44	0.27	0.19	0.14	0.10	0.06	0.03	—	90

Evacuation time

COAX® cartridge	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	90	
Si08-2	0.60	0.44	0.14	0.31	0.55	0.90	1.40	2.10	3.10	—	—	75
Si08-3	0.60	0.44	0.10	0.25	0.48	0.80	1.30	2.00	2.90	—	—	75
Xi10-2	0.50	0.46	0.14	0.30	0.60	1.00	1.60	2.30	3.50	5.30	8.90	94
Xi10-3	0.50	0.46	0.09	0.26	0.50	0.80	1.50	2.20	3.40	5.20	8.80	94
Pi12-2	0.314	0.44	0.17	0.32	0.58	1.10	1.80	2.70	4.00	6.40	—	90
Pi12-3	0.314	0.44	0.08	0.23	0.49	1.00	1.70	2.60	3.90	6.30	—	90

For performance graphs, see section Vacuum cartridges/integration.

Ordering information

1. Housing	VGS Code
Housing Left hand	00
Housing Right hand	01

2. COAX® cartridge	VGS Code
COAX® cartridge MINI Pi12-2	AB
COAX® cartridge MINI Pi12-3	AC
COAX® cartridge MINI Pi12-2, non-return valve	AD
COAX® cartridge MINI Pi12-3, non-return valve	AE
COAX® cartridge MINI Si08-2	AF
COAX® cartridge MINI Si08-3	AG
COAX® cartridge MINI Si08-3, non-return valve	AI
COAX® cartridge MINI Si08-2, non-return valve	AH
COAX® cartridge MINI Xi10-2	AJ

2. COAX® cartridge	VGS Code
COAX® cartridge MINI Xi10-3	AK
COAX® cartridge MINI Xi10-2, non-return valve	AL
COAX® cartridge MINI Xi10-3, non-return valve	AM

3. Mounting style	VGS Code
No mounting style	00
P Mounting Lock pin 16 mm	01
C Mounting Lock pin 19 mm	02
I Mounting Ball joint	03
P Mounting Lock pin 16 mm level compensator	04
C Mounting Lock pin 19 mm level compensator	05
I Mounting Ball joint level compensator	06
Mounting Extrusion mount level compensator	07
Mounting Profile mount	08

4. Energy saving	VGS Code
No energy saving	AA
Energy saving Vacustat 65 -kPa	AB
Energy saving Vacustat, Adjustable (factory set at 45 -kPa)	AC

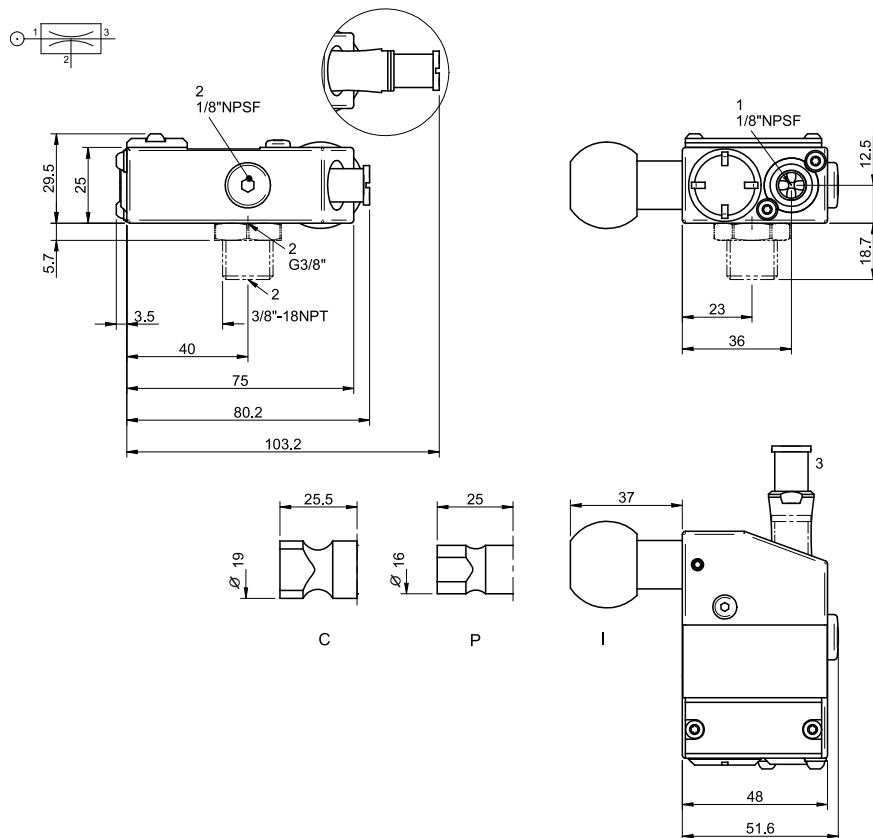
For detailed information on Vacustat, see separate datasheet.

5. Release function	VGS Code
Release Blow-off	01
Release AQR 02 internal	02
Release AQR 02 external	03

For detailed information on Blow-off and AQR 02, see separate datasheets.

6. Vacuum connection	VGS Code
G3/8" female	AA
G3/8" male - 3/8" NPT male adapter	AB

Example	Ordering number
VGS™3040 with left hand housing, COAX® cartridge MINI Pi 12-2, mounting lock pin 16mm, no energy saving, release blow-off, G3/8" female vacuum connection	VGS3040 00 AB 01 AA 01 AA



All drawings are of left-handed tooling.

VGS™3040 with profile mount



- ▶ COAX® cartridge integrated.
- ▶ Easy attachment to standard extrusion and profile systems.
- ▶ Adjustable position.
- ▶ Quick setup and change-over.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level, range	dB(A)	65-74
Material		Al, NBR, PA
Temperature range	°C	-10-80
Weight, range	g	225-775

Performance tables

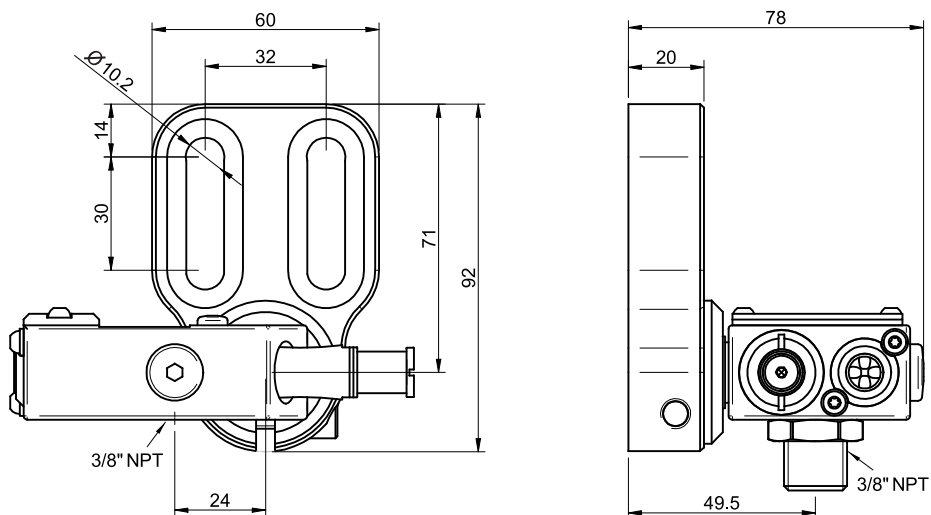
Depending upon choice of COAX® cartridge, performance data of the VGS™3040 can be found in the tables for vacuum flow and evacuation time on the VGS™3040 or Vacuum cartridges/integration datasheets.

Ordering information

1. Housing	VGS Code
Housing Left hand	00
Housing Right hand	01
2. COAX® cartridge	VGS Code
COAX® cartridge MINI Pi12-2	AB
COAX® cartridge MINI Pi12-3	AC
COAX® cartridge MINI Pi12-2, non-return valve	AD
COAX® cartridge MINI Pi12-3, non-return valve	AE
COAX® cartridge MINI Si08-2	AF
COAX® cartridge MINI Si08-3	AG
COAX® cartridge MINI Si08-3, non-return valve	AI
COAX® cartridge MINI Si08-2, non-return valve	AH
COAX® cartridge MINI Xi10-2	AJ
COAX® cartridge MINI Xi10-3	AK
COAX® cartridge MINI Xi10-2, non-return valve	AL
COAX® cartridge MINI Xi10-3, non-return valve	AM
3. Mounting style	VGS Code
Mounting Profile mount	08
4. Energy saving	VGS Code
No energy saving	AA
Energy saving Vacustat 65 -kPa	AB
Energy saving Vacustat, Adjustable (factory set at 45 -kPa)	AC
<i>For detailed information on Vacustat, see separate datasheet.</i>	
5. Release function	VGS Code
Release Blow-off	01
Release AQR 02 internal	02
Release AQR 02 external	03
<i>For detailed information on Blow-off and AQR 02, see separate datasheets.</i>	

6. Vacuum connection	VGS Code
G3/8" female	AA
G3/8" male - 3/8" NPT male adapter	AB

Example	Ordering number
VGS™3040 with left hand housing, COAX® cartridge MINI Pi 12-2, mounting Profile mount, no energy saving, release blow-off, G3/8" female vacuum connection	VGS3040 00 AB 08 AA 01 AA



All drawings are of left-handed tooling.

VGS™3040 with Vacustat



- ▶ COAX® cartridge integrated.
- ▶ Integrated energy-saving device, Vacustat results in very low air consumption in sealed applications.
- ▶ Built-in blow off check valve for fast release of object.
- ▶ Available in lock pin 16, 19 or ball joint mountings, industry standard.
- ▶ Available with level compensator to compensate for differences in level of object.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, range	MPa	0.17-0.7
Noise level	dBA	65-74
Material		PA, AI, SS, NBR, PE, TPU, POM, CuZn
Temperature range	°C	0-60
Weight, range	g	279-340
Singal range	-kPa	adjustable/ -65
Function		2/2 NO
Hysteresis	kPa	8

Performance tables

Depending upon choice of COAX® cartridge, performance data of the VGS™3040 can be found in the tables for vacuum flow and evacuation time on the VGS™3040 or Vacuum cartridges/integration datasheets.

Ordering information

1. Housing		VGS Code
Housing Left hand		00
Housing Right hand		01

2. COAX® cartridge		VGS Code
COAX® cartridge MINI Pi12-2, non-return valve		AD
COAX® cartridge MINI Pi12-3, non-return valve		AE
COAX® cartridge MINI Si08-3, non-return valve		AI
COAX® cartridge MINI Si08-2, non-return valve		AH
COAX® cartridge MINI Xi10-2, non-return valve		AL
COAX® cartridge MINI Xi10-3, non-return valve		AM

3. Mounting style		VGS Code
No mounting style		00
P	Mounting Lock pin 16 mm	01
C	Mounting Lock pin 19 mm	02
I	Mounting Ball joint	03
P	Mounting Lock pin 16 mm level compensator	04
C	Mounting Lock pin 19 mm level compensator	05
I	Mounting Ball joint level compensator	06
	Mounting Extrusion mount level compensator	07
	Mounting Profile mount	08

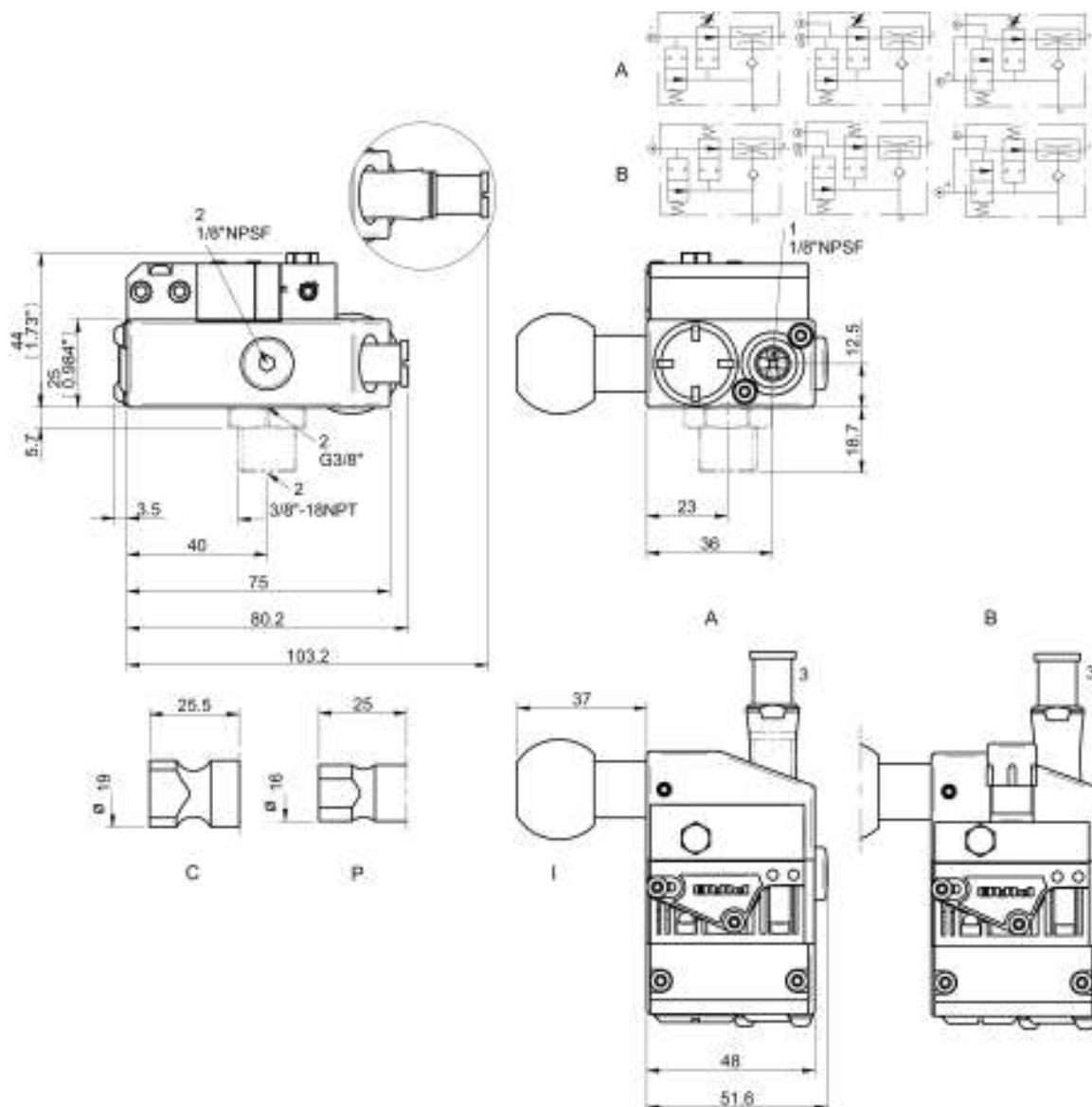
4. Energy saving		VGS Code
A	Energy saving Vacustat 65 -kPa	AB
B	Energy saving Vacustat, Adjustable (factory set at 45 -kPa)	AC

5. Release function	VGS Code
Release Blow-off	01
Release AQR 02 internal	02
Release AQR 02 external	03

For detailed information on Blow-off and AQR 02, see separate datasheets.

6. Vacuum connection	VGS Code
G3/8" female	AA
G3/8" male - 3/8" NPT male adapter	AB

Example	Ordering number
VGS™3040 with left hand housing, COAX® cartridge MINI Pi 12-2, non-return valve, mounting lock pin 16mm, energy saving Vacuostat 65 -kPa, release blow-off, G3/8" female vacuum connection	VGS3040 01 AD 01 AB 01 AA



All drawings are of left-handed tooling.

VGS™3040 with Atmospheric quick-release valve - AQR 02



- ▶ COAX® cartridge integrated.
- ▶ Built-in quick release for fast release of object, internal or separate feed.
- ▶ Available in lock pin 16, 19 or ball joint mountings, industry standard.
- ▶ Available with level compensator to compensate for differences in level of object.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, range	MPa	0.3-0.7
Noise level, range	dBA	65-74
Material		Al, NBR, PA, SS
Temperature range	°C	0-50
Weight, range	g	221-282
Flow, atmospheric, average	NI/s	7.85

Performance tables

Depending upon choice of COAX® cartridge, performance data of the VGS™3040 can be found in the tables for vacuum flow and evacuation time on the VGS™3040 or Vacuum cartridges/integration datasheets.

Ordering information

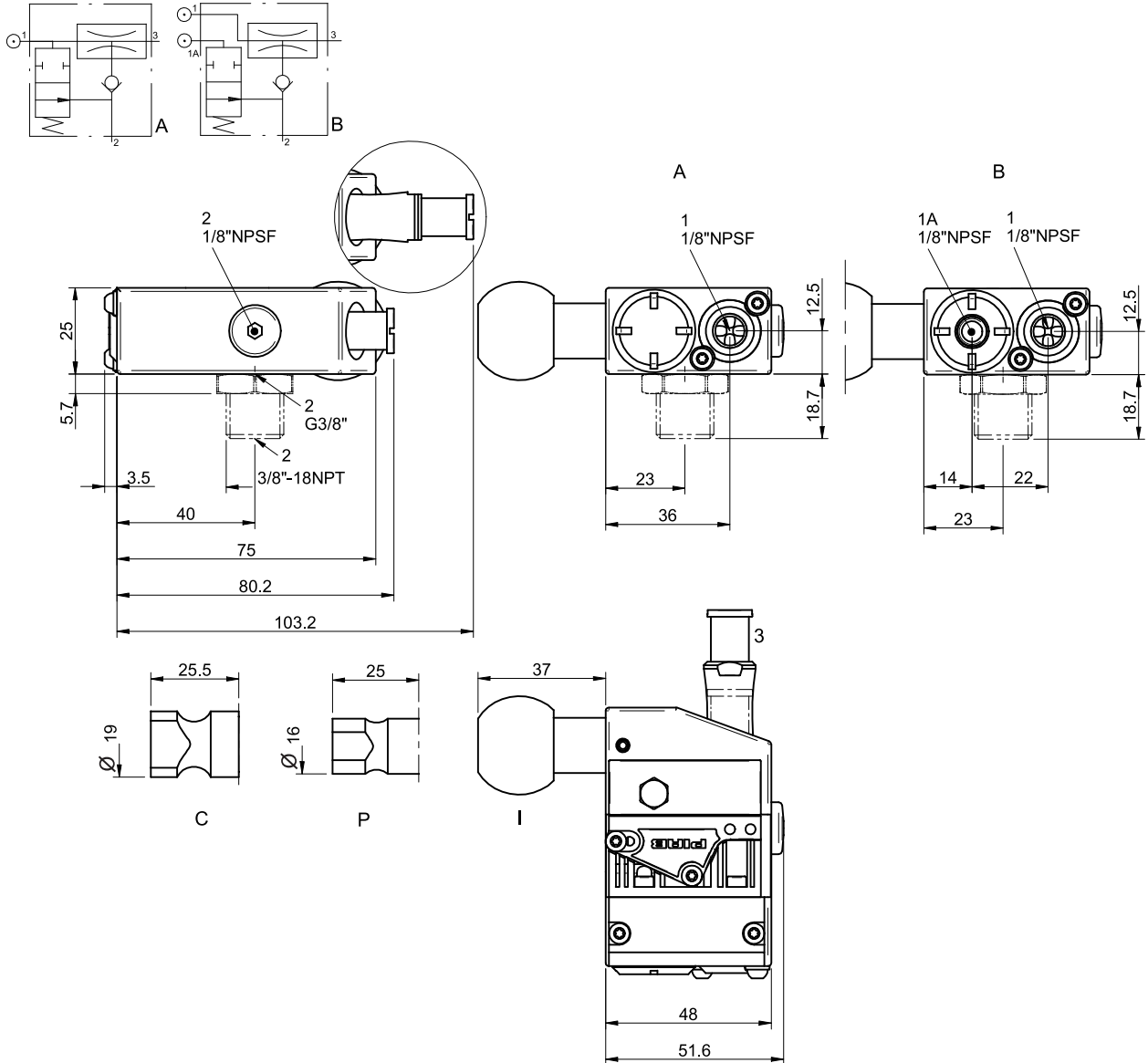
1. Housing		VGS Code
Housing Left hand		00
Housing Right hand		01
2. COAX® cartridge		VGS Code
COAX® cartridge MINI Pi12-2		AB
COAX® cartridge MINI Pi12-3		AC
COAX® cartridge MINI Pi12-2, non-return valve		AD
COAX® cartridge MINI Pi12-3, non-return valve		AE
COAX® cartridge MINI Si08-2		AF
COAX® cartridge MINI Si08-3		AG
COAX® cartridge MINI Si08-3, non-return valve		AI
COAX® cartridge MINI Si08-2, non-return valve		AH
COAX® cartridge MINI Xi10-2		AJ
COAX® cartridge MINI Xi10-3		AK
COAX® cartridge MINI Xi10-2, non-return valve		AL
COAX® cartridge MINI Xi10-3, non-return valve		AM
3. Mounting style		VGS Code
No mounting style		00
P	Mounting Lock pin 16 mm	01
C	Mounting Lock pin 19 mm	02
I	Mounting Ball joint	03
P	Mounting Lock pin 16 mm level compensator	04
C	Mounting Lock pin 19 mm level compensator	05
I	Mounting Ball joint level compensator	06
	Mounting Extrusion mount level compensator	07
	Mounting Profile mount	08
4. Energy saving		VGS Code
No energy saving		AA
Energy saving Vacustat 65 -kPa		AB
Energy saving Vacustat, Adjustable (factory set at 45 -kPa)		AC

For detailed information on Vacustat, see separate datasheet.

5. Release function		VGS Code
A	Release AQR 02 internal	02
B	Release AQR 02 external	03

6. Vacuum connection		VGS Code
G3/8" female		AA
G3/8" male - 3/8" NPT male adapter		AB

Example	Ordering number
VGST TM 3040 with left hand housing, COAX [®] cartridge MINI Pi 12-2, mounting lock pin 16mm, no energy saving, release AQR 02 internal, G3/8" female vacuum connection	VG3040 01 AB 01 AA 02 AA



All drawings are of left-handed tooling.

VGS™3040 with blow-off



- ▶ COAX® cartridge integrated.
- ▶ Built-in blow off check valve for fast release of object.
- ▶ Available in lock pin 16, 19 or ball joint mountings, industry standard.
- ▶ Available with level compensator to compensate for differences in level of object.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, range	MPa	0.3-0.7
Feed pressure, min.	MPa	0.1
Noise level, range	dBA	65-74
Material		Al, NBR, PA, SS, CuZn
Temperature range	°C	-10-80
Weight, range	g	223-284
Flow, rate of 0-0.7 MPa	l/s	1.5-2.8

Performance tables

Depending upon choice of COAX® cartridge, performance data of the VGS™3040 can be found in the tables for vacuum flow and evacuation time on the VGS™3040 or Vacuum cartridges/integration datasheets.

Ordering information

1. Housing	VGS Code
Housing Left hand	00
Housing Right hand	01

2. COAX® cartridge	VGS Code
COAX® cartridge MINI Pi12-2	AB
COAX® cartridge MINI Pi12-3	AC
COAX® cartridge MINI Pi12-2, non-return valve	AD
COAX® cartridge MINI Pi12-3, non-return valve	AE
COAX® cartridge MINI Si08-2	AF
COAX® cartridge MINI Si08-3	AG
COAX® cartridge MINI Si08-3, non-return valve	AI
COAX® cartridge MINI Si08-2, non-return valve	AH
COAX® cartridge MINI Xi10-2	AJ
COAX® cartridge MINI Xi10-3	AK
COAX® cartridge MINI Xi10-2, non-return valve	AL
COAX® cartridge MINI Xi10-3, non-return valve	AM

3. Mounting style	VGS Code
No mounting style	00
P Mounting Lock pin 16 mm	01
C Mounting Lock pin 19 mm	02
I Mounting Ball joint	03
P Mounting Lock pin 16 mm level compensator	04
C Mounting Lock pin 19 mm level compensator	05
I Mounting Ball joint level compensator	06
Mounting Extrusion mount level compensator	07
Mounting Profile mount	08

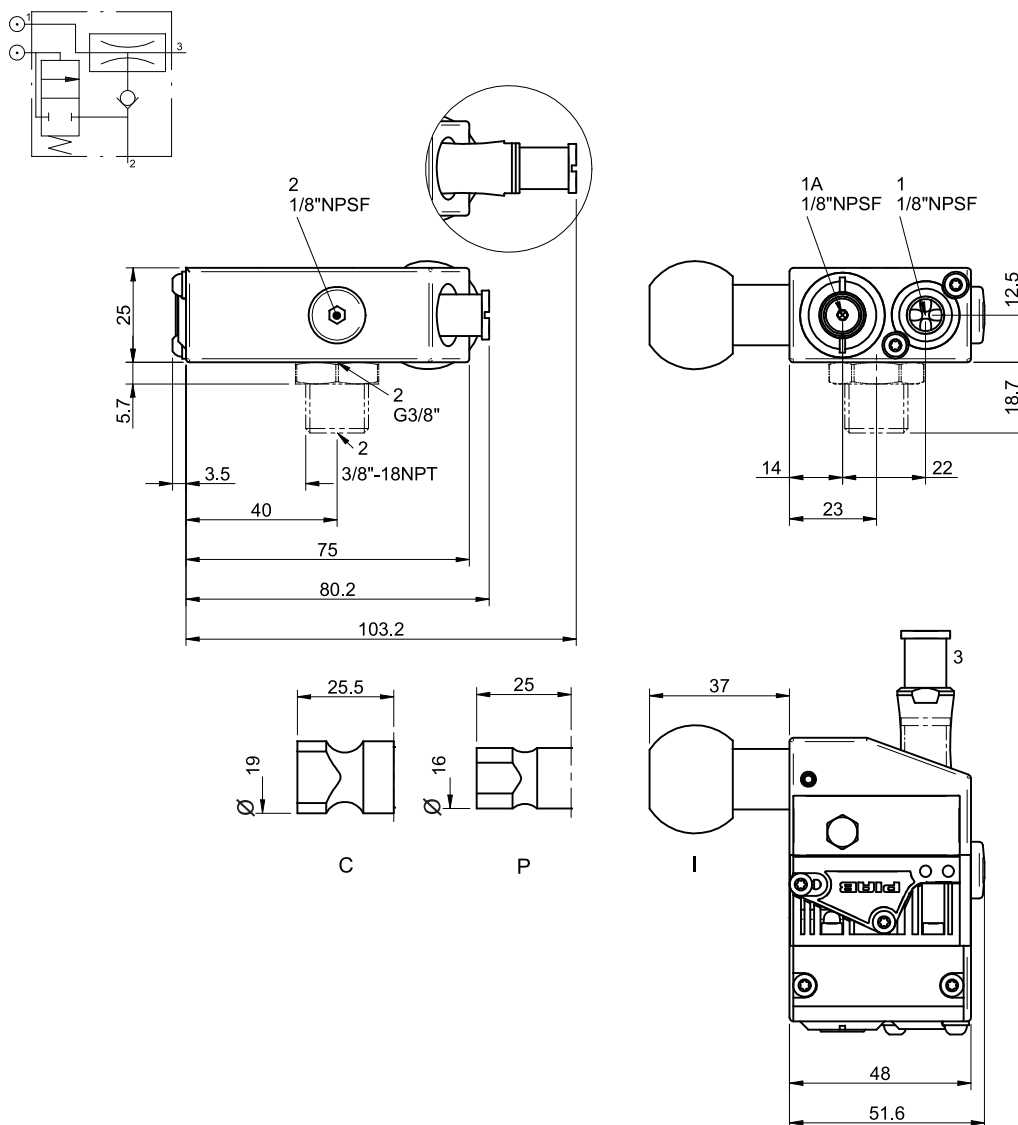
4. Energy saving	VGS Code
No energy saving	AA
Energy saving Vacustat 65 -kPa	AB
Energy saving Vacustat, Adjustable (factory set at 45 -kPa)	AC

For detailed information on Vacustat, see separate datasheet.

5. Release function	VGS Code
Release Blow-off	01

6. Vacuum connection	VGS Code
G3/8" female	AA
G3/8" male - 3/8" NPT male adapter	AB

Example	Ordering number
VGST TM 3040 with left hand housing, COAX [®] cartridge MINI Pi 12-2, mounting lock pin 16mm, no energy saving, release Blow-off, G3/8" female vacuum connection	VGS3040 01 AB 01 AA 01 AA



All drawings are of left-handed tooling.

VGS™5010



Dimension and connection			W mm	D mm	H mm	Feed pressure mm	Vacuum	Exhaust/blow mm
1	Housing				33	45 ^a	Ø8 mm, 3x G1/4", G1/8"	
2	COAX® cartridg ^e	2:1	No COAX® cartridge	110				
		2:2	COAX® cartridge 2-stage	153				Ø19 mm
		2:3	COAX® cartridge 3-stage	199				Ø19 mm
3	Mounting / orientation	3:1	4 x M6 top, flush mount					2x G1/4"
		3:2	4 x M6 top, angle bracket		b	b		2x G1/4"
		3:3	M12 20 mm		20	20		2x G1/4"
		3:4	M12 20 mm, angle bracket		b	b		2x G1/4"
4	Suction cup		No suction cup					G1/2"
			Suction cup	c	c	c		

For complete dimensions add the measurements from all selected modules or visit www.piab.com and download your configuration at the CAD download centre.

a For suction cups with G3/8" thread connection add an extra 5 mm to account for the bushing.

b For complete dimensions, configure your CAD model at www.piab.com

c For suction cup dimensions see suction cup data sheet.




Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level	dBA	73–83
Temperature range	°C	10–50
Material		Al, SS, NBR, PA, PP, PU

For more technical information about the COAX® cartridges, please go to the data sheet for the COAX® cartridge MIDI.

Ordering information

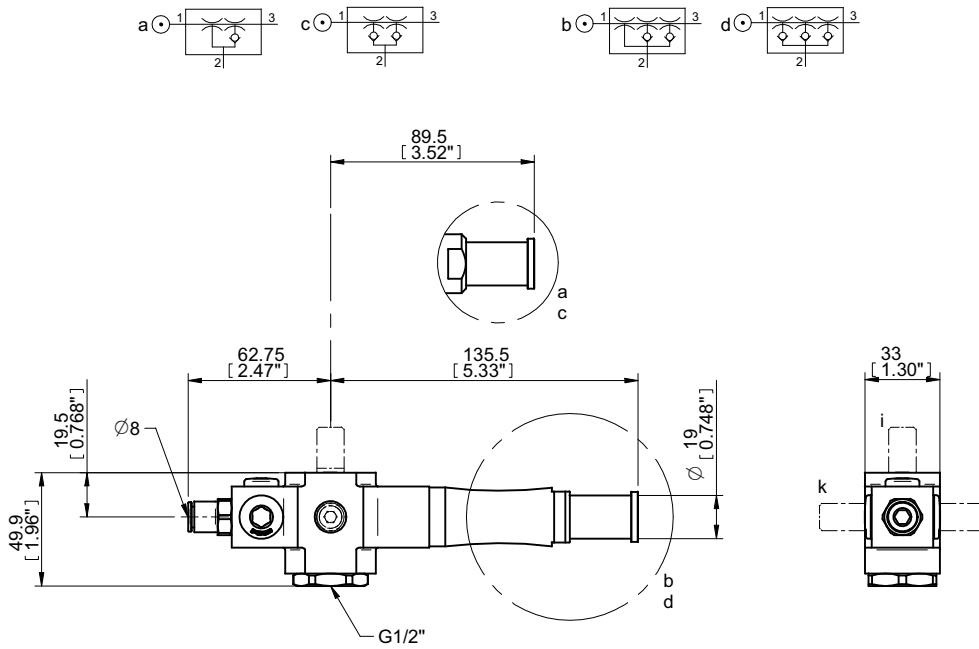
1. Select housing	VGS™5010 code
Housing	VGS5010

	2. Select COAX® cartridge module	Initial flow NI/s	Evacuation time to reach 60 -kPa s/l	Description	VGS™5010 code
				No COAX® cartridge (slave unit)	AA
a		2.8	0.7	COAX® cartridge MIDI Pi48-2	AB
c		2.8	0.7	COAX® cartridge MIDI Pi48-2, non-return valve	AD
b		5.6	0.7	COAX® cartridge MIDI Pi48-3	AC
d		5.6	0.7	COAX® cartridge MIDI Pi48-3, non-return valve	AE
a		3.3	0.53	COAX® cartridge MIDI Si32-2	AF
c		3.3	0.53	COAX® cartridge MIDI Si32-2, non-return valve	AH
b		6.0	0.53	COAX® cartridge MIDI Si32-3	AG
d		6.0	0.53	COAX® cartridge MIDI Si32-3, non-return valve	AI
a		2.8	0.63	COAX® cartridge MIDI Xi40-2	AJ
c		2.8	0.63	COAX® cartridge MIDI Xi40-2, non-return valve	AL
b		5.9	0.57	COAX® cartridge MIDI Xi40-3	AK
d		5.9	0.57	COAX® cartridge MIDI Xi40-3, non-return valve	AM

	3. Select mounting/orientation	VGS™5010 code
	4x M6 top, flush mount	00
	4x M6 top, angle bracket	01
i	M12 20 mm top	02
j	M12 20 mm right	03
k	M12 20 mm left	04
i	M12 20 mm top, angle bracket	05
j	M12 20 mm right, angle bracket	06
k	M12 20 mm left, angle bracket	07

	4. Select suction cup with fitting	VGS™5010 code
	No suction cup	BA
	BF110P 30°/60° Shore A	CO
	BF110P 60° Shore A	CP
	BL50-3P 30°/70° Shore A	CX
	BX75P 30°/60° Shore A	CY
	BX75P 60° Shore A	CZ
	BX110P 30°/60° Shore A	CQ
	BX110P 60° Shore A	CR
	F110P 30°/60° Shore A	CS
	F110P 60° Shore A	CT
	OB65x170P 30°/60° Shore A	CU
	OB65x170P 60° Shore A	CV

Example	Ordering number
VGS™5010 BF110P – Pi48-2, M12 20 mm top, BF110P 30/60° Shore A	VGS5010.AB.02.CO



VGS™2010 mounting-kits



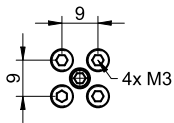
- ▶ Easy attachment to standard extrusion and profile systems
- ▶ Flexible positioning
- ▶ Quick setup and change-over
- ▶ Durable and non-rotating installation

Technical data

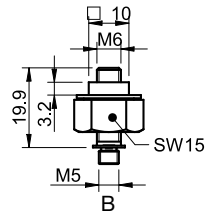
Description	Unit	Value	
		0114097	0114098
Material		SS, PA, NBR	Al, SS, Steel, PA, NBR
Weight	g	4.1	13.1

Ordering information

Description	Art. No.
A 4x M3 top, flush mount	0114097
B M6 19 mm top, profile kit	0114098



A



B

VGS™3010 mounting-kits



- ▶ Fits standard robot end-of-arm tooling interfaces.
- ▶ Easy attachment to standard extrusion and profile systems.
- ▶ Flexible positioning.
- ▶ Quick setup and change-over.
- ▶ Durable and non-rotating installation.

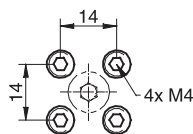
Technical data, specific

Description	Unit	Value				
		0106915	0106927	0106949	0108488	0108731
Material		SS, NBR	SS, PA, NBR	Al, SS, Steel, NBR	Al, SS, Steel, NBR	AL, SS, NBR
Weight	g	24	24	36	22	46

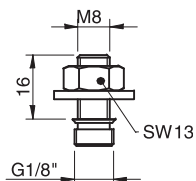
Ordering information

	Description	Art. No.
A	4x M4 top, flush mount	0106915
B	M8 16 mm	0106927
C	M8 27 mm, profile kit	0106949
D	M6 22 mm, profile kit	0108488
E	Ball joint VGS™3010	0108731

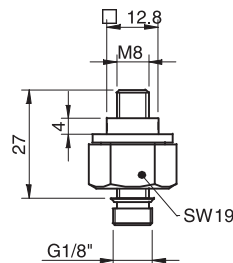
B-D 4x plug G1/8" included.



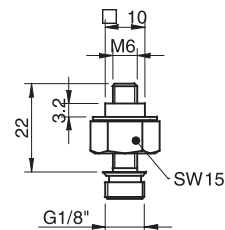
A



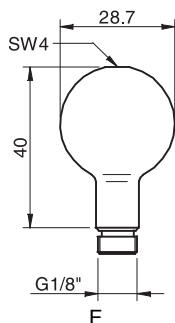
B



C



D



E

VGS™5010 mounting-kits



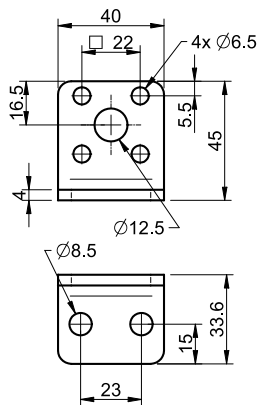
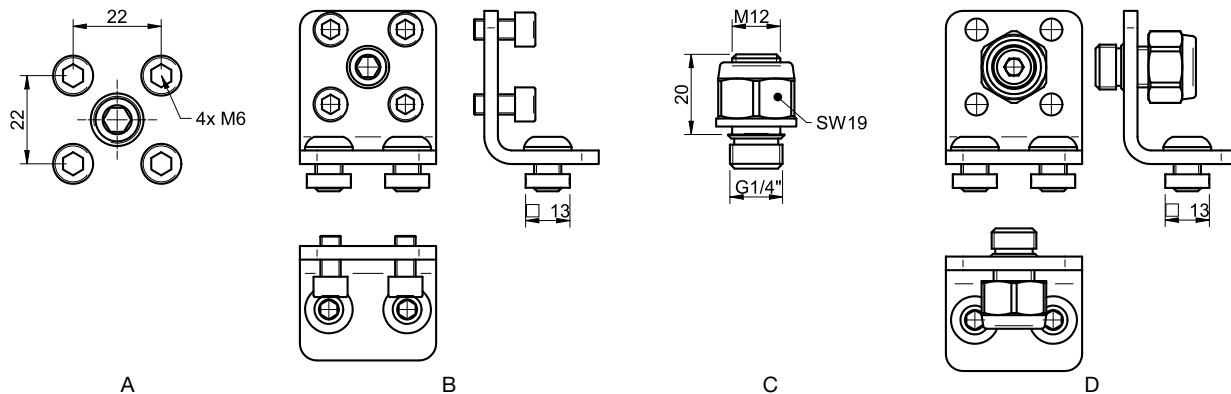
- ▶ Easy attachment to standard extrusion and profile systems
- ▶ Flexible positioning
- ▶ Quick setup and change-over
- ▶ Durable and non-rotating installation

Technical data

Description	Unit	Value			
		0114162	0114163	0114164	0114152
Material		Al, SS, PA, NBR	Al, SS, Steel, PA, NBR	SS, Steel, PA, NBR	SS, Steel, PA, NBR
Weight	g	34.8	133.1	58.7	154.1

Ordering information

Description	Art. No.
A 4x M6 top, flush mount	0114162
B 4x M6 top, angle bracket	0114163
C M12 20 mm top	0114164
D M12 20 mm top, angle bracket	0114152



Angle bracket included in B & D