

piCLASSIC Si32-3



- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Si cartridge offers extra vacuum flow.
- ▶ Suitable for handling porous materials or if leakage is present.
- ▶ Large capacity range, available with 1 to 6 COAX® Si32 three-stage cartridges.
- ▶ Can be easily be upgraded with more capacity if needed.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.60
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	75
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm ³	353
Noise level at 40 -kPa & optimal feed pressure	dB(A)	66-77
Temperature range	°C	-10-80
Materials		PA, Al, SS, NBR (FKM), CuZn

Technical data, specific

Weight	Value (g)
1-2 cartridges	500-550
3-4 cartridges	720-790
5-6 cartridges	795-875
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.6 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)							
		0	10	20	30	40	50	60	70
Si32-3 x1	1.75	6.00	3.50	2.60	1.70	0.90	0.60	0.50	0.35
Si32-3 x2	3.50	12.0	7.00	5.20	3.40	1.80	1.20	1.00	0.70
Si32-3 x3	5.25	18.0	10.5	7.80	5.10	2.70	1.80	1.50	1.10
Si32-3 x4	7.00	24.0	14.0	10.4	6.80	3.60	2.40	2.00	1.40
Si32-3 x5	8.75	25.5	15.8	12.4	8.50	4.50	3.00	2.50	2.10
Si32-3 x6	10.5	28.8	17.9	14.8	10.2	5.40	3.60	3.00	2.20

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.6 MPa*)

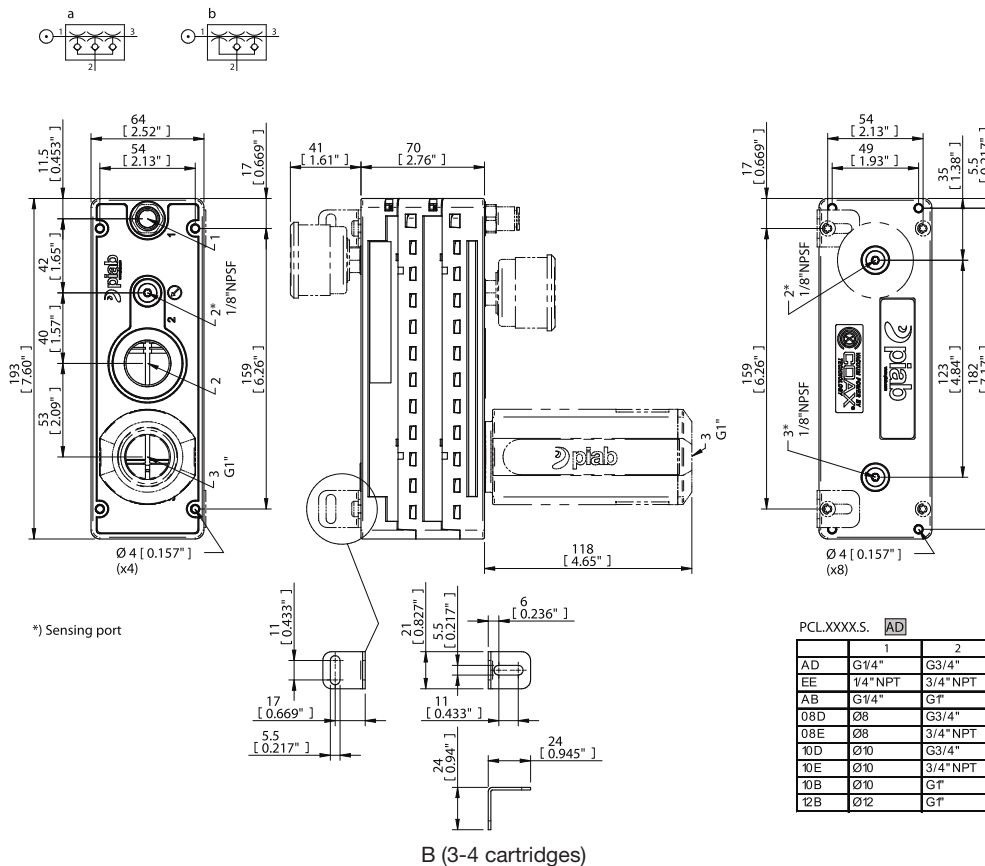
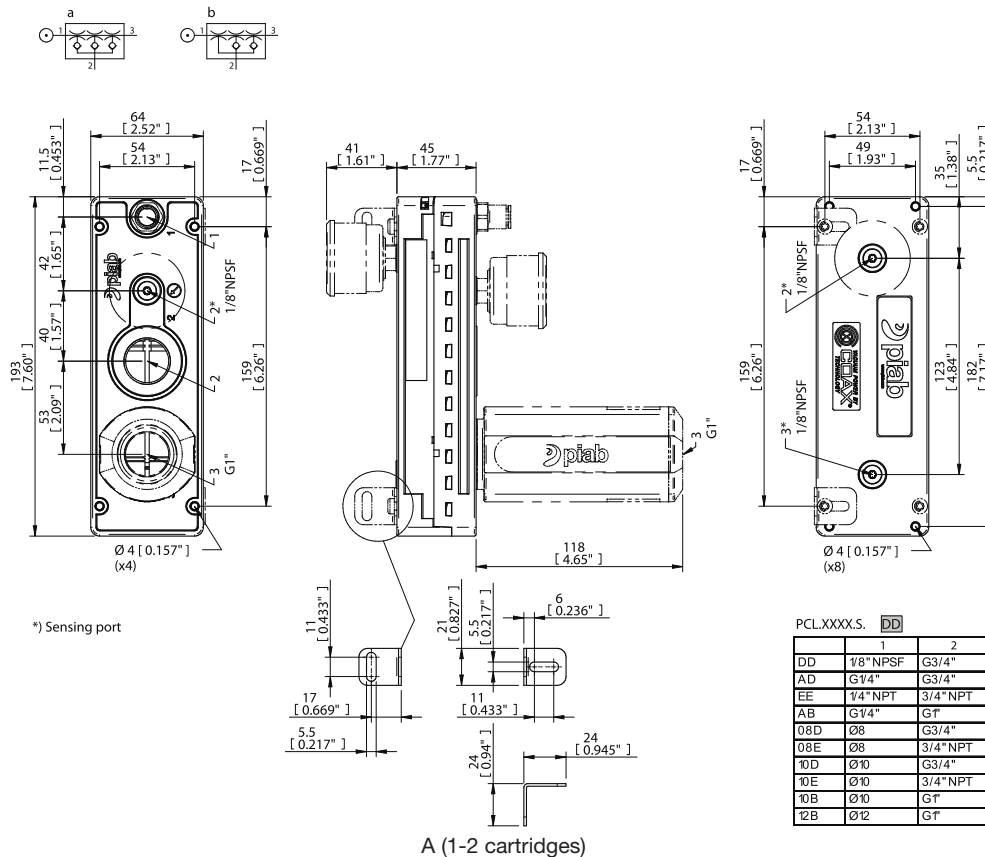
COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)						
		10	20	30	40	50	60	70
Si32-3 x1	1.75	0.02	0.05	0.10	0.18	0.33	0.53	0.80
Si32-3 x2	3.50	0.01	0.025	0.05	0.09	0.17	0.27	0.40
Si32-3 x3	5.25	0.007	0.017	0.033	0.06	0.11	0.18	0.27
Si32-3 x4	7.00	0.005	0.013	0.025	0.045	0.083	0.13	0.20
Si32-3 x5	8.75	0.005	0.012	0.022	0.036	0.066	0.11	0.16
Si32-3 x6	10.5	0.004	0.010	0.018	0.03	0.055	0.09	0.13

*Feed pressure tolerance, ± 0.01 MPa.

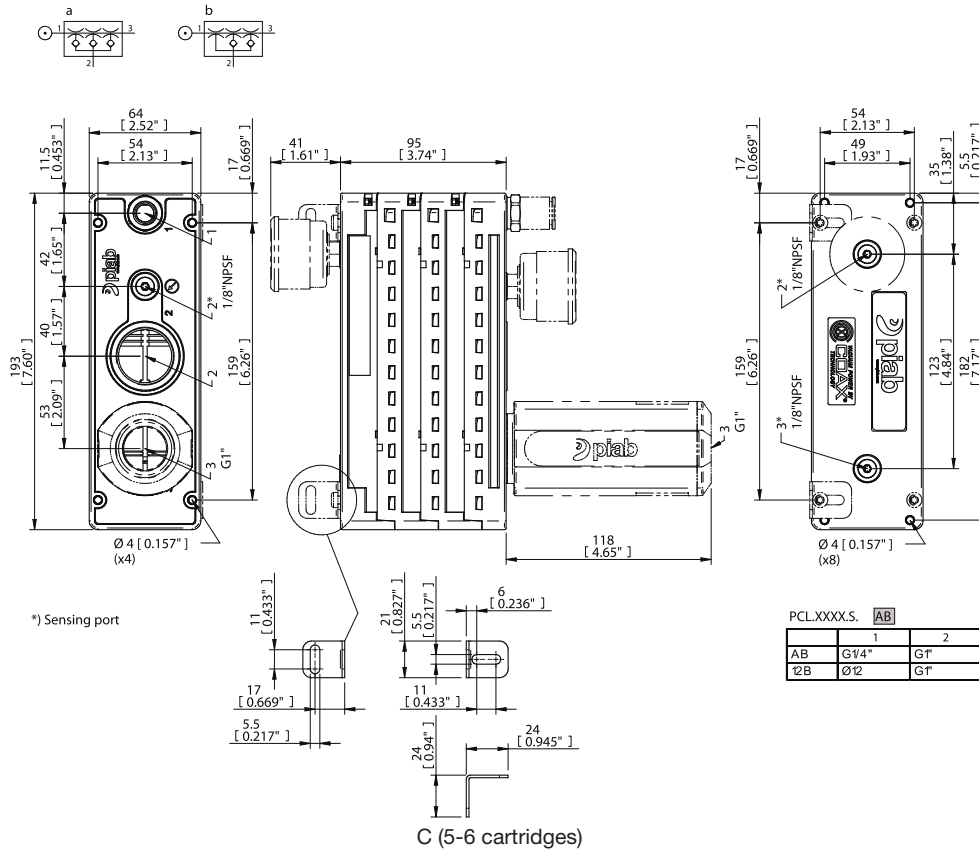
Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Si32-3x1	S1
A	COAX® cartridge module Si32-3x2	S2
B	COAX® cartridge module Si32-3x3	S3
B	COAX® cartridge module Si32-3x4	S4
C	COAX® cartridge module Si32-3x5	S5
C	COAX® cartridge module Si32-3x6	S6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
b	Non-return valve	A
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
Standard		S
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
1/8" NPSF (G) female		D
*Push-in 8 mm (5/32")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Si32-3x1, Standard Valve, Nitrile Sealing, Function Standard, Connections Comp. Air G1/4" female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.S1BN.S.AD.SV

Dimensional drawing for piCLASSIC Si32-3



Dimensional drawing for piCLASSIC Si32-3



Crossover Classic to piCLASSIC

Classic Art. No.	Classic Code No.	piCLASSIC Art. No.	piCLASSIC Code No.
0102117	L25B6ADN	9904047	PCL.S1BN.S.08D.SV
0102119	L50B6ADN	9904040	PCL.S2BN.S.08D.SV
0102121	L100B6ADN	9904043	PCL.S3BN.S.08D.SV
0102122	L100B6ADNA	9904052	PCL.S3AN.S.08D.SV
0102027	L50B6-DN	9904050	PCL.S2BN.S.DD.SV
0102401	L25B6-EN	9904048	PCL.S1BN.S.08E.SV
0102403	L50B6-EN	9904046	PCL.S2BN.S.08E.SV
0102405	L100B6-EN	9904045	PCL.S3BN.S.08E.SV

Ordering information, accessories

Description	Art. No.
Silencer G3/4" with thread insert 1"-3/4"	0126362

Recommended for piCLASSIC pumps with 1-2 cartridges. Choose a piCLASSIC without Silencer G 1" in the ordering code.

piCLASSIC Pi48-3



- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ High performance reliability in cases of fluctuating or low compressed air pressure.
- ▶ Deep vacuum level achieved at very low feed pressure, 0.3 MPa.
- ▶ Fluctuating compressed air is commonplace in large plants and when the compressor has a high degree of utilization.
- ▶ Large capacity range, available with 1 to 6 COAX® Pi48 three-stage cartridges. A smaller piCLASSIC can easily be upgraded with more capacity if needed.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.30
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	90
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm ³	353
Noise level at 40 -kPa & optimal feed pressure	dBA	65-68
Temperature range	°C	-10-80
Materials		PA, Al, SS, NBR (FKM), CuZn

Technical data, specific

Weight	Value (g)
1-2 cartridges	500-550
3-4 cartridges	720-790
5-6 cartridges	795-875
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.30 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								
		0	10	20	30	40	50	60	70	80
Pi48-3 x1	2.0	5.6	2.5	1.8	1.1	0.65	0.50	0.35	0.25	0.10
Pi48-3 x2	4.0	11.2	5.0	3.6	2.2	1.3	1.0	0.70	0.50	0.20
Pi48-3 x3	6.0	16.8	7.5	5.4	3.3	1.95	1.5	1.05	0.75	0.30
Pi48-3 x4	8.0	22.4	10.0	7.2	4.4	2.6	2.0	1.4	1.0	0.40
Pi48-3 x5	10.0	23.8	11.3	8.6	5.5	3.25	2.5	1.75	1.25	0.50
Pi48-3 x6	12.0	26.9	12.8	10.3	6.6	3.9	3.0	2.1	1.5	0.60

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.30 MPa*)

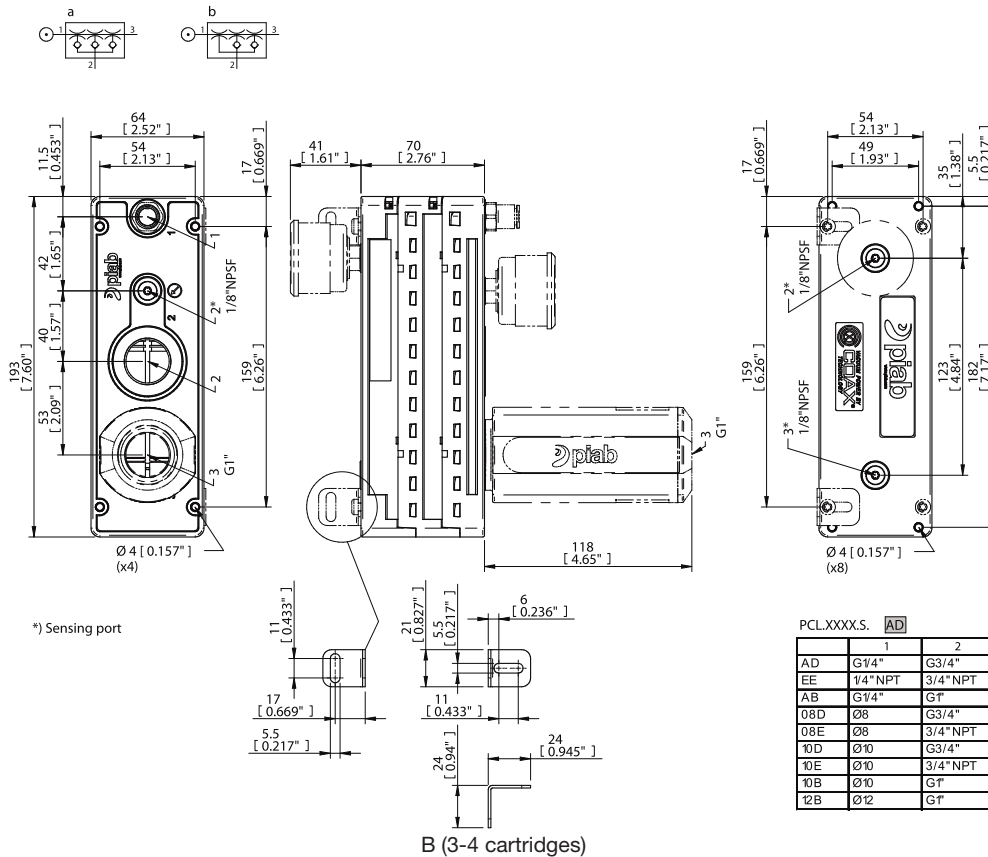
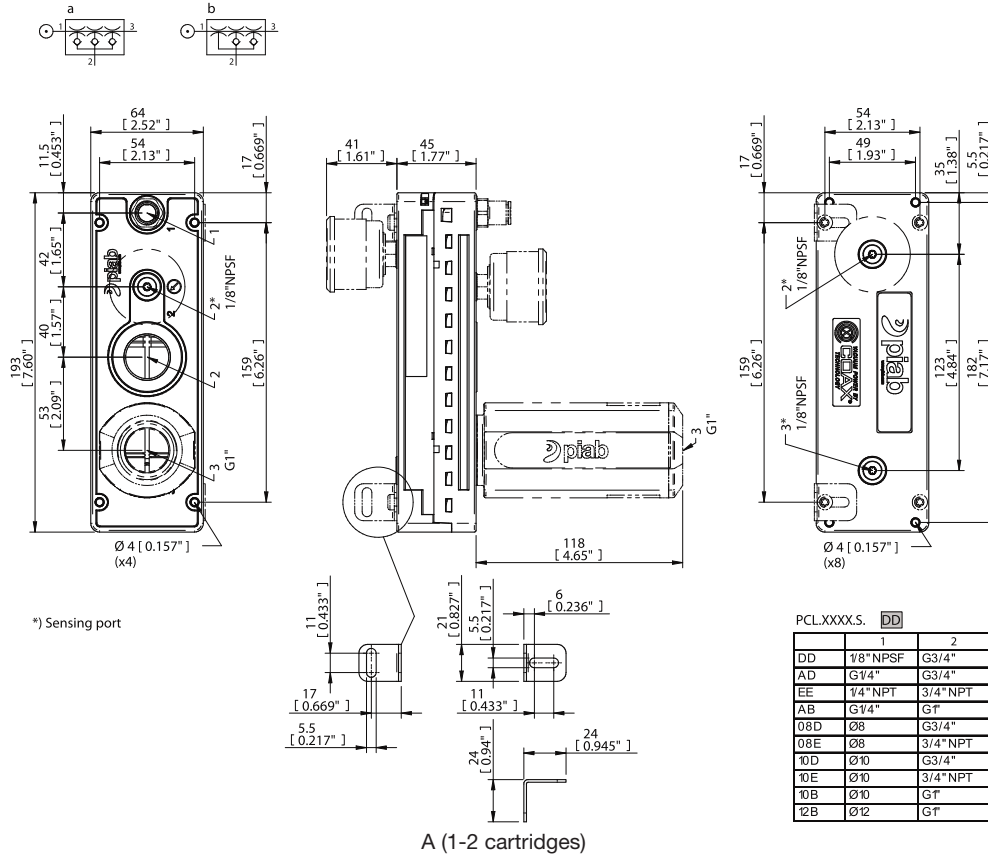
COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
Pi48-3 x1	2.0	0.020	0.060	0.12	0.25	0.45	0.70	1.0	1.6	4.0
Pi48-3 x2	4.0	0.010	0.030	0.06	0.13	0.23	0.35	0.50	0.80	2.0
Pi48-3 x3	6.0	0.007	0.020	0.04	0.08	0.15	0.23	0.33	0.53	1.33
Pi48-3 x4	8.0	0.005	0.015	0.03	0.06	0.11	0.18	0.25	0.40	1.0
Pi48-3 x5	10.0	0.005	0.014	0.028	0.05	0.09	0.14	0.20	0.32	0.80
Pi48-3 x6	12.0	0.004	0.013	0.025	0.04	0.08	0.12	0.17	0.27	0.67

*Feed pressure tolerance, ± 0.01 MPa.

Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Pi48-3x1	P1
A	COAX® cartridge module Pi48-3x2	P2
B	COAX® cartridge module Pi48-3x3	P3
B	COAX® cartridge module Pi48-3x4	P4
C	COAX® cartridge module Pi48-3x5	P5
C	COAX® cartridge module Pi48-3x6	P6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
b	Non-return valve	A
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
Standard		S
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
1/8" NPSF (G) female		D
*Push-in 8 mm (5/32")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
*Compressed air push-in connector included separately.		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Pi48-3x1, Standard Valve, Nitrile Sealing, Function Standard, Connections Comp. Air G1/4" female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.P1BN.S.AD.SV

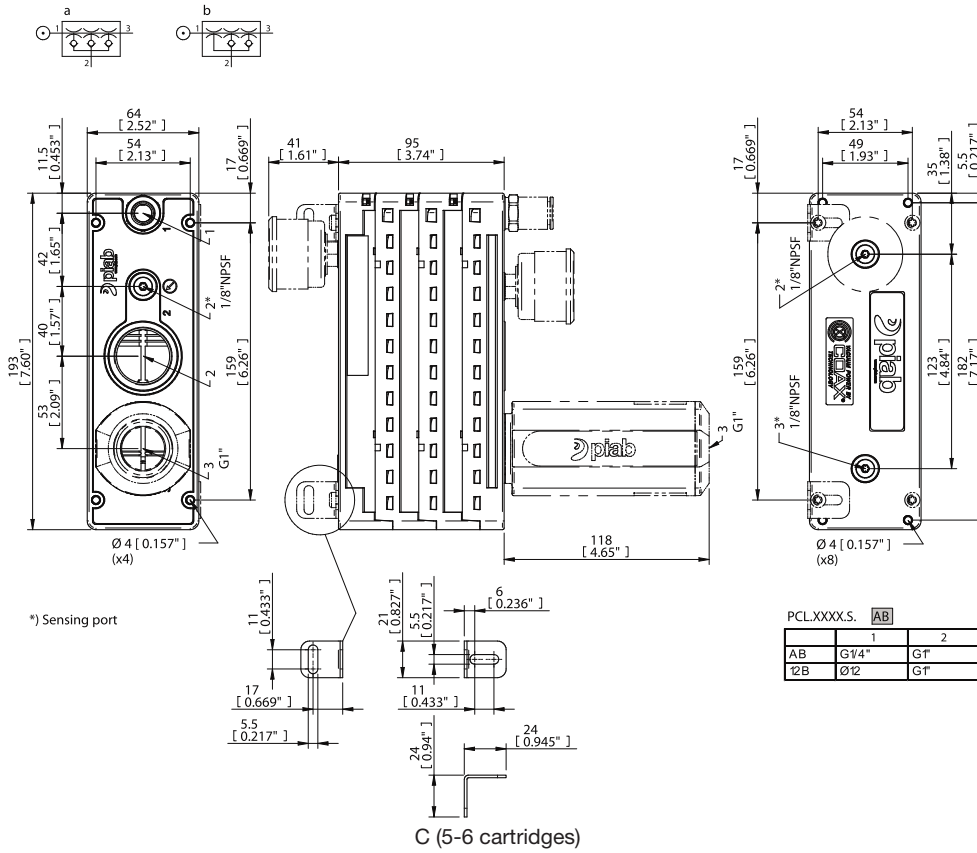
Dimensional drawing for piCLASSIC Pi48-3



Vacuum pumps/generators Medium



Dimensional drawing for piCLASSIC Pi48-3



piCLASSIC Xi40-3



- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Xi cartridge offers high flow at deep vacuum levels to 95 -kPa.
- ▶ Suitable for non-porous applications when deep vacuum level is needed.
- ▶ Large capacity range, available with 1 to 6 COAX® Xi40 three-stage cartridges. A smaller piCLASSIC can easily be upgraded with more capacity if needed.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.45
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	95
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm ³	353
Noise level at 40 -kPa & optimal feed pressure	dBA	64-69
Temperature range	°C	-10-80
Materials		PA, Al, SS, NBR (FKM), CuZn

Technical data, specific

Weight	Value (g)
1-2 cartridges	500-550
3-4 cartridges	720-790
5-6 cartridges	795-875
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.45 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	5.9	3.0	2.0	1.3	0.73	0.58	0.43	0.32	0.18	0.03
Xi40-3 x2	3.66	11.8	6.0	4.0	2.6	1.46	1.16	0.86	0.64	0.36	0.06
Xi40-3 x3	5.49	17.7	9.0	6.0	3.9	2.19	1.74	1.29	0.96	0.54	0.09
Xi40-3 x4	7.32	23.6	12.0	8.0	5.2	2.92	2.32	1.72	1.28	0.72	0.12
Xi40-3 x5	9.15	25.1	13.5	9.5	6.5	3.65	2.90	2.15	1.60	0.90	0.15
Xi40-3 x6	11.0	28.3	15.3	11.4	7.8	4.38	3.44	2.58	1.92	1.08	0.18

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.45 MPa*)

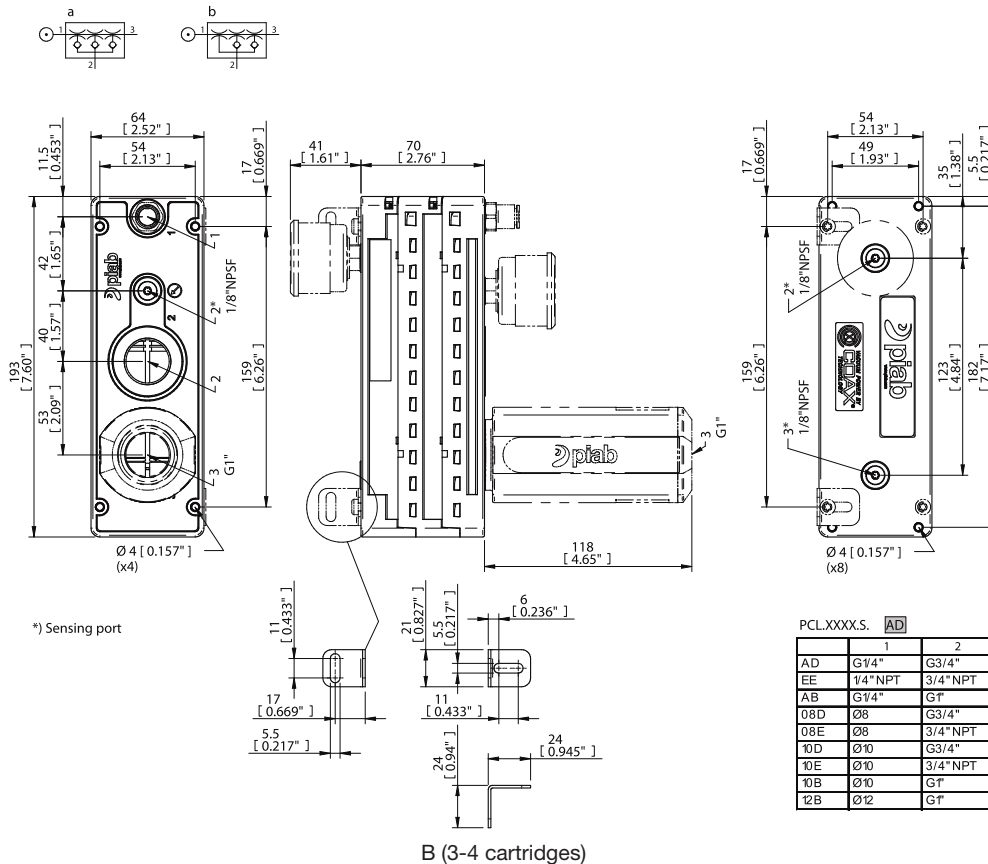
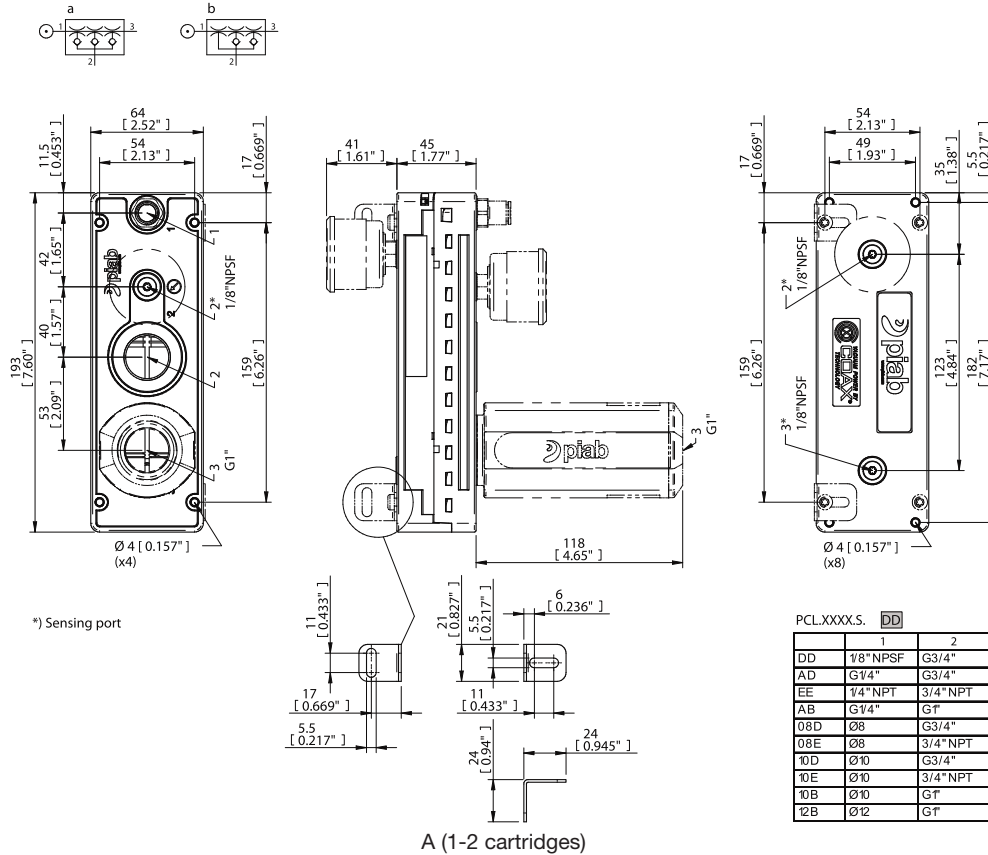
COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	0.022	0.062	0.12	0.22	0.37	0.57	0.84	1.2	2.2
Xi40-3 x2	3.66	0.011	0.031	0.06	0.11	0.19	0.29	0.42	0.6	1.1
Xi40-3 x3	5.49	0.007	0.021	0.04	0.07	0.12	0.19	0.28	0.4	0.73
Xi40-3 x4	7.32	0.006	0.016	0.03	0.055	0.09	0.14	0.21	0.3	0.55
Xi40-3 x5	9.15	0.005	0.014	0.026	0.044	0.07	0.11	0.17	0.24	0.44
Xi40-3 x6	11.0	0.005	0.012	0.022	0.040	0.06	0.10	0.14	0.20	0.37

*Feed pressure tolerance, ± 0.01 MPa.

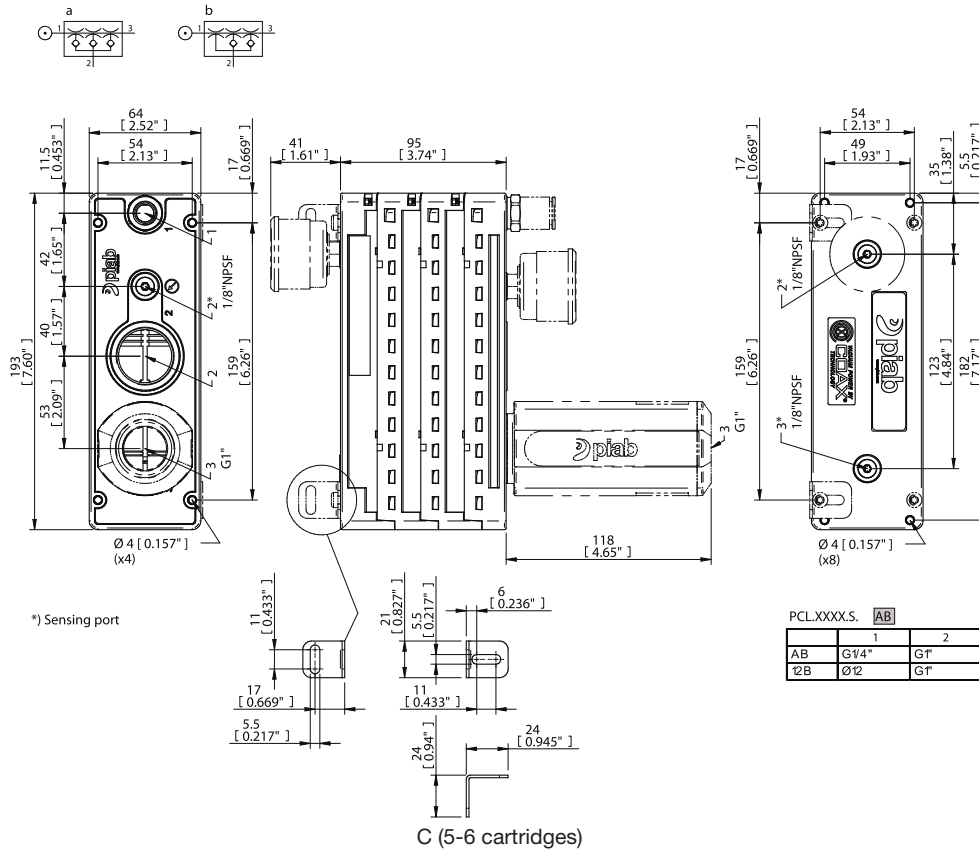
Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Xi40-3x1	X1
A	COAX® cartridge module Xi40-3x2	X2
B	COAX® cartridge module Xi40-3x3	X3
B	COAX® cartridge module Xi40-3x4	X4
C	COAX® cartridge module Xi40-3x5	X5
C	COAX® cartridge module Xi40-3x6	X6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
b	Non-return valve	A
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
Standard		S
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
1/8" NPSF (G) female		D
*Push-in 8 mm (5/32")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Xi40-3x1, Standard Valve, Nitrile Sealing, Function Standard, Connections Comp. Air G1/4" female- -Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.X1BN.S.AD.SV

Dimensional drawing for piCLASSIC Xi40-3



Dimensional drawing for piCLASSIC Xi40-3



Crossover Classic to piCLASSIC

Classic Art. No.	Classic Code No.	piCLASSIC Art. No.	piCLASSIC Code No.
0102133	M25B5-ADN	9904039	PCL.X1BN.S.08D.SV
0102184	M25B6-ADN	9904039	PCL.X1BN.S.08D.SV
0102135	M50B5-ADN	9904034	PCL.X2BN.S.08D.SV
0102113	M50B6-ADN	9904034	PCL.X2BN.S.08D.SV
0102137	M100B5-ADN	9904035	PCL.X3BN.S.08D.SV
0102115	M100B6-ADN	9904035	PCL.X3BN.S.08D.SV
0102136	M50B5-ADNA	9904053	PCL.X2AN.S.08D.SV
0102138	M100B5-ADNA	9904051	PCL.X3AN.S.08D.SV
0102031	M25B5-DN	9904044	PCL.X1BN.S.DD.SV
0100366	M25B6-DN	9904044	PCL.X1BN.S.DD.SV
0102033	M50B5-DN	9904041	PCL.X2BN.S.DD.SV
0100372	M50B6-DN	9904041	PCL.X2BN.S.DD.SV
0102035	M100B5-DN	0126065	piCLASSIC Xi x3, Connection plate DD
0100378	M100B6-DN	0126065	piCLASSIC Xi x3, Connection plate DD
0102411	M25B5-EN	9904038	PCL.X1BN.S.08E.SV
0102395	M25B6-EN	9904038	PCL.X1BN.S.08E.SV
0102413	M50B5-EN	9904036	PCL.X3BN.S.08E.SV
0102397	M50B6-EN	9904036	PCL.X2BN.S.08E.SV
0102415	M100B5-EN	9904037	PCL.X3BN.S.08E.SV
0102399	M100B6-EN	9904037	PCL.X3BN.S.08E.SV

piCLASSIC Si32-3 piSAVE optimize



- ▶ Vacuum controlled proportional pressure regulator (ingranted module for piCLASSIC), a fully pneumatic device.
- ▶ The feed pressure to piCLASSIC is automatically regulated and controlled to maintain the set vacuum level. Air/energy usage is kept to a minimum for the application (optimized).
- ▶ Recommended for leaking and sealed applications to save energy and secure the right vacuum level.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Si cartridge offers extra good vacuum flow.
- ▶ Air ventilation port with filter.
- ▶ Several push in and threaded air connection sizes to choose from.
- ▶ piSAVE optimize gives maximum feed pressure/ flow to piCLASSIC until vacuum level starts to build up .

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, min.	MPa	0.4
Max. vacuum*	-kPa	75
Feed pressure	Pressure drop	0.05 MPa @ 0.7 MPa and 15 NI/s
Operation range	-kPa	30-60
Accuracy	kPa	±3
Max. particle size compressed air	µm	5
Life span	years	5 or 5 million cycle
Internal volume, vacuum chamber, 1-2 cartridges	cm³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm³	353
Noise level at 40 -kPa & optimal feed pressure	dBA	66-77
Temperature range	°C	-10-60
Materials		PA, Al, SS, NBR (FKM), CuZn, HNBR

*) Max vacuum for the pump will be limited by the operating range of piSAVE optimize

Technical data, specific

Weight	Value (g)
1-2 cartridges	768-818
3-4 cartridges	988-1058
5-6 cartridges	1063-1143
Silencer	120
Vacuum gauge	50

Vacuum flow at output pressure (0.6 MPa)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)							
		0	10	20	30	40	50	60	70
Si32-3 x1	1.75	6.00	3.50	2.60	1.70	0.90	0.60	0.50	0.35
Si32-3 x2	3.50	12.0	7.00	5.20	3.40	1.80	1.20	1.00	0.70
Si32-3 x3	5.25	18.0	10.5	7.80	5.10	2.70	1.80	1.50	1.10
Si32-3 x4	7.00	24.0	14.0	10.4	6.80	3.60	2.40	2.00	1.40
Si32-3 x5	8.75	25.5	15.8	12.4	8.50	4.50	3.00	2.50	2.10
Si32-3 x6	10.5	28.8	17.9	14.8	10.2	5.40	3.60	3.00	2.20

Evacuation time at output pressure (0.6 MPa)

COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)						
		10	20	30	40	50	60	70
Si32-3 x1	1.75	0.02	0.05	0.10	0.18	0.33	0.53	0.80
Si32-3 x2	3.50	0.01	0.025	0.05	0.09	0.17	0.27	0.40
Si32-3 x3	5.25	0.007	0.017	0.033	0.06	0.11	0.18	0.27
Si32-3 x4	7.00	0.005	0.013	0.025	0.045	0.083	0.13	0.20
Si32-3 x5	8.75	0.005	0.012	0.022	0.036	0.066	0.11	0.16
Si32-3 x6	10.5	0.004	0.010	0.018	0.03	0.055	0.09	0.13

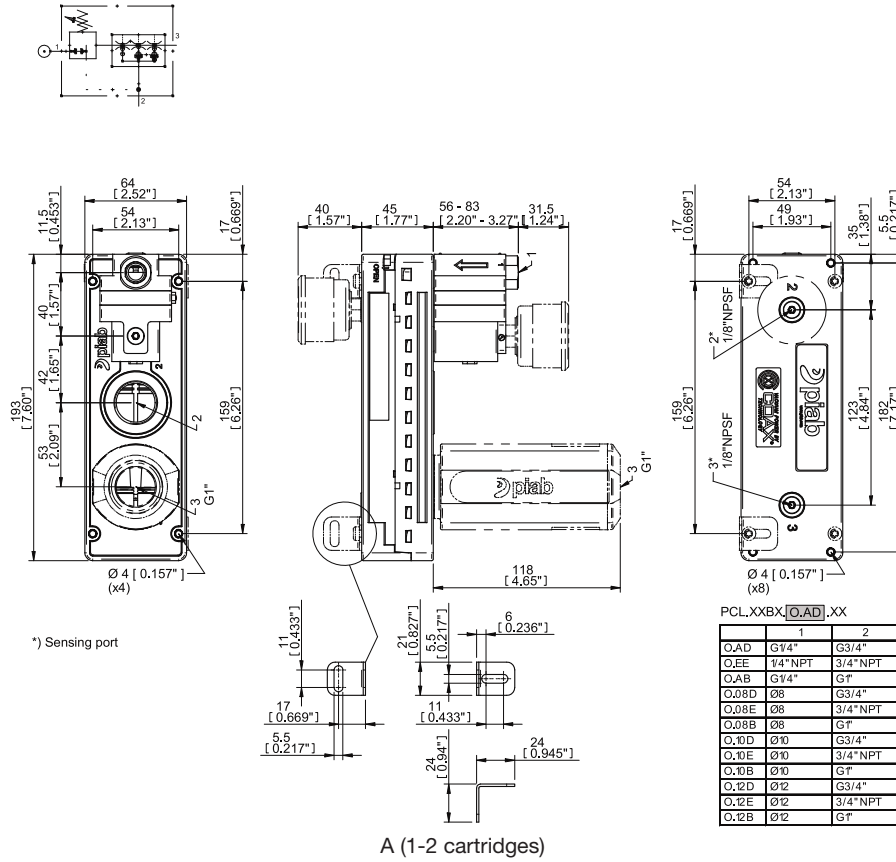
Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Si32-3x1	S1
A	COAX® cartridge module Si32-3x2	S2
B	COAX® cartridge module Si32-3x3	S3
B	COAX® cartridge module Si32-3x4	S4
C	COAX® cartridge module Si32-3x5	S5
C	COAX® cartridge module Si32-3x6	S6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
piSAVE optimize		O
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
*Push-in 8 mm (5/16")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Si32-3x1, Standard Valve, Nitrile Sealing, Function piSAVE optimize, Connections Comp. Air G1/4" female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.S1BN.O.AD.SV

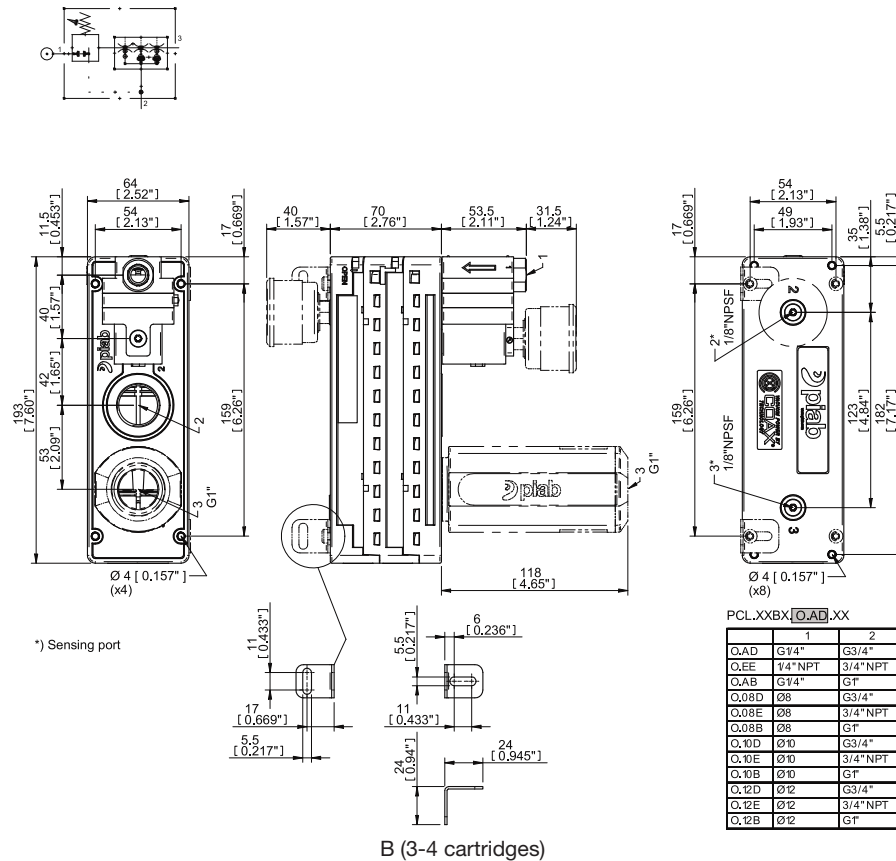
Vacuum pumps/generators Medium



Dimensional drawing for piCLASSIC Si32-3 with piSAVE optimize



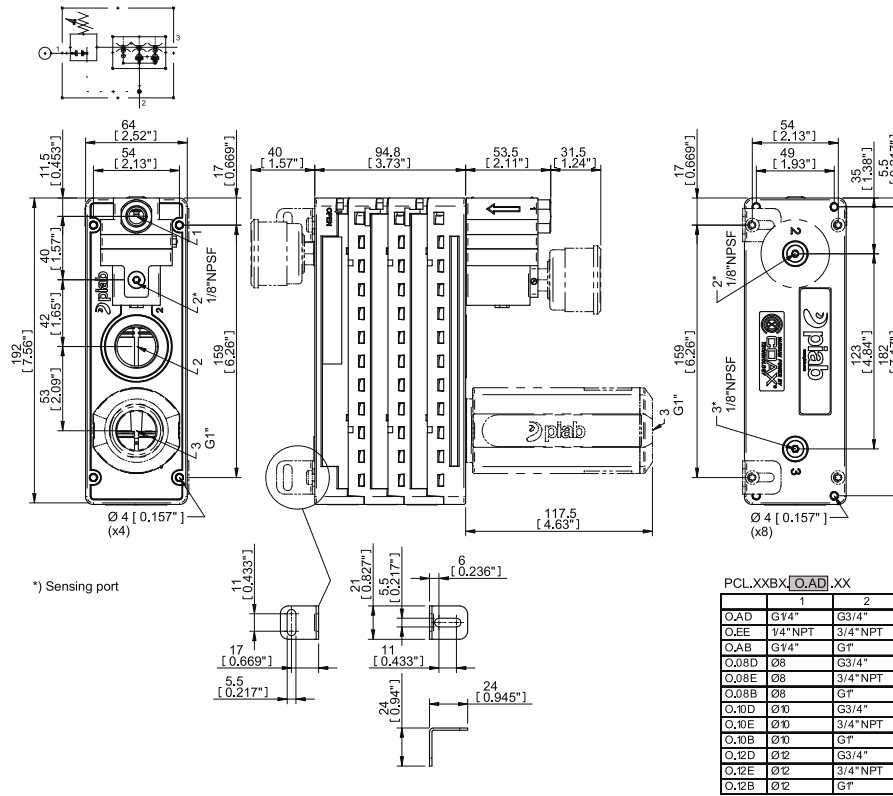
Dimensional drawing for piCLASSIC Si32-3 with piSAVE optimize



Vacuum pumps/generators Medium



Dimensional drawing for piCLASSIC Si32-3 with piSAVE optimize



C (5-6 cartridges)

Ordering information, accessories

Description	Art. No.
Silencer G3/4" with thread insert 1" - 3/4"	0126362

Recommended for piCLASSIC pumps with 1-2 cartridges. Choose a piCLASSIC without Silencer G 1" in the ordering code.

piCLASSIC Pi48-3 piSAVE optimize



- ▶ Vacuum controlled proportional pressure regulator (ingranted module for piCLASSIC), a fully pneumatic device.
- ▶ The feed pressure to piCLASSIC is automatically regulated and controlled to maintain the set vacuum level. Air/energy usage is kept to a minimum for the application (optimized).
- ▶ Recommended for leaking and sealed applications to save energy and secure the right vacuum level.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ High performance reliability in cases of fluctuating or low compressed air pressure. Deep vacuum level achieved at very low feed pressure, 0.31 MPa.
- ▶ Air ventilation port with filter.
- ▶ Several push in and threaded air connection sizes to choose from.
- ▶ piSAVE optimize gives maximum feed pressure/ flow to piCLASSIC until vacuum level starts to build up.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, min.	MPa	0.4
Max. vacuum*	-kPa	90
Feed pressure	Pressure drop	0.05 MPa @ 0.7 MPa and 15 NI/s
Operation range	-kPa	30-60
Accuracy	kPa	±3
Max. particle size compressed air	µm	5
Life span	years	5 or 5 million cycle
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm ³	353
Noise level at 40 -kPa & optimal feed pressure	dBA	66-77
Temperature range	°C	-10-60
Materials		PA, AI, SS, NBR (FKM), CuZn, HNBR

*) Max vacuum for the pump will be limited by the operating range of piSAVE optimize

Technical data, specific

Weight	Value (g)
1-2 cartridges	768-818
3-4 cartridges	988-1058
5-6 cartridges	1063-1143
Silencer	120
Vacuum gauge	50

Vacuum flow at output pressure (0.30 MPa)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								
		0	10	20	30	40	50	60	70	80
Pi48-3 x1	2.0	5.6	2.5	1.8	1.1	0.65	0.50	0.35	0.25	0.10
Pi48-3 x2	4.0	11.2	5.0	3.6	2.2	1.3	1.0	0.70	0.50	0.20
Pi48-3 x3	6.0	16.8	7.5	5.4	3.3	1.95	1.5	1.05	0.75	0.30
Pi48-3 x4	8.0	22.4	10.0	7.2	4.4	2.6	2.0	1.4	1.0	0.40
Pi48-3 x5	10.0	23.8	11.3	8.6	5.5	3.25	2.5	1.75	1.25	0.50
Pi48-3 x6	12.0	26.9	12.8	10.3	6.6	3.9	3.0	2.1	1.5	0.60

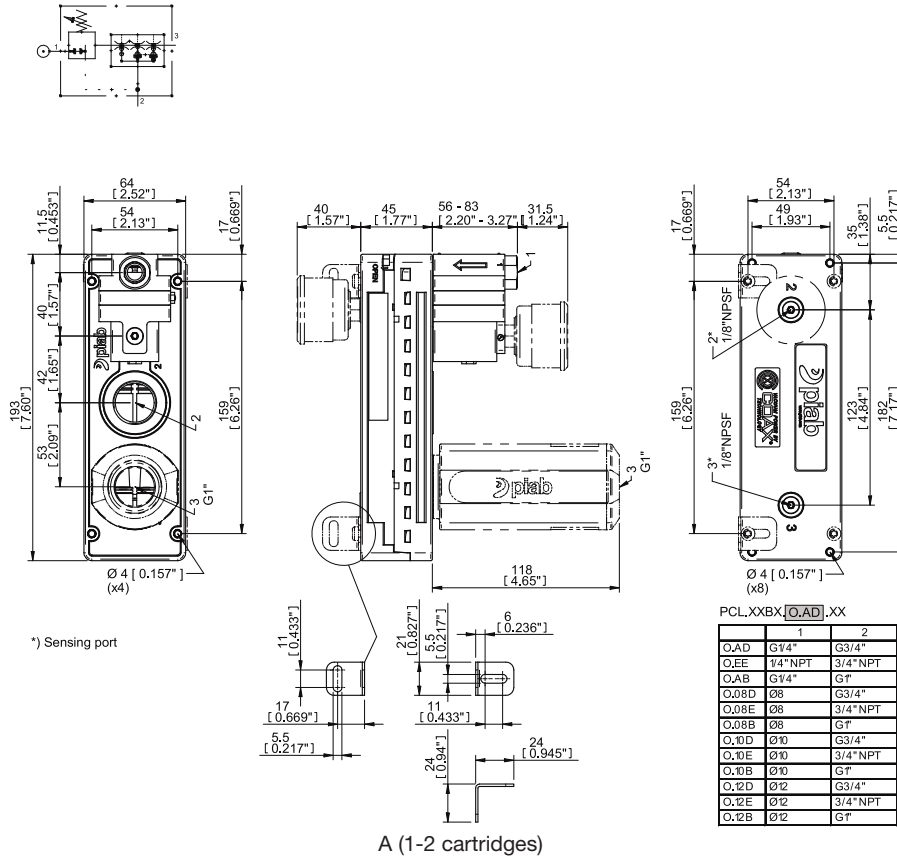
Evacuation time at output pressure (0.30 MPa)

COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
Pi48-3 x1	2.0	0.020	0.060	0.12	0.25	0.45	0.70	1.0	1.6	4.0
Pi48-3 x2	4.0	0.010	0.030	0.06	0.13	0.23	0.35	0.50	0.80	2.0
Pi48-3 x3	6.0	0.007	0.020	0.04	0.08	0.15	0.23	0.33	0.53	1.33
Pi48-3 x4	8.0	0.005	0.015	0.03	0.06	0.11	0.18	0.25	0.40	1.0
Pi48-3 x5	10.0	0.005	0.014	0.028	0.05	0.09	0.14	0.20	0.32	0.80
Pi48-3 x6	12.0	0.004	0.013	0.025	0.04	0.08	0.12	0.17	0.27	0.67

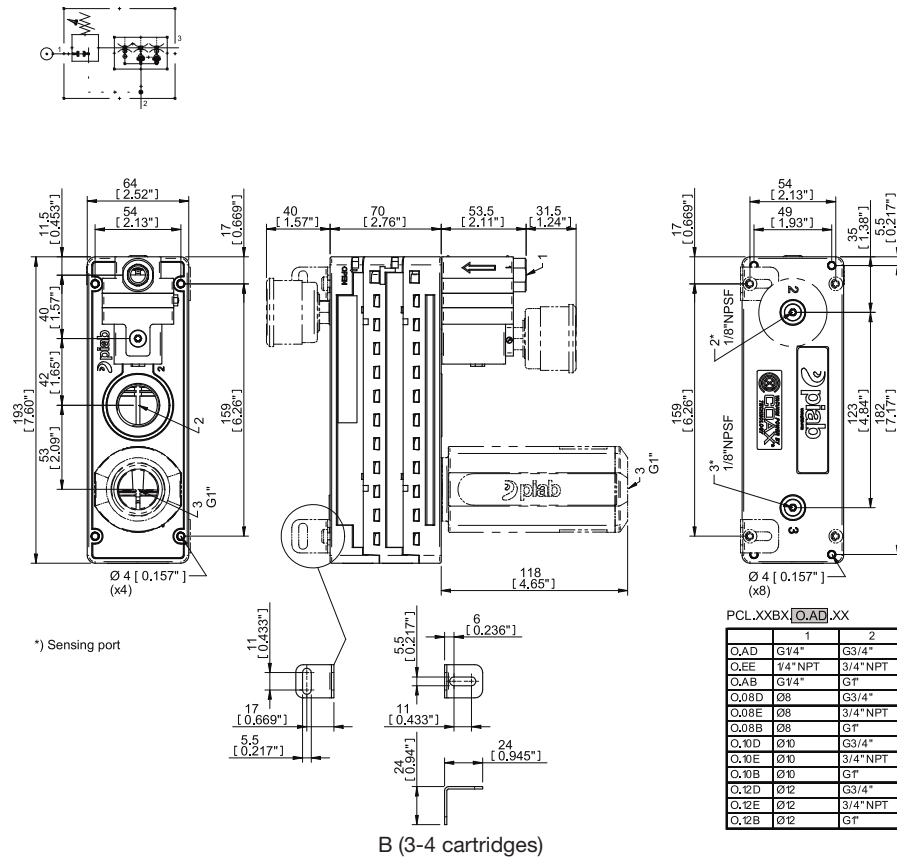
Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Pi48-3x1	P1
A	COAX® cartridge module Pi48-3x2	P2
B	COAX® cartridge module Pi48-3x3	P3
B	COAX® cartridge module Pi48-3x4	P4
C	COAX® cartridge module Pi48-3x5	P5
C	COAX® cartridge module Pi48-3x6	P6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
piSAVE optimize		S
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
*Push-in 8 mm (5/16")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Pi48-3x1, Standard Valve, Nitrile Sealing, Function piSAVE optimize, Connections Comp. Air G1/4" female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.P1BN.O.AD.SV

Dimensional drawing for piCLASSIC Pi48-3 with piSAVE optimize



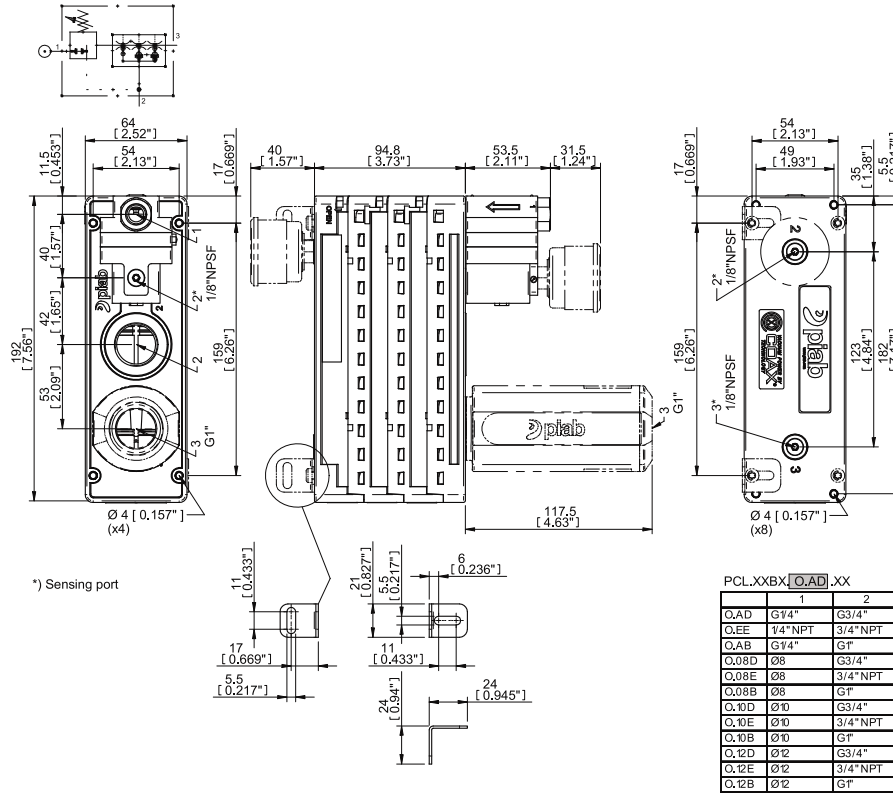
Dimensional drawing for piCLASSIC Pi48-3 with piSAVE optimize



Vacuum pumps/generators Medium



Dimensional drawing for piCLASSIC Pi48-3 with piSAVE optimize



C (5-6 cartridges)

Ordering information, accessories

Description	Art. No.
Silencer G3/4" with thread insert 1" - 3/4"	0126362

Recommended for piCLASSIC pumps with 1-2 cartridges. Choose a piCLASSIC without Silencer G 1" in the ordering code.

piCLASSIC Xi40-3 piSAVE optimize



- ▶ Vacuum controlled proportional pressure regulator (ingranted module for piCLASSIC), a fully pneumatic device
- ▶ The feed pressure to piCLASSIC is automatically regulated and controlled to maintain the set vacuum level. Air/energy usage is kept to a minimum for the application (optimized).
- ▶ Recommended for leaking and sealed applications to save energy and secure the right vacuum level.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Xi cartridge offers high flow at deep vacuum levels to 95 -kPa.
- ▶ Air ventilation port with filter
- ▶ Several push in and threaded air connection sizes to choose from
- ▶ piSAVE optimize gives maximum feed pressure/ flow to piCLASSIC until vacuum level starts to build up.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, min.	MPa	0.4
Max. vacuum*	-kPa	95
Feed pressure	Pressure drop	0.05 MPA @ 0.7 MPa and 15 NI/s
Operation range	-kPa	30-60
Accuracy	kPa	±3
Max. particle size compressed air	µm	5
Life span	years	5 or 5 million cycle
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Internal volume, vacuum chamber, 5-6 cartridges	cm ³	353
Noise level at 40 -kPa & optimal feed pressure	dB(A)	66-77
Temperature range	°C	-10-60
Materials		PA, AI, SS, NBR (FKM), CuZn, HNBR

*) Max vacuum for the pump will be limited by the operating range of piSAVE optimize

Technical data, specific

Weight	Value (g)
1-2 cartridges	768-818
3-4 cartridges	988-1058
5-6 cartridges	1063-1143
Silencer	120
Vacuum gauge	50

Vacuum flow at output pressure (0.45 MPa)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	5.9	3.0	2.0	1.3	0.73	0.58	0.43	0.32	0.18	0.03
Xi40-3 x2	3.66	11.8	6.0	4.0	2.6	1.46	1.16	0.86	0.64	0.36	0.06
Xi40-3 x3	5.49	17.7	9.0	6.0	3.9	2.19	1.74	1.29	0.96	0.54	0.09
Xi40-3 x4	7.32	23.6	12.0	8.0	5.2	2.92	2.32	1.72	1.28	0.72	0.12
Xi40-3 x5	9.15	25.1	13.5	9.5	6.5	3.65	2.90	2.15	1.60	0.90	0.15
Xi40-3 x6	11.0	28.3	15.3	11.4	7.8	4.38	3.44	2.58	1.92	1.08	0.18

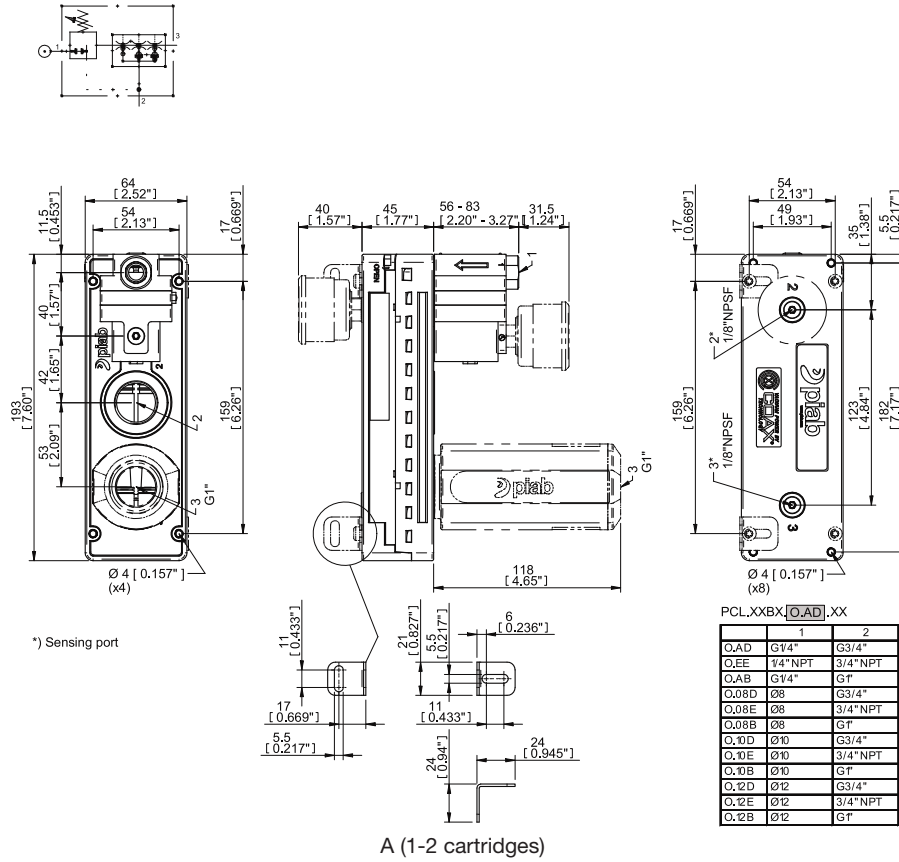
Evacuation time at output pressure (0.45 MPa)

COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	0.022	0.062	0.12	0.22	0.37	0.57	0.84	1.2	2.2
Xi40-3 x2	3.66	0.011	0.031	0.06	0.11	0.19	0.29	0.42	0.6	1.1
Xi40-3 x3	5.49	0.007	0.021	0.04	0.07	0.12	0.19	0.28	0.4	0.73
Xi40-3 x4	7.32	0.006	0.016	0.03	0.055	0.09	0.14	0.21	0.3	0.55
Xi40-3 x5	9.15	0.005	0.014	0.026	0.044	0.07	0.11	0.17	0.24	0.44
Xi40-3 x6	11.0	0.005	0.012	0.022	0.040	0.06	0.10	0.14	0.20	0.37

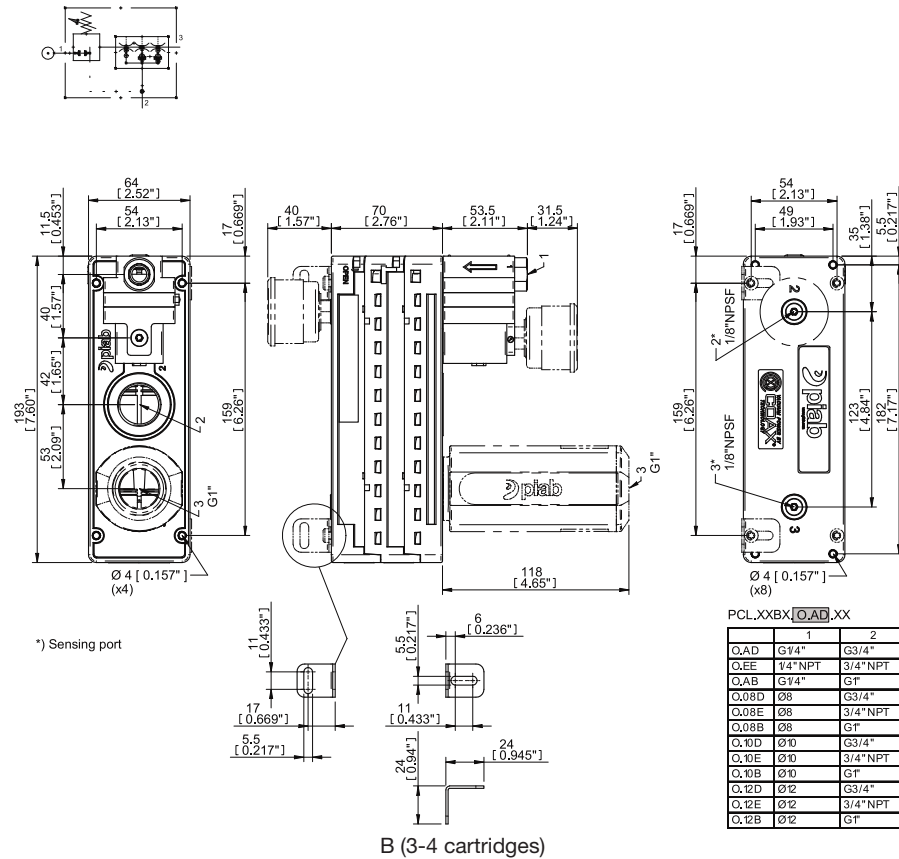
Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Xi40-3x1	X1
A	COAX® cartridge module Xi40-3x2	X2
B	COAX® cartridge module Xi40-3x3	X3
B	COAX® cartridge module Xi40-3x4	X4
C	COAX® cartridge module Xi40-3x5	X5
C	COAX® cartridge module Xi40-3x6	X6
2b. Valve Configuration		piCLASSIC Code
a	Standard	B
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
piSAVE optimize		O
4a. Compressed air connection		piCLASSIC Code
G1/4" female		A
1/4" NPT female		E
*Push-in 8 mm (5/16")-1/4" female		08
*Push-in 10 mm-1/4" female		10
*Push-in 12 mm-1/4" female		12
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
G1" female		B
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Xi40-3x1, Standard Valve, Nitrile Sealing, Function piSAVE optimize, Connections Comp. Air G1/4" female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.X1BN.O.AD.SV

Dimensional drawing for piCLASSIC Xi40-3 with piSAVE optimize



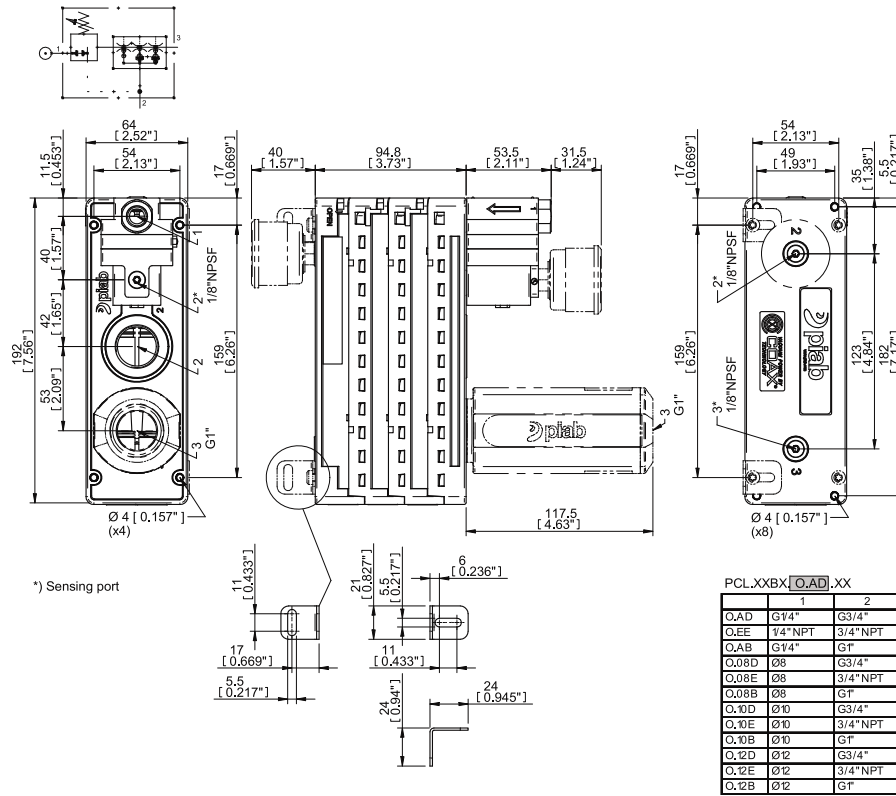
Dimensional drawing for piCLASSIC Xi40-3 with piSAVE optimize



Vacuum pumps/generators Medium



Dimensional drawing for piCLASSIC Xi40-3 with piSAVE optimize



Ordering information, accessories

Description	Art. No.
Silencer G3/4" with thread insert 1" - 3/4"	0126362

Recommended for piCLASSIC pumps with 1-2 cartridges. Choose a piCLASSIC without Silencer G 1" in the ordering code.

piCLASSIC Si32-3 Energy Saving



- ▶ Integrated Energy Saving device, results in a large air-consumption reduction.
- ▶ Recommended for sealed or almost sealed applications.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Si cartridge offers extra good vacuum flow.
- ▶ Available with 1 to 4 COAX® Si32 three-stage cartridges.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.60
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	75
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3-4 cartridges	cm ³	246
Noise level at 40 -kPa & optimal feed pressure	dBA	66-77
Temperature range	°C	-10-60
Materials		PA, Al, SS, NBR (FKM), CuZn, POM
Hysteresis	kPa	12
Kv, Flow @ P1=0.6 MPa and Δp=0.1 Mpa	NI/s	7.8
Life span	cycles	>10,000,000

Technical data, specific

Weight	Value (g)
1-2 cartridges	600-630
3-4 cartridges	820-870
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.6 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)							
		0	10	20	30	40	50	60	70
Si32-3 x1	1.75	6.00	3.50	2.60	1.70	0.90	0.60	0.50	0.35
Si32-3 x2	3.50	12.0	7.00	5.20	3.40	1.80	1.20	1.00	0.70
Si32-3 x3	5.25	18.0	10.5	7.80	5.10	2.70	1.80	1.50	1.10
Si32-3 x4	7.00	24.0	14.0	10.4	6.80	3.60	2.40	2.00	1.40

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.6 MPa*)

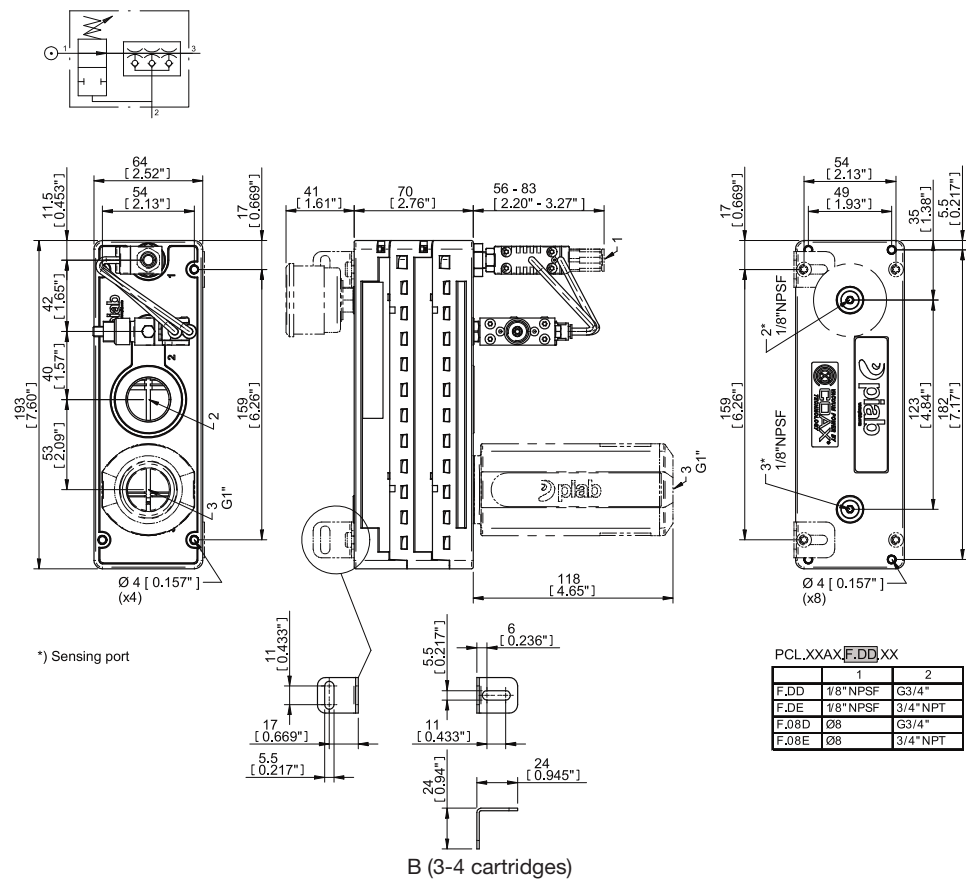
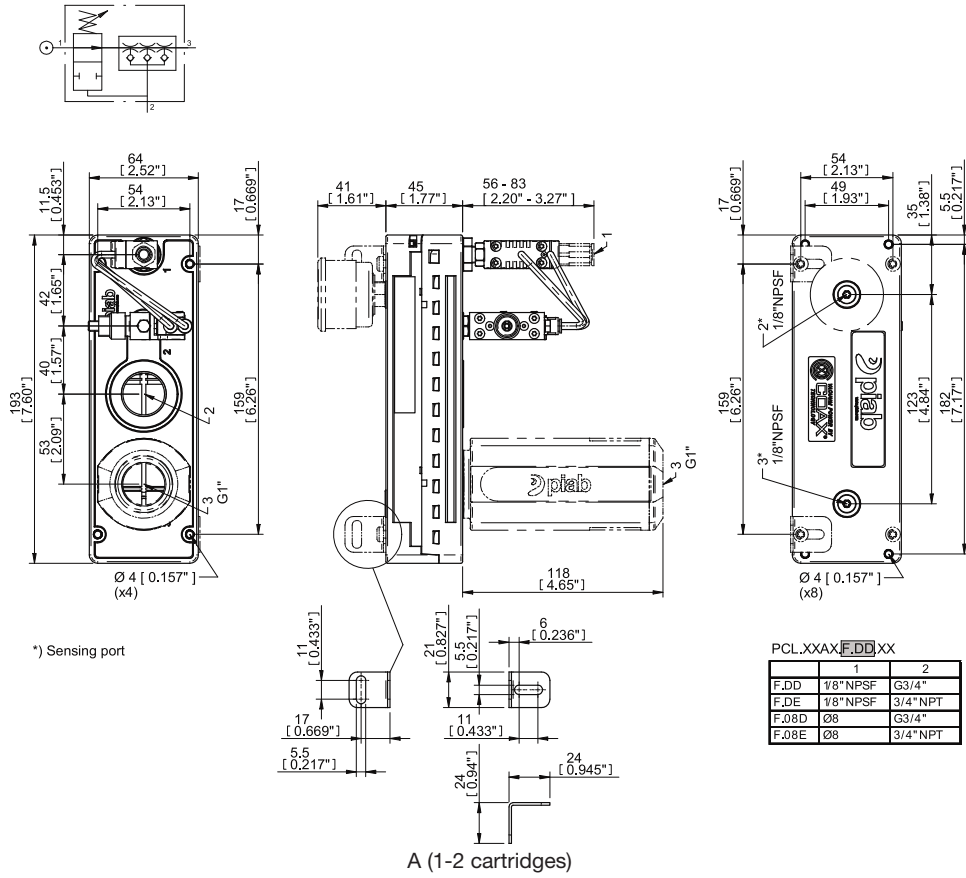
COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)						
		10	20	30	40	50	60	70
Si32-3 x1	1.75	0.02	0.05	0.10	0.18	0.33	0.53	0.80
Si32-3 x2	3.50	0.01	0.025	0.05	0.09	0.17	0.27	0.40
Si32-3 x3	5.25	0.007	0.017	0.033	0.06	0.11	0.18	0.27
Si32-3 x4	7.00	0.005	0.013	0.025	0.045	0.083	0.13	0.20

*Feed pressure tolerance, ± 0.01 MPa.

Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Si32-3x1	S1
A	COAX® cartridge module Si32-3x2	S2
B	COAX® cartridge module Si32-3x3	S3
B	COAX® cartridge module Si32-3x4	S4
2b. Valve Configuration		piCLASSIC Code
b	Non-return valve	A
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
Energy saving system (ES)		F
4a. Compressed air connection		piCLASSIC Code
1/8" NPSF (G) female		D
*Push-in 8 mm (5/32")-1/4" female		08
<i>*Compressed air push-in connector included separately.</i>		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Si32-3x1, Non-return Valve, Nitrile Sealing, Energy saving Function, Connections Comp. Air 1/8" NPSF (G) female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.S1AN.F.DD.SV

Dimensional drawing for piCLASSIC Si32-3 ES



piCLASSIC Pi48-3 Energy Saving



- ▶ Integrated Energy Saving device, results in a large air-consumption reduction.
- ▶ Recommended for sealed or almost sealed applications.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ High performance reliability in cases of fluctuating or low compressed air pressure.
- ▶ Deep vacuum level achieved at very low feed pressure, 0.3 MPa.
- ▶ Available with 1 or 2 COAX® Pi48 three-stage cartridges.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.30
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	90
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Noise level at 40 -kPa & optimal feed pressure	dB(A)	65-68
Temperature range	°C	-10-60
Materials		PA, Al, SS, NBR (FKM), CuZn, POM
Hysteresis	kPa	12
Kv, Flow @ P1=0.6 MPa and Δp=0.1 Mpa	NI/s	7.8
Life span	cycles	>10,000,000

Technical data, specific

Weight	Value (g)
1-2 cartridges	600-630
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.30 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	
Pi48-3 x1	2.0	5.6	2.5	1.8	1.1	0.65	0.50	0.35	0.25	0.10	
Pi48-3 x2	4.0	11.2	5.0	3.6	2.2	1.3	1.0	0.70	0.50	0.20	

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.30 MPa*)

COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)									
		10	20	30	40	50	60	70	80	90	
Pi48-3 x1	2.0	0.020	0.060	0.12	0.25	0.45	0.70	1.0	1.6	4.0	
Pi48-3 x2	4.0	0.010	0.030	0.06	0.13	0.23	0.35	0.50	0.80	2.0	

*Feed pressure tolerance, ± 0.01 MPa.

piCLASSIC Xi40-3 Energy Saving



- ▶ Integrated Energy Saving device, results in a large air-consumption reduction.
- ▶ Recommended for sealed or almost sealed applications.
- ▶ Patented COAX® technology inside – the most energy efficient ejector technology.
- ▶ The Xi cartridge offers high flow at deep vacuum levels to 95 -kPa.
- ▶ Available with 1 to 3 COAX® Xi40 three-stage cartridges.
- ▶ Low-weight, configurable and modular design.
- ▶ Easy disassembly for maintenance.

Technical data

Description	Unit	Value
Feed pressure, optimum	MPa	0.45
Feed pressure, max.	MPa	0.7
Max. vacuum	-kPa	95
Internal volume, vacuum chamber, 1-2 cartridges	cm ³	140
Internal volume, vacuum chamber, 3 cartridges	cm ³	246
Noise level at 40 -kPa & optimal feed pressure	dB(A)	64-69
Temperature range	°C	-10-60
Materials		PA, Al, SS, NBR (FKM), CuZn, POM
Hysteresis	kPa	12
Kv, Flow @ P1=0.6 MPa and Δp=0.1 Mpa	NI/s	7.8
Life span	cycles	>10,000,000

Technical data, specific

Weight	Value (g)
1-2 cartridges	600-630
3 cartridges	820
Silencer	120
Vacuum gauge	50

Vacuum flow at recommended feed pressure (0.45 MPa*)

COAX® cartridge	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	5.9	3.0	2.0	1.3	0.73	0.58	0.43	0.32	0.18	0.03
Xi40-3 x2	3.66	11.8	6.0	4.0	2.6	1.46	1.16	0.86	0.64	0.36	0.06
Xi40-3 x3	5.49	17.7	9.0	6.0	3.9	2.19	1.74	1.29	0.96	0.54	0.09

*Feed pressure tolerance, ± 0.01 MPa.

Evacuation time at recommended feed pressure (0.45 MPa*)

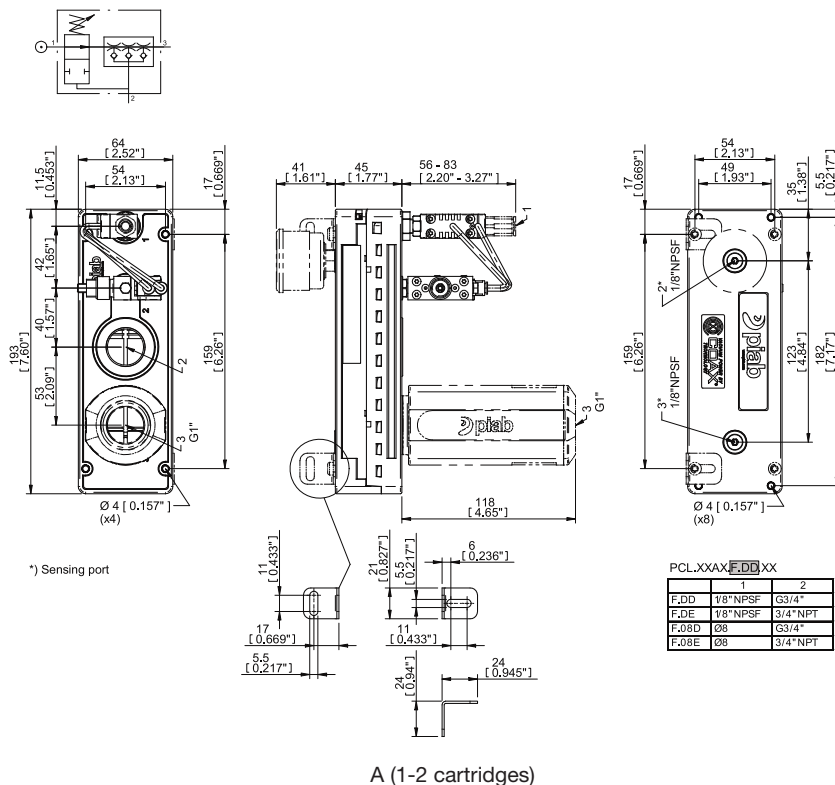
COAX® cartridge	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
Xi40-3 x1	1.83	0.022	0.062	0.12	0.22	0.37	0.57	0.84	1.2	2.2
Xi40-3 x2	3.66	0.011	0.031	0.06	0.11	0.19	0.29	0.42	0.6	1.1
Xi40-3 x3	5.49	0.007	0.021	0.04	0.07	0.12	0.19	0.28	0.4	0.73

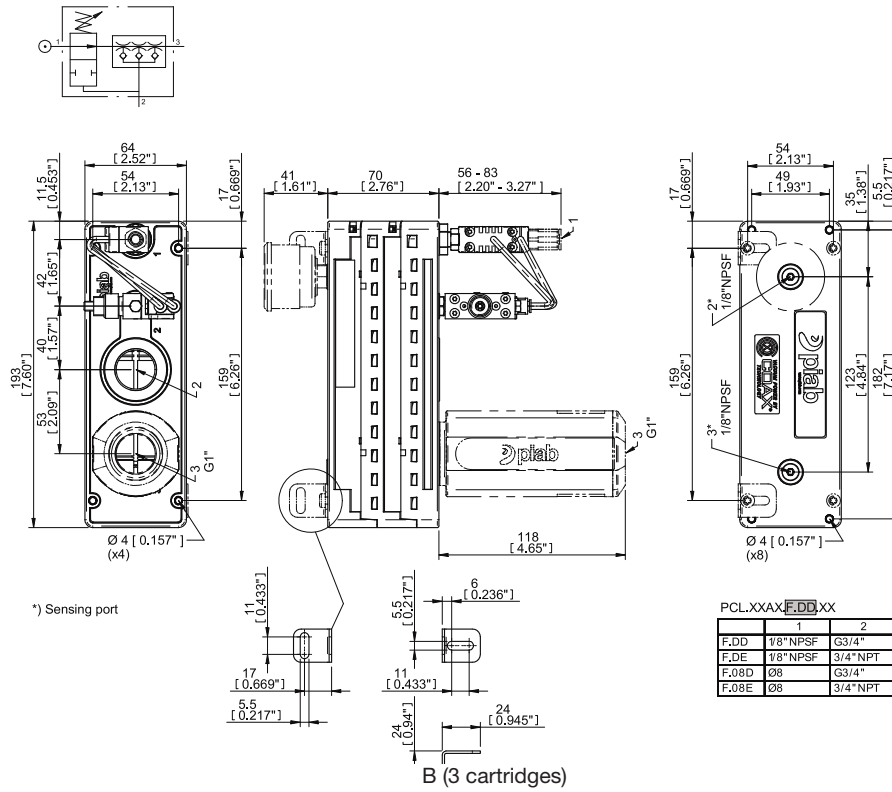
*Feed pressure tolerance, ± 0.01 MPa.

Ordering information

1. Housing		piCLASSIC Code
Housing		PCL
2a. COAX® cartridge modules		piCLASSIC Code
A	COAX® cartridge module Xi40-3x1	X1
A	COAX® cartridge module Xi40-3x2	X2
B	COAX® cartridge module Xi40-3x3	X3
2b. Valve Configuration		piCLASSIC Code
b	Non-return valve	A
2c. Sealing material		piCLASSIC Code
Nitrile		N
Viton		V
3. Function		piCLASSIC Code
Energy saving system (ES)		F
4a. Compressed air connection		piCLASSIC Code
1/8" NPSF (G) female		D
*Push-in 8 mm (5/32")-1/4" female		08
*Compressed air push-in connector included separately.		
4b. Vacuum connection		piCLASSIC Code
G3/4" female		D
3/4" NPT female		E
5. Accessory		piCLASSIC Code
None		X
Silencer G1" male		S
Vacuum gauge		V
Silencer G1" male & vacuum gauge		SV
Example		Ordering number
piCLASSIC Xi40-3x1, Non-return Valve, Nitrile Sealing, Energy saving Function, Connections Comp. Air 1/8" NPSF (G) female--Vacuum G3/4" female, Silencer G1" male & vacuum gauge		PCL.X1AN.F.DD.SV

Dimensional drawing for piCLASSIC Xi40-3 ES





Crossover Classic to piCLASSIC

Classic Art. No.	Classic Code No.	piCLASSIC Art. No.	piCLASSIC Code No.
0103092	M50B5-ADNAF	9904049	PCL.X2AN.F.08D.SV
0103265	M100B6-ADNAF	9904051	PCL.X3AN.F.08D.SV

Mounting brackets



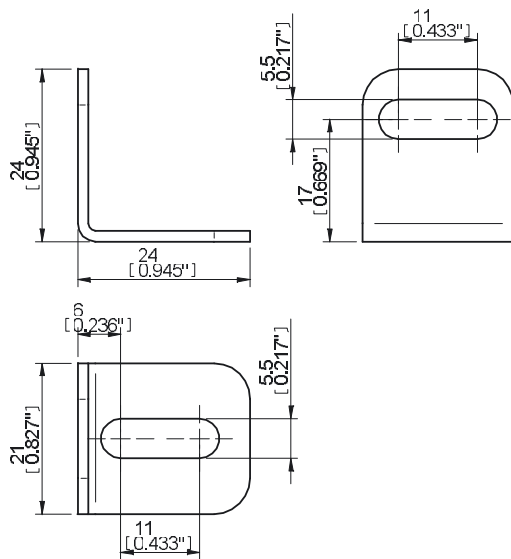
- ▶ Corrosion-resistant material.
- ▶ Included as a set (2 pieces) with each vacuum pump.
- ▶ Suitable for vacuum pumps piCLASSIC.

Technical data

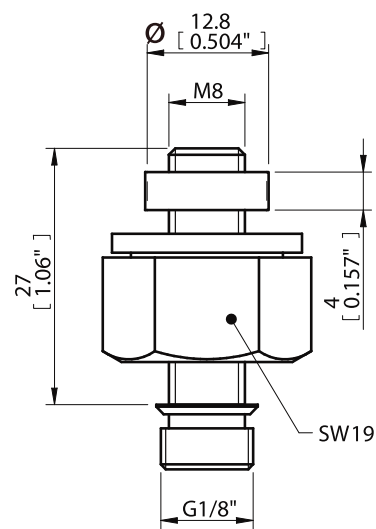
Description	Unit	Value	
		0124869	0125073
Weight	g	10-27	56
Material		SS	Al, SS, Steel

Ordering information

	Description	Art. No.
A	Mounting bracket piCLASSIC cpl	0124869
B	Mounting kit M8/27 piCLASSIC, profile	0125073



A



B