

Pi12-2



- ▶ Two-stage COAX® cartridge - MINI - with small mounting dimensions.
- ▶ Vacuum level to 90 -kPa at low feed pressures.
- ▶ High operational reliability in case of fluctuating or low compressed-air pressure.
- ▶ Suitable for handling sealed objects.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	2.6-9.7
Material		Al, NBR, PA, SS

Vacuum flow

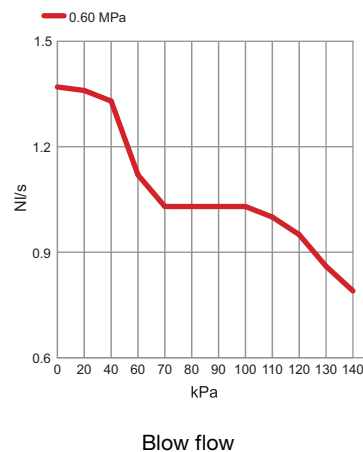
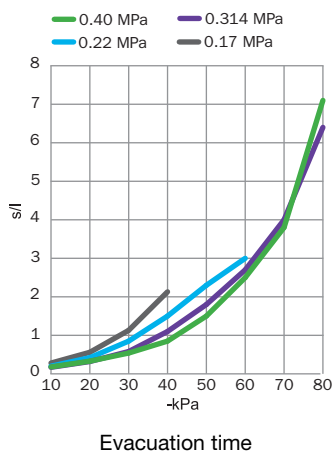
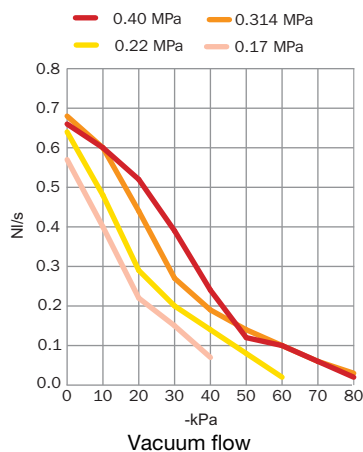
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80		
0.17	0.29	0.57	0.40	0.22	0.15	0.070	—	—	—	—	49	
0.22	0.34	0.64	0.48	0.29	0.20	0.14	0.080	0.020	—	—	64	
0.314	0.44	0.68	0.60	0.44	0.27	0.19	0.14	0.10	0.060	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

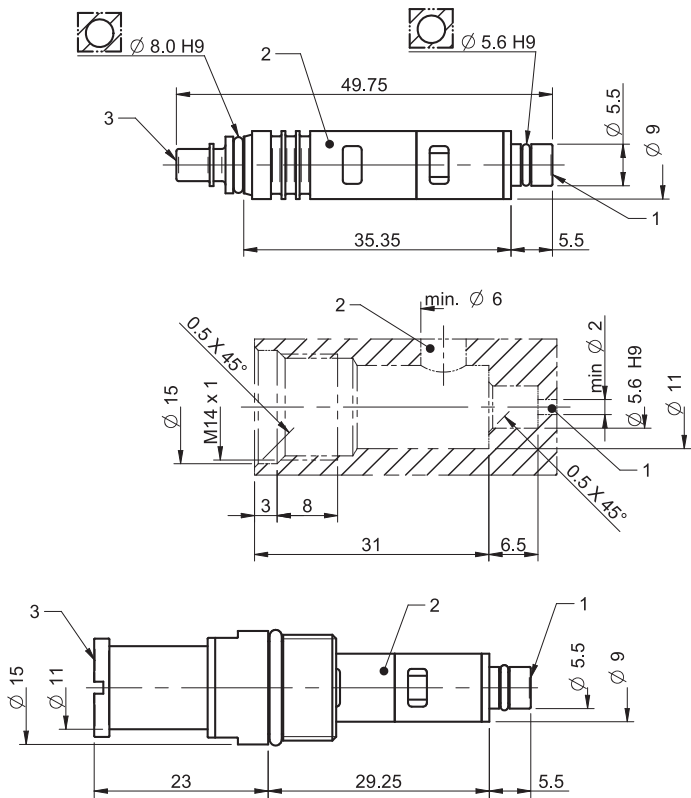
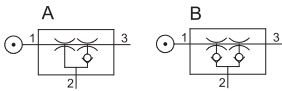
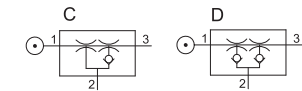
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)												Max pressure kPa
		0	20	40	60	70	80	90	100	110	120	130	140	
0.6	0.75	1.37	1.36	1.33	1.12	1.03	1.03	1.03	1.03	1.0	0.95	0.86	0.79	140



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Pi12-2	0106922
A	COAX® cartridge MINI Pi12-2, holding cap	0106924
D	COAX® cartridge MINI Pi12-2, extra non-return valve	0106963
B	COAX® cartridge MINI Pi12-2, holding cap, extra non-return valve	0106964



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977

Pi12-3



- ▶ Three-stage COAX® cartridge - MINI - with high initial vacuum flow.
- ▶ Vacuum level to 90 -kPa at low feed pressure.
- ▶ High system reliability in case of fluctuating or low feed pressure.
- ▶ Suitable for handling sealed objects with high pick-up speed.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	4.7-12.5
Material		Al, NBR, PA, SS

Vacuum flow

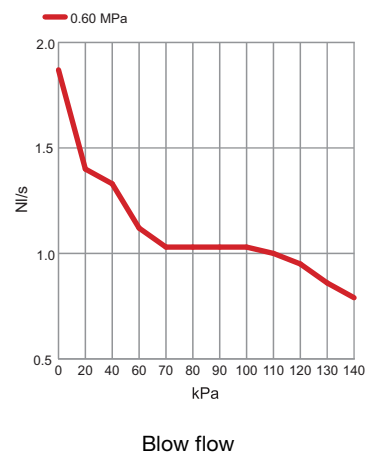
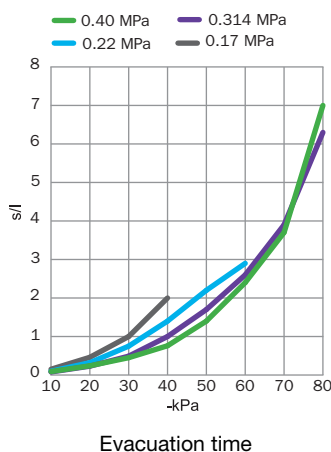
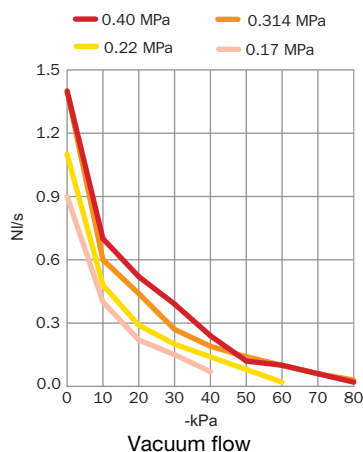
Feed pressure	Air consumption	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum
MPa	NI/s	0	10	20	30	40	50	60	70	80	-kPa	
0.17	0.29	0.90	0.40	0.22	0.15	0.07	—	—	—	—	49	
0.22	0.34	1.10	0.48	0.29	0.20	0.14	0.08	0.02	—	—	64	
0.314	0.44	1.40	0.60	0.44	0.27	0.19	0.14	0.10	0.06	0.03	90	
0.40	0.53	1.40	0.70	0.52	0.39	0.24	0.12	0.10	0.06	0.02	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	0.15	0.46	1.00	2.00	—	—	—	—	49
0.22	0.34	0.10	0.32	0.75	1.40	2.20	2.90	—	—	64
0.314	0.44	0.08	0.23	0.49	1.00	1.70	2.60	3.90	6.30	90
0.40	0.53	0.09	0.24	0.45	0.76	1.40	2.40	3.70	7.00	84

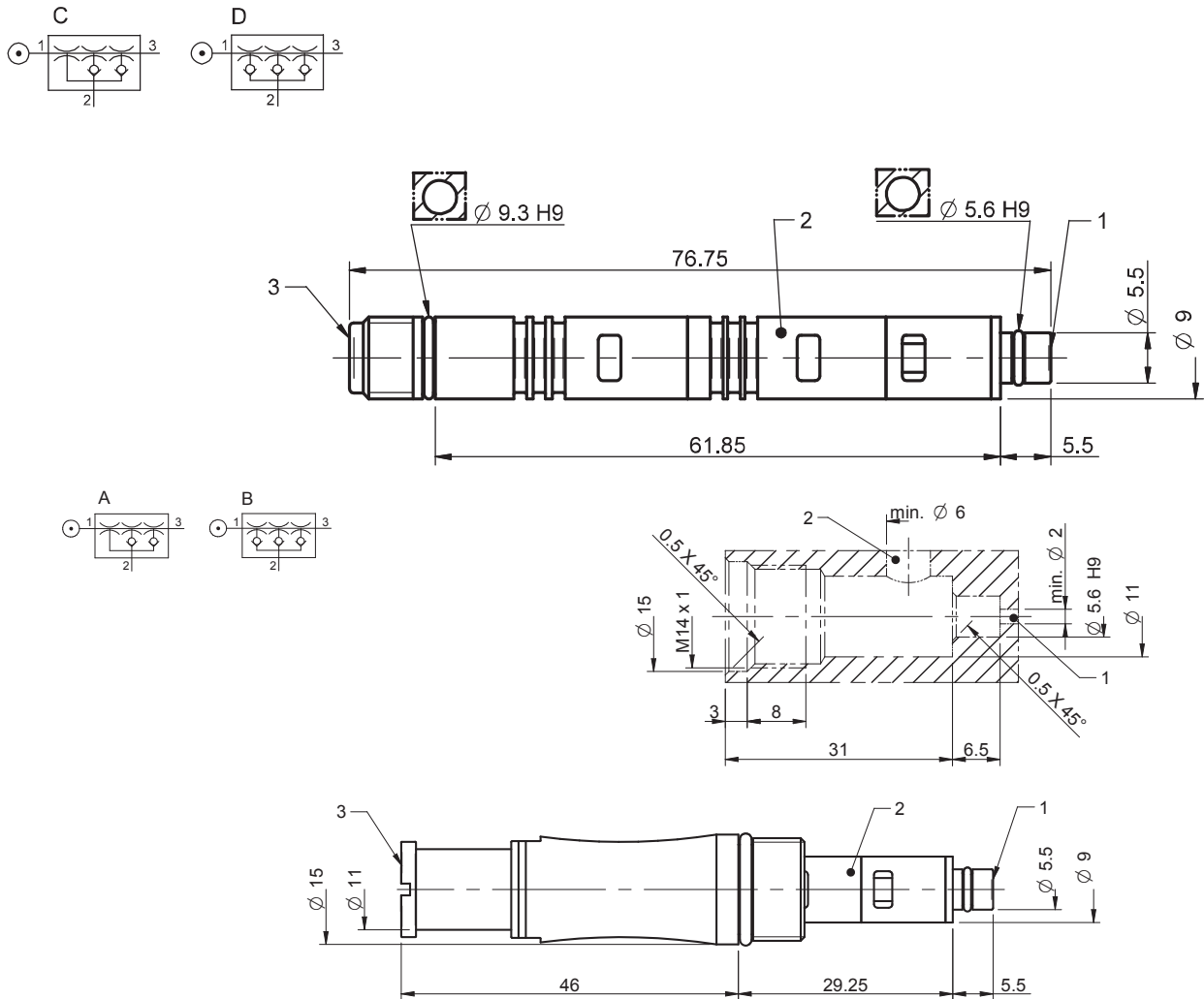
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)												Max pressure kPa
		0	20	40	60	70	80	90	100	110	120	130	140	
0.6	0.75	1.87	1.4	1.33	1.12	1.03	1.03	1.03	1.03	1.0	0.95	0.86	0.79	140



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Pi12-3	0106895
A	COAX® cartridge MINI Pi12-3, holding cap	0106923
D	COAX® cartridge MINI Pi12-3, extra non-return valve	0106956
B	COAX® cartridge MINI Pi12-3, holding cap, extra non-return valve	0106957



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977
Exhaust adapter	0106344

Pi12-3 FS



- ▶ Three-stage COAX® cartridge - MINI - with high initial vacuum flow.
- ▶ Includes a flow-through silencer and a built-in vacuum filter for harsh environments.
- ▶ Vacuum level to 90 -kPa at low feed pressure.
- ▶ High system reliability in case of fluctuating or low feed pressure.
- ▶ Suitable for handling sealed objects with high pick-up speed.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	11.4
Material		NBR, PA, PP, SS

Vacuum flow

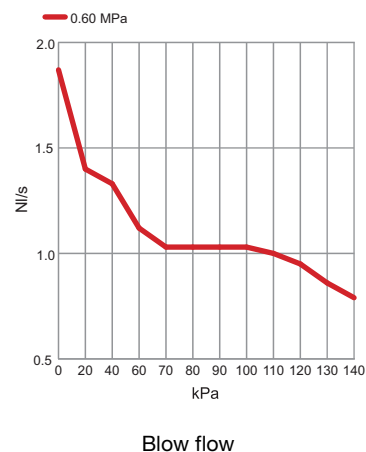
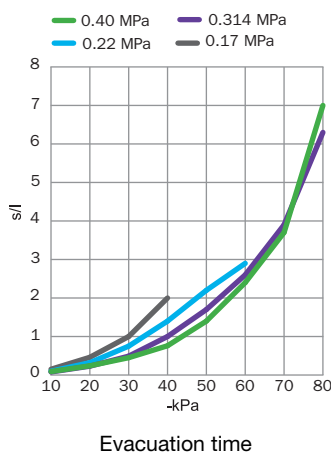
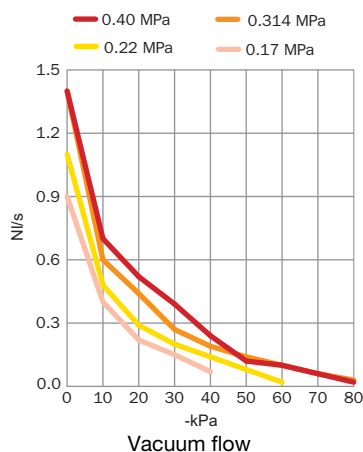
Feed pressure	Air consumption	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum
MPa	NI/s	0	10	20	30	40	50	60	70	80	-kPa	
0.17	0.29	0.90	0.40	0.22	0.15	0.07	—	—	—	—	49	
0.22	0.34	1.10	0.48	0.29	0.20	0.14	0.08	0.02	—	—	64	
0.314	0.44	1.40	0.60	0.44	0.27	0.19	0.14	0.10	0.06	0.03	90	
0.40	0.53	1.40	0.70	0.52	0.39	0.24	0.12	0.10	0.06	0.02	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	0.15	0.46	1.00	2.00	—	—	—	—	49
0.22	0.34	0.10	0.32	0.75	1.40	2.20	2.90	—	—	64
0.314	0.44	0.08	0.23	0.49	1.00	1.70	2.60	3.90	6.30	90
0.40	0.53	0.09	0.24	0.45	0.76	1.40	2.40	3.70	7.00	84

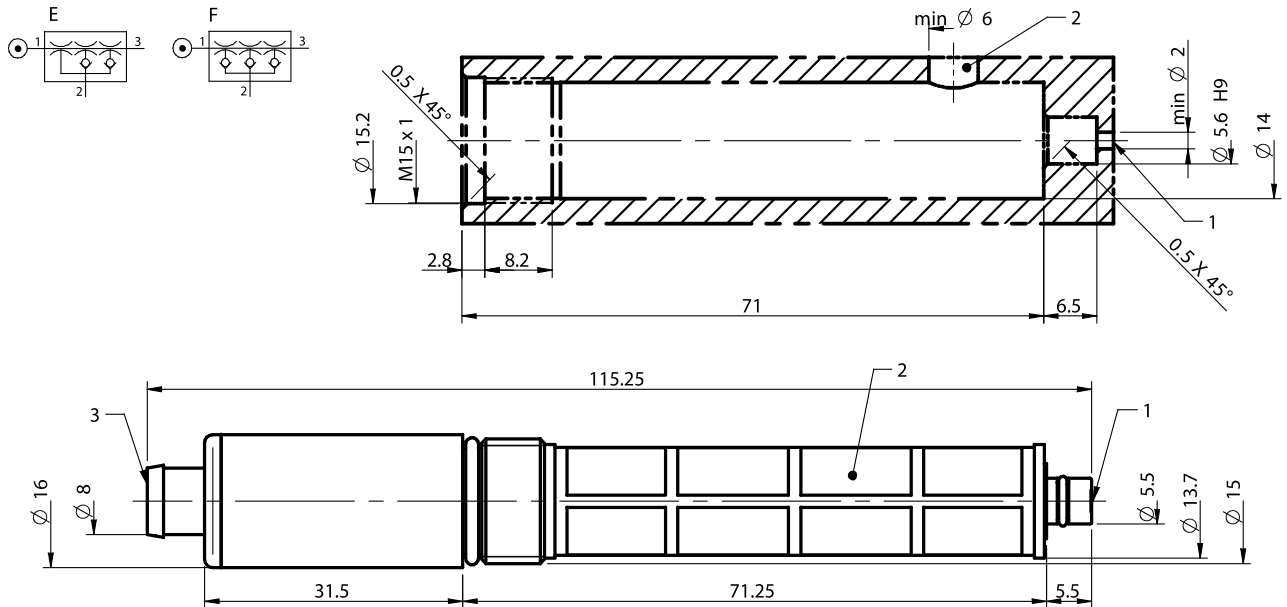
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)												Max pressure kPa
		0	20	40	60	70	80	90	100	110	120	130	140	
0.6	0.75	1.87	1.4	1.33	1.12	1.03	1.03	1.03	1.03	1.0	0.95	0.86	0.79	140



Ordering information

	Description	Art. No.
E	COAX® cartridge MINI Pi12-3, holding cap silencer, vacuum filter	0104265
F	COAX® cartridge MINI Pi12-3, extra non-return valve, holding cap silencer, vacuum filter	0106676



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977
Exhaust adapter	0106344

Si08-2



- ▶ Two-stage COAX® cartridge - MINI - with small mounting dimensions.
- ▶ Large vacuum flow in relation to energy consumption.
- ▶ Good for handling porous materials or if surface leakage is present.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10–80
Weight	g	2.8–9.9
Material		Al, NBR, PA, SS

Vacuum flow

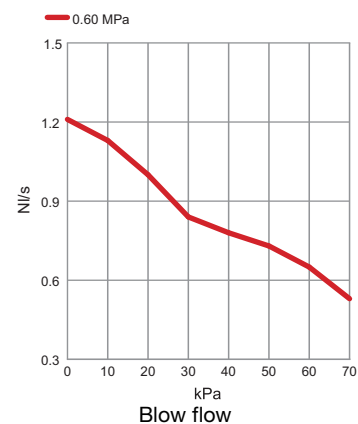
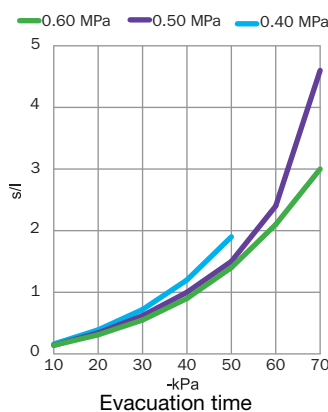
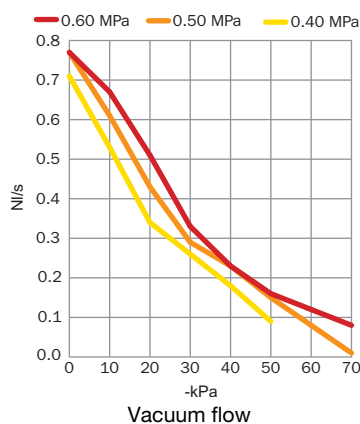
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum -kPa
		0	10	20	30	40	50	60	70	
0.40	0.31	0.71	0.53	0.34	0.26	0.18	0.09	0.01	—	60
0.50	0.38	0.77	0.61	0.43	0.29	0.23	0.15	0.08	0.01	70
0.60	0.44	0.77	0.67	0.51	0.33	0.23	0.16	0.12	0.08	75

Evacuation time

Feed pressure	Air consumption	Evacuation time (s/l) to reach different vacuum levels (-kPa)							Max vacuum
MPa	NI/s	10	20	30	40	50	60	70	-kPa
0.40	0.31	0.16	0.39	0.72	1.2	1.9	3.9	—	60
0.50	0.38	0.14	0.34	0.62	1.0	1.5	2.4	4.6	70
0.60	0.44	0.14	0.31	0.55	0.9	1.4	2.1	3.1	75

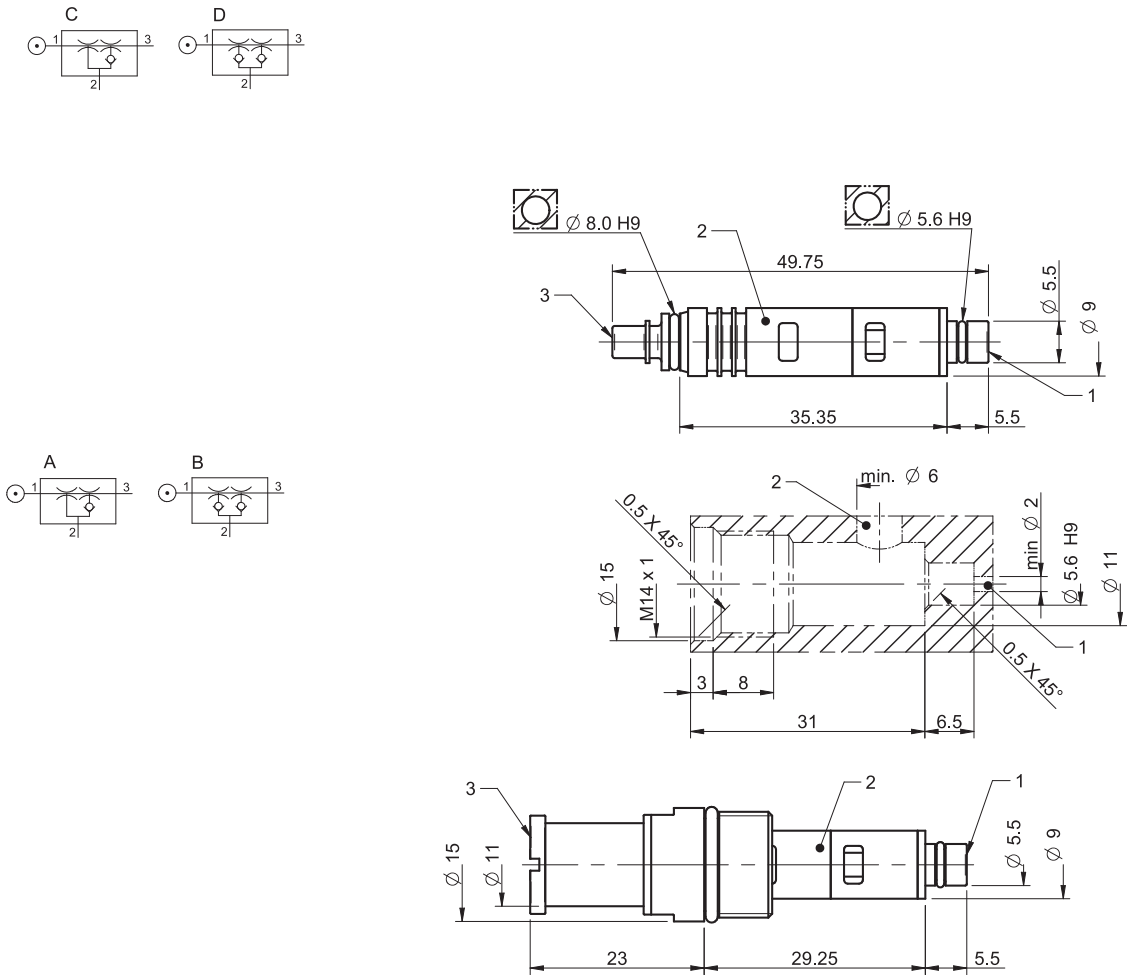
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)								Max pressure kPa
		0	10	20	30	40	50	60	70	
0.60	0.44	1.21	1.13	1.0	0.84	0.78	0.73	0.65	0.53	70



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Si08-2	0113583
A	COAX® cartridge MINI Si08-2, holding cap	0113585
D	COAX® cartridge MINI Si08-2, extra non-return valve	0113587
B	COAX® cartridge MINI Si08-2, holding cap, extra non-return valve	0113589



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977

Si08-3



- ▶ Three-stage COAX® cartridge - MINI - with extra high initial vacuum flow.
- ▶ Large vacuum flow in relation to energy consumption.
- ▶ Good for handling porous materials or if surface leakage is present. Recommended for high speed applications.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	4.9-12.7
Material		Al, NBR, PA, SS

Vacuum flow

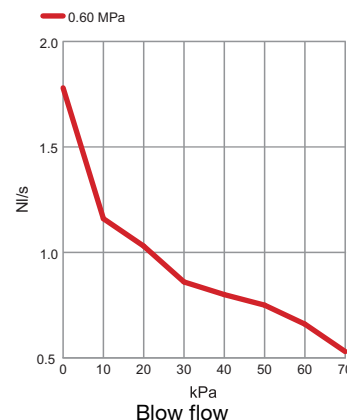
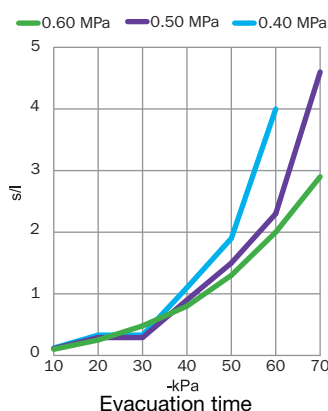
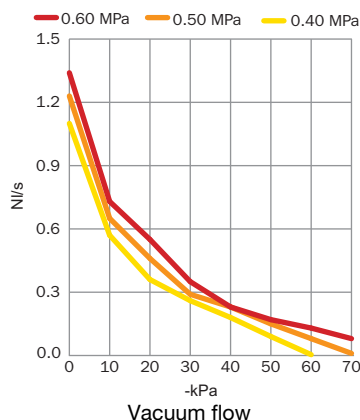
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum -kPa
		0	10	20	30	40	50	60	70	
0.40	0.31	1.10	0.57	0.36	0.26	0.18	0.09	—	—	60
0.50	0.38	1.23	0.65	0.46	0.29	0.23	0.15	0.08	0.01	70
0.60	0.44	1.34	0.73	0.55	0.35	0.23	0.17	0.13	0.08	75

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	
0.40	0.31	0.12	0.33	0.66	1.10	1.90	—	—	60
0.50	0.38	0.11	0.29	0.55	0.90	1.50	2.30	4.60	70
0.60	0.44	0.10	0.25	0.48	0.80	1.30	2.00	2.90	75

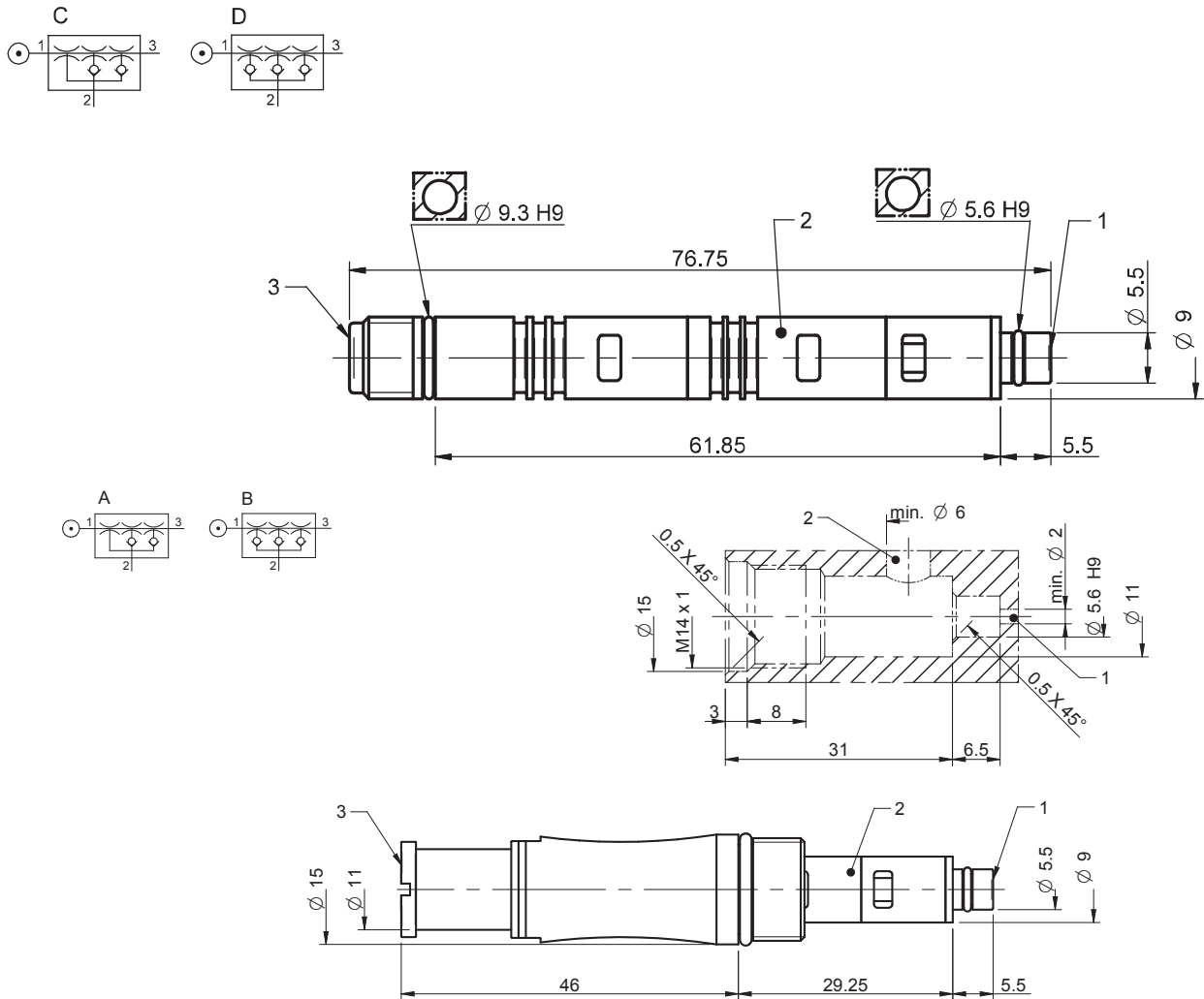
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)								Max pressure kPa
		0	10	20	30	40	50	60	70	
0.60	0.44	1.78	1.16	1.03	0.86	0.80	0.75	0.66	0.53	70



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Si08-3	0113214
A	COAX® cartridge MINI Si08-3, holding cap	0113572
D	COAX® cartridge MINI Si08-3, extra non-return valve	0113575
B	COAX® cartridge MINI Si08-3, holding cap, extra non-return valve	0113577



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977
Exhaust adapter	0106344

Si08-3 FS



- ▶ Three-stage COAX® cartridge - MINI - with extra high initial vacuum flow.
- ▶ Includes a flow-through silencer and a built-in vacuum filter for harsh environments.
- ▶ Large vacuum flow in relation to energy consumption.
- ▶ Good for handling porous materials or if leakage is present. Recommended for high speed applications.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	11.4
Material		NBR, PA, PP, SS

Vacuum flow

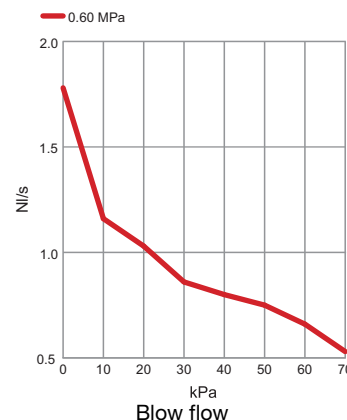
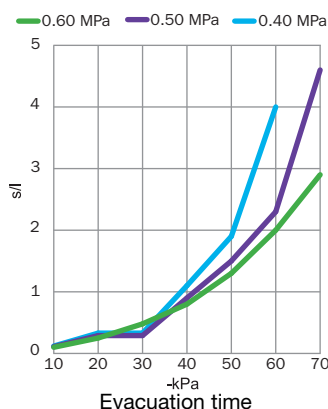
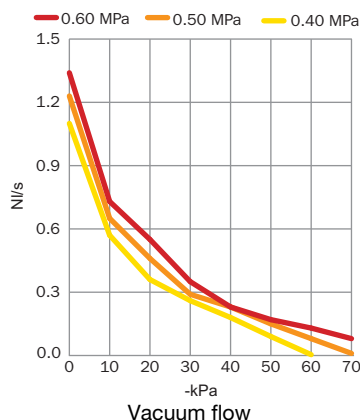
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum -kPa
		0	10	20	30	40	50	60	70	
0.40	0.31	1.10	0.57	0.36	0.26	0.18	0.09	—	—	60
0.50	0.38	1.23	0.65	0.46	0.29	0.23	0.15	0.08	0.01	70
0.60	0.44	1.34	0.73	0.55	0.35	0.23	0.17	0.13	0.08	75

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	
0.40	0.31	0.12	0.33	0.66	1.10	1.90	—	—	60
0.50	0.38	0.11	0.29	0.55	0.90	1.50	2.30	4.60	70
0.60	0.44	0.10	0.25	0.48	0.80	1.30	2.00	2.90	75

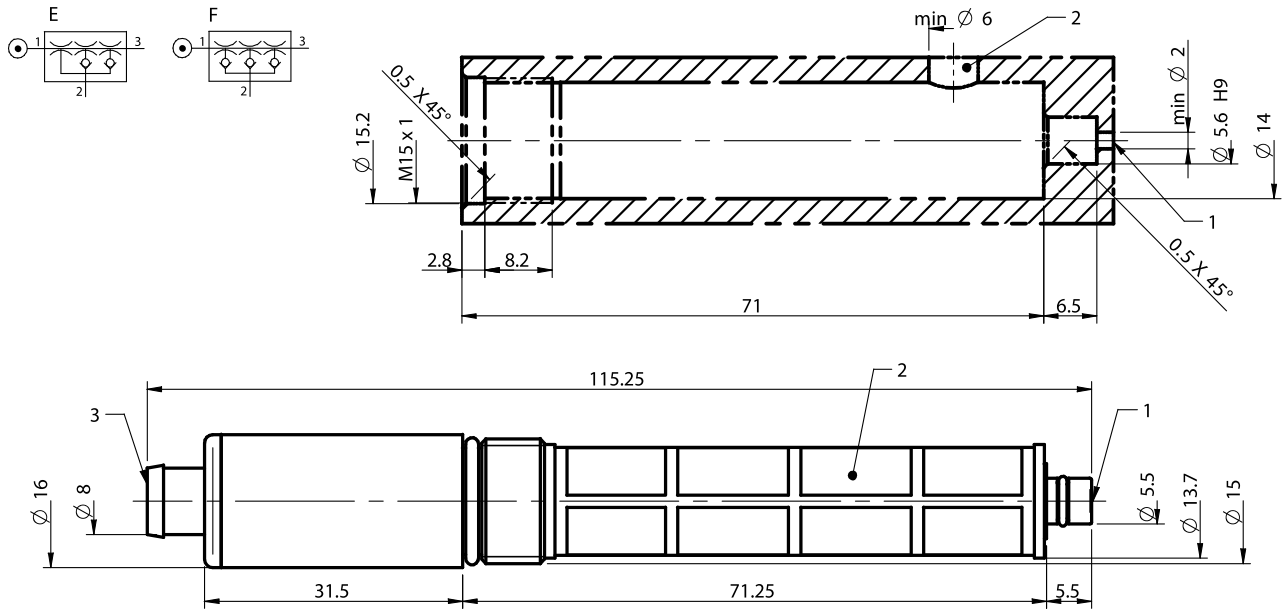
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)							Max pressure kPa
		0	10	20	30	40	50	60	
0.60	0.44	1.78	1.16	1.03	0.86	0.80	0.75	0.66	70



Ordering information

	Description	Art. No.
E	COAX® cartridge MINI Si08-3, holding cap silencer, vacuum filter	0113579
F	COAX® cartridge MINI Si08-3, extra non-return valve, holding cap silencer, vacuum filter	0113581



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977
Exhaust adapter	0106344

Xi10-2



- ▶ Two-stage COAX® cartridge - MINI - with small mounting dimensions.
- ▶ High vacuum flow at deep vacuum levels to 94 -kPa.
- ▶ Large vacuum flow in relation to energy consumption.
- ▶ Quick response time when deep vacuum is needed.
- ▶ Good for handling sealed materials.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	2.6-9.7
Material		Al, NBR, PA, SS

Vacuum flow

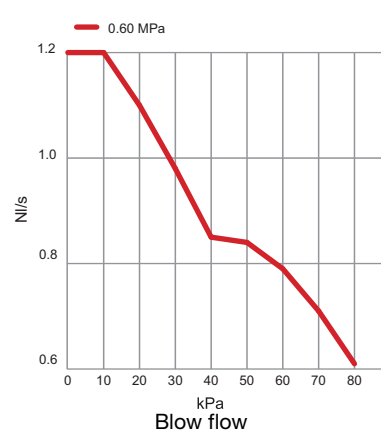
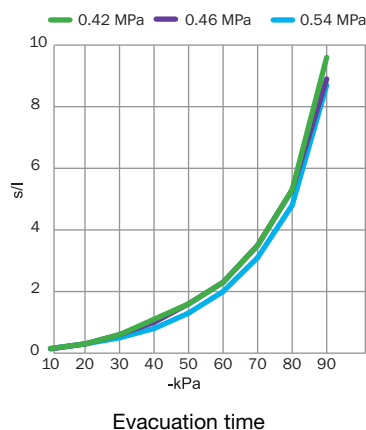
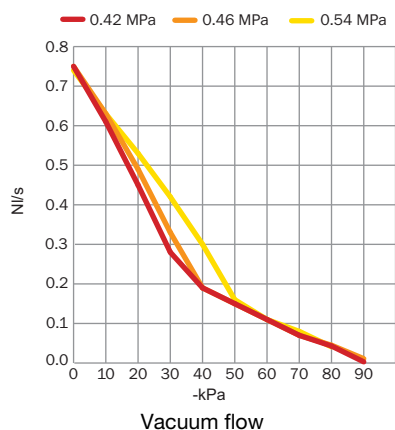
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80	90	
0.45	0.42	0.75	0.61	0.45	0.28	0.19	0.15	0.11	0.07	0.043	0.003	92
0.5	0.46	0.75	0.63	0.49	0.33	0.19	0.15	0.11	0.07	0.045	0.011	94
0.6	0.54	0.74	0.63	0.53	0.42	0.30	0.16	0.11	0.08	0.041	0.010	93

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	90		
0.45	0.42	0.15	0.3	0.6	1.1	1.6	2.3	3.5	5.3	9.6	92	
0.5	0.46	0.14	0.3	0.6	1.0	1.6	2.3	3.5	5.3	8.9	94	
0.6	0.54	0.15	0.3	0.5	0.8	1.3	2.0	3.1	4.8	8.7	93	

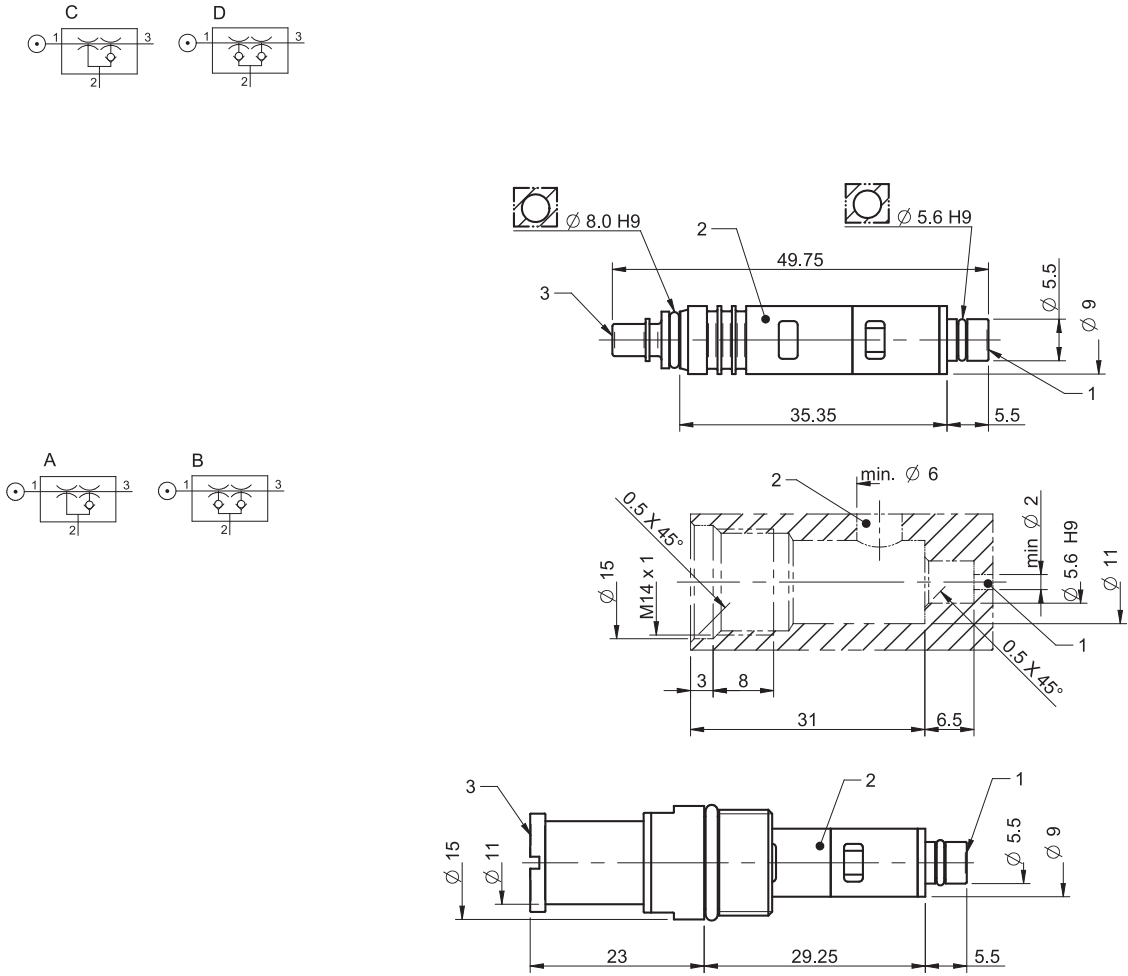
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)									Max pressure kPa
		0	10	20	30	40	50	60	70	80	
0.6	0.54	1.2	1.2	1.1	0.98	0.85	0.84	0.79	0.71	0.61	90



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Xi10-2	0120284
A	COAX® cartridge MINI Xi10-2, holding cap	0120294
D	COAX® cartridge MINI Xi10-2, extra non-return valve	0120280
B	COAX® cartridge MINI Xi10-2, holding cap, extra non-return valve	0120300



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977

Xi10-3



- ▶ Three-stage COAX® cartridge – MINI.
- ▶ High vacuum flow at deep vacuum levels to 94 -kPa.
- ▶ Quick response time when deep vacuum is needed.
- ▶ Suitable for handling sealed objects with high pick-up speed.
- ▶ Large vacuum flow in relation to energy consumption

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	4.7-12.5
Material		Al, NBR, PA, SS

Vacuum flow

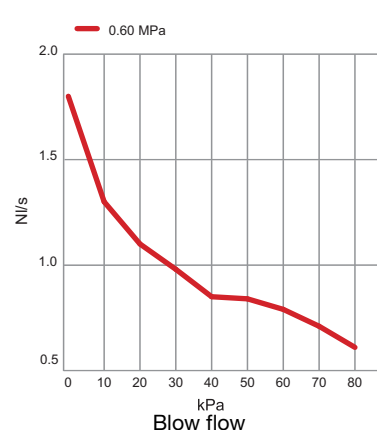
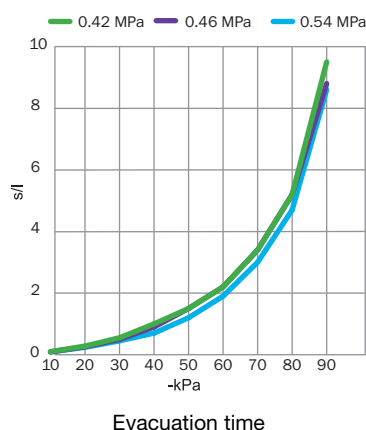
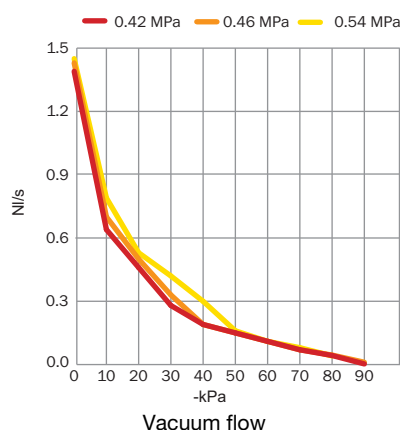
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80	90	
0.45	0.42	1.39	0.64	0.46	0.28	0.19	0.15	0.11	0.07	0.043	0.003	92
0.5	0.46	1.43	0.70	0.50	0.33	0.19	0.15	0.11	0.07	0.045	0.011	94
0.6	0.54	1.45	0.79	0.53	0.42	0.30	0.16	0.11	0.08	0.041	0.010	93

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	90		
0.45	0.42	0.1	0.28	0.55	1.0	1.5	2.2	3.4	5.2	9.5	92	
0.5	0.46	0.09	0.26	0.50	0.90	1.5	2.2	3.4	5.2	8.8	94	
0.6	0.54	0.09	0.24	0.45	0.70	1.2	1.9	3.0	4.7	8.6	93	

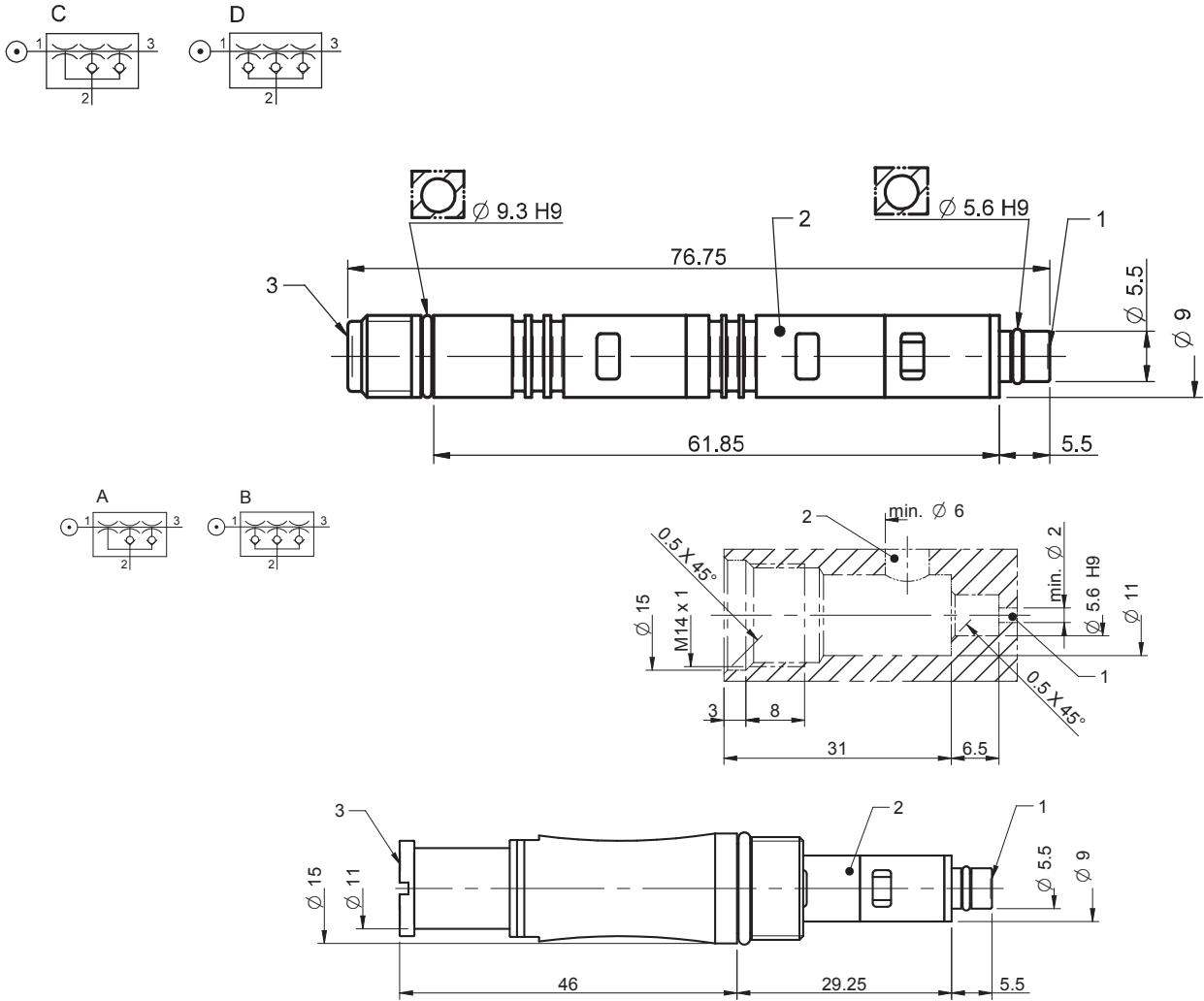
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)									Max pressure kPa
		0	10	20	30	40	50	60	70	80	
0.6	0.54	1.8	1.3	1.1	0.98	0.85	0.84	0.79	0.71	0.61	90



Ordering information

	Description	Art. No.
C	COAX® cartridge MINI Xi10-3	0120286
A	COAX® cartridge MINI Xi10-3, holding cap	0120299
D	COAX® cartridge MINI Xi10-3, extra non-return valve	0120289
B	COAX® cartridge MINI Xi10-3, holding cap, extra non-return valve	0120298



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977

Xi10-3 FS



- ▶ Three-stage COAX® cartridge - MINI.
- ▶ Includes a flow-through silencer and a built-in vacuum filter for harsh environments.
- ▶ High vacuum flow at deep vacuum levels to 94 - kPa.
- ▶ Quick response time when deep vacuum is needed.
- ▶ Suitable for handling sealed objects with high pick-up speed.
- ▶ Large vacuum flow in relation to energy consumption.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	-10-80
Weight	g	12.5
Material		NBR, PA, PP, SS

Vacuum flow

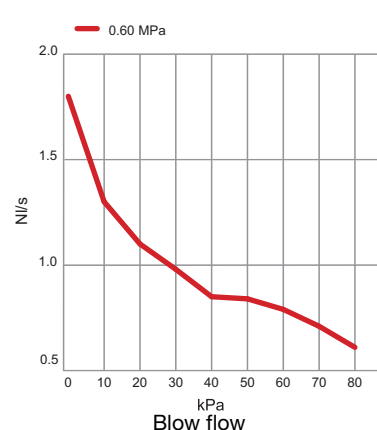
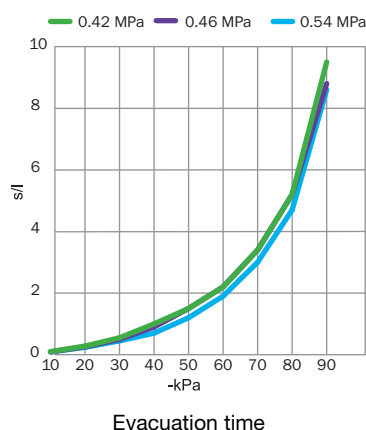
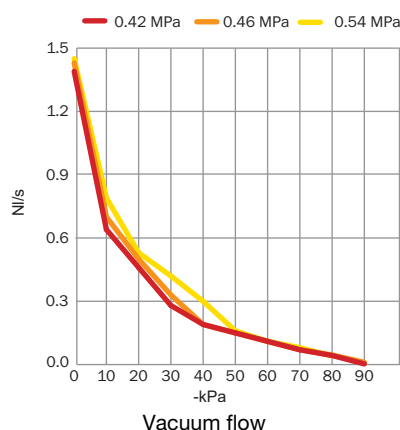
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80	90	
0.45	0.42	1.39	0.64	0.46	0.28	0.19	0.15	0.11	0.07	0.043	0.003	92
0.5	0.46	1.43	0.70	0.50	0.33	0.19	0.15	0.11	0.07	0.045	0.011	94
0.6	0.54	1.45	0.79	0.53	0.42	0.30	0.16	0.11	0.08	0.041	0.010	93

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	90		
0.45	0.42	0.1	0.28	0.55	1.0	1.5	2.2	3.4	5.2	9.5	92	
0.5	0.46	0.09	0.26	0.50	0.90	1.5	2.2	3.4	5.2	8.8	94	
0.6	0.54	0.09	0.24	0.45	0.70	1.2	1.9	3.0	4.7	8.6	93	

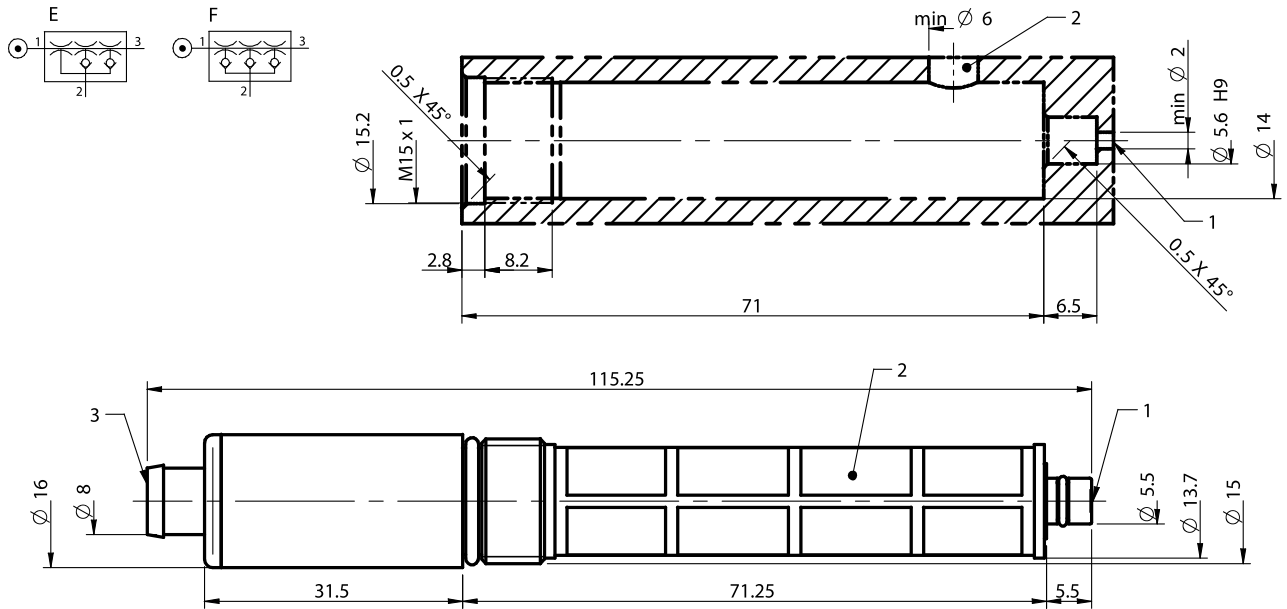
Blow flow

Feed pressure MPa	Air consumption NI/s	Blow flow (NI/s) at different pressure levels (kPa)									Max pressure kPa
		0	10	20	30	40	50	60	70	80	
0.6	0.54	1.8	1.3	1.1	0.98	0.85	0.84	0.79	0.71	0.61	90



Ordering information

	Description	Art. No.
E	COAX® cartridge MINI Xi10-3, holding cap silencer, vacuum filter	0120775
F	COAX® cartridge MINI Xi10-3, extra non-return valve, holding cap silencer, vacuum filter	0120776



Ordering information, accessories

Description	Art. No.
Silencer COAX® MINI	0111977
Exhaust adapter	0106344