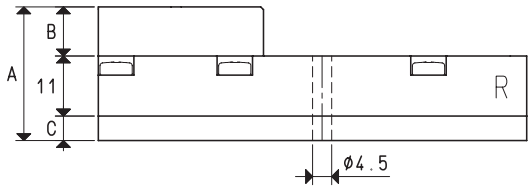
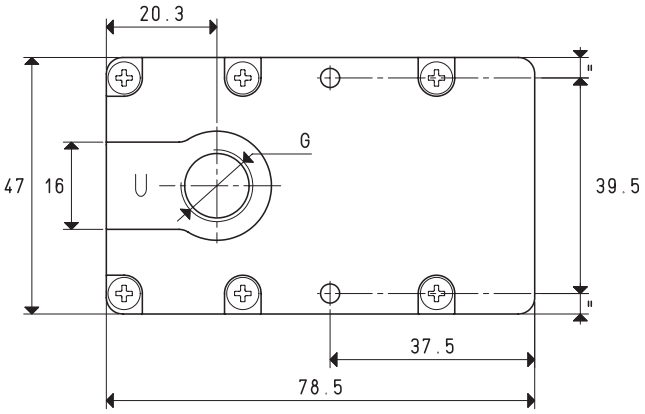
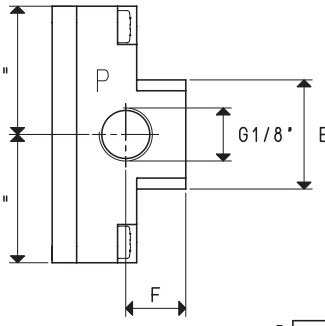
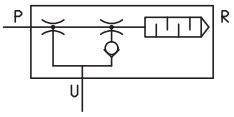
MULTI-STAGE VACUUM GENERATORS SERIES M

These new design vacuum generators feature multiple state of the art ejectors assembled onto small modules. One of their distinctive features is their great suction flow rate compared to their reduced size.
With a compressed air supply of 4 - 5 bar, they can produce a maximum vacuum equal to 85% and a suction flow rate of 3.6 - 18 m³/h, according to the number of modules.
The silencer is built-in.
They are fully made with slightly anodised alloys and can be installed in any position. The multi-stage vacuum generators in this range are suited for interconnecting vacuum cup gripping systems and, in particular, in the industrial robotics sector, which requires equipment with excellent working performance, but with weight and size reduced to the minimum.









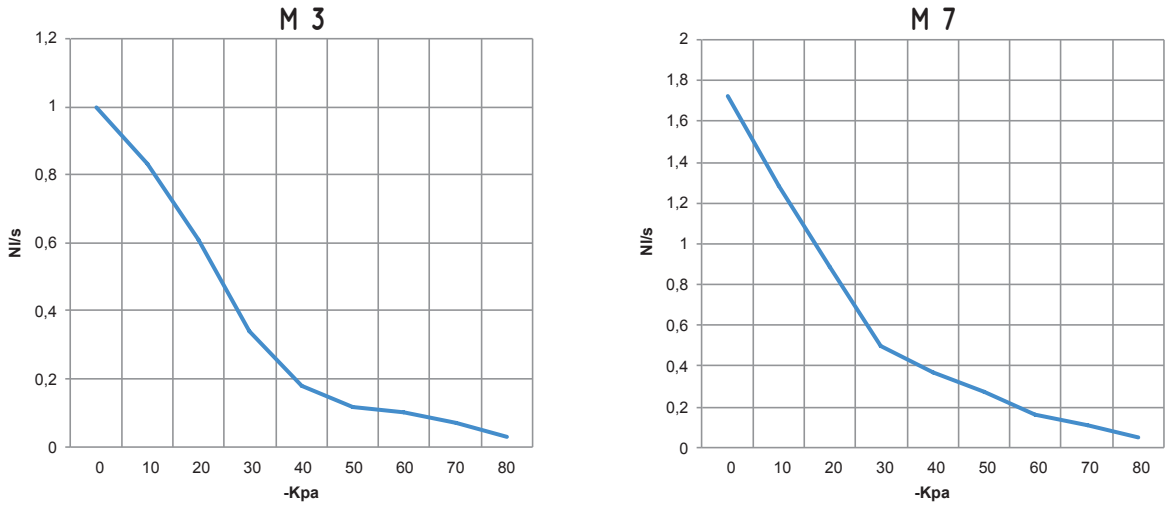
P=COMPRESSED AIR CONNECTION R=EXHAUST U=VACUUM CONNECTION

Item		M 3			M 7		
Intake air flow rate	m³/h	3	3.4	3.6	5.4	5.8	6.2
Maximum level of vacuum	-KPa	62	82	85	62	82	85
Final pressure	mbar abs.	380	180	150	380	180	150
Supply pressure	bar	3	4	5	3	4	5
Optimal supply pressure	bar			5			5
Air consumption	Nl/s	0.5	0.7	0.8	0.8	1.2	1.4
Operating temperature	°C			-10 / +80			-10 / +80
Noise level at optimal supply pressure	dB(A)			64			70
Weight	g			109			111
A				24.5			25.5
B				9			10
C				4.5			4.5
E	Ø			20			24
F				11			12
G	Ø			G1/4"			G3/8"

Spare parts		M 3	M 7
Sealing kit and reed valves	item	00 KIT M 3	00 KIT M 7
Exhaust silencer	item	00 15 150	00 15 150

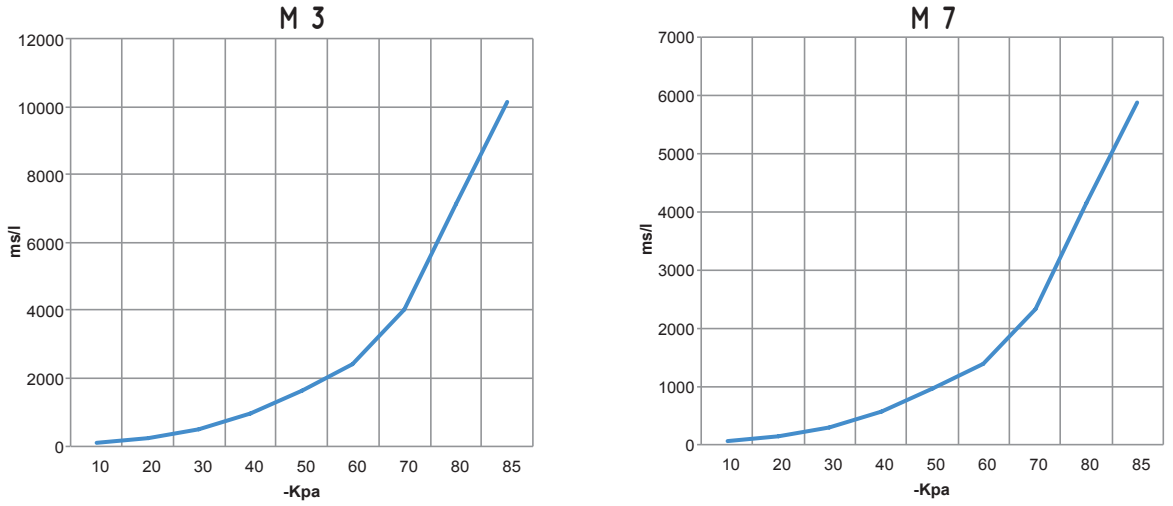
Note: All vacuum values indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.
Vacuum generator supply must be carried out with non-lubricated compressed air, 5 micron filtration, in accordance with standard **ISO 8573-1 class 4**.

Air flow rate (Nl/s) at different level of vacuum (-KPa) at optimal supply pressure

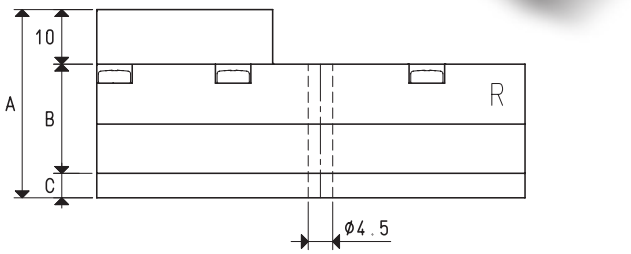


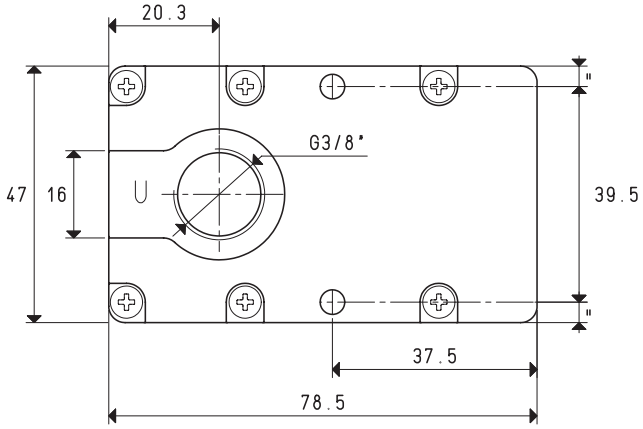
Generator item	Supp. press. bar	Air consumption Nl/s	Air flow rate (Nl/s) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			0	10	20	30	40	50	60	70	80	-KPa
M 3	5.0	0.8	1.00	0.83	0.61	0.34	0.18	0.12	0.10	0.07	0.03	85
M 7	5.0	1.4	1.72	1.28	0.89	0.50	0.37	0.27	0.16	0.11	0.05	85

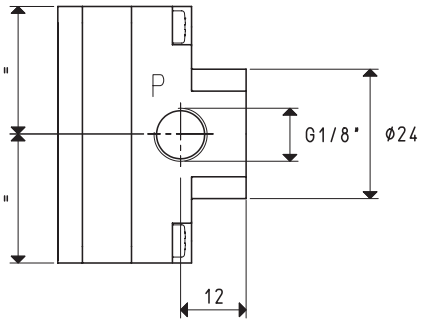
Evacuation rates (ms/l = s/m³) at different levels of vacuums (-KPa) at optimal supply pressure

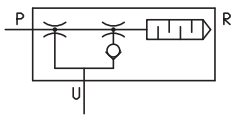


Generator item	Supp. press. bar	Air consumption Nl/s	Evacuation rates (ms/l= s/m³) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			10	20	30	40	50	60	70	80	85	-KPa
M 3	5.0	0.8	106	244	491	969	1642	2398	4004	7128	10122	85
M 7	5.0	1.4	61	142	285	563	954	1394	2328	4144	5885	85









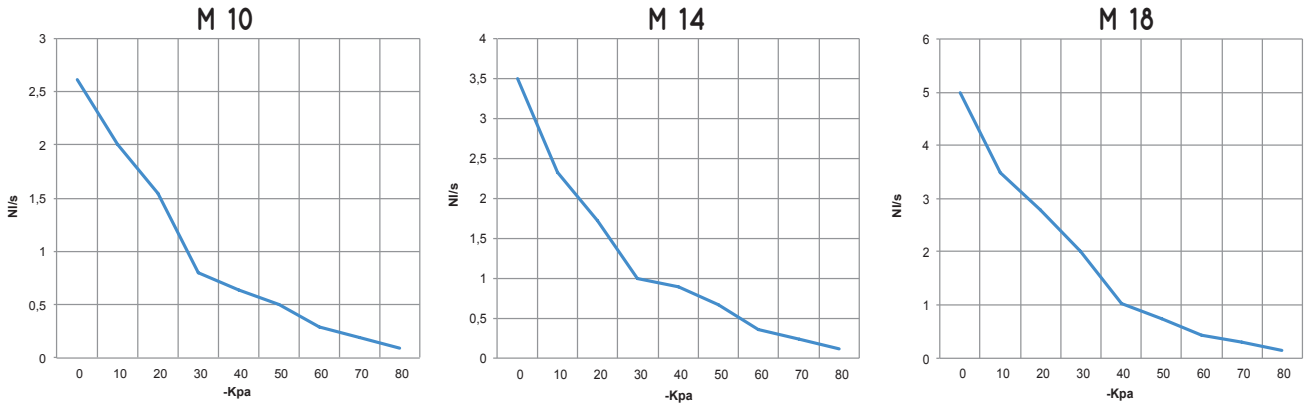
P=COMPRESSED AIR CONNECTION R=EXHAUST U=VACUUM CONNECTION

Item		M 10			M 14			M 18		
Intake air flow rate	m^3/h	7.7	8.5	9.4	10.2	11.6	12.6	14.8	16.5	18.0
Maximum level of vacuum	-KPa	62	82	85	62	82	85	62	82	85
Final pressure	mbar abs.	380	180	150	380	180	150	380	180	150
Supply pressure	bar	3	4	5	3	4	5	3	4	5
Optimal supply pressure	bar			5			5			5
Air consumption	Nl/s	1.2	1.6	1.9	1.7	2.1	2.5	2.3	2.9	3.6
Operating temperature	°C			-10 / +80			-10 / +80			-10 / +80
Noise level at optimal supply pressure	dB(A)			72			72			76
Weight	g			144			145			150
A				34.5			34.5			44.5
B				20			20			30
C				4.5			4.5			4.5

Spare parts		M 10	M 14	M 18
Sealing kit and reed valves	item	00 KIT M 10	00 KIT M 14	00 KIT M 18
Exhaust silencer	item	N°2 00 15 150	N°2 00 15 150	N°3 00 15 150

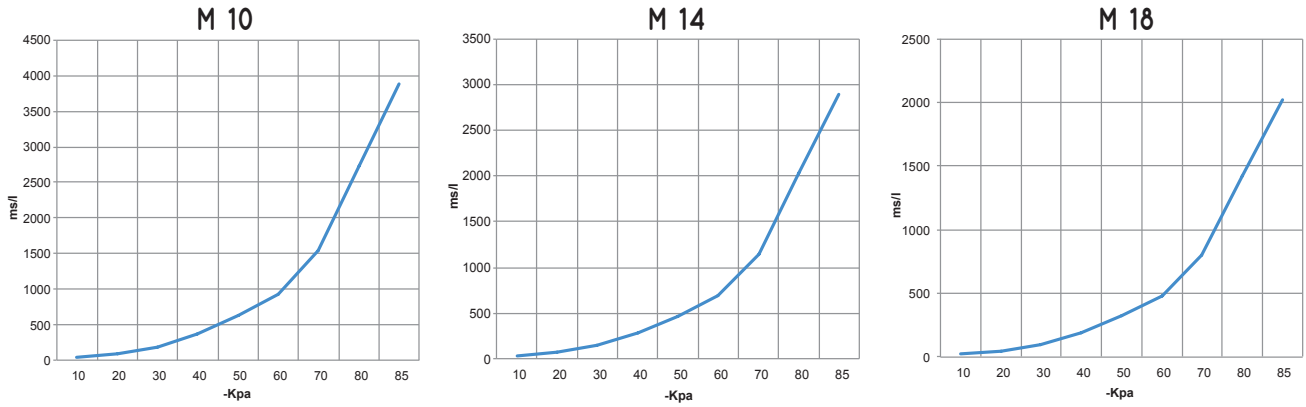
Note: All vacuum values indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.
Vacuum generator supply must be carried out with non-lubricated compressed air, 5 micron filtration, in accordance with standard **ISO 8573-1 class 4**.

Air flow rate (Nl/s) at different level of vacuum (-KPa) at optimal supply pressure



Generator item	Supp. press. bar	Air consumption Nl/s	Air flow rate (Nl/s) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			0	10	20	30	40	50	60	70	80	-KPa
M 10	5.0	1.9	2.61	2.00	1.55	0.80	0.64	0.50	0.29	0.19	0.09	85
M 14	5.0	2.5	3.50	2.33	1.72	1.00	0.89	0.67	0.35	0.24	0.11	85
M 18	5.0	3.6	5.00	3.50	2.78	2.02	1.02	0.75	0.44	0.30	0.14	85

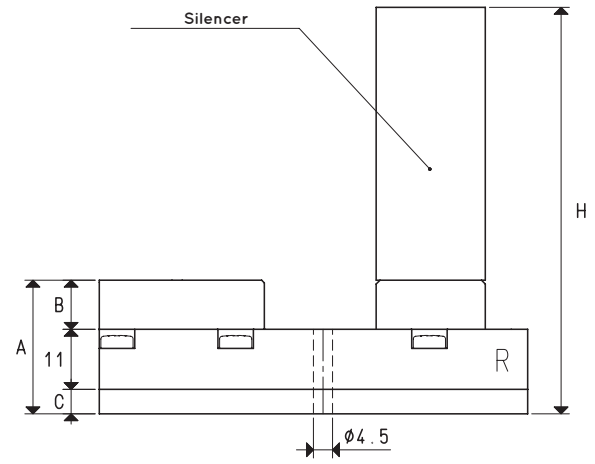
Evacuation rates (ms/l = s/m³) at different levels of vacuums (-KPa) at optimal supply pressure

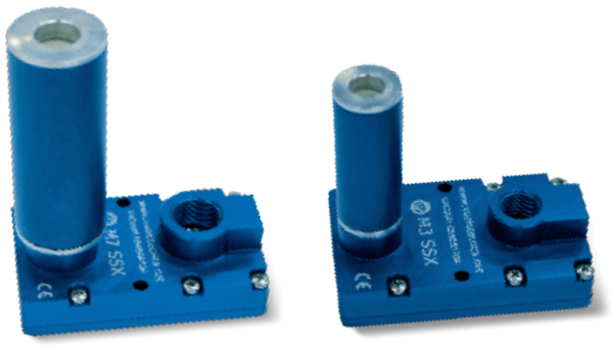


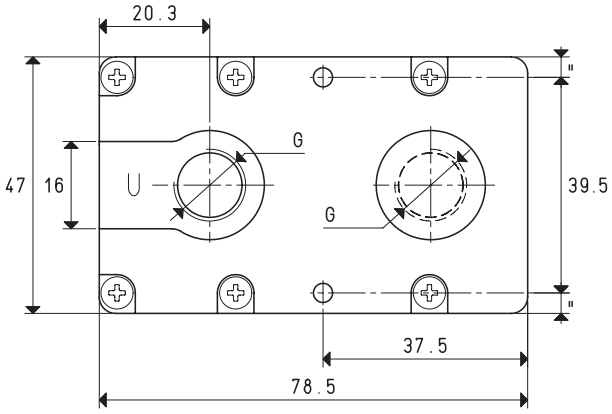
Generator item	Supp. press. bar	Air consumption Nl/s	Evacuation rates (ms/l= s/m³) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			10	20	30	40	50	60	70	80	85	-KPa
M 10	5.0	1.9	40	93	188	371	629	918	1534	2731	3878	85
M 14	5.0	2.5	30	69	140	276	469	685	1144	2036	2892	85
M 18	5.0	3.6	21	48	98	193	327	478	799	1423	2020	85

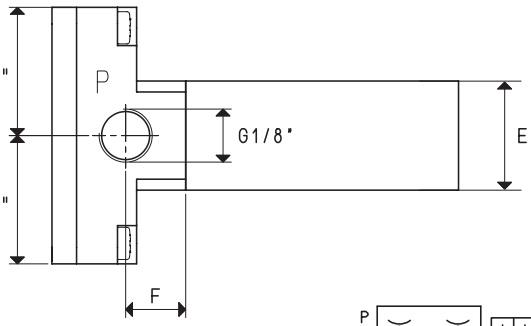
MULTI-STAGE VACUUM GENERATORS SERIES M.. SSX

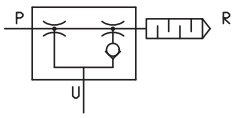
These vacuum generators share the same technical features as the others of the M series described above. Their distinctive feature is their silent operation. In fact, along with the built-in silencer, they also have an external SSX silencer for a further noise reduction.
These generators are particularly recommended in work environments where the noise level must be kept within very low values.











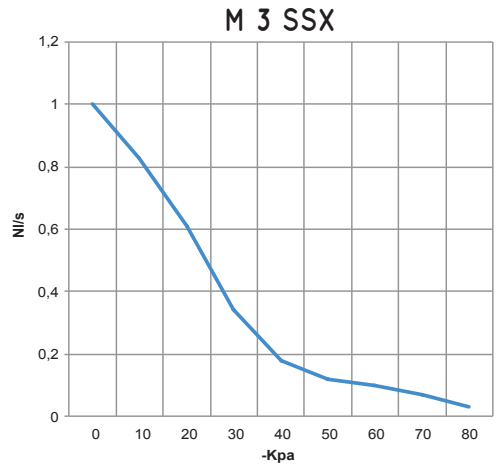
P=COMPRESSED AIR CONNECTION R=EXHAUST U=VACUUM CONNECTION

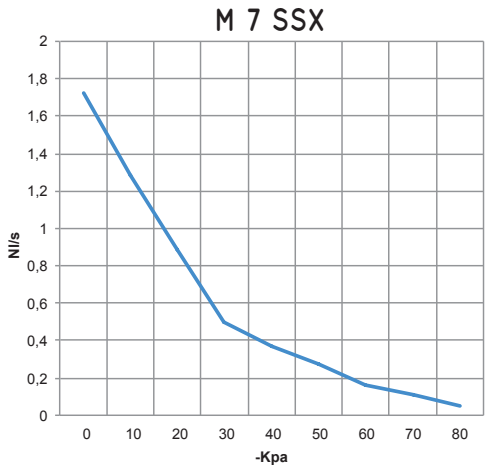
Item		M 3 SSX			M 7 SSX		
Intake air flow rate	m^3/h	3.0	3.4	3.6	5.4	5.8	6.2
Maximum level of vacuum	-KPa	62	82	85	62	82	85
Final pressure	mbar abs.	380	180	150	380	180	150
Supply pressure	bar	3	4	5	3	4	5
Optimal supply pressure	bar			5			5
Air consumption	Nl/s	0.5	0.7	0.8	0.8	1.2	1.4
Operating temperature	°C			-10 / +80			-10 / +80
Noise level at optimal supply pressure	dB(A)			52			58
Weight	g			109			111
A				24.5			25.5
B				9			10
C				4.5			4.5
E	Ø			20			29
F				11			12
G	Ø			G1/4"			G3/8"
H				74.5			97.5

Spare parts		M 3 SSX	M 7 SSX
Silencer	item	SSX 1/4"	SSX 3/8"
Sealing kit and reed valves	item	00 KIT M 3	00 KIT M 7

Note: All vacuum values indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.
Vacuum generator supply must be carried out with non-lubricated compressed air, 5 micron filtration, in accordance with standard **ISO 8573-1 class 4**.

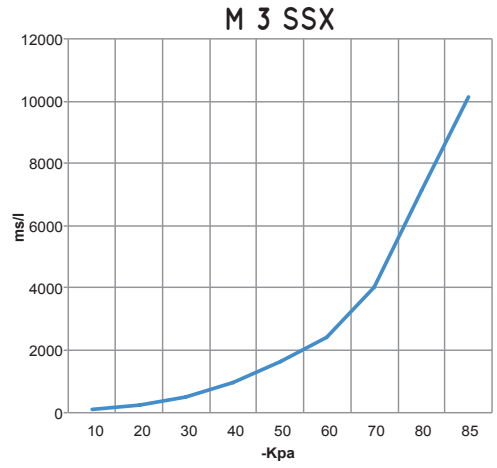
Air flow rate (Nl/s) at different level of vacuum (-KPa) at optimal supply pressure

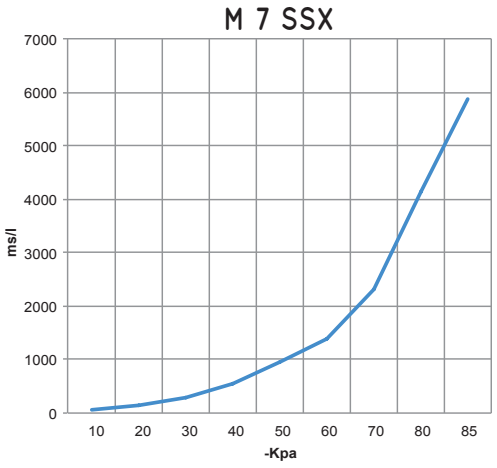




Generator item	Supp. press. bar	Air consumption Nl/s	Air flow rate (Nl/s) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			0	10	20	30	40	50	60	70	80	-KPa
M 3 SSX	5.0	0.8	1.00	0.83	0.61	0.34	0.18	0.12	0.10	0.07	0.03	85
M 7 SSX	5.0	1.4	1.72	1.28	0.89	0.50	0.37	0.27	0.16	0.11	0.05	85

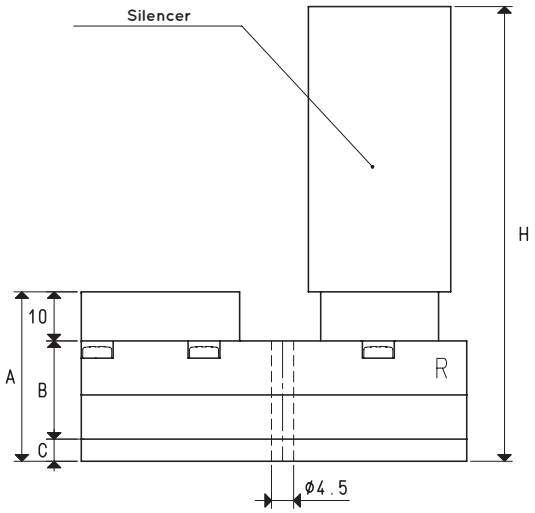
Evacuation rates (ms/l = s/m³) at different levels of vacuums (-KPa) at optimal supply pressure

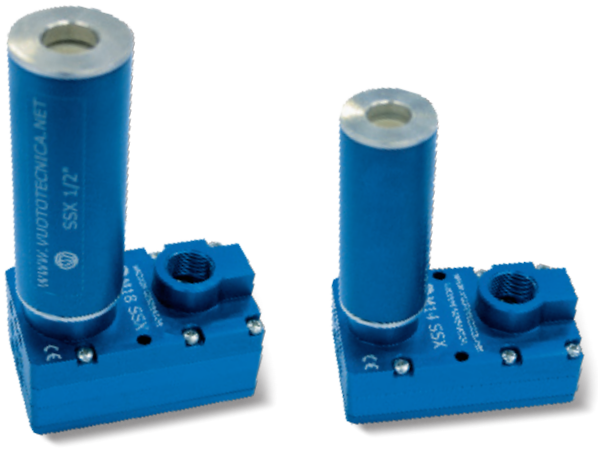


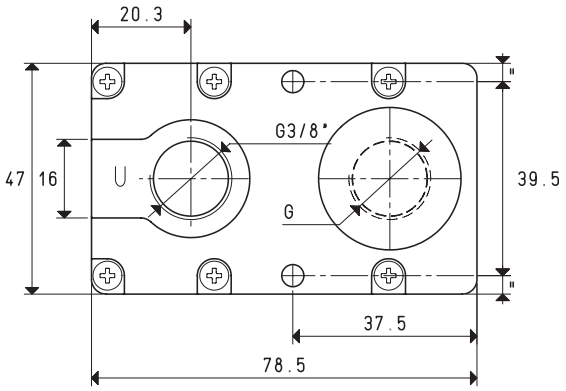


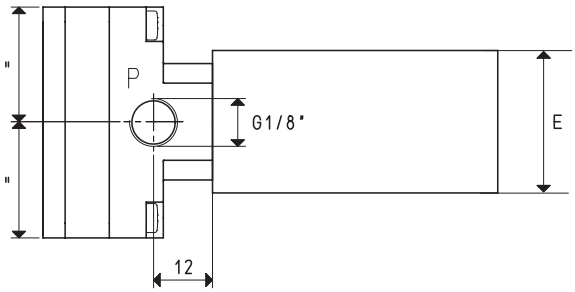
Generator item	Supp. press. bar	Air consumption Nl/s	Evacuation rates (ms/l= s/m³) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			10	20	30	40	50	60	70	80	85	-KPa
M 3 SSX	5.0	0.8	106	244	491	969	1642	2398	4004	7128	10122	85
M 7 SSX	5.0	1.4	61	142	285	563	954	1394	2328	4144	5885	85

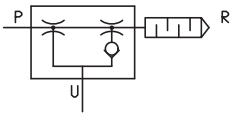
MULTI-STAGE VACUUM GENERATORS M 10 SSX, M 14 SSX and M 18 SSX











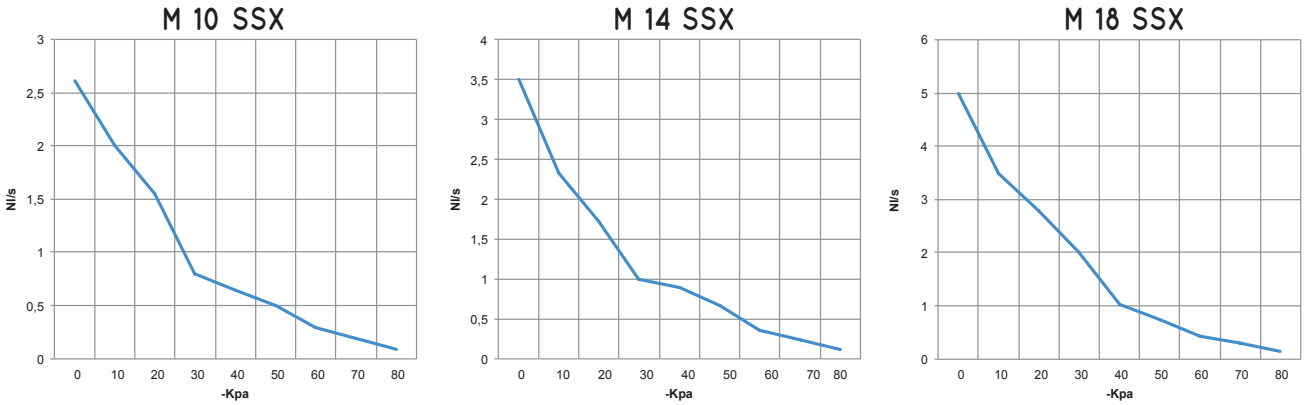
P=COMPRESSED AIR CONNECTION R=EXHAUST U=VACUUM CONNECTION

Item		M 10 SSX			M 14 SSX			M 18 SSX		
Intake air flow rate	m^3/h	7.7	8.5	9.4	10.2	11.5	12.6	14.8	16.5	18.0
Maximum level of vacuum	-KPa	62	82	85	62	82	85	62	82	85
Final pressure	mbar abs.	380	180	150	380	180	150	380	180	150
Supply pressure	bar	3	4	5	3	4	5	3	4	5
Optimal supply pressure	bar			5			5			5
Air consumption	Nl/s	1.2	1.6	1.9	1.7	2.1	2.5	2.3	2.9	3.6
Operating temperature	°C			-10 / +80			-10 / +80			-10 / +80
Noise level at optimal supply pressure	dB(A)			60			62			66
Weight	g			144			145			150
A				34.5			34.5			44.5
B				20			20			30
C				4.5			4.5			4.5
E	Ø			29			29			35
G	Ø			G3/8"			G3/8"			G1/2"
H				106.5			106.5			136.5

Spare parts		M 10 SSX	M 14 SSX	M 18 SSX
Silencer	item	SSX 3/8"	SSX 3/8"	SSX 1/2"
Sealing kit and reed valves	item	00 KIT M 10	00 KIT M 14	00 KIT M 18

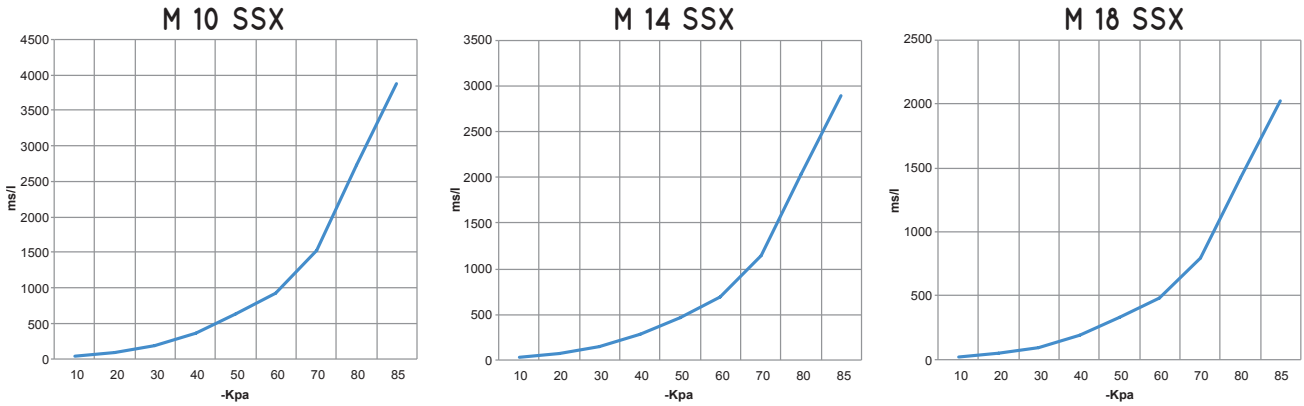
Note: All vacuum values indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.
Vacuum generator supply must be carried out with non-lubricated compressed air, 5 micron filtration, in accordance with standard **ISO 8573-1 class 4**.

Air flow rate (Nl/s) at different level of vacuum (-KPa) at optimal supply pressure



Generator item	Supp. press. bar	Air consumption Nl/s	Air flow rate (Nl/s) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			0	10	20	30	40	50	60	70	80	-KPa
M 10 SSX	5.0	1.9	2.61	2.00	1.55	0.80	0.64	0.50	0.29	0.19	0.09	85
M 14 SSX	5.0	2.5	3.50	2.33	1.72	1.00	0.89	0.67	0.35	0.24	0.11	85
M 18 SSX	5.0	3.6	5.00	3.50	2.78	2.02	1.02	0.75	0.44	0.30	0.14	85

Evacuation rates (ms/l = s/m³) at different levels of vacuums (-KPa) at optimal supply pressure



Generator item	Supp. press. bar	Air consumption Nl/s	Evacuation rates (ms/l= s/m³) at different levels of vacuums (-KPa) at optimal supply pressure									Max vacuum
			10	20	30	40	50	60	70	80	85	-KPa
M 10 SSX	5.0	1.9	40	93	188	371	629	918	1534	2731	3878	85
M 14 SSX	5.0	2.5	30	69	140	276	469	685	1144	2036	2892	85
M 18 SSX	5.0	3.6	21	48	98	193	327	478	799	1423	2020	85

Sealing kit and reed valves

Item	By generators item
00 KIT M 3	M3 - M3 SSX
00 KIT M 7	M7 - M7 SSX
00 KIT M 10	M10 - M10 SSX
00 KIT M 14	M14 - M14 SSX
00 KIT M 18	M18 - M18 SSX

Exhaust silencers SSX

Item	By generators item
SSX 1/4"	M3 SSX
SSX 3/8"	M7 SSX - M10 SSX - M14 SSX
SSX 1/2"	M18 SSX

Sound absorbing material on the exhaust

Item	By generators item	Quantity
00 15 150	M3 - M3 SSX	1 piece
	M7 - M7 SSX	1 piece
	M10 - M10 SSX	2 pieces
	M14 - M14 SSX	2 pieces
	M18 - M18 SSX	3 pieces