



PRODUCT INFORMATION

English

Series
SM - SMR - SMT

SIDE CHANNEL BLOWERS





SERIES
SM - SMR - SMT

About us

Ing. **Enea Mattei SpA** is an Italian company that has been producing air compressors since 1919. Over the years, the company has continually evolved and is today one of the world's foremost companies in the compressed air sector and the leader in the production of rotary vane compressors. Behind the success of Mattei are the choices the company has made in terms of design, production and marketing, driven by the results of its continual and in-depth research and development programmes. During these years of continual change, Mattei has been able to adapt to the requirements of the market and through the results of its research has created products that are always innovative and technologically advanced.



Certified quality

Quality as an integral part of all company functions and constant improvement of all production processes so as to always guarantee the maximum level of reliability and satisfaction. This, in brief, is the value and the meaning of **Mattei's** operational philosophy. A way of approaching the market and customers that makes **Mattei** an absolute point of reference in the compressed air sector. Since 1994, **Mattei** has been operating with a Quality System certified by the DNV Institute under UNI EN ISO 9001 regulations.



SERIES SM - SMR - SMT

Side channel blowers

The “heart” of the **blower** is an impeller inside a toroidal channel. Subjected to centrifugal force, the fluid flows into the channel, which, due to its shape, immediately pushes it toward the roots of the impeller vanes. In such a way, the fluid undergoes a new acceleration and assumes a helicoidal trajectory along with a progressive increase in energy.

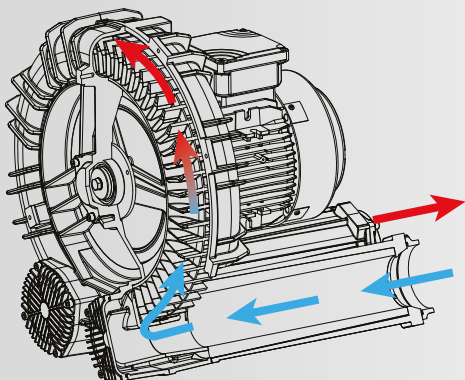
Mattei side channel blowers can find applications in the most varied sectors: water purification, drying systems, industrial suction, pneumatic conveying for production and manufacturing, the food and pharmaceutical industries, textiles, aerospace, medical, agricultural, etc..

Mattei's blower range ensures better performances, efficiency and reliability: the best you can have in order to achieve significant energy savings.

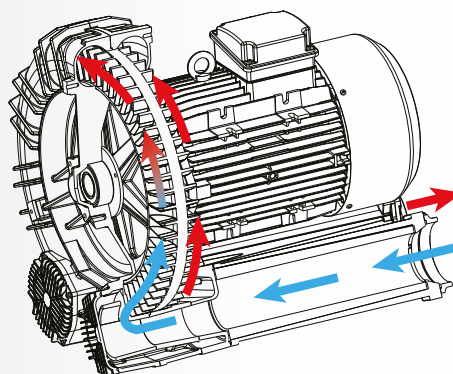
MATTEI SM - SMR - SMT RANGE

- **No wearing parts / maintenance free operation**
- **No pulsations in the conveyed fluid**
- **Extremely modular and easy to install**
- **Availability of special surface treatments**
- **Customizations and/or construction specifications to meet the customer's needs and requirements**

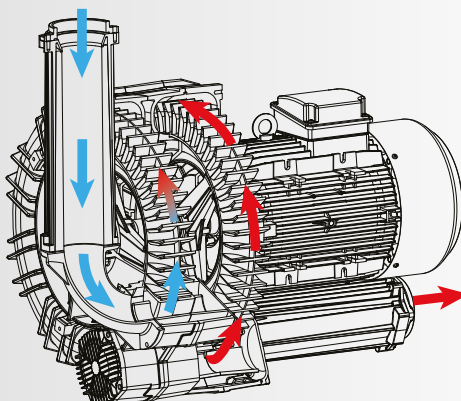
SM single impeller single stage



SMR single impeller double stage



SMT twin impeller double stage



Series SM 3 ÷ 8 - SMT 6 - SMR 30 ÷ 40

50 Hz

Models	Max. flow		Flow Installed motor size												Max. motor power kW	Max. pressure mbar	Sound level dB(A)	Connections [G"]* = mm										
	m ³ /h	kw	+ 50 hPa (mbar)	+ 100 hPa (mbar)	+ 150 hPa (mbar)	+ 200 hPa (mbar)	+ 250 hPa (mbar)	+ 300 hPa (mbar)	+ 350 hPa (mbar)	+ 400 hPa (mbar)	+ 450 hPa (mbar)	+ 500 hPa (mbar)	+ 550 hPa (mbar)															
IN COMPRESSION																												
50 Hz			m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw										
SM 3	74	0,37	56,2	0,37	38,4	0,37	20,7	0,55											0,55	150	58,7	1 1/4						
SM 4	137	0,75	116,6	0,75	96,2	0,75	75,7	0,75	55,2	1,1	34,6	1,5							1,1	200	61,6	1 1/2						
SM 5	219	1,1	192,5	1,10	166	1,1	139,4	1,5	112,8	2,2	86,2	2,2	59,5	3,0					2,2	250	67,2	2						
SM 6	304	2,2	273,2	2,20	242,4	2,2	211,7	2,2	181	3,0	150,3	4,0	119,6	4,0	95,1	4,0			3	240	70	2						
			4	340																								
SM 7	536	3,0	492,8	3,0	449,5	3,0	406,3	4,0	363	5,5	319,7	5,5	276,4	7,5	233	7,5	189,7	9,20	7,5	350	76,5	3						
SM 8	782	5,5	732,9	5,5	683,7	5,5	634,6	5,5	585,5	7,5	536,4	9,2	487,3	9,2	438,2	11,0	389,1	15,0	7,5	225	77,4	4						
SMT 6	312	4,0	297,9	4,0	283,7	4,0	269,5	4,0	255,4	4,0	241,2	4,0	227,0	5,5	212,9	5,5	198,7	5,5	184,5	7,5	170,3	7,5	156,1	7,5	5,5	425	72,6	2
SMR 30	91	1,1	80,9	1,1	71,4	1,1	62,5	1,1	54,1	1,1	46,2	1,1	38,9	1,1	32,2	1,5	26,0	1,5	1,5	425	69,7	1 1/4						
SMR 40	117	2,2	107,6	2,2	98,5	2,2	89,7	2,2	81,1	2,2	72,9	2,2	64,9	2,2	57,1	2,2	49,7	2,2	42,5	3,0	35,6	3,0		3,0	500	71,3	1 1/4	
IN VACUUM																												
50 Hz			m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw	m ³ /h	kw										
SM 3	74	0,37	55,1	0,37	34,7	0,37													0,55	125	58,7	1 1/4						
SM 4	137	0,75	115,9	0,75	91,8	0,75	64,8	0,75	34,9	1,1									1,1	200	61,6	1 1/2						
SM 5	219	1,1	191,8	1,1	160,7	1,1	125,8	1,5	87,0	2,2									2,2	240	67,2	2						
SM 6	304	2,2	272,6	2,2	236,6	2,2	195,9	2,2	150,5	3,0	100,5	4,0							3	240	70	2						
			4	270																								
SM 7	536	3,0	493,1	3,0	443	3,0	385,6	4,0	321,1	5,5	249,3	5,5	170,3	7,5					7,5	300	76,5	3						
SM 8	782	5,5	733,1	5,5	676,1	5,5	611	5,5	537,8	7,5	456,4	9,2	367	9,2					7,5	225	77,4	4						
SMT 6	312	4,0	297,9	4,0	283,7	4,0	269,5	4,0	255,4	4,0	241,2	4,0	227	5,5	212,9	5,5	198,7	5,5	184,5	7,5	170,3	7,5	156,1	7,5	5,5	400	72,6	2
SMR 30	91	1,1	80,1	1,1	69,3	1,1	58,7	1,1	48,2	1,1	38	1,1	27,9	1,1	17,9	1,5			1,5	350	69,7	1 1/4						
SMR 40	117	2,2	106,9	2,2	96,5	2,2	85,7	2,2	74,4	2,2	62,8	2,2	50,8	2,2	38,4	2,2			3,0	350	71,3	1 1/4						

SERIES SM - SMR - SMT

Series SM 3 ÷ 8 - SMT 6 - SMR 30 ÷ 40

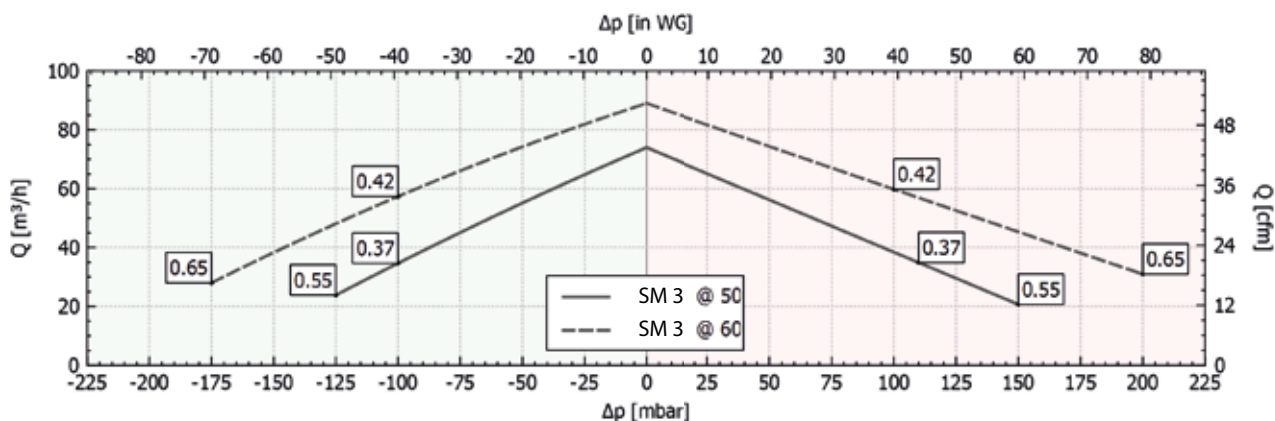
60 Hz

Models			Max. flow		Flow Installed motor size												Max. motor power	Max. pressure	Sound level	Connections		
			m ³ /h	kw													kW	mbar	dB(A)	[G"]* = mm		
60 Hz			IN COMPRESSION																			
			+ 50 hPa (mbar)	+ 100 hPa (mbar)	+ 150 hPa (mbar)	+ 200 hPa (mbar)	+ 250 hPa (mbar)	+ 300 hPa (mbar)	+ 350 hPa (mbar)	+ 400 hPa (mbar)	+ 450 hPa (mbar)	+ 500 hPa (mbar)										
			m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	kW	mbar	dB(A)	[G"]* = mm	
SM 3	89	0,42	74,4	0,42	59,8	0,42	45,4	0,65	31	0,65								0,65	200	60,7	1 1/4	
SM 4	166	0,9	148,9	0,90	131,9	0,90	114,9	1,30	98	1,7	81,1	1,7						1,3	175	63,6	1 1/2	
SM 5	265	1,3	242,9	1,3	220,8	1,3	198,8	1,7	176,8	2,6	154,8	2,6	132,9	3,5	111	3,5		2,6	260	69,2	2	
SM 6	366	2,6	340,5	2,6	315,1	2,6	289,7	3,5	264,2	3,5	238,8	4,8	213,4	4,8				3,5	220	72	2	
																		4,8	325			
SM 7	647	3,5	611,2	3,5	575,5	4,8	539,7	4,8	503,8	6,5	468	9	432,1	9	396,3	11	360,4	9	300	78,5	3	
SM 8	944	6,5	903,2	6,5	862,5	6,5	821,7	9	781	9	740,3	11	699,6	13	658,9	17	618,2	17	200	79,4	4	
SMT 6	376	4,8	364,2	4,8	352,5	4,8	340,7	4,8	329	4,8	317,2	6,5	305,4	6,5	293,7	6,5	281,9	9	350	74,6	2	
SMR 30	110	1,3	101,8	1,3	93,9	1,3	86,3	1,3	78,9	1,3	71,8	1,3	65	1,3	58,4	1,7	52,2	1,7	1,7	425	72,8	1 1/4
SMR 40	137	2,6	130	2,6	123	2,6	116	2,6	109,1	2,6	102,1	2,6	95,2	2,6	88,3	2,6	81,4	2,6	3,5	500	73,3	1 1/4
60 Hz			IN VACUUM																			
			- 50 hPa (mbar)	- 100 hPa (mbar)	- 150 hPa (mbar)	- 200 hPa (mbar)	- 250 hPa (mbar)	- 300 hPa (mbar)	- 350 hPa (mbar)	- 400 hPa (mbar)	- 450 hPa (mbar)	- 500 hPa (mbar)										
			m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	m ³ /h kw	kW	mbar	dB(A)	[G"]* = mm	
SM 3	89	0,42	74,3	0,42	57,4	0,42	38,3	0,65										0,65	175	60,7	1 1/4	
SM 4	166	0,9	148,6	0,90	128,6	0,90	106,2	1,3	81,4	1,7	54	1,7						1,3	175	63,6	1 1/2	
SM 5	265	1,3	242,4	1,3	216,5	1,3	187,3	1,7	154,9	2,6	119,2	2,6						2,6	220	69,2	2	
SM 6	366	2,6	340,7	2,6	311,2	2,6	277,6	3,5	239,8	3,5	197,9	4,8						3,5	220	72	2	
																4,8	275					
SM 7	647	3,5	611,7	3,5	570,3	4,8	522,7	4,8	468,9	6,5	409	9	342,9	9				9	325	78,5	3	
SM 8	944	6,5	904,2	6,5	857,3	6,5	803,4	9	742,5	9	674,5	11	599,4	13				9	200	79,4	4	
SMT 6	376	4,8	365,3	4,8	352,3	4,8	336,8	4,8	319	4,8	298,7	6,5	276,1	6,5	251,1	6,5	223,7	9	350	74,6	2	
SMR 30	110	1,3	100,7	1,3	91,1	1,3	81,3	1,3	71,2	1,3	60,9	1,3	50,4	1,3	39,6	1,7		1,7	375	72,8	1 1/4	
SMR 40	137	2,6	128,6	2,6	119,7	2,6	110,1	2,6	99,9	2,6	89,1	2,6	77,6	2,6	65,6	2,6		3,5	375	73,3	1 1/4	

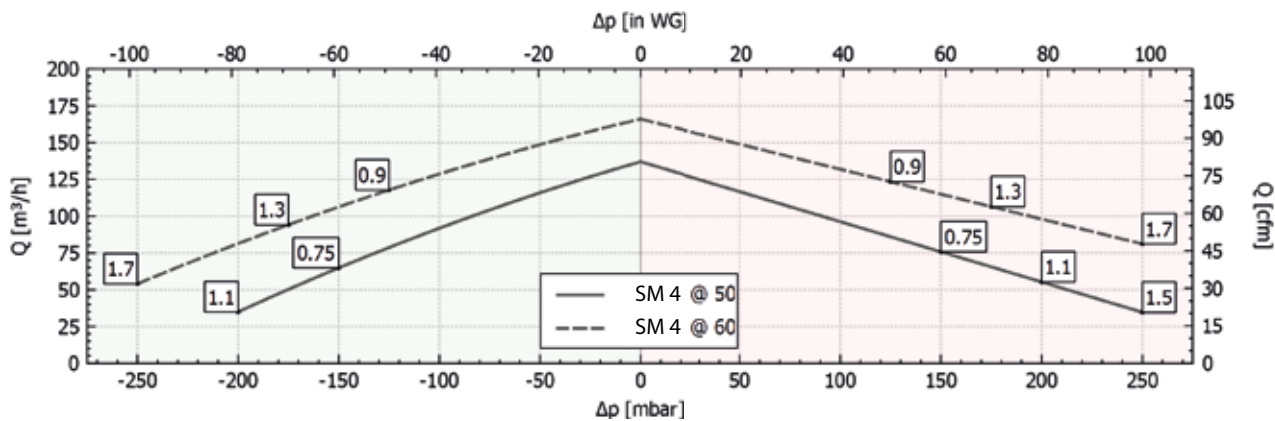
VACUUM

COMPRESSION

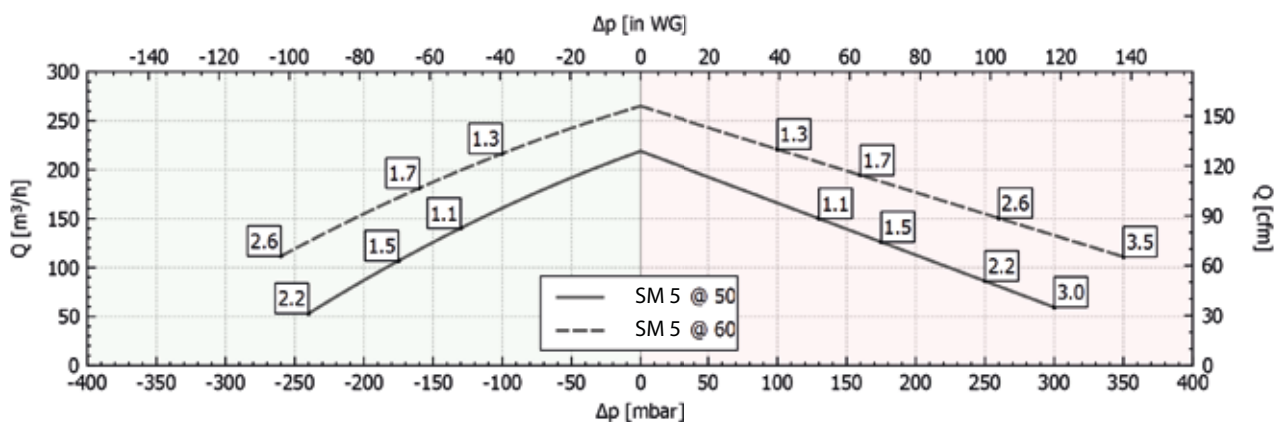
SM 3



SM 4



SM 5

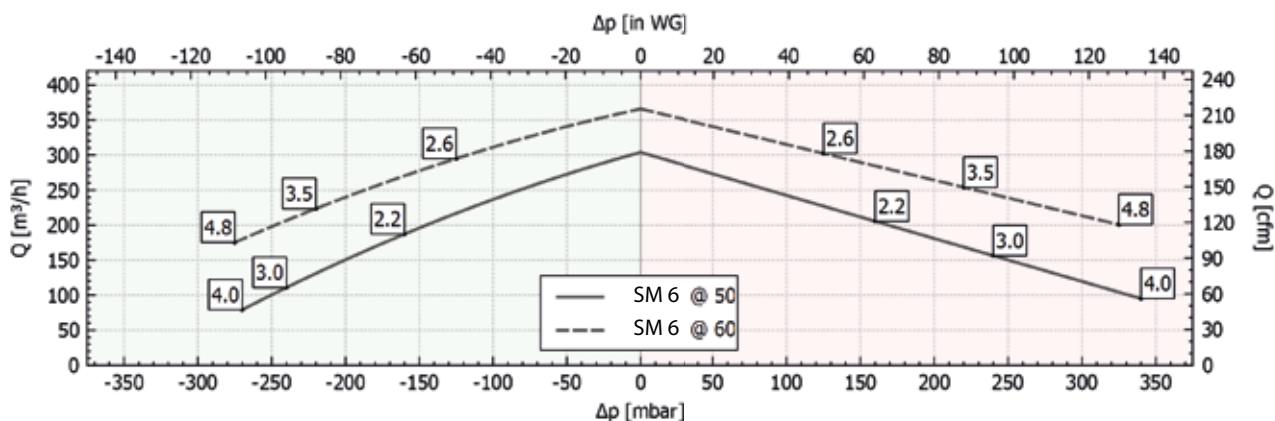


SERIES SM - SMR - SMT

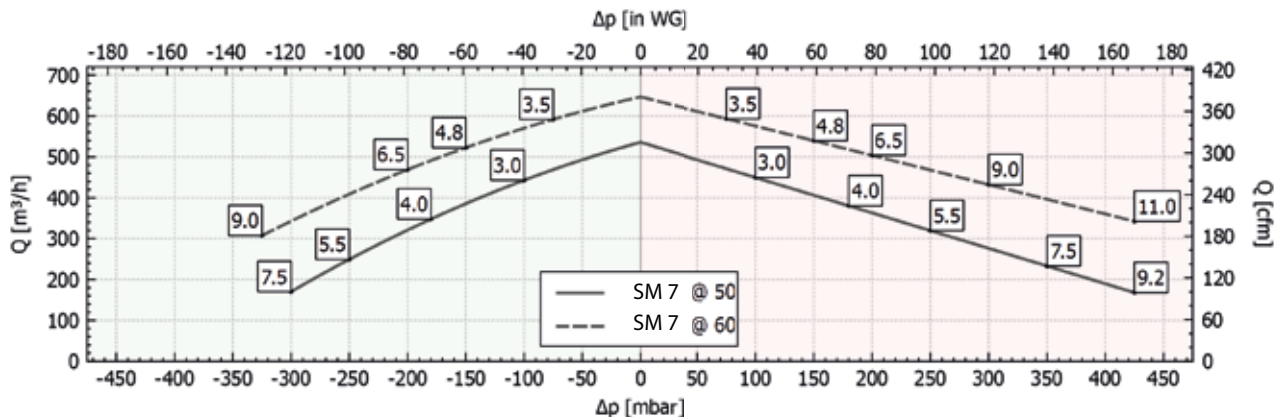
VACUUM

COMPRESSION

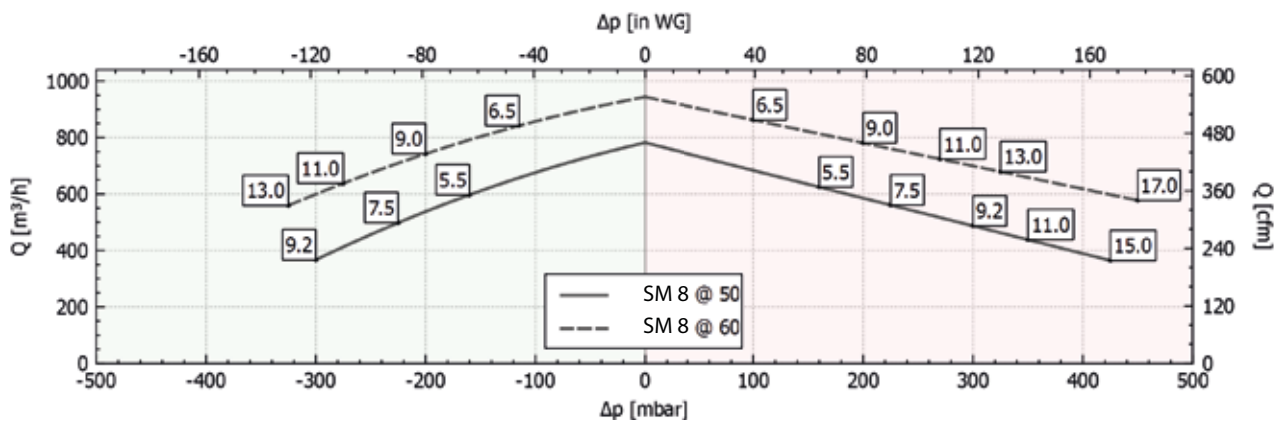
SM 6



SM 7



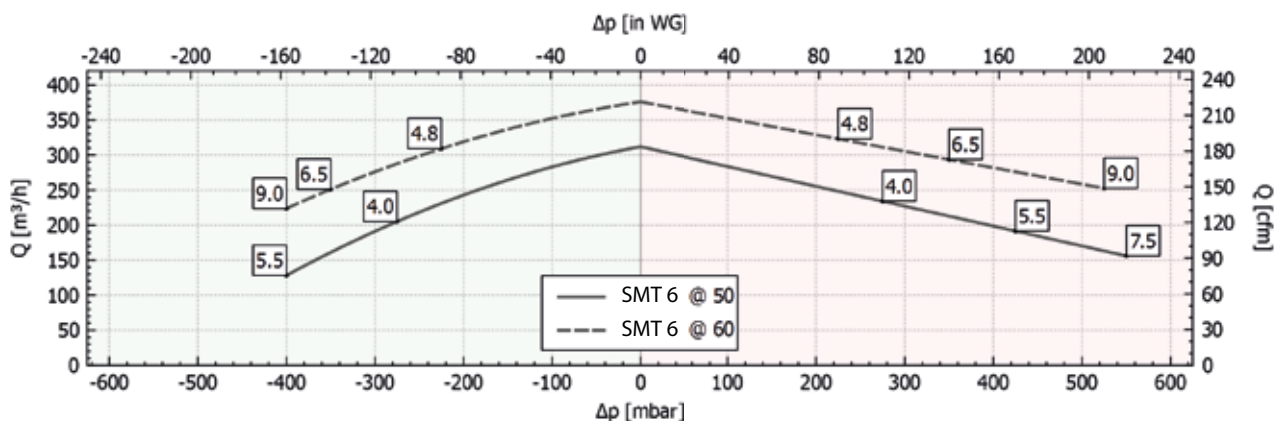
SM 8



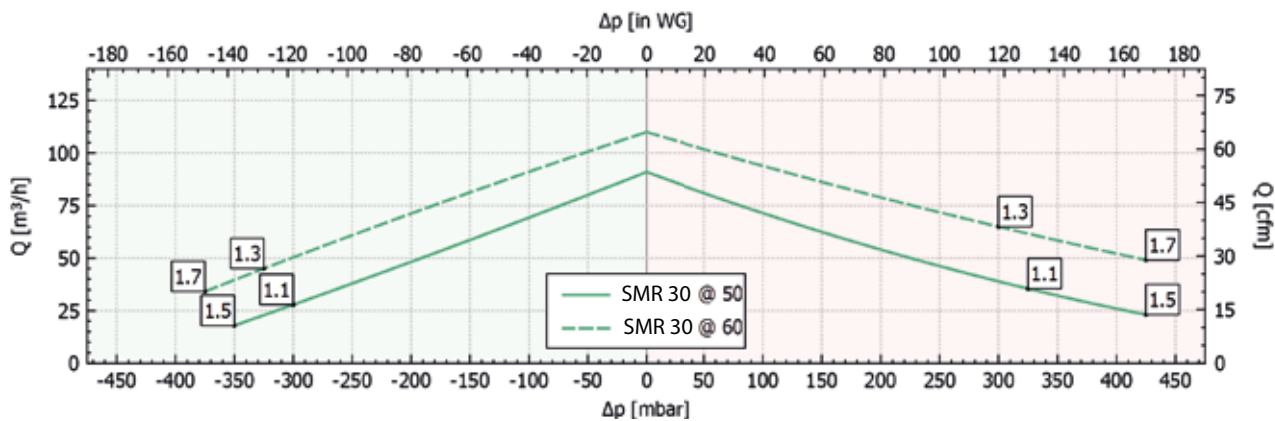
VACUUM

COMPRESSION

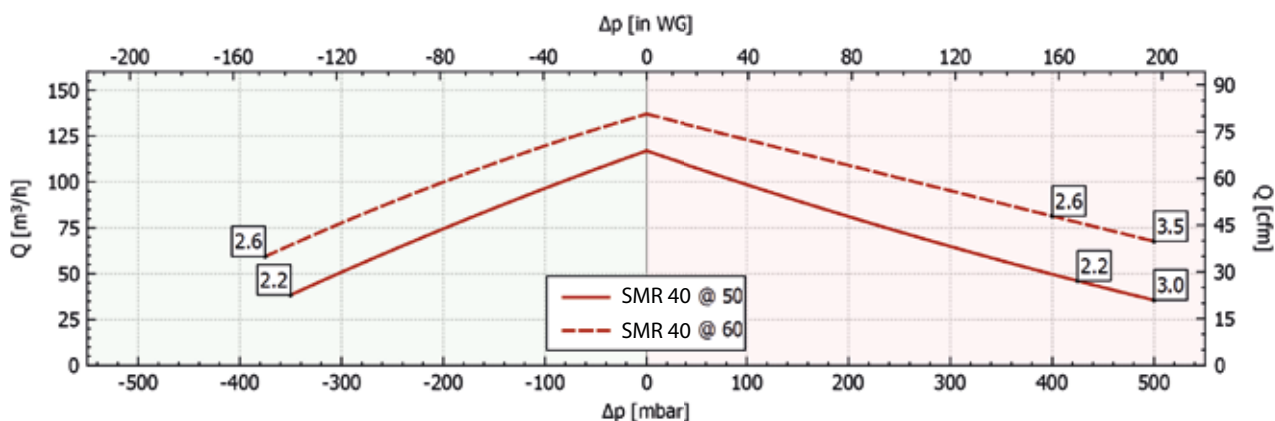
SMT 6



SMR 30



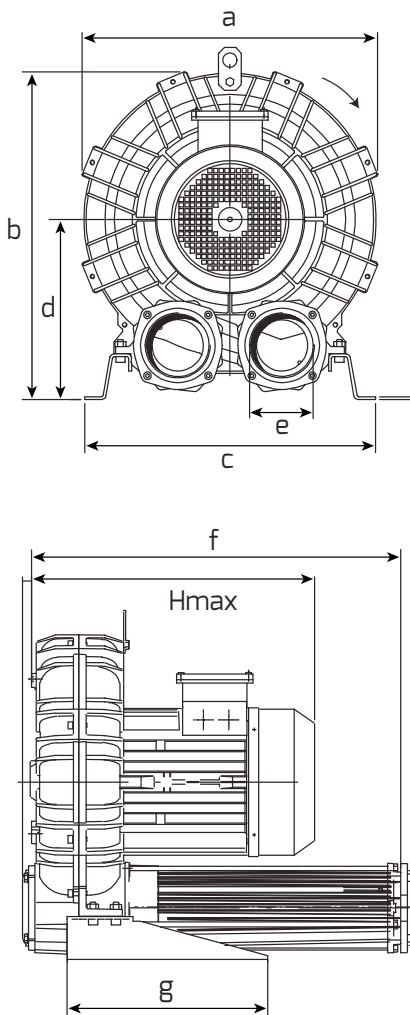
SMR 40




SERIES SM - SMR - SMT

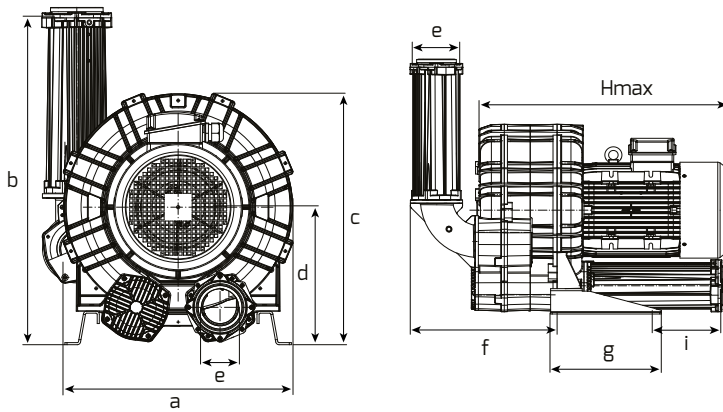
Overall dimensions (mm)


SM 3 ÷ 8



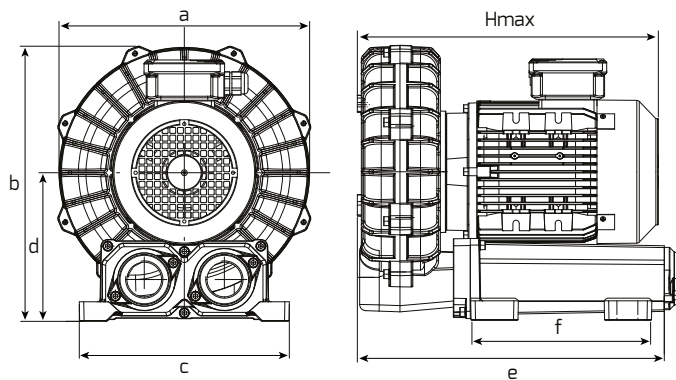
	A	B	C	D	E	F	G	Hmax	kg
SM 3	241	268	230	147	G 1" 1/4	205	142	300	12
SM 4	285	315	255	172	G 1" 1/2	222	171	335	18
SM 5	327	365	320	200	G 2"	320	265	375	28
SM 6	376	393	325	205	G 2"	334	265	385	37
SM 7	457	498	480	269	G 3"	512	350	485	75
SM 8	516	573	510	315	G 4"	586	350	635	86

SMT 6

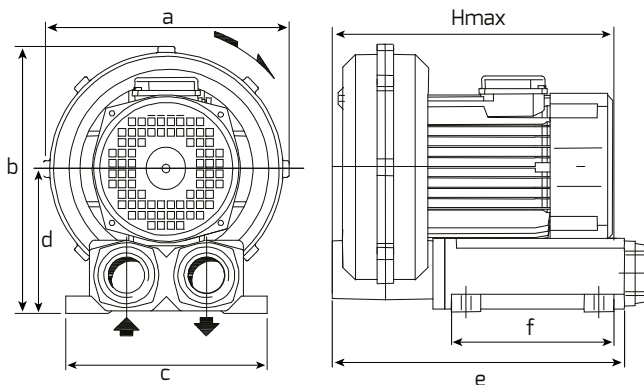



	A	B	C	D	E	F	G	I	Hmax	kg
SMT 6	376	455	420	232	G 2"	354	265	136	585	69

SMR 30



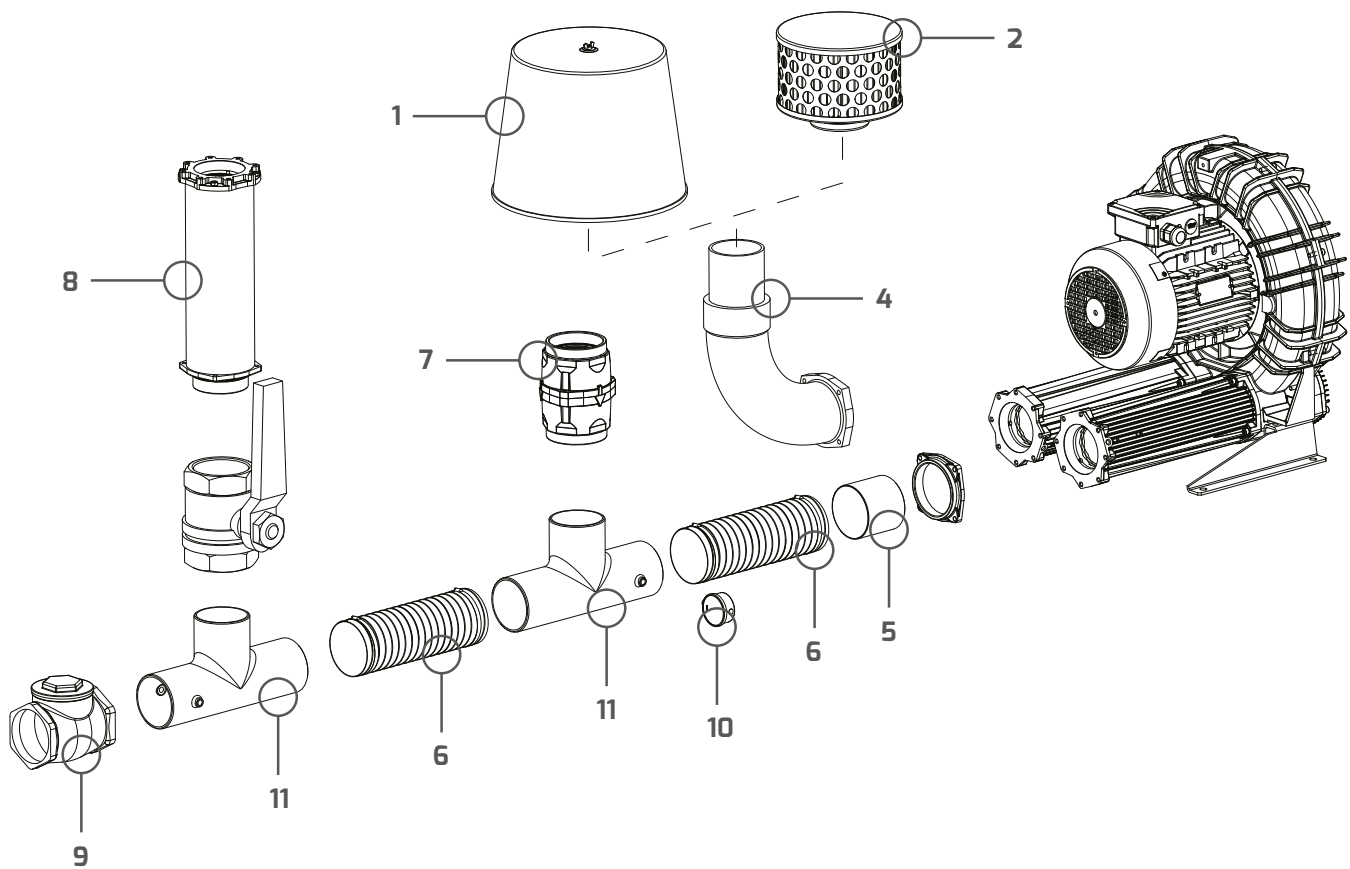
SMR 40




	A	B	C	D	E	F	Hmax	kg
SMR 30	319	346	235	187	354	200	390	25
SMR 40	350	372	235	197	364	200	440	40

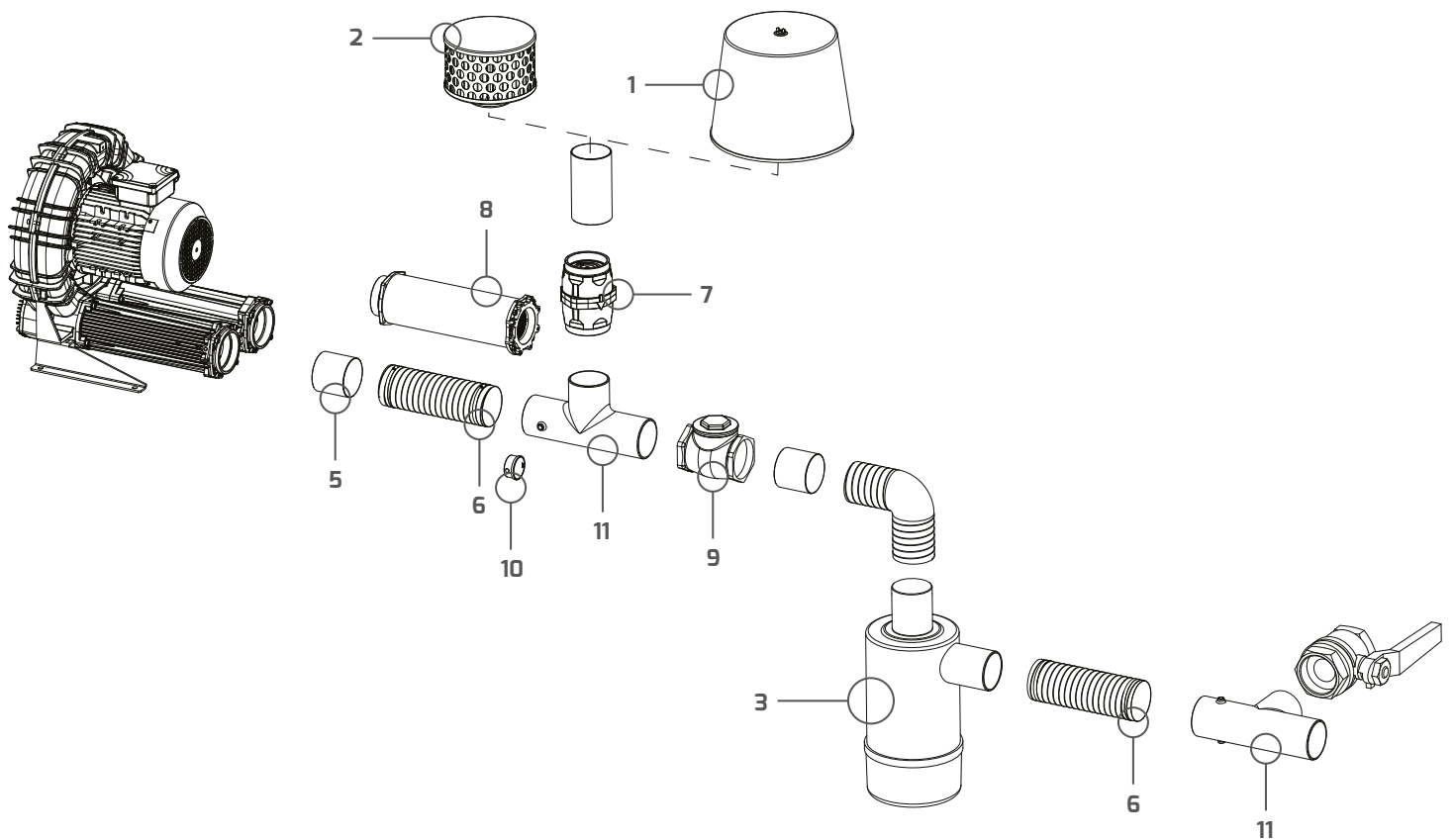
SERIES SM - SMR - SMT


Accessories for compression



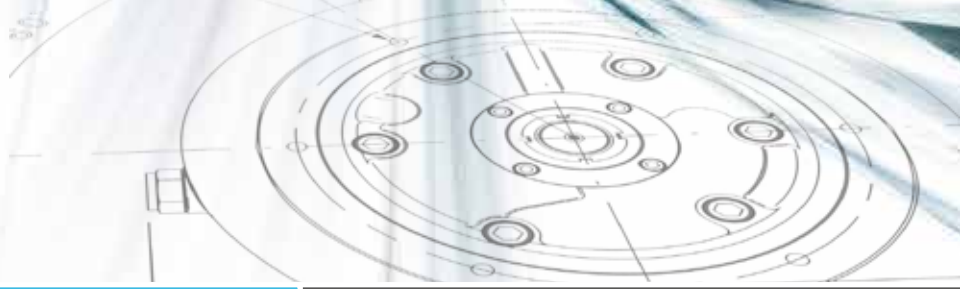
	
1	Cartridge filter
2	Indoor intake filter
3	Cyclone filter
4	Filter manifold
5	Hose sleeve
6	Flexible hose

Accessories for vacuum



	
7	Vacuum / pressure relief valve
8	Additional silencer
9	Non return
10	Pressure / vacuum gauge
11	Relief valve / gauge holder

SERIES
SM - SMR - SMT





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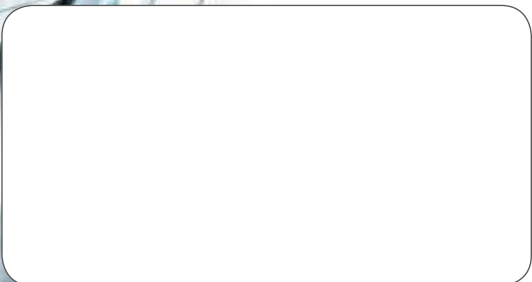
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