

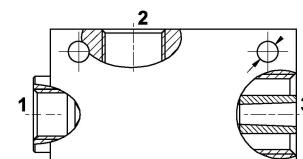
Single stage vacuum generators

Single stage generators, robust reliable and compact suitable for applications which need the required degree of vacuum to be reached quickly with high flow rates.



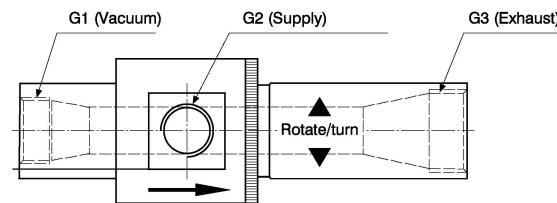
Performance and application

The single stage vacuum generator operates using the Venturi principle. By feeding compressed air into port 1 of the generator, a depression (Vacuum) is generated at port 2 with the air being drawn from port 2 discharged out at port 3. When the compressed supply to port 1 is interrupted, the suction (Vacuum) at port 2 is lost. The optimum inlet pressure is different for each type of single stage generator which ranges from 1 - 6 bar. These generator are generally used in conjunction with suction cups for gripping and the handling of porous and non-porous objects with limited suction flow required.



Adjustable version

Based on the Venturi principle, these differ from traditional ones, in fact they have an ejector with a much larger diameter, and are adjustable. This feature makes it possible to change the device's flow rate and degree of vacuum without affecting the inlet pressure.

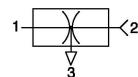
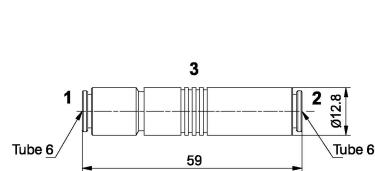


Series 1900

Single stage vacuum generator T06

Ordering code

19T06.S.05.HV.CO

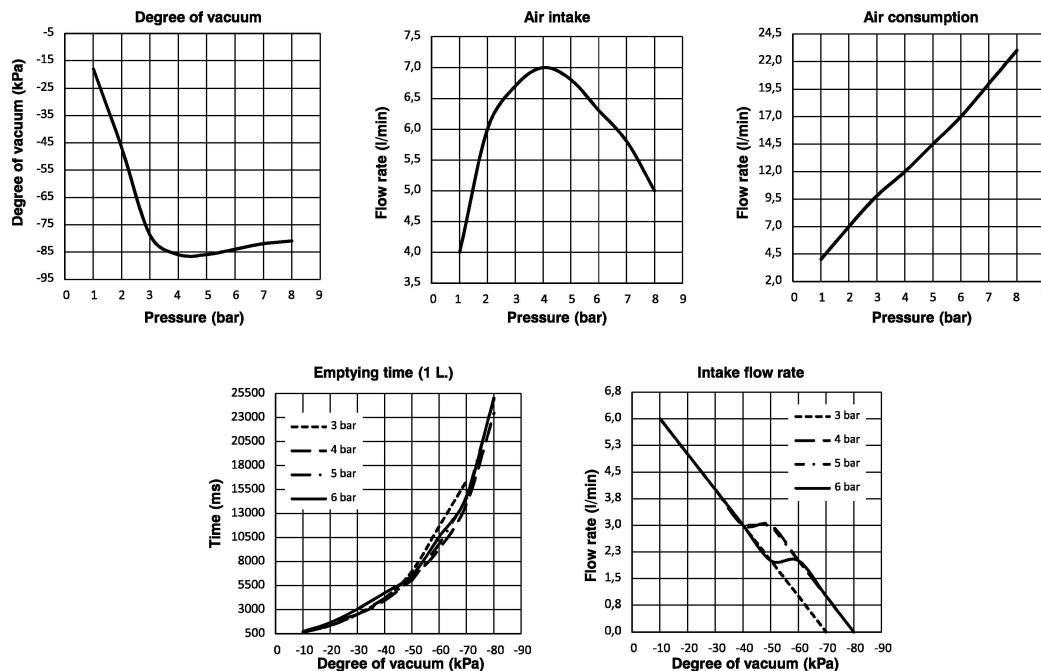


Single stage generators, with operation based on the Venturi principle; their main feature is the presence of feed pressure and connection for the vacuum on the same axis. This makes it possible to connect the suction cups directly to the generator or through the suction cup holder, so therefore still on the same axis with advantages in terms of system layout and simplicity.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	47	86	84
Intake flow rate (l/min)	6	7	6
Air consumption (l/min)	7	12	17

Performance Charts



Technical characteristics

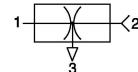
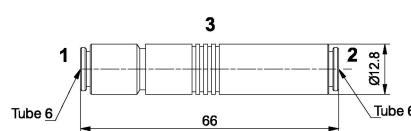
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	7
Noise (dBA)	68



► Single stage vacuum generator T06

Ordering code

19T06.S.07.HV.CO



Single stage generators, with operation based on the Venturi principle; their main feature is the presence of feed pressure and connection for the vacuum on the same axis. This makes it possible to connect the suction cups directly to the generator or through the suction cup holder, so therefore still on the same axis with obvious advantages in terms of system layout and simplicity.

Operational characteristics				
Inlet pressure (bar)	2	4	6	
Degree of Vacuum (-kPa)	21	70	92	
Intake flow rate (l/min)	6	9	10	
Air consumption (l/min)	10	17	25	
Performance Charts	 			

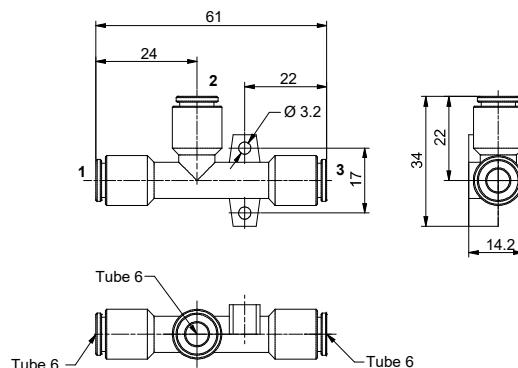
Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	8
Noise (dBA)	68

Single stage vacuum generator T06

Ordering code

19T06.S.07.HV.ZZ

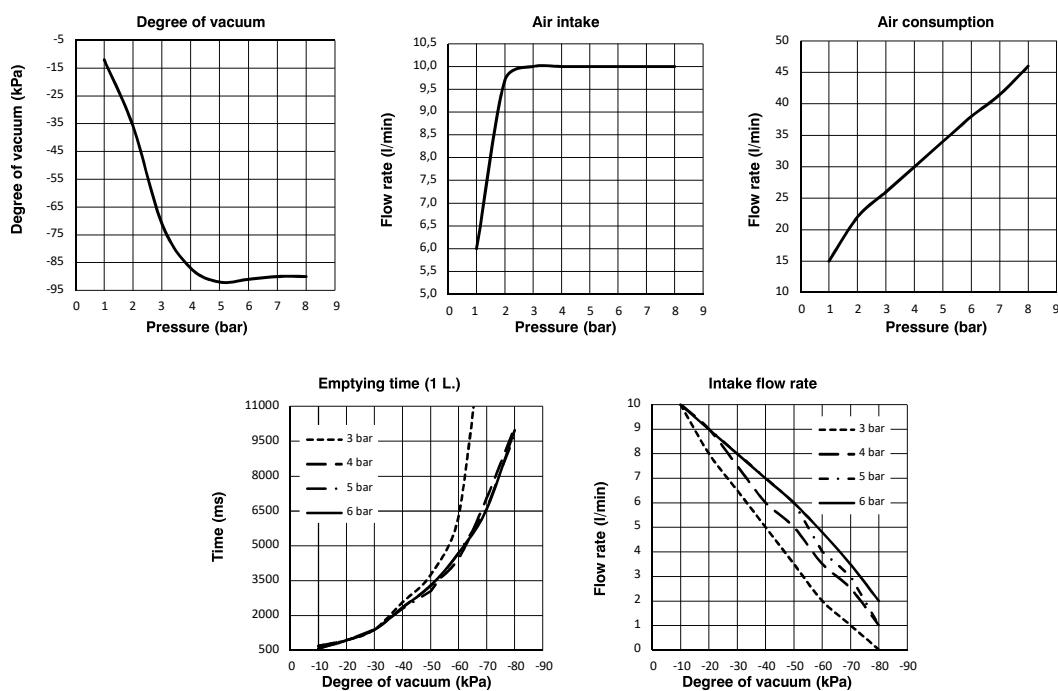


Single stage generators, robust and reliable, with compact dimensions and suitable for applications that need the required degree of vacuum to be reached quickly with limited airflows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and can be applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	36	87	91
Intake flow rate (l/min)	10	10	10
Air consumption (l/min)	22	30	38

Performance Charts



Technical characteristics

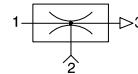
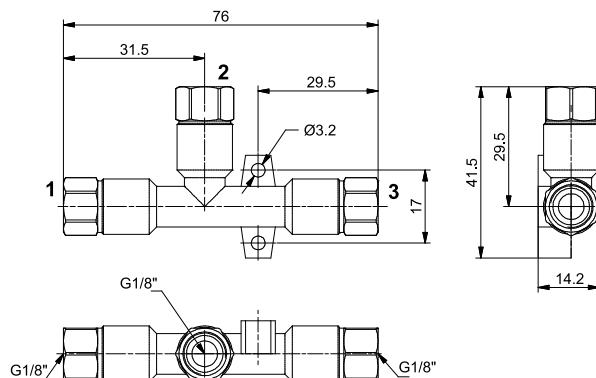
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	12
Noise (dBA)	76



► Single stage vacuum generator T18

Ordering code

19T18.S.07.HV.VV

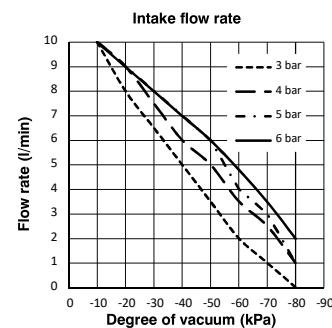
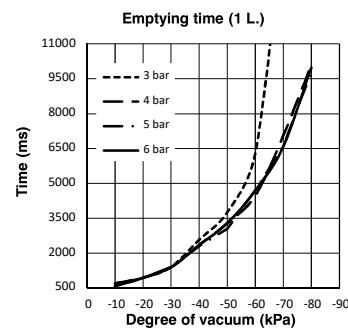
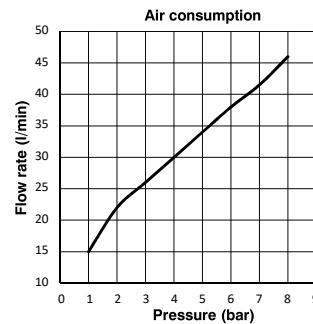
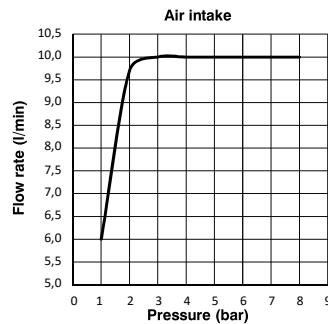
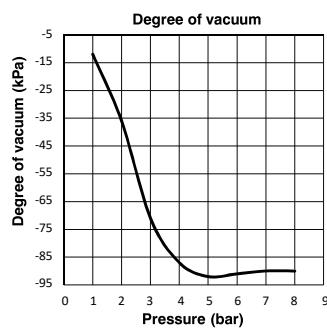


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	36	87	91
Intake flow rate (l/min)	10	10	10
Air consumption (l/min)	22	30	38

Performance Charts



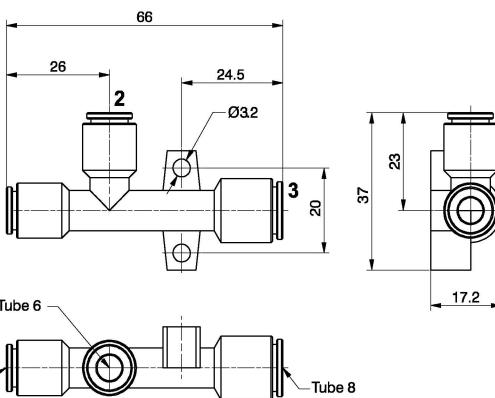
Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	36
Noise (dBA)	77

Accessories

19S18.S	Silencer G1/8"
---------	----------------

Single stage vacuum generator T06



Ordering code

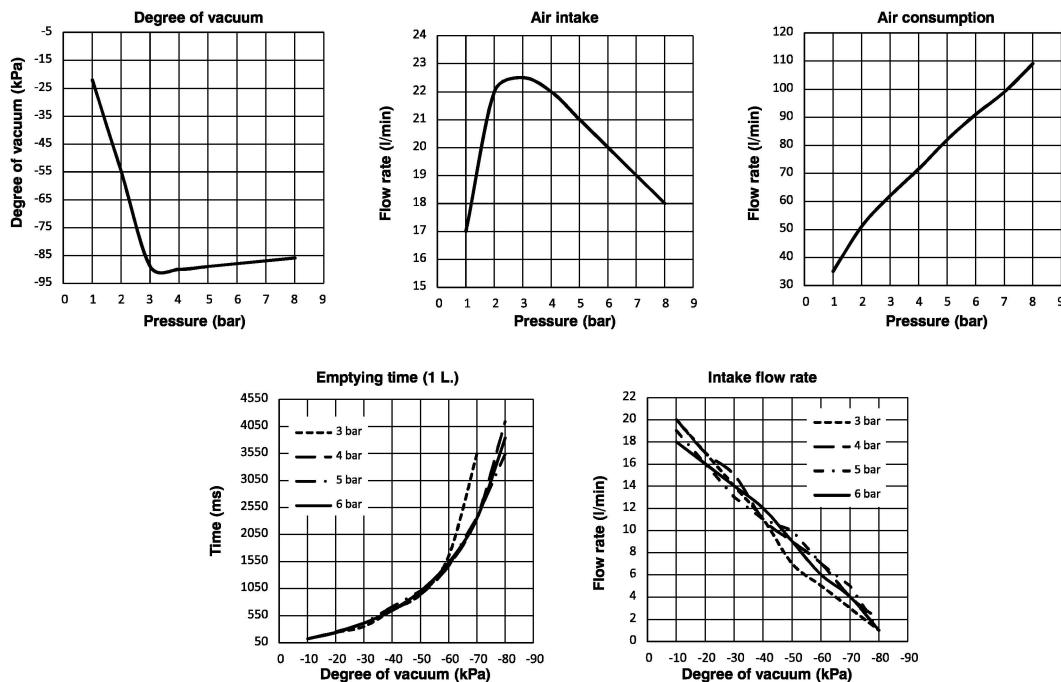
19T06.S.10.HV.ZY

Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	55	90	88
Intake flow rate (l/min)	22	22	20
Air consumption (l/min)	51	72	91

Performance Charts

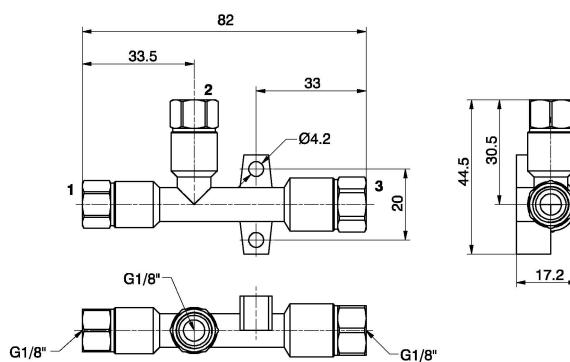


Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	15
Noise (dBA)	94



► Single stage vacuum generator T18



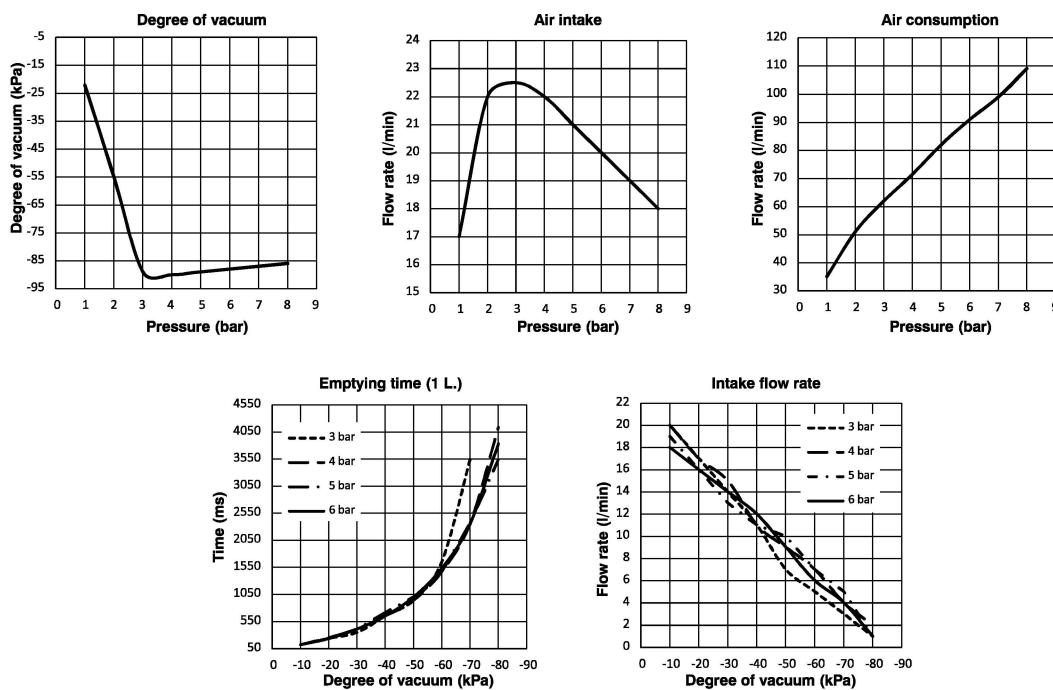
Ordering code
19T18.S.10.HV.VV

Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	55	90	88
Intake flow rate (l/min)	22	22	20
Air consumption (l/min)	51	72	91

Performance Charts



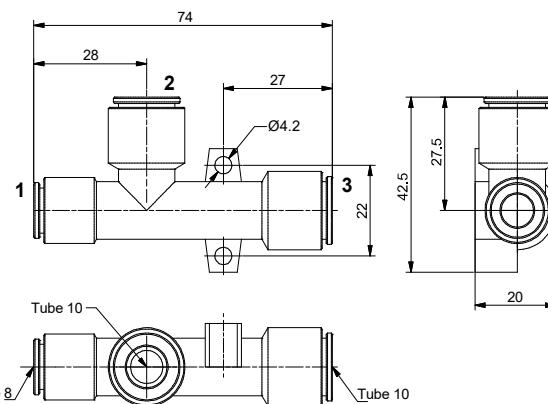
Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	46
Noise (dBA)	87

Accessories

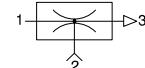
19S18.S	Silencer G1/8"
---------	----------------

Single stage vacuum generator T10



Ordering code

19T10.S.13.HV.XX

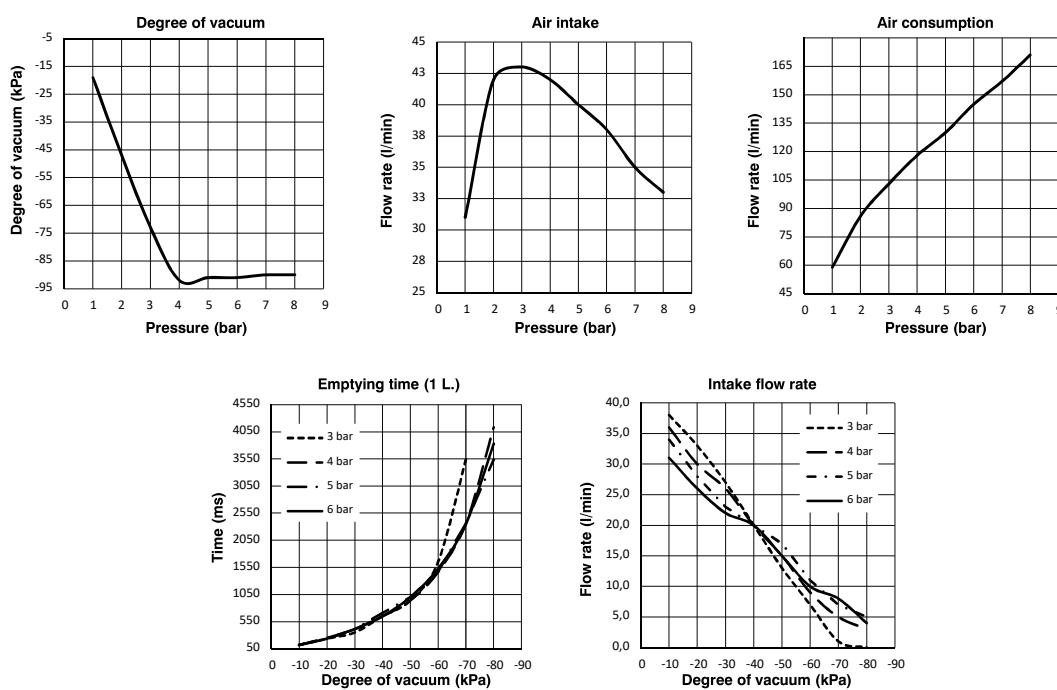


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	47	92	91
Intake flow rate (l/min)	42	42	38
Air consumption (l/min)	86	118	145

Performance Charts

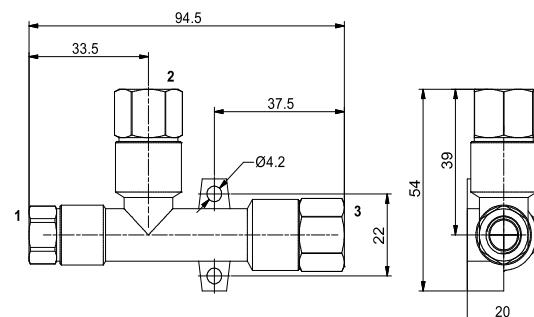


Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	25
Noise (dBA)	92

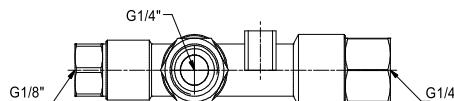
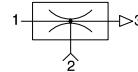


► Single stage vacuum generator T14



Ordering code

19T14.S.15.HV.UU

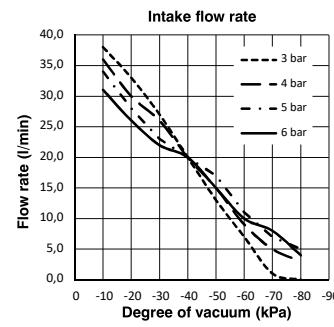
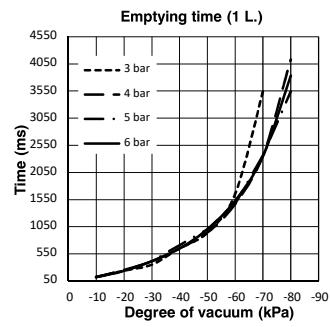
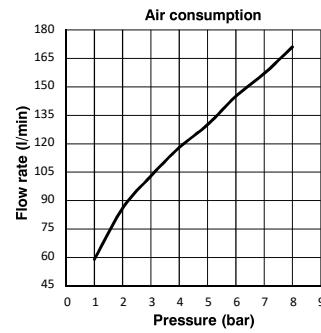
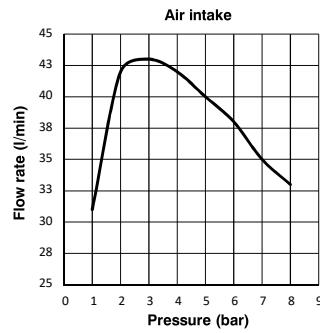
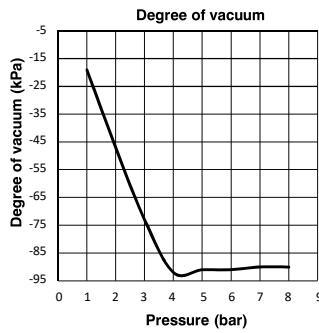


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	47	92	91
Intake flow rate (l/min)	42	42	38
Air consumption (l/min)	86	118	145

Performance Charts



Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	86
Noise (dBA)	96

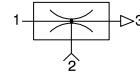
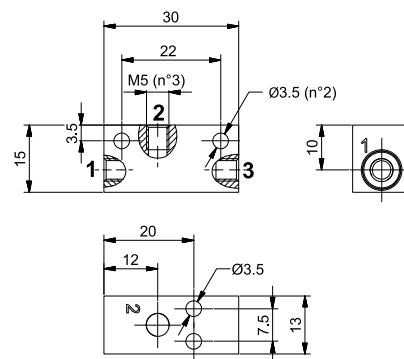
Accessories

19S14.S	Silencer G 1/4"
---------	-----------------

▶ Single stage vacuum generator M5

Ordering code

19M05.S.05.SS.00

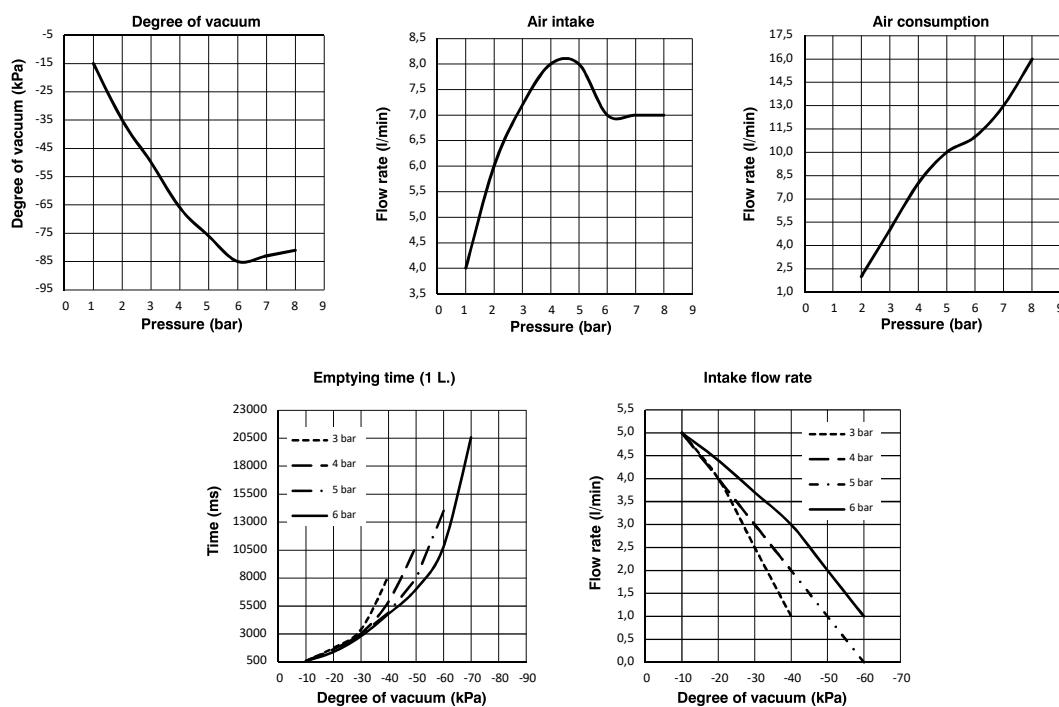


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	35	66	85
Intake flow rate (l/min)	6	8	7
Air consumption (l/min)	2	8	11

Performance Charts

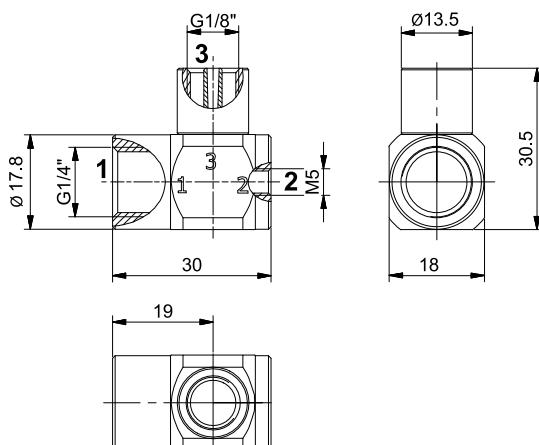


Technical characteristics

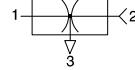
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	15



► Single stage vacuum generator M5



Ordering code
19M05.S.08.SS.L0

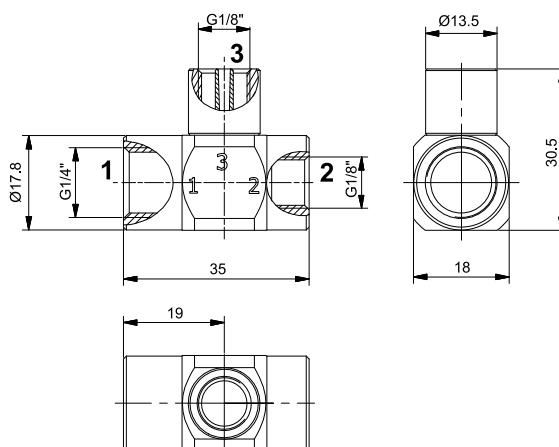


Single stage generators, with operation based on the Venturi principle; their main feature is the presence of feed pressure and connection for the vacuum on the same axis. This makes it possible to connect the suction cups directly to the generator or through the suction cup holder, so therefore still on the same axis with obvious advantages in terms of system layout and simplicity. The outlet connection has a female thread G 1/8".

Operational characteristics				
Inlet pressure (bar)	2	4	6	
Degree of Vacuum (-kPa)	53	82	78	
Intake flow rate (l/min)	13	14	12	
Air consumption (l/min)	11	24	36	
Performance Charts				
Performance Charts				
Technical characteristics				
Fluid	Unlubricated filtered air			
Pressure (bar)	1 ... 8			
Temperature (°C)	-10 ... +80			
Weight (g)	24			

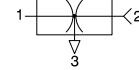
Accessories	
19S18.S	Silencer G1/8"

Single stage vacuum generator G1/8"



Ordering code

19M18.S.08.SS.L0

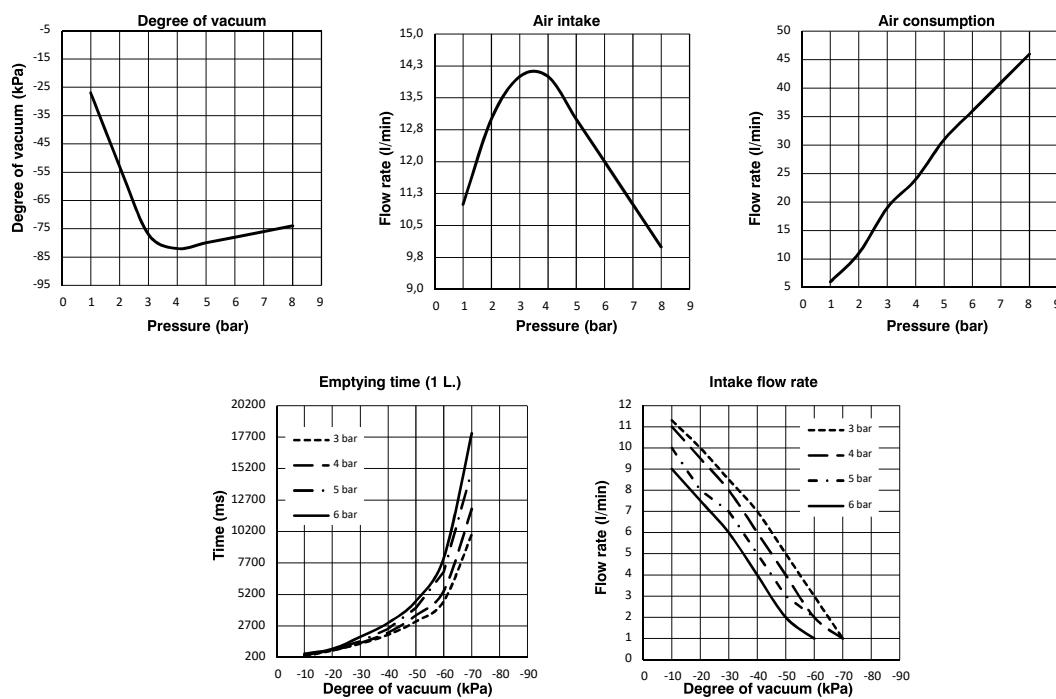


Single stage generators, with operation based on the Venturi principle; their main feature is the presence of feed pressure and connection for the vacuum on the same axis. This makes it possible to connect the suction cups directly to the generator or through the suction cup holder, so therefore still on the same axis with obvious advantages in terms of system layout and simplicity. The outlet connection has a female thread G 1/8".

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	53	82	78
Intake flow rate (l/min)	13	14	12
Air consumption (l/min)	11	24	36

Performance Charts



Technical characteristics

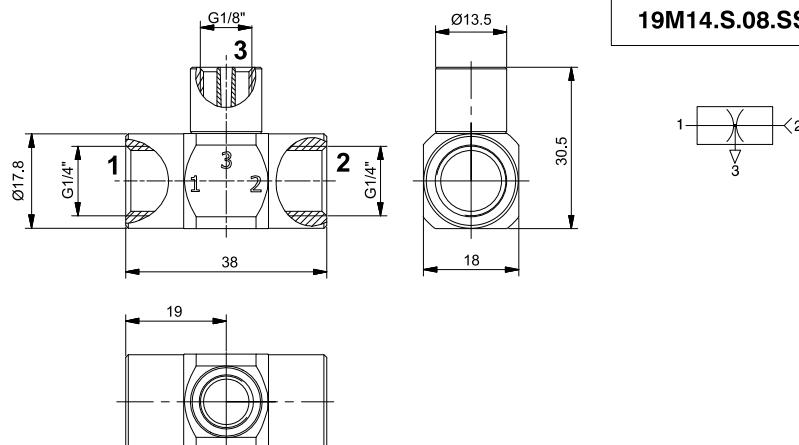
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	26

Accessories

19S18.S	Silencer G1/8"
---------	----------------



► Single stage vacuum generator G1/4"



Ordering code

19M14.S.08.SS.L0

Single stage generators, with operation based on the Venturi principle; their main feature is the presence of feed pressure and connection for the vacuum on the same axis. This makes it possible to connect the suction cups directly to the generator or through the suction cup holder, so therefore still on the same axis with obvious advantages in terms of system layout and simplicity. The outlet connection has a female thread G 1/8".

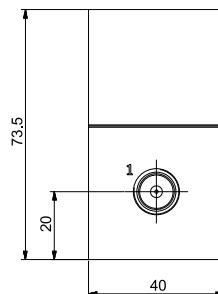
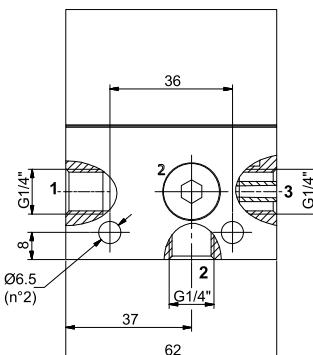
VACUUM GENERATORS

Operational characteristics																																																										
Inlet pressure (bar)	2	4	6																																																							
Degree of Vacuum (-kPa)	53	82	78																																																							
Intake flow rate (l/min)	13	14	12																																																							
Air consumption (l/min)	11	24	36																																																							
Performance Charts	<p>Degree of vacuum</p> <p>Degree of vacuum (kPa) vs Pressure (bar)</p> <table border="1"> <caption>Estimated data for Degree of vacuum vs Pressure</caption> <thead> <tr> <th>Pressure (bar)</th> <th>Degree of vacuum (kPa)</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>-28</td></tr> <tr><td>2.0</td><td>-45</td></tr> <tr><td>3.0</td><td>-75</td></tr> <tr><td>4.0</td><td>-82</td></tr> <tr><td>5.0</td><td>-85</td></tr> <tr><td>6.0</td><td>-87</td></tr> <tr><td>7.0</td><td>-88</td></tr> <tr><td>8.0</td><td>-89</td></tr> </tbody> </table>	Pressure (bar)	Degree of vacuum (kPa)	1.0	-28	2.0	-45	3.0	-75	4.0	-82	5.0	-85	6.0	-87	7.0	-88	8.0	-89	<p>Air intake</p> <p>Flow rate (l/min) vs Pressure (bar)</p> <table border="1"> <caption>Estimated data for Air intake vs Pressure</caption> <thead> <tr> <th>Pressure (bar)</th> <th>Flow rate (l/min)</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>11.3</td></tr> <tr><td>2.0</td><td>13.5</td></tr> <tr><td>3.0</td><td>14.3</td></tr> <tr><td>4.0</td><td>14.0</td></tr> <tr><td>5.0</td><td>13.5</td></tr> <tr><td>6.0</td><td>12.5</td></tr> <tr><td>7.0</td><td>11.5</td></tr> <tr><td>8.0</td><td>10.5</td></tr> </tbody> </table>	Pressure (bar)	Flow rate (l/min)	1.0	11.3	2.0	13.5	3.0	14.3	4.0	14.0	5.0	13.5	6.0	12.5	7.0	11.5	8.0	10.5	<p>Air consumption</p> <p>Flow rate (l/min) vs Pressure (bar)</p> <table border="1"> <caption>Estimated data for Air consumption vs Pressure</caption> <thead> <tr> <th>Pressure (bar)</th> <th>Flow rate (l/min)</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>5</td></tr> <tr><td>2.0</td><td>10</td></tr> <tr><td>3.0</td><td>15</td></tr> <tr><td>4.0</td><td>20</td></tr> <tr><td>5.0</td><td>25</td></tr> <tr><td>6.0</td><td>30</td></tr> <tr><td>7.0</td><td>35</td></tr> <tr><td>8.0</td><td>45</td></tr> </tbody> </table>	Pressure (bar)	Flow rate (l/min)	1.0	5	2.0	10	3.0	15	4.0	20	5.0	25	6.0	30	7.0	35	8.0	45	
Pressure (bar)	Degree of vacuum (kPa)																																																									
1.0	-28																																																									
2.0	-45																																																									
3.0	-75																																																									
4.0	-82																																																									
5.0	-85																																																									
6.0	-87																																																									
7.0	-88																																																									
8.0	-89																																																									
Pressure (bar)	Flow rate (l/min)																																																									
1.0	11.3																																																									
2.0	13.5																																																									
3.0	14.3																																																									
4.0	14.0																																																									
5.0	13.5																																																									
6.0	12.5																																																									
7.0	11.5																																																									
8.0	10.5																																																									
Pressure (bar)	Flow rate (l/min)																																																									
1.0	5																																																									
2.0	10																																																									
3.0	15																																																									
4.0	20																																																									
5.0	25																																																									
6.0	30																																																									
7.0	35																																																									
8.0	45																																																									
Emptying time (1 L.)	<p>Emptying time (1 L.)</p> <p>Time (ms) vs Degree of vacuum (kPa)</p> <table border="1"> <caption>Estimated data for Emptying time vs Degree of vacuum</caption> <thead> <tr> <th>Degree of vacuum (kPa)</th> <th>Time (ms)</th> </tr> </thead> <tbody> <tr><td>-10</td><td>200</td></tr> <tr><td>-20</td><td>250</td></tr> <tr><td>-30</td><td>350</td></tr> <tr><td>-40</td><td>550</td></tr> <tr><td>-50</td><td>1000</td></tr> <tr><td>-60</td><td>2000</td></tr> <tr><td>-70</td><td>3500</td></tr> <tr><td>-80</td><td>6000</td></tr> <tr><td>-90</td><td>17700</td></tr> </tbody> </table>	Degree of vacuum (kPa)	Time (ms)	-10	200	-20	250	-30	350	-40	550	-50	1000	-60	2000	-70	3500	-80	6000	-90	17700	<p>Intake flow rate</p> <p>Flow rate (l/min) vs Degree of vacuum (kPa)</p> <table border="1"> <caption>Estimated data for Intake flow rate vs Degree of vacuum</caption> <thead> <tr> <th>Degree of vacuum (kPa)</th> <th>Flow rate (l/min)</th> </tr> </thead> <tbody> <tr><td>-10</td><td>11.5</td></tr> <tr><td>-20</td><td>10.5</td></tr> <tr><td>-30</td><td>9.5</td></tr> <tr><td>-40</td><td>8.5</td></tr> <tr><td>-50</td><td>7.5</td></tr> <tr><td>-60</td><td>6.5</td></tr> <tr><td>-70</td><td>5.5</td></tr> <tr><td>-80</td><td>4.5</td></tr> <tr><td>-90</td><td>3.5</td></tr> </tbody> </table>	Degree of vacuum (kPa)	Flow rate (l/min)	-10	11.5	-20	10.5	-30	9.5	-40	8.5	-50	7.5	-60	6.5	-70	5.5	-80	4.5	-90	3.5																
Degree of vacuum (kPa)	Time (ms)																																																									
-10	200																																																									
-20	250																																																									
-30	350																																																									
-40	550																																																									
-50	1000																																																									
-60	2000																																																									
-70	3500																																																									
-80	6000																																																									
-90	17700																																																									
Degree of vacuum (kPa)	Flow rate (l/min)																																																									
-10	11.5																																																									
-20	10.5																																																									
-30	9.5																																																									
-40	8.5																																																									
-50	7.5																																																									
-60	6.5																																																									
-70	5.5																																																									
-80	4.5																																																									
-90	3.5																																																									
Technical characteristics																																																										
Fluid	Unlubricated filtered air																																																									
Pressure (bar)	1 ... 8																																																									
Temperature (°C)	-10 ... +80																																																									
Weight (g)	26																																																									

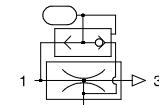
Accessories

19S18.S	Silencer G1/8"
---------	----------------

Single stage vacuum generator G1/4"



Ordering code
19M14.S.10.SS.E0

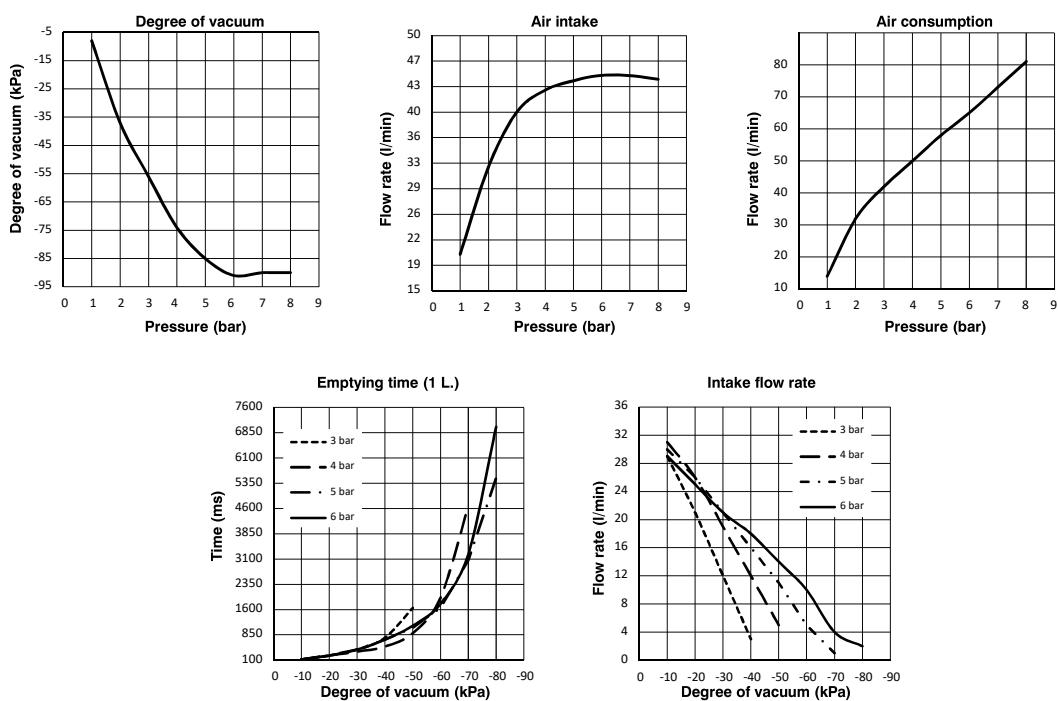


Single stage generators derived from standard traditional single-stage generators, complete with automatic release system. The pressure supply, in addition to generating the defined vacuum through the Venturi principle, supplies a chamber which serves as a pressure accumulator. When the supply stops, through a non-return valve, the accumulated pressure will be discharged automatically through the vacuum connection, ensuring quick detachment of the gripped piece.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	37	74	91
Intake flow rate (l/min)	32	43	45
Air consumption (l/min)	32	50	75

Performance Charts



Technical characteristics

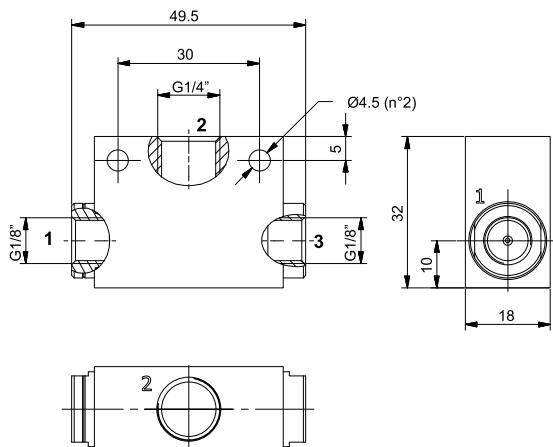
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	346

Accessories

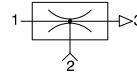
19S14.S	Silencer G1/4"
---------	----------------



► Single stage vacuum generator G1/4"



Ordering code
19M14.S.10.SS.R0

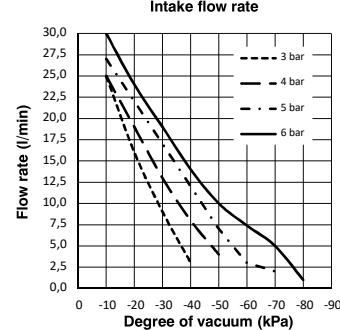
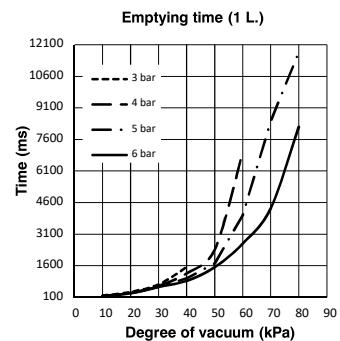
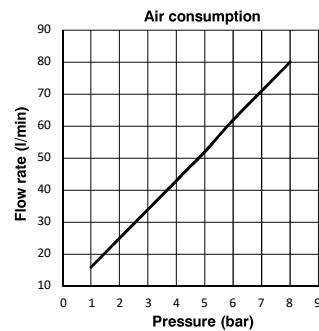
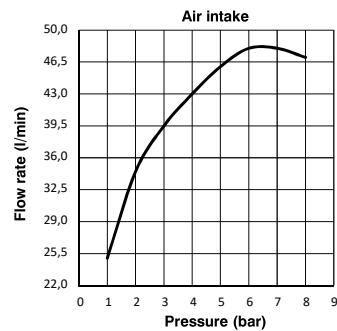
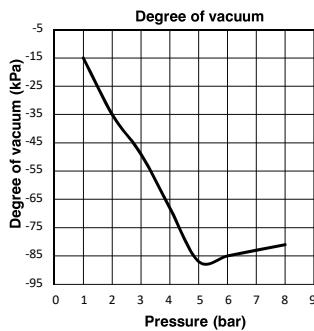


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	35	68	85
Intake flow rate (l/min)	35	43	48
Air consumption (l/min)	25	43	62

Performance Charts



Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	55

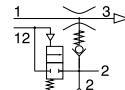
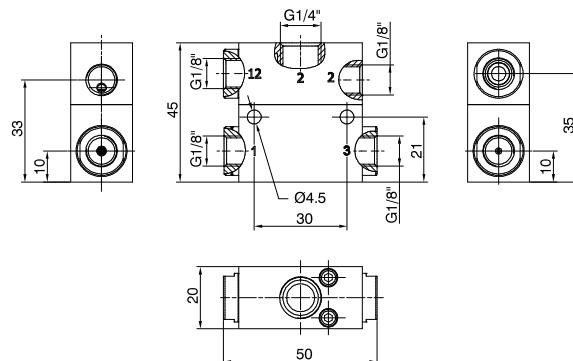
Accessories

19S18.S	Silencer G1/8"
---------	----------------

Single stage vacuum generator with built in vacuum retaining valve

Ordering code

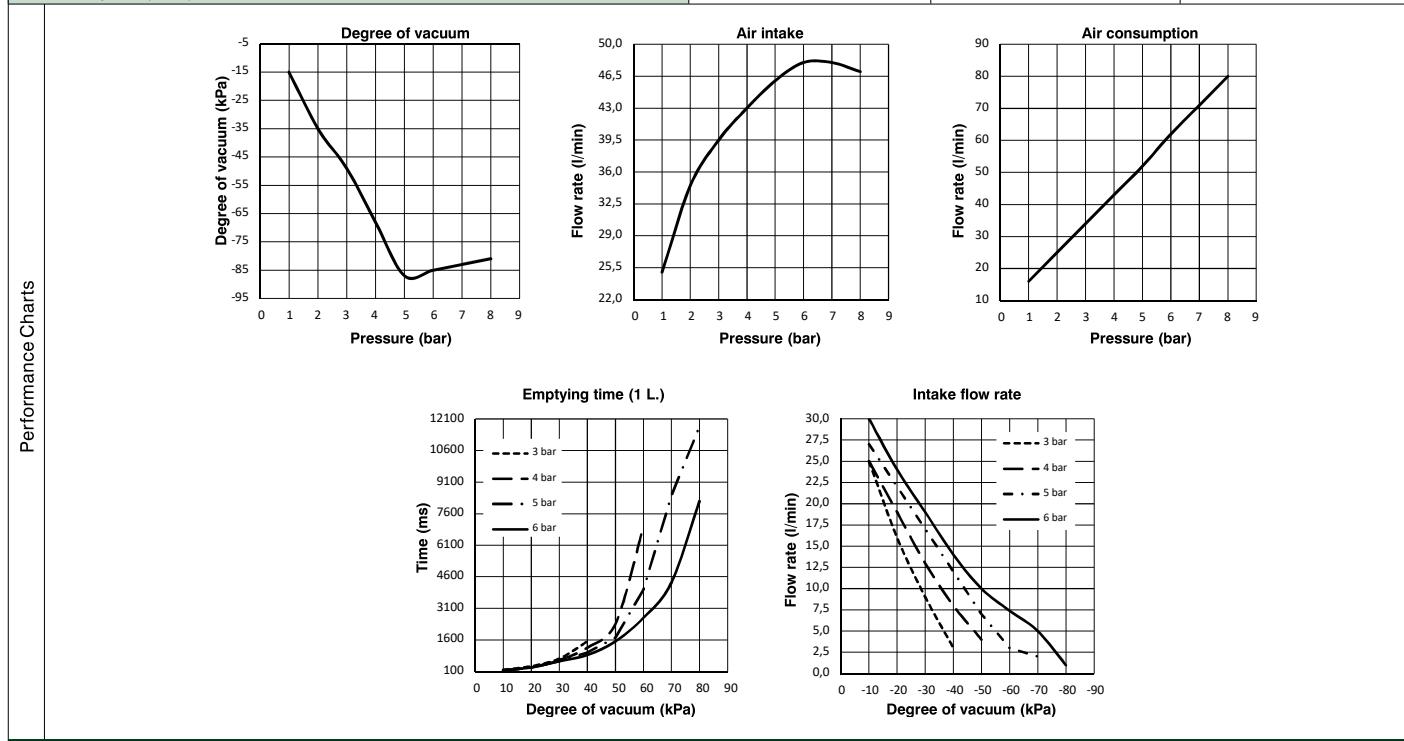
19M14.S.10.SS.03



Single stage generators, robust and reliable, with compact dimensions and suitable for applications which require the vacuum to be reached quickly with limited air flow. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups or suction cup holder for the construction of a decentralized plant. Equipped with an integrated non-return valve, which holds the vacuum in sealed applications and breakdowns or lack of air supply and a flap valve for the quick release of the manipulated objects.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	35	68	85
Intake flow rate (l/min)	35	43	48
Air consumption (l/min)	25	43	62



Technical characteristics

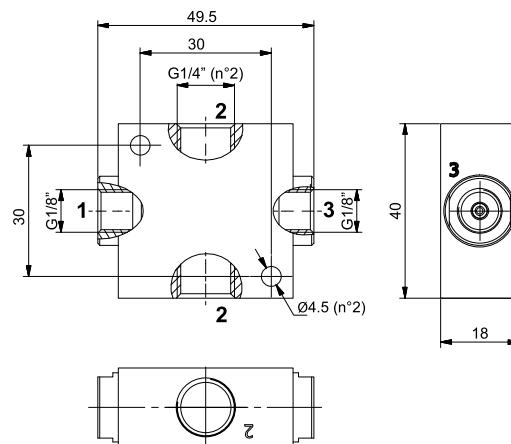
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	85

Accessories

19S18.S	Silencer G1/8"
---------	----------------



► Single stage vacuum generator G1/4"



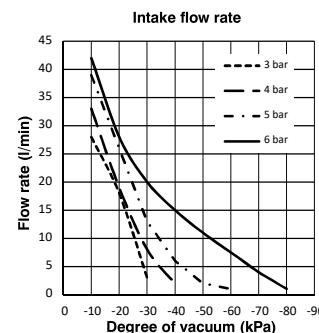
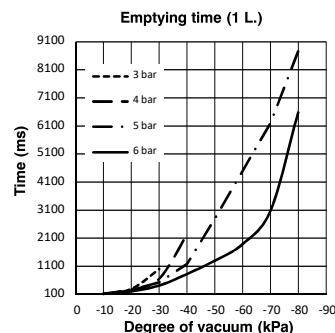
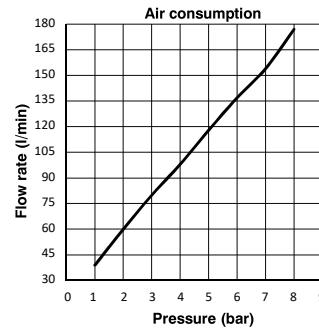
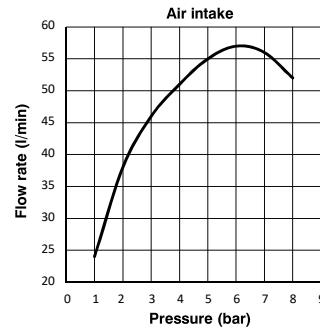
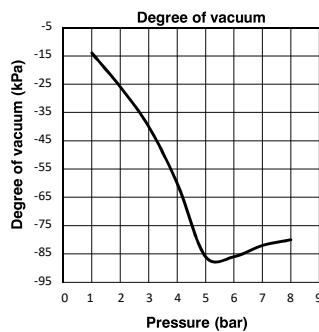
Ordering code
19M14.S.15.SS.RD

Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	26	60	86
Intake flow rate (l/min)	38	51	57
Air consumption (l/min)	60	98	137

Performance Charts



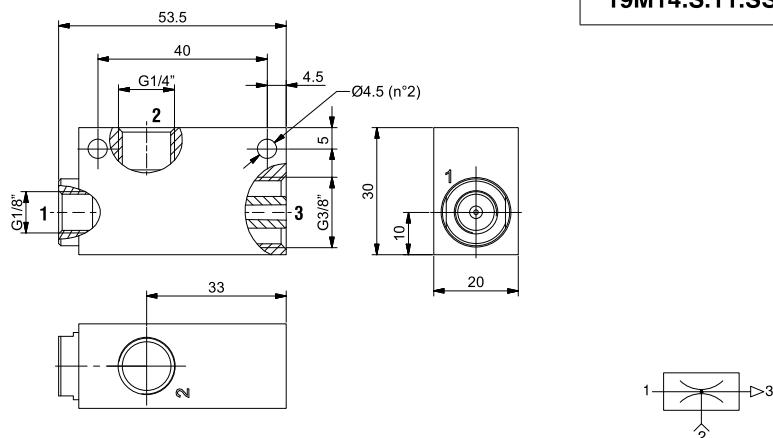
Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	68

Accessories

19S18.S	Silencer G1/8"
---------	----------------

▶ Single stage vacuum generator G1/4"



Ordering code

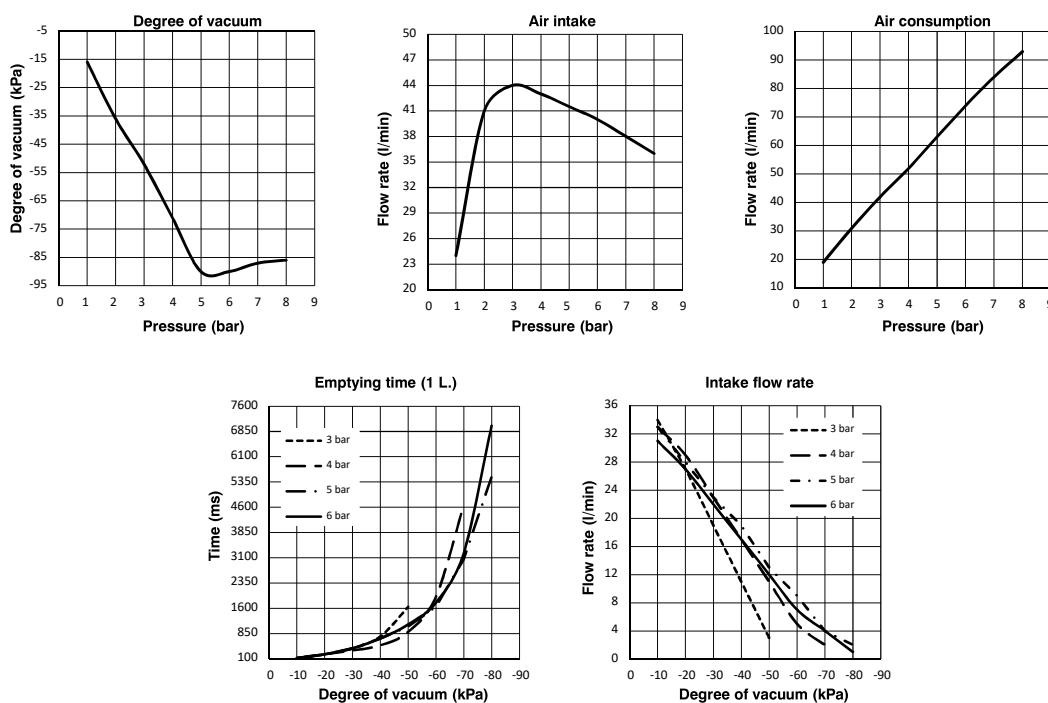
19M14.S.11.SS.00

Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	36	71	90
Intake flow rate (l/min)	41	43	40
Air consumption (l/min)	31	52	74

Performance Charts



Technical characteristics

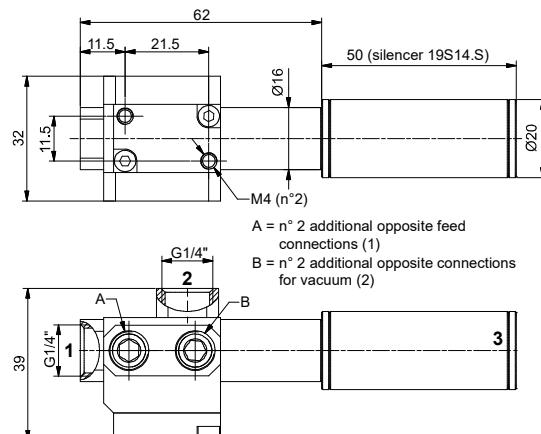
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	67

Accessories

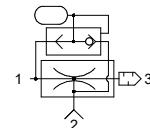
19S38.S	Silencer G3/8"
---------	----------------



► Single stage vacuum generator G1/4"



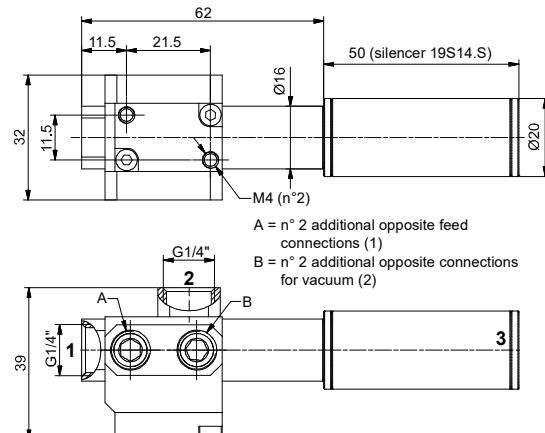
Ordering code
19M14.S.12.SL.ES



High-performance compact generator for high frequency applications; the presence of the integrated ejector ensures release capacity in the shortest possible time. The fact of it being extremely lightweight allows its application directly onto the robot gripping arms and/or mobile applications. Available with two flow rates in the same overall dimensions.

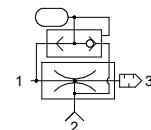
Operational characteristics				
Inlet pressure (bar)	2	4	6	
Degree of Vacuum (-kPa)	29	65	89	
Intake flow rate (l/min)	32	40	39	
Air consumption (l/min)	34	55	79	
Performance Charts				
Performance Charts				
Technical characteristics				
Fluid	Unlubricated filtered air			
Pressure (bar)	1 ... 8			
Temperature (°C)	-10 ... +80			
Weight (g)	83			

► Single stage vacuum generator G1/4"



Ordering code

19M14.S.17.SL.ES

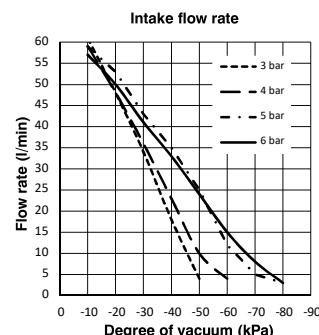
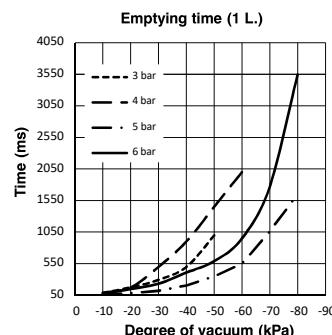
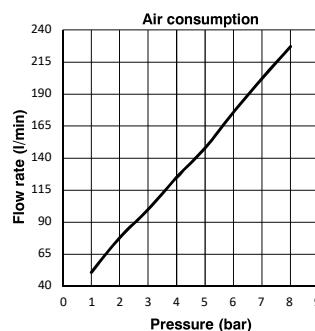
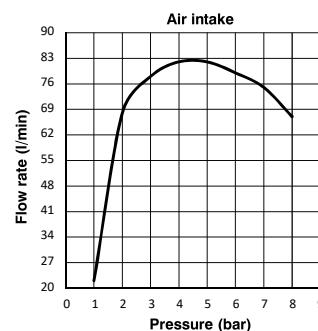
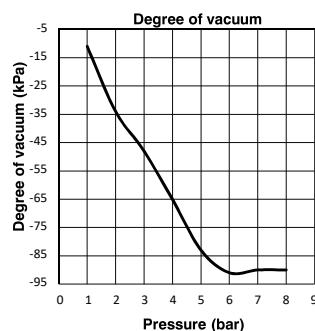


High-performance compact generator for high frequency applications; the presence of the integrated ejector ensures release capacity in the shortest possible time. The fact of it being extremely lightweight allows its application directly onto the robot gripping arms and/or mobile applications. Available with two flow rates in the same overall dimensions.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	34	65	91
Intake flow rate (l/min)	68	82	79
Air consumption (l/min)	78	125	176

Performance Charts

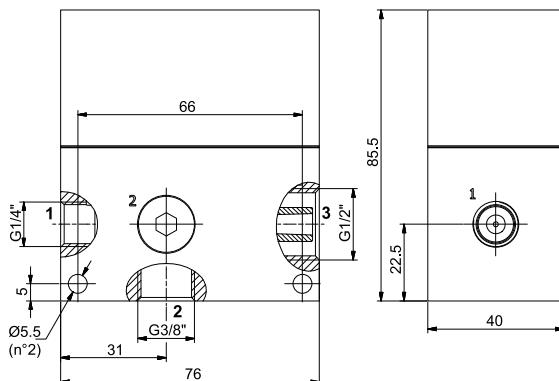


Technical characteristics

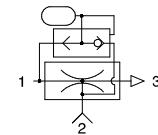
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	83



► Single stage vacuum generator G3/8"



Ordering code
19M38.S.14.SS.E0



Single stage generators derived from standard traditional single-stage generators, complete with automatic release system. The pressure supply, in addition to generating the defined vacuum through the Venturi principle, supplies a chamber which serves as a pressure accumulator. When the supply stops, through a non-return valve, the accumulated pressure will be discharged automatically through the vacuum connection, ensuring quick detachment of the gripped piece.

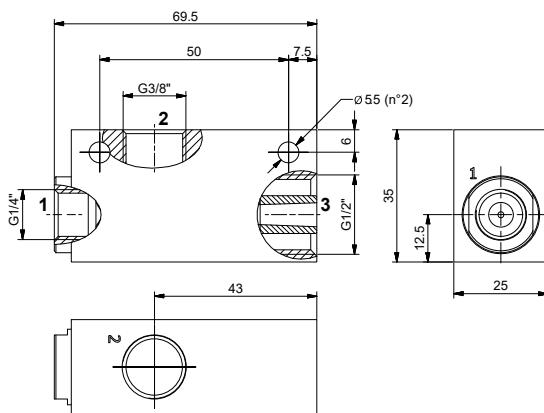
VACUUM GENERATORS

Operational characteristics				
Inlet pressure (bar)	2	4	6	
Degree of Vacuum (-kPa)	30	66	85	
Intake flow rate (l/min)	75	94	92	
Air consumption (l/min)	55	86	120	
Performance Charts				
Technical characteristics				
Fluid	Unlubricated filtered air			
Pressure (bar)	1 ... 8			
Temperature (°C)	-10 ... +80			
Weight (g)	480			

Accessories

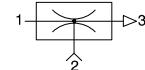
19S12.R	Silencer G1/2"
---------	----------------

► Single stage vacuum generator G3/8"



Ordering code

19M38.S.15.SS.00

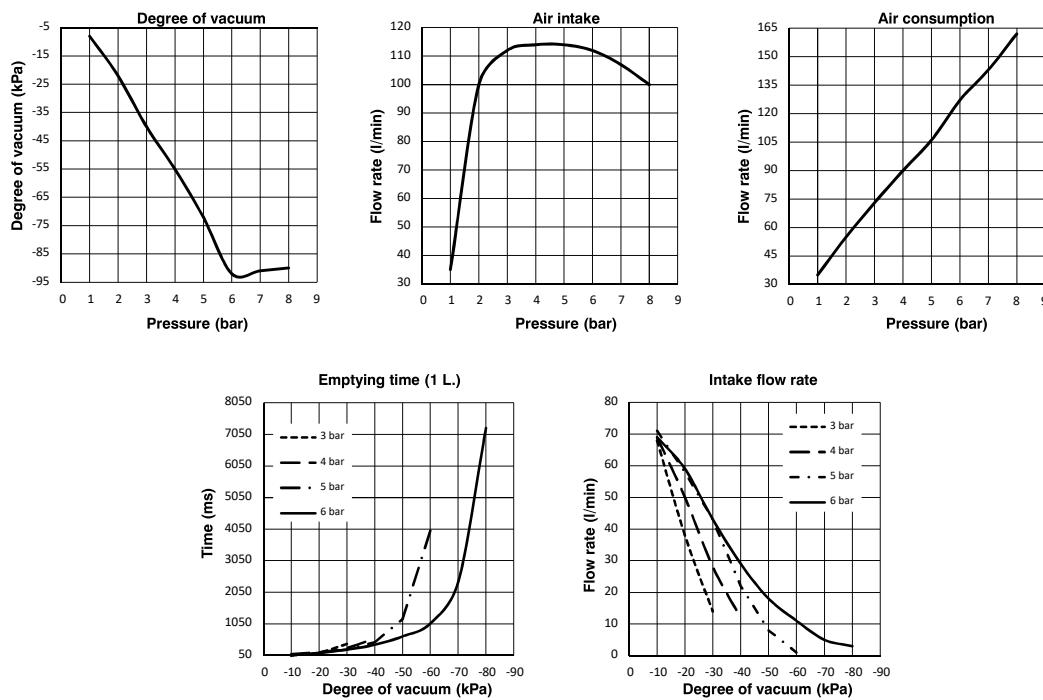


Single stage generators, robust and reliable, with compact dimensions and suitable for applications which need the required degree of vacuum to be reached quickly with limited air flows. Operating on the Venturi principle they have the vacuum connection orthogonal to the axis of supply and outlet. They can be connected directly to the suction cups and/or suction cup holder and applied in any position.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	22	55	92
Intake flow rate (l/min)	100	114	112
Air consumption (l/min)	55	90	127

Performance Charts



Technical characteristics

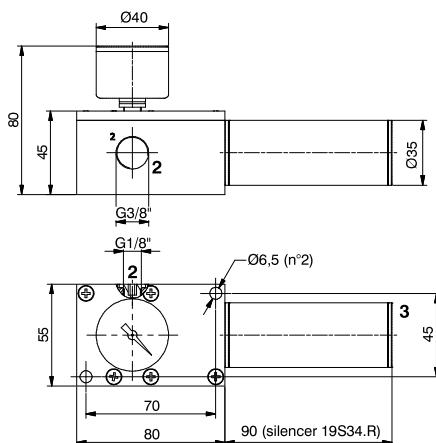
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	122

Accessories

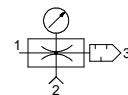
19S12.R	Silencer G1/2"
---------	----------------



► Single stage vacuum generator G3/8"



Ordering code	
19M38.S.18.HV.◎	
OPTIONS	
◎	VS = vacuum gauge + silencer
OS	only silencer

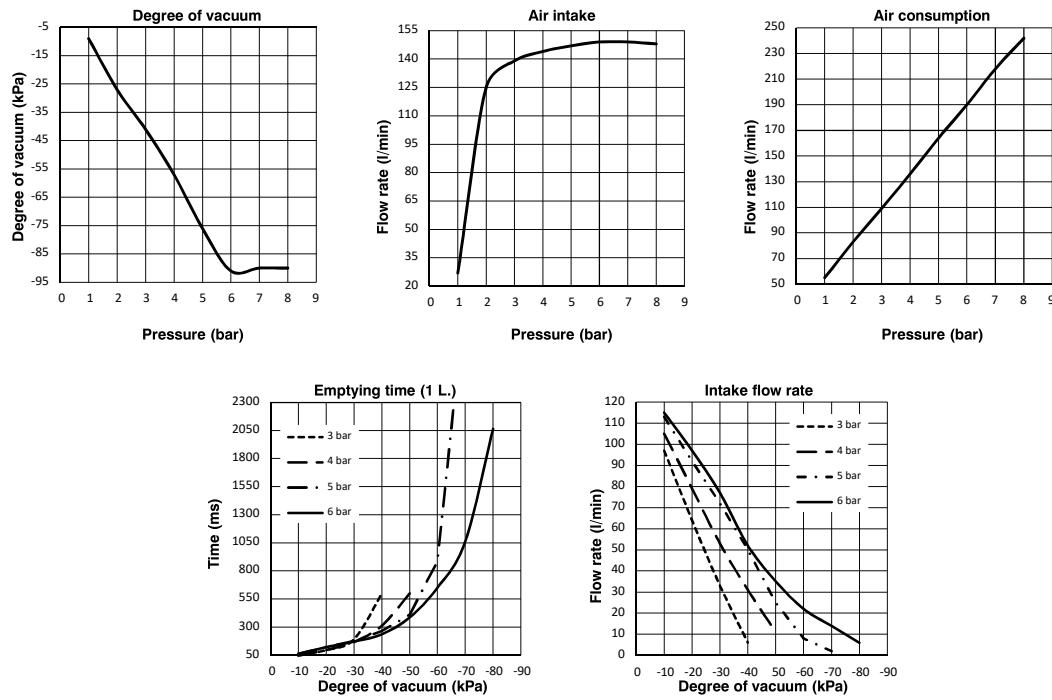


Single stage generator with high suction capacity due to a pair of nozzles mounted in parallel; they are particularly quiet thanks to a free-flow type silencer, standard-fitted with a vacuum gauge, and allows direct connection with a vacuum switch or alternatively a solenoid valve for quick detachment via direct blowing into the vacuum connection. Suitable for decentralised connection of one or more suction cups.

Operational characteristics

Inlet pressure (bar)	2	4	6
Degree of Vacuum (-kPa)	27	57	91
Intake flow rate (l/min)	125	144	149
Air consumption (l/min)	83	136	190

Performance Charts



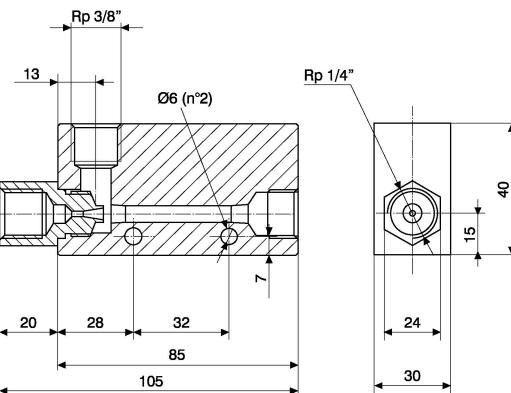
Technical characteristics

Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 8
Temperature (°C)	-10 ... +80
Weight (g)	450

High-flow single stage vacuum generator G3/8"

Ordering code

19M38.S.20.HF.00



Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-flow silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and an average degree of vacuum are required (57 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	57
Intake flow rate (l/min)	170
Air consumption (l/min)	180
Performance Charts	Intake flow rate
	5bar —
	Evacuation time
	5bar —

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)							Degree of Vacuum max. (-kPa)
		0	10	20	30	40	50	55	
5	180	170	125	115	95	70	35.5	7.5	57

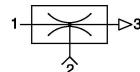
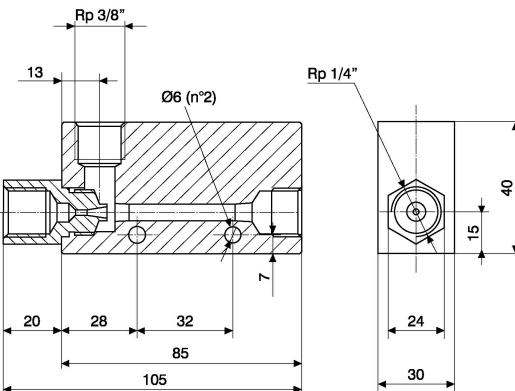
Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)							Degree of Vacuum max. (-kPa)
		10	20	30	40	50	55		
5	180	0.029	0.062	0.105	0.138	0.246	0.338		57

Technical characteristics								
Fluid	Unlubricated filtered air							
Pressure (bar)	1 ... 6							
Temperature (°C)	0 ... +60							
Weight (g)	327							
Noise (dBA)	72							

Accessories	
19S12.S	Silencer G1/2"

► High-flow single stage vacuum generator G3/8"

Ordering code
19M38.S.20.HH.00



Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-low silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and a high degree of vacuum are required (92 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	92
Intake flow rate (l/min)	110
Air consumption (l/min)	180

Performance Charts

Intake flow rate 5bar —

-kPa	l/min
0	108
10	96
20	84
30	74
40	58
50	42
60	30
70	22
80	12

Evacuation time 5bar —

-kPa	s
10	0.00
20	0.05
30	0.10
40	0.18
50	0.28
60	0.42
70	0.62
80	0.90

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)									Degree of Vacuum max. (-kPa)
		0	10	20	30	40	50	60	70	80	
5	180	110	100	85	75	55	40.5	30	20	12	92

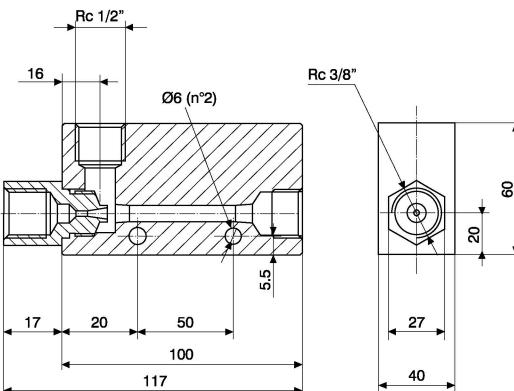
Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)								Degree of Vacuum max. (-kPa)
		10	20	30	40	50	60	70	80	
5	180	0.043	0.1	0.167	0.23	0.338	0.492	0.707	0.923	92

Technical characteristics	
Fluid	Unlubricated filtered air
Pressure (bar)	1 ... 6
Temperature (°C)	0 ... +60
Weight (g)	327
Noise (dBA)	72

Accessories

19S12.S Silencer G1/2"

► High-flow single stage vacuum generator G1/2"



Ordering code

19M12.S.25.HF.00

Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-flow silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and an average degree of vacuum are required (57 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	57
Intake flow rate (l/min)	250
Air consumption (l/min)	265
Performance Charts	

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)							Degree of Vacuum max. (-kPa)
		0	10	20	30	40	50	55	
5	265	250	215	200	150	105	60	36	57

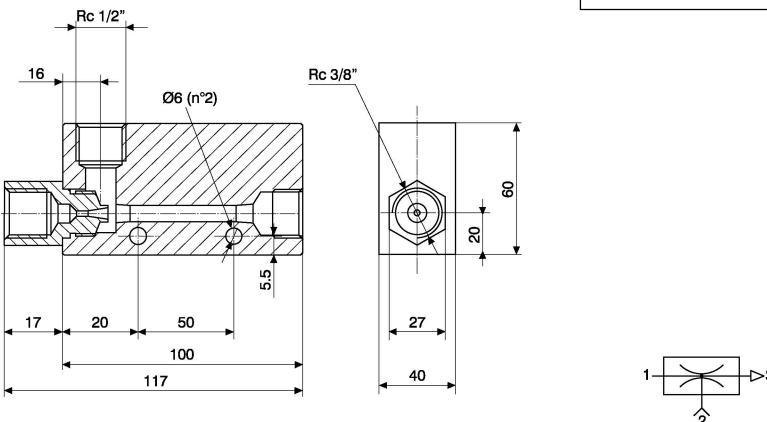
Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)							Degree of Vacuum max. (-kPa)
		10	20	30	40	50	55		
5	265	0.021	0.046	0.076	0.123	0.184	0.3		57

Technical characteristics								
Fluid	Unlubricated filtered air							
Pressure (bar)	1 ... 6							
Temperature (°C)	0 ... +60							
Weight (g)	660							
Noise (dBA)	75							

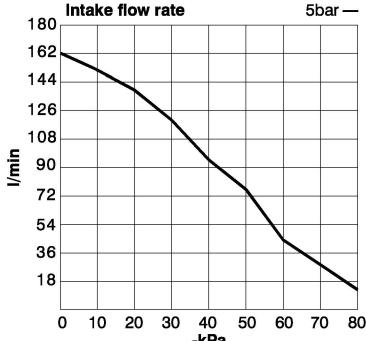
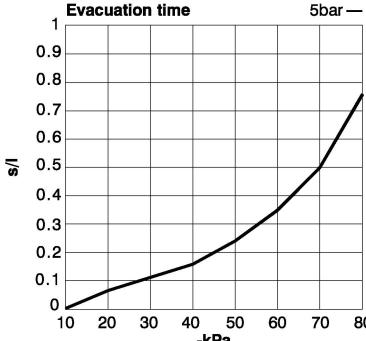
Accessories	
19S34.R	Silencer G3/4"



► High-flow single stage vacuum generator G1/2"



Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-flow silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and a high degree of vacuum are required (92 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	92
Intake flow rate (l/min)	160
Air consumption (l/min)	265
Performance Charts	 

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)								Degree of Vacuum max. (-kPa)	
		0	10	20	30	40	50	60	70		
5	265	160	155	140	120	95	72	47	28	15	92

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)								Degree of Vacuum max. (-kPa)
		10	20	30	40	50	60	70	80	
5	265	0.03	0.069	0.112	0.168	0.241	0.345	0.494	0.753	92

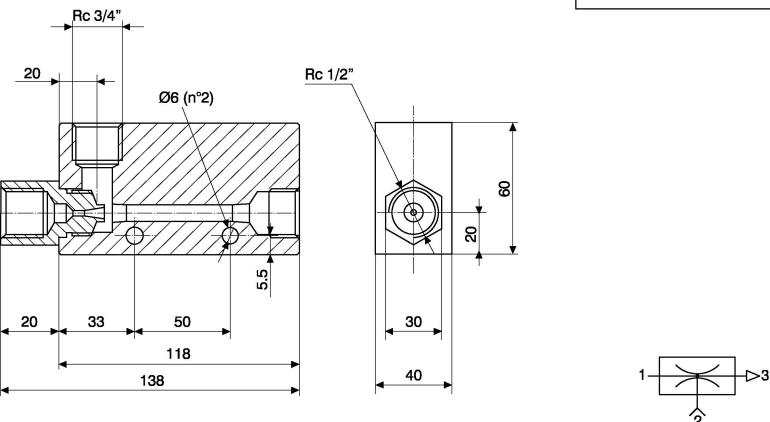
Technical characteristics										
Fluid	Unlubricated filtered air									
Pressure (bar)	1 ... 6									
Temperature (°C)	0 ... +60									
Weight (g)	660									
Noise (dB(A))	75									

Accessories	
19S34.R	Silencer G3/4"

High-flow single stage vacuum generator G3/4"

Ordering code

19M34.S.30.HF.00



Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-flow silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and an average degree of vacuum are required (57 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	57
Intake flow rate (l/min)	350
Air consumption (l/min)	385
Performance Charts	Intake flow rate
	5bar —
	Evacuation time
	5bar —

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)						Degree of Vacuum max. (-kPa)	
		0	10	20	30	40	50		
5	385	350	295	267	215	150	85	41	57

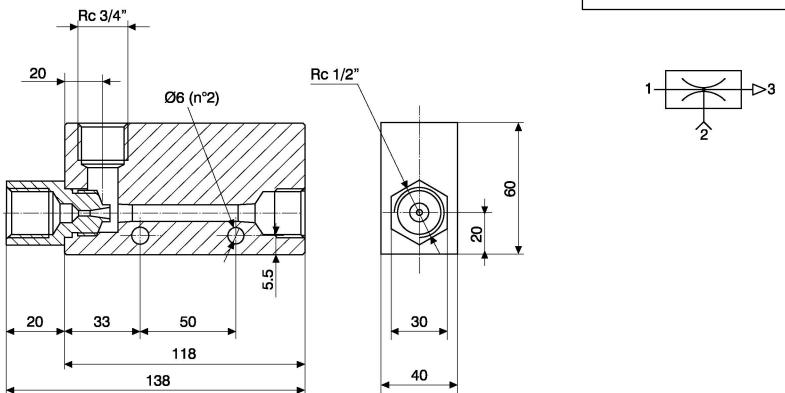
Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)						Degree of Vacuum max. (-kPa)
		10	20	30	40	50	55	
5	385	0.017	0.035	0.058	0.086	0.132	0.219	57

Technical characteristics							
Fluid	Unlubricated filtered air						
Pressure (bar)	1 ... 6						
Temperature (°C)	0 ... +60						
Weight (g)	774						
Noise (dBA)	75						

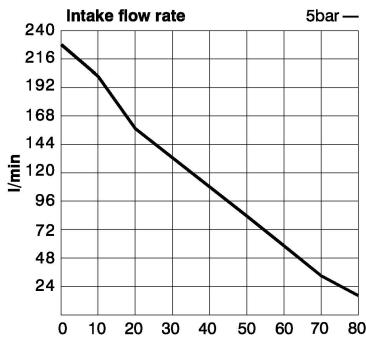
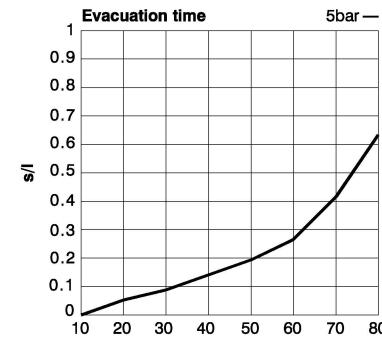
Accessories	
19S34.R	Silencer G3/4"



► High-flow single stage vacuum generator G3/4"



Single stage high suction power generators operating using a single large Venturi nozzle; particularly silent thanks to a free-flow silencer which is mounted separately. Suitable for use in dusty environments and in applications where a large suction capacity and a high degree of vacuum are required (92 -kPa).

Operational characteristics	
Inlet pressure (bar)	5
Degree of Vacuum (-kPa)	92
Intake flow rate (l/min)	225
Air consumption (l/min)	385
Performance Charts	 

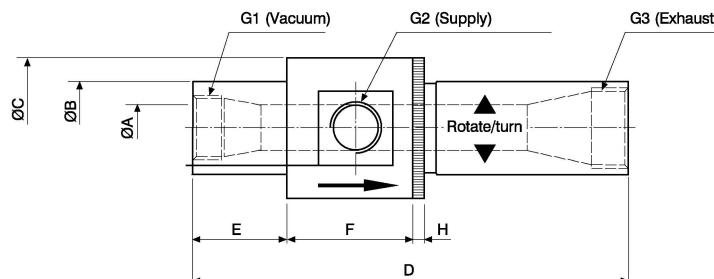
Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)								Degree of Vacuum max. (-kPa)	
		0	10	20	30	40	50	60	70		
5	385	225	200	160	135	105	78	55	33	19	92

Inlet pressure (bar)	Air consumption (l/min)	Evacuation time (s/l) at different levels of vacuum (-kPa)								Degree of Vacuum max. (-kPa)
		10	20	30	40	50	60	70	80	
5	385	0.029	0.058	0.092	0.136	0.196	0.265	0.406	0.625	92

Technical characteristics									
Fluid						Unlubricated filtered air			
Pressure (bar)						1 ... 6			
Temperature (°C)						0 ... +60			
Weight (g)						774			
Noise (dBA)						75			

Accessories	
19S34.R	Silencer G3/4"

▶ Adjustable vacuum generator conveyor



Code	ØA	ØB	ØC	D	E	F	H	G1	G2	G3	Weight (g)
19M14.S.00.SS.RG	6.5	19	32	94-105	22	32	5	G1/4"	G1/8"	G1/4"	96
19M38.S.00.SS.RG	10	25	45	155-165	38	45	5	G3/8"	G3/8"	G1/2"	271.6
19M12.S.00.SS.RG	13	32	51	155-160	38	51	5	G1/2"	G3/8"	G3/4"	377.2
19M34.S.00.SS.RG	19	38	58	175-189	38	51	5	G3/4"	G1/2"	G1"	526.8

Based on the Venturi principle, these differ from traditional ones because they have a much better ejector and are adjustable, this characteristic makes it possible to change the device's low rate and degree of vacuum without affecting the inlet pressure. Their special shape and their operating principle make them suitable for suction and the transfer of powders, granules, sawdust, metal chips, liquid or dry food products, etc., to control suction cups in the presence of large quantities of powders or liquids; these can also be used to suction smoke, coolant fog, water vapour, etc.

Operational characteristics											
Inlet pressure (bar)	4 ... 6 (Max. 7)										
Max. Degree of Vacuum (-kPa)	84										
Max. Intake flow rate (l/min)	3390										
Max. Air consumption (l/min)	2550										

		Inlet pressure (bar)				
		5.5				
Code	Degree of Vacuum (-kPa)	17	34	50	68	84
19M14.S.00.SS.RG		112	169	233	276	342
19M38.S.00.SS.RG		176	327	485	595	825
19M12.S.00.SS.RG		340	625	795	940	1280
19M34.S.00.SS.RG		650	875	1250	1790	2550

		Inlet pressure (bar)				
		5.5				
Code	Degree of Vacuum (-kPa)	17	34	50	68	84
19M14.S.00.SS.RG		280	240	200	162	125
19M38.S.00.SS.RG		846	735	620	520	395
19M12.S.00.SS.RG		1695	1325	1130	990	650
19M34.S.00.SS.RG		3390	2460	1970	1440	1130

Accessories		Description
19S14.S	Silencer G1/4"	for 19M14.S.00.SS.RG
19S12.R	Silencer G1/2"	for 19M38.S.00.SS.RG
19S34.R	Silencer G3/4"	for 19M12.S.00.SS.RG
19S10.R	Silencer G1"	for 19M34.S.00.SS.RG