

# **Vuototecnica Vacuum Pumps**

# **BONDY**

INDUSTRIAL EQUIPMENT SUPPLIER

For ordering and questions call

**(+45) 70 15 14 14**

## VACUUM PUMPS VTL 2 and 4

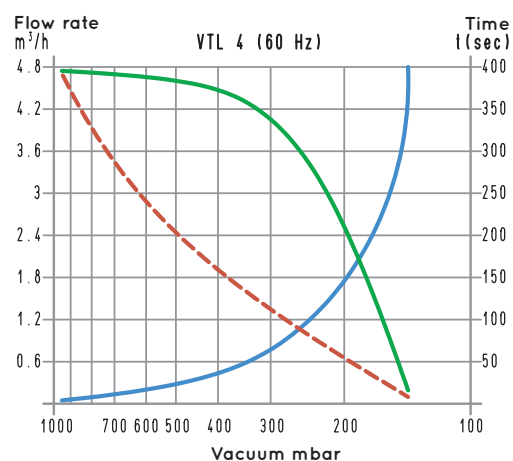
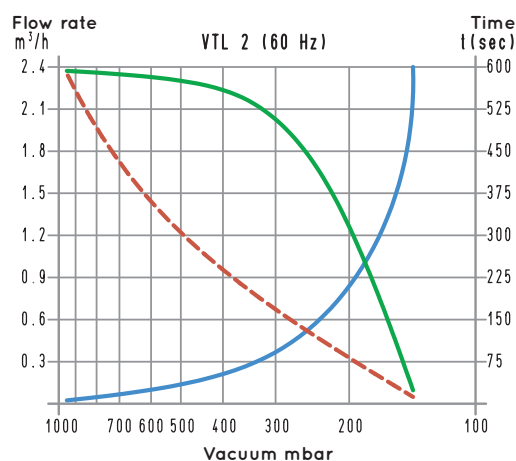
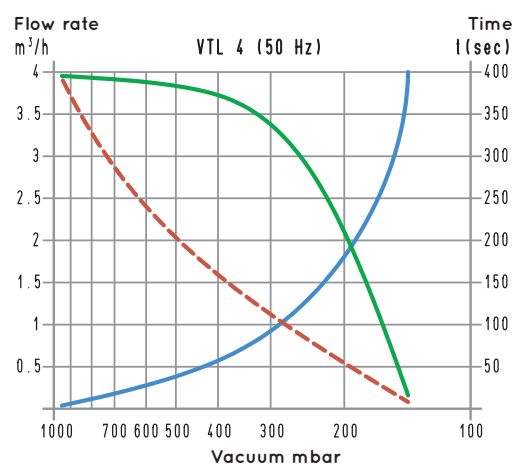
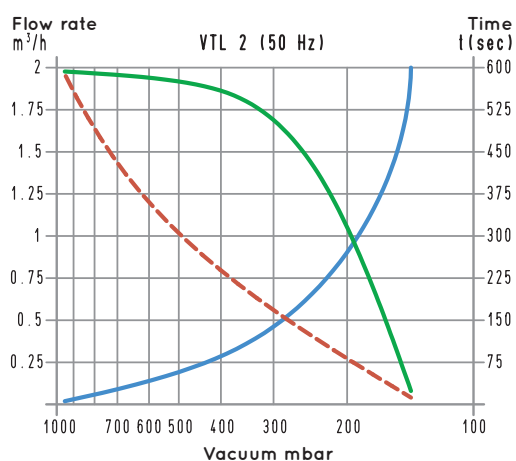
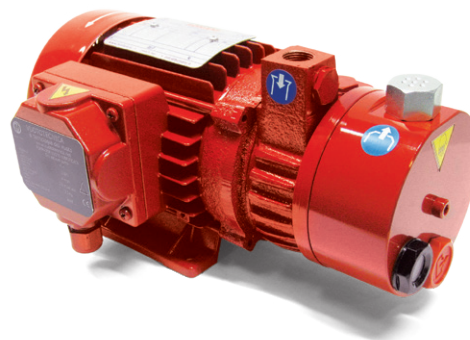
These small vacuum pumps have a suction flow rate of 2 and 4 m<sup>3</sup>/h. They feature a wick lubrication with oil recirculation, while the rotor, which is cantilevered-fitted on the motor shaft, allows reducing the overall dimensions to the minimum.

The motor and the pump are cooled by the motor fan (surface cooling).

The pumps are equipped with a small tank in line with the pump, which contains the lubrication oil as well as a separator filter to prevent oil mists and to reduce noise.

We strongly recommend installing a check valve and a filter on the suction inlet.

Pumps VTL 2 and 4 can also be supplied with single-phase electric motor.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)

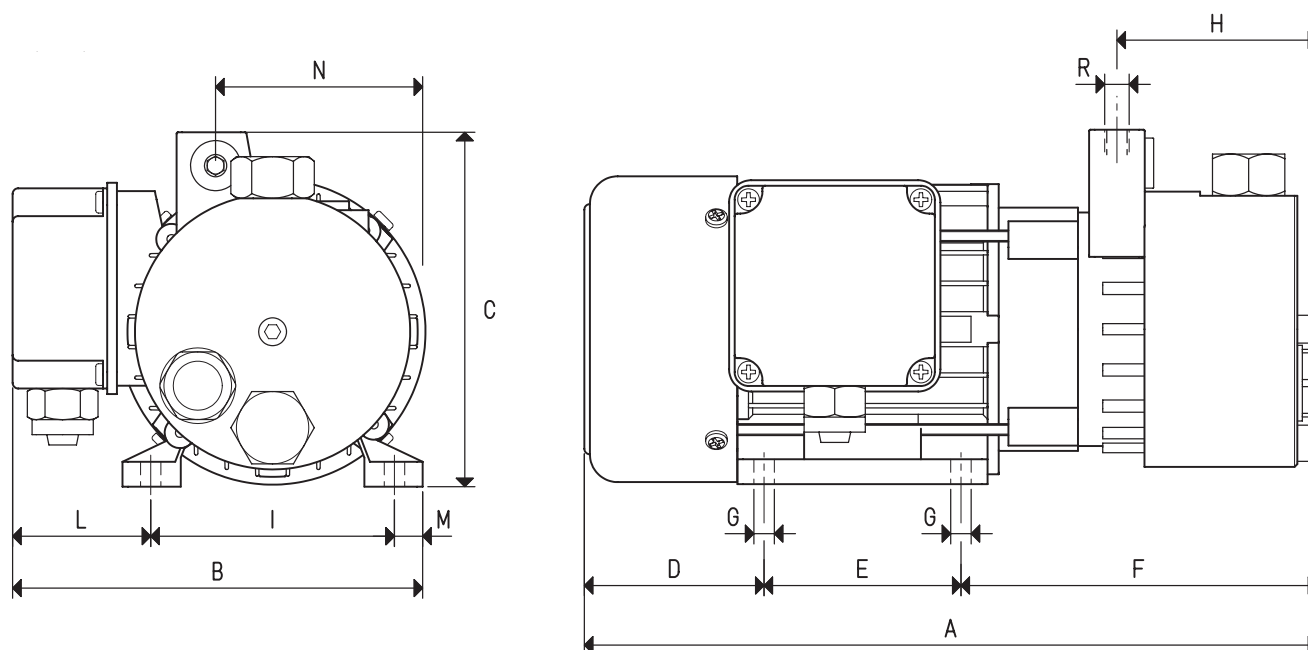
$t_1$ : time to be calculated (sec)

$t$ : time obtained in the table (sec)



# VACUUM PUMPS VTL 2 and 4

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 2		VTL 4	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	2.0	2.4	4.0	4.8
Final pressure	mbar abs.	150		150	
Motor performance		230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.12	0.15	0.18	0.21
Kw	1~	0.12	0.15	0.18	0.21
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	2700	3245	2760	3300
Motor shape		Speciale		Speciale	
Motor size		56		63	
Noise level	dB(A)	62	65	62	65
Max weight	3~	5.7		7.3	
Kg	1~	6.0		7.5	
A		260		285	
B		145		160	
C		126		132	
D		62		66	
E		71		81	
F		127		139	
G	Ø	6.5		7.5	
H		72		81	
I		90		100	
L		43		48	
M		12		12	
N		76		86	
R	Ø gas	G1/4"		G3/8"	
Accessories and Parts		VTL 2		VTL 4	
Oil charge	L	0.05		0.05	
Lubricating oil	type	ISO 32		ISO 32	
4 vanes	item	00 VTL 02 10		00 VTL 04 10	
Sealing kit	item	00 KIT VTL 02		00 KIT VTL 04	
Check valve	item	10 01 15		10 02 15	
Suction filter	item	FB 5		FB 10/FC 10	

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTL 2 M).

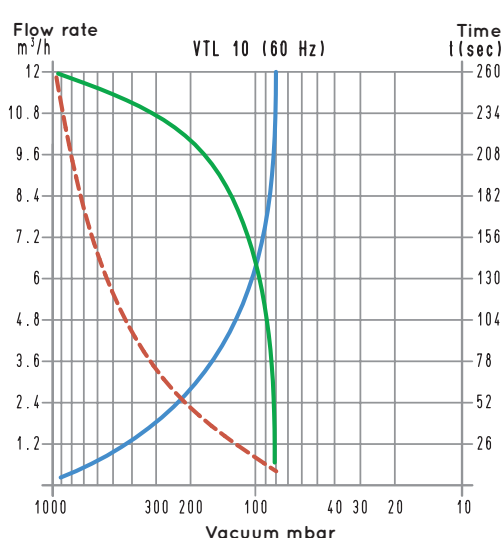
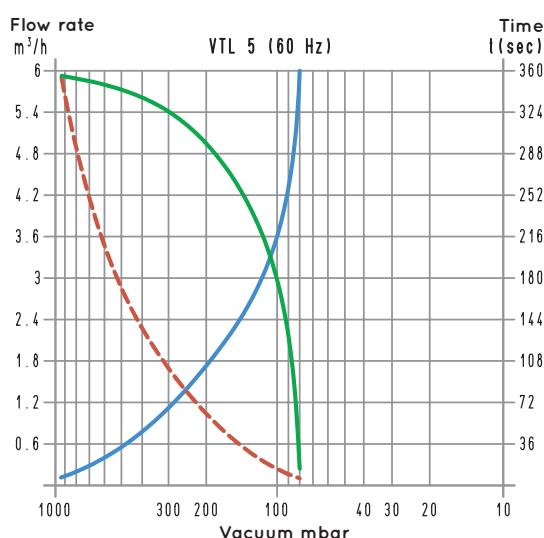
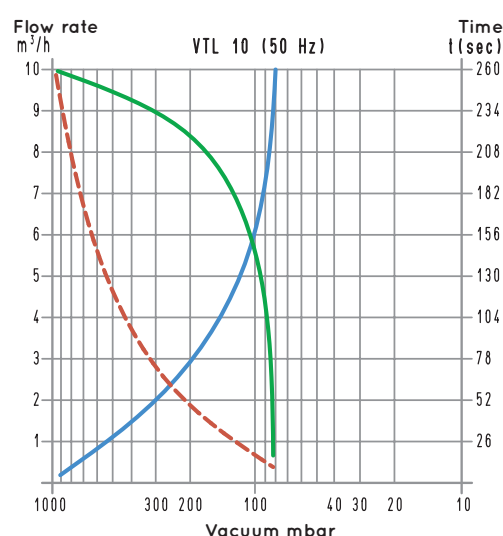
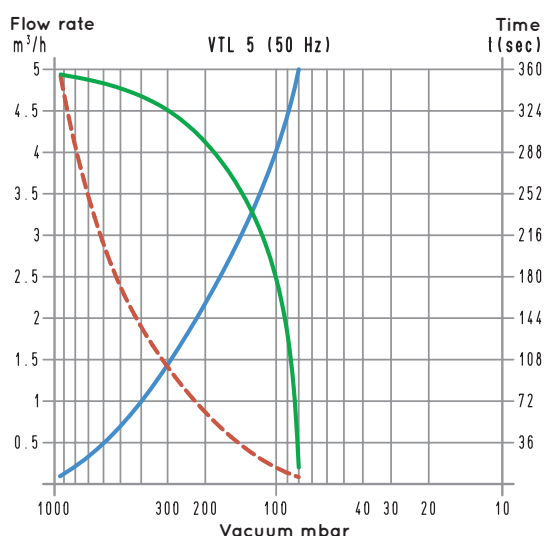
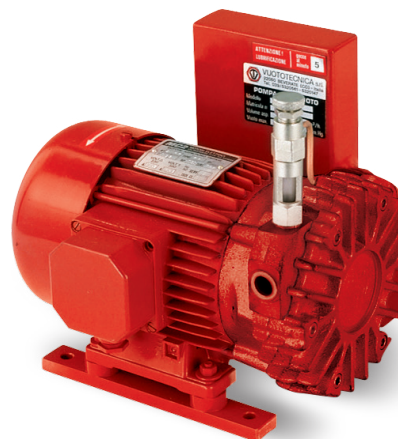
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

## VACUUM PUMPS VTL 5 and 10

These vacuum pumps have a suction flow rate of 5 and 10 m<sup>3</sup>.  
 The vacuum lubrication with oil recirculation can be adjusted via an oiler located in correspondence of the suction inlet.  
 The rotor is cantilevered-fitted on the motor shaft and, as a result, the overall dimensions are reduced.  
 The motor and the pump are cooled by the motor fan (surface cooling).  
 An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.  
 We strongly recommend installing a check valve and a filter on the suction inlet.  
 Pumps VTL 5 and 10 can also be supplied with a single-phase electric motor.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

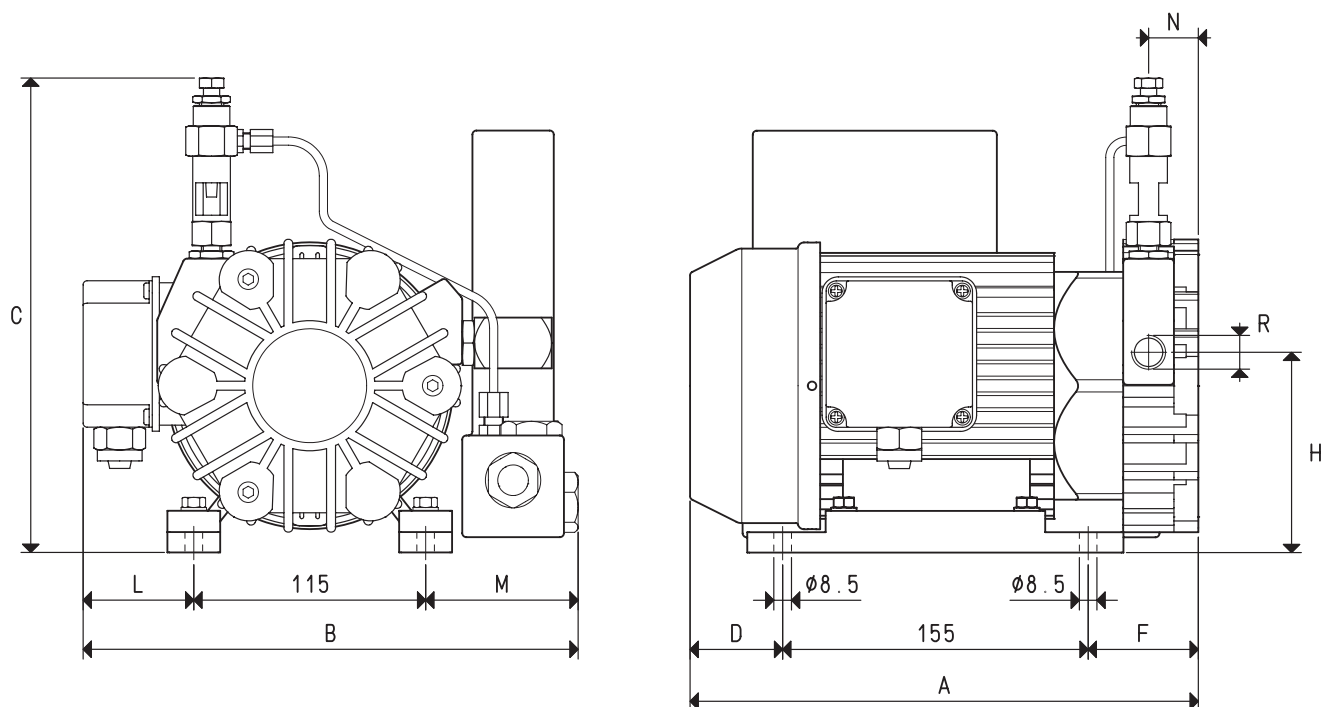
$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)





# VACUUM PUMPS VTL 5 and 10

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 5		VTL 10	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	5.0	6.0	10.0	12.0
Final pressure	mbar abs.	80		80	
Motor performance	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.25	0.30	0.37	0.40
Kw	1~	0.25	0.30	0.37	0.40
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1450	1680	1450	1680
Motor shape		Special		Special	
Motor size		71		71	
Noise level	dB(A)	62	64	62	64
Max weight	3~	14.5		20.5	
Kg	1~	15.0		21.0	
A		260		310	
B		245		262	
C		245		245	
D		52		70	
F		53		85	
H		122		122	
L		45		45	
M		85		102	
N		27		52	
R	Ø gas	G3/8"		G1/2"	

Accessories and Parts		VTL 5	VTL 10
Oil charge	L	0.25	0.40
Lubricating oil	type	ISO 32	ISO 100
6 vanes	item	00 VTL 05 10	00 VTL 10 10
Sealing kit	item	00 KIT VTL 05	00 KIT VTL 10
Check valve	item	10 02 10	10 03 10
Suction filter	item	FB 10/FC 10	FB 20/FC 20
Adjustable drip oiler	item	00 VTL 00 11	00 VTL 00 11

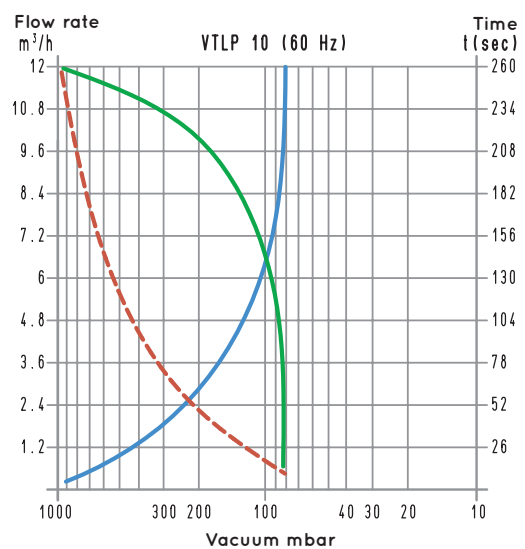
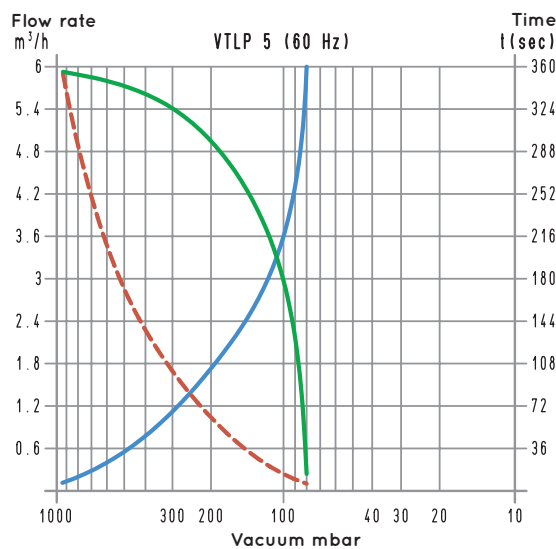
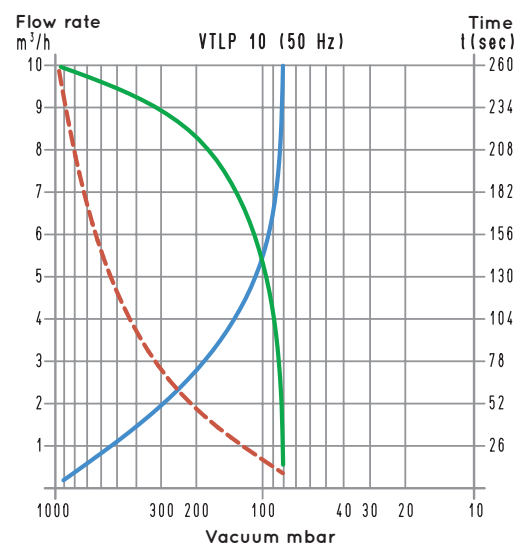
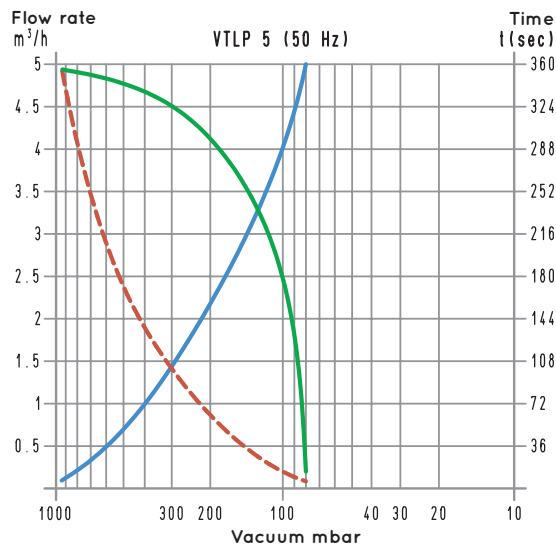
Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTL 5 M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

# VACUUM PUMPS VTLP 5 and 10 WITH DISPOSABLE LUBRICATION



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

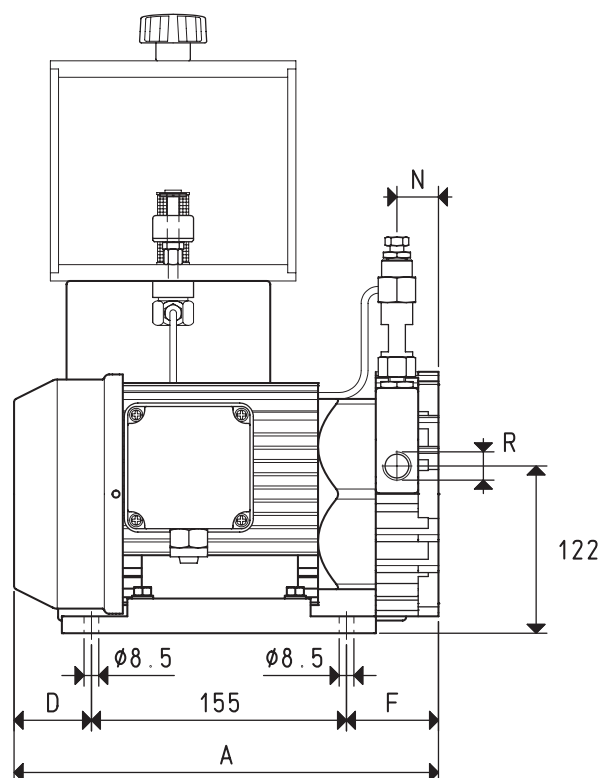
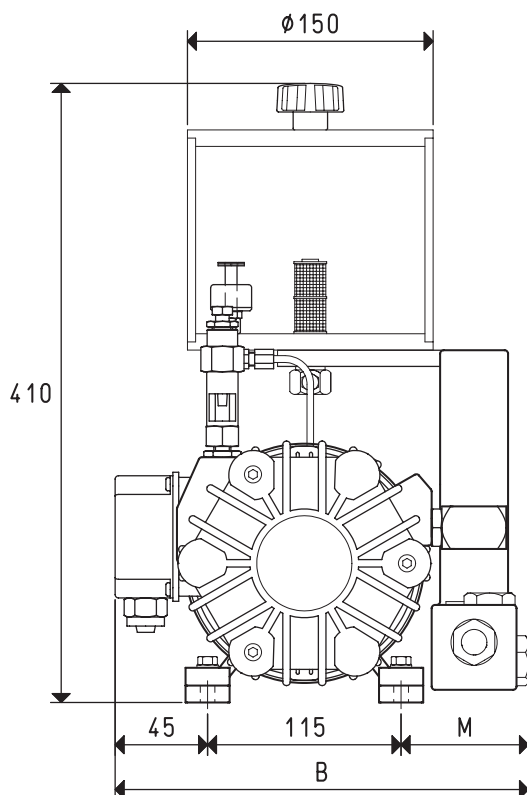
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



# VACUUM PUMPS VTLP 5 and 10 WITH DISPOSABLE LUBRICATION

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTLP 5		VTLP 10	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	5.0	6.0	10.0	12.0
Final pressure	mbar abs.	80		80	
Motor performance	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.25	0.30	0.37	0.40
Kw	1~	0.25	0.30	0.37	0.40
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1450	1680	1450	1680
Motor shape		Special		Special	
Motor size		71		71	
Noise level	dB(A)	62	64	62	64
Max weight	3~	15.6		21.6	
Kg	1~	16.1		22.1	
A		260		310	
B		245		262	
D		52		70	
F		53		85	
M		85		102	
N		27		52	
R	$\varnothing$ gas	G3/8"		G1/2"	

Accessories and Parts		VTLP 5		VTLP 10	
Oil charge	L	1.8		1.8	
Lubricating oil	type	ISO 32		ISO 100	
6 vanes	item	00 VTL 05 10		00 VTL 10 10	
Sealing kit	item	00 KIT VTL 05		00 KIT VTL 10	
Check valve	item	10 02 10		10 03 10	
Suction filter	item	FB 10/FC 10		FB 20/FC 20	
Oil level switch	item	00 LP VTL 99		00 LP VTL 99	
Oil filter	item	00 LP VTL 40		00 LP VTL 40	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11	

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTLP 5 M).

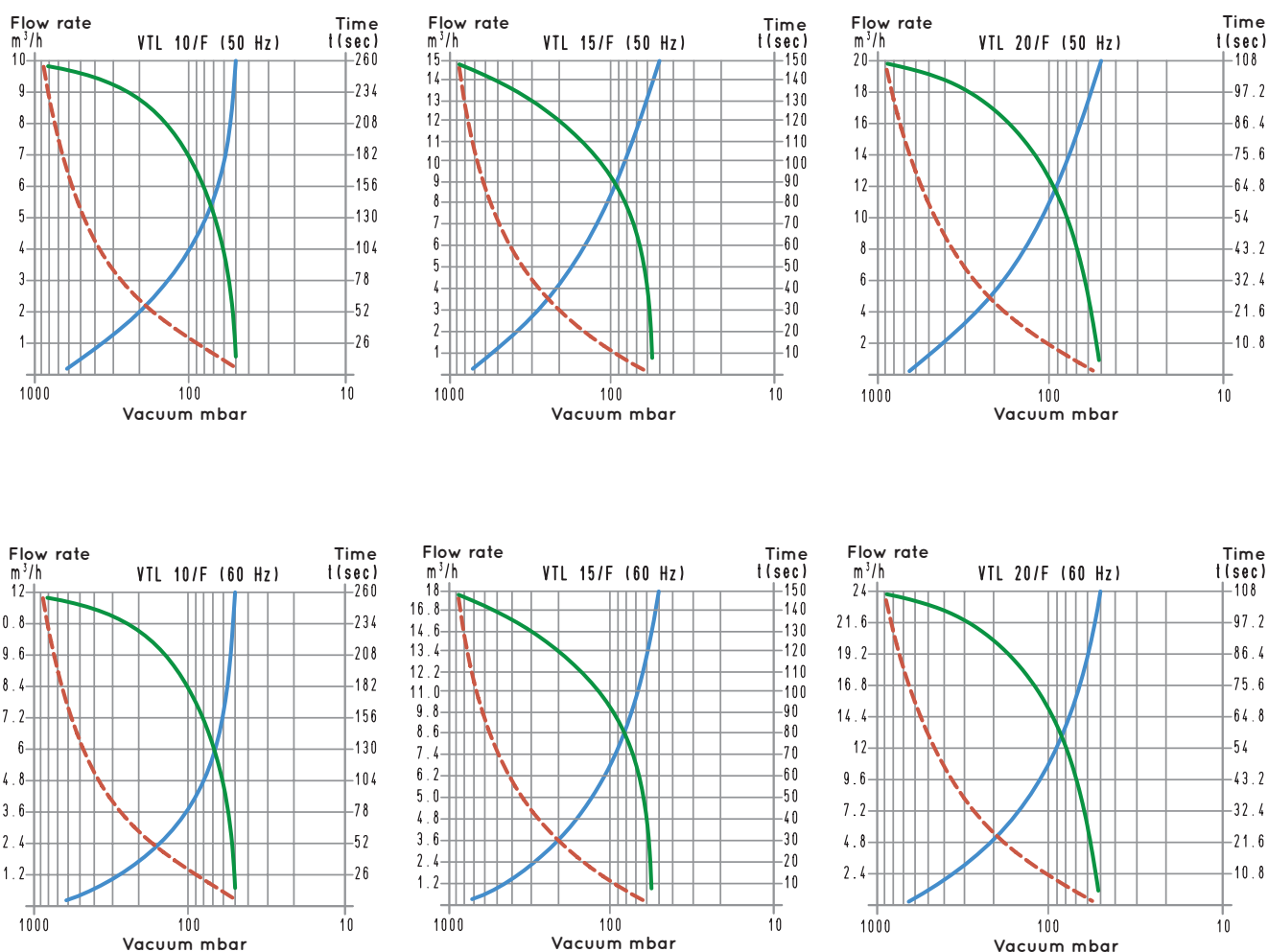
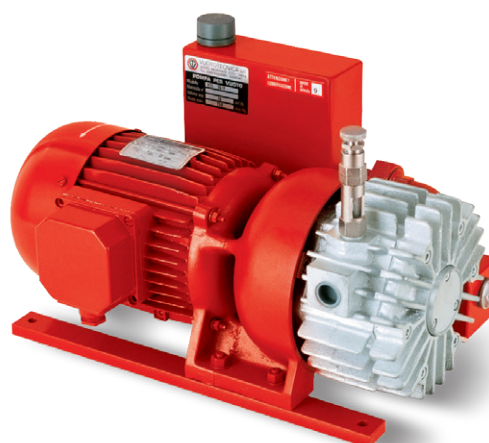
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

## VACUUM PUMPS VTL 10/F, 15/F and 20/F

These vacuum pumps have a suction flow rate of 10, 15 and 20 m<sup>3</sup>/h. The vacuum lubrication with oil recirculation can be adjusted via an oiler located in correspondence of the suction inlet. The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges. The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump. An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise. We strongly recommend installing a check valve and a filter on the suction inlet. Also this range of pumps can be supplied with single-phase electric motors.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

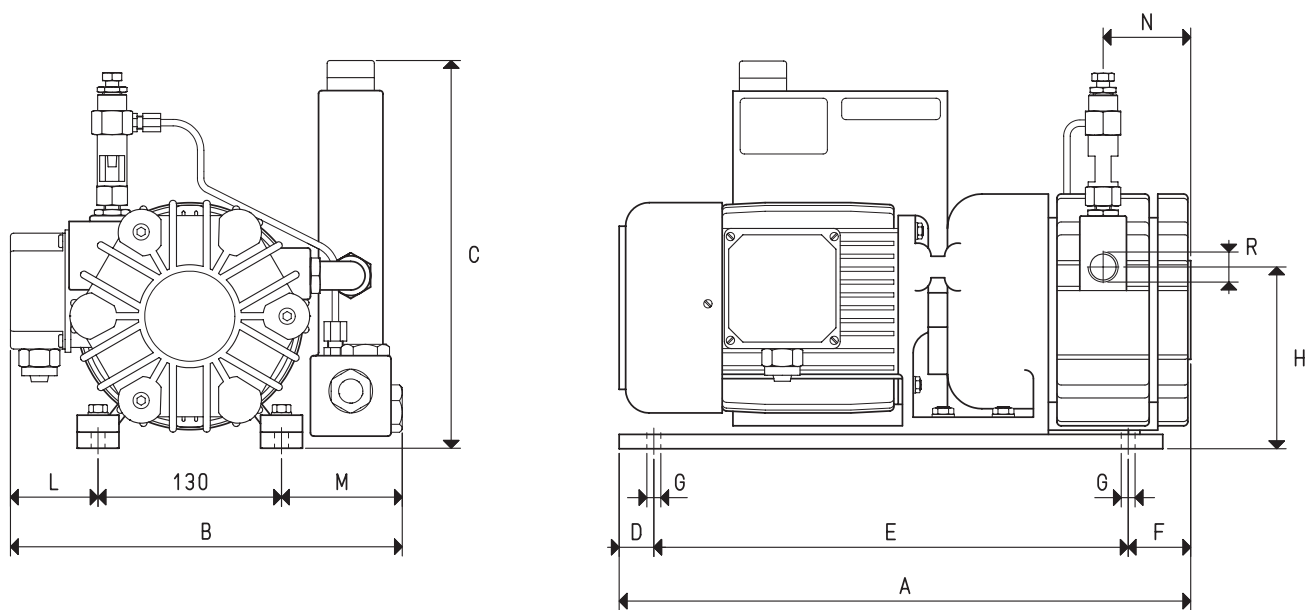
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



## VACUUM PUMPS VTL 10/F,15/F and 20/F

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 10/F		VTL 15/F		VTL 20/F	
<b>Frequency</b>		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
<b>Flow rate</b>	m <sup>3</sup> /h	10.0	12.0	15.0	18.0	20.0	24.0
<b>Final pressure</b>	mbar abs.	50		50		50	
<b>Motor performance</b>	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
<b>Volt</b>	1~	230±10%		230±10%		230±10%	
<b>Motor power</b>	3~	0.55	0.66	0.55	0.66	0.55	0.66
<b>Kw</b>	1~	0.55	0.66	0.55	0.66	0.55	0.66
<b>Motor protection</b>	IP	55		55		55	
<b>Rotation speed</b>	g/min <sup>-1</sup>	1450	1680	1450	1680	1450	1680
<b>Motor shape</b>		Special		Special		Special	
<b>Motor size</b>		80		80		80	
<b>Noise level</b>	dB(A)	62	64	63	65	64	66
<b>Max weight</b>	3~	25.0		27.0		30.0	
<b>Kg</b>	1~	25.5		27.5		30.5	
<b>A</b>		385		405		425	
<b>B</b>		285		285		285	
<b>C</b>		259		259		259	
<b>D</b>		25		25		25	
<b>E</b>		340		340		340	
<b>F</b>		20		40		60	
<b>H</b>		133		133		133	
<b>L</b>		55		55		55	
<b>M</b>		100		100		100	
<b>N</b>		53		63		73	
<b>R</b>	Ø gas	G1/2"		G1/2"		G1/2"	

Accessories and Parts		VTL 10/F	VTL 15/F	VTL 20/F
<b>Oil charge</b>	L	0.4	0.5	0.65
<b>Lubricating oil</b>	type	ISO 100	ISO 100	ISO 100
<b>6 vanes</b>	item	00 VTL 10F 10	00 VTL 15F 10	00 VTL 20F 10
<b>Sealing kit</b>	item	00 KIT VTL 10F	00 KIT VTL 15F	00 KIT VTL 20F
<b>Check valve</b>	item	10 03 10	10 03 10	10 03 10
<b>Suction filter</b>	item	FB 20/FC 20	FB 20/FC 20	FB 20/FC 20
<b>Adjustable drip oiler</b>	item	00 VTL 00 11	00 VTL 00 11	00 VTL 00 11

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTL 10/F M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

## VACUUM PUMPS VTLP 10/F,15/F and 20/F, WITH DISPOSABLE LUBRICATION

These vacuum pumps have a suction flow rate of 10, 15 and 20 m<sup>3</sup>/h.

The vacuum with disposable oil lubrication can be adjusted via an oiler located in correspondence of the suction inlet.

The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

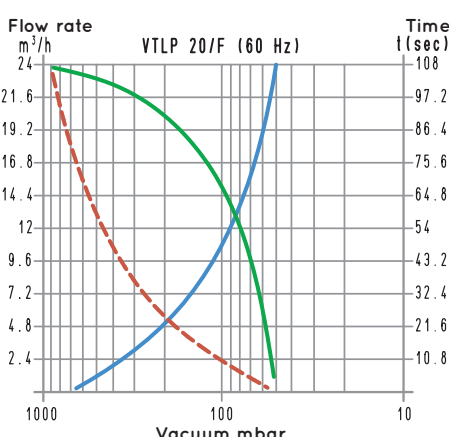
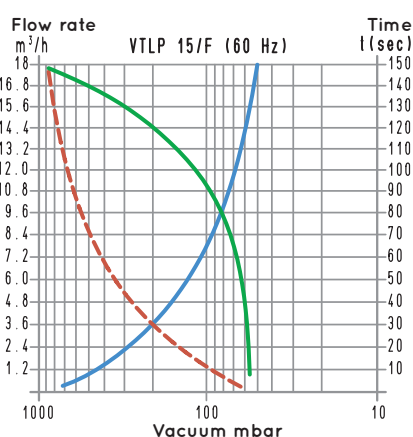
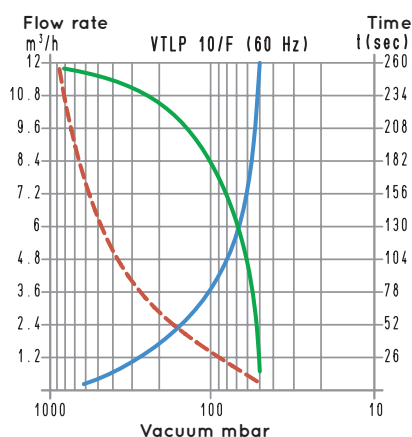
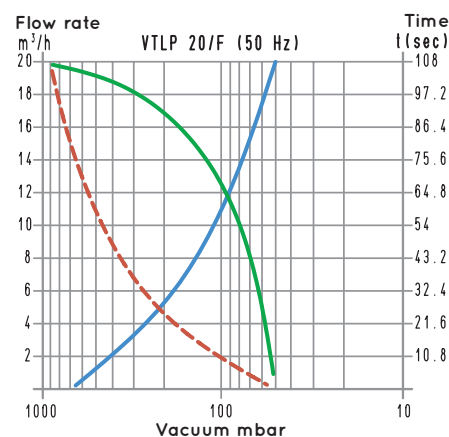
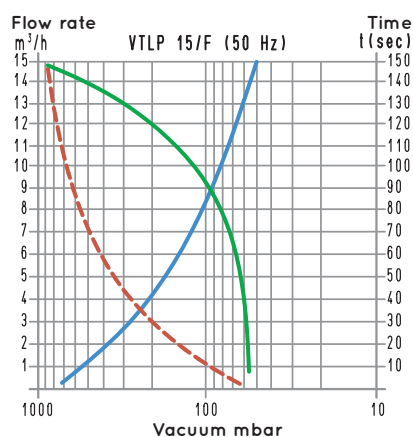
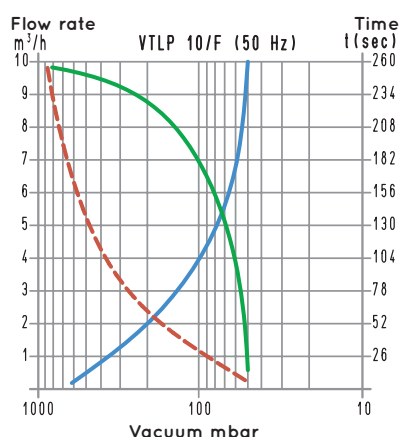
An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.

A safety valve is also installed on the tank for the automatic drainage of the exhaust oil when not regularly drained.

The lubrication oil is contained in a special transparent container, fixed to the pump via its support, and controlled by a magnetic level switch.

In pumps with disposable lubrication, the oil is sucked in the pump through an adjustable drip oiler and drained together with the sucked air in the recovery tank, without being put in circulation again. These pumps are necessary when the air to be sucked contains water condensation, solvent vapours or anything else that could affect oil properties.

We strongly recommend installing a check valve and a filter on the suction inlet. Also this range of pumps can be supplied with single-phase electric motors.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

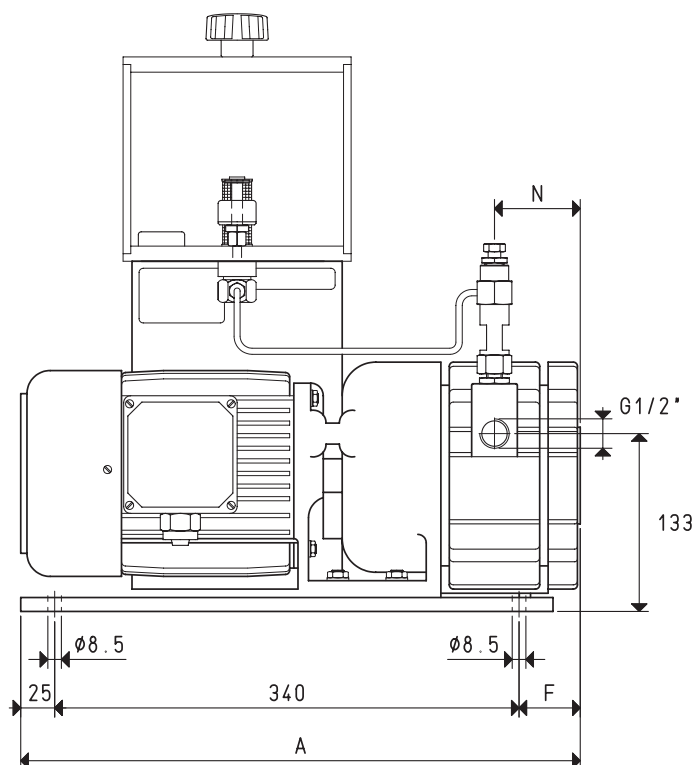
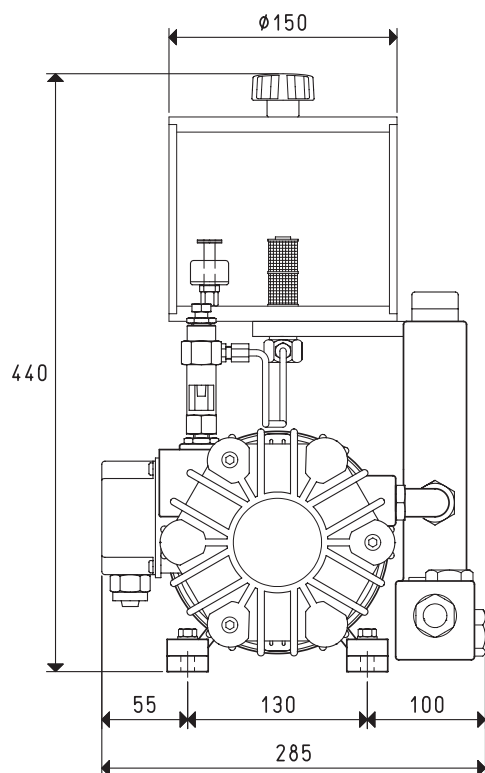
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



# VACUUM PUMPS VTLP 10/F,15/F and 20/F, WITH DISPOSABLE LUBRICATION

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTLP 10/F		VTLP 15/F		VTLP 20/F	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	10.0	12.0	15.0	18.0	20.0	24.0
Final pressure	mbar abs.	50		50		50	
Motor performance	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%		230±10%	
Motor power	3~	0.55	0.66	0.55	0.66	0.55	0.66
Kw	1~	0.55	0.66	0.55	0.66	0.55	0.66
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1450	1680	1450	1680	1450	1680
Motor shape		Special		Special		Special	
Motor size		80		80		80	
Noise level	dB(A)	62	64	63	65	64	66
Max weight	3~	26.1		28.1		31.1	
Kg	1~	26.6		28.6		31.6	
A		385		405		425	
F		20		40		60	
N		53		63		73	
Accessories and Parts		VTLP 10/F		VTLP 15/F		VTLP 20/F	
Oil charge	L	1.8		1.8		1.8	
Lubricating oil	type	ISO 100		ISO 100		ISO 100	
6 vanes	item	00 VTL 10F 10		00 VTL 15F 10		00 VTL 20F 10	
Sealing kit	item	00 KIT VTL 10F		00 KIT VTL 15F		00 KIT VTL 20F	
Check valve	item	10 03 10		10 03 10		10 03 10	
Suction filter	item	FB 20/FC 20		FB 20/FC 20		FB 20/FC 20	
Oil level switch	item	00 LP VTL 99		00 LP VTL 99		00 LP VTL 99	
Oil filter	item	00 LP VTL 40		00 LP VTL 40		00 LP VTL 40	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11		00 VTL 00 11	

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTLP 10/F M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



## VACUUM PUMPS VTL 25/FG, 30/FG and 35/FG

These vacuum pumps have a suction flow rate of 25, 30 and 35 m<sup>3</sup>/h. The vacuum lubrication with oil recirculation is adjusted via two oilers located in correspondence of the support bearings.

The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges.

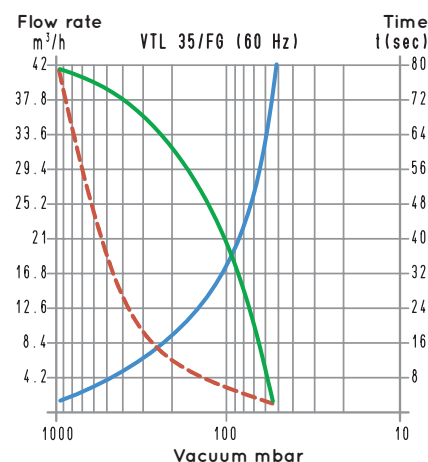
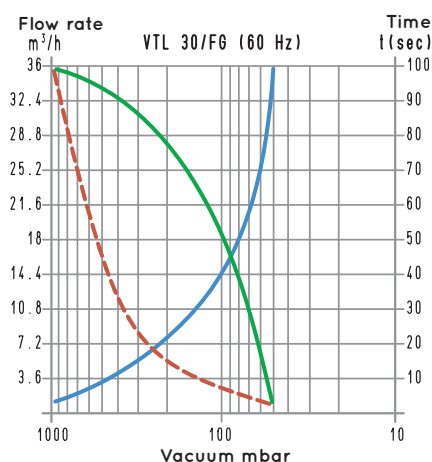
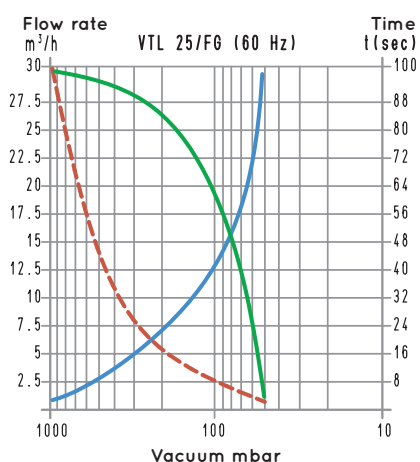
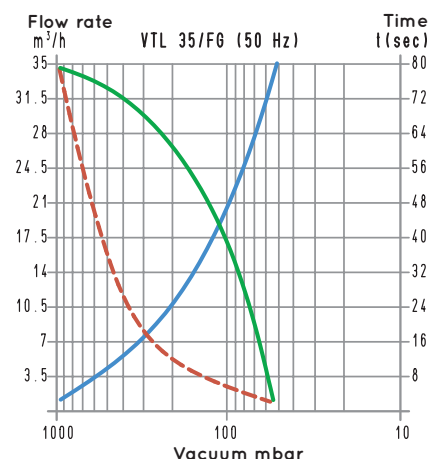
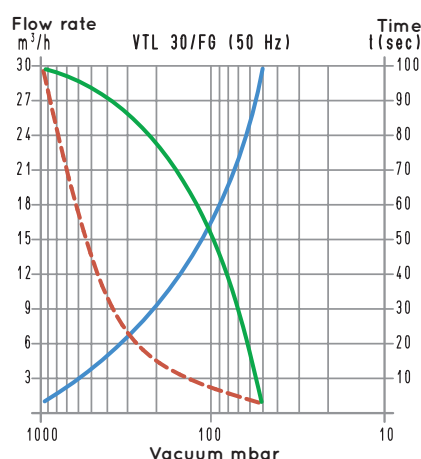
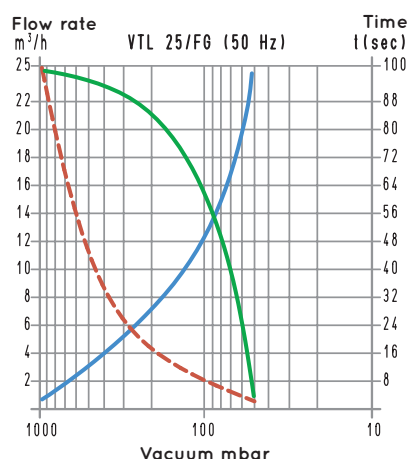
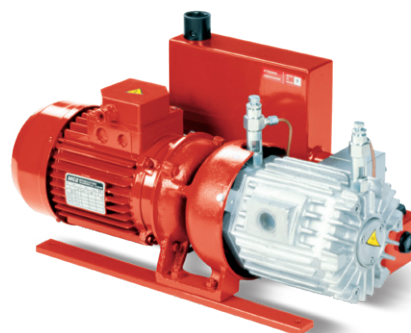
The pump and the electric motor are, therefore, two independent units and fixed onto a special support and connected to each other via an elastic transmission joint.

All this allows using standard electric motors, in the shapes and sizes indicated in the table.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise. We strongly recommend installing a check valve and a filter on the suction inlet.

These pumps are supplied with three-phase electric motors only.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

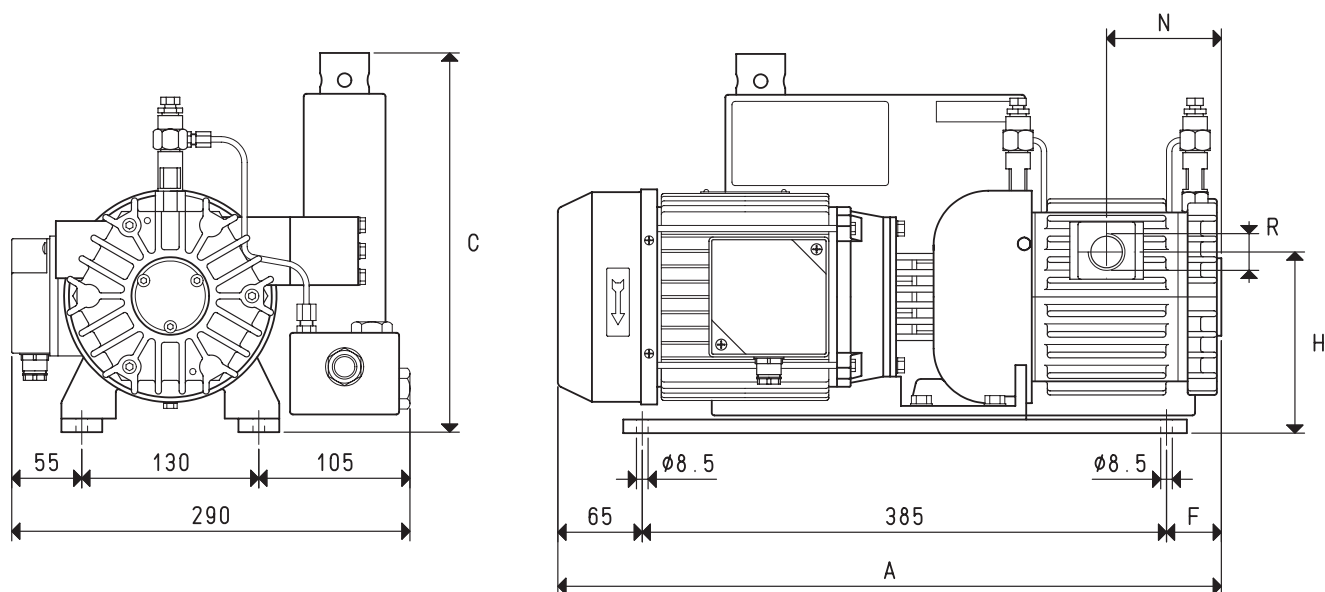
$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)





# VACUUM PUMPS VTL 25/FG, 30/FG and 35/FG

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 25/FG		VTL 30/FG		VTL 35/FG	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	25.0	30.0	30.0	36.0	35.0	42.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	0.75	0.90	0.75	0.90	1.10	1.35
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1410	1640	1410	1640	1435	1745
Motor shape		B14		B14		B14	
Motor size		80		80		80	
Noise level	dB(A)	64	66	65	67	65	67
Max weight 3~	kg	31.0		35.0		37.0	
A		470		490		510	
C		280		280		280	
F		20		40		60	
H		133		133		133	
N		73		83		93	
R	Ø gas	G3/4"		G3/4"		G3/4"	
Accessories and Parts		VTL 25/FG		VTL 30/FG		VTL 35/FG	
Oil charge	L	0.65		0.85		0.85	
Lubricating oil	type	ISO 100		ISO 100		ISO 100	
6 vanes	item	00 VTL 25FG 10		00 VTL 30FG 10		00 VTL 35FG 10	
Sealing kit	item	00 KIT VTL 25FG		00 KIT VTL 30FG		00 KIT VTL 35FG	
Check valve	item	10 04 10		10 04 10		10 04 10	
Suction filter	item	FB 28/FC 25		FB 28/FC 25		FB 28/FC 25	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11		00 VTL 00 11	

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

## VACUUM PUMPS VTLP 25/FG, 30/FG and 35/FG WITH DISPOSABLE LUBRICATION

These vacuum pumps have a suction flow rate of 25, 30 and 35 m<sup>3</sup>/h.

The vacuum with disposable oil lubrication is adjusted via two oilers located in correspondence of the support bearings.

The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges.

The pump and the electric motor are, therefore, two independent units and fixed onto a special support and connected to each other via an elastic transmission joint.

All this allows using standard electric motors, in the shapes and sizes indicated in the table.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.

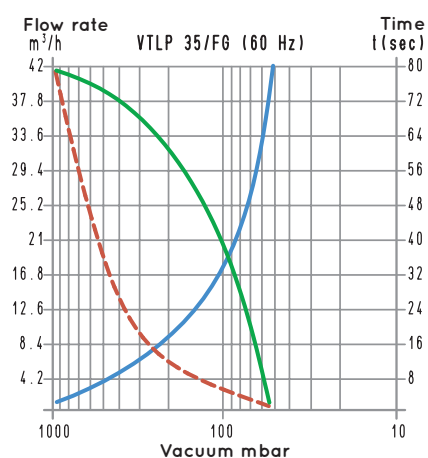
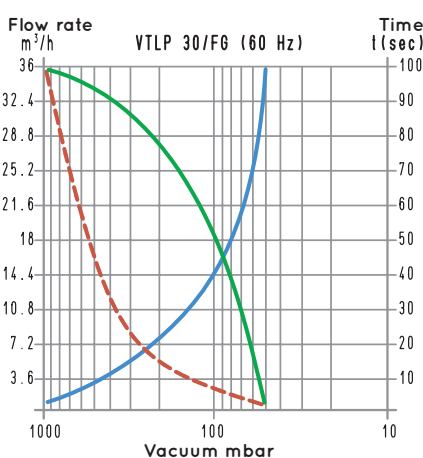
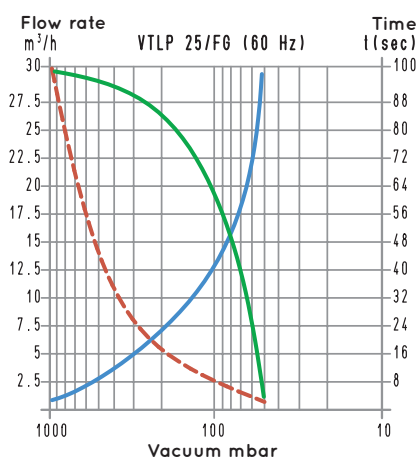
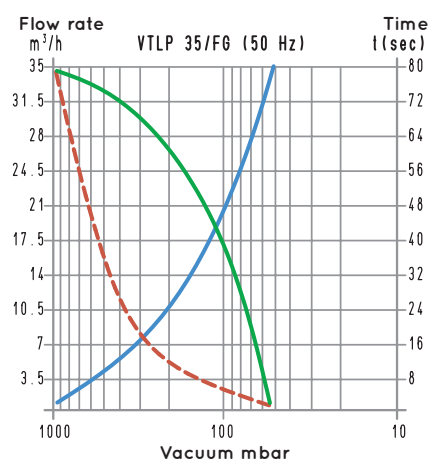
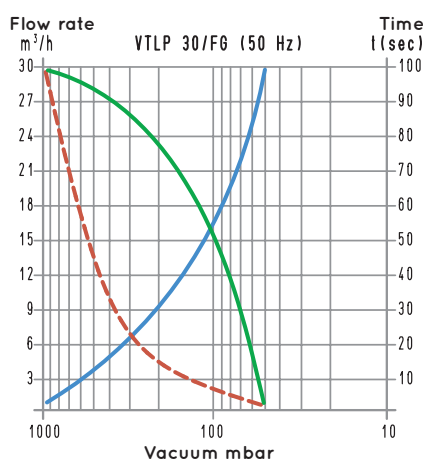
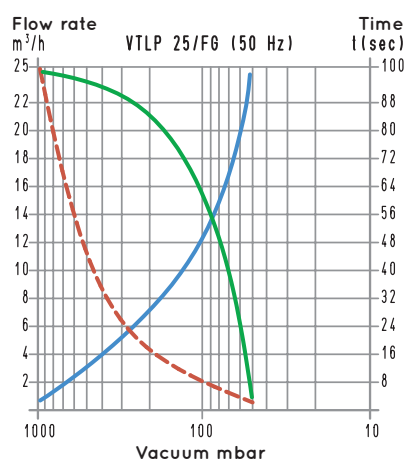
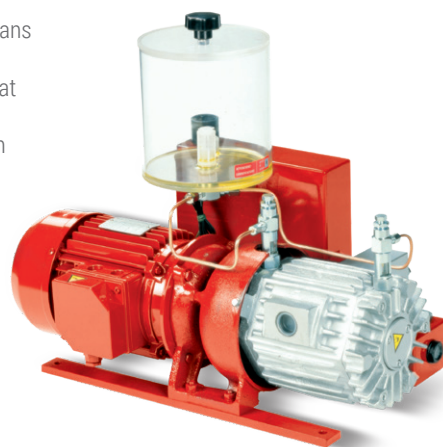
A safety valve is also installed on the tank for the automatic drainage of the exhaust oil when not regularly drained.

The lubrication oil is contained in a special transparent container, fixed to the pump via its support, and controlled by a magnetic level switch.

In pumps with disposable lubrication, the oil is sucked in the pump through an adjustable drip oilers and drained together with the sucked air in the recovery tank, without being put in circulation again. These pumps are necessary when the air to be sucked contains water condensation, solvent vapours or anything else that could affect oil properties.

We strongly recommend installing a check valve and a filter on the suction inlet.

These pumps are supplied with three-phase electric motors only.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

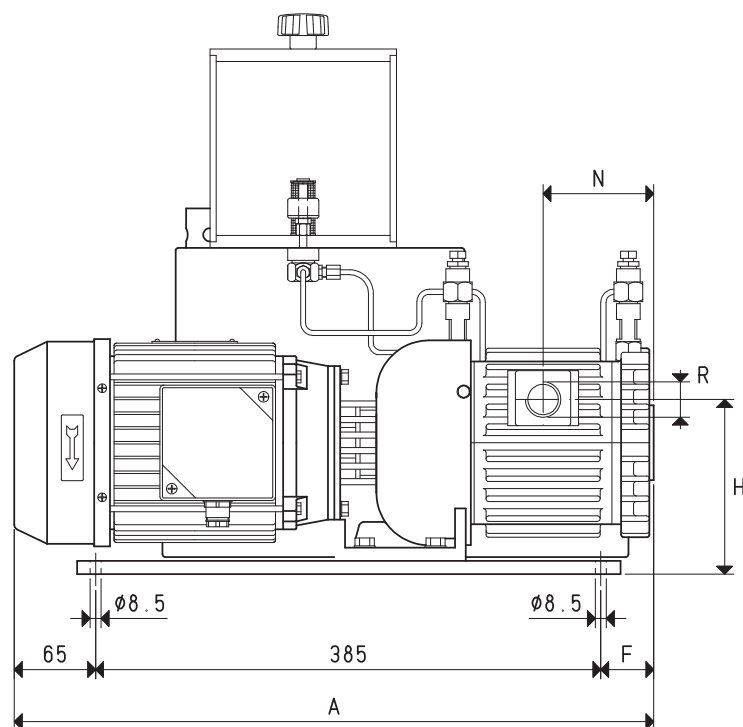
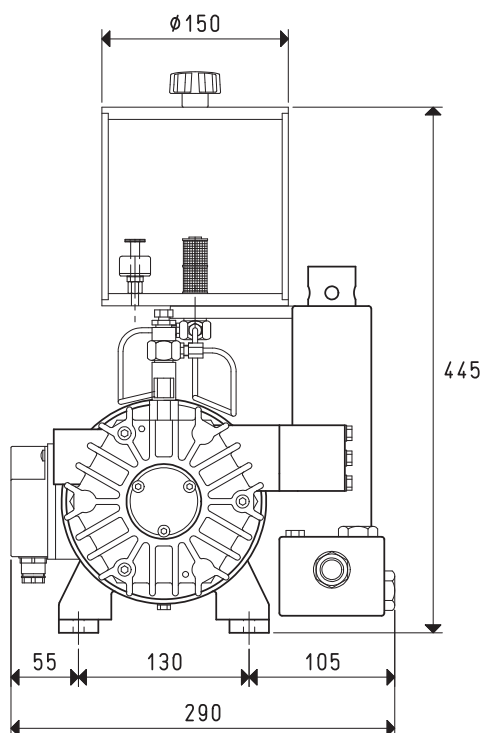
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



## VACUUM PUMPS VTLP 25/FG, 30/FG and 35/FG WITH DISPOSABLE LUBRICATION

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTLP 25/FG		VTLP 30/FG		VTLP 35/FG	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	25.0	30.0	30.0	36.0	35.0	42.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	0.75	0.90	0.75	0.90	1.10	1.35
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1410	1640	1410	1640	1435	1745
Motor shape		B14		B14		B14	
Motor size		80		80		80	
Noise level	dB(A)	64	66	65	67	65	67
Max weight 3~	kg	32.0		36.0		38.0	
A		470		490		510	
F		20		40		60	
H		133		133		133	
N		73		83		93	
R	Ø gas	G3/4"		G3/4"		G3/4"	
Accessories and Parts		VTLP 25/FG		VTLP 30/FG		VTLP 35/FG	
Oil charge	L	1.8		1.8		1.8	
Lubricating oil	type	ISO 100		ISO 100		ISO 100	
6 vanes	item	00 VTL 25FG 10		00 VTL 30FG 10		00 VTL 35FG 10	
Sealing kit	item	00 KIT VTL 25FG		00 KIT VTL 30FG		00 KIT VTL 35FG	
Check valve	item	10 04 10		10 04 10		10 04 10	
Suction filter	item	FB 28/FC 25		FB 28/FC 25		FB 28/FC 25	
Oil level switch	item	00 LP VTL 99		00 LP VTL 99		00 LP VTL 99	
Oil filter	item	00 LP VTL 40		00 LP VTL 40		00 LP VTL 40	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11		00 VTL 00 11	

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

## VACUUM PUMPS VTL 40/G1 - 105/G1

These vacuum pumps have a suction flow rate of 40, 50, 65, 75, 90 and 105 m<sup>3</sup>/h.

The vacuum lubrication with oil recirculation is adjusted via two oilers located in correspondence of the support bearings.

The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges.

The pump and the electric motor are, therefore, two independent units and fixed onto a special support and connected to each other via an elastic transmission joint.

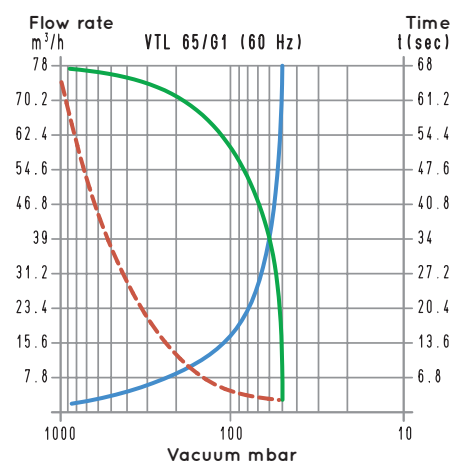
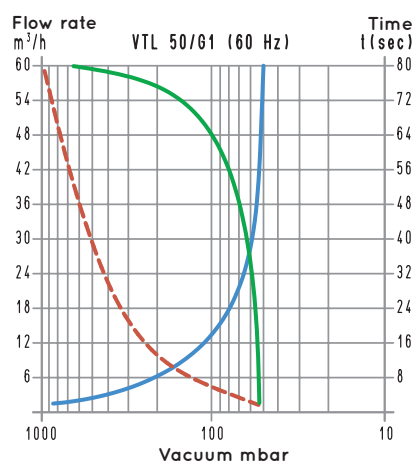
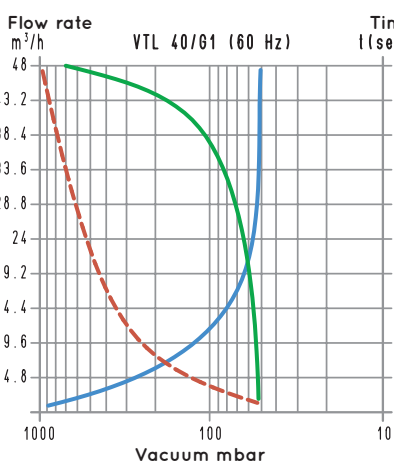
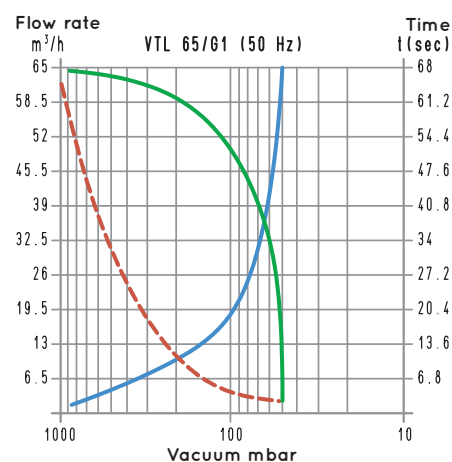
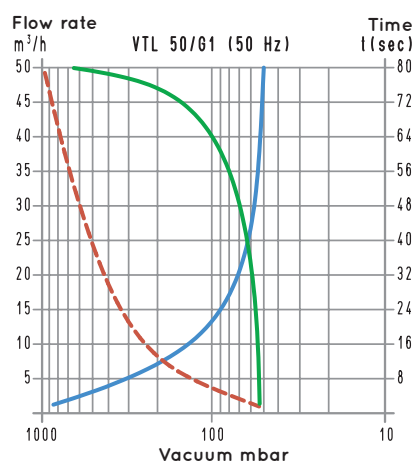
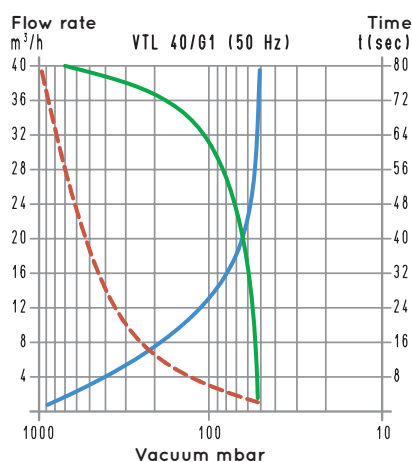
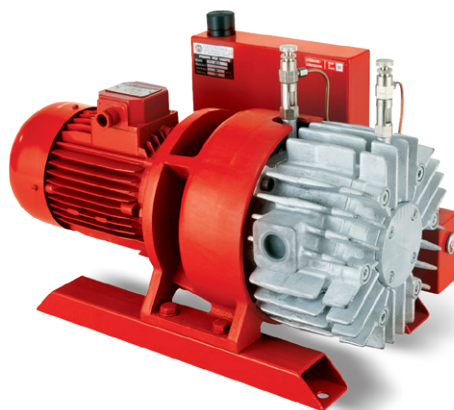
All this allows using standard electric motors, in the shapes and sizes indicated in the table.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.

A check valve and a filter must be installed on the suction inlet.

These pumps are supplied with three-phase electric motors only.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

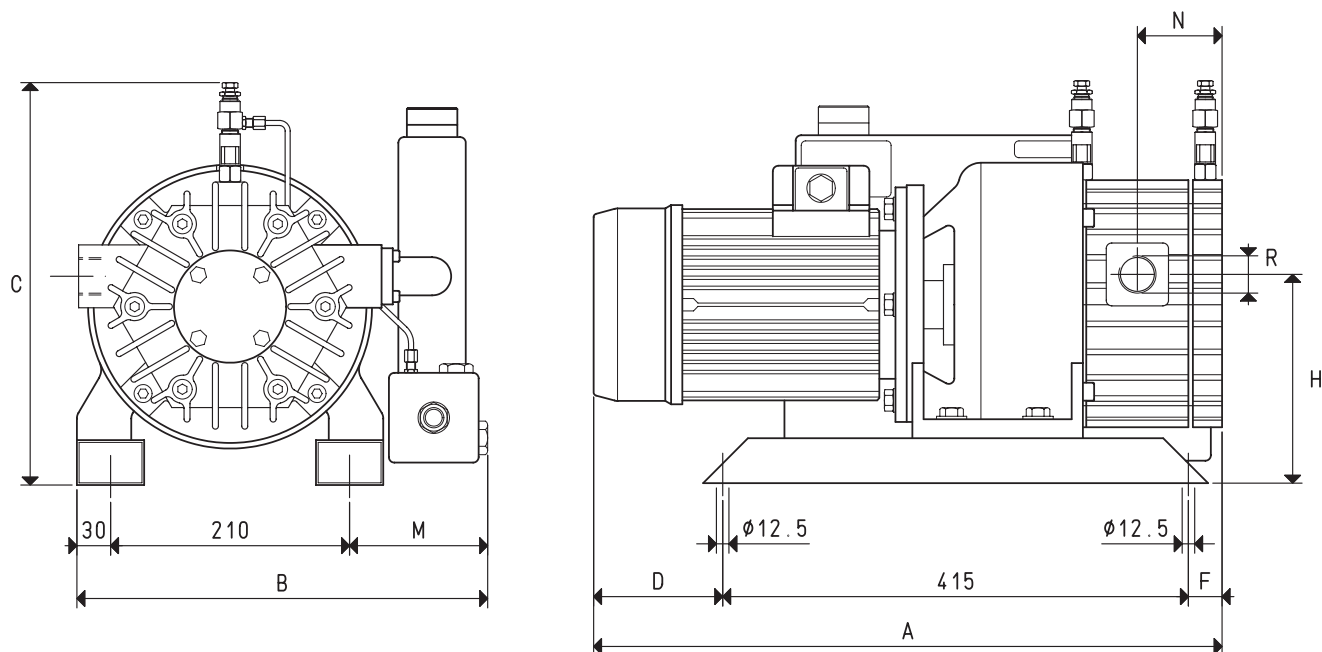
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



# VACUUM PUMPS VTL 40/G1, 50/G1 and 65/G1

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 40/G1		VTL 50/G1		VTL 65/G1	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	40.0	48.0	50.0	60.0	65.0	78.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	1.10	1.35	1.50	1.80	1.50	1.80
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1440	1750	1440	1750	1440	1750
Motor shape		B5		B5		B5	
Motor size		90		90		90	
Noise level	dB(A)	68	70	68	70	70	72
Max weight 3~	kg	51.0		54.0		71.0	
A		520		560		580	
B		365		365		365	
C		350		350		350	
D		60		115		120	
F		45		30		45	
H		186		186		186	
M		125		125		125	
N		70		80		80	
R	Ø gas	G1"		G1"		G1"	

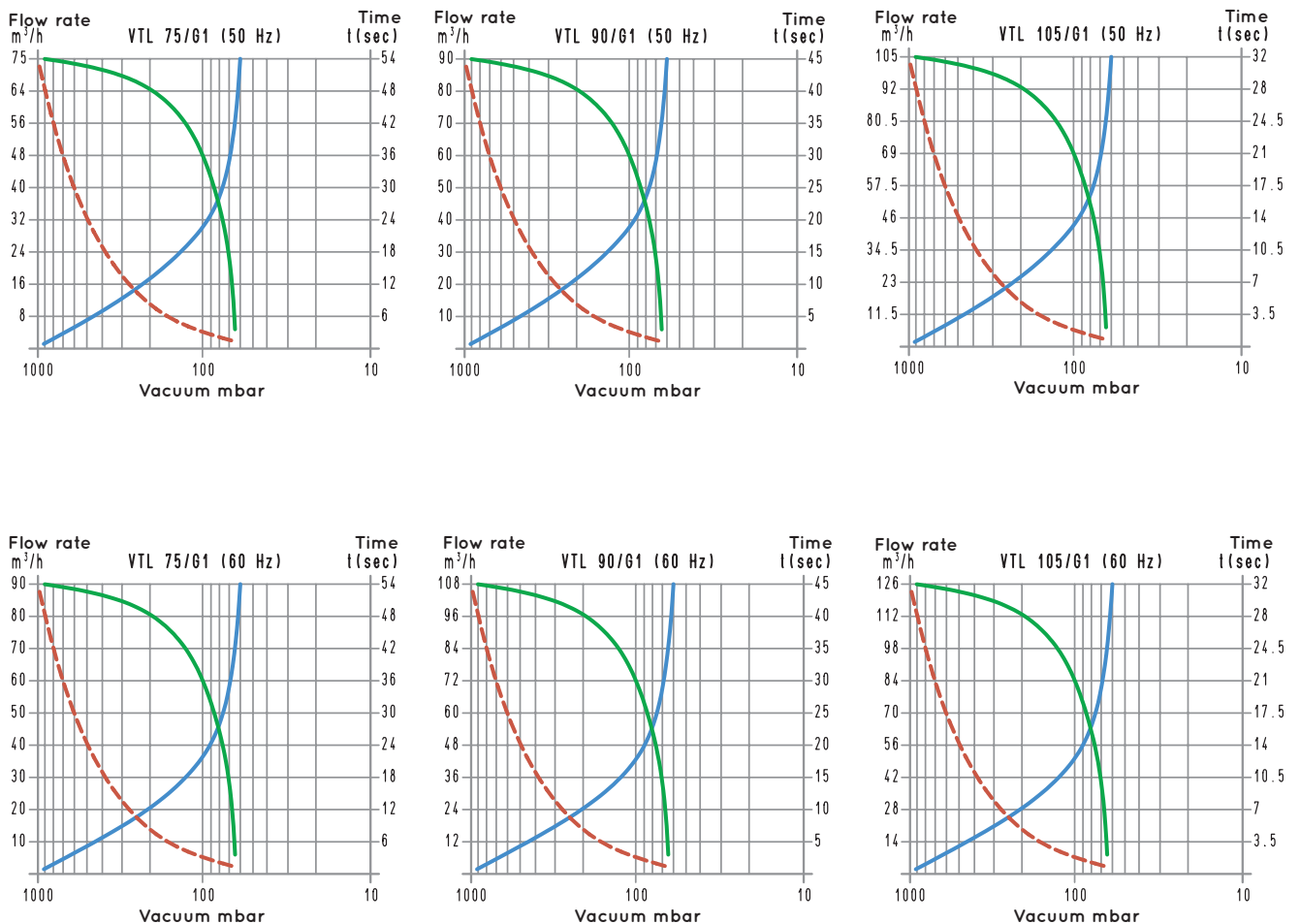
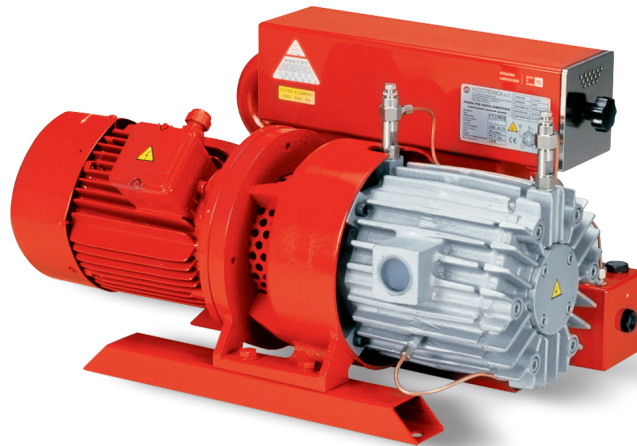
  

Accessories and Parts		VTL 40/G1	VTL 50/G1	VTL 65/G1
Oil charge	L	0.85	1.00	1.00
Lubricating oil	type	ISO 100	ISO 100	ISO 100
6 vanes	item	00 VTL 40G1 10	00 VTL 50G1 10	00 VTL 65G1 10
Sealing kit	item	00 KIT VTL 40G1	00 KIT VTL 50G1	00 KIT VTL 65 G1
Check valve	item	10 05 10	10 05 10	10 05 10
Suction filter	item	FB 30/FC 30	FB 30/FC 30	FB 30/FC 30
Adjustable drip oiler	item	00 VTL 00 11	00 VTL 00 11	00 VTL 00 11

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

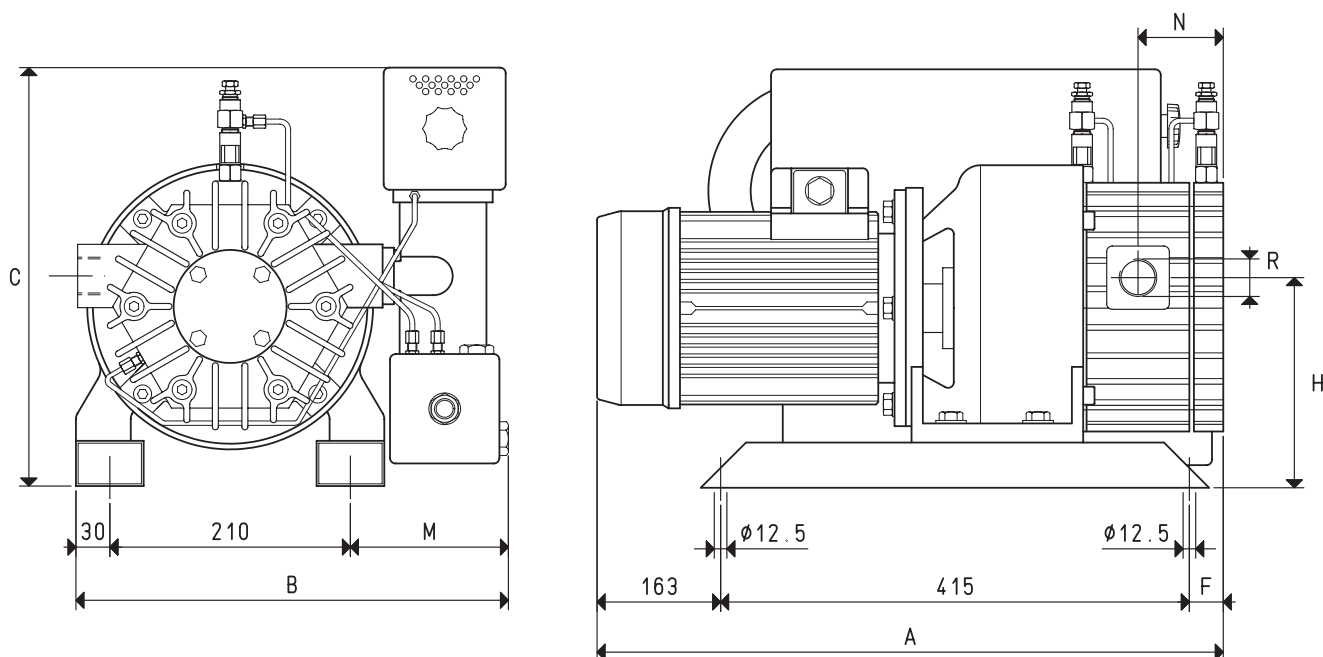
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



# VACUUM PUMPS VTL 75/G1, 90/G1 and 105/G1

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTL 75/G1		VTL 90/G1		VTL 105/G1	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	75.0	90.0	90.0	108.0	105.0	126.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	2.20	2.70	3.00	3.60	3.00	3.60
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1450	1755	1440	1700	1440	1700
Motor shape		B5		B5		B5	
Motor size		100		100		100	
Noise level	dB(A)	70	72	71	73	72	74
Max weight 3~	kg	76.5		84.0		97.6	
A		640		660		690	
B		385		400		400	
C		400		400		445	
F		62		82		112	
H		186		186		186	
M		145		150		160	
N		80		92		122	
R	Ø gas	G1"1/4		G1"1/4		G1"1/2	
Accessories and Parts		VTL 75/G1		VTL 90/G1		VTL 105/G1	
Oil charge	L	2.0		2.6		2.6	
Lubricating oil	type	ISO 150		ISO 150		ISO 150	
Deoiling cartridge	item	00 VTL 75G1 29		00 VTL 90G1 29		00 VTL 105G1 29	
6 vanes	item	00 VTL 75G1 10		00 VTL 90G1 10		00 VTL 105G1 10	
Sealing kit	item	00 KIT VTL 75G1		00 KIT VTL 90G1		00 KIT VTL 105G1	
Check valve	item	10 06 10		10 06 10		10 07 10	
Exhaust filter	item	FB 40/FC 40		FB 40/FC 40		FB 50/FC 50	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11		00 VTL 00 11	

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



## VACUUM PUMPS VTLP 40/G1 - 105/G1 WITH DISPOSABLE LUBRICATION

These vacuum pumps have a suction flow rate of 40, 50, 65, 75, 90 and 105 m<sup>3</sup>/h.

The vacuum with disposable oil lubrication is adjusted via two oilers located in correspondence of the support bearings.

The rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges.

The pump and the electric motor are, therefore, two independent units and fixed onto a special support and connected to each other via an elastic transmission joint.

All this allows using standard electric motors, in the shapes and sizes indicated in the table.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.

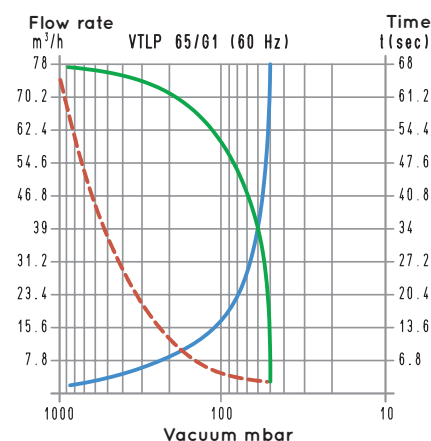
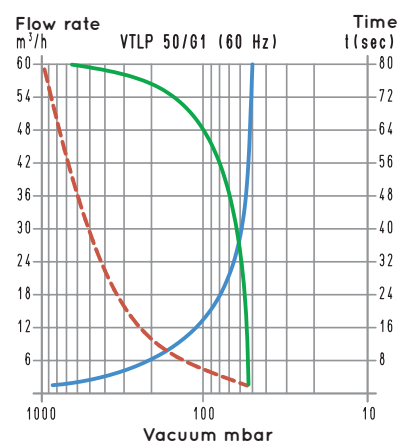
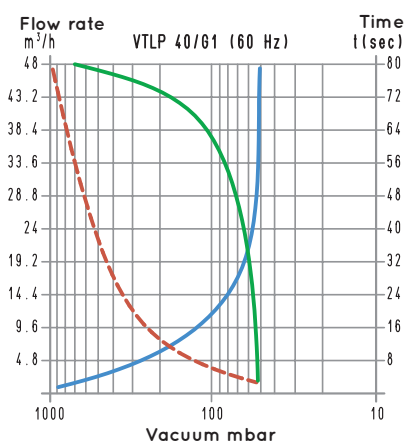
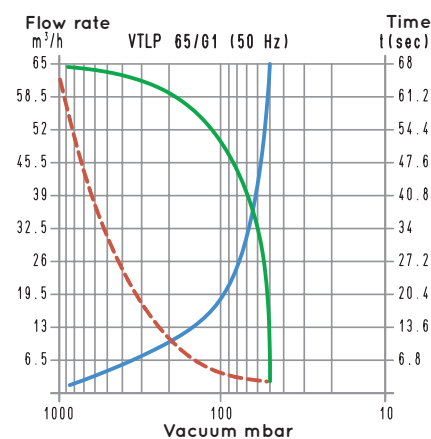
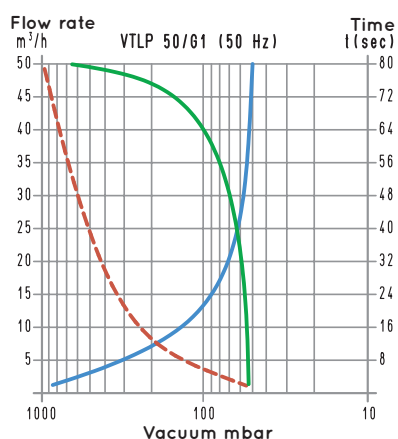
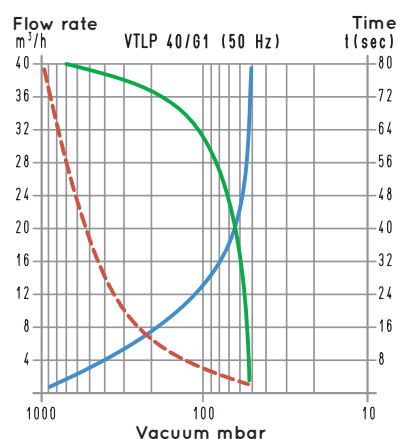
A safety valve is also installed on the tank for the automatic drainage of the exhaust oil when not regularly drained.

The lubrication oil is contained in a special transparent container, fixed to the pump via its support, and controlled by a magnetic level switch.

In pumps with disposable lubrication, the oil is sucked in the pump through an adjustable drip oilers and drained together with the sucked air in the recovery tank, without being put in circulation again. These pumps are necessary when the air to be sucked contains water condensation, solvent vapours or anything else that could affect oil properties.

A check valve and a filter must be installed on the pump suction inlet.

These pumps are supplied with three-phase electric motors only.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

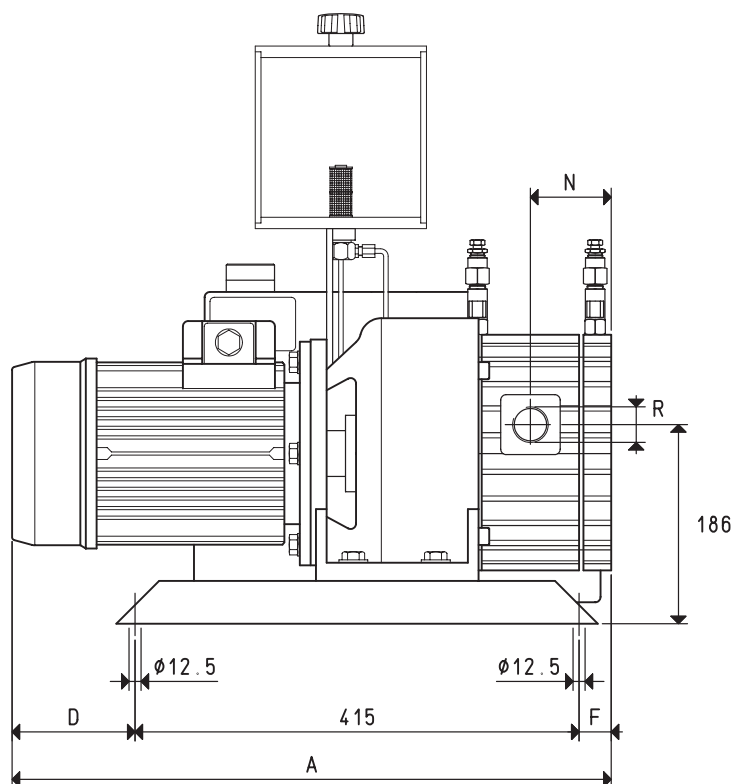
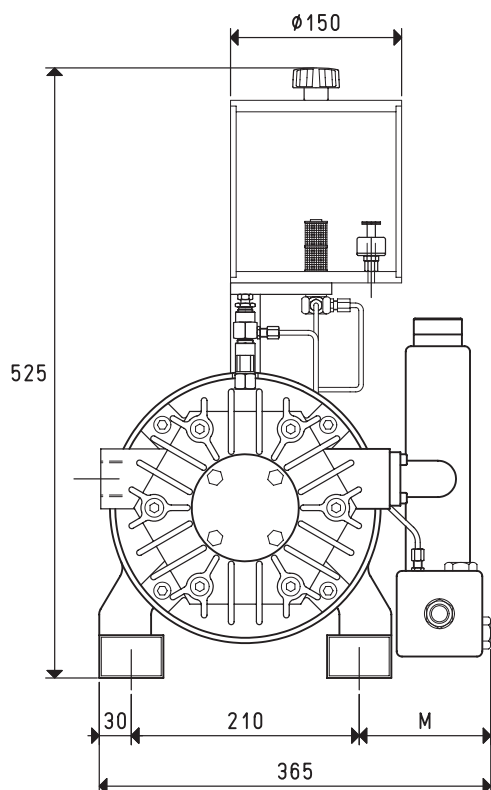
$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)





# VACUUM PUMPS VTLP 40/G1, 50/G1 and 65/G1 WITH DISPOSABLE LUBRICATION

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



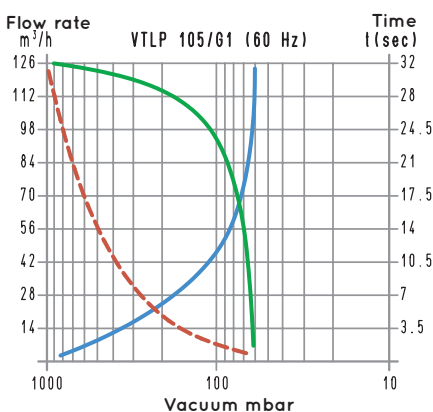
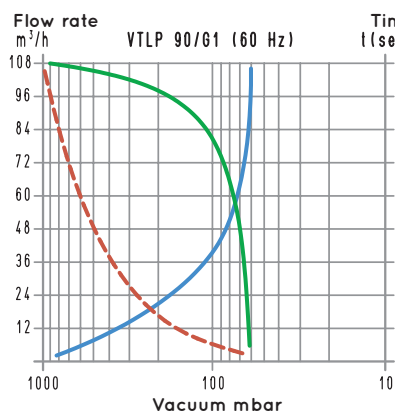
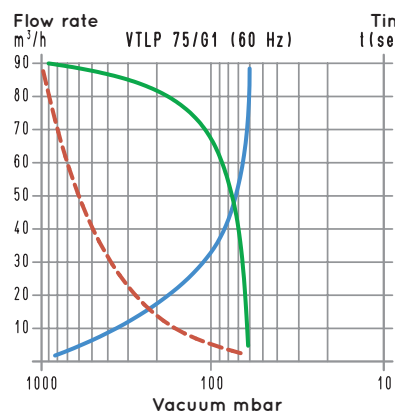
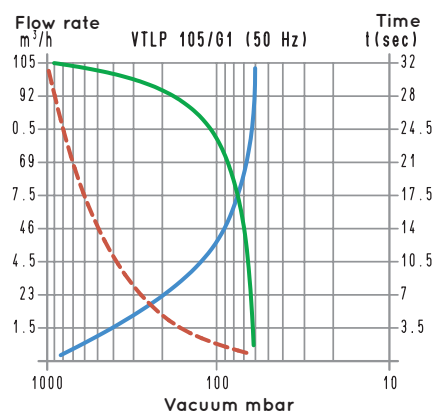
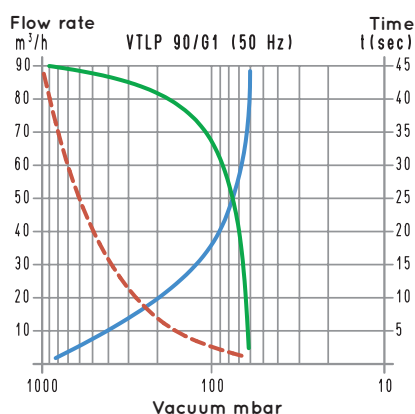
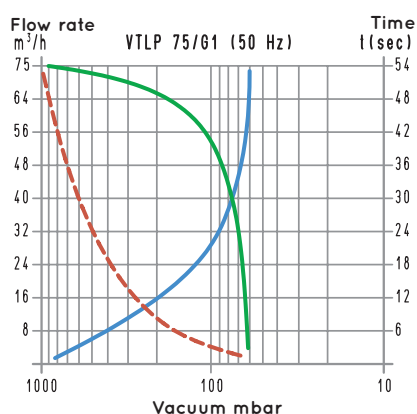
Item		VTLP 40/G1		VTLP 50/G1		VTLP 65/G1	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	40.0	48.0	50.0	60.0	65.0	78.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	1.10	1.35	1.50	1.80	1.50	1.80
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1440	1750	1440	1750	1440	1750
Motor shape		B5		B5		B5	
Motor size		90		90		90	
Noise level	dB(A)	68	70	68	70	70	72
Max weight 3~	kg	52.5		55.1		72.1	
A		520		560		580	
D		60		115		120	
F		45		30		45	
M		125		125		125	
N		70		80		80	
R	Ø gas	G1"		G1"		G1"	
Accessories and Parts		VTLP 40/G1		VTLP 50/G1		VTLP 65/G1	
Oil charge	L	1.8		1.8		1.8	
Lubricating oil	type	ISO 100		ISO 100		ISO 100	
6 vanes	item	00 VTL 40G1 10		00 VTL 50G1 10		00 VTL 65G1 10	
Sealing kit	item	00 KIT VTL 40G1		00 KIT VTL 50G1		00 KIT VTL 65G1	
Check valve	item	10 05 10		10 05 10		10 05 10	
Suction filter	item	FB 30/FC 30		FB 30/FC 30		FB 30/FC 30	
Oil level switch	item	00 LP VTL 99		00 LP VTL 99		00 LP VTL 99	
Oil filter	item	00 LP VTL 40		00 LP VTL 40		00 LP VTL 40	
Adjustable drip oiler	item	00 VTL 00 11		00 VTL 00 11		00 VTL 00 11	

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6

# VACUUM PUMPS VTLP 75/G1, 90/G1 and 105/G1 WITH DISPOSABLE LUBRICATION



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

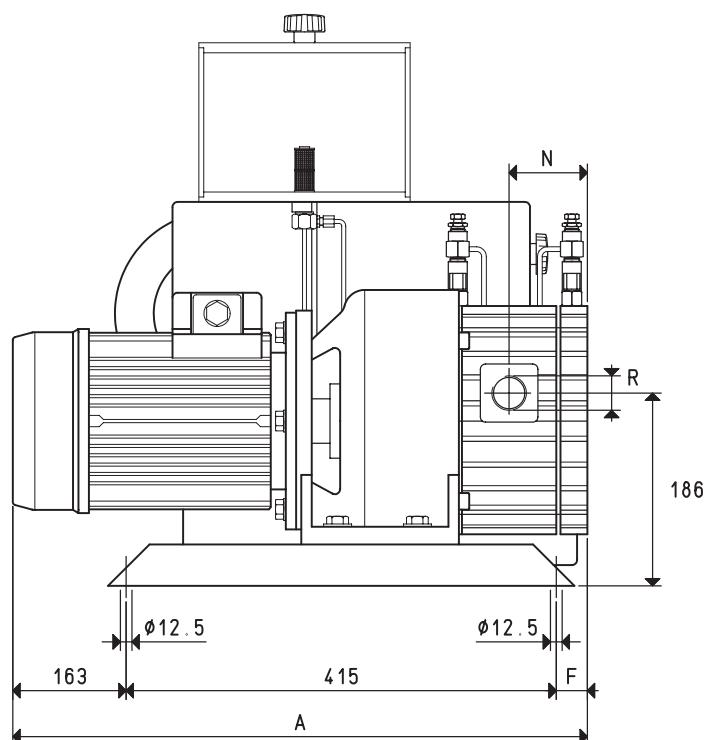
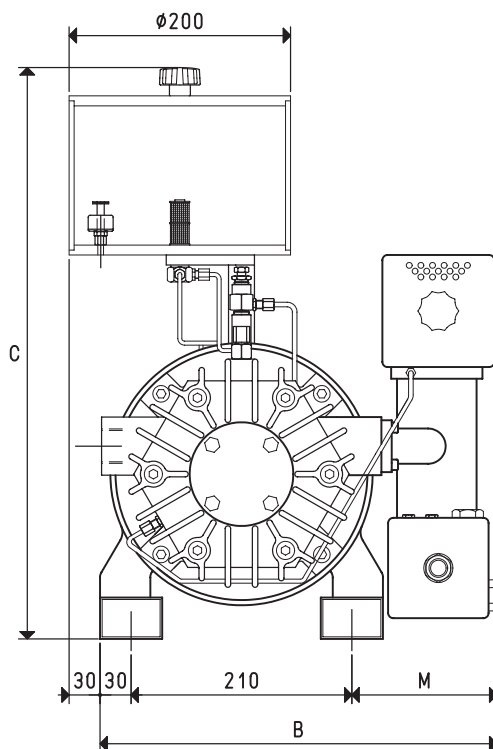
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



## VACUUM PUMPS VTLP 75/G1, 90/G1 and 105/G1 WITH DISPOSABLE LUBRICATION

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



Item		VTLP 75/G1		VTLP 90/G1		VTLP 105/G1	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	75.0	90.0	90.0	108.0	105.0	126.0
Final pressure	mbar abs.	50		50		50	
Motor performance 3~	volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	2.20	2.70	3.00	3.60	3.00	3.60
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1450	1735	1440	1700	1440	1700
Motor shape		B5		B5		B5	
Motor size		100		100		100	
Noise level	dB(A)	70	72	71	73	72	74
Max weight 3~	kg	78.3		85.8		99.4	
A		640		660		690	
B		415		430		430	
C		575		575		620	
F		62		82		112	
M		145		150		160	
N		80		92		122	
R	Ø gas	G1"1/4		G1"1/4		G1"1/2	

Accessories and Parts		VTLP 75/G1	VTLP 90/G1	VTLP 105/G1
Oil charge	L	3.8	3.8	3.8
Lubricating oil	type	ISO 150	ISO 150	ISO 150
Deoiling cartridge	item	00 VTL 75G1 29	00 VTL 90G1 29	00 VTL 105G1 29
6 vanes	item	00 VTL 75G1 10	00 VTL 90 G110	00 VTL 105 G110
Sealing kit	item	00 KIT VTL 75G1	00 KIT VTL 90G1	00 KIT VTL 105G1
Check valve	item	10 06 10	10 06 10	10 07 10
Suction filter	item	FB 40/FC 40	FB 40/FC 40	FB 50/FC 50
Oil level switch	item	00 LP VTL 99	00 LP VTL 99	00 LP VTL 99
Oil filter	item	00 LP VTL 40	00 LP VTL 40	00 LP VTL 40
Adjustable drip oiler	item	00 VTL 00 11	00 VTL 00 11	00 VTL 00 11

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



The pumps in this new series are single-stage, rotary vane and with oil-bath lubrication with recycling. The implementation of cutting edge construction techniques and the use of hi-tech, latest generation materials has allowed for the achievement of high standards of quality, performance, duration and low cost of use. The resulting technical features include:

- High pumping speed in the field of absolute pressure between 850 and 0.5 mbar
- Extremely low noise output
- Low operating temperatures
- No pollution
- Low maintenance

The pumps are driven by an electric motor, coupled by means of an elastic transmission joint (not including RVP 15), in compliance with IEC International Standard 60034 requirements for rotating machines and European Directives for Low Voltage (LV) 2006/95/EC, for Electromagnetic Compatibility (EMC) 2004/108/EC, for the limitation of use of hazardous substances RoHS 2011/65/CE and Machine Directive 2006/42/EC for CE marking.

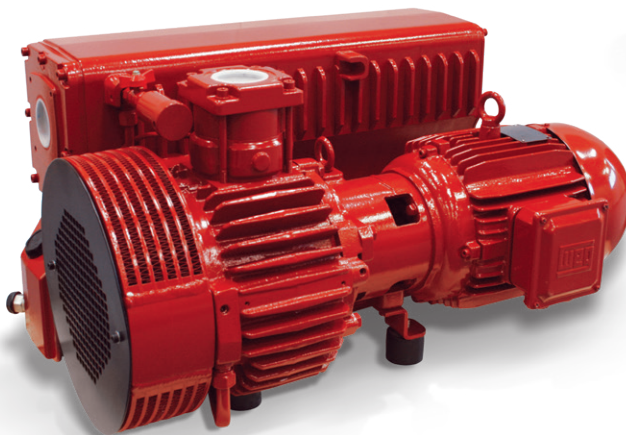
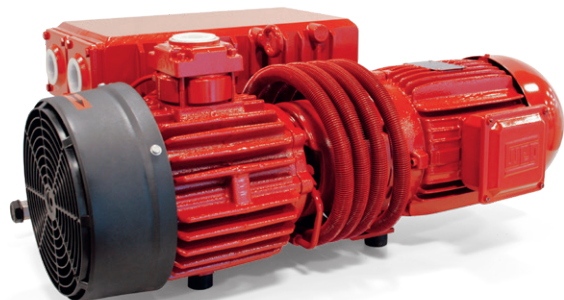
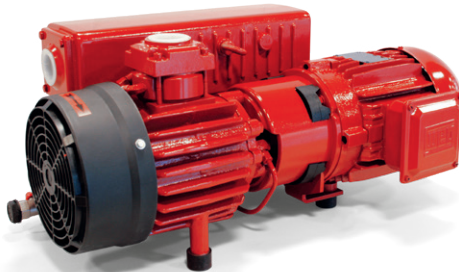
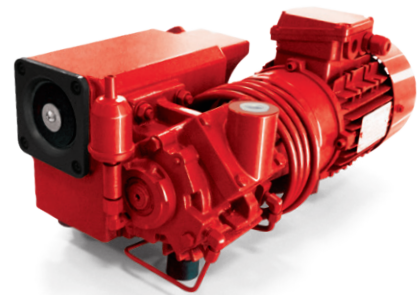
With the exception of electric motors with power lower than 0.75 KW, the efficiency class corresponds to IE3 = Premium Efficiency, with protection degree IP 55, Tolerance of nominal Voltage  $\pm 10\%$  and Class of Insulation F.

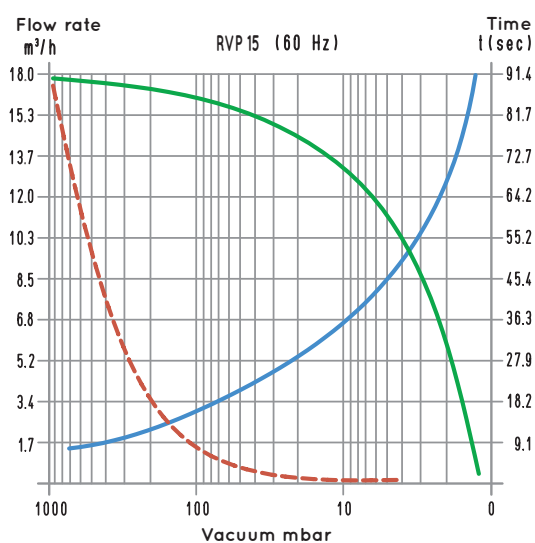
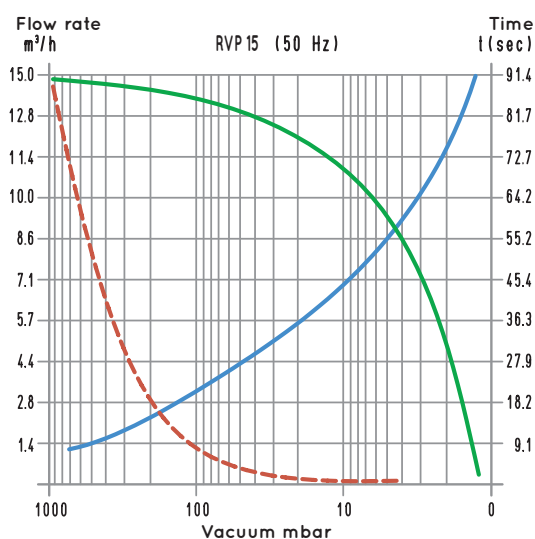
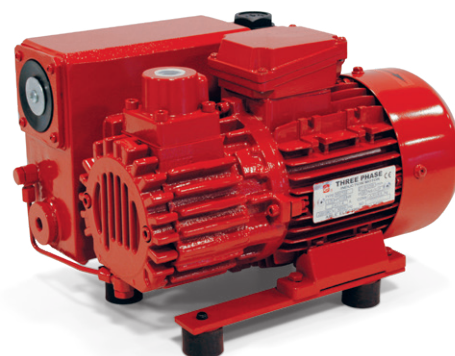
A centrifuge fan fitted on the pump shaft ensures a suitable air flow for optimal pump body and radiator cooling (forced surface cooling).

A capacious oil recovery tank located on the pump outlet and equipped with microfibre deoiling cartridges has the function of smoke filtering system and silencer. A special built-in ball cock valve allows for the recovery of oil retained by cartridges. The oil filter, except mod. RVP 15 and 21 pumps, are installed as standard on all.

The oil contained in the system lubricates, cools and seals rotating and fixed pump parts. The check valve on the suction line is an integral part of the pump and is standard while a filter suitable for trapping any suctioned impurities can be supplied upon request. All pumps except mod. RVP 15 and RVP 21, are supplied standard with a gas ballast valve, which permits high water vapour compatibility. Instead, for mod. RVP 21, the ballast valve can only be installed upon request.

The above described product devices combined with strong, compact construction make RVP series vacuum pumps especially suitable for continuous and heavy-duty use.

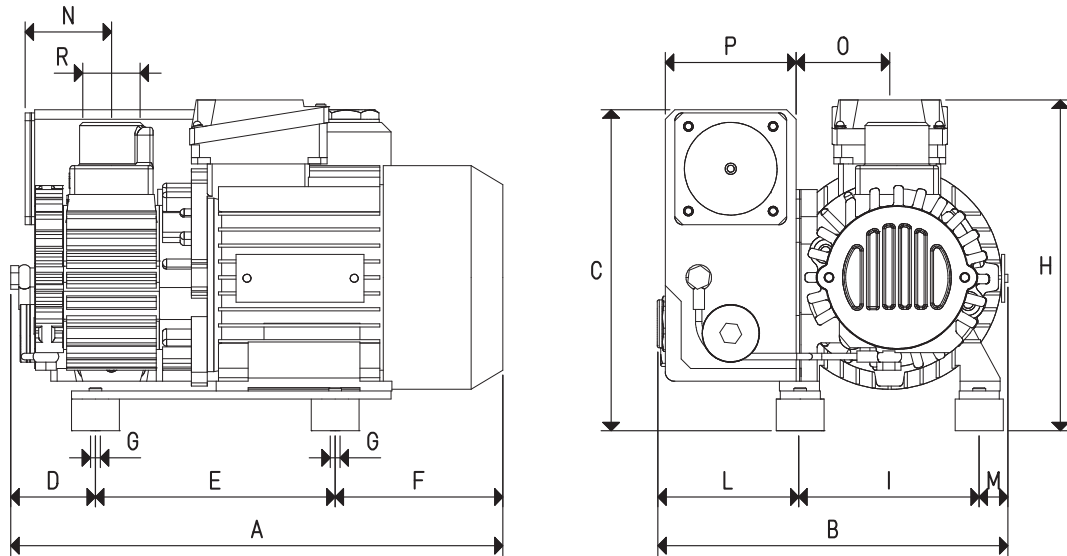




To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)

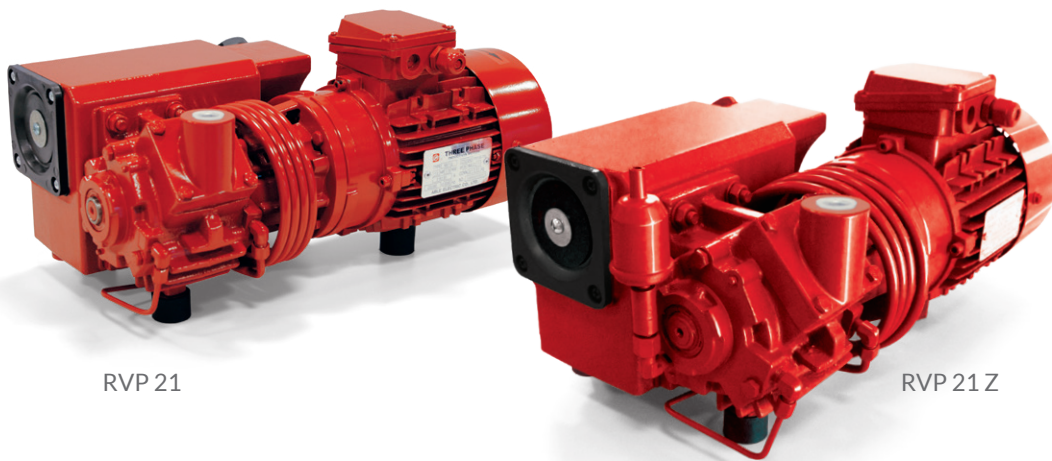


Item		RVP 15		
Frequency		50 Hz		60 Hz
Flow rate	m <sup>3</sup> /h	15.0		18.0
Final pressure	mbar abs.		2	
Motor performance	3~	230/400 ± 10%		275/480 ± 10%
Volt	1~	230 ± 10%		275 ± 10%
Motor power	3~	0.55		0.66
Kw	1~	0.55		0.66
Motor protection	IP		55	
Rotation speed	g/min <sup>-1</sup>	2700		3240
Motor shape			B14	
Motor size			90	
Noise level	dB(A)	63		64
Max weight	3~		15.0	
Kg	1~		15.5	
A			308	
B			221	
C			200	
D			53	
E			150	
F			105	
G	Ø		M8	
H			195	
I			112	
L			89	
M			19	
N			54	
O			58	
P			82	
R	Ø gas		G1/2"	
Accessories and Parts		RVP 15		
Oil charge	L		0.50	
Lubricating oil	type		VT OIL 68	
Deoiling cartridge	item		00 RVP 15 05	
3 vanes	item		00 RVP 15 04	
Sealing kit	item		00 RVP 15 06	
Check valve	item		00 RVP 15 03	
Suction filter	item		FC 20	

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: RVP 15 M).

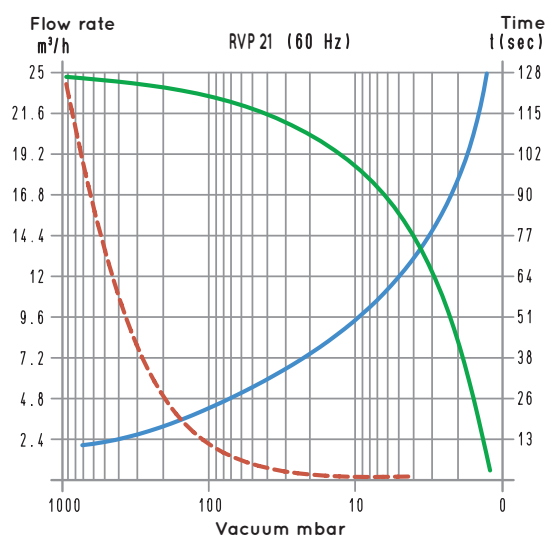
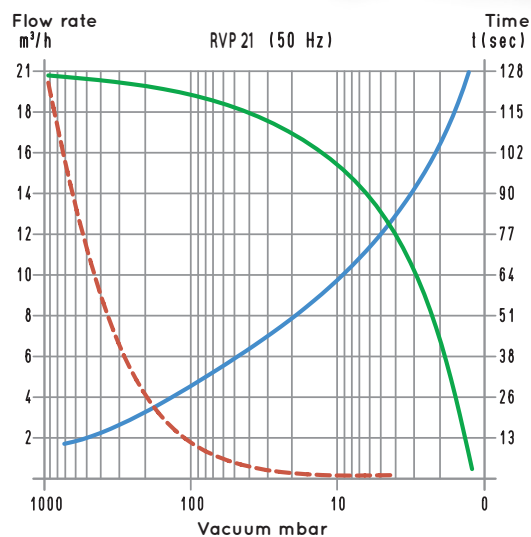


## OIL-BATH VACUUM PUMP RVP 21



RVP 21

RVP 21 Z

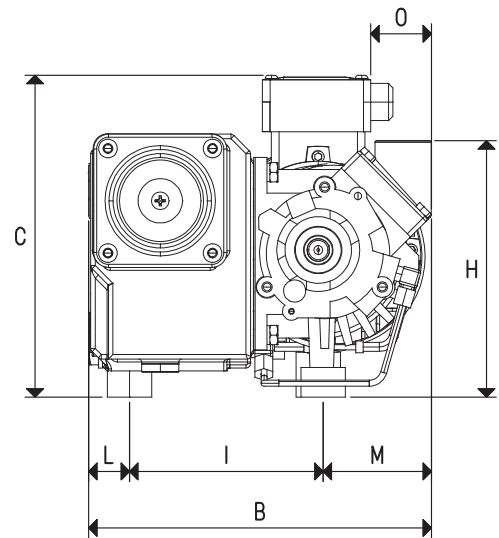
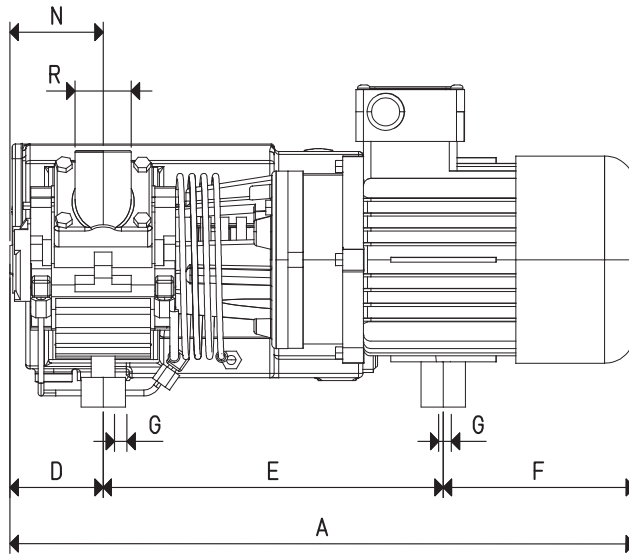


To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)





Item		RVP 21	
Frequency		50 Hz	60 Hz
Flow rate	m³/h	21.0	25.0
Final pressure	mbar abs.	1	
Motor performance	3~	230/400 ± 10%	275/480 ± 10%
Volt	1~	230 ± 10%	275 ± 10%
Motor power	3~	0.75	0.90
Kw	1~	0.75	0.90
Motor protection	IP	55	
Rotation speed	g/min <sup>-1</sup>	2700	3240
Motor shape		B14	
Motor size		90	
Noise level	dB(A)	64	65
Max weight	3~	18.5	
Kg	1~	19.0	
A		421	
B		232	
C		225	
D		63	
E		230	
F		128	
G	Ø	M8	
H		173	
I		131	
L		28	
M		73	
N		62	
O		41	
R	Ø gas	G1/2"	

Accessories and Parts		RVP 21	
Oil charge	L	0.50	
Lubricating oil	type	VT OIL 68	
Deoiling cartridge	item	00 RVP 21 05	
3 vanes	item	00 RVP 21 04	
Sealing kit	item	00 RVP 21 06	
Check valve	item	00 RVP 21 03	
Suction filter	item	FC 20	
Ballast valve	item	VZR 01	

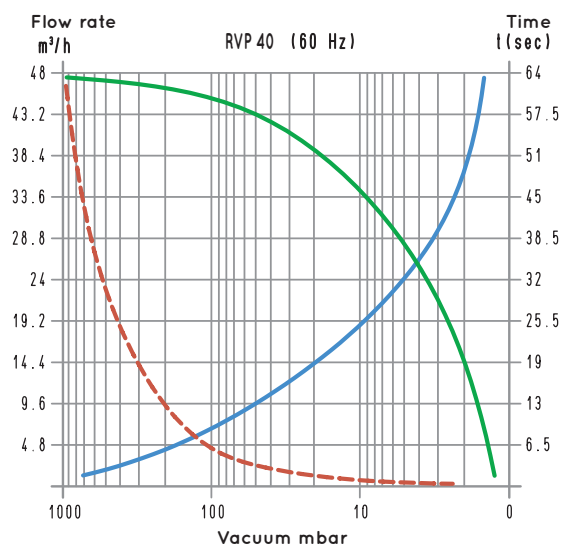
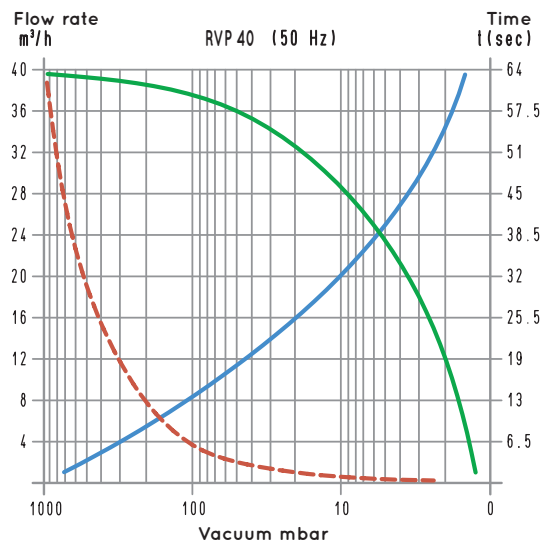
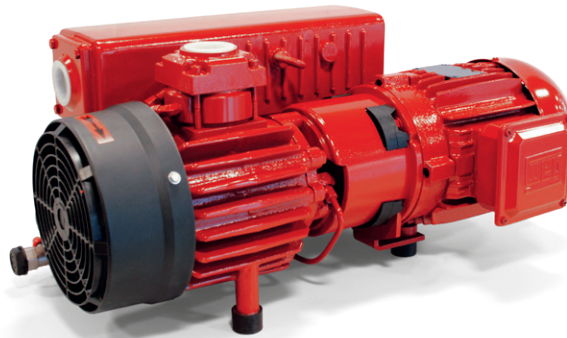
Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: RVP 21 M).

Add the letter Z to the item for a pump supplied with a ballast valve (Example: RVP 21 Z).





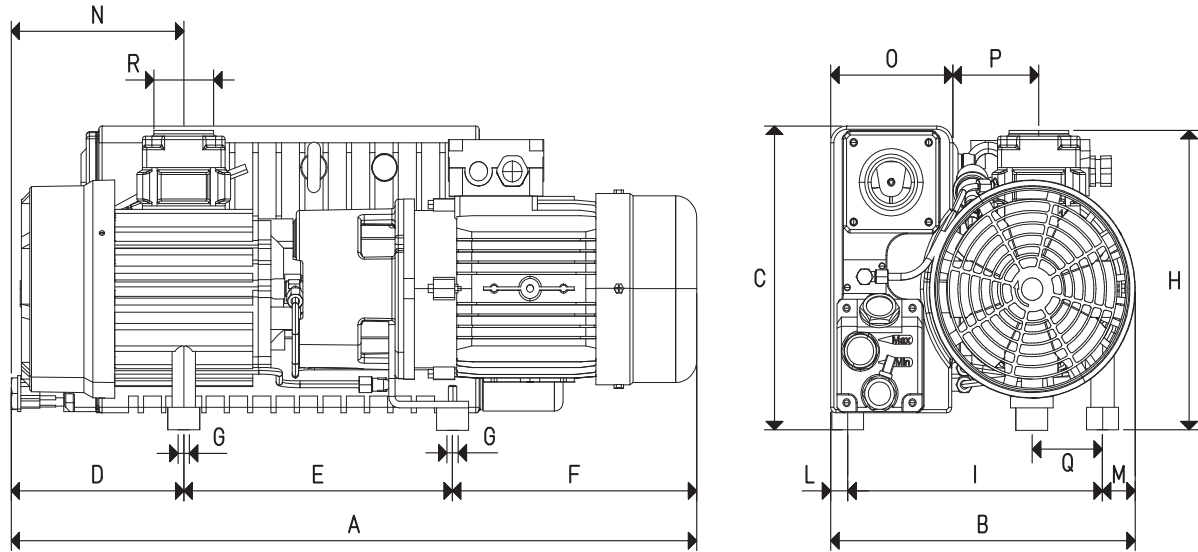
## OIL-BATH VACUUM PUMP RVP 40



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

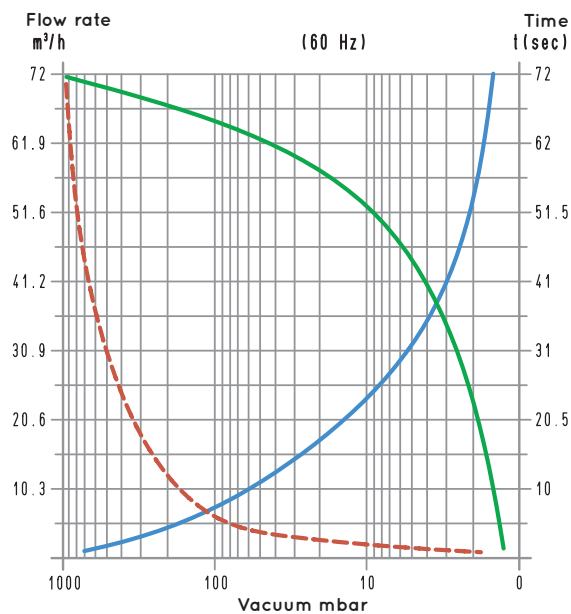
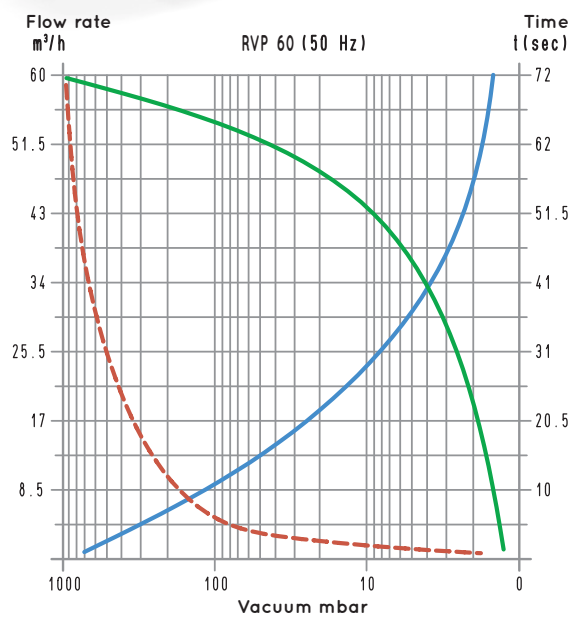
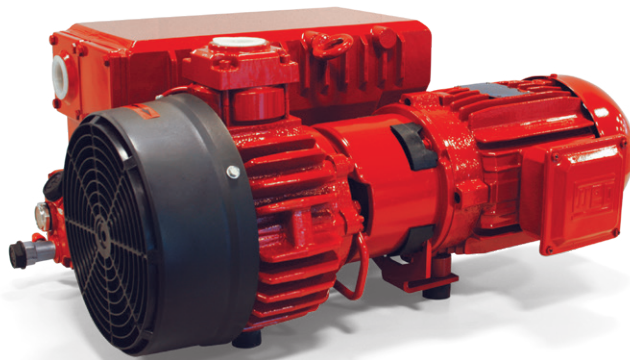
$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		RVP 40		
Frequency		50 Hz		60 Hz
Flow rate	m <sup>3</sup> /h	40.0		48.0
Final pressure	mbar abs.		0.5	
H <sub>2</sub> O steam quantity permitted	Kg/h		0,7	
Motor performance 3~	Volt	230/400 ± 10%		275/480 ± 10%
Motor power 3~	Kw	1.10		1.35
Motor protection	IP		55	
Rotation speed	g/min <sup>-1</sup>	1450		1740
Motor shape			B14	
Motor size			100	
Noise level	dB(A)	64		65
Max weight	Kg		49.0	
A			645	
B			286	
C			266	
D			157	
E			335	
F			225	
G	Ø		M8	
H			260	
I			240	
L			15	
M			31	
N			157	
O			115	
P			80	
Q			66	
R	Ø gas		G1"1/4	
Accessories and Parts		RVP 40		
Oil charge	L		1.25	
Lubricating oil	type		VT OIL 100	
Oil filter	item		00 RVP 40 07	
Deoiling cartridge	item		00 RVP 40 05	
3 vanes	item		00 RVP 40 04	
Sealing kit	item		00 RVP 40 06	
Check valve	item		00 RVP 40 03	
Suction filter	item		FC 35	
Ballast valve	item		integrated	



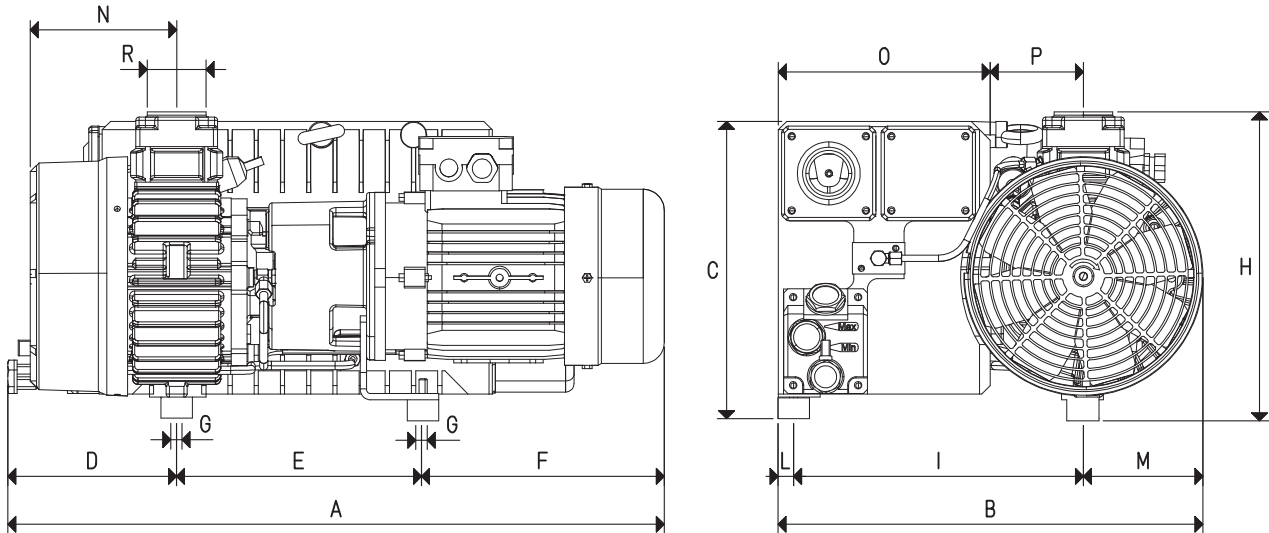
## OIL-BATH VACUUM PUMP RVP 60



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

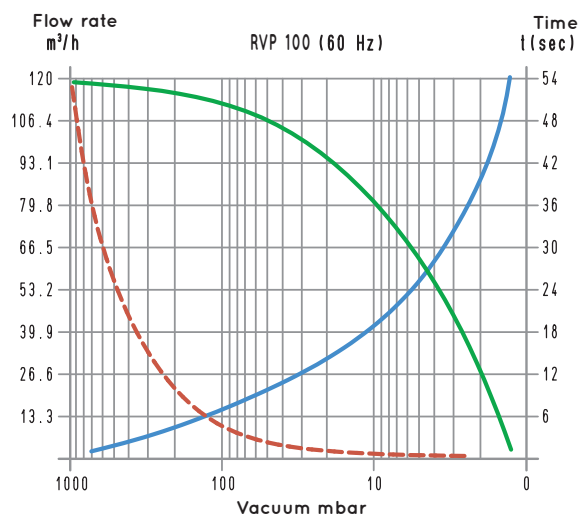
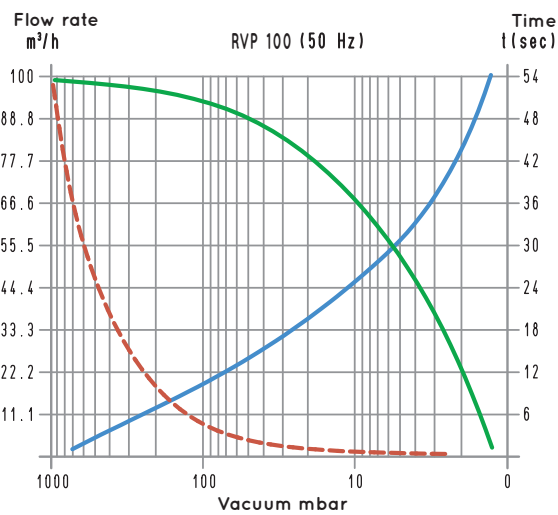
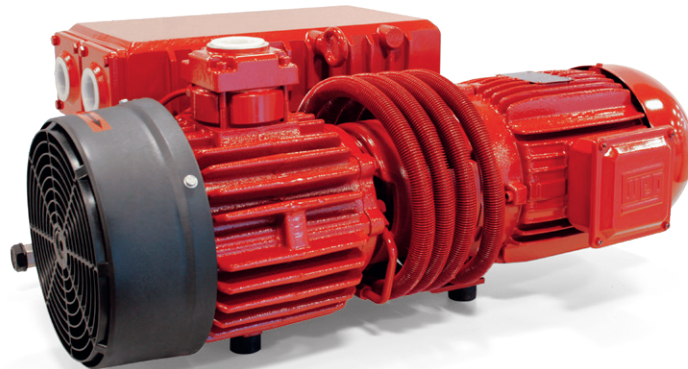
$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		RVP 60		
Frequency		50 Hz	60 Hz	
Flow rate	m <sup>3</sup> /h	60.0	72.0	
Final pressure	mbar abs.	0.5		
H <sub>2</sub> O steam quantity permitted	Kg/h	1		
Motor performance 3~	Volt	230/400 ± 10%	275/480 ± 10%	
Motor power 3~	Kw	1.50	1.80	
Motor protection	IP	55		
Rotation speed	g/min <sup>-1</sup>	1450	1740	
Motor shape		B14		
Motor size		100		
Noise level	dB(A)	65	66	
Max weight	Kg	59.0		
A		615		
B		420		
C		290		
D		148		
E		317		
F		217		
G	Ø	M8		
H		298		
I		276		
L		15		
M		129		
N		140		
O		200		
P		89		
R	Ø gas	G1"1/4		

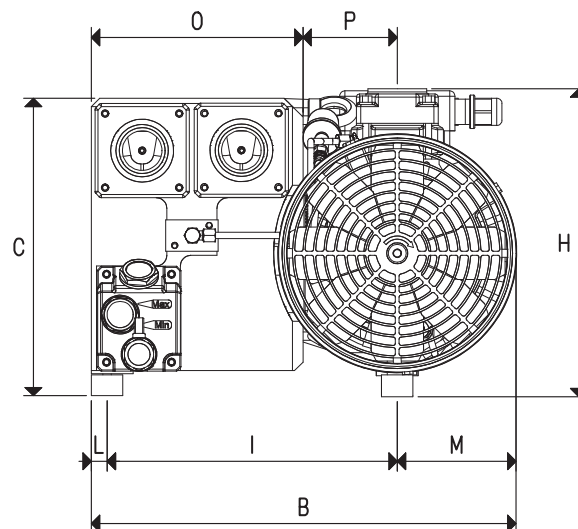
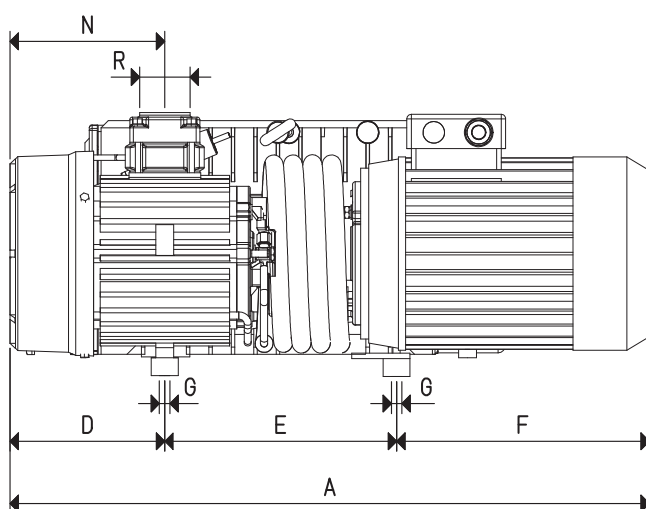
Accessories and Parts		RVP 60		
Oil charge	L	2		
Lubricating oil	type	VT OIL 100		
Oil filter	item	00 RVP 60 07		
2 deoiling cartridges	item	00 RVP 60 05		
3 vanes	item	00 RVP 60 04		
Sealing kit	item	00 RVP 60 06		
Check valve	item	00 RVP 60 03		
Suction filter	item	FC 35		
Ballast valve	item	integrated		



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



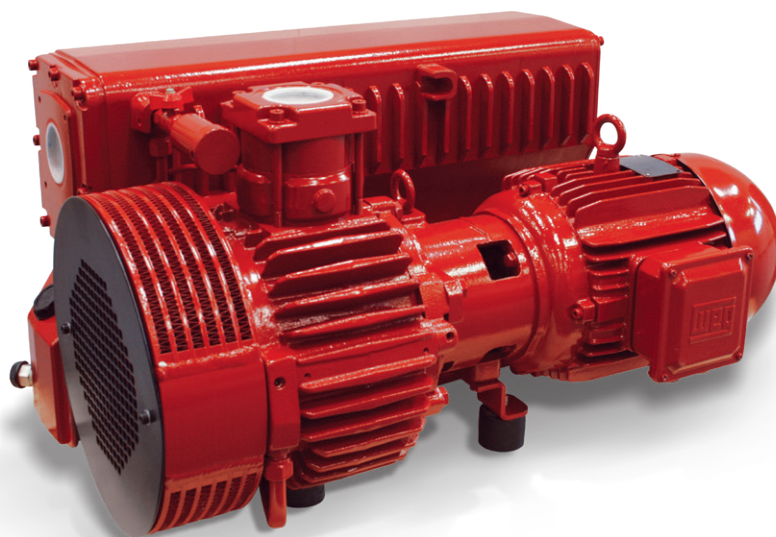
Item		RVP 100	
Frequency		50 Hz	60 Hz
Flow rate	m <sup>3</sup> /h	100.0	120.0
Final pressure	mbar abs.	0.5	
H <sub>2</sub> O steam quantity permitted	Kg/h	1.5	
Motor performance 3~	Volt	230/400 ± 10%	275/480 ± 10%
Motor power 3~	Kw	2.2	3.0
Motor protection	IP	55	
Rotation speed	g/min <sup>-1</sup>	1450	1740
Motor shape		B14	
Motor size		100	
Noise level	dB(A)	67	69
Max weight	Kg	78.0	
A		710	
B		405	
C		280	
D		175	
E		360	
F		275	
G	Ø	M8	
H		290	
I		277	
L		15	
M		113	
N		170	
O		200	
P		90	
R	Ø gas	G1"1/4	

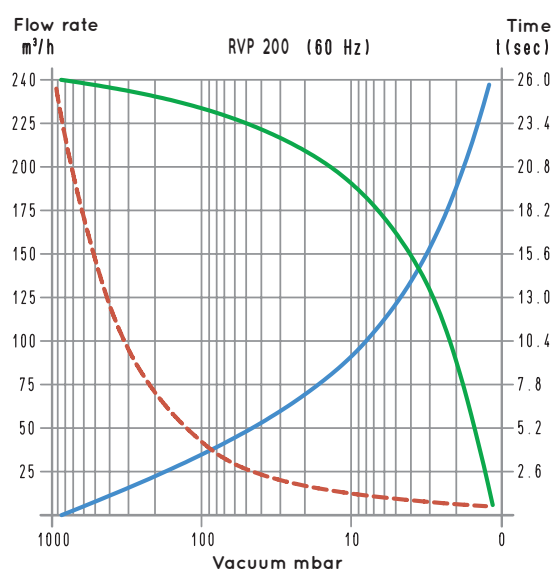
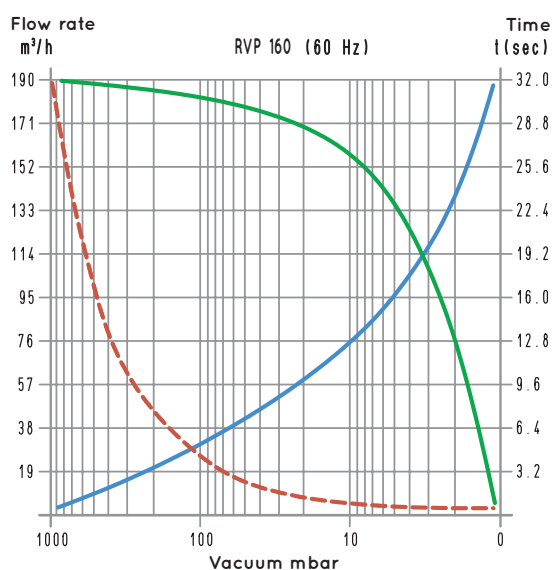
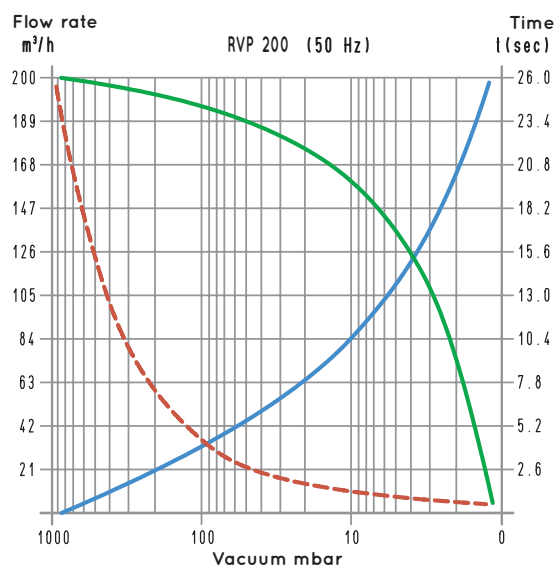
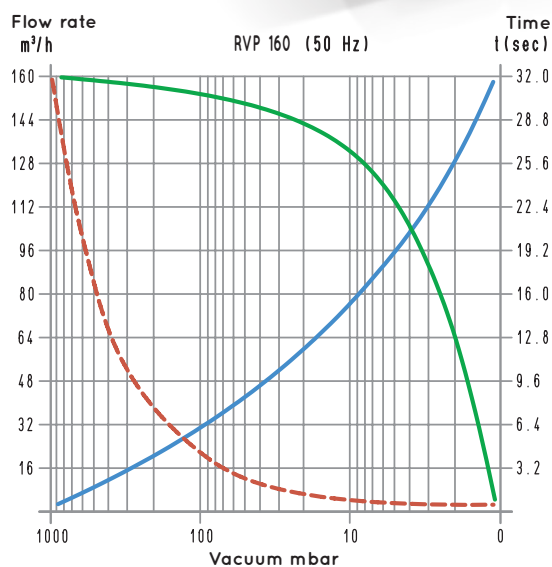
Accessories and Parts		RVP 100	
Oil charge	L	2	
Lubricating oil	type	VT OIL 100	
Oil filter	item	00 RVP 100 07	
2 deoiling cartridges	item	00 RVP 100 05	
3 vanes	item	00 RVP 100 04	
Sealing kit	item	00 RVP 100 06	
Check valve	item	00 RVP 100 03	
Suction filter	item	FC 35	
Ballast valve	item	integrated	



## OIL-BATH VACUUM PUMPS RVP 160 and RVP 200



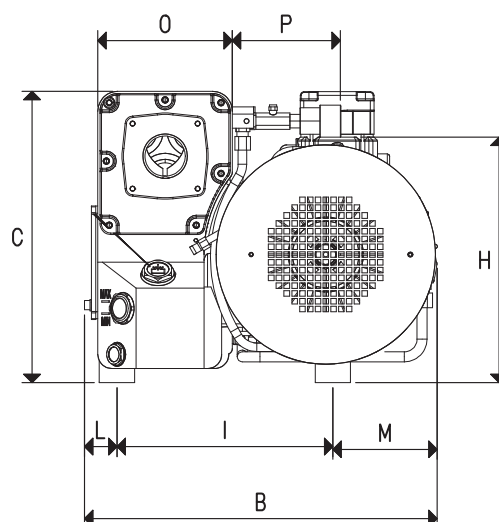
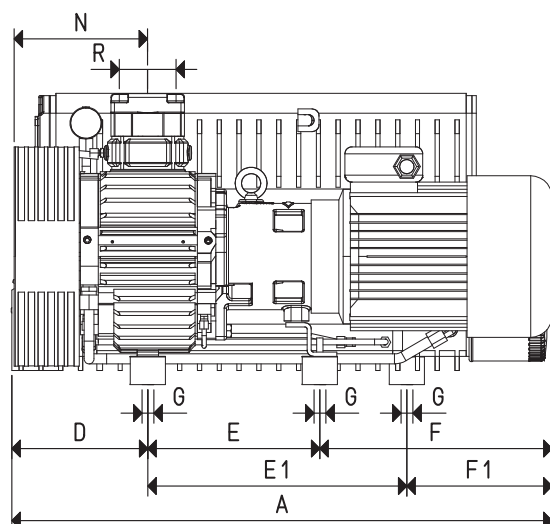
3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Green line: Curve relative to the flow rate (referring to the suction pressure)
- - - Red line: Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Blue line: Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)

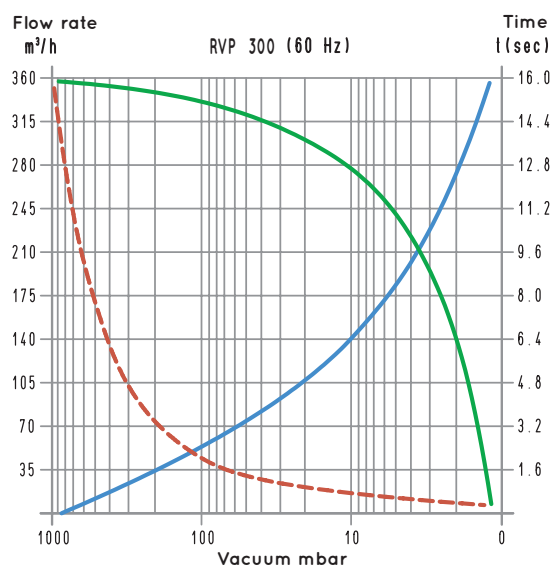
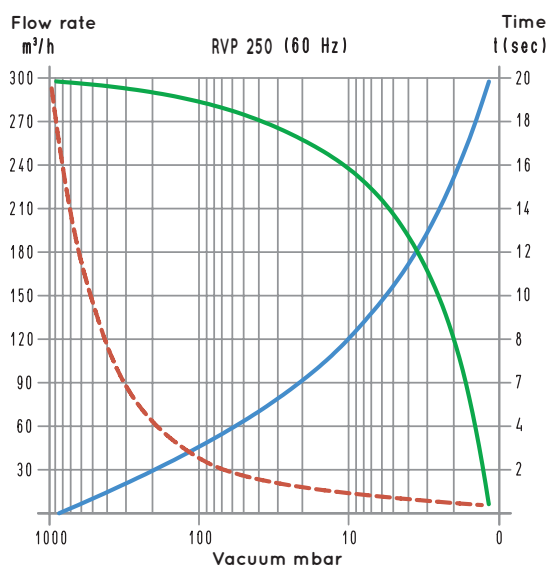
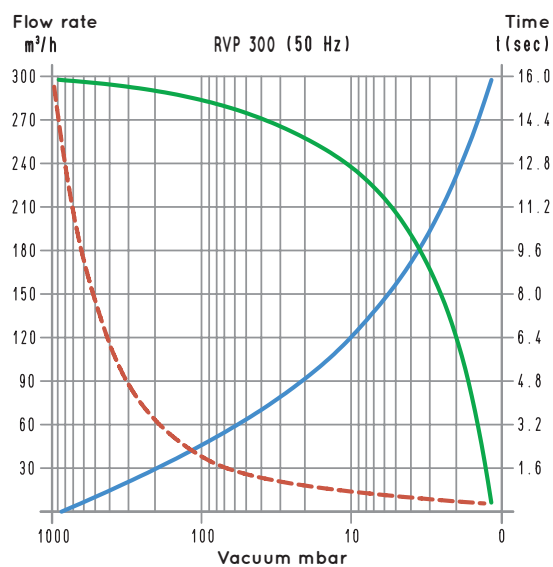
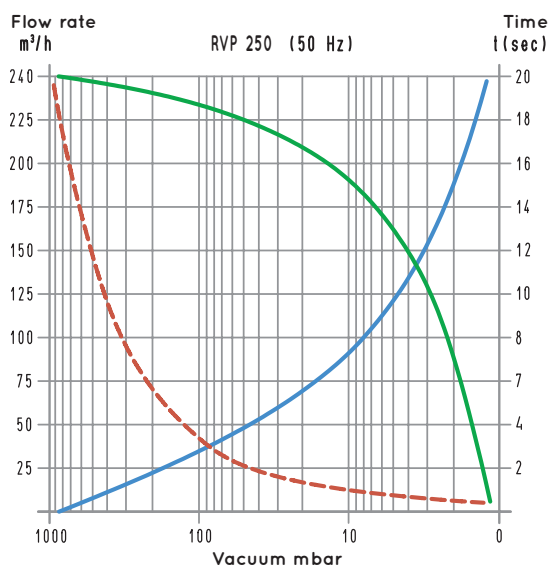
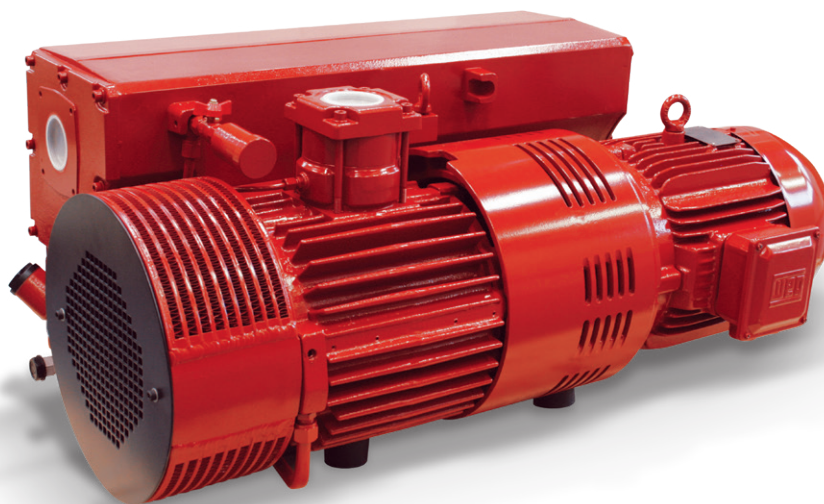


Item		RVP 160		RVP 200	
Frequency		50 Hz	60 Hz	50 Hz	60 Hz
Flow rate	m³/h	160.0	190.0	200.0	240.0
Final pressure	mbar abs.	0.5		0.5	
H <sub>2</sub> O steam quantity permitted	Kg/h	2.5		4	
Motor performance 3~	Volt	400/690 ± 10%		400/690 ± 10%	
Motor power 3~	Kw	4		4	
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1450		1450	
Motor shape		B14		B14	
Motor size		112		112	
Noise level	dB(A)	72		74	
Max weight	kg	142.0		145.0	
A		761		761	
B		495		495	
C		411		411	
D		192		192	
E		243		243	
E1		366		366	
F		326		326	
F1		205		205	
G	Ø	M10		M10	
H		310		310	
I		305		305	
L		25		25	
M		165		165	
N		189		189	
O		80		80	
P		65		65	
R	Ø gas	G2"		G2"	
Accessories and Parts		RVP 160		RVP 200	
Oil charge	L	8		8	
Lubricating oil	type	VT OIL 100		VT OIL 100	
Oil filter	item	00 RVP 160 07		00 RVP 200 07	
3 deoiling cartridges	item	00 RVP 160 05		00 RVP 200 05	
3 vanes	item	00 RVP 160 04		00 RVP 200 04	
Sealing kit	item	00 RVP 160 06		00 RVP 200 06	
Check valve	item	00 RVP 160 03		00 RVP 200 03	
Suction filter	item	FC 60		FC 60	
Ballast valve	item	integrated		integrated	





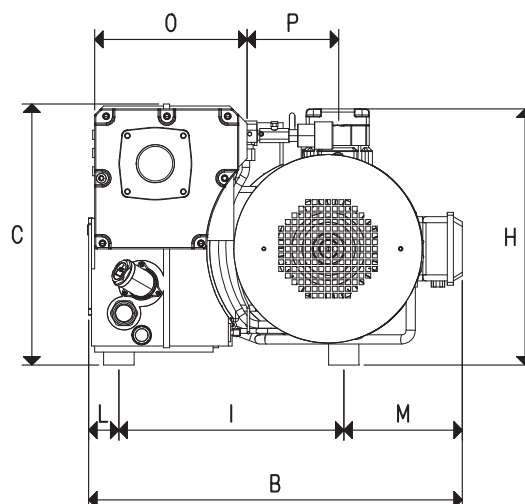
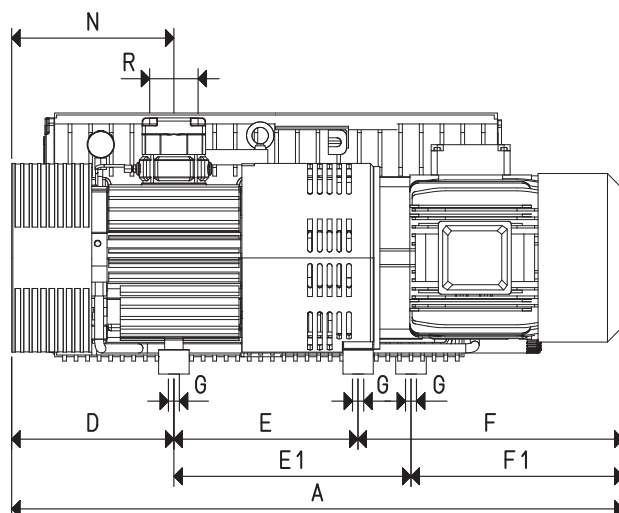
## OIL-BATH VACUUM PUMPS RVP 250 and RVP 300



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



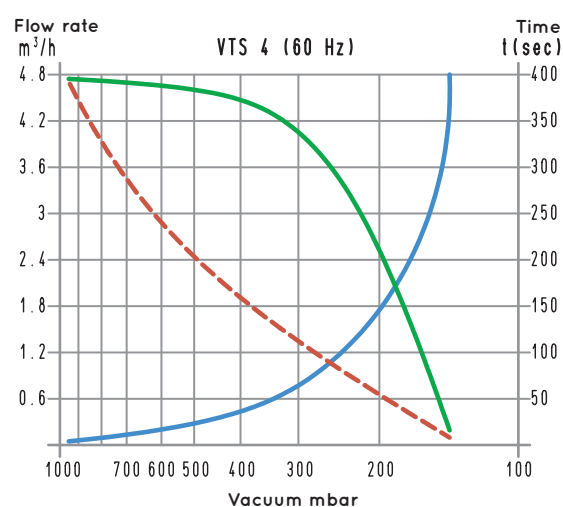
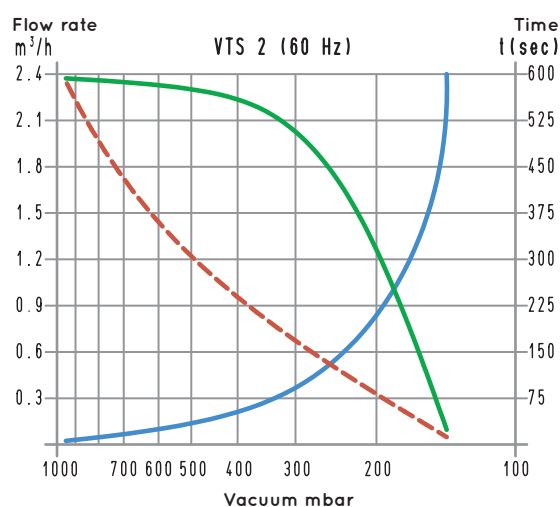
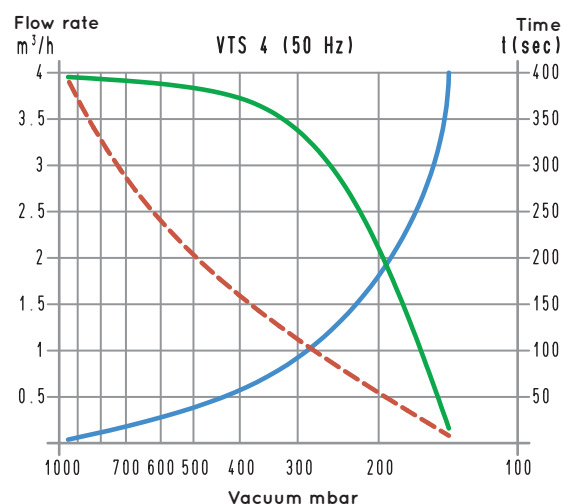
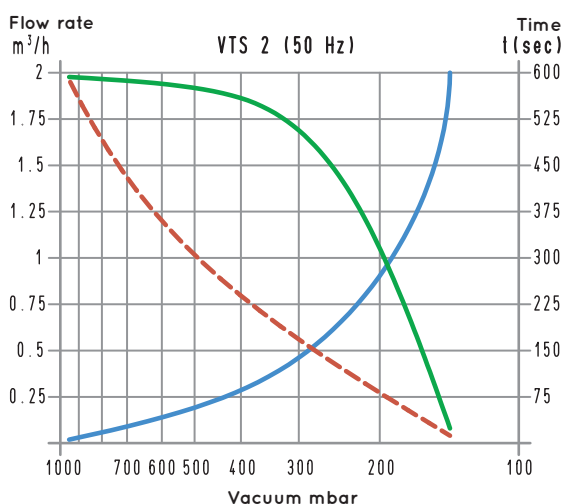
Item		RVP 250		RVP 300	
Frequency		50 Hz	60 Hz	50 Hz	60 Hz
Flow rate	m³/h	250	300	300	360
Final pressure	mbar abs.	0.5		0.5	
H <sub>2</sub> O steam quantity permitted	Kg/h	4		4.5	
Motor performance 3~	Volt	400/690 ± 10%		400/690 ± 10%	
Motor power 3~	Kw	5.5		7.5	
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1450		1450	
Motor shape		B5		B5	
Motor size		132		132	
Noise level	dB(A)	74		75	
Max weight	Kg	198.0		212.0	
A		975		1010	
B		579		579	
C		411		411	
D		287		287	
E		303		303	
E1		390		390	
F		385		420	
F1		350		350	
G	Ø	M10		M10	
H		421		421	
I		369		369	
L		50		50	
M		185		185	
N		267		267	
O		242		242	
P		150		150	
R	Ø gas	G2"		G2"	
Accessories and Parts		RVP 250		RVP 300	
Oil charge	L	8		8	
Lubricating oil	type	VT OIL 100		VT OIL 100	
Oil filter	item	00 RVP 250 07		00 RVP 300 07	
4 deoiling cartridges	item	00 RVP 250 05		00 RVP 300 05	
3 vanes	item	00 RVP 250 04		00 RVP 300 04	
Sealing kit	item	00 RVP 250 06		00 RVP 300 06	
Check valve	item	00 RVP 250 03		00 RVP 300 03	
Suction filter	item	FC 60		FC 60	
Ballast valve	item	integrated		integrated	



## DRY VACUUM PUMPS VTS 2 and 4

These small lubrication-free rotary vane vacuum pumps have a suction flow rate of 2 and 4 m<sup>3</sup>/h. The particular shape of the working chamber and the special graphite, with which the locking flanges and vanes are made, allow these pumps to operate with no lubrication. The rotor is cantilevered-fitted on the motor shaft, thus reducing overall dimensions to the minimum. The motor and the pump are cooled by the motor fan (surface cooling).

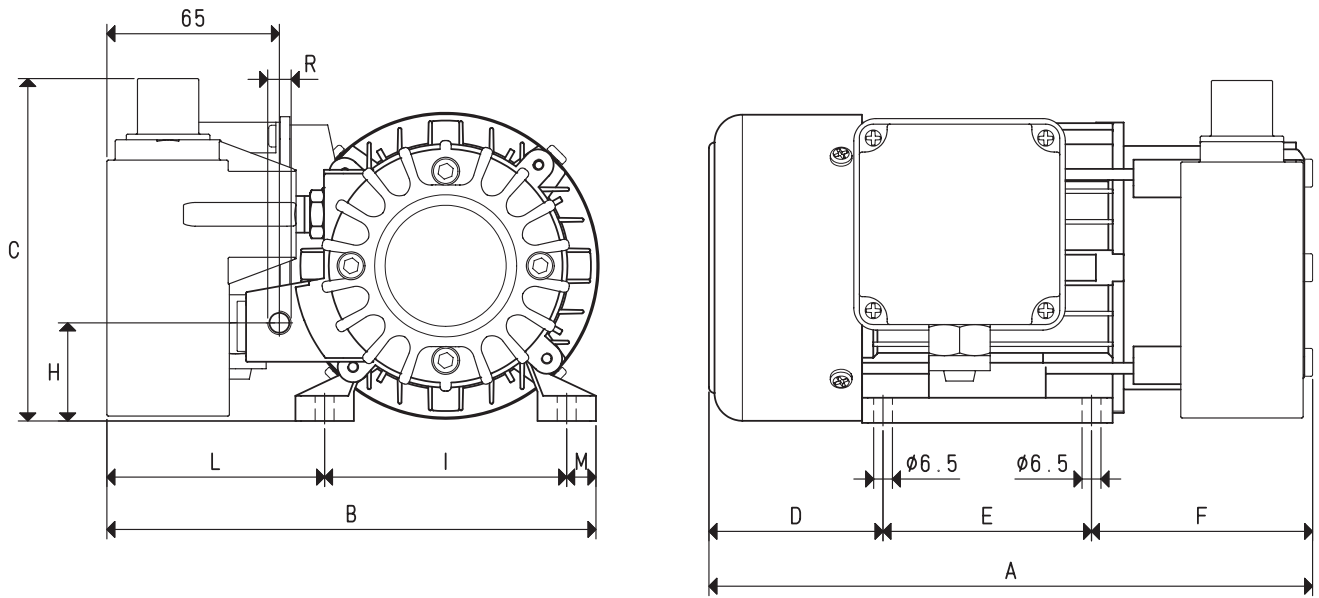
A filter that functions as a silencer is installed on the suction inlet. We strongly recommend installing a filter on the suction inlet against possible impurities. These pumps are not recommended when the fluid to be sucked contains water or oil vapours or condensations. Vacuum pumps VTS 2 and 4 can also be supplied with single-phase electric motor.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		VTS 2		VTS 4	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	2.0	2.4	4.0	4.8
Final pressure	mbar abs.	200		150	
Motor performance	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.12	0.15	0.18	0.21
Kw	1~	0.12	0.15	0.18	0.21
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	2800	3300	2800	3300
Motor shape					
Motor size		56		63	
Noise level	dB(A)	64	66	64	66
Max weight	3~	5.3		6.8	
Kg	1~	5.5		7.0	
A		217		251	
B		180		186	
C		121		131	
D		66		78	
E		71		81	
F		80		92	
H		35		45	
I		90		100	
L		79		73	
M		11		13	
R	Ø gas	G1/4"		G1/4"	

Accessories and Parts		VTS 2	VTS 4
4 graphite vanes	item	00 VTS 02 10	00 VTS 04 10
Front flange complete with graphite disc	item	00 VTS 02 11	00 VTS 04 11
Rear flange complete with graphite disc	item	00 VTS 02 15	00 VTS 02 15
Sealing kit	item	00 KIT VTS 02	00 KIT VTS 04
Check valve	item	10 01 15	10 01 15
Suction filter	item	FB 5	FB 5

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 2 M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m<sup>3</sup>/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



## DRY VACUUM PUMPS VTS 6 and 10

These lubrication-free rotary vane vacuum pumps have a suction flow rate of 6 and 10 m<sup>3</sup>/h. The particular shape of the working chamber and the special graphite, with which the locking flanges and vanes are made, allow these pumps to operate with no lubrication.

The rotor is cantilevered-fitted on the motor shaft, thus reducing overall dimensions to the minimum. The motor and the pump are cooled by the motor fan (surface cooling).

A filter that functions as a silencer is installed on the suction inlet.

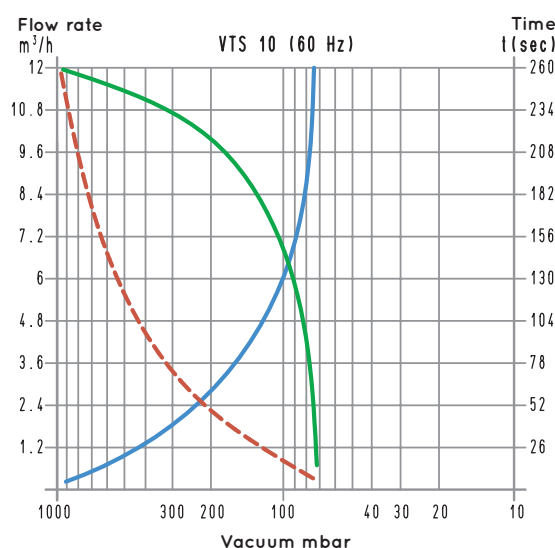
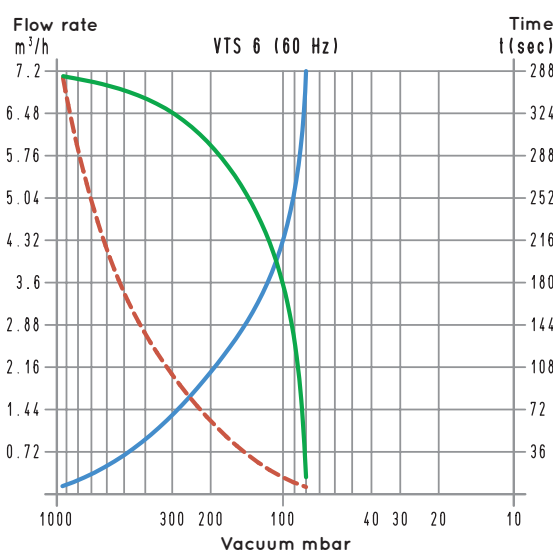
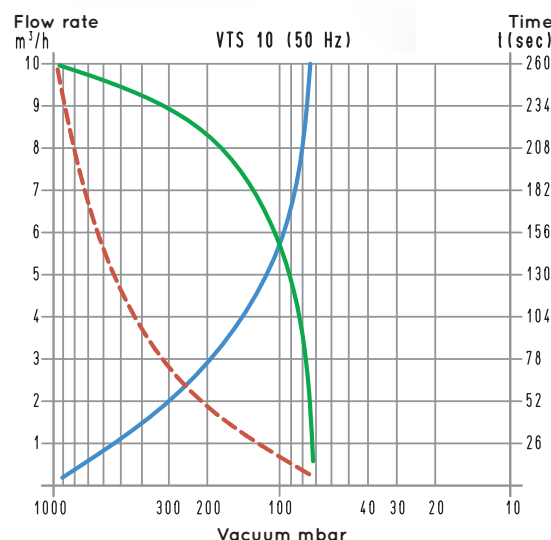
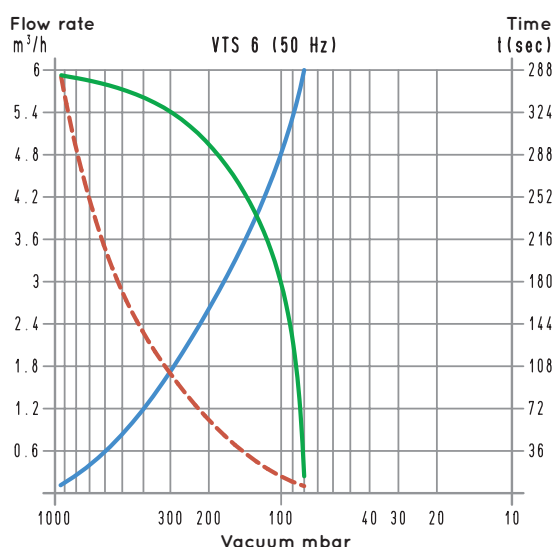
We strongly recommend installing a filter on the suction inlet against possible impurities. These pumps are not recommended when the fluid to be sucked contains water or oil vapours or condensations.

Vacuum pumps VTS 6 and 10 can also be supplied with single-phase electric motor.



VTS 6

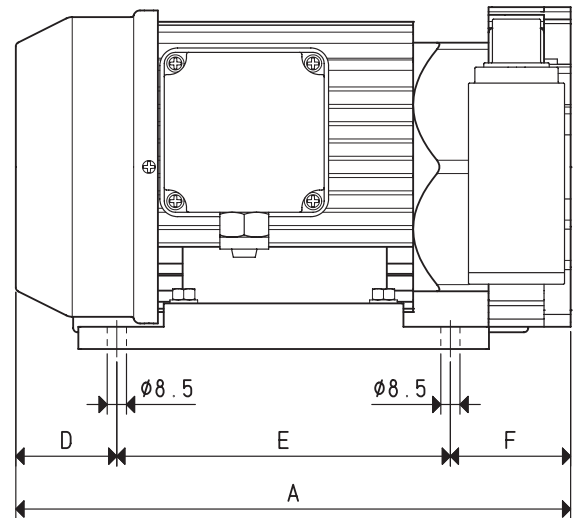
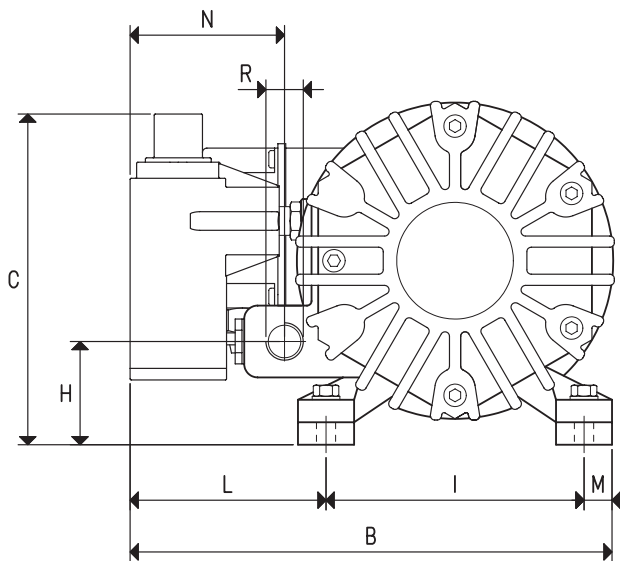
VTS 10



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		VTS 6		VTS 10	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	6.0	7.2	10.0	12.0
Final pressure	mbar abs.	80		80	
Motor performance		230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.25	0.30	0.37	0.40
Kw	1~	0.25	0.30	0.37	0.40
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1400	1680	1400	1680
Motor shape		Special		Special	
Motor size		71		71	
Noise level	dB(A)	64	66	64	66
Max weight	3~	11.8		15.0	
Kg	1~	12.0		15.2	
A		268		290	
B		210		182	
C		156		156	
D		55		55	
E		155		155	
F		58		88	
H		43		53	
I		115		115	
L		82.5		52.5	
M		12.5		12.5	
N		68		13	
R	Ø gas	G3/8"		G3/8"	

Accessories and Parts		VTS 6	VTS 10
6 graphite vanes	item	00 VTS 06 10	00 VTS 10 10
Front flange complete with graphite disc	item	00 VTS 06 07	00 VTS 10 11
Rear flange complete with graphite disc	item	00 VTS 06 12	00 VTS 10 20
Sealing kit	item	00 KIT VTS 06	00 KIT VTS 10
Check valve	item	10 02 10	10 02 10
Suction filter	item	FB 5	FB 10/FC 10

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 6 M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

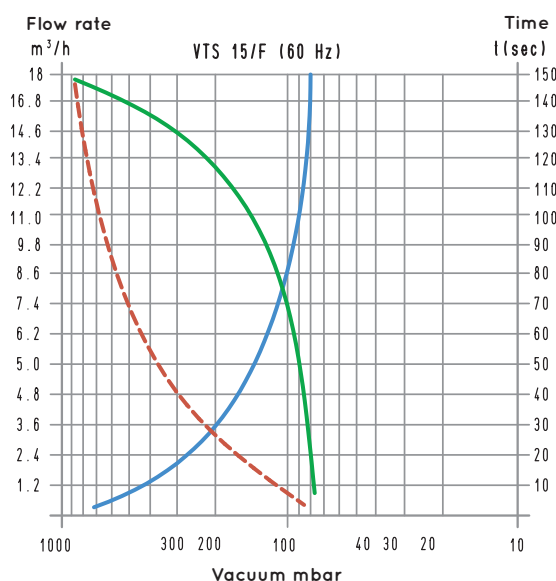
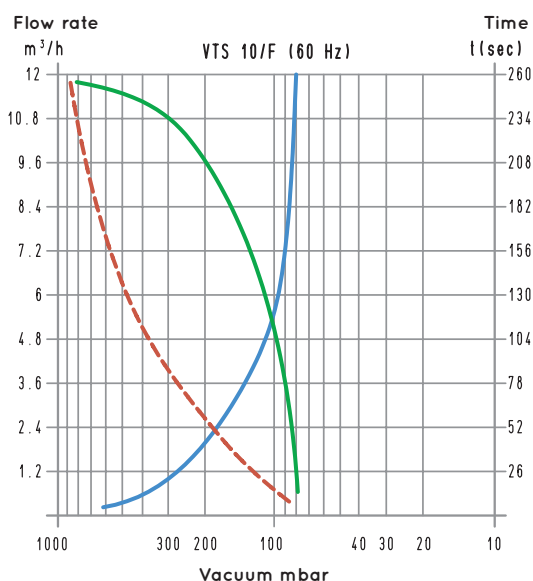
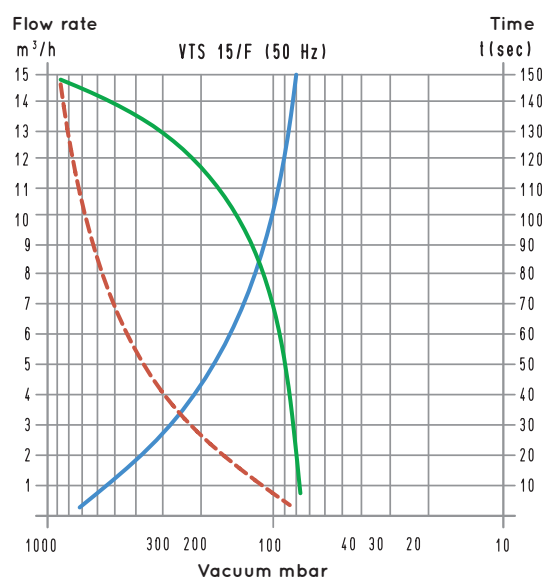
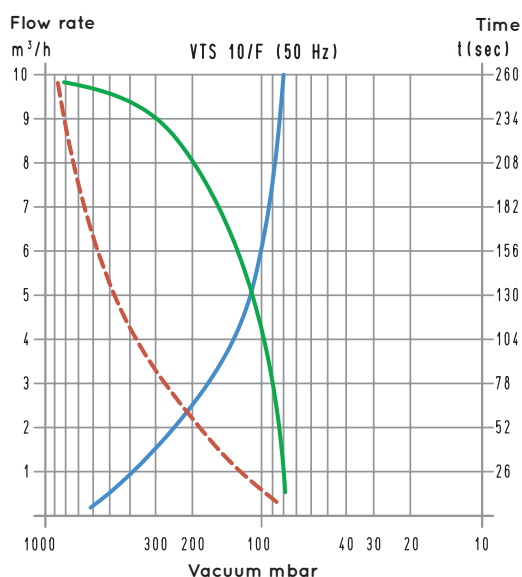
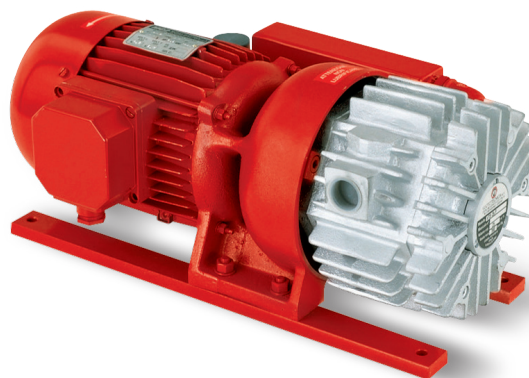
cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



## DRY VACUUM PUMPS VTS 10/F, 15/F, 20/F and 25/F

These lubrication-free rotary vane vacuum pumps have a suction flow rate of 10, 15, 20 and 25 m<sup>3</sup>/h. The particular shape of the working chamber and the special graphite, with which the locking flanges and vanes are made, allow these pumps to operate with no lubrication. The pump rotor is fitted on the motor shaft and supported by independent bearings located on both the pump locking flanges. The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

A filter that functions as a silencer is installed on the suction inlet. We strongly recommend installing a filter on the suction inlet against possible impurities. These pumps are not recommended when the fluid to be sucked contains water or oil vapours or condensations. This range of pumps can be also supplied with single-phase electric motors.

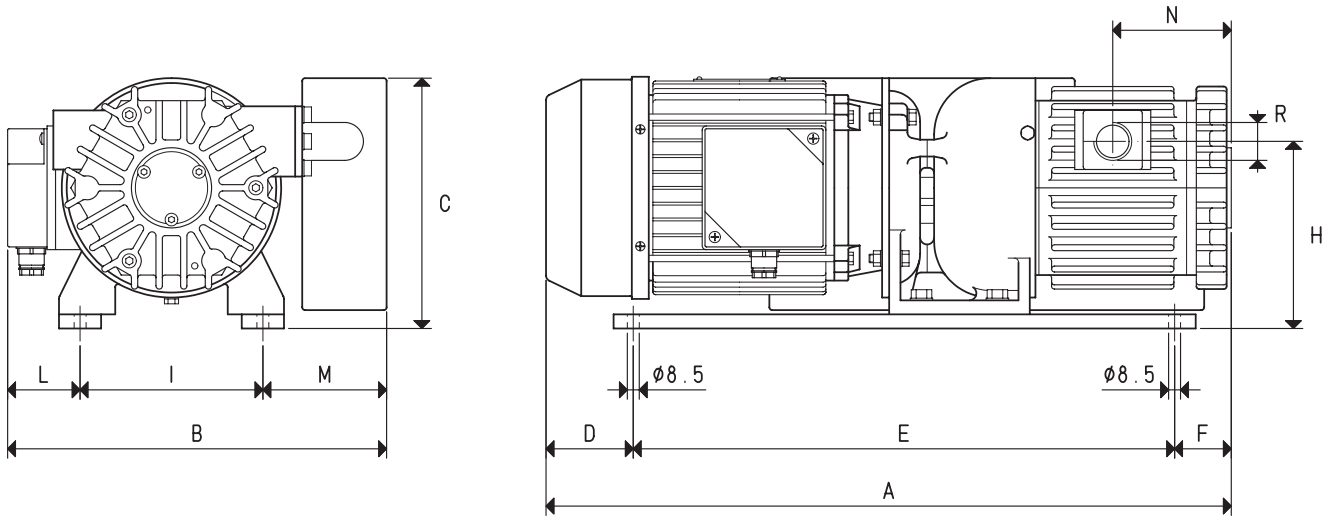


To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)





Item		VTS 10/F		VTS 15/F	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	10.0	12.0	15.0	18.0
Final pressure	mbar abs.	80		80	
Motor performance		230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.55	0.66	0.55	0.66
Kw	1~	0.55	0.66	0.55	0.66
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1400	1680	1400	1680
Motor shape		Special		Special	
Motor size		80		80	
Noise level	dB(A)	64	66	65	67
Max weight	3~	22.1		24.1	
Kg	1~	22.5		24.5	
A		388		408	
B		260		260	
C		187		187	
D		24		24	
E		340		340	
F		24		44	
H		133		133	
I		130		130	
L		55		55	
M		75		75	
N		53		63	
R	Ø gas	G1/2"		G1/2"	

Accessories and Parts		VTS 10/F	VTS 15/F
6 graphite vanes	item	00 VTS 10F 10	00 VTS 15F 10
Front flange complete with graphite disc	item	00 VTS 10F 15	00 VTS 10F 15
Rear flange complete with graphite disc	item	00 VTS 10F 19	00 VTS 10F 19
Sealing kit	item	00 KIT VTS 10F	00 KIT VTS 15F
Check valve	item	10 03 10	10 03 10
Suction filter	item	FB 20/FC 20	FB 20/FC 20

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 10/F M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

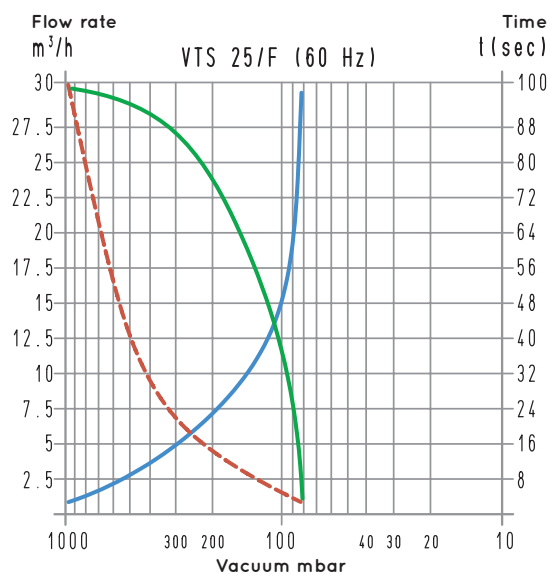
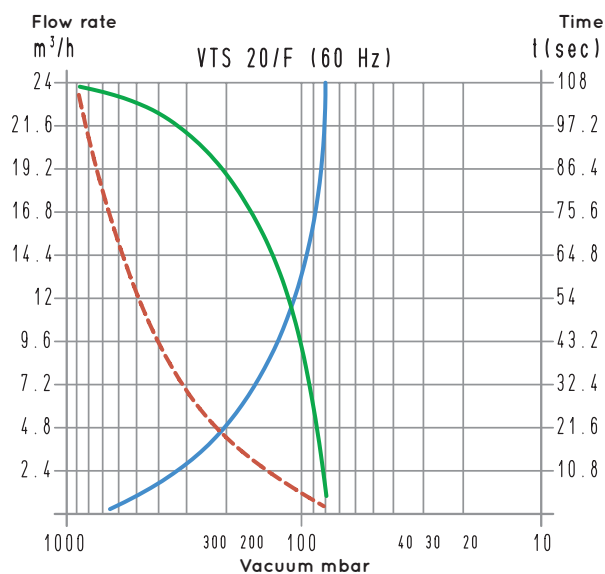
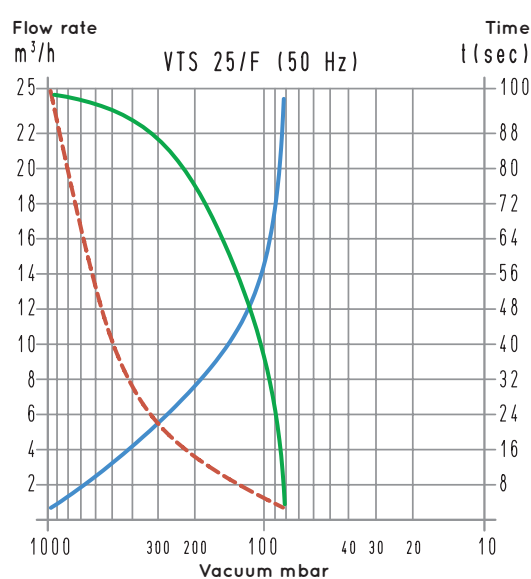
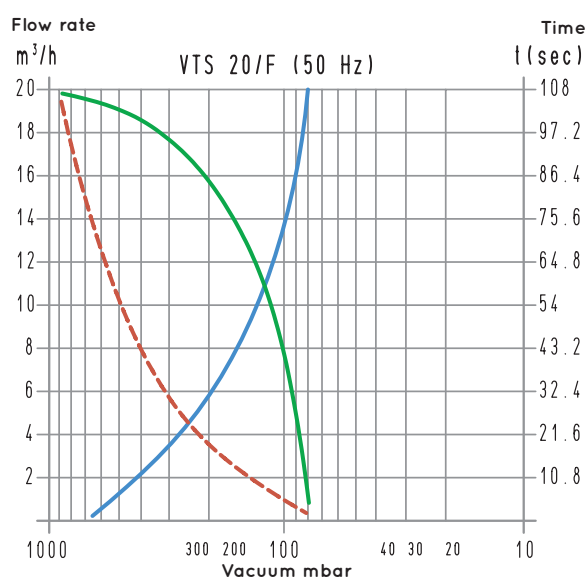
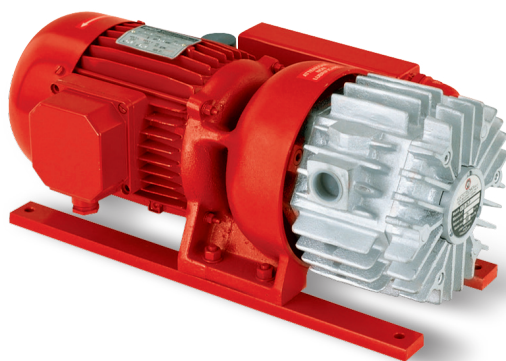
inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6





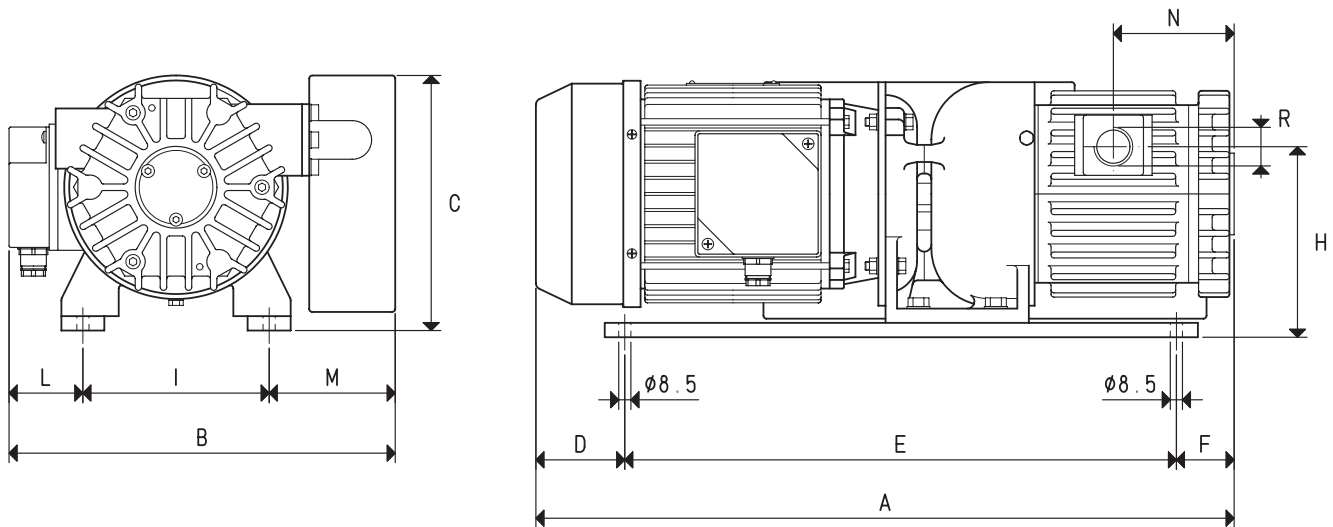
## DRY VACUUM PUMPS VTS 20/F and 25/F



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		VTS 20/F		VTS 25/F	
Frequency		50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	20.0	24.0	25.0	30.0
Final pressure	mbar abs.	80		80	
Motor performance		230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%	
Motor power	3~	0.55	0.66	0.75	0.90
Kw	1~	0.55	0.66	0.75	0.90
Motor protection	IP	55		55	
Rotation speed	g/min <sup>-1</sup>	1400	1680	1400	1680
Motor shape		Special		Special	
Motor size		80		80	
Noise level	dB(A)	65	67	65	67
Max weight	3~	27.4		28.1	
Kg	1~	27.9		28.6	
A		428		428	
B		260		260	
C		187		187	
D		24		24	
E		340		385	
F		64		19	
H		133		133	
I		130		130	
L		55		55	
M		75		75	
N		73		73	
R	Ø gas	G1/2"		G3/4"	

Accessories and Parts		VTS 20/F	VTS 25/F
6 graphite vanes	item	00 VTS 20F 10	00 VTS 25F 10
Front flange complete with graphite disc	item	00 VTS 10F 15	00 VTS 10F 15
Rear flange complete with graphite disc	item	00 VTS 10F 19	00 VTS 25F 05
Sealing kit	item	00 KIT VTS 20F	00 KIT VTS 25F
Check valve	item	10 03 10	10 04 10
Suction filter	item	FB 20/FC 20	FB 28/FC 25

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 20/F M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



## DRY VACUUM PUMPS VTS 10/FG - 35/FG

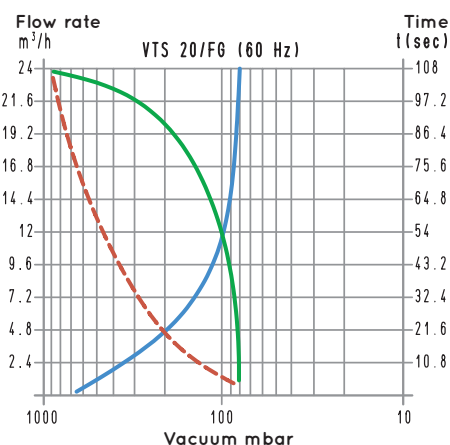
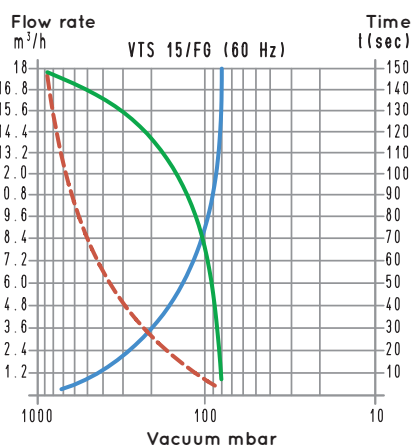
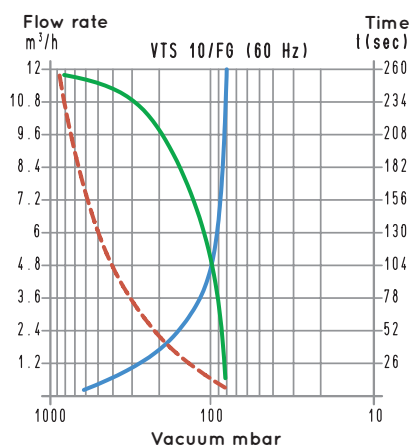
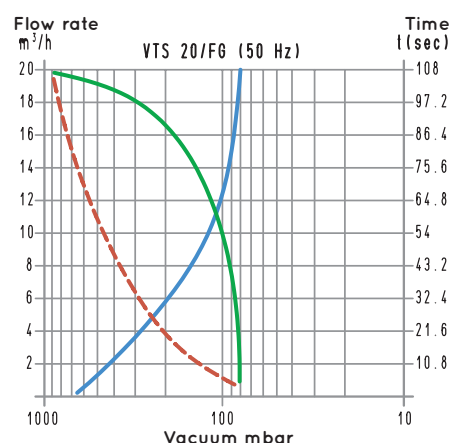
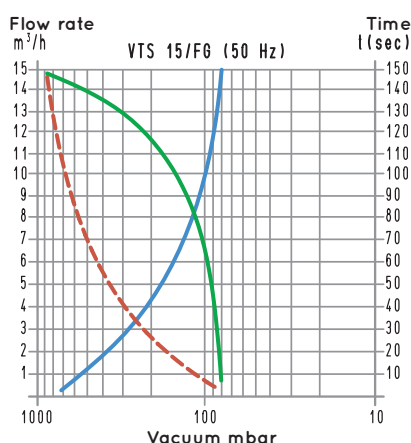
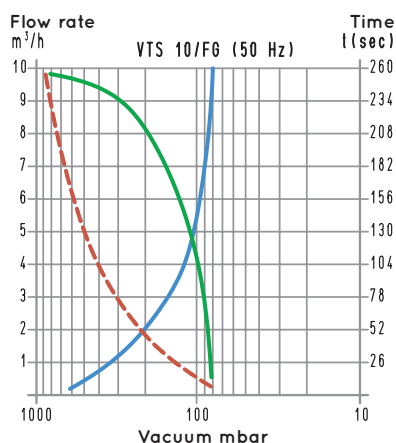
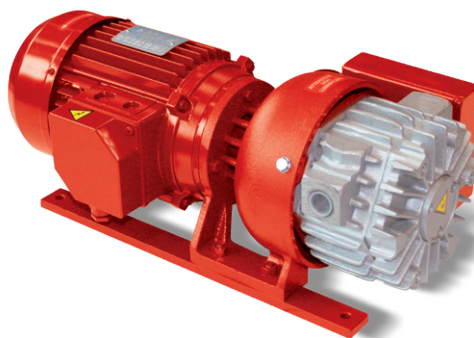
These lubrication-free rotary vane vacuum pumps have a suction flow rate of 10, 15, 20, 25, 30 and 35 m<sup>3</sup>/h. The particular shape of the working chamber and the special graphite, with which the locking flanges and vanes are made, allow these pumps to operate with no lubrication.

The pump rotor is cantilevered-fitted on the motor shaft and supported by independent bearings housed in the two pump flanges. The pump and the electric motor are, therefore, two independent units and fixed onto a special support and connected to each other via an elastic transmission joint.

All this allows using standard electric motors, in the shapes and sizes indicated in the table.

The pump is surface cooled. Heat is dispersed from the outer surface, suitably finned, by means of a radial fan placed between motor and pump.

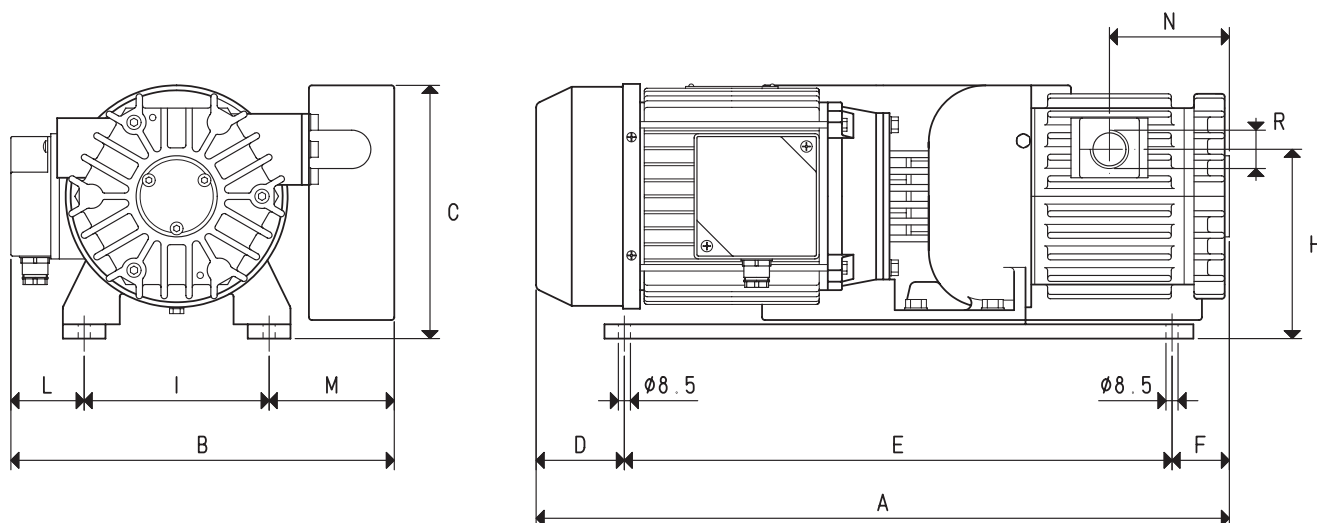
A filter that functions as a silencer is installed on the suction inlet. We strongly recommend installing a filter on the suction inlet against possible impurities. These pumps are not recommended when the fluid to be sucked contains water or oil vapours or condensations. These pumps with flow rate up to 20 m<sup>3</sup>/h can also be supplied with single-phase electric motors.



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		VTS 10/FG		VTS 15/FG		VTS 20/FG	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m³/h	10.0	12.0	15.0	18.0	20.0	24.0
Final pressure	mbar abs.	80		80		80	
Motor performance	3~	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Volt	1~	230±10%		230±10%		230±10%	
Motor power	3~	0.35	0.40	0.55	0.66	0.55	0.66
Kw	1~	0.25	0.30	0.55	0.66	0.55	0.66
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1400	1680	1400	1680	1400	1680
Motor shape		B14		B14		B14	
Motor size		80		80		80	
Noise level	dB(A)	64	66	65	67	65	67
Max weight	3~	22.0		24.0		27.3	
Kg	1~	22.4		24.4		27.8	
A		430		450		470	
B		265		265		265	
C		170		170		170	
D		65		65		65	
E		340		340		340	
F		25		45		65	
H		133		133		133	
I		130		130		130	
L		55		55		55	
M		80		80		80	
N		73		83		93	
R	Ø gas	G1/2"		G1/2"		G1/2"	

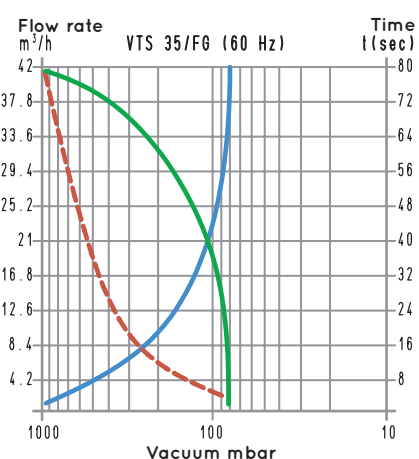
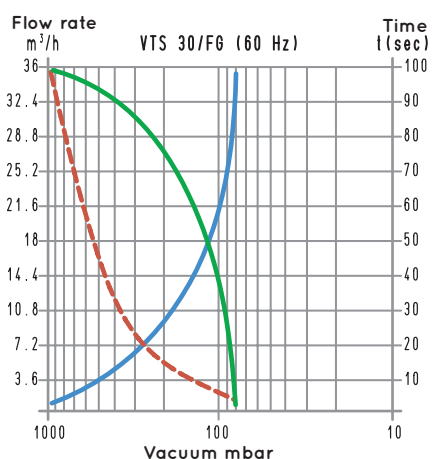
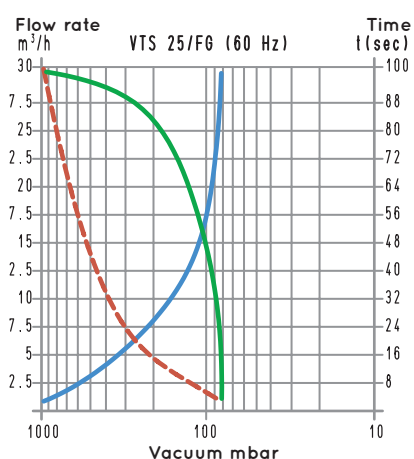
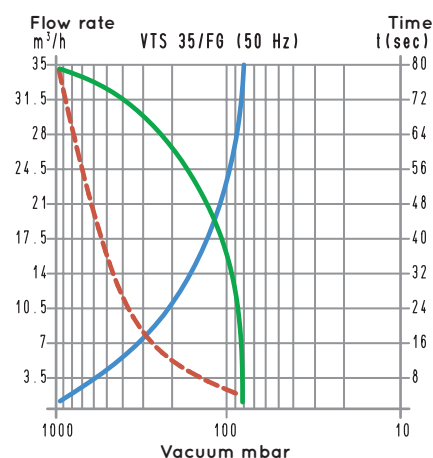
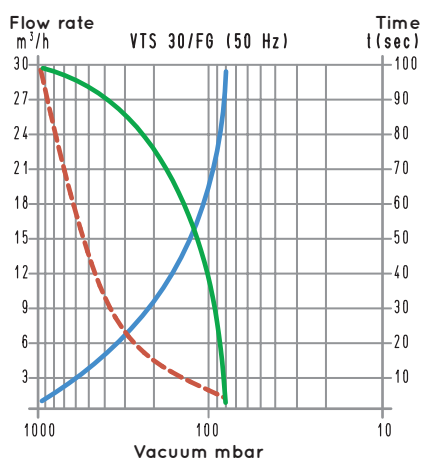
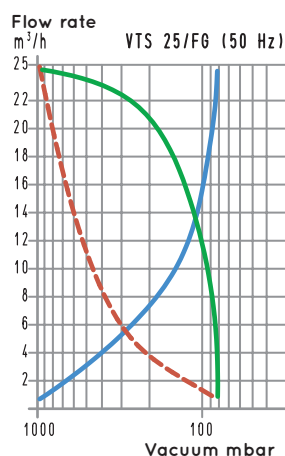
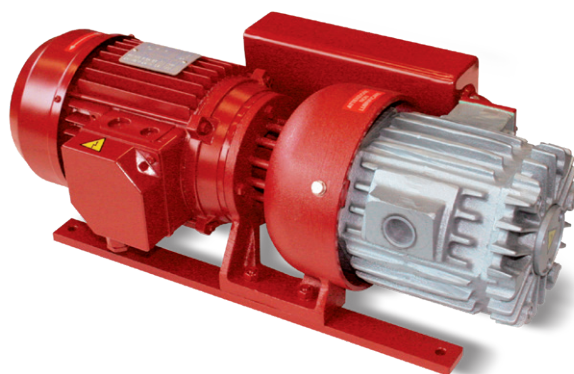
Accessories and Parts		VTS 10/FG	VTS 15/FG	VTS 20/FG
6 graphite vanes	item	00 VTS 10FG 10	00 VTS 15FG 10	00 VTS 20FG 10
Sealing kit	item	00 KIT VTS 10FG	00 KIT VTS 15FG	00 KIT VTS 20FG
Check valve	item	10 03 10	10 03 10	10 03 10
Suction filter	item	FB 20/FC 20	FB 20/FC 20	FB 20/FC 20

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 10/FG M).

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)      inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$       cfm= m³/h x 0.588; inch Hg= mbar x 0.0295; psi= bar x 14.6



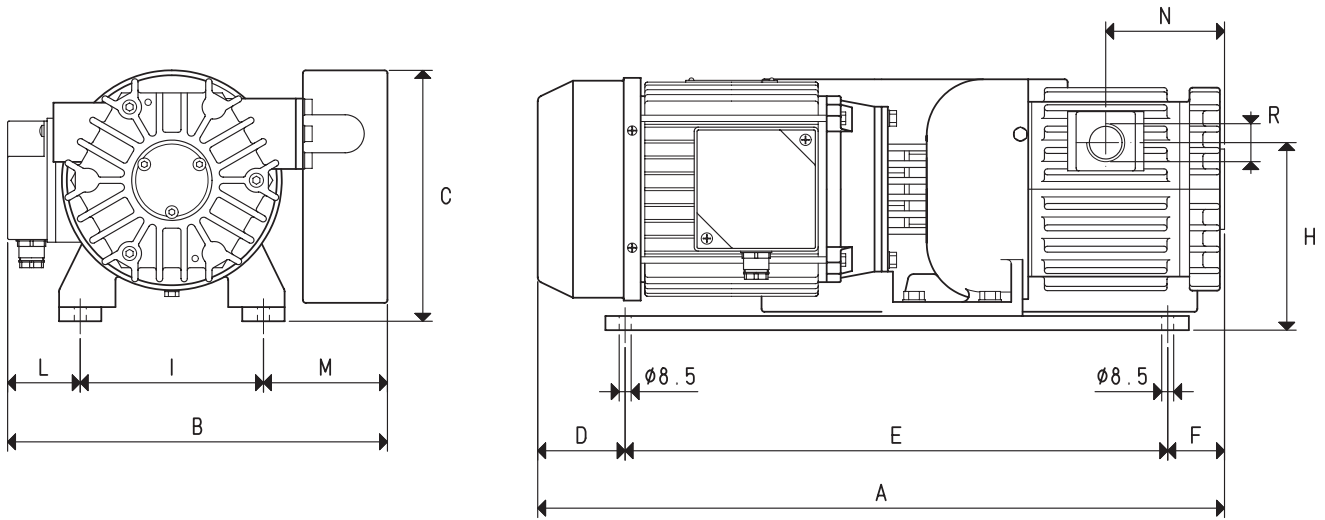
## DRY VACUUM PUMPS VTS 25/FG, 30/FG and 35/FG



To calculate the emptying time of a volume of  $V_1$ , use the following formula:  $t_1 = \frac{t \times V_1}{100}$

- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

$V_1$ : Volume to be emptied (l)  
 $t_1$ : time to be calculated (sec)  
 $t$ : time obtained in the table (sec)



Item		VTS 25/FG		VTS 30/FG		VTS 35/FG	
Frequency		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Flow rate	m <sup>3</sup> /h	25.0	30.0	30.0	36.0	35.0	42.0
Final pressure	mbar abs.	80		80		80	
Motor performance 3~	Volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
Motor power 3~	Kw	0.75	0.90	0.75	0.90	1.10	1.35
Motor protection	IP	55		55		55	
Rotation speed	g/min <sup>-1</sup>	1410	1640	1410	1640	1440	1750
Motor shape		B14		B14		B14	
Motor size		80		80		80	
Noise level	dB(A)	66	68	68	70	70	72
Max weight	kg	78.3		85.8		99.4	
A		470		490		510	
B		265		265		265	
C		170		170		170	
D		65		65		65	
E		385		385		385	
F		20		40		60	
H		133		133		133	
I		130		130		130	
L		55		55		55	
M		80		80		80	
N		73		83		93	
R	Ø gas	G3/4"		G3/4"		G3/4"	
Accessories and Parts		VTS 25/FG		VTS 30/FG		VTS 35/FG	
6 graphite vanes	item	00 VTS 25FG 10		00 VTS 30FG 10		00 VTS 35FG 10	
Sealing kit	item	00 KIT VTS 25FG		00 KIT VTS 30FG		00 KIT VTS 35FG	
Check valve	item	10 04 10		10 04 10		10 04 10	
Suction filter	item	FB 28/FC 25		FB 28/FC 25		FB 28/FC 25	

# BONDY

INDUSTRIAL EQUIPMENT SUPPLIER



**Transmission**



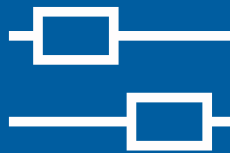
**Handling**



**Motor & Gear**



**Vacuum Conveying**



**Linear**



**Support**

See our products and solutions at

**[www.bondy.dk](http://www.bondy.dk)**

For ordering and questions call (+45) 70 15 14 14