



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

3D drawings are available on vuotecnica.net

These lubrication-free rotary vane vacuum pumps have a suction flow rate of 25, 30 and 35 m³/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.

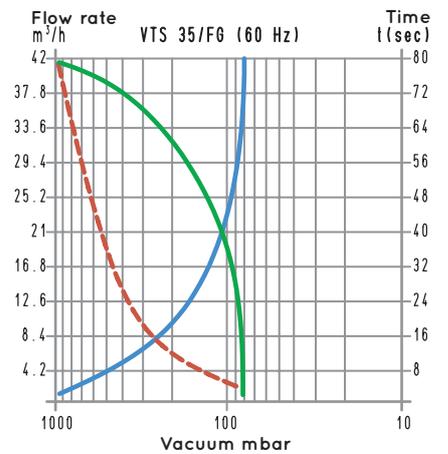
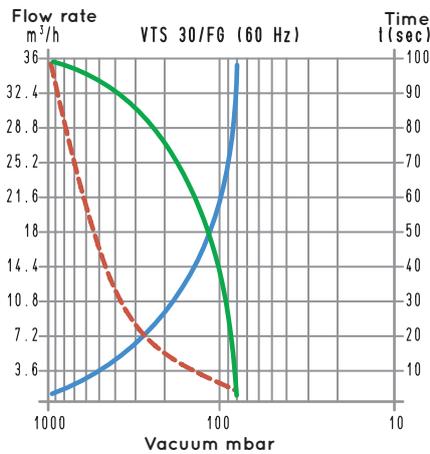
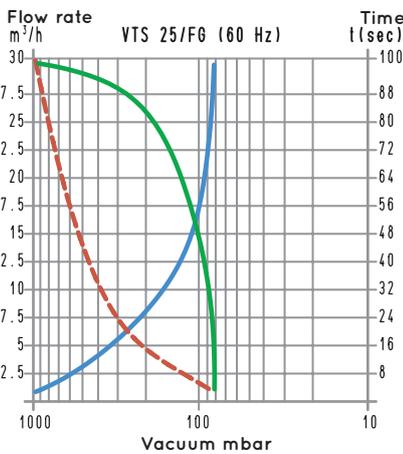
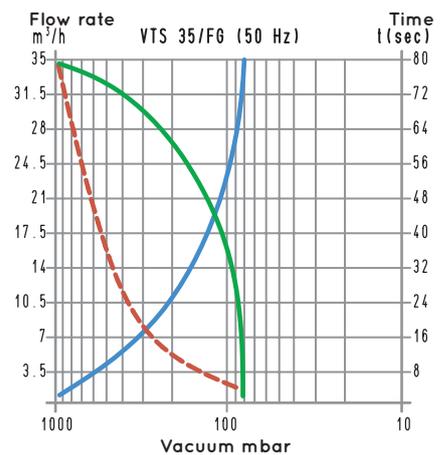
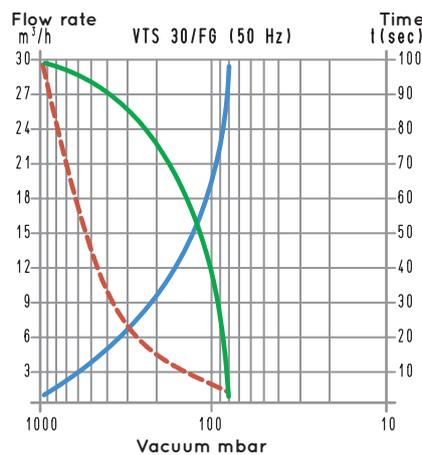
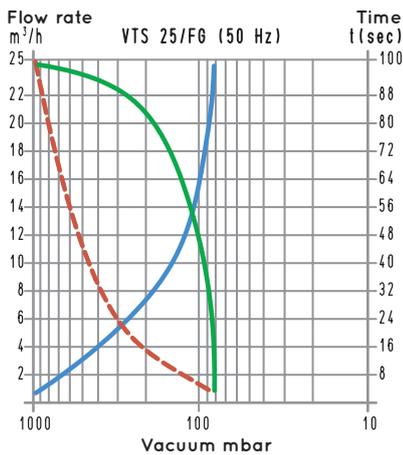
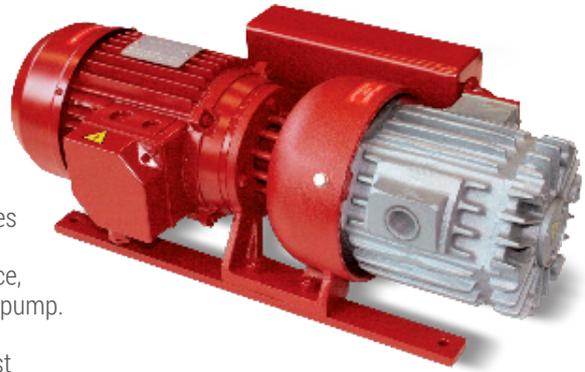
All this allows using standard electric motors, in the shapes and sizes indicated in the table.

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.

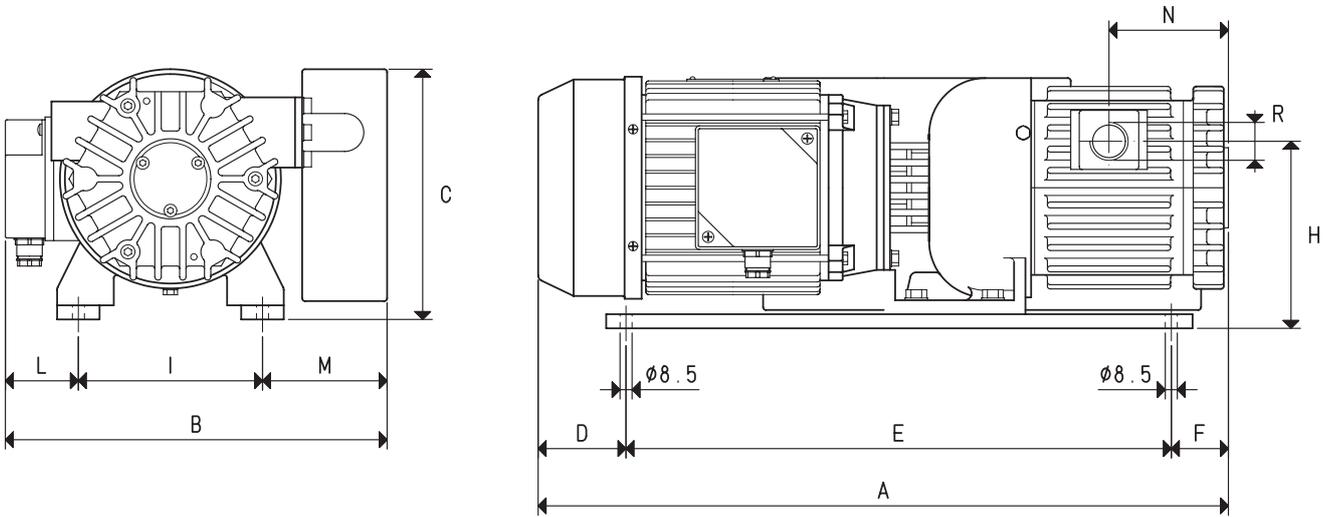
Also this range of pumps can be supplied with single-phase electric motors.



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)



Item	VTS 25/FG		VTS 30/FG		VTS 35/FG			
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
Frequency	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
Flow rate	m ³ /h	25.0	30.0	30.0	36.0	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%
	1~	Volt	230±10%		230±10%		230±10%	
Motor power	3~	Kw	0.75	0.90	0.75	0.90	1.10	1.35
	1~	Kw	0.75		0.75		1.10	
Motor protection	IP	55		55		55		
Rotation speed	g/min ⁻¹	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	3~	Kg	29		32		34	
	1~	Kg	29.5		32.5		34.5	
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	∅ gas	G3/4"		G3/4"		G3/4"		

Accessories and Parts		VTS 25/FG	VTS 30/FG	VTS 35/FG
Graphite vane	item	00 VTS 25FG 10 (N°6)	00 VTS 30FG 10 (N°6)	00 VTS 35FG 10 (N°6)
Front flange complete with graphite disc	item	00 VTS 25FG 17	00 VTS 30FG 18	00 VTS 35FG 18
Rear flange complete with graphite disc	item	00 VTS 25FG 26	00 VTS 30FG 27	00 VTS 35FG 27
Sealing kit	item	00 KIT VTS 25FG	00 KIT VTS 30FG	00 KIT VTS 35FG
Check valve	item	10 04 15	10 04 15	10 04 15
Suction filter	item	FB 28 - FC 25 - FPL 4 - FCL 4 - FIL 4	FB 28 - FC 25 - FPL 4 - FCL 4 - FIL 4	FB 28 - FC 25 - FPL 4 - FCL 4 - FIL 4

Note: Add the letter M to the item for a pump supplied with a single-phase electric motor (Example: VTS 25/FG M).

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