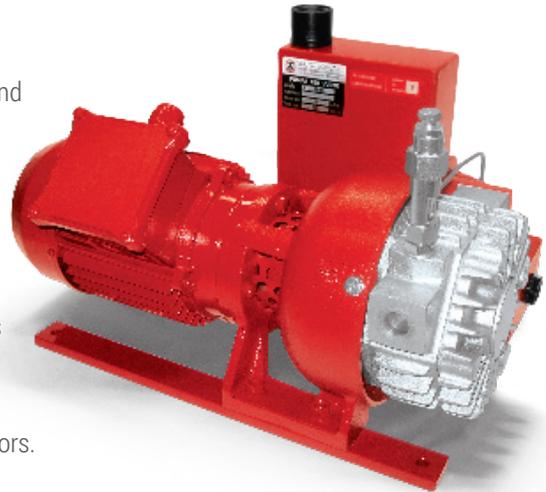


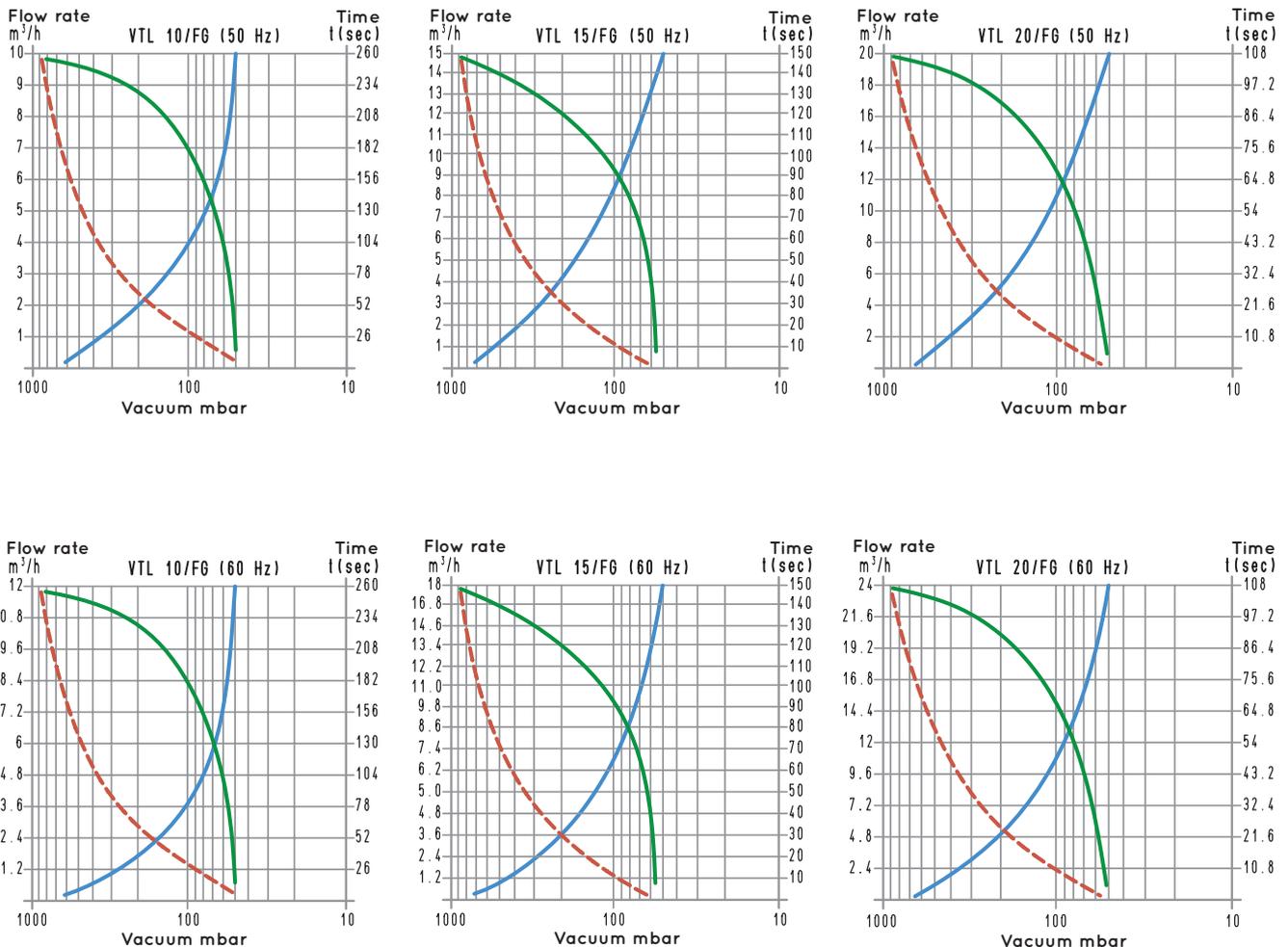


## VACUUM PUMPS VTL 10/FG, 15/FG and 20/FG

These vacuum pumps have a suction flow rate of 10, 15 and 20 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. Also this range of pumps can be supplied with single-phase electric motors.



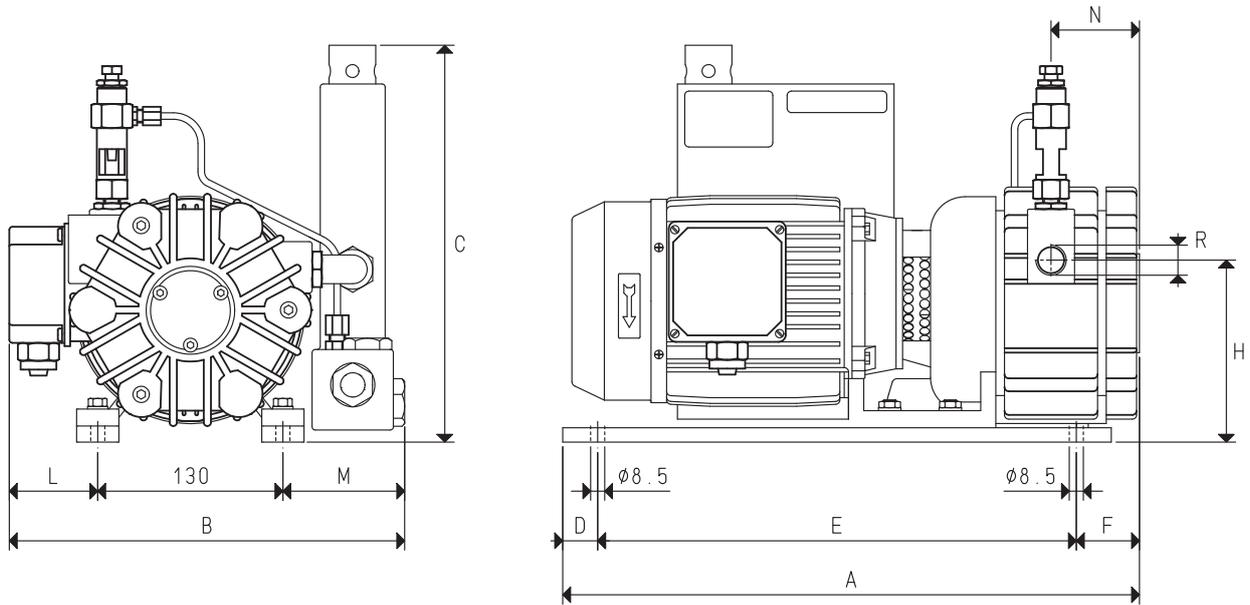
3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



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

- 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		VTL 10/FG		VTL 15/FG		VTL 20/FG	
<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>	<b>3~</b> Volt	230/400±10%	265/460±10%	230/400±10%	265/460±10%	230/400±10%	265/460±10%
	<b>1~</b> Volt	230±10%		230±10%		230±10%	
<b>Motor power</b>	<b>3~</b> Kw	0.55	0.66	0.55	0.66	0.55	0.66
	<b>1~</b> Kw	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)	71	73	74	76	80	82
<b>Max weight</b>	<b>3~</b> Kg	24.0		28.0		31.0	
	<b>1~</b> Kg	24.5		28.5		31.5	
<b>A</b>		430		450		470	
<b>B</b>		300		300		300	
<b>C</b>		270		270		285	
<b>D</b>		65		65		65	
<b>E</b>		340		340		340	
<b>F</b>		25		45		65	
<b>H</b>		133		133		133	
<b>L</b>		55		55		55	
<b>M</b>		115		115		155	
<b>N</b>		58		68		78	
<b>R</b>	∅ gas	G1/2"		G1/2"		G1/2"	

Accessories and Parts		VTL 10/FG		VTL 15/FG		VTL 20/FG	
<b>Oil charge</b>	L	0.4		0.5		0.65	
<b>Lubricating oil</b>	type	ISO 100		ISO 100		ISO 100	
<b>Vane</b>	item	00 VTL 10FG 10 (N°6)		00 VTL 15FG 10 (N°6)		00 VTL 20FG 10 (N°6)	
<b>Sealing kit</b>	item	00 KIT VTL 10FG		00 KIT VTL 15FG		00 KIT VTL 20FG	
<b>Check valve</b>	item	10 03 15		10 03 15		10 03 15	
<b>Suction filter</b>	item	FB 20 - FC 20 - FPL 3 - FCL 3 - FIL 3		FB 20 - FC 20 - FPL 3 - FCL 3 - FIL 3		FB 20 - FC 20 - FPL 3 - FCL 3 - FIL 3	
<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/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 = m<sup>3</sup>/h x 0.588; inch Hg = mbar x 0.0295; psi = bar x 14.6