

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

These vacuum pumps have a suction flow rate of 10, 15 and 20 m³/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.

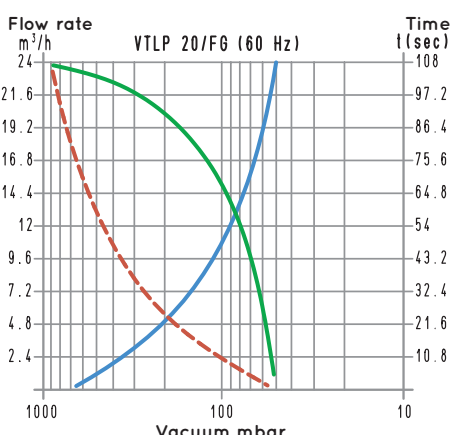
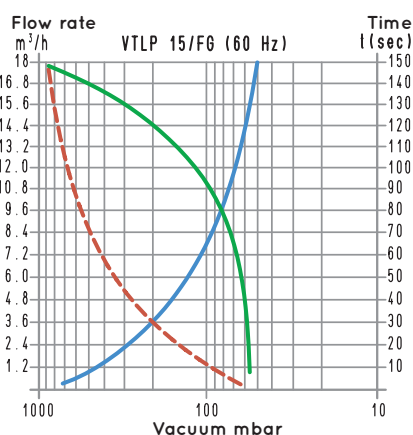
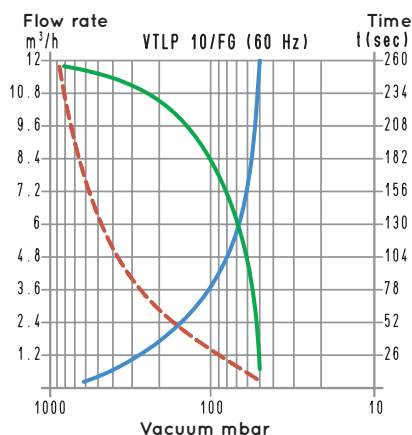
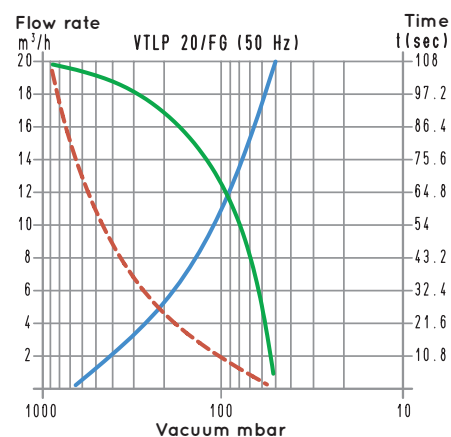
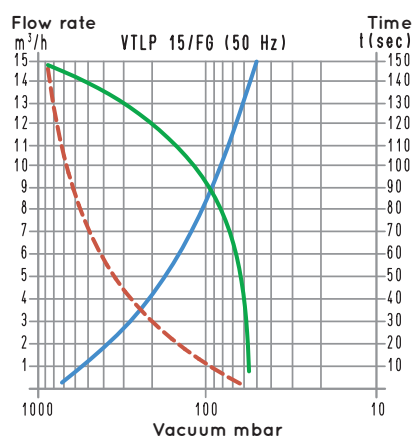
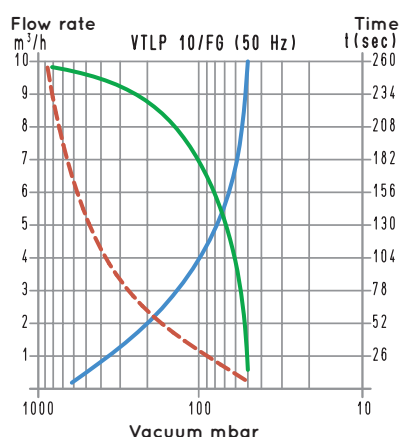
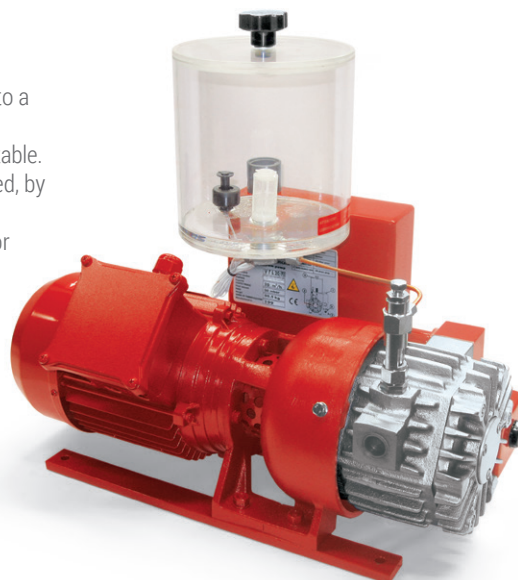
An oil recovery tank is installed on the pump exhaust. This tank contains a separator filter that prevents oil mists and reduces noise.

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. 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:  $t_1 = \frac{t \times V_1}{100}$

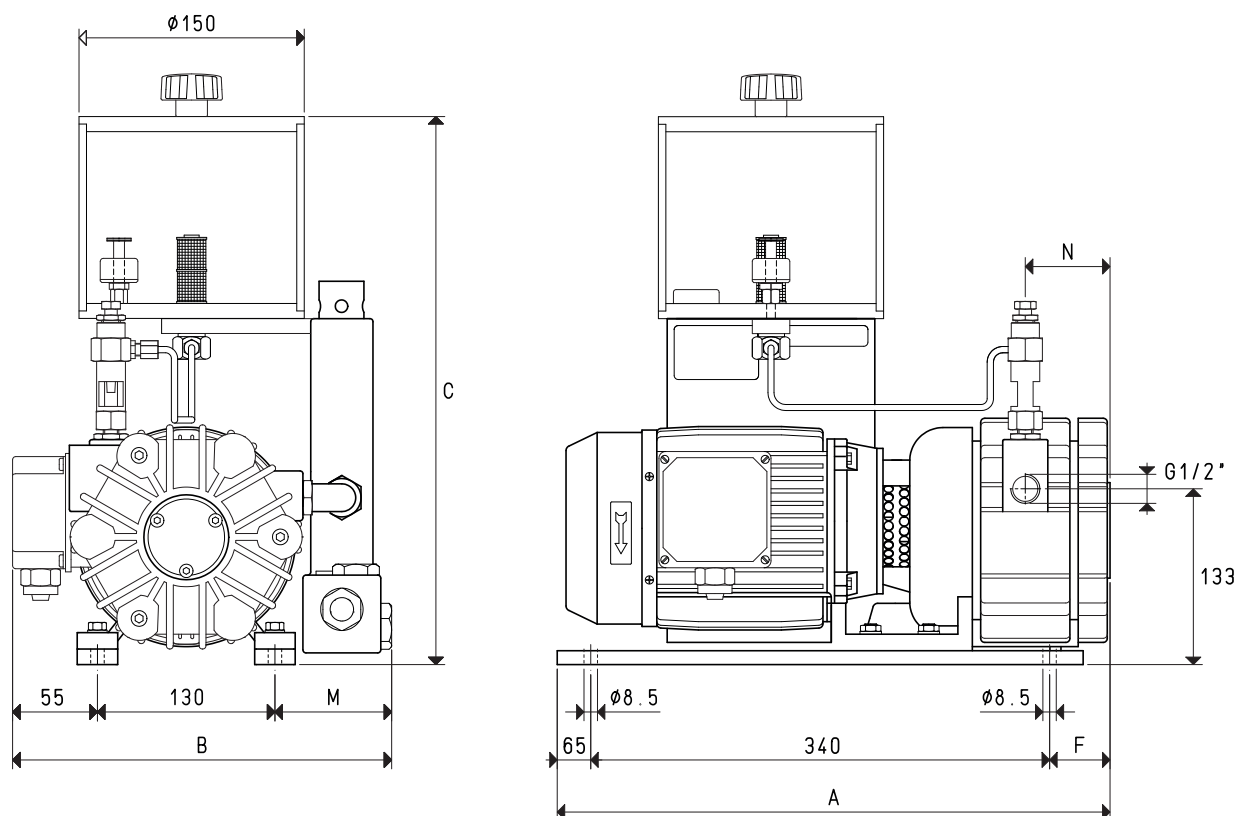
- Curve relative to the flow rate (referring to the suction pressure)
- - - Curve relative to the flow rate (referring to a 1013 mbar pressure)
- Curve regarding the emptying time of a 100-litre volume

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



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



Item		VTLP 10/FG		VTLP 15/FG		VTLP 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.	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)	71	73	74	76	80	82
Max weight	3~	24.0		28.0		31.0	
Kg	1~	24.5		28.5		31.5	
A		430		450		470	
B		300		300		300	
C		445		445		460	
F		25		45		65	
M		115		115		155	
N		58		68		78	

Accessories and Parts		VTLP 10/FG		VTLP 15/FG		VTLP 20/FG	
Oil charge	L	1.8		1.8		1.8	
Lubricating oil	type	ISO 100		ISO 100		ISO 100	
6 vanes	item	00 VTL 10FG 10		00 VTL 15FG 10		00 VTL 20FG 10	
Sealing kit	item	00 KIT VTL 10FG		00 KIT VTL 15FG		00 KIT VTL 20FG	
Check valve	item	10 03 10		10 03 10		10 03 10	
Suction filter	item	FB 20/FG 20		FB 20/FG 20		FB 20/FG 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/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