

Oil Rotary Vacuum Pump [VD Series]

VD series is a direct-drive low noise oil rotary vacuum pump. This pump is suitable for a wide range of applications such as evaporator, sputtering and food packaging.



VD901

Features

- ▶ **Optimized Design Operation for Quiet**
- ▶ **Easy Maintenance**
Pump head can be removed without disconnecting the vacuum piping (except VD151, VD201). * See attached figure.
Oil level gauge and drain valve accessible for easy oil exchange and daily inspection.
- ▶ **Forced Oil Circulation System Ensures Stable Pumping Speed Below Atmospheric Pressure**
When equipped with the optional oil mist trap and oil return mechanism, the VD301, VD401 and VD601 can continuously run at all pressure ranges below atmospheric pressure.

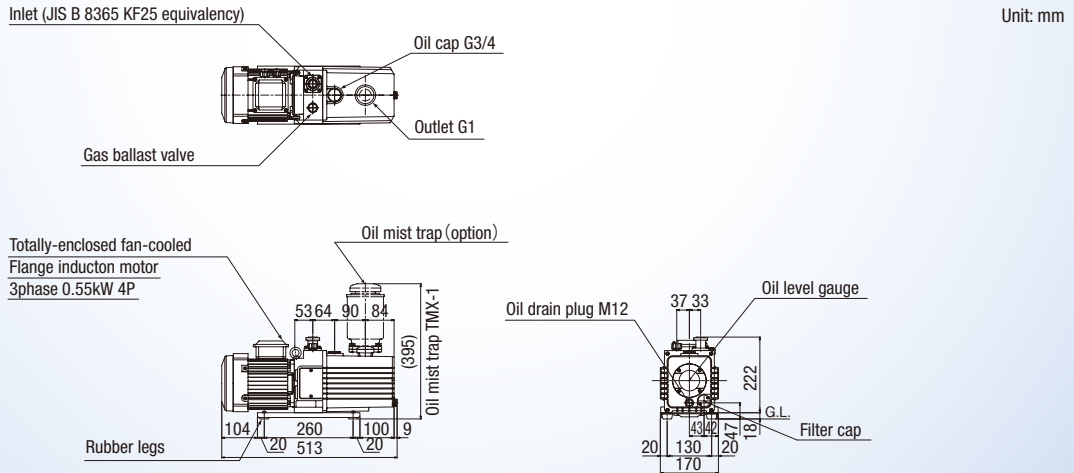
Applications

- ▶ Evaporation, sputtering, and ion plating
- ▶ Analytical instrument and leak test system
- ▶ Gas exchange, gas filling, and vacuum insulation
- ▶ Vacuum drying, freeze drying, vacuum degassing, vacuum packing, vacuum chuck and vacuum molding, etc.

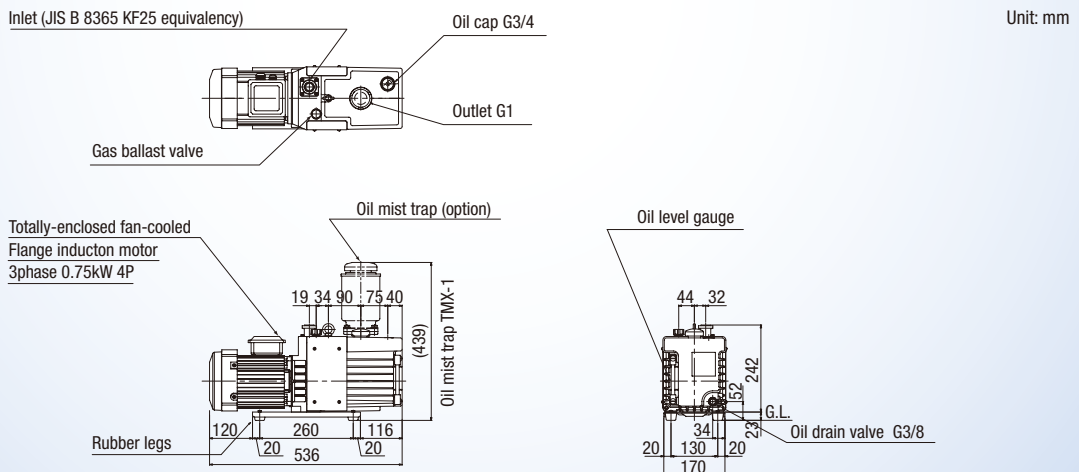
Oil Rotary Vacuum Pump [VD Series]

► Dimensions

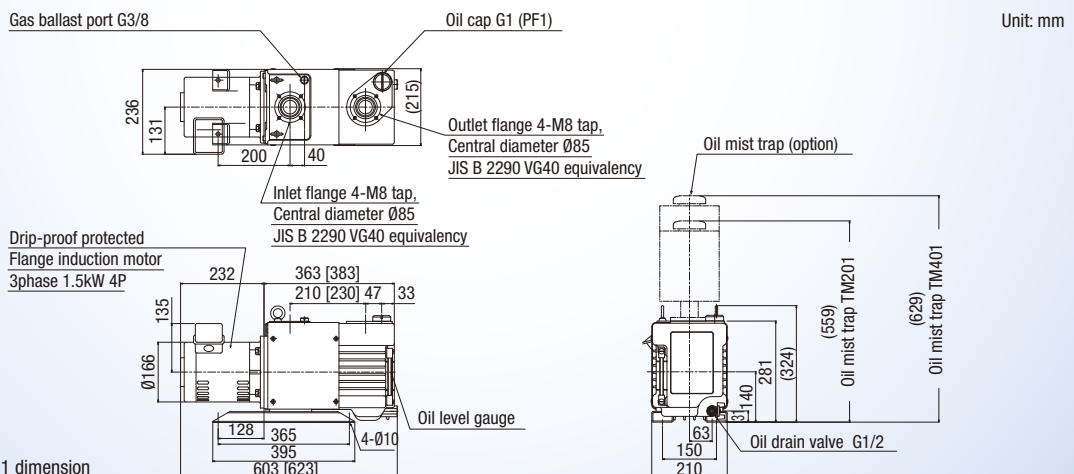
VD151



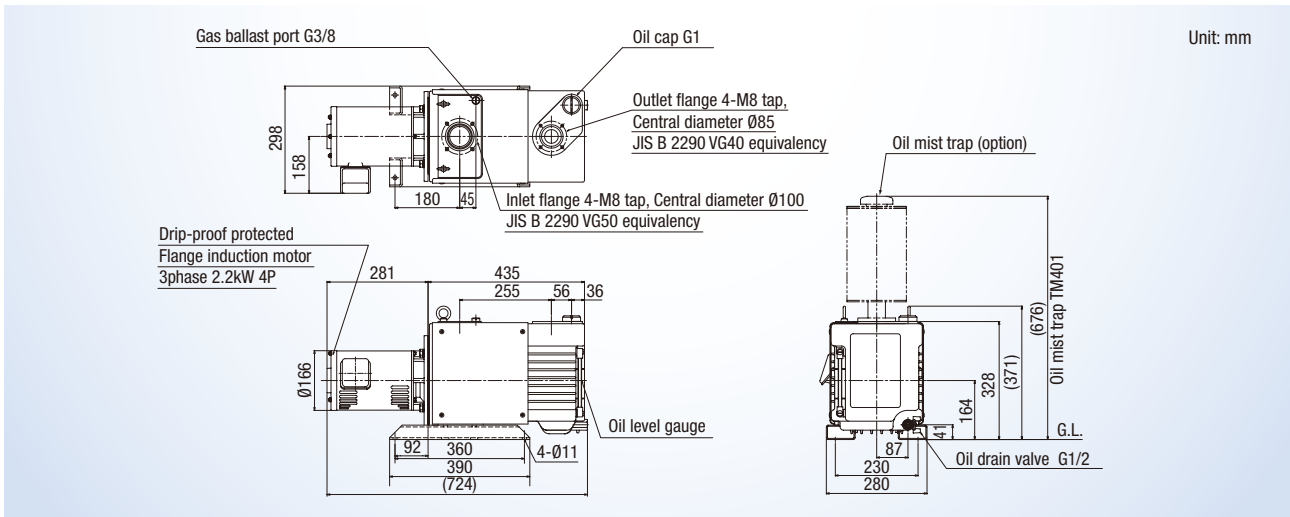
VD201



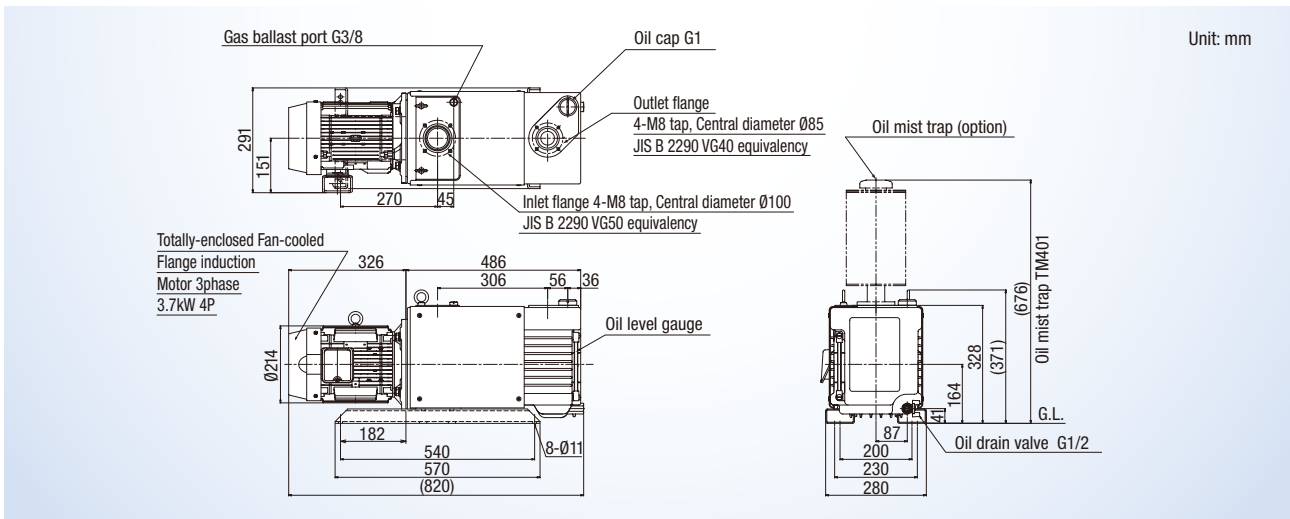
VD301, 401



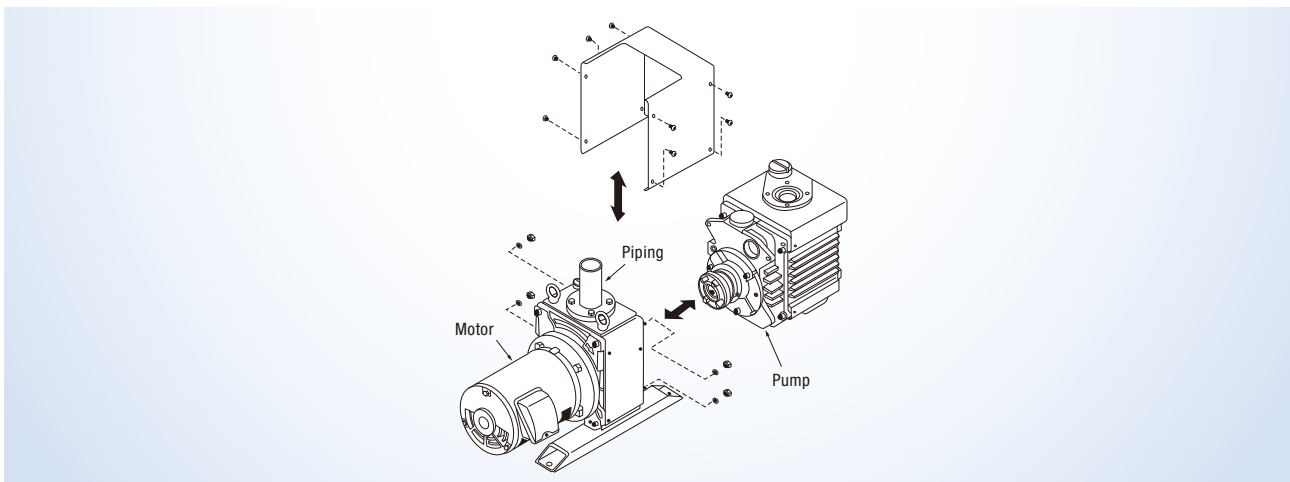
VD601



VD901



► When a pump is removed (VD301~VD901)



Oil Rotary Vacuum Pump [VD Series]

Specifications

Model		VD151	VD201	VD301	VD401	VD601	VD901	
Designed pumping speed	50Hz	m ³ /h	14.4	20.2	30	40	90	
		L/min	240	336	500	670	1000	1500
		CFM	8.47	11.89	17.66	23.54	35.31	52.97
	60Hz	m ³ /h	17.3	24.2	36	48	72	108
		L/min	288	403	600	800	1200	1800
		CFM	10.18	14.24	21.29	28.25	42.38	63.57
Ultimate pressure *1	GP close	Pa	0.67					
		Torr	5×10 ⁻³					
		mbar	6.7×10 ⁻³					
	GP open	Pa	6.7	2				
		Torr	5×10 ⁻²	1.5×10 ⁻²				
		mbar	6.7×10 ⁻²	2.0×10 ⁻²				
Motor *2	Type	Totally Enclosed Fan Cooled Motor			Drip-proof protected Flange Motor		Totally Enclosed Fan Cooled Motor	
	kw (number of poles)	0.55 (4)	0.75 (4)	1.5 (4)		2.2 (4)	3.7 (4)	
	HP (number of poles)	0.75 (4)	1 (2)	2 (4)		2.95 (4)	4.96 (4)	
	Voltage/Frequency *3	200V / 220V / 230V / 240V / 380V / 400V / 415V-50Hz 200V / 220V / 230V / 240V / 380V / 400V / 440V / 460V-60Hz			200V / 50Hz, 60Hz 220V / 60Hz			
Oil *4	ULVOIL R-7							
Oil capacity	0.7 to 1.1 L			1.0 to 2.5 L		2.5 to 4.0 L		
Cooling method	Air cooled							
Inlet	KF25 (NW25)			KF25 (NW25) or VG40(JIS B2290)		ISO63 or VG50 (JIS B2290)		
Outlet	G1			KF25 (NW25)				
Weight	29 kg		34 kg	59 kg	61 kg	88 kg	105 kg	
External dimensions W×L×H	170×514×240mm		170×536×265mm	236×603×324mm	236×623×324mm	298×725×371mm	294×820×371mm	
Certification	CE			CE (Option)				
Standard accessories	Motor, Oil for 1 pump, Operation manual							
Options *5	Oil mist trap			Oil mist trap, Gas ballast valve, Oil return mechanism, Helium tight, CE				

*1 Measured with a Pirani gauge. (Approx. 6.7×10⁻²Pa when measured with a McLeod vacuum gauge.)

*2 Options: The pump is also compatible with a totally-enclosed fan-cooled motor, increased safety explosion-resistant motor, and pressure resistant explosion-resistant flange motor.

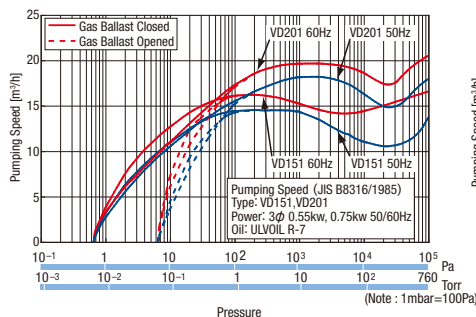
*3 Other voltage is available upon request.

*4 Other oil types are available upon request.

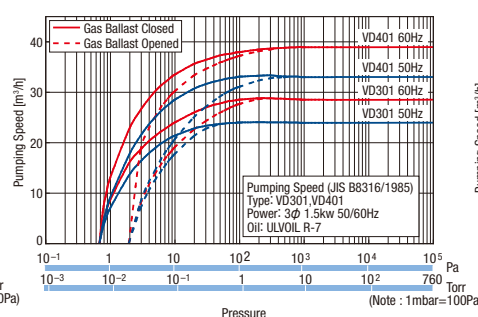
*5 TM401 and TM-2 are available oil mist trap for VD601 and VD901. Please use TM-2 if repeated intake pressure exceeds 10,000Pa.

Pumping Speed Curves

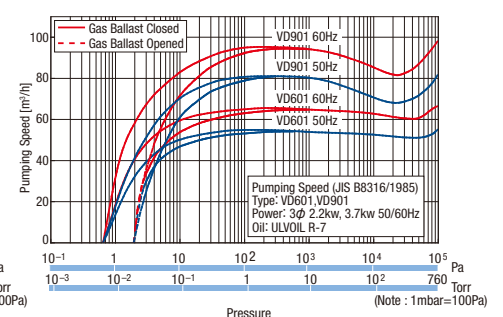
VD151, 201



VD301, 401



VD601, 901



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