# Oil-sealed Rotary Vacuum Pump PVD Series

The PVD series belt-drive oil rotary vane pumps are compact, quiet running and robust.

The superior pumping performance of these industrial strength pumps has earned them an excellent reputation among many users.



# **Features**

### · Consistent Pumping Performance

The pumping performance of the pump is extremely stable.

#### · Low Vibration and Low Noise

The pump is suitable for use in noise and vibration sensitive environments.

#### Easy Maintenance

Because the pump body is machined from a single aluminum block casting the unit has fewer parts to maintain.

#### · Gas-Ballast Valve

Gas ballast valve is standard with these pumps to effectively deal with water vapor from condensation.

#### · Oil-backflow Prevention

This model contains an oil-backflow prevention device as standard equipment.

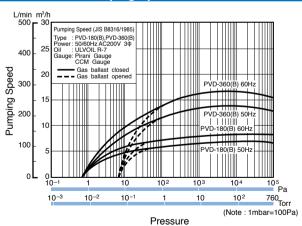
#### · Various Options

An optional base with casters allows ease of movement of the pump.

#### **Applications**

- · Vacuum drying and freeze drying
- · Vacuum packing, vacuum adsorption and transport
- · Gas substitution, filling and vacuum heat insulation
- · Vacuum casting, etc.

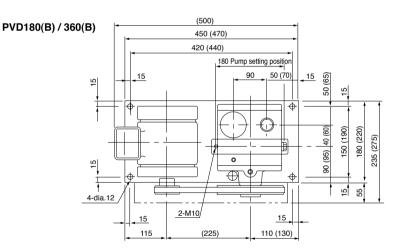
## **Pumping Speed Curves**



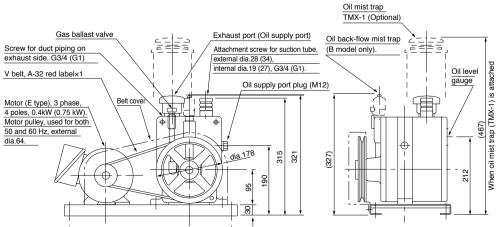
Specifications				
Model *1			PVD-180(B)	PVD-360(B)
Designed pumping speed	50Hz	m³/h	9	19
		L/min	155	310
		CFM	5.3	11.18
	60Hz	m³/h	11	22
		L/min	186	372
		CFM	6.47	12.95
Ultimate pressure *2 Pa Torr mbar		Pa	0.67	
		Torr	5×10 <sup>-3</sup>	
		6.7×10 <sup>-3</sup>		
	Туре		Totally Enclosed Fan Cooled Motor	
Motor *3	kw (number of poles)		0.4 (4)	0.75 (4)
	HP (number of poles)		0.54 (4)	1.0 (4)
	Rotations	50Hz	500rpm	
		60Hz	600rpm	
Oil *4			ULVOIL R-7	
		L	0.3	0.5
Cooling method			Air cooled	
Inlet (external × internal )			dia. 28 × dia. 19	dia. 34 × dia. 27
Outlet (JIS tube screw)			G3/4 (PF3/4)	G1 (PF1)
Weight		kg	33.5	43
External diamensions W x L x H   r		mm	235 × 450 × 321	275 × 500 × 321
Options			TMX-1 oil mist trap, adapter for oil mist trap, C-1 or 2 base with handle and casters, BG-1 fully sealed belt cover.	

- \*1 PVD-B series models (with oil back-flow prevention mechanism) are designated as PVD-180B for the PVD-180 model and PVD-360B for the PVD-360 models.
- \*2 Measured with a Pirani gauge.
- \*3 Please specify the need for a motor, the motor model, voltage, and power frequency when ordering. The fully sealed external fan motor, increased safety explosion-resistant motor, and pressure resistant explosion-resistant motor can also be ordered as options. (Except PVD-B series)
- \*4 Other oil types are available, upon request.

# **External Dimension Diagram**



Note) Dimensions in ( ) are for the PVD-360 (B) model. Dimensions not in () are common to all models.



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Vacuum Pump