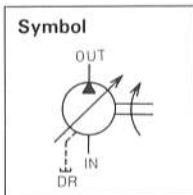


# Coolant vane pumps

## Series WVP-V ※ 1

Designed for water-soluble and non-water-soluble cutting oil, this pump is best suited to deliver cutting oil for the high-pressure cutting equipment.

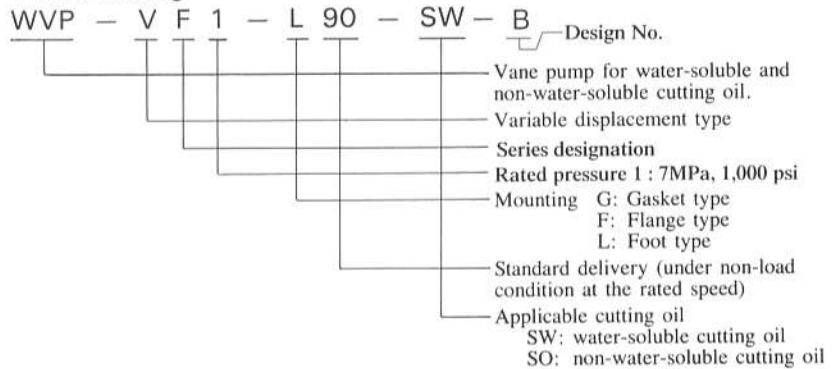
Assists speed cutting with the max pressure of 7MPa 1,000 psi and delivery of 30~160 ℓ/min 7.9~423gpm.



### ● Features

1. Water-soluble cutting oil and non-water-soluble cutting oil are applicable.
2. Long life. Stable pressure and delivery rate.
3. Relief valve is unnecessary due to its variable displacement vane pump construction.
4. Choose from the wide selection according to the required delivery rate.
5. Mounting dimensions are the same as those of series HVP-V ※1.

### ● Model coding



### ● Specifications

Model	Rated pressure		Delivery under non-load condition				Pressure adjusting range		Speed min <sup>-1</sup>		
	MPa	psi	1,000min <sup>-1</sup>		2,000min <sup>-1</sup>		MPa	psi	Rated	Max.	Min.
			ℓ/min	gpm	ℓ/min	gpm					
WVP-VD1-G 30-SW-B	4	571	25	6.6	30	7.9	2~4	286~571	1,200	1,200	750
WVP-VD1-F 30-SW-B											
WVP-VF1-L 56-SW-B											
WVP-VF1-L 90-SW-B											
WVP-VF1-L 120-SW-B											
WVP-VG1-G160-SW-B			133	35.2	160	42.3					
WVP-VD1-G 30-SO-B	7	1,000	25	6.6	30	7.9	3~7	428~1,000	1,200	1,200	750
WVP-VD1-F 30-SO-B											
WVP-VF1-L 56-SO-B											
WVP-VF1-L 90-SO-B											
WVP-VF1-L 120-SO-B	4	571	100	24.4	120	31.7	2~4	286~571			
WVP-VG1-G160-SO-B	7	1,000	133	35.2	160	42.3	3~7	428~1,000			

● Direction of rotation is clockwise viewed from shaft end.

### ● Control criteria for chips

Kind of cutting oil	Operating pressure		Contaminant density mg/ℓ	Contaminant particle size μm	Workpiece
	MPa	psi			
Water-soluble cutting oil	3 and lower	428 and lower	500 and less	50 and finer	Aluminum (Al) Iron (Fe)
	3~4	428~571	250 and less		
Non-water-soluble cutting oil	4 and lower	571 and lower	500 and less		
	7 and lower	1,000 and lower	250 and less		

### ● Cutting oil

Applicable and recommended cutting oils for series WVP-V※1.

Kind of cutting oil	Operating pressure		Dilution ratio	Kind and brand recommended	Oil temperature	
	MPa	psi			°C	°F
Water-soluble cutting oil	3 and lower	428 and lower	50 and lower	JISK2241 Class W1 No. 1~3 Yushiroken EE50 (Yushiro), Emulcut 20 (Kyod) Class W2 No. 1 Hi-clean CF1 (Sanyo)	5~50	40~120
	3~4	428~571	25 and lower			
Non-water-soluble cutting oil	4 and lower	571 and lower	—	JISK2241 Class 1 No. 1~5 Class 2 No. 1~4, No. 11~14		
	7 and lower	1,000 and lower	—			