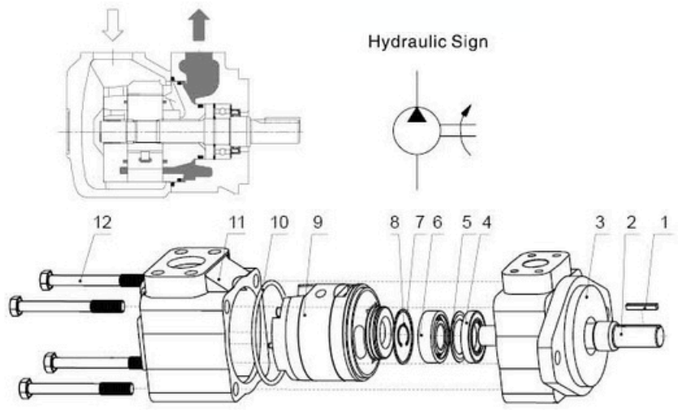
V Series-single Pumps





NO.	Part	Qty
1	straight key	1
2	shaft	1
3	Front cover	1
4	shaft seal	1

NO.	Part	Qty
5	gasket	1
6	Ball bearing	1
7	pile type retainer	1
8	cir clip for shaft	1

序号NO.	Part	Qty
9	cartridge	1
10	ring	1
11	Rear cover	1
12	hexagon headed bolt	4

High Performance intravane Pumps for plastic injection machinery, Shoe machinery, Tool machinery, Die casting machinery and Metallurgical equipment.

Features

1. Intra-vane pumps with hydraulic balancing structure provide more stable performance and longer life since less pressure from vane on stator.
2. Twelve vane system provide low amplitude flow pulsation resulting in low system noise characteristics.
3. Verious displacement and shafts with 4 different outlet opposite position make operation more flexible.
4. The cartridge is independent of the drive shaft, allowing for easy servicing without remore the pump from its mounting.

Model Designation

(F3–)	25V	19	A	–1	A	22	R
Note	Series	Flow code	Port connections	Shaft type	Outlet positions	Design number	Rotation
No–marking: Petroleum series oil 乳化液 emulsification fluid water glycol–fluid F3: phosphate ester fluid	20V	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	A–SAE 4–bolt flange	1– Str key 151– Spline 1–: Str key 86– HD Str key 11– Spline	(Viewed from cover end of pump) A–: Opposite inlet B–: 90° CCW from inlet C–: Inline with inlet D–: 90° CW from inlet	22	(Viewed from shaft end of pump) R– right hand for clockwise L–: left hand for counter–clockwise
	25V	10, 12, 14, 15, 17, 19, 21, 25					
	35V	21, 25, 30, 32, 35, 38, 45					
	45V	42, 45, 50, 57, 60, 66, 75					

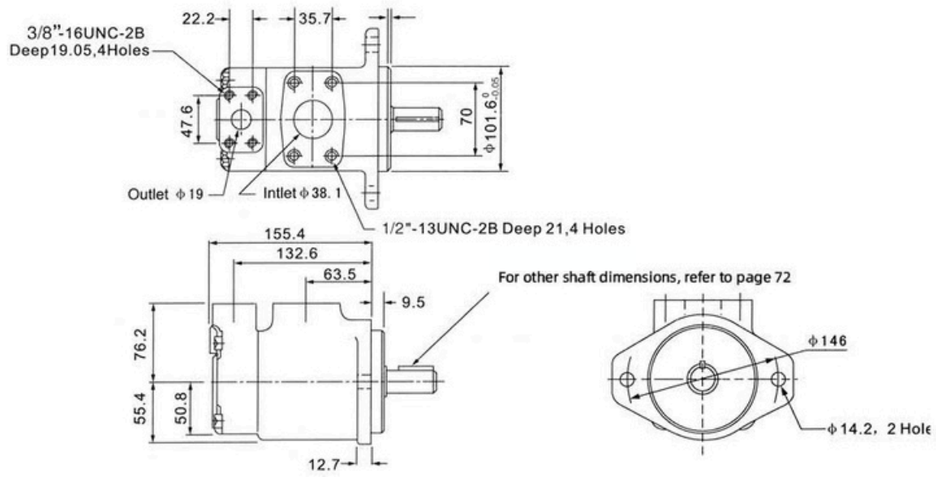
▲ 在1200r/min 和0.69MPa(100psi)
USgpm Flow(USgpm) at 1200r/min and 0.69MPa

Technical Data

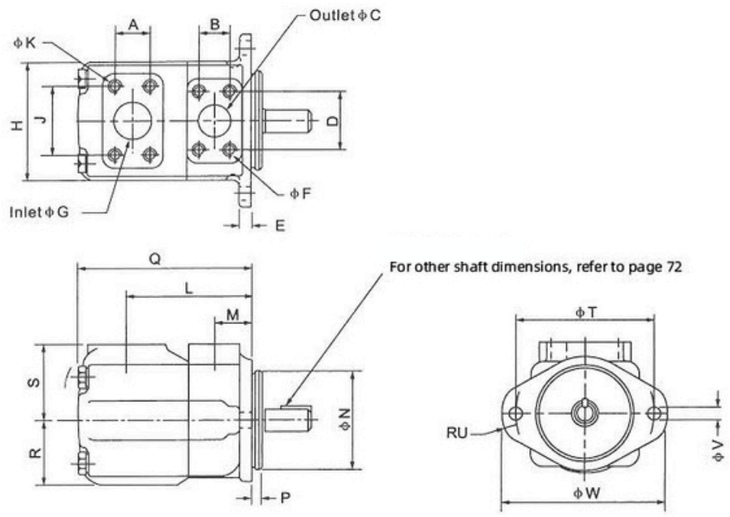
series	Flow code (USgpm)	Geometric displacement mL/r(in³/r)	With antiwear hydraulic oil ri phosphate ester fluid		With water glycol fluid		With water–oil emulsions		Min. speed
			Max.operating pressure MPa	Max.speed r/min	Max.operating pressure MPa	Max.speed r/min	Max.operating pressure MPa	Max.speed r/min	
20V	2	7.5(0.46)	13.8	1800	13.8	1500	6.9	1200	600
	3	10(0.61)							
	4	13(0.79)	20.7		15.9				
	5	16.5(1.01)							
	6	19(1.16)							
	7	23(1.40)							
	8	27(1.67)							
	9	30(1.85)							
	10	32(1.95)							
	11	36(2.20)							
	12	40(2.44)	15.9		13.8				
	14	45(2.78)	13.8						
25V	10	32.5(1.98)	17.2	1800	15.9	1500	6.9	1500	600
	12	39(2.38)							
	14	45(2.78)							
	15	47(2.89)							
	17	55(3.36)							
	19	60(3.66)							
	21	67(4.13)							
	25	81(4.94)							
35V	21	67(4.13)	17.2	1800	15.9	1500	6.9	1500	600
	25	81(4.94)							
	30	97(5.91)							
	32	101(6.16)							
	35	112(6.83)							
	38	121(7.37)							
	45	147(8.95)	13.8		13.8				
45V	42	138(8.41)	17.2	1800	15.9	1500	6.9	1500	600
	45	147(8.95)							
	50	162(9.85)							
	57	181(11.05)							
	60	193(11.75)							
	66	212(12.93)							
	75	237(14.46)	13.8		13.8				

Installation Dimensions

20V



25V,35V,45V

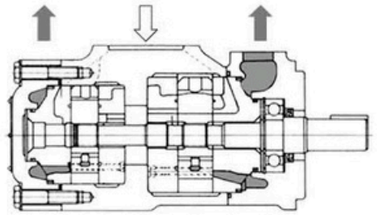


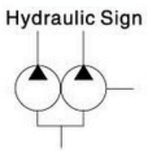
Model	A	B	ØC	D	E	ØG	H	J	L	M	N	P	Q	R
25V	35.7	26.2	25.4	52.4	12.7	38.1	118	69.9	121	38.1	101.60/101.55	9.53	162.1	63.5
35V	42.9	30.2	31.8	58.7	16	50.8	140	77.8	125.5	38.1	127.00/126.95	9.53	185	69.9
45V	61.9	35.7	38.1	69.9	16	76.2	159	106.4	153	43	127.00/126.95	12.7	216	82.6

Model	S	T	RU	ØV	W	ØX	ØFxfull thread depth,4 holes	ØKxfull thread depth,4 holes
25V	76.2	146	14	14.2	175	121	3/8-16UNC-2BX19.1	1/2-13UNC-2BX23.8
35V	82.6	181	16	17.5	213	148	7/16-14UNC-2BX22.3	1/2-13UNC-2BX22.3
45V	93.7	181	16	17.5	213	148	1/2-13UNC-2BX23.8	5/8-11UNC-2BX25.4

V Series-double Pumps







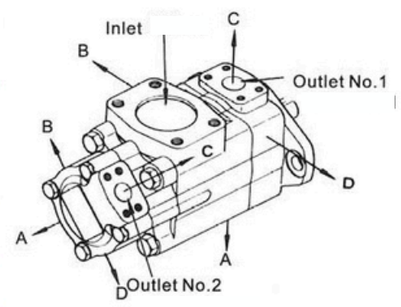
Model Designation

(F3–)	3525V	38	A	17	–1	AB	22	R
Note	Series	Flow–Shaft end code	Port connections	Flow–Cover end code	Shaft type	Outlet positions	Design number	Rotation
No–marking: Petroleum series oil emulsification fluid water glycol–fluid F3: phosphate ester fluid	2520V	10, 12, 14, 15, 17, 19, 21, 25	A–SAE 4 4–bolt flange	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	1– Str key 86– HD Str key 11– Spline	See below	22	(Viewed from shaft end of pump) R– right hand for clockwise L– left hand for counter–clockwise
	3520V	21, 25, 30, 32, 35, 38, 45		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14				
	3525V	21, 25, 30, 32, 35, 38, 45		10, 12, 14, 15, 17, 19, 21, 25				
	4520V	42, 45, 50, 57, 60, 66, 75		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14				
	4525V	42, 45, 50, 57, 60, 66, 75		10, 12, 14, 15, 17, 19, 21, 25				
	4535V	42, 45, 50, 57, 60, 66, 75		21, 25, 30, 32, 35, 38, 45				

▲ 在1200r/min 和0.69MPa(100psi)
USgpm Flow(USgpm) at 1200r/min and 0.69MPa

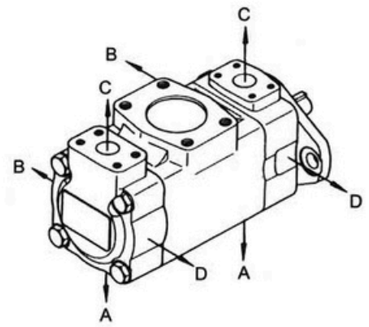
Outlet Positions (Viewed from cover end of pump)

Outlet positions		All series except 4535V	4535V
No.1 outlet opposite inlet	AA	No.2 outlet 135° CCW from inlet	No.2 outlet opposite inlet
	AB	No.2 outlet 45° CCW from inlet	No.2 outlet 90° CCW from inlet
	AC	No.2 outlet 45° CW from inlet	No.2 outlet inline with inlet
	AD	No.2 outlet 135° CW from inlet	No.2 outlet 90° CW from inlet
No.1 outlet 90° CCW from inlet	BA	No.2 outlet 135° CCW from inlet	No.2 outlet opposite inlet
	BB	No.2 outlet 45° CCW from inlet	No.2 outlet 90° CCW from inlet
	BC	No.2 outlet 45° CW from inlet	No.2 outlet inline with inlet
	BD	No.2 outlet 135° CW from inlet	No.2 outlet 90° CW from inlet



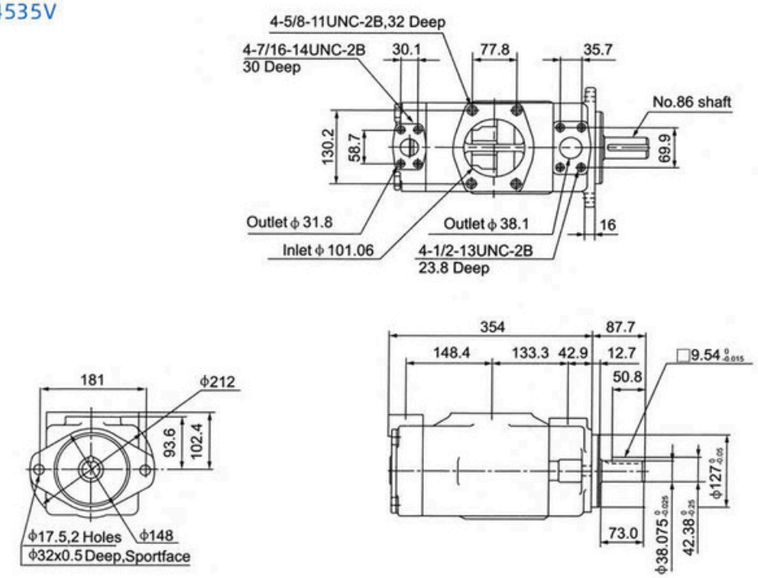
Outlet Positions (Viewed from cover end of pump)

Outlet positions		All series except 4535V	4535V
No.1 outlet inline with inlet	CA	No.2 outlet 135° CCW from inlet	No.2 outlet opposite inlet
	CB	No.2 outlet 45° CCW from inlet	No.2 outlet 90° CCW from inlet
	CC	No.2 outlet 45° CW from inlet	No.2 outlet inline with inlet
	CD	No.2 outlet 135° CW from inlet	No.2 outlet 90° CW from inlet
No.1 outlet 90° CW from inlet	DA	No.2 outlet 135° CCW from inlet	No.2 outlet opposite inlet
	DB	No.2 outlet 45° CCW from inlet	No.2 outlet 90° CCW from inlet
	DC	No.2 outlet 45° CW from inlet	No.2 outlet inline with inlet
	DD	No.2 outlet 135° CW from inlet	No.2 outlet 90° CW from inlet



Installation Dimensions

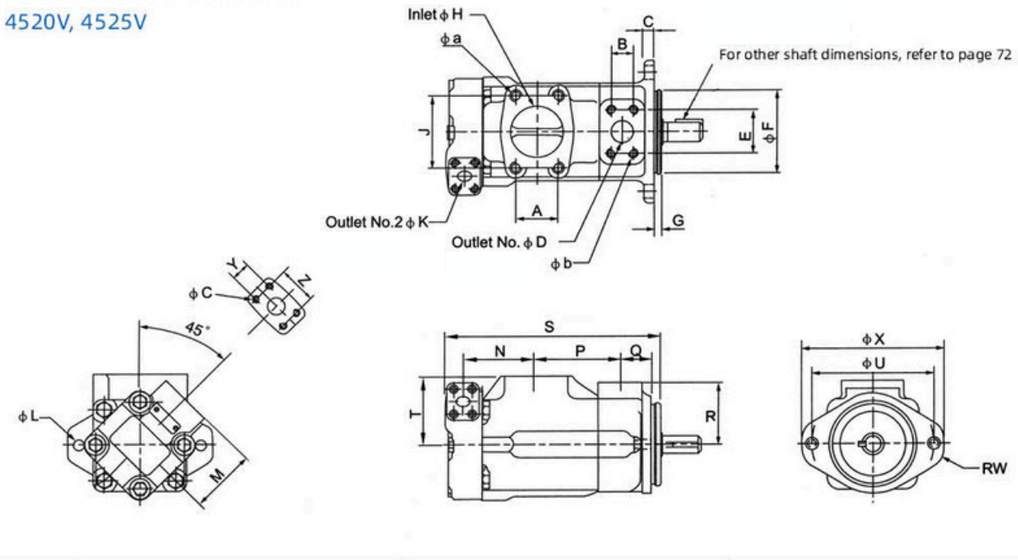
4535V



其它轴类尺寸见72页
For other shaft dimensions, refer to page 72

Installation Dimensions

2520V, 3520V, 3525V, 4520V, 4525V



Model	Øa x full thread depth,4 holes	Øb x full thread depth,4 holes	Øc x full thread depth,4 holes
2520V	1/2-13UNC-2Bx23.8	3/8-16UNC-2Bx19.1	3/8-16UNC-2Bx19.1
3520V	5/8-11UNC-2Bx30.0	7/16-14UNC-2Bx22.3	3/8-16UNC-2Bx19.1
3525V	5/8-11UNC-2Bx30.0	7/16-14UNC-2Bx22.3	3/8-16UNC-2Bx19.1
4520V	5/8-11UNC-2Bx30.0	1/2-13UNC-2Bx23.8	3/8-16UNC-2Bx19.1
4525V	5/8-11UNC-2Bx30.0	1/2-13UNC-2Bx23.8	3/8-16UNC-2Bx19.1

Model	A	B	C	ØD	E	ØF	G	ØH	J	ØK	ØL	M
2520V	50.8	26.2	12.7	25.4	52.4	101.60/101.55	9.53	63.5	88.9	19.1	14.2	76.2
3520V	62	30.1	15.9	31.7	58.7	127.00/126.95	9.53	76.2	106.3	19.1	17.5	76.2
3525V	62	30.1	15.9	31.7	58.7	127.00/126.95	9.53	76.2	106.3	25.4	17.5	74.7
4520V	69.9	35.7	15.9	38.1	69.9	127.00/126.95	12.7	88.9	120.6	19.1	17.5	76.2
4525V	69.9	35.7	15.9	38.1	69.9	127.00/126.95	12.7	88.9	120.6	25.4	17.5	74.7

Model	N	P	Q	R	S	T	ØU	ØV	RW	ØX	Y	Z
2520V	88.1	101.6	38.1	76.2	250	85.3	146.1	120.7	14	174.7	22.2	47.6
3520V	99.6	114.3	38.1	82.6	273.3	88.9	181	148	16	213	22.2	47.6
3525V	109. 5	114.3	38.1	82.6	287.3	88.9	181	148	16	213	26.2	52.4
4520V	120	119.4	42.9	93.7	303.5	102.4	181	148	16	213	22.2	47.6
4525V	136	119.4	42.9	93.7	325	102.4	181	148	16	213	26.2	52.4