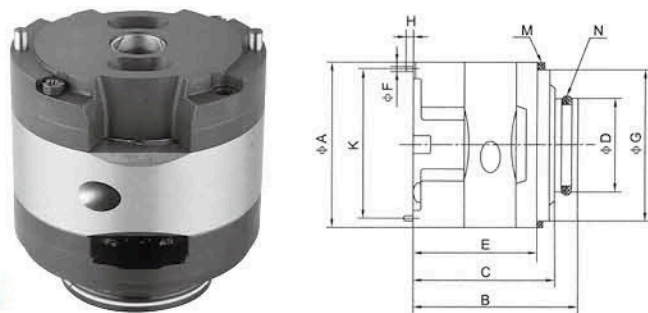


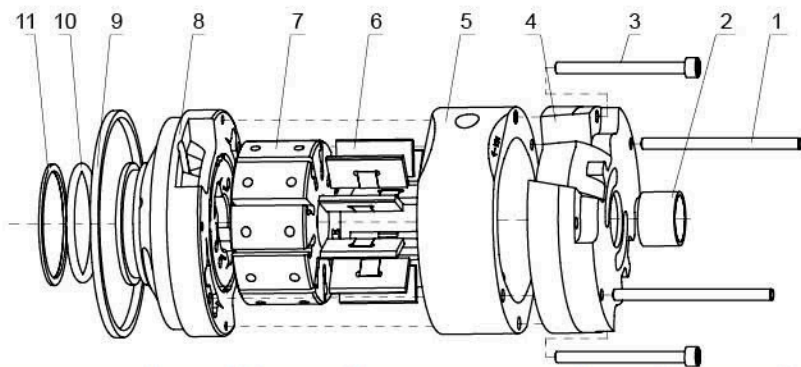
V 系列泵芯 Series-cartridge



型号说明/Model Designation

(F3-)	PC-	25V	19	R	10
前注 Note	泵芯标志 Cartridge mark	系列号 Series	▲排量代号 Flow code	旋转方向 Rotation	设计号 Design number
无标记 No-marking: 石油系油 Petroleum series oil 乳化液 emulsification fluid 水-乙二醇 water glycol-fluid F3: 磷酸酯液 phosphate ester fluid	PC-单泵泵芯	20V	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	(从泵的轴端看) (Viewed from shaft end of pump) L-逆时针旋转 Left hand for counter clockwise	10
	双联泵轴端泵芯	25V	10, 12, 14, 15, 17, 19, 21, 25	R-顺时针旋转 Right hand for clockwise	
	PCT-双联泵盖端泵芯	35V	21, 25, 30, 32, 35, 38, 45		
	Cartridge kit of double pump cover end	45V	42, 45, 50, 57, 60, 66, 75		

▲ 在1200r/min和0.69MPa(100psi)下的额定排量; 与相应系列、规格的油泵性能参数一致, 详见V系列单泵的性能参数。
USgpm Flow(USgpm) at 1200r/min and 0.69MPa.
The data of relevant series, model are unanimous. Please see V series-single pump data.



序号NO.	名称Part	数量Qty	序号NO.	名称Part	数量Qty	序号NO.	名称Part	数量Qty
1	销 Pin	2	5	定子 cam ring	1	9	挡圈 Retainer	1
2	滑动轴承 sliding bearing	1	6	叶片 vane kit	12	10	O型圈 O ring	1
3	十字槽盘头螺钉 cross pan head bolts	2	7	转子 Rotor	1	11	挡圈 Retainer	1
4	侧板 inlet support plate	1	8	压力侧板 outlet support plate	1			

系列号 Series	ØA	B	C	ØD	E	ØF	ØG	H	K	M (挡圈Gasket)	M(O形圈O-Ring)
20V	82.55	81.5	70.1	47	61.5	4.8	76.2	7	73.6	82.76x76.26x3.5	40x3.55
25V	96.8	98.8	87	52.2	71.2	4.8	90.5	7	88.19	97x91x3.5	44x3.53
35V	114.3	117.7	105	72.2	90.3	6.4	108	8	103.94	114.5x108.5x3.5	63.09x3.53
45V	133.35	141.1	129.6	80.2	105.5	6.4	127	8	123.8	133.6x127.6x3.5	71x3.55

系列号 Series	转子内花键齿廓参数Inside spline tooth outline paramenter of rotor					
	齿数 Number of teeth	径节 Pitch	压力角 Pressure angle	大径 Major Diameter	小径 Minor Diameter	
20V	30	48/96	45°	16.617	15.56	
25V	40	48/96	45°	21.9	20.86	
35V	37	40/80	45°	24.38	23.10	
45V	14	12/24	30°	32.59	27.6	

VQ 系列叶片泵 Series-vane Pumps

产品简介/Product Introduction

适用于工程机械的高压高性能子母叶片泵。

主要特点为:

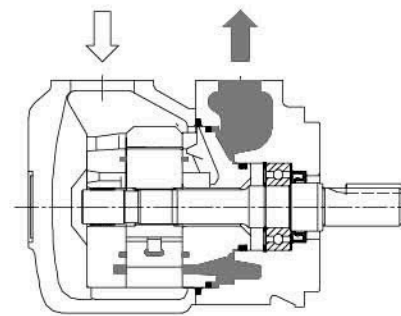
- 1、采用液压平衡的子母叶片结构及10叶片制的设计, 压力更高, 最高达到21MPa。
- 2、采用浮动侧板结构, 可自动补偿端面间隙, 使泵在高压下能保持较高的容积效率。
- 3、侧板采用双金属材料, 提高了抗咬合性能, 使泵的使用寿命更长。

The high-pressure and high-performance Intra-vane pumps for Mobile Equipment.

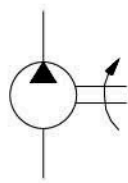
Features:

1. To adopt balanced hydraulic for the struction of Intra-vane and ten-Vane design, higher Pressure, top to 21 MPa.
2. To adopt floating structure for side plate, it will do a compensation for end-face clearance by automatic, so that even the pump under high pressure it can maintain a high volumetric efficiency.
3. The side plate is made of dual-metal material, it improved the seizure resistance. and so that the life of pump will be longer

VQ 系列单泵 Series-single Pumps



液压符号
Hydraulic Sign



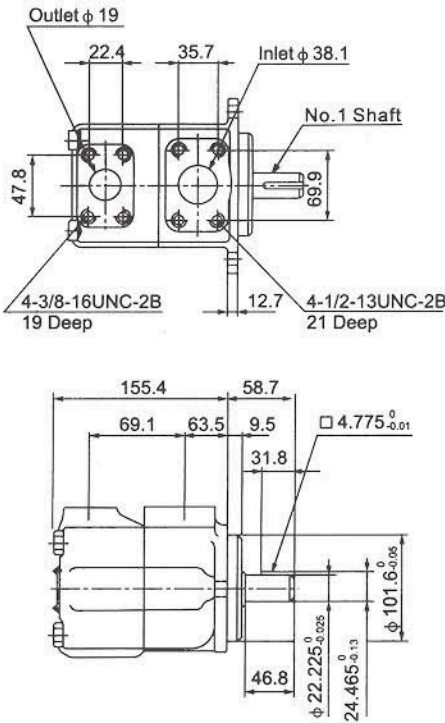
(F3-)	25VQ	19	A	(F)	-1	A	30	R
前注 Note	系列号 Series	▲排量代号 Flow code	油口连接 Port connections	安装形式 Installation type	轴伸形式 Shaft type	出油口位置 Outlet positions	设计号 Design number	旋转方向 Rotation
无标记 No-marking 石油系油 Petroleum series oil 乳化液 emulsification fluid 水-乙二醇 water glycol-fluid F3: 磷酸酯液 phosphate ester fluid	20VQ	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	A-SAE 4 螺栓法兰 A-SAE 4 bolt flange	无标记 No-marking - 法兰安装型 Flange Mounting F- 脚座安装型 F-Foot Mountion	1平键轴/Str key 151花键轴/Spline	(从泵的盖端看) (Viewed from cover end of pump) A-进油口对面 Opposite inlet port B-从进油口逆时针90° 90° CCW from inlet C-进油口同侧 Inline with inlet D-从进油口顺时针90° 90° CW from inlet	30	(从泵的轴端看) (Viewed from shaft end of pump) R- 顺时针旋转 right hand for clockwise L- 逆时针旋转 left hand for counter-clockwise
	25VQ	10, 12, 14, 15, 17, 19, 21, 25						
	35VQ	21, 25, 30, 32, 35, 38, 45			1平键轴/Str key 86重型平键轴 HD str key 11 花键轴/Spline		20	
	45VQ	42, 45, 50, 57, 60, 66, 75						

▲ 在1200r/min 和0.69MPa(100psi)下的额定排量
USgpm Flow(USgpm) at 1200r/min and 0.69MPa

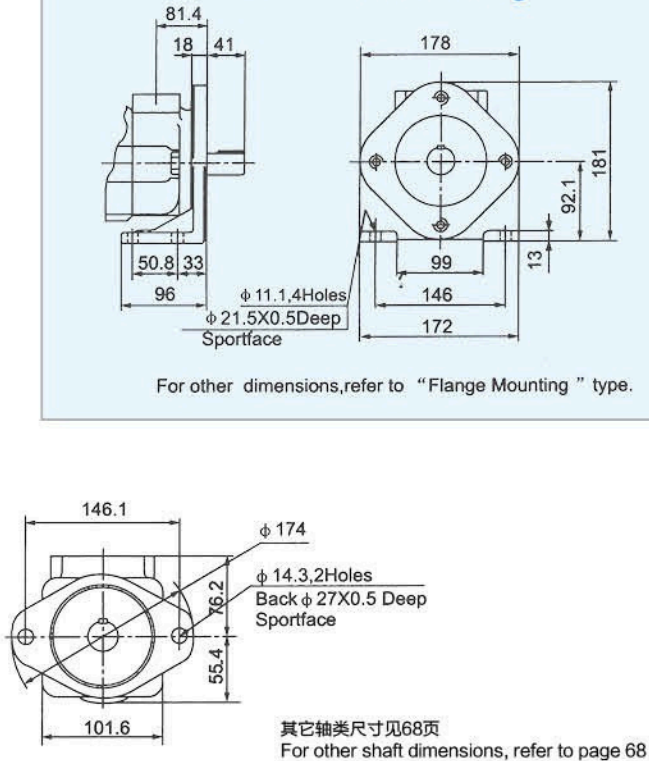
技术参数/Technical Data

系列号 series	排量代号 Flow code (USgpm)	理论排量 Geometric displace- ment mL/r	最高使用压力 Max.operating pressure Mpa	最高转速 Max.speed r/min	最低转速 Min. speed r/min
20VQ	2	7(0.43)	21	2700	600
	3	10(0.61)			
	4	13(0.79)			
	5	16.5(1.01)			
	6	19(1.16)			
	7	22(1.40)			
	8	27(1.67)			
	9	30(1.85)			
	10	31.5(1.92)			
	11	35(2.14)			
	12	40(2.44)	16		
	14	45(2.78)	14		
25VQ	10	32(1.95)	21	2700	600
	12	38(2.32)			
	14	43.5(2.65)			
	15	47(2.89)			
	17	54(3.30)			
	19	60(3.66)			
	21	67(4.13)			
	25	79.2(4.83)			
35VQ	21	67(4.13)	21	2500	600
	25	81(4.94)			
	30	95(5.80)			
	32	101(6.16)			
	35	109(6.65)			
	38	119(7.26)			
	45	143(8.72)		14	
45VQ	42	134(8.17)	17.5	2400	600
	45	143(8.72)			
	50	159(9.70)			
	57	181(11.05)			
	60	189(11.53)			
	66	210(12.81)			
	75	237(14.46)	14		

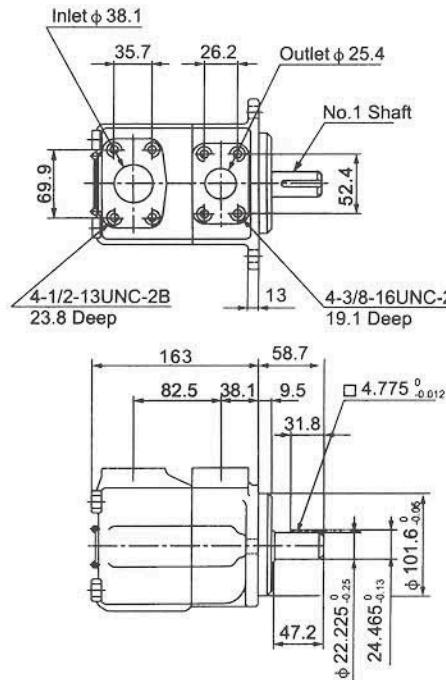
20VQ 法兰安装尺寸
Flange Mounting



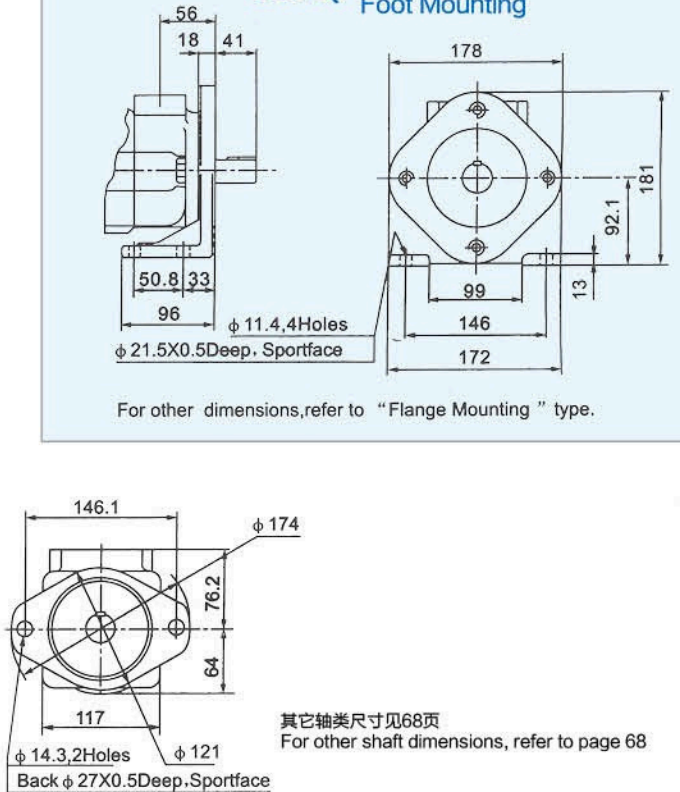
20VQ 脚座安装尺寸
Foot Mounting



25VQ 法兰安装尺寸
Flange Mounting



25VQ 脚座安装尺寸
Foot Mounting

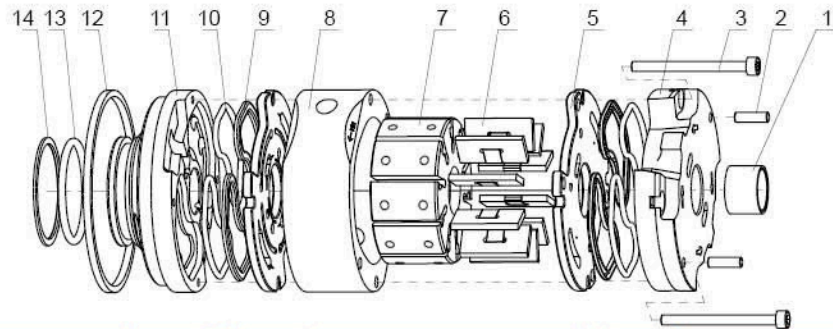


VQ 系列泵芯 Series-cartridge

型号说明/Model Designation

(F3-)	PC-	25VQ	19	R	10
前注 Note	泵芯标记 Cartridge mark	系列号 Series	▲排量代号 Displacement	旋转方向 Rotation	设计号 Design number
无标记 No-marking: 石油系油 Petroleum series oil 乳化液 emulsification fluid 水-乙二醇 water glycol-fluid F3: 磷酸酯液 phosphate ester fluid	PC-单泵泵芯、双联泵轴端泵芯 Cartridge kit of single pump double pump shaft end PCT-双联泵盖端泵芯 Cartridge kit of double pump cover end	20VQ 25VQ 35VQ 45VQ	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14 10, 12, 14, 15, 17, 19, 21, 25 21, 25, 30, 32, 35, 38, 45 42, 45, 50, 57, 60, 66, 75	(从泵的轴端看) (Viewed from shaft end of pump) R-顺时针旋转 right hand for clockwise L-逆时针旋转 left hand for counter-clockwise	10

▲ 在1200r/min 和0.69MPa(100psi)下的额定排量; 与相应系列、规格的油泵性能参数一致, 详见VQ系列单泵的性能参数。
USgpm Flow(USgpm) at 1200r/min and 0.69MPa.
The data of relevant series, model are unanimous. Please see VQ series-single pumps data.



序号NO.	名称Part	数量Qty	序号NO.	名称Part	数量Qty	序号NO.	名称Part	数量Qty
1	滑动轴承 Sliding bearing	1	6	叶片 vane kit	10	11	压力侧板 outlet support plate	1
2	销 Pin	2	7	转子 Rotor	1	12	挡圈 Retainer	1
3	内六角圆柱头螺钉 Hexagon socket head cap screws	2	8	定子 cam ring	1	13	O型圈 O shape retainer	1
4	侧板 inlet support plate	1	9	异形挡圈 irregular shape retainer	4	14	挡圈 Retainer	1
5	配油盘 valve plate	2	10	O型圈 O shape retainer	4			

技术规格/Specifications

系列号 Series	ΦA	B	C	ΦD	E	ΦF	ΦG	H	K	M(挡圈Gasket)	N(O形圈O-Ring)
20VQ	82.55	81.5	70.1	47.2	61.5	4.8	76.2	7	73.8	82.76×76.26×3.5	40×3.55
25VQ	96.8	98.8	87	52.2	71.2	4.8	90.5	7	88.19	97×91×3.5	44×3.53
35VQ	114.3	117.7	105	72.2	90.3	6.4	108	7	103.94	114.5×108.5×3.5	63.09×3.53
45VQ	133.35	141.1	129.6	80.2	105.5	6.4	127	11	123.8	133.6×127.6×3.5	71×3.55

系列号 Series	转子内花键齿廓参数 Inside spline tooth outline parameter of rotor				
	齿数 Number of teeth	径节 Pitch	压力角 Pressure angle	大径 Major diameter	小径 Minor diameter
20VQ	30	48/96	45°	16.617	15.56
25VQ	40	48/96	45°	21.9	20.86
35VQ	37	40/80	45°	24.38	23.10
45VQ	14	12/24	30°	32.59	27.6

2520VQSV10S 三联泵 Series-treble Pumps

型号说明/Model Designation

(F3-)	2520VQSV10S	-21	A	7	-P	7	-86	C	B	C	-20	R
前注 Note	系列号 Series	轴端泵排量 代号 Flow-shaft end code	双泵油口连接 Double pump port connection	中间泵排量 代号 Flow-mid code	盖端泵油口连接 Flow-cover end pump port connction	盖端泵排 量代号 Flow- cover end code	轴伸形 式 Shaft type	第一出 油口位 置 No.1 Outlet positions	第二出 油口位 置 No.2 Outlet positions	第三出 油口位 置 No.3 Outlet positions	设计号 Design number	旋转方向 Rotation
无标记 No-marking: 石油系油 Petroleum series oil 乳化液 emulsification fluid 水-乙二醇 water glycol-fluid F3: 磷酸酯液 phosphate ester fluid	2520VQSV10S	10, 12, 14, 15, 17, 19, 21, 25	A- SAE 4螺栓法兰 A-SAE 4-bolt flange	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	1/2"NPT-14	1, 2, 3, 4, 5, 6, 7	-86 轴 Shaft	见下表 see below	见下表 see below	见下表 see below	-20	(从泵的轴端看) (Viewed from shaft end of pump) R-顺时针旋转 right hand for clockwise L-逆时针旋转 left hand for counter-clockwise

出油口位置代号/Outlet oil port position code

从盖端观察的位置/Views from cover end of pump	No.1 出油口/No.1 Outlet	No.2 出油口/No.2 Outlet	No.3 出油口/No.3 Outlet
在进油口对侧 Oppsite of the inlet oil port	A	-	A
从进油口逆时针135° CCW from the inlet oil port	-	A	-
从进油口逆时针90° CCW from the inlet oil port	B	-	B
从进油口逆时针45° CCW from the inlet oil port	-	B	-
在进油口同侧 Same side of the inlet oil port	C	-	C
从进油口顺时针45° CW from the inlet oil port	-	C	-
从进油口顺时针90° CW from the inlet oil port	D	-	D
从进油口顺时针135° CW from the inlet oil port	-	D	-

2520VQSV10S安装连接尺寸/Installation Dimensions

