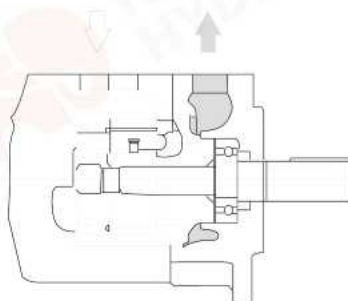
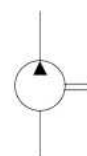


SQP系列单泵 SQP series single pumps

产品外观 Shape



功能符号
Functional sign



本系列是专为低噪音工况而开发的高压高性能子母叶片泵。适用于塑料机械，压铸机械，机床以及工程机械等要求噪音较低的液压系统中。其主要特点：

- 1、泵芯使用V系列子母叶片泵泵芯，完全互换，使用更灵活方便。
- 2、增加了脉动衰减结构的设计，极大降低了压力的脉动，使噪音更低，音质更流畅。
- 3、使用加厚的外壳设计，增加了泵的强度和抗震性，同时消音性能更优越。

SQP series single pumps are composition vane pumps with high pressure resistance and high performance, especially developed for application in the industries of plastic machinery, forging machinery, machine tool industry and engineering machinery, where lower noise is required. The main features are as follows:

1. Adopt V series composition vane pump core, making the application flexible by its complete interchangeable advantage.
2. Adopt the structure of pulsation attenuation, dramatically reducing the pulsation of pressure with lower noise.
3. Adopt the designing with thick pump casing, making the pump with stronger strength, stronger vibration resistance and better performance of silencing.

型号说明 Model descriptions

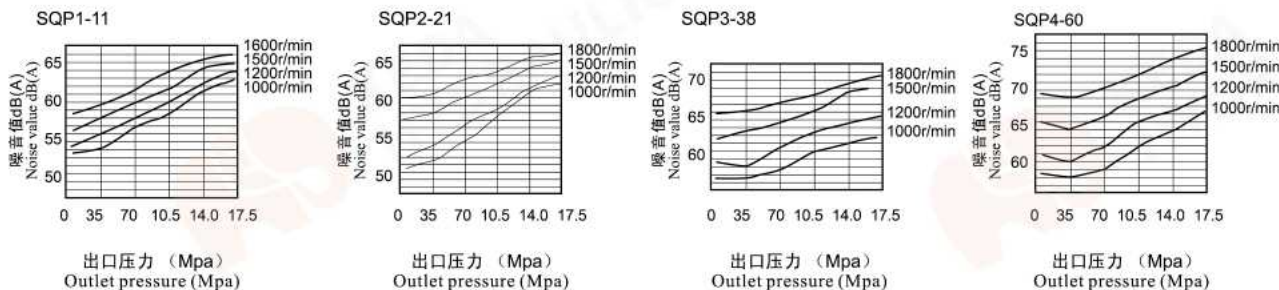
(F3-)	SQP2	-21	-86	C	(F)	(LH)	-18
前注、油液相容性 Front marks, compatibility between hydraulic oil and fluid	泵壳号 Pump shell No	▲排量代号 Displacement codes	轴伸形式 Shaft extension	出油口位置 Outlet port position	安装型式 Mounting type	旋转方向 Direction of rotation	设计号 Designing No.
无标记-使用抗磨液压油或磷酸酯液 No marks- use anti-wear hydraulic oil or F11-使用水乙二醇液 F11- use water- glycol fluid F3- 使用油包水乳化液 F3- use water-in-oil emulsion	SQP1	2,3,4,5,6,7,8,9 10,11,12,14	1带键直轴 1 straight shaft with key	(从泵的盖端看) (from cover end pump) A-进口油对侧 A- Opposition of inlet B-从进口油逆时针90° B- counterclockwise 90° from inlet C-进口油同侧 C- the same side of inlet D-从进口油顺时针90° D- Clockwise 90° from inlet	无标记法 兰安装 No mark Flange mounting F: 脚座安装型 foot mounting	(从泵的盖端看) (from cover end pump) LH-逆时针旋转 LH- counterclockwise rotation 无标记 No mark 顺时针旋转 Clockwise rotation	15
	SQP2	10,11,12,14,15,17, 19,21	86-重型带 键直轴 86- heavy-duty straight shaft with key				18
	SQP3	21,25,30,32,35, 38,45					18
	SQP4	42,45,50,57,60 66,75					18

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

The rated displacement USgpm is under the conditions of 1200r/min and 0.69Mpa(100psi).

噪音数据 测试条件ISO VG32、(50°C), 距离1m

Noise data testing conditions ISO VG32,(50°C), distance of 1m



工作参数 Operating parameters

泵壳号 Pump shell No	● 排量代号 Displacement code	几何排量 Geometric displacement (mL/r)	SQP		F11-SQP		F3-SQP		最低转速 Mini speed (r/min)
			使用抗磨液压油或磷酸酯液 Anti-wear hydraulic oil or phospholipid		使用水乙二醇液 Water glycol fluid		使用油包水乳化液 Water-in-oil emulsion		
			最高压力 Max pressure (Mpa)	最高转速 Max speed (r/min)	最高压力 Max pressure (Mpa)	最高转速 Max speed (r/min)	最高压力 Max pressure (Mpa)	最高转速 Max speed (r/min)	
SQP1	2	7.5	13.8	1800	13.8	1200	13.8	1200	600
	3	10.2							
	4	12.8							
	5	16.7							
	6	19.2							
	7	22.9							
	8	26.2	17.2						
	9	28.8							
	10	31.0							
	11	35.0							
	12	37.9	15.7		15.7				
14	44.2	13.8	13.8						
SQP2	10	32.5	17.2	1800	17.2	1200	13.8	1200	600
	12	38.3							
	14	43.3							
	15	46.7							
	17	52.5							
	19	59.2							
21	65.0								
SQP3	21	66.7	17.2	1800	17.2	1200	13.8	1200	600
	25	79.2							
	30	95.0							
	32	100							
	35	109							
	38	118							
45	140								
SQP4	42	134	17.2	1800	17.2	1200	13.8	1200	600
	45	140							
	50	156							
	57	178							
	60	189							
	66	207							
75	237								

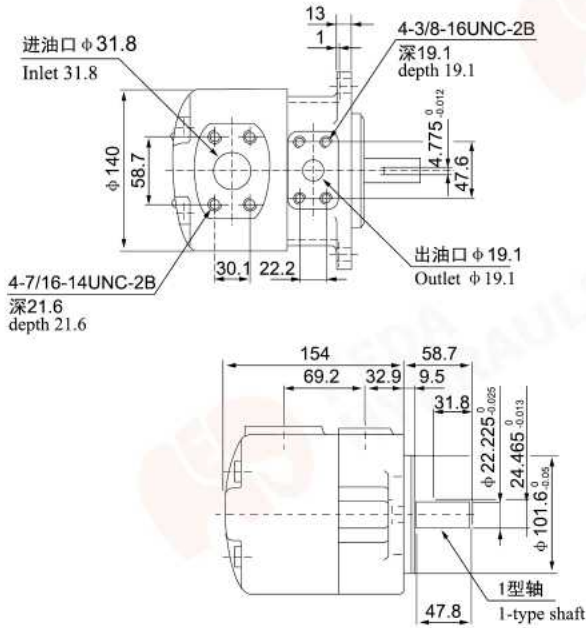
●在1200r/min和0.69MPa(100psi)下的额定排量USgpm。▲0.5秒内，允许超过最高压力10%的瞬时压力。

The rated displacement USgpm is under the conditions of 1200r/min and 0.69Mpa(100psi).

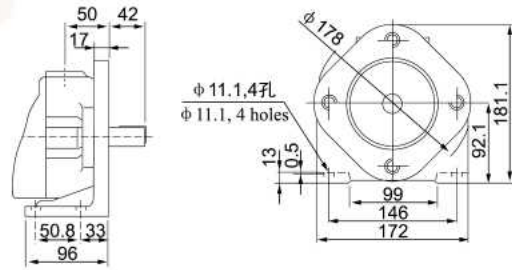
The instantaneous pressure is allowed to exceed 10% of the Max pressure for within 0.5 seconds long.

安装连接尺寸 Installation sizes

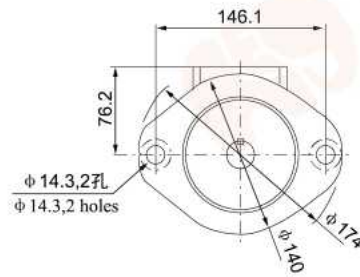
SQP1法兰安装型 SQP1 Flange mounting



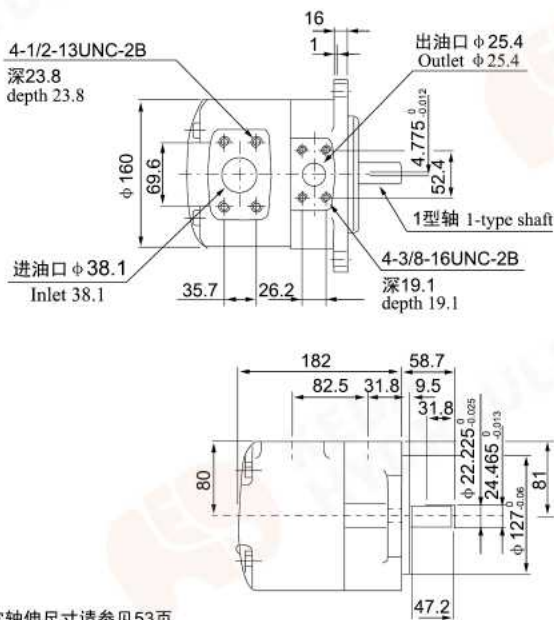
SQP1脚座安装型 SQP1 foot mounting



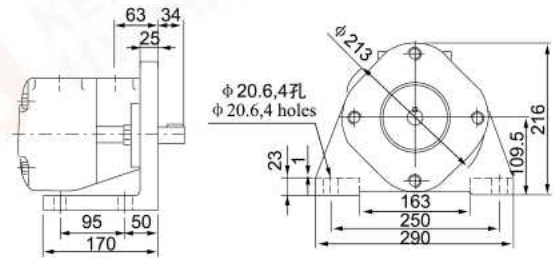
其余尺寸请参照法兰安装型
Please refer to Flange mounting for rest sizes



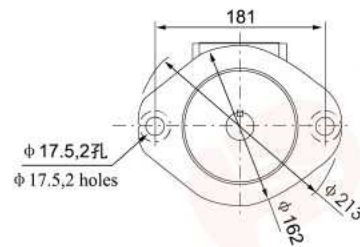
SQP2法兰安装型 SQP2 Flange mounting



SQP2脚座安装型 SQP2 foot mounting

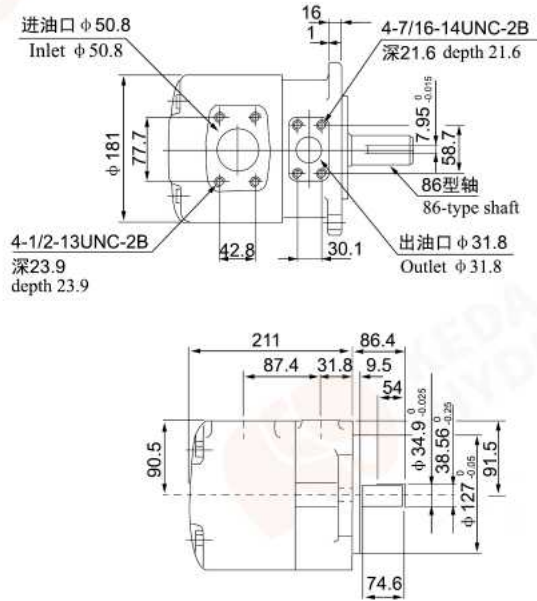


其余尺寸请参照法兰安装型
Please refer to Flange mounting for rest sizes



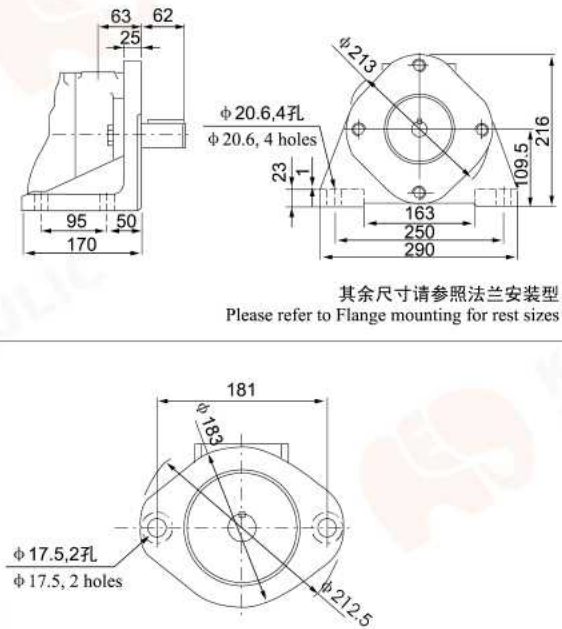
安装连接尺寸 Installation sizes

SQP3法兰安装型 SQP3 Flange mounting

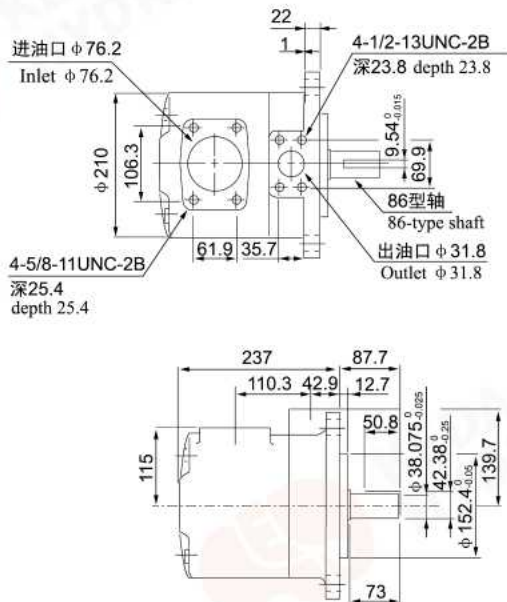


其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

SQP3脚座安装型 SQP3 foot mounting

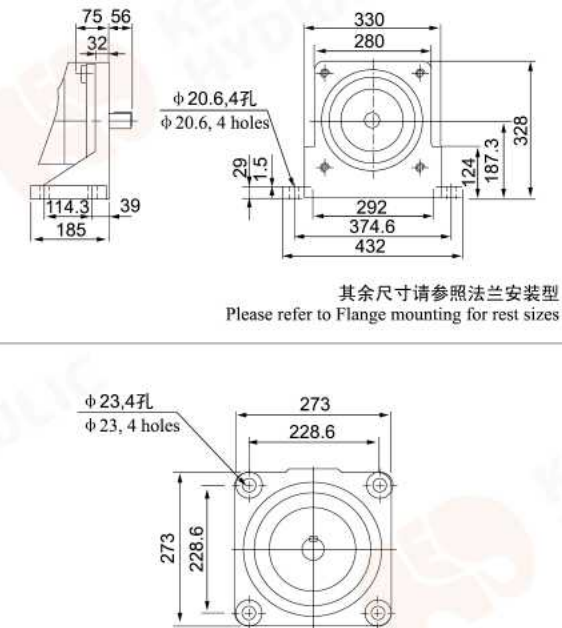


SQP4法兰安装型 SQP4 Flange mounting



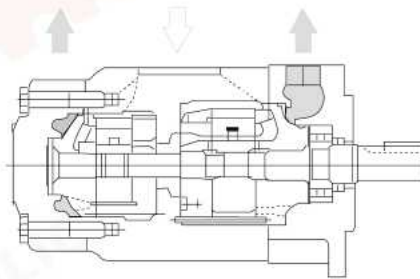
其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

SQP4脚座安装型 SQP4 foot mounting

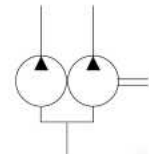


SQP系列双联泵 SQP series double vane pumps

产品外观 Shape



功能符号
Functional signs



型号说明 Model descriptions:

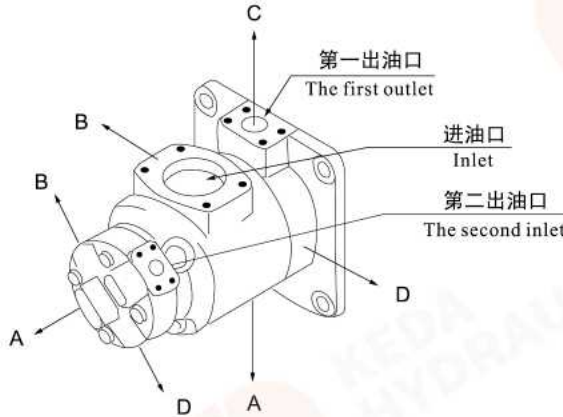
(F3)	SQP32	35	17	86	CD	(F)	-(LH)	18
前注 Front marks	系列号 Code of series	▲排量代号轴端泵 Displacement code Shaft end pump	▲排量代号盖端泵 Displacement code cover end pump	轴伸形式 Shaft extension	油口位置 Pump position	安装型式 Mounting type	旋转方向 Direction of rotation	设计号 Designing No.
无标记- 使用抗磨液压油或磷酸酯液 No mark-anti- wear hydraulic oil or Sul phosuccinic ester fluid F11- 使用水乙二醇液 F1-adopt water -glycol F3- 使用油包水乳 化液 F3- water-in-oil emulsion	SQP21	10,12,14,15,17, 19,21	2,3,4,5,6,7,8,9, 10,11,12,14	1-带键直轴 1- straight shaft with key 86-重型带键直轴 86-heavy-duty straight shaft with key	见下表 See as the following table	无标记- 法兰安装型 No marks- Flange mounting F- 脚座安装型 foot mounting	(从泵的轴端看) (from shaft end pump) LH-逆时针旋转 LH-counterclockwise rotation 无标记 逆时针旋转 No marks counterclockwise	18
	SQP31	21,25,30,32,35, 38,45	2,3,4,5,6,7,8,9, 10,11,12,14					
	SQP32	21,25,30,32,35, 38,45	10,12,14,15,17, 19,21					
	SQP41	42,45,50,57,60, 66,75	2,3,4,5,6,7,8,9, 10,11,12,14					
	SQP42	42,45,50,57,60, 66,75	10,12,14,15,17, 19,21					
	SQP43	42,45,50,57,60, 66,75	21,25,30,32,35, 38,45					

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

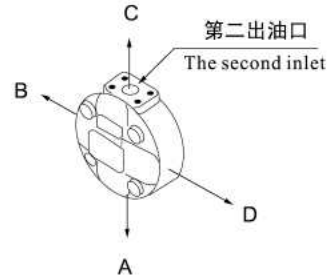
The rated displacement USgpm is under the conditions of 1200r/min and 0.69Mpa(100psi).

油口位置表 (从泵的盖端看) Pump oil port position (viewed from cover end pump)

油口位置 Pump position



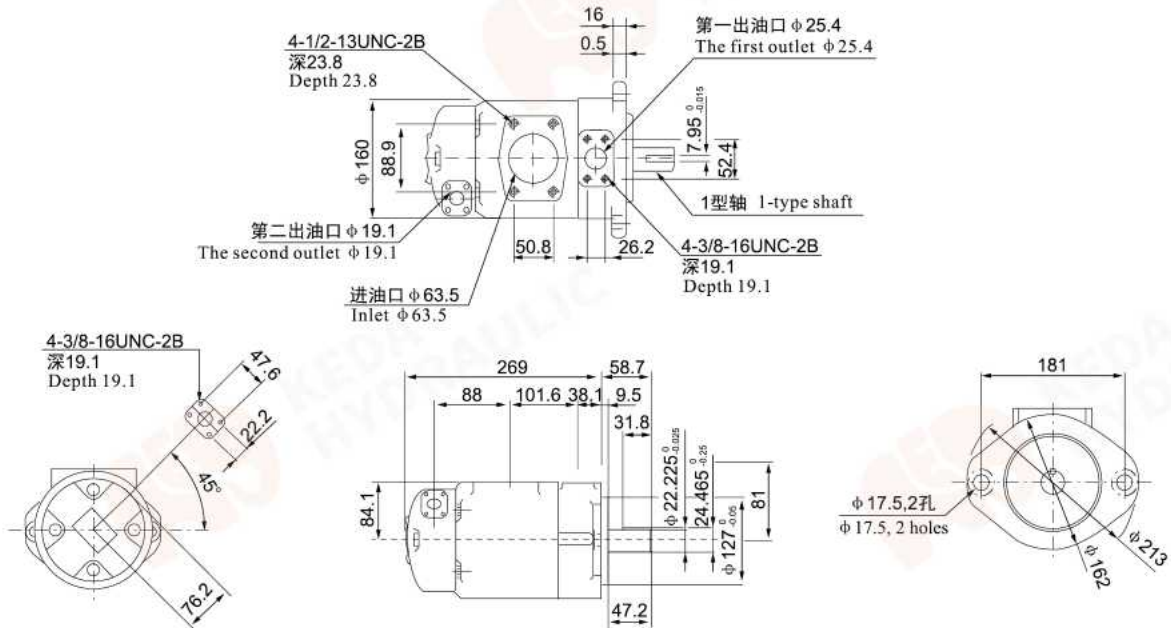
SQP43



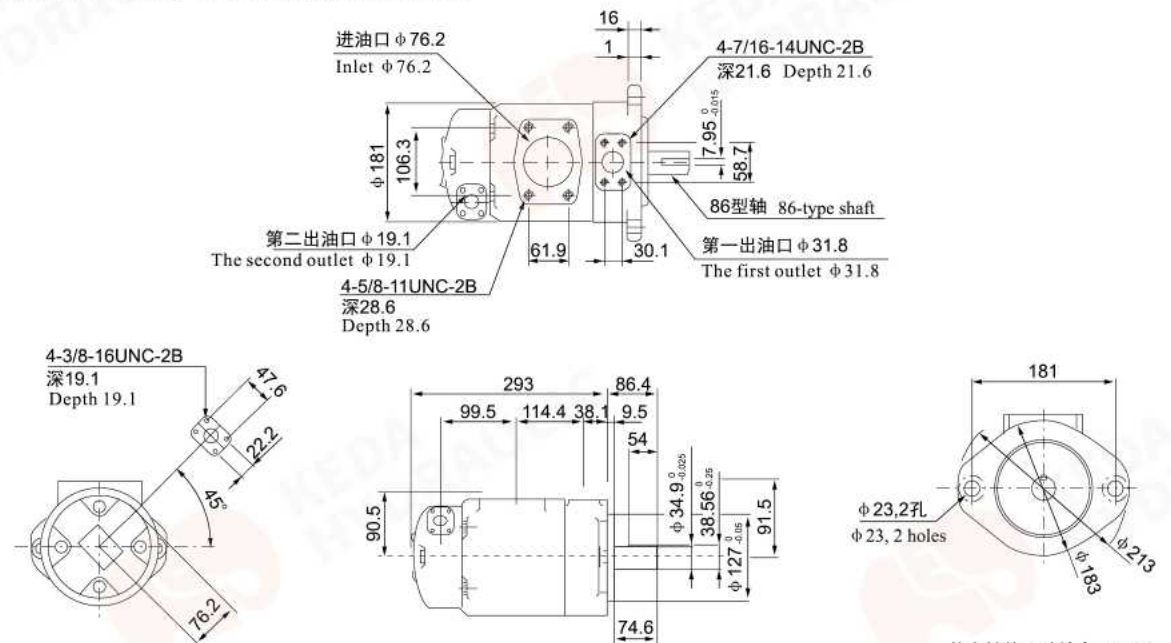
油口位置 Pump position	所有系列 (除SQP43外) All series (except for SQP43)	SQP43
第一出油口 在进油口对侧 The first outlet is the opposition side of inlet.	AA 第二出油口在进油口逆时针转135° The second outlet is to counterclockwise rotation of 135° from inlet	第二出油口在进油口对侧 The second outlet is the opposition side of inlet.
	AB 第二出油口在进油口逆时针转45° The second outlet is to counterclockwise rotation of 45° from inlet	第二出油口在进油口逆时针转90° The second outlet is to counterclockwise rotation of 90° from inlet
	AC 第二出油口在进油口顺时针转45° The second outlet is to clockwise rotation of 45° from inlet	第二出油口在进油口同侧 The second outlet is the same side of inlet.
	AD 第二出油口在进油口顺时针转135° The second outlet is to clockwise rotation of 135° from inlet	第二出油口在进油口顺时针转90° The second outlet is to clockwise rotation of 90° from inlet
第一出油口 从进油口逆 时针转90° The first outlet is to counterclockwise rotation of 90° from inlet	BA 第二出油口在进油口逆时针转135° The second outlet is to counterclockwise rotation of 135° from inlet	第二出油口在进油口对侧 The second outlet is the opposition side of inlet.
	BB 第二出油口在进油口逆时针转45° The second outlet is to counterclockwise rotation of 45° from inlet	第二出油口在进油口逆时针转90° The second outlet is to counterclockwise rotation of 90° from inlet
	BC 第二出油口在进油口顺时针转45° The second outlet is to clockwise rotation of 45° from inlet	第二出油口在进油口同侧 The second outlet is the same side of inlet.
	BD 第二出油口在进油口顺时针转135° The second outlet is to clockwise rotation of 135° from inlet	第二出油口在进油口顺时针转90° The second outlet is to clockwise rotation of 90° from inlet
第一出油口 在进油口同侧 The first outlet is the same side of inlet.	CA 第二出油口在进油口逆时针转135° The second outlet is to counterclockwise rotation of 135° from inlet	第二出油口在进油口对侧 The second outlet is the opposition side of inlet.
	CB 第二出油口在进油口逆时针转45° The second outlet is to counterclockwise rotation of 45° from inlet	第二出油口在进油口逆时针转90° The second outlet is to counterclockwise rotation of 90° from inlet
	CC 第二出油口在进油口顺时针转45° The second outlet is to clockwise rotation of 45° from inlet	第二出油口在进油口同侧 The second outlet is the same side of inlet.
	CD 第二出油口在进油口顺时针转135° The second outlet is to clockwise rotation of 135° from inlet	第二出油口在进油口顺时针转90° The second outlet is to clockwise rotation of 90° from inlet
第一出油口 从进油口顺 时针转90° The first outlet is to clockwise rotation of 90° from inlet	DA 第二出油口在进油口逆时针转135° The second outlet is to counterclockwise rotation of 135° from inlet	第二出油口在进油口对侧 The second outlet is the opposition side of inlet.
	DB 第二出油口在进油口逆时针转45° The second outlet is to counterclockwise rotation of 45° from inlet	第二出油口在进油口逆时针转90° The second outlet is to counterclockwise rotation of 90° from inlet
	DC 第二出油口在进油口顺时针转45° The second outlet is to clockwise rotation of 45° from inlet	第二出油口在进油口同侧 The second outlet is the same side of inlet.
	DD 第二出油口在进油口顺时针转135° The second outlet is to clockwise rotation of 135° from inlet	第二出油口在进油口顺时针转90° The second outlet is to clockwise rotation of 90° from inlet

安装连接尺寸 Installation sizes

SQP21法兰安装型 SQP21 Flange mounting

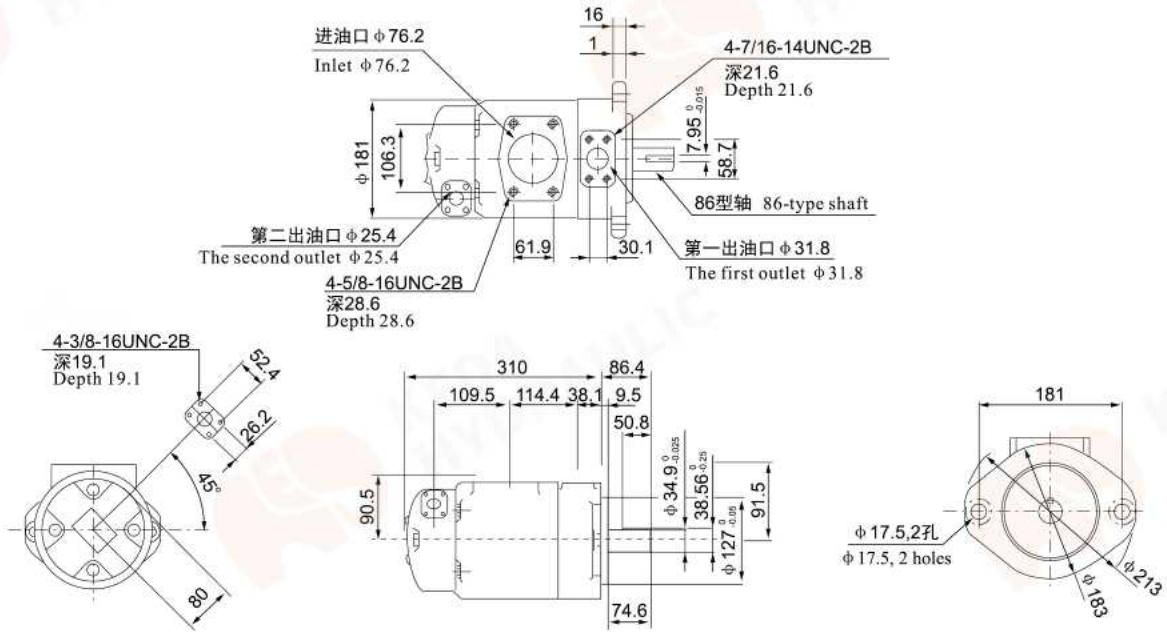


SQP31 法兰安装型 SQP31 Flange mounting



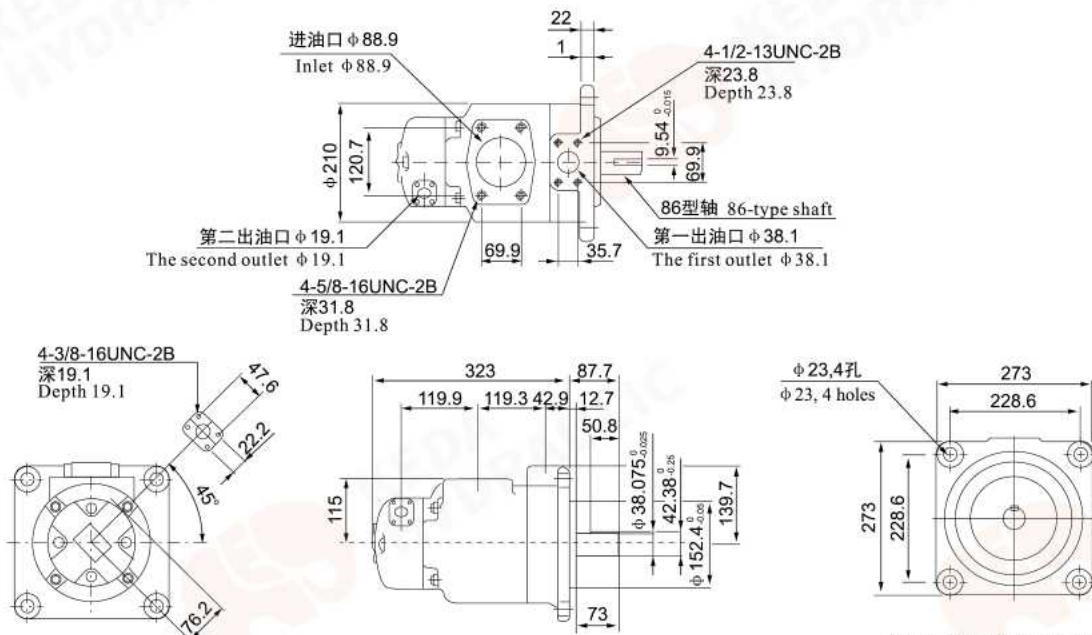
安装连接尺寸 Installation sizes

SQP32法兰安装型 SQP32 Flange mounting



其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

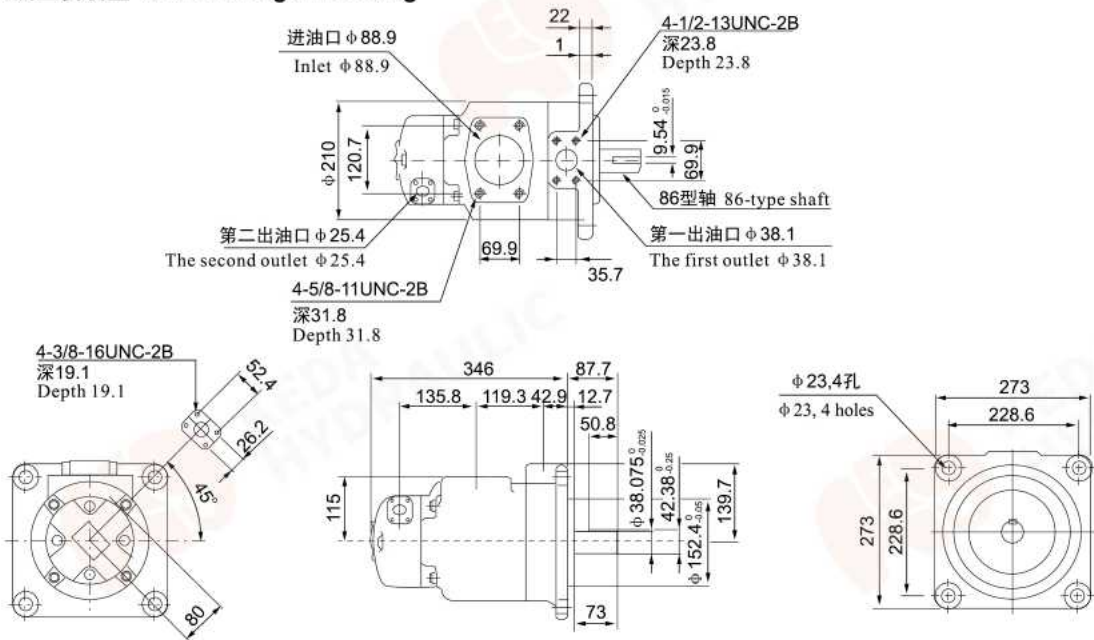
SQP41法兰安装型 SQP41 Flange mounting



其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

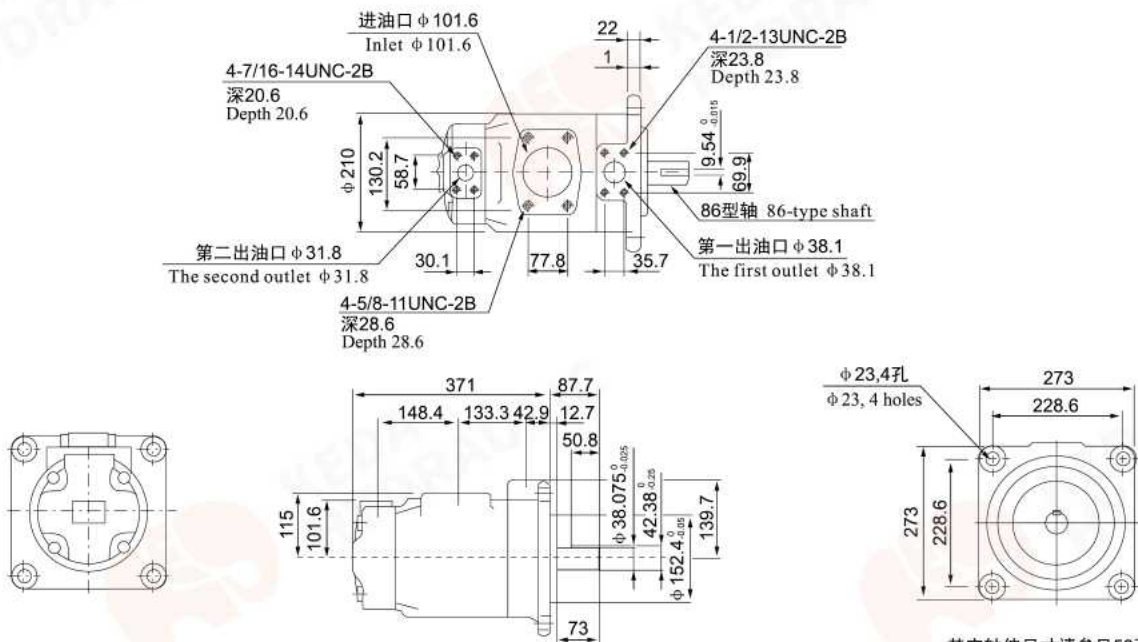
安装连接尺寸 Installation sizes

SQP42法兰安装型 SQP42 Flange mounting



其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

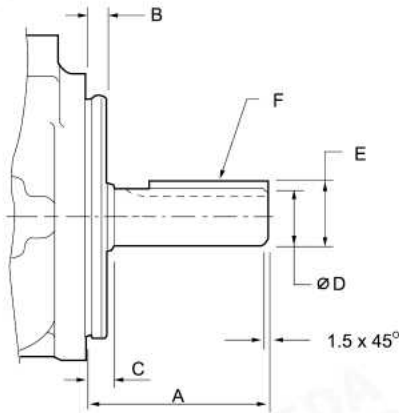
SQP43 法兰安装型 SQP43 Flange mounting



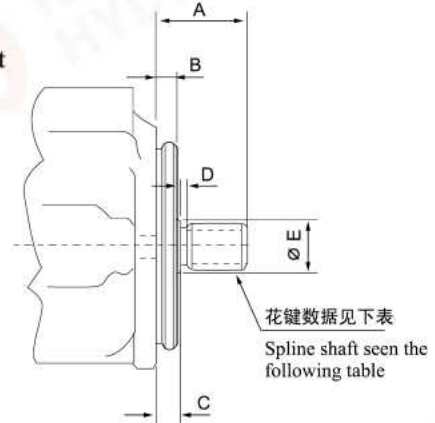
其它轴伸尺寸请参见53页
Please refer to shaft extension sizes in page 53 for rest sizes

V/VQ/SQP系列叶片泵可选轴伸形式 V/VQ/SQP series vane pump shaft extension type

平键直轴
Straight shaft



花键轴
Spline shaft



平键直轴 Straight shaft with key

型号 Models			轴伸代号 Shaft code	A	B	C	D	E	F键宽×长 F key width × length
V	VQ	SQP							
20V	20VQ	SQP1	1	59	9.53	12.1	22.23/22.20	24.5/24.4	4.76×32
25V	25VQ	SQP2	1	59	9.53	11.1	22.23/22.20	24.5/24.4	4.76×32
2520V	2520VQ	SQP21	86	78	9.53	11.1	25.37/25.35	28.3/28.1	6.36×50.8
35V	35VQ	SQP3	1	73.2	9.53	11.1	31.75/31.70	35.36/34.10	7.94×38.1
352*V	352*VQ	SQP3*	86	86	9.53	11.1	34.90/34.67	38.6/38.3	7.94×54
45V	45VQ	SQP4	1	62	12.7	14.22	31.75/31.70	35.36/34.10	7.94×28.5
45**V	45**VQ	SQP4*	86	87.4	12.7	14.22	38.07/38.05	42.4/42.1	9.54×50.8

花键轴 Spline shaft

型号 Models		轴伸代号 Shaft code	A	B	C	D	E	花键数据 (见下表) Spline data (see the following table)
V	VQ							
20V	20VQ	151	41.1	9.53	11.1	3.9	27.8	A
25V	25VQ	11	44.5	9.53	11.1	3.9	27.8	A
2520V	2520VQ							
35V	35VQ	11	58.7	9.53	11.1	6.35	35.1	C
352*V	352*VQ							
45V	45VQ	11	61.9	12.7	14.3	9.7	39.6	C
45**V	45**VQ							

花键数据表 (渐开线花键) Spline data (Involute spline)

花键数据标记 Spline data tags	齿数 Teeth No	径节 Diametral pitches	大径 Major diameters	成形直径 Forming diameters	小径 Minor diameters	平齿根配合 Match with flat teeth
A	13	16/32	22.17 22.15	19.03	18.63 18.35	大径配合 Match with major diameter
C	14	12/24	31.7 31.67	27.2	26.99 26.64	大径配合 Match with major diameter