# VQH系列叶片泵 VQH Series - Low Noise vane pump

## 工业用子母叶片泵
## Intra-vane Pump for Industry Application

## VQ单泵 VQ Series Vane Pumps

PIONEER FLURD POWER

产品外观及介绍

本系列是专为工程机械开发的高压高性能子母叶片泵，适用于工程机械，尤其是行走机械。

功能特点：

1，结构设计为子母叶片，最大程度降低了叶片对定子的高压冲击，在中高压和高转速下，性能更稳定，寿命更长。

2，采用浮动侧板，自动补偿间隙，达到压力平衡，实现高转速，高压力，最高达到21MPa。

3，侧板采用双金属挠性材料，提高抗咬合性能，排量齐全，插装式结构的泵芯，高精度的零部件，使用灵活，维修方便。Products introduction

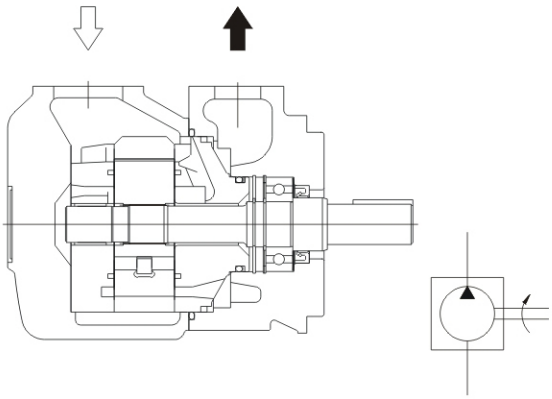
VQ series is intra-vane pump with high performance and high pressure which designed for constraction machinery especially for mobile machinery.

Features:

1, Designed by intra-vane structure,reduce the vane pressure to rotor, makes stable performance and longer life in high speed and pressure.

2,To adopt folating structure for side plate,will do a compensation for end-face clearance by automatic, makes high speed and high pressure which can up to 21 Mpa.

3,The plate is made of dual-metal material,improved the seizure resistance. Complete displacement,composite structure and high pricise spare parts allows convenient maintenance.



## (F3-) 25VQH 21 A-1 A 22 R

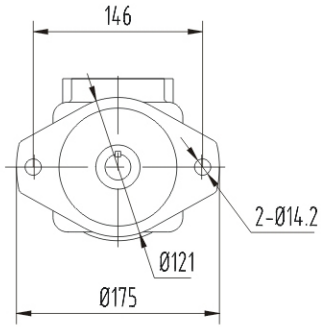
| (F3-) | **V | ** | A | (F) | * | * | 22 | * |
|---|---|---|---|---|---|---|---|---|
| | 系列号 Series designation | 流量代号 Flow code | 油口连接 port connections | 安装方式 Mountiing | 轴伸形式 Shaft type | 出油口位置 Outlet positions | 设计号 Design number | 旋转方向 Rotation |
| 无要求可省略 Omit if not required<br>F3-氟橡胶密封 Viton seals | 25VQH | 10、12、14、15<br>17、19、21、25 | A-SAE4 螺栓连接<br>A-SAE 4 bolt flange | 无标记-法兰安装 Omit flange nounting<br>F-脚座安装 F- Foot mounting | -1-平键 -1-strkey<br>-86 重载平键 -86 HDsyrkey<br>-11(151) 花键 -11(151) Spline | A-在进油口对面<br>B-在进油口逆时针旋转90°<br>C-在进油口同侧<br>D-在进油口顺时针旋转90°<br>A-opposite intet pott port<br>B-90° CCW from inlet<br>C-inline with inlet<br>D-90° CW from inlet | 22 | 从轴端看 Viewed from shaft end of pump<br>R-右旋，可省略 CW<br>L-左旋，CCW |
| | 35VQH | 21、25、30、32<br>35、38 | | | | | | |
| | 45VQH | 35、42、45、50<br>57、60、66、75 | | | | | | |

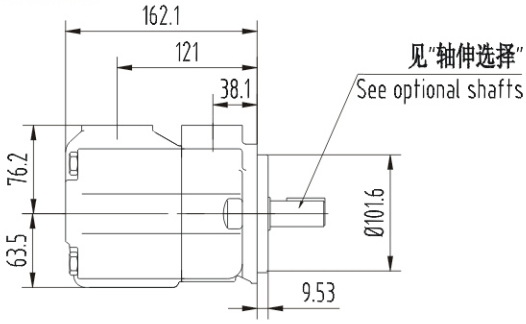
# □ 25VQH技术参数 Technical Data

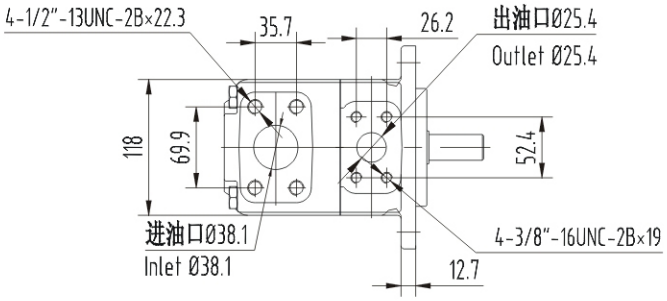
| 系列号 Series designtion | △代 号 Code USgpm | 理论排量 Geometric displacement ml/r(in³/r) | 最高连续使用压力 Max. continuous pressure MPa | 最高压力 Max. pressure MPa | 最高转速 Max. speed rpm |
|---|---|---|---|---|---|
| 25VSH | 10 | 32 (1.95) | 24 | 26.5 | 2700 |
| | 12 | 38 (2.32) | 24 | 26.5 | 2700 |
| | 14 | 43.5 (2.65) | 24 | 26.5 | 2700 |
| | 15 | 47 (2.89) | 24 | 26.5 | 2700 |
| | 17 | 54 (3.30) | 24 | 26.5 | 2700 |
| | 19 | 60 (3.66) | 24 | 26.5 | 2700 |
| | 21 | 67 (4.13) | 24 | 26.5 | 2700 |
| | 25 | 81 (4.94) | 24 | 26.5 | 2700 |

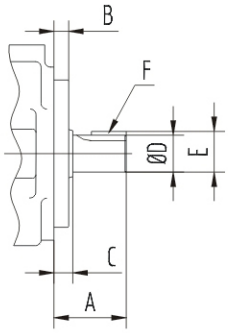
△ 代号是在1200rpm和0.7MPa下的额定流量 (USgpm) Flow (USgpm) at 1200rpm and 0.7MPa

25VQH



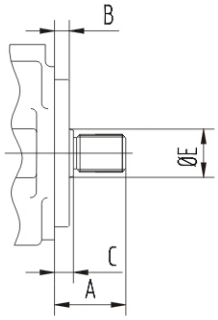




□轴伸选择 Optional Shafts　　平键轴伸 Straight key shaft type

| 型号 Model | 轴伸代号 Shaft code | A | B | C | ØD | E | F 键宽×长度 F(Key)width×length |
|---|---|---|---|---|---|---|---|
| 25VQH | 1 | 59 | 9.53 | 11.1 | 22.23/22.20 | 24.5/24.4 | 4.75×32 |
| | 86 | 78 | 9.53 | 11.1 | 25.37/25.35 | 28.3/28.1 | 6.36×50.8 |




轴伸选择 Optional Shafts　　花键轴伸 Splined shaft type

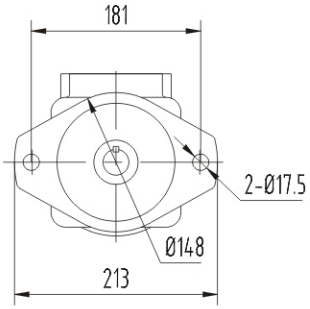
| 型号 Model | 轴伸代号 Shaft code | A | B | C | D | ØE | 花键参数表 Spline data table | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 齿数 Number of teeth | 径节 Pitch | 齿顶圆直径 Major diameter | 基圆直径 Form diameter | 齿根圆直径 Minor diameter | 配合形式 Suitable for |
| 25VQH | 11 | 44.5 | 9.53 | 11.1 | 3.9 | 27.8 | 13 | 16/32 | 22.17/22.15 | 19.03 | 18.63/18.35 | 齿顶Tooth tip |

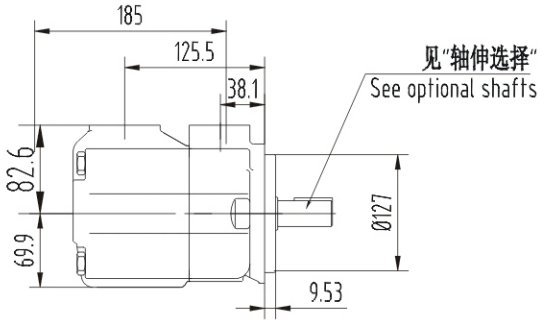
# □ 35VQH技术参数 Technical Data

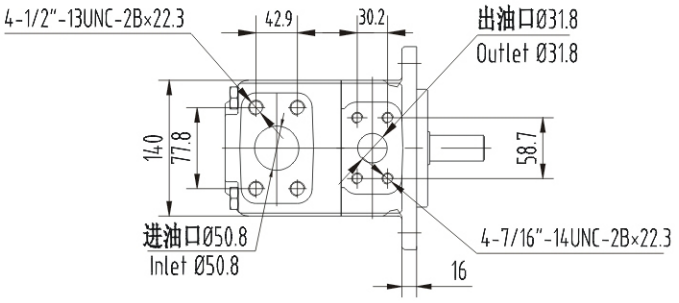
| 系列号 Series designtion | △代 号 Code USgpm | 理论排量 Geometric displacement ml/r(in³/r) | 最高连续使用压力 Max. continuous pressure MPa | 最高压力 Max. pressure MPa | 最高转速 Max. speed rpm |
|---|---|---|---|---|---|
| 35VQH | 25 | 81 (4.94) | 23 | 25 | 2500 |
| | 30 | 95 (5.80) | 23 | 25 | 2500 |
| | 32 | 101 (6.16) | 23 | 25 | 2500 |
| | 35 | 109 (6.65) | 23 | 25 | 2400 |
| | 38 | 119 (7.26) | 23 | 25 | 2400 |

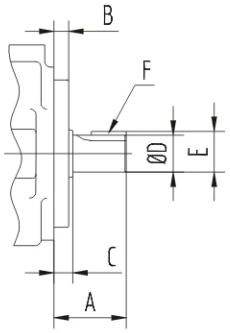
△ 代号是在1200rpm和0.7MPa下的额定流量 (USgpm) Flow (USgpm) at 1200rpm and 0.7MPa

35VQH



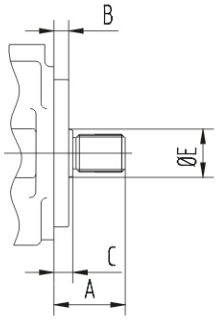




□轴伸选择 Optional Shafts　　平键轴伸 Straight key shaft type

| 型号 Model | 轴伸代号 Shaft code | A | B | C | ØD | E | F 键宽×长度 F(Key)width×length |
|---|---|---|---|---|---|---|---|
| 35VQH | 1 | 73.2 | 9.53 | 11.1 | 31.75/31.70 | 35.36/35.10 | 7.94×38.1 |
| | 86 | 86 | 9.53 | 11.1 | 34.90/34.87 | 38.6/38.3 | 7.94×54 |




轴伸选择 Optional Shafts　　花键轴伸 Splined shaft type

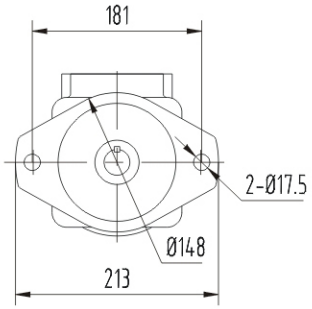
| 型号 Model | 轴伸代号 Shaft code | A | B | C | D | ØE | 花键参数表 Spline data table | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 齿数 Number of teeth | 径节 Pitch | 齿顶圆直径 Major diameter | 基圆直径 Form diameter | 齿根圆直径 Minor diameter | 配合形式 Suitable for |
| 35VQH | 11 | 58.7 | 9.53 | 11.1 | 6.35 | 35.1 | 14 | 12/24 | 31.70/31.67 | 27.2 | 26.99/26.64 | 齿顶Tooth tip |

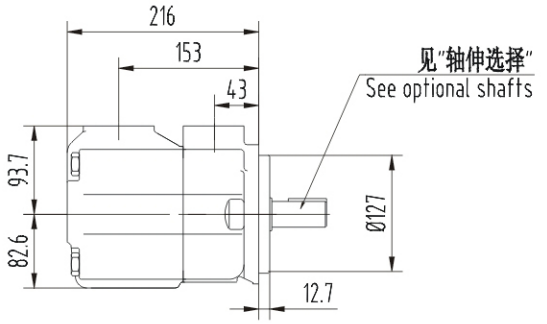
# □ 45VQH技术参数 Technical Data

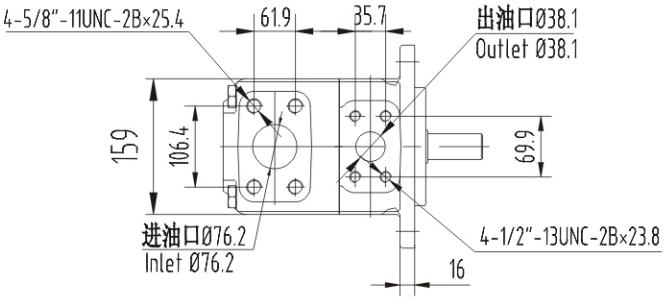
| 系列号 Series designtion | △代 号 Code USgpm | 理论排量 Geometric displacement ml/r(in³/r) | 最高连续使用压力 Max. continuous pressure MPa | 最高压力 Max. pressure MPa | 最高转速 Max. speed rpm |
|---|---|---|---|---|---|
| 45VQH | 45 | 143 (8.72) | 23 | 25 | 2200 |
| | 50 | 159 (9.70) | 23 | 25 | 2200 |
| | 57 | 181 (11.05) | 23 | 25 | 2200 |
| | 60 | 189 (11.53) | 21 | 25 | 2200 |

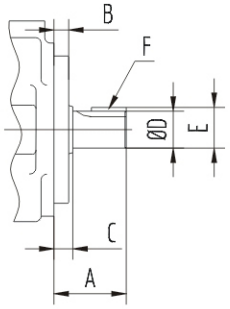
△ 代号是在1200rpm和0.7MPa下的额定流量 (USgpm) Flow (USgpm) at 1200rpm and 0.7MPa

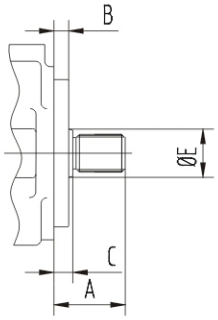
45VQH




□轴伸选择 Optional Shafts　　平键轴伸 Straight key shaft type

| 型号 Model | 轴伸代号 Shaft code | A | B | C | ØD | E | F 键宽×长度 F(Key)width×length |
|---|---|---|---|---|---|---|---|
| 45VQH | 1 | 62 | 12.7 | 14.22 | 31.75/31.70 | 35.36/35.10 | 7.94×28.5 |
| | 86 | 87.4 | 12.7 | 14.22 | 38.07/38.05 | 42.4/42.1 | 9.53×50.8 |

轴伸选择 Optional Shafts　　花键轴伸 Splined shaft type

| 型号 Model | 轴伸代号 Shaft code | A | B | C | D | ØE | 花键参数表 Spline data table | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 齿数 Number of teeth | 径节 Pitch | 齿顶圆直径 Major diameter | 基圆直径 Form diameter | 齿根圆直径 Minor diameter | 配合形式 Suitable for |
| 45VQH | 11 | 61.9 | 12.7 | 14.3 | 9.7 | 39.6 | 14 | 12/24 | 31.7/31.67 | 27.2 | 26.99/26.64 | 齿顶Tooth tip |