Service Data

Vickers®

Vane Pumps



High Pressure, High Performance Double Vane Pump

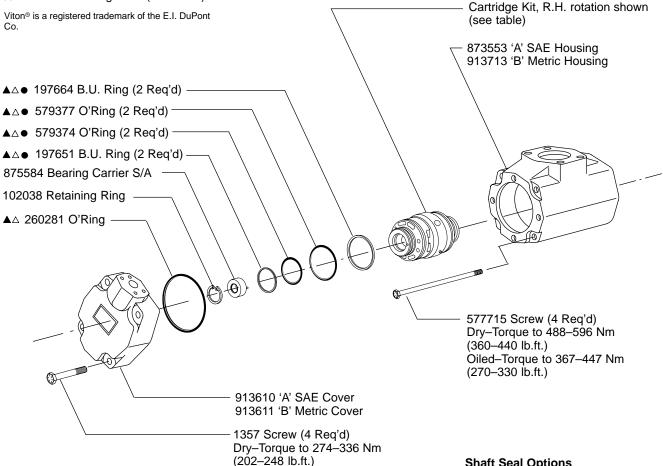
4535VPF Series -21 Design



NOTE: Lubricate all parts and seals with a thin coat of oil at assembly.

Parts prefixed with symbols are available only in kits.

- Included in Cartridge Kits (see table).
- ▲ 02-160550 STD Seal Kit, Single Shaft Seal or 02-160551 Viton® Seal Kit, Single Shaft Seal
- △ 02–160552 STD Seal Kit, Double Shaft Seal or 02-160553 Viton® Seal Kit, Double Shaft Seal
- ★ Included in Flange Kits (See table).



Oiled-Torque to 206-252 Nm

(152-186 lb.ft.)

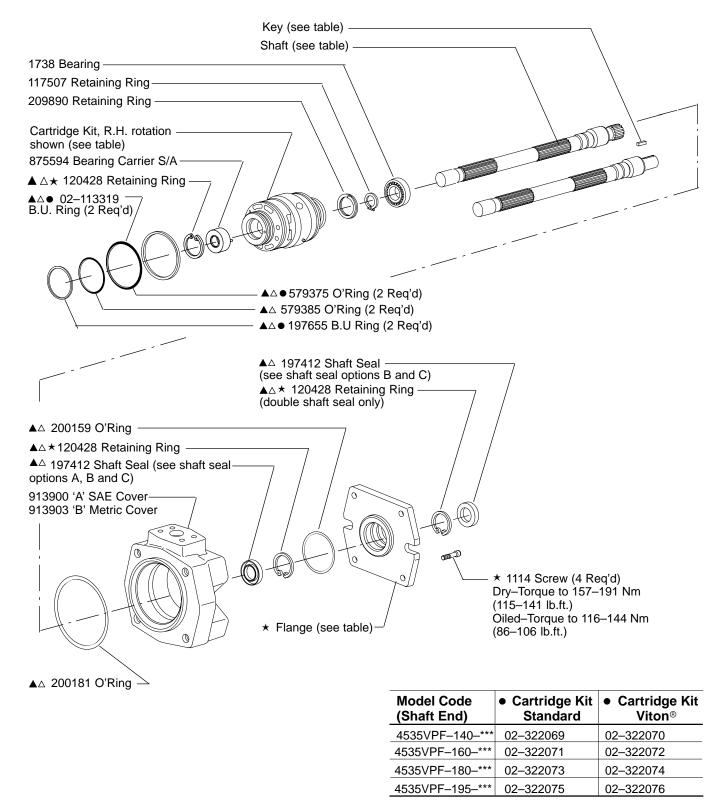
To reverse Cartridge rotation remove Retaining Ring and Bearing Carrier S/A. Install Bearing Carrier S/A and Retaining Ring in opposite end of Cartridge and reinstall Cartridge facing in opposite direction. For R.H. rotation the end of the Cartridge with screw heads showing will be installed toward the cover end. For L.H. rotation the end of the Cartridge with screw heads showing will be installed toward the shaft end.

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Shaft Seal Options

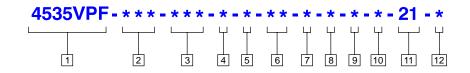
- A Primary seal only: spring loaded sealing member facing inward.
- **B** Primary and secondary seals: primary seal with spring loaded sealing member facing inward and secondary seal with spring loaded sealing member facing outward.
- C Primary and secondary seals: both with spring loaded sealing member facing inward.

Model Code (Cover End)	Cartridge Kit Standard	Cartridge Kit Viton®
4535VPF-***-090	02–322011	02–322012
4535VPF-***-100	02-322013	02-322014
4535VPF-***-112	02–322015	02–322016
4535VPF-***-125	02-322017	02-322018
4535VPF-***-135	02-322019	02-322020



	★ Flange Kit		
Flange Type	Single Shaft Seal	Double Shaft Seal	
SAE J744-127-2 (SAE C)	02-142497	02-142501	
ISO 3019/2-125A2HW	02-142498	02-142502	
SAE J744 152-2 (SAE D)	02-142499	02-142503	
ISO 3019/2-160A2HW	02-142500	02-142504	

Model Code	Shaft	Key
4535VPF-***-**-*-01	928558	928542
4535VPF-***-**-*-02	928560	_
4535VPF-***-**-*-03	928561	928547
4535VPF-***-**-*-05	928562	928543
4535VPF-***-**-*-06	877159	_



Series designation (frame size)

4535VPF - 230 to 330 cm³/r (14.03 to 20.14 in³/r)

2 Displacement – front section

 $140 - 140 \text{ cm}^3/\text{r} (8.54 \text{ in}^3/\text{r})$ $160 - 160 \text{ cm}^3/\text{r} (9.76 \text{ in}^3/\text{r})$

 $180 - 180 \text{ cm}^3/\text{r} (10.98 \text{ in}^3/\text{r})$

 $195 - 195 \text{ cm}^3/\text{r} (11.90 \text{ in}^3/\text{r})$

3 Displacement - rear section

 $090 - 90 \text{ cm}^3/\text{r} (5.49 \text{ in}^3/\text{r})$

 $100 - 100 \text{ cm}^3/\text{r} (6.10 \text{ in}^3/\text{r})$

 $112 - 112 \text{ cm}^3/\text{r} (6.83 \text{ in}^3/\text{r})$

 $125 - 125 \text{ cm}^3/\text{r} (7.625 \text{ in}^3/\text{r})$

 $135 - 135 \text{ cm}^3/\text{r} (8.24 \text{ in}^3/\text{r})$

4 Port connection

A - SAE 4-bolt flange

B - Metric 4-bolt flange

5 Flange mounting style

A - SAE J744 127-2 (SAE C)

B - ISO 3019/2 125A2HW

C - SAE J744 152-2 (SAE D)

D - ISO 3019/2 160A2HW

6 Shaft end

01 - SAE J744 38-1 (1.50 in keyed shaft)

02 - SAE J744 38-4 (C-C splined shaft)

03 - ISO 3019/2 E40N (40mm keyed shaft)

05 - SAE J744 44-1 (1.75 in keyed shaft)

06 - SAE J744 44-4 (D splined shaft)

Shaft seal

A - Single, primary

B - Double, secondary (spring side out)

C - Double, secondary (spring side in)

8 Seal type

N - Standard, Buna N

V - Viton®

W - Buna N with Viton® shaft seal(s)

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Outlet port no. 1 position (viewed from cover end)

A - Opposite inlet port.

B – 90° counterclockwise from inlet port.

C - Inline with inlet port.

D -90° clockwise from inlet port.

Outlet port no. 2 position (viewed from cover end)

A – 135° counterclockwise from inlet port.

B – 45° counterclockwise from inlet port.

C - 45° clockwise from inlet port.

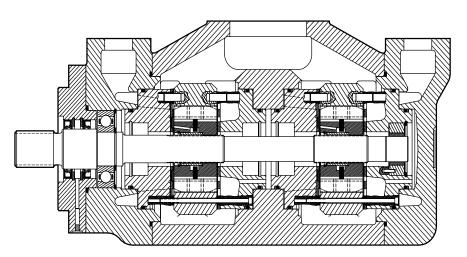
D - 135° clockwise from inlet port.

11 Design

12 Rotation (viewed from shaft end)

R - Right hand (clockwise)

L - Left hand (counterclockwise)



Typical sectional view

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