Service Data

**Vickers**®

## **Vane Pumps**



# **High Pressure, High Performance Double Vane Pump**

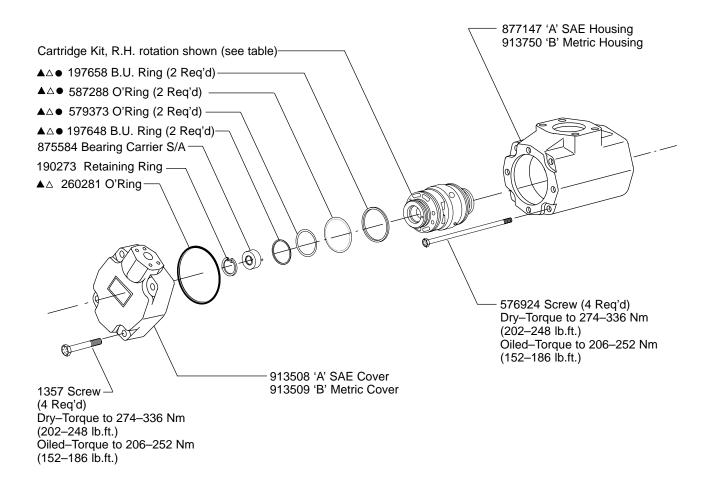
3525VPF Series -21 Design





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 showing will be installed toward the shaft end.

Model Code (Cover End)	●Cartridge Kit Standard	• Cartridge Kit Viton®
3525VPF-010	02-319101	02-319102
3525VPF-016	02–319103	02-319104
3525VPF-025	02–319105	02–319106
3525VPF-032	02-319107	02-319108
3525VPF-040	02-319109	02-319110
3525VPF-050	02–319111	02-379112
3525VPF-063	02-319113	02-319114
3525VPF-071	02–319115	02–319116
3525VPF-080	02–319117	02–319118



Parts prefixed with symbols are available only in kits.

- ▲ Available in 02-160542 Std Seal Kit, Single Shaft Seal or 02-160543 Viton® Seal Kit, Single Shaft Seal only.
- △ Available in 02-160544 Std Seal Kit, Double Shaft Seal or 02-160545 Viton® Seal Kit, Double Shaft Seal only.
- ★ Included in Flange Kits (see table).
- Included in Cartridge Kits (see table).
   Viton® is a registered trademark of the

E.I. DuPont Co.

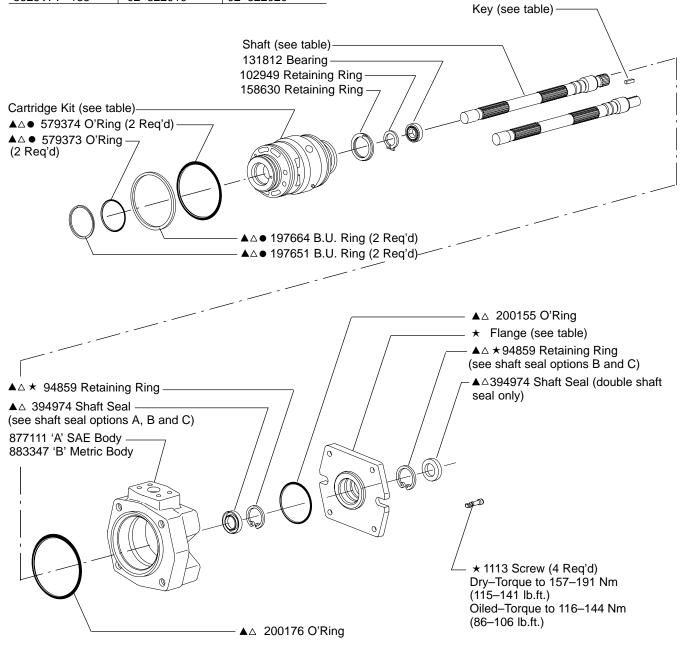
NOTE: Lubricate all parts and seals with a thin coat of oil at assembly.

#### **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.

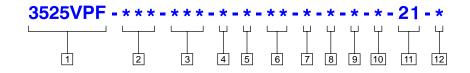
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Model Code (Shaft End)	Cartridge Kit     Standard	Cartridge Kit     Viton®
3525VPF-090-***	02–322011	02-322012
3525VPF-100-***	02-322013	02-322014
3525VPF-112-***	02–322015	02-322016
3525VPF-125-***	02–322017	02-322018
3525VPF-135-***	02-322019	02-322020



	★ Flange Kit	
Flange Type	Single Shaft Seal	Double Shaft Seal
SAE J744-127-2 (SAE C)	02-142488	02–142491
ISO 3019/2-125A2HW	02–142489	02–142492
SAE J744 152–2 (SAE D)	02-142487	02–152288
ISO 3019/2-160A2HW	02-142490	02-142493

Model Code	Shaft	Key
3525VPF-***-**-*-01	913744	928541
3525VPF-***-**-*-02	913699	
3525VPF-***-**-*-*-03	913745	928546
3525VPF-***-**-*-05	913747	928542
3525VPF-***-**-*-06	877148	_
3525VPF-***-**-*-07	913748	928547



#### Series designation (frame size)

 $3525VPF - 100 \text{ to } 215 \text{ cm}^3/\text{r}$ (6.1 to 13.12 in<sup>3</sup>/r)

#### 2 Displacement - front section

090 - 90 cm $^3$ /r (5.49 in $^3$ /r) 100 - 100 cm $^3$ /r (6.10 in $^3$ /r) 112 - 112 cm $^3$ /r (6.83 in $^3$ /r) 125 - 125 cm $^3$ /r (7.63 in $^3$ /r) 135 - 135 cm $^3$ /r (8.24 in $^3$ /r)

#### 3 Displacement – rear section

016 -16 cm<sup>3</sup>/r (0.97 in<sup>3</sup>/r) 025 -25 cm<sup>3</sup>/r (1.52 in<sup>3</sup>/r) 032 -32 cm<sup>3</sup>/r (1.95 in<sup>3</sup>/r) 040 -40 cm<sup>3</sup>/r (2.44 in<sup>3</sup>/r) 050 -50 cm<sup>3</sup>/r (3.05 in<sup>3</sup>/r) 063 -63 cm<sup>3</sup>/r (3.84 in<sup>3</sup>/r) 071 -71 cm<sup>3</sup>/r (4.33 in<sup>3</sup>/r) 080 -80 cm<sup>3</sup>/r (4.88 in<sup>3</sup>/r)

010  $-10 \text{ cm}^3/\text{r} (0.61 \text{ in}^3/\text{r})$ 

#### 4 Port connection

A – SAE 4-bolt flangeB – 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

01 - SAE J744 32-1 (1.25 in keyed shaft)

02 - SAE J744 32-4 (C splined shaft)

03 - ISO 3019/2 E32N (32mm keyed shaft)

05 – SAE J744 38–1 (1.50 in keyed shaft)

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

07 – ISO 3019/2 E40N (40mm keyed shaft)

## 7 Shaft seal

A - Single, primary (spring side in)

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  $\,-\,90^{\circ}$  clockwise from inlet port

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

A – 135° counterclockwise from inlet port

B - 45° counterclockwise from inlet port

C  $\,-\,45^{\circ}$  clockwise from inlet port

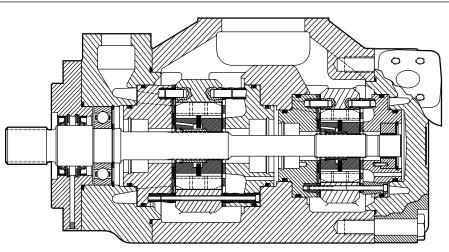
D  $\,-\,$  135 $^{\circ}$  clockwise from inlet port

### 11 Design

## 12 Rotation (viewed from shaft end)

R - Right hand (clockwise)

L - Left hand (counterclockwise)



Typical sectional view

**Eaton Hydraulics** 15151 Highway 5 Eden Prairie, MN 55344 Telephone: 612 937-7254 Fax: 612 937-7130 www.eatonhydraulics.com

46 New Lane, Havant Hampshire PO9 2NB England Telephone: (44) 170-548-6451 Fax: (44) 170-548-7110

