



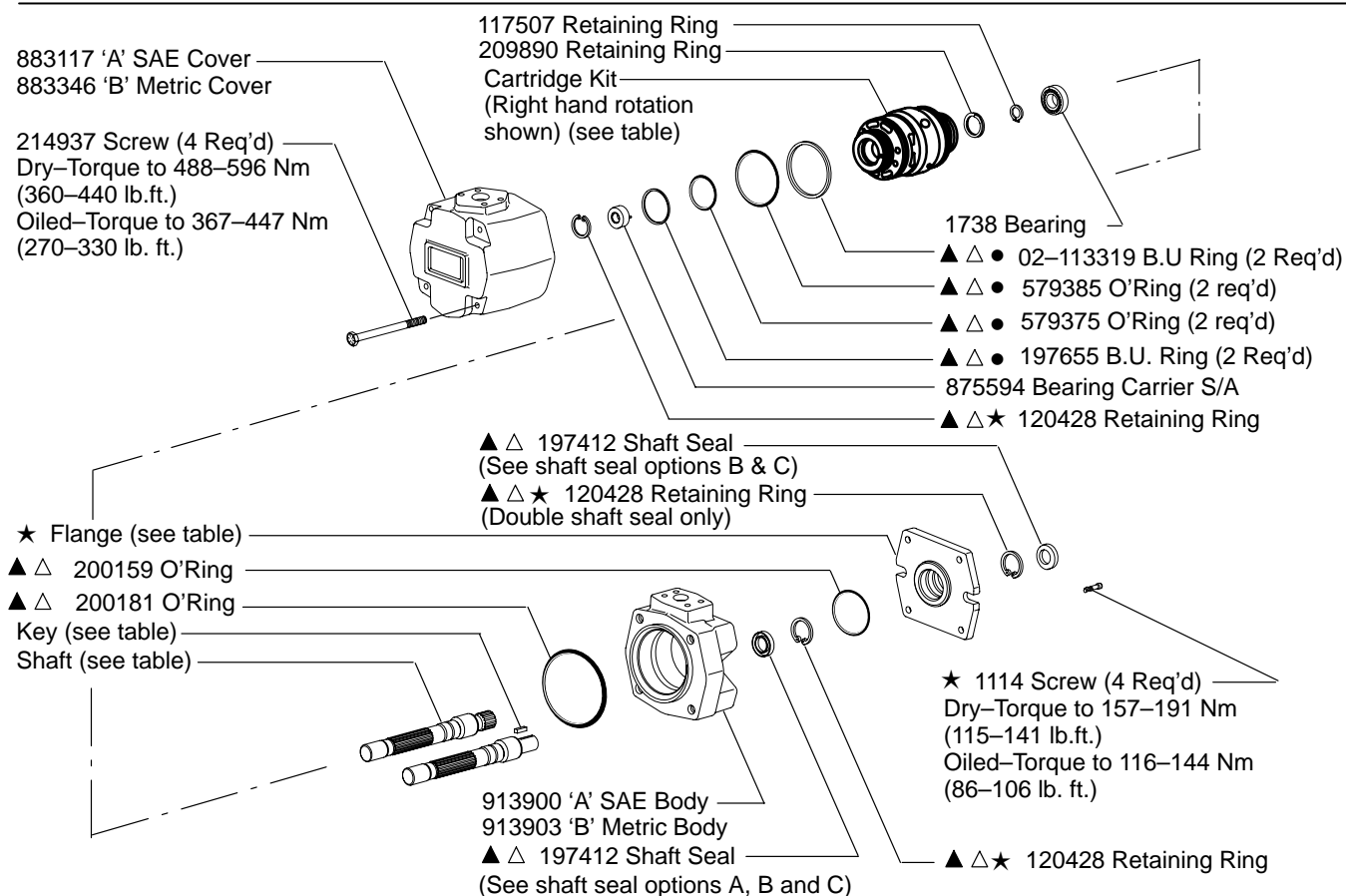
# **High Pressure, High Performance Vane Pump**

**45VPF Series – 21 Design**

## Service Data

# High Pressure, High Performance Vane Pump

## 45VPF Series – 21 Design



● Included in Cartridge Kit (see table)

★ Included in Flange Kit (see table)

Model Code	Shaft	Key
45VPF-***-***-*_*-01	883356	928542
45VPF-***-***-*_*-02	883357	—
45VPF-***-***-*_*-03	883358	928547
45VPF-***-***-*_*-05	883359	928543
45VPF-***-***-*_*-06	860370	—

NOTE: Lubricate all parts and seals with a thin coat of oil at assembly.  
Parts prefixed with symbols are available only in kits (see back page).

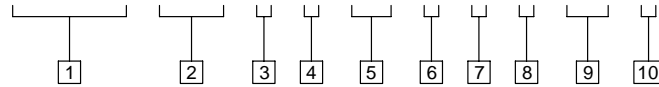
Flange Type	★ Flange Kit	
	Single Shaft Seal	Double Shaft Seal
SAE J744–127 (SAE C)	02–142497	02–142501
ISO 3019/2–125A2HW	02–142498	02–142502
SAE J744 152–2 (SAE D)	02–142499	02–142503
ISO 3019/2–160A2HW	02–142500	02–142504

Model Code	● Cartridge Kit (Standard)	● Cartridge Kit (Viton®)
45VPF–140	02–322069	02–322070
45VPF–160	02–322071	02–322072
45VPF–180	02–322073	02–322074
45VPF–195	02–322075	02–322076

Viton® is a registered trademark of E.I. DuPont Co.

# Model Code

**45VPF - \*\*\* - \* - \* - \* - \* - \* - \* - 21 - \***



## 1 Series designation (frame size)

45VPF – 140 to 195 cm<sup>3</sup>/r  
(8.54 to 11.90 in<sup>3</sup>/r)

## 2 Displacement

140 – 140 cm<sup>3</sup>/r (8.54 in<sup>3</sup>/r)  
160 – 160 cm<sup>3</sup>/r (9.76 in<sup>3</sup>/r)  
180 – 180 cm<sup>3</sup>/r (10.98 in<sup>3</sup>/r)  
195 – 195 cm<sup>3</sup>/r (11.90 in<sup>3</sup>/r)

## 3 Port connection

A – SAE 4-bolt flange  
B – Metric 4-bolt flange

## 4 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

## 5 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)

## 6 Shaft seal

A – Single, primary  
B – Double, secondary (spring side out)  
C – Double, secondary (spring side in)

## 7 Seal type

N – Standard, Buna N  
V – Viton®  
W – Buna N with Viton® shaft seal(s)

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## 8 Outlet port 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

## 9 Design

## 10 Rotation (viewed from shaft end)

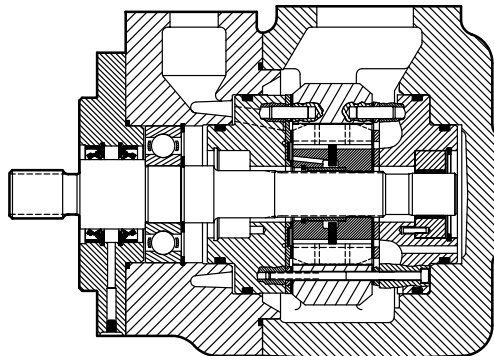
R – Right hand (clockwise)  
L – Left hand (counterclockwise)

- ▲ 02–142427 STD Seal Kit, Single Shaft Seal or  
02–142429 Viton® Seal Kit, Single Shaft seal.
- △ 02–142428 STD Seal Kit, Double Shaft Seal or  
02–142430 Viton® Seal Kit, Double Shaft Seal.

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.

## Shaft Seal Option

**A** – Primary seal only: 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.



Typical sectional view

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