

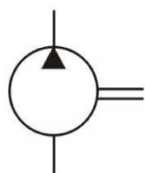
SINGLE FIXED DISPLACEMENT 45V SERIES



FEATURES

The Northman 45V Series pump is a fixed displacement, hydraulic balanced vane pump. This high performance intravane pump for industrial applications features high pressure capability with 12 vanes for low noise. The available flow ratings for the 45V series are from 42 GPM to 60 GPM at 1200 RPM. Viton seals are standard. Standard rotation is right-hand (clockwise), with left-hand rotation (counterclockwise) available ("L" option). The flange mounting is the SAE "C" two-bolt standard. The outlet port may be oriented in any one of four positions.

SYMBOL



MODEL CODE

45 **V** - **50** - **A** - **1** - **C** - ****** - **(L)**
[1] [2] [3] [4] [5] [6] [7] [8]

1 Series

45: 45 Series Fixed Vane Pump

2 Design Type

V: Industrial Design

3 GPM

Flow at 1200 RPM, 100 PSI:

42, 45, 50, 60

4 Ports

A: Inlet – 3" SAE, 4-Bolt Flange
Outlet – 1.5" SAE, 4-Bolt Flange

5 Shaft

1: 1-1/4" Dia., 0.3125 Sq. St. Key

11: 14 Tooth Spline

86: 1-1/2" Dia., 0.375 Sq. St. Key

6 Position of Outlet Port

(Viewed from Cover End)

A: Opposite Inlet

B: 90° CCW from Inlet

C: Inline with Inlet

D: 90° CW from Inlet

7 Design Number

8 Shaft Rotation

(Viewed from Shaft End)

No Code: Right Hand (CW)

L: Left Hand (CCW)

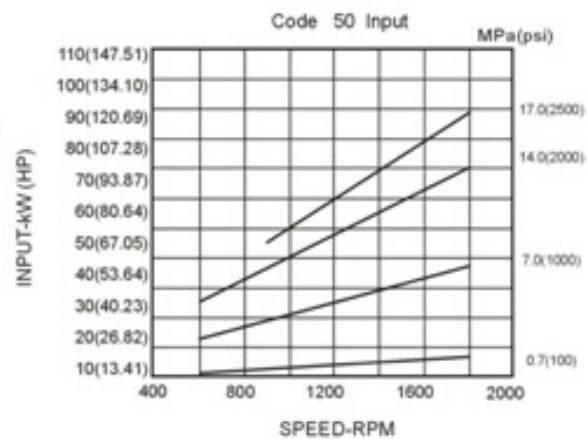
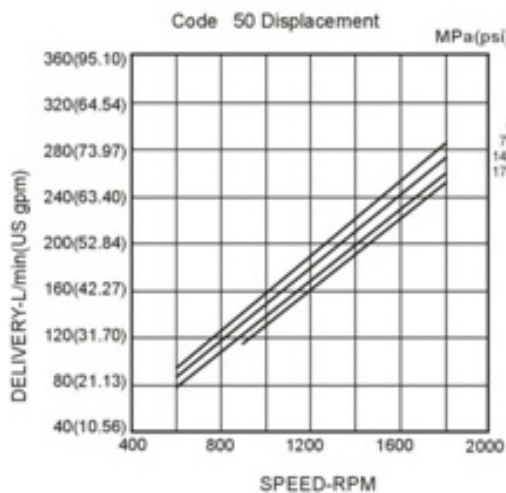
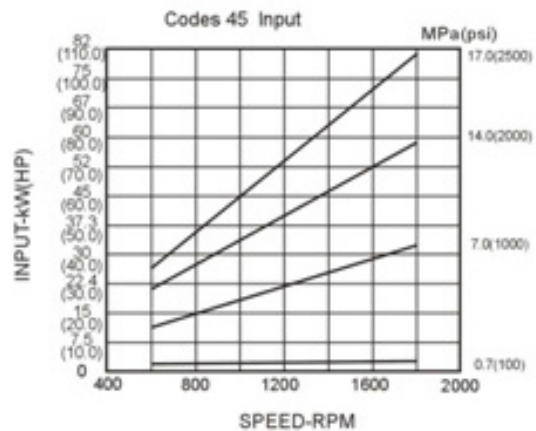
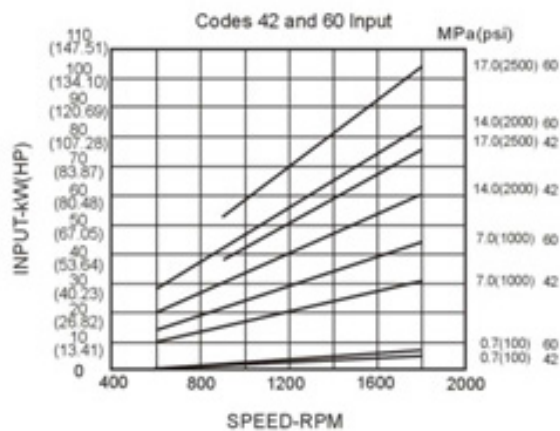
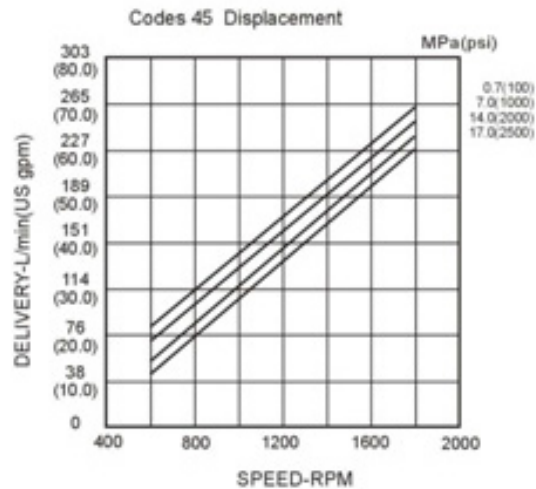
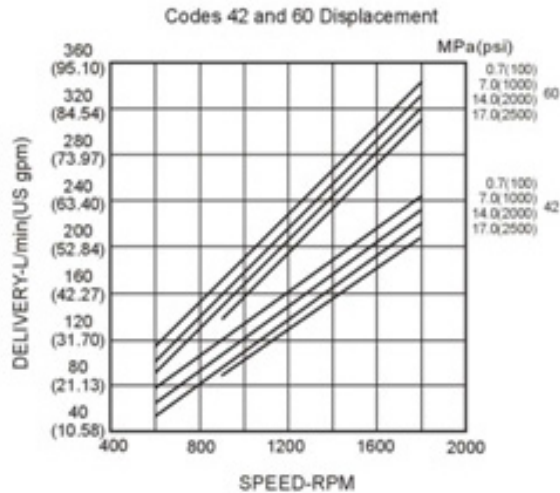
SINGLE FIXED DISPLACEMENT 45V SERIES

PERFORMANCE CURVES

45V Single Pump (Ring Size -42 & 60 GPM)

SAE 10W Fluid at 120°F.

Pump Inlet at 0° hg.



SINGLE FIXED DISPLACEMENT

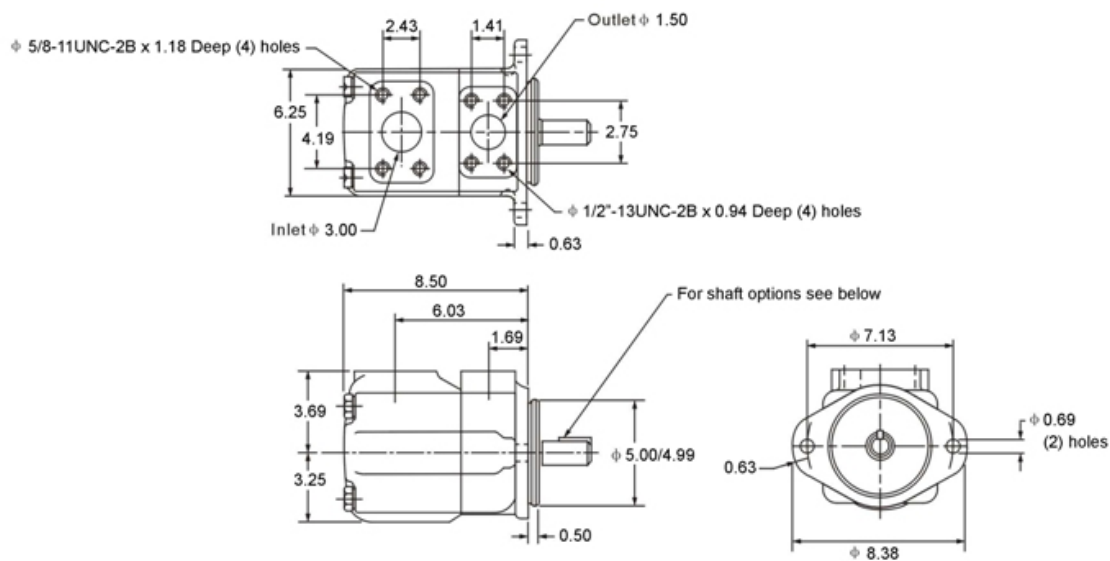
45V SERIES

SPECIFICATIONS

Based on Petroleum Oil: 120°F (49°C), Viscosity 150 SUS at 100°F (38°C), 0 Inlet PSI					
Model	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in ³ /r (cm ³ /r)	Max. Speed RPM	Max. Pressure PSI (BAR)	Weight Lbs (Kg)
45V	42	8.42 (138)	1800	2500 (172)	75.2 (34.1)
	45	8.66 (142)			
	50	9.89 (162)			
	60	11.78 (193)			

DIMENSIONS

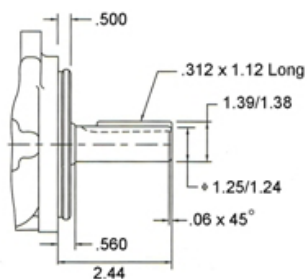
45V Single Pump - Dimensions in Inches



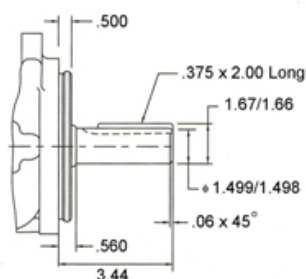
45V Shafts

Dimensions in inches

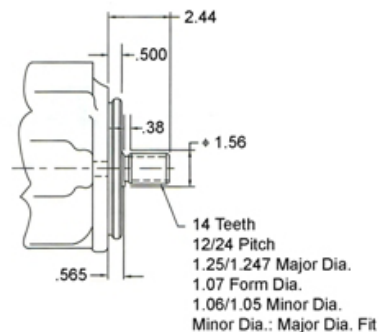
#1 Straight Shaft



#86 Straight Shaft



#11 Splined Shaft



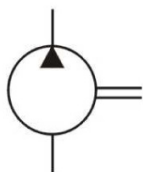
SINGLE FIXED DISPLACEMENT 45VQ SERIES



FEATURES

The Northman 45VQ Series pump is a fixed displacement, hydraulic balanced vane pump. This high performance intravane pump features the 10 vane design for the high pressure and speed requirements of mobile applications. The available flow ratings for the 45VQ series are from 42 GPM to 60 GPM at 1200 RPM. Viton seals are standard. Standard rotation is right-hand (clockwise), with left-hand rotation (counterclockwise) available ("L" option). The flange mounting is the SAE "C" two-bolt standard. The outlet port may be oriented in any one of four positions.

SYMBOL



Model Code

45 VQ - 50 - A - 1 - C - ** - (L)

1 2 3 4 5 6 7 8

1 Series

45: 45 Series Fixed Vane Pump

2 Design Type

VQ: Mobile Design

3 GPM

Flow at 1200 RPM, 100 PSI:

42, 45, 50, 60

4 Ports

A: Inlet - 3" SAE, 4-Bolt Flange

Outlet - 1.5" SAE, 4-Bolt Flange

5 Shaft

1: 1-1/4" Dia., 0.3125 Sq. St. Key

11: 14 Tooth Spline

86: 1-1/2" Dia., 0.375 Sq. St. Key

6 Position of Outlet Port

(Viewed from Cover End)

A: Opposite Inlet

B: 90° CCW from Inlet

C: Inline with Inlet

D: 90° CW from Inlet

7 Design Number

8 Shaft Rotation

(Viewed from Shaft End)

No Code: Right Hand (CW)

L: Left Hand (CCW)

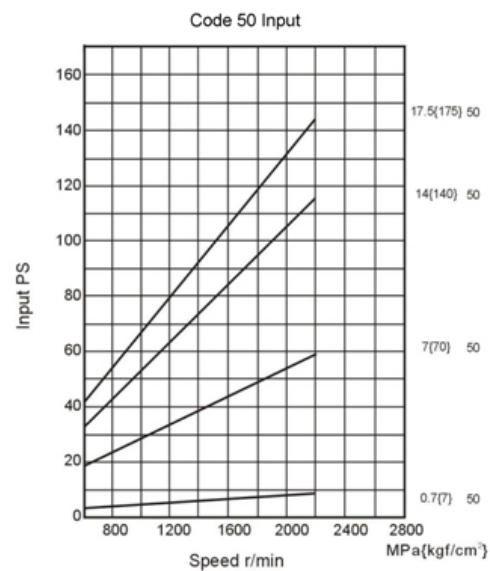
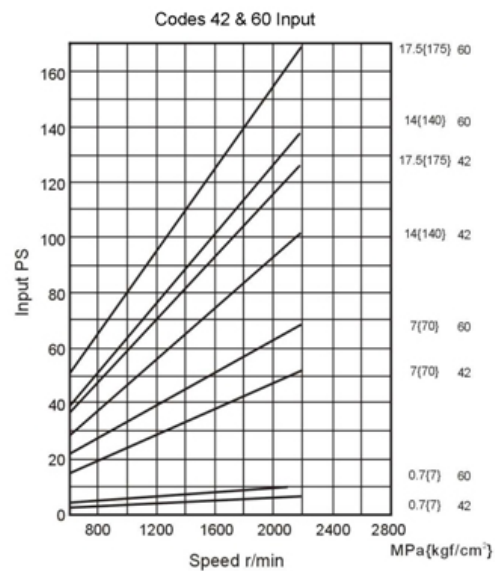
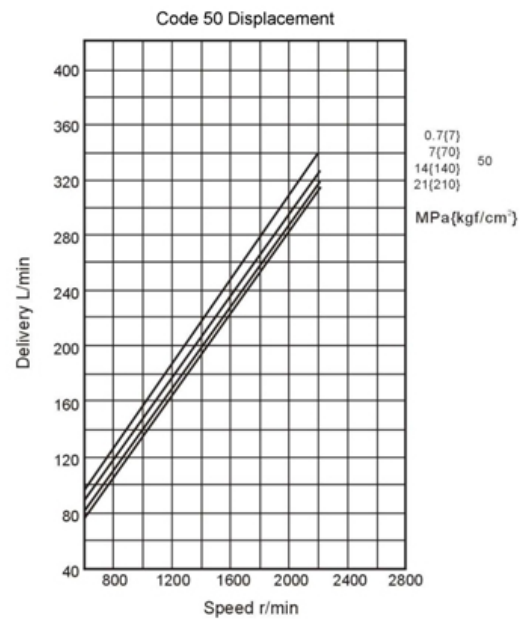
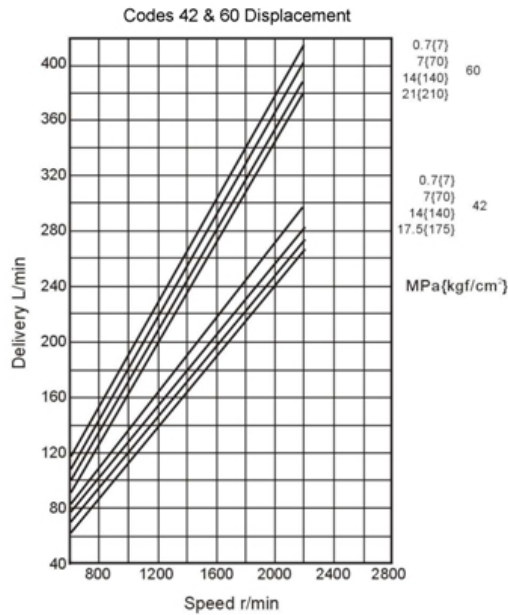
SINGLE FIXED DISPLACEMENT 45VQ SERIES

PERFORMANCE CURVES

45VQ Single Pump (Ring Size -50 GPM)

SAE 10W Fluid at 120°F.

Pump Inlet at 0° hg.



SINGLE FIXED DISPLACEMENT

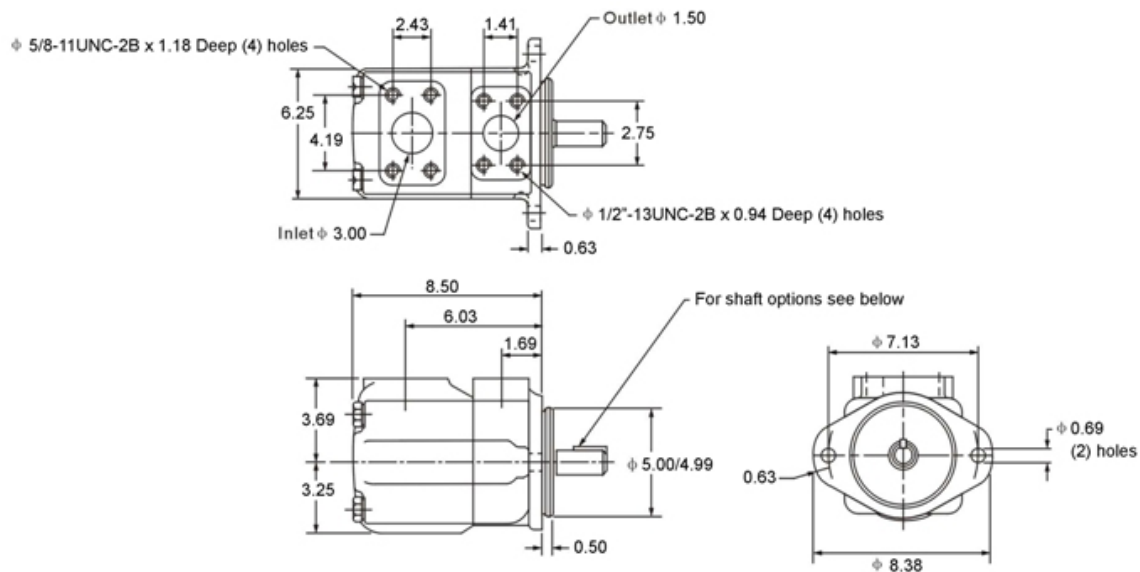
45VQ SERIES

SPECIFICATIONS

Based on Petroleum Oil: 120°F (49°C), Viscosity 150 SUS at 100°F (38°C), 0 Inlet PSI					
Model	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in³/r (cm³/r)	Max. Speed RPM	Max. Pressure PSI (BAR)	Weight Lbs (Kg)
45VQ	42	8.18 (134)	2400	2500 (172)	75.2 (34.1)
	45	8.97 (147)	2200		
	50	9.52 (156)			
	60	11.53 (189)			

Dimensions

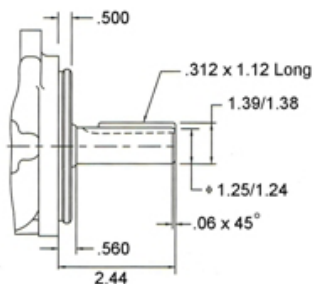
45VQ Single Pump - Dimensions in Inches



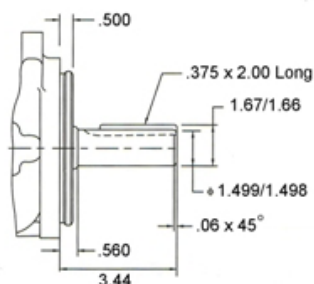
45VQ Shafts

Dimensions in inches

#1 Straight Shaft



#86 Straight Shaft



#11 Splined Shaft

