

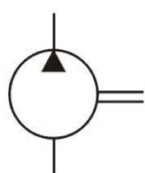
DOUBLE FIXED DISPLACEMENT 4535V SERIES

FEATURES

The Northman 4535V Series double 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 4535V series are from 42 GPM to 60 GPM at 1200 RPM on the shaft end and from 21 to 38 GPM at 1200 RPM on the cover end. 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

4535 **V** - **50** - **A** - **25** - **1** - **CC** - ****** - **(L)**

1
2
3
4
5
6
7
8
9

1 Series 4535: 4535 Fixed Double Pump	5 Cover End Pump <i>Flow at 1200 RPM, 100 PSI:</i> 21, 25, 30, 35, 38	7 Port Orientation (Cont.) <i>(Viewed from Cover End)</i> <u>With No. 1 Outlet Inline with Inlet</u> CA – No. 2 Outlet Opposite Inlet CB – No. 2 Outlet 90° CCW from Inlet CC – No. 2 Outlet Inline with Inlet CD – No. 2 Outlet 90° CW from Inlet
2 Design Type V: Industrial Design	6 Shaft 1: 1-1/4" Dia., 0.312 Sq. St. Key 11: 14 Tooth Spline 86: 1-1/2" Dia., 0.375 Sq. St. Key	<u>With No. 1 Outlet 90° CW FROM Inlet</u> DA – No. 2 Outlet Opposite Inlet DB – No. 2 Outlet 90° CCW from Inlet DC – No. 2 Outlet Inline with Inlet DD – No. 2 Outlet 90° CW from Inlet
3 Shaft End Pump <i>Flow at 1200 RPM, 100 PSI:</i> 42, 45, 50, 60	7 Port Orientation <i>(Viewed from Cover End)</i> <u>With No. 1 Outlet Opposite Inlet</u> AA – No. 2 Outlet Opposite Inlet AB – No. 2 Outlet 90° CCW from Inlet AC – No. 2 Outlet Inline with Inlet AD – No. 2 Outlet 90° CW from Inlet	8 Design Number
4 Ports A: Inlet – 4" SAE, 4-Bolt Flange Shaft End Outlet – 1.5" SAE, 4-Bolt Flange Cover End Outlet – 1.25" SAE, 4-Bolt Flange	<u>With No. 1 Outlet 90° CCW from Inlet</u> BA – No. 2 Outlet Opposite Inlet BB – No. 2 Outlet 90° CCW from Inlet BC – No. 2 Outlet Inline with Inlet BD – No. 2 Outlet 90° CW from Inlet	9 Shaft Rotation <i>(Viewed from Shaft End)</i> No Code: Right Hand (CW) L: Left Hand (CCW)

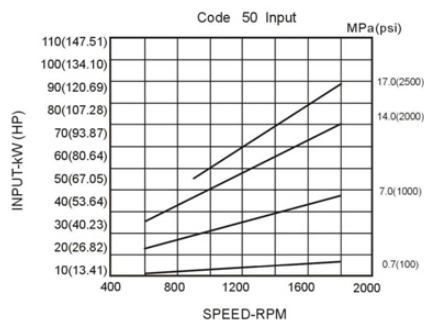
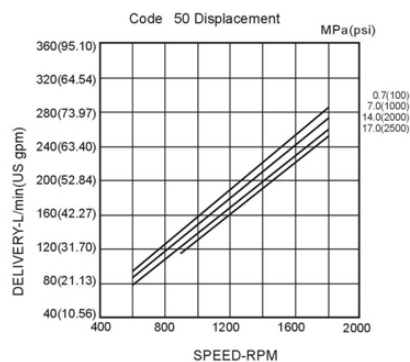
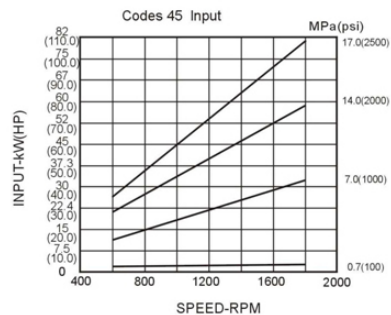
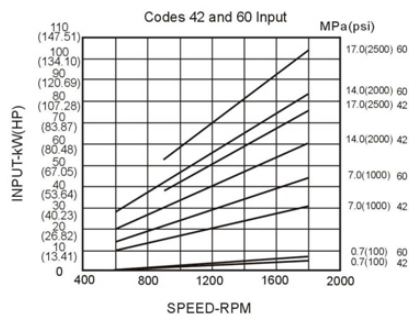
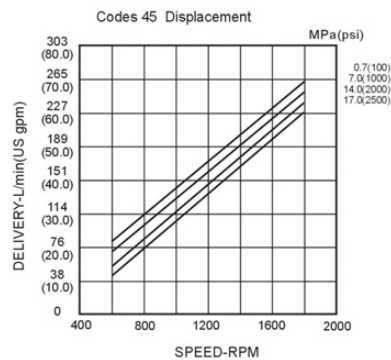
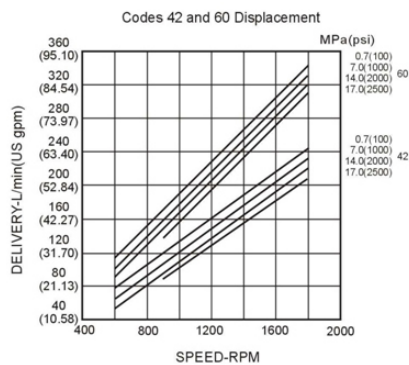
DOUBLE FIXED DISPLACEMENT 4535V SERIES

PERFORMANCE CURVES

4535V Double Pump

SAE 10W Fluid at 120°F.

Pump Inlet at 0" hg.



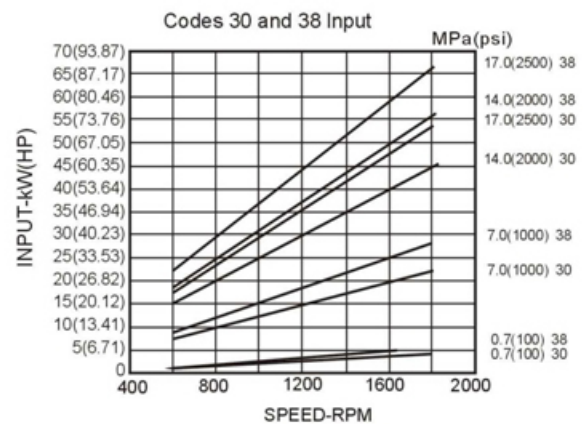
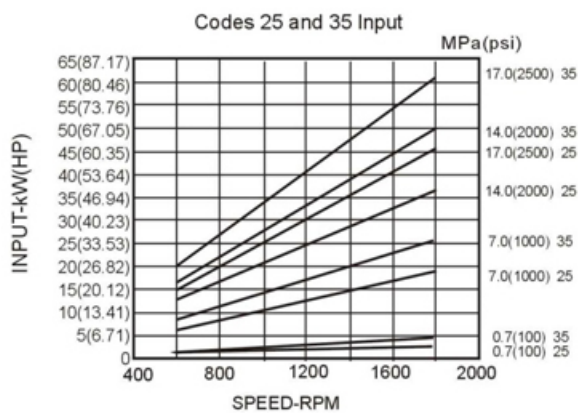
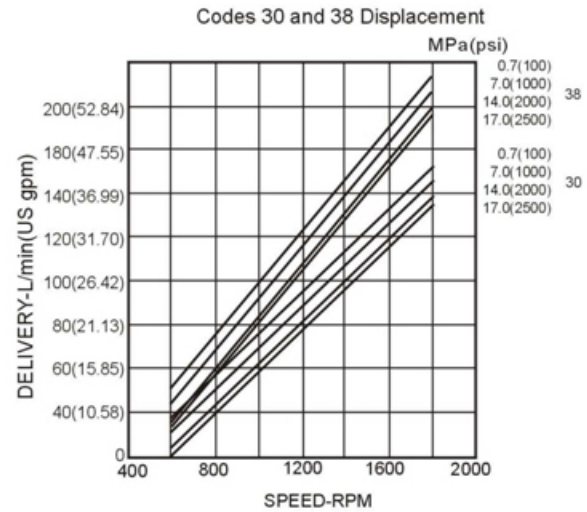
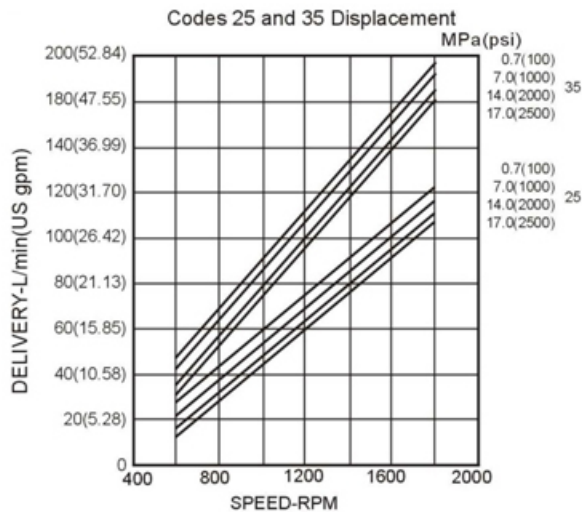
DOUBLE FIXED DISPLACEMENT 4535V SERIES

PERFORMANCE CURVES

4535V Double Pump (Ring Size -30 & 38 GPM)

SAE 10W Fluid at 120°F.

Pump Inlet at 0" hg.



DOUBLE FIXED DISPLACEMENT

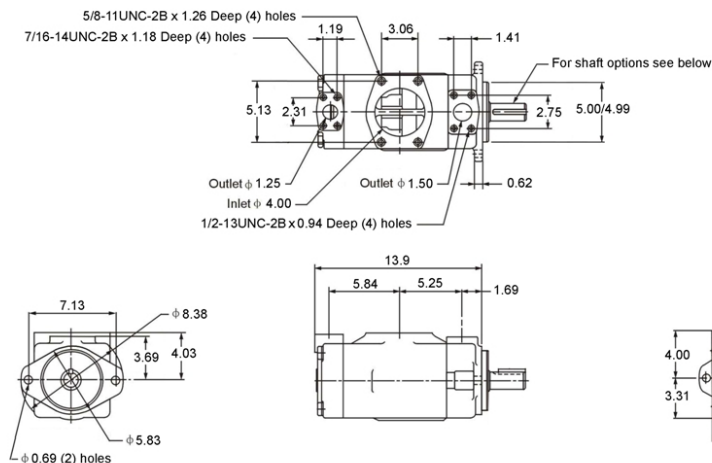
4535V SERIES

SPECIFICATIONS

Shaft End Pump	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in ³ /r (cm ³ /r)	Max. Pressure PSI (BAR)
P/N Example 4535V-50-A-30-1-CC-20 ("50" = Shaft End Pump)	42	8.42 (138)	2500 (172)
	45	8.66 (142)	
	50	9.89 (162)	
	60	11.78 (193)	
Cover End Pump	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in ³ /r (cm ³ /r)	Max. Pressure PSI (BAR)
P/N Example 4535V-50-A-30-1-CC-20 ("30" = Cover End Pump)	21	4.09 (67)	2500 (172)
	25	4.94 (81)	
	30	5.92 (97)	
	35	6.83 (112)	
	38	7.38 (121)	

DIMENSIONS

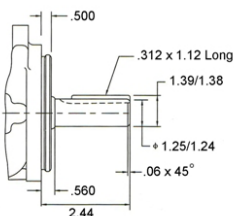
4535V Double Pump - Dimensions in Inches



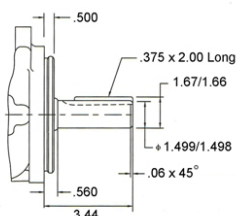
4535V Shafts

Dimensions in inches

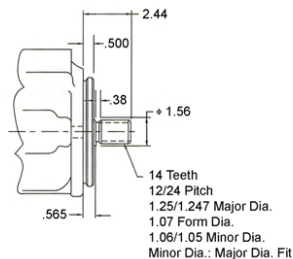
#1 Straight Shaft



#86 Straight Shaft



#11 Splined Shaft



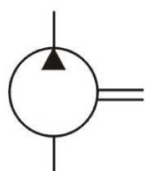
DOUBLE FIXED DISPLACEMENT 4535VQ SERIES

FEATURES

The Northman 4535VQ Series double 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 4535VQ series are from 42 GPM to 60 GPM at 1200 RPM on the shaft end and from 21 to 38 GPM at 1200 RPM on the cover end. 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

4535 VQ - 50 - A - 25 - 1 - CC - ** - (L)

1 2 3 4 5 6 7 8 9

1 Series 4535: 4535 Fixed Double Pump	5 Cover End Pump <i>Flow at 1200 RPM, 100 PSI:</i> 21, 25, 30, 35, 38	7 Port Orientation (Cont.) <i>(Viewed from Cover End)</i> <u>With No. 1 Outlet Inline with Inlet</u> CA – No. 2 Outlet Opposite Inlet CB – No. 2 Outlet 90° CCW from Inlet CC – No. 2 Outlet Inline with Inlet CD – No. 2 Outlet 90° CW from Inlet
2 Design Type VQ: Mobile Design	6 Shaft 1: 1-1/4" Dia., 0.312 Sq. St. Key 11: 14 Tooth Spline 86: 1-1/2" Dia., 0.375 Sq. St. Key	<u>With No. 1 Outlet 90° CW FROM Inlet</u> DA – No. 2 Outlet Opposite Inlet DB – No. 2 Outlet 90° CCW from Inlet DC – No. 2 Outlet Inline with Inlet DD – No. 2 Outlet 90° CW from Inlet
3 Shaft End Pump <i>Flow at 1200 RPM, 100 PSI:</i> 42, 45, 50, 60	7 Port Orientation <i>(Viewed from Cover End)</i> <u>With No. 1 Outlet Opposite Inlet</u> AA – No. 2 Outlet Opposite Inlet AB – No. 2 Outlet 90° CCW from Inlet AC – No. 2 Outlet Inline with Inlet AD – No. 2 Outlet 90° CW from Inlet	8 Design Number
4 Ports A: Inlet – 4" SAE, 4-Bolt Flange Shaft End Outlet – 1.5" SAE, 4-Bolt Flange Cover End Outlet – 1.25" SAE, 4-Bolt Flange	<u>With No. 1 Outlet 90° CCW from Inlet</u> BA – No. 2 Outlet Opposite Inlet BB – No. 2 Outlet 90° CCW from Inlet BC – No. 2 Outlet Inline with Inlet BD – No. 2 Outlet 90° CW from Inlet	9 Shaft Rotation <i>(Viewed from Shaft End)</i> No Code: Right Hand (CW) L: Left Hand (CCW)

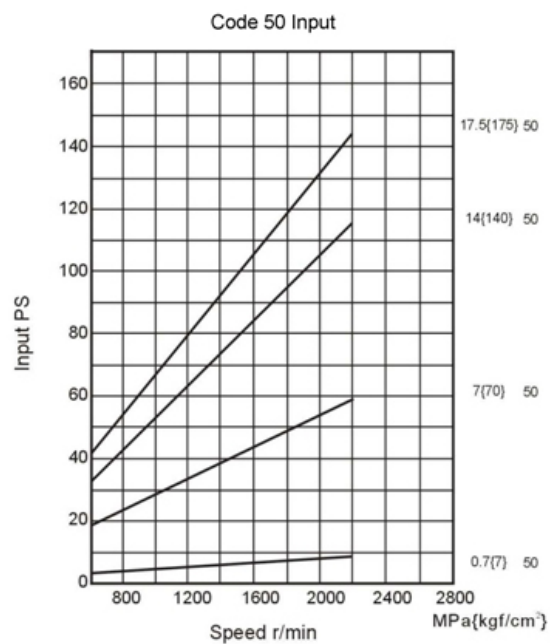
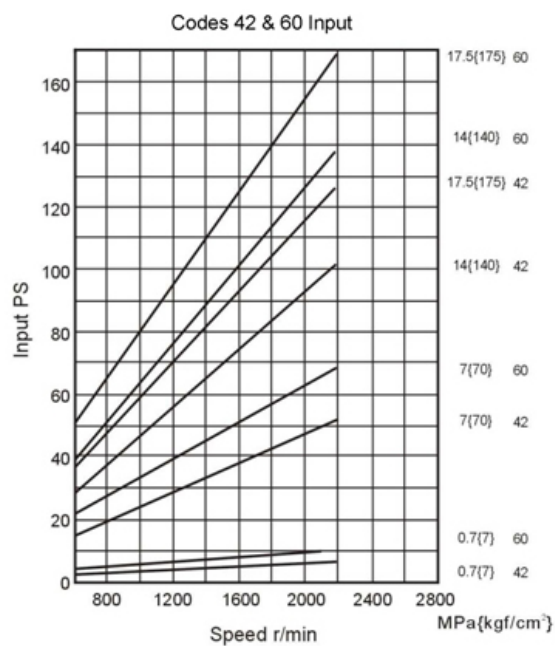
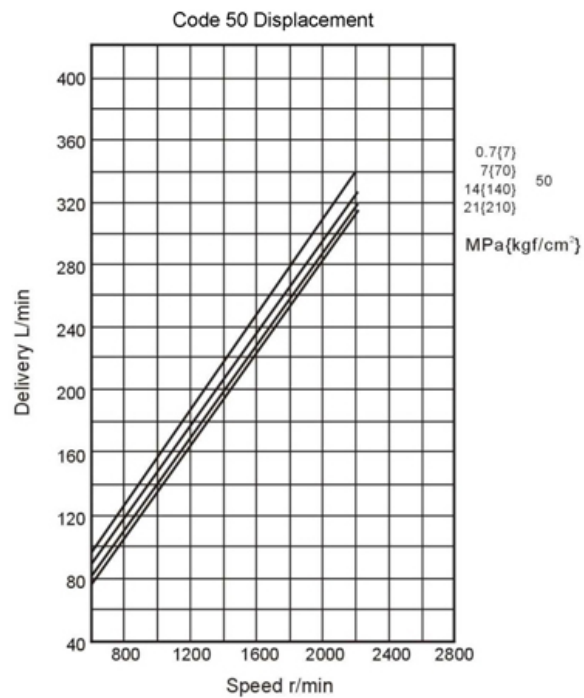
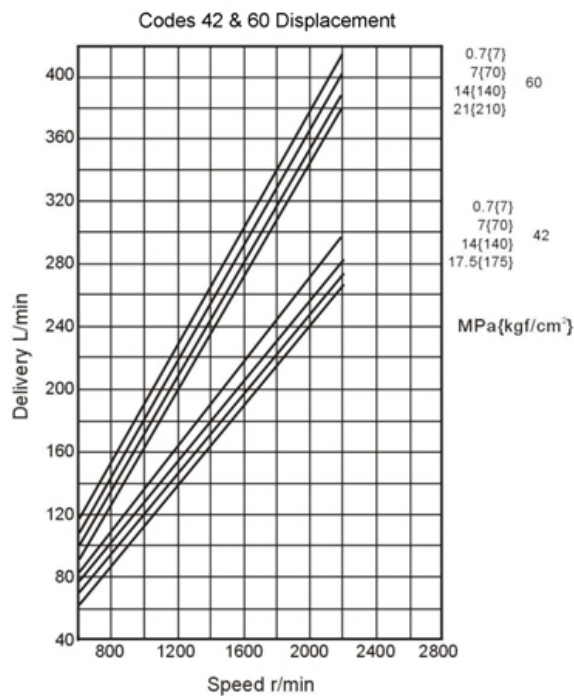
DOUBLE FIXED DISPLACEMENT 4535VQ SERIES

PERFORMANCE CURVES

4535VQ Double Pump (Ring Size -42 & 60 GPM)

SAE 10W Fluid at 120°F.

Pump Inlet at 0" hg.



DOUBLE FIXED DISPLACEMENT 4535VQ SERIES

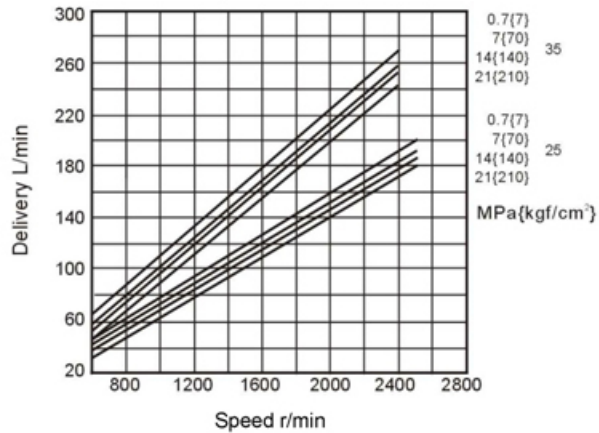
PERFORMANCE CURVES

4535VQ Double Pump

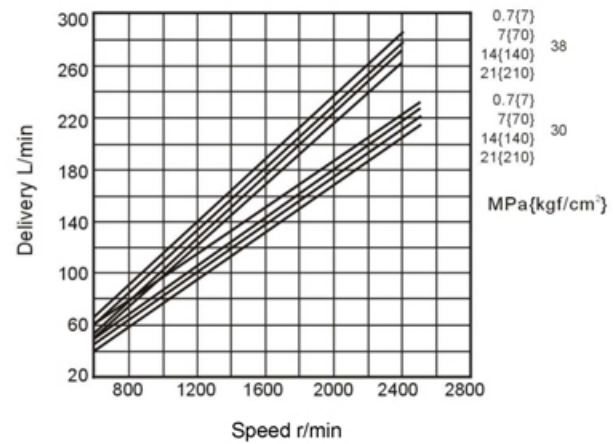
SAE 10W Fluid at 120°F.

Pump Inlet at 0" hg.

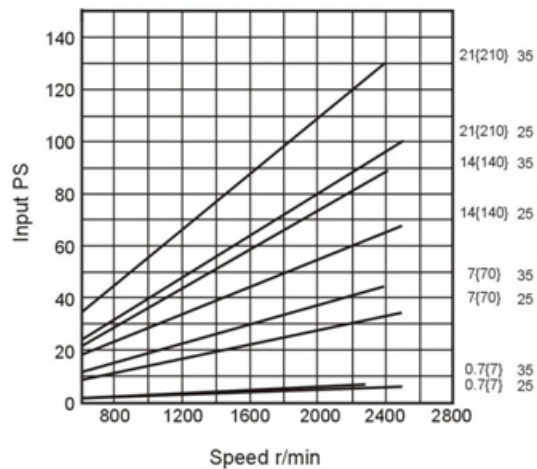
Codes 25 & 35 Displacement



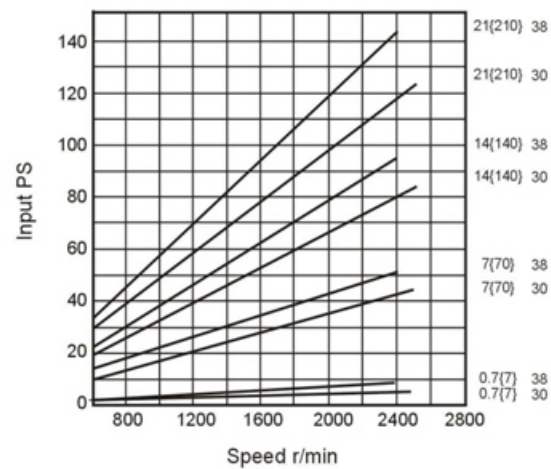
Codes 30 & 38 Displacement



Codes 25 & 35 Input



Codes 30 & 38 Input



DOUBLE FIXED DISPLACEMENT

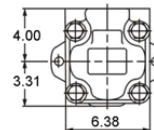
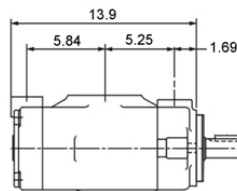
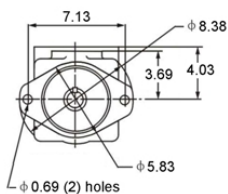
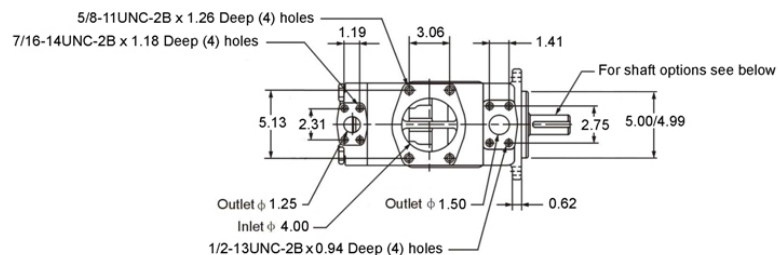
4535VQ SERIES

SPECIFICATIONS

Shaft End Pump	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in³/r (cm³/r)	Max. Speed RPM	Max. Pressure PSI (BAR)
P/N Example 4535VQ- <u>50</u> -A-30-1-CC-20 ("50" = Shaft End Pump)	42	8.18 (134)	2400	2500 (172)
	45	8.97 (147)	2200	
	50	9.52 (156)		
	60	11.53 (189)		
Cover End Pump	Flow Code GPM @ 1200 RPM & 100 PSI	Displacement in³/r (cm³/r)	Max. Speed RPM	Max. Pressure PSI (BAR)
P/N Example 4535VQ-50-A- <u>30</u> -1-CC-20 ("30" = Cover End Pump)	21	3.90 (64)	2500	3000 (210)
	25	4.83 (79.2)		
	30	5.80 (95)		
	35	6.65 (109)	2400	
	38	7.20 (118)		

DIMENSIONS

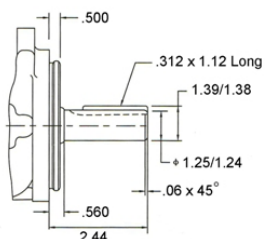
4535VQ Double Pump - Dimensions in Inches



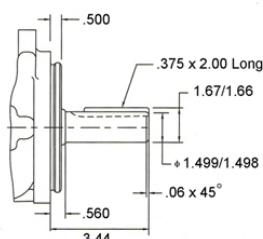
4535VQ Shafts

Dimensions in inches

#1 Straight Shaft



#86 Straight Shaft



#11 Splined Shaft

