

DOUBLE VANE PUMP

CODE

F3	HS	2520	2I	8	D	I	A	A
1	2	3	4	5	6	7	8	9

- 1 - "F3" means special seals for fire-resistant fluids. Omit if not required.
- 2 - **Type of pump:**
 HS = 12 vane pump, (except the cover end cartridge of the HS**20 pump), **industrial uses** (very quiet), UNC threads.
 HQ = 10 vane pump, **bronze plates, mobile uses**, UNC threads.
- 3 - **Model of pump:** 2520, 3520, 3525, 4520, 4525, 4535.
- 4 - **Pump flow at shaft side:**
 All the models in US gallons per minute at 1200 rpm and 7 Bar. (See flow chart).
- 5 - **Pump flow at cover side:**
 All the models in gallons per minute at 1200 rpm and 7 Bar. (See flow chart).
- 6 - **D = Right-hand** direction of rotation (clockwise).
S = Left-hand direction of rotation (Counterclockwise).
 (To check the direction of rotation view from the shaft end) .
- 7 - **Type of shaft:**
 - 1 = Parallel keyed
 - 2 = Splined
 - 11 = Splined
 - 86 = Heavy duty parallel keyed

8 - 9 Port Orientation

(Viewed from cover end of pump)
All series except 2525V & 4535V

- With No.1 outlet opposite inlet:**
 - AA - No. 2 outlet 135° CCW from inlet
 - AB - No. 2 outlet 45° CCW from inlet
 - AC - No. 2 outlet 45° CW from inlet
 - AD - No. 2 outlet 135° CW from inlet
- With No.1 outlet 90° CCW from inlet:**
 - BA - No. 2 outlet 135° CCW from inlet
 - BB - No. 2 outlet 45° CCW from inlet
 - BC - No. 2 outlet 45° CW from inlet
 - BD - No. 2 outlet 135° CW from inlet
- With No.1 outlet inline with inlet:**
 - CA - No. 2 outlet 135° CCW from inlet
 - CB - No. 2 outlet 45° CCW from inlet
 - CC - No. 2 outlet 45° CW from inlet
 - CD - No. 2 outlet 135° CW from inlet
- With No.1 outlet 90° CW from inlet:**
 - DA - No. 2 outlet 135° CCW from inlet
 - DB - No. 2 outlet 45° CCW from inlet
 - DC - No. 2 outlet 45° CW from inlet
 - DD - No. 2 outlet 135° CW from inlet

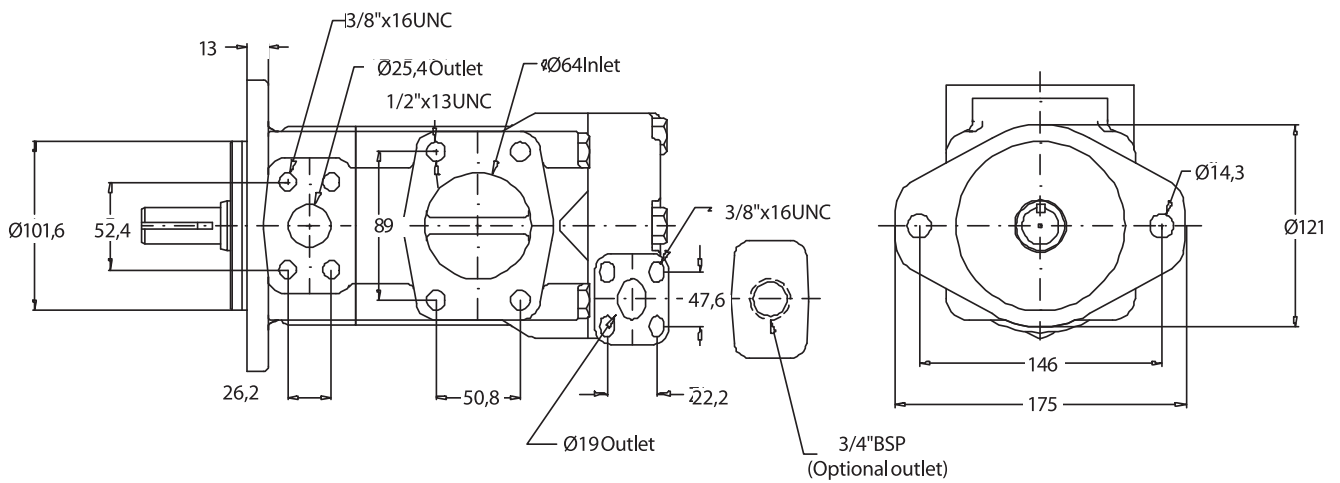
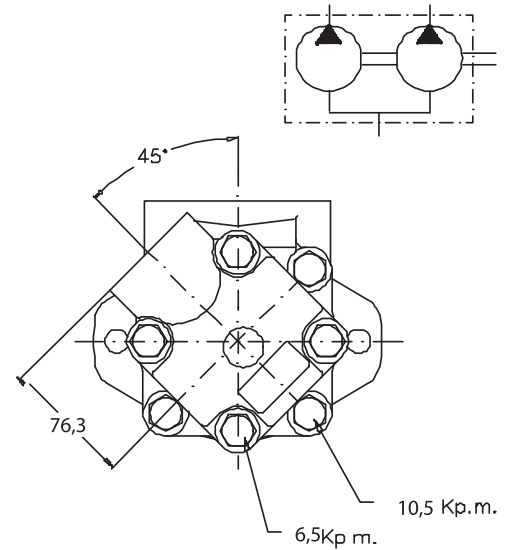
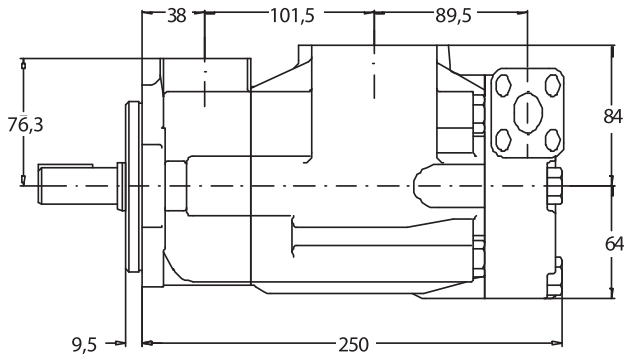
Series 2525V & 4535V

- With No.1 outlet opposite inlet:**
 - 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
- With No.1 outlet 90° CCW from inlet:**
 - 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
- With No.1 outlet inline with inlet:**
 - CA - No. 2 outlet opposite inlet
 - CB - No. 2 outlet 90° CCW from inlet
 - CC - No. 2 outlet inline inlet
 - CD - No. 2 outlet 90° CW from inlet
- With No.1 outlet 90° CW from inlet:**
 - 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

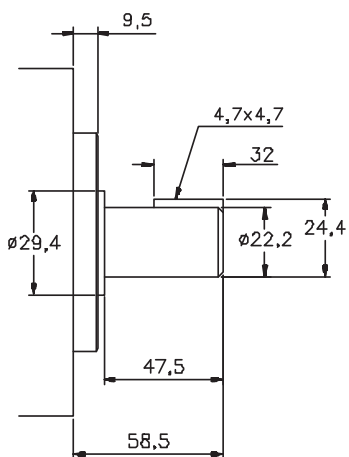
DOUBLE VANE PUMPS

HS-2520, HQ-2520

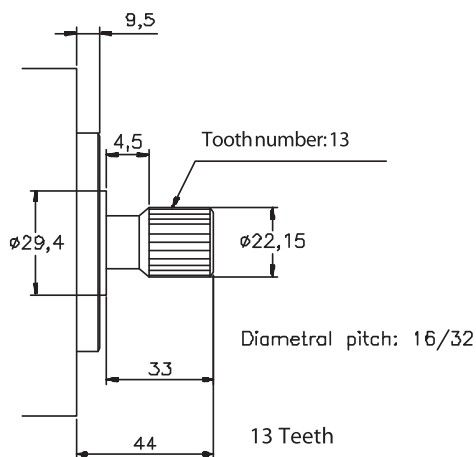
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



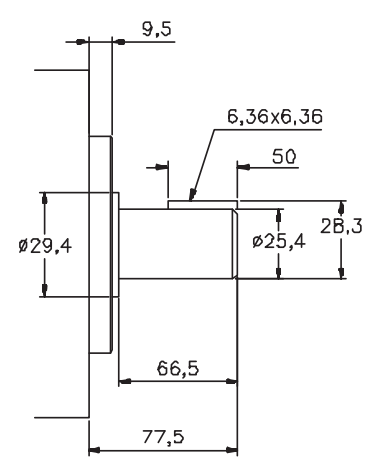
N°1 Shaft



N°11 Shaft



N°86 Shaft

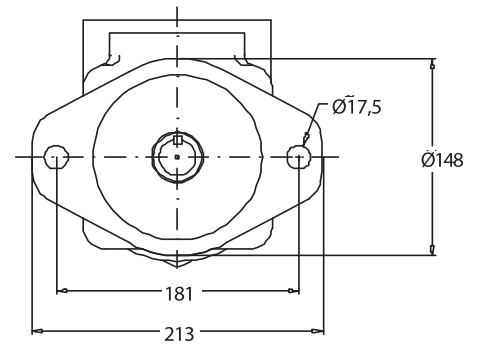
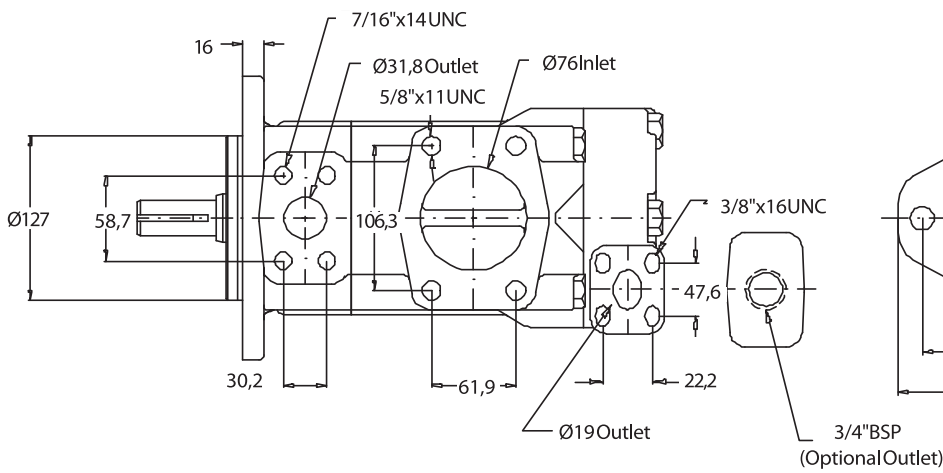
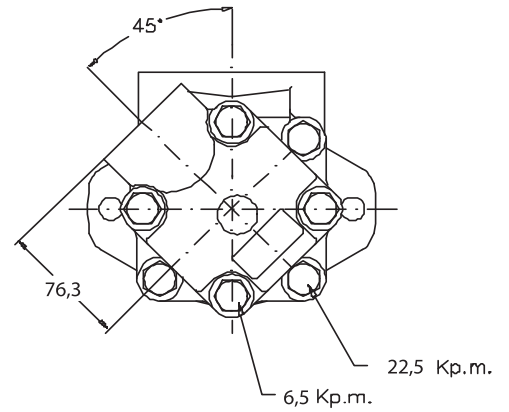
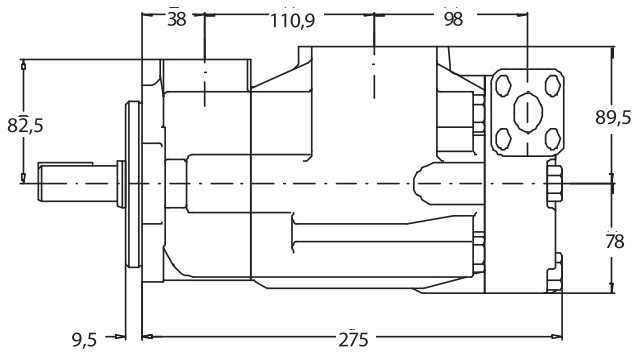
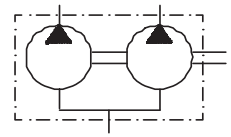


Enquire about other types of shafts

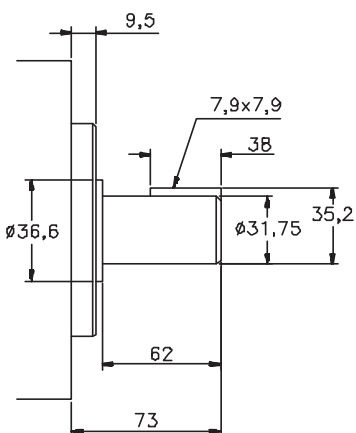
DOUBLE VANE PUMPS

HS-3520, HQ-3520

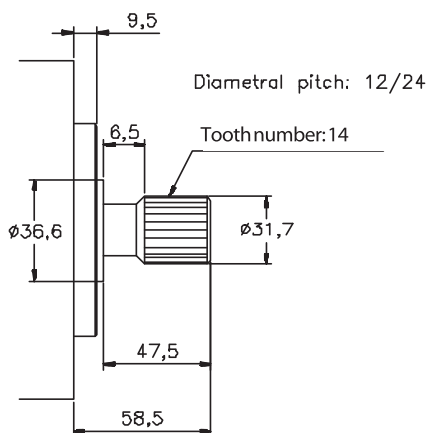
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



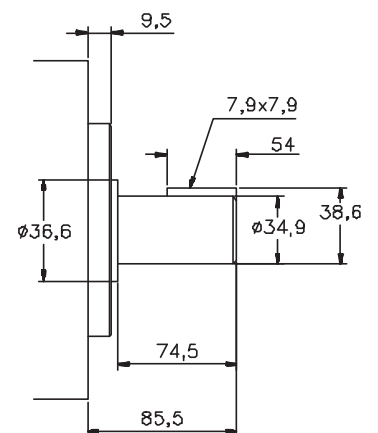
N°1 Shaft



N°11 Shaft



N°86 Shaft

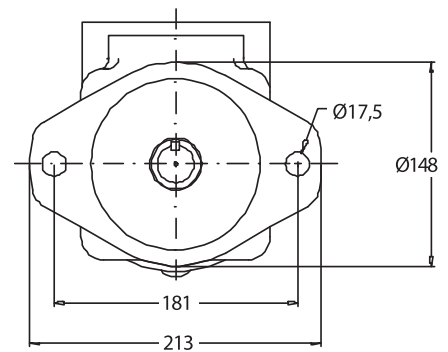
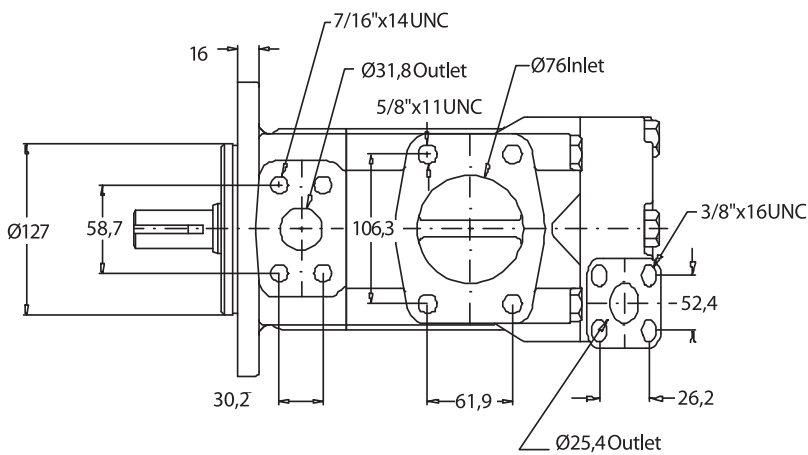
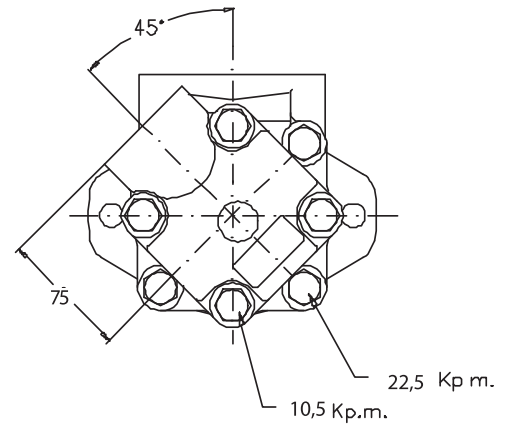
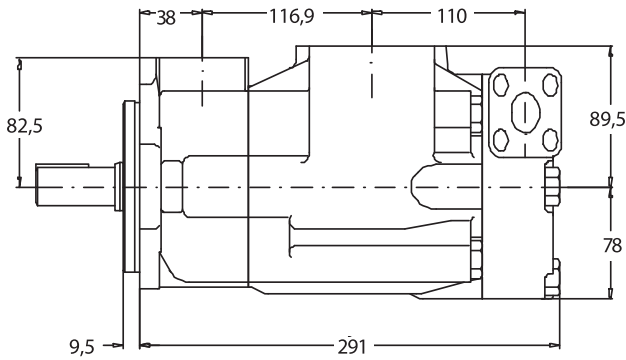
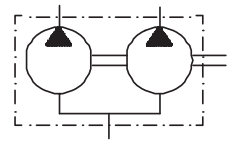


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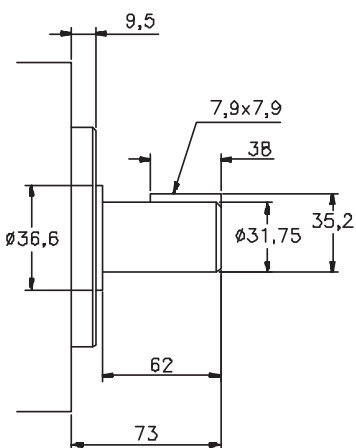
DOUBLE VANE PUMPS

HS-3525, HQ-3525

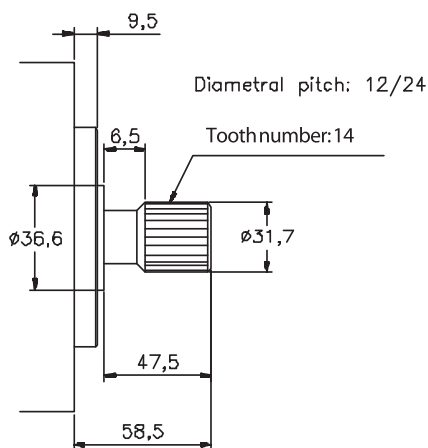
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



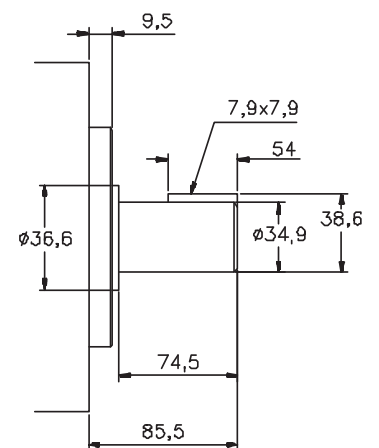
N°1 Shaft



N°11 Shaft



N°86 Shaft

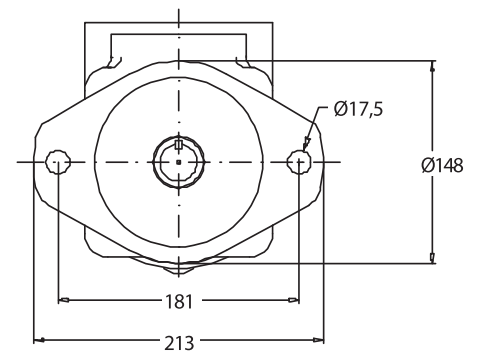
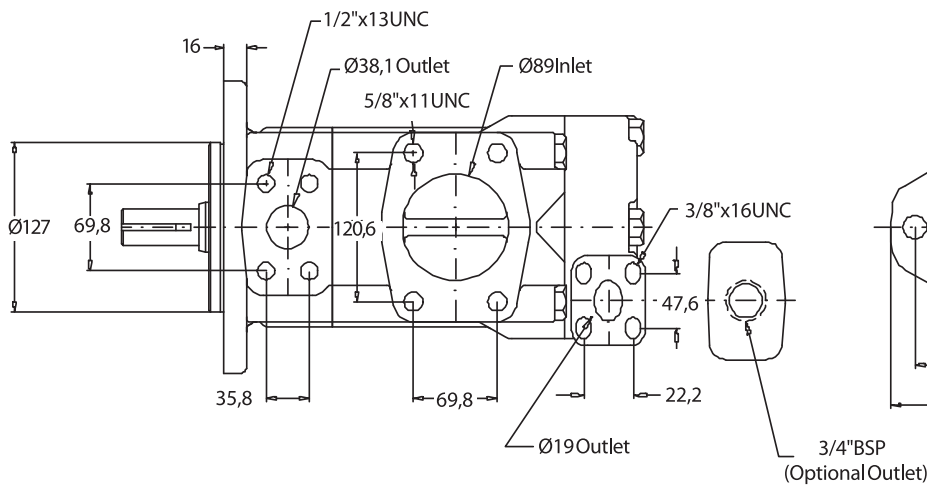
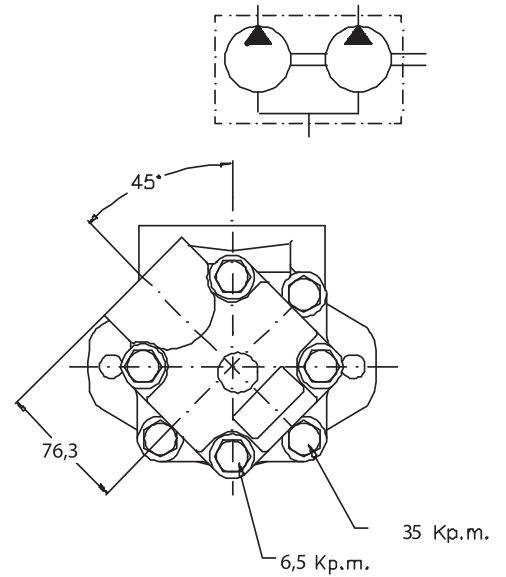
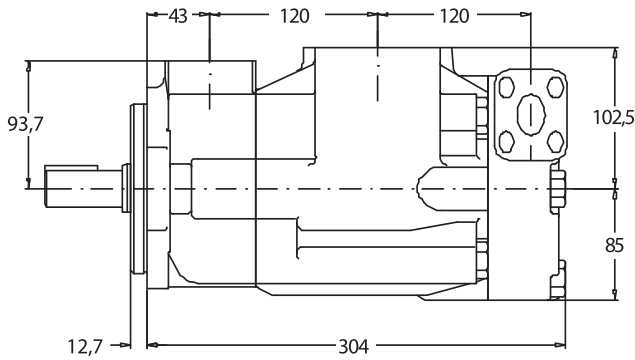


Enquire about other types of shafts

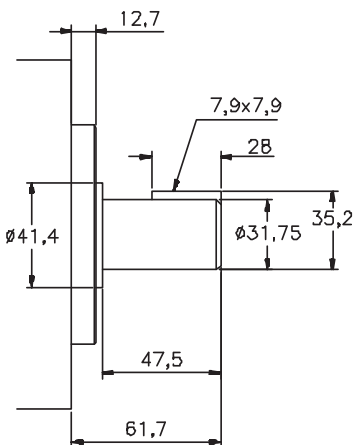
DOUBLE VANE PUMPS

HS-4520, HQ-4520

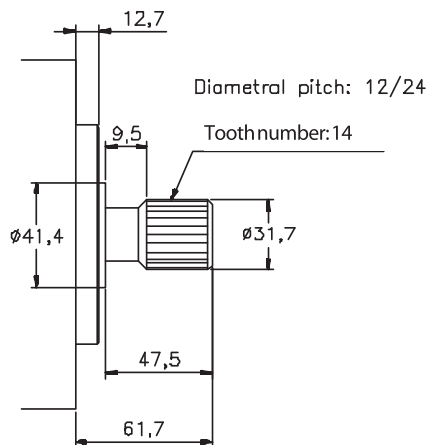
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



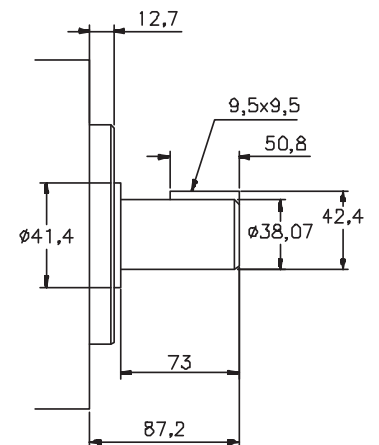
N°1 Shaft



N°11 Shaft



N°86 Shaft

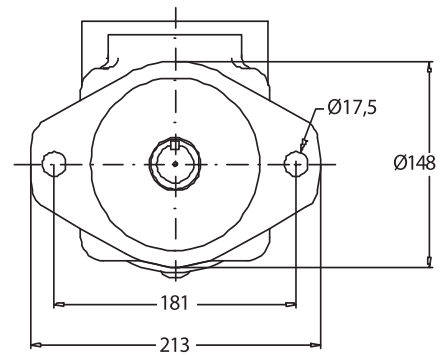
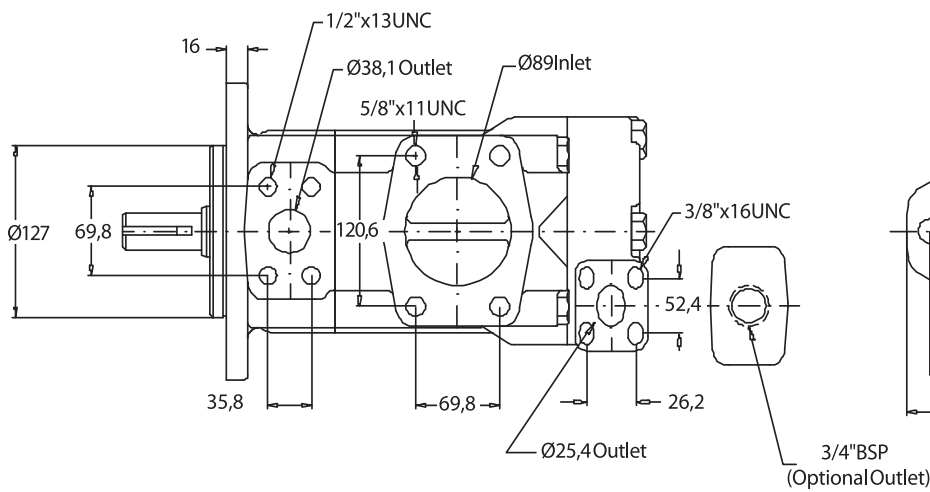
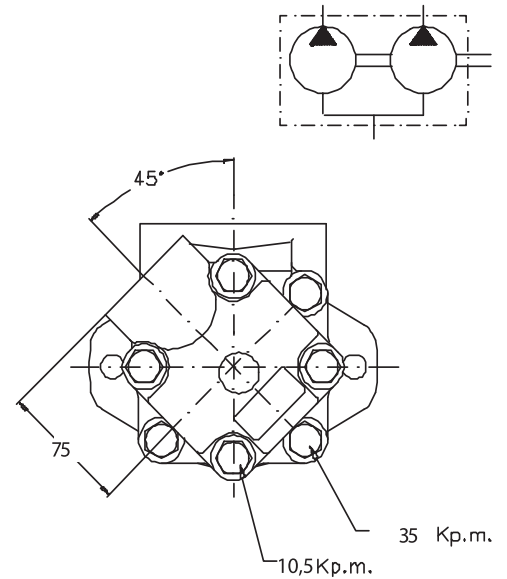
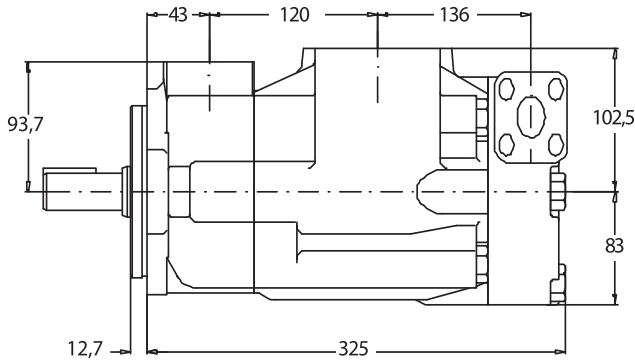


Enquire about other types of shafts

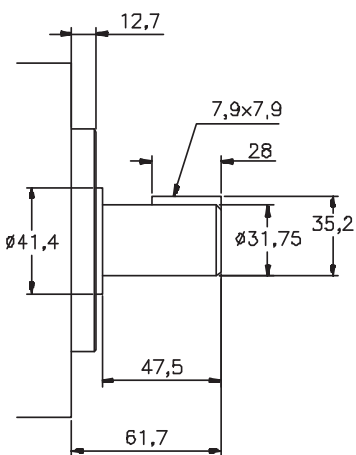
DOUBLE VANE PUMPS

HS-4525, HQ-4525

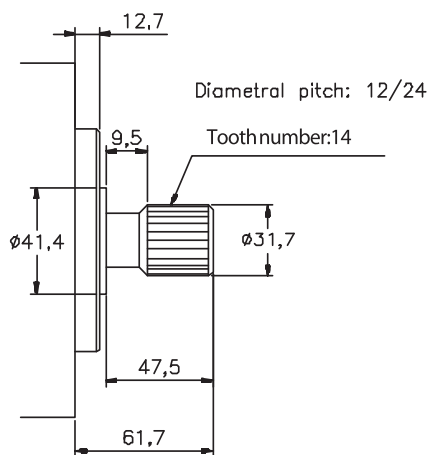
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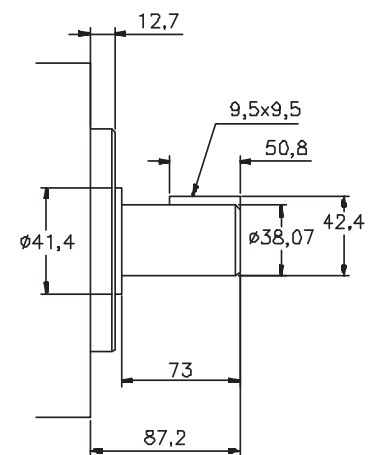
N°1 Shaft



N°11 Shaft



N°86 Shaft

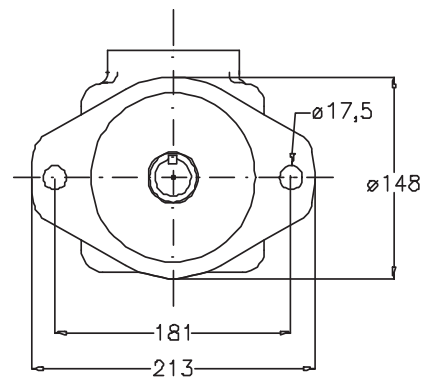
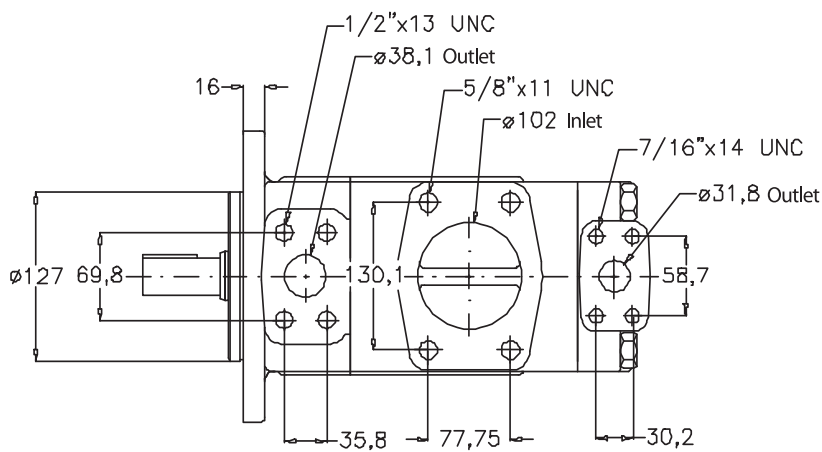
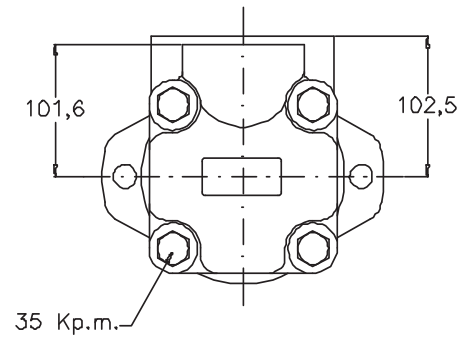
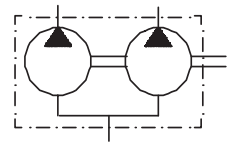
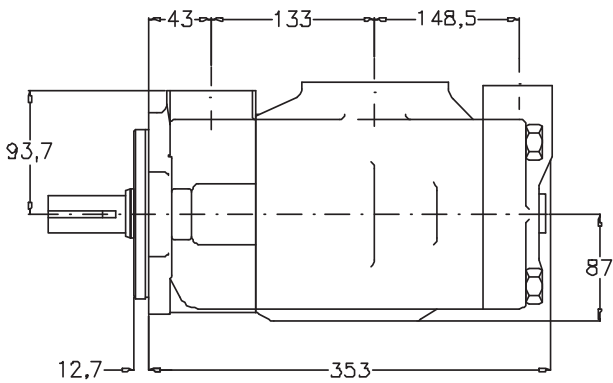


Enquire about other types of shafts

DOUBLE VANE PUMPS

HS-4535, HQ-4535

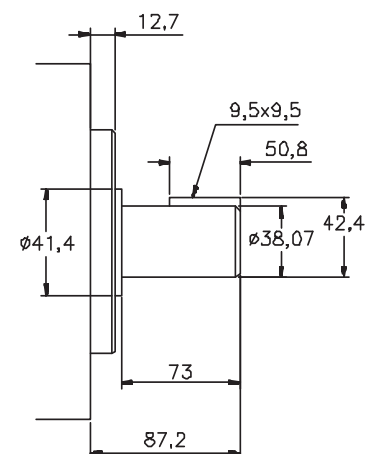
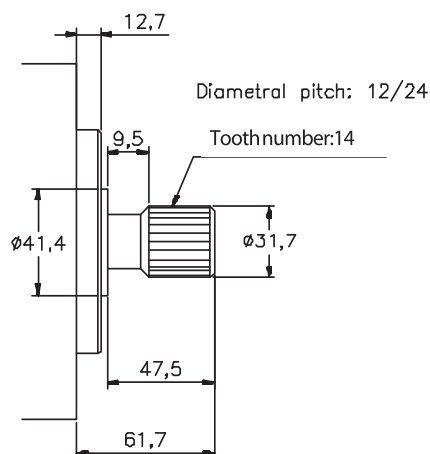
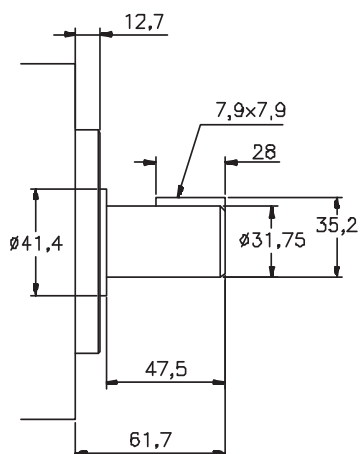
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



N°1 Shaft

N°11 Shaft

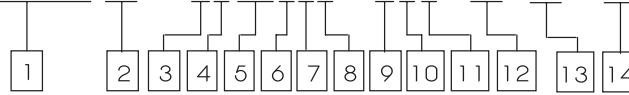
N°86 Shaft



Enquire about other types of shafts

DOUBLE VANE PUMP

VH2010 (F) - 1 F13S7S - 1CC - (8) (H) - (L)



<p>1 Model VH2010, VH2020</p> <p>2 Cover (optional) Omit - Standard Cover F - Flow Control Cover P - Priority Valve Cover</p> <p>3 Mounting 1 - 2-Bolt Flang</p> <p>4 Inlet Port Connection F - 4-bolt Flange Dia 1.5" (VH2010) - 4-bolt Flange Dia 2.0" (VH2020)</p> <p>5 Shaft End Pump Delivery (Usgpm at 1200 rpm) 5, 6, 7, 8, 9, 10, 11, 12, 13</p> <p>6 Shaft End Outlet Port Connection S - 1.0625"-12 Str.thd. P - 0.750" NPT B - 0.750" BSP</p> <p>7 Cover End Pump Delivery (Usgpm at 1200 rpm) VH2010 - 1, 2, 3, 4, 5, 6, 7 VH2020 - 5, 6, 7, 8, 9, 10, 11, 12, 13</p> <p>8 Cover End Outlet Port Connection VH2010 and VH2020 S - 0.750"-16 Str.thd. (VH2010) - 1.0625"-12 Str.thd. (VH2020) P - 0.500" NPT (VH2010) B - 0.500" BSP (VH2010) - 0.750" BSP (VH2020) VH10F, VH10P, VH20F and VH20P</p>	<p>9 Shaft 1 - Straight keyed 11 - Splined</p> <p>10 11</p>	<p>Position of outlet (Viewed from cover end of pump)</p> <p>V2010 <i>With no. 1 outlet opposite inlet</i> AA - No. 2 outlet 135° CCW from inlet AB - No. 2 outlet 45° CCW from inlet AC - No. 2 outlet 45° CW from inlet AD - No. 2 outlet 135° CW from inlet</p> <p><i>With no. 1 outlet 90° CCW from inlet</i> BA - No. 2 outlet 135° CCW from inlet BB - No. 2 outlet 45° CCW from inlet BC - No. 2 outlet 45° CW from inlet BD - No. 2 outlet 135° CW from inlet</p> <p><i>With no. 1 outlet in line with inlet</i> CA - No. 2 outlet 135° CCW from inlet CB - No. 2 outlet 45° CCW from inlet CC - No. 2 outlet 45° CW from inlet CD - No. 2 outlet 135° CW from inlet</p> <p><i>With no. 1 outlet 90° CW from inlet</i> DA - No. 2 outlet 135° CCW from inlet DB - No. 2 outlet 45° CCW from inlet DC - No. 2 outlet 45° CW from inlet DD - No. 2 outlet 135° CW from inlet</p> <p>V2020 <i>With no. 1 outlet opposite inlet</i> AA - No. 2 outlet opposite inlet AB - No. 2 outlet 90° CCW from inlet AC - No. 2 outlet in line with inlet AD - No. 2 outlet 90° CW from inlet</p> <p><i>With no. 1 outlet 90° CCW from inlet</i> BA - No. 2 outlet opposite inlet BB - No. 2 outlet 90° CCW from inlet BC - No. 2 outlet in line with inlet BD - No. 2 outlet 90° CW from inlet</p> <p><i>With no. 1 outlet inline with inlet</i> CA - No. 2 outlet opposite inlet CB - No. 2 outlet 90° CCW from inlet CC - No. 2 outlet in line with inlet CD - No. 2 outlet 90° CW from inlet</p> <p><i>With no. 1 outlet 90° CW from inlet</i> DA - No. 2 outlet opposite inlet DB - No. 2 outlet 90° CCW from inlet DC - No. 2 outlet in line with inlet DD - No. 2 outlet 90° CW from inlet</p>	<p>12 Flow rate Setting for Flow control and Priority Valve Cover L/min (Usgpm) (optional)</p> <p>2 - 7.6 (2) 3 - 11.4 (3) 4 - 15.2 (4) 5 - 19.0 (5) 6 - 22.7 (6) 7 - 26.5 (7) 8 - 30.3 (8)</p> <p>13 Pressurer Setting for Flow control and Priority Valve Cover bar (psi) (optional)</p> <p>A - 17 (250) B - 34 (500) C - 52 (750) D - 69 (1000) E - 86 (1250) F - 103 (1500) G - 121 (1750) H - 138 (2000) J - 155 (2200) K - 172 (2500)</p> <p>14 Shaft Rotation (Viewed from shaft end) Omit - Turn right L - Turn left</p>
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DOUBLE VANE PUMP

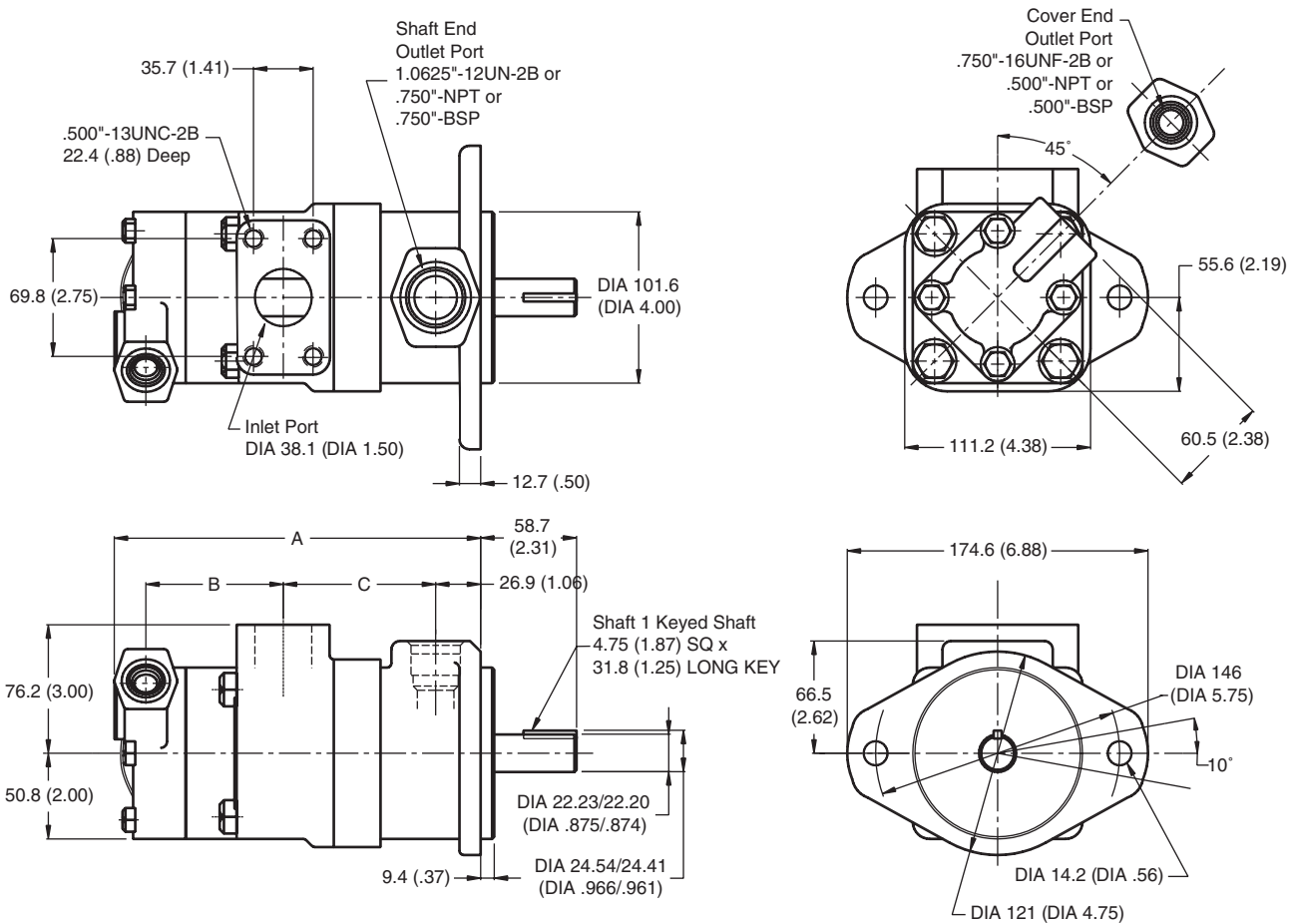
SPECIFICATIONS

Model Series	Cartridge Position	Ring Size Delivery at 1200 r/min & 7 bar (100 psi)	Geometric Displacement	Delivery at 1500 r/min & 7 bar (100 psi)	Maximum Pressure	Maximum Speed	Weight
		USgpm	cm ³ /r (in ³ /r)	L/min (USgpm)	bar (psi)	rpm	
HV2010	Shaft End	6	19.5 (1.19)	28.40 (7.50)	172 (2500)	3400	13.6 (30)
		7	22.8 (1.39)	33.11 (8.75)	172 (2500)	3000	
		8	26.5 (1.62)	37.85 (10.00)	172 (2500)	2800	
		9	29.7 (1.81)	42.57 (11.25)	172 (2500)	2800	
		11	36.4 (2.22)	52.04 (13.75)	172 (2500)	2500	
		12	39.0 (2.38)	56.77 (15.00)	152 (2200)	2400	
		13	42.4 (2.59)	61.50 (16.25)	152 (2200)	2400	
	Cover End	1	3.3 (0.20)	4.70 (1.25)	172 (2500)	3000	
		2	6.6 (0.40)	9.40 (2.50)	172 (2500)	3000	
		3	9.8 (0.60)	14.20 (3.75)	172 (2500)	3000	
		4	13.1 (0.80)	18.90 (5.00)	172 (2500)	3000	
		5	16.4 (1.00)	23.60 (6.25)	172 (2500)	3000	
		6	19.5 (1.19)	28.40 (7.50)	152 (2200)	3000	
		7	22.8 (1.39)	33.10 (8.75)	138 (2000)	2800	
HV2020	Shaft End	12	39.0 (2.38)	56.77 (15.00)	152 (2200)	2400	15.9 (35)
		13	42.4 (2.59)	61.50 (16.25)	152 (2200)	2400	
	Cover End	6	19.5 (1.19)	28.39 (7.50)	172 (2500)	3000	
		7	22.8 (1.39)	33.11 (8.75)		3000	
		8	26.5 (1.62)	37.85 (10.00)		2800	
		9	29.7 (1.81)	42.57 (11.25)		2800	
		11	36.4 (2.22)	52.04 (13.75)		2500	

DOUBLE VANE PUMP

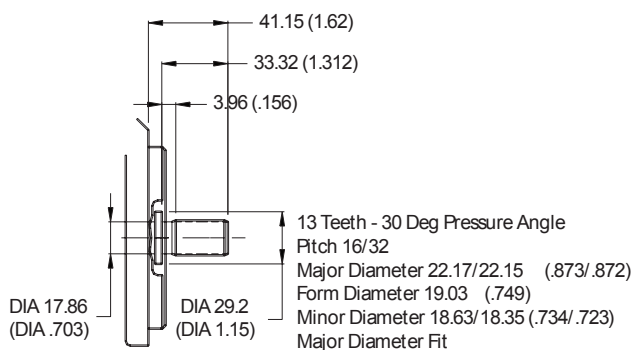
VH2010

INSTALLATION DIMENSIONS mm (inch)



Delivery @ 1200 rpm & 7 bar (100 psi)		Dimension		
Shaft End	Cover End	A	B	C
7, 8, 9	1, 2, 3	213.1 (8.39)	75.9 (2.99)	86.4 (3.40)
7, 8, 9	4, 5	219.5 (8.64)	82.3 (3.24)	86.4 (3.40)
7, 8, 9	6, 7	224.5 (8.84)	87.4 (3.44)	86.4 (3.40)
10, 11	1, 2, 3	218.2 (8.59)	75.9 (2.99)	91.2 (3.59)
10, 11	4, 5	224.5 (8.84)	82.3 (3.24)	91.2 (3.59)
10, 11	6, 7	229.6 (9.04)	87.4 (3.44)	91.2 (3.59)
12, 13	1, 2, 3	221.7 (8.73)	75.9 (2.99)	94.7 (3.73)
12, 13	4, 5	227.8 (8.97)	82.3 (3.24)	94.7 (3.73)
12, 13	6, 7	232.9 (9.17)	87.4 (3.44)	94.7 (3.73)

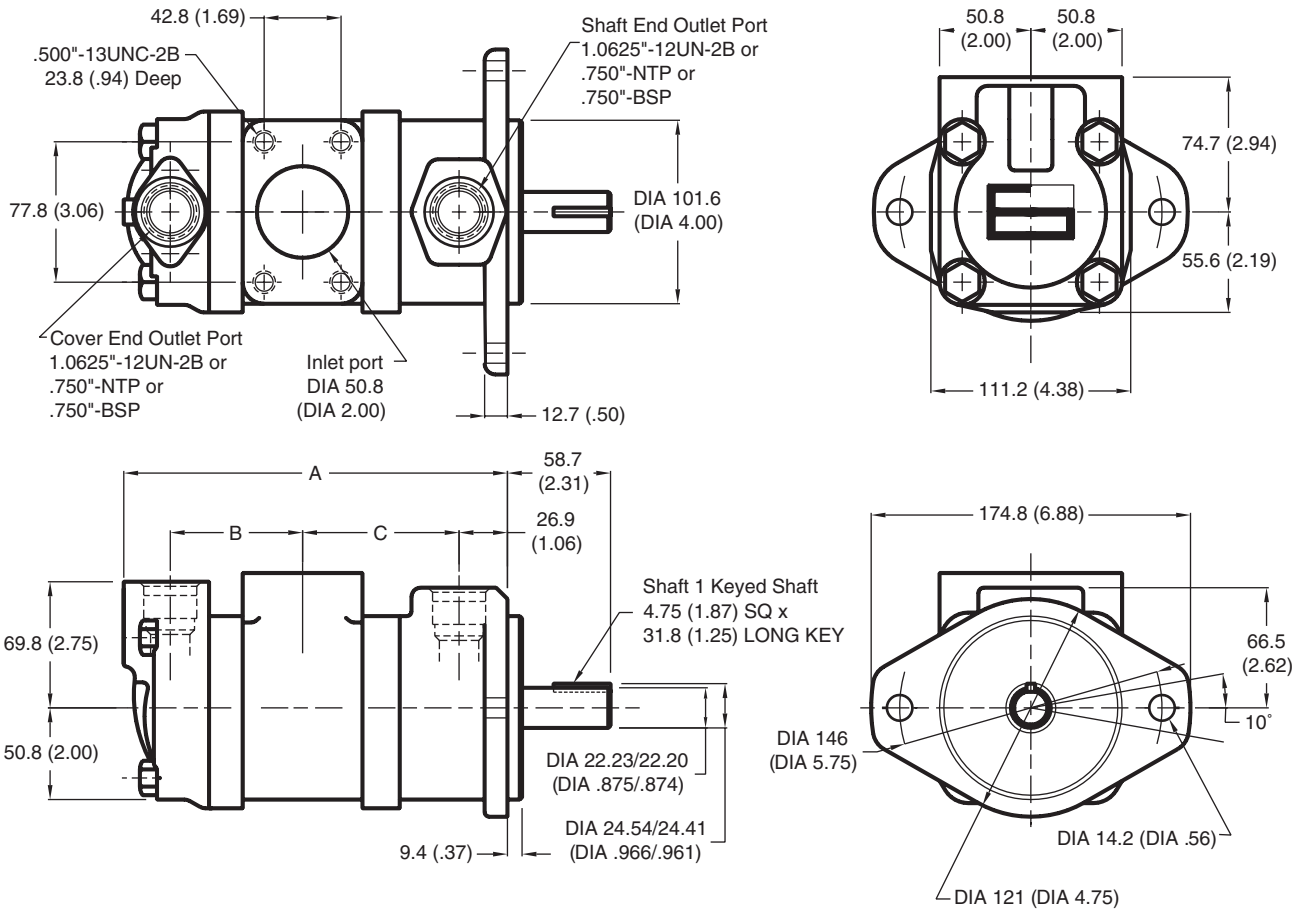
OTHER SHAFT OPTIONS FOR DOUBLE PUMP V2010 AND V2020



DOUBLE VANE PUMP

VH2020

INSTALLATION DIMENSIONS mm (inch)



Delivery @ 1200 rpm & 7 bar (100 psi)		Dimension		
Shaft End	Cover End	A	B	C
7, 8, 9	5, 6	213.6 (8.41)	73.7 (2.90)	87.1 (3.43)
7, 8, 9	7, 8, 9	220.0 (8.66)	80.0 (3.15)	87.1 (3.43)
10, 11	5, 6	218.7 (8.61)	73.7 (2.90)	92.2 (3.63)
10, 11	7, 8, 9	225.0 (8.86)	80.0 (3.15)	92.2 (3.63)
10, 11	10, 11	229.9 (9.05)	85.1 (3.35)	92.2 (3.63)
12, 13	5, 6	222.3 (8.75)	73.7 (2.90)	95.5 (3.76)
12, 13	7, 8, 9	228.3 (8.99)	80.0 (3.15)	95.5 (3.76)
12, 13	11	233.4 (9.19)	85.1 (3.35)	95.5 (3.76)