

FIXED DISPLACEMENT VANE PUMPS

- Single Vane Pumps
- Double Vane Pumps
- Thru-Drive Vane Pumps

HS - HQ - VH - SERIES



- Working pressure: up to 210 bar
- Displacements: from 3 cc to 200 cc
- Pumps, cartridges and spare parts are 100% interchangeable to **Vickers design**

SINGLE VANE PUMP

PUMP DRIVE

Direct coaxial drive is recommended via flexible coupling. For indirect drives imposing a radial load on the shaft, consult HYDRAUT or your nearest distributor for advice.

ROTATION

The direction of rotation can be reversed by turning the ring, rotor and vanes through 180 degrees. Direction of rotation is viewed from the shaft end.

STARTING

HYDRAUT vane pumps are self priming, however, if possible, fill the pump with oil before starting or bleed the outlet port while the pump is running to remove any trapped air.

FILTRATION

For satisfactory service life, full flow filtration to provide fluid cleanliness conforming to ISO code 18/15 or better is recommended.

HYDRAULIC FLUIDS

Use antiwear industrial hydraulic oils with a viscosity of 25-49 cST. Automotive crankcase oils SAE10-SAE20 may also be used depending on the operating temperature. The optimum operating temperature is 50 °C with a maximum of 70 °C. At higher temperatures service life is decreased with degradation of the wearing parts and seals.

For fire resistance fluids, the "F3" version with special seals must be used at reduced pressures and speeds as indicated below.

MAXIMUM SPEED RANGES

With antiwear fluids: 1800 to 2500 rpm (depending on model type. See performance chart).

With synthetic fluids, water glycols and water in oil emulsions, the maximum recommended speed is 1200 rpm.

Speeds shown are given as a guide only based on the correct fluid and correct suction characteristics as recommended by our Technical Services department.

Long or restricted suction lines can cause cavitation, therefore the maximum running speed must be reduced. Avoid using 90 degree elbows in suction lines, use swept bends where possible. Too viscous a fluid will also cause cavitation.

When using lower displacement pumps within a given pump frame size, speeds slightly higher than those shown in the charts are acceptable.

For antiwear hydraulic fluids and water glycols, the inlet pressure must not exceed 0.2 bar vacuum, for synthetic fluids and water in oil emulsions, the inlet pressure must not exceed 0.1 bar vacuum.

MINIMUM SPEED: 600 rpm

MAXIMUM CONSTANT PRESSURE

Anti-wear Hydraulic Oil: **from 175 to 210 Bar**

Synthetic Oil: **from 175 to 210 Bar**

Water-Glycol emulsions: **160 Bar**

Water-in-oil emulsions: **070 Bar**

This data is for H*20, H*25, H* 35, H* 45, double and triple pumps. For other pumps see chart.

The intermittent pressures shown in the table can be maintained for 10% of the time, with a maximum duration of 6 seconds/minute.

SINGLE VANE PUMP

CODE

F3	HS	25	21	D	1	A	00
1	2	3	4	5	6	7	8

- 1 - **"F3"** means special seals for fire-resistant fluids. Omit if not required

- 2 - **Pump Type:**
HS = 12 vane pump, industrial use (very quiet), UNC threads
HQ = 10 vane pump and bronze plates, mobile use, UNC threads

- 3 - **Pump model:** 20, 25, 35 and 45 in HS and HQ types

- 4 - **Flow:** HS, HQ in US Gallons per minute at 1200 rpm and 7 Bar.

- 5 - **D = Right-hand** direction of rotation (Clockwise).
Y = Left-hand direction of rotation.
(To check the direction of rotation view from the shaft end).

- 6 - **Shaft type:** See on each pump

- 7 - **Outlet position**
Viewed from cover end of pump
A: Opposite inlet port
B: 90 CCW from inlet
C: Inline with inlet
D: 90 CW from inlet

- 8 - **Special characteristic:**
Omit if not required
Example: 02 : BSP
 03 : UNF
 04 : NPT

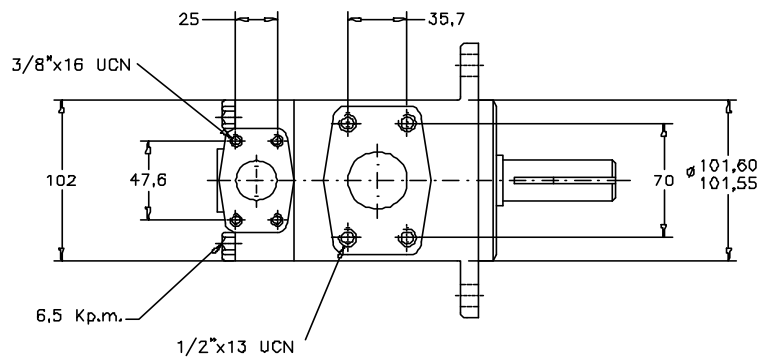
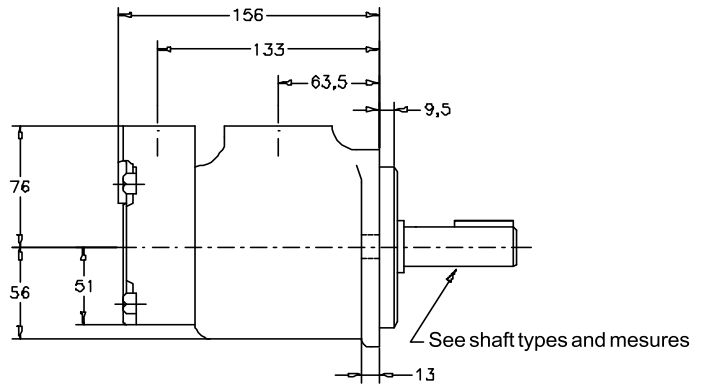
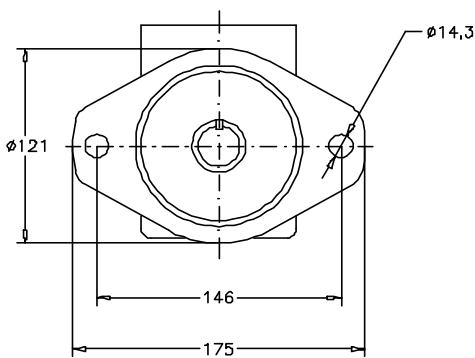
SINGLE VANE PUMPS

HS-20 / HQ-20

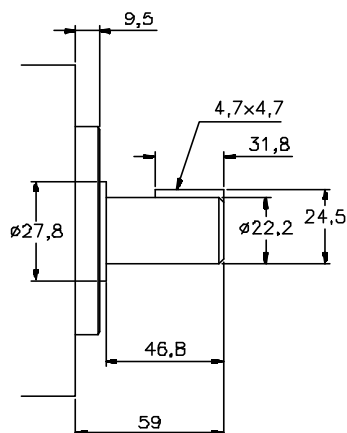
	FLOW						SPEED (rpm)		PRES. (Bar)		CONNECTION		WEIGHT (Kgs.)	
	Lts.a 1000 rpm	8	18	27	29	36	39	46	Mín.	Máx.	Contin.	Intermit.		Inlet
Gal. a 1200 rpm	2	5	8	9	11	12	14	600	2500*	175	210	Ø 1 1/2"	Ø 3/4"	12

* For further details see general chart

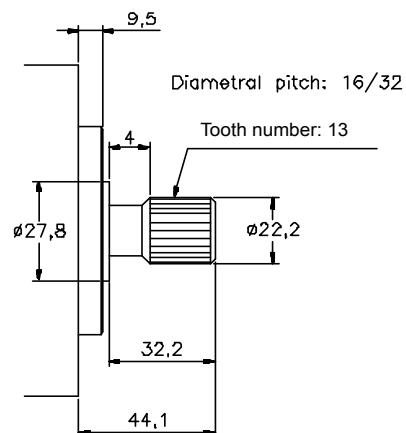
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



Nº1 Shaft



Nº 151 Shaft



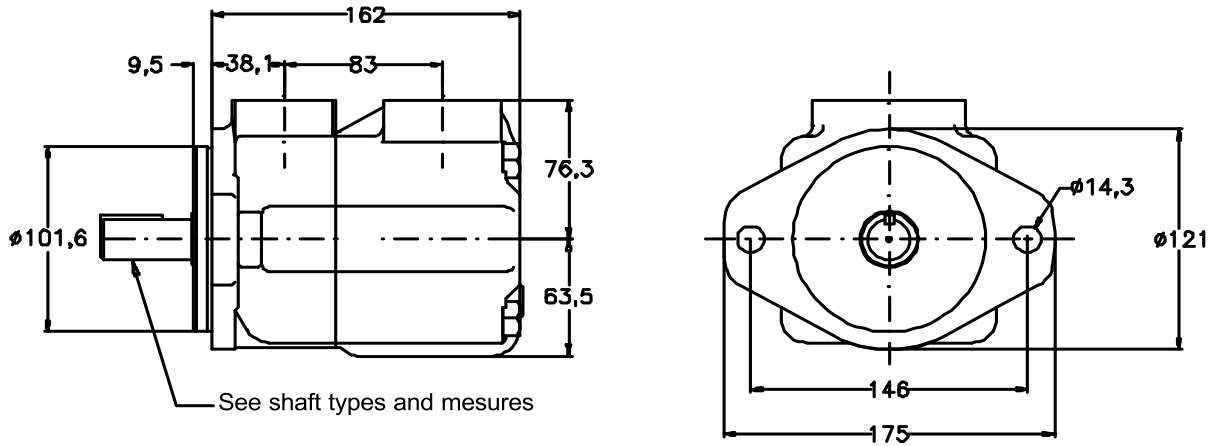
Enquire about other types of shafts

SINGLE VANE PUMPS

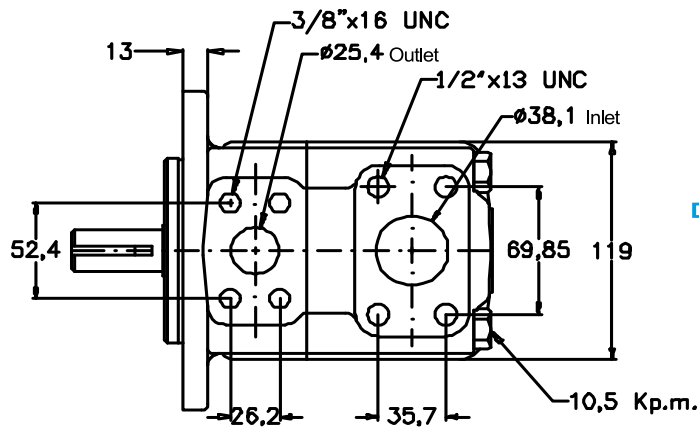
HS-25 / HQ-25

FLOW		SPEED (rpm)		PRES. (Bar)		CONNECTION		WEIGHT (Kgs.)
Lts.at 1000 rpm	Gal. at 1200 rpm	Mín.	Máx.	Contin.	Intermit.	Inlet	Outlet	
26 40 45 55 60 67 80 88	8 12 14 17 19 21 24 27	600	2500	175	210	Ø1"1/2	Ø1"	15

27 gallons (88lts.) cartridge not monted in VQ25 vane pump model.



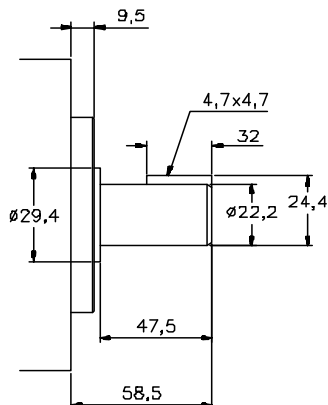
See shaft types and mesures



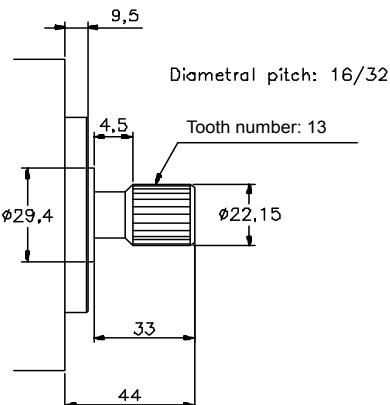
DIMENSIONS IN MILLIMETRES

1" = 25.4 millimetres

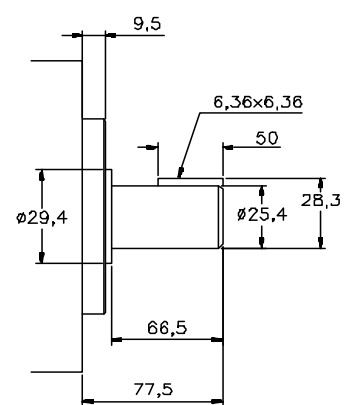
Nº1 Shaft



Nº11 Shaft



Nº86 Shaft



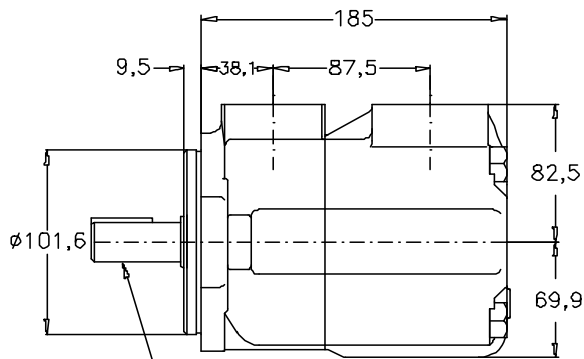
Enquire about other types of shafts

SINGLE VANE PUMPS

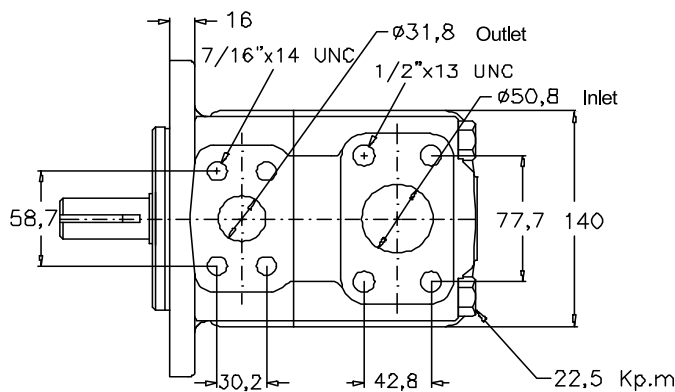
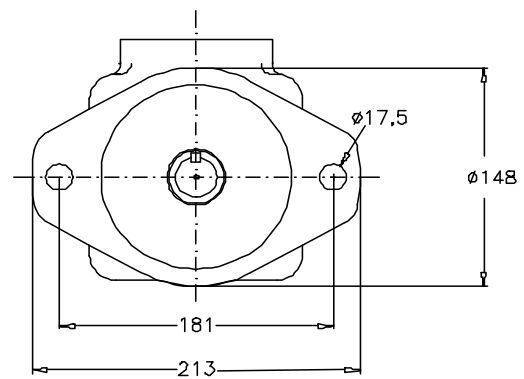
HS-35 / HQ-35

FLOW						SPEED (rpm)		PRES. (Bar)		CONNECTION		WEIGHT (Kgs.)	
Lts.at 1000 rpm	66	81	97	112	121	142	Min.	Máx.	Contin.	Intermit.	Inlet	Outlet	(Kgs.)
Gal. at 1200 rpm	21	25	30	35	38	45	600	2400	175	210	Ø2"	Ø1"1/4	23

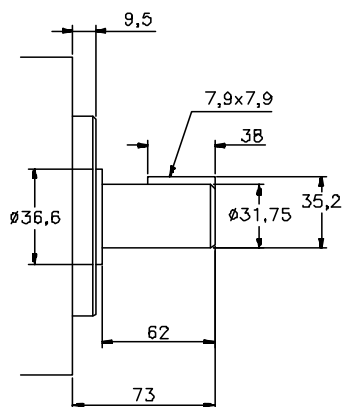
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



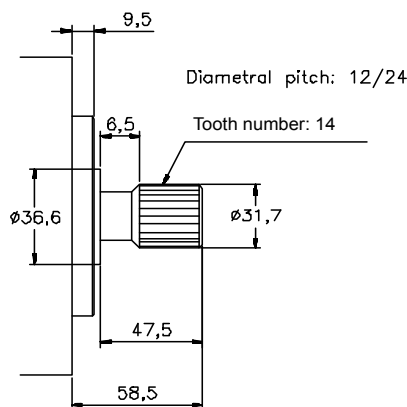
See shaft types and mesures



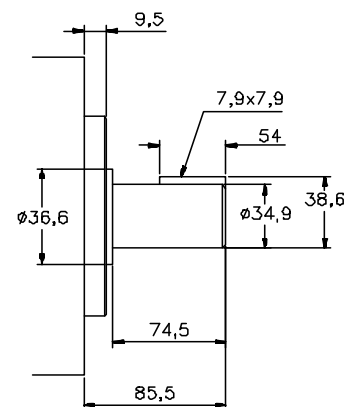
Nº1 Shaft



Nº11 Shaft



Nº86 Shaft



Enquire about other types of shafts

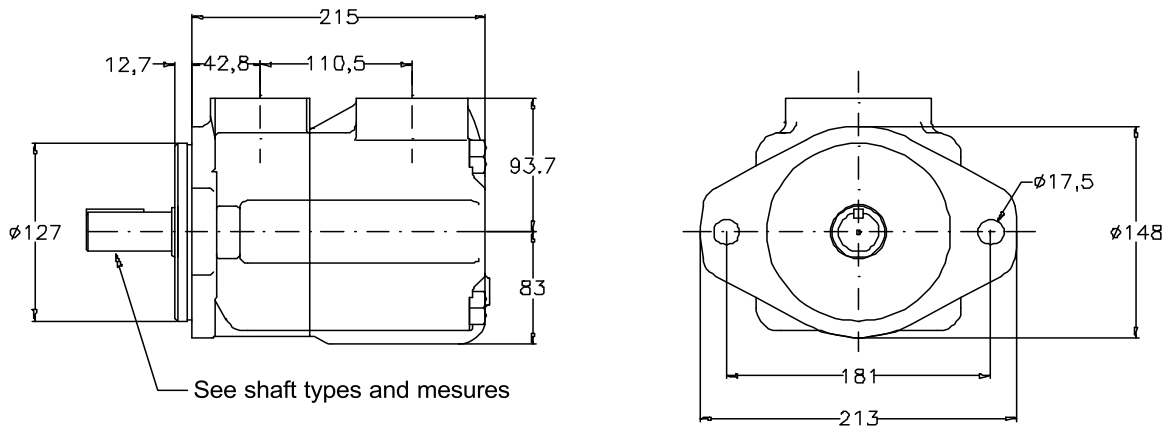
SINGLE VANE PUMPS

HS-45 / HQ-45

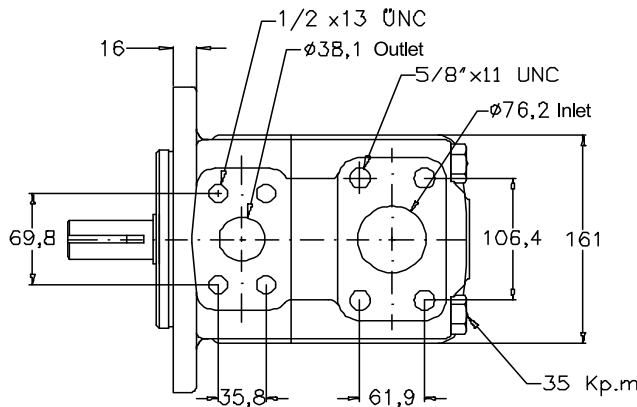
FLOW		SPEED (rpm)		PRES. (Bar)		CONNECTION		WEIGHT (Kgs.)												
Lts.at 1000rpm	Gal. at 1200rpm	Mín.	Máx.	Contin.	Intermit.	Inlet	Outlet													
138	42	148	47	162	50	180	57	193	60	214	67	240	75	600	2200*	155	175	Ø3"	Ø1"1/2	35,5

* For further details see general chart

DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



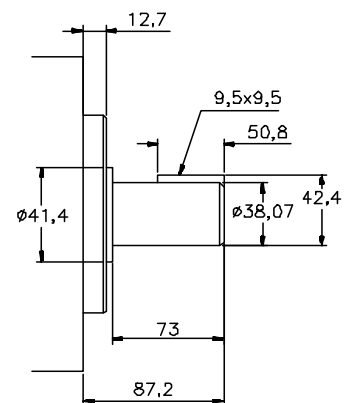
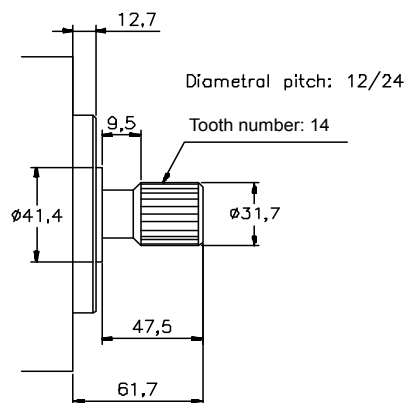
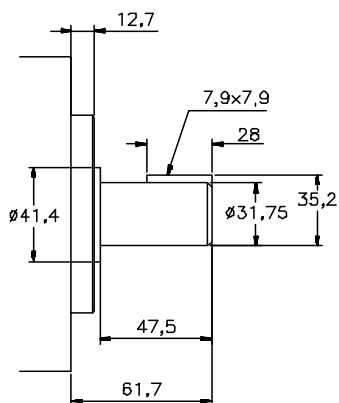
See shaft types and mesures



N°1 Shaft

N°11 Shaft

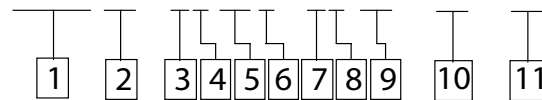
N°86 Shaft



Enquire about other types of shafts

SINGLE VANE PUMP

VH20(F) - 1P11S - 1C (8) - (H) - (L)



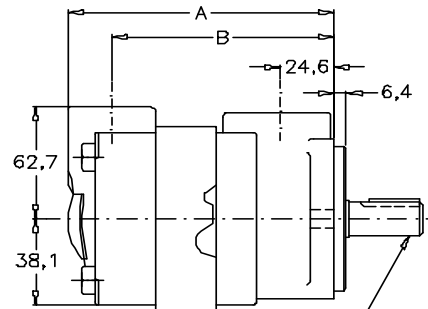
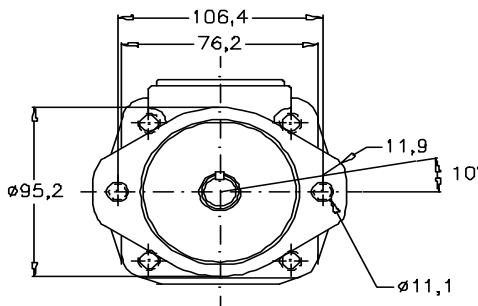
- 1 Model**
VH10, VH20
- 2 Cover (optional)**
Omit - Standard Cover
F - Flow Control Cover
P - Priority Valve Cover
- 3 Mounting**
1 - 2 - Bolt Flange
- 4 Inlet Port Connection**
S - 1.3125"-12 Str.thd. (VH10)
- 1.625"-12 Str.thd. (VH20)
P - 1.00" NPT (VH10)
- 1.25" NPT (VH20)
B - 1.00" BSP (VH10)
- 1.25" BSP (VH20)
- 5 Delivery (USgpm at 1200 rpm)**
VH10-1, 2, 3, 4, 5, 6, 7
VH20-5, 6, 7, 8, 9, 10, 11, 12, 13
- 6 Outlet Port Connection**
VH10 and VH20
S - 0.750"-16 Str.thd. (VH10)
- 1.0625"-12 Str.thd. (VH20)
P - 0.500" NPT (VH10)
- 0.750" NPT (VH20)
B - 0.500" BSP (VH10)
- 0.750" BSP (VH20)
VH10F, VH10P, VH20F and VH20P
S - 0.750"-16 Str.thd. for outlet and
1.0625"-12 Str. thd. For tank port (VH20F)
P - 0.750"-16 Str.thd. for outlet and 0.500" NPT
for tank port (VH10F and VH20F)
T - 0.750"-16 Str.thd. for outlet and tank port (VH10F)
- 0.750"-16 Str.thd. for primary outlet and tank port 0.875"-14 Str.thd.for secondary outlet (VH20P)
K - 0.5625"-18 Str.thd. for primary outlet and tank port and 0.750"-16 Str.thd.for secondary outlet (VH10P)
T - 0.750"-16 Str.thd. for outlet and 0.750"-16 Str.thd. for tank port (VH20F)
- 7 Shaft**
1 - Straight keyed
11 - Splined
62 - Splined (VH20 only)
38 - Splined (VH20 only)
123 - Threaded with woodruff key
- 8 Outlet Port Position**
(Viewed from cover end)
A - Opposite inlet
B - 90° CCW from inlet
C - Inline with inlet
D - 90° CW from inlet
- 9 Flow rate Setting for Flow control and Priority Valve Cover L/min (USgpm) (optional)**
2 - 7.6 (2) 6 - 22.7 (6)
3 - 11.4 (3) 7 - 26.5 (7)
4 - 15.2 (4) 8 - 30.3 (8)
5 - 19.0 (5)
- 10 Pressurer Setting for Flow control and Priority Valve Cover bar (psi) (optional)**
A - 17 (250) F - 103 (1500)
B - 34 (500) G - 121 (1750)
C - 52 (750) H - 138 (2000)
D - 69 (1000) J - 155 (2200)
E - 86 (1250) K - 172 (2500)
- 11 Shaft Rotation**
(Viewed from shaft end)
Omit - Turn right
L - Turn left

SINGLE VANE PUMP

VH10

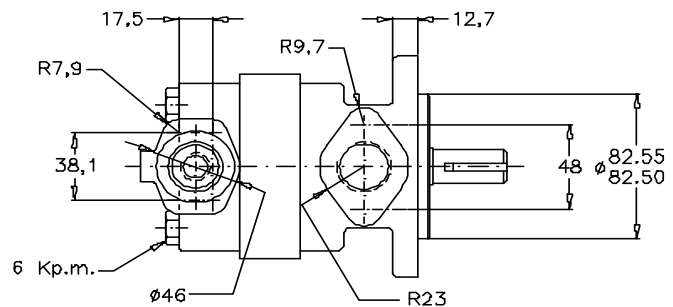
FLOW			SPEED (rpm)		PRESSURE (Bar)		Nominal power (3)	CONNECTION		WEIGHT (Kgs.)
Lts.at 1000 rpm	US Gal. at 1200 rpm	Reduction (2)	Mín.	Máx.	Contin.	Intermit.		Inlet	Outlet	
3	1	0,8	600	4800	155	177	0,7	1" NPT	1/2" NPT	4,5
6	2	0,9		4500						
9	3	1,2		4000						
13	4	1,6		3400						
16	5	1,7		3200						
19	6	1,8		3000						
22	7	1,9		2800	140	4,2				

DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



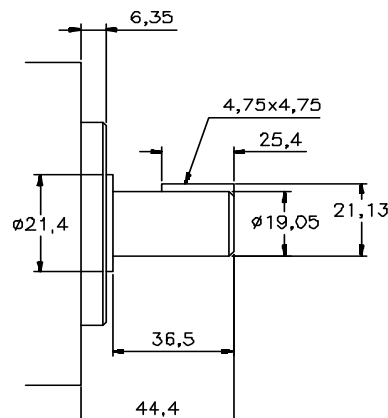
See shaft type and measures

Galon:	Dimension	
	A	B
1, 2, 3	115,6	91,9
4, 5	121,9	98,3
6, 7	127	103,4



Num.	Inlet	Outlet
02	1" BSP	1/2" BSP
04	1" NPT	1/2" NPT

Nº1 Shaft

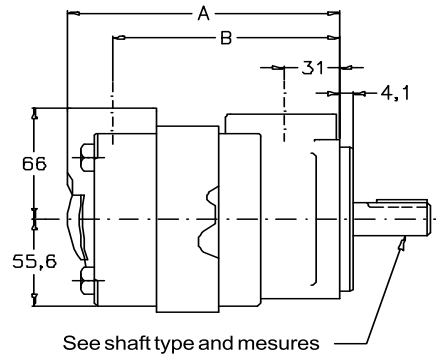
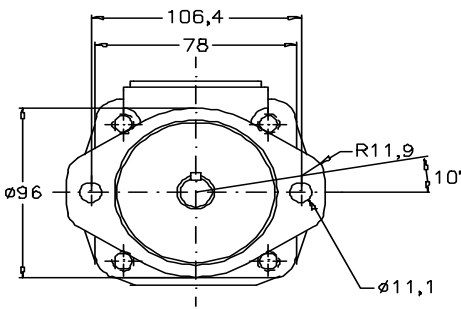


SINGLE VANE PUMP

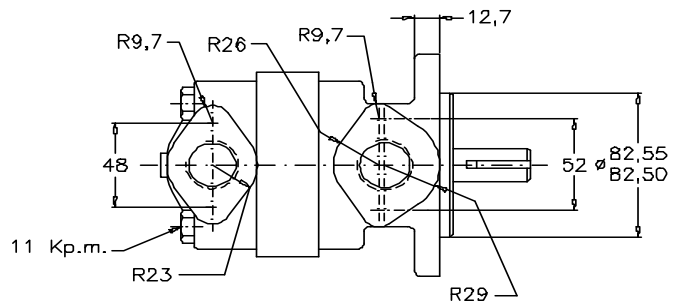
VH20

FLOW			SPEED (rpm)	PRESSURE (Bar)		Nominal power (3)	CONNECTION		WEIGHT (Kgs.)	
Lts.at 1000 rpm	US Gal. at 1200 rpm	Reduction (2)		Mín.	Máx.		Contin.	Intermit.		Inlet
19	6	2,8	600	3400	155	177	3,9	1 1/4" NPT	3/4" NPT	7,3
22	7	4,2		3000						
26	8	4,5		2800						
29	9	4,8		2800						
36	11	4,8		2500						
39	12	5,4		2400						
42	13	6,0	2400	140	8,1	1 1/4" BSP	3/4" BSP			

DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres

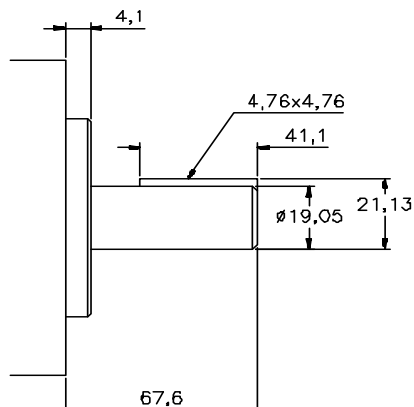


Galon	Dimension	
	A	B
6	125,2	102,1
7, 8, 9	131,6	108,4
11	136,7	113,5
12, 13	140,2	117,1



Num.	Inlet	Outlet
02	1" 1/4 BSP	3/4" BSP
04	1" 1/4 NPT	3/4" NPT

Nº1 Shaft



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

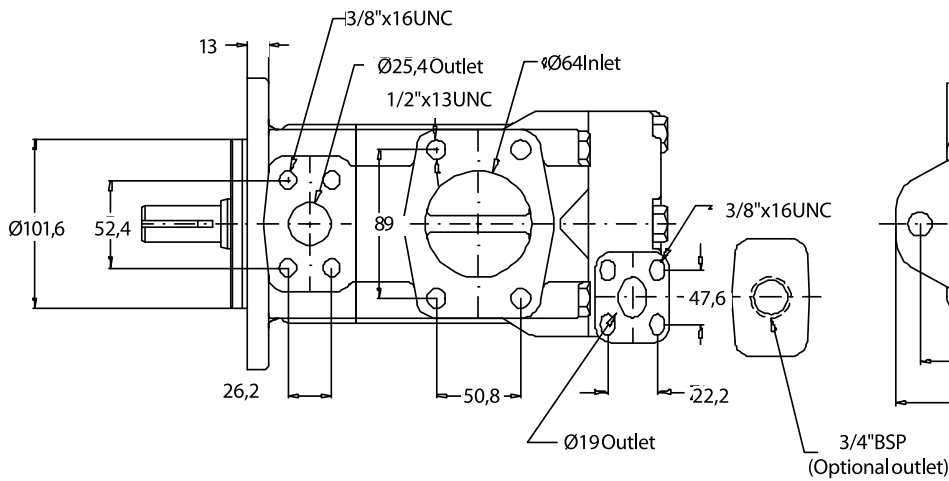
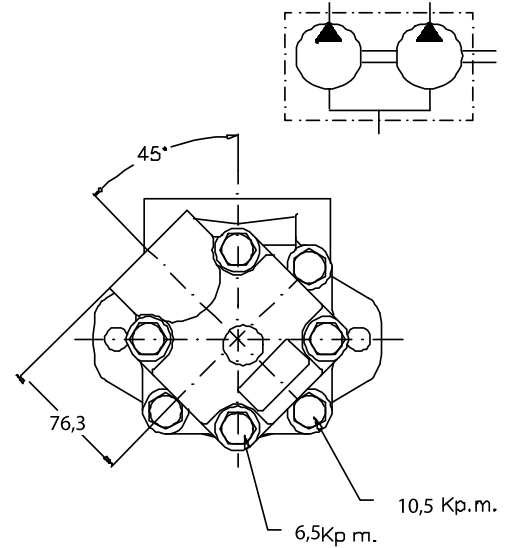
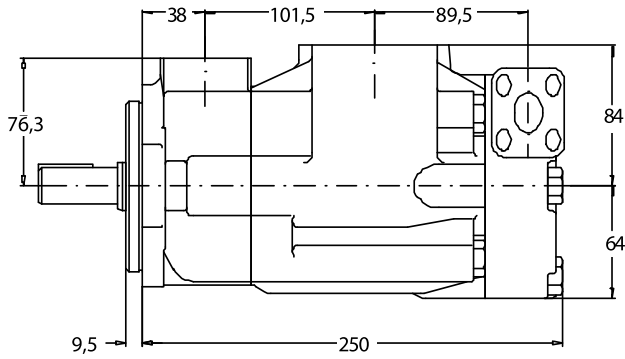
Series 2525V & 4535V

- 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

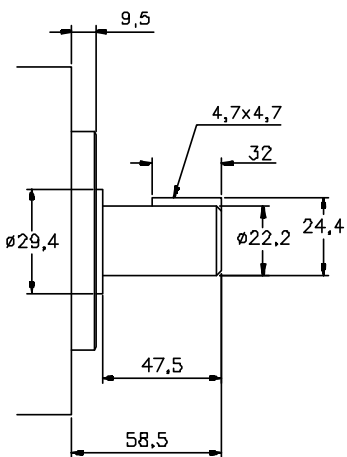
DOUBLE VANE PUMPS

HS-2520, HQ-2520

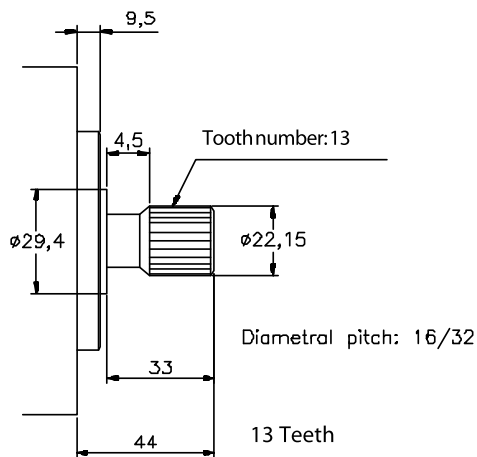
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



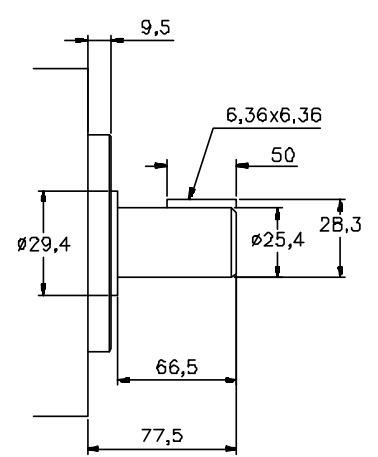
N°1 Shaft



N°11 Shaft



N°86 Shaft

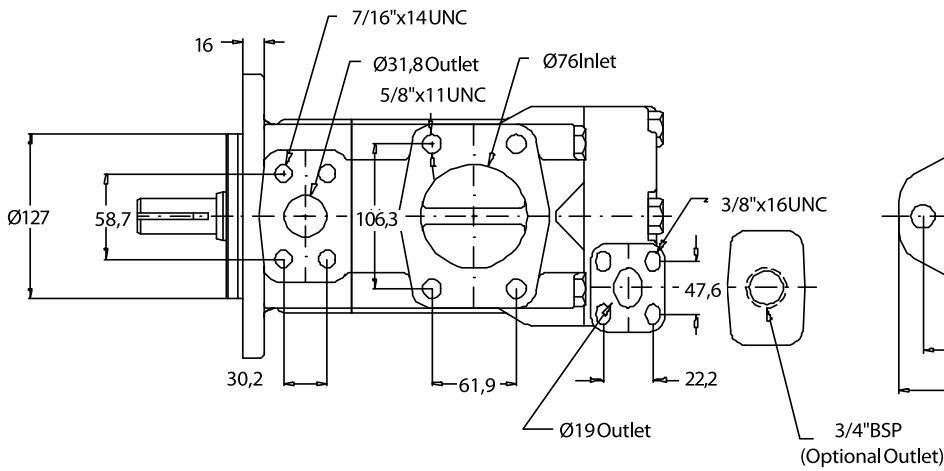
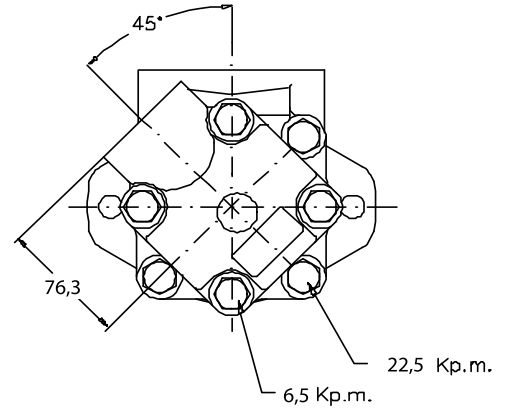
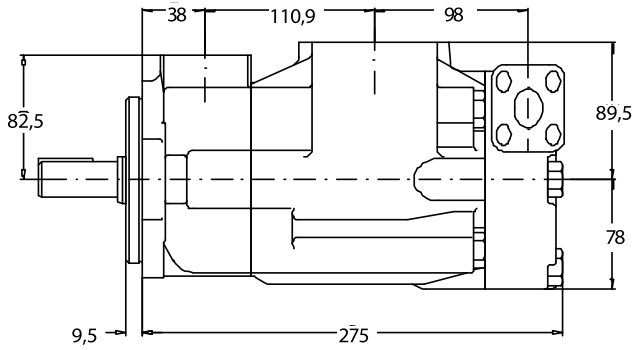
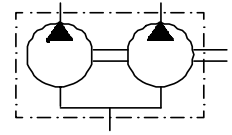


Enquire about other types of shafts

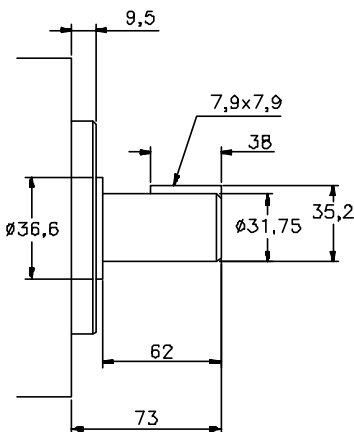
DOUBLE VANE PUMPS

HS-3520, HQ-3520

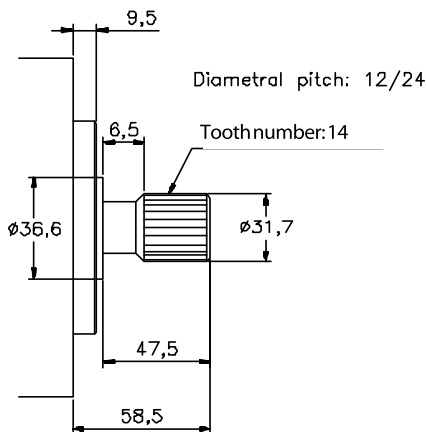
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



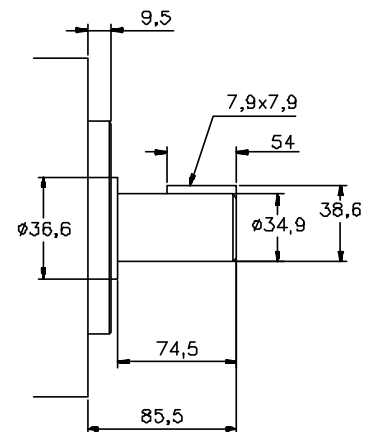
N°1 Shaft



N°11 Shaft



N°86 Shaft

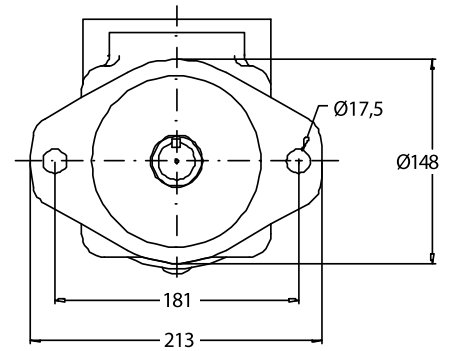
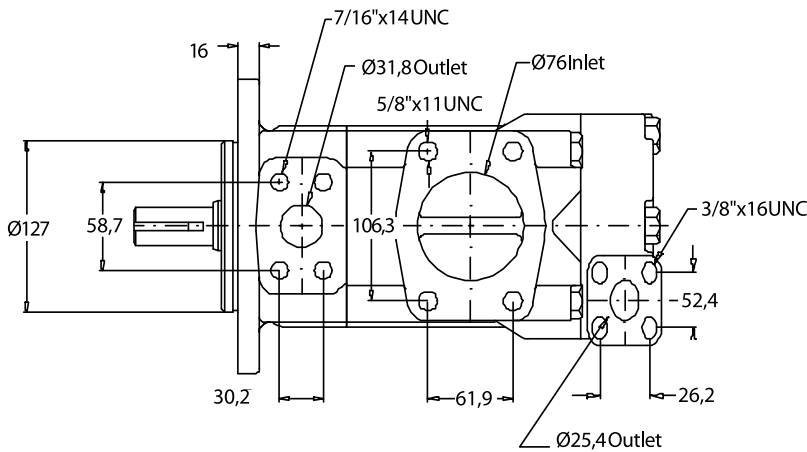
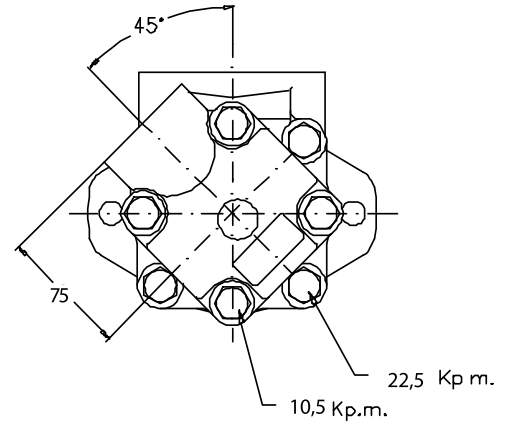
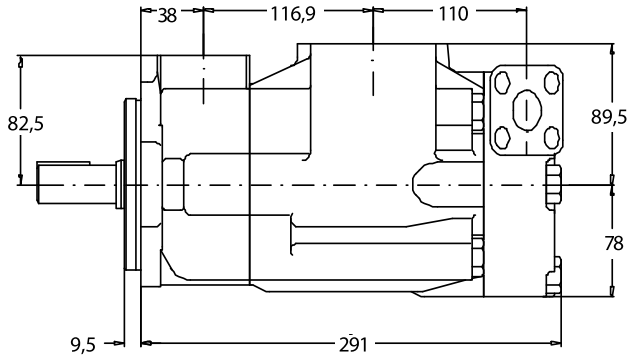
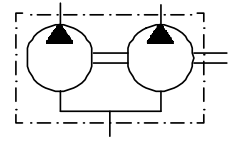


Enquire about other types of shafts

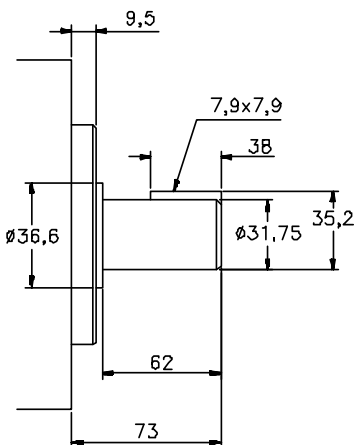
DOUBLE VANE PUMPS

HS-3525, HQ-3525

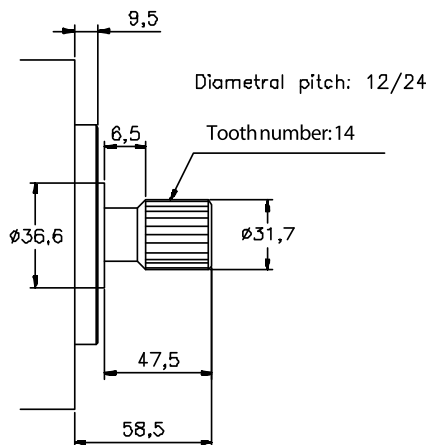
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



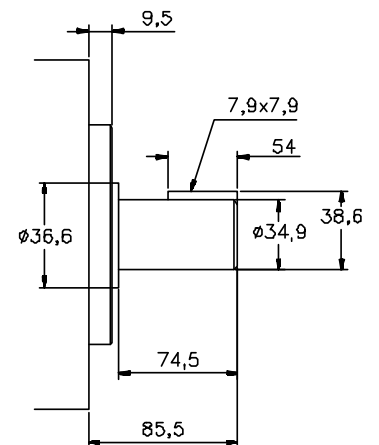
N°1 Shaft



N°11 Shaft



N°86 Shaft

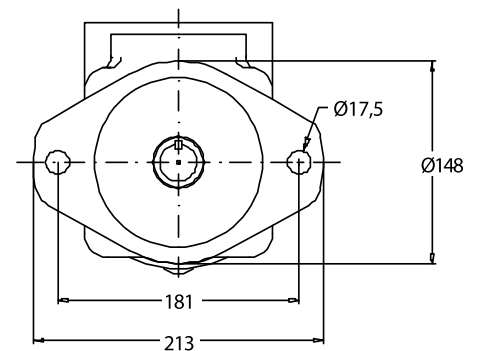
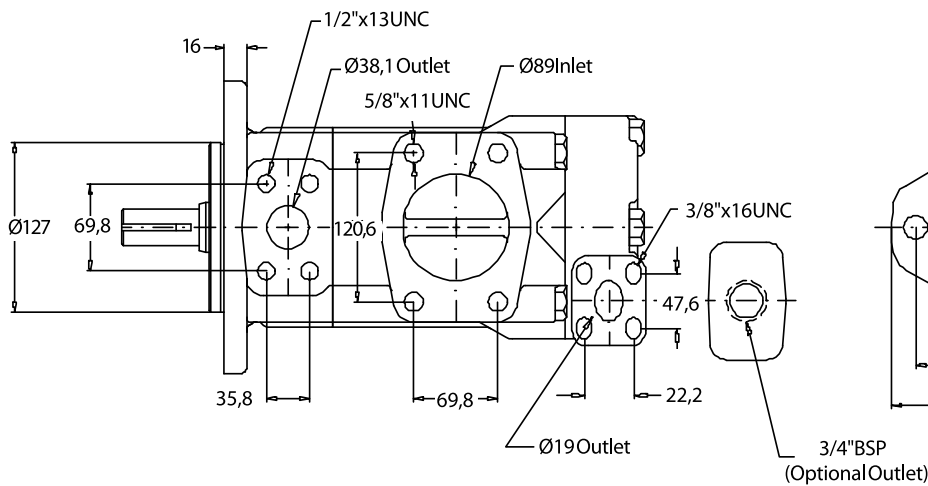
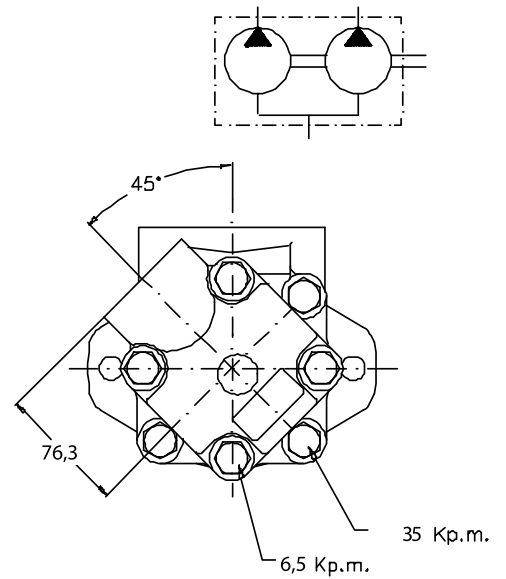
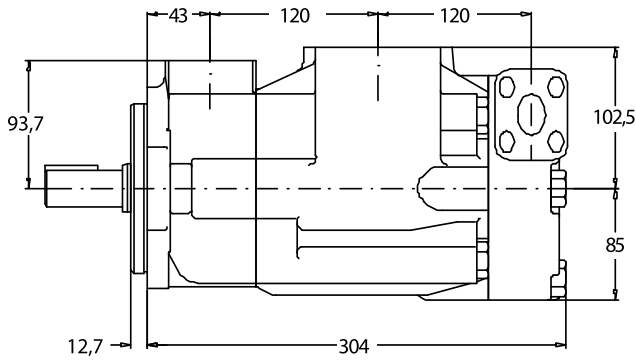


Enquire about other types of shafts

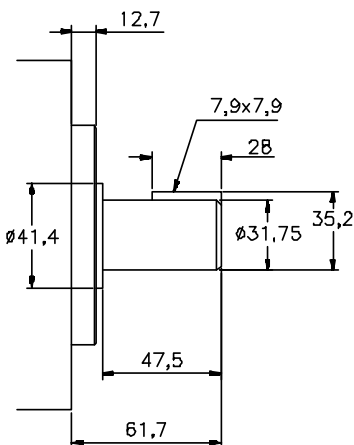
DOUBLE VANE PUMPS

HS-4520, HQ-4520

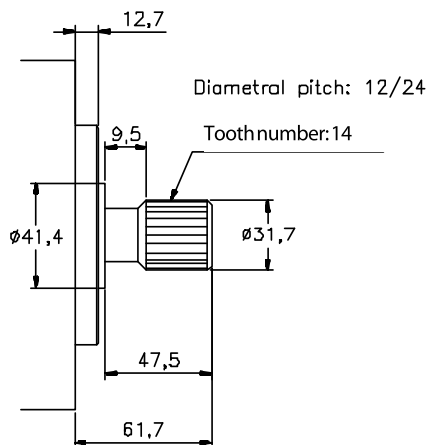
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



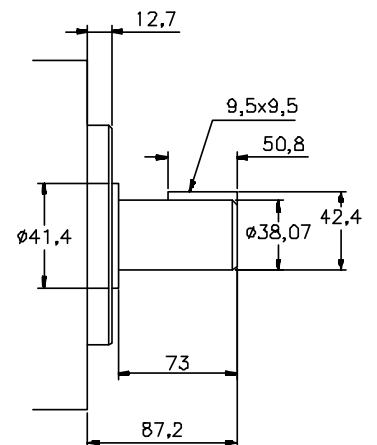
N°1 Shaft



N°11 Shaft



N°86 Shaft

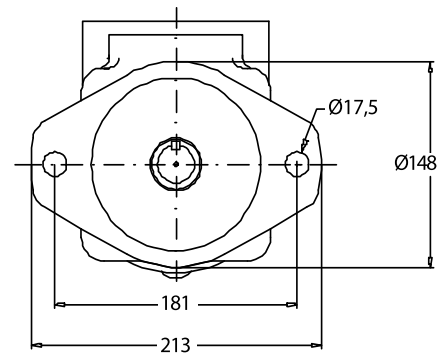
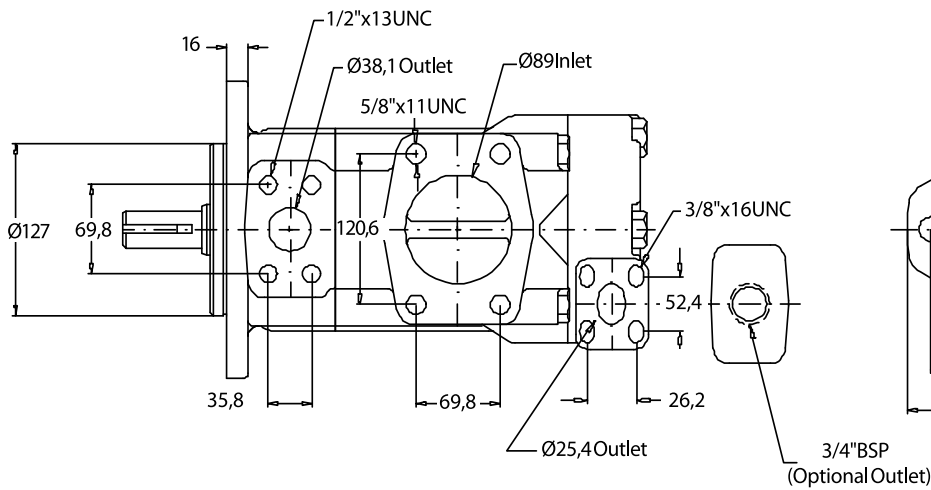
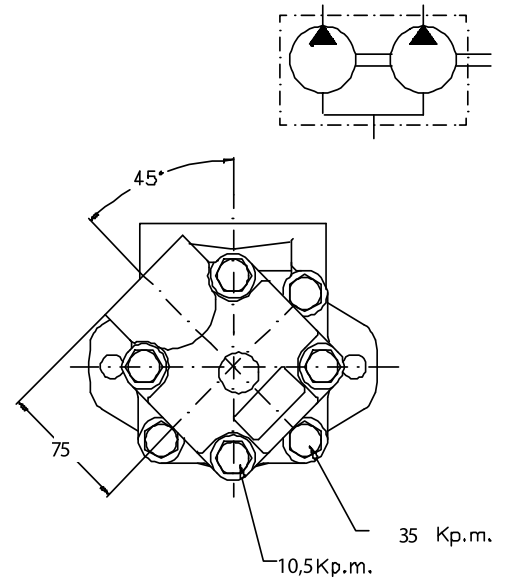
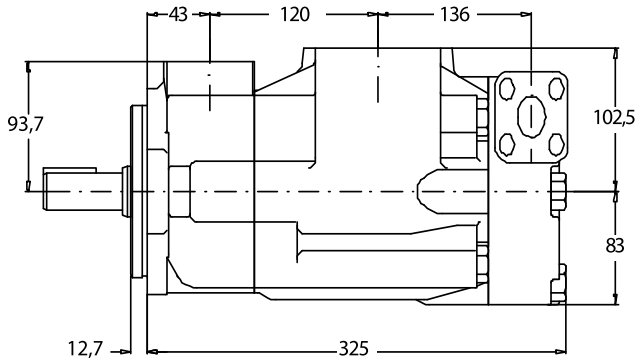


Enquire about other types of shafts

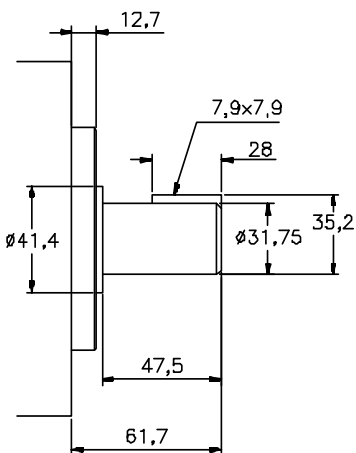
DOUBLE VANE PUMPS

HS-4525, HQ-4525

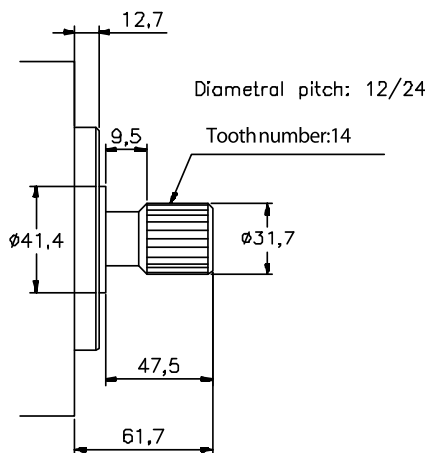
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



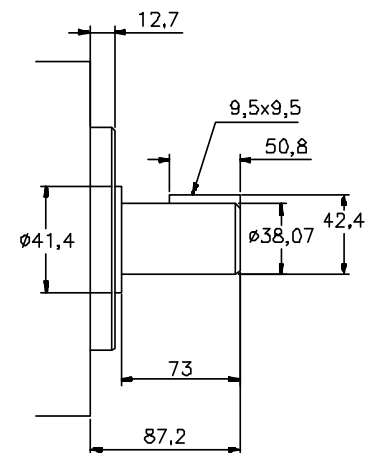
N°1 Shaft



N°11 Shaft



N°86 Shaft

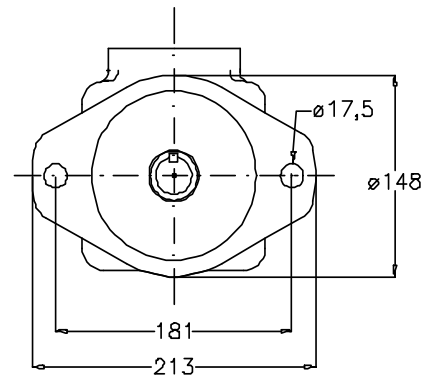
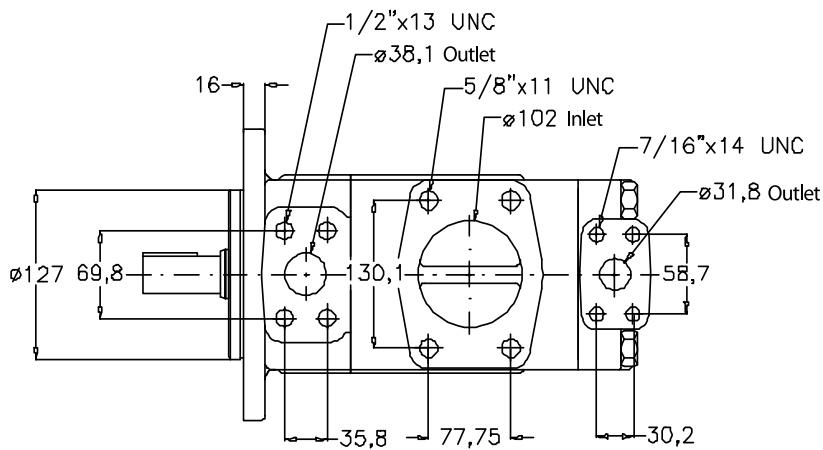
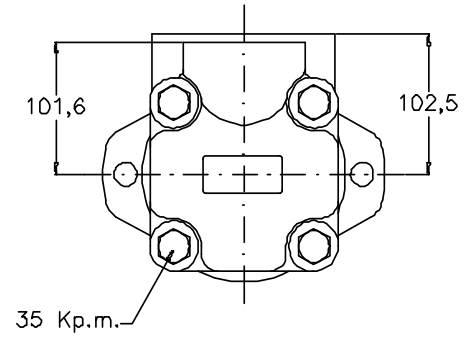
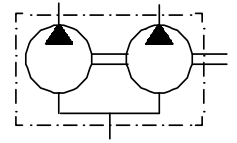
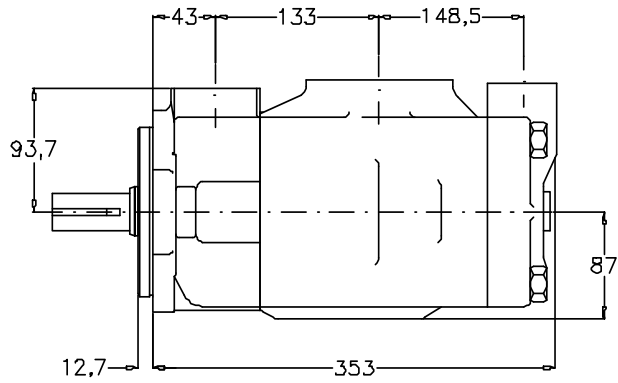


Enquire about other types of shafts

DOUBLE VANE PUMPS

HS-4535, HQ-4535

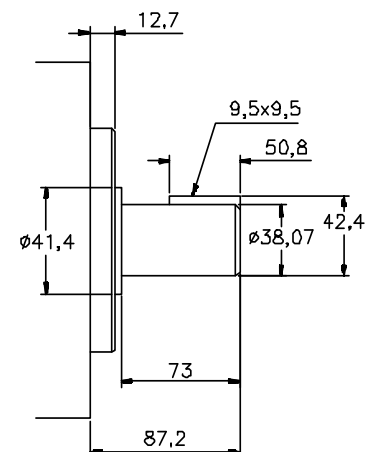
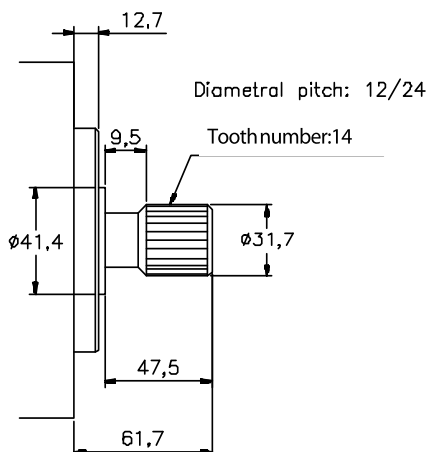
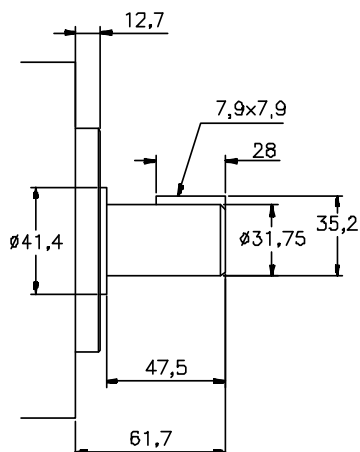
DIMENSIONS IN MILLIMETRES 1" = 25.4 millimetres



N°1 Shaft

N°11 Shaft

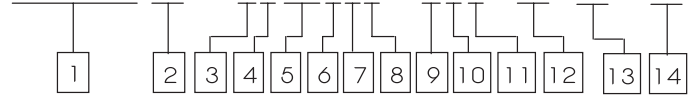
N°86 Shaft



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 Position of outlet
(Viewed from cover end of pump)
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

<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

<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

<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

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

<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

<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

<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)
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)
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> |
|--|--|---|

DOUBLE VANE PUMP

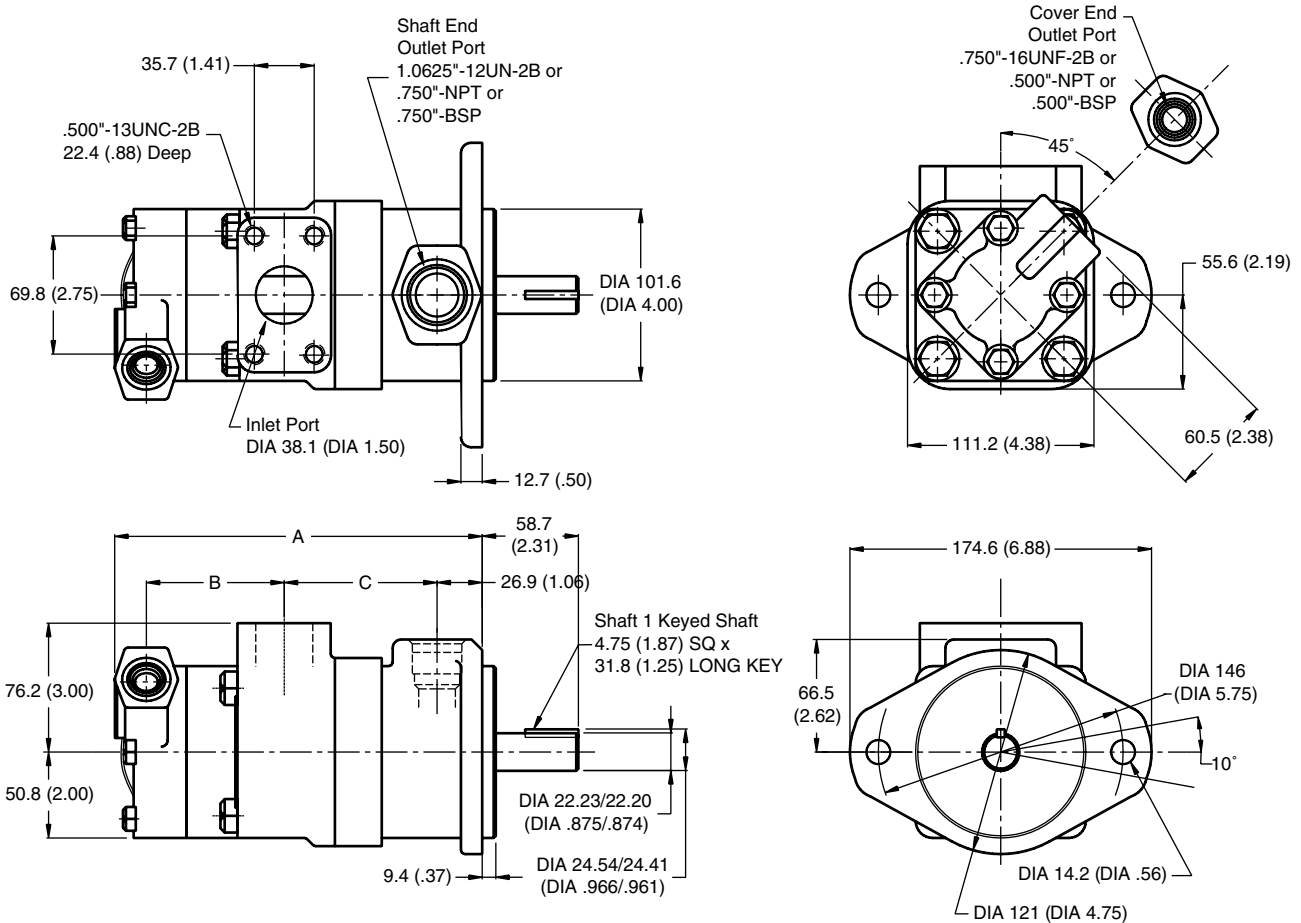
SPECIFICATIONS

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	kg (lb)
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

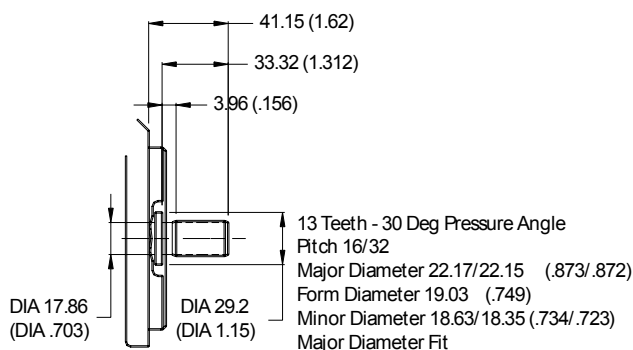
VH2010

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)

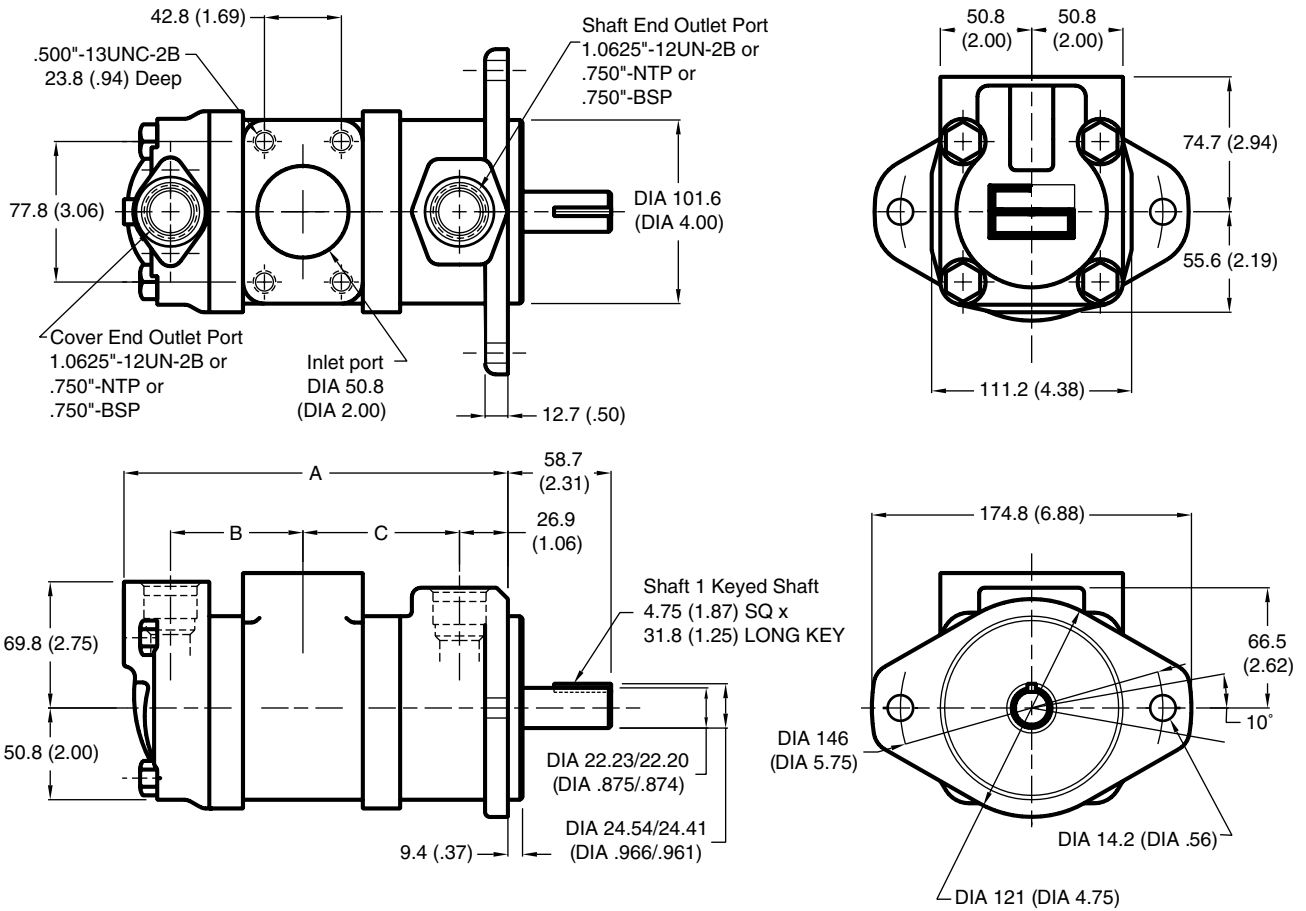
OTHER SHAFT OPTIONS FOR DOUBLE PUMP V2010 AND V2020



DOUBLE VANE PUMP

VH2020

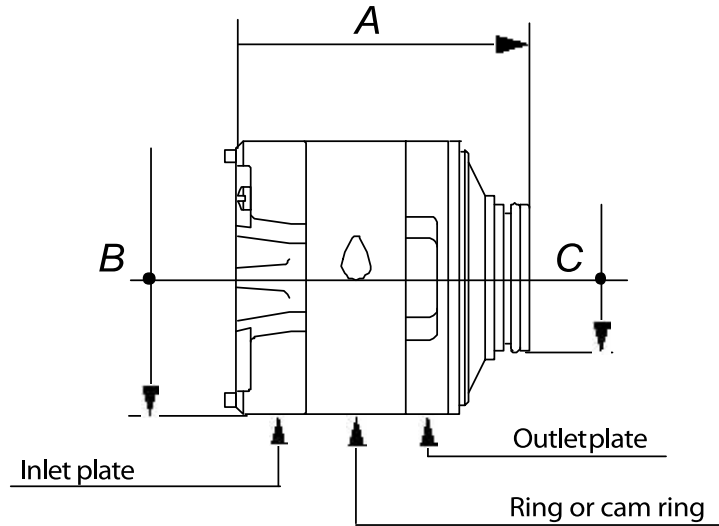
INSTALLATION DIMENSIONS mm (inch)



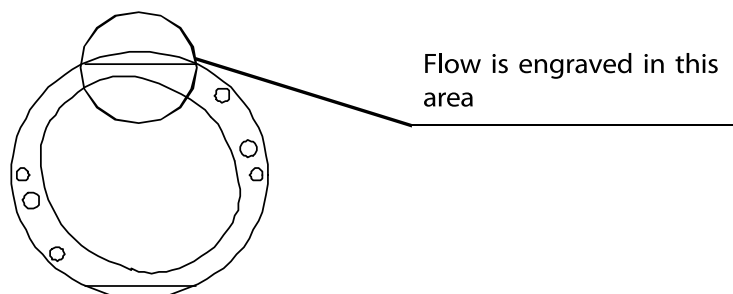
Delivery @ 1200 rpm & 7 bar (100 psi)		Dimension		
Shaft End	Cover End	A	B	C
7, 8, 9	5, 6	213.6 (8.41)	73.7 (2.90)	87.1 (3.43)
7, 8, 9	7, 8, 9	220.0 (8.66)	80.0 (3.15)	87.1 (3.43)
10, 11	5, 6	218.7 (8.61)	73.7 (2.90)	92.2 (3.63)
10, 11	7, 8, 9	225.0 (8.86)	80.0 (3.15)	92.2 (3.63)
10, 11	10, 11	229.9 (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)

IDENTIFICATION

DIMENSIONS AND FLOW



DIMENSIONS in mm.	PUMP TYPE				
	20V	25V	30V	35V	45V
A	81,8	99,5	110,5	118,4	140,5
B	82,6	96,8	96,8	114,25	133,3
C	47,15	52,15	52,15	72,15	80,15
WEIGHT aprox. in Kg.	2,300	3,800	4,100	6,400	10,200
FLOW in Gal. at 1.200 rpm	2	8	24	21	42
	5	12	28	25	47
	8	14		30	50
	9	17		35	57
	11	19		38	60
	12	21		45	67
	14	24			75



RANGE OF PRODUCTS



SINGLE • DOUBLE • THRU-DRIVE VANE PUMPS



VARIABLE DISPLACEMENT PUMP H(S)P-10V



DIRECTIONAL CONTROL VALVE



HYDRAULIC CYLINDERS

hydraut

hydraut.com