

## BH\* SINGLE VANE PUMP ORDERING CODE

DATA SHEET

F3	BHQ	4	67	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:**

- BHP = 10 vane pump**, industrial and mobile use, BSP, NPT & SAE threads. Only BHP1 and BHP2
- BHS = 12 vane pump**, industrial use (very quiet), metric threads.
- BHQ = 10 vane pump and bronze plates**, mobile use, metric threads.

**3- Pump model:** 1 and 2 in BHP types; 4, 6 and 7 in BHS and BHQ types.

**4- Flow:** BHP, BHS and BHQ in Litres per minute at 1000 rpm and 7 Bar.

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

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

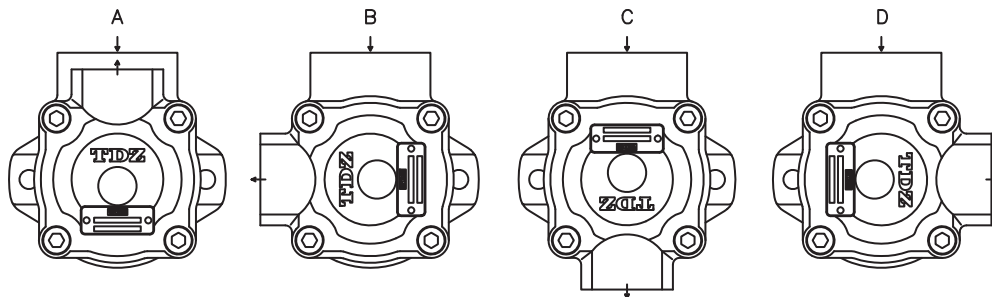
**7- Outlet position, (viewed from shaft):**

- A: Outlet in line with inlet.
- B: 90° on the right from inlet (Clockwise from inlet).
- C: 180° from inlet.
- D: 90° on the left from inlet (90° counter clock wise from inlet).

**8- Special characteristics**

Omit if not required

- Example:
- 02: BSP
  - 03: UNF
  - 04: NPT



## BH\* SINGLE VANE PUMP CHARACTERISTICS

### TDZ DESIGN VANE PUMPS

TYPE	FLOW			SPEED (rpm)		PRESSURE (Bar)		Nominal Power (2)	CONNECTION		WEIGHT (Kgs.)
	Ltrs.at 1000 rpm	Gal. At 1200 rpm	Reduction (1)	Mín.	Máx.	Contin.	Intermit.		Inlet	Outlet	
<b>BHP1</b>	2	0,6	0,18	600	2500	150	175	0,5	(4)	(4)	1
	3	0,9	0,18					0,7			
	4,5	1,2	0,36					1			
	5,5	1,7	0,36					1,4			
	6,5	2	0,36					1,6			
<b>BHP2</b>	7	2,2	0,7	600	2500	150	175	1,8	(4)	(4)	3,6
	8	2,5	1,1					2			
	10	3,2	1,1					2,5			
	12	3,8	1,1					3			
	15	4,7	1,1					3,7			
<b>BHS4 BHQ4</b>	26	8	4,5	600	2500 1800 (BHS)	175	210	6,9	Ø38	Ø26	14,5
	40	12	5,7					10,4			
	45	14	5,7		11,6						
	55	17	5,8		13,8						
	60	19	5,8		14,6						
	67	21	6		16,8						
	80	24	6,2		20,3						
88*	27*	6,5	1500	125	150	22,4					
<b>BHS6 BHQ6</b>	66	21	8,6	600	2400 1800 (BHS)	175	210	16,8	Ø60	Ø32	26,3
	81	25	9					20,3			
	97	30	10		24,3						
	112	35	11,4		27,4						
	121	38	11,4		29,3						
	142	45	13,1		1500		125	150			
<b>BHS7 BHQ7</b>	138	42	15	600	2200 1800 (BHS)	155	175	32,3	Ø75	Ø38	38,3
	148	47	15,7					36,3			
	162	50	14,3		37,9						
	180	57	17,9		43,2						
	193	60	18,6		46,1						
	214	67	22		51,2						
	240	75	26		57,4						

**\*27 gallons (88 lts.) cartridge not mounted in BHQ4 vane pump model.**

**(1) Delivery flow reduction** in Ltrs./min. at 100 Bar. 22 cST of oil viscosity at operating temperature. To calculate the approximate delivery flow at a given pressure and speed, use the following formula with flow reduction and theoretical flow values shown in the chart. Flow reduction values are independent of shaft speed.

$$\text{Approx. output flow (Ltrs./min.)} = \text{Theoretical flow} \times \frac{\text{R.P.M}}{1000} - \text{Reduction} \times \frac{\text{Pressure (Bar)}}{1000}$$

**(2) Nominal Power** in H.P. at 100 Bar and 1000 RPM (to convert into Kw multiply by 0.735). To obtain the real input power at different pressure and revolutions, use the formula as follows:

$$\text{Real input power} = \text{Input power} \times \frac{\text{R.P.M}}{1000} \times \frac{\text{Pressure (Bar)}}{1000}$$

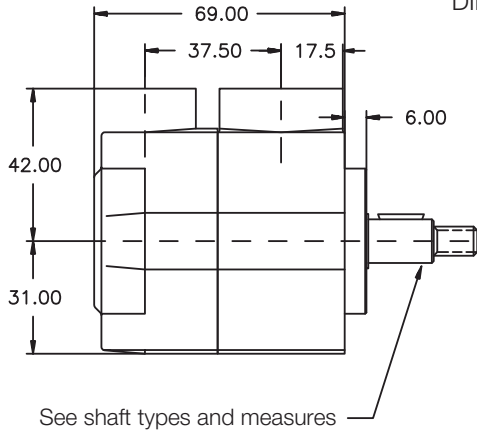
**(3)** See options on dimension pages.

**SINGLE VANE PUMP TYPE BHP-1**

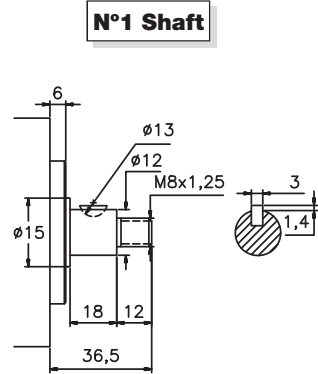
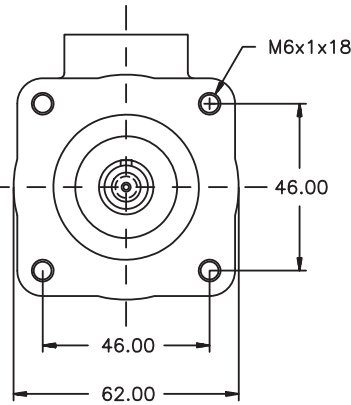
**DATA SHEET**

	FLOW					SPEED (rpm)		PRES (BAR)		CONNECTION		WEIGHT (Kgs.)	
	Lts at 1000 rpm	2	3	4,5	5,5	6,5	Mín.	Máx.	Contin.	Intermit.	Inlet		Outlet
Gal at 1200 rpm	0,6	0,9	1,2	1,7	2		600	2500	175	210	Ø38	Ø26	1

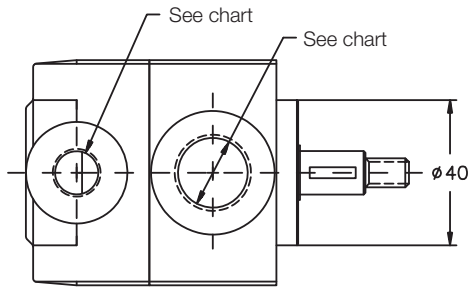
DIMENSIONS IN MILLIMETERS 1" = 25.4 mm



See shaft types and measures



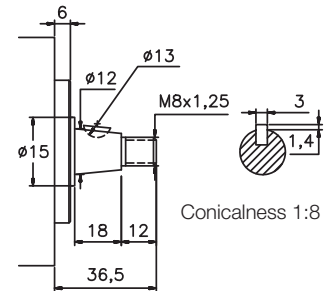
**N°1 Shaft**



See chart

See chart

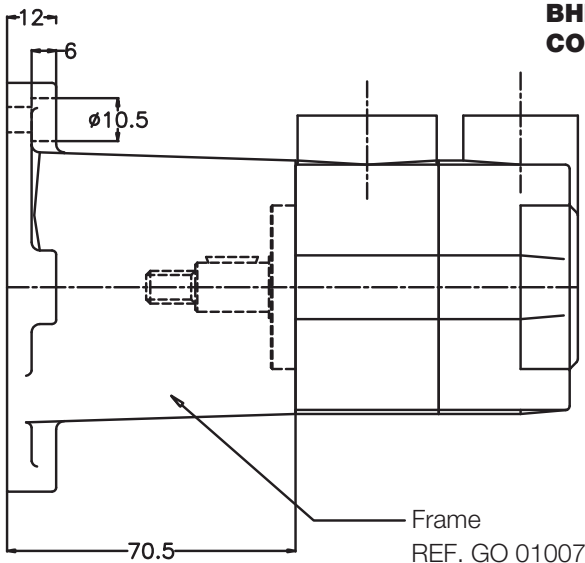
Ø40



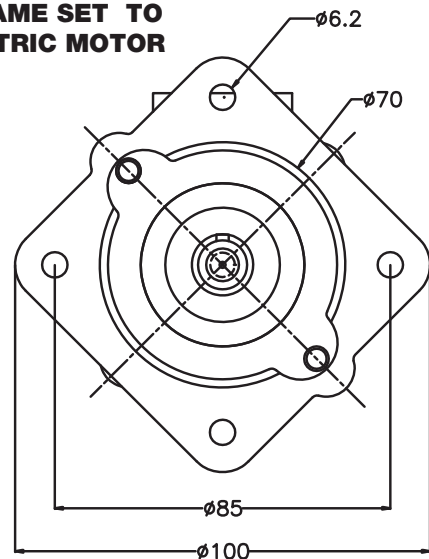
**N°2 Shaft**

Num.	Inlet	Outlet
01	1/2" BSP	1/4" BSP
02	3/8" BSP	1/4" BSP

**BHP1 PUMP AND FRAME SET TO CONNECT TO ELECTRIC MOTOR**

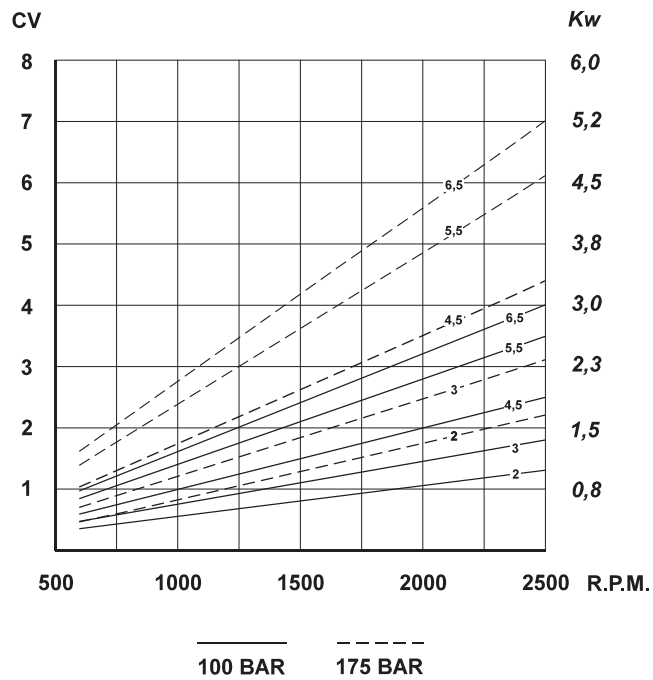
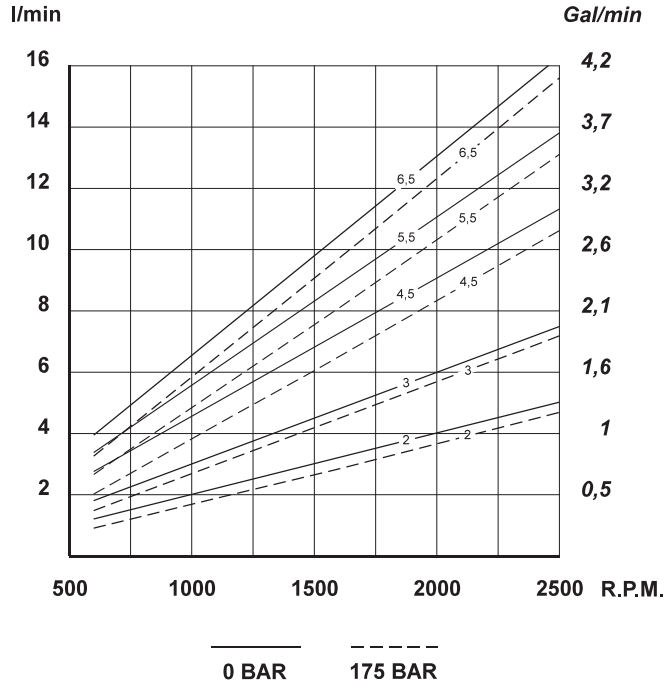


Frame  
REF. GO 01007



**SINGLE VANE PUMP TYPE BHP-1**

**FLOW AND INPUT POWER DIAGRAMS**

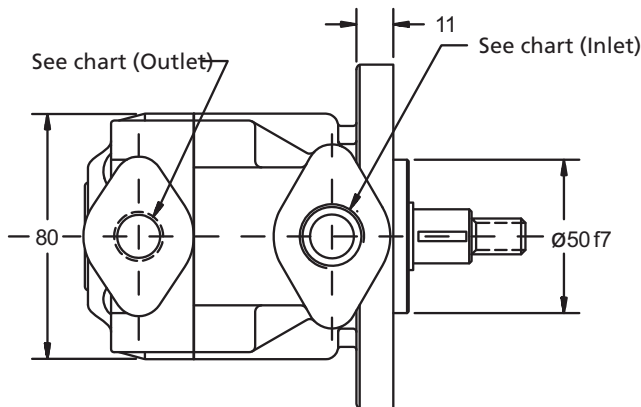
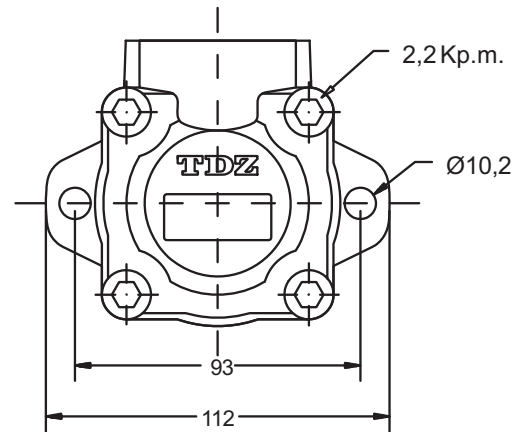
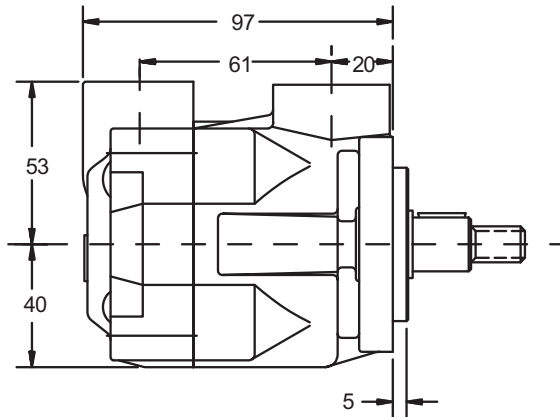


**SINGLE VANE PUMP TYPE BHP-2**

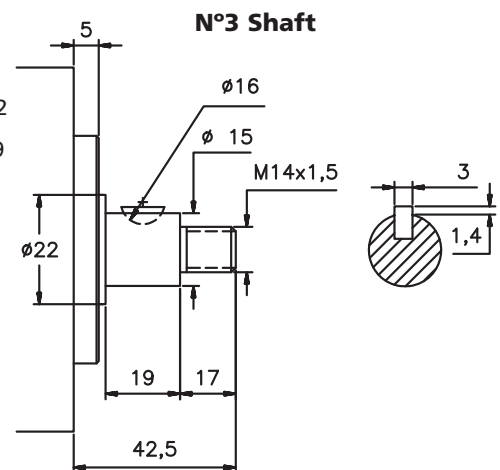
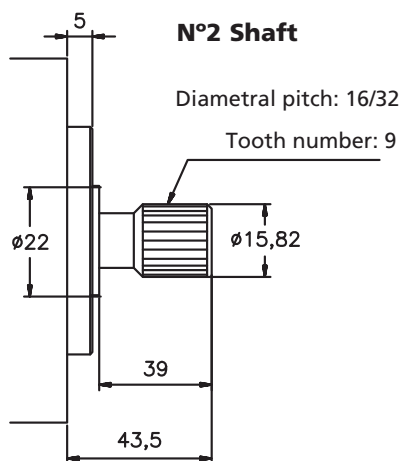
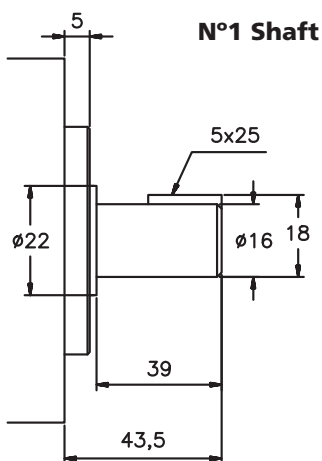
	FLOW					SPEED (rpm)		PRES (BAR)		CONNECTION		WEIGHT (Kgs.)	
	Lts at 1000 rpm	7	8	10	12	15	Mín.	Máx.	Contin	Intermit.	Inlet		Outlet
Lts at 1000 rpm	7	8	10	12	15		600	2500*	150	175	3/4" BSP	1/2" BSP	3,6
Gal at 1200 rpm	2,2	2,5	3,2	3,8	4,7								

\* For further details see general chart

DIMENSIONS IN MILLIMETERS 1" = 25.4 mm

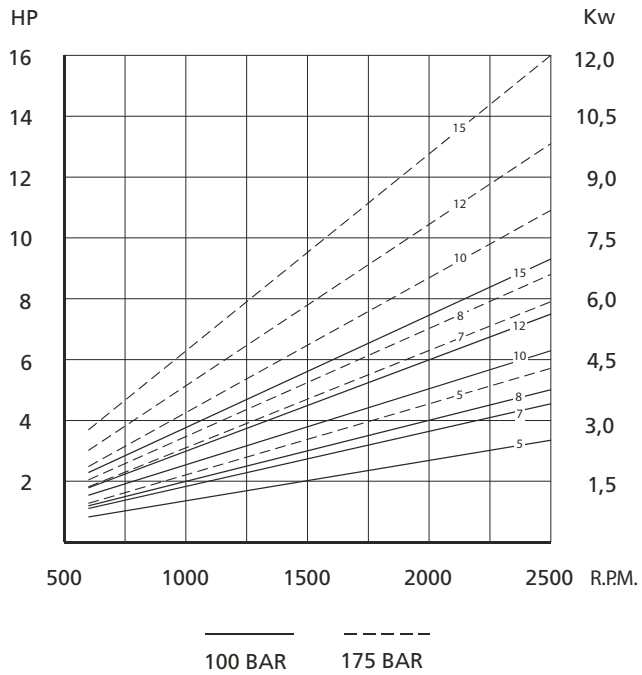
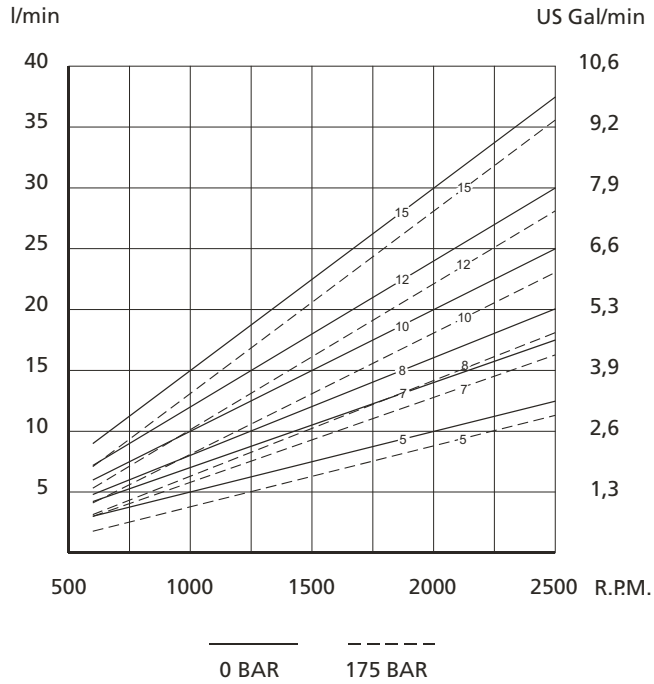


Num.	Inlet	Outlet
02	3/4" BSP	1/2" BSP



**SINGLE VANE PUMP TYPE BHP-2**

**FLOW AND INPUT POWER DIAGRAMS**



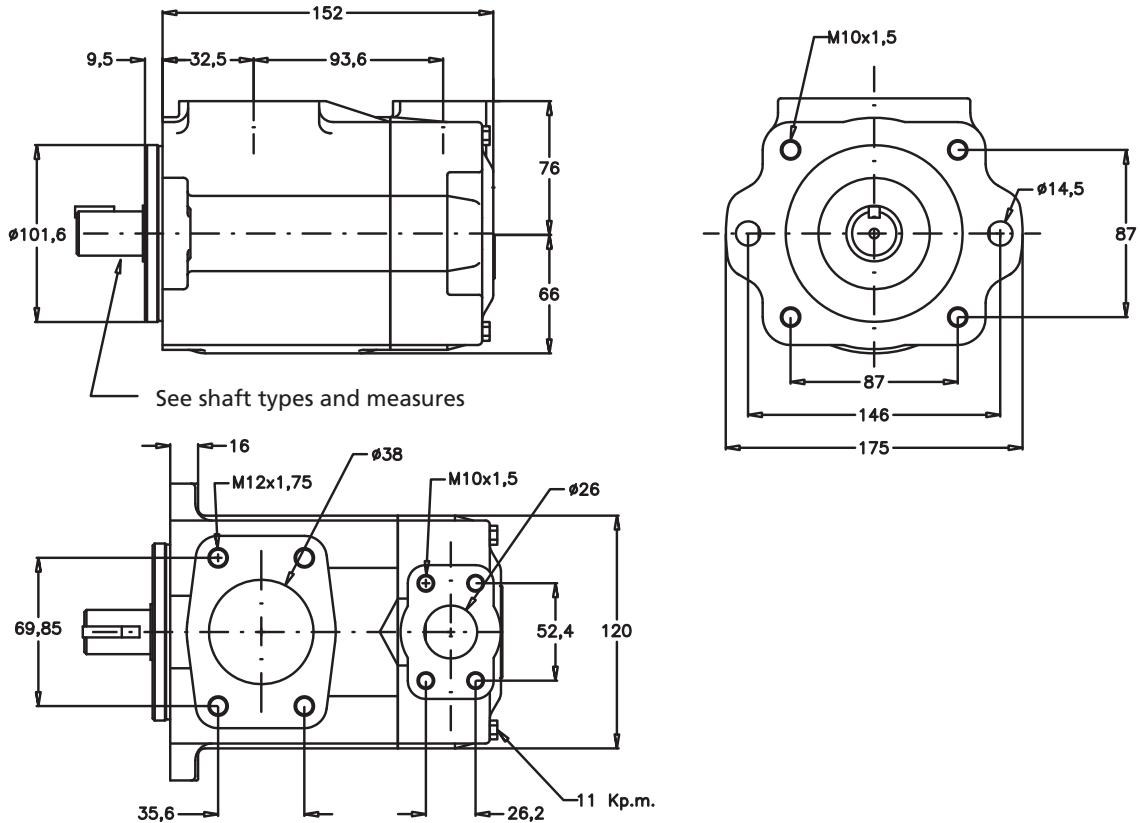
**SINGLE VANE PUMP TYPE BHS-4 & BHQ-4**

**DATA SHEET**

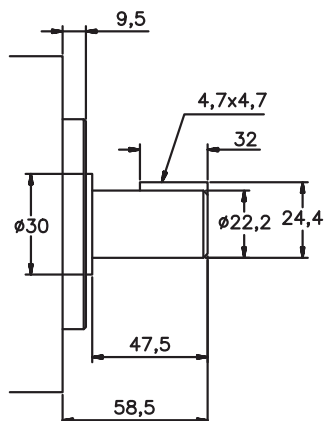
FLOW	SPEED (rpm)		PRES (BAR)		CONNECTION		WEIGHT (Kgs.)		
	Min.	Máx.	Contin.	Intermit.	Inlet	Outlet			
Lts at 1000 rpm	26	39	44	54	60	66	80*	85*	
Gal at 1200 rpm	8	12	14	17	19	21	24*	27*	
		600		2500*	175	210*	Ø38	Ø26	14,5

\* For further details see general chart

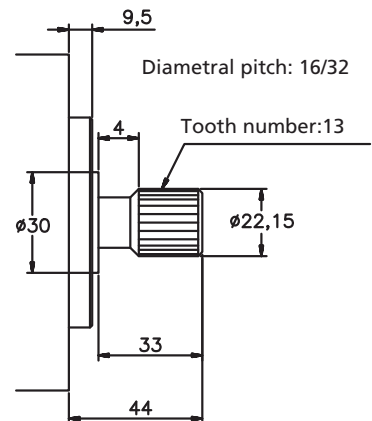
DIMENSIONS IN MILLIMETERS 1" = 25.4 mm



**N°1 Shaft**



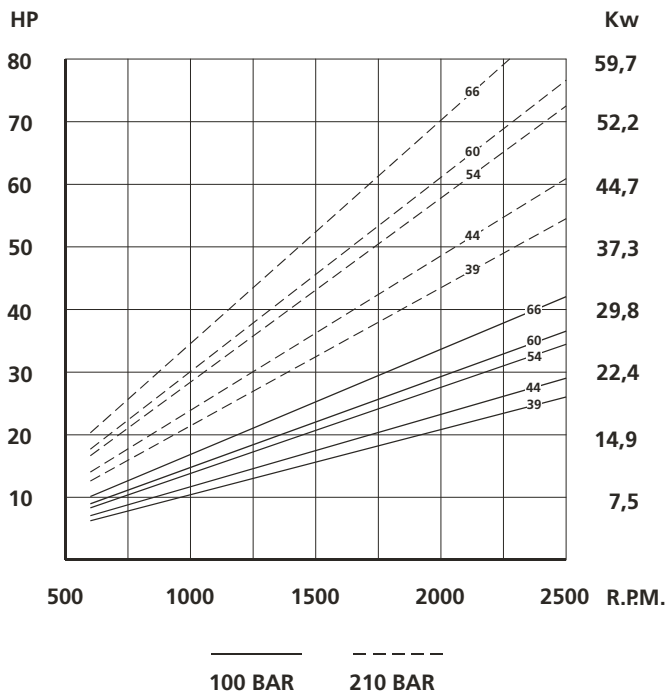
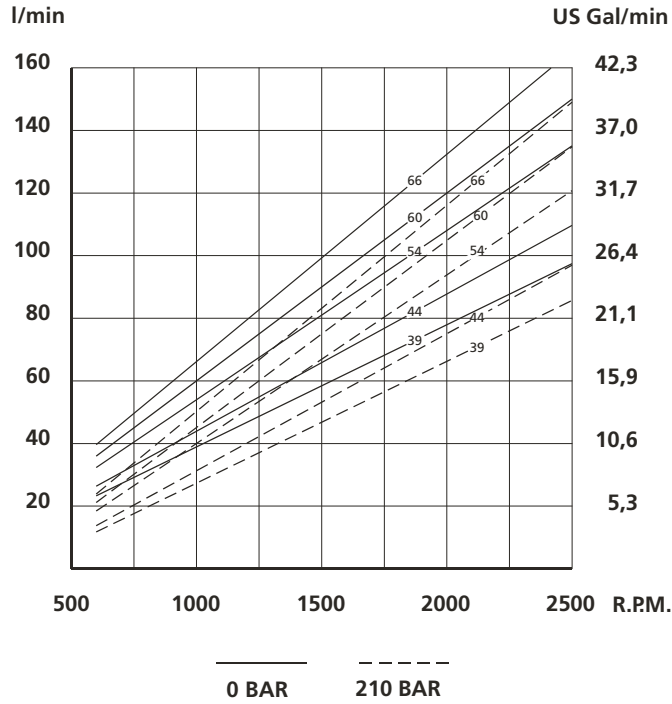
**N°2 Shaft**



Enquire about other types of shafts

**SINGLE VANE PUMP TYPE BHS-4 & BHQ-4**

**FLOW AND INPUT POWER DIAGRAMS**





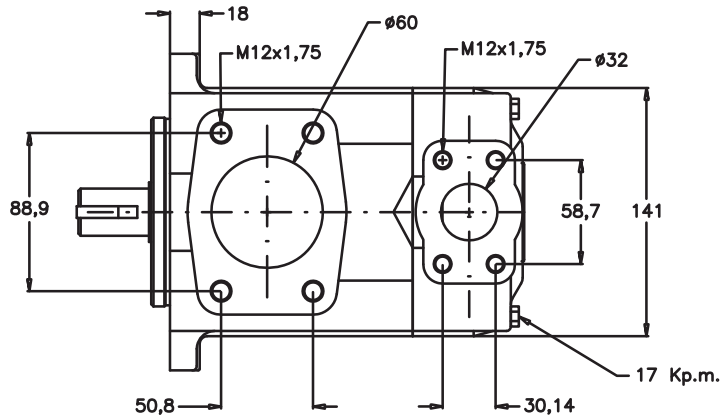
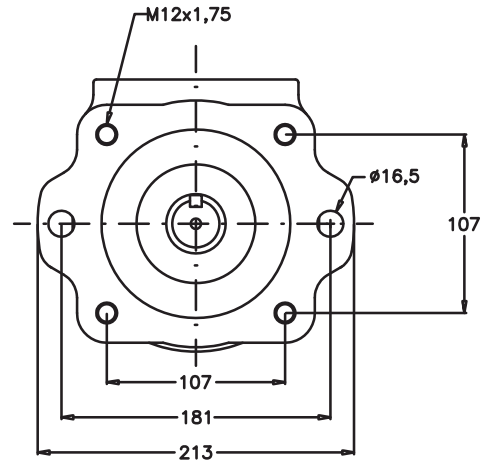
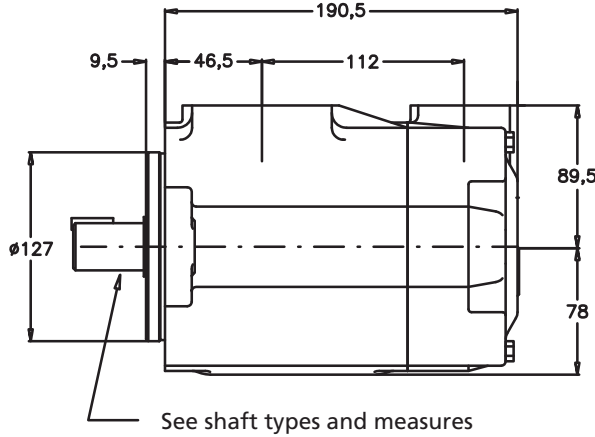
**SINGLE VANE PUMP TYPE BHS-6 & BHQ-6**

**DATA SHEET**

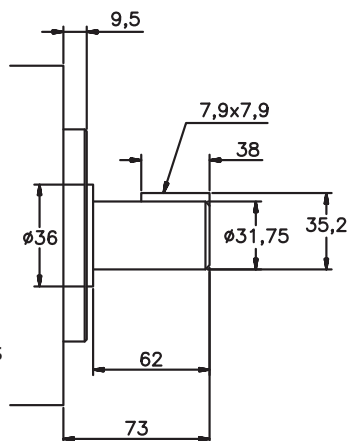
FLOW						SPEED (rpm)		PRES (BAR)		CONNECTION		WEIGHT (Kgs.)	
Lts at 1000 rpm	66	81	97	112	121	142*	Mín.	Máx.	Contín	Intermit.	Inlet	Outlet	26,3
Gal at 1200 rpm	21	25	30	35	38	45*	600	2400*	175	210*	Ø60	Ø32	

\* For further details see general chart

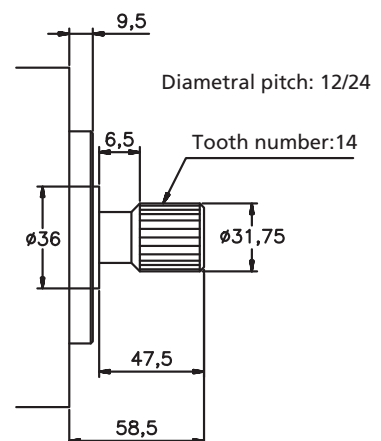
DIMENSIONS IN MILLIMETERS 1" = 25.4 mm



**N°1 Shaft**



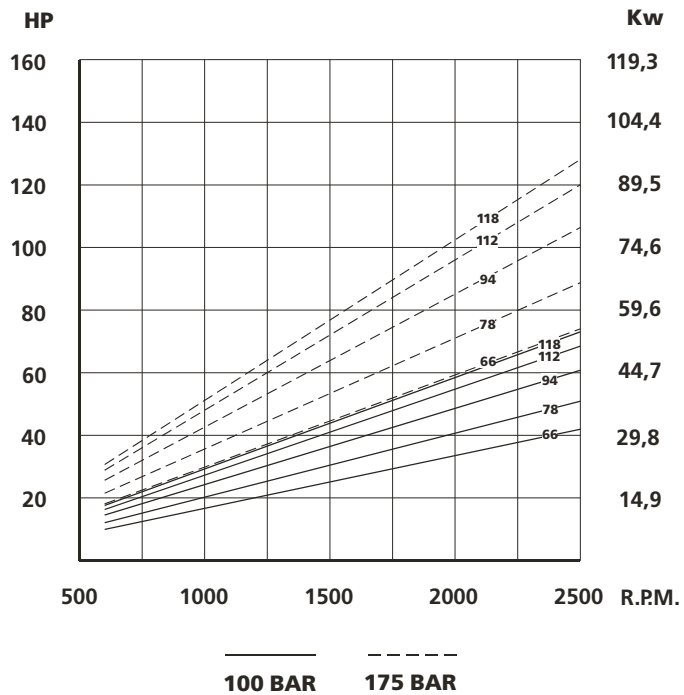
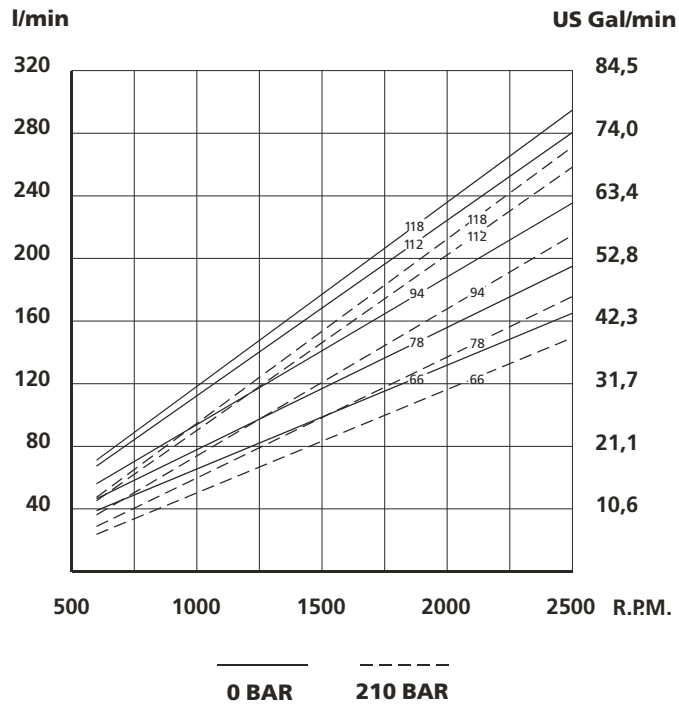
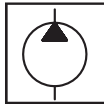
**N°2 Shaft**



Enquire about other types of shafts

**SINGLE VANE PUMP TYPE BHS-6 & BHQ-6**

**FLOW AND INPUT POWER DIAGRAMS**

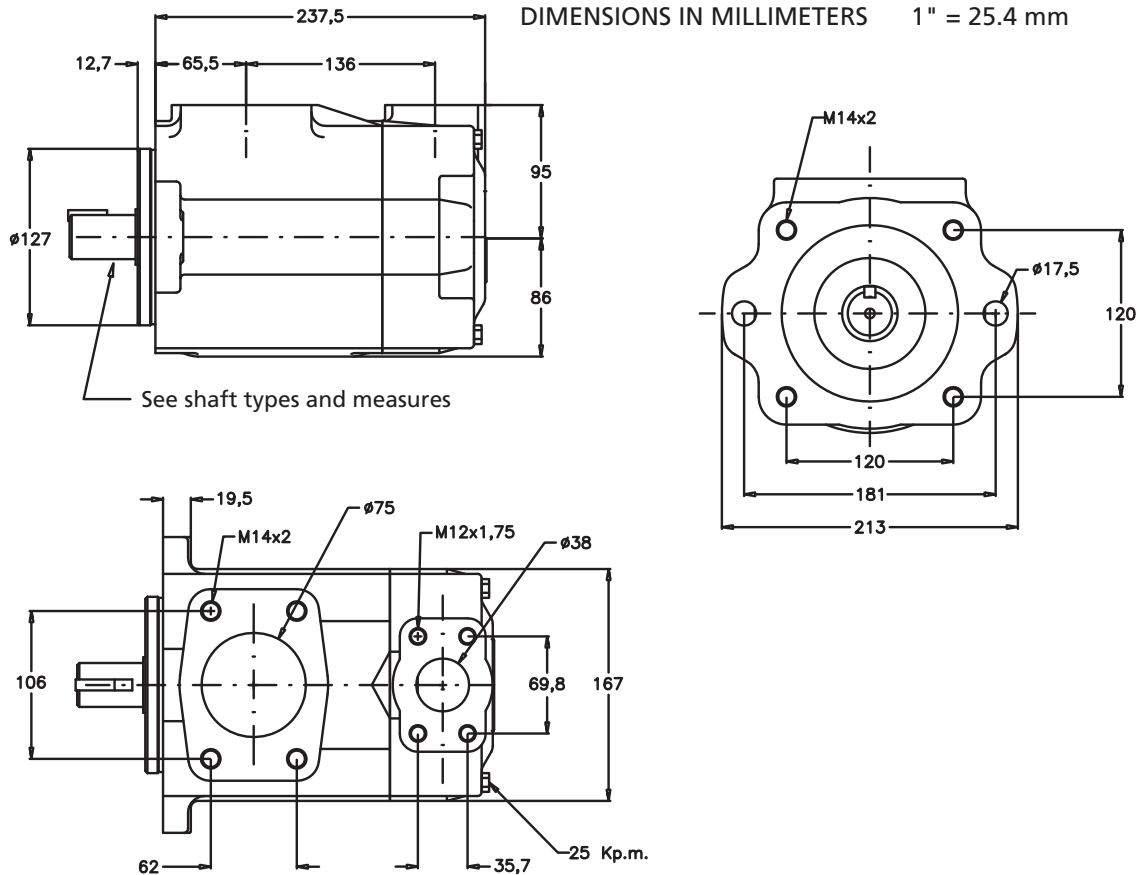


**SINGLE VANE PUMP TYPE BHS-7 & BHQ-7**

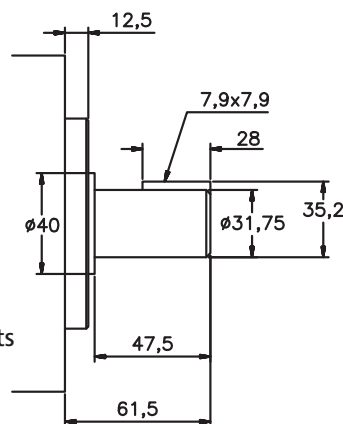
**DATA SHEET**

FLOW	SPEED (rpm)		PRES (BAR)		CONNECTION		WEIGHT (Kgs.)	
	Mín.	Máx.	Contin.	Intermit.	Inlet	Outlet		
Lts at 1000 rpm	138	148	162	180	193	214	240	38,3
Gal at 1200 rpm	42	47	50	57	60	67	75	
	600	2200*	155	175	Ø75	Ø38		

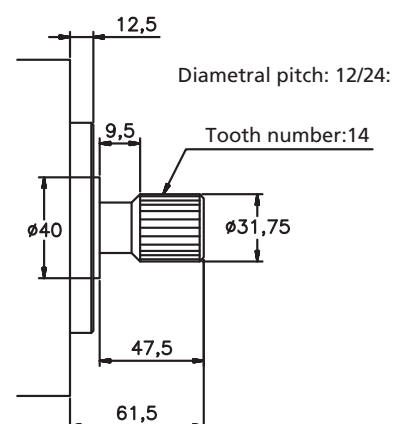
\* For further details see general chart



**N°1 Shaft**



**N°2 Shaft**



Enquire about other types of shafts

**SINGLE VANE PUMP TYPE BHS-7 & BHQ-7**

**FLOW AND INPUT POWER DIAGRAMS**

