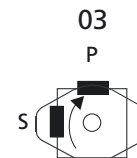
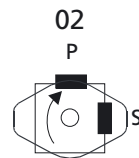
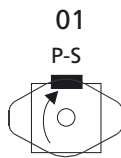
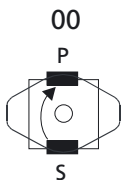
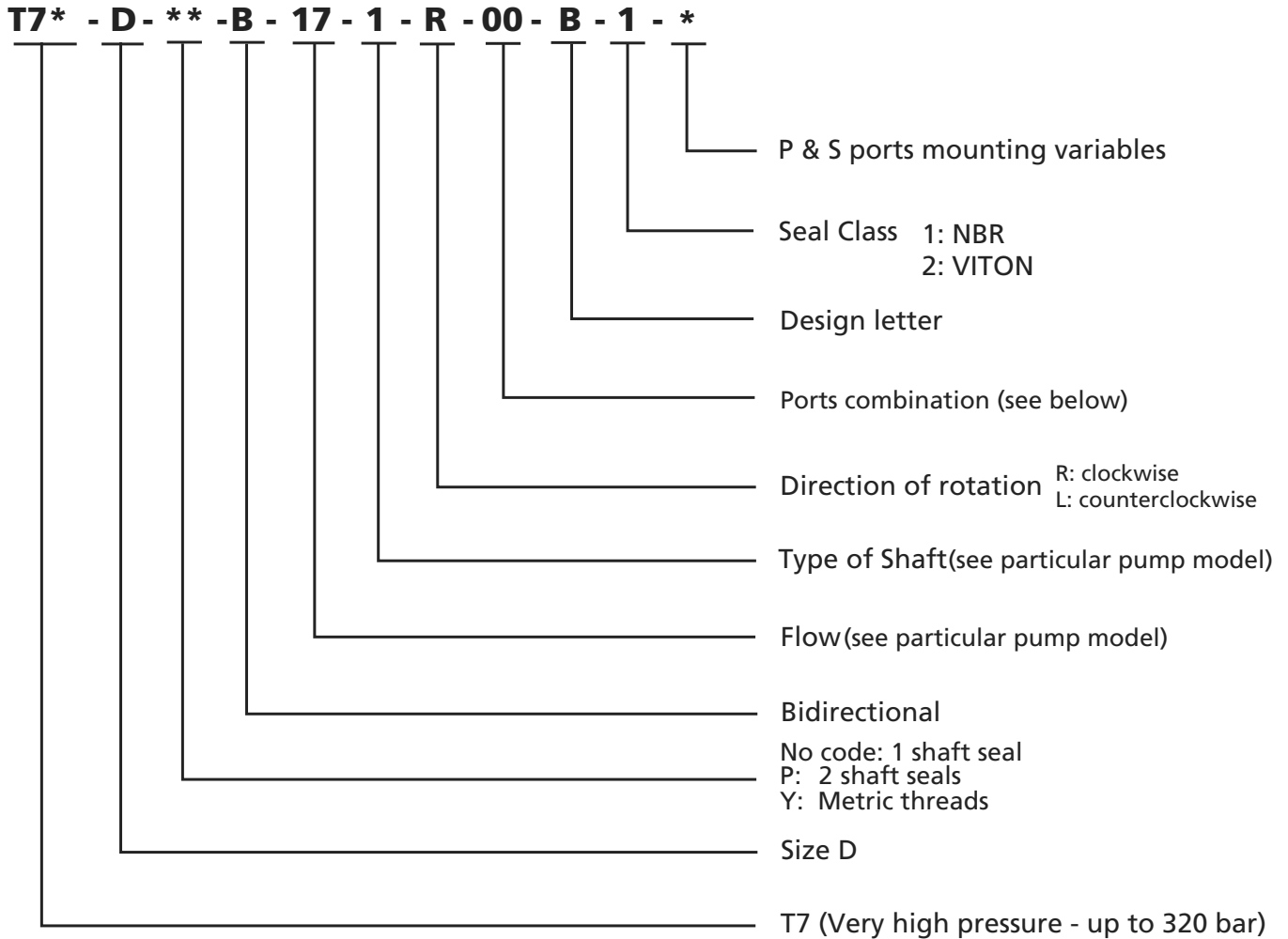


## LT7 SINGLE VANE PUMPS ORDERING CODE

DATA SHEET





# LT7 SINGLE VANE PUMPS

## LT7 SINGLE VANE PUMPS - GENERAL CHARACTERISTICS

### SINGLE PUMPS

Pump Model	Cartridge Model	Theoretical displacement (cm <sup>3</sup> /rev)	Maximum Pressure int./cont. (bar)	Max.speed (rpm)	Min. speed (rpm)	Weight (Kg)	Front flange Standard SAE j744c ISO 3019-4	SAE 4 holes flange	
								Suction S	Pressure P
<b>T7D</b>	014	47.6	300/250	3000	500	24	SAE C	2"	1 ¼"
	020	66.0							
	024	79.5							
	028	89.7							
	031	98.3							
	035	111.0	280/250						
	038	120.3							
	042	136.0	260/210	2200					
	045	145.7	240/210						
	050	158.0	210/160						
061	190.5	160/80	1800						

Lower speed can be achieved depending of pressure, temperature, oil viscosity. Consult our technical department

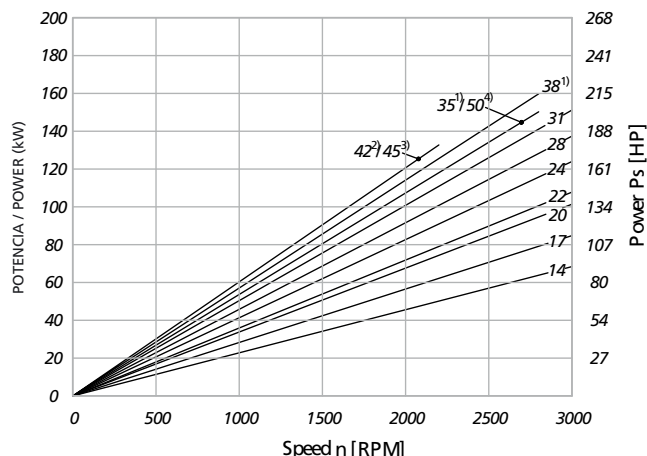
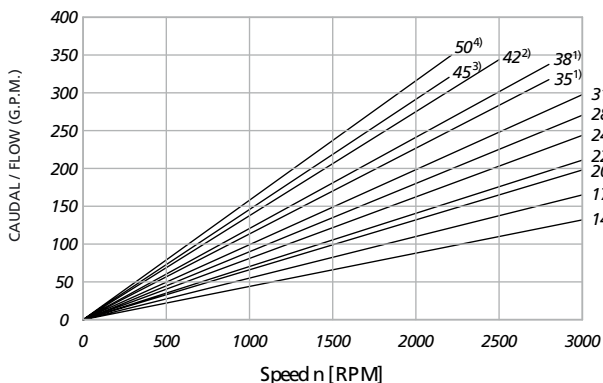
(1)



## LT7D OPERATING CHARACTERISTICS

	FLOW														SPEED (rpm)		PRESSURE (bar)		WEIGHT (kgs)
	Lts/min.at 1000 rpm	44	55	66	70	81	90	99	113	121	138	146	158	Min.	Max.	Intermit.	Contin.		
Gal/min.at 1200 rpm	14	17	20	22	24	28	31	35	38	42	45	50	600	3000*	300*	250	29		

\* See page 41 for further information about speed & pressure.



### Theoretical Flow (0 Bar)

To calculate the real flow at a given operating pressure, subtract the internal leakage value for this pressure (see diagram below) from the theoretical flow. (See diagram above).

- <sup>1</sup>B35 - B38 = 280 bar max. int. / 2800 rpm max.
- <sup>2</sup>B42 = 260 bar max. int. / 2500 rpm max.
- <sup>3</sup>045 = 240 bar max. int. / 2200 rpm max.
- <sup>4</sup>050 = 210 bar max. int. / 2200 rpm max.

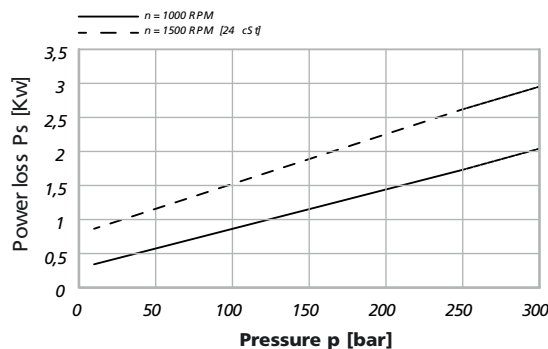
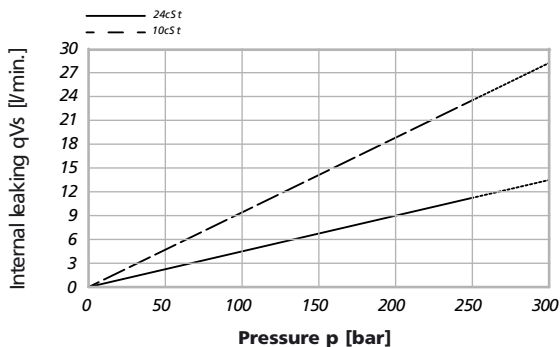
### Theoretical Input Power at 300 Bar

To calculate the theoretical input power at other pressures and speeds, use the formula:

$$P(Kw) = \frac{Q(L/min.) \times P(Bar)}{600}$$

Where Q is the theoretical flow (upper left diagram) and P the operating pressure.

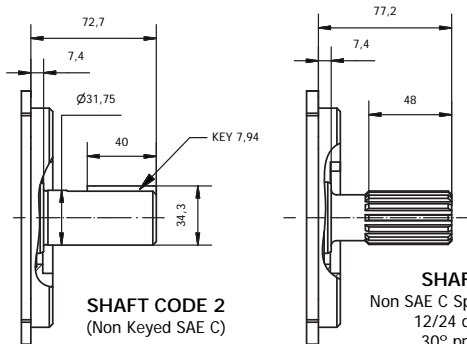
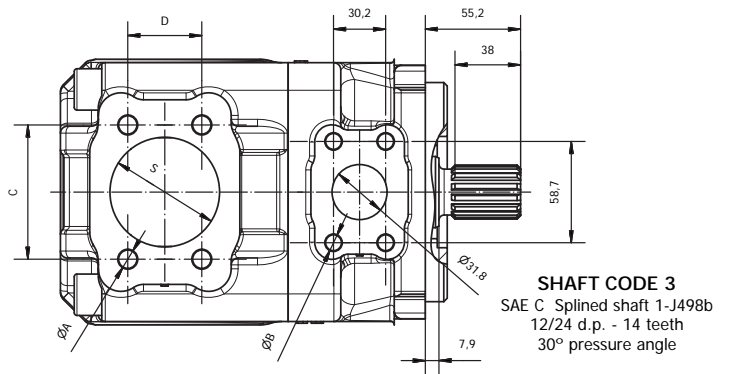
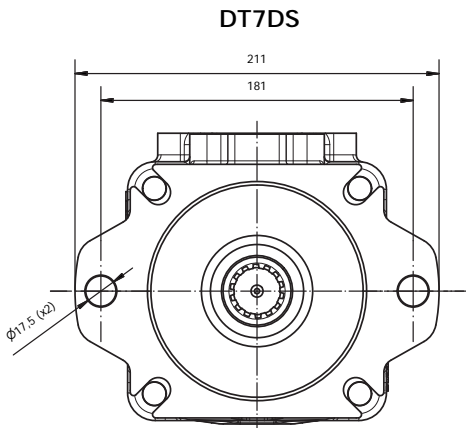
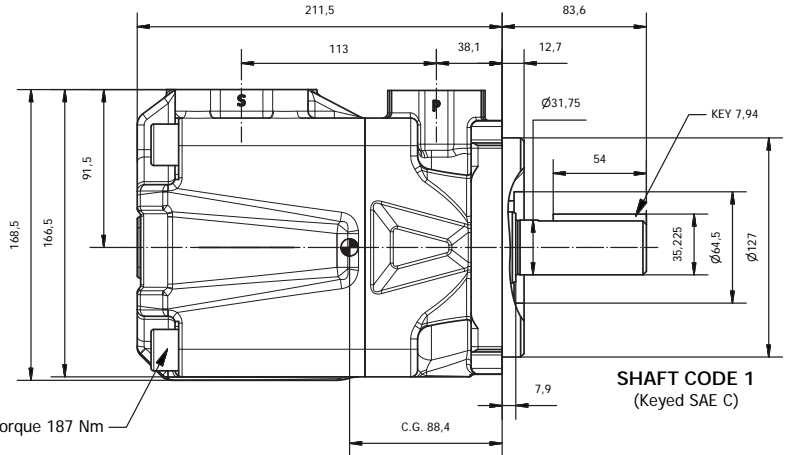
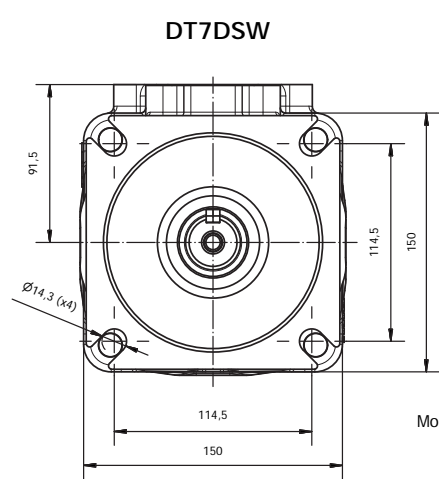
To calculate the real input power, add to the theoretical power the hydromechanical power losses (see diagram below).



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow



## DIMENSIONS - SINGLE VANE PUMPS LT7D



Model	T7DS			T7DSW		
	00	M0	Y0 <sup>1)</sup>	00	M0	Y0 <sup>1)</sup>
Ø A	1/2" - 13 UNC	M12	M12	1/2" - 13 UNC	M12	M12
Ø B	7/16" - 14 UNC	M12	M10	7/16" - 14 UNC	M12	M10
C	77,8			88,9		
D	42,9			50,8		
S	50,8			63,5		

<sup>1)</sup> 250 bar max. int.

Shaft torque limits [ml/rev. x bar]	
Shaft	Vi x p max.
1	43240
2	34590
3	61200
4	61200

	Metric thread		UNC thread
	M0	Y0 <sup>1)</sup>	00
T7DSW	M0	Y0 <sup>1)</sup>	00
T7DS	M0	Y0 <sup>1)</sup>	00

<sup>1)</sup> 250 bar max. int.

