DATA SHEET

ORDERING CODE

DT* C ** B 17 1 R 00 B 1 **

DT6 High pressure
up to 275 bar
DT67 / **DT7** Very high pressure
up to 320 bar

SIZE
B, C, D, E

NO CODE - 1 Shaft Seal
P - 2 Shaft Seals
Y - Metric Thread

BIDIRECTIONAL

FLOW
Check pump model

SHAFT TYPE
See shaft options on pump dimension pages.

P & S PORTS MOUNTING VARIABLES
00, 11, W0, 1M

SEAL CLASS
1: NBR
5: Viton

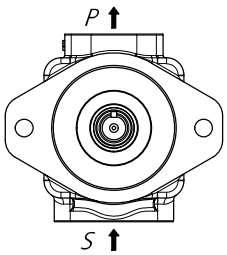
DESIGN LETTER

PORTING COMBINATION
00: 180° from inlet.
01: Outlet in line with inlet.
02: 90° counterclockwise from inlet.
03: 90° Clockwise from inlet
Viewed from shaft end of pump

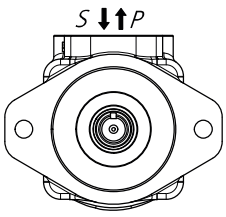
ROTATION
R = Clockwise rotation.
L = Counterclockwise
Viewed from shaft end of pump

PORTING COMBINATION

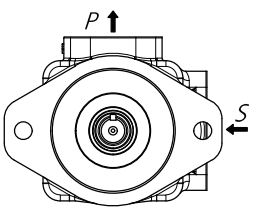
00



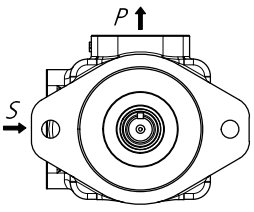
01



02



03



DATA SHEET

GENERAL CHARACTERISTICS

TYPE	FLOW		SPEED(rpm)		PRESSURE (bar)		NOMINAL POWER	CONNECTION			WEIGHT
DENISON	GAL. @ 1200RPM	L @ 1000RPM	MIN	MAX	CONT	INTERMIT	(2)	FLANGE	INLET	OUTLET	KG
DT7BS DT67B	2	6	600 (1)	3600	290	320	1,3	SAE B	Ø 1 ½"	Ø ¾" Ø 1"	23
	3	10					2,2				
	4	13					2,9				
	5	16					3,6				
	6	20					4,4				
	7	23					5,1				
	8	25					5,6				
	9	28					6,2				
	10	32					7,1				
	11	35		3000	275	300	7,8				
	12	41					9,1				
	14	45					10,0				
	15	50			240	280	11,1				
DT7DS DT67D	14	44	600	3000	250	300	9,8	SAE C	Ø 2" Ø 2 ½"	Ø 1 1/4"	29
	17	55					12,2				
	20	66					14,7				
	22	70					15,6				
	24	81					18,0				
	28	90					20,0				
	31	99					22,0				
	35	113		2800		280	25,1				
	38	121					26,9				
	42	138		2500	230	260	30,7				
	45	146		2200	210	240	32,4				
	50	158			160	210	35,1				
	61	191		1800	80	120	42,4				
DT6C	3	11	500	2800	240	275	2,4	SAE B	Ø 1 ½"	Ø 1"	15
	5	17					3,8				
	6	21					4,7				
	8	26					5,8				
	10	34					7,6				
	12	37					8,2				
	14	46					10,2				
	17	58					12,9				
	20	64					14,2				
	22	70					15,6				
	25	79					17,6				
	28	89		2500	160	210	19,8				
	31	100					22,2				
DT6CP Pump model only mount B14 to B31 cartridges.											
DT6D	14	48	500	2500	210	240	10,7	SAE C	Ø 2"	Ø 1 1/4"	24
	20	66					14,7				
	24	80					17,8				
	28	90					20,0				
	31	98					21,8				
	35	111					24,7				
	38	120					26,7				
	42	136					30,2				
	45	146		2200			32,4				
	50	158			160	210	35,1				
	61	191		1800	80	120	42,4				
DT6E	42	132	500	2200	210	240	29,3	SAE C	Ø 3"	Ø 1 ½"	44
	45	142					31,6				
	50	159					35,3				
	52	165					36,7				
	57	183									
	62	197					43,8				
	66	213					47,3				
	72	227					50,4				
	85	270		2000	75	90	60,0				

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

(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:

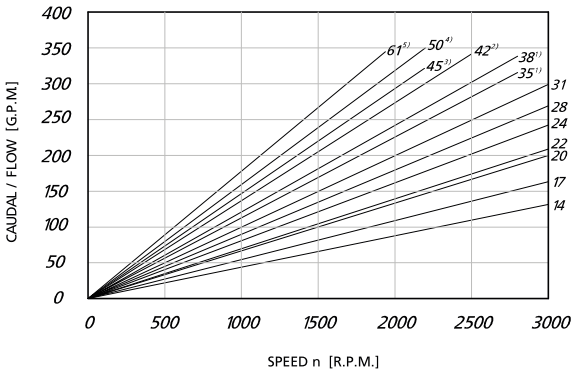
$$\text{Real input power} = \text{Input power} \times \frac{\text{R.P.M}}{1000} \times \frac{\text{Pressure (Bar)}}{1000}$$

DATA SHEET

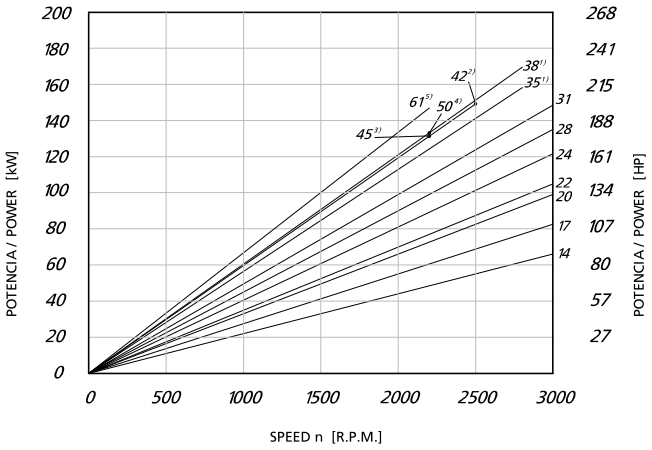
DT7DS / DT67D OPERATING CHARACTERISTICS

FLOW														SPEED(rpm)		PRESSURE (bar)		WEIGHT
Lts/min.at 1000 rpm	44	55	66	70	81	90	99	113	121	138	146	158	191	Mín.	Máx.*	Contin.*	Intermit.*	(Kgs.)
Gal/min.at1200 rpm	14	17	20	22	24	28	31	35	38	42	45	50	61	600	3000	250	300	29

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



1) B35 - B38 = 280 bar max. int. / 2800 rpm max.
2) B42 = 260 bar max. int. / 2500 rpm max.
3) B45 = 240 bar max. int. / 2200 rpm max.
4) B50 = 210 bar max. int. / 2200 rpm max.
5) B61 = 120 bar max. int / 1800 rpm max.



Theoretical Flow (0 Bar)

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

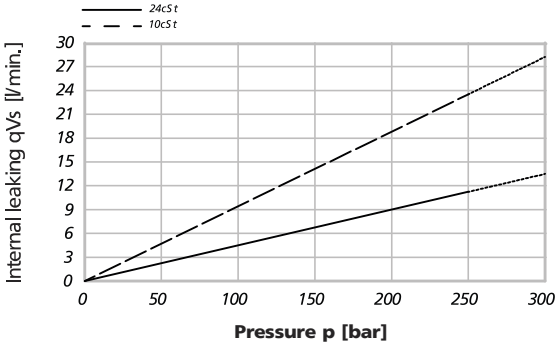
Theoretical Input Power at max. int. pressure

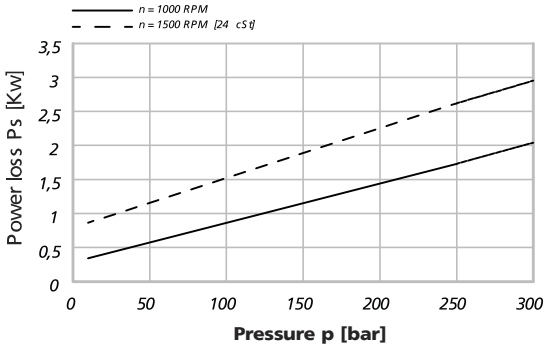
To calculate the theoretical input power at other pressures and speeds, use the formula:

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

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).





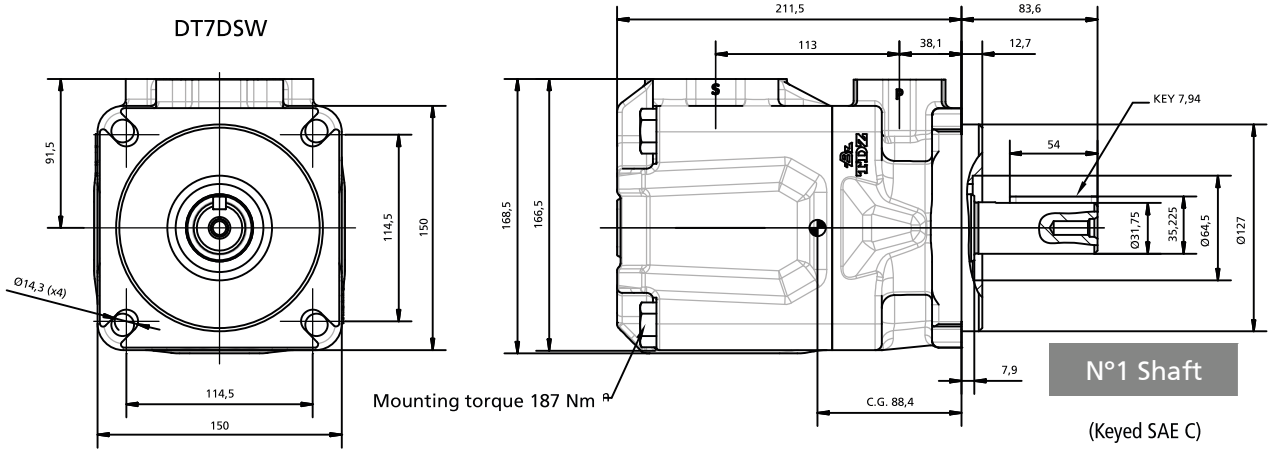
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow

DATA SHEET

DT7DS DIMENSIONS

DIMENSIONS IN MILLIMETERS. 1" = 25,4 mm

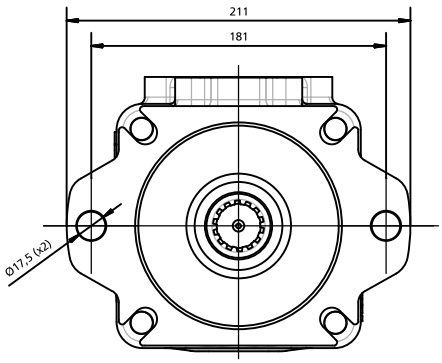
DT7DSW

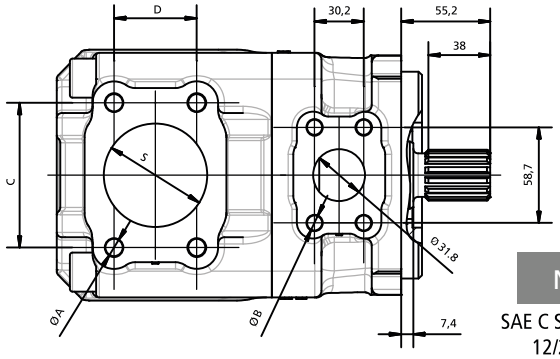


N°1 Shaft

(Keyed SAE C)

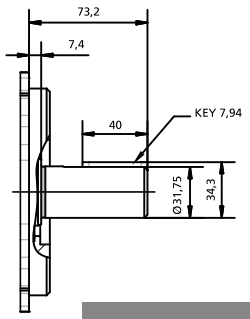
DT7DS





N°3 Shaft

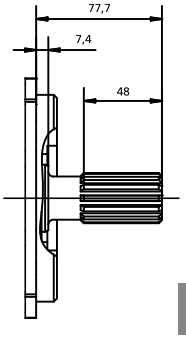
SAE C Splined shaft 1-J498b
12/24 d.p. - 14 teeth
30° pressure angle



N°2 Shaft

(Non Keyed SAE C)

ADDITIONAL SHAFT CODES:
SEE ON PAGES 114-118



N°4 Shaft

Non SAE C Splined shaft 1-J498b
12/24 d.p. - 14 teeth
30° pressure angle

	UNC	METRIC	
T7DSW T7DS	00	M0	Y0*[1]
*[1] 250 BAR MAX INT.			

	T7DS			T7DSW		
	00	M0	Y0[1)]	W1	M0	Y0[1)]
ØA	½" 13 UNC	M12	M12	½" 13 UNC	M12	M12
ØB	7/16" 14 UNC		M10	7/16" 14 UNC		M10
C	77,8			88,9		
D	42,9			50,8		
S	50,8			63,5		
*[1] 250 BAR MAX INT.						

SHAFT TORQUE LIMITS	
SHAFT	Nm
1	688.5
2	550.8
3 4	974.5