

Industrial Hydraulic Pumps T7D, T7DS

Hydraulic Pumps

Parker



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Model No.

T7D* or T7DS - B42 - 1 R 00 - A 1 - M0 - ..

T7D series - 125 A2 HW
 ISO 2 bolts 3019-2 mounting flange
T7DS series - SAE C 2 bolts
 J744 mounting flange
 * Rear drive option available, please contact Parker

Displacement
 Volumetric displacement (ml/rev.)
 B14 = 44,0 B31 = 99,2
 B17 = 55,0 B35 = 113,4
 B20 = 66,0 B38 = 120,6
 B22 = 70,3 B42 = 137,5
 B24 = 81,1 045 = 145,7
 B28 = 90,0 050 = 158,0

Type of shaft T7D - T7DS
 5 = keyed (ISO 3019-2 - G32M)

Type of shaft T7DS
 1 = keyed (SAE C) Ø 31,7
 2 = keyed (non SAE)
 3 = splined (SAE C) 14 teeth
 4 = splined (non SAE)

Modifications

Mounting w/connection variables
 4 bolts SAE flange J518

	P = 1.1/4" - S = 2"	
	Metric thread	UNC thread
T7D	M0	
T7DS	M0	Y0 ¹⁾
		00

¹⁾ 250 bar max. int.

Seal class

1 = S1 BUNA N - 0,7 bar max. (for mineral oil)
 4 = S4 EPDM - 7 bar max. (for fire resistant fluids)
 5 = S5 VITON® - 7 bar max. (for mineral oil and fire resistant fluids)

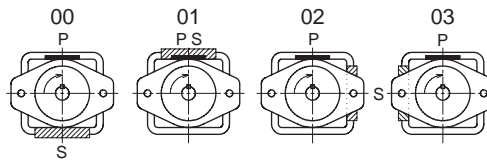
Design letter

Porting combination
 00 = standard

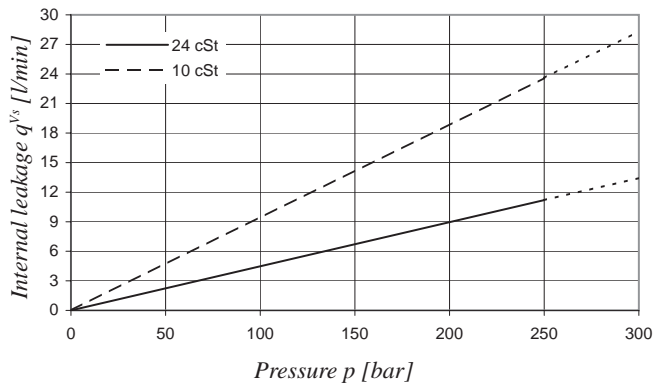
Direction of rotation (shaft end view)

R = Clockwise
 L = Counter-clockwise

P = Pressure port
 S = Suction port

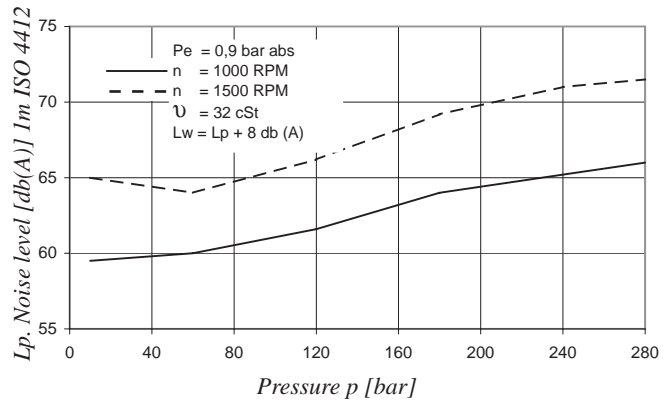


INTERNAL LEAKAGE (TYPICAL)

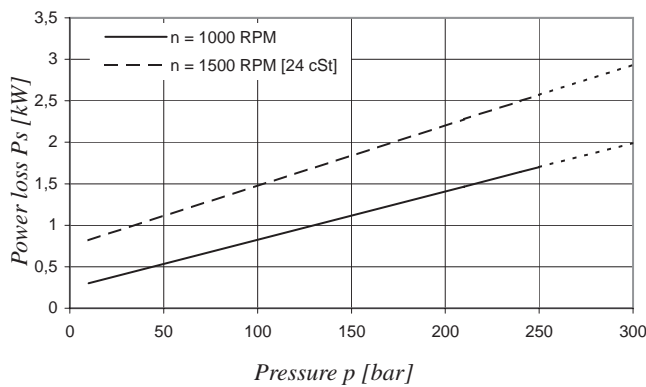


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow.

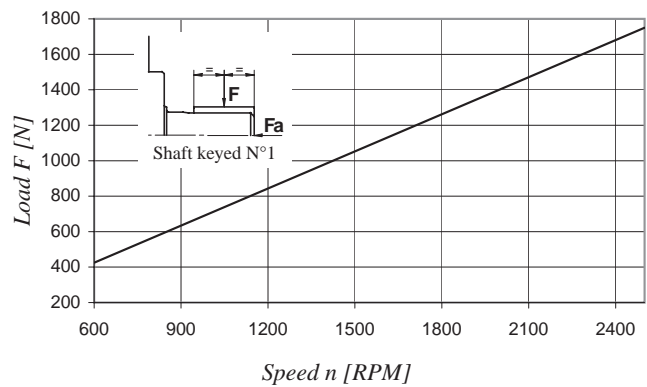
NOISE LEVEL (TYPICAL) - T7D - B31



POWER LOSS HYDROMECHANICAL (TYPICAL)

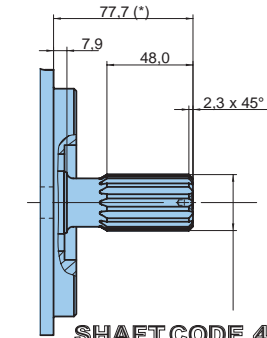
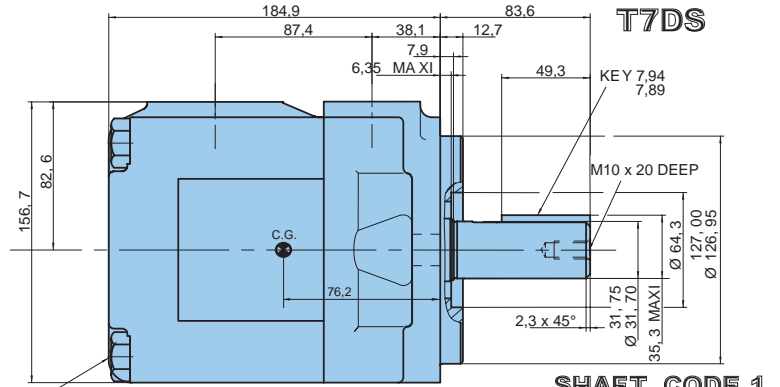
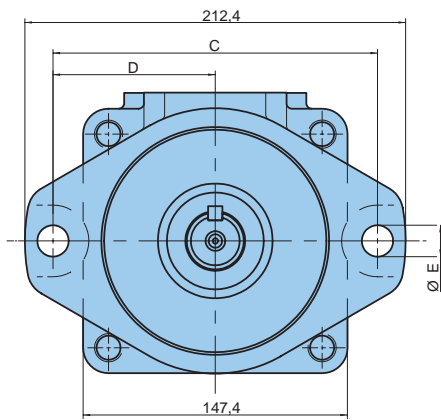


PERMISSIBLE RADIAL LOAD

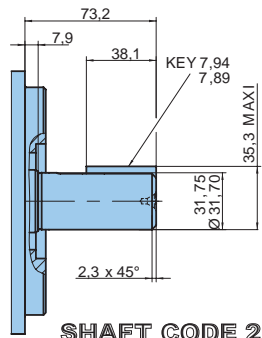


Maximum permissible axial load Fa = 1200 N



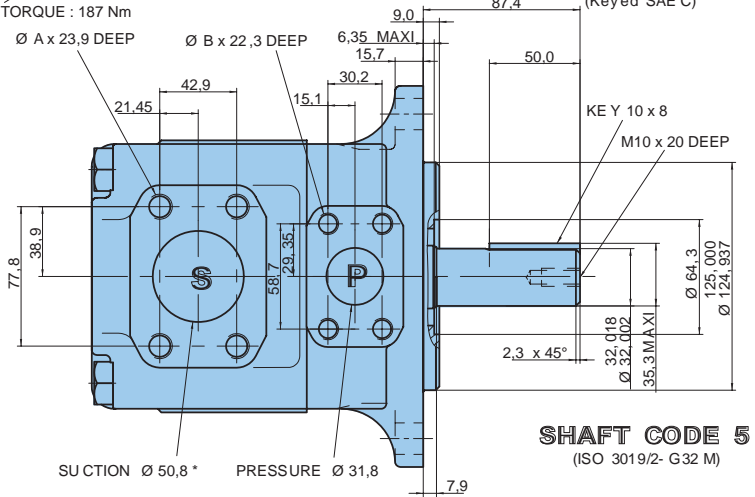


SHAFT CODE 4
SAE C S_{pc} (*) INVOLUTE SPLINE DATA
CLASS 1-FLAT ROOT SIDE FIT
J498 b - PITCH 12/24
14 TEETH - 30° PRESSURE ANGLE



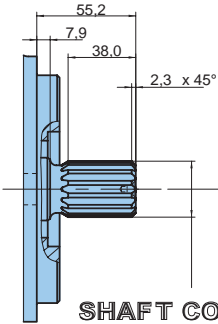
SHAFT CODE 2
(Keyed non SAE)

MOUNTING TORQUE : 187 Nm



SHAFT CODE 1
(Keyed SAE C)

SHAFT CODE 5
(ISO 3019/2- G32 M)



SHAFT CODE 3
SAE C INVOLUTE SPLINE DATA
CLASS 1-FLAT ROOT SIDE FIT
J498 b - PITCH 12/24
14 TEETH - 30° PRESSURE ANGLE

Model	T7D	T7DS		
Code	M0	00	M0	YO ¹⁾
Ø A	M12	1/2" - 13 UNC	M12	M12
Ø B	M12	7/16" - 14 UNC	M12	M10
C	180,0	181,0		
D	90,0	90,5		
Ø E	18,0	17,5		

Shaft torque limits [ml/rev. x bar]	
Shaft	Vi x p max.
1	43240
2	34590
3	61200
4	61200
5	44300

¹⁾ 250 bar max. int.

OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Pressure port	Series	Vi Volumetric displacement	Flow q _v [l/min] & n = 1500 RPM			Input power P [kW] & n = 1500 RPM		
			p = 0 bar	p = 140 bar	p = 300 bar	p = 7 bar	p = 140 bar	p = 300 bar
T7D T7DS	B14	44,0 ml/rev	66,0	59,4	51,9	1,5	16,6	34,2
	B17	55,0 ml/rev	82,5	75,9	68,4	1,7	20,4	42,4
	B20	66,0 ml/rev	99,0	92,4	84,9	1,9	24,3	50,7
	B22	70,3 ml/rev	105,5	98,8	91,3	2,0	25,8	53,9
	B24	81,1 ml/rev	121,7	115,0	107,5	2,2	29,5	62,0
	B28	90,0 ml/rev	135,0	128,4	120,9	2,3	32,7	68,7
	B31	99,2 ml/rev	148,8	142,2	134,7	2,5	35,9	75,6
	B35	113,4 ml/rev	170,1	163,5	156,9 ¹⁾	2,7	40,8	80,5 ¹⁾
	B38	120,6 ml/rev	180,9	174,3	167,7 ¹⁾	2,9	43,4	85,6 ¹⁾
	B42	137,5 ml/rev	206,3	199,6	194,0 ²⁾	3,2	49,3	90,5 ²⁾
	045	145,7 ml/rev	218,6	209,2	202,6 ³⁾	4,1	52,8	89,5 ³⁾
	050	158,0 ml/rev	237,0	227,7	223,0 ⁴⁾	4,4	57,1	85,0 ⁴⁾

¹⁾ B35 - B38 = 280 bar max. int. ²⁾ B42 = 260 bar max. int. ³⁾ 045 = 240 bar max. int. ⁴⁾ 050 = 210 bar max. int.

* special 2.1/2" (Ø 63,5) suction also available - Please contact Parker.

