

HYDRAULIC PUMPS

GEAR PUMPS 50T SERIES Specification Sheet





The CROSS Series 50T hydraulic pumps are designed to be driven by a 540 or 1000 rpm PTO and provide a 3:1 speed increase. The thru-type internal spline permits the use of a stub shaft PTO driven accessory while simultaneously driving the pump.

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Effective displacement sizes. . . .

4.6	5.6	7.0	8.2	9.9	11.4	15.6	cu. in/rev.	
75	96	114	135	162	187	256	cc/rev.	

Rated working pressure (max. relief valve setting at full flow)

3000 psi (207 bar) except as noted

540 rpm option: 50T038 - 2700 psi(186 bar); 50T052 - 2000 psi (13	88 bar)
1000 rpm option: 50T023 - 2650 psi (182 bar); 50T027 - 2300 psi (182 bar)	58 bar); 50T033 - 1850 psi (127 bar)
Maximum shock and surge pressure	3500 psi (242 Bar)
Maximum input speed (continuous)	
Maximum flow rate (delivery) at 540 rpm	
Maximum flow rate (delivery) at 1000 rpm	38.6 gpm(146 l/m)
Maximum input horsepower	42 hp(31 Kw)
Mounting	PTO, torque arm
Weight.	Approx. 38 lbs. (17 Kg)
4	

MATERIAL SPECIFICATIONS:

Pump body and end covers, speed increaser housing die cas	st auminum alloy
Pump gears and shafts	hardened steel
Increaser gears and shafts	hardened steel
Seals	Buna N

STANDARD FEATURES:

- Left hand rotation right hand pump required (gear box reverses direction)
- Side port location
- Hole for 3/8" dia. bolt for torque arm attachment
- SAE #20 (1 1/4") o-ring (1 5/8"-12) or SAE #24(1 1/2") o-ring (1 7/8-12) inlet port
- SAE #16 (1") o-ring outlet port (1 5/16-12)

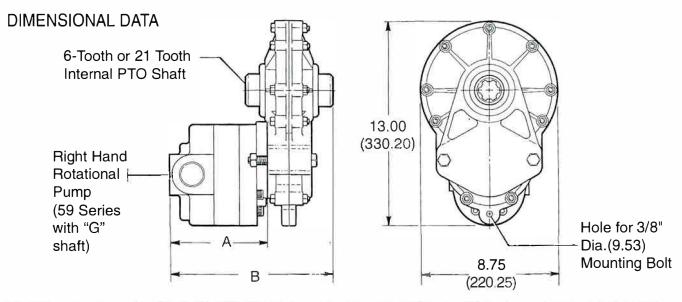
OPTIONAL FEATURES AVAILABLE: Rear port location

Notes: PTO torque arm must be attached to keep unit from rotating. The speed increaser case is lubricated through the pump. The 50T unit uses a special pump configuration. Refer to CROSS pump and motor technical service sheet for special instructions, start-up procedures, filter and oil recommendations, etc.



HYDRAULIC PUMPS





Model No.	50T015	50T019	50T023	50T027	50T033	50T038	50T052	
Dimension "A"	5.60	5.80	5.96	6.15	6.40	6.62	7.21	in.
	(142.2)	(147.3)	(151.4)	(156.2)	(162.6)	(168.1)	(183.1)	mm
Dimension "B"	9.72	9.92	10.08	10.28	10.52	10.74	11.34	in.
	(247.0)	(252.1)	(256.2)	(261.0)	(267.3)	(272.9)	(287.9)	mm
Flow at 540 rpm	9.6	12.3	14.6	17.3	20.8	24.0	32.8	gpm
	(36)	(47)	(55)	(65)	(79)	(91)	(124)	I/m
Flow at 1000 rpm	17.8 (67)	22.8 (86)	27.1 (103)	32.0 (121)	38.6 (146)		i i i i asam	gpm I/m

ORDERING DATA

Series	Туре	Special Options	Size cu.in/R x 10	Rotation	Mounting	Shaft Size & Type		Ports Location & Size In Out		
50 T	Т	0	15 19 23 27	L Left Hand	T PTO	A * 6 tooth PTO Spline	SA SB*	1 ⁷ / ₈ 1 ⁵ / ₈	1 ⁵ / ₁₆ 1 ⁵ / ₁₆	Side Ports
			33 38 52			S 21 tooth PTO Spline	RD RE	1 ⁷ /8 1 ⁵ /8	1 ⁵ / ₁₆ 1 ⁵ / ₁₆	Rear Ports

For Typical Performance Refer to 50 Series Literature (Form P501) * Standard for Full Line Distributor program



CROSS MANUFACTURING, INC. 100 Factory Street Lewis, Kansas 67552

Phone 620/324-5525; FAX 620/324-5737; e-mail: info@crossmfg.com

