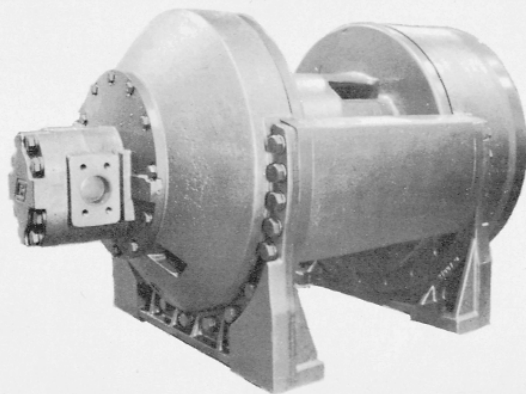


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Hydraulic Service, Inc.

M50

PLANETARY, HYDRAULIC WINCH



EQUAL SPEED
DOWN



MASTER 

THE LOGICAL CHOICE

MODEL

M50 PLANETARY HYDRAULIC WINCH

DESCRIPTION

The PULLMASTER Model M50 is a high performance, high efficiency, planetary hydraulic winch having equal speed in both forward and reverse rotation. The automatic, multi-disc brake of this unit is effective in one direction only and achieves an exceptionally smooth lowering control of the maximum rated load in a stepless operation. The PULLMASTER Model M50 planetary winch is powered by a hydraulic gear motor and the required reduction ratio of 116:1 is established by three planetary reduction stages. In forward rotation (hoisting) the hydraulic motor drives direct into planetary reductions without affecting the brake assembly. When forward rotation is stopped, an over-running clutch between the brake assembly and the motor drive shaft will lock and the multi-disc brake will safely hold the maximum load. The multi-disc brake is spring applied and pressure released, requiring no calibration for fail-safe operation. When the hydraulic motor is powered for reverse rotation (lowering) the brake is released automatically and is then modulated for the desired lowering speed by a single control lever. A counter-balance valve or brake valve is not required for dynamic braking. All moving parts of the PULLMASTER Model M50 planetary winch are totally enclosed and run in an oil bath, assuring long, trouble free service with a minimum requirement for maintenance.

- SPECIAL DRUM SIZE • FREESPPOOLING • EXTERNAL BRAKE RELEASE • HYDRAULIC PISTON MOTORS • DRUM GROOVING

PERFORMANCE

- Maximum operating volume = 115 (US) gpm (435 l/min)
- Maximum operating pressure = 2500 psi (172 bar)
- Drum rpm at maximum volume in both directions = 17.4
- Drum torque at maximum pressure = 381250 lb-in (43075 Nm)

MODEL NUMBER	BARE DRUM		MEAN DRUM (THEORETICAL)		FULL DRUM	
	LINE PULL	LINE SPEED	LINE PULL	LINE SPEED	LINE PULL	LINE SPEED
M50-7-86-1	5000 lb 222.4 kN	69 fpm 21 m/min	42533 lb 189.1 kN	84 fpm 26 m/min	35065 lb 155.9 kN	99 fpm 30 m/min
M50-7-86-2	39610 lb 176.2 kN	88 fpm 27 m/min	33465 lb 148.9 kN	107 fpm 33 m/min	27320 lb 121.5 kN	127 fpm 39 m/min

The volumetric requirement for the PULLMASTER Model M50 is the recommended maximum and should not be exceeded. When the PULLMASTER Model M50 is installed in existing hydraulic circuits with a lesser volume or lower pressure, the performance will change. Performance graphs for line speed vs. oil volume and line pull vs. hydraulic pressure are available upon request.

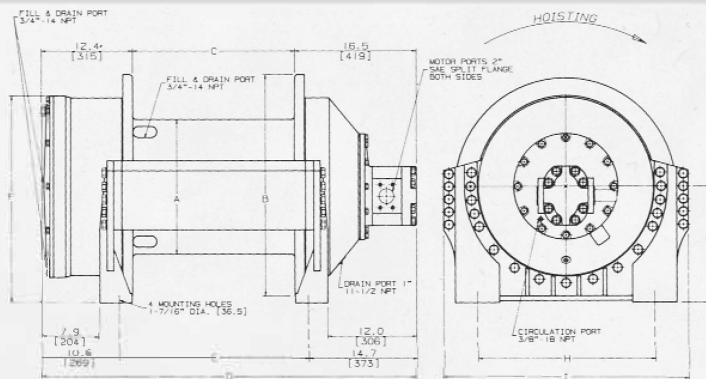
CABLE STORAGE

DRUM CABLE STORAGE CAPACITY FOR WIRE ROPE

MODEL NUMBER	DRUM SIZE			WIRE ROPE DIAMETER*							
	BARREL	FLANGE	LENGTH	9/16 in	5/8 in	3/4 in	7/8 in	1 in	1 1/8 in	1 1/4 in	
M50-7-86-1	14 in	23.75 in	14 in	854 ft	681 ft	519 ft	375 ft	276 ft	195 ft	177 ft	
	356 mm	603 mm	356 mm	260 m	211 m	158 m	114 m	84 m	59 m	54 m	
M50-7-86-2	18 in	30 in	22 in	2309 ft	1725 ft	1341 ft	860 ft	654 ft	605 ft	440 ft	
	457 mm	762 mm	559 mm	704 m	526 m	409 m	262 m	199 m	184 m	134 m	

* Standard cable anchor is suitable for 3/4 - 1 1/2 inch diameter wire rope. For safety, 3 - 4 wraps of wire rope must be maintained at all times.

DIMENSIONS



MODEL NUMBER	A	B	C	D	E	F	G	H	I
M50-7-86-1	14 in	23.75 in	14 in	43 in	17.63 in	26.75 in	14.63 in	21 in	27.50 in
	356 mm	603 mm	356 mm	1089 mm	448 mm	680 mm	372 mm	533 mm	699 mm
M50-7-86-2	18 in	30 in	22 in	51 in	25.63 in	30.5 in	15.5 in	24 in	33.13 in
	457 mm	762 mm	559 mm	1290 mm	651 mm	775 mm	394 mm	610 mm	841 mm

PULLMASTER planetary winches are covered by a liberal warranty. Parts and repair service are available from authorized PULLMASTER distributors throughout Canada, the United States and most overseas areas.

IMPORTANT

PULLMASTER planetary winches are neither designed nor intended for installation on equipment used in lifting or moving of personnel.

DISTRIBUTOR

