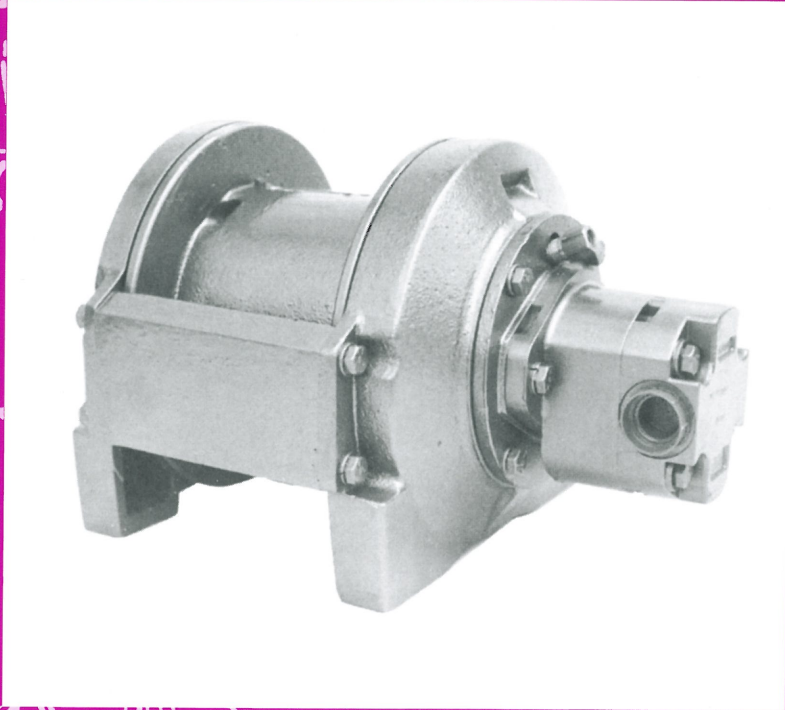


THE INTRAVENT

PL2

PLANETARY, HYDRAULIC WINCH



MASTER

A DOVER COMPANY

THE LOGICAL CHOICE

**EQUAL SPEED
EQUAL STROKE**

MODEL **PL2** PLANETARY HYDRAULIC WINCH

DESCRIPTION

The **PULLMASTER** Model PL2 is a high performance, high efficiency planetary winch, having equal speed in both directions of rotation. The cable drum of this unit conforms with OSHA recommendations, making this winch especially suitable for applications where a load is raised or lowered.

The **PULLMASTER** Model PL2 is powered by a hydraulic gear motor and a reduction ratio of 40.5:1 is established by two planetary stages. The automatic multi-disc brake is "Spring Applied - Pressure Released". An over-running clutch, between the motor drive shaft and the brake assembly, permits free rotation in the "Hoisting" direction without affecting the brake. During "Lowering" operation the over-running clutch locks, causing the brake discs to rotate between a series of divider discs. Dynamic braking is then achieved by modulation of the winch control valve handle. When the control is returned to neutral position the brake applies automatically. During lowering of a load, temperature generated by the disc brake is dissipated by a flow of hydraulic fluid supplied from the hydraulic motor. This circulation flow is vented internally and therefore, there is no need for an external vent line. A counter-balance valve is not required for smooth and positive "Down" control of the **PULLMASTER** Model PL2 planetary winch.

All moving parts of the **PULLMASTER** Model PL2 planetary winch are totally enclosed and run in an oil bath. Anti-friction bearings are used on all turning components, assuring long, trouble free service with a minimum requirement for maintenance.

PERFORMANCE

- Maximum operating volume = 7.7 (US) gpm (29 l/min)
- Maximum operating pressure = 2200 psi (152 bar)
- Drum rpm at maximum volume = 49
- Drum torque at maximum pressure = 7095 lb-in (802 Nm)

| MODEL NUMBER | BARE DRUM | | MEAN DRUM (THEORETICAL) | | FULL DRUM | |
|----------------|-----------|------------|-------------------------|------------|-----------|------------|
| | LINE PULL | LINE SPEED | LINE PULL | LINE SPEED | LINE PULL | LINE SPEED |
| PL2-12-228-1-B | 2204 lb | 83 fpm | 1925 lb | 96 fpm | 1633 lb | 111 fpm |
| | 9.8 kN | 25 m/min | 8.6 kN | 29 m/min | 7.3 kN | 34 m/min |

When the **PULLMASTER** Model PL2 is installed in an existing hydraulic circuit with a lesser volume or pressure the performance will change. Maximum pressure and maximum hydraulic volume must not be exceeded. Performance graphs for line pull vs. oil pressure and line speed vs. oil volume, are available upon request.

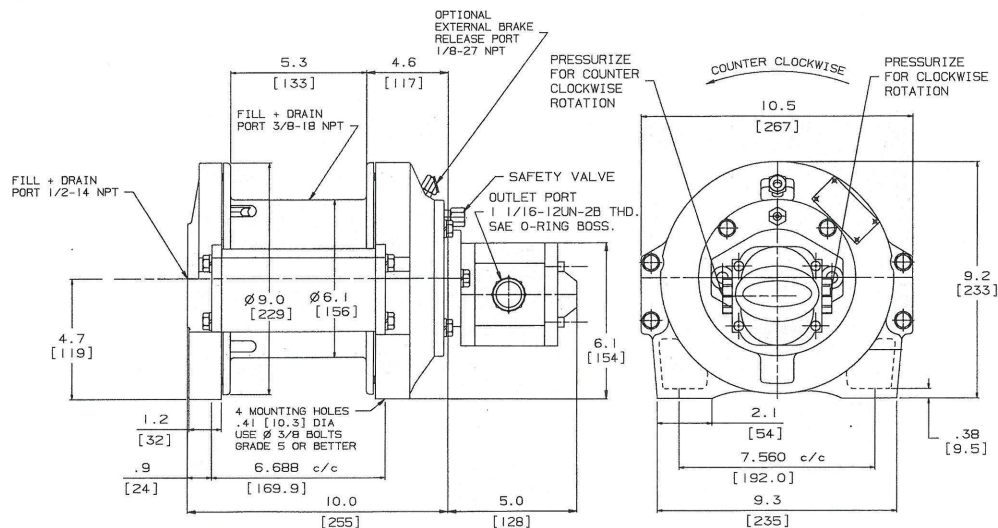
CABLE STORAGE

CABLE STORAGE CAPACITY FOR WIRE ROPE

| MODEL NUMBER | DRUM SIZE | | | WIRE ROPE DIAMETER* | | | | |
|----------------|-----------|--------|----------|---------------------|---------|--------|---------|--------|
| | BARREL | FLANGE | LENGTH | 1/8 in | 3/16 in | 1/4 in | 5/16 in | 3/8 in |
| PL2-12-228-1-B | 6 1/8 in | 9 in | 5 1/4 in | 745 ft | 318 ft | 172 ft | 122 ft | 84 ft |
| | 156 mm | 229 mm | 133 mm | 227 m | 97 m | 52 m | 37 m | 25 m |

* Standard cable anchor is suitable for 1/4 - 3/8 inch diameter wire rope. For safety, 5 wraps of wire rope must be maintained at all times.

DIMENSIONS



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.

PULLMASTER planetary winches are available for larger line pull capacities. Options are provided on some models for "Rapid Reverse", "Freespooling", "External Brake Release" and different drum sizes.

DISTRIBUTOR



For more information write to:

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