



DURABLE, SPACE-SAVING PERFORMANCE

Muncie Power clutch pumps provide hydraulic power at the flip of a switch. Clutch pumps can be used in situations where a PTO aperture is unavailable or difficult to access. The PH Series clutch pumps mount on a flat bracket and are driven from either an add-on pulley or an OEM belt.



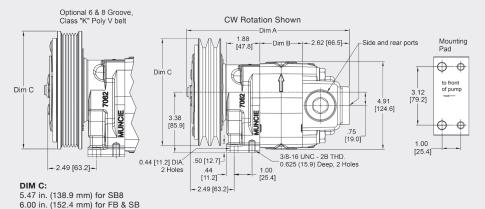
KEY FEATURES

- All cast iron construction
- Speeds up to 4,000 RPM
- Pressures to 3,500 PSI
- Solid, one-piece shaft
- Integral mounting pad
- Both side and rear ports
- Full one-year warranty

PUMP SPECIFICATIONS

MODEL NUMBER	DISPLACEMENT CUBIC IN (CC)	MAX* RPM	MIN* RPM	MAX. PSI (BAR)	MAX. OIL TEMP.	MAX INLET VACUUM
PH1-03	0.62 (10)	4,000	800	3,500 (241)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-05	1.24 (20)	4,000	800	3,500 (241)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-07	1.55 (25)	3,600	800	3,000 (207)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-09	2.17 (36)	3,000	800	2,600 (179)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-11 *	2.48 (41)	3,000	800	2,000 (138)	200°F (93°C)	5 IN.HG.(.17 BAR)

MOUNTING DIMENSIONS



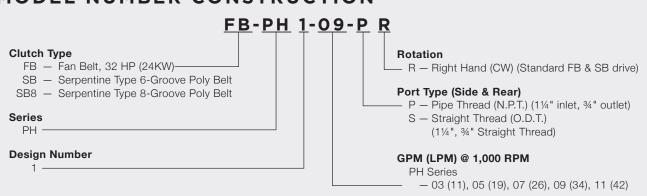
FB/SB SERIES 32 HP (24 kW) 95 ft.lbs. (129 Nm)

MODEL	DIM A IN (mm)	DIM B IN (mm)
PH1-03	7.4 (188.0)	0.90 (22.9)
PH1-05	7.9 (200.7)	1.40 (35.6)
PH1-07	8.2 (208.3)	1.65 (41.9)
PH1-09	8.6 (218.4)	2.15 (54.6)
PH1-11	8.9 (226.1)	2.40 (61.0)

Note: Basis pump dimensions for all models are the same no matter which clutch is installed. Clutches require 6 amps @ 12-VDC. Minimum 12.0-V required at clutch.

Approx. Shipping Weight: 34 lbs. (15.4)

MODEL NUMBER CONSTRUCTION



OIL RECOMMENDATIONS

Muncie Power Products does not promote specific manufacturers' brands of oil. Recommendations below are guidelines; consult oil manufacturer for exact application needs.

Viscosity Range:

Viscosity Minimum: 50-60 SUS (7.5-10.5 cST)

Viscosity Optimum Continuous: 60-100 SUS (10.5-21.6 cST)

Viscosity Maximum @ Startup: 7,500 SUS (1,600 cST)

Viscosity Index: 90 Minimum

Aniline Point: 175 Minimum

Pour Point: 15° F (-10° C) Maximum

Foam Resistance: Recommended

Rust Resistance Inhibitors: Recommended

Corrosion Resistance: Recommended

Oxidation Stability: Recommended

Anti-Wear Additive: .06% Zinc Minimum*

Notes: Cold weather operation requires special oil considerations. Viscosity should not exceed 7,500 SUS (1,600 cST) at lowest startup temperature. Continuous operation should range between 60-1,000 SUS (10.5-216 cST) for all temperature ranges. Never use diesel fuel or kerosene to thin oil.

* Anti-Wear Additives may be recommended by some motor manufacturers. However, they are optional and typically not required for gear pump or gear motors.

