

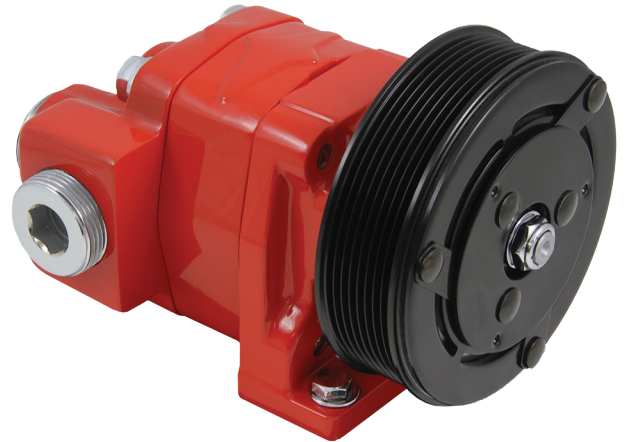
H/K SERIES

CLUTCH PUMPS



DURABLE, SPACE-SAVING PERFORMANCE

Muncie 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. Although normally belt driven, clutch pumps may also be shaft driven from the engine crankshaft.



KEY FEATURES

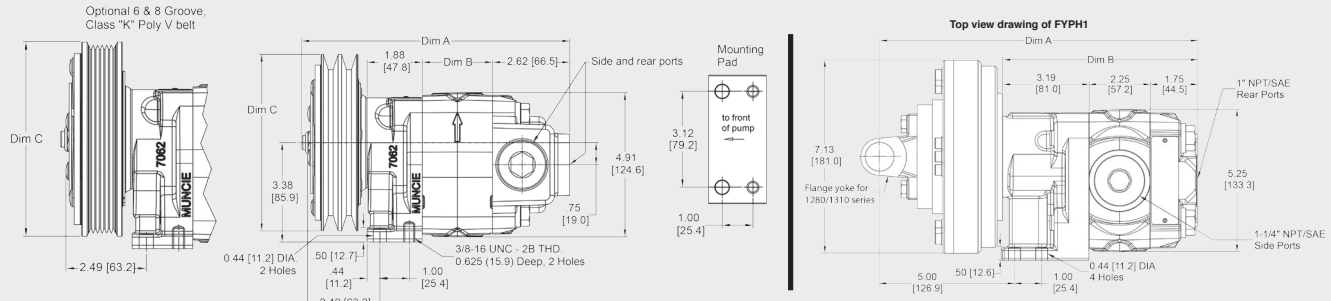
- All cast iron construction
- Solid, one-piece shaft
- Full one-year warranty
- Speeds up to 4,000 RPM
- Integral mounting pad
- Pressures to 3,500 PSI
- Both side and rear ports

PUMP SPECIFICATIONS

MODEL NUMBER	DISPLACEMENT CUBIC IN (CC)	MAX* RPM	MIN* RPM	FB/SB MAX. PSI (BAR)	FY MAX. PSI (BAR)	MAX. OIL TEMP.	MAX INLET VACUUM
PH1-03	0.62 (10)	4,000	800	3,500 (241)	3,500 (241)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-05	1.24 (20)	4,000	800	3,500 (241)	3,500 (241)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-07	1.55 (25)	3,600	800	3,000 (207)	3,500 (241)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-09	2.17 (36)	3,000	800	2,600 (179)	2,900 (200)	200°F (93°C)	5 IN.HG.(.17 BAR)
PH1-11*	2.48 (41)	3,000	800	2,000 (138)	2,500 (172)	200°F (93°C)	5 IN.HG.(.17 BAR)
PK1-13	2.96 (48)	2,500	600	N/A	3,000 (207)	200°F (93°C)	5 IN.HG.(.17 BAR)

*Model PH1-11 tested at 2,000 PSI (138 BAR). Flow Rate Tested at 2,500 PSI (172 BAR). PK1-13 pump not tested.

MOUNTING DIMENSIONS



FB/SB SERIES

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)

**32 HP (24 KW)
95 FT.LBS. (129NM)**

DIM C:
5.47 in. (138.9 mm) for SB8
6.00 in. (152.4 mm) for FB & SB

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)

Approx. Shipping Weight: 56 lbs. (25.4) Manual Override Standard
Clutches require 6 amps @ 12-VDC. Minimum 12.0-V required at clutch.

FY SERIES

**70 HP (52 KW)
200 FT.LBS. (271NM)**

MODEL	DIM A IN (MM)	DIM B IN (MM)
PH1-03	9.9 (251.5)	5.40 (137.2)
PH1-05	10.4 (264.2)	5.90 (149.9)
PH1-07	10.6 (269.2)	6.15 (156.2)
PH1-09	11.1 (281.9)	6.65 (168.9)
PH1-11	11.4 (289.6)	6.90 (175.3)
PK1-13	11.7 (297.2)	7.19 (182.6)

MODEL NUMBER CONSTRUCTION

FB-P H 1-09-P R

Clutch Type

- FB - Fanbelt, 32 HP (24KW)
- FBH - Fanbelt, 45 HP (34KW)
- SB - Serpentine Type 6-Groove Poly Belt
- SB8 - Serpentine Type 8-Groove Poly Belt
- FY - Flange Yoke

Pump

Series

- K Series (Flange Yoke Only)
- H Series

Design Number

Rotation

- R — Right Hand (CW)
(Standard FB & SB drive)
- L — Left Hand (CCW)
(Front Mount FY Drive)

Port Type (Side & Rear)

- P — Pipe Thread (N.P.T.)
(1-1/4" inlet, 3/4" outlet)
- S — Straight Thread (O.D.T.)
(1-1/4", 3/4" Straight Thread)

GPM (LPM) @ 1,000 RPM

- GPM (LPM) @ 1,000 RPM
- H Series: 03 (11), 05 (19), 07 (26), 09 (34), 11 (42)
- K Series: 13 (49)

OIL RECOMMENDATIONS

Muncie 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: 7500 SUS (1600 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*

Note: Cold weather operation requires special oil considerations. Viscosity should not exceed 7500 SUS (1600 cST) at lowest startup temperature. Continuous operation should range between 60-1000 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.

