A20 & A30 SERIES POWER TAKE-OFFS

SY

DESIGNED FOR ALLISON 3000 & 4000 SERIES TRANSMISSIONS



A20 SERIES POWER TAKE-OFF

THE A20 IS THE NEW 10-BOLT MEDIUM-DUTY, CLUTCH SHIFT PTO rated for up to 415 lbs.ft. torque intermittent/continuous and features various product improvements allowing for easier installation and a more durable PTO for Allison 3000 and 4000 Series transmissions.

ROTATABLE REAR COVER AXIMIZED GEAR DESIGN TAPERED ROLLER BEARINGS PROVEN CLUTCH PACK DESIGN INCREASED OUTPUT SHAFT DIAMETER

A30 SERIES POWER TAKE-OFF

THE A30 IS THE NEW 10-BOLT MEDIUM-DUTY, CONSTANT DRIVE PTO designed as a functional replacement to front, crankshaft-driven hydraulic pump applications, and boasts up to 415 lbs.ft. torque intermittent/continuous for heavy duty applications.

MAXIMIZED GEAR DESIGN

TAPERED ROLLER BEARINGS

INCREASED OUTPUT SHAFT DIAMETER

KEY FEATURES

- New Rotatable pump flange
- Increased clearance for easier installation
- Shift cover allowing 360-degree rotation
- Tapered roller bearings increasing
 PTO life
- Increased output shaft diameter for higher durability
- Reduced leak paths
- Maximized gear design for noise reduction

- Single intermittent/continuous torque rating
- Three housing arrangements
- Extended length PTO mounting fasteners
- Compatible with EX Drive shaft
 extension
- A20 available with Muncie Start[®] to eliminate torque spikes
- Tool kit available for easier installation

TARGET MARKETS

- Class 7–8 trucks with automatic transmissions
- Dump
- Fire
- Refuse
- Utility
- Tow & Recovery
- Snow & Ice
- Bulk Hauling

INSTALLATION TOOL KIT

Created for Muncie Power Products' A20 and A30 Series PTOs. Available to order.

- Kit # 49TK6580: Torque wrench, tool bag, and all required tools
- Kit # 49TK6581: Tool bag and all required tools (without torque wrench)

PTO TORQUE & HORSEPOWER RATINGS

SPEED RATIO	3000 SERIES ENGINE %	4000 SERIES ENGINE %	INTERMITTENT/ CONTINUOUS HP (KW) @ 1,000 RPM	INTERMITTENT/ CONTINUOUS TORQUE LBS.FT. (NM)
05	74 %	105 %	77 (57)	400 (542)
06	85 %	122 %	77 (57)	400 (542)
07	99 %	141 %	79 (59)	415 (563)
08	114 %	163 %	69 (51)	360 (488)
09	122 %	175 %	65 (48)	340 (461)
10	131 %	187 %	59 (44)	310 (420)
11	151 %	215 %	52 (39)	275 (373)
12	162 %	231 %	50 (37)	265 (359)
15	201 %	287 %	39 (29)	205 (278)

Approximate Weight: A20 Series 47 lbs. (21 Kg.) and A30 Series 38 lbs. (17 kg)

A1 POSITION CODE SHOWN ABOVE E

G

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C

P

4

11

A20 & A30 SERIES

EASIER INSTALLATION

- New rotatable flange for easy pump mounting
- Housing design allows for easier access to mounting bolts
- Extended mounting bolts
- No external hoses to work around
- Installation tool kit available

ROTATABLE FLANGE

- Stamped with position codes
- 30 unique positions allows for optimal clearance
- More flexibility when mounting pumps
- Flange is easily adjustable without seal disturbance
- Can be shipped loose or at a specific position code for quicker mounting

MUNCIE START®

Use Shift Code:

SX – 12 V Muncie Start® Integral

SR - 12 V Muncie Start® Remote Mount

*Only available for A20



EX DRIVE SHAFT EXTENSION

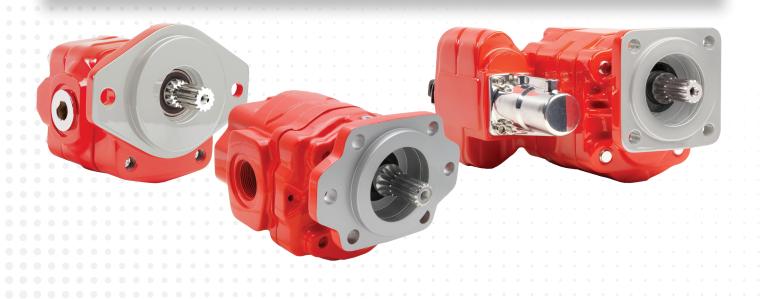
Designed to fit on Allison 3000 and 4000 Series transmissions with or without a retarder or cooler, allows for large gear or piston pumps to be direct mounted.

This ability to be direct mounted eliminates the need for timely driveline installations. Providing maximum torque from the PTO, the shaft extension is available for the A20 and A30 Series PTOs.



COMPATIBLE PUMPS

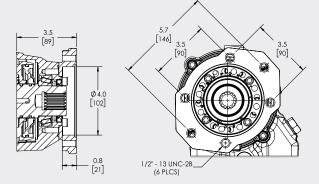
The A20 and A30 Series PTOs are compatible with numerous Muncie Power gear pumps. Gear pumps are available in a wide variety of pump sizes and designs dependent on your application requirements. With bushing design, roller bearing design, and the availability to fit small to high flow rates, our pumps are designed to improve system reliability.



OUTPUT OPTION DIMENSIONS

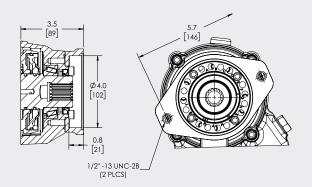
SAE "B" 2- & 4- BOLT FLANGE

"BB" OUTPUT - SAE "B" 7/8" -13T SHAFT "CB" OUTPUT - SAE "C" 11/4" -14T SHAFT "PB" OUTPUT - SAE "BB" 1" -15T SHAFT "ZB" OUTPUT - SAE "C" 11/4" -14T SHAFT



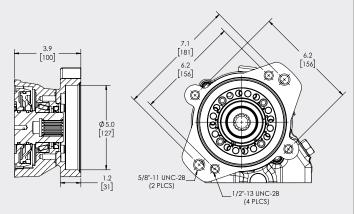
SAE "B" 2-BOLT FLANGE

"BS" OUTPUT - SAE "B" ⁷/₈" -13T SHAFT "PS" OUTPUT - SAE "BB" 1" -15T SHAFT



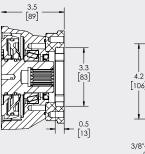
SAE "C" 2- & 4-BOLT FLANGE

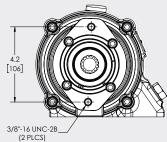
"CC" OUTPUT - SAE "C" 11/4" -14T SHAFT



SAE "A" 2-BOLT FLANGE

"AA" OUTPUT - SAE "A" ⁵/8" -9T SHAFT "BA" OUTPUT - SAE "B" ⁷/8" - 3T SHAFT "TA" OUTPUT - SAE ³/4" -11T SHAFT





ASSEMBLY ARRANGEMENT DIMENSIONS

7.5 [190]

> 4.5 [114]

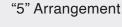
"3" Arrangement

3.0 [77]

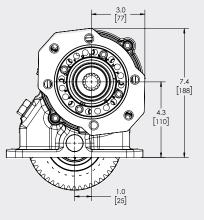
> 1.0 [25]

7.4 [188]

4.3



"1" Arrangement



A20-A10 07-HX 3 BB PX XX

				<u>-</u>				<u>^</u>
PTO Types								Flange Position Codes**
A20 – Clutch Shift 10-Bolt –			•		•	•		A1–T3–Custom Flange Position
A30 – Constant Drive 10-Bolt			•		•	•		XX—Flange Shipped Loose
								Blank – Default Position
Transmission Input Gear Option								
A10 — Allison 3000/4000 Series —			•					Special Features
Speed Ratios			•		•	-	•	> PX-Standard Hose Kit
								PW – Wet Spline w/Standard Hose Kit***
0663:1								BX—Top Opening Hose Kit
0773:1								BW—Top Opening Hose Kit Wet Spline
0884:1			•		•			US—Pulse Generator & SPD-2000
00 = .04.1 00 = .90.1			•					UX—Pulse Generator & Standard Hose Kit
1097:10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								UB—Pulse Generator & Top Opening
11 - 1.11:1								Hose Kit
12 - 1.19:1			•		•			XX—Delete Hose Kit
15 - 1.48:1			•		•			Output Types
			•					1X-11/4" Round Keyed Shaft
Shift Types								2I – DIN 5462 with Tapped Hole****
HX — 12 V Electric/Hydraulic 2015-2020 —								AA—SAE "A" 5/10 - 97. SAE "A" 2-Bolt*****
HR – 12 V Electric/Hydraulic Remote Moun	t • •				•			—— BA*—SAE "B" %" -13T, SAE "A" 2-Bolt
JX – 24 V Electric/Hydraulic								
JR - 24 V Electric/Hydraulic Remote Moun	t							BB*-SAE "B" %" -13T, SAE "B" 2- & 4-Bolt
XX — Electric/Hydraulic w/o Activation Com	ponents							BS*-SAE "B" %" -13T, SAE "B" 2-Bolt
RX — 12 V Reduced Harness (Wiring Pigtail	s Only)							CB*—XSMC Shaft Extension Mount***
SX — 12 V Muncie Start [®] Integral								CC*-SAE "C" 1¼" -14T, SAE "C" 2- & 4-Bolt
SR – 12 V Muncie Start* Remote Mount								
HH — 12V Electric/Hydraulic Hino 2020 & Ol	lder							PB*—SAE "BB" 1" -15T, SAE "B" 2- & 4-Bolt PS*—SAE "BB" 1" -15T, SAE "B" 2-Bolt
H2 – 12V Electric/Hydraulic Hino 2021 & Ne	ewer							
J2 – 24V Electric/Hydraulic Hino 2021 & Ne	ewer							TA-3/4" -11T, SAE "A" 2-Bolt
S2 – 12 V Muncie Start [®] Hino 2021 & Newer								X2—11/2" -10T, DIN 100 Companion Flange
RS — Reduced Harness Muncie Start*								X4—11/2" -10T Male, 1410 Companion Flange
MX — Constant Drive****								XX—1½" -10T Male, for Companion Flange
								ZB-SAE "C" 1¼" -14T, SAE "B" 2- & 4-Bolt
Notes: * Wet Spline Option Available								Assembly Arrangements
** Special Flange Arrangement Example: A1 or T3: fo								1-Right Side Shaft Low
selection adjust flange to the ideal position and no aligns centered with the marked dots.	ote the letter t	nat						3-Left Side Shaft Low
*** Use with Shaft Extension								5—No Offset (Straight Out From Opening)
**** Required for A30 Series PTO, not available for A20								

** SPECIAL FLANGE ARRANGEMENT

For proper code selection adjust flange to the ideal position and note the letter that aligns centered with the marked dots.

Example A1 or T3

***** Not available for A30



Muncie® Power Products

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