

# TITAN<sup>®</sup> MC1 SERIES

POWER TAKE-OFF



## INCREASED LIFESPAN, UNCOMPROMISED RATING, GREATER ADVANTAGE

The first in the TITAN<sup>®</sup> Class of power take-offs, the TITAN MC1 Series is a medium-duty, 10-bolt mounting, clutch shift PTO. Designed to fit Allison 3000/4000 Series transmissions, the TITAN MC1 showcases various product improvements, including a robust clutch pack design, maximized gear design, internally pressure-lubricated tapered roller bearings for long life, and an updated shift cover allowing 360-degree rotation for easier installation. Featuring a redesigned housing, the TITAN MC1 Series allows for maximum clearance for installation on tight-fitting envelopes including Hino trucks.



## KEY FEATURES

- Increased clearance for easier access
- Unique shift cover allows 360-degree rotation
- Improved clutch pack design for increased life
- Improved tapered roller bearings increase life of PTO
- Increased input shaft diameter to increase life and durability
- Reduced leak paths
- Maximized gear design for improved life and noise reduction
- Pump flange rotation at 30-degree intervals
- Available with all options previously available on CS24/25 and HS24
- Self-adjusting shaft brake
- Single torque rating
- Compatible with Muncie Power's EX Drive shaft extension
- Available with **Muncie Start<sup>®</sup>** – an electronically controlled, modulated clutch engagement system that eliminates torque spikes upon start up for high inertia loads

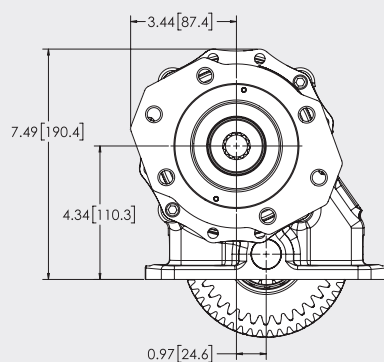
## PTO TORQUE & HORSEPOWER RATINGS

| SPEED RATIO | INTERMITTENT/CONTINUOUS HP @ 1,000 RPM | INTERMITTENT/CONTINUOUS TORQUE LBS.FT. | INTERMITTENT (KW) @ 1,000 RPM | INTERMITTENT/CONTINUOUS TORQUE (NM) |
|-------------|----------------------------------------|----------------------------------------|-------------------------------|-------------------------------------|
| 05          | 77                                     | 400                                    | (57)                          | (542)                               |
| 06          | 77                                     | 400                                    | (57)                          | (542)                               |
| 07          | 79                                     | 415                                    | (59)                          | (563)                               |
| 08          | 69                                     | 360                                    | (51)                          | (488)                               |
| 09          | 65                                     | 340                                    | (48)                          | (461)                               |
| 10          | 59                                     | 310                                    | (44)                          | (420)                               |
| 11          | 52                                     | 275                                    | (39)                          | (373)                               |
| 12          | 50                                     | 265                                    | (37)                          | (359)                               |
| 15          | 39                                     | 205                                    | (29)                          | (278)                               |

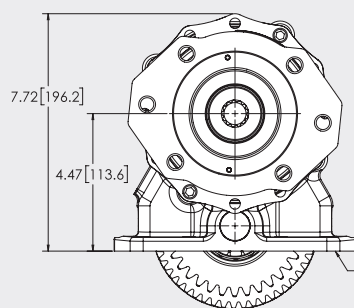
Approximate Weight: 47.2 lbs. (21.4 Kg.)

## DIMENSIONS

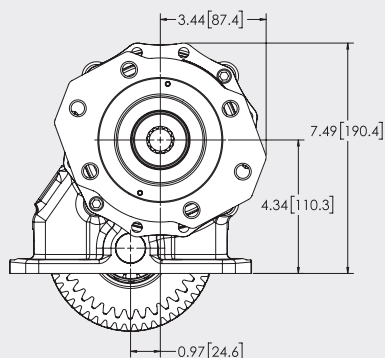
**"3" Arrangement**



**"5" Arrangement**

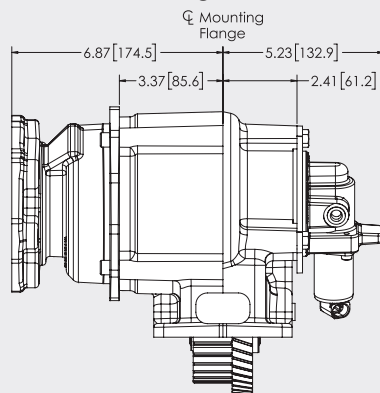


**"1" Arrangement**

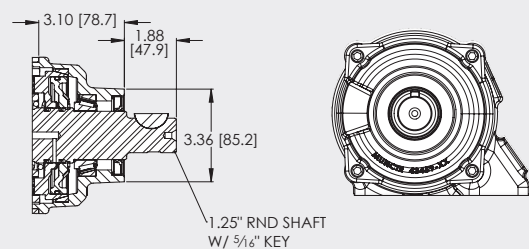


ALLISON 10-BOLT  
MOUNTING PAD

**All Arrangements**

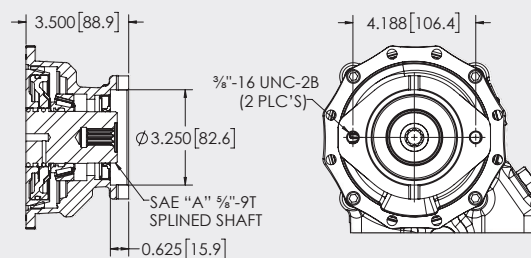


## OUTPUT OPTIONS



1.25" RND SHAFT  
W/ 5/16" KEY

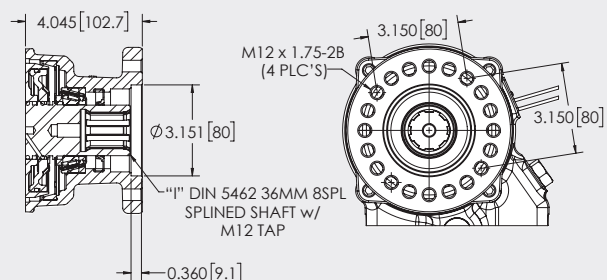
**"1X" OUTPUT - 1 1/4" ROUND KEYED SHAFT**



5/8"-16 UNC-2B  
(2 PLC'S)

SAE "A" 5/8"-9T  
SPLINED SHAFT

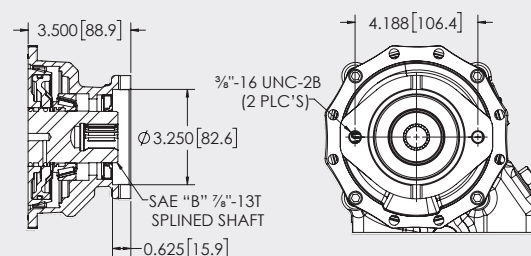
**"AA" OUTPUT - SAE "A" 5/8" 9T SHAFT, 2-BOLT SAE "A"**



M12 x 1.75-2B  
(4 PLC'S)

1" DIN 5462 36MM 8SPL  
SPLINED SHAFT w/  
M12 TAP

**"2I" OUTPUT - DIN 5462 EURO WITH M12 TAP**

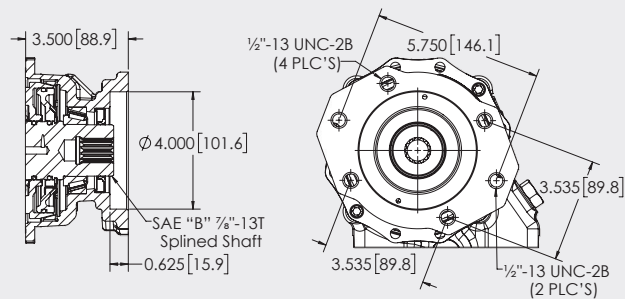


5/8"-16 UNC-2B  
(2 PLC'S)

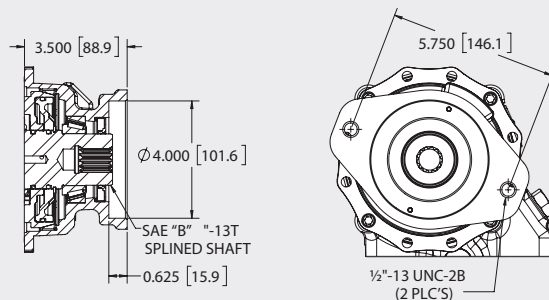
SAE "B" 7/8"-13T  
SPLINED SHAFT

**"BA" OUTPUT - SAE "B" 7/8" 13T, 2-BOLT FLANGE SAE "A"**

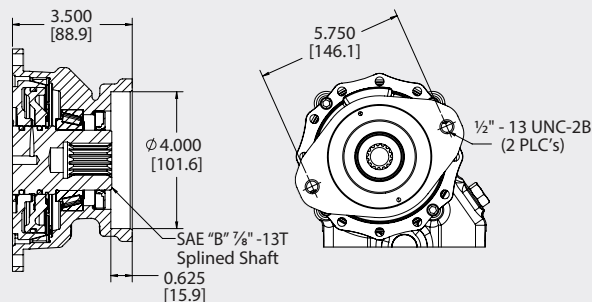
## OUTPUT OPTIONS (CONT)



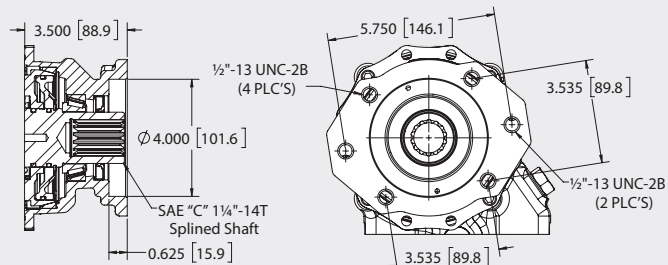
"BB" OUTPUT - SAE "B"  $\frac{7}{8}$ " -13T, 2- & 4-BOLT SAE "B"



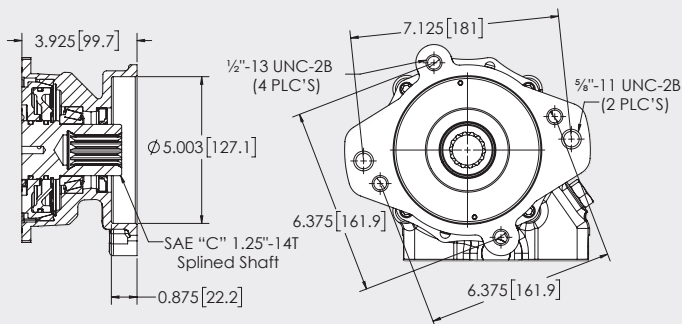
"BS" OUTPUT - SAE "B"  $\frac{7}{8}$ " -13T SHAFT  
SAE "B" 2-BOLT



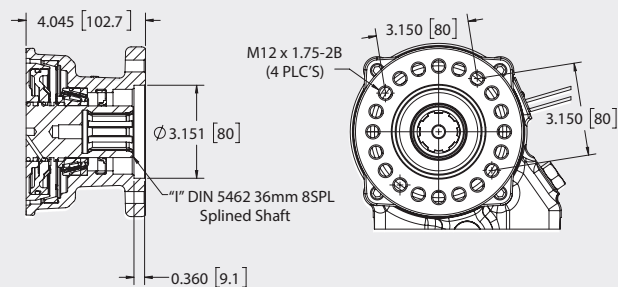
"B6" OUTPUT - Special SAE "B"  $\frac{7}{8}$ " -13T, 2-Bolt SAE "B"



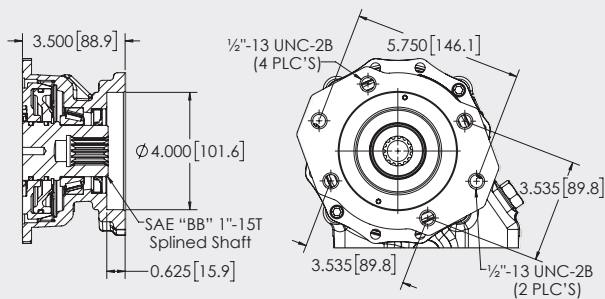
"CB" OUTPUT - SAE "C"  $1\frac{1}{4}$ " -14T, SAE "B"



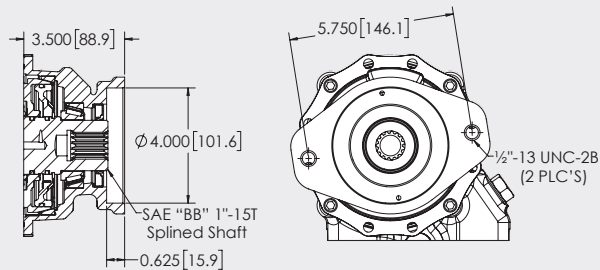
"CC" OUTPUT - SAE "C"  $1\frac{1}{4}$ " -14T, 2- & 4-BOLT SAE "C"



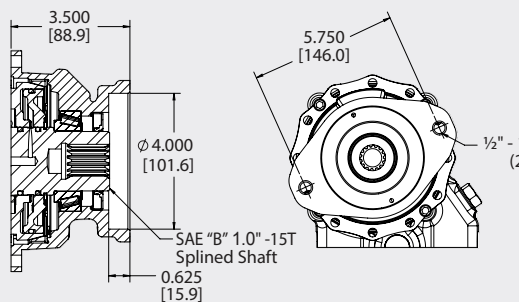
"II" OUTPUT - DIN 5462



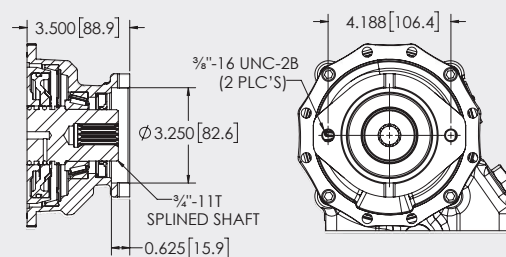
"PB" OUTPUT - SAE "BB"  $1\frac{1}{2}$ " -15T, 2- & 4-BOLT SAE "B"



"PS" OUTPUT - SAE "BB"  $1\frac{1}{2}$ " -15T, 2-BOLT SAE "B"

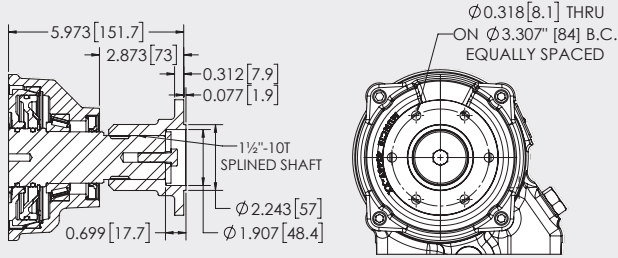


"P6" OUTPUT - SAE "BB"  $1.0$ " -15T, 2-BOLT SAE "B Special"

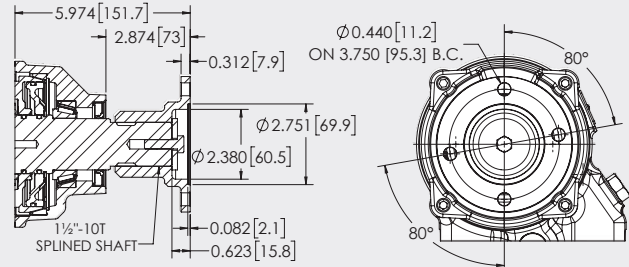


"TA" OUTPUT - SAE  $\frac{3}{4}$ " -11T, 2-BOLT SAE "A"

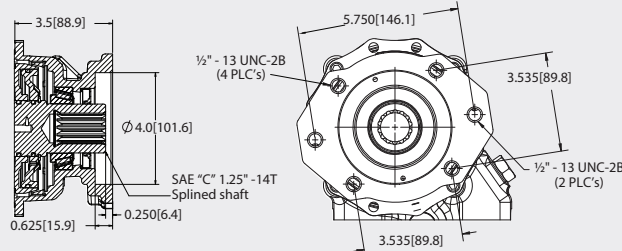
## OUTPUT OPTIONS (CONT)



"X2" OUTPUT - 1 1/2" -10T, DIN Companion Flange



"X4" OUTPUT - 1 1/2" -10T, 1410 Companion



"ZB" OUTPUT - SAE "C" 1.25" -14T, 2- & 4-Bolt SAE "B"

## MODEL NUMBER CONSTRUCTION

### MC1-A10 07-HX 3 BB PX

**Model** \_\_\_\_\_  
MC1 – Medium Duty Clutch Shift 10-Bolt

**Transmission Gear** \_\_\_\_\_  
A10 – Allison 3000/4000 Series

**Ratio** \_\_\_\_\_  
05 – .54:1 Output Speed  
06 – .63:1  
07 – .73:1  
08 – .84:1  
09 – .90:1  
10 – .97:1  
11 – 1.11:1  
12 – 1.19:1  
15 – 1.48:1

**Shift Type** \_\_\_\_\_  
HH – Elec/Hyd 12V Hino  
HX – Elec/Hyd 12V  
HR – Elec/Hyd 12V Remote Mount  
JX – Elec/Hyd 24V  
JR – Elec/Hyd 24V Remote Mount  
XX – Elec/Hyd Without Activation Components  
SX – **Muncie Start**® 12VDC Integral  
SR – **Muncie Start**® 12VDC Remote Mount

**Assembly Arrangement** \_\_\_\_\_  
1 – Right Side Shaft Low  
3 – Left Side Shaft Low  
5 – Top/No Offset (Straight Out From Opening)

#### Special Features

PX – Standard Hose Kit  
BX – Hose Kit for Top Opening  
US – Pulse Generator & SPD-1001  
UX – Pulse Generator & Standard Hose Kit  
UB – Pulse Generator & Top Hose Kit  
XX – Hose Delete Kit  
PW – Wet Spline & Standard Hose Kit  
Note: Use with Shaft Extensions

#### Output Type

1X – 1 1/4" Round Shaft  
2I – DIN 5462 Euro  
AA – SAE "A" 5/8" -9T, 2-Bolt SAE-"A"  
BA – SAE "B" 7/8" -13T, 2-Bolt SAE-"A"  
BB – SAE "B" 7/8" -13T, 2- & 4-Bolt SAE-"B"  
BS – SAE "B" 7/8" -13T, 2-Bolt SAE-"B"  
B6 – SAE "B" 7/8" -13T, 2-Bolt SAE-"B"  
CB – SAE "C" 1 1/4" -14T, SAE-"B"  
Note: Used with Shaft Extensions  
CC – SAE "C" 1 1/4" -14T, 2- & 4-Bolt SAE-"C"  
II – DIN 5462  
PB – SAE "BB" 1" -15T, 2- & 4-Bolt SAE-"B"  
PS – SAE "BB" 1" -15T, 2-Bolt SAE-"B"  
P6 – SAE "BB" 1.0" -15T, 2-Bolt SAE "B" Special  
TA – SAE 3/4" -11T, 2-Bolt SAE-"A"  
X2 – 1 1/2" -10T, DIN Companion  
X4 – 1 1/2" -10T Male, 1410 Companion  
ZB – SAE "C" 1.25" -14T, 2- & 4-Bolt SAE-"B"