

# Rockford - NACD Style

Standard Power Take-Offs

with **11.5"** <sup>SP</sup> Clutches

Foley Engines

Shipping Address:  
200 Summer Street

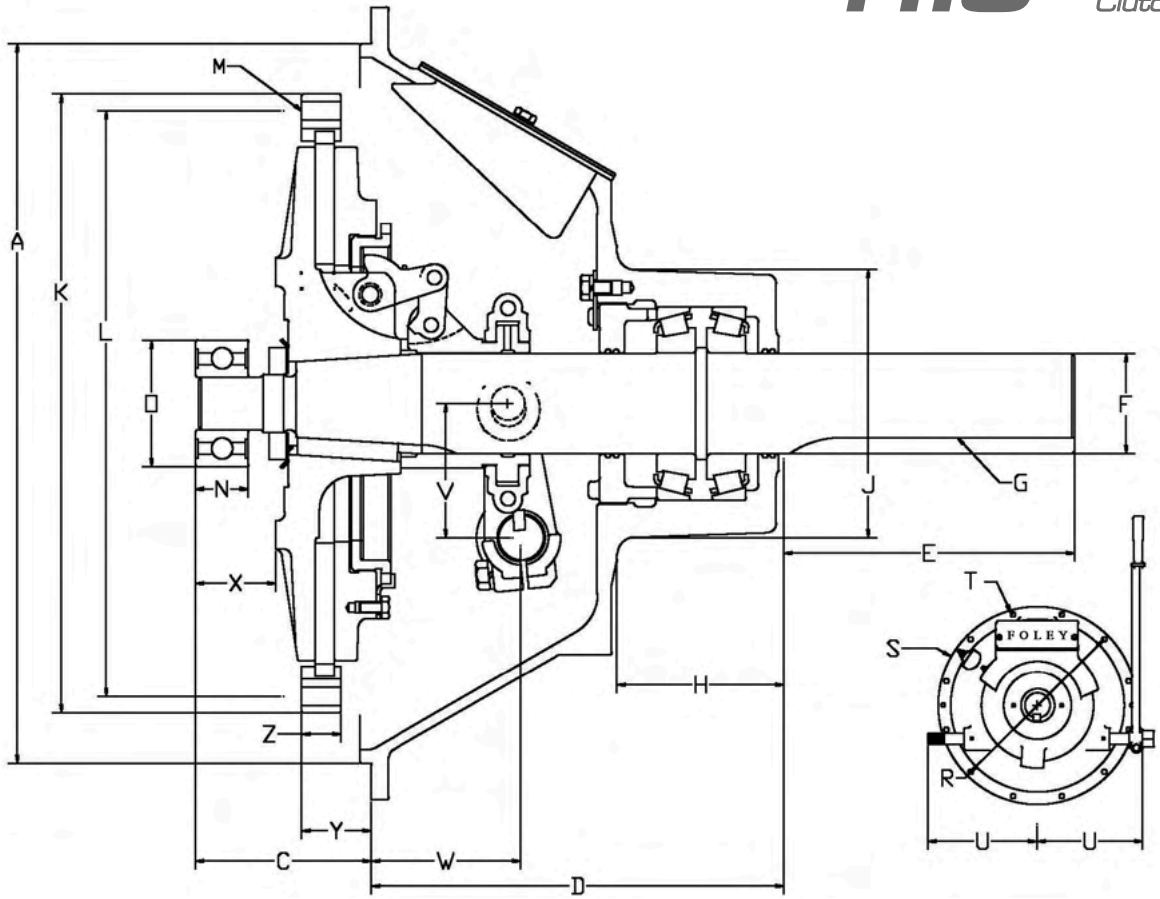
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Manufacturers names, symbols and numbers are for reference purposes only and do not imply manufacturing origin.

| PTO Part Number | Ball or Tapered Roller Brng Type | Model        |             |                 | Application (in-line or side loaded) | Type of Facing | Type Release Bearing | Clutch Torque Capacity lb. Ft * | A      | C    | D    | Shaft    |                   |            |
|-----------------|----------------------------------|--------------|-------------|-----------------|--------------------------------------|----------------|----------------------|---------------------------------|--------|------|------|----------|-------------------|------------|
|                 |                                  | SAE Hsg Size | Clutch Size | Qty. of Facings |                                      |                |                      |                                 |        |      |      | E Length | F Dia. +.000-.001 | G Keyway   |
| 434510FO        | Tapered                          | 3            | 11.5"       | 1               | Both                                 | Organic        | Bronze               | 700                             | 16.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434510FO1       | Tapered                          | 3            | 11.5"       | 1               | Both                                 | Organic        | Bronze               | 700                             | 16.125 | 4.05 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434200FO        | Tapered                          | 3            | 11.5"       | 1               | Both                                 | Organic        | Ball                 | 700                             | 16.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434100FO        | Tapered                          | 3            | 11.5"       | 1               | Both                                 | Feramic        | Ball                 | 895                             | 16.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434511FO        | Tapered                          | 3            | 11.5"       | 1               | Both                                 | Feramic        | Bronze               | 895                             | 16.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434514FO        | Tapered                          | 2            | 11.5"       | 1               | Both                                 | Organic        | Bronze               | 700                             | 17.625 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434515FO        | Tapered                          | 2            | 11.5"       | 1               | Both                                 | Feramic        | Bronze               | 895                             | 17.625 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 411054FO        | Tapered                          | 1            | 11.5"       | 1               | Both                                 | Organic        | Bronze               | 700                             | 20.125 | 4.05 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434516FO        | Tapered                          | 1            | 11.5"       | 1               | Both                                 | Organic        | Bronze               | 700                             | 20.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |
| 434517FO        | Tapered                          | 1            | 11.5"       | 1               | Both                                 | Feramic        | Bronze               | 895                             | 20.125 | 3.94 | 9.25 | 6.50     | 2.250             | 5/8 x 5/16 |

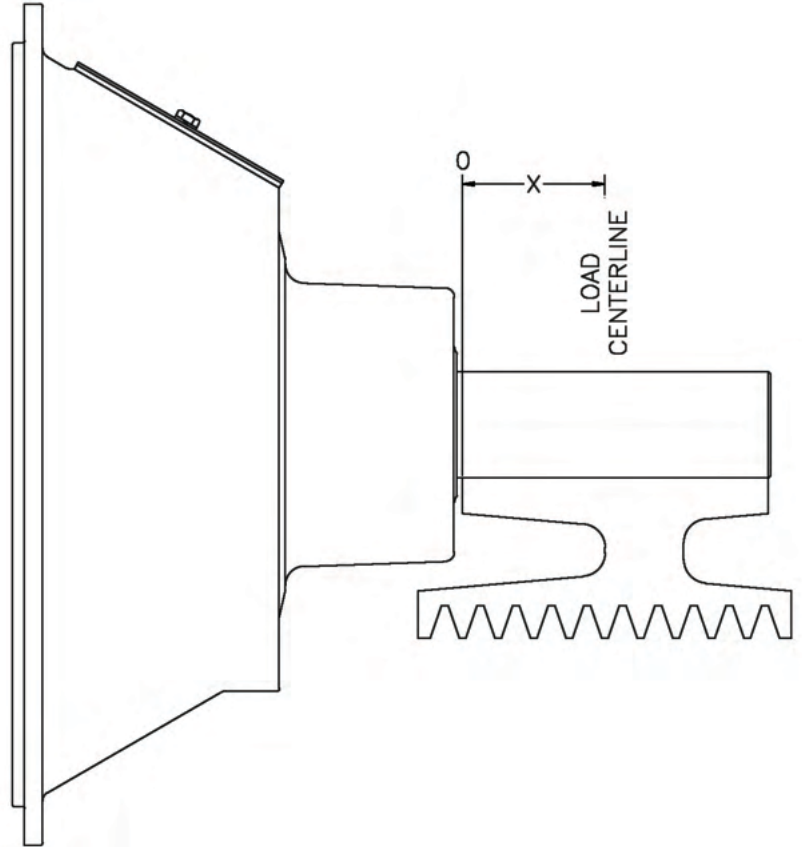
| PTO Part Number | H    | J    | K      | L      | M (holes) |      | N      | O see note** | R      | S     | T (holes) |      | U    | V    | W    | X    | Y    | Z   |
|-----------------|------|------|--------|--------|-----------|------|--------|--------------|--------|-------|-----------|------|------|------|------|------|------|-----|
|                 |      |      |        |        | Qty.      | Dia. |        |              |        |       | Qty.      | Dia. |      |      |      |      |      |     |
| 434510FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 16.875 | 17.75 | 12        | .433 | 9.75 | 3.00 | 3.35 | 1.81 | 1.56 | .88 |
| 434510FO1       | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | N/S    | N/S          | 16.875 | 17.75 | 12        | .433 | 9.75 | 3.00 | 3.35 | 1.91 | 1.56 | .88 |
| 434200FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 16.875 | 17.75 | 12        | .433 | 9.75 | 3.00 | 3.35 | 1.81 | 1.56 | .88 |
| 434100FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 16.875 | 17.75 | 12        | .433 | 9.75 | 3.00 | 3.35 | 1.81 | 1.56 | .88 |
| 434511FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 16.875 | 17.75 | 12        | .433 | 9.75 | 3.00 | 3.35 | 1.81 | 1.56 | .88 |
| 434514FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 18.375 | 19.25 | 12        | .433 | 9.75 | 3.00 | 3.25 | 1.81 | 1.56 | .88 |
| 434515FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 18.375 | 19.25 | 12        | .433 | 9.75 | 3.00 | 3.25 | 1.81 | 1.56 | .88 |
| 411054FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | N/S    | N/S          | 20.875 | 21.75 | 12        | .469 | 9.75 | 3.00 | 3.44 | 1.91 | 1.56 | .88 |
| 434516FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 20.875 | 21.75 | 12        | .469 | 9.75 | 3.00 | 3.44 | 1.81 | 1.56 | .88 |
| 434517FO        | 3.75 | 6.00 | 13.875 | 13.125 | 8         | .406 | 1.1875 | 2.8346       | 20.875 | 21.75 | 12        | .469 | 9.75 | 3.00 | 3.44 | 1.81 | 1.56 | .88 |

**Allowable Side Load Pulls:**

The following formula can be used to calculate applied side load. Loads are calculated on proper tensioning of belts. If belts are tightened excessively, the resulting side load can exceed these limits

$$L = \frac{126000 \times H.P.}{N \times D} \times F \times A$$

- L** = Actual Applied Load (lbs.)
- N** = Shaft Speed (rev./min.)
- D** = Pitch Diameter of Sheaves, etc. (in.)
- F** = Load Factor (see below)
  - 1.0 for chain
  - 2.5 for V belt drive
  - 3.5 for flat belt drive
- A** = 1.0 for low & moderate duty drives
  - 1.4 for severe duty shock loads or large inertia loads (reciprocating compressors, crusher, chippers, planers, etc.)



**Required Clutch Torque Capacity Calculation:**

Required Clutch Torque = Maximum Engine Torque x Service Factor

**Blower or Vacuum**

- Centrifugal with free flow of air ..... 1.7
- With high start-up inertia or subject to choking of air supply ..... 4.0

**Compressors**

- Reciprocating, 1 or 2 cylinders ..... 4.0
- Reciprocating, 3 or more cylinders ..... 2.5
- Roto screw or turbine ..... 2.0

**Conveyor**

- Fed uniformly ..... 1.5
- Not fed uniformly ..... 2.0
- Reciprocating ..... 3.0

**Drills** ..... 2.0

**Generator** ..... 2.0

**Pump**

- Centrifugal or turbine ..... 1.5
- Dredge ..... 2.0
- Mud or reciprocating ..... 3.0

**Rock Crusher, Hammer** ..... 3.0

**Mill Snow Blower** ..... 2.0

**Wood Chipper, Saw Mill** ..... 3.0

Power Take-Off Part Numbers 434100FO, 434510FO, 434511FO, 434514FO 434515FO, 434516FO, 434517FO, 434200FO

| RPM  | X" Distance |      |      |      |      |      |      |
|------|-------------|------|------|------|------|------|------|
|      | 0           | 1"   | 2"   | 3"   | 4"   | 5"   | 6"   |
| 2000 | 4860        | 4510 | 3890 | 3090 | 2570 | 2190 | 1910 |
| 2200 | 4730        | 4380 | 3770 | 3000 | 2490 | 2120 | 1850 |
| 2400 | 4610        | 4270 | 3660 | 2910 | 2410 | 2060 | 1800 |
| 2600 | 4500        | 4170 | 3560 | 2830 | 2350 | 2010 | 1750 |
| 2800 | 4400        | 4070 | 3480 | 2760 | 2290 | 1960 | 1710 |

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