

# Rockford - NADC Style

Standard Power Take-Offs

with **14" HD** Clutches

Foley Engines

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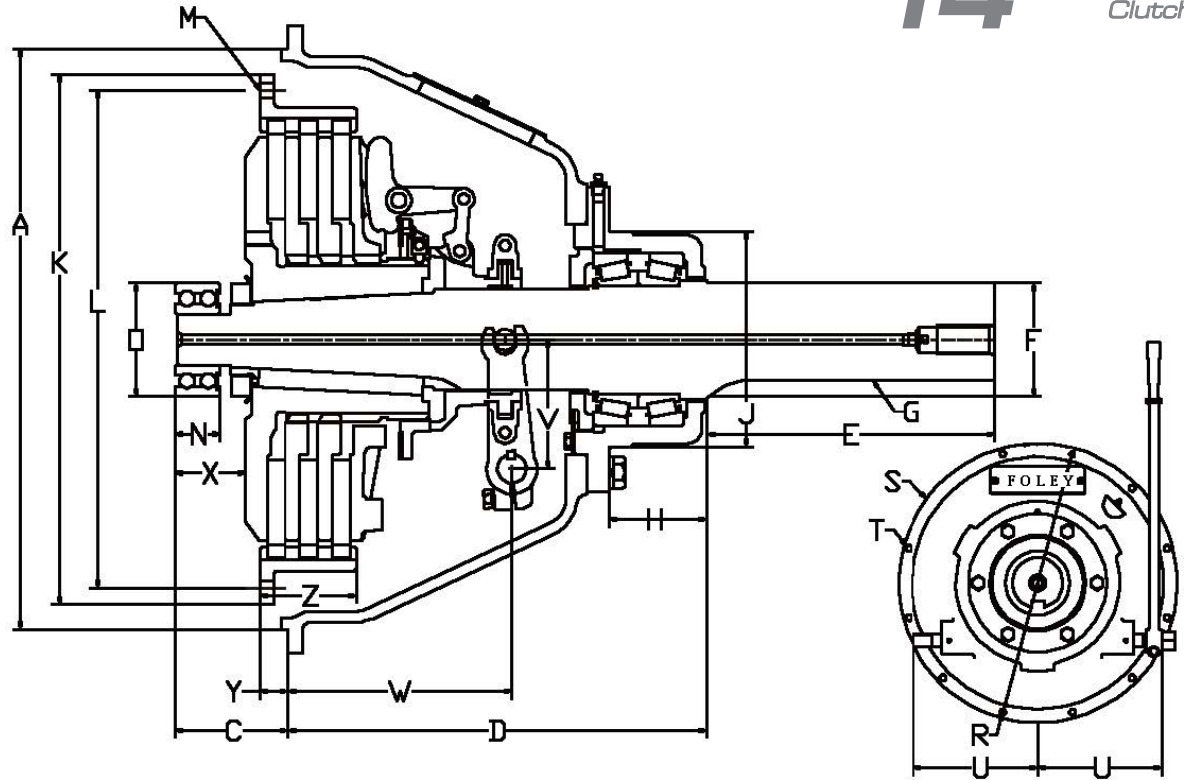
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Manufacturers names, symbols and numbers are for reference purposes only and do not imply manufacturing origin.

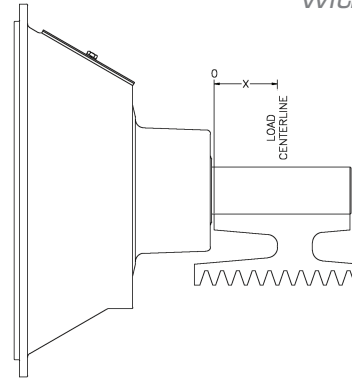


**Side Load Applications**

| PTO Part Number | Ball or Tapered Roller Bearing Type | Max RPM | Model        |             |                | Application (in-line or side load) | 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   | H    |
| 411058FO        | Tapered                             | 2200    | 1            | 14          | 1              | Side Load                          | Organic        | Bronze               | 1050                             | 20.125 | 3.94 | 12.12 | 8.50     | 3.000            | 3/4 x 3/8  | 3.75 |
| 425393FO        | Tapered                             | 2200    | 1            | 14          | 1              | Side Load                          | Feramic        | Bronze               | 1345                             | 20.125 | 3.94 | 12.12 | 8.50     | 3.000            | 3/4 x 3/8  | 3.75 |
| 437430FO        | Tapered                             | 2200    | 1            | 14          | 1              | Side Load                          | Organic        | Ball                 | 1050                             | 20.125 | 3.94 | 12.12 | 8.50     | 3.000            | 3/4 x 3/8  | 3.75 |
| 411060FO        | Tapered                             | 2200    | 1            | 14          | 2              | Side Load                          | Organic        | Bronze               | 2100                             | 20.125 | 3.94 | 13.50 | 10.00    | 3.500            | 7/8 x 7/16 | 3.75 |
| 427491FO        | Tapered                             | 2200    | 1            | 14          | 2              | Side Load                          | Feramic        | Bronze               | 2690                             | 20.125 | 3.94 | 13.50 | 10.00    | 3.500            | 7/8 x 7/16 | 3.75 |
| 437440FO        | Tapered                             | 2200    | 1            | 14          | 2              | Side Load                          | Organic        | Ball                 | 2100                             | 20.125 | 3.94 | 13.50 | 10.00    | 3.500            | 7/8 x 7/16 | 3.75 |
| 434764FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Organic        | Bronze               | 3150                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |
| 433853FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Feramic        | Bronze               | 4035                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |
| 437455FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Organic        | Ball                 | 3150                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |
| 411074FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Organic        | Bronze               | 3150                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |
| 427493FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Feramic        | Bronze               | 4035                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |
| 437450FO        | Tapered                             | 2200    | 1            | 14          | 3              | Side Load                          | Organic        | Ball                 | 3150                             | 20.125 | 3.94 | 14.50 | 10.00    | 3.938            | 1 x 1/2    | 3.38 |

| PTO Part Number | J    | K      | L      | M (holes) |      | N      | O See Note** | R      | S     | T (holes) |      | U    | V    | W    | X    | Y    | Z    |
|-----------------|------|--------|--------|-----------|------|--------|--------------|--------|-------|-----------|------|------|------|------|------|------|------|
|                 |      |        |        | Qty       | Dia  |        |              |        |       | Qty       | Dia  |      |      |      |      |      |      |
| 411058FO        | 6.75 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 6.00 | 2.19 | 1.00 | 1.12 |
| 425393FO        | 6.75 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 6.00 | 2.19 | 1.00 | 1.12 |
| 437430FO        | 6.75 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 6.00 | 2.19 | 1.00 | 1.12 |
| 411060FO        | 7.62 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 7.00 | 2.19 | 1.00 | 2.38 |
| 427491FO        | 7.62 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 7.00 | 2.19 | 1.00 | 2.38 |
| 437440FO        | 7.62 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.00 | 7.00 | 2.19 | 1.00 | 2.38 |
| 434764FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |
| 433853FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |
| 437455FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.3750 | 3.1496       | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |
| 411074FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.5625 | 3.937        | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |
| 427493FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.5625 | 3.937        | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |
| 437450FO        | 7.50 | 18.375 | 17.250 | 8         | .531 | 1.5625 | 3.937        | 20.875 | 21.75 | 12        | .469 | 9.75 | 4.50 | 7.75 | 2.50 | 1.00 | 3.38 |

with **14" HD Clutches**



**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

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Power Take-Off Part Numbers 437430FO, 411058FO, 425393FO

| RPM  | X" Distance |      |      |      |      |      |      |      |
|------|-------------|------|------|------|------|------|------|------|
|      | 0           | 1"   | 2"   | 3"   | 4"   | 5"   | 6"   | 7"   |
| 1600 | 4370        | 3046 | 2337 | 1896 | 1595 | 1377 | 1211 | 1081 |
| 1900 | 4126        | 2876 | 2207 | 1791 | 1506 | 1300 | 1143 | 1021 |
| 2200 | 3930        | 2739 | 2102 | 1705 | 1435 | 1238 | 1089 | 972  |

Power Take-Off Part Numbers 411060FO, 437440FO, 427491FO

| RPM  | X" Distance |      |      |      |      |      |      |      |
|------|-------------|------|------|------|------|------|------|------|
|      | 0           | 1"   | 2"   | 3"   | 4"   | 5"   | 6"   | 7"   |
| 1600 | 4386        | 3133 | 2437 | 1994 | 1687 | 1462 | 1290 | 1154 |
| 1900 | 4142        | 2959 | 2301 | 1883 | 1593 | 1381 | 1218 | 1090 |
| 2200 | 3944        | 2817 | 2191 | 1793 | 1517 | 1315 | 1160 | 1038 |

Power Take-Off Part Numbers 411074FO 427493FO, 437450FO

| RPM  | X" Distance |       |      |      |      |      |      |      |
|------|-------------|-------|------|------|------|------|------|------|
|      | 0           | 1"    | 2"   | 3"   | 4"   | 5"   | 6"   | 7"   |
| 1600 | 10950       | 10362 | 8334 | 6765 | 5693 | 4914 | 4323 | 3858 |
| 1900 | 10341       | 9785  | 7870 | 6388 | 5376 | 4640 | 4082 | 3643 |
| 2200 | 9847        | 9318  | 7495 | 6083 | 5119 | 4419 | 3887 | 3470 |

Power Take-Off Part Numbers 433853FO, 434764FO, 437455FO

| RPM  | X" Distance |      |      |      |      |      |      |      |
|------|-------------|------|------|------|------|------|------|------|
|      | 0           | 1"   | 2"   | 3"   | 4"   | 5"   | 6"   | 7"   |
| 1600 | 10000       | 7000 | 5400 | 4400 | 3700 | 3200 | 2800 | 2500 |
| 1900 | 9400        | 6600 | 5100 | 4150 | 3500 | 3025 | 2650 | 2375 |
| 2200 | 8900        | 6200 | 4800 | 3900 | 3300 | 2850 | 2500 | 2250 |