



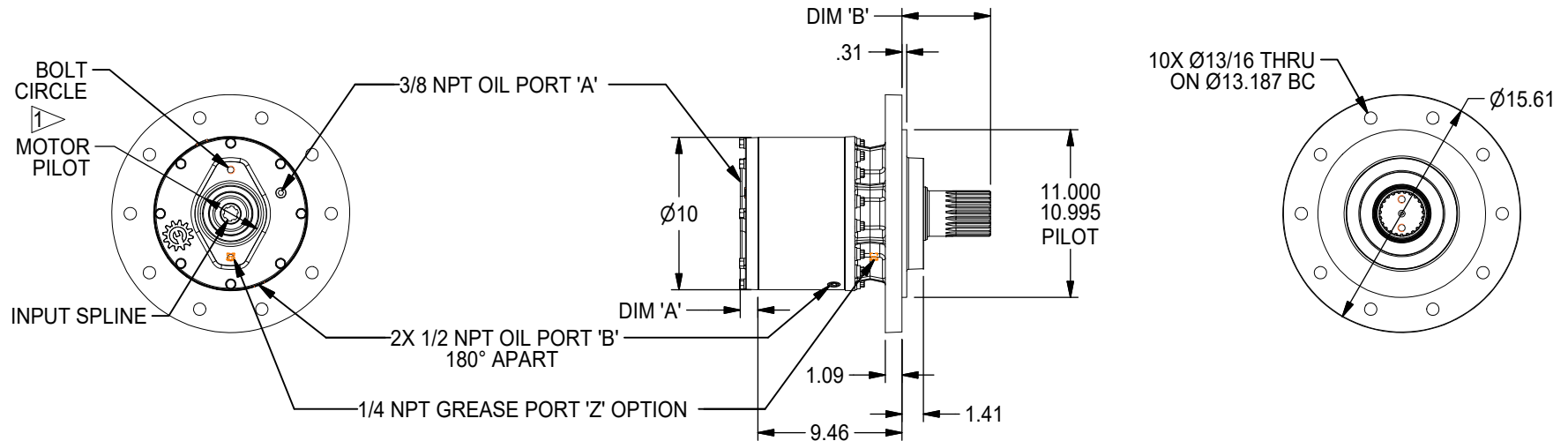
160 GEAR DRIVE - SHAFT OUTPUT

160,000 in-lb (18,078 N-m) Intermittent Rating 80,000 in-lb (9,039 N-m) Continuous Rating
Typical Applications: Industrial, Marine or Mobile Equipment

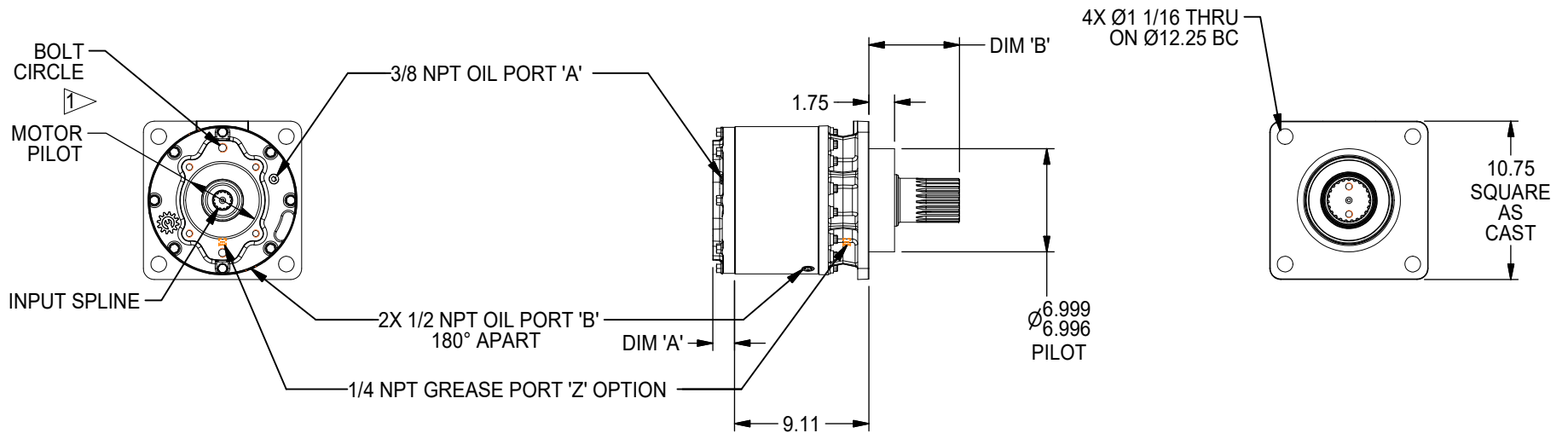
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SHEET 1 OF 9

160 1&2-Stage General Dimensions Flanged 'A' Option



160 1&2-Stage General Dimensions Square 'B' Option





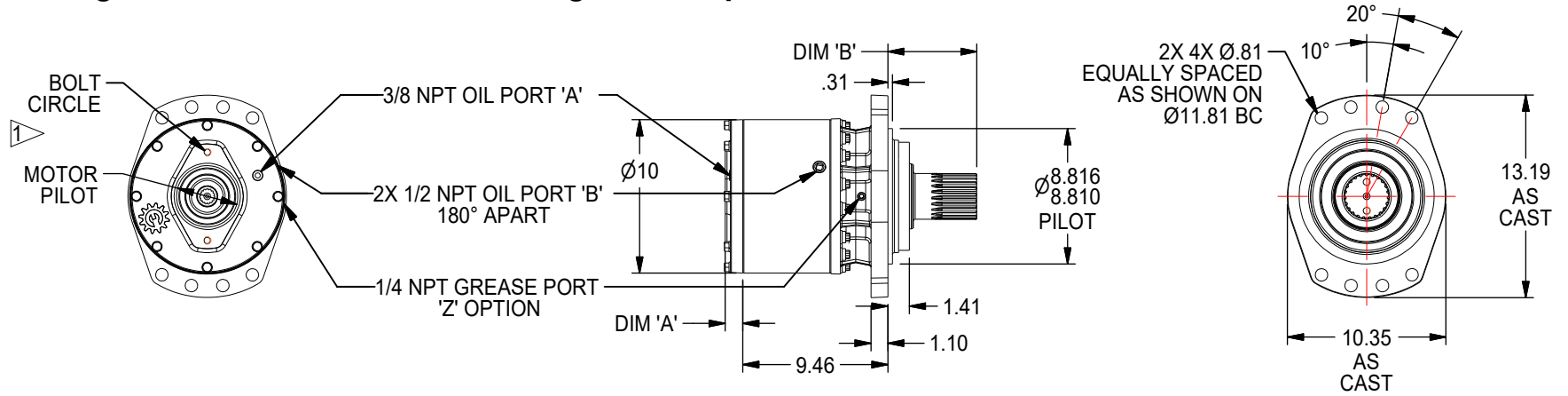
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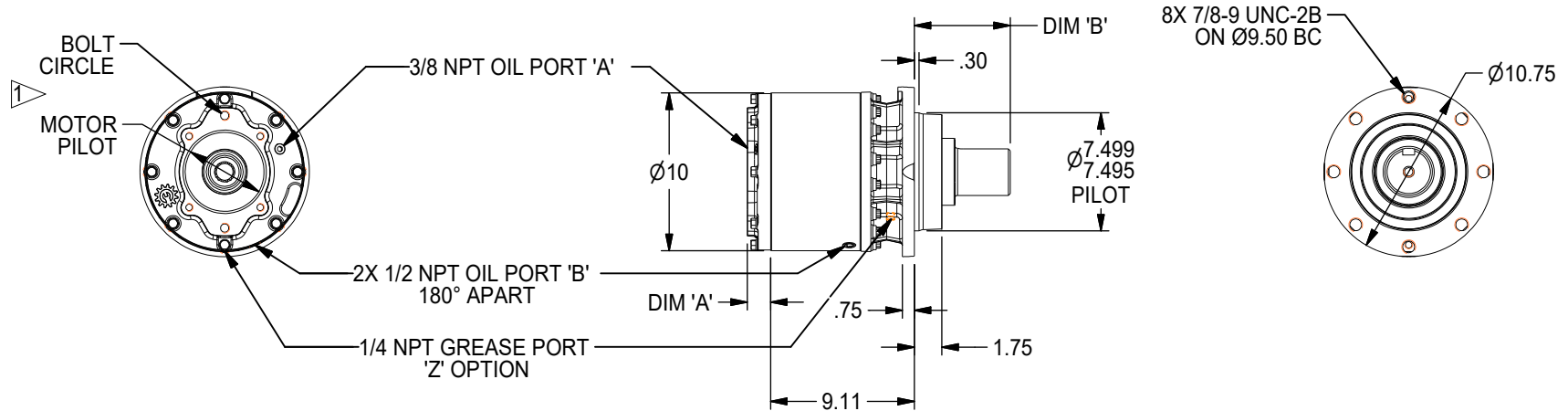
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SHEET 2 OF 9

160 1&2-Stage General Dimensions Rectangular 'E' Option



160 1&2-Stage General Dimensions Flangeless 'F' Option





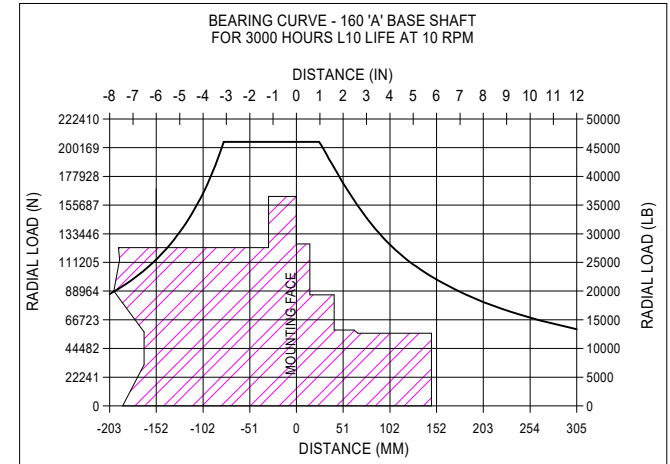
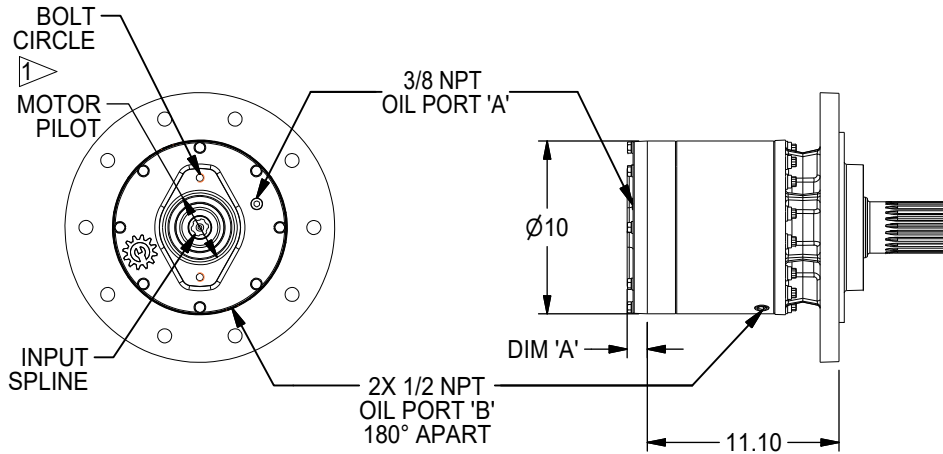
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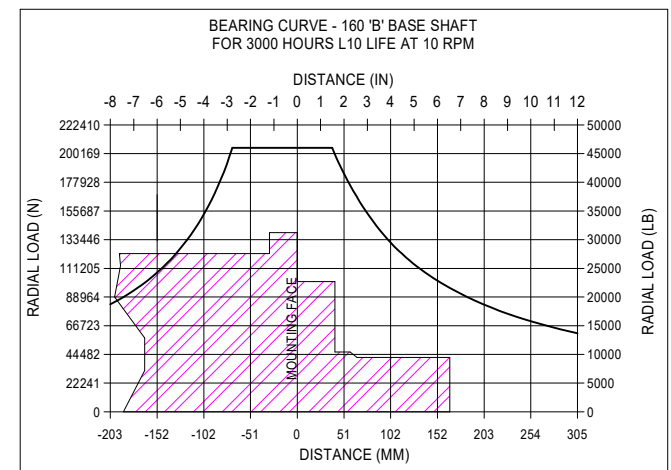
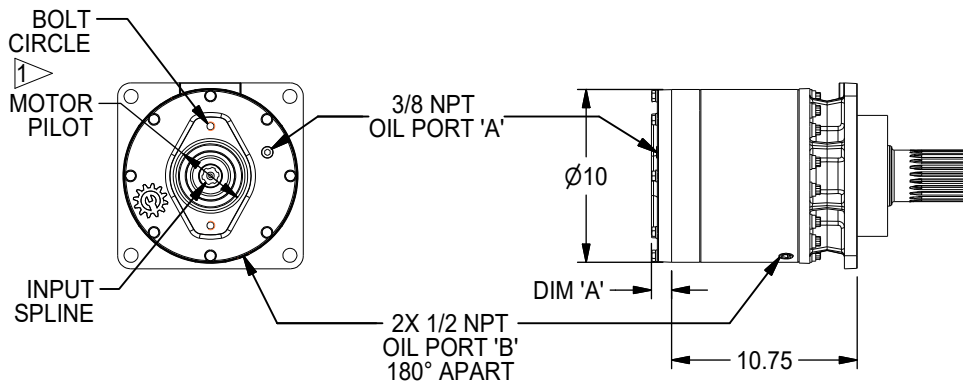
3-stage 'A' Option (Base Dimensions Identical to 1&2-Stage Options)



To adjust for loads and speeds other than those shown on above curve, use this formula:

$$\text{Adjusted Life (hours)} = 3000 \left(\frac{10 \text{ rpm}}{\text{Speed (Adjusted)}} \right) \times \left(\frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$

3-stage 'B' Option (Base Dimensions Identical to 1&2-Stage Options)



To adjust for loads and speeds other than those shown on above curve, use this formula:

$$\text{Adjusted Life (hours)} = 3000 \left(\frac{10 \text{ rpm}}{\text{Speed (Adjusted)}} \right) \times \left(\frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$



160 GEAR DRIVE - SHAFT OUTPUT

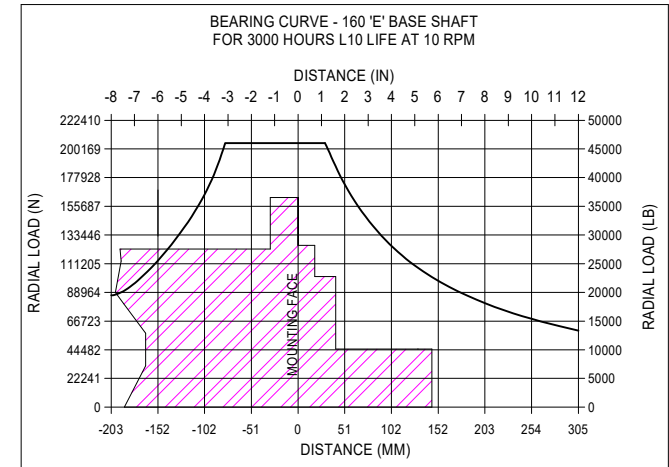
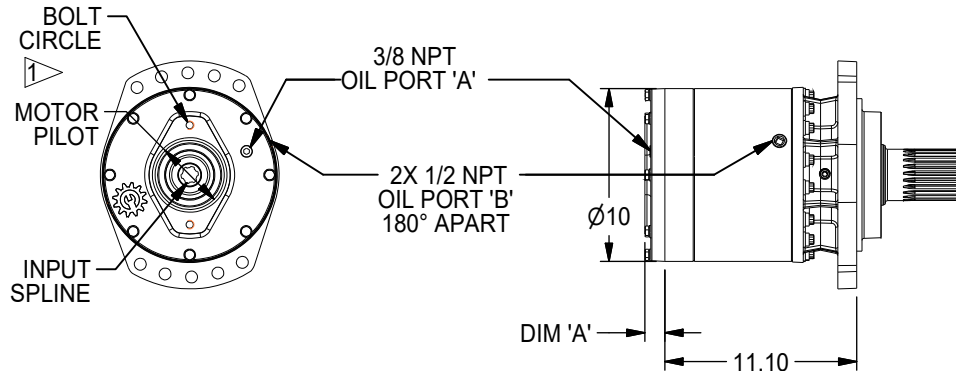
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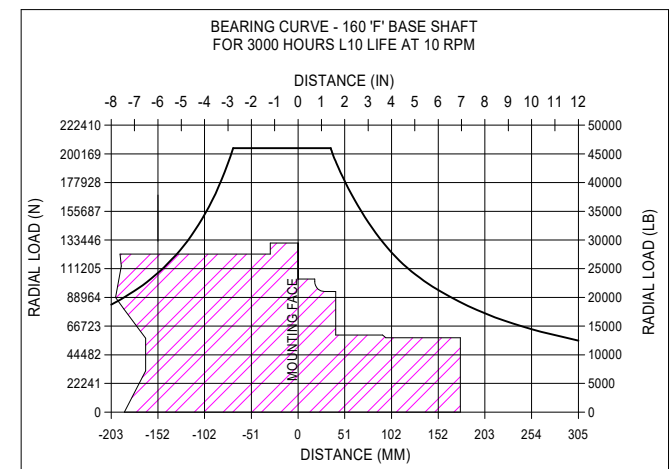
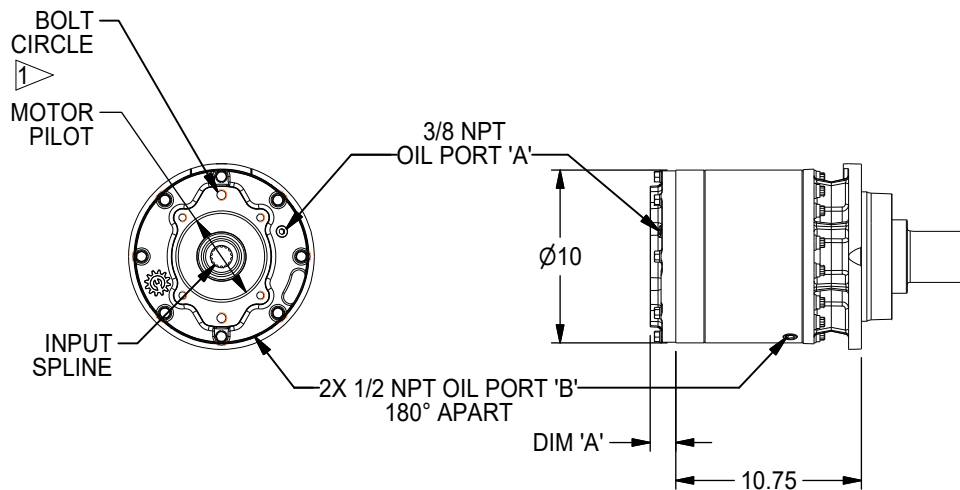
3-stage 'E' Option (Base Dimensions Identical to 1&2-Stage Options)



To adjust for loads and speeds other than those shown on above curve, use this formula:

$$\text{Adjusted Life (hours)} = 3000 \left(\frac{10 \text{ rpm}}{\text{Speed (Adjusted)}} \right) \times \left(\frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$

3-stage 'F' Option (Base Dimensions Identical to 1&2-Stage Options)



To adjust for loads and speeds other than those shown on above curve, use this formula:

$$\text{Adjusted Life (hours)} = 3000 \left(\frac{10 \text{ rpm}}{\text{Speed (Adjusted)}} \right) \times \left(\frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$



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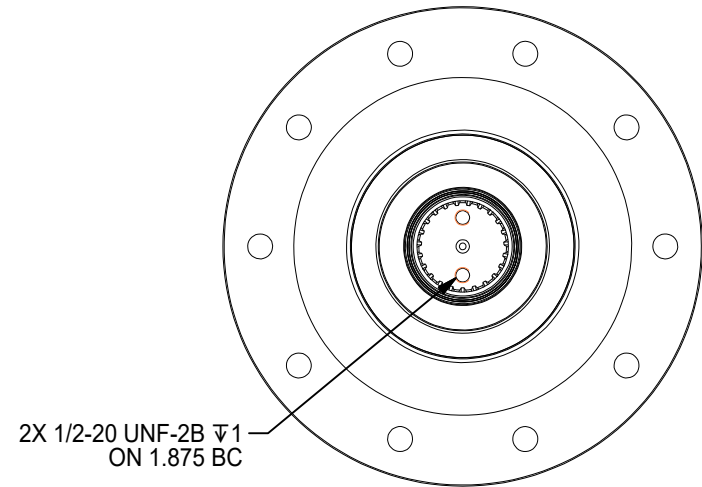
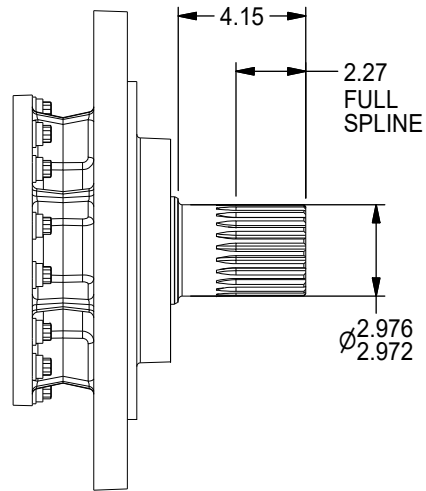
SHEET 5 OF 9

Output Shaft Options *Values are shown as inches.*

D1 Output Shaft 23T 8/16 DP Spline

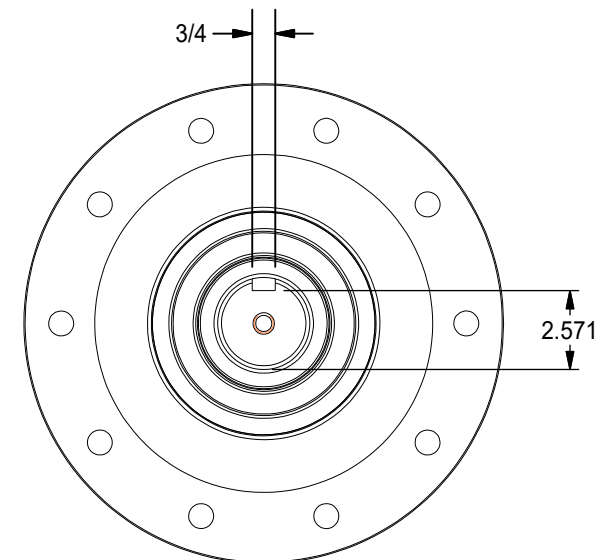
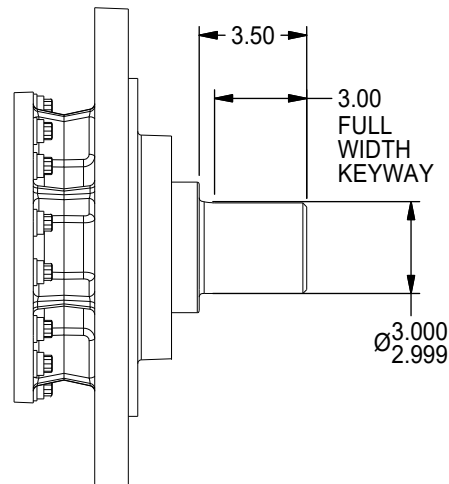
AVAILABLE OPTIONS:
Splined Hub: P/N 81-004-2172
Retainer Kit: P/N 81-018-0741

See Hubs & Pinions technical
data sheet for details



D2 Output Shaft Ø3.00 With 3/4" Keyway

Requires full-length
1045 or 4140 cold-finished
steel key to meet
torque requirement





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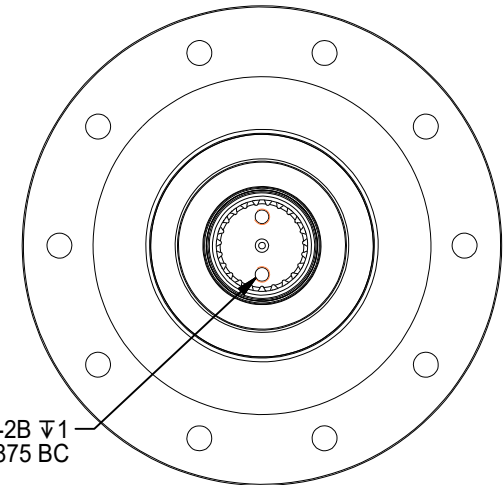
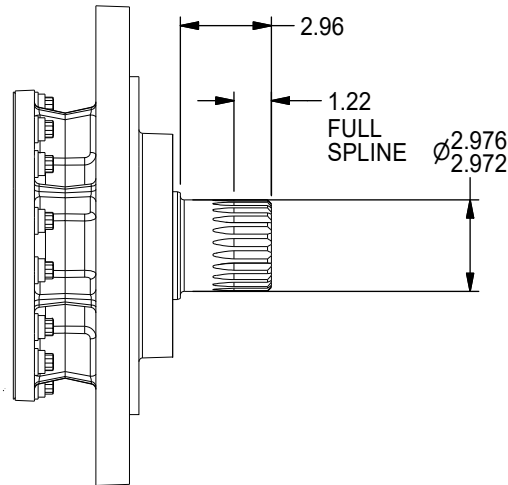
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SHEET 6 OF 9

D3 Output Shaft 23T 8/16 DP Spline

AVAILABLE OPTIONS:
Retainer Kit: P/N 81-018-0741

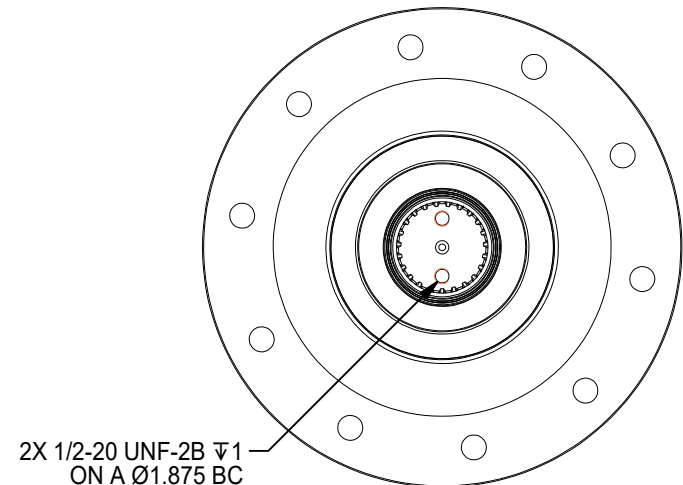
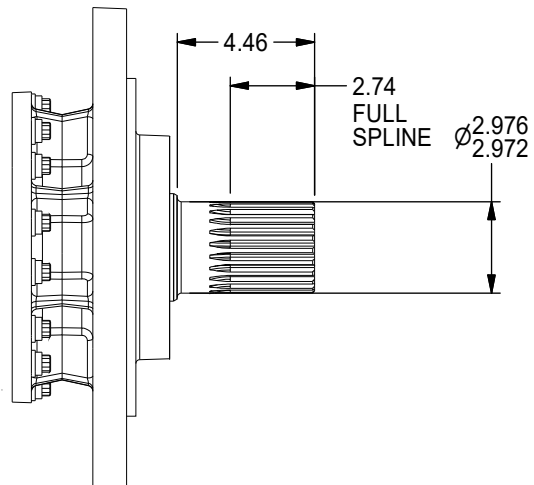
See Hubs & Pinions technical
data sheet for details



D4 Output Shaft 23T 8/16 DP Spline

AVAILABLE OPTIONS:
Retainer Kit: P/N 81-018-0741

See Hubs & Pinions technical
data sheet for details





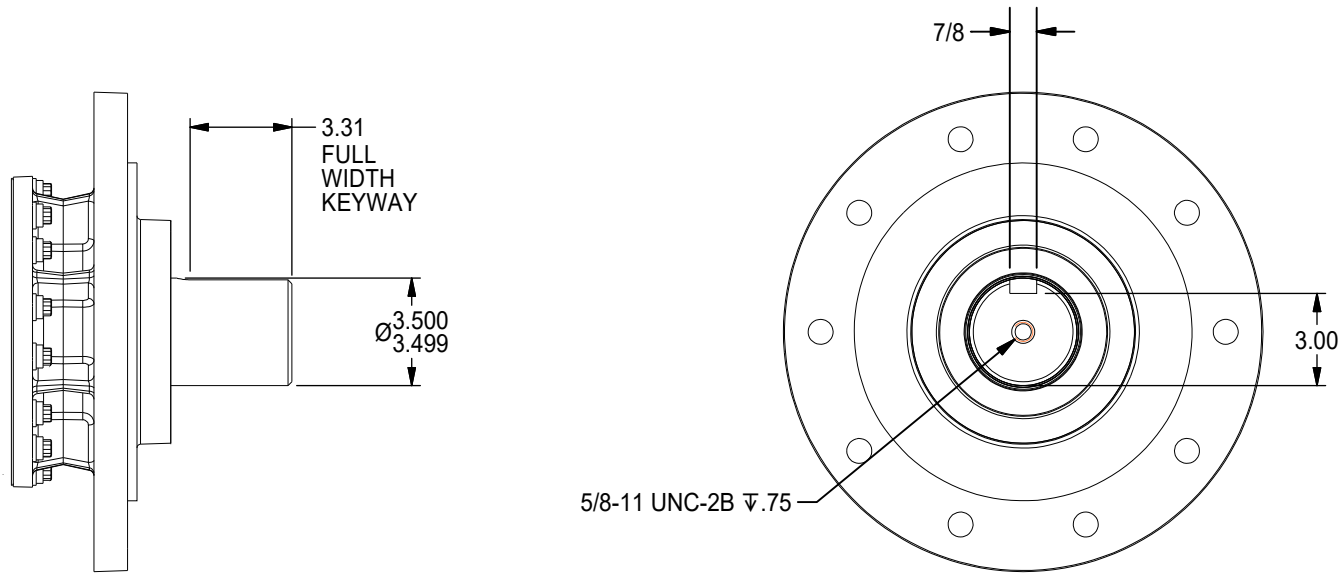
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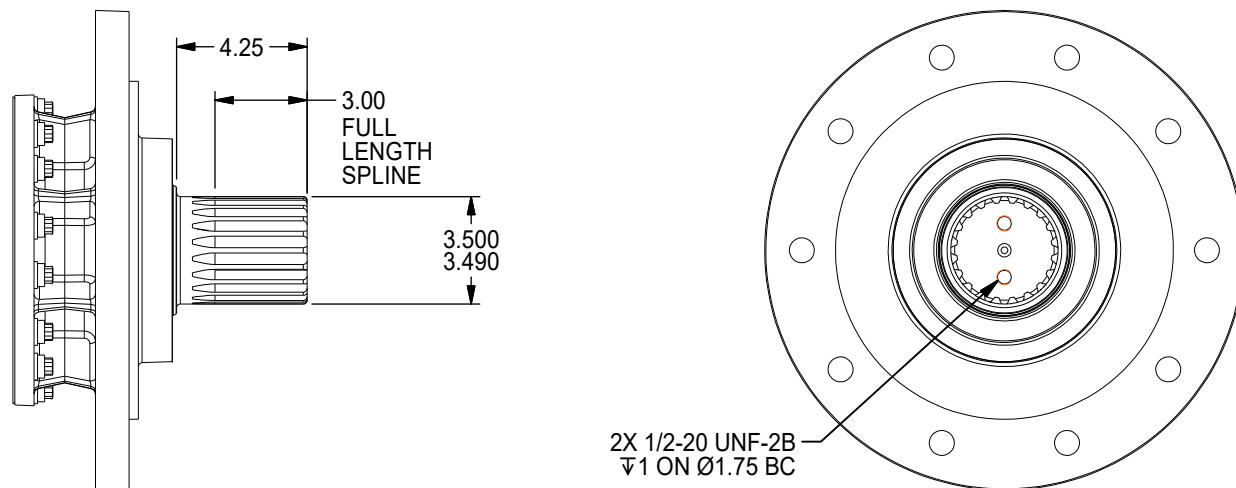
SHEET 7 OF 9

D5 Output Shaft Ø3.50 With 7/8" Keyway



D6 Output Shaft 20T 6/12 DP SPLINE

AVAILABLE OPTIONS:
RETAINER KIT: PN
80-018-0851





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Performance Ratings

Maximum Intermittent Output Torque:	160,000 in-lb (18,078 N-m)
Continuous Output Torque:	80,000 in-lb (9,039 N-m)
Maximum Input Speed:	3,000 RPM
Maximum Operating Ambient Temperature:	110° F (43° C)
Minimum Operating Ambient Temperature:	-20° F (-28° C)

*Above ratings are general, mechanical ratings, not thermal ratings.
 Continuous duty may require additional cooling.
 Consult your Eskridge representative to determine
 ratings for your specific application or configuration.*

Motor Mount Dimensions

PILOT DIMENSIONS

BOLT CIRCLE

*SAE 'A' Ø3.251/3.253	4X 1/2-13 UNC-2B ∇5/8 ON Ø4.188 B.C.
*SAE 'B' Ø4.001/4.005	2X 1/2-13 UNC-2B ∇.50 ON Ø5.750 B.C.
SAE 'C' Ø5.001/5.004	4X 1/2-13 UNC-2B ∇1 ON Ø6.375 B.C. 2X 5/8-11 UNC-2B ∇1 ON Ø7.125 B.C.
SAE 'D' Ø6.000/6.004	4X 3/4-10 UNC-2B ∇1 ON Ø9.000 BC

Approximate Unit Weights (lbs)

Gear Drive Mounting	Stages		
	Single Planetary	Double Planetary	Triple Planetary
A	191	202	219
B	159	170	188
E	166	177	195
F	142	152	170
C	Consult Eskridge		

NOTES: ▷

- SPECIFICATIONS CALLED OUT IN MOTOR MOUNT DIMENSIONS SECTION.
- VALUES ARE SHOWN IN INCHES
- OUTPUT SHAFT ROTATION SAME AS INPUT ROTATION.
- ONLY AVAILABLE WITH SINGLE STAGE GEAR BOXES

Oil Capacities

Position	Quantity		
	Single Planetary	Double Planetary	Triple Planetary
Vertical Shaft Down	5.0 pts Fill to: 1.5" From Port 'A'	5.0 pts Fill to: 1.5" From Port 'A'	6.9 pts Fill to: 1.5" From Port 'A'
Vertical Shaft Up	5.0 pts Fill to: Port 'B'	5.0 pts Fill to: Port 'B'	6.9 pts Fill to: Port 'B'
Horizontal	3.0 pts Fill to: Port 'A'	3.0 pts Fill to: Port 'A'	4.1 pts Fill to: Port 'A'

Units shipped without oil
 Use EP or API GL5 Designated Lubricants

Dimension 'A' Specifications

Input Spline Code	Ratio	Standard Input Mounting			
		SAE 'A'	SAE 'B'	SAE 'C'	SAE 'D'
2,3,5	4, 5, 19, 24, 26, 32	1.22	1.17	1.47	-
4	4, 5, 19, 24	1.47	1.47	1.47	-
4	26, 32	2.72	2.27	2.72	-
7, 9	4, 5	-	-	-	1.69

Dimension 'B' Specifications

Gear Drive Mount	Output Shaft Code					
	D1	D2	D3	D4	D5	D6
A	5.80	5.80	4.62	6.12	5.34	5.80
B	6.15	6.15	4.96	6.46	5.68	6.15
E	5.80	5.80	4.62	6.12	5.34	5.80
F	6.15	6.15	4.96	6.46	5.68	6.15
C	Custom Shaft: Consult Eskridge					



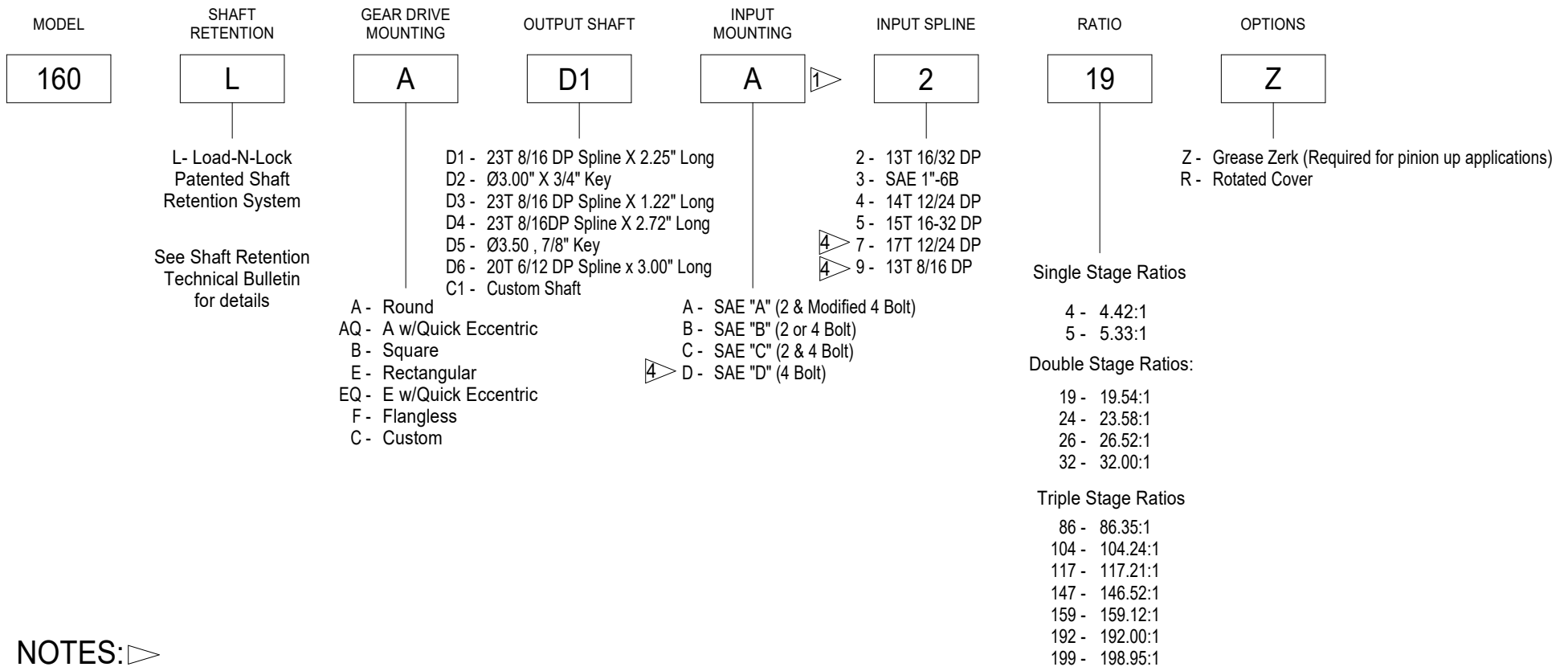
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Ordering Information

Example Part Number: 160LAD1A2-19-Z



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