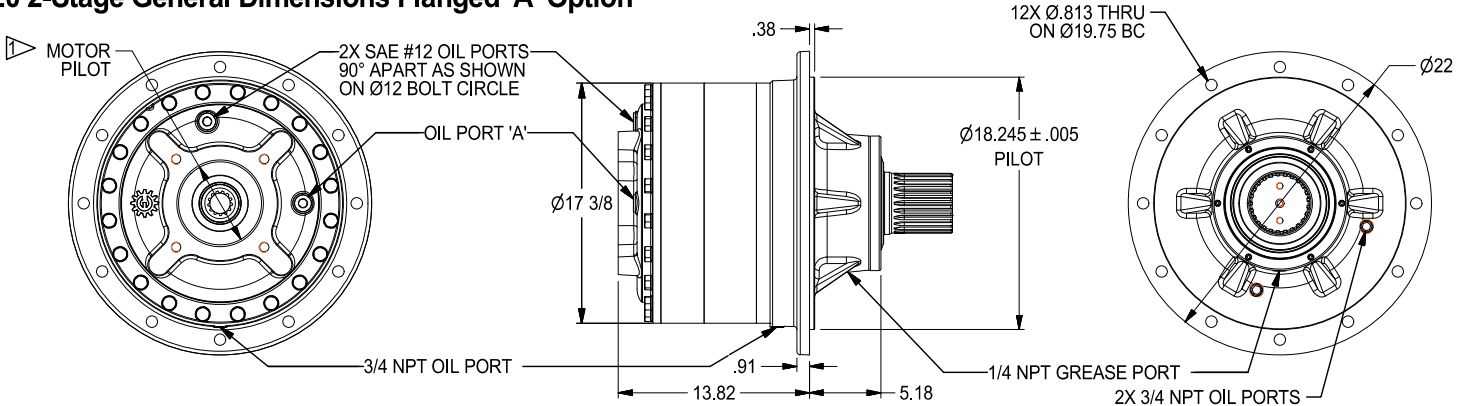
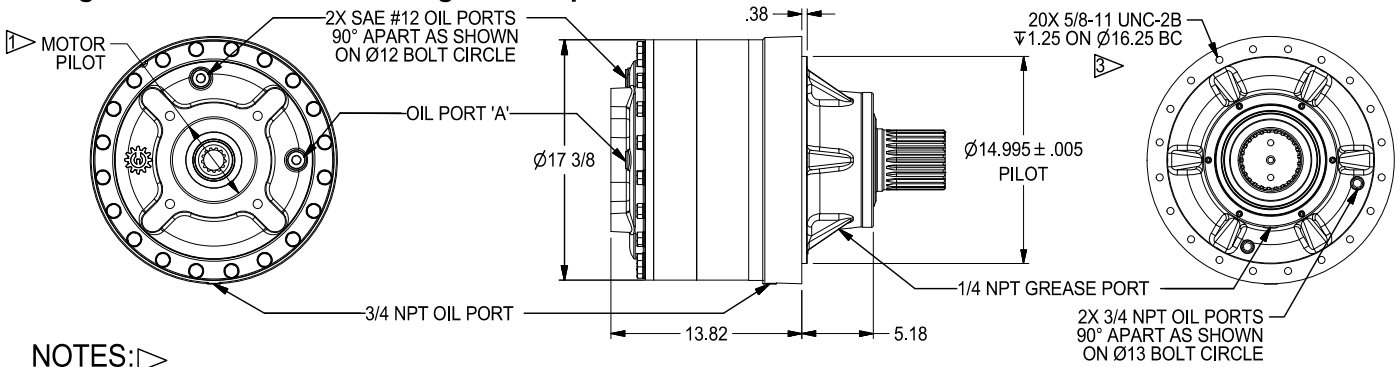


## 520 2-Stage General Dimensions Flanged 'A' Option



## 520 2-Stage General Dimensions Flangless 'F' Option

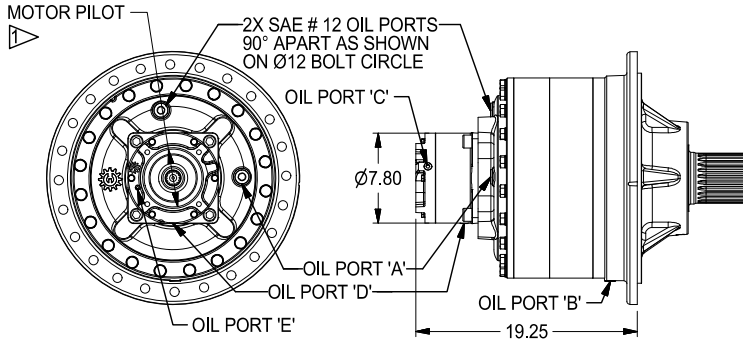


### NOTES:

1. SPECIFICATIONS CALLED OUT IN MOTOR MOUNT DIMENSIONS SECTION.
2. VALUES ARE SHOWN IN INCHES.
3. 'T' OPTION; THROUGH BOLT MOUNTING, HOLES ARE 18X Ø.656 HOLE ON Ø16.25 B.C.
4. OUTPUT SHAFT ROTATION SAME AS INPUT ROTATION.

ORIENTATION	HORIZONTAL:	VERTICAL: PINION DOWN	VERTICAL: PINION UP
LUBRICATION QUANTITY	7.50 Ql	10.50 Ql	10.50 Ql
OIL FILL LEVEL (GRADE GL-5 EP 80/90)	FILL TO: 1/2 TO 2/3 FULL	FILL TO: 1.5" FROM COVER PORT "A"	FILL TO: PORT "B"

## 3-Stage Option M-28 First Stage (Base Dimensions Identical to 2-Stage Option)



### Available Ratios:

73	(73.31:1)
80	(79.76:1)
*99	(98.77:1)
109	(109.01:1)
119	(118.60:1)
141	(140.92:1)
*147	(146.87:1)
153	(153.33:1)
*190	(187.88:1)

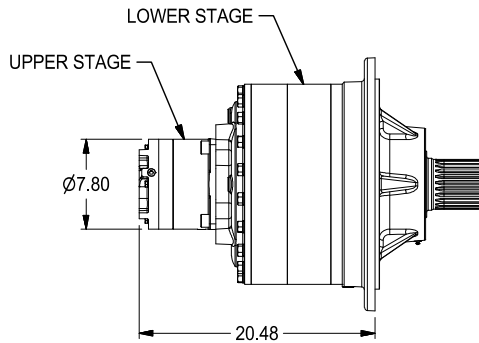
### Input Mounting:

SAE "A" (2 & Modified 4 Bolt)
SAE "B" (2 & 4 Bolt)
SAE "C" (2 & 4 Bolt)

### Input Spline:

2 (13T 16/32 DP Spline)
3 (1"-6B SAE Parallel Sided Spline)
4 (14T 12/24 DP Spline)
5 (15T 16/32 DP Spline)

## \*3-Stage Option with Code 4 Input for 99:1; 147:1 & 190:1 Ratios



### Oil Volume (3 Stage With M28) Upper Stage

LUBRICATION	ORIENTATION	ORIENTATION		
		HORIZONTAL:	VERTICAL: PINION DOWN	VERTICAL: PINION UP
QUANTITY		1.0 Pt/1.25 (Code 4)	1.8 Pt/1.25 (Code 4)	1.8 Pt/2.25 (Code 4)
OIL FILL LEVEL (GRADE GL-5 EP 80/90)		FILL TO: PORT 'C'	FILL TO: 1.5" FROM COVER PORT 'E'	FILL TO: PORT 'D'

### Oil Volume Lower Stage

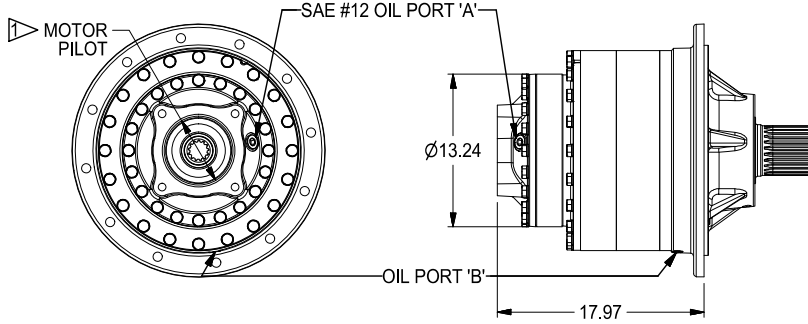
LUBRICATION	ORIENTATION	ORIENTATION		
		HORIZONTAL:	VERTICAL: PINION DOWN	VERTICAL: PINION UP
QUANTITY		7.50 Qt	10.50 Qt	10.50 Qt
OIL FILL LEVEL (GRADE GL-5 EP 80/90)		FILL TO: PORT 'A'	FILL TO: 1.5" FROM COVER PORT 'A'	FILL TO: PORT 'B'

All Units Shipped Without Oil

### NOTES:

1. SPECIFICATIONS CALLED OUT IN MOTOR MOUNT DIMENSIONS SECTION.
2. UPPER AND LOWER STAGES SEPARATED WITH A SEAL. BOTH STAGES NEED TO BE FILLED WITH OIL.

**3-Stage Option 254 First Stage (Base dimensions identical to 2-Stage Option)**



**Available Ratios:**

84	(84.30:1)
110	(109.64:1)
123	(123.16:1)
125	(125.36:1)
162	(162.06:1)
163	(163.04:1)
167	(167.56:1)
183	(183.13:1)
211	(210.77:1)
237	(236.75:1)
249	(249.16:1)
322	(322.11:1)

**Input Mounting:**

SAE "A" (2 & Modified 4 Bolt)
SAE "B" (2 & 4 Bolt)
SAE "C" (2 & 4 Bolt)
SAE "D" (4 Bolt)

**Input Spline:**

4 (14T 12/24 DP Spline)
9 (13T 8/16 DP Spline)

**Oil Volume (3 Stage With 254)**

LUBRICATION	ORIENTATION	ORIENTATION		
		HORIZONTAL:	VERTICAL: PINION DOWN	VERTICAL: PINION UP
QUANTITY		9.00 Qt	15.00 Qt	15.00 Qt
OIL FILL LEVEL (GRADE GL-5 EP 80/90)		FILL TO: PORT 'A'	FILL TO: 1.5" FROM COVER PORT 'A'	FILL TO: PORT 'B'

All Units Shipped Without Oil

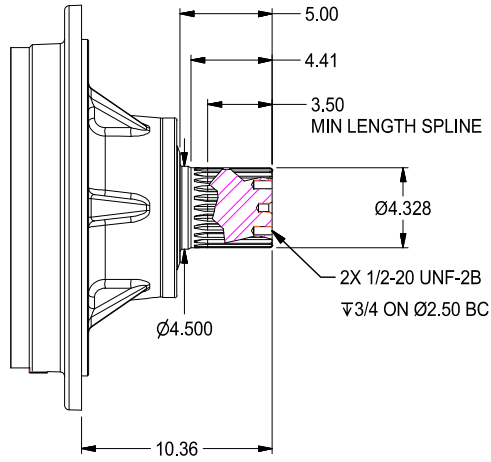
**NOTES:**

- SPECIFICATIONS CALLED OUT IN MOTOR MOUNT DIMENSIONS SECTION.

## D1 Output Shaft 25 Tooth 6/12 DP Spline

AVAILABLE OPTIONS:  
SPLINED HUB: P/N 42-004-4052  
RETAINER KIT: P/N 42-018-0221

See Hubs & Pinions technical  
data sheet for details





# 520 GEAR DRIVE - SHAFT OUTPUT

520,000 in-lb (58,800 N-m) Intermittent Rating 260,000 in-lb (29,400 N-m) Continuous Rating  
 Typical Applications: Industrial, Marine or Mobile Equipment

(913) 782-1238 (Tel)  
 (913) 782-4206 (Fax)  
 Sales@Eskridgeinc.com  
 www.Eskridgeinc.com  
 FORM: PS444L-AC

## Performance Ratings

Maximum Intermittent Output Torque: 520,000 in-lb (58,800 N-m)  
 Continuous Output Torque: 260,000 in-lb (29,400 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*

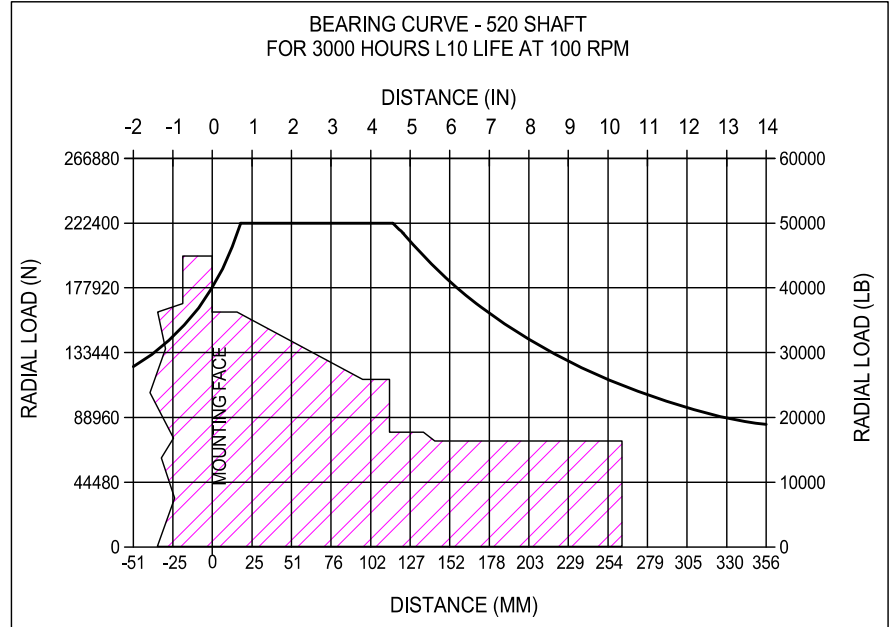
## Motor Mount Dimensions

PILOT DIMENSIONS	BOLT CIRCLE
*SAE 'A' Ø3.251/3.255	4X 1/2-13 UNC-2B ∇.50 ON Ø4.1875 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 B.C.
SAE 'E' Ø6.501/6.505	4X 3/4-10 UNC-2B ∇1 ON Ø12.500 B.C.

\*SAE 'A' & 'B' ONLY OFFERED ON 3 STAGE GEARBOXES

## Approximate Unit Weight

Single Stage: 450 lb (204 kg)  
 Two Stage: 700 lb (318 kg)  
 Three Stage: 850 lb (386 kg)



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

$$\text{Adjusted Life (hours)} = 3000 \left( \frac{100 \text{ rpm}}{\text{Speed (Adjusted)}} \right) \times \left( \frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$



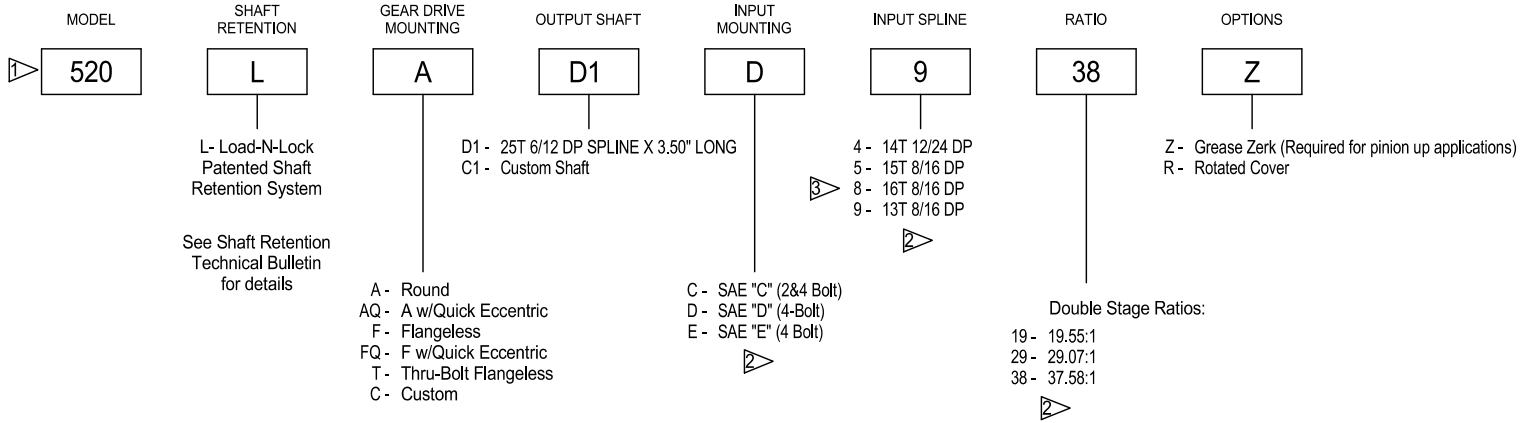
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FORM: PS444L-AC

## Ordering Information

Example Part Number: 520LAD1D9-38-Z



## NOTES:

1. TWO STAGE RATIO GEARBOX SHOWN IN EXAMPLE.
2. THREE STAGE INPUT MOUNTING, INPUT SPLINE AND RATIOS ARE SHOWN ON PAGES 2 & 3.
3. 16T ONLY AVAILABLE ON 19:1 & 29:1 TWO STAGE RATIOS.