

# COTTA

TRANSMISSION COMPANY, LLC

1301 Prince Hall Drive Beloit, WI • Tel 608-368-5600  
Fax 608-368-5605 • sales@cotta.com • www.cotta.com

## PRECISION ENGINEERED FOR TODAY'S DIESEL ENGINES.

Compact and rugged, Cotta's engine mounted speed reducers are designed to meet the demands of modern diesel engines. Choose from our standard models or we will design one for your application . . . either way COTTA will meet the challenge.

Standard case is cast iron.  
For custom cases, fabricated  
stress relieved steel is used.

Lube pump and heat  
exchanger provided.

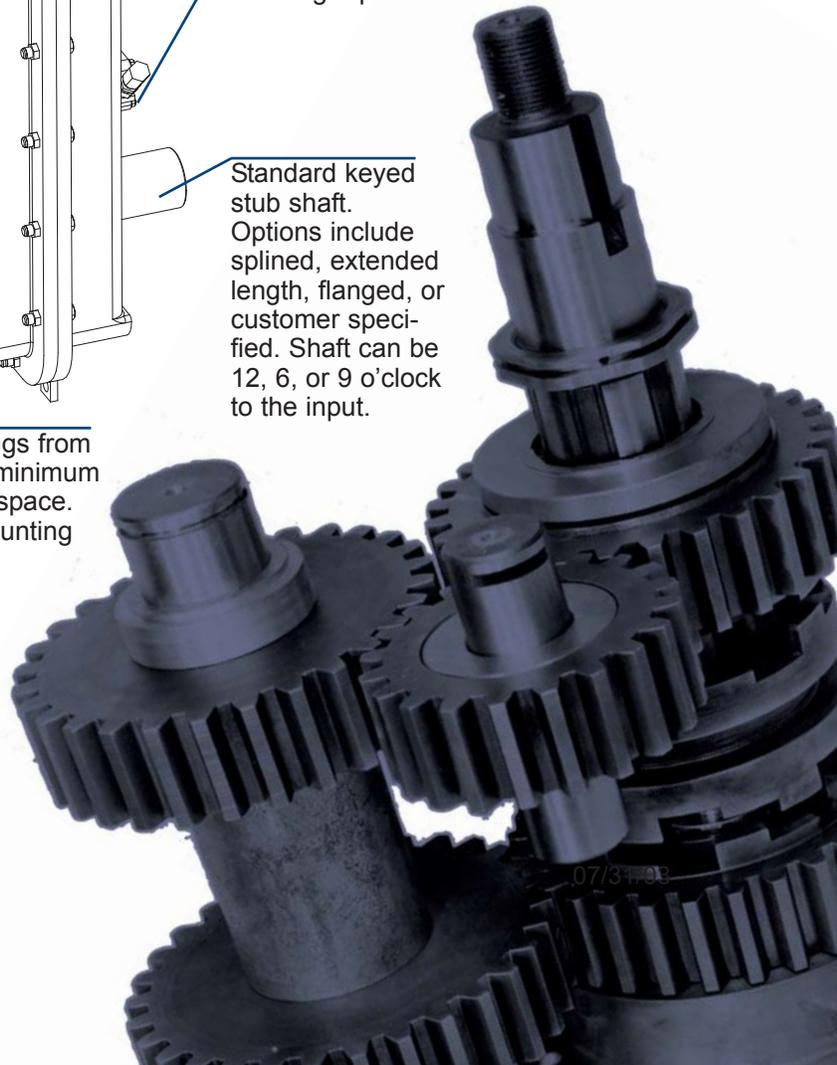
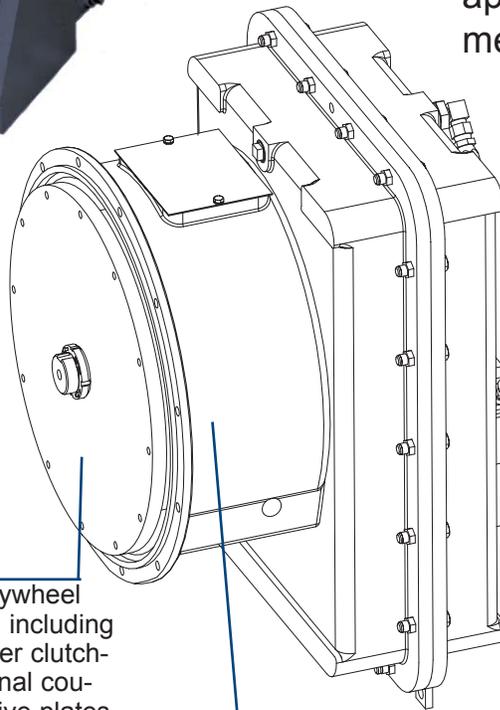
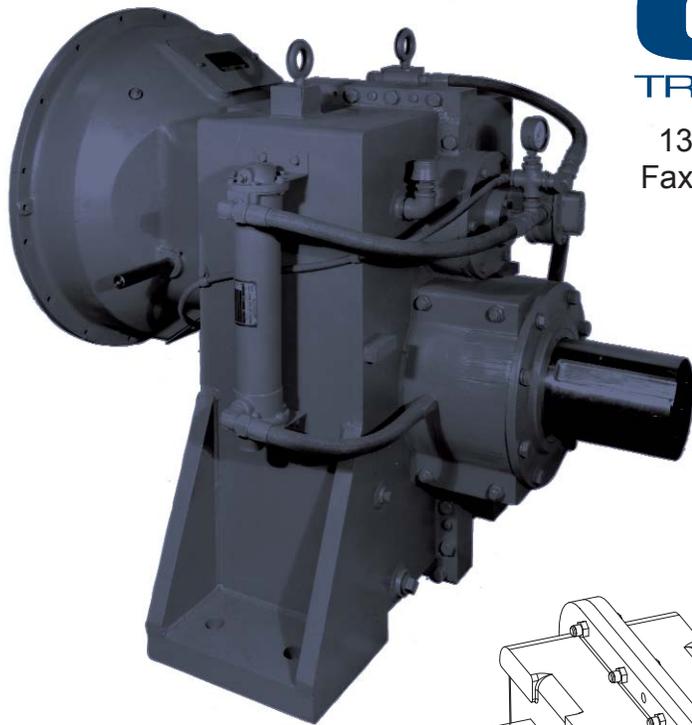
Standard keyed  
stub shaft.  
Options include  
splined, extended  
length, flanged, or  
customer speci-  
fied. Shaft can be  
12, 6, or 9 o'clock  
to the input.

Various flywheel  
couplings including  
over center clutch-  
es, torsional cou-  
plings, drive plates,  
and custom.

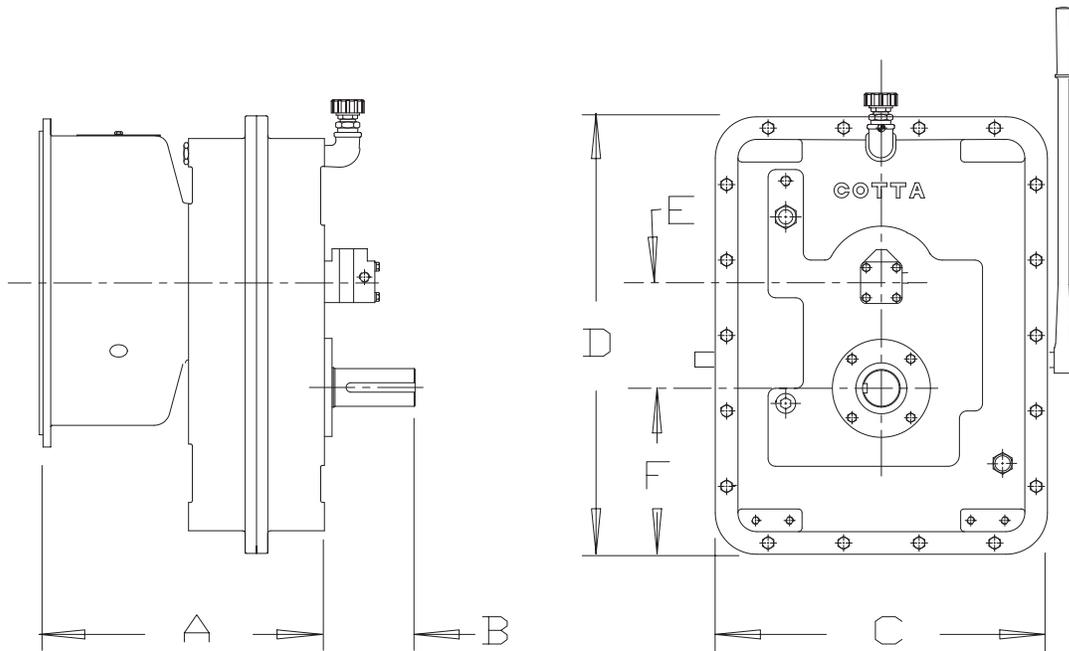
SAE housings from  
00 to 5 for minimum  
installation space.  
Remote mounting  
available.

# SPEED REDUCERS

- Pumps
- Compressors
- Gen-sets
- Rock crushers
- Wood chippers
- Shreaders
- Dredges
- Snow Blowers



# COTTA SPEED REDUCERS



Model	Torque Capacity (lb. ft.)	Ratio Range	SAE Hsg. Size	Approx Weight (lbs.)	Output Shaft Dia.	Key Size	A	B	C	D	E	F
AR2053E	300	1to 4	② 3 4	415	2.25	5/8	14.62	5.67	16.12	21.75	5.5	9.12
AR2053A	500	1to 3.54	② 3 4	400	2.25	5/8	14.62	5.67	16.12	21.85	5.5	9.12
SR2E	600	1to 3.82	① 2 3	800	3.00	3/4	18.5	6.2	22.0	29.0	7.0	11.0
SR2A	800	1to 4	① 2 3	775	3.00	3/4	18.5	6.2	22.0	29.0	7.0	11.0
SR700E	650	1.43 to 1.95	1	560	3.00	3/4	21.18	5.5	14.0	18.0	6.25	6.5
SR700A	650	1.5 to 2	1	510	3.00	3/4	21.18	5.5	14.0	18.0	6.25	6.5
SR3E	950	1.9 to 3.89	① 1 2	975	3.00	7/8	24.0	6.4	25.0	33.0	8.00	12.5
SR3A	1400	1.02 to 3.89	① 1 2	940	3.00	7/8	24.0	6.4	25.0	33.0	8.00	12.5
GR15E	1450	1.28 to 2.43	00 0 1/2 ①	1230	4.00	1	25.38	5.5	21.0	23.5	9.00	8.75
GR15A	1450	1.08 to 2.46	00 0 1/2 ①	1180	4.00	1	25.38	5.5	21.0	23.5	9.00	8.75
GR16E	1650	1.5 to 3	00 ① 1/2 1	1530	4.00	1	28.25	9.0	25.0	25.75	10.25	9.75
GR16A	1650	1.5 to 3	00 ① 1/2 1	1380	4.00	1	28.25	9.0	25.0	25.75	10.25	9.75
GR1600E	2600	1.28 to 2.5	① 0 1/2	1700	4.00	1	32.75	9.0	25.0	25.75	10.25	9.75
GR1600A	3000	1.35 to 3.07	① 0 1/2	1600	4.00	1	32.75	9.0	25.0	25.75	10.25	9.75
GR3200E	4500	1.2 to 3.13	① 0	2000	4.75	1-1/4	28.15	7.0	41.0	37.3	11.754	15.75
GR3200A	5500	1.19 to 2.89	① 0	1800	4.75	1-1/4	29.15	7.0	31.0	38.0	11.754	15.75

- All dimensions are in inches.
- Circled bell housings are standard. Chart dimension "A" is based upon this standard. Consult individual spec sheets for optional bell housing dimensions.
- Standard output shaft location for speed reducers is 6 o'clock to the input (as shown).
- Cotta speed reducers are designed to be driven clockwise facing the input shaft.
- Refer to individual specification sheets for speed limitations.
- All speed reducers require rear supports. Location of support holes vary. See spec sheet for specific dimensions.

**MODEL GR3200A  
REDUCTION GEAR**

Model GR3200A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications and are precision ground. The bearings are taper roller and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (nominal input torque):</b>	5500 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	1.19, 1.50, 1.80, 1.92, 2.04, 2.18, 2.50, 2.89
<b>BELL HOUSINGS:</b>	SAE #0, #00
<b>CLUTCHES:</b>	SP318, IBF318, SP321, IBF321 21" rubber block drives and flywheel couplings
<b>OUTPUT SHAFT:</b>	4.750" diameter with 1.25 x .4375 keyway
<b>REAR SUPPORT:</b>	Rear mounting support feet
<b>LUBRICATION:</b>	Lube pump is furnished
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	1800 lbs

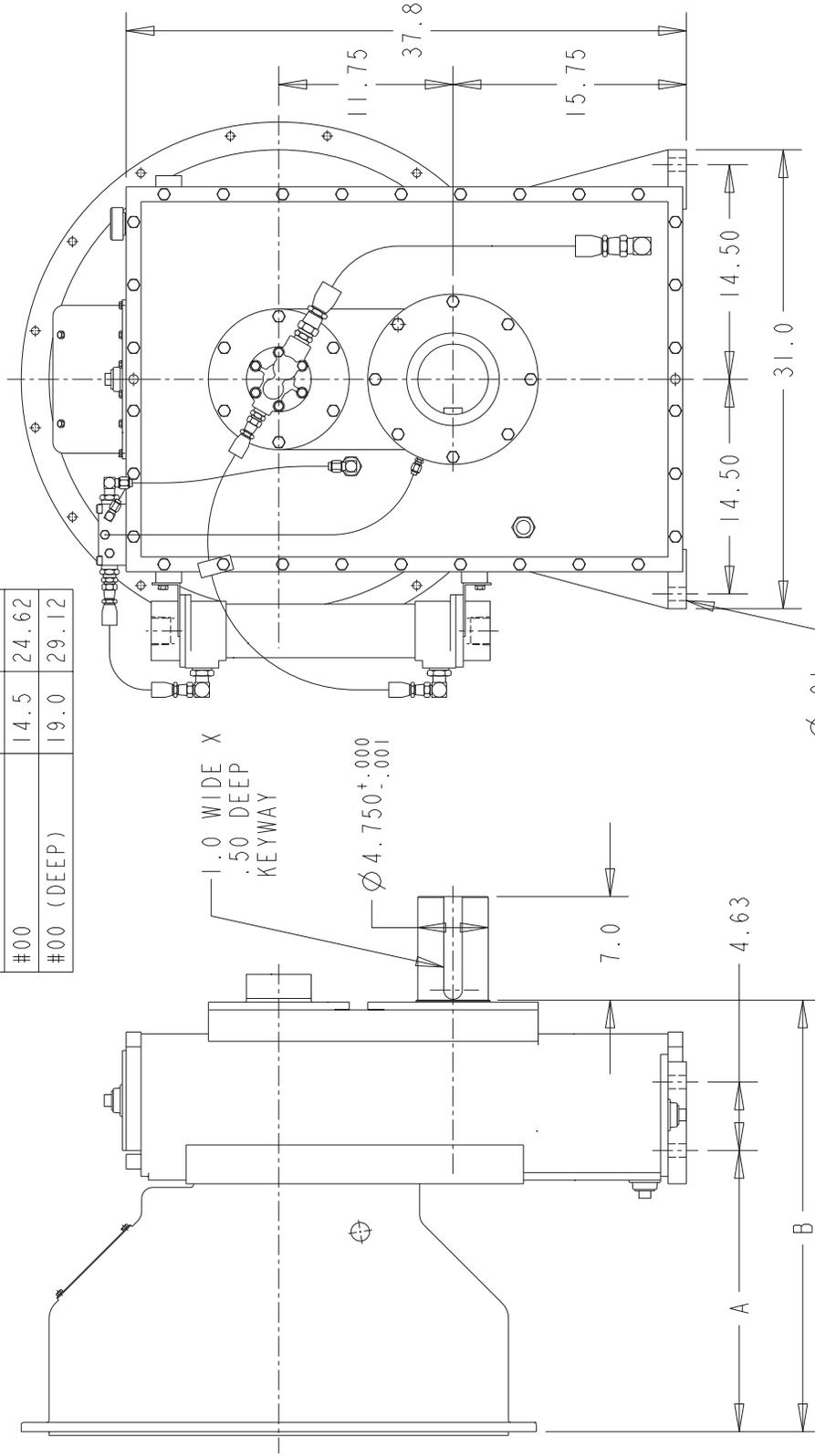
Note—For ratios 3.05, 3.29 and 3.56 see Model GR3210A

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# MODEL GR3200A REDUCTION GEAR

BELLHSG SAE #	DIM A	DIM B
#0	14.5	24.63
#0 (DEEP)	16.75	26.88
#0 (EXTRA DEEP)	19.0	29.12
#00	14.5	24.62
#00 (DEEP)	19.0	29.12

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)



FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL GR975-200  
REDUCTION GEAR**

Model GR975-200 is a heavy duty reduction gear having engine rotation, includes a clutch and bell housing and mounts to an engine for a compact package with proper alignment. There is a double train of gears that are helical, carburized and precision ground for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

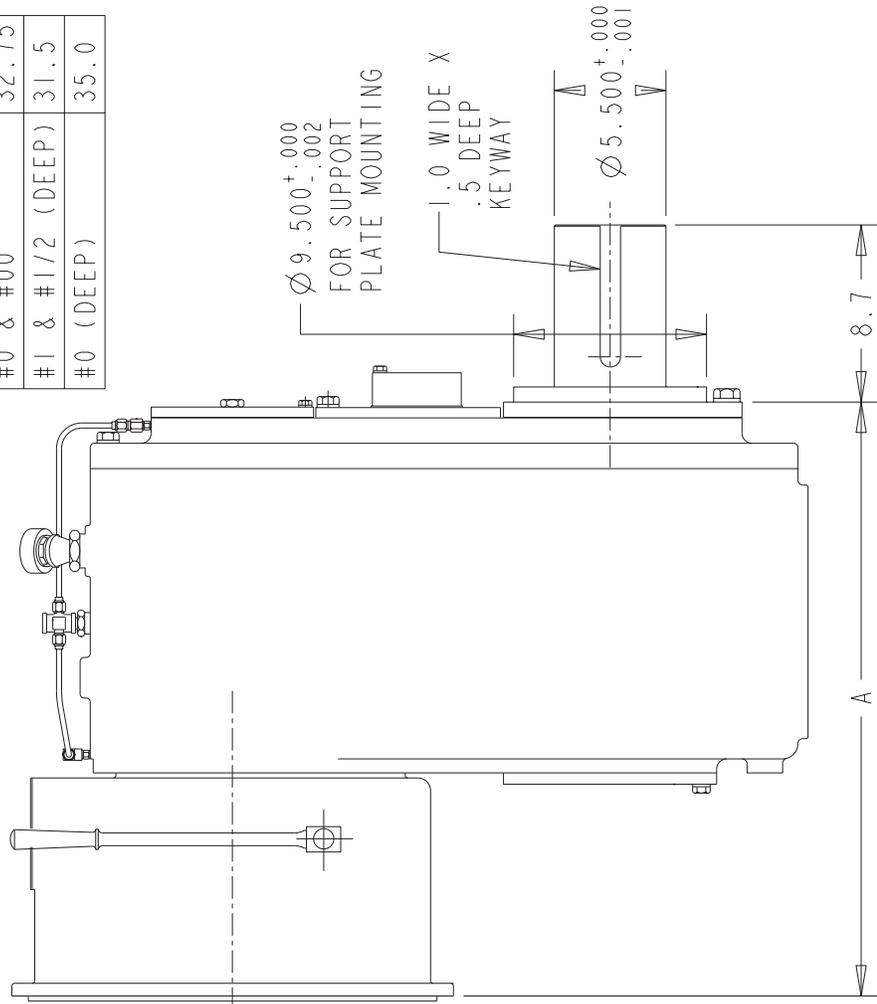
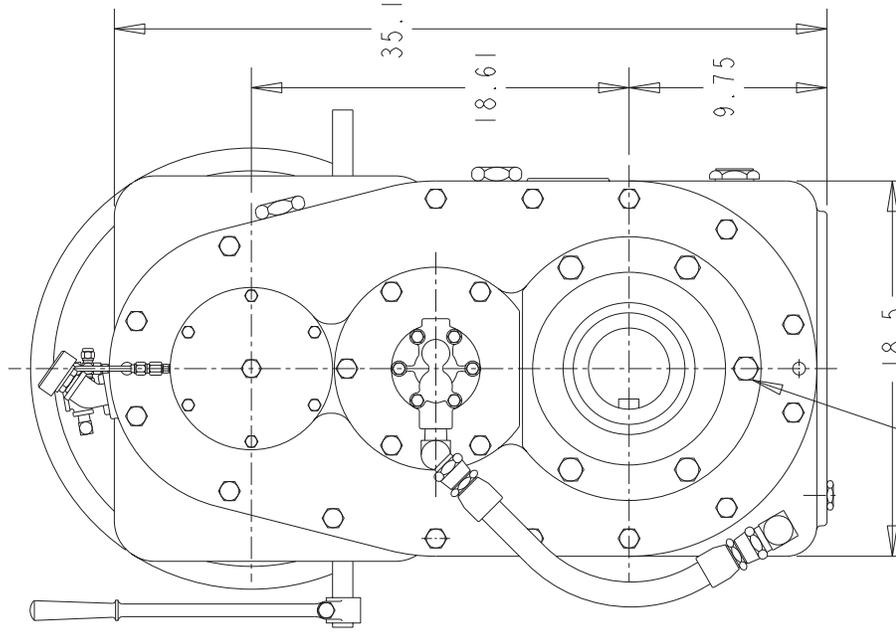
<b>CAPACITY (nominal):</b>	2400 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	3.27, 3.48, 3.69, 4.07, 4.42, 4.92, 6.13, 6.58
<b>BELL HOUSINGS:</b>	SAE #0, #00, #1
<b>CLUTCHES:</b>	SP314, IBF218, SP318, SP321, 18" and 21" Rubber Block Drives and Flywheel Couplings
<b>OUTPUT SHAFT:</b>	5.5" dia. with 1.0 x .5 keyway x 8" long
<b>REAR SUPPORT:</b>	Rear support plate required (not furnished)
<b>LUBRICATION:</b>	Lube pump is furnished, 7 1/2 gallon sump capacity
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	2300 lbs

07/31/03

# MODEL GR975-200 REDUCTION GEAR

BELLHSG SAE#	DIM A
#1 & #1/2	30.0
#0 & #00	32.75
#1 & #1/2 (DEEP)	31.5
#0 (DEEP)	35.0

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)



Ø9.500<sup>+0.000</sup><sub>-.002</sub>  
FOR SUPPORT  
PLATE MOUNTING

1.0 WIDE X  
.5 DEEP  
KEYWAY

Ø5.500<sup>+0.000</sup>  
-.001

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
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**MODEL GR3200E  
REDUCTION GEAR**

Model GR3200E is a heavy duty reduction gear having engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications and are precision ground. The bearings are tapered roller and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (nominal input torque):</b>	4500 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	1.20, 1.54, 1.64, 1.75, 2.0, 2.14, 2.30, 2.67, 3.0, 3.13
<b>BELL HOUSINGS:</b>	SAE #0, #00
<b>CLUTCHES:</b>	SP318, IBF318, SP321, IBF321 21" rubber block drives and flywheel couplings
<b>OUTPUT SHAFT:</b>	4.750" diameter with 1.25 x .4375 keyway
<b>REAR SUPPORT:</b>	Rear mounting support feet
<b>LUBRICATION:</b>	Lube pump is furnished
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	2000 lbs

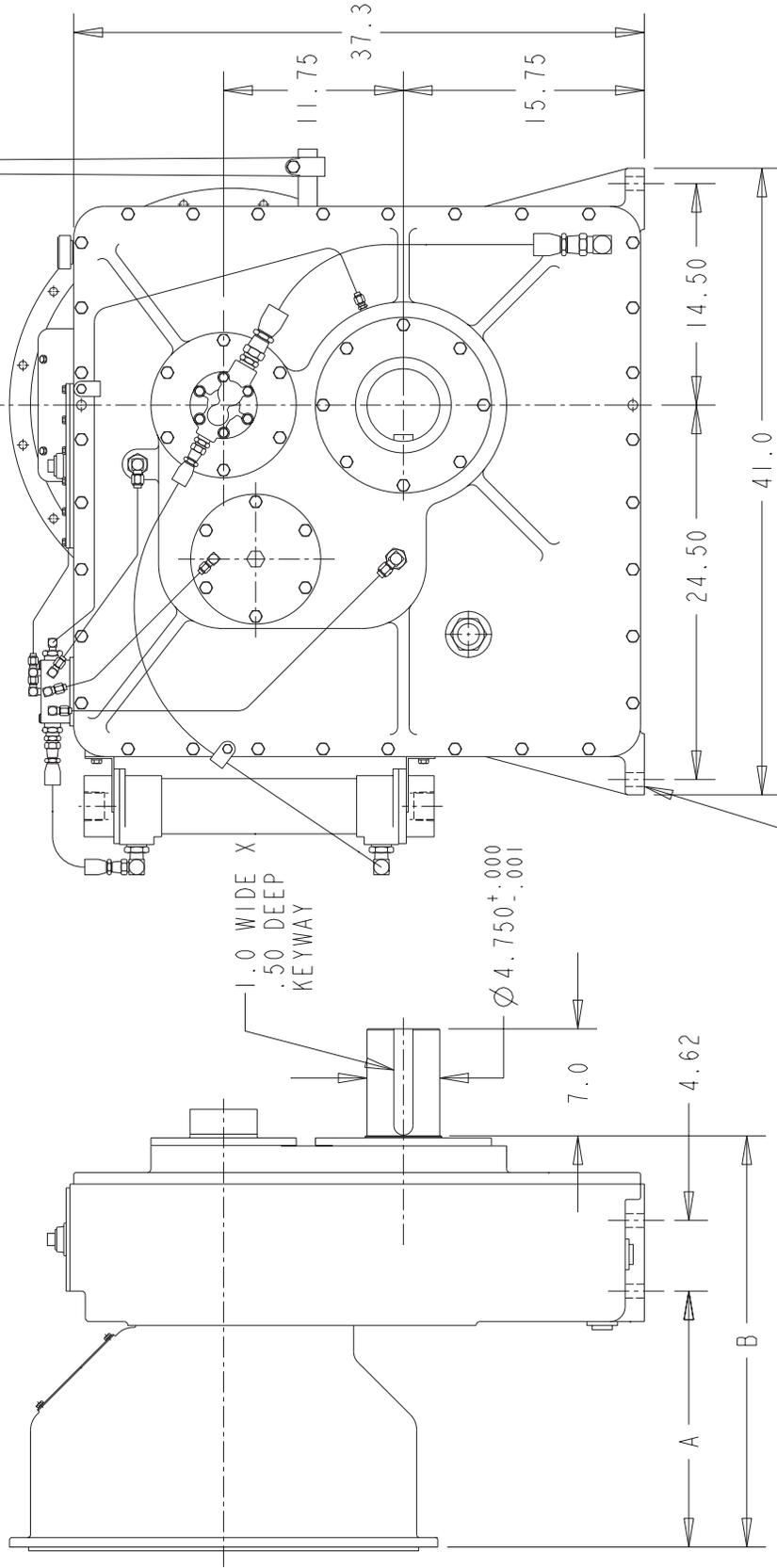
Note—See Model GR3210E for 3.31 to 1 ratio

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# MODEL GR3200E REDUCTION GEAR

BELHSG SAE #	DIM A	DIM B
#0	14.5	24.63
#0 (DEEP)	16.75	26.88
#0 (EXTRA DEEP)	19.0	29.12
#00	14.5	24.62
#00 (DEEP)	19.0	29.12

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)



FOR GEARBOX MOUNTING

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INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL GR1600A  
REDUCTION GEAR**

Model GR1600A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications and are precision ground. The bearings are tapered roller and the case is cast iron. A wide variety of ratios are available.

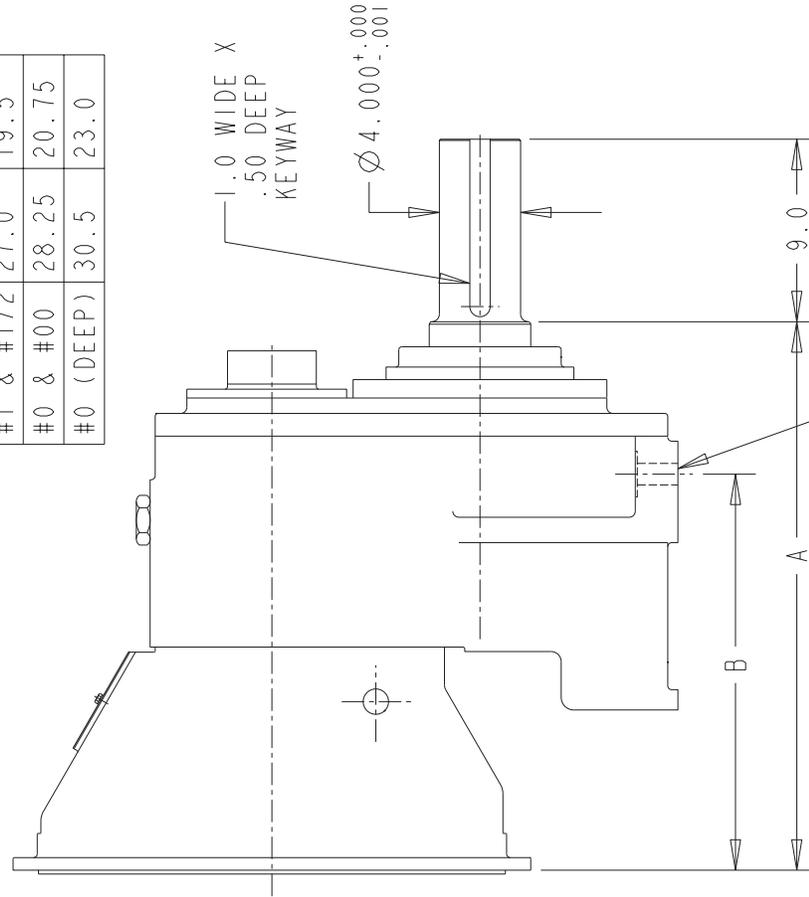
<b>CAPACITY (nominal input torque):</b>	3000 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:*</b>	1.35, 1.44, 1.54, 1.65, 1.77, 1.90, 2.21, 2.39, 2.59, 2.81, 3.07
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	SP314, IBF314, SP218, SP318, IBF318, SP321, 14", 18" and 21" rubber block drives
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet are provided
<b>LUBRICATION:</b>	Lube pump is furnished 32 pints sump capacity
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	1600 lbs

\*Note—Ratios above 2.0 to 1 can't be used with SP321 clutch

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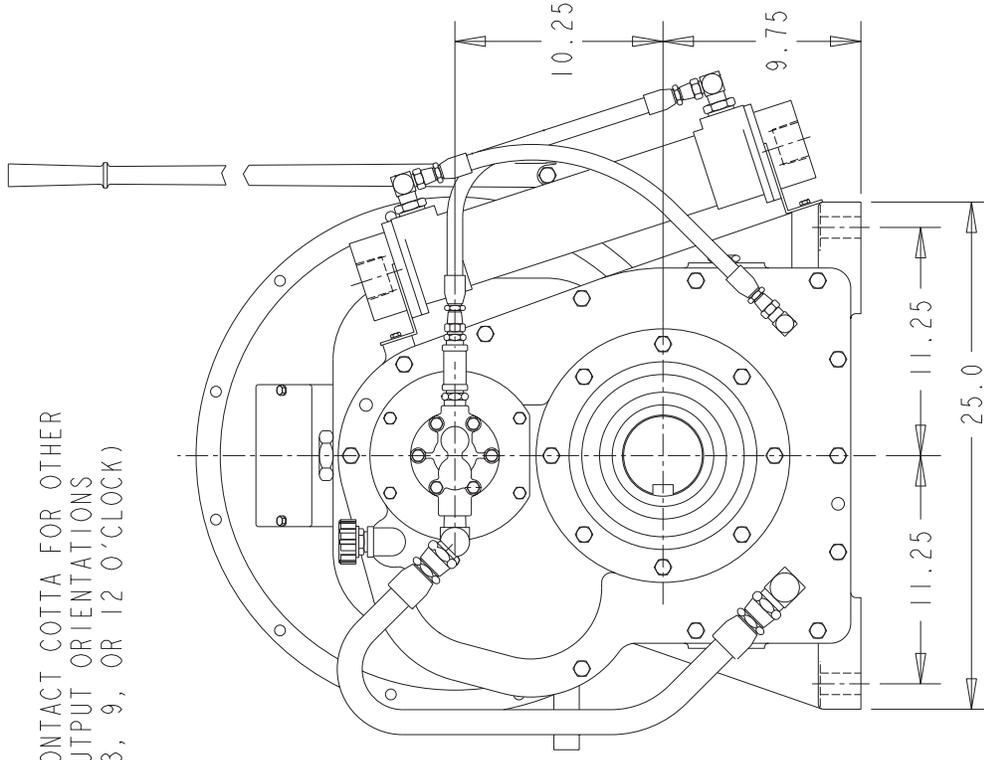
# MODEL GR1600A REDUCTION GEAR

BELLHSG SAE#	DIM A	DIM B
#1 & #1/2	27.0	19.5
#0 & #00	28.25	20.75
#0 (DEEP)	30.5	23.0



$\varnothing 1.06$   
TYP (2)  
FOR GEARBOX  
MOUNTING

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)



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**MODEL GR1600E  
REDUCTION GEAR**

Model GR1600E is a heavy duty reduction gear having engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications and are precision ground. The bearings are tapered roller and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (nominal input torque):</b>	2600 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:*</b>	1.28, 1.38, 1.48, 1.71, 2.0, 2.17, 2.35, 2.56, 2.80, 3.0
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	SP314, IBF314, SP218, SP318, IBF318, SP321
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet are provided
<b>LUBRICATION:</b>	Lube pump is furnished 32 pints sump capacity
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	1700 lbs

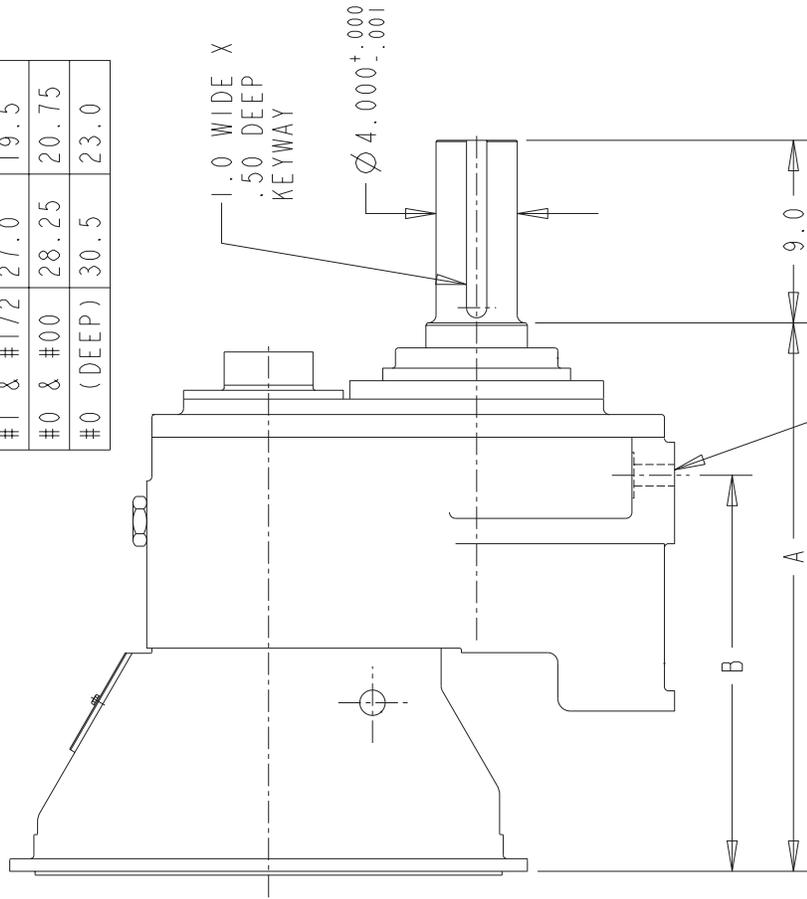
\*Note—Ratios above 2.0 to 1 can't be used with SP321 clutch 0599

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# MODEL GR1600E REDUCTION GEAR

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)

BELLHSG SAE#	DIM A	DIM B
#1 & #1/2	27.0	19.5
#0 & #00	28.25	20.75
#0 (DEEP)	30.5	23.0



$\varnothing 1.06$   
TYP (2)  
FOR GEARBOX  
MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL GR16A  
REDUCTION GEAR**

Model GR16A is a heavy duty anti-engine rotation reduction gear. A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

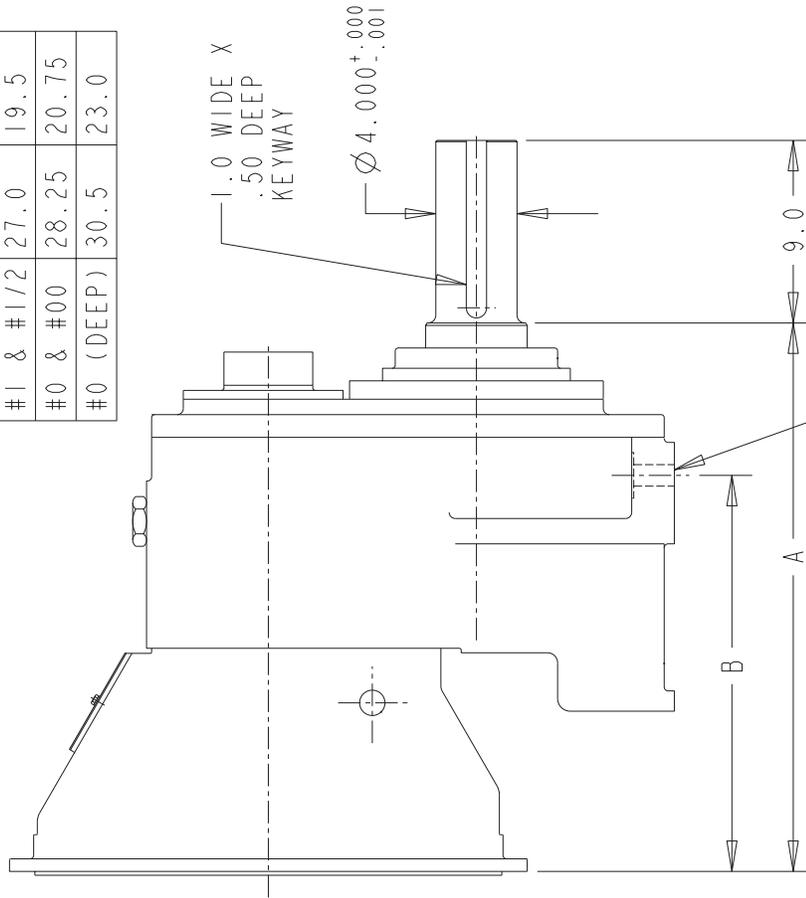
<b>CAPACITY (Maximum input torque):</b>	1650 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	1.50, 1.60, 1.72, 1.85, 2.0, 2.16, 2.33, 2.52, 2.75, 3.00
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	IBF214, SP314, SP218, SP318 18" rubber block drive
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet provided
<b>LUBRICATION:</b>	Lube pump furnished 32 pints sump capacity
<b>COOLING:</b>	A heat exchanger furnished.
<b>WEIGHT:</b>	1380 pounds

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# MODEL GR16A REDUCTION GEAR

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)

BELLHSG SAE#	DIM A	DIM B
#1 & #1/2	27.0	19.5
#0 & #00	28.25	20.75
#0 (DEEP)	30.5	23.0



DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
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**MODEL GR16E  
REDUCTION GEAR**

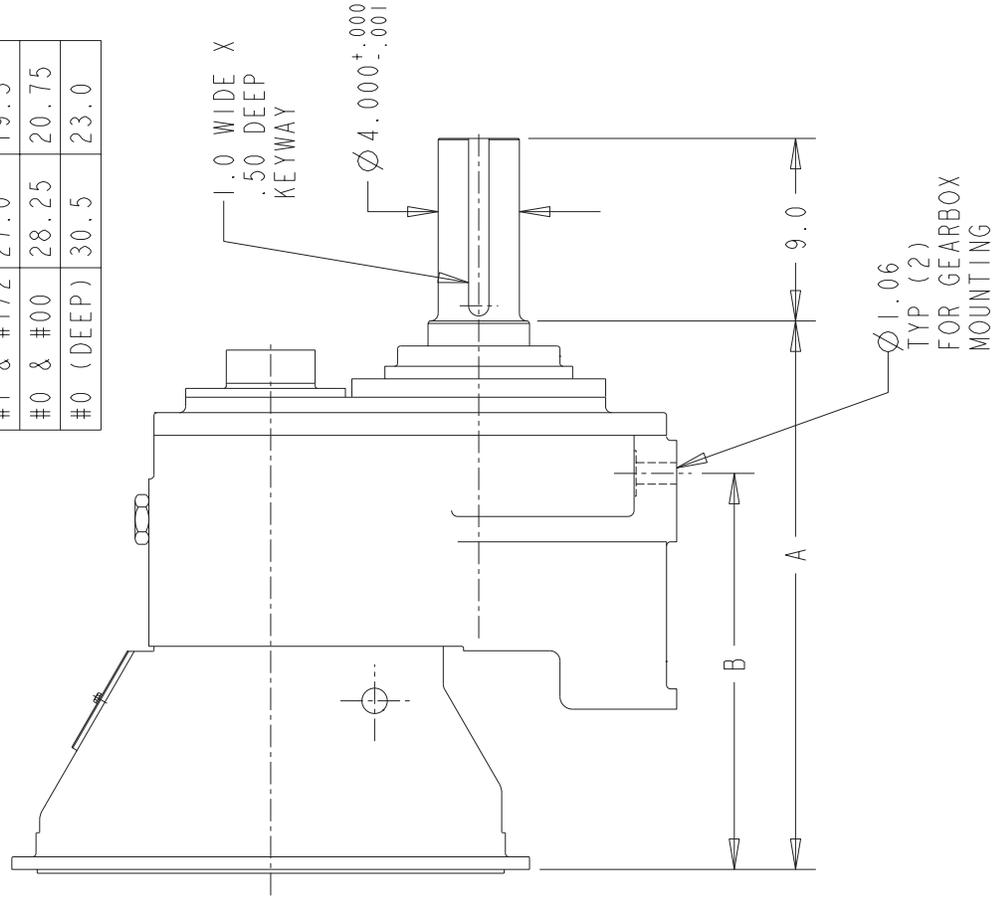
Model GR16E is a heavy duty engine rotation reduction gear. A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (Maximum input torque):</b>	1650 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	1.50, 1.66, 1.80, 1.95, 2.11, 2.29, 2.50, 2.73, 3.00
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	IBF214, SP314, SP218, SP318 18" rubber block drive
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet provided
<b>LUBRICATION:</b>	Lube pump furnished 32 pints sump capacity
<b>COOLING:</b>	A heat exchanger furnished.
<b>WEIGHT:</b>	1530 pounds

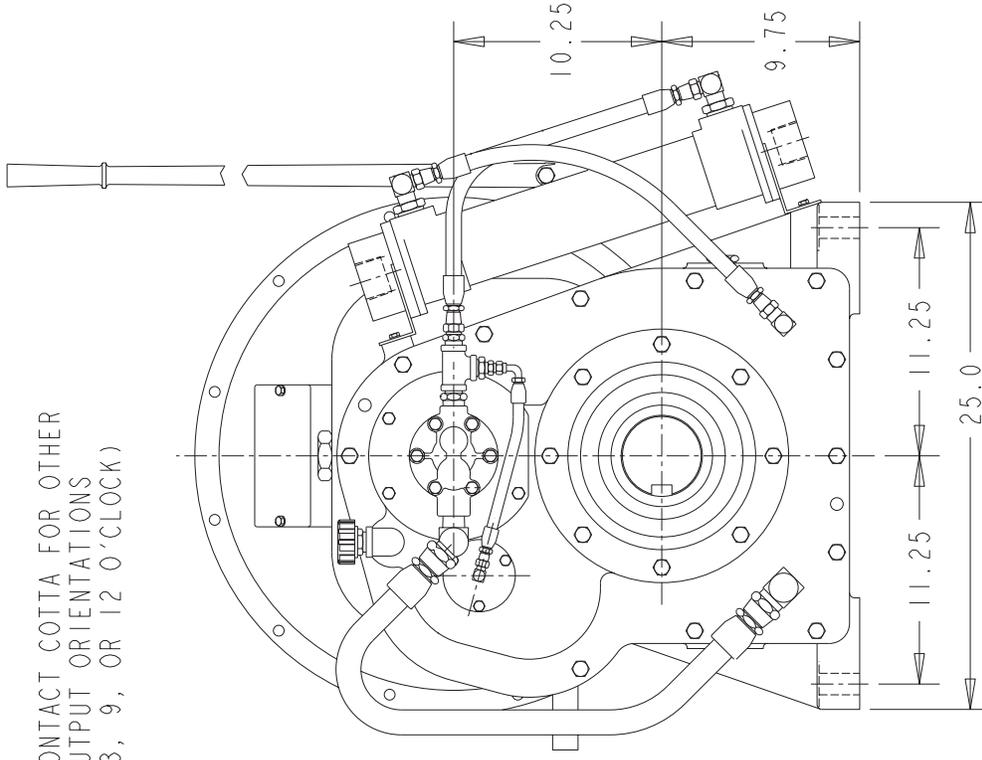
07/31/03

# MODEL GR16E REDUCTION GEAR

BELLHSG SAE#	DIM A	DIM B
#1 & #1/2	27.0	19.5
#0 & #00	28.25	20.75
#0 (DEEP)	30.5	23.0



CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
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**MODEL GR15A  
REDUCTION GEAR**

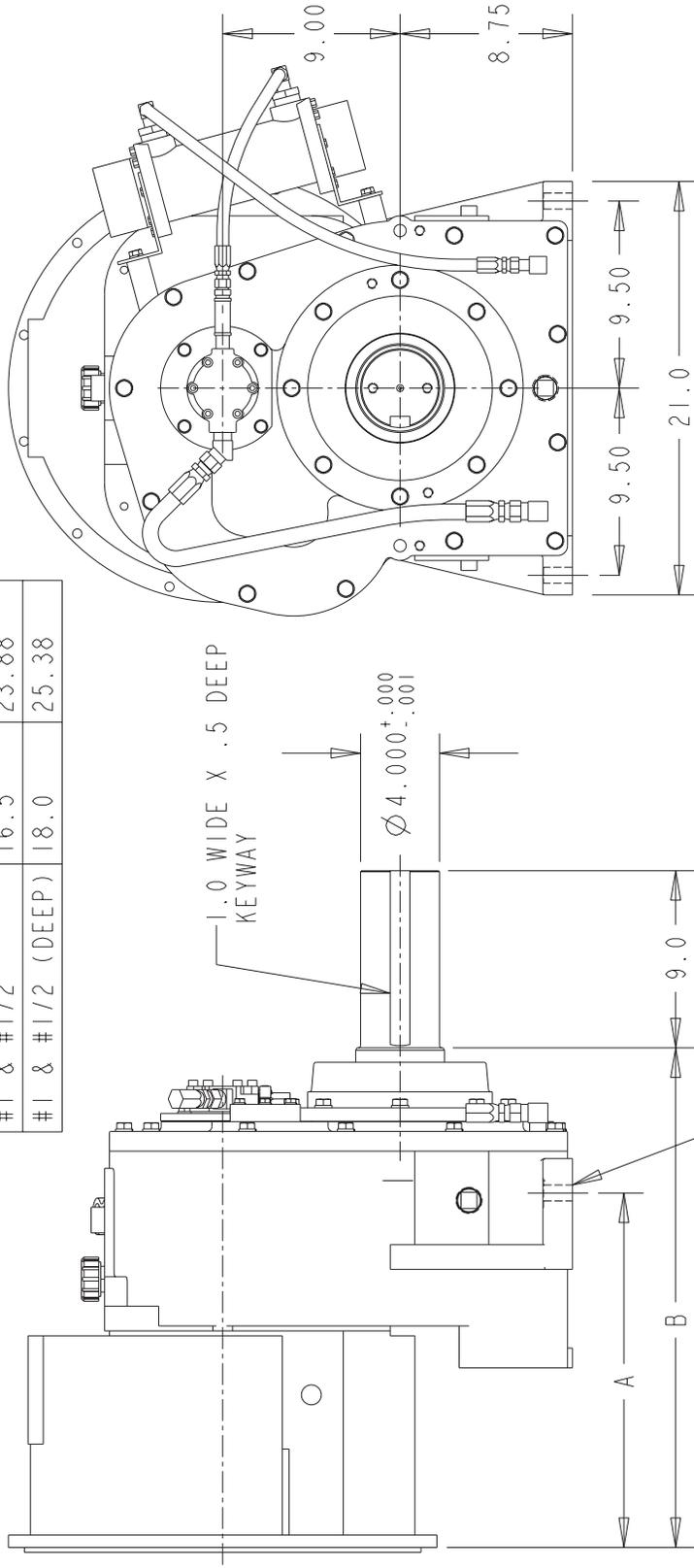
Model GR15A is a heavy duty anti-engine rotation reduction gear. A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY:</b>	1450 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2300 RPM
<b>RATIOS: (ANTI-ENGINE)</b>	1.08, 1.16, 1.26, 1.36, 1.47, 1.60, 1.73, 1.89, 2.05, 2.25, 2.46
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	IBF214, SP314, SP218 14" and 18" rubber block drives and flywheel couplings
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet provided
<b>LUBRICATION:</b>	Lube pump furnished 25 pints sump capacity
<b>COOLING:</b>	A heat exchanger furnished
<b>WEIGHT:</b>	1180 lbs

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# MODEL GR15A REDUCTION GEAR

BELLHSG SAE #	A	B
#0 & #00	19.25	26.63
#0 (DEEP)	21.5	28.88
#1 & #1/2	16.5	23.88
#1 & #1/2 (DEEP)	18.0	25.38



DO NOT USE DIMENSIONS ON THIS DRAWING FOR INSTALLATIONS, USE CERTIFIED PRINT PROVIDED WITH ORDERS.

**MODEL GR15E  
REDUCTION GEAR**

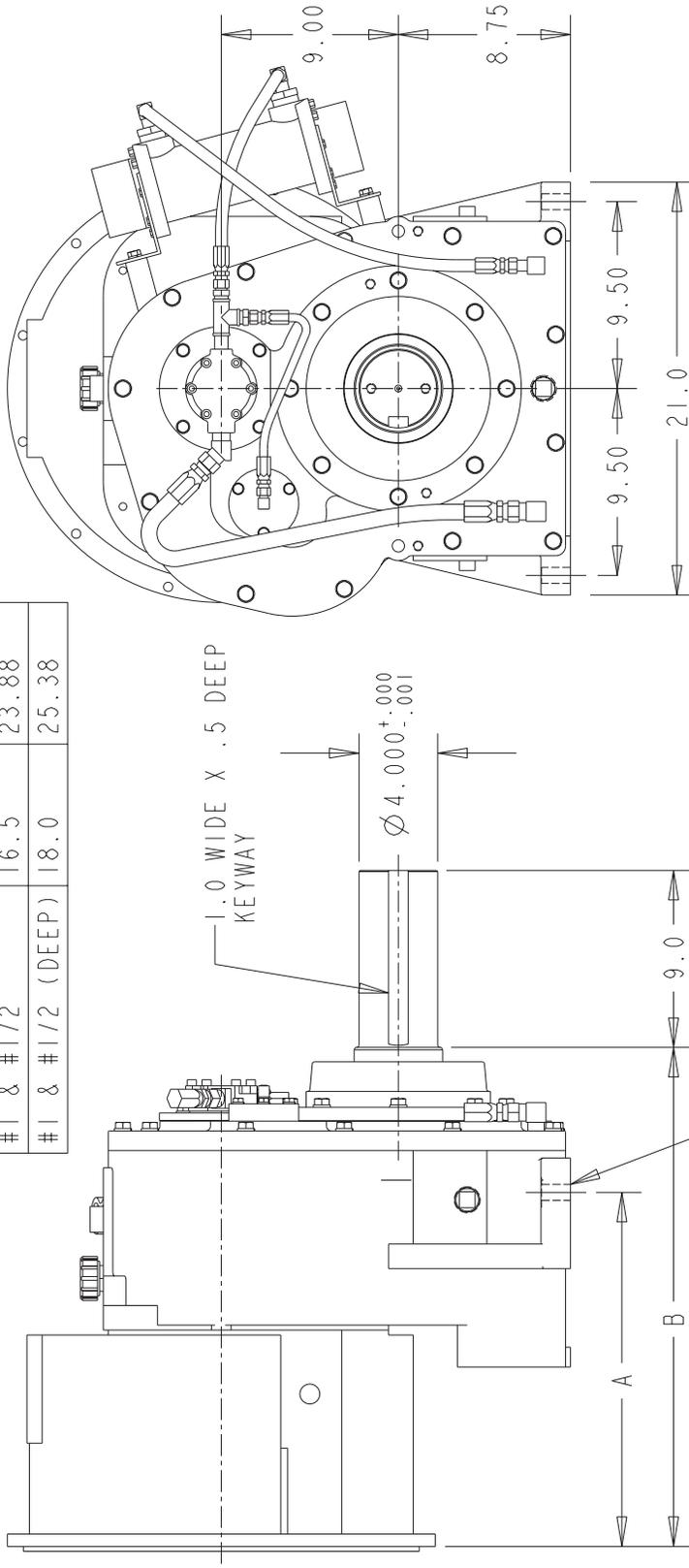
Model GR15E is a heavy duty engine rotation reduction gear. A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY:</b>	1450 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2300 RPM
<b>RATIOS:</b>	1.28,1.40, 1.52,1.66,1.82, 2.00, 2.20, 2.43
<b>BELL HOUSINGS:</b>	SAE #1, #1/2, #0, #00
<b>CLUTCHES:</b>	IBF214, SP314, SP218 14" and 18" rubber block drives and flywheel couplings
<b>OUTPUT SHAFT:</b>	4.000" diameter, 9" long with 1" x 1/2" keyway
<b>REAR SUPPORT:</b>	Two mounting feet provided
<b>LUBRICATION:</b>	Lube pump furnished 25 pints sump capacity
<b>COOLING:</b>	A heat exchanger furnished
<b>WEIGHT:</b>	1330 lbs

07/31/03

# MODEL GR15E REDUCTION GEAR

BELLHSG SAE #	A	B
#0 & #00	19.25	26.63
#0 (DEEP)	21.5	28.88
#1 & #1/2	16.5	23.88
#1 & #1/2 (DEEP)	18.0	25.38



FOR GEARBOX MOUNTING

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**MODEL SR2031  
REDUCTION GEAR**

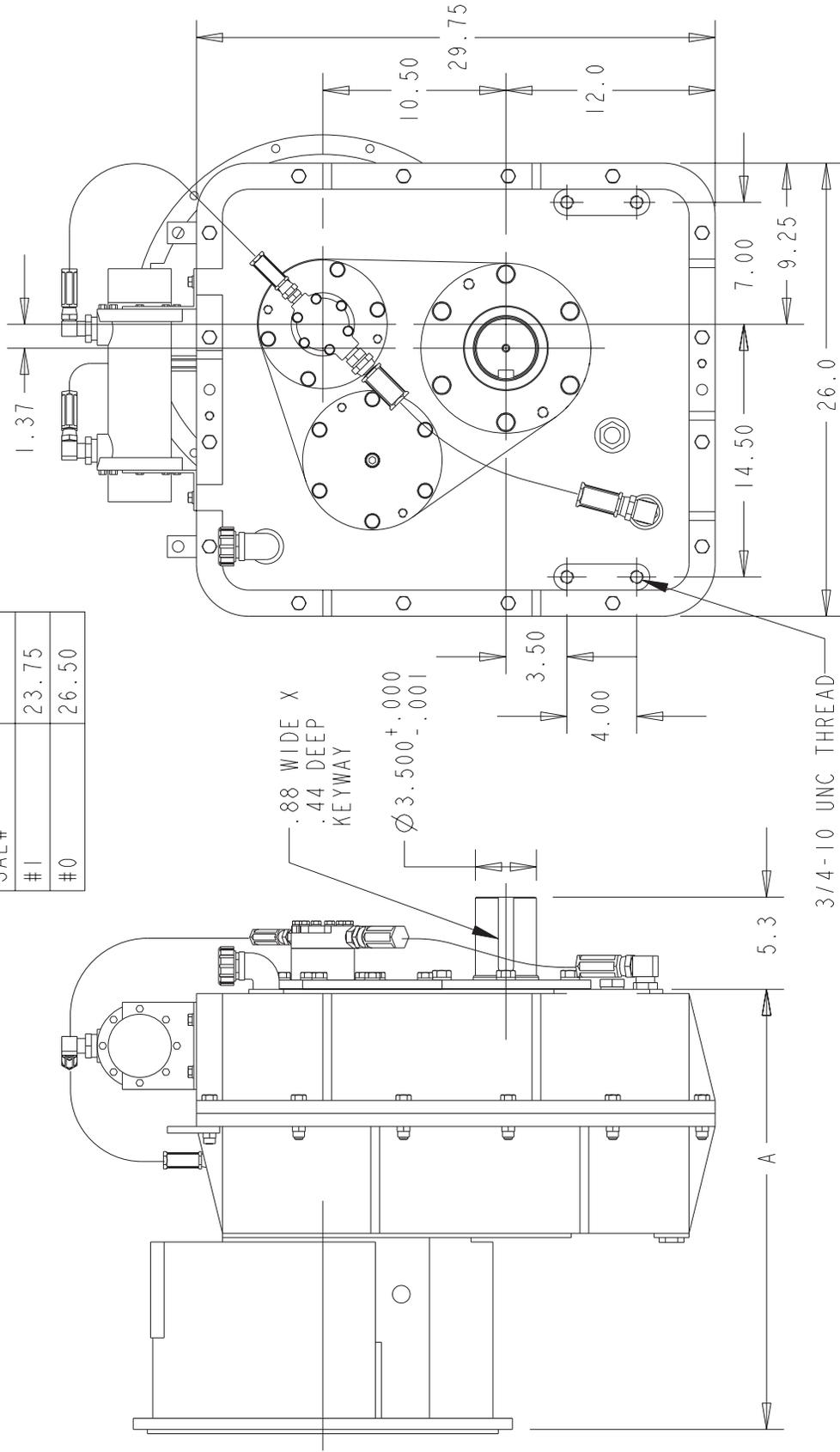
Model SR2031 is a heavy duty reduction gear that unit mounts to an engine for a compact package with proper alignment. It has engine rotation and is available with a variety of ratios. The gears are helical, carburized and designed per AGMA standards for ultimate strength, and endurance. The bearings are tapered roller and the case is stress relieved fabricated steel.

<b>CAPACITY (nominal input torque):</b>	1150 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2500 RPM
<b>RATIOS:</b>	3.50, 4.04, 5.25, 5.94, 7.05
<b>BELL HOUSINGS:</b>	SAE #1, #0
<b>CLUTCHES:</b>	SP214, SP314, SP218 also 14" and 18" rubber block drives and flywheel couplings
<b>OUTPUT SHAFT:</b>	3.500" diameter, 4.50" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	4 holes 3/4-10 for customer provided rear support
<b>LUBRICATION:</b>	Lube pump furnished
<b>WEIGHT:</b>	1420 lbs

07/31/03

# MODEL SR2031 REDUCTION GEAR

BELLHSG SAE#	DIM A
#1	23.75
#0	26.50



DO NOT USE DIMENSIONS ON THIS DRAWING FOR INSTALLATIONS, USE CERTIFIED PRINT PROVIDED WITH ORDERS.

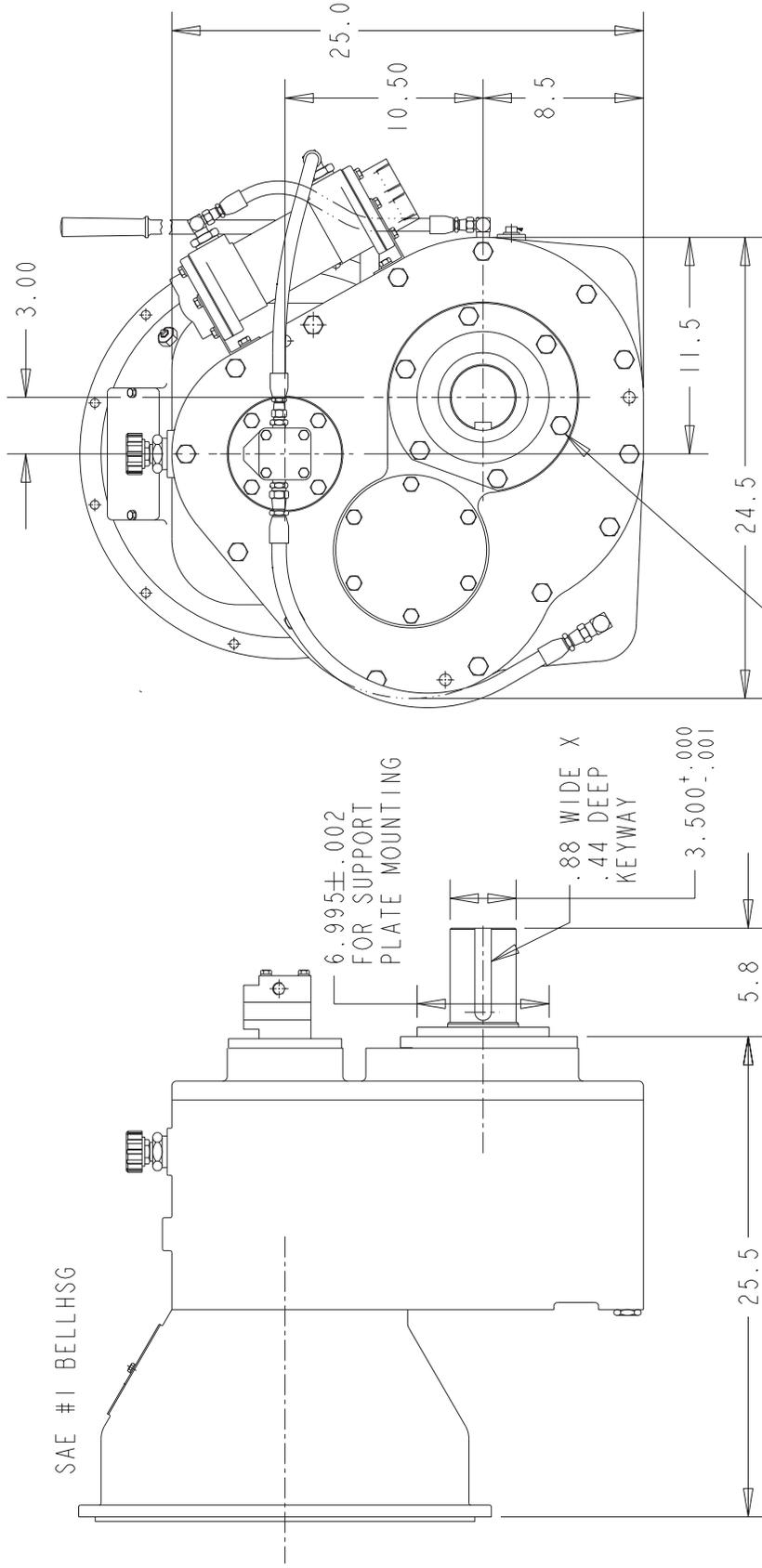
**MODEL SR972E  
REDUCTION GEAR**

Model SR972E is a heavy duty reduction gear having engine rotation that includes a clutch and bell housing and mounts to an engine for a compact package with proper alignment. There is a double train of gears that are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (maximum input torque):</b>	1000 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	3.09, 3.48, 3.70, 3.94, 4.20, 4.48, 4.78, 5.12, 5.49, 5.89, 6.25
<b>BELL HOUSINGS:</b>	SAE #1, #0 Adapter
<b>CLUTCHES:</b>	SP214, SP314, 14" Rubber Block Drive
<b>OUTPUT SHAFT:</b>	3.500" diameter, 4 1/2" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	6 holes around output shaft for customer provided rear support plate
<b>LUBRICATION:</b>	Lube pump furnished 5 gallons sump capacity
<b>COOLING:</b>	A heat exchanger is furnished
<b>WEIGHT:</b>	1190 lbs

07/31/03

# MODEL SR972E REDUCTION GEAR



5/8-11 UNC CAPSCREW  
(6) EQ SPACED  
ON A  $\varnothing$  8.750 BC  
FOR SUPPORT  
PLATE MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

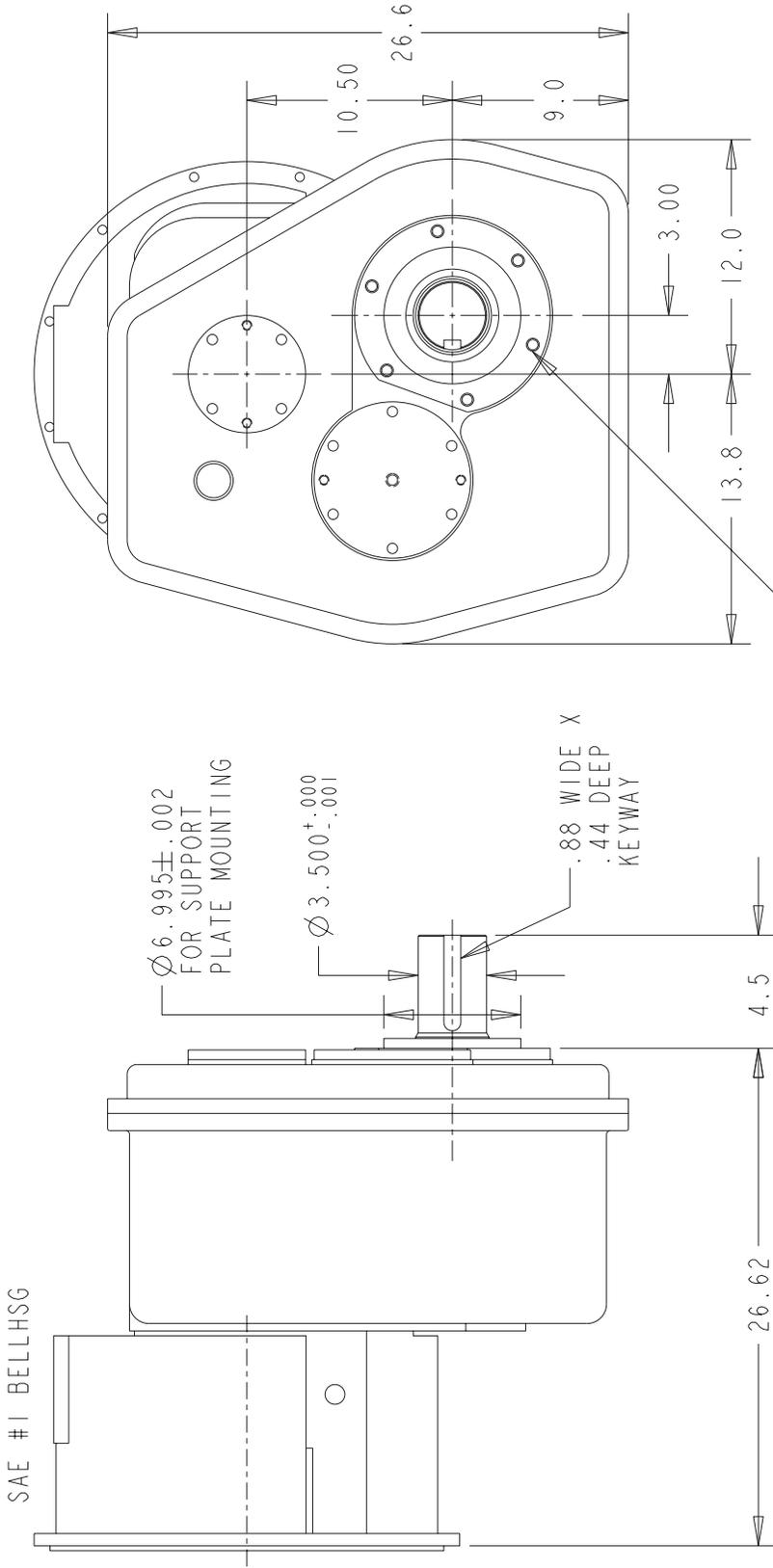
**MODEL SR972A  
REDUCTION GEAR**

Model SR972A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and bell housing and mounts to an engine for a compact package with proper alignment. There is a double train of gears that are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available.

<b>CAPACITY (maximum input torque):</b>	1000 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2200 RPM
<b>RATIOS:</b>	3.49, 3.71, 3.94, 4.45, 5.07, 6.25
<b>BELL HOUSINGS:</b>	SAE #1, #0 Adapter
<b>CLUTCHES:</b>	SP214, SP314
<b>OUTPUT SHAFT:</b>	3.500" diameter, 4 1/2" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	6 holes around output shaft for customer provided rear support plate
<b>LUBRICATION:</b>	Lube pump furnished
<b>WEIGHT:</b>	1190 lbs

07/31/03

# MODEL SR972A REDUCTION GEAR



5/8-11 UNC CAPSCREW  
(6) EQ SPACED  
ON A Ø 8.750 BC  
FOR SUPPORT PLATE MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR2030  
REDUCTION GEAR**

Model SR2030 is a heavy duty reduction gear available in engine rotation (SR2030E) or anti-engine rotation (SR2030A). A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is cast iron. A wide variety of ratios are available in either direction of rotation.

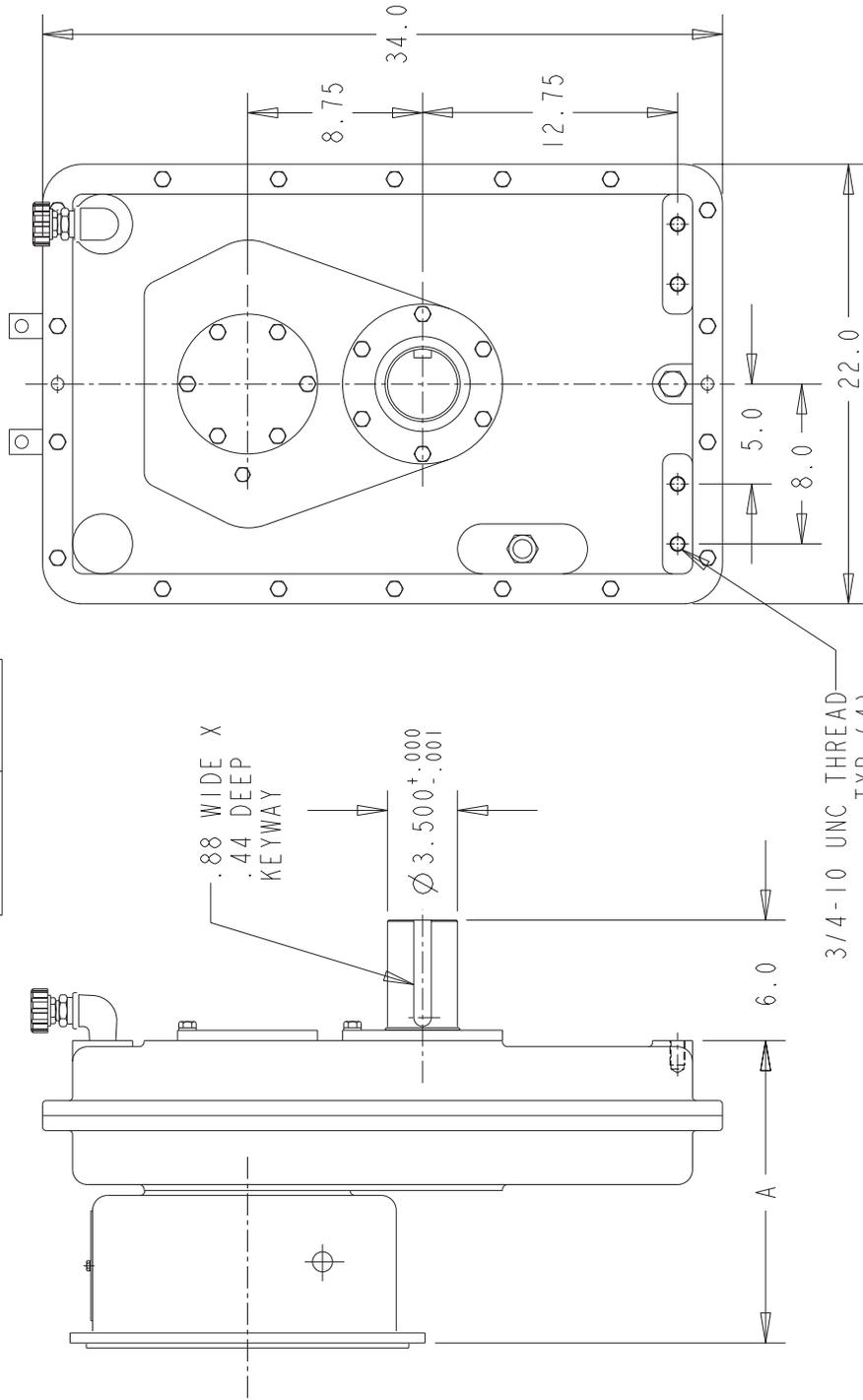
<b>CAPACITY (nominal input torque):</b>	750 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2500 RPM
<b>RATIOS: (ENGINE) (ANTI-ENGINE)</b>	3.22, 3.42, 3.89, 4.16, 4.47, 4.81, 5.20 3.45, 3.77, 4.00, 4.25, 4.53, 4.83, 5.17
<b>BELL HOUSINGS:</b>	SAE #1, #2, #3, #0
<b>CLUTCHES:</b>	SP111, SP214, SP314, SP218
<b>OUTPUT SHAFT:</b>	3.500" diameter, 5.5" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	4 holes 3/4-10 for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	900 lbs

07/31/03

# MODEL SR2030 REDUCTION GEAR

CONTACT COTTA FOR OTHER  
OUTPUT ORIENTATIONS  
(3, 9, OR 12 O'CLOCK)

BELLHSG SAE #	DIM A
#2	15.12
#1	17.00
#0	19.75



3/4-10 UNC THREAD  
TYP (4)  
FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR12  
REDUCTION GEAR**

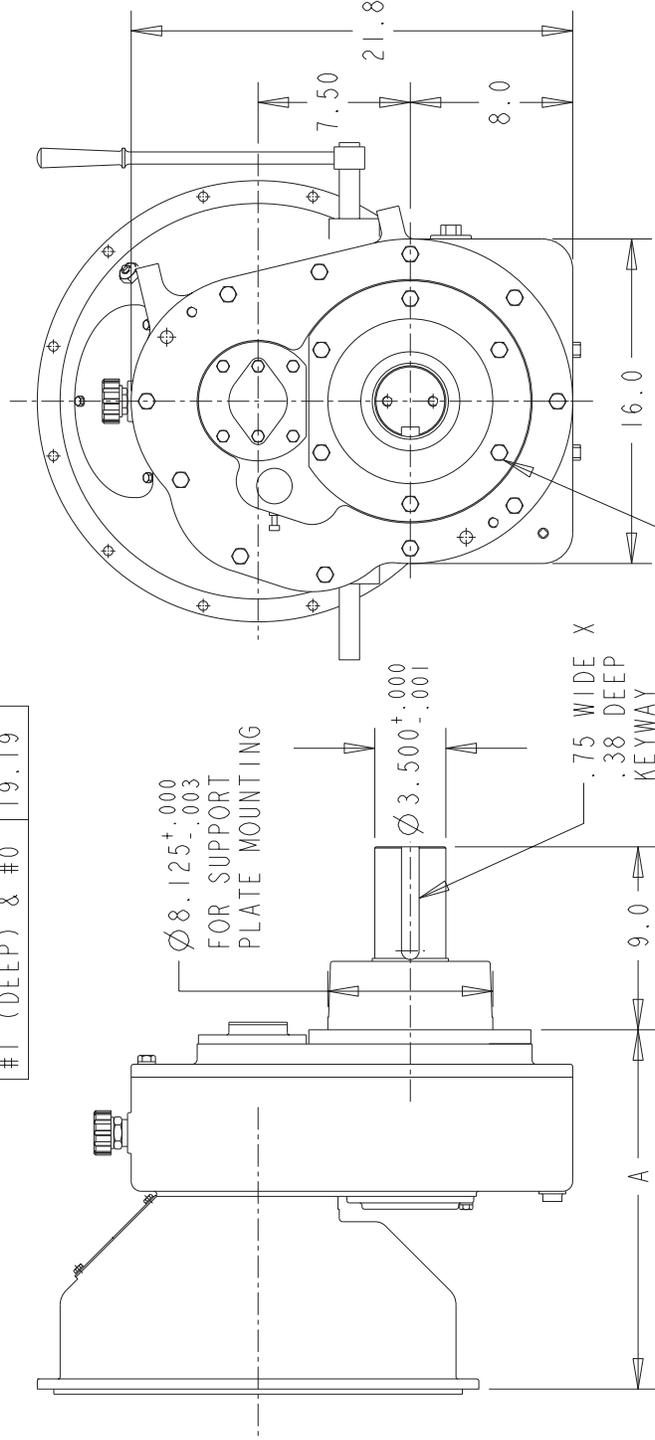
Model SR12 is a heavy duty reduction gear available in engine rotation (SR12E) or anti-engine rotation (SR12A). A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available in either direction of rotation.

<b>CAPACITY (nominal input torque):</b>	750 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2500 RPM
<b>RATIOS: (ENGINE)</b>	1.30, 1.46, 1.55, 1.65, 1.76, 1.87, 2.00, 2.28, 2.45, 2.63, 3.05, 3.60, 3.92
<b>(ANTI-ENGINE)</b>	1.03, 1.14, 1.28, 1.43, 1.52, 1.60, 1.70, 1.80, 1.92, 2.04, 2.47, 2.84, 3.05, 3.29, 3.87
<b>BELL HOUSINGS:</b>	SAE #1, #2, #0
<b>CLUTCHES:</b>	SP211, SP114, SP214, SP314
<b>OUTPUT SHAFT:</b>	3.000" diameter, 5.5" long 3/4" x 3/8" keyway  With ratios above 2.45 the output shaft is 3.500" diameter with a 7/8" x 7/16" keyway
<b>REAR SUPPORT:</b>	6 holes on a 10.125" B.C. for customer's support plate
<b>LUBRICATION:</b>	Splash 6 quarts sump capacity
<b>WEIGHT:</b>	SR12E - 810 lbs SR12A - 750 lbs

07/31/03

# MODEL SR12 REDUCTION GEAR

BELLHSG SAE#	DIM A
#1	17.7
#1 (DEEP) & #0	19.19



1/2-13 UNC CAPSCREW  
(6) EQ SPACED  
ON A  $\phi 10.125$  BC  
FOR SUPPORT  
PLATE MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR700  
REDUCTION GEAR**

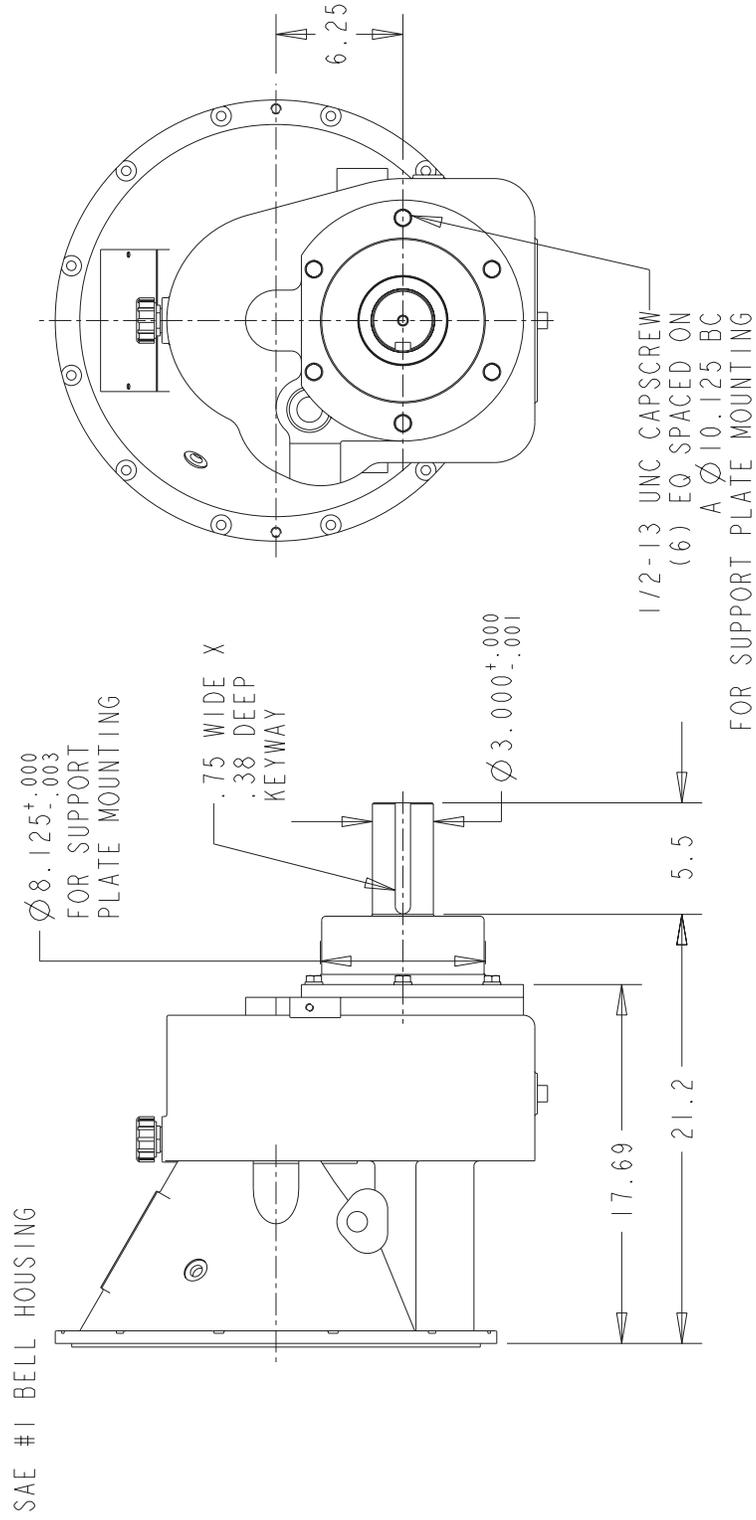
Model SR700 is a heavy duty reduction gear available in engine rotation (SR700E) or anti-engine rotation (SR700A). A clutch and bell housing is included for mounting to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are anti-friction and the case is cast iron. A wide variety of ratios are available in either direction of rotation.

<b>CAPACITY (nominal input torque):</b>	650 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	2500 RPM
<b>RATIOS: (ENGINE)</b>	1.43, 1.55, 1.67, 1.80, 1.95
<b>(ANTI-ENGINE)</b>	1.50, 1.61, 1.73, 1.86, 2.00
<b>BELL HOUSINGS:</b>	SAE #1
<b>CLUTCHES:</b>	SP211, SP114, SP214, pilot bearing provided to meet engine specifications
<b>OUTPUT SHAFT:</b>	3.000" diameter, 5.5" long 3/4 x 3/8 keyway
<b>REAR SUPPORT:</b>	6 holes on a 10.125" B.C. for customer's support plate
<b>LUBRICATION:</b>	Splash 7 quarts sump capacity
<b>WEIGHT:</b>	SR700E - 560 lbs SR700A - 510 lbs

07/31/03

# MODEL SR700 REDUCTION GEAR

DO NOT USE DIMENSIONS ON THIS DRAWING FOR INSTALLATIONS, USE CERTIFIED PRINT PROVIDED WITH ORDERS.



**MODEL SR3E  
REDUCTION GEAR**

Model SR3E is a heavy duty reduction gear having engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

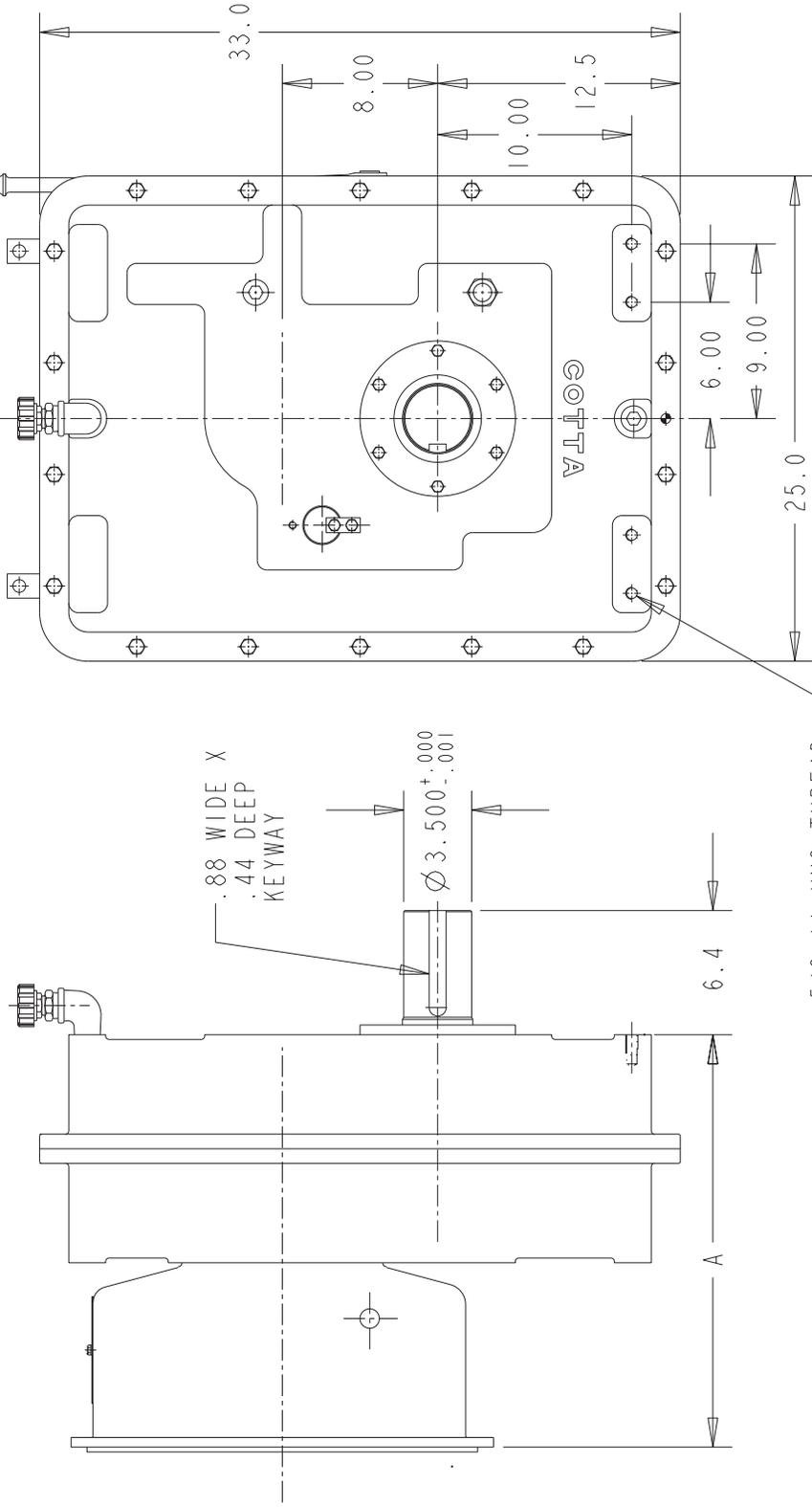
<b>CAPACITY (nominal input torque):</b>	900 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	3000 RPM
<b>RATIOS:</b>	1.20, 1.38, 1.59, 1.84, 2.03, 2.52, 3.00
<b>BELL HOUSINGS:</b>	SAE #1, #2, #0
<b>CLUTCHES:</b>	SP211, SP114, SP214, SP314, SP218
<b>OUTPUT SHAFT:</b>	3.500" diameter, 5" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	4 holes 5/8-11 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	975 lbs

07/31/03

# MODEL SR3E REDUCTION GEAR

OUTPUT CAN BE ORIENTED  
AT 3, 6, 9, OR 12 O'CLOCK POSITION  
CONTACT COTTA FOR MOUNTING HOLE LOCATION

SAE BELLHSG #	DIM A
#3	19.38
#2	19.38
#1	21.25
#1 (DEEP)	22.75



.88 WIDE X  
.44 DEEP  
KEYWAY

$\varnothing 3.500^{+.000}_{-.001}$

6.4

A

5/8-11 UNC THREAD  
TYP (4)  
FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR3A  
REDUCTION GEAR**

Model SR3A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

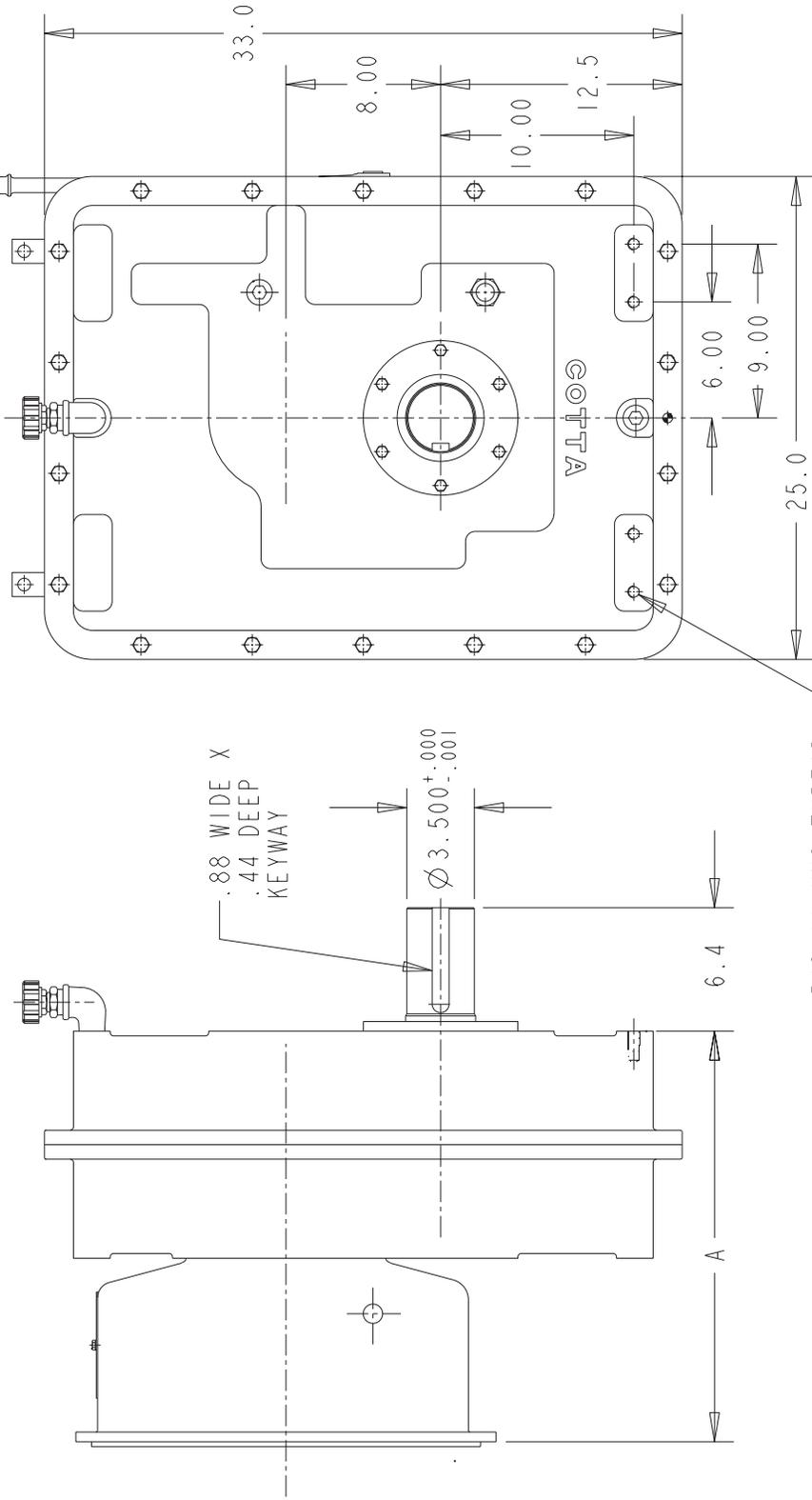
<b>CAPACITY (nominal input torque):</b>	1400 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	3000 RPM
<b>RATIOS:</b>	1.38, 1.58, 1.82, 2.00, 2.44, 3.04
<b>BELL HOUSINGS:</b>	SAE #1, #2, #0
<b>CLUTCHES:</b>	SP211, SP114, SP214, SP314, SP218
<b>OUTPUT SHAFT:</b>	3.500" diameter, 5" long 7/8 x 7/16 keyway
<b>REAR SUPPORT:</b>	4 holes 5/8-11 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	940 lbs

07/31/03

# MODEL SR3A REDUCTION GEAR

OUTPUT CAN BE ORIENTED  
AT 3, 6, 9, OR 12 O'CLOCK POSITION  
CONTACT COTTA FOR MOUNTING HOLE LOCATION

SAE BELLHSG #	DIM A
#3	19.38
#2	19.38
#1	21.25
#1 (DEEP)	22.75



DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR2A  
REDUCTION GEAR**

Model SR2A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

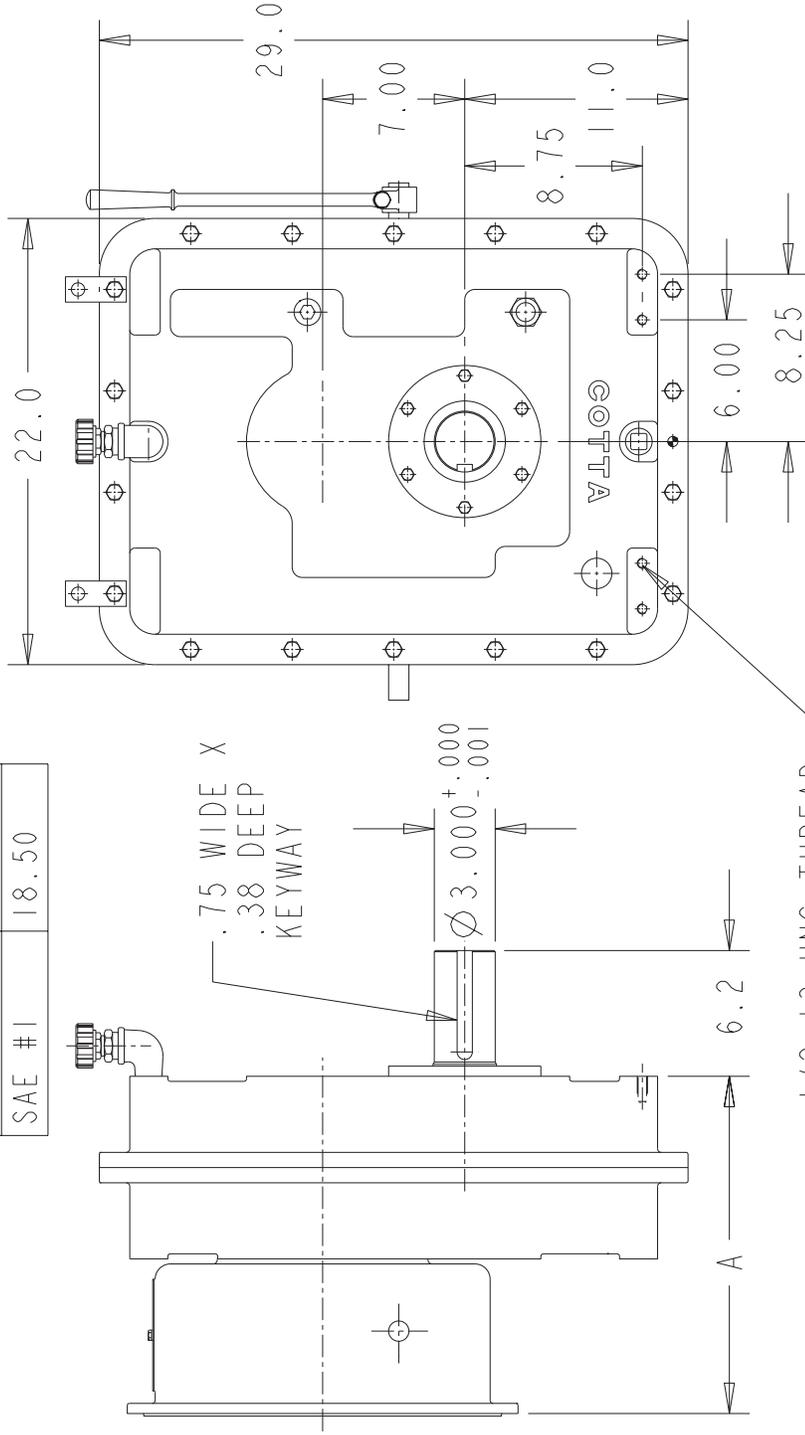
<b>CAPACITY (nominal input torque):</b>	800 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	3000 RPM
<b>RATIOS:</b>	1.39, 1.61, 1.82, 1.97, 2.55, 3.07
<b>BELL HOUSINGS:</b>	SAE #1, #2, #3
<b>CLUTCHES:</b>	SP111, SP211, SP114, SP214
<b>OUTPUT SHAFT:</b>	3.000" diameter, 5.5" long 3/4 x 3/8 keyway
<b>REAR SUPPORT:</b>	4 holes 1/2-13 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	775 lbs

07/31/03

# MODEL SR2A REDUCTION GEAR

BELLHSG	DIM A
SAE #3	16.63
SAE #2	16.63
SAE #1	18.50

OUTPUT CAN BE ORIENTED  
AT 3, 6, 9, OR 12 O'CLOCK POSITION  
CONTACT COTTA FOR MOUNTING HOLE LOCATION



1/2-13 UNC THREAD  
TYP (4)  
FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL SR2E  
REDUCTION GEAR**

Model SR2E is a heavy duty reduction gear having engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

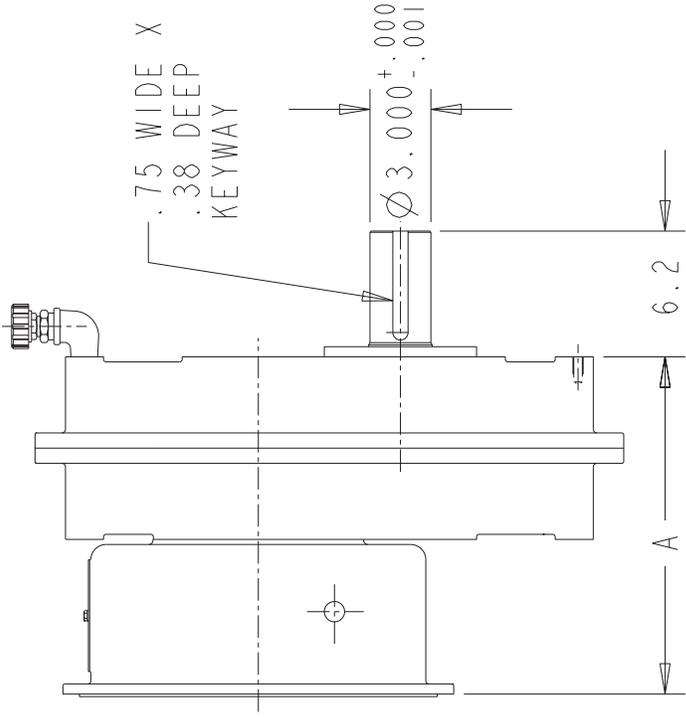
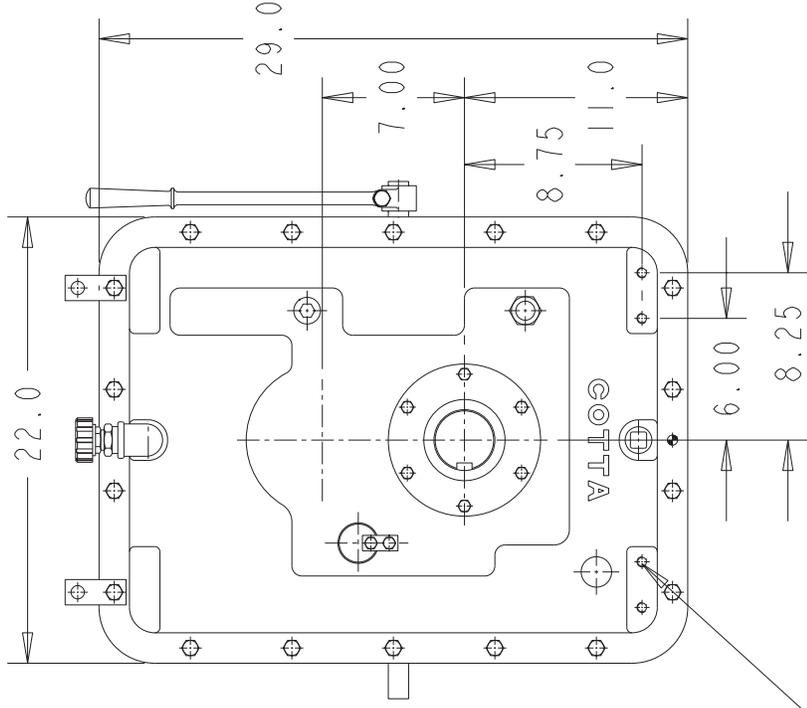
<b>CAPACITY (nominal input torque):</b>	600 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	3000 RPM
<b>RATIOS:</b>	1.42, 1.60, 1.81, 1.97, 2.47, 3.00
<b>BELL HOUSINGS:</b>	SAE #1, #2, #3
<b>CLUTCHES:</b>	SP111, SP211, SP114, SP214
<b>OUTPUT SHAFT:</b>	3.000" diameter, 5.5" long 3/4 x 3/8 keyway
<b>REAR SUPPORT:</b>	4 holes 1/2-13 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	800 lbs

07/31/03

# MODEL SR2E REDUCTION GEAR

BELLHSG	DIM A
SAE #3	16.63
SAE #2	16.63
SAE #1	18.50

OUTPUT CAN BE ORIENTED  
AT 3, 6, 9, OR 12 O'CLOCK POSITION  
CONTACT COTTA FOR MOUNTING HOLE LOCATION



1/2-13 UNC THREAD  
TYP (4)  
FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.

**MODEL AR2053A  
REDUCTION GEAR**

Model AR2053A is a heavy duty reduction gear having anti-engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

<b>CAPACITY (nominal input torque):</b>	300 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	With C108 or C110 clutch - 3000 RPM With SP111 or SP211 clutch - 2850 RPM
<b>RATIOS: (STANDARD) (SPECIAL)</b>	1.55, 2.0 1:1, 1.4, 1.63, 1.80, 2.23, 2.50, 3.0 (3.94 is a special ratio - not available with SP211 clutch)
<b>BELL HOUSINGS:</b>	SAE #2, #3, #4
<b>CLUTCHES:</b>	C108, C110, SP111, SP211
<b>OUTPUT SHAFT:</b>	2.250" diameter, 5" long 5/8 x 5/16 keyway
<b>REAR SUPPORT:</b>	4 holes 1/2-13 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	400 lbs

07/31/03



**MODEL AR2053E  
REDUCTION GEAR**

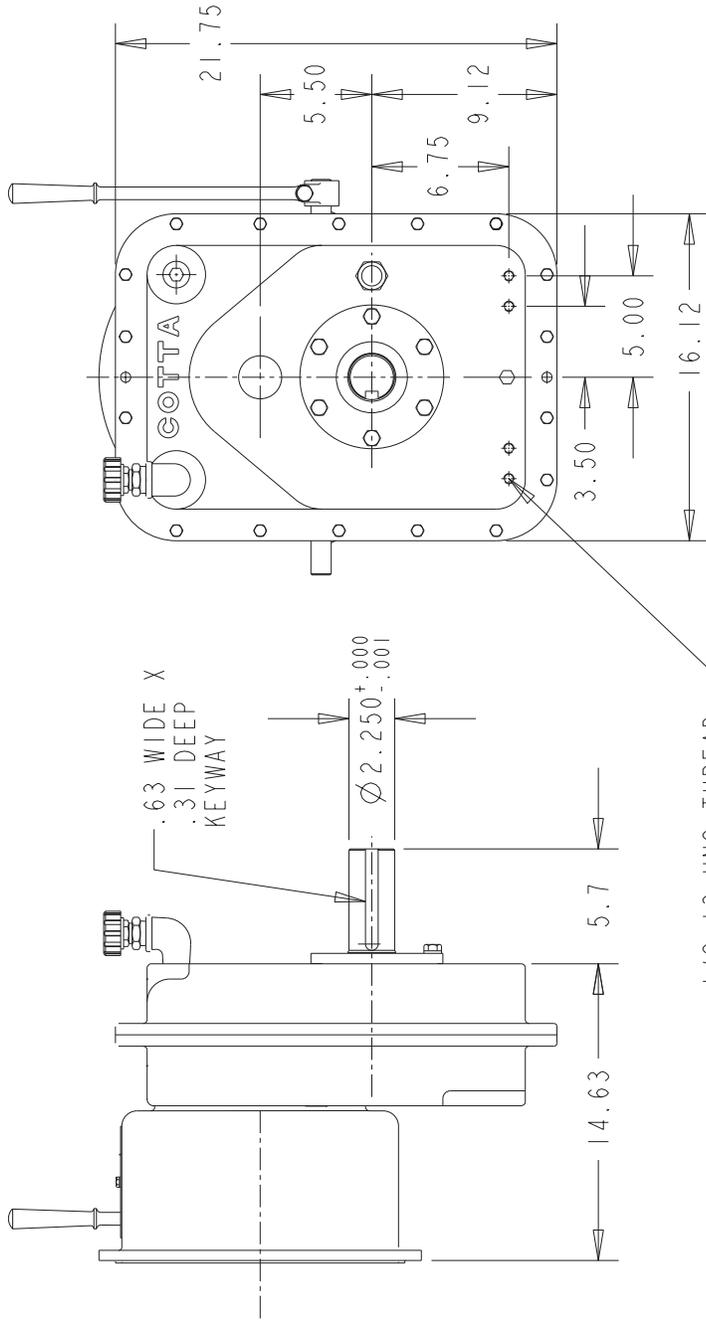
Model AR2053E is a heavy duty reduction gear having engine rotation that includes a clutch and mounts to an engine for a compact package with proper alignment. The gears are helical and carburized for ultimate strength and endurance. Gears are designed per AGMA specifications. The bearings are tapered roller and the case is heavy cast iron. A wide variety of ratios are available.

<b>CAPACITY (nominal input torque):</b>	300 lb. ft.
<b>MAXIMUM INPUT SPEED:</b>	With C108 or C110 clutch - 3000 RPM With SP111 or SP211 clutch - 2850 RPM
<b>RATIOS: (STANDARD) (SPECIAL)</b>	1.50, 1.96 1.42, 1.66, 1.76, 2.20, 2.48, 3.0, 3.42, 3.71 (4.0 is a Special Ratio not available with SP211 clutch)
<b>BELL HOUSINGS:</b>	SAE #2, #3, #4
<b>CLUTCHES:</b>	C108, C110, SP111, SP211
<b>OUTPUT SHAFT:</b>	2.250" diameter, 5" long 5/8 x 5/16 keyway
<b>REAR SUPPORT:</b>	4 holes 1/2-13 on rear cover for customer's support plate
<b>LUBRICATION:</b>	Splash
<b>WEIGHT:</b>	415 lbs

07/31/03

**MODEL AR2053E  
REDUCTION GEAR**

OUTPUT CAN BE ORIENTED  
AT 6 OR 12 O'CLOCK POSITION



1/2-13 UNC THREAD  
TYP (4)  
FOR GEARBOX MOUNTING

DO NOT USE DIMENSIONS ON THIS DRAWING FOR  
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED  
WITH ORDERS.