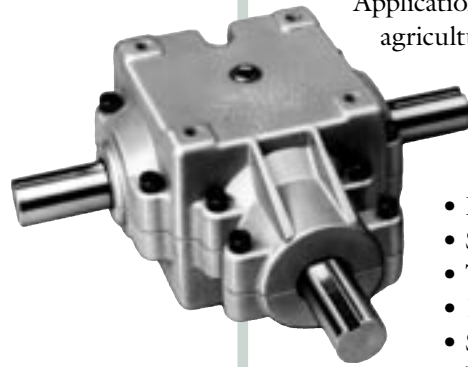




# 400 Series



Applications include grain carts, mowers, combines, grain augers, potato harvesters, agricultural sprayers, irrigation pumps and conveyers.

**Features:**

- Two-piece aluminum housing for high strength, corrosion resistance and thermal capacity
- Precision machined for exact gear mesh and bearing preload
- Precision forged gears are offered in four ratios: 1:1, 1.35:1, 1.5:1 and 2:1
- Spiral bevel available in 1:1
- Tapered roller bearings provide increased load capacity and bearing life
- 1.250" shaft made of high strength steel is standard
- Serviced with 80W90 gear lubricant, run and leak tested before shipment
- The 400 Series weighs 25/30 lbs. including 28 oz of lubricant

Rating Chart		Input RPM			
Ratio <sup>1</sup>	Gear Design		100	540	1000
Miter	1:1 Forged Straight Bevel	Input HP	18.18	71.70	103.57
		Output Torque*	11458	8368	6527
		Input kW	13.56	53.47	77.23
	1:1 Cut Spiral Bevel	Input HP	5.38	22.86	34.63
		Output Torque*	3391	2668	2183
		Input kW	4.01	17.05	25.82
Reducers	1.35:1 Forged Straight Bevel	Output Torque**	1295	945	737
		Input HP	13.51	54.88	80.73
		Output Torque*	11495	8647	6869
	1.5:1 Forged Straight Bevel	Input kW	10.07	40.92	60.20
		Output Torque**	1299	977	776
		Input HP	7.47	32.07	48.90
	2:1 Forged Straight Bevel	Output Torque*	7062	5614	4623
		Input kW	5.57	23.91	36.47
		Output Torque**	798	634	522
	1:1.35 Forged Straight Bevel	Input HP	5.25	23.71	37.47
		Output Torque*	6618	5535	4723
		Input kW	3.91	17.68	27.94
1:1.5 Forged Straight Bevel	Output Torque**	748	625	534	
	Input HP	17.77	67.02	94.25	
	Output Torque*	8296	5794	4400	
1:1.5 Forged Straight Bevel	Input kW	13.25	49.98	70.28	
	Output Torque**	937	655	497	
	Input HP	10.89	42.72	61.53	
1:1.5 Forged Straight Bevel	Output Torque*	4576	3324	2585	
	Input kW	8.12	31.86	45.88	
	Output Torque**	517	376	292	

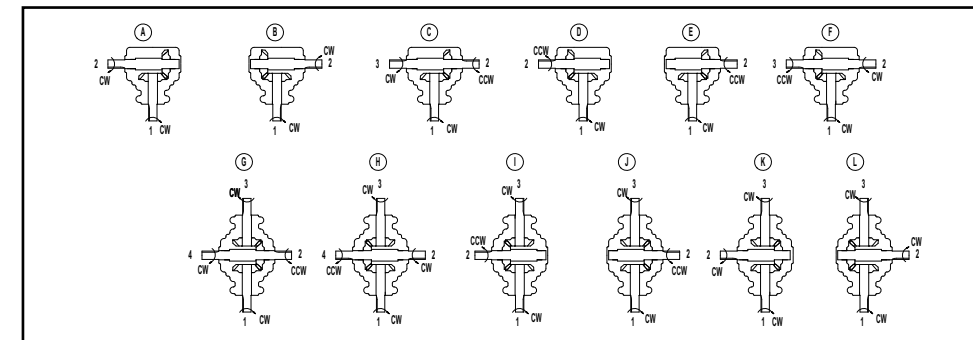
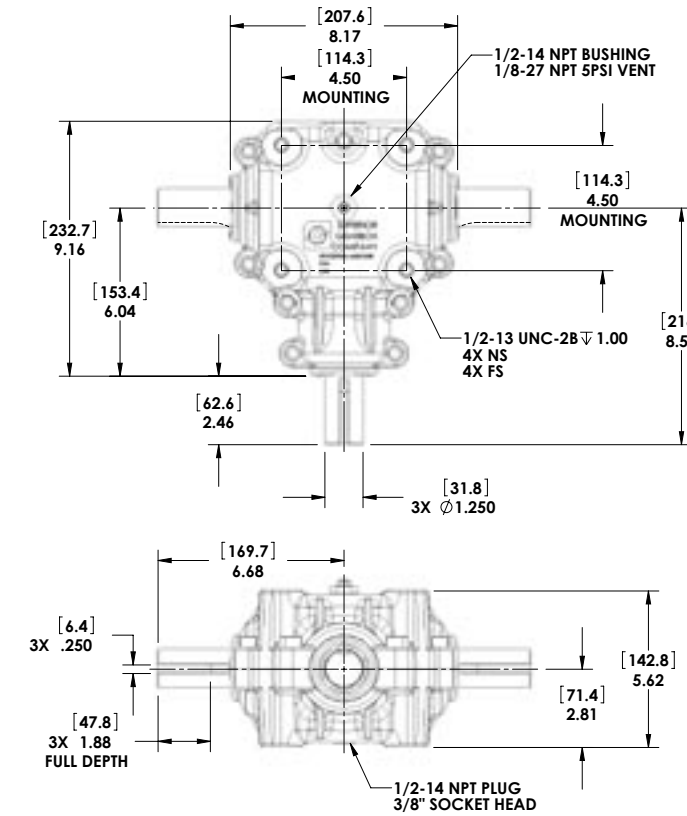
<sup>1</sup> All ratings specified with the #1 shaft as the input  
\*Torque measured in inch-lbs \*\*Torque measured in N-m

See information under Service Factors

Character of Shock Driven Machine	Character of Power Source Shock Load											
	Electric Motor Uniform				Multi-Cylinder Engine Light Shock				Single-Cylinder Engine Medium Shock			
	Duration of Service (Hours per Day)											
	.5	3	10	24	.5	3	10	24	.5	3	10	24
Uniform	0.60	0.80	1.00**	1.25	0.80	1.00	1.25	1.50	1.00	1.25	1.50	1.75
Moderate	0.80	1.00	1.25	1.50	1.00	1.25	1.50	1.75	1.25	1.50	1.75	2.00
Heavy	1.25	1.50	1.75	2.00	1.50	1.75	2.00	2.25	1.50	1.75	2.25	2.50

\* Divide the horsepower rating by the service factor to obtain the design horsepower. \*\* AGMA Class 1 Service

LIMITATIONS ON HORSEPOWER AND TORQUE RATINGS: The horsepower and torque ratings given here are generalizations. Different conditions for various applications may result in higher or lower horsepower capacities. Under certain conditions the maximum indicated rpm may be exceeded. For these reasons the ratings cannot be guaranteed for any application. Prototype testing should be conducted for each application before production.



Contact Superior Gearbox for your special requirements.