
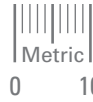







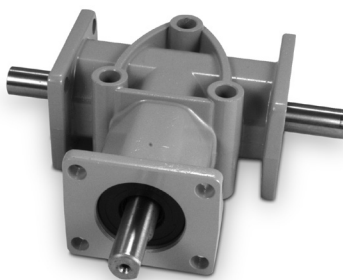
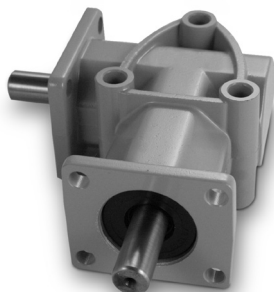
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Catalog Series	Material	Ratios	Pages
 S99RD1MBE...-1	Economy Series Right Angle Bevel Gear Drives AISI 1045 Steel Gears	1:1	12-2
 S99RD1MBE...-2	Economy Series Right Angle Bevel Gear Drives AISI 1045 Steel Gears	2:1	12-3
 A 2Z20M.C...	Right Angle Bevel Gear Drives Hardened Steel Gears Steel Ball Bearings	1:1	12-4
 A 2Z21M.M...	Right Angle Bevel Gear Drives Molded Nylon Gears Sintered Bronze Bearings	1:1 and 2:1	12-5
 A 2Z21M.C...	Right Angle Bevel Gear Drives Case-Hardened Steel Gears Precision Grade Steel Ball Bearings and Sintered Bronze Bearings	1:1, 2:1 and 3:1	12-6
 A 2Z27MC... A 2Z28MC... A 2Z29MC...	Precision Quality Right Angle Bevel Gear Drives SAE 4340 Steel Miter Gears Sealed Ball Bearings	1:1	12-7
 S991LYM...	Heavy-Duty "L" Gear Drives Case-Hardened Alloy Steel Spiral Bevel Gears	1:1 and 2:1	12-9
 S991TYM...	Heavy-Duty "T" Gear Drives Case-Hardened Alloy Steel Spiral Bevel Gears	1:1 and 2:1	12-10



Catalog Series	Material	Ratios	Pages
 <p>A 2Z17M... A 2Z18M... A 2Z19M...</p>	<p>Precision Quality Worm Gear Speed Reducers Hardened Carbon Steel Worms and Phosphor Bronze Worm Wheels Precision Ball Bearings and Self-Lubricating Bearings</p>	<p>6:1 thru 100:1</p>	<p>12-11 thru 12-13</p>
 <p>A 2Z22M...</p>	<p>Base-Mounted Right Angle Helical Gear Speed Reducers Hardened Steel Helical Gears</p>	<p>1:1 thru 25:1</p>	<p>12-14</p>
 <p>A 2Z23M...</p>	<p>Panel-Mounted Right Angle Helical Gear Speed Reducers Hardened Steel Helical Gears</p>	<p>1:1 thru 25:1</p>	<p>12-15</p>

- I
- R
- T
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12**
- 13
- 14
- 15
- A



> PERFORMANCE DATA FOR FOLLOWING PAGES:

Catalog Number	Ratio	Specification	X-Axis (rpm)												Allowable Thrust Load N (lbf)	
			50	100	200	300	400	600	900	1200	1500	1800	2500	3600	X-Axis	Y-Axis
1:1 RATIO																
S991TYM10A S991LYM10A	1:1	Allowable Power kW	0.01	0.02	0.05	0.07	0.09	0.14	0.20	0.26	0.31	0.35	0.38	0.44	59 (13.3)	69 (15.5)
		X-Y Axis Torque N • m (kgf • m) [lb • ft]	2.35 (0.24) [1.73]	2.35 (0.24) [1.73]	2.25 (0.23) [1.66]	2.25 (0.23) [1.66]	2.16 (0.22) [1.59]	2.16 (0.22) [1.59]	2.06 (0.21) [1.52]	2.06 (0.21) [1.52]	1.96 (0.20) [1.45]	1.86 (0.19) [1.37]	1.47 (0.15) [1.08]	1.18 (0.12) [0.87]		
S991TYM15A S991LYM15A		Allowable Power kW	0.05	0.09	0.18	0.27	0.35	0.51	0.75	0.96	1.16	1.30	1.44	1.66	98 (22.0)	118 (26.5)
		X-Y Axis Torque N • m (kgf • m) [lb • ft]	8.82 (0.90) [6.51]	8.82 (0.90) [6.51]	8.62 (0.88) [6.36]	8.53 (0.87) [6.29]	8.33 (0.85) [6.14]	8.13 (0.83) [6.00]	7.94 (0.81) [5.86]	7.64 (0.78) [5.63]	7.35 (0.75) [5.42]	6.86 (0.70) [5.06]	5.49 (0.56) [4.05]	4.41 (0.45) [3.25]		
S991TYM20A S991LYM20A		Allowable Power kW	0.09	0.18	0.36	0.52	0.68	0.95	1.38	1.78	2.15	2.50	2.55	2.95	196 (44.1)	274 (61.6)
		X-Y Axis Torque N • m (kgf • m) [lb • ft]	17.6 (1.80) [13.0]	17.6 (1.80) [13.0]	17.2 (1.75) [12.7]	16.7 (1.70) [12.3]	16.2 (1.65) [11.9]	15.2 (1.55) [11.2]	14.7 (1.50) [10.8]	14.2 (1.45) [10.4]	13.7 (1.40) [10.1]	13.2 (1.35) [9.7]	9.80 (1.00) [7.2]	7.84 (0.80) [5.8]		
2:1 RATIO																
S991TYM10B S991LYM10B	2:1	Allowable Power kW	0.005	0.01	0.02	0.03	0.04	0.06	0.09	0.12	0.14	0.16	0.17	0.20	59 (13.3)	69 (15.5)
		Y-Axis Torque N • m (kgf • m) [lb • ft]	2.06 (0.21) [1.52]	2.06 (0.21) [1.52]	2.06 (0.21) [1.52]	1.96 (0.20) [1.45]	1.96 (0.20) [1.45]	1.96 (0.20) [1.45]	1.86 (0.19) [1.37]	1.86 (0.19) [1.37]	1.76 (0.18) [1.30]	1.67 (0.17) [1.23]	1.27 (0.13) [0.94]	1.08 (0.11) [0.80]		
S991TYM15B S991LYM15B		Allowable Power kW	0.02	0.04	0.08	0.13	0.17	0.25	0.36	0.46	0.55	0.62	0.69	0.80	98 (22.0)	118 (26.5)
		Y-Axis Torque N • m (kgf • m) [lb • ft]	8.43 (0.86) [6.22]	8.43 (0.86) [6.22]	8.23 (0.84) [6.07]	8.13 (0.83) [6.00]	8.04 (0.82) [5.93]	7.84 (0.80) [5.78]	7.55 (0.77) [5.57]	7.25 (0.74) [5.35]	7.06 (0.72) [5.21]	6.57 (0.67) [4.85]	5.29 (0.54) [3.90]	4.21 (0.43) [3.11]		
S991TYM20B S991LYM20B		Allowable Power kW	0.05	0.10	0.19	0.28	0.37	0.53	0.77	0.99	1.15	1.31	1.40	1.57	196 (44.1)	274 (61.6)
		Y-Axis Torque N • m (kgf • m) [lb • ft]	19.6 (2.00) [14.5]	19.6 (2.00) [14.5]	18.6 (1.90) [13.7]	18.1 (1.85) [13.3]	17.6 (1.80) [13.0]	17.0 (1.73) [12.5]	16.4 (1.67) [12.1]	15.7 (1.60) [11.6]	14.7 (1.50) [10.8]	13.9 (1.42) [10.3]	10.8 (1.10) [7.97]	8.33 (0.85) [6.14]		

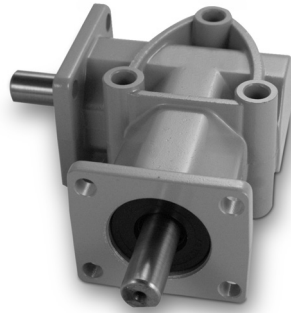
NOTE: When the 2:1 ratio is used as a speed increaser (from the Y-Axis to the X-Axis), the X-Axis torque becomes one half of the Y-Axis torque shown in the table.

HEAVY-DUTY "L" GEAR DRIVES

SDP/SI

1:1 OR 2:1 RATIOS
 RATED SPEEDS UP TO 3600 RPM
 LOW NOISE & HIGH EFFICIENCY
 EASY INSTALLATION
 COMPACT DESIGN
 MAINTENANCE-FREE
 REVERSIBLE

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

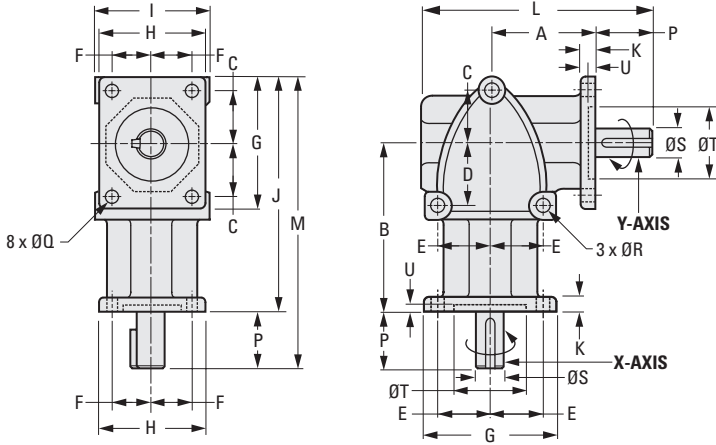


► MATERIAL:

- Gears** - Spiral Bevel, Case-Hardened Alloy Steel
- Case** - Aluminum Die-Cast
- Shafts** - Alloy Steel

► OPERATING TEMPERATURE:

-10°C to +40°C



The projections shown are per ISO convention.

METRIC COMPONENT

Catalog Number	Ratio	A	B	C	D	E	F	G	H	I	J	K	L
S991LYM10A	1:1	37	58	18	18	18	14	46	38	40	82	5	82
S991LYM10B	2:1	37	58	18	18	18	14	46	38	40	82	5	82
S991LYM15A	1:1	66	100	31	36	31	22	80	62	66	140	8	137
S991LYM15B	2:1	66	100	31	36	31	22	80	62	66	140	8	137
S991LYM20A	1:1	80	120	36	36	36	26	92	72	76	166	10	168
S991LYM20B	2:1	80	120	36	36	36	26	92	72	76	166	10	168

Catalog Number (Ref.)	M	P	Q Dia.	R Dia.	S Dia. h7	T Dia. H7	U	Key	Backlash of Shaft Rotation	Weight kg
S991LYM10A	102	20	5.5	6.5	10	26	2	1 mm deep	16'...44'	0.4
S991LYM10B	102	20	5.5	6.5	10	26	2	Flat 15 /	30'...1°23'	0.4
S991LYM15A	170	30	8.5	8.5	15	42	3	5 x 5 x 27 /	10'...37'	1.8
S991LYM15B	170	30	8.5	8.5	15	42	3		19'...1°09'	1.8
S991LYM20A	206	40	8.5	8.5	20	52	4	6 x 6 x 35 /	8'...33'	3.1
S991LYM20B	206	40	8.5	8.5	20	52	4		15'...60'	3.1

See page 12-8 for performance data.

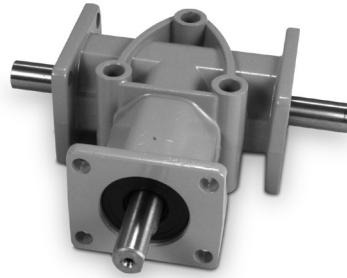


HEAVY-DUTY "T" GEAR DRIVES

SDP/SI

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

- 1:1 OR 2:1 RATIOS
- RATED SPEEDS UP TO 3600 RPM
- LOW NOISE & HIGH EFFICIENCY
- EASY INSTALLATION
- COMPACT DESIGN
- MAINTENANCE-FREE
- REVERSIBLE

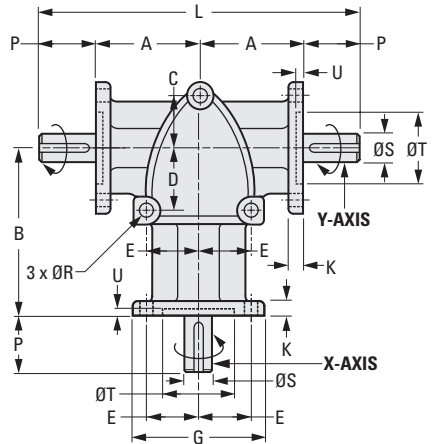
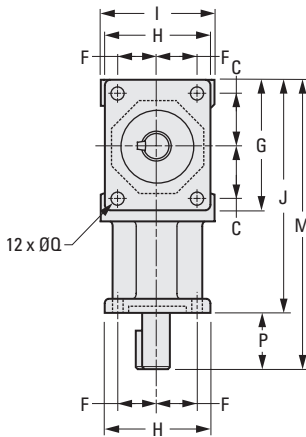


> MATERIAL:

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- Case** - Aluminum Die-Cast
- Shafts** - Alloy Steel

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-10°C to +40°C



The projections shown are per ISO convention

METRIC COMPONENT

Catalog Number	Ratio	A	B	C	D	E	F	G	H	I	J	K	L
S991TYM10A	1:1	37	58	18	18	18	14	46	38	40	82	5	114
S991TYM10B	2:1	37	58	18	18	18	14	46	38	40	82	5	144
S991TYM15A	1:1	66	100	31	36	31	22	80	62	66	140	8	192
S991TYM15B	2:1	66	100	31	36	31	22	80	62	66	140	8	192
S991TYM20A	1:1	80	120	36	36	36	26	92	72	76	166	10	240
S991TYM20B	2:1	80	120	36	36	36	26	92	72	76	166	10	240

Catalog Number (Ref.)	M	P	Q Dia.	R Dia.	S Dia. h7	T Dia. H7	U	Key	Backlash of Shaft Rotation	Weight kg
S991TYM10A	102	20	5.5	6.5	10	26	2	1 mm deep	16'...44'	0.5
S991TYM10B	102	20	5.5	6.5	10	26	2	Flat 15 /	30'...1°23'	0.5
S991TYM15A	170	30	8.5	8.5	15	42	3	5 x 5 x 27 /	10'...37'	2.2
S991TYM15B	170	30	8.5	8.5	15	42	3		19'...1°09'	2.2
S991TYM20A	206	40	8.5	8.5	20	52	4	6 x 6 x 35 /	8'...33'	3.4
S991TYM20B	206	40	8.5	8.5	20	52	4		15'...60'	3.4

See page 12-8 for performance data.