TRUE PLANETARY™ GEARHEADS

SHIPPED WITHIN 24 HOURS!

HIGH PRECISION • LOW BACKLASH • EASY TO MOUNT

Best of the Best
GM SUPPLIER OF THE YEAR
THOMSON First in Linear Motion Technology

THOMSON™ MICRON, LLC

USA, Canada, Mexico: 1-888-554-MOTION
Europe: 44 1271 334 500
Elsewhere: 516-883-8937

GEARHEAD EXPRESS*

TRUE PLANETARY* GEARHEADS

- DELIVERED IN DAYS
- WORLD-WIDE SUPPORT
- LARGEST SELECTION

Order your gearhead today in three easy steps:

1.

Complete the order form on page 14

2.

Fax order form to

USA, CANADA, MEXICO: 516-467-9814

EUROPE: 44 1271 334 502

ELSEWHERE: 516-883-7109

for immediate quote

3.

Place order

DuraTRUE
- **Precision:** 8 arc-minutes
- **Frame Sizes:** 60, 90, 115 and 142mm
- **Torque Capacity:** up to 7377 in-lb
- **Ratio Availability:** 3, 5, 10, 15, and 30:1
- **Radial Load Capacity:** up to 2500 lb
- **Mounting System:** RediMount

DuraTRUE* in-line Page 4

UltraTRUE
- **Precision:** 4 arc-minutes
- **Frame Sizes:** 60, 75, 100, 140
- **Torque Capacity:** up to 29,201 in-lb
- **Ratio Availability:** 5, 10, and 25:1
- **Radial Load Capacity:** up to 8500 lb
- **Mounting System:** RediMount

UltraTRUE* in-line Page 8

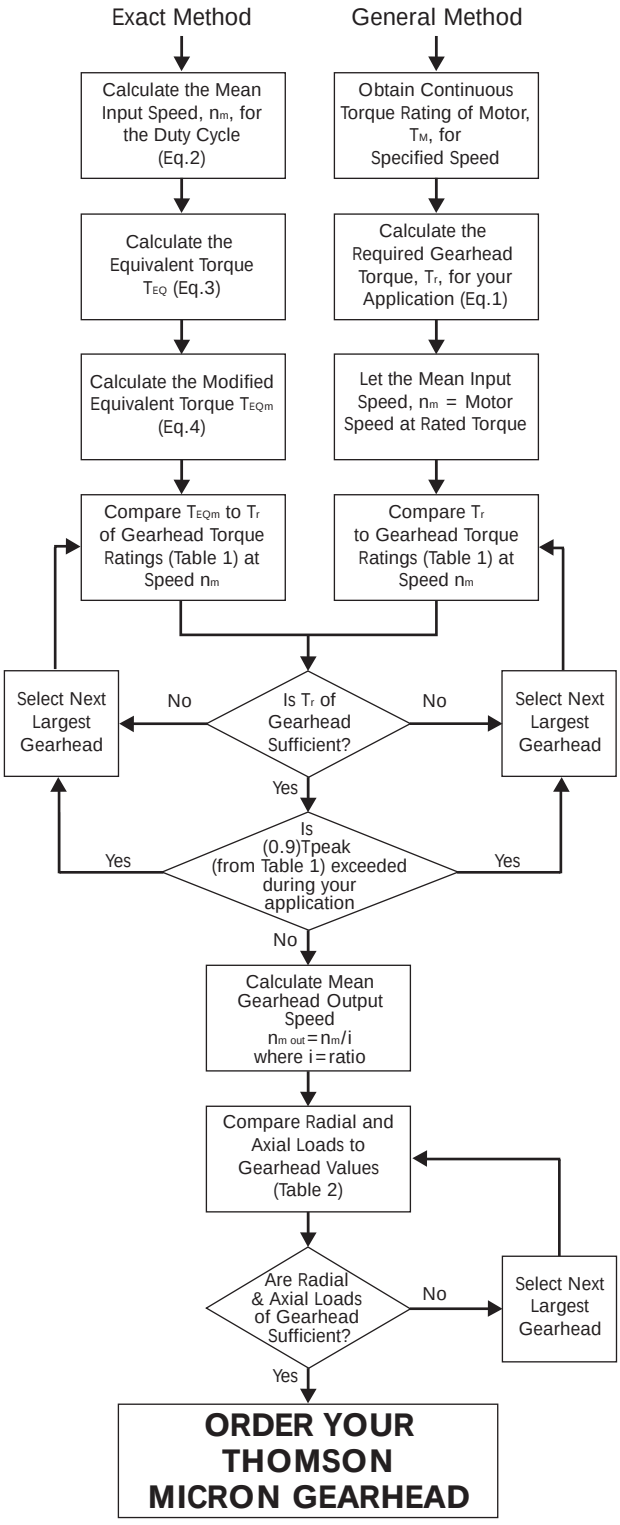
Redimount Motor Mounting
- **Self-aligning hub:** Maintains concentricity between motor shaft and gearhead
- **Pre-installed pinion:** Eliminates pinion setting procedure

Redimount* Motor Mounting Page 12

THOMSON MICRON
Leading in Motion Control Technology

Step 1: Select the required precision class

Step 2: Select the proper gearhead using exact or general method.



General Method:

Required Gearhead Torque (T_r)

Eq.(1) $T_r = T_M^{\ddagger} \times i \times e$

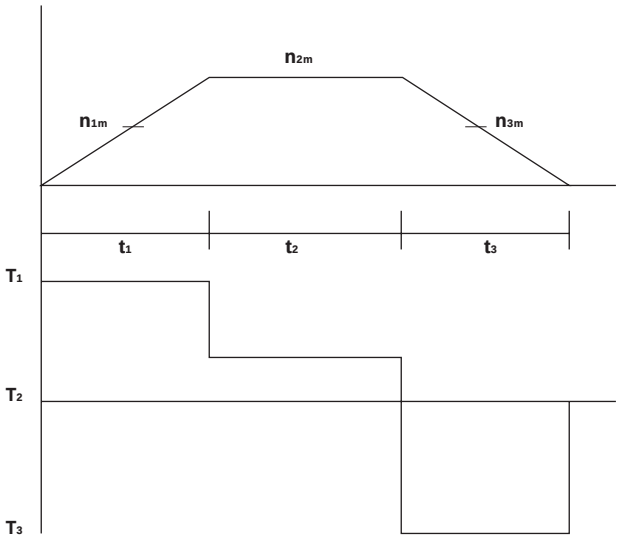
where: $T_M^{\ddagger}$ = continuous torque of motor

i = gearhead ratio

e = efficiency of gearhead

‡ Since many motors are capable of exceeding their continuous torque rating for extended lengths of time, the value of T_m will only provide a starting point for gearhead selection. Only use the general method if the continuous motor rating is not exceeded in the application.

Exact Method:



t_n = time period n

n_{nm} = mean speed during time period t_n

T_n = torque during time period t_n

Mean Input speed (n_m)

Eq.(2) $$n_m = \frac{n_{1m}t_1 + n_{2m}t_2 + n_{3m}t_3 + \ldots + n_{nm}t_n}{t_t}$$

where $t_t = t_1 + t_2 + t_3 + \ldots + t_n$

Equivalent torque (T_{EQ})

Eq.(3) $$T_{EQ} = \sqrt[8.7]{T_1^{8.7}\frac{n_{1m}t_1}{n_m t_t} + T_2^{8.7}\frac{n_{2m}t_2}{n_m t_t} + T_3^{8.7}\frac{n_{3m}t_3}{n_m t_t} + \ldots + T_n^{8.7}\frac{n_{nm}t_n}{n_m t_t}}$$

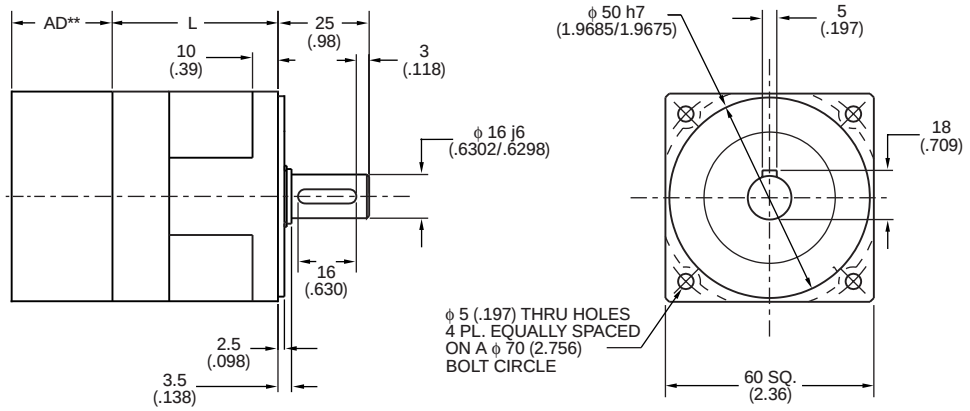
Modified equivalent torque (T_{EQm})

Eq.(4) $$T_{EQm} = \frac{T_{EQ}}{Q}$$

where Q is:

Q	# Cycles/hr
1.0	>0
0.9	>1000
0.7	>2500
0.5	>5000

DuraTRUE*Size 60
TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg (*lb*)	Efficiency
3:1 to 10:1	53 *(2.07)*	8 max	1.0 *(2.2)*	90%
15:1 to 30:1	70 *(2.76)*	9 max	1.2 *(2.7)*	85%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	T_{peak} Nm *(in-lb)*	10,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	J kg-cm² *(in-lb-sec²x10⁴)*	Torsional Stiffness Nm/arc-min *(in-lb/arc-min)*
XDT60-003	3:1	15 *(134)*	12 *(109)*	11 *(97)*	10 *(89)*	52 *(460)*	12 *(109)*	10 *(89)*	9 *(79)*	8 *(72)*	.52 *(4.6)*	0.9 *(8.1)*
XDT60-005	5:1	17 *(148)*	14 *(120)*	12 *(106)*	11 *(98)*	46 *(410)*	14 *(120)*	11 *(98)*	10 *(86)*	9 *(79)*	.46 *(4.1)*	0.9 *(7.9)*
XDT60-010	10:1	15 *(134)*	14 *(121)*	13 *(114)*	12 *(108)*	45 *(400)*	14 *(124)*	13 *(112)*	11 *(100)*	10 *(92)*	.44 *(3.9)*	0.8 *(6.8)*
XDT60-015	15:1	25 *(218)*	20 *(177)*	18 *(157)*	16 *(144)*	52 *(460)*	20 *(177)*	16 *(144)*	14 *(127)*	13 *(117)*	.46 *(4.1)*	0.9 *(8.2)*
XDT60-030	30:1	28 *(246)*	25 *(218)*	22 *(193)*	20 *(177)*	52 *(460)*	25 *(218)*	20 *(177)*	18 *(157)*	16 *(144)*	.44 *(3.9)*	1.0 *(8.7)*

[1] Ratios are exact, other ratios are also available, consult factory.

For ordering information see page 14.

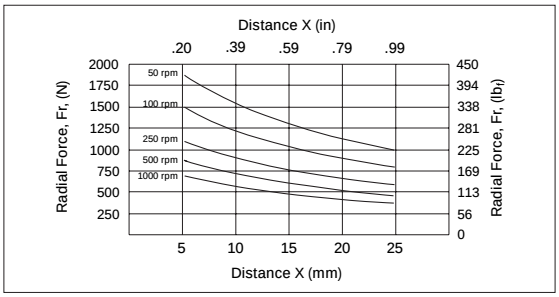
T_r = Rated output torque at rated speed for specified hours of life.

J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

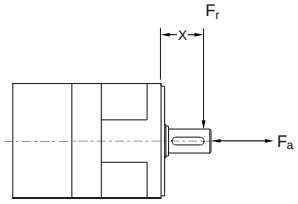
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XDT60 Radial Loadings



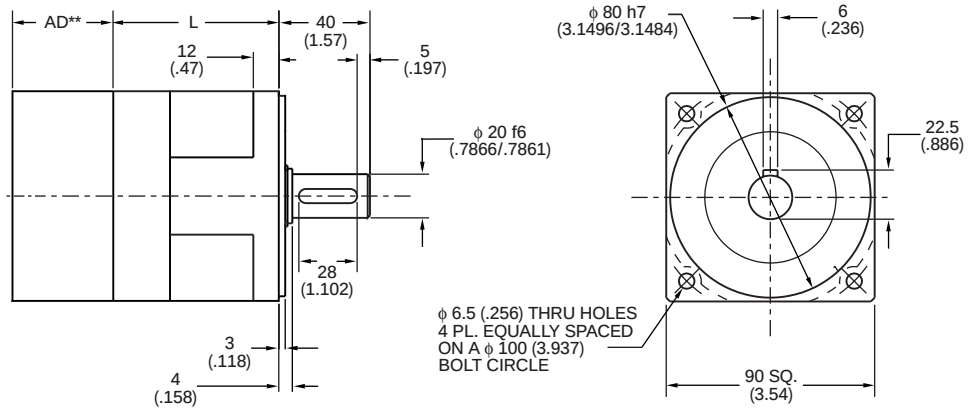
XDT60 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb$_f$)
50	3075	*(692)*
100	2441	*(549)*
250	1798	*(405)*
500	1427	*(321)*
1000	1133	*(255)*



THOMSON MICRON*
Leading in Motion Control Technology

DuraTRUE*Size 90
TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg *(lb)*	Efficiency
3:1 to 10:1	67 *(2.63)*	8 max	3.0 *(6.6)*	90%
15:1 to 30:1	90 *(3.53)*	9 max	3.7 *(8.1)*	85%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	T_{peak} Nm *(in-lb)*	10,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	J kg-cm² *(in-lb-sec²x10⁴)*	Torsional Stiffness Nm/arc-min *(in-lb/arc-min)*
XDT90-003	3:1	69 *(614)*	56 *(499)*	50 *(442)*	46 *(405)*	167 *(1476)*	56 *(499)*	46 *(405)*	41 *(359)*	37 *(329)*	2.22 *(1.97)*	4.9 *(43.3)*
XDT90-005	5:1	75 *(664)*	62 *(549)*	55 *(486)*	50 *(446)*	157 *(1385)*	62 *(549)*	50 *(446)*	45 *(395)*	41 *(362)*	1.76 *(1.56)*	4.8 *(42.9)*
XDT90-010	10:1	55 *(488)*	50 *(439)*	46 *(411)*	44 *(392)*	157 *(1390)*	51 *(452)*	46 *(407)*	43 *(381)*	41 *(363)*	1.63 *(1.44)*	4.0 *(35.6)*
XDT90-015	15:1	93 *(826)*	84 *(747)*	79 *(702)*	74 *(657)*	167 *(1479)*	86 *(764)*	74 *(657)*	66 *(582)*	60 *(534)*	1.78 *(1.58)*	4.9 *(43.7)*
XDT90-030	30:1	103 *(908)*	93 *(826)*	88 *(780)*	84 *(747)*	167 *(1479)*	95 *(840)*	86 *(764)*	81 *(716)*	74 *(657)*	1.64 *(1.45)*	4.9 *(43.4)*

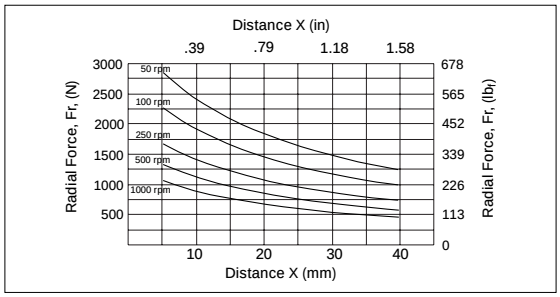
[1] Ratios are exact, other ratios are also available, consult factory.
T_r = Rated output torque at rated speed for specified hours of life.
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

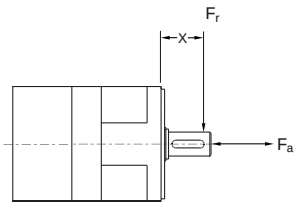
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XDT90 Radial Loadings



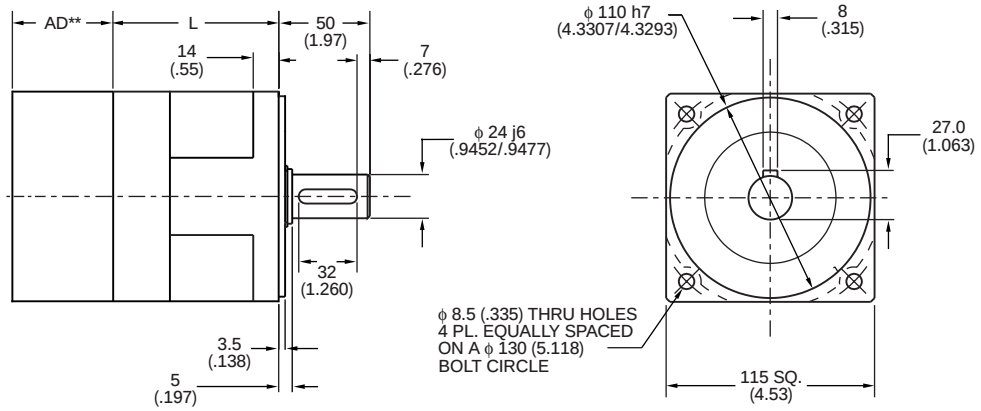
XDT90 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb_f)
50	4506	*(1014)*
100	3576	*(805)*
250	2635	*(593)*
500	2091	*(471)*
1000	1660	*(373)*



DuraTRUE*Size 115

TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg (*lb*)	Efficiency
3:1 to 10:1	88 *(3.46)*	8 max	5.7 *(12.7)*	90%
15:1 to 30:1	119 *(4.69)*	9 max	7.3 *(16.2)*	85%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE				T_{peak}	10,000 HOUR LIFE				J	Torsional Stiffness
		T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	Nm *(in-lb)*	T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	kg-cm² *(in-lb-sec²x10⁴)*	Nm/arc-min *(in-lb/arc-min)*
XDT115-003	3:1	105 *(932)*	86 *(757)*	76 *(670)*	70 *(615)*	284 *(2511)*	86 *(757)*	70 *(615)*	62 *(544)*	56 *(499)*	4.39 *(3.88)*	13.9 *(123.4)*
XDT115-005	5:1	116 *(1025)*	91 *(803)*	83 *(738)*	77 *(677)*	284 *(2511)*	94 *(833)*	77 *(677)*	68 *(599)*	62 *(550)*	2.88 *(2.55)*	13.6 *(120.8)*
XDT115-010	10:1	90 *(796)*	81 *(715)*	76 *(668)*	72 *(635)*	284 *(2511)*	83 *(737)*	75 *(661)*	70 *(618)*	66 *(588)*	2.47 *(2.18)*	11.6 *(102.4)*
XDT115-015	15:1	171 *(1510)*	139 *(1226)*	123 *(1086)*	113 *(996)*	284 *(2511)*	139 *(1226)*	113 *(996)*	100 *(882)*	91 *(809)*	2.95 *(2.61)*	12.9 *(114.1)*
XDT115-030	30:1	203 *(1794)*	171 *(1510)*	151 *(1337)*	139 *(1226)*	284 *(2511)*	171 *(1510)*	139 *(1226)*	123 *(1086)*	113 *(996)*	2.48 *(2.20)*	14.1 *(124.4)*

[1] Ratios are exact, other ratios are also available, consult factory.

T_r = Rated output torque at rated speed for specified hours of life.

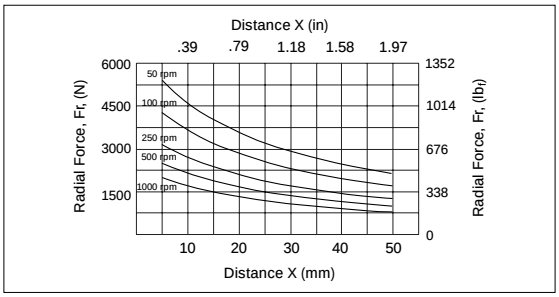
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

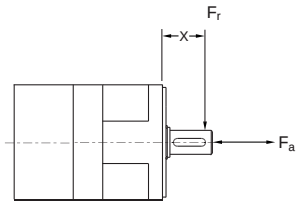
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XDT115 Radial Loadings



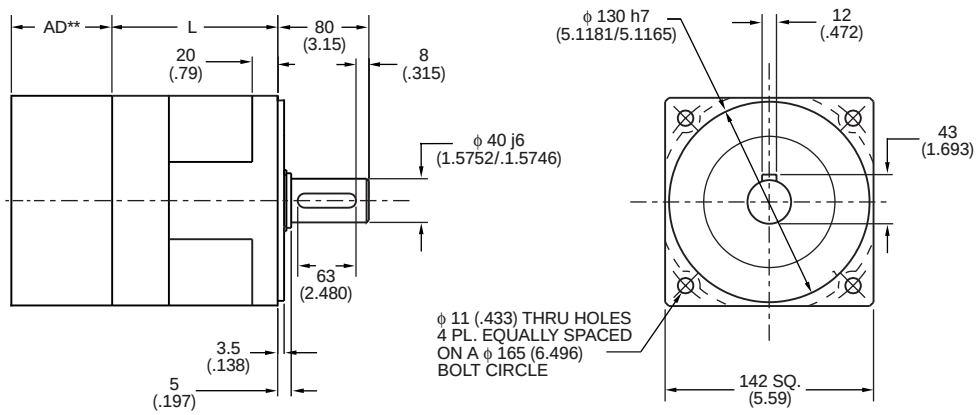
XDT115 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb_f)
50	8196	*(1844)*
100	6505	*(1464)*
250	4793	*(1078)*
500	3804	*(856)*
1000	3019	*(679)*



THOMSON MICRON* Leading in Motion Control Technology

DuraTRUE*Size 142
TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg (*lb*)	Efficiency
3:1 to 10:1	121 *(4.77)*	8 max	12.8 *(28.3)*	90%
15:1 to 30:1	170 *(6.71)*	9 max	17.2 *(38.0)*	85%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE				T_{peak}	10,000 HOUR LIFE				J	Torsional Stiffness
		T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	Nm *(in-lb)*	T_r (1000rpm) Nm *(in-lb)*	T_r (2000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (4000rpm) Nm *(in-lb)*	kg-cm² *(in-lb-sec²x10⁴)*	Nm/arc-min *(in-lb/arc-min)*
XDT142-003	3:1	372 *(3289)*	302 *(2671)*	267 *(2365)*	245 *(2170)*	834 *(7377)*	302 *(2671)*	245 *(2170)*	*217 (1921)*	*199 (1762)*	23.2 *(2.05)*	51.8 *(458.7)*
XDT142-005	5:1	410 *(3625)*	333 *(2944)*	295 *(2607)*	270 *(2391)*	834 *(7377)*	333 *(2944)*	270 *(2391)*	239 *(2118)*	*219 (1942)*	14.7 *(1.30)*	52.6 *(465.1)*
XDT142-010	10:1	229 *(2022)*	204 *(1808)*	190 *(1685)*	181 *(1598)*	834 *(7377)*	211 *(1871)*	189 *(1673)*	176 *(1559)*	167 *(1479)*	12.1 *(1.07)*	41.3 *(365.1)*
XDT142-015	15:1	524 *(4634)*	471 *(4167)*	433 *(3833)*	397 *(3516)*	834 *(7377)*	484 *(4287)*	397 *(3516)*	352 *(3114)*	323 *(2856)*	15.1 *(1.34)*	59.6 *(527.6)*
XDT142-030	30:1	578 *(5113)*	524 *(4634)*	493 *(4359)*	471 *(4167)*	834 *(7377)*	535 *(4731)*	484 *(4287)*	433 *(3833)*	397 *(3516)*	12.2 *(1.08)*	59.9 *(529.9)*

[1] Ratios are exact, other ratios are also available, consult factory.

For ordering information see page 14.

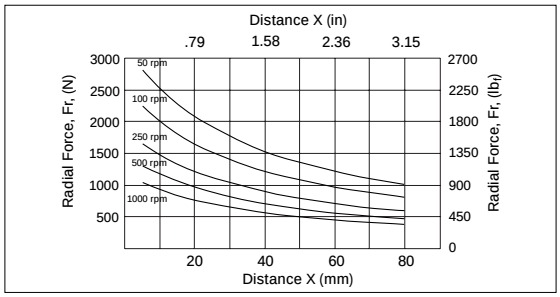
T_r = Rated output torque at rated speed for specified hours of life.

J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

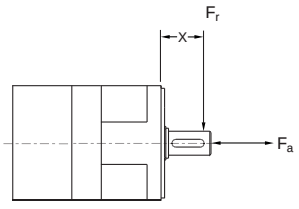
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XDT142 Radial Loadings

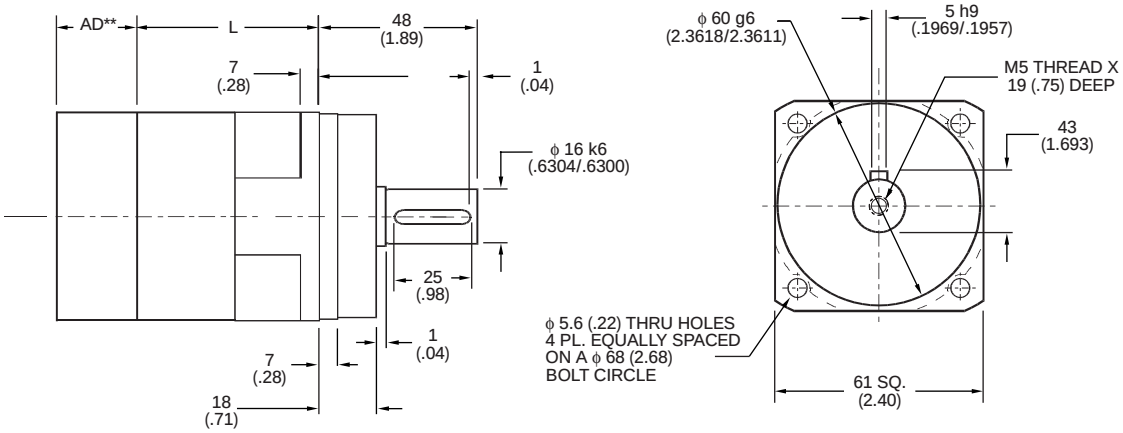


XDT142 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb_f)
50	17,023	*(3830)*
100	13,511	*(3040)*
250	9956	*(2240)*
500	7902	*(1778)*
1000	6271	*(1411)*



UltraTRUE*Size 6
HELICAL TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg (*lb*)	Efficiency
5:1 to 10:1	57 *(2.25)*	4 max	2 *(4.4)*	92%
25:1	105.4 *(4.15)*	5 max	2.5 *(5.5)*	87%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	T_{peak} Nm *(in-lb)*	10,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	J kg-cm² *(in-lb-sec²x10⁴)*	Torsional Stiffness Nm/arc-min *(in-lb/arc-min)*
XUT006-005	5:1	47 *(412)*	43 *(377)*	40 *(355)*	98 *(865)*	46 *(404)*	38 *(288)*	33 *(288)*	.13 *(1.16)*	2.56 *(22.7)*
XUT006-010	10:1	26 *(232)*	23 *(200)*	21 *(186)*	88 *(781)*	24 *(215)*	21 *(173)*	19 *(173)*	.10 *(.85)*	1.93 *(17.1)*
XUT006-025	25:1	51 *(456)*	48 *(428)*	47 *(413)*	107 *(948)*	50 *(446)*	47 *(418)*	46 *(404)*	.16 *(1.44)*	2.58 *(22.8)*

[1] Ratios are exact, other ratios are also available, consult factory.

T_r = Rated output torque at rated speed for specified hours of life.

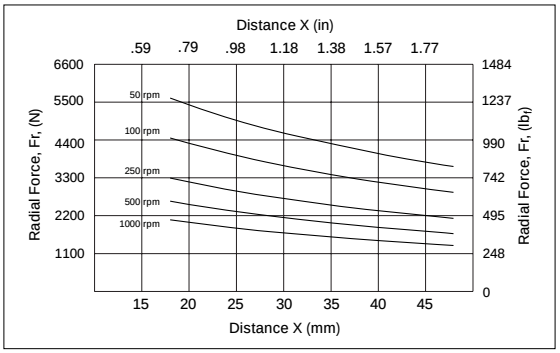
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

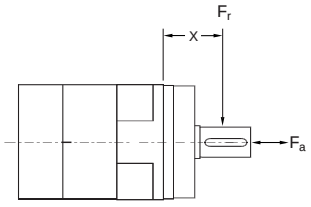
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XUT006 Radial Loadings



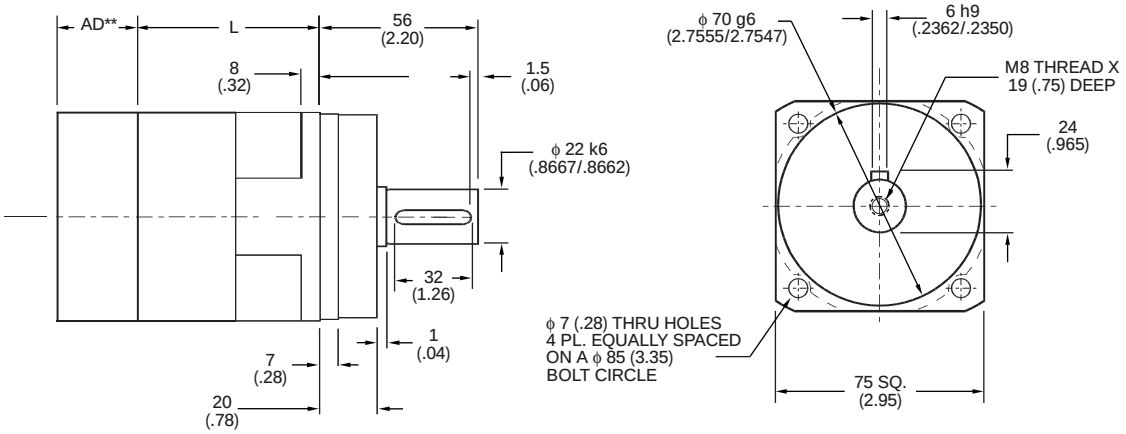
XUT006 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lbf)
50	7198	*(1618)*
100	5710	*(1284)*
250	4208	*(946)*
500	3342	*(751)*
1000	2652	*(596)*



THOMSON MICRON* Leading in Motion Control Technology

UltraTRUE*Size 7.5
HELICAL TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg *(lb)*	Efficiency
5:1 to 10:1	60 *(2.35)*	4 max	2.5 *(5.5)*	92%
25:1	117 *(4.60)*	5 max	3.0 *(6.6)*	87%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE			T_{peak}	10,000 HOUR LIFE			J	Torsional Stiffness
		T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	Nm *(in-lb)*	T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	kg-cm² *(in-lb-sec²x10⁴)*	Nm/arc-min *(in-lb/arc-min)*
XUT075-005	5:1	84 *(740)*	76 *(672)*	72 *(636)*	174 *(1537)*	82 *(723)*	74 *(657)*	66 *(583)*	.38 *(3.4)*	6.86 *(60.7)*
XUT075-010	10:1	47 *(418)*	41 *(360)*	38 *(335)*	157 *(1393)*	44 *(387)*	38 *(333)*	35 *(310)*	.27 *(2.4)*	4.46 *(39.5)*
XUT075-025	25:1	93 *(820)*	87 *(767)*	84 *(740)*	192 *(1698)*	91 *(801)*	85 *(750)*	82 *(723)*	.31 *(2.8)*	7.07 *(62.6)*

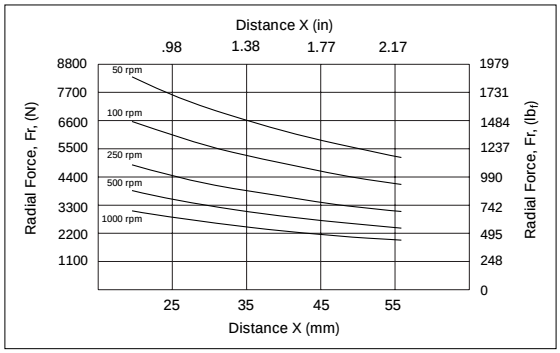
[1] Ratios are exact, other ratios are also available, consult factory.
T_r = Rated output torque at rated speed for specified hours of life.
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

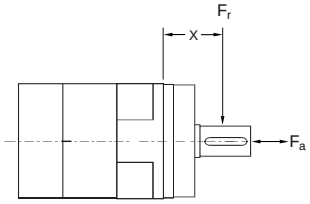
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XUT075 Radial Loadings

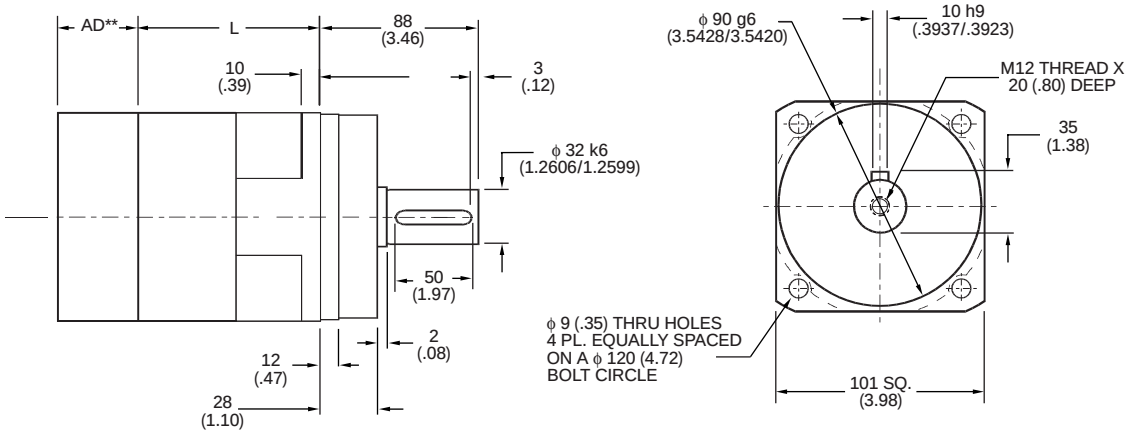


XUT075 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb_f)
50	9903	*(2227)*
100	7863	*(1768)*
250	5793	*(1303)*
500	4599	*(1034)*
1000	3650	*(821)*



UltraTRUE*Size 10
HELICAL TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg *(lb)*	Efficiency
5:1 to 10:1	78 *(3.07)*	4 max	6 *(13)*	92%
25:1	146 *(5.75)*	5 max	8 *(18)*	87%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	T_{peak} Nm *(in-lb)*	10,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	T_r (3000rpm) Nm *(in-lb)*	T_r (5000rpm) Nm *(in-lb)*	J kg-cm² *(in-lb-sec²x10⁴)*	Torsional Stiffness Nm/arc-min *(in-lb/arc-min)*
XUT010-005	5:1	245 *(2168)*	220 *(1950)*	194 *(1720)*	501 *(4434)*	240 *(2120)*	184 *(1628)*	158 *(1397)*	1.36 *(12.0)*	22.8 *(202)*
XUT010-010	10:1	138 *(1220)*	118 *(1048)*	110 *(971)*	457 *(4044)*	128 *(1129)*	110 *(969)*	102 *(898)*	.90 *(8.0)*	14.4 *(128)*
XUT010-025	25:1	274 *(2422)*	255 *(2256)*	245 *(2168)*	562 *(4974)*	268 *(2368)*	249 *(2206)*	240 *(2120)*	1.10 *(9.7)*	24.3 *(215)*

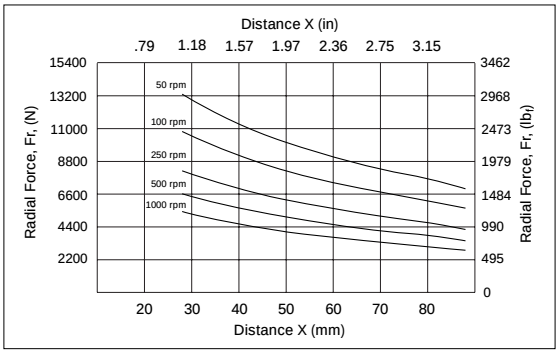
[1] Ratios are exact, other ratios are also available, consult factory.
T_r = Rated output torque at rated speed for specified hours of life.
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

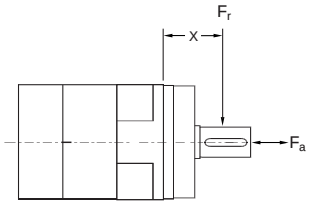
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XUT010 Radial Loadings



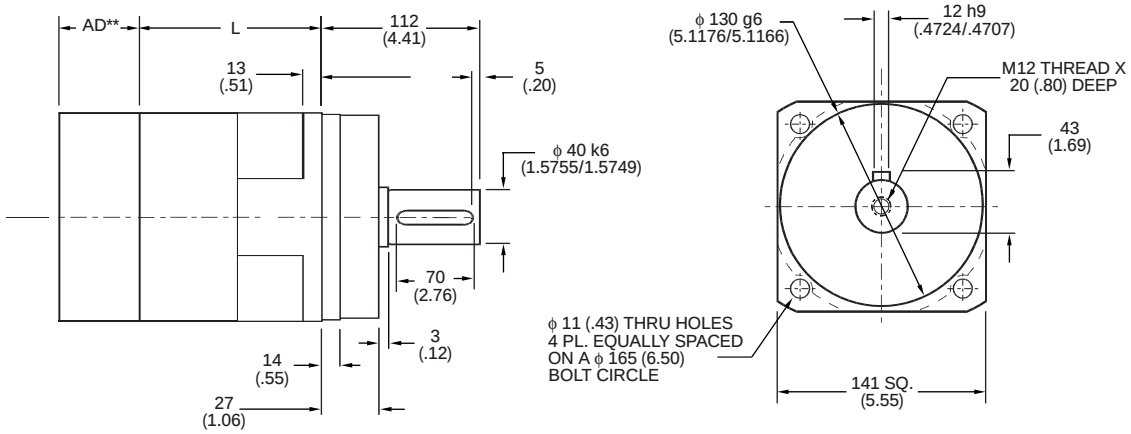
XUT010 Axial Loadings

Speed (rpm)	Axial Load, F_a N	(lb_f)
50	13,675	*(3075)*
100	11,107	*(2497)*
250	8435	*(1897)*
500	6855	*(1542)*
1000	5568	*(1252)*



THOMSON MICRON* Leading in Motion Control Technology

UltraTRUE*Size 14
HELICAL TRUE PLANETARY* Gearhead



Ratio	Dimension 'L' mm *(in)*	Backlash (arc-min)	Weight kg (*lb*)	Efficiency
5:1 to 10:1	110.5 *(4.35)*	4 max	14 *(31)*	92%
25:1	195 *(7.69)*	5 max	18 *(40)*	87%

** AD = Adapter length.
Adapter length will vary depending on motor.

All dimensions are: mm (inches)

(TABLE 1) PERFORMANCE SPECIFICATIONS

Part Number	Ratio[1]	5,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	5,000 HOUR LIFE T_r (3000rpm) Nm *(in-lb)*	5,000 HOUR LIFE T_r (5000rpm) Nm *(in-lb)*	T_{peak} Nm *(in-lb)*	10,000 HOUR LIFE T_r (1000rpm) Nm *(in-lb)*	10,000 HOUR LIFE T_r (3000rpm) Nm *(in-lb)*	10,000 HOUR LIFE T_r (5000rpm) Nm *(in-lb)*	J kg-cm² *(in-lb-sec²x10⁴)*	Torsional Stiffness Nm/arc-min *(in-lb/arc-min)*
XUT014-005	5:1	572 *(5066)*	511 *(4519)*	474 *(4191)*	1156 *(10,229)*	560 *(4954)*	448 *(3968)*	385 *(3404)*	5.02 *(44.4)*	51 *(452)*
XUT014-010	10:1	329 *(2913)*	282 *(2492)*	260 *(2304)*	1062 *(9399)*	305 *(2696)*	261 *(2306)*	241 *(2132)*	3.39 *(30.0)*	35 *(311)*
XUT014-025	25:1	645 *(5706)*	598 *(5288)*	572 *(5066)*	1314 *(11,625)*	630 *(5579)*	584 *(5171)*	560 *(4954)*	4.07 *(36.0)*	54 *(479)*

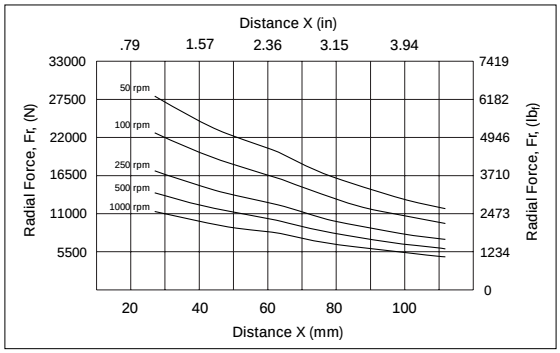
[1] Ratios are exact, other ratios are also available, consult factory.
T_r = Rated output torque at rated speed for specified hours of life.
J = Mass moment of inertia reflected to the input shaft (including pinion assembly).

For ordering information see page 14.

(TABLE 2) RADIAL AND AXIAL LOAD RATINGS

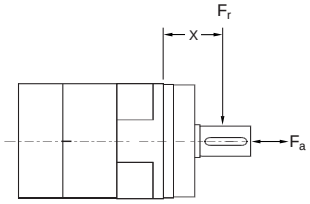
These graphs display the allowable radial load at a given distance (X) from the mounting surface based on an L_{10} life of 10,000 hours for the mean output speed, n_{mout}, as described on page 3.

XUT014 Radial Loadings



XUT014 Axial Loadings

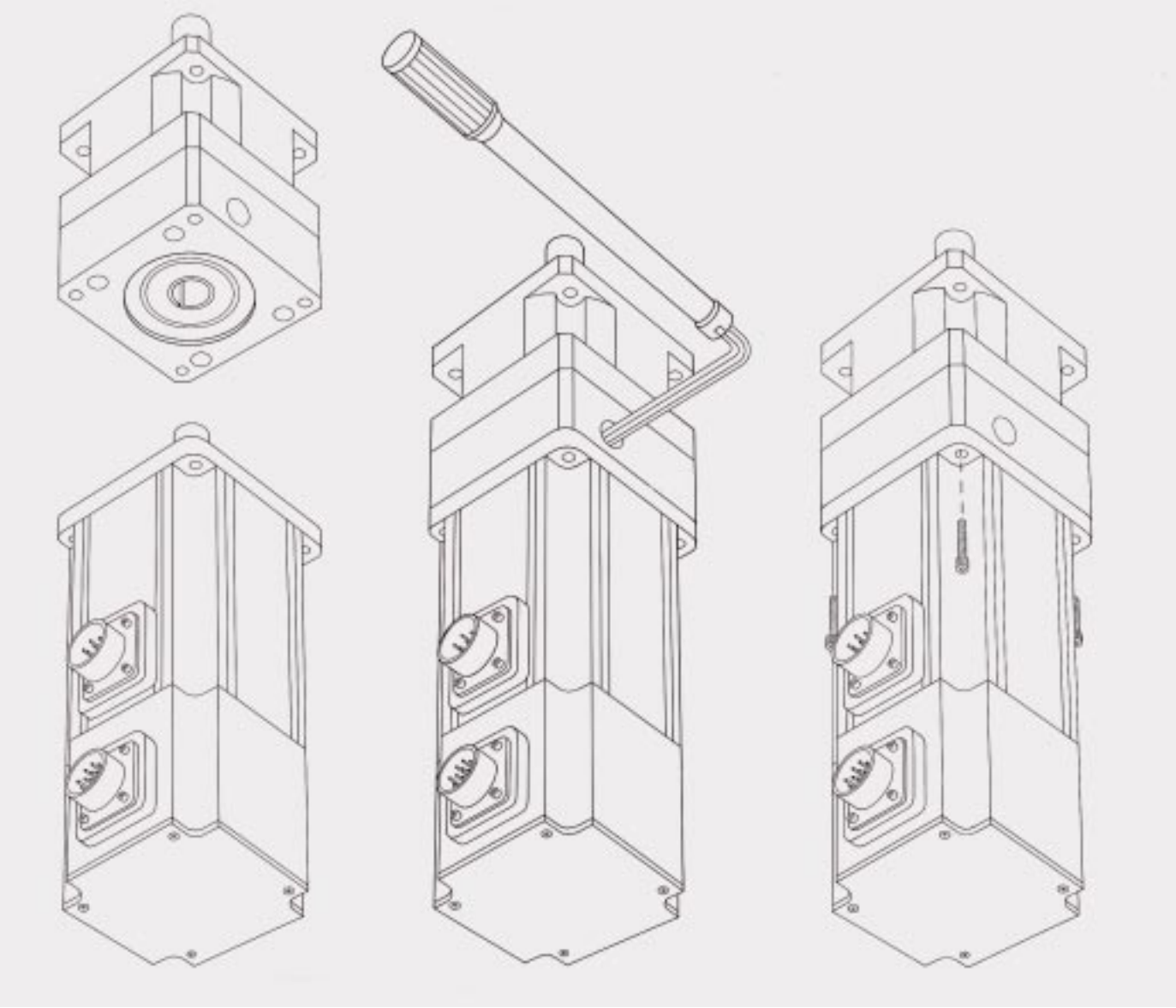
Speed (rpm)	Axial Load, F_a N	(lb_f)
50	25,374	*(5705)*
100	20,609	*(4633)*
250	15,657	*(3520)*
500	12,716	*(2859)*
1000	10,329	*(2322)*



RediMount* Motor Mounting System

Mount in 3 easy steps.

STEP 1 **STEP 2** **STEP 3**



STEP 1

SLIDE GEARHEAD ON MOTOR

STEP 2

TIGHTEN HUB ON MOTOR SHAFT

STEP 3

TIGHTEN BOLTS

SELECT FROM THE WORLD'S LARGEST OFFERING OF TRUE PLANETARY* GEARHEADS

Precision (13 arc-minutes of backlash)

- Nema 23, 34, 42 frame sizes
- Ratios ..... 1:1 thru 500:1
- High speed • High torque
- Delivery from stock
- In-line and right angle
- Torque ..... up to 2,255 in-lbs

NemaTRUE*

NemaTRUE90*

High Precision (8 arc-minutes of backlash)

- 60, 90, 115 and 142mm frame sizes
- Ratios ..... 1:1 thru 500:1
- Whisper quiet
- Drop in replacement for Bayside's PG and RA Series
- Torque ..... up to 7,377 in-lbs
- In-line and right angle

DuraTRUE*

DuraTRUE90*

Super Precision (6 arc-minutes of backlash)

- 60, 75, 100, 140 and 180mm frame sizes
- Ratios ..... 3:1 thru 100:1
- Torque ..... up to 27,500 in-lbs
- Right angle spiral bevel design
- In-line and right angle

AccuTRUE*

AccuTRUE90*

Ultra Precision (4 arc-minutes of backlash)

- Crowned Helical Planetary
- Torque ..... up to 31,000 in-lbs
- 60, 75, 100, 140 and 180mm frame sizes
- Ratios ..... 1:1 thru 100:1
- Efficiency 90%
- In-line and right angle

UltraTRUE*

UltraTRUE90*

CALL TODAY FOR YOUR THOMSON MICRON GEARHEAD CATALOG

USA, CANADA, MEXICO: 1-888-554-MOTION
EUROPE: +44 1271 334 500
ELSEWHERE: 516-883-8937

THOMSON MICRON*
Leading in Motion Control Technology

GEARHEAD EXPRESS* ORDER FORM

Fax to: USA, CANADA, MEXICO: 516-467-9814
EUROPE: 44 1271 334 502
ELSEWHERE: 516-883-7109

YOUR DETAILS

Company Name: _____

Contact Name: _____ Title: _____

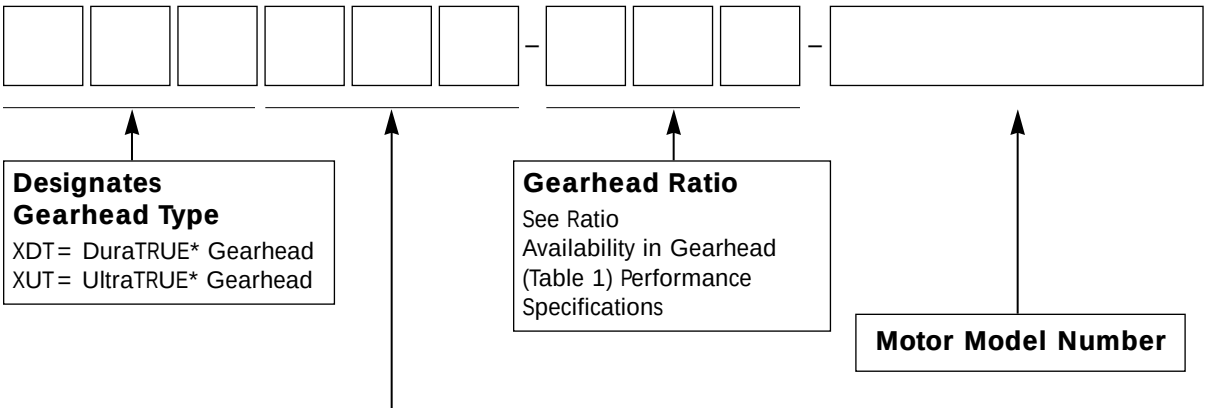
Street/Shipping Address: _____

City/State: _____ Zip Code:_____

Telephone:_____ Fax No: _____

GEARHEAD DETAILS

No. of Gearheads_____



Gearhead Size	
DuraTRUE Gearheads	**UltraTRUE Gearheads UltraTRUE**
60 = Size 60 115 = Size 115 90 = Size 90 142 = Size 142	006 = Size 6 010 = Size 10 075 = Size 7.5 014 = Size 14

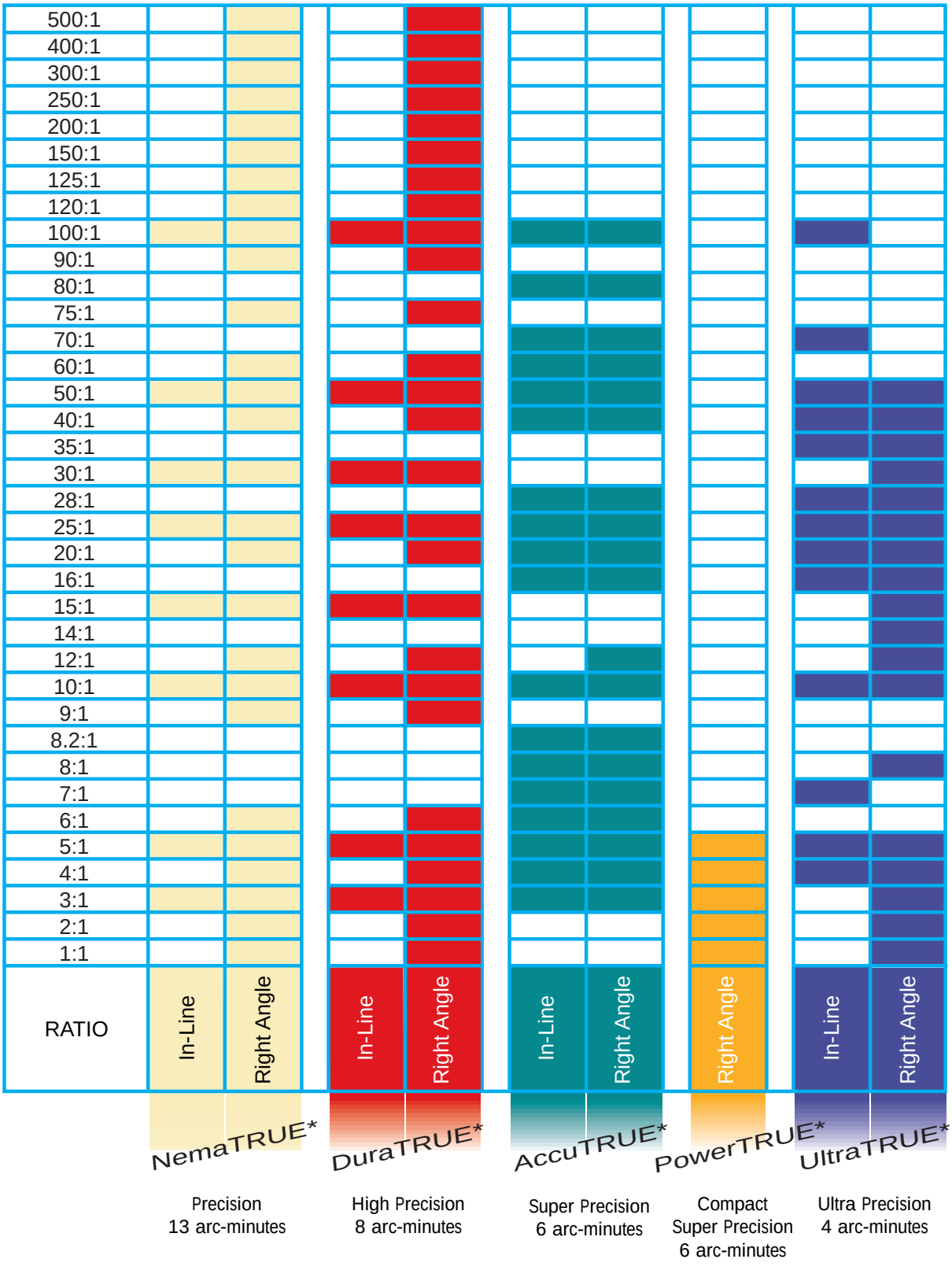
Motor Manufacturer: _____ Motor Part No:_____

THOMSON MICRON
Leading in Motion Control Technology

In addition to Gearhead Express*, Thomson offers the largest selection of True Planetary* gearheads, with more precision classes than any other manufacturer in the world.

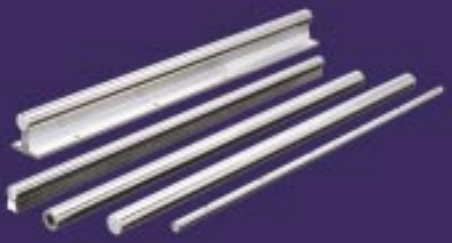
Thomson Micron Planetary Gearheads Capability Matrix

Use this easy capability matrix to fit your application requirements, or call with your custom requirements.



SAGINAW* AND IBL* BALL SCREWS
Over 90% efficient in converting rotary motion to linear actuation
• Precision accuracies to .0002 in/ft
• Five to ten day delivery of standard ball screws

SUPER SMART BALL BUSHING* BEARINGS
6X the load capacity of Ball Bushing* bearings or
• 216X the travel life of Ball Bushing* bearings
• Available in all metric and inch sizes
• Extend 60 Case* LinearRace* shafting life up to 5 times



60 CASE
The specified inner race for Ball Bushing* bearings
• Available in 3/16"-4" and 5-8mm diameters
• Machined to customer specifications
• Quick Delivery
• Available with a variety of plating options & stainless steel

PERFORMANCE PAK* ACTUATORS
• Electromechanical ball screws provide up to 90% efficiency
• Combine low energy, high efficiency and precise positioning
• Excellent replacement for air and hydraulic cylinders
• Custom engineered to meet your stringent requirements even in harsh environments.

MOLDED PRODUCTS
• Ideally suited for linear, rotary and oscillating applications
• Designed for use in contaminated, washdown or submerged environments
• Load capacities up to 12,500 lbf

SYSTEMS
• Motor actuated ball screw and belt driven slides, stages and systems
• Pre-engineered, pre-assembled, ready-to-ship and ready-to-install systems
• Save design and installation time improves accuracy and lowers overall equipment costs

ACCUGLIDE* T-SERIES
• 10X more forgiving to bed imperfections than conventional linear guides
• Patented design increases travel life by reducing induced loads from installation imperfections

FOR IMMEDIATE ASSISTANCE:

Europe:	☎:	(44) 1271 334 500
	Sales Fax:	(44) 1271 334 502
UK	Free ☎:	0800 9751000
	Free Fax:	0800 9751001
France:	Free ☎:	0800 90 5721
	Free Fax:	0800 91 6315
Germany	Free ☎:	0130 816 553
	Free Fax:	0130 816 552
USA, Canada or Mexico:	Free ☎:	1 (888) 554-8466
	Fax:	1 (516) 467-9814
Elsewhere:	☎:	1 (516) 883-8937
	Fax:	1 (516) 883-7109

Internet: www.thomsonindustries.com
E-mail: micron@thomsonmail.com
Europe E-mail: information@tiblmail.com
Literature: litrequest@thomsonmail.com
LinearFax*: 1 (800) 55-4-THOMSON
or write:
Thomson Micron, LLC
50 Alexander Court
Ronkonkoma, NY 11779

THOMSON MICRON, LLC

Thomson Micron, LLC
50 Alexander Court
Ronkonkoma, NY 11779