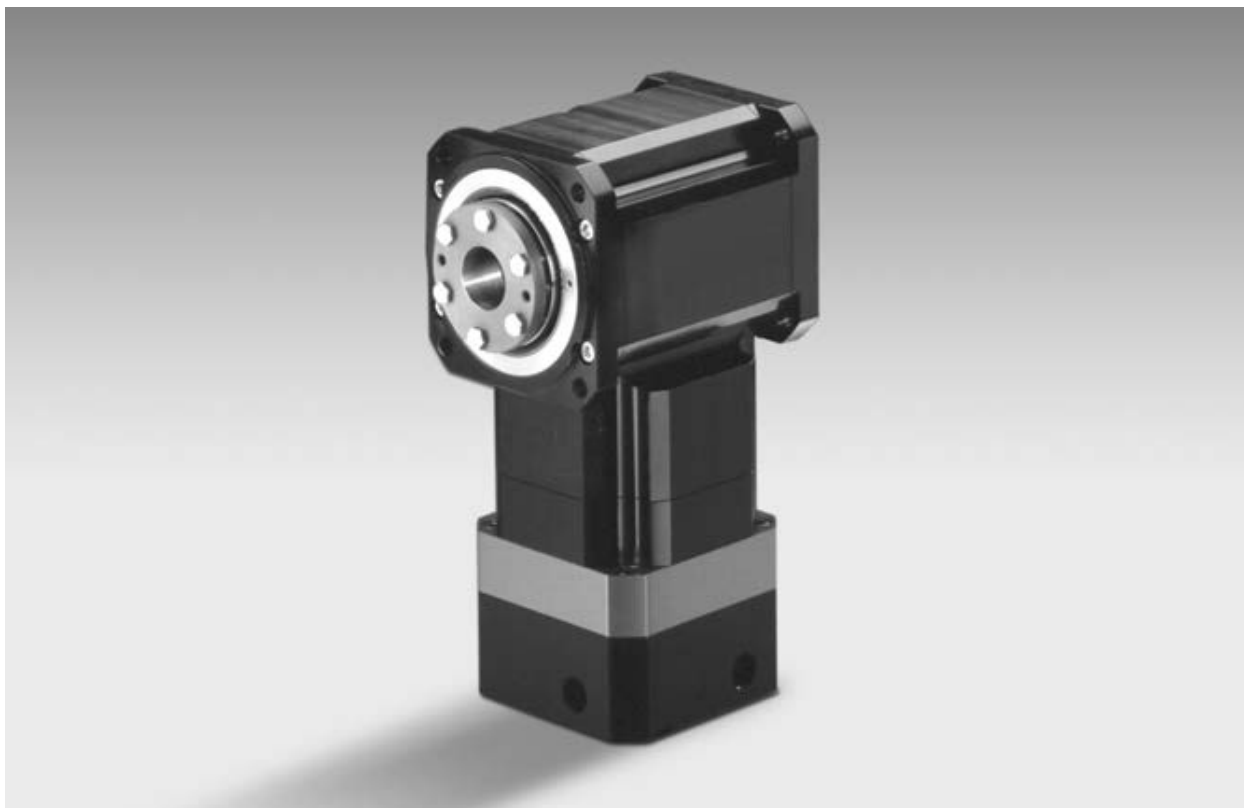


MICRON

DuraTRUE™ 90 Hollow Shaft

Right Angle Gearheads

Ready for Immediate Delivery	
Precision	8 arc-minutes
Frame Sizes	90 mm, 115 mm and 142 mm
Torque Capacity	up to 865 Nm
Ratio Availability	1:1 thru 500:1
Radial load capacity	up to 11150 N
Mounting System	RediMount™

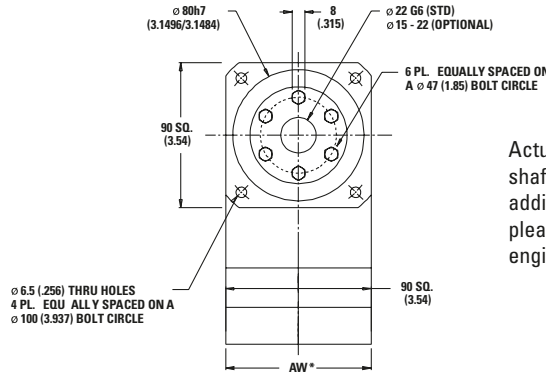
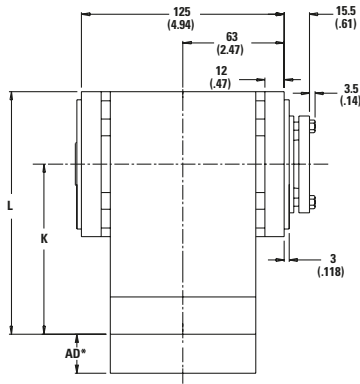


TRUE™ Planetary Gearheads

DuraTRUE 90 Size 90H (Hollow Shaft)

Right Angle Gearheads

Metric



Actual thru bore of output shaft is larger than shown. For additional thru bore information, please contact application engineering.

Ratio ¹	Dimension 'K' mm [in.]	Dimension 'L' mm [in.]	Backlash [arc-min]	Weight kg [lb.]	Efficiency
1:1 to 5:1P	101 [3.99]	146 [5.76]	8 max	4.1 [9]	98%
5:1T to 50:1	124 [4.89]	169 [6.66]	9 max	4.8 [10]	93%
60:1 to 500:1	147 [5.79]	192 [7.56]	9 max	5.5 [12]	88%

All dimensions are: mm (in.)

AW* = Adapter width

AD* = Adapter length

Both will vary depending on motor.

Efficiency is calculated at 100% of the rated torque.

Performance Specifications

Part Number	Ratio ¹	10,000 Hour Life				T peak Nm [in.-lb.]	20,000 Hour Life			J kg-cm ² [in.-lb.-sec ² x10 ⁻⁴]	Torsional Stiffness Nm/arc-min [in.-lb./arc-min]
		T _r (1000 rpm) Nm [in.-lb.]	T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]	T _r (1000 rpm) Nm [in.-lb.]		T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]			
DTR90H-001	1:1	21 [188]	19 [171]	17 [155]	140 [1237]	20 [173]	18 [158]	16 [143]	3,11 [27.5]	4,3 [37.9]	
DTR90H-002	2:1	48 [426]	44 [389]	40 [352]	140 [1237]	44 [394]	41 [359]	37 [325]	1,59 [14.1]	6,5 [57.2]	
DTR90H-003	3:1	32 [281]	29 [256]	26 [232]	140 [1237]	29 [260]	27 [237]	24 [214]	1,37 [12.1]	7,3 [64.6]	
DTR90H-004	4:1	24 [215]	22 [196]	20 [177]	140 [1237]	22 [199]	20 [181]	19 [164]	1,27 [11.2]	7,6 [67.7]	
DTR90H-005P	5:1P	18 [158]	16 [144]	15 [131]	140 [1237]	17 [146]	15 [133]	14 [121]	1,25 [11.0]	7,8 [69.2]	
DTR90H-005T	5:1T	64 [568]	55 [483]	53 [469]	140 [1237]	63 [556]	50 [446]	49 [433]	1,64 [14.5]	5,1 [45.1]	
DTR90H-006	6:1	57 [501]	48 [426]	47 [414]	140 [1237]	55 [490]	44 [394]	43 [382]	1,63 [14.4]	5,1 [45.1]	
DTR90H-009	9:1	37 [331]	32 [281]	31 [273]	140 [1237]	37 [323]	29 [260]	28 [252]	1,37 [12.1]	6,4 [56.9]	
DTR90H-010	10:1	58 [516]	53 [471]	48 [426]	140 [1237]	58 [510]	51 [452]	44 [394]	1,54 [13.7]	5,0 [44.5]	
DTR90H-012	12:1	29 [253]	24 [215]	24 [209]	140 [1237]	28 [247]	22 [199]	22 [193]	1,31 [11.6]	7,1 [62.7]	
DTR90H-015	15:1	38 [340]	35 [311]	32 [281]	140 [1237]	38 [336]	34 [298]	29 [260]	1,28 [11.3]	7,4 [65.8]	
DTR90H-020	20:1	29 [261]	27 [238]	24 [215]	140 [1237]	29 [257]	26 [228]	22 [199]	1,22 [10.8]	7,1 [62.4]	
DTR90H-025	25:1	22 [192]	20 [175]	18 [158]	140 [1237]	21 [189]	19 [168]	17 [146]	1,20 [10.6]	7,4 [65.6]	
DTR90H-030	30:1	39 [348]	38 [333]	36 [318]	140 [1237]	39 [346]	37 [327]	35 [307]	1,25 [11.1]	6,1 [53.8]	
DTR90H-040	40:1	30 [266]	29 [255]	28 [243]	140 [1237]	30 [265]	28 [250]	27 [235]	1,19 [10.6]	6,8 [60.5]	
DTR90H-050	50:1	22 [196]	21 [188]	20 [179]	140 [1237]	22 [195]	21 [184]	20 [173]	1,17 [10.4]	7,3 [64.2]	
DTR90H-060	60:1	60 [535]	60 [527]	59 [520]	140 [1237]	60 [534]	59 [524]	58 [514]	1,63 [14.4]	4,9 [43.5]	
DTR90H-075	75:1	40 [352]	39 [346]	38 [340]	140 [1237]	40 [351]	39 [344]	38 [336]	1,31 [11.6]	6,4 [56.2]	
DTR90H-090	90:1	40 [353]	39 [348]	39 [343]	140 [1237]	40 [352]	39 [346]	38 [339]	1,37 [12.1]	6,3 [55.8]	
DTR90H-100	100:1	61 [536]	60 [532]	60 [527]	140 [1237]	61 [536]	60 [530]	59 [524]	1,55 [13.7]	5,0 [43.9]	
DTR90H-120	120:1	31 [270]	30 [266]	30 [262]	140 [1237]	30 [269]	30 [265]	29 [260]	1,31 [11.6]	7,0 [62.0]	
DTR90H-125	125:1	22 [198]	22 [195]	22 [192]	140 [1237]	22 [198]	22 [194]	21 [189]	1,23 [10.8]	7,4 [65.5]	
DTR90H-150	150:1	40 [354]	40 [351]	39 [348]	140 [1237]	40 [353]	39 [350]	39 [346]	1,29 [11.4]	6,3 [56.1]	
DTR90H-200	200:1	61 [538]	60 [535]	60 [533]	140 [1237]	61 [537]	60 [534]	60 [531]	1,52 [13.5]	4,6 [40.7]	
DTR90H-250	250:1	23 [199]	22 [198]	22 [196]	140 [1237]	22 [199]	22 [197]	22 [195]	1,21 [10.7]	7,4 [65.4]	
DTR90H-300	300:1	40 [355]	40 [353]	40 [352]	140 [1237]	40 [354]	40 [352]	40 [350]	1,26 [11.1]	6,1 [53.7]	
DTR90H-400	400:1	31 [271]	31 [270]	30 [269]	140 [1237]	31 [271]	30 [270]	30 [268]	1,20 [10.6]	6,8 [60.5]	
DTR90H-500	500:1	23 [200]	22 [199]	22 [198]	140 [1237]	23 [200]	22 [198]	22 [197]	1,18 [10.4]	7,3 [64.2]	

Ratio 5P is designed using only PowerTRUE face gearing technology.

Ratio 5T adds a True Planetary gearing stage for increased torque capacity.

¹ Ratios are exact, higher ratios are also available, consult factory.

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

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

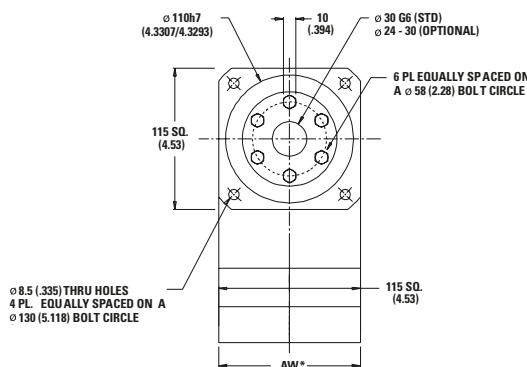
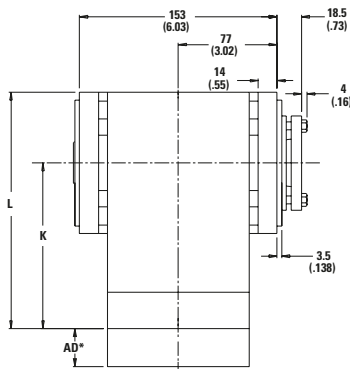
T_{peak} = Allowable momentary peak torque for emergency stop or heavy shock loading.

MICRON

DuraTRUE™ 90 Size 115H (Hollow Shaft)

Right Angle Gearheads

Metric



Actual thru bore of output shaft is larger than shown. For additional thru bore information, please contact application engineering.

Ratio ¹	Dimension 'K' mm [in.]	Dimension 'L' mm [in.]	Backlash [arc-min]	Weight kg [lb.]	Efficiency
1:1 to 5:1P	137 [5.41]	195 [7.67]	8 max	9 [20]	98%
5:1T to 50:1	169 [6.64]	226 [8.90]	9 max	11 [24]	93%
60:1 to 500:1	200 [7.87]	257 [10.13]	9 max	12 [27]	88%

All dimensions are: mm (in.)
 AW* = Adapter width
 AD* = Adapter length
 Both will vary depending on motor.
 Efficiency is calculated at 100% of the rated torque.

Performance Specifications

Part Number	Ratio ¹	10,000 Hour Life			T _{peak} Nm [in.-lb.]	20,000 Hour Life			J kg-cm ² [in.-lb.-sec ² x10 ⁻⁴]	Torsional Stiffness Nm/arc-min [in.-lb./arc-min]
		T _r (1000 rpm) Nm [in.-lb.]	T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]		T _r (1000 rpm) Nm [in.-lb.]	T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]		
DTR115H-001	1:1	63 [554]	57 [506]	52 [457]	283 [2505]	58 [512]	53 [467]	48 [422]	5,28 [46.7]	7,6 [67.6]
DTR115H-002	2:1	112 [989]	102 [903]	92 [816]	283 [2505]	103 [913]	94 [834]	85 [754]	2,71 [23.9]	12,5 [111]
DTR115H-003	3:1	87 [768]	79 [701]	72 [634]	283 [2505]	80 [709]	73 [647]	66 [585]	2,33 [20.6]	14,2 [126]
DTR115H-004	4:1	58 [511]	53 [467]	48 [422]	283 [2505]	53 [472]	49 [431]	44 [390]	2,16 [19.1]	14,9 [132]
DTR115H-005P	5:1P	43 [384]	40 [350]	36 [316]	283 [2505]	40 [354]	37 [323]	33 [292]	2,12 [18.8]	15,3 [135]
DTR115H-005T	5:1T	170 [1505]	126 [1117]	108 [958]	283 [2505]	143 [1262]	102 [907]	88 [778]	2,78 [24.6]	15,3 [135]
DTR115H-006	6:1	131 [1163]	112 [989]	109 [960]	283 [2505]	129 [1138]	103 [913]	100 [887]	2,77 [24.5]	10,2 [90.7]
DTR115H-009	9:1	102 [903]	87 [768]	84 [746]	283 [2505]	100 [884]	80 [709]	78 [689]	2,32 [20.5]	12,8 [113]
DTR115H-010	10:1	135 [1198]	124 [1094]	112 [989]	283 [2505]	134 [1183]	118 [1048]	103 [913]	2,63 [23.2]	10,2 [90.3]
DTR115H-012	12:1	68 [601]	58 [511]	56 [496]	283 [2505]	66 [588]	53 [472]	52 [458]	2,22 [19.6]	14,0 [124]
DTR115H-015	15:1	105 [930]	96 [849]	87 [768]	283 [2505]	104 [919]	92 [814]	80 [709]	2,18 [19.3]	14,6 [130]
DTR115H-020	20:1	70 [619]	64 [565]	58 [511]	283 [2505]	69 [612]	61 [542]	53 [472]	2,08 [18.4]	14,0 [124]
DTR115H-025	25:1	52 [465]	48 [424]	43 [384]	283 [2505]	52 [459]	46 [406]	40 [354]	2,04 [18.0]	14,6 [129]
DTR115H-030	30:1	107 [951]	103 [910]	98 [869]	283 [2505]	107 [945]	101 [892]	95 [840]	2,13 [18.9]	12,5 [111]
DTR115H-040	40:1	72 [633]	68 [606]	65 [579]	283 [2505]	71 [629]	67 [594]	63 [559]	2,03 [18.0]	13,8 [122]
DTR115H-050	50:1	54 [475]	51 [454]	49 [434]	283 [2505]	53 [472]	50 [446]	47 [419]	1,99 [17.6]	14,5 [128]
DTR115H-060	60:1	140 [1242]	138 [1224]	136 [1207]	283 [2505]	140 [1239]	137 [1217]	135 [1194]	2,78 [24.6]	10,0 [88.5]
DTR115H-075	75:1	109 [963]	107 [947]	105 [930]	283 [2505]	109 [960]	106 [939]	104 [919]	2,22 [19.7]	12,7 [112]
DTR115H-090	90:1	109 [964]	107 [951]	106 [937]	283 [2505]	109 [962]	107 [945]	105 [927]	2,33 [20.6]	12,6 [112]
DTR115H-100	100:1	141 [1245]	140 [1235]	138 [1224]	283 [2505]	141 [1244]	137 [1230]	137 [1217]	2,64 [23.3]	10,1 [89.5]
DTR115H-120	120:1	73 [642]	72 [633]	70 [624]	283 [2505]	72 [641]	70 [629]	70 [617]	2,23 [19.7]	13,9 [123]
DTR115H-125	125:1	54 [481]	53 [473]	52 [465]	283 [2505]	54 [480]	52 [469]	52 [459]	2,08 [18.4]	14,6 [129]
DTR115H-150	150:1	109 [967]	108 [959]	107 [951]	283 [2505]	109 [966]	107 [955]	107 [945]	2,19 [19.4]	12,7 [112]
DTR115H-200	200:1	141 [1248]	140 [1243]	140 [1237]	283 [2505]	141 [1247]	139 [1240]	138 [1234]	2,59 [22.9]	9,8 [87.1]
DTR115H-250	250:1	55 [483]	54 [479]	54 [475]	283 [2505]	54 [482]	53 [477]	53 [472]	2,05 [18.1]	14,6 [129]
DTR115H-300	300:1	109 [969]	109 [965]	109 [961]	283 [2505]	109 [968]	108 [963]	108 [958]	2,14 [18.9]	12,5 [111]
DTR115H-400	400:1	73 [645]	73 [642]	72 [640]	283 [2505]	73 [645]	72 [641]	72 [638]	2,04 [18.1]	13,8 [122]
DTR115H-500	500:1	55 [484]	54 [482]	54 [480]	283 [2505]	55 [483]	54 [481]	54 [478]	2,00 [17.7]	14,5 [128]

Ratio 5P is designed using only PowerTRUE face gearing technology.
 Ratio 5T adds a True Planetary gearing stage for increased torque capacity.
¹ Ratios are exact, higher ratios are also available, consult factory.

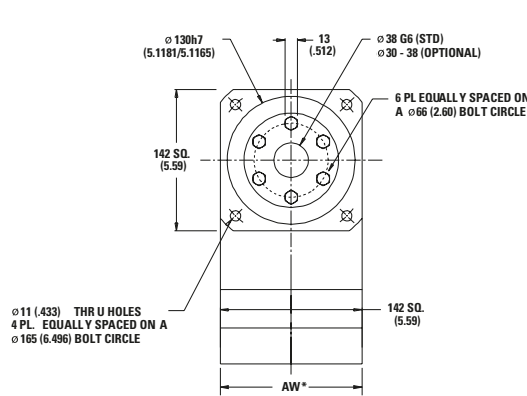
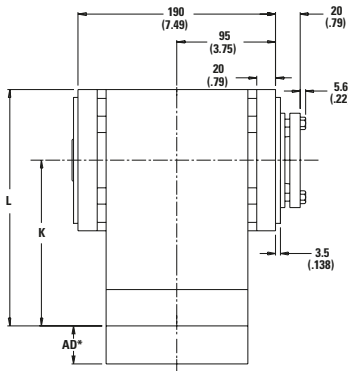
T_r = Rated output torque at rated speed for specific hours of life.
 J = Mass moment of inertia reflected to the input shaft (including pinion assembly)
 T_{peak} = Allowable momentary peak torque for emergency stop or heavy shock loading.

TRUE™ Planetary Gearheads

DuraTRUE 90 Size 142H (Hollow Shaft)

Right Angle Gearheads

Metric



Actual thru bore of output shaft is larger than shown. For additional thru bore information, please contact application engineering.

Ratio ¹	Dimension 'K' mm [in.]	Dimension 'L' mm [in.]	Backlash [arc-min]	Weight kg [lb.]	Efficiency
1:1 to 5:1P	163 [6.43]	234 [9.22]	8 max	19 [43]	98%
5:1T to 50:1	233 [9.17]	304 [11.96]	9 max	24 [53]	93%
60:1 to 500:1	262 [10.3]	332 [13.10]	9 max	28 [62]	88%

All dimensions are: mm (in.)

AW* = Adapter width

AD* = Adapter length

Both will vary depending on motor.

Efficiency is calculated at 100% of the rated torque.

Performance Specifications

Part Number	Ratio ¹	10,000 Hour Life			T peak Nm [in.-lb.]	20,000 Hour Life			J kg-cm ² [in.-lb.-sec ² x10 ⁻⁴]	Torsional Stiffness Nm/arc-min [in.-lb./arc-min]
		T _r (1000 rpm) Nm [in.-lb.]	T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]		T _r (1000 rpm) Nm [in.-lb.]	T _r (3000 rpm) Nm [in.-lb.]	T _r (5000 rpm) Nm [in.-lb.]		
DTR142H-001	1:1	135 [1194]	123 [1090]	111 [985]	865 [7659]	125 [1103]	114 [1006]	103 [910]	26.3 [232]	23,7 [210]
DTR142H-002	2:1	279 [2474]	255 [2257]	231 [2041]	865 [7659]	258 [2284]	236 [2084]	213 [1885]	13.5 [119]	38,9 [344]
DTR142H-003	3:1	188 [1663]	171 [1518]	155 [1372]	865 [7659]	174 [1536]	158 [1401]	143 [1267]	11.6 [102]	44,1 [390]
DTR142H-004	4:1	135 [1194]	123 [1090]	111 [985]	865 [7659]	125 [1103]	114 [1006]	103 [910]	10.8 [95.1]	46,3 [410]
DTR142H-005P	5:1P	101 [896]	92 [818]	84 [739]	865 [7659]	93 [827]	85 [755]	77 [683]	10.6 [93.3]	47,4 [419]
DTR142H-005T	5:1T	340 [3009]	289 [2559]	281 [2484]	865 [7659]	333 [2944]	267 [2363]	259 [2294]	13.8 [122]	47,4 [419]
DTR142H-006	6:1	329 [2909]	279 [2474]	271 [2402]	865 [7659]	322 [2846]	258 [2284]	251 [2218]	13.8 [122]	31,8 [281]
DTR142H-009	9:1	221 [1956]	188 [1663]	182 [1614]	865 [7659]	216 [1913]	174 [1536]	168 [1491]	11.6 [102]	39,6 [351]
DTR142H-010	10:1	339 [2996]	309 [2735]	279 [2474]	865 [7659]	334 [2958]	296 [2621]	258 [2284]	13.1 [116]	31,6 [280]
DTR142H-012	12:1	159 [1404]	135 [1194]	131 [1159]	865 [7659]	155 [1374]	125 [1103]	121 [1071]	11.1 [97.7]	43,4 [384]
DTR142H-015	15:1	228 [2014]	208 [1839]	188 [1663]	865 [7659]	225 [1989]	199 [1762]	174 [1536]	10.9 [95.9]	45,4 [402]
DTR142H-020	20:1	163 [1446]	149 [1320]	135 [1194]	865 [7659]	161 [1428]	143 [1265]	125 [1103]	10.4 [91.5]	43,3 [383]
DTR142H-025	25:1	123 [1085]	112 [991]	101 [896]	865 [7659]	121 [1071]	107 [949]	93 [827]	10.2 [89.8]	45,3 [401]
DTR142H-030	30:1	233 [2058]	223 [1970]	213 [1882]	865 [7659]	231 [2045]	218 [1932]	205 [1819]	10.6 [93.8]	38,8 [343]
DTR142H-040	40:1	167 [1478]	160 [1415]	153 [1352]	865 [7659]	166 [1469]	157 [1387]	148 [1306]	10.1 [89.4]	42,8 [379]
DTR142H-050	50:1	125 [1109]	120 [1061]	115 [1014]	865 [7659]	125 [1102]	118 [1041]	111 [980]	9.91 [87.6]	45,0 [398]
DTR142H-060	60:1	351 [3105]	346 [3061]	341 [3018]	865 [7659]	350 [3099]	344 [3042]	337 [2986]	13.8 [122]	31,0 [274]
DTR142H-075	75:1	236 [2084]	232 [2049]	228 [2014]	865 [7659]	235 [2079]	230 [2034]	225 [1989]	11.1 [97.9]	39,4 [348]
DTR142H-090	90:1	236 [2087]	233 [2058]	229 [2029]	865 [7659]	235 [2083]	231 [2045]	227 [2008]	11.6 [103]	39,1 [346]
DTR142H-100	100:1	352 [3114]	349 [3088]	346 [3061]	865 [7659]	351 [3110]	348 [3076]	344 [3042]	13.1 [116]	31,3 [278]
DTR142H-120	120:1	169 [1499]	167 [1478]	165 [1457]	865 [7659]	169 [1496]	166 [1469]	163 [1442]	11.1 [98.2]	43,0 [380]
DTR142H-125	125:1	127 [1123]	125 [1104]	123 [1085]	865 [7659]	127 [1120]	124 [1096]	121 [1071]	10.4 [91.7]	45,3 [401]
DTR142H-150	150:1	237 [2093]	235 [2076]	233 [2058]	865 [7659]	236 [2091]	234 [2068]	231 [2045]	10.9 [96.4]	39,3 [348]
DTR142H-200	200:1	353 [3120]	351 [3107]	350 [3094]	865 [7659]	352 [3118]	350 [3101]	349 [3085]	12.9 [114]	30,5 [270]
DTR142H-250	250:1	127 [1128]	126 [1118]	125 [1109]	865 [7659]	127 [1126]	126 [1114]	125 [1102]	10.2 [90.3]	45,2 [400]
DTR142H-300	300:1	237 [2098]	236 [2089]	235 [2080]	865 [7659]	237 [2096]	236 [2085]	234 [2074]	10.7 [94.3]	38,8 [343]
DTR142H-400	400:1	170 [1506]	169 [1500]	169 [1494]	865 [7659]	170 [1505]	169 [1497]	168 [1489]	10.2 [89.8]	42,8 [379]
DTR142H-500	500:1	128 [1130]	127 [1125]	127 [1121]	865 [7659]	128 [1129]	127 [1123]	126 [1117]	9.96 [88.1]	45,0 [398]

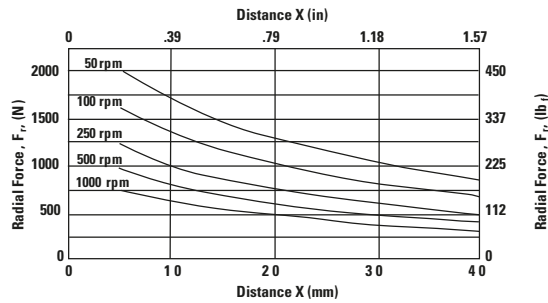
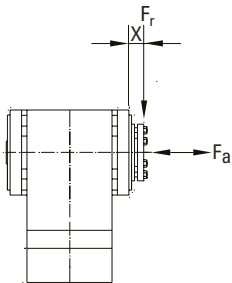
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Ratio 5T adds a True Planetary gearing stage for increased torque capacity.
¹ Ratios are exact, higher ratios are also available, consult factory.

T_r = Rated output torque at rated speed for specific hours of life.
J = Mass moment of inertia reflected to the input shaft (including pinion assembly)
T_{peak} = Allowable momentary peak torque for emergency stop or heavy shock loading.

MICRON

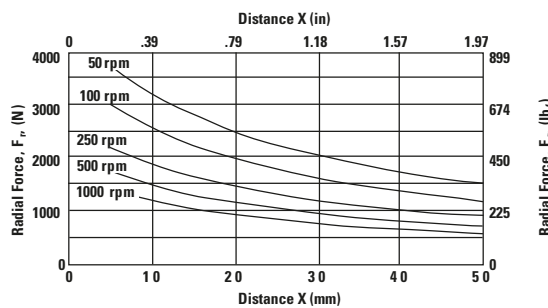
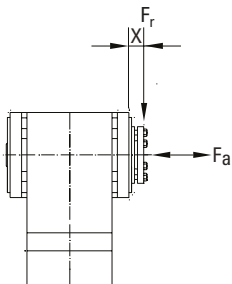
Radial and Axial Load Ratings

DTR90H



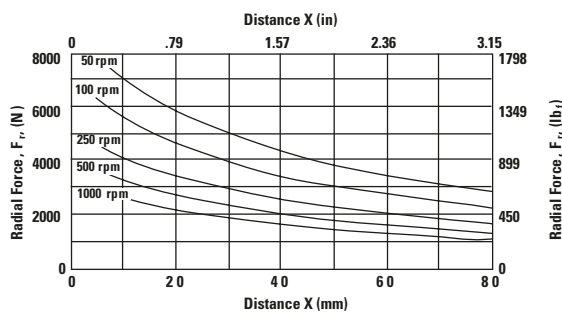
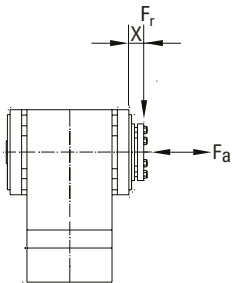
Speed rpm	Axial Load, F_a N [lbf]
50	3157 [710]
100	2506 [563]
250	1846 [415]
500	1465 [329]
1000	1163 [261]

DTR115H



Speed rpm	Axial Load, F_a N [lbf]
50	5742 [1291]
100	4558 [1025]
250	3358 [755]
500	2665 [599]
1000	2115 [476]

DTR142H



Speed rpm	Axial Load, F_a N [lbf]
50	11925 [2681]
100	9465 [2128]
250	6974 [1568]
500	5535 [1244]
1000	4393 [988]

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 9.

TRUE™ Planetary Gearheads

