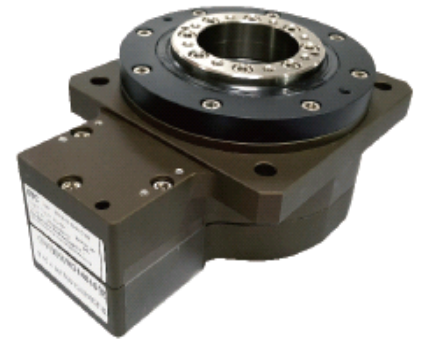
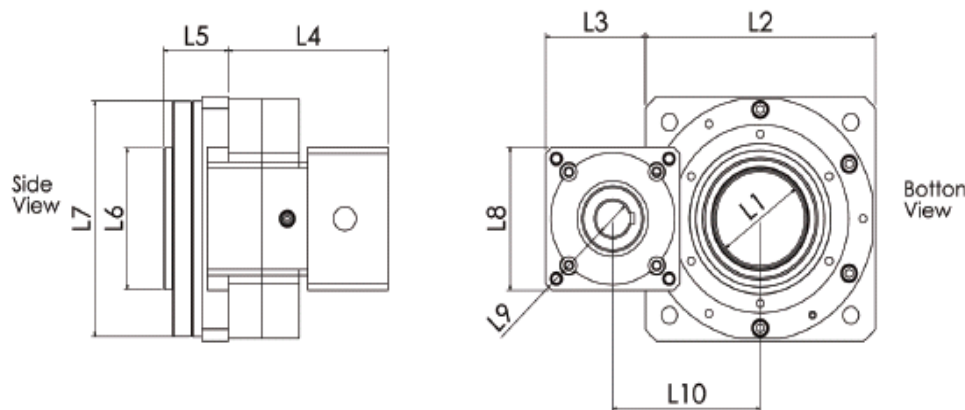


## NT series -- hollow bore, rotating flange

- A – Max Backlash of 30 arc-seconds.
- B – Large hollow rotary flange – hollow bore for wiring or shafts.
- C – Hollow bore driven by your servo motor via large helical ring gear integrated in a rotating flange. Provides smooth, accurate and fast positioning & indexing.
- D – Flange rotates on precision high capacity “crossed roller” type bearing for positional accuracy, rigidity and heavy axial loads.
- E – Larger reduction ratios achievable by inputting with planetary or right angle gearhead.



Top view shows precision threaded attachment holes in round rotating output



Item	Description (all dimensions in mm)	NT85	NT130	NT230
L1	Diameter of NT gearbox rotating hollow bore	35	50	105
L2	Square of flange for bolting NT gearbox to machine frame – has 4 mounting holes	85	130	235
L3	End of motor mounting housing	42.54	63.29	97.5
L4	Motor mounting housing length from bottom of square flange	55	89	129
L5	Height of rotating output flange from bottom of square flange	23	36.6	60
L6	Diameter of NT rotating flange. Has precision threaded holes in face for fastening of customer features.	56	75	150
L7	Diameter of ring gear housing –does not rotate	80	125	230
L8	Square flange for attachment of power input to NT – a servomotor –alone or with gearhead.	60	76	130
L9	Typical diameter of motor shaft associated with L8	9	11-19	19-24
L10	Center distance - Hollow bore to power input shaft	55.04	83.29	150

The standard dimension diagram contemplates a “stand-alone” servo motor as the power input device. If In-line or right-angle gear ratios are required, we can provide input flanges for our Type GNP or WS gearboxes.

**How to Order:** State NT model desired, and planned input motor or gearmotor. Supply drawing of input device proposed.

## Some NT input alternatives:



Type NT with servo motor input. Could also be a servo motor with an In-Line planetary gear box.



Type NT with input from combined Right-Angle and In-Line planetary gearboxes.



Type NT with input from R-A servo gearbox and a second gearbox arranged to rotate a ball-screw or shaft through the NT hollow bore

Performances		NT85	NT130	NT230
Nominal Output Torque	Lb-in/ Nm	13.0 / 1.47	155 / 17.5	321 / 36.2
Max Acceleration Torque	Lb-in/ Nm	3 times Nominal Output Torque		
Emergency Stop Torque (1)	Lb-in/ Nm	3.4 times Nominal Output Torque		
Permissible Input Speed	rpm	3000	3000	600 (2)
NT Gear ratio (3)	i	30	10	10
Standard Max Backlash	Arc-sec	30	30	30
Max Tilting moment-at flange face	Lb-in/ Nm	88 / 10	440 / 50	880 / 100
Max radial load ( perpendicular to axis)	Lbf/ N	110 / 490	440 / 1961	1840 / 8188
Max. axial force - along rotational axis	Lbf/ N	55 / 245	220 / 980	920 / 4094
Rated life (4)	H	> 10,000		
Operating Temperature Range	°C	-10°C to +40°C ambient -- 90°C max operating case temperature		
Lubrication		Lubricated for Life ( synthetic grease)		
Protection class		IP54		
Gearhead Inertia	Kg- cm <sup>2</sup>	0.02	0.2	2.3
Efficiency at full load	%	80%		
Weight	Kg	1.1	3.8~4.1	13.7
No-load running torque	Lb-in / Nm	0.005 / 0.05	0.05 / 0.5	0.17 / 1.7

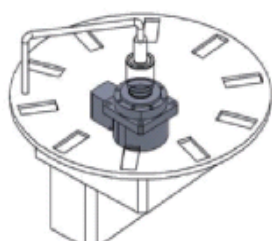
(1) For 1000 times max during life of gearhead

(2) Output limit speed at 60 rpm

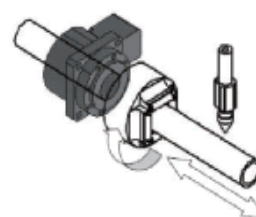
(3) Larger reduction ratios possible by inputting with an In-line or right angle gearhead.

(4) At permissible input speed and Continuous Output Torque

## Some NT Applications:



Index Table with wiring



CNC Laser cutting machine