

# STR SERIES Hollow Rotary Index Tables

## STR 250E 1-Stage and 2-Stage Specifications with EVB 180

Frame Size	250E									
Stage			1-Stage	2-Stage						
Ratio	Units	Notes	20	60	80	100	120	140	160	180
Nominal Torque	[Nm]	*1	4006	4006	4006	4006	4006	4006	4006	4006
Acceleration Torque	[Nm]	--	6072	6072	6072	6072	6072	6072	6072	6072
No Load Torque	[Nm]	*1	14.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Nominal Input Speed	[rpm]	*2	400	1500	1500	1500	1500	1500	1500	1500
Maximum Input Speed	[rpm]	*2	800	3000	3000	3000	3000	3000	3000	3000
Reflected Inertia (Single)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	430.041	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	94.785	78.795	72.965	69.815	67.505	66.345	65.675
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	129.675	113.675	107.875	104.675	102.375	101.175	100.535
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	215.275	199.275	193.475	190.275	187.975	186.775	186.175
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 1.5	≤ 1.5						
Angular Repeatability Accuracy	[arc-min]	--	± 0.15	± 0.15						
Surface Runout	[µm (max)]	--	20	20	20	20	20	20	20	20
Weight	[kg]	--	383	432	432	432	432	432	432	432
Maximum Axial Load	[N]	--	38051	38051	38051	38051	38051	38051	38051	38051
Maximum Radial Load	[N]	--	11165	11165	11165	11165	11165	11165	11165	11165
Maximum Tilting Moment Load	[Nm]	--	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6
Efficiency	[%]	--	80	72	72	72	72	72	72	72
Protection Class	--	*4	IP54 (IP65)							

\*1) At nominal input speed

\*2) Speeds are at the actuator input. Limits when used with additional gearbox are higher

\*3) At input shaft

\*4) IP65 (wash-down) is available as an option. Contact Nidec Drive Technology for more details and our food grade options

## STR 250E 2-Stage and 3-Stage Specifications with EVB 180

Frame Size	250E									
Stage			2-Stage	3-Stage						
Ratio	Units	Notes	200	300	320	400	500	560	600	700
Nominal Torque	[Nm]	*1	4006	4006	4006	4006	4006	4006	4006	4006
Acceleration Torque	[Nm]	--	6072	6072	6072	6072	6072	6072	6072	6072
No Load Torque	[Nm]	*1	11.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Nominal Input Speed	[rpm]	*2	1500	1500	1500	1500	1500	1500	1500	1500
Maximum Input Speed	[rpm]	*2	3000	3000	3000	3000	3000	3000	3000	3000
Reflected Inertia (Single)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	12.565	13.165	12.225	12.055	12.665	11.405	11.905
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	65.355	21.355	21.955	21.015	20.845	21.455	20.185	20.695
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	100.215	26.175	26.775	25.835	25.665	26.275	25.015	25.515
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	185.775	--	--	--	--	--	--	--
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 1.5	≤ 1.5						
Angular Repeatability Accuracy	[arc-min]	--	± 0.15	± 0.15						
Surface Runout	[µm (max)]	--	20	20	20	20	20	20	20	20
Weight	[kg]	--	432	419	419	419	419	419	419	419
Maximum Axial Load	[N]	--	38051	38051	38051	38051	38051	38051	38051	38051
Maximum Radial Load	[N]	--	11165	11165	11165	11165	11165	11165	11165	11165
Maximum Tilting Moment Load	[Nm]	--	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6
Efficiency	[%]	--	72	68	68	68	68	68	68	68
Protection Class	--	*4	IP54 (IP65)							

\*1) At nominal input speed

\*2) Speeds are at the actuator input. Limits when used with additional gearbox are higher

\*3) At input shaft

\*4) IP65 (wash-down) is available as an option. Contact Nidec Drive Technology for more details and our food grade options

## STR 250E 3-Stage Specifications with EVB 180

Frame Size	250E									
Stage	3-Stage									
Ratio	Units	Notes	800	900	1000	1200	1400	1600	1800	2000
Nominal Torque	[Nm]	*1	4006	4006	4006	4006	4006	4006	4006	4006
Acceleration Torque	[Nm]	--	6072	6072	6072	6072	6072	6072	6072	6072
No Load Torque	[Nm]	*1	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Nominal Input Speed	[rpm]	*2	1500	1500	1500	1500	1500	1500	1500	1500
Maximum Input Speed	[rpm]	*2	3000	3000	3000	3000	3000	3000	3000	3000
Reflected Inertia (Single)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	11.315	11.835	11.275	11.255	11.235	11.225	11.225	11.215
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	20.105	20.625	20.065	20.035	20.025	20.015	20.005	20.005
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	24.925	25.445	24.885	24.855	24.845	24.835	24.825	24.825
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 1.5							
Angular Repeatability Accuracy	[arc-min]	--	± 0.15							
Surface Runout	[µm (max)]	--	20	20	20	20	20	20	20	20
Weight	[kg]	--	419	419	419	419	419	419	419	419
Maximum Axial Load	[N]	--	38051	38051	38051	38051	38051	38051	38051	38051
Maximum Radial Load	[N]	--	11165	11165	11165	11165	11165	11165	11165	11165
Maximum Tilting Moment Load	[Nm]	--	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6	2478.6
Efficiency	[%]	--	68	68	68	68	68	68	68	68
Protection Class	--	*4	IP54 (IP65)							

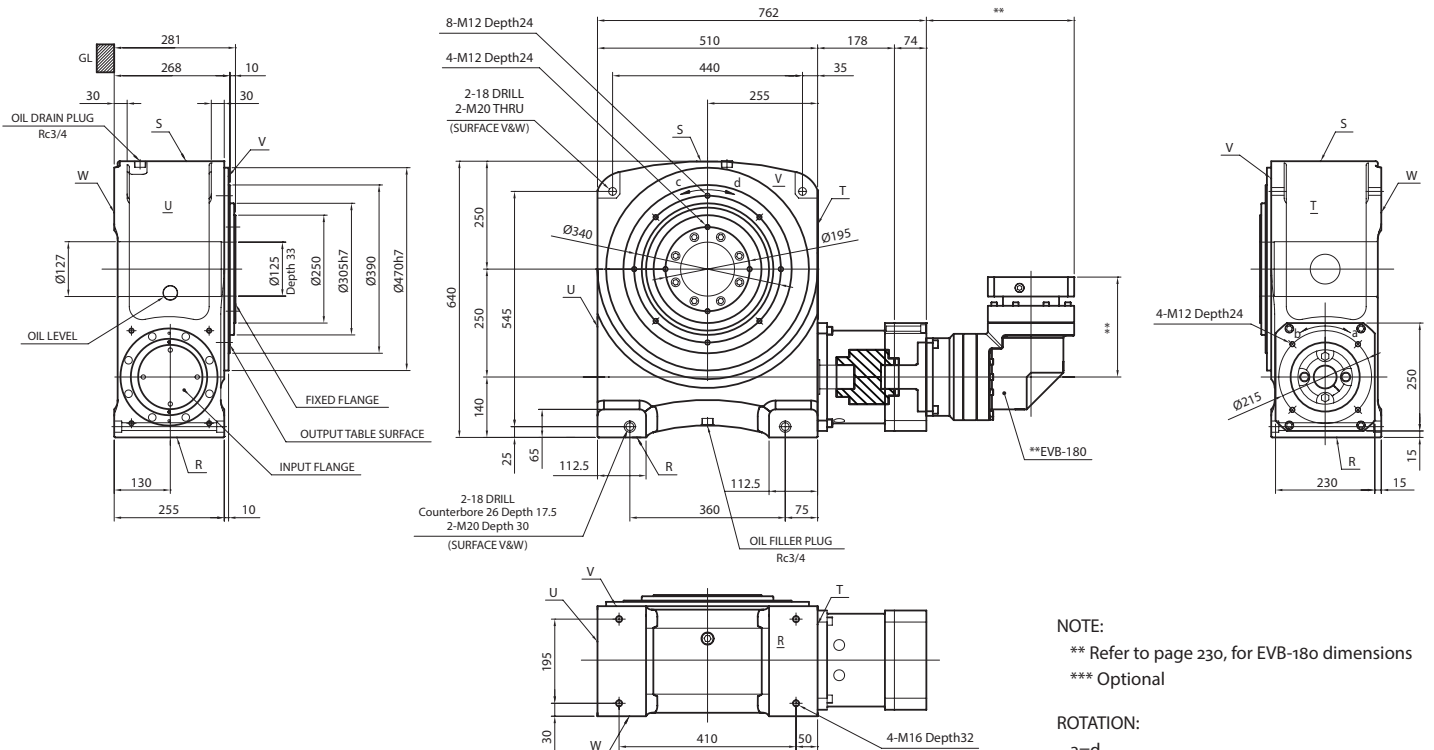
\*1) At nominal input speed

\*2) Speeds are at the actuator input. Limits when used with additional gearbox are higher

\*3) At input shaft

\*4) IP65 (wash-down) is available as an option. Contact Nidec Drive Technology for more details and our food grade options

## STR 250 Dimensions with EVB 180



NOTE:

\*\* Refer to page 230, for EVB-180 dimensions

\*\*\* Optional

ROTATION:

a=d

a=c (upon special request)