

# STR SERIES Hollow Rotary Index Tables

## STR 100E 1-Stage and 2-Stage Specifications with EVB 090

Frame Size	100E									
Stage			1-Stage	2-Stage						
Ratio	Units	Notes	20	60	80	100	120	140	160	180
Nominal Torque	[Nm]	*1	330	330	330	330	330	330	330	330
Acceleration Torque	[Nm]	--	565	565	565	565	565	565	565	565
No Load Torque	[Nm]	*1	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Nominal Input Speed	[rpm]	*2	600	1800	2400	3000	3000	3000	3000	3000
Maximum Input Speed	[rpm]	*2	2000	6000	6000	6000	6000	6000	6000	6000
Reflected Inertia	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	8.687	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	2.132	1.912	1.822	1.782	1.752	1.732	1.722
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	2.462	2.242	2.152	2.112	2.082	2.062	2.052
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	4.592	4.372	4.282	4.232	4.202	4.192	4.182
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 0.7	≤ 0.7						
Angular Repeatability Accuracy	[arc-min]	--	± 0.08	± 0.08						
Surface Runout	[µm (max)]	--	10	10	10	10	10	10	10	10
Weight	[kg]	--	21.5	26.6	26.6	26.6	26.6	26.6	26.6	26.6
Maximum Axial Load	[N]	--	3724	3724	3724	3724	3724	3724	3724	3724
Maximum Radial Load	[N]	--	3109	3109	3109	3109	3109	3109	3109	3109
Maximum Tilting Moment Load	[Nm]	--	284	284	284	284	284	284	284	284
Efficiency	[%]	--	82	74	74	74	74	74	74	74
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-SHIMPO for more details and our food grade options

## STR 100E 2-Stage and 3-Stage Specifications with EVB 090

Frame Size	100E									
Stage			2-Stage	3-Stage						
Ratio	Units	Notes	200	300	320	400	500	560	600	700
Nominal Torque	[Nm]	*1	330	330	330	330	330	330	330	330
Acceleration Torque	[Nm]	--	565	565	565	565	565	565	565	565
No Load Torque	[Nm]	*1	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Nominal Input Speed	[rpm]	*2	3000	3000	3000	3000	3000	3000	3000	3000
Maximum Input Speed	[rpm]	*2	6000	6000	6000	6000	6000	6000	6000	6000
Reflected Inertia	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	0.362	0.402	0.352	0.342	0.392	0.272	0.342
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	1.712	0.432	0.482	0.422	0.422	0.472	0.352	0.422
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	2.042	0.622	0.672	0.612	0.612	0.662	0.532	0.612
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	4.172	--	--	--	--	--	--	--
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 0.7	≤ 0.7						
Angular Repeatability Accuracy	[arc-min]	--	± 0.08	± 0.08						
Surface Runout	[µm (max)]	--	10	10	10	10	10	10	10	10
Weight	[kg]	--	26.6	25.9	25.9	25.9	25.9	25.9	25.9	25.9
Maximum Axial Load	[N]	--	3724	3724	3724	3724	3724	3724	3724	3724
Maximum Radial Load	[N]	--	3109	3109	3109	3109	3109	3109	3109	3109
Maximum Tilting Moment Load	[Nm]	--	284	284	284	284	284	284	284	284
Efficiency	[%]	--	74	70	70	70	70	70	70	70
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

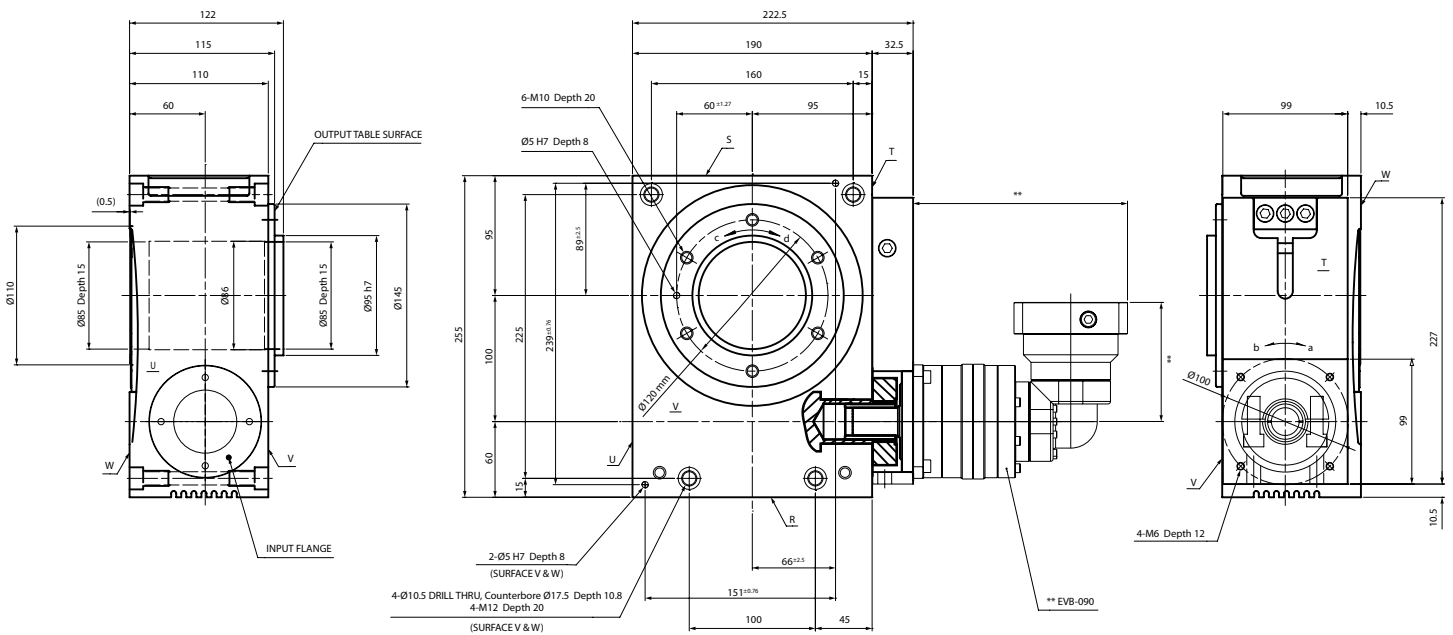
\*4) IP65 (wash-down) is available as an option. Contact NIDEC-SHIMPO for more details and our food grade options

## STR 100E 3-Stage Specifications with EVB 090

Frame Size	100E									
Stage	3-Stage									
Ratio	Units	Notes	800	900	1000	1200	1400	1600	1800	2000
Nominal Torque	[Nm]	*1	330	330	330	330	330	330	330	330
Acceleration Torque	[Nm]	--	565	565	565	565	565	565	565	565
No Load Torque	[Nm]	*1	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Nominal Input Speed	[rpm]	*2	3000	3000	3000	3000	3000	3000	3000	3000
Maximum Input Speed	[rpm]	*2	6000	6000	6000	6000	6000	6000	6000	6000
Reflected Inertia	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	0.272	0.342	0.272	0.272	0.272	0.272	0.272	0.272
Reflected Inertia (≤Ø 14)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	0.342	0.412	0.342	0.342	0.342	0.342	0.342	0.342
Reflected Inertia (≤Ø 19)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	0.532	0.602	0.532	0.532	0.532	0.532	0.532	0.532
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Backlash	[arc-min]	--	0	0	0	0	0	0	0	0
Angular Transmission Accuracy	[arc-min]	--	≤ 0.7							
Angular Repeatability Accuracy	[arc-min]	--	± 0.08							
Surface Runout	[µm (max)]	--	10	10	10	10	10	10	10	10
Weight	[kg]	--	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
Maximum Axial Load	[N]	--	3724	3724	3724	3724	3724	3724	3724	3724
Maximum Radial Load	[N]	--	3109	3109	3109	3109	3109	3109	3109	3109
Maximum Tilting Moment Load	[Nm]	--	284	284	284	284	284	284	284	284
Efficiency	[%]	--	70	70	70	70	70	70	70	70
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-SHIMPO for more details and our food grade options

## STR 100 Dimensions with EVB 090



NOTE:  
 \*\* Refer to page 222, for EVB-090 dimensions  
 \*\*\* Optional

ROTATION:  
 a=d  
 a=c (upon special request)