

# STR SERIES Hollow Rotary Index Tables

## STR 250V 1-Stage and 2-Stage Specifications with VRB 180

Frame Size	250V									
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	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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	430.0	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	45.08	29.08	23.08	19.08	17.08	16.08	15.08
Reflected Inertia (≤Ø 48)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	67.08	51.08	45.08	42.08	39.08	38.08	37.08
Reflected Inertia (≤Ø 65)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	131.1	111.1	101.1	101.1	100.1	98.08	98.08
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	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	[%]	--	80	76	76	76	76	76	76	76
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 250V 2-Stage and 3-Stage Specifications with VRB 180

Frame Size	250V									
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	2.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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 28)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	--	5.775	6.475	5.475	5.275	5.975	4.275	5.175
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	15.08	13.08	14.08	13.08	13.08	14.08	12.08	13.08
Reflected Inertia (≤Ø 48)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	37.08	35.08	36.08	35.08	35.08	36.08	34.08	35.08
Reflected Inertia (≤Ø 65)	[kg-m <sup>2</sup> x10 <sup>-4</sup> ]	*3	97.08	--	--	--	--	--	--	--
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]	--	419	420	420	420	420	420	420	420
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	[%]	--	76	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-SHIMPO for more details and our food grade options

## STR 250V 3-Stage Specifications with VRB 180

Frame Size	250V									
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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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> ×10 <sup>-4</sup> ]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 28)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	4.275	5.075	4.175	4.175	4.175	4.175	4.175	4.175
Reflected Inertia (≤Ø 38)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	12.08	13.08	12.08	12.08	12.08	12.08	12.08	12.08
Reflected Inertia (≤Ø 48)	[kg-m <sup>2</sup> ×10 <sup>-4</sup> ]	*3	34.08	35.08	34.08	34.08	34.08	34.08	34.08	34.08
Reflected Inertia (≤Ø 65)	[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]	--	≤ 1.5							
Angular Repeatability Accuracy	[arc-min]	--	± 0.15							
Surface Runout	[µm (max)]	--	20	20	20	20	20	20	20	20
Weight	[kg]	--	420	420	420	420	420	420	420	420
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	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-SHIMPO for more details and our food grade options

## STR 250 Dimensions with VRB 180

