

STR SERIES Hollow Rotary Index Tables

STR 125V 1-Stage and 2-Stage Specifications with VRB 090

Frame Size	125V									
Stage			1-Stage	2-Stage						
Ratio	Units	Notes	20	60	80	100	120	140	160	180
Nominal Torque	[Nm]	*1	548	548	548	548	548	548	548	548
Acceleration Torque	[Nm]	--	939	939	939	939	939	939	939	939
No Load Torque	[Nm]	*1	3.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Nominal Input Speed	[rpm]	*2	600	1800	2400	3000	3000	3000	3000	3000
Maximum Input Speed	[rpm]	*2	1600	4800	6000	6000	6000	6000	6000	6000
Reflected Inertia (Single)	[kg-m ² ×10 ⁻⁴]	*3	14.85	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m ² ×10 ⁻⁴]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 14)	[kg-m ² ×10 ⁻⁴]	*3	--	0.757	0.527	0.437	0.397	0.357	0.347	0.327
Reflected Inertia (≤Ø 19)	[kg-m ² ×10 ⁻⁴]	*3	--	1.237	0.987	0.897	0.857	0.827	0.807	0.797
Reflected Inertia (≤Ø 28)	[kg-m ² ×10 ⁻⁴]	*3	--	3.237	3.037	2.937	2.837	2.837	2.837	2.837
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]	--	36.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Maximum Axial Load	[N]	--	8178	8178	8178	8178	8178	8178	8178	8178
Maximum Radial Load	[N]	--	7452	7452	7452	7452	7452	7452	7452	7452
Maximum Tilting Moment Load	[Nm]	--	764	764	764	764	764	764	764	764
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 Drive Technology for more details and our food grade options

STR 125V 2-Stage and 3-Stage Specifications with VRB 090

Frame Size	125V									
Stage			2-Stage	3-Stage						
Ratio	Units	Notes	200	300	320	400	500	560	600	700
Nominal Torque	[Nm]	*1	548	548	548	548	548	548	548	548
Acceleration Torque	[Nm]	--	939	939	939	939	939	939	939	939
No Load Torque	[Nm]	*1	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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 (Single)	[kg-m ² ×10 ⁻⁴]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m ² ×10 ⁻⁴]	*3	--	0.167	0.187	0.167	0.157	0.177	0.137	0.157
Reflected Inertia (≤Ø 14)	[kg-m ² ×10 ⁻⁴]	*3	0.327	0.317	0.337	0.317	0.317	0.327	0.287	0.307
Reflected Inertia (≤Ø 19)	[kg-m ² ×10 ⁻⁴]	*3	0.787	0.757	0.777	0.757	0.747	0.767	0.737	0.747
Reflected Inertia (≤Ø 28)	[kg-m ² ×10 ⁻⁴]	*3	2.837	2.737	2.837	2.737	2.737	2.737	2.637	2.737
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]	--	40.0	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Maximum Axial Load	[N]	--	8178	8178	8178	8178	8178	8178	8178	8178
Maximum Radial Load	[N]	--	7452	7452	7452	7452	7452	7452	7452	7452
Maximum Tilting Moment Load	[Nm]	--	764	764	764	764	764	764	764	764
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 Drive Technology for more details and our food grade options

STR 125V 3-Stage Specifications with VRB 090

Frame Size	125V									
Stage	3-Stage									
Ratio	Units	Notes	800	900	1000	1200	1400	1600	1800	2000
Nominal Torque	[Nm]	*1	548	548	548	548	548	548	548	548
Acceleration Torque	[Nm]	--	939	939	939	939	939	939	939	939
No Load Torque	[Nm]	*1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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 (Single)	[kg-m ² ×10 ⁻⁴]	*3	--	--	--	--	--	--	--	--
Reflected Inertia (≤Ø 8)	[kg-m ² ×10 ⁻⁴]	*3	0.136	0.157	0.135	0.135	0.134	0.134	0.134	0.134
Reflected Inertia (≤Ø 14)	[kg-m ² ×10 ⁻⁴]	*3	0.287	0.307	0.287	0.287	0.287	0.287	0.287	0.287
Reflected Inertia (≤Ø 19)	[kg-m ² ×10 ⁻⁴]	*3	0.737	0.747	0.727	0.727	0.727	0.727	0.727	0.727
Reflected Inertia (≤Ø 28)	[kg-m ² ×10 ⁻⁴]	*3	2.637	2.737	2.637	2.637	2.637	2.637	2.637	2.637
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]	--	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Maximum Axial Load	[N]	--	8178	8178	8178	8178	8178	8178	8178	8178
Maximum Radial Load	[N]	--	7452	7452	7452	7452	7452	7452	7452	7452
Maximum Tilting Moment Load	[Nm]	--	764	764	764	764	764	764	764	764
Efficiency	[%]	--	72	72	72	72	72	72	72	72
Protection Class	--	*4	IP54 (IP65)							

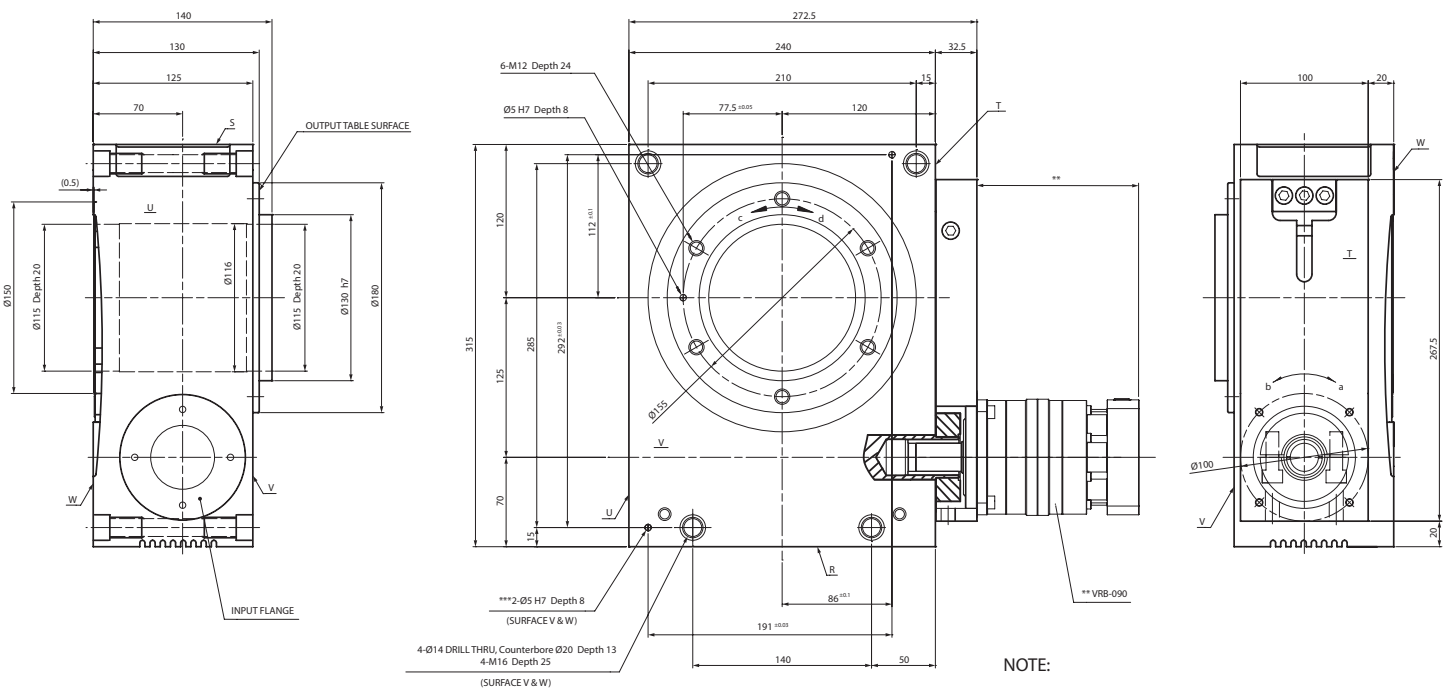
*1) At nominal input speed

*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 Drive Technology for more details and our food grade options

STR 125 Dimensions with VRB 090



NOTE:

** Refer to page 74, for VRB-090 dimensions

*** Optional

ROTATION:

a=d

a=c (upon special request)