

STH SERIES Hollow Rotary Index Tables

STHVL7 2-Stage & 3-Stage Specifications

Frame Size	STHVL7								
Stage	Units	Notes	2-Stage					3-Stage	
Ratio	--	*1	12:1	16:1	20:1	28:1	40:1	60:1	80:1
Nominal Torque	[Nm]	*2	65	85	85	85	68	68	85
Maximum Acceleration Torque	[Nm]	--	126	170	170	170	133	133	170
Emergency Stop Torque	[Nm]	--	240	240	240	240	240	240	240
Nominal Input Speed	[rpm]	--	3000					3000	
Maximum Input Speed	[rpm]	--	6000					6000	
Maximum Axial Load	[N]	--	4000					4000	
Maximum Radial Load	[N]	--	5000					5000	
Maximum Tilting Moment Load	[Nm]	--	200					200	
Maximum Surface Runout	[mm]	--	0.070					0.070	
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	*3	1.109	0.640	0.426	0.240	0.143	0.094	0.076
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	*3	1.189	0.715	0.509	0.318	0.227	0.179	0.152
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	*3	1.399	0.925	0.709	0.528	0.427	0.389	0.372
Efficiency	[%]	--	86	86	90	90	90	86	86
Maximum Torsional Backlash	[arc-min]	--	≤ 2					≤ 2	
Accuracy	[arc-sec]	--	± 60					± 60	
Torsional Stiffness	[Nm/arc-min]	--	7.6					7.6	
Noise Level	[dB]	--	72	72	65	65	65	65	65
Maximum Ambient Temperature	$^{\circ}\text{C}$	--	0-40					0-40	
Permitted Housing Temperature	$^{\circ}\text{C}$	--	90					90	
Protection Class	--	*4	IP54 (IP65)					IP54 (IP65)	
Weight	[kg]	--	7.6					7.8	

*1) Contact NIDEC-SHIMPO for special ratios

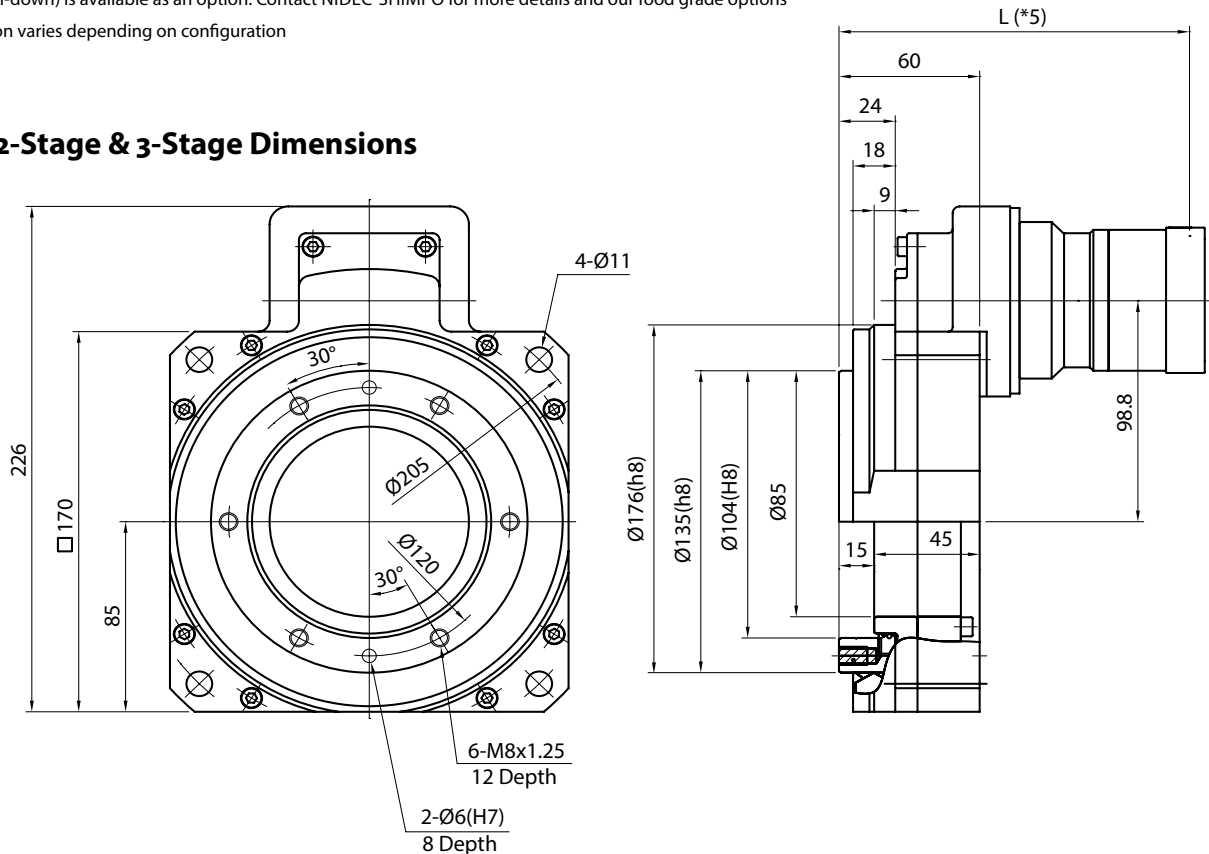
*2) At nominal input speed, service life is 20,000 hours

*3) Measured at input shaft

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

*5) L dimension varies depending on configuration

STHVL7 2-Stage & 3-Stage Dimensions



STHVL7 3-Stage Specifications

Frame Size	STHVL7								
Stage	Units	Notes	3-Stage						
Ratio	--	*1	100:1	120:1	140:1	160:1	200:1	280:1	400:1
Nominal Torque	[Nm]	*2	85	68	85	85	85	85	68
Maximum Acceleration Torque	[Nm]	--	170	133	170	170	170	170	133
Emergency Stop Torque	[Nm]	--	240	240	240	240	240	240	240
Nominal Input Speed	[rpm]	--	3000						
Maximum Input Speed	[rpm]	--	6000						
Maximum Axial Load	[N]	--	4000						
Maximum Radial Load	[N]	--	5000						
Maximum Tilting Moment Load	[Nm]	--	200						
Maximum Surface Runout	[mm]	--	0.070						
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	*3	0.067	0.059	0.060	0.054	0.052	0.051	0.050
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	*3	0.144	0.140	0.137	0.135	0.133	0.132	0.131
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	*3	0.364	0.350	0.357	0.345	0.343	0.342	0.341
Efficiency	[%]	--	86	86	86	86	86	86	86
Maximum Torsional Backlash	[arc-min]	--	≤ 2						
Accuracy	[arc-sec]	--	± 60						
Torsional Stiffness	[Nm/arc-min]	--	7.6						
Noise Level	[dB]	--	65	65	65	65	65	65	65
Maximum Ambient Temperature	$^{\circ}\text{C}$	--	0-40						
Permitted Housing Temperature	$^{\circ}\text{C}$	--	90						
Protection Class	--	*4	IP54 (IP65)						
Weight	[kg]	--	7.8						

*1) Contact NIDEC-SHIMPO for special ratios

*2) At nominal input speed, service life is 20,000 hours

*3) Measured at input shaft

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

*5) L dimension varies depending on configuration

STHVL7 3-Stage Dimensions

