

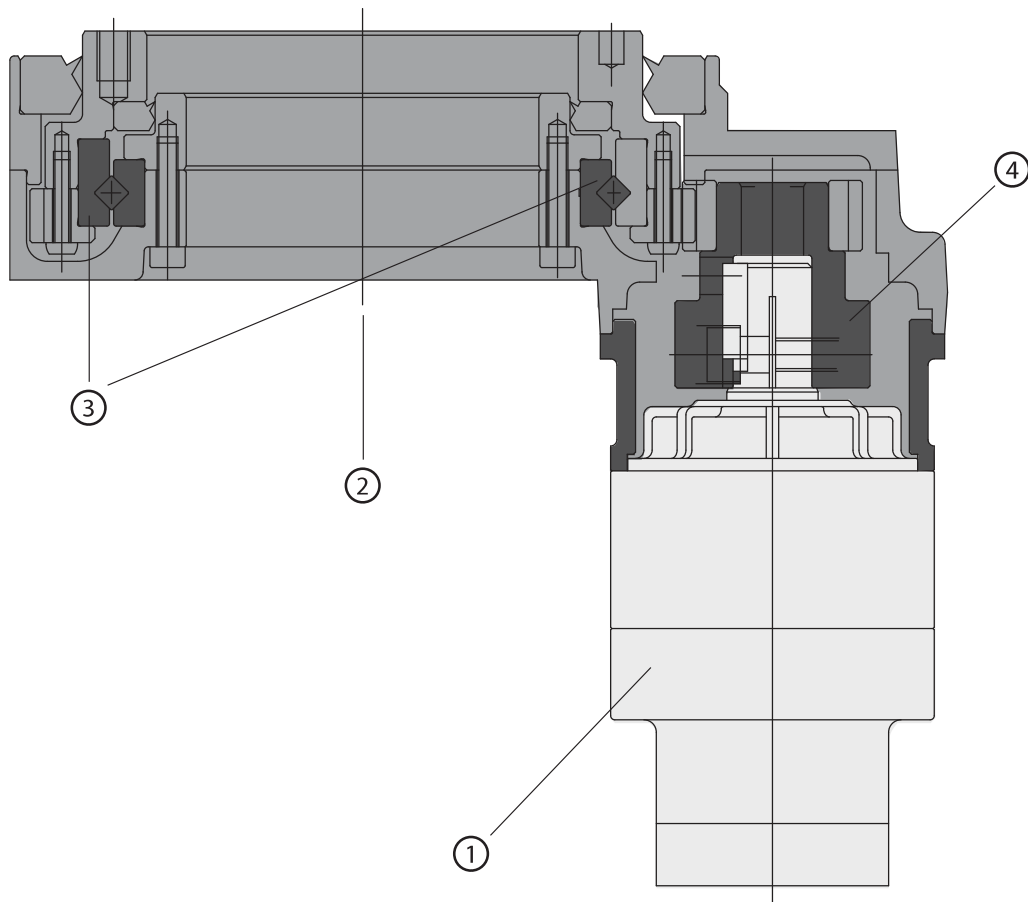


STH-SERIES

- 85 mm pass-through hole allows use of air lines or wiring
- Input is compatible with most servo motor brands
- Exceptional value for small to mid-range indexing applications
- Available ratios range from 12:1 through 324:1
- Ships within 48 hours
- Assembled in the USA

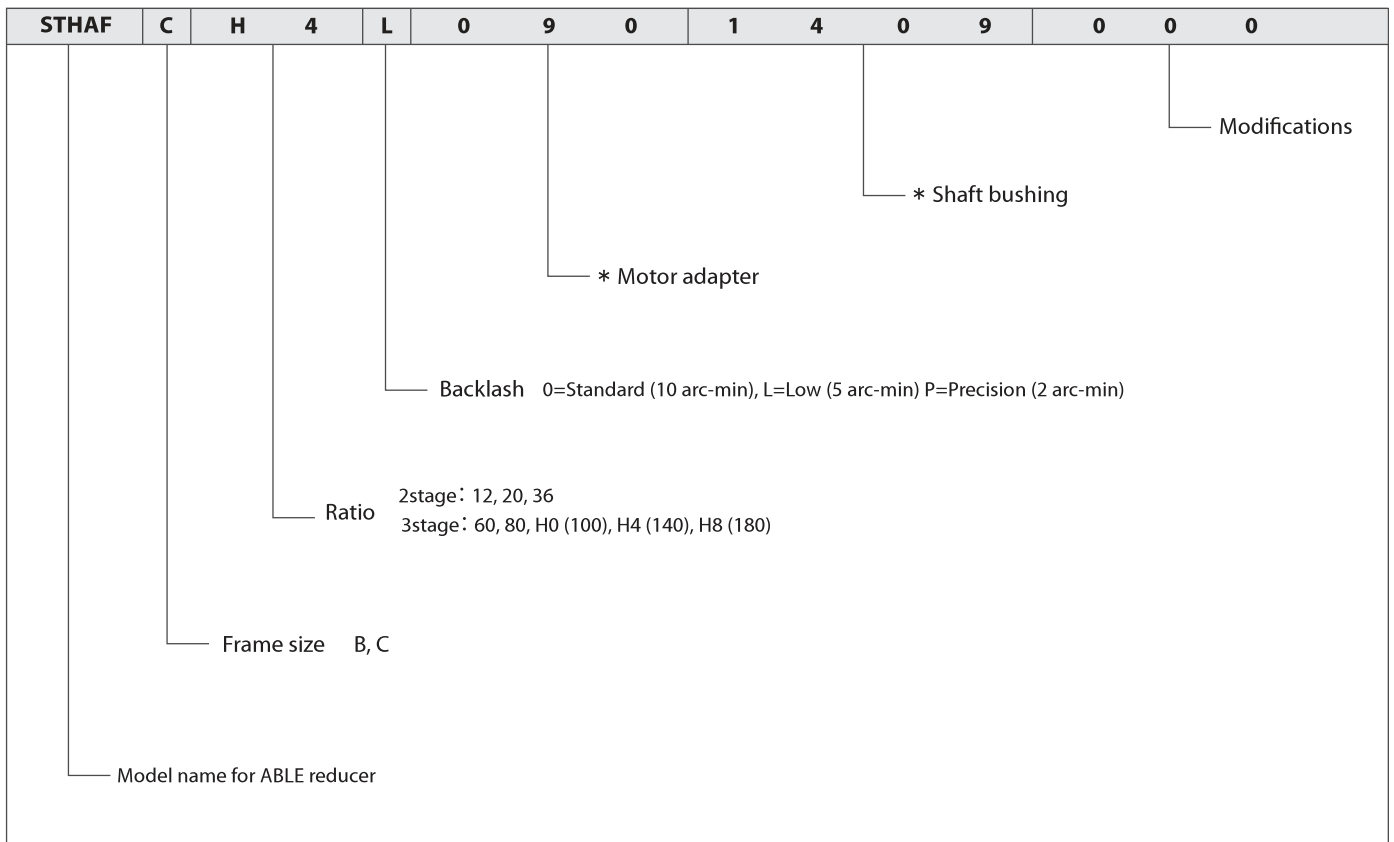
STH-SERIES Hollow output rotary actuators

STH-Series – Features



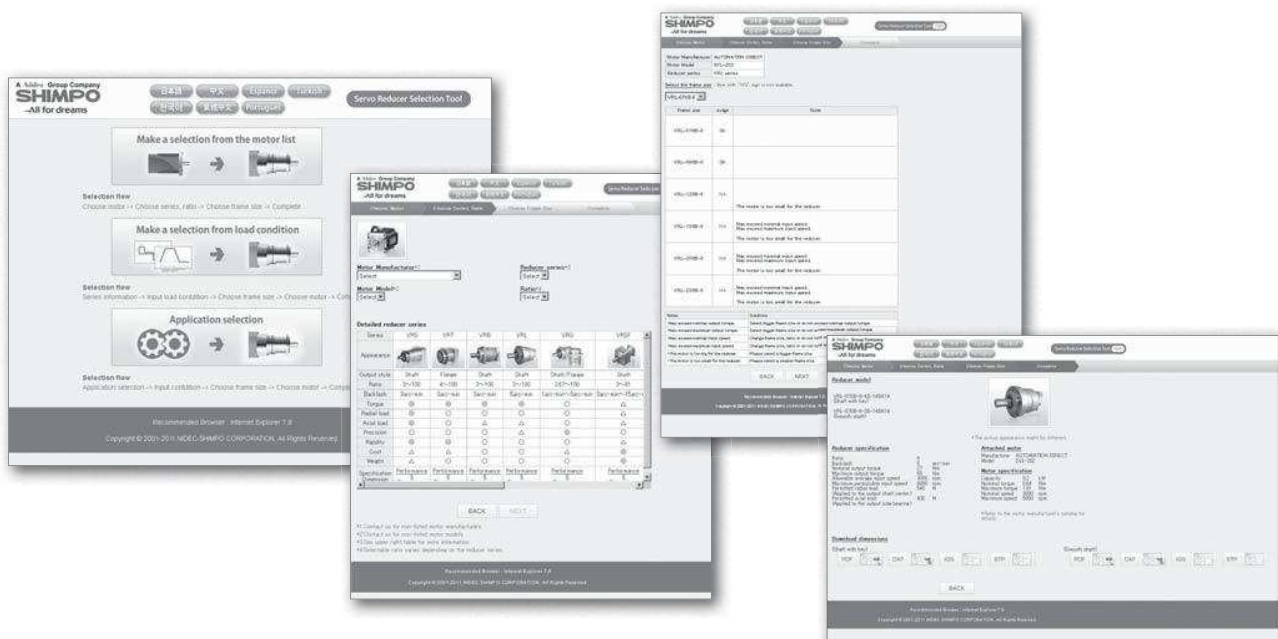
- ① One or two stage planetary reducer
- ② 85 mm pass through
- ③ Heavy duty cross-roller bearing
- ④ Final stage primary gear

STH-Series – Model Number



*1) Call us for the code (800) 842-1479

Contact us for additional information or refer to our online reducer selection tool.
 Selection tool www.nidec-shimpo.co.jp/selection/eng



STHS

STH-SERIES Hollow output rotary actuators

STH 2-Stage Specifications

Frame Size			B			C		
Stage			2-Stage					
Ratio	Unit	Note	12:1	20:1	36:1	12:1	20:1	36:1
Nominal Torque	[Nm]	*1	10	13	13	71	71	71
Acceleration Torque	[Nm]	--	24	31	29	160	160	160
Emergency Stop Torque	[Nm]	--	36	46	43	240	240	240
Nominal Input Speed	[rpm]	--	3000			3000		
Maximum Input Speed	[rpm]	--	6000			6000		
Maximum Surface Runout	[mm]	--	0.070			0.070		
Reflected Inertia	[kg-m ² x10 ⁻³]	*2	104.100	47.100	25.000	210.940	122.680	91.104
Accuracy	[arc-sec]	--	±60			±60		
Torsional Rigidity	[Nm/arc-min]	--	7.6			7.6		
Backlash	[arc-min]	*3	10 (5, 2 optional)			10 (5, 2 optional)		
Maximum Axial Load	[N]	--	4000			4000		
Maximum Radial Load	[N]	--	5000			5000		
Maximum Tilting Moment Load	[Nm]	--	200			200		
Maximum Deflection	[mm]	--	0.70			0.70		
Efficiency	[%]	--	60	60	60	85	85	85
Noise Level	[dbA]	--	72	65	65	72	65	65
Maximum Ambient Temperature	[°C]	--	40			40		
Maximum Surface Temperature	[°C]	--	90			90		
Protection	--	--	IP 65			IP 65		
Unit Life	[hr]	--	20000			20000		
Weight	[kg]	--	5.9			7.4		

STH 3-Stage Specifications

Frame Size			B					
Stage			3-Stage					
Ratio	Unit	Note	60:1	80:1	100:1	140:1	180:1	324:1
Nominal Torque	[Nm]	*1	13	13	18	18	18	18
Acceleration Torque	[Nm]	--	33	33	36	36	36	36
Emergency Stop Torque	[Nm]	--	50	50	54	54	54	54
Nominal Input Speed	[rpm]	--	3000					
Maximum Input Speed	[rpm]	--	6000					
Maximum Surface Runout	[mm]	--	0.070					
Reflected Inertia	[kg-m ² x10 ⁻³]	*2	7.400	5.880	5.090	2.540	0.780	0.490
Accuracy	[arc-sec]	--	±60					
Torsional Rigidity	[Nm/arc-min]	--	7.6					
Backlash	[arc-min]	*3	10 (5, 2 optional)					
Maximum Axial Load	[N]	--	4000					
Maximum Radial Load	[N]	--	5000					
Maximum Tilting Moment Load	[Nm]	--	200					
Maximum Deflection	[mm]	--	0.70					
Efficiency	[%]	--	70	70	70	70	70	70
Noise Level	[dbA]	--	65	65	65	65	65	65
Maximum Ambient Temperature	[°C]	--	40					
Maximum Surface Temperature	[°C]	--	90					
Protection	--	--	IP 65					
Unit Life	[hr]	--	20000					
Weight	[kg]	--	5.9					

*1) At nominal input speed

*2) At input shaft

*3) Optional: 2 & 5 arc-min

STH 3-Stage Specifications

Frame Size	C							
Stage	3-Stage							
Ratio	Unit	Note	60:1	80:1	100:1	140:1	180:1	324:1
Nominal Torque	[Nm]	*1	85	85	85	85	85	85
Acceleration Torque	[Nm]	--	160	160	160	160	160	160
Emergency Stop Torque	[Nm]	--	240	240	240	240	240	240
Nominal Input Speed	[rpm]	--	3000					
Maximum Input Speed	[rpm]	--	6000					
Maximum Surface Runout	[mm]	--	0.070					
Reflected Inertia	[kg-m ² x10 ⁻³]	*2	36.285	34.617	32.656	16.377	3.825	3.530
Accuracy	[arc-sec]	--	±60					
Torsional Rigidity	[Nm/arc-min]	--	7.6					
Backlash	[arc-min]	*3	10 (5, 2 optional)					
Maximum Axial Load	[N]	--	4000					
Maximum Radial Load	[N]	--	5000					
Maximum Tilting Moment Load	[Nm]	--	200					
Maximum Deflection	[mm]	--	0.70					
Efficiency	[%]	--	85	85	85	85	85	85
Noise Level	[dbA]	--	65	65	65	65	65	65
Maximum Ambient Temperature	[°C]	--	40					
Maximum Surface Temperature	[°C]	--	90					
Protection	--	--	IP 65					
Unit Life	[hr]	--	20000					
Weight	[kg]	--	7.4					

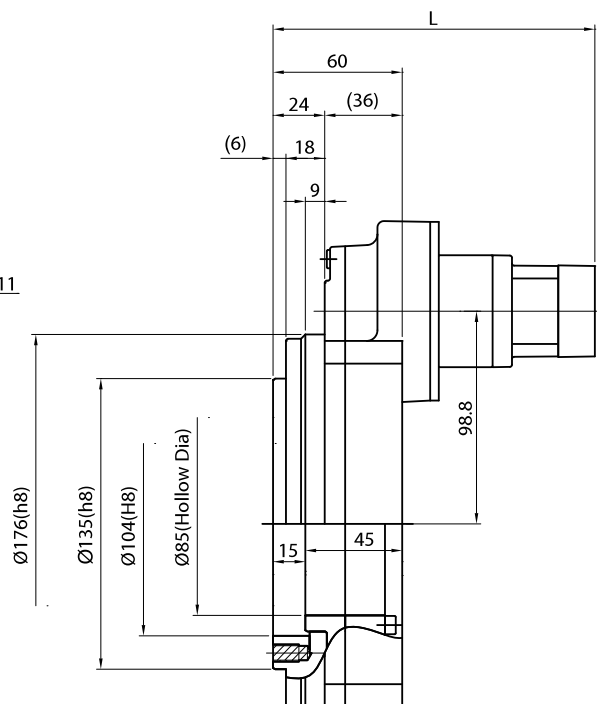
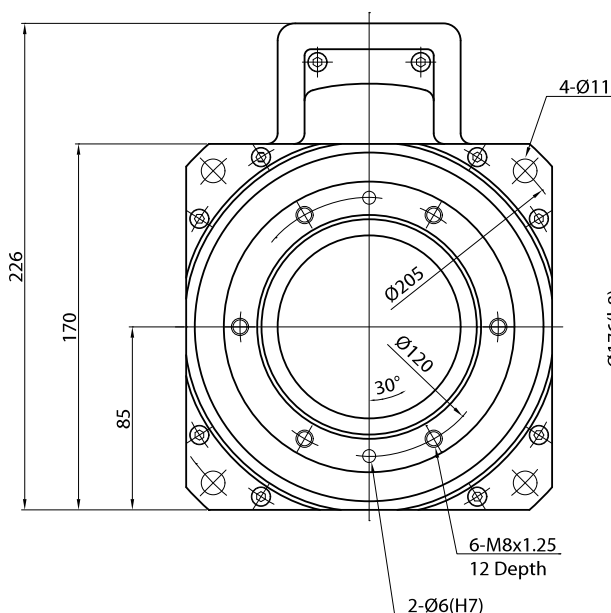
*1) At nominal input speed

*2) At input shaft

*3) Optional: 2 & 5 arc-min

STH 2-Stage & 3-Stage Dimensions

Frame Size	B	C
Overall Length (L)	mm	mm
Double Stage	149.5	204.5
Triple Stage	155.0	207.0



NOTE:

Depending on installed Servo Motor and Reduction of Reducer, the "L" dimensions varies slightly