

TBI MOTION BALL SCREW

2-3 Rolled Ball Screw

■ 2-3-1 Rolled Screws

Rolled screws are made through thread roller. Generally rolled screw has a smoother operation while lowering friction and backlash. Therefore, it gradually replaced the traditional ACME screws and trapezoidal screws. Moreover, rolled screws can eliminate axial play by preloading nut with a cost effective pricing compare to ground screw.

■ 2-3-2 The Features of *TBI MOTION* Rolled Ball Screw

(1) Lead Accuracy Up to Grade C5

C7 and C10 Screws have been Standardized. C5 on request.

(2) Precision Ground Ball Nut

High Precision Ball Nut are interchangeable between ground and rolled screws.

(3) Available to ship separately

Ball screw and ball nuts can be shipped separated ensure shortest delivery time. The ball nuts are standardized with P0 preloaded, preload value can be adjusted through reballing.

■ 2-3-3 Nominal Model Code of Rolled Ball Screws

Nominal Model Code of Shaft

SC R 025 05 F C7 - 1000 + N3

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	④	⑦
Type of Screw Shaft	Lead	Overall Length of Shaft
SC:standard SS:For H, NH type nut	Unit:mm	Unit:mm
②	⑤	⑧
Threading Direction	Product Code	Shaft Surface Treatment
R:Right L:Left	F:Rolled	□:Standard B1:Black Oxidation N1:Hard Chrome Plating P:Phosphating N3:Nickel Plating N4:Raydent N5:Chrome Plating
③	⑥	
Nominal Diameter	Accuracy Grade	
Unit:mm	C5, C7, C10	



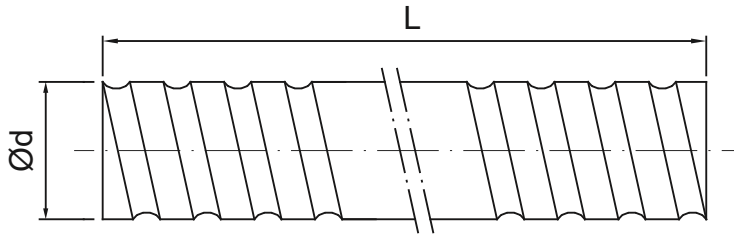


Fig 2.3.1 Screw Shaft Nominal Diameter

Table 2.3.1 Rolled Ball Screw Specifications Ø 6~32

Unit : mm

Model No.			Accuracy Grade	Threading Direction R:Right L:Left	Number of Grooves	Standard Code of Shaft	Type of Nut	Overall Length of Shaft
d	I	Da						
6	1	0.8	C10, C7	R	1	SCR00601	K	1000
	1	0.8	C10, C7, C5	R	1	SCR00801	K	
8	2	1.2	C10, C7, C5	R	1	SCR00802	K	1000
	2.5	1.2	C10, C7, C5	R	1	SCR0082.5	K, BSH	
10	2	1.2	C10, C7, C5	R	1	SCR01002	K, BSH	3000
	4	2	C10, C7, C5	R	1	SCR01004	K, BSH	
12	2	1.2	C10, C7, C5	R	1	SCR01202	K	3000
	4	2.5	C10, C7, C5	R	1	SCR01204	U, BSH	
	5	2.5	C10, C7, C5	R	1	SCR01205-A	V, U, BSH, H	
	5	2.5	C10, C7, C5	R	1	SCR01205-B	K	
	10	2.5	C10, C7, C5	R	2	SCR01210-B	V	
	20	2.5	C10, C7	R	4	SCR01220	Y	
14	2	1.2	C10, C7, C5	R	1	SCR01402	K	1800
	4	2.5	C10, C7	R	1	SCR01404	BSH	3000
16	4	2.381	C10, C7, C5	R	1	SCR01604(N)	V, I, U, BSH	3000
	5	3.175	C10, C7, C5	R/L	1	SCR01605	V, NI, NU, BSH	
	10	3.175	C10, C7, C5	R	2	SCR01610	V, NI, NU, BSH	
	16	2.778	C10, C7, C5	R	4	SCR01616	Y	
	32	2.778	C10, C7	R	8	SCR01632	Y	
20	4	2.381	C10, C7, C5	R	1	SCR02004(N)	V, I, U	3000
	5	3.175	C10, C7, C5	R/L	1	SCR02005	V, NI, NU, BSH, H	
	20	3.175	C10, C7, C5	R	4	SCR02020	V, Y, H	
	40	3.175	C10, C7	R	8	SCR02040	Y	
25	4	2.381	C10, C7	R	1	SCR02504(N)	I, U	6000
	5	3.175	C10, C7, C5	R/L	1	SCR02505	V, NI, NU, BSH, H	
	10	4.762	C10, C7, C5	R	1	SCR02510-A	NI, NU, BSH	
	10	6.35	C10, C7, C5	R	1	SCR02510-B	V	
	25	3.969	C10, C7, C5	R	4	SCR02525	Y	
	50	3.969	C10, C7	R	8	SCR02550	Y	
32	4	2.381	C10, C7, C5	R	1	SCR03204(N)	V, I, U	6000
	5	3.175	C10, C7, C5	R/L	1	SCR03205	V, NI, NU, M, H	
	10	6.35	C10, C7, C5	R/L	1	SCR03210	V, NI, NU	
	32	4.762	C10, C7	R	4	SCR03232	Y	
	64	4.762	C10, C7	R	8	SCR03264	Y	

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Table 2.3.2 Standard Specifications Ø40~80

Unit : mm

Model No.			Accuracy Grade	Threading Direction	Number of Grooves	Standard Code of Shaft	Type of Nut	Overall Length of Shaft
d	I	Da		R : Right L : Left				
40	5	3.175	C10, C7, C5	R/L	1	SCR04005	V, NI, NU, H	6000
	10	6.35	C10, C7	R/L	1	SCR04010	V, NI, NU	
	20	6.35	C10, C7	R	2	SCR04020	V	
	40	6.35	C10, C7	R	4	SCR04040	Y	
	80	6.35	C10, C7	R	8	SCR04080	Y	
50	5	3.175	C10, C7, C5	R	1	SCR05005	V, H	6000
	10	6.35	C10, C7, C5	R/L	1	SCR05010	V, NI, NU	
	20	9.525	C10, C7	R	1	SCR05020	V	
	50	7.938	C10, C7	R	4	SCR05050	Y	
	100	7.938	C10, C7	R	8	SCR050100	Y	
63	10	6.35	C10, C7, C5	R	1	SCR06310	V, NI, NU	7000
	20	9.525	C10, C7	R	1	SCR06320	V, NU	
80	10	6.35	C10, C7, C5	R	1	SCR08010	V, NI, NU	7000
	20	9.525	C10, C7	R	1	SCR08020	V, NU	

Table 2.3.3 H-Type Specifications Ø16~50

Unit : mm

Model No.			Accuracy Grade	Threading Direction	Number of Grooves	Type-H Code of Shaft	Type of Nut	Overall Length of Shaft
d	I	Da		R : Right L : Left				
12	10	2.5	C10, C7, C5	R	2	SSR01210	H	3000
16	5	2.778	C10, C7, C5	R	1	SSR01605	H	3000
	10	2.778	C10, C7, C5	R	2	SSR01610	H	
	16	2.778	C10, C7, C5	R	4	SSR01616	H	
	20	2.778	C10, C7, C5	R	4	SSR01620	H	
20	10	3.175	C10, C7, C5	R	2	SSR02010	H	3000
25	10	3.175	C10, C7, C5	R	2	SSR02510	H	6000
	25	3.175	C10, C7	R	4	SSR02525	H	
32	10	3.969	C10, C7, C5	R	1	SSR03210	H	6000
	20	3.969	C10, C7	R	2	SSR03220	H	
	32	3.969	C10, C7	R	4	SSR03232	H	
40	10	6.35	C10, C7	R	1	SSR04010	H	6000
	20	6.35	C10, C7, C5	R	2	SSR04020	H	
	40	6.35	C10, C7	R	4	SSR04040	H	
50	10	6.35	C10, C7	R	1	SSR05010	H	6000
	20	6.35	C10, C7	R	2	SSR05020	H	
	50	6.35	C10, C7	R	4	SSR05050	H	

※ The information is for standard production, if required accuracy grade C5 or other needs, please contact **TBI MOTION**.