■ 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 *KIWI 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 Type of Screw Shaft
SC : standard
SS : For H, NH type nut

② Threading Direction
R : Right
L : Left

③ Nominal Diameter
Unit : mm

④ Lead
Unit : mm

⑤ Product Code
F : Rolled

⑥ Accuracy Grade
C5, C7, C10

⑦ Overall Length of Shaft
Unit : mm

⑧ Shaft Surface Treatment
□ : Standard
B1 : Black Oxidation
N1 : Hard Chrome Plating
P : Phosphating
N3 : Nickel Plating
N4 : Raydent
N5 : Chrome Plating

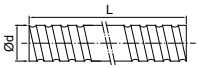


Fig 2.3.1 Screw Shaft Nominal Diameter

Table 2.3.1 Rolled Ball Screw Specifications Ø6~32 Unit : mm

Model No.			Accuracy Grade	Threading Direction	Number of Grooves	Standard Code of Shaft	Type of Nut	Overall Length of Shaft
d	l	Da		R : Right L : Left				
6	1	0.8	C10, C7, C5	R	1	SCR00601	K	1000
	6	1.2	C10, C7, C5	R	2	SCR00606	J	1000
8	1	0.8	C10, C7, C5	R	1	SCR00801	K	1000
	2	1.2	C10, C7, C5	R	1	SCR00802	K	
	2.5	1.2	C10, C7, C5	R	1	SCR0082.5	K, BSH	
	8	1.2	C10, C7, C5	R	4	SCR00808	J	1000
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	K	
	5	2.5	C10, C7, C5	R	1	SSR01205	V, BSH, A, B	
	10	2.5	C10, C7, C5	R	1	SCR01210-B	V	
	20	2.5	C10, C7, C5	R	4	SCR01220	Y	
14	2	1.2	C10, C7, C5	R	1	SCR01402	K	3000
	4	2.5	C10, C7, C5	R	1	SCR01404	K, 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	NI, NU, BSH	
	10	3.175	C10, C7, C5	R	1	SCR01610	V, NI, NU, BSH	
	16	2.778	C10, C7, C5	R	4	SCR01616	YA	
	32	2.778	C10, C7, C5	R	8	SCR01632	Y, YA	
20	4	2.381	C10, C7, C5	R	1	SCR02004(N)	I, U	3000
	5	3.175	C10, C7, C5	R/L	1	SCR02005	V, NI, NU, BSH, A, B	
	20	3.175	C10, C7, C5	R	4	SCR02020, SSR02020	V, Y, YA, A, B	
	40	3.175	C10, C7, C5	R	8	SCR02040	YA	
25	4	2.381	C10, C7, C5	R	1	SCR02504(N)	I, U	6000
	5	3.175	C10, C7, C5	R/L	1	SCR02505	V, NI, NU, BSH, A, B	
	10	4.762	C10, C7, C5	R	1	SCR02510-A	NI, NU, BSH	
	25	3.969	C10, C7, C5	R	4	SCR02525	Y, YA	
	50	3.969	C10, C7, C5	R	8	SCR02550	Y, YA	
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, A	
	10	6.35	C10, C7, C5	R/L	1	SCR03210	V, NI, NU	
	32	4.762	C10, C7, C5	R	4	SCR03232	YA	
	64	4.762	C10, C7, C5	R	8	SCR03264	Y, YA	

※The information is for standard production, if required accuracy grade C5 or other needs, please contact *KIWI MOTION*
※If the extended type in YA nut is needed, please contact KIWI MOTION.

Table2.3.2 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	l	Da		R : Right L : Left				
40	5	3.175	C10, C7, C5	R/L	1	SCR04005	V, NI, NU, A	6000
	10	6.35	C10, C7, C5	R/L	1	SCR04010	V, NI, NU	
	20	6.35	C10, C7, C5	R	1	SCR04020	V	
	40	6.35	C10, C7, C5	R	4	SCR04040	Y, YA	
	80	6.35	C10, C7, C5	R	8	SCR04080	YA	
50●	5	3.175	C10, C7, C5	R	1	SCR05005	V, A	6000
	10	6.35	C10, C7, C5	R/L	1	SCR05010	V, NI, NU	
	20	9.525	C10, C7, C5	R	1	SCR05020	V	
	50	7.938	C10, C7, C5	R	4	SCR05050	Y, YA	
	100	7.938	C10, C7, C5	R	8	SCR050100	Y, YA	
63●	10	6.35	C10, C7, C5	R	1	SCR06310	V, NI, NU	7000
	20	9.525	C10, C7, C5	R	1	SCR06320	V, NU	
80●	10	6.35	C10, C7, C5	R	1	SCR08010	V, NI, NU	7000
	20	9.525	C10, C7, C5	R	1	SCR08020	V, NU	

Table2.3.3 H/A/J/B-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	l	Da		R : Right L : Left				
12	10	2.5	C10, C7, C5	R	2	SSR01210	A, B	3000
16	5	2.778	C10, C7, C5	R	1	SSR01605	A, B	3000
	10	2.778	C10, C7, C5	R	2	SSR01610	A, B	
	16	2.778	C10, C7, C5	R	4	SSR01616	A, B	
	20	2.778	C10, C7, C5	R	4	SSR01620	A, B	
20	10	3.175	C10, C7, C5	R	2	SSR02010	A, B	3000
25	10	3.175	C10, C7, C5	R	2	SSR02510	A, B	6000
	25	3.175	C10, C7, C5	R	4	SSR02525	A, V, B	
32	10	3.969	C10, C7, C5	R	1	SSR03210	A, B	6000
	20	3.969	C10, C7, C5	R	2	SSR03220	A, B	
	32	3.969	C10, C7, C5	R	4	SSR03232	A, B	
40	10	6.35	C10, C7, C5	R	1	SSR04010	A	6000
	20	6.35	C10, C7, C5	R	2	SSR04020	A	
	40	6.35	C10, C7, C5	R	4	SSR04040	A	
50●	10	6.35	C10, C7, C5	R	1	SSR05010	A	6000
	20	6.35	C10, C7, C5	R	2	SSR05020	A	
	50	6.35	C10, C7, C5	R	4	SSR05050	A	

※The information is for standard production, if required accuracy grade C5 or other needs, please contact ***KIWI MOTION***
※Please contact TBI MOTION if the marked types (●) are required.
※If the extended type in YA nut is needed, please contact KIWI MOTION.

Nominal Model Code of Nut

G SFU R 025 05 T4 D + N3

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product Code		③ Threading Direction	⑥ Number of Turns (Turn·Row)
		R : Right	Turn : T : 1
② Nominal Model		L : Left	A : 1.5 (or 1.7/1.8)
S	S : Single nut		B : 2.5/2.8
F	F : With flange	④ Nominal Diameter	C : 3.5
	C : Without flange	Unit : mm	D : 4.8
U	NI : NI type nut		E : 5.8
	NU : NU type nut		ex : (2.5 × 2 = B2)
	A : A type nut	⑤ Lead	⑦ Flange Type
	J : J type nut	Unit : mm	N : Not cutting
	B : B type nut		S : Single cutting
	NH : NH nut (A solution for slide table)	⑧ Nut Surface Treatment	D : Double cutting
	Y : Y type nut	S : Standard	
	YA : YA type nut	B1 : Black Oxidation	
	V : V type nut	N1 : Hard Chrome Plating	
	U : U type nut	P : Phosphating	
	K : K type nut	N3 : Nickel Plating	
		N4 : Raydent	
		N5 : Chrome Plating	

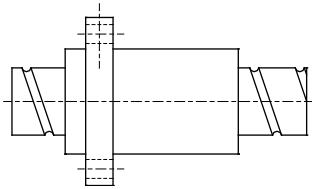
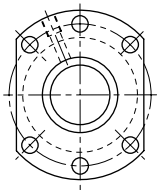
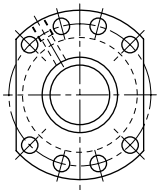
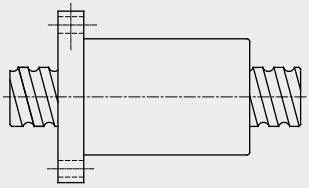
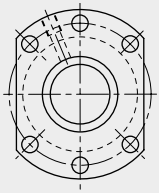
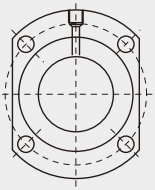
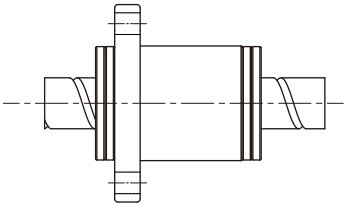
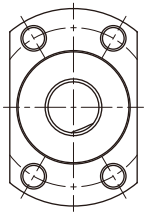
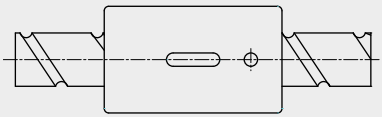
■ 2-3-4 Preload of Rolled Ball Screw

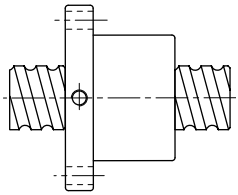
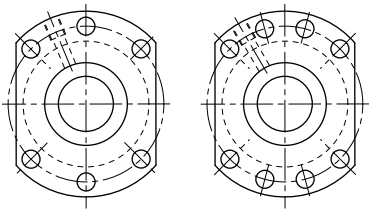
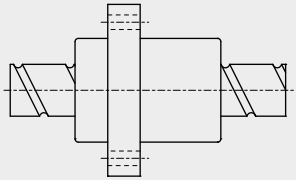
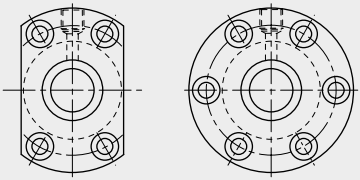
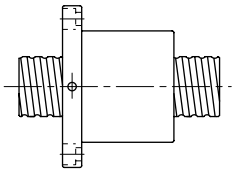
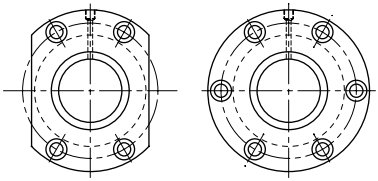
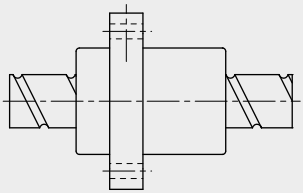
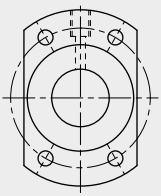
The standard preloading for Rolled Ball Screw is P0. If P1 preloading is required, please contact ***KIWI MOTION***.

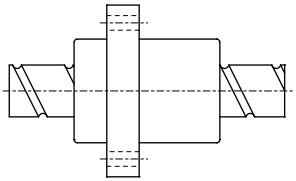
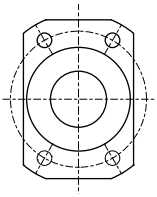
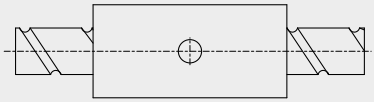
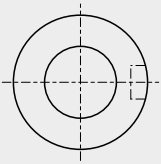
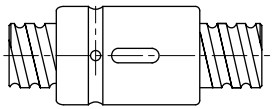
Table2.3.4 Accuracy grade of rolled ball screw Unit : μm

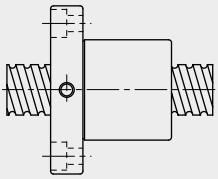
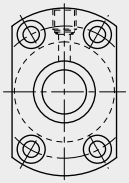
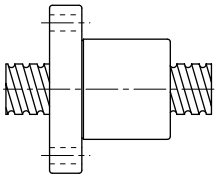
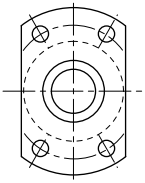
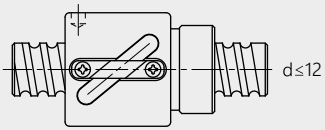
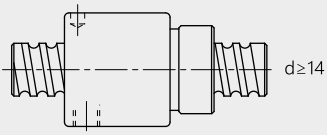
Grade		Rolled		
		C5	C7	C10
e_{300}	ISO, DIN	23	52	210
	JIS	18	50	210
	TBI MOTION	23	50	210

■ 2-4-1 *KIWI MOTION* Nut of Rolled Ball Screw Type

	Nut Type	Flange Type
A (High Speed/Strong dust-proof type)	SFA (DIN)  C72	 d≤32  d≥40
B (High-speed reinforced silent and dust-proof type)	SFB (DIN)  C73	 d≤32  1205/1210
J (Low Noise/Strong dust-proof type)	SFJ (DIN)  C74	
CNH (A solution for slide table)	SCNH  C75	No-Flange

	Nut Type	Flange Type
NU/U (Strong dust-proof type)	SFNU/ SFU (DIN)  C76	 d≤32 d≥40
NI/I (Strong dust-proof type)	SFNI/SFI  C77	
V (High Load External Circulation type)	SFV  C78	
Y/YA (High DM-N Rating)	SFY/SFYA  C79, 80	

	Nut Type	Flange Type
XSY (Miniature type)	XSY  C81	
XCYA	XCYA  C81	
CNI/I (Standard)	SCNI/SCI  C82	No-Flange

	Nut Type	Flange Type
K (Miniature type)	SFK  C83	 (SFK 01004) (SFK 02002) (SFK 02502)
	SFK  C83	
BSH	BSH  d≤12  d≥14 C84	No-Flange

※The information is for specifications, if customized products are needed please contact ***KIWI MOTION***