

ep(Within the effective thread length, the permissible value of accumulated lead deviation)

Unit: μm

Grade	C5	C7	C8	C10
PMI	$ep = \pm(lu/300) \times e_{300}$ lu: Effective thread length (Unit: mm)			

Unit: μm

e ₃₀₀ Measured length	Grade			
	C5	C7	C8	C10
0~100	20	44	84	178
101~200	22	48	92	194
201~315	25	50	100	210

P.S. Please contact us for PMI C5 and C6 requirements.

14.4 Reference Table of the Nominal Outer Diameter and Lead of the PMI's Rolled Screw Shaft

PMI rolled ballscrews offer a variety of specifications, lead accuracies, and maximum rolling length, as shown in table 14.2~14.3:

Table 14.2. Specifications of Rolled Ballscrews

Screw nominal outer diameter \varnothing	Lead										Maximum rolled ballscrew length
	4	5	5.08	6	10	16	20	25	32	40	
12	●	●									1500
14	●	●									3000
15		●			●	●					3000
16	●	●			●	●					3000
20	●	●			●		●				3000
25	●	●/○	●/○		●			●			6000
28		●		●							6000
32		●/○	●/○		●		●		●		6000
36					●						6000
38					●		●			●	6000
40		●			●		●			●	6000
50					●						6000

● : right-hand thread ○ : left-hand thread

P.S. Rolled ballscrews are limited in length and accuracy, please contact us for other requirements.

Table 14.3 Lead Accuracy and Maximum Rolled Length

Screw nominal outer diameter $\varnothing(mm)$	Lead Accuracy Grade (e_{300}) Maximum Rolling Length (mm)			
	C5	C7	C8	C10
12	1500	1500	1500	1500
14	1500	3000	3000	3000
15	2000	3000	3000	3000
16	2000	3000	3000	3000
20	3000	3000	3000	3000
25	3000	6000	6000	6000
28				
32				
36				
38				
40				
50				

14.5 Axial Play

The maximum axial play under normal non-preload condition, as shown in table 14.4

Table 14.4 Maximum Axial Play

Screw O.D. $\varnothing d (mm)$	6~32	36~50
Maximum Axial Play (mm)	0.04	0.07

PMI rolled ballscrews can eliminate axial play by preloading. Please contact our sales representatives if preloading is required.

14.6 Materials and Hardness

Standard material and surface hardness for **PMI** rolled screw, as shown in table 14.5

Table 14.5

Denomination	Material	Heat Treatment	Hardness (HRC)
Rolled screw	S55C/Equivalent	Induction hardening	58~62
Nuts	SCM420H/Equivalent	Carburized hardening	58~62