

14.2 Features of the *PMI* Rolled Ballscrew

High Precision Rolled Nuts

The manufacturing process of rolled nuts is identical to that of ground nuts. Surface hardening treatment and internal thread grinding ensure durability and smoothness.

Nuts are Interchangeable

Without preload and within the maximum permissible axial play, different types of nuts can be used on the same screw.

14.3 Lead Accuracy of Rolled Screws (e_{300})

According to ISO 3408-3, the definition of lead accuracy for *PMI* rolled ballscrews is as follows: Within the effective thread length, the permissible value of accumulated lead deviation in random 300mm. As shown in table 14.1:

Table 14.1 Lead Accuracy

e_{300} (Within the effective thread length, the permissible value of accumulated lead deviation in random 300mm)

Unit: μm

Grade	C5	C7	C8	C10
ISO, DIN	23	52		210
JIS	18	50		210
<i>PMI</i>	23	50	100	210

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.