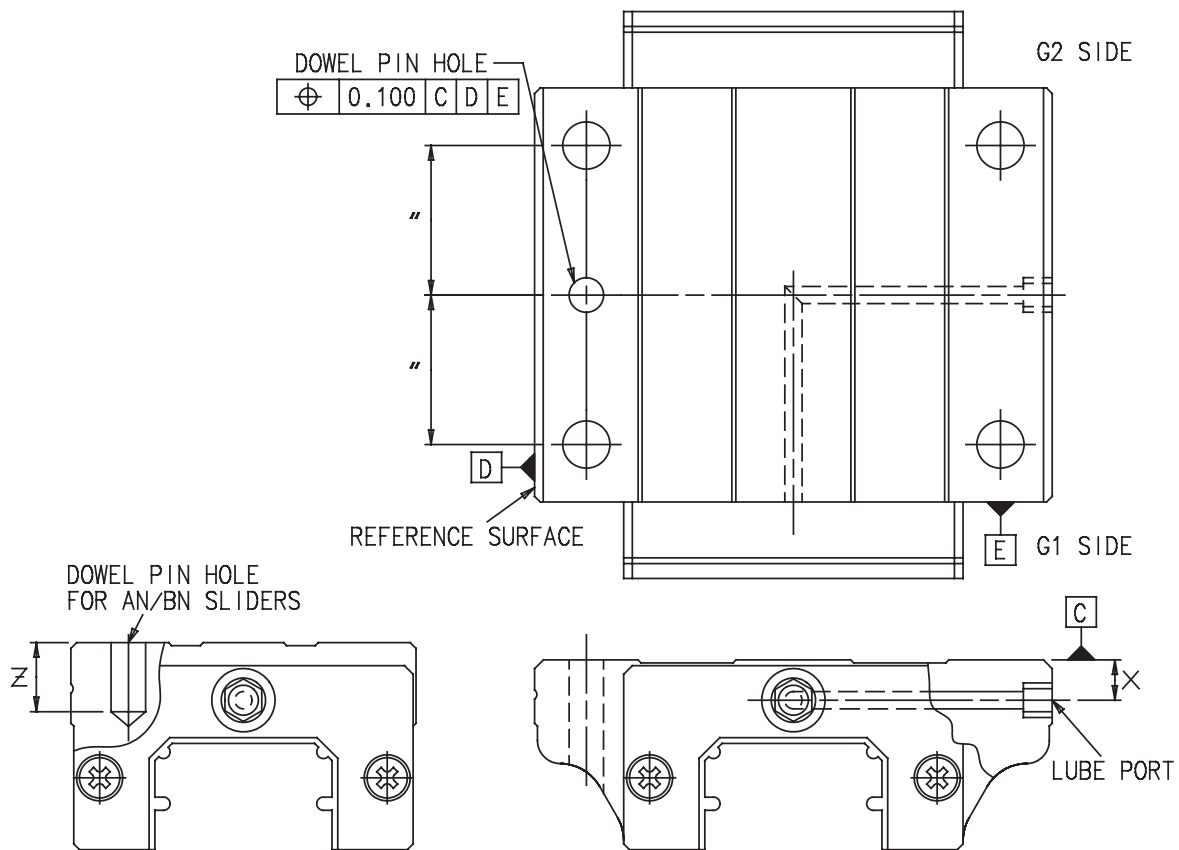


## Standard Dowel Hole Options for NSK LH Linear Guides

### Slider Modifications; Reference Table 1 and Illustration 1, page 2

Code	Sizes	Description
D035	20,25	Slider with 6mm slip fit dowel hole located centrally in line with bolt holes on reference side of slider.
D065	30~65	Slider with 10mm s/f dowel hole located centrally in line with bolt holes on reference side of slider.
D047	25~65	Slider with M6X.75 side lube port located centrally in line with bolt holes on non-reference side of slider.
D086	25	Slider with 6mm s/f dowel hole located centrally in line with bolt holes on reference side of slider and M6X.75 lube port located centrally in line with bolt holes on non-reference side of slider.(D035+D047)
D087	25	Slider with 6mm s/f dowel hole located centrally in line with bolt holes on reference side and 1/16NPT lube port located centrally in line with bolt holes on non-reference side of slider.(D035+M047)
D088	30~65	Slider with 10mm s/f dowel hole located centrally in line with bolt holes on reference side and M6X.75 lube port located centrally in line with bolt holes on non-reference side of slider.(D065+D047)
D089	30~65	Slider with 10mm s/f dowel hole located centrally in line with bolt holes on reference side and 1/16NPT lube port located centrally in line with bolt holes on non-reference side of slider.(D065+M047)
D075	20,25	Slider with two 6mm slip fit dowel holes located centrally in line with bolt holes on both sides of slider.
D095	30~65	Slider with two 10mm s/f dowel holes located centrally in line with bolt holes on both sides of slider.
D100	30~65	Slider with two 10mm s/f dowel holes located centrally in line with bolt holes on both sides of slider and M6X.75 lube port 25% of the bolt span from G1 side of bolt on non-reference surface.
M035	20,25	Slider with 1/4" dowel hole located centrally in line with bolt holes on reference side.
M065	30~65	Slider with 3/8" dowel hole located centrally in line with bolt holes on reference side.
M047	25~65	Slider with 1/16 NPT side lube port option located centrally in line with bolt holes on non-reference side of slider.
M087	25	Slider with 1/4" s/f dowel hole located centrally in line with bolt holes on reference side of slider and a 1/16NPT lube port located centrally in line with bolt holes on non-reference side of slider.(M035+M047)
M089	30~65	Slider with 3/8" s/f dowel hole located centrally in line with bolt holes on reference side of slider and a 1/16NPT lube port located centrally in line with bolt holes on non-reference side of slider.(M065+M047)
M075	20,25	Slider with 1/4" dowel hole located centrally in line with bolt holes on both sides.
M095	30~65	Slider with 3/8" s/f dowel hole located centrally in line with bolt holes on both sides.
M100	30~65	Slider with 3/8" s/f dowel hole located centrally in line with bolt holes on both sides of slider and M6X.75 lube port 25% of the bolt span from G1 side of bolt on non-reference surface.
W31	20~65	Oil port with plug in non-reference side of slider, centrally located between bolt holes. Oil port size as follows: Size 20=M6X.75, Sizes 25~65=1/8NPT

## Illustration 1 – Slider Modifications



**Table 1**

Size	Related Stds.	Dowel 1 Dia	Dowel Pin Depth "Z" AN/BN	Lube Port Depth "X"		Lube Port Depth "X"	
				EL/FL/GL/HL 1/16NPT	M6	AN/BN Sliders 1/16NPT	M6
20	D/M035, D/M075	6mm (1/4")	6				
25	D/M035, D/M047, D/M075, D/M087, D086	6mm (1/4")	9	6	6	8	10
30	D/M047, D/M065, D/M089, D/M095, D/M100, D088	10mm (3/8")	12	7	7	8	10
35	D/M047, D/M065, D/M089, D/M095, D/M100, D088	10mm (3/8")	13	8	8	8	15
45	D/M047, D/M065, D/M089, D/M095, D/M100, D088	10mm (3/8")	18	9	9	8	19
55	D/M047, D/M065, D/M089, D/M095, D/M100, D088	10mm (3/8")	19	10	10	8	20
65	D/M047, D/M065, D/M089, D/M095, D/M100, D088	10mm (3/8")	20	19	19	8	19

**Notes:**

Tolerance for metric dowel holes = 6mm  $+0.025/+0.0$  and 10mm  $+0.025/+0.0$ .

Tolerance for inch dowel holes = 1/4 in  $+0.001/+0.0$  and 3/8 in  $+0.001/+0.0$ .

Dowel holes for EM and GM sliders have thru dowel holes, AN, BN sliders have dowel depth "Z" shown in table.

## Rail Modifications Reference Table 2 and Illustration 2, page 4

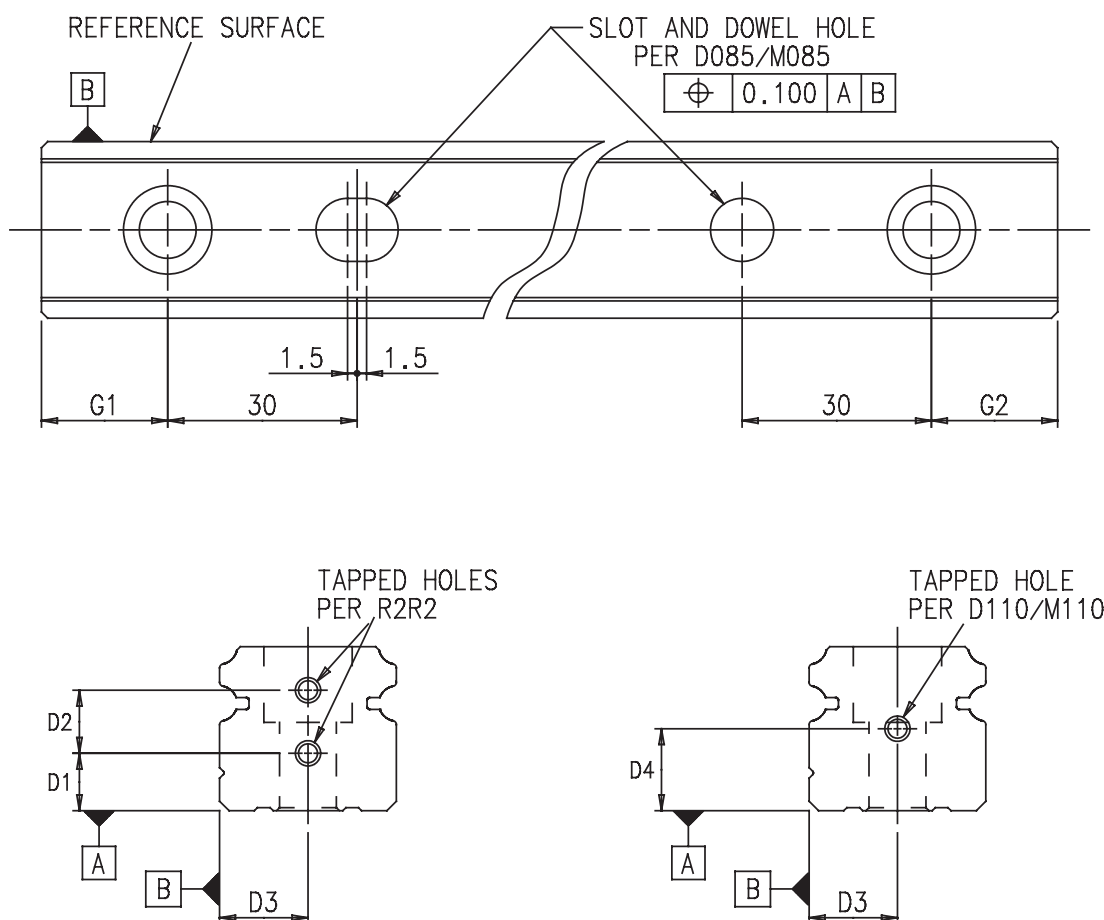
Code	Sizes	Description
D080	20	Rail with 6mm slot located 30mm inside of last bolt hole on G1 side and a 6mm s/f dowel thru hole located 30mm inside last bolt hole on G2 end.
D085	25-65	Rail with 10mm slot located 30mm inside last bolt hole on G1 end and a 10mm s/f dowel thru hole located 30mm inside last bolt hole on G2 end.
D110	20-65	M5X.8, 10mm deep, tapped hole located at center point of both ends of rail for Bellows attachment per table 2.
D185	20-65	Rail with thru dowel hole and slot per D080 and D085 with both ends prepped for bellows per R2R2.
M080	20	Rail with 1/4" slot located 30mm inside last bolt hole on G1 end and a 1/4" s/f dowel thru hole located 30mm inside last bolt hole on G2 side.
M085	25-65	Rail with 3/8" slot located 30mm inside last bolt hole on G1 side and a s/f dowel thru hole located 30mm inside last bolt hole on G2 side.
M110	25-65	Rail with 10-32 UNF, .5 inch deep, tapped hole located at center point of both ends of rail for bellows attachment.
M185	20-65	Rail with dowel hole and slot per M080 or M085 with both ends prepped for bellows per R2R2.

### Misc. Codes

Code	Sizes	Description
R2R2	20-65	Rail with both ends prepped for bellows per Table 2.
R2	20-65	Rail with G1 rail end prepped for bellows per Table 2.

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## Illustration 2 – Rail Modifications



**Table 2, R2R2 and M110/D110 Rail end preparations for bellows**

Size	Dowel Hole	d1	d2	d3	Thread Spec for R2R2	d4 for D110 and M110
20	D080-6mm M080-1/4"	5mm	8mm	10mm	M3X.5	9
25	D085-10mm M085-3/8"	7.25mm	10mm	11.5mm	M4X.7	11
30	D085-10mm M085-3/8"	9.1mm	10mm	14mm	M4X.7	13
35	D085-10mm M085-3/8"	11mm	10mm	17mm	M4X.7	15
45	D085-10mm M085-3/8"	15mm	10mm	22.5mm	M4X.7	19
55	D085-10mm M085-3/8"	18mm	23.9mm	26.5mm	M4X.7	22
65	D085-10mm M085-3/8"	18mm	23.9mm	26.5mm	M4X.7	26

Tolerance for metric dowel holes and slots = 6mm  $+0.025/+0.0$  and 10mm  $+0.025/+0.0$ .

Tolerance for inch dowel holes and slots = 1/4 in  $+0.001/+0.0$  and 3/8 in  $+0.001/+0.0$ .