

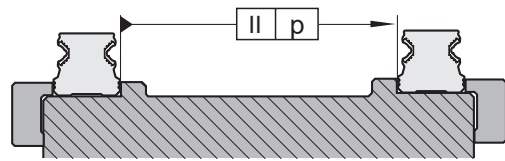
Installation Instructions

Parallelism

Parallelism of the installed rails measured at the guide rails and the runner blocks. The parallelism offset P1 causes a slight increase in preload on one side of the assembly. As long as values specified in the table are met, the effect of parallelism offsets on the service life can generally be neglected. Through the deviation in parallelism (P1) the preload is increased on one side. If table values are adhered to, the influence on the service life is generally negligible. Profiled rail system allow substantially higher installation tolerances compared to steel rail systems.

Size	Permissible deviation in parallelism P_{max}	
	Standard	Preload
15	0,027	0,018
20	0,031	0,021
25	0,034	0,022

Values in mm.



Height Deviation

Given adherence to the permissible height deviation "S", the influence on the service life can generally be neglected.

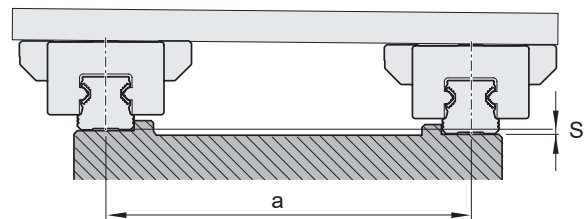
Permissible height deviation in lateral direction "S"

$$S \leq a \cdot f$$

S = Permissible height deviation (mm)

a = Distance between rails (mm)

f = Calculation factor



Calculation factor

f

Standard

$1,2 \cdot 10^{-3}$

Preload

$0,75 \cdot 10^{-3}$

Permissible Height Deviation in Longitudinal Direction

Given adherence to the permissible height deviation "R", the influence on the service life can generally be neglected.

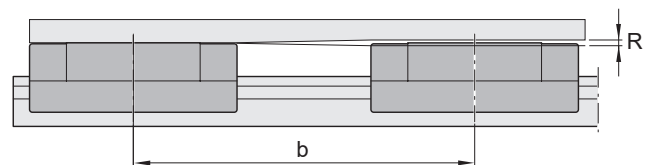
Permissible height deviation in longitudinal direction "R"

$$R \leq b \cdot g$$

R = Permissible height deviation (mm)

b = Distance between runner blocks (mm)

g = Calculation factor



Calculation factor

g

Standard

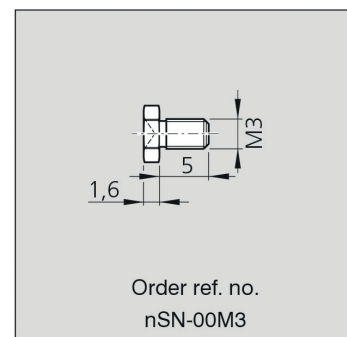
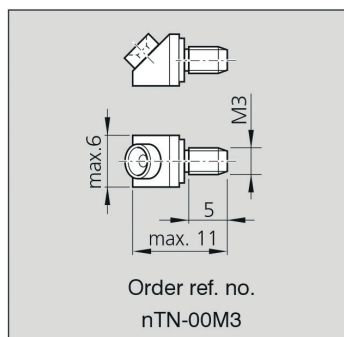
$6 \cdot 10^{-4}$

Preload

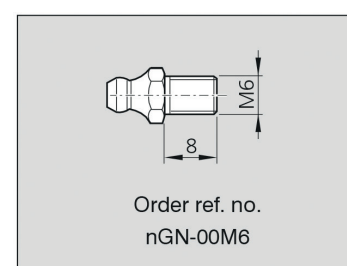
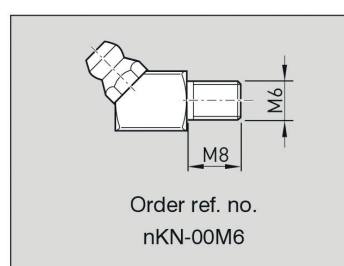
$2,1 \cdot 10^{-4}$

Lubrication Nipple for Lube Units

Funnel-type lube nipple for size 15



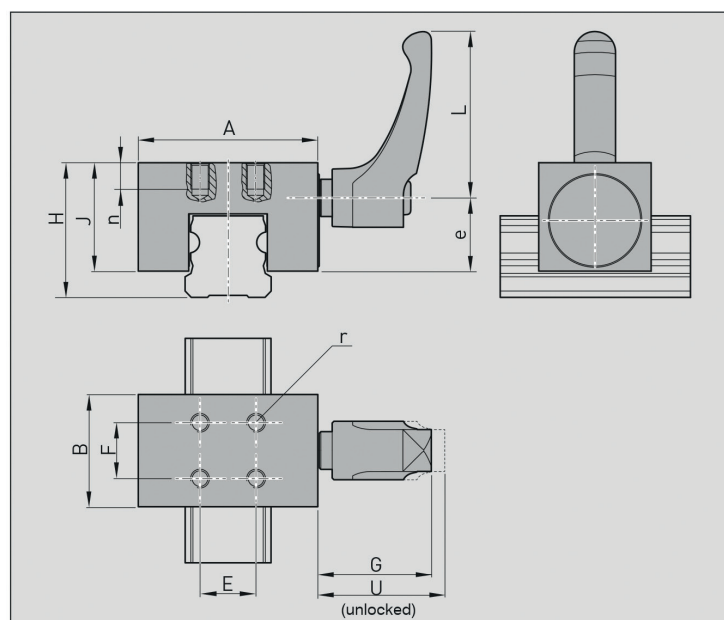
Hydraulic-type lube nipple for sizes 20 and 25



Manual Clamping Unit

The manual clamping unit dHK is made of aluminium and plastic.

It fits on both type of rails (A and B).



Article no.	Torsional	A	B	e	H	J	mm						
							E	F	L	G	U	n	r
dHK15	130 N / 3 Nm	34	20	12,9	24	19,8	10	10	40	29,9	33,3	6	M3
dHK20	250 N / 3 Nm	44	24	16	30	24	12	12	40	29,9	33,4	6	M4
dHK25	330 N / 3 Nm	48	30	19,6	36	29	15	15	44	29,8	33,3	7	M5

Technical Information

Accuracy

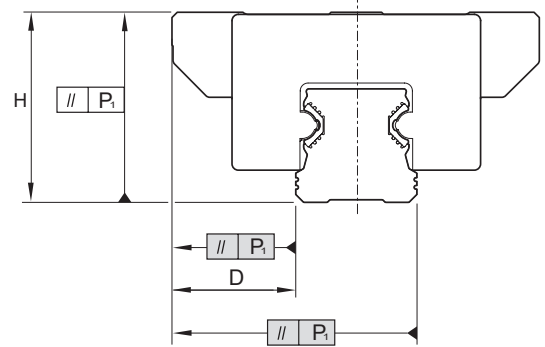
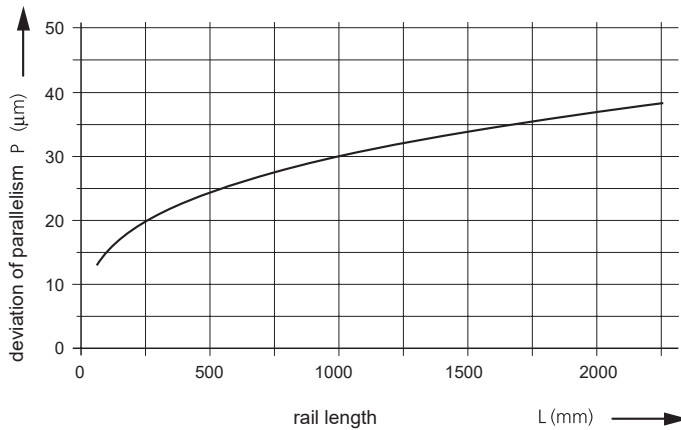
The carriage and the rails are produced with high precision, so that non preloaded carriages can be replaced by another anytime. The following values are valid for the stocked types in the dimensions tables in the product range section of this catalogue.

Height tolerance “H”

The height tolerance of several carriages on a rail is maximum +/- 30 µm.
In the case of several carriages and rails the maximum is +/-120 µm.

Side tolerance “D”

The side tolerance of several carriages on a rail is maximum +/- 30 µm.
In the case of several carriages and rails the maximum is +/-70 µm.



Deviation of Parallelism

Deviation of parallelism can be found in the diagram above on the left.

Carriages in Standard Precision (stocked products)

For normal applications we recommend a combination of carriage and rail without preload. With the standard precision it will have a tolerance in the micro range between the rail and carriage. It is possible to order just the rail or carriage separately (interchangeable and in stock).