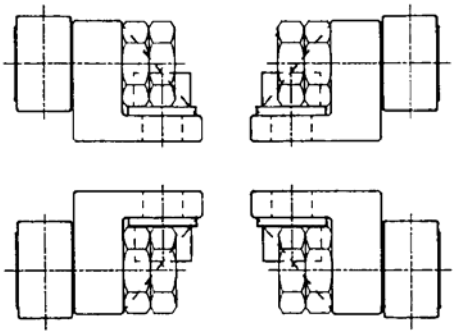
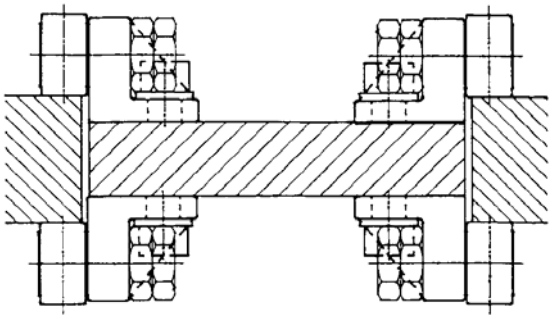
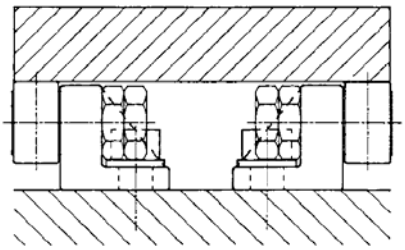
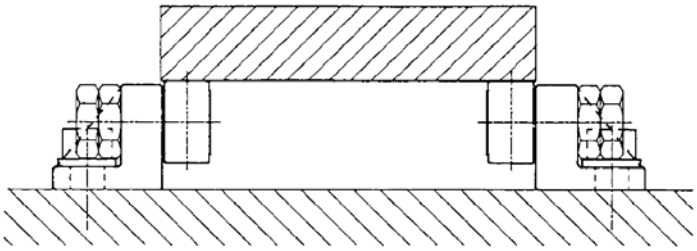
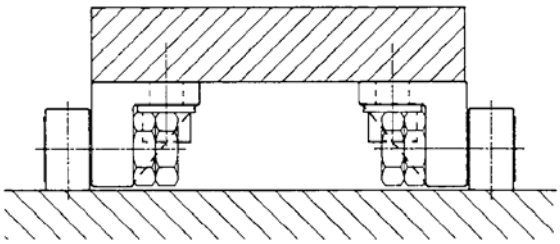
CAM-FOLLOWER BLOCKS for LINEAR MOTION

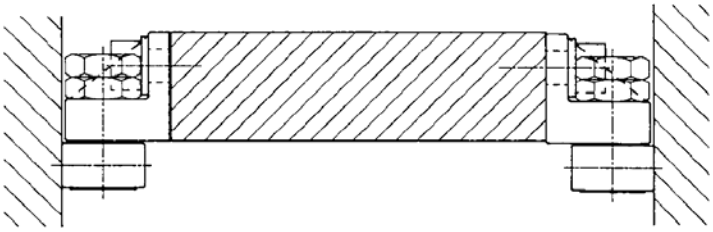


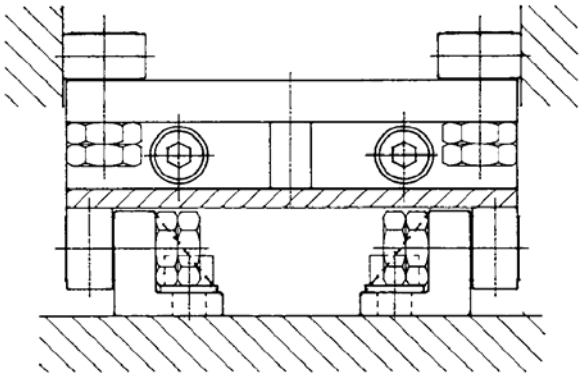


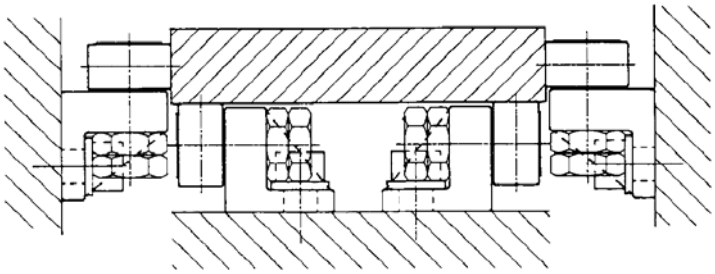


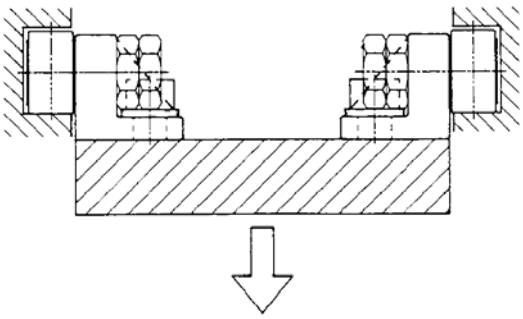


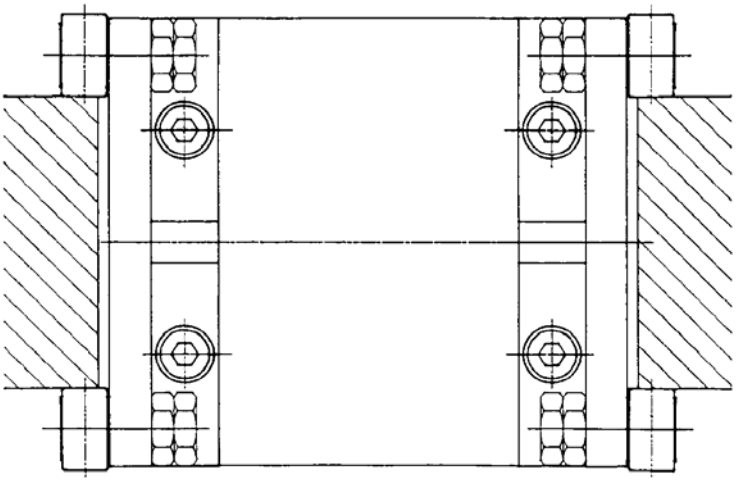




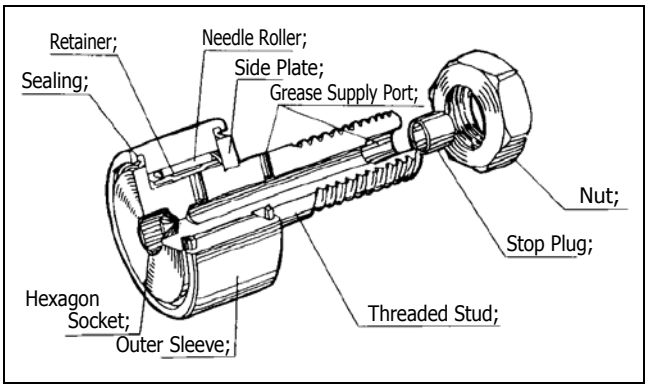








Construction and Features



1) Because the stud features a hexagon socket head, this unit can be installed easily.
2) Sealed type(UU) is suitable for heavy dust or possible intrusion of foreign matters and this type prevents grease leakage out of the bearings.
3) This unit adopts a needle roller as a rolling element to sustain a heavy load and vibration. Along with its low operating torque, an extremely quiet linear motion guiding system can be obtained by this unit.
4) The shaft center deviation during installation can be adjusted by the spherical surface of the outer sleeve. Also, the outer sleeve prevents an unbalanced load from occurring during operations.

Standard Precision

Table 253 unit: μm

Nominal Dimension (mm)		Outer sleeve							Stud Diameter (ds) Tolerance	
		Outside Diameter				Width (B) Tolerance		Radial Deviation (Max)		
		Spherical Surface		Cylinder Surface						
more than	equal or less than	Up lt	Lw lt	Up lt	Lw lt	Up lt	Lw lt		Up lt	Lw lt
-	6	-	-	-	-	-	-	-	0	-12
6	10									-15
10	18	0	-50	0	-8	0	-120	15		-18

*All the radial clearances range from 8 to 50 μm.

Rated Life

The rated life of this cam-follower can be calculated by the following formula.

$$Lh_{10} = \frac{10^6}{60 \cdot n}\left(\frac{C}{P}\right)^{10/3}$$

Lh_{10}: Cam-follower's basic rated life [h]
C: Basic dynamic load rating [N]
P: Equivalent load [N]
n: Rotational Frequency [rpm]

Track Allowable Load

This term means a load which does not cause any adverse effects such as deformation or indentation on the track that the cam-follower has come into contact with. The load value can be decided by both the tensile strength and hardness of track materials.

An example of the track allowable load is shown Table 256, when the tensile strength is 1250 N/mm^2 with the hardness of H_RC40. If the track material's tensile strength or hardness differs from these values, multiply the allowable load in Table 256 by the proper coefficient in Table 254.

Table 254

Tensile Strength (N/mm^2)	Hardness (H_RC)	Track Allowable Load Coefficient
820	26	0.45
960	32	0.61
1100	36	0.79
1240	40	1.00
1380	44	1.24
1520	47	1.50
1660	50	1.78
1790	53	2.09
1910	56	2.42
2070	58	2.78

Lubrication

1) Grease Supply Ports P, H

Type	Grease Supply Port at Stud Screw End (P)	Grease Supply Port on Stud Outside Surface (H)
CF6·8	-	-
CF10	○	
CF12 or more	○	○

2) The grease supply port (P) at the stud screw end can be used following the press fit of a greased nipple into the port.
3) When the grease supply port (H) on the stud's outside surface is in use, fill the other supply port (P) at the screw end with the attached stop plug.
4) A fine-quality lithium soap group grease is contained in this cam-follower at the time of shipment. Periodically supply an additional lithium soap group grease in response to service conditions.

* The working temperature ranges from -20℃ to +120℃.