

3. Fits of Spherical Bearing Rod Ends

Fitted with Rod Ends.

Table 3.1 For shaft

With indeterminate loads	Normal conditions
n6, p6	h6, h7

Table 3.2 For thread

Male thread	Female thread
6g	6h

Table 3.3 Roughness of fitting surface

(Unit: μm)

Fitting surface		Shaft surface	Bore surface of housing	Side of shaft shoulder, washer, housing bore shoulder
Bearing bore diameter "d" or outer diameter "D" Nominal bore diameter (mm)				
over	incl.	Ra \leq	Ra \leq	Ra \leq
-	80	1.25	1.60	2.00
80	150	2.00	2.50	2.50

To look into the table with "d" for shaft, to look into the table with "D" for housing.

Table 3.4 Shape and position tolerance of fitting surface

(Unit: μm)

d or D mm		Cylindricity		Side beat of round circuity		Parallelism of two sides of washer max.
over	incl.	Housing bore max.	Shaft diameter max.	Housing bore shoulder max.	Shaft shoulder max.	
-	6	4	-	8	-	12
6	10	4	4	9	9	15
10	18	5	5	10	10	18
18	30	6	6	11	11	21
30	50	7	7	13	13	25
50	80	8	8	16	16	30
80	120	10	10	19	19	35
120	150	12	12	22	22	40

4. Radial Internal Clearance for Spherical Bearing Rod Ends

4.1 Maintenance-free type

Table 4.1 Radial internal clearance for BNM..K, BNF..K, DM, DF, RBL, RBI, DMSS and DFSS series.

(Unit: μm)

d mm		Group	
over	incl.	min.	max.
-	12	32	68
12	20	40	82
20	30	50	100

4.2 Lubricant type

Table 4.2 Radial internal clearance for BNM and BNF series.

(Unit: μm)

d mm		Group	
over	incl.	min.	max.
-	30	0	35