FITS OF SPHERICAL PLAIN BEARINGS

1. Tolerance zone number of fit

Type		Operating conditions	Sliding contact surface combination	
			Steel / Steel	Steel / PTFE
Shaft	Radial	Loads of all kinds, clearance of transition fit	f8, h6, h7 Hardened shaft	g6, h6
		Loads of all kinds, interference fit	m6, n6	k6
	Angular contact	Loads of all kinds	m6, n6	m6
	Thrust	Loads of all kinds	m6, n6	m6
Housing bore	Radial	Light loads, clearance of transition fit	H6, H7	H7
		Heavy loads, interference fit	J7, M7	K7
		Light alloy housings	N7	M7
	Angular contact	Loads of all kinds, clearance or transition fit	J7	J7
		Loads of all kinds, interference fit	M7	M7
	Thrust	Purely axial loads	H11	H11
		Combined loads	J7	J7

GEK...XS-2RS Please select f8, J7 for GEK...XS-2RS.

2. Roughness of fitting surface

Fitting surface	D Bearing bore diameter (d) or outside diameter (D) nominal	
	incl 80 mm	Over 80 mm incl 500 mm
	Ra ≤ µm	
Shaft surface	1.25	2.00
Bore surface of housing	1.60	2.50
Side of shaft shoulder, washer, housing bore shoulder	2.00	2.50

Please look into the table with d for shaft. Please look into the table with D for housing.

3. Shape and position tolerance of fitting surface

d or D	over mm / incl	– 6	6 10	10 18	18 30	30 50	50 80	80 120	120 150	150 180	180 250	250 315	315 400	400 500
Cylindricity	≤ μm Shaft diameter	4	4	5	6	7	8	10	12	12	14	16	18	–
	≤ μm Housing bore	–	4	5	6	7	8	10	12	12	14	16	18	20
Side beat of round circuity	≤ μm Shaft shoulder	8	9	11	13	16	19	22	25	25	29	32	36	–
	≤ μm Housing bore shoulder	–	9	11	13	16	19	22	25	25	29	32	36	40
≤ μm Parallelism of two sides of washer		12	15	18	21	25	30	35	40	40	46	52	57	63

Please look into the table with d for shaft. Please look into the table with D for housing.

RADIAL INTERNAL CLEARANCE OF SPHERICAL PLAIN BEARINGS

1. Series E, EW, EM

d	over mm / incl	– 12	12 20	20 35	35 60	60 90	90 140	140 160	160 240	240 315
Group C2	min μm	8	10	12	15	18	18	18	18	18
	max μm	32	40	50	60	72	85	100	100	110
Group normal	min μm	32	40	50	60	72	85	100	100	110
	max μm	68	82	100	120	142	165	192	192	214
Group C3	min μm	68	82	100	120	142	165	192	192	214
	max μm	104	124	150	180	212	245	284	284	318

2. Series G

d	over mm / incl	– 10	10 17	17 30	30 50	50 80	80 120	120 160	160 220	220 280
Group C2	min μm	8	10	12	15	18	18	18	18	18
	max μm	32	40	50	60	72	85	100	100	110
Group normal	min μm	32	40	50	60	72	85	100	100	110
	max μm	68	82	100	120	142	165	192	192	214
Group C3	min μm	68	82	100	120	142	165	192	192	214
	max μm	104	124	150	180	212	245	284	284	318

3. Series GEF...ES

d	over mm / incl	– 12	12 20	20 35	35 55	55 80	80 120	120 150
Group normal	min μm	32	40	50	60	72	85	100
	max μm	68	82	100	120	142	165	192

4. Series Z, WZ

d	over mm / incl	– 15.875	15.875 50.8	50.8 76.2	76.2 152.4	152.4 203.2	203.2 254	254 304.8
Group normal	min μm	50	80	100	130	180	200	230
	max μm	150	180	200	230	300	330	350

5. Series GZ

d	over	mm	–	12.7	44.45	69.85
	incl		12.7	44.45	69.85	139.7
Group normal	min	µm	50	80	100	130
	max		150	180	200	230

6. Series GEF...XS

d	over	mm	–	15	30	50	65	80	100	120
	incl		15	30	50	65	80	100	120	150
Group normal	min	µm	70	75	85	90	95	100	110	120
	max		125	140	150	160	170	185	200	215

7. Series GEK...XS-2RS

d	over	mm	20	35
	incl		35	60
Group normal	min	µm	100	120
	max		200	250

8. Series GE...ET-2RS,GE...XT-2RS

d	over	mm	–	20	35	60	90	140	240
	incl		20	35	60	90	140	240	300
Group normal	min	µm	0	0	0	0	0	0	0
	max		40	50	60	72	85	100	110

9. Series GEG...ET-2RS,GEG...XT-2RS

d	over	mm	–	30	50	80	120	220
	incl		30	50	80	120	220	280
Group normal	min	µm	0	0	0	0	0	0
	max		50	60	72	85	100	110