

### 免维护的径向球面滑动轴承

径向球面滑动轴承由一个具有凸球形外表面的内圈和一个具有相应凹球形内表面的外圈组成。这种设计特别适用于下列工况的轴承配置：必须能调节轴和轴承座之间的对心偏差，或必须能在相对较慢的滑动速度下进行往复或周期性偏摆或回转运动。

HYJG® 免维护球面滑动轴承具有采用摩擦力极低的现代材料制成的特殊滑动层。此类轴承在运行中无需维护。适用于下列应用场合：要求轴承具有很长的使用寿命而无需进行维护，或工作条件（如润滑不足或完全无润滑）不允许使用钢对钢轴承。免维护轴承主要用于定向重荷的场合。此类轴承吸收交变负荷的能力有限，如要将其用于此类场合，应向 HYJG® 查询。

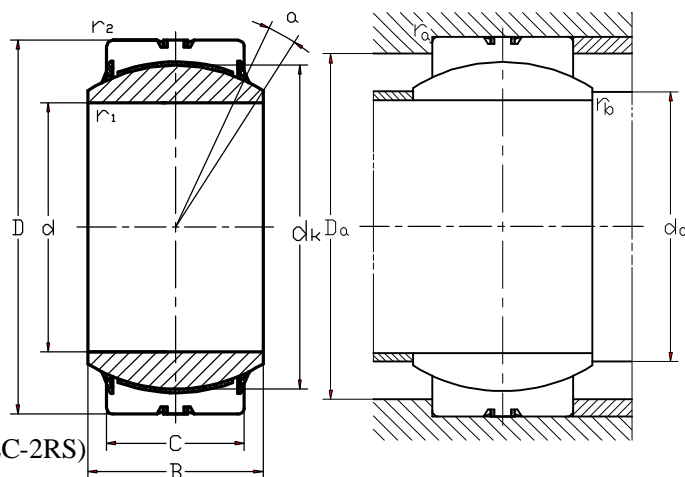
### Maintenance-free radial spherical plain bearings

Radial spherical plain bearings have an inner ring with a sphered convex outside diameter and an outer ring with a correspondingly sphered but concave inside surface. Their design makes them particularly suitable for bearing arrangements where alignment movements between shaft and housing have to be accommodated, or where oscillating or recurrent tilting or slewing movements must be permitted at relatively slow sliding speeds.

HYJG® maintenance-free spherical plain bearings incorporate special sliding layers of modern materials which have very low friction. The bearings can be operated without maintenance. They are used for applications where long bearing lives are required without maintenance, or where operating conditions are such (e.g. inadequate or total absence of lubrication) that the use of steel-on-steel bearing is inadvisable. The maintenance-free bearings are primarily intended for applications where loads are heavy and have a constant direction. They have only limited ability to take up alternating loads and HYJG® should be contacted for advice in such cases.

向心球面滑动关节轴承/Radial spherical plain bearing  
(免维护) (hardened,maintenance free)

滑动面: 硬铬/PTFE 复合材料 sliding surface :hardchrome/  
PTFEsteel



系列/Series

GE...ET-2RS

GE...XT-2RS

(GE...UK-2RS,GE...TXE-2RS<140,GE...TXA-2RS>140,GE..EC-2RS)

尺寸 (mm) Dimension (mm)				倾斜角 Tilting angle a°≈	额定载荷 (kN) Rated Load ratings(kN)		质量 Mass  Kg	型号 Designation	尺寸 (mm) Dimension				安装尺寸 (mm) Install dimension					
d	D	B	C		Cr 动	Cor 静			d	dk	r1	r2	da	da	Da	Da	ra	rb
					Dynamic	Static												
100	150	70	55	5	858	1730	4.4	GE100 ET -2RS	100	130	1	1	106.5	109.5	144	131	1	1
110	160	70	55	4	924	1860	4.8	GE110 ET -2RS	110	140	1	1	116.5	121	154	141.5	1	1
120	180	85	70	4	1340	2700	8.25	GE120 ET -2RS	120	160	1	1	127.5	135.5	173.5	157.5	1	1
140	210	90	70	5	1500	3000	11	GE140 XT -2RS	140	180	1	1	147	155.5	203.5	180	1	1
160	230	105	80	6	1920	3800	14	GE160 XT -2RS	160	200	1	1	167.5	170	223.5	197	1	1
180	260	105	80	4	2160	4300	18.5	GE180 XT -2RS	180	225	1.1	1.1	189	199	252	224.5	1	1
200	290	130	100	4	3000	6000	28	GE200 XT -2RS	200	250	1.1	1.1	209.5	213.5	281.5	244.5	1	1
220	320	135	100	5	3300	6550	35.5	GE220 XT -2RS	220	275	1.1	1.1	229.5	239.5	311.5	271	1	1
240	340	140	100	5	3600	7200	40	GE240 XT -2RS	240	300	1.1	1.1	249.5	265	331	298	1	1
260	370	150	110	5	4290	8650	51.5	GE260 XT -2RS	260	325	1.1	1.1	270	288	361	321.5	1	1
280	400	155	120	4	5000	10000	65	GE280 XT -2RS	280	350	1.1	1.1	290.5	313.5	391	344.5	1	1
300	430	165	120	5	5400	10800	78.5	GE300 XT -2RS	300	375	1.1	1.1	310.5	336.5	421	371	1	1

允许工作温度范围

以钢/PTFE 复合材料为滑动接触面组合的球面滑动轴承可在摄氏-40 度到+75 度的温度范围内工作, 并可在摄氏+110 度以下的温度环境中短暂工作。但是, 温度超过摄氏+50 度后, 轴承的负荷能力会降低。

Permissible operating temperature range

Spherical plain bearings with the sliding contact surface combination steel/PTFE composite can be operated in the temperature range -40 to +75 °C and for brief periods at temperatures up to +110 °C. However, the load carrying capacity of the bearings is reduced at temperatures above +50 °C.

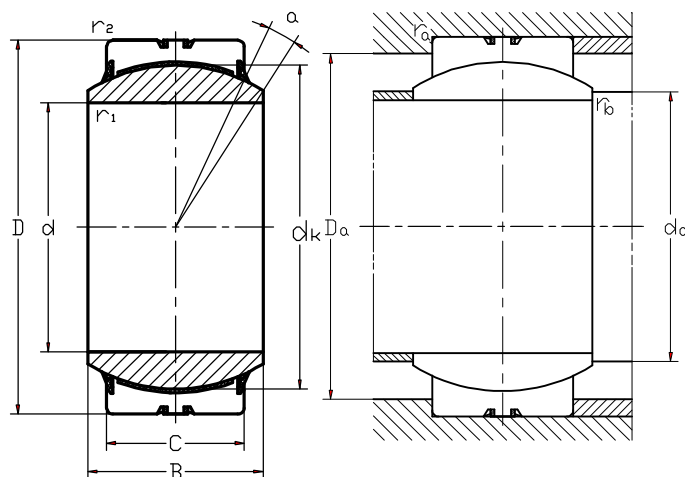
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(免维护) (hardened,maintenance free)

滑动面: 硬铬/PTFE 复合材料 sliding surface :hardchrome/  
PTFEsteel

系列/Series

GEP...FS

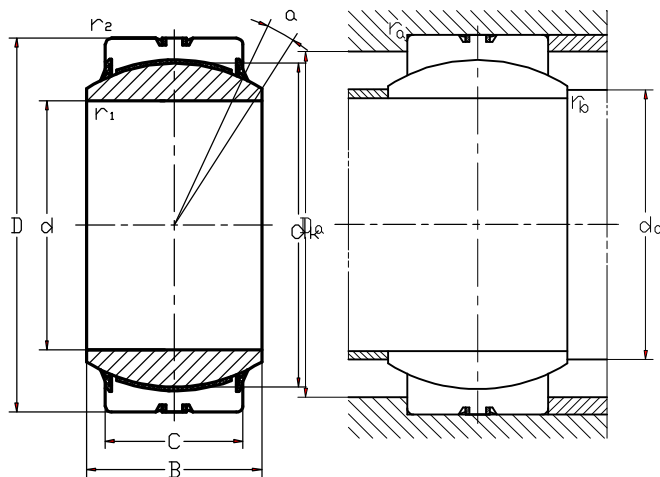
(GEH...FS,GEH...XT, GEH...HC)



尺寸 (mm) Dimension (mm)				倾斜角 Tilting angle	额定载荷 (kN) Rated Load ratings(kN)		质量 Mass	型号 Designation	尺寸 (mm) Dimension						安装尺寸 (mm) Install dimension					
d	D	B	C	a°≈	Cr 动 Dynamic	Cor 静 Static	Kg		d	dk	b	M	r1	r2	da	da	Da	Da	ra	rb
															min	min	min	max	max	min
100	150	71	67	2	600	900	4.5	GEP100FS	100	135	7.5	4	1	1	107	114.5	141.5	126	1	1
110	160	78	74	2	720	1080	5.35	GEP110FS	110	145	7.5	4	1	1	117	122	151	135	1	1
120	180	85	80	2	850	1270	7.95	GEP120FS	120	160	7.5	4	1	1	127.5	135.5	171	149	1	1
140	210	100	95	2	1200	1800	13	GEP140FS	140	185	7.5	4	1	1	148	155.5	200	172.5	1	1
160	230	115	109	2	1600	2400	16.5	GEP160FS	160	210	7.5	4	1	1	169	175.5	218.5	195.5	1	1
180	260	128	122	2	2080	3100	24.5	GEP180FS	180	240	7.5	4	1.1	1.1	191	203	246.5	223.5	1	1
200	290	140	134	2	2450	3650	33.5	GEP200FS	200	260	12	5	1.1	1.1	211	219	276	242	1	1
220	320	155	148	2	3050	4550	46	GEP220FS	220	290	14	6	1.1	1.1	232	245	304.5	270	1	1
240	340	170	162	2	3550	5400	53.5	GEP240FS	240	310	14	6	1.1	1.1	252.5	259	323.5	288.5	1	1
260	370	185	175	2	4250	6400	69.5	GEP260FS	260	340	16	7	1.1	1.1	273.5	285	352.5	316.5	1	1
280	400	200	190	2	5000	7500	89.5	GEP280FS	280	370	16	7	1.1	1.1	294	311	381.5	344	1	1
300	430	212	200	2	5600	8300	110	GEP300FS	300	390	16	7	1.1	1.1	314.5	327	411	363	1	1
320	460	230	218	2	6400	9650	135	GEP320FS	320	414	21	8	1.1	3	335	351	434	385	1	2.5
340	480	243	230	2	7100	10800	150	GEP340FS	340	434	21	8	1.1	3	356	359	453	404	1	2.5
360	520	258	243	2	8150	12200	200	GEP360FS	360	474	21	8	1.1	4	377	397	490	441	1	3
380	540	272	258	2	9150	13700	220	GEP380FS	380	494	21	8	1.5	4	398	412	508	460	1.5	3
400	580	280	265	2	9650	14600	275	GEP400FS	400	514	21	8	1.5	4	418	431	549	478	1.5	3
420	600	300	280	2	10600	16000	300	GEP420FS	420	534	21	8	1.5	4	439	441	568	497	1.5	3
440	630	315	300	2	12200	18600	360	GEP440FS	440	574	27	10	1.5	4	460	479	596	534	1.5	3
460	650	325	308	2	12900	19600	380	GEP460FS	460	593	27	10	1.5	5	481	496	612	552	1.5	4
480	680	340	320	2	14300	21200	435	GEP480FS	480	623	27	10	2	5	503	522	641	580	2	4
500	710	355	335	2	15300	23200	500	GEP500FS	500	643	27	10	2	5	523	536	670	598	2	4
530	750	375	355	2	17000	25500	585	GEP530FS	530	673	27	10	2	5	554	558	709	626	2	4
560	800	400	380	2	19600	29000	730	GEP560FS	560	723	27	10	2	5	585	602	758	673	2	4

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 (免维护) (hardened,maintenance free)  
 滑动面: 硬铬/PTFE 复合材料 sliding surface :hardchrome/  
 PTFEsteel

系列/Series  
 GEC...FSA  
 (GEC...XT)



尺寸 (mm) Dimension (mm)				倾斜角 Tilting angle $a^\circ \approx$	额定载荷 (kN) Rated Load ratings(kN)		质量 Mass  Kg	型号 Designation	尺寸 (mm) Dimension						安装尺寸 (mm) Install dimension					
d	D	B	C		Cr 动 Dynamic	Cor 静 Static			d	dk	b	M	r1 min	r2 min	da min	da max	Da max	Da min	ra max	rb max
320	440	160	135	4	2800	4150	73	GEC320FSA	320	380	21	8	1.1	3	327	344	427	381	1	2.5
340	460	160	135	3	2900	4400	77	GEC340FSA	340	400	21	8	1.1	3	347	366	447	401	1	2.5
360	480	160	135	3	3100	4650	80	GEC360FSA	360	420	21	8	1.1	3	367	388	467	421	1	3
380	520	190	160	4	3900	5850	120	GEC380FSA	380	450	21	8	1.5	4	389	407	505	451	1.5	3
400	540	190	160	3	4050	6100	125	GEC400FSA	400	470	21	8	1.5	4	409	429	525	471	1.5	3
420	560	190	160	3	4250	6400	130	GEC420FSA	420	490	21	8	1.5	4	429	451	545	491	1.5	3
440	600	218	185	3	5200	7800	180	GEC440FSA	440	520	27	10	1.5	4	449	472	584	521	1.5	3
460	620	218	185	3	5400	8150	190	GEC460FSA	460	540	27	10	1.5	4	469	494	604	541	1.5	3
480	650	230	195	3	6000	9000	220	GEC480FSA	480	565	27	10	2	5	491	516	631	566	2	4
500	670	230	195	3	6200	9300	230	GEC500FSA	500	585	27	10	2	5	511	537	651	586	2	4
530	710	243	205	3	6950	10400	270	GEC530FSA	530	620	27	10	2	5	541	570	691	621	2	4
560	750	258	215	4	7650	11400	320	GEC560FSA	560	655	27	10	2	5	571	602	731	656	2	4
600	800	272	230	3	8800	13200	385	GEC600FSA	600	700	27	10	2	5	611	645	781	701	2	4

对于外圈带有对接接头、特意断开或轴向剖分的轴承，只能将轴承插入套筒后才能正确检查内部游隙。套筒内径应等于轴承的公称外径；直径公差极限为 0/-0,004 毫米。

For bearings which have an outer ring with a butt joint, a deliberate fracture or which is axially split, the internal clearance can only be properly checked if the bearing is first inserted in a sleeve. The sleeve bore diameter should equal the nominal outside diameter of the bearing; the diameter tolerance limits are 0/-0,004 mm.

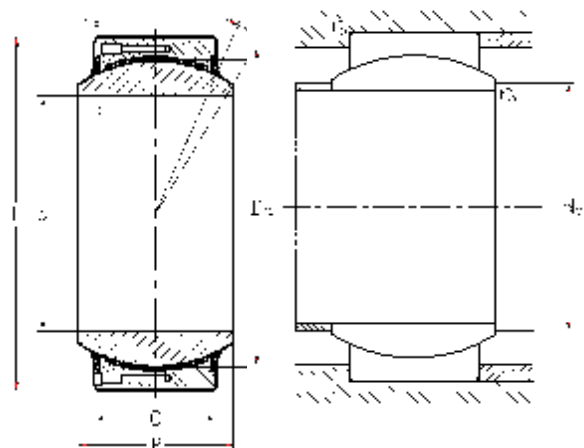
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(免维护) (hardened,maintenance free)

滑动面: 硬铬/PTFE 复合材料 sliding surface :hardchrome/  
PTFEsteel

系列/Series

GEC...HT-2RS

(GEC...DW-2RS)



尺寸 (mm) Dimension (mm)				倾斜角 Tilting angle a°≈	额定载荷 (kN) Rated Load ratings(kN)		质量 Mass Kg	型号 Designation	尺寸 (mm) Dimension				安装尺寸 (mm) Install dimension		径向游隙值 (CN) Radial internal clearance
d	D	B	C		Cr 动 Dynamic	Cor 静 Static			d	dk	r1 min	r2 min	da max	Da min	
320	440	160	135	4	7380	11070	77	GEC320HT-2RS	320	380	1.1	3	344.6	361	0.125-0.239
340	460	160	135	3.8	7770	11650	82	GEC340 HT-2RS	340	400	1.1	3	366.6	382	0.125-0.239
360	480	160	135	3.6	8160	12240	84.2	CEC360 HT-2RS	360	420	1.1	3	388.3	403	0.135-0.261
380	520	190	160	4.1	10360	15540	129	GEC380 HT-2RS	380	450	1.5	4	407.9	426	0.135-0.261
400	540	190	160	3.9	10820	16230	133	GEC400 HT-2RS	400	470	1.5	4	429.8	447	0.135-0.261
420	560	190	160	3.7	11280	16920	138	CEC420 HT-2RS	420	490	1.5	4	451.6	469	0.135-0.261
440	600	218	185	3.9	13850	20770	193	CEC440 HT-2RS	440	520	1.5	4	472	491	0.145-0.285
460	620	218	185	3.7	14380	21570	200	GEC460 HT-2RS	460	540	1.5	4	494	513	0.145-0.285
480	650	230	195	3.8	15860	23790	237	GEC480 HT-2RS	480	565	2	5	516	536	0.145-0.285
500	670	230	195	3.6	16420	24630	244	CEC500 HT-2RS	500	585	2	5	537.8	557	0.145-0.285
530	710	243	205	3.7	18300	27450	289	CEC530 HT-2RS	530	620	2	5	570.3	591	0.145-0.285
560	750	258	215	4	20270	30410	325	GEC560 HT-2RS	560	655	2	5	602	624	0.145-0.285
600	800	272	230	3.6	23180	34700	407	GEC600 HT-2RS	600	700	2	5	644.9	667	0.145-0.285