EBT INTERNATIONAL PTE LTD

Bridge Bearing

About us

EBT is a professional products and solutions provider in the specialised fields of bridge devices, seismic isolation and vibration control. Our comprehensive range of products include bridge bearings, expansion joints, dampers, prestressing anchorages and other structure–related products cater for the construction industry.

Our recent focus of activities has been the provision of consultancy services in response to the increasing market demands. Apart from committed in R&D by ourselves and absorb advanced technology from Germany, we've also leveraged on our close collaboration in R&D activities with Shanghai Tongji University. Therefore, EBT has gained a reputation as the inventor of various patented products and solutions provider for sophisticated case studies.

Complete with a team of highly competent technicians and engineers, our delivery of a comprehensive and diligent customer support is never compromised. EBT has been constantly engaging a panel of both local and foreign experts for advice in further optimisation of our product's capabilities.

Today, EBT is one of the Asia's premier players in the highly competitive bridge, construction industry. Embrace with a clear company vision, we're now ready to propel forward and take on a much bigger role in the international arena.

Vision

EBT aims to be a world class preferred partner in the specialised fields of bridge devices, seismic isolation and vibration control.

Mission

To be the leading provider of products and solutions with enhanced priority in diligent customer support.

Qualification and Merit »

Qualifications:

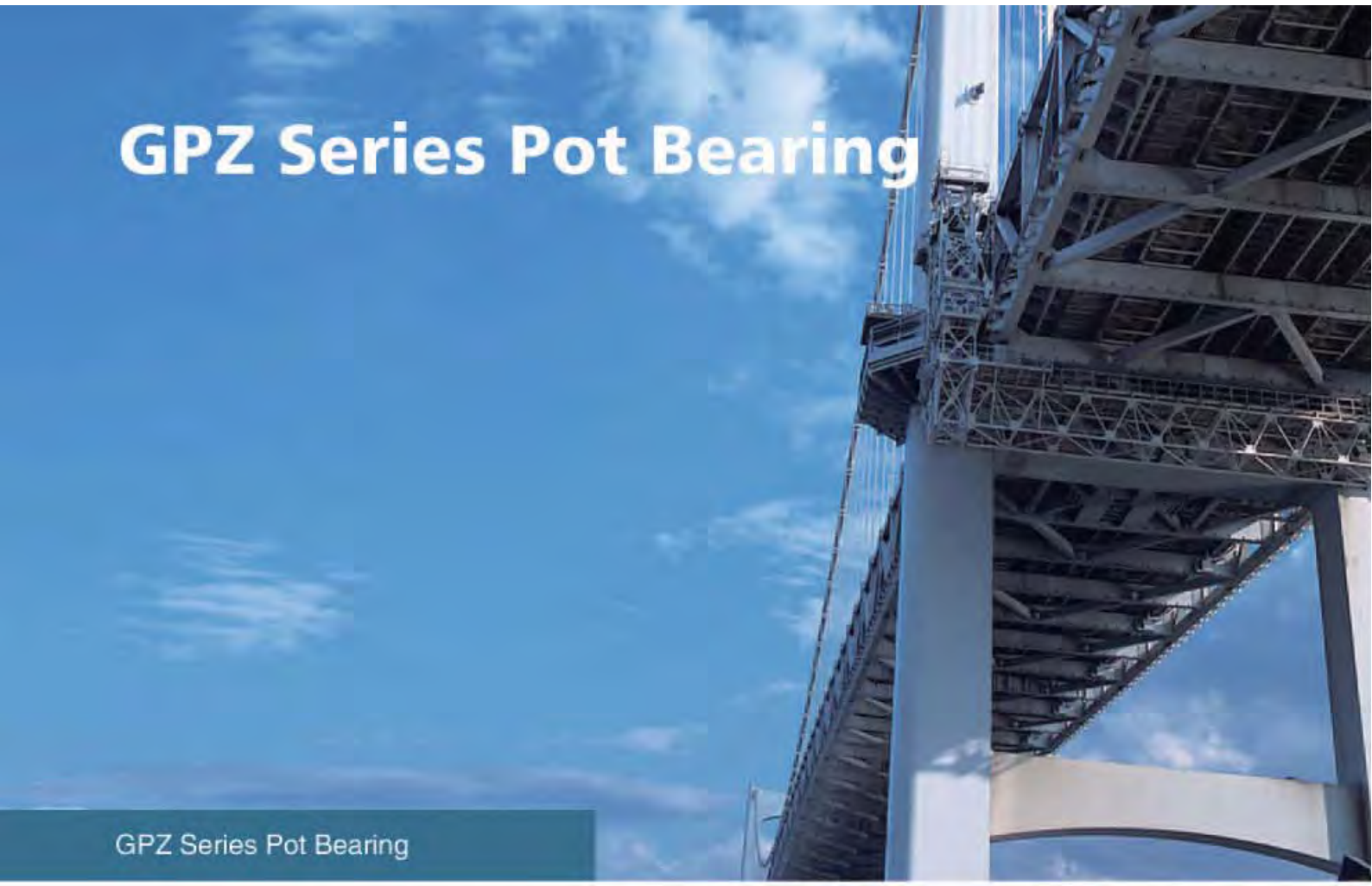

CHINA GREAT WALL QUALITY
ASSURANCE CENTRE
QUALITY MANAGEMENT SYSTEM CERTIFICATE

Patents:






GPZ Series Pot Bearing



GPZ Series Pot Bearing

The GPZ Pot Bearings are designed in accordance to BS 5400 – British Standard – Section 9.1 and 9.2， EN 1337 – European Norm， AASHTO – American Association of State Highway and Transport officials. Its main properties parameters are listed as follows:

1. The designed vertical load capacity of a bearing covers a range of 0.4MN~60MN, which is divided into 33classes
2. Vertical design rotation of a bearing is 0.02rad (approximately 1.15°), and it is applicable to horizontal rotation of any sizes
3. Horizontal load that a bearing can bear

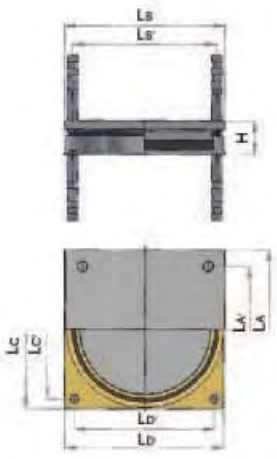
The horizontal load capacity of a fixed bearing (FX) in all directions and guided sliding bearing (SGL) in limited direction reaches 10% of vertical load capacity of the bearing.

4. The range of bearing displacement is given in the attached table
5. Designed values of friction coefficient of bearings:

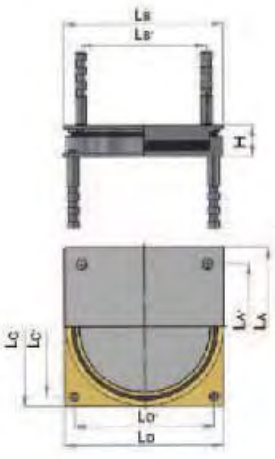
Normal temperature(−25℃~+60℃):u≤0.03

Low temperature(−40℃~−25℃):u≤0.06

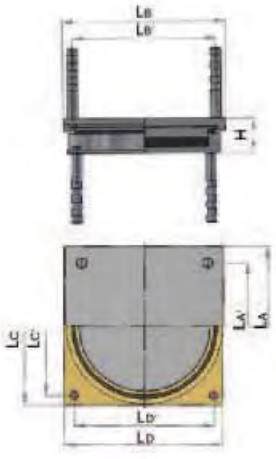
6. Special design may be adopted if the displacement and vertical/horizontal load capacity exceed relevant standard values.



Schematic Diagram of Guided Sliding Bearing (Type SGL)



Schematic Diagram of Fixed Bearing (Type FX)



Schematic Diagram of Free Sliding Bearing (Type FF)

Main Dimensions of Free Sliding Bearing (Type FF) GPZ Series

MN Type	LA					LB	LA'					LB'	LC	LC'	LD	LD'	H	Bolt/Sleeve diamenter*length	Weight(kg)				
	±50	±100	±150	±200	±250		±50	±100	±150	±200	±250								±50	±100	±150	±200	±250
0.4	310	410	510	610	710	260	270	370	470	570	670	220	195	160	195	160	75	ϕ40×300	43	46	49	52	55
0.5	325	425	525	625	725	270	285	385	485	585	685	230	210	170	210	170	80	ϕ40×300	47	51	54	58	62
0.6	340	440	540	640	740	295	300	400	500	600	700	250	230	190	230	190	85	ϕ40×300	54	58	62	67	72
0.8	365	465	565	665	765	320	325	425	525	625	725	275	260	210	260	210	90	ϕ40×300	63	69	74	80	85
1	385	485	585	685	785	340	345	445	545	645	745	295	290	230	290	230	95	ϕ40×300	74	80	87	93	99
1.5	435	535	635	735	835	390	395	495	595	695	795	345	345	270	345	270	100	ϕ40×300	94	101	109	116	123
2	475	575	675	775	875	430	435	535	635	735	835	385	395	310	395	310	105	ϕ40×300	117	125	134	142	150
2.5	510	610	710	810	910	465	470	570	670	770	870	420	445	350	445	350	115	ϕ40×300	150	160	171	181	192
3	560	660	760	860	960	500	510	610	710	510	910	440	480	380	480	380	120	ϕ50×300	191	203	216	227	239
3.5	590	690	790	890	990	530	540	641	740	845	945	470	545	410	515	410	125	ϕ50×300	219	232	245	258	271
4	615	715	815	915	1015	555	565	665	765	865	965	495	550	435	550	435	130	ϕ50×300	247	261	274	286	300
5	685	785	885	985	1085	615	625	725	825	925	1025	545	615	490	615	490	140	ϕ50×300	318	333	348	364	379
6	730	830	930	1030	1130	675	670	770	870	970	1070	605	675	530	675	530	150	ϕ50×300	393	411	428	447	464
7	775	875	975	1075	1175	725	715	815	915	1015	1115	655	725	570	725	570	155	ϕ50×300	458	477	497	515	535
8	820	920	1020	1120	1220	775	755	855	955	1055	1155	690	775	610	775	610	165	ϕ55×350	567	590	615	638	662
9	860	960	1060	1160	1260	820	795	895	995	1095	1195	735	820	640	820	640	175	ϕ55×350	666	693	721	748	776
10	895	995	1095	1195	1295	865	830	930	1030	1130	1230	780	865	670	865	670	185	ϕ55×350	774	805	836	867	898
12.5	985	1085	1185	1285	1385	970	915	1015	1115	1215	1315	870	970	760	970	760	200	ϕ60×400	1049	1086	1123	1160	1197
15	1060	1155	1255	1355	1455	1060	985	1080	1180	1280	1380	960	1060	820	1060	820	220	ϕ60×400	1359	1404	1450	1498	1545
17.5	1145	1230	1330	1430	1530	1145	1060	1145	1245	1345	1445	1035	1145	900	1145	900	240	ϕ60×400	1706	1753	1809	1863	1919
20	1225	1315	1415	1515	1615	1225	1135	1225	1325	1425	1525	1095	1225	970	1225	970	255	ϕ70×450	2099	2155	2218	2281	2345
22.5	1300	1370	1470	1570	1670	1300	1200	1270	1370	1470	1570	1170	1300	1030	1300	1030	270	ϕ70×450	2508	2560	2635	2709	2783
25	1370	1425	1525	1625	1725	1370	1270	1325	1425	1525	1625	1240	1370	1080	1370	1080	280	ϕ70×450	2854	2898	2976	3054	3232
27.5	1440	1495	1595	1695	1795	1440	1330	1385	1485	1585	1685	1290	1440	1150	1440	1150	290	ϕ80×500	3297	3345	3429	3514	3597
30	1505	1545	1645	1745	1845	1505	1385	1425	1525	1625	1725	1355	1505	1200	1505	1200	300	ϕ80×500	3723	3761	3853	3945	4036
32.5	1560	1595	1695	1795	1895	1560	1440	1475	1575	1675	1775	1410	1560	1240	1560	1240	310	ϕ80×500	4095	4130	4226	4323	4419
35	1620	1660	1760	1860	1960	1620	1480	1520	1620	1720	1820	1440	1620	1300	1620	1300	320	ϕ90×550	4596	4639	4741	4844	4947
37.5	1680	1705	1805	1905	2005	1680	1540	1565	1665	1765	1865	1500	1680	1340	1680	1340	330	ϕ90×550	5077	5108	5219	5331	5442
40	1735	1750	1850	1950	2050	1735	1595	1610	1710	1810	1910	1555	1735	1380	1735	1380	340	ϕ90×550	5580	5601	5717	5834	5950
45	1840	1890	1990	2090	2190	1840	1680	1730	1830	1930	2030	1640	1840	1480	1840	1480	360	ϕ95×600	6658	6727	6859	6991	7124
50	1940	1940	2040	2140	2240	1940	1780	1780	1880	1980	2080	1740	1940	1560	1940	1560	375	ϕ95×600	7626	7630	7773	7914	8057
55	2030	2030	2110	2210	2310	2030	1870	1870	1950	2050	2150	1830	2030	1630	2030	1630	390	ϕ95×600	8653	8657	8782	8937	9093
60	2120	2120	2180	2880	2380	2120	1960	1960	2020	2120	2220	1920	2120	1700	2120	1700	405	ϕ95×600	9779	9784	9887	10056	10224

Main Dimensions of Guided Sliding Bearing (Type SGL) GPZ Series

MN Type	LA					LB	LA'					LB'	LC	LC'	LD	LD'	H	Bolt/Sleeve diamenter*length	Weight(kg)				
	±50	±100	±150	±200	±250		±50	±100	±150	±200	±250								±50	±100	±150	±200	±250
0.4	320	420	520	620	720	245	290	390	490	590	690	200	200	160	200	160	80	ϕ40×300	46	49	52	56	59
0.5	335	435	535	635	735	260	300	400	500	600	700	210	215	170	215	170	85	ϕ40×300	50	54	58	62	66
0.6	350	450	550	650	750	280	315	415	515	615	715	230	230	190	230	190	90	ϕ40×300	55	60	64	68	73
0.8	375	475	575	675	775	315	340	440	540	640	740	260	265	225	265	225	95	ϕ40×300	67	73	78	83	89
1	395	495	595	695	795	345	360	460	560	660	760	290	295	250	295	250	100	ϕ40×300	78	85	91	97	103
1.5	445	545	645	745	845	405	410	510	610	710	810	350	355	310	355	310	110	ϕ40×300	109	117	126	134	143
2	505	605	705	805	905	460	460	560	660	760	860	400	405	360	405	360	115	ϕ50×300	152	162	172	182	192
2.5	540	640	740	840	940	505	500	600	700	800	900	440	455	400	455	400	125	ϕ50×300	191	203	215	227	239
3	575	675	775	875	975	550	530	630	730	830	930	490	495	435	495	435	130	ϕ50×300	225	239	153	267	282
3.5	625	725	825	925	1025	585	570	670	770	870	970	510	530	470	530	470	135	ϕ50×350	265	280	295	309	325
4	650	750	850	950	1050	625	600	700	800	900	1000	550	565	500	565	500	140	ϕ55×350	301	317	333	349	365
5	720	820	920	1020	1120	695	660	760	860	960	1060	610	630	560	630	560	155	ϕ55×350	408	428	447	466	485
6	765	865	965	1065	1165	750	700	800	900	1000	1100	660	390	610	690	610	165	ϕ55×350	496	517	539	561	583
7	830	930	1030	1130	123	805	760	860	960	1060	1160	700	740	650	740	650	170	ϕ60×400	597	620	644	667	690
8	865	965	1065	1165	1265	860	790	890	990	1090	1190	750	795	700	795	700	180	ϕ60×400	712	740	768	795	823
9	920	1020	1120	1220	1320	905	840	940	1040	1140	1240	790	840	740	840	740	190	ϕ60×400	830	863	896	928	961
10	955	1055	1155	1255	1355	945	870	970	1070	1170	1270	830	885	780	885	780	200	ϕ60×400	950	985	1021	1056	1092
12.5	1065	1165	1265	1365	1465	1050	970	1070	1170	1270	1370	910	990	870	990	870	220	ϕ70×450	1320	1364	1408	1451	1496
15	1135	1235	1335	1435	1535	1145	1040	1140	1240	1340	1440	1000	1080	950	1080	950	235	ϕ70×450	1631	1681	1731	1780	1830
17.5	1235	1335	1435	1535	1635	1240	1120	1220	1320	1420	1520	1080	1165	1020	1165	1020	255	ϕ80×500	2088	2148	2209	2270	2330
20	1300	1400	1500	1600	1700	1315	1190	1290	1390	1490	1590	1150	1245	1100	1245	1100	275	ϕ80×500	2531	2600	2669	2738	2806
22.5	1390	1490	1590	1690	1790	1395	1260	1360	1460	1560	1660	1200	1320	1160	1320	1160	290	ϕ90×550	3042	3121	3201	3281	3360
25	1445	1545	1645	1745	1845	1460	1310	1410	1510	1610	1710	1260	1390	1230	1390	1230	300	ϕ90×550	3416	3500	3584	3669	3753
27.5	1495	1595	1695	1795	1895	1540	1360	1460	1560	1660	1760	1340	1455	1290	1455	1290	310	ϕ90×550	3838	3931	4023	7116	4208
30	1585	1685	1785	1885	1985	1600	1430	1530	1630	1730	1830	1380	1520	1340	1520	1340	320	ϕ95×600	4342	4441	4541	4641	4741
32.5	1635	1735	1835	1935	2035	1660	1480	1580	1680	1780	1880	1440	1580	1390	1580	1390	340	ϕ95×600	4966	5076	5158	5295	5405
35	1680	1780	1880	1980	2080	1715	1530	1630	1730	7830	1930	1490	1640	1450	1640	1450	350	ϕ95×600	5462	5580	5697	5814	5931
37.5	1755	1855	1955	2055	2155	1780	1590	1690	1790	1890	1990	1540	1700	1500	1700	1500	360	ϕ100×650	6078	6230	6365	6490	6616
40	1800	1900	2000	2100	2200	1830	1630	1730	1830	1930	2030	1590	1750	1550	1750	1550	365	ϕ100×650	6472	6601	6731	6859	6989
45	1910	2010	2110	2210	2310	1950	1740	1840	1940	2040	2140	1700	1860	1640	1860	1640	390	ϕ100×750	7798	7945	8091	8238	8384
50	2000	2100	2200	2300	2400	2040	1810	1910	2010	2110	2210	1780	1960	1720	196	1720	405	ϕ110×750	8946	9100	9255	9409	9564
55	2070	2170	2270	2370	2470	2145	1880	1980	2080	2180	2280	1880	2050	1800	2050	1800	425	ϕ110×750	10231	10408	10584	10760	10936
60	2140	2240	2340	2440	2540	2230	1950	2050	2150	2250	2350	1960	2140	1890	2140	1890	435	ϕ110×750	11270	11455	11640	11825	12009

Main Dimensions of Fixed Bearing (Type FX) GPZ Series

MN Type	L_A	L_A'	L_B	L_B'	L_C	L_C'	L_D	L_D'	H	Bolt/Sleeve diamenter*length	Weight(kg)
0.4	240	200	240	200	200	160	200	160	65	ϕ40×300	39
0.5	255	215	255	215	215	170	215	170	65	ϕ40×300	41
0.6	270	230	270	230	230	190	230	190	70	ϕ40×300	45
0.8	305	265	305	265	265	225	265	225	75	ϕ40×300	52
1	335	295	335	295	295	250	295	250	80	ϕ40×300	61
1.5	390	350	390	350	355	310	355	310	90	ϕ40×300	83
2	405	320	405	320	405	360	405	360	95	ϕ50×300	115
2.5	455	360	455	360	455	400	455	400	105	ϕ50×300	147
3	495	390	495	390	495	435	495	435	110	ϕ50×300	173
3.5	530	420	530	420	530	470	530	470	115	ϕ50×350	205
4	565	445	565	445	565	500	565	500	120	ϕ55×350	236
5	630	505	630	505	630	560	630	560	130	ϕ55×350	310
6	690	550	690	550	690	610	690	610	140	ϕ55×350	383
7	740	585	740	585	740	650	740	650	150	ϕ60×400	486
8	795	630	795	630	795	700	795	700	160	ϕ60×400	583
9	840	665	840	665	840	740	840	740	165	ϕ60×400	656
10	885	700	885	700	885	780	885	780	175	ϕ60×400	758
12.5	990	760	990	760	990	870	990	870	185	ϕ70×450	1007
15	1080	825	1080	825	1080	950	1080	950	205	ϕ70×450	1302
17.5	1165	900	1165	900	1165	1020	1165	1020	220	ϕ80×500	1642
20	1245	955	1245	955	1245	1100	1245	1100	235	ϕ80×500	1960
22.5	1320	1020	1320	1020	1320	1160	1320	1160	245	ϕ90×550	2321
25	1390	1070	1390	1070	1390	1230	1390	1230	255	ϕ90×550	2631
27.5	1455	1120	1455	1120	1455	1290	1455	1290	265	ϕ90×550	2960
30	1520	1170	1520	1170	1520	1340	1520	1340	275	ϕ95×600	3389
32.5	1580	1210	1580	1210	1580	1390	1580	1390	290	ϕ95×600	3832
35	1640	1250	1640	1250	1640	1450	1640	1450	300	ϕ95×600	4262
37.5	1700	1300	1700	1300	1700	1500	1700	1500	310	ϕ100×650	4778
40	1750	1340	1750	1340	1750	1550	1750	1550	315	ϕ100×650	5104
45	1860	1420	1860	1420	1860	1640	1860	1640	335	ϕ100×650	6061
50	1960	1500	1960	1500	1960	1720	1960	1720	355	ϕ110×750	7215
55	2050	1560	2050	1560	2050	1800	2050	1800	370	ϕ110×750	8152
60	2140	1630	2140	1630	2140	1890	2140	1890	380	ϕ110×750	9041

GPZ (II) Series Anti-seismic Pot Rubber Bearing

GPZ (II) Series Anti-seismic Pot Rubber Bearing

With the aid of friction and damping-rubber energy dissipation, the GPZ (II) Series anti-seismic pot rubber bearing can attenuate the seismic energy such that it can prevent the bridge structure from being destructed by sporadic load like earthquake, Its main properties parameters are listed as follows:

1. The designed vertical load capacity of bearing covers a range of 0.8MN ~ 60MN, which is divided into 31 classes
2. Vertical design rotation of a bearing is 0.02rad (approximately1.15°),and it is applicable to horizontal rotation of any sizes
3. Horizontal load that a bearing can bear

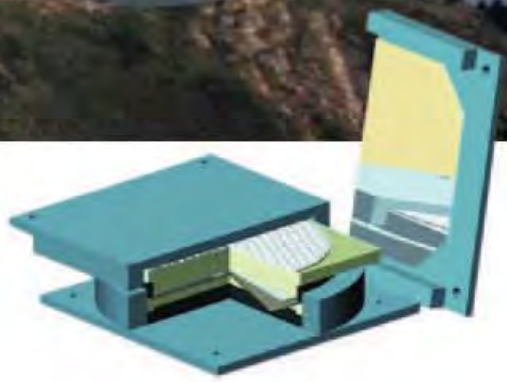
The horizontal load capacity of a fixed bearing (FX) in all directions and guided sliding bearing (SGL) in limited direction reaches 20% of vertical load capacity of the bearing.

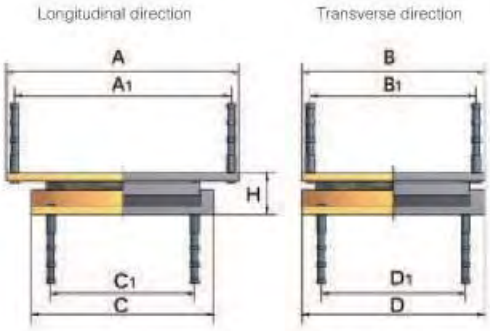
4. The range of bearing displacement is given in the attached table.
5. Designed values of friction coefficient of bearings:

Normal temperature(-25℃~+60℃):u≤0.03

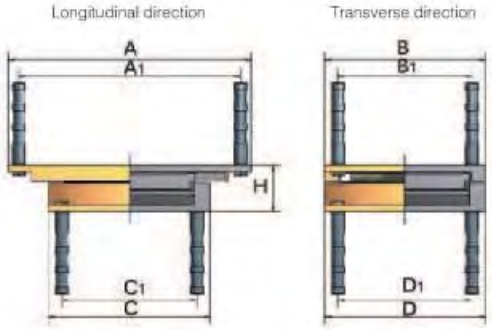
Low temperature(-40℃~-25℃):u≤0.06

6. Special design may be adopted if the displacement and vertical/horizontal load capacity exceed relevant standard values.

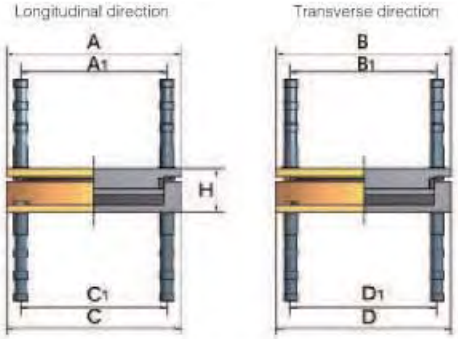




Schematic Diagram of Free Sliding Bearing (Type FF)



Schematic Diagram of Fixed Bearing (Type FX)



Schematic Diagram of Guided Sliding Bearing (Type SGL)

Main Dimensions of Anti-seismic Free Sliding Bearing (Type FF) GPZ (II) Series

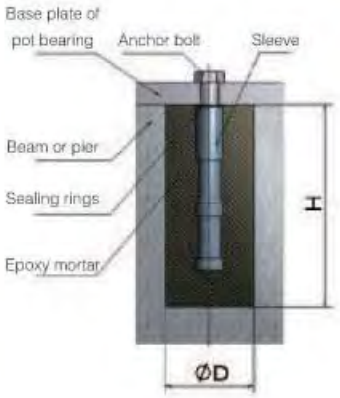
Type	A(longitudinal direction e) (mm)	A1(longitudinal direction e) (mm)	B (mm)	B1 (mm)	C(D) (mm)	C1(D) (mm)	H (mm)	Weight (longitudinal direction e)(kg)	Transverse direction e
	±50 ±100 ±150 ±200 ±250 ±300	±50 ±100 ±150 ±200 ±250 ±300						±50 ±100 ±150 ±200 ±250 ±300	
GPZ(II)0.8FF	320 420 520	280 380 480	300	260	250	210	80	36 40 44	±40
GPZ(II)1FF	340 440 540	300 400 500	320	280	275	230	85	44 49 53	±40
GPZ(II)1.25FF	360 460 560	320 420 520	340	300	305	250	90	53 58 63	±40
GPZ(II)1.5FF	380 480 580	340 440 540	360	320	335	270	95	64 70 75	±40
GPZ(II)2FF	420 520 620	380 480 580	400	360	390	310	105	93 100 107	±40
GPZ(II)2.5FF	460 560 660	420 520 620	440	400	430	340	110	121 129 137	±40
GPZ(II)3FF	490 590 690	440 540 640	470	420	470	380	115	147 156 165	±40
GPZ(II)3.5FF	620 720 820	570 670 770	505	450	505	410	120	190 200 210	±40
GPZ(II)4FF	640 740 840	590 690 790	545	490	545	440	130	227 238 250	±40
GPZ(II)5FF	690 790 890	630 730 830	605	540	605	490	140	289 303 316	±40
GPZ(II)6FF	740 840 940	680 780 880	660	600	660	520	150	367 382 397	±40
GPZ(II)7FF	780 880 980	720 820 920	710	640	710	560	165	463 481 499	±40
GPZ(II)8FF	810 910 1010	735 835 935	760	680	760	610	175	554 574 594	±40
GPZ(II)9FF	850 950 1050	775 875 975	805	720	805	640	190	677 700 723	±40
GPZ(II)10FF	980 1080 1180	905 1005 1105	850	770	850	670	195	793 818 843	±40
GPZ(II)12.5FF	1060 1160 1260	970 1070 1170	950	860	950	760	210	1051 1082 1111	±40
GPZ(II)15FF	1130 1230 1330	1040 1140 1240	1040	950	1040	820	230	1371 1407 1442	±40
GPZ(II)17.5FF	1190 1290 1390	1100 1200 1300	1120	1030	1120	880	240	1742 1783 1825	±40
GPZ(II)20FF	1250 1350 1450	1150 1250 1350	1200	1100	1200	950	260	2037 2084 2131	±40
GPZ(II)22.5FF	1310 1410 1510	1210 1310 1410	1270	1170	1270	1000	270	2357 2409 2461	±40
GPZ(II)25FF	1360 1460 1560	1250 1350 1450	1350	1240	1350	1070	280	2769 2827 2886	±40
GPZ(II)27.5FF	1420 1520 1620	1310 1410 1510	1420	1310	1420	1130	290	3147 3210 3273	±40
GPZ(II)30FF	1480 1560 1660	1370 1450 1550	1480	1370	1480	1160	300	3537 3593 3662	±40
GPZ(II)32.5FF	1610 1710 1810	1490 1590 1690	1535	1410	1535	1220	310	4032 4107 4183	±50
GPZ(II)35FF	1650 1750 1850	1530 1630 1730	1595	1470	1595	1260	320	4463 4544 4625	±50
GPZ(II)37.5FF	1690 1790 1890	1570 1670 1770	1655	1530	1655	1300	330	4922 5009 5095	±50
GPZ(II)40FF	1730 1830 1930	1610 1710 1810	1700	1580	1700	1340	340	5341 5431 5521	±50
GPZ(II)45FF	1810 1910 2010	1680 1780 1880	1810	1670	1810	1430	360	6353 6453 6553	±50
GPZ(II)50FF	1900 1990 2090	1770 1860 1960	1900	1760	1900	1500	375	7286 7386 7499	±50
GPZ(II)55FF	2000 2060 2160	1860 1920 2020	2000	1860	2000	1580	390	8398 8474 8597	±50
GPZ(II)60FF	2080 2130 2230	1940 1990 2090	2080	1940	2080	1640	405	9890 9550 9665	±50

Main Dimensions of Anti-seismic Guided Sliding Bearing (Type SGL) GPZ (II) Series

Type	A(longitudinal direction e) (mm)	A1(longitudinal direction e) (mm)	B (mm)	B1 (mm)	C(D) (mm)	C1(D1) (mm)	H (mm)	Weight (longitudinal direction e)(kg)					
	± 50 ± 100 ± 150 ± 200 ± 250 ± 300	± 50 ± 100 ± 150 ± 200 ± 250 ± 300						50	100	150	200	250	300
GPZ(II)0.8SGL	390 490 590	350 450 550	265	200	265	225	125	62	68	73			
GPZ(II)1SGL	410 510 610	370 470 570	295	230	295	245	130	79	84	89			
GPZ(II)1.25SGL	460 560 660	410 510 610	325	250	325	275	135	98	105	111			
GPZ(II)1.5SGL	480 580 680	430 530 630	355	280	355	300	145	128	136	144			
GPZ(II)2SGL	550 650 750	490 590 690	410	330	410	350	150	172	182	192			
GPZ(II)2.5SGL	580 680 780	520 620 720	455	370	455	380	160	217	227	237			
GPZ(II)3SGL	640 740 840	570 670 770	495	400	495	420	165	269	281	292			
GPZ(II)3.5SGL	770 870 970	700 800 900	530	430	530	450	170		325	337	350		
GPZ(II)4SGL	820 920 1020	740 840 940	565	460	565	480	180		405	405	435		
GPZ(II)5SGL	870 970 1070	790 890 990	635	530	635	530	190		552	552	569		
GPZ(II)6SGL	950 1050 1150	855 955 1055	695	580	695	580	205		668	668	708		
GPZ(II)7SGL	1010 1110 1210	905 1005 1105	750	600	750	630	215		847	847	869		
GPZ(II)8SGL	1060 1160 1260	955 1055 1155	800	650	800	670	230		1010	1010	1036		
GPZ(II)9SGL	1090 1190 1290	985 1085 1185	845	690	845	700	240		1200	1200	1230		
GPZ(II)10SGL	1250 1350 1450	1135 1235 1335	890	730	890	740	250		1372	1372	1405	1438	
GPZ(II)12.5SGL	1370 1470 1570	1240 1340 1440	995	830	995	820	270		1825	1825	1864	1902	
GPZ(II)15SGL	1440 1540 1640	1310 1410 1510	1085	920	1085	880	290		2331	2331	2376	2421	
GPZ(II)17.5SGL	1530 1630 1730	1390 1490 1590	1170	1000	1170	950	305		2752	2752	2803	2854	
GPZ(II)20SGL	1640 1740 1840	1480 1580 1680	1260	1070	1260	1030	320		3378	3378	3436	3493	
GPZ(II)22.5SGL	1700 1800 1900	1540 1640 1740	1330	1140	1330	1080	340		3921	3921	3985	4048	
GPZ(II)25SGL	1790 1890 1990	1615 1715 1815	1400	1200	1400	1140	350		4526	4526	4595	4664	
GPZ(II)27.5SGL	1850 1950 2050	1675 1775 1875	1475	1270	1475	1190	360		5057	5057	5149	5223	
GPZ(II)30SGL	1940 2040 2140	1745 1845 1945	1540	1320	1540	1250	375		5867	5867	5949	6032	
GPZ(II)32.5SGL	2090 2190 2290	1895 1995 2095	1600	1370	1600	1290	395				6669	6758	6847
GPZ(II)35SGL	2140 2240 2340	1945 2045 2145	1660	1420	1660	1340	405				7269	7364	7459
GPZ(II)37.5SGL	2225 2325 2425	2010 2110 2210	1720	1460	1720	1390	420				8217	8318	8420
GPZ(II)40SGL	2265 2365 2465	2050 2250 2250	1770	1500	1770	1430	430				8819	8926	9032
GPZ(II)45SGL	2390 2490 2590	2160 2360 2360	1880	1600	1880	1520	445				10150	10267	10385
GPZ(II)50SGL	2470 2570 2670	2240 2440 2440	1980	1700	1980	1590	470				11712	11843	11974
GPZ(II)55SGL	2585 2685 2785	2340 2540 2540	2080	1780	2080	1670	485				13404	13547	13690
GPZ(II)60SGL	2690 2790 2890	2425 2625 2625	2165	1850	2165	1740	505				14928	15080	15231

Main Dimensions of Anti-seismic Fixed Bearing (Type FX)
GPZ (II) Series

Type	Main dimensions (mm)							Weight(kg)
	A	B	C	D	A1	B1	C1	D1	H	
GPZ(II)0.8FX	265	225	95	47						
GPZ(II)1FX	295	245	100	59						
GPZ(II)1.25FX	325	275	105	74						
GPZ(II)1.5FX	355	300	115	100						
GPZ(II)2FX	410	350	125	134						
GPZ(II)2.5FX	455	380	130	171						
GPZ(II)3FX	495	420	135	212						
GPZ(II)3.5FX	530	450	140	245						
GPZ(II)4FX	565	480	155	315						
GPZ(II)5FX	635	530	165	427						
GPZ(II)6FX	695	580	175	528						
GPZ(II)7FX	750	630	185	663						
GPZ(II)8FX	800	670	200	790						
GPZ(II)9FX	845	700	205	953						
GPZ(II)10FX	890	740	210	1080						
GPZ(II)12.5FX	995	820	235	1471						
GPZ(II)15FX	1085	880	250	1894						
GPZ(II)17.5FX	1170	950	265	2272						
GPZ(II)20FX	1260	1030	280	2761						
GPZ(II)22.5FX	1330	1080	295	3187						
GPZ(II)25FX	1400	1140	310	3740						
GPZ(II)27.5FX	1475	1190	325	4234						
GPZ(II)30FX	1540	1250	340	4935						
GPZ(II)32.5FX	1600	1290	350	5447						
GPZ(II)35FX	1660	1340	360	5954						
GPZ(II)37.5FX	1720	1390	370	6605						
GPZ(II)40FX	1770	1430	380	7247						
GPZ(II)45FX	1880	1520	400	8417						
GPZ(II)50FX	1980	1590	415	9641						
GPZ(II)55FX	2080	1670	430	11087						
GPZ(II)60FX	2165	1740	445	12377						



Dimensions of Holes for Steel Sleeves of Free sliding Bearing (TypeFF) GPZ (II) Series

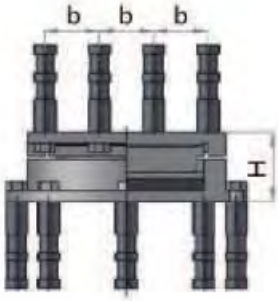
Type	Main dimensions (mm)	
	D	H
GPZ(II)0.8~GPZ(II)4	80	300
GPZ(II)5~GPZ(II)7	100	360
GPZ(II)8~GPZ(II)10	120	360
GPZ(II)12.5~GPZ(II)17.5	140	420
GPZ(II)20~GPZ(II)22.5	160	420
GPZ(II)25~GPZ(II)30	180	480
GPZ(II)32.5~GPZ(II)40	200	480
GPZ(II)45~GPZ(II)50	220	540
GPZ(II)55~GPZ(II)60	240	540

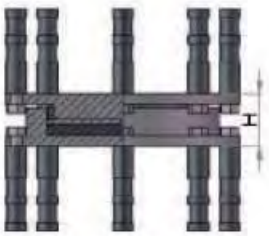
Dimensions of Holes for Steel Sleeves of Guided sliding/Fixed Bearing (Type SGL and FX) GPZ (II) Series

Type	Main dimensions (mm)	
	D	H
GPZ(II)0.8~GPZ(II)1	80	300
GPZ(II)1.25~GPZ(II)2.5	120	360
GPZ(II)3~GPZ(II)5	160	420
GPZ(II)6~GPZ(II)9	200	480
GPZ(II)10~GPZ(II)15	240	540
GPZ(II)17.5~GPZ(II)22.5	280	600
GPZ(II)25~GPZ(II)35	350	650
GPZ(II)37.5~GPZ(II)50	360	700
GPZ(II)55~GPZ(II)60	400	700

GPZ (III) Series Anti-seismic Pot Rubber Bearing

GPZ (III) Series Anti–seismic Pot Rubber Bearing





The GPZ(III) Series anti–seismic pot rubber bearing is applicable to the a bridge structures located in regions with basic intensity of 8 degrees (or lower). Its main properties parameters are listed as follows:

1. The designed vertical load capacity of a bearing covers a range of 0.8MN~60MN, which is divided into 31 classes
2. Vertical design rotation of a bearing is 0.02rad (approximately1.15°),and it is applicable to horizontal rotation of any sizes
3. Horizontal load that a bearing can bear

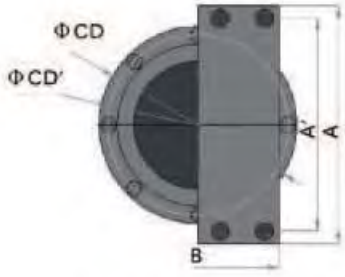
The horizontal load capacity of a fixed bearing (FX) in all directions and guided sliding bearing (SGL) in limited direction reaches 20% of vertical load capacity of the bearing.

4. The range of bearing displacement is given in the attached table.
5. Designed values of friction coefficient of bearings:

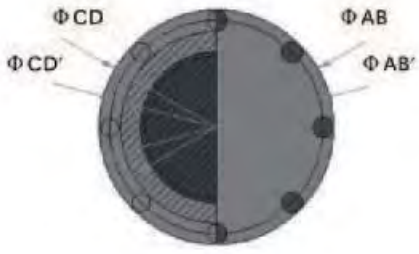
Normal temperature(–25℃~+60℃):u≤0.03

Low temperature(–40℃~–25℃):u≤0.06

6. Special design may be adopted if the displacement and vertical/horizontal load capacity exceed relevant standard values.



Schematic Diagram of Guided Sliding Bearing (Type SGL)



Schematic Diagram of Fixed Bearing (Type FX)

Main Dimensions of Anti-seismic Fixed Bearing (Type FX) GPZ (III) Series

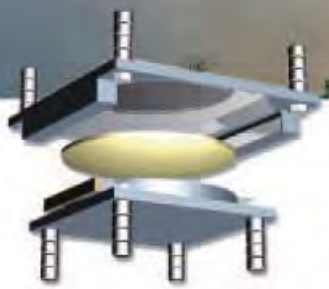
Type	ϕ AB	ϕ AB'	ϕ CD	ΦCD'	H	Weight(kg)	Bolt/Sleeve diamenter*length
GPZ(III)0.8FX	325	295	325	295	95	53	ϕ 30 × 160
GPZ(III)1FX	355	325	355	325	100	65	ϕ 30 × 160
GPZ(III)1.25FX	385	355	385	355	105	76	ϕ 30 × 160
GPZ(III)1.5FX	435	395	435	395	115	106	ϕ 40 × 160
GPZ(III)2FX	495	450	490	450	120	137	ϕ 40 × 160
GPZ(III)2.5FX	555	505	555	505	125	194	ϕ 50 × 200
GPZ(III)3FX	595	545	595	545	130	227	ϕ 50 × 200
GPZ(III)3.5FX	610	570	610	570	135	230	ϕ 40 × 160
GPZ(III)4FX	645	605	645	605	150	280	ϕ 40 × 160
GPZ(III)5FX	735	685	735	685	160	386	ϕ 50 × 200
GPZ(III)6FX	795	745	795	745	170	480	ϕ 50 × 200
GPZ(III)7FX	860	805	860	805	180	593	ϕ 55 × 220
GPZ(III)8FX	915	860	915	860	195	715	ϕ 55 × 220
GPZ(III)9FX	965	905	965	905	200	816	ϕ 60 × 240
GPZ(III)10FX	1015	955	1015	955	205	930	ϕ 60 × 240
GPZ(III)12.5FX	1135	1065	1135	1065	230	1328	ϕ 70 × 280
GPZ(III)15FX	1225	1155	1225	1155	245	1626	ϕ 70 × 280
GPZ(III)17.5FX	1335	1255	1335	1255	260	2082	ϕ 80 × 340
GPZ(III)20FX	1420	1340	1420	1340	270	2409	ϕ 80 × 340
GPZ(III)22.5FX	1510	4120	1510	4120	285	2924	ϕ 90 × 380
GPZ(III)25FX	1585	1495	1585	1495	300	3344	ϕ 90 × 380
GPZ(III)27.5FX	1660	1570	1660	1570	315	3804	ϕ 90 × 380
GPZ(III)30FX	1740	1640	1740	1640	325	4366	ϕ 100 × 450
GPZ(III)32.5FX	1800	1700	1800	1700	340	4858	ϕ 100 × 450
GPZ(III)35FX	1860	1760	1860	1760	350	5341	ϕ 100 × 450
GPZ(III)37.5FX	1925	1825	1925	1825	360	5927	ϕ 100 × 450
GPZ(III)40FX	1995	1885	1995	1885	370	6568	ϕ 110 × 500
GPZ(III)45FX	2100	1990	2100	1990	390	7612	ϕ 110 × 500
GPZ(III)50FX	2225	2105	2225	2105	405	8955	ϕ 120 × 580
GPZ(III)55FX	2320	2200	2320	2200	420	9997	ϕ 120 × 580
GPZ(III)60FX	2405	2285	2405	2285	435	11064	ϕ 120 × 580

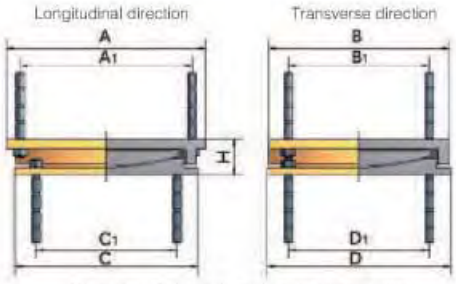
Main Dimensions of Anti-seismic Guided Sliding Bearing (Type SGL) GPZ (III) Series

Type	Longitudinal direction			Transverse direction	A			A'			B	b	ϕCD	ϕCD'	H	sleeve Type	Weight(kg)		
GPZ(III)0.8SGL	±50	±100	±150	±3	370	470	570	330	430	530	265	70	325	295	125	ϕ30×160	67	70	74
GPZ(III)1SGL	±50	±100	±150	±3	390	490	590	350	450	550	295	80	355	325	130	ϕ30×160	80	85	91
GPZ(III)1.25SGL	±50	±100	±150	±3	420	520	620	380	480	580	325	90	385	355	135	ϕ30×160	97	103	108
GPZ(III)1.5SGL	±50	±100	±150	±3	460	560	660	410	510	610	355	100	435	395	145	ϕ40×160	132	139	145
GPZ(III)2SGL	±50	±100	±150	±3	510	610	710	460	560	660	410	115	490	450	150	ϕ40×160	171	178	185
GPZ(III)2.5SGL	±50	±100	±150	±3	570	670	770	500	600	700	455	125	555	505	160	ϕ50×200	240	248	256
GPZ(III)3SGL	±50	±100	±150	±3	610	710	810	540	640	740	495	135	595	545	165	ϕ50×200	281	291	300
GPZ(III)3.5SGL	±100	±150	±200	±3	720	820	920	660	760	860	530	150	610	570	170	ϕ40×160	306	317	328
GPZ(III)4SGL	±100	±150	±200	±3	750	850	950	690	790	890	565	160	645	605	180	ϕ40×160	361	374	387
GPZ(III)5SGL	±100	±150	±200	±3	820	920	1020	750	850	950	635	180	735	685	190	ϕ50×200	487	501	515
GPZ(III)6SGL	±100	±150	±200	±3	870	970	1070	800	900	1000	695	200	795	745	205	ϕ50×200	618	637	655
GPZ(III)7SGL	±100	±150	±200	±3	930	1030	1130	845	945	1045	750	220	860	805	215	ϕ55×220	756	776	797
GPZ(III)8SGL	±100	±150	±200	±3	980	1080	1180	895	995	1095	805	235	915	860	230	ϕ55×220	901	923	944
GPZ(III)9SGL	±100	±150	±200	±3	1020	1120	1220	930	1030	1130	845	245	965	905	240	ϕ60×240	1050	1076	1102
GPZ(III)10SGL	±150	±200	±250	±3	1160	1260	1360	1070	1170	1270	895	260	1015	955	250	ϕ60×240	1236	1264	1292
GPZ(III)12.5SGL	±150	±200	±250	±3	1270	1370	1470	1170	1270	1370	995	290	1135	1065	270	ϕ70×280	1657	1688	1791
GPZ(III)15SGL	±150	±200	±250	±3	1340	1440	1540	1240	1340	1440	1085	320	1225	1155	290	ϕ70×280	2066	2102	2139
GPZ(III)17.5SGL	±150	±200	±250	±3	1430	1530	1630	1320	1420	1520	1175	350	1335	1255	305	ϕ80×340	2588	2630	2671
GPZ(III)20SGL	±150	±200	±250	±3	1500	1600	1700	1390	1490	1590	1260	380	1420	1335	320	ϕ80×340	3069	3119	3169
GPZ(III)22.5SGL	±150	±200	±250	±3	1580	1680	1780	1460	1560	1660	1330	400	1510	1420	340	ϕ90×380	3723	3782	3841
GPZ(III)25SGL	±150	±200	±250	±3	1640	1740	1840	1520	1620	1720	1405	420	1585	1510	350	ϕ90×380	4204	4268	4324
GPZ(III)27.5SGL	±150	±200	±250	±3	1680	1780	1880	1560	1660	1760	1480	440	1660	1585	360	ϕ90×380	4691	4759	4819
GPZ(III)30SGL	±150	±200	±300	±3	1740	1840	1940	1600	1700	1800	1540	460	1740	1660	375	ϕ100×450	5391	5456	5529
GPZ(III)32.5SGL	±200	±250	±300	±3	1890	1990	2090	1750	1850	1950	1600	480	1800	1740	395	ϕ100×450	6141	6223	6305
GPZ(III)35SGL	±200	±250	±300	±3	1940	2040	2140	1800	1900	2000	1660	500	1860	1800	405	ϕ100×450	6685	6770	6855
GPZ(III)37.5SGL	±200	±250	±300	±3	1990	2090	2190	1850	1950	2050	1725	520	1925	1860	420	ϕ100×450	7415	7505	7596
GPZ(III)40SGL	±200	±250	±300	±3	2050	2150	2250	1900	2000	2100	1775	530	1995	1925	430	ϕ110×500	8192	5891	8390
GPZ(III)45SGL	±200	±250	±300	±3	2140	2240	2340	1990	2090	2190	1880	565	2100	1995	445	ϕ110×500	9372	9481	9589
GPZ(III)50SGL	±200	±250	±300	±3	2240	2340	2440	2080	2180	2280	1985	600	2225	2100	470	ϕ120×580	11196	11321	1146
GPZ(III)55SGL	±200	±250	±300	±3	2320	2420	2520	2160	2260	2360	2080	630	2320	2225	485	ϕ120×580	12482	12616	12750
GPZ(III)60SGL	±200	±250	±300	±3	2390	2490	2590	2230	2330	2430	2165	655	2405	2405	505	ϕ120×580	13950	14096	14241

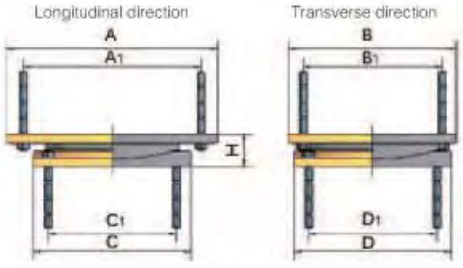
QZ Series Spherical Bearing

QZ Series Spherical Bearing

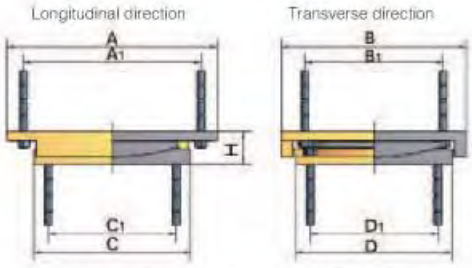




Schematic Diagram of Fixed Bearing (Type FX)



Schematic Diagram of Free Sliding Bearing (Type FF)



Schematic Diagram of Fixed Bearing (Type SGL)

QZ Series Spherical Bearing, which was jointly developed by the company and the railway Research Institute in 1990, meets the standards BS 5400 – British Standard – Section 9.1 and 9.2 , EN 1337 – European Norm , AASHTO – American Association of State Highway and Transport officials, and is characterized by its turning angle that is greater than that of pot bearings and free turning, and it is applicable to the curved bridges, wide bridges, gradient bridges and long span bridges. Its main properties parameters are listed as follows:

1. The designed vertical load capacity of a bearing covers a range of 1000KN – 30000KN, which is divided into 20classes.
2. vertical design rotation of a bearing is 0.02rad (approximately1.15°)
3. Horizontal load that a bearing can bear

The horizontal load capacity of a fixed bearing (FX) in all directions and guided sliding bearing (SGL) in limited direction reaches 10% of vertical load capacity of the bearing.

4. The range of bearing displacement is given in the attached table.
5. Designed values of friction coefficient of bearings:

Normal temperature(−25℃−+60℃):u≤0.03

Low temperature(−40℃~−25℃):u≤0.06

6. Range of gradient application of bearings:

The bearing can self-adapt to the gradient smaller than 6‰, For the gradients greater than 6‰, steel plates may be buried underneath the beams, or upper bearing plates may be positioned as per the actual processing gradients.

7. Special design may be adopted if the displacement and vertical/horizontal load capacity exceed relevant standard values.

Main Dimensions of Free Sliding Bearing (Type FF) QZ Series

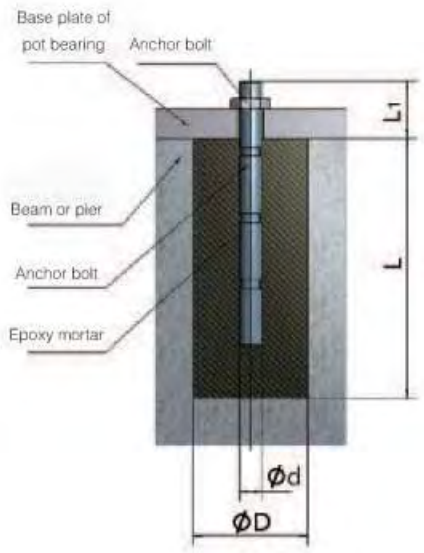
Type	Bearing rotaion θ (rad)	A(longitudinal direction e) (mm)	A1(longitudinal direction e) (mm)	B (mm)	B1 (mm)	C (mm)	C1 (mm)	H (mm)	Bolt/sleeve diameter*length (mm)	Weight(longitudinal direction e)(kg)
		±50 ±100 ±150 ±200 ±250	±50 ±100 ±150 ±200 ±250							±50 ±100 ±150 ±200 ±250
QZ1000FF	0.01~0.02	410 510	350 450	350	290	300	240	79	M20×400	64 71
QZ1500FF	0.01~0.02	460 560	400 500	390	330	350	290	84	M20×400	85 92
QZ2000FF	0.01~0.02	510 610	430 530	440	360	400	320	89	M20×400	111 119
QZ2500FF	0.01~0.02	555 655	450 550	485	395	445	355	105	M24×460	165 176
QZ3000FF	0.01~0.02	590 690 790	470 570 670	520	420	480	380	110	M24×460	195 207 219
QZ4000FF	0.01~0.02	650 750 850	530 630 730	580	470	540	430	115	M27×500	254 267 281
QZ5000FF	0.01~0.02	710 810 910	580 680 780	640	530	600	490	127	M30×500	350 369 387
QZ6000FF	0.01~0.02	770 870 970	640 740 840	700	570	660	530	137	M33×500	446 467 487
QZ7000FF	0.01~0.02	820 920 1020	680 780 880	750	610	710	570	147	M36×500	557 582 606
QZ8000FF	0.01~0.02	850 950 1050	720 820 920	780	645	740	605	152	M40×600	631 657 682
QZ9000FF	0.01~0.02	900 1000 1100	760 860 960	830	680	790	640	162	M42×600	769 800 830
QZ10000FF	0.01~0.02	935 1035 1135	790 890 990	865	705	825	665	167	M42×600	850 882 913
QZ12500FF	0.010	1000 1100 1200	800 900 1000	940	740	910	710	191	M45×600	1103 1137 1172
	0.015	1020 1120 1220	820 920 1020	960	760	930	730			1144 1179 1215
	0.020	1050 1150 1250	850 950 1050	990	790	960	760			1207 1244 1280
QZ15000FF	0.010	1080 1180 1280	880 980 1080	1020	820	990	790	207	M48×600	1390 1427 1465
	0.015	1100 1200 1300	900 100 1100	1040	840	1010	810			1438 1476 1515
	0.020	1130 1230 1330	930 1030 1130	1070	870	1040	840			1512 1552 1591
QZ17500FF	0.010	1140 1240 1340	900 1000 1100	1080	840	1050	810	211	M56×800	1641 1681 1720
	0.015	1180 1280 1380	940 1040 1140	1120	880	1090	850			1745 1786 1827
	0.020	1210 1310 1410	970 1070 1170	1150	910	1120	880			1825 1867 1910
QZ20000FF	0.010	1200 1300 1400	960 1060 1160	1140	900	1110	870	227	M60×800	1980 2027 2074
	0.015	1240 1340 1440	1000 1100 1200	1180	940	1150	910			2100 2148 2196
	0.020	1270 1370 1470	1030 1130 1230	1210	970	1180	940			2192 2241 2291
QZ22500FF	0.020	1390 1490 1590	1160 1260 1360	1290	1100	1210	960	260	M64×800	2764 2816 2869
	0.040	1390 1490 1590	1160 1260 1360	1310	120	1210	960			2804 2857 2911
	0.060	1390 4190 1590	1160 1260 1360	1350	1140	1210	960			2847 2902 2957
QZ25000FF	0.020	1434 1534 1634	1230 1330 1430	1290	1090	1234	990	270	M64×800	2969 3024 3078
	0.040	1434 1534 1634	1230 1330 1430	1350	1150	1234	990			3039 3096 3153
	0.060	1434 1534 1634	1230 1330 1430	1380	1180	1234	990			3082 3140 3199
QZ27500FF	0.020	1524 1624 1724	1280 1380 1480	1346	1346	1254	1000	277	M72×800	3274 3334 3394
	0.040	1524 1624 1724	1280 1380 1480	1376	1376	1254	1000			3337 3399 3468
	0.060	1524 1624 1724	1280 1380 1480	1436	1436	1254	1000			3403 3467 3531
QZ30000FF	0.020	1530 1630 1730	1290 1390 1490	1408	1408	1320	1050	289	M72×800	3688 3756 3818
	0.040	1530 1630 1730	1290 1390 1490	1466	1466	1320	1050			3771 3839 3907
	0.060	1530 1630 1730	1290 1390 1490	1494	1494	1320	1050			3821 3890 3959

Main Dimensions of Guided Sliding Bearing (Type SGL) QZ Series

Type	Bearing rotaion θ (rad)	A(longitudinal direction e) (mm)	A1(longitudinal direction e) (mm)	B (mm)	B1 (mm)	C (mm)	C1 (mm)	H (mm)	Bolt/sleeve diameter*length (mm)	Weight(longitudinal direction e)(kg)
		±50 ±100 ±150 ±200 ±250	±50 ±100 ±150 ±200 ±250							±50 ±100 ±150 ±200 ±250
QZ1000SGL	0.01~0.02	410 510	350 450	410	290	300	240	79	M20×400	75 85
QZ1500SGL	0.01~0.02	460 560	400 500	460	330	350	290	84	M20×400	97 109
QZ2000SGL	0.01~0.02	510 610	430 530	510	360	400	320	89	M20×400	127 140
QZ2500SGL	0.01~0.02	555 655	450 550	555	395	445	355	105	M24×460	184 200
QZ3000SGL	0.01~0.02	590 690 790	470 570 670	600	420	480	380	110	M24×460	220 238 256
QZ4000SGL	0.01~0.02	650 750 850	530 630 730	670	470	540	430	115	M27×500	290 311 332
QZ5000SGL	0.01~0.02	710 810 910	580 680 780	710	530	600	490	127	M30×500	385 410 435
QZ6000SGL	0.01~0.02	770 870 970	640 740 840	780	570	660	530	137	M33×500	492 520 547
QZ7000SGL	0.01~0.02	820 920 1020	680 780 880	840	610	710	570	147	M36×500	611 645 678
QZ8000SGL	0.01~0.02	850 950 1050	720 820 920	880	645	740	605	152	M40×600	699 734 770
QZ9000SGL	0.01~0.02	900 1000 1100	760 860 960	930	680	790	640	162	M42×600	844 885 925
QZ10000SGL	0.01~0.02	935 1035 1135	790 890 990	965	705	825	665	167	M42×600	928 971 1013
QZ12500SGL	0.010	1000 1100 1200	800 900 1000	990	790	910	710	191	M45×600	1171 1214 1257
	0.015	1020 1120 1220	820 920 1020	1010	810	930	730			1212 1256 1300
	0.020	1050 1150 1250	850 950 1050	1040	840	960	760			1276 1321 1366
QZ15000SGL	0.010	1080 1180 1280	880 980 1080	1080	880	990	790	207	M48×600	1472 1519 1565
	0.015	1100 1200 1300	900 100 1100	1100	900	1010	810			1521 1568 1616
	0.020	1130 1230 1330	930 1030 1130	1130	930	1040	840			1595 1644 1693
QZ17500SGL	0.010	1140 1240 1340	900 1000 1100	1150	910	1050	810	211	M56×800	1743 1793 1844
	0.015	1180 1280 1380	940 1040 1140	1190	950	1090	850			1847 1899 1951
	0.020	1210 1310 1410	970 1070 1170	1220	980	1120	880			1928 1981 2034
QZ20000SGL	0.010	1200 1300 1400	960 1060 1160	1210	970	1110	870	227	M60×800	2100 2158 2215
	0.015	1240 1340 1440	1000 1100 1200	1250	1010	1150	910			2221 2280 2339
	0.020	1270 1370 1470	1030 1130 1230	1280	1040	1180	940			2313 2374 2434
QZ22500SGL	0.020	1460 1560 1660	1240 1340 1440	1422	1090	1168	930	260	M64×800	3010 3083 3156
	0.040	1460 1560 1660	1240 1340 1440	1498	1200	1244	1000			3156 3232 3308
	0.060	1500 1600 1700	1280 1380 1480	1614	1310	1360	1100			3386 3467 3548
QZ25000SGL	0.020	1484 1584 1684	1260 1360 1460	1458	1170	1204	960	270	M64×800	3265 3342 3419
	0.040	1484 1584 1684	1260 136 1460	1568	1280	1314	1050			3728 3811 3892
	0.060	1534 1634 1734	1300 1400 1500	1648	1340	1394	1110			3999 4084 4166
QZ27500SGL	0.020	1564 1664 1764	1300 1400 1500	1534	1270	1264	1000	277	M72×800	3736 3819 3911
	0.040	1564 1664 1764	1300 1400 1500	1594	1330	1324	1060			3990 4069 4157
	0.060	1604 1704 1804	1340 1440 1540	1714	1450	1444	1170			4483 4575 4667
QZ30000SGL	0.020	1620 1720 1820	1340 1440 1540	1564	1280	1290	1020	289	M72×800	4050 4139 4227
	0.040	1620 1720 1820	1340 1440 1540	1644	1360	1370	1090			4396 4488 4581
	0.060	1660 1760 1860	1380 1480 1580	1774	1490	1500	1220			4989 5088 5186

Main Dimensions of Free Bearing (Type FX) QZ Series

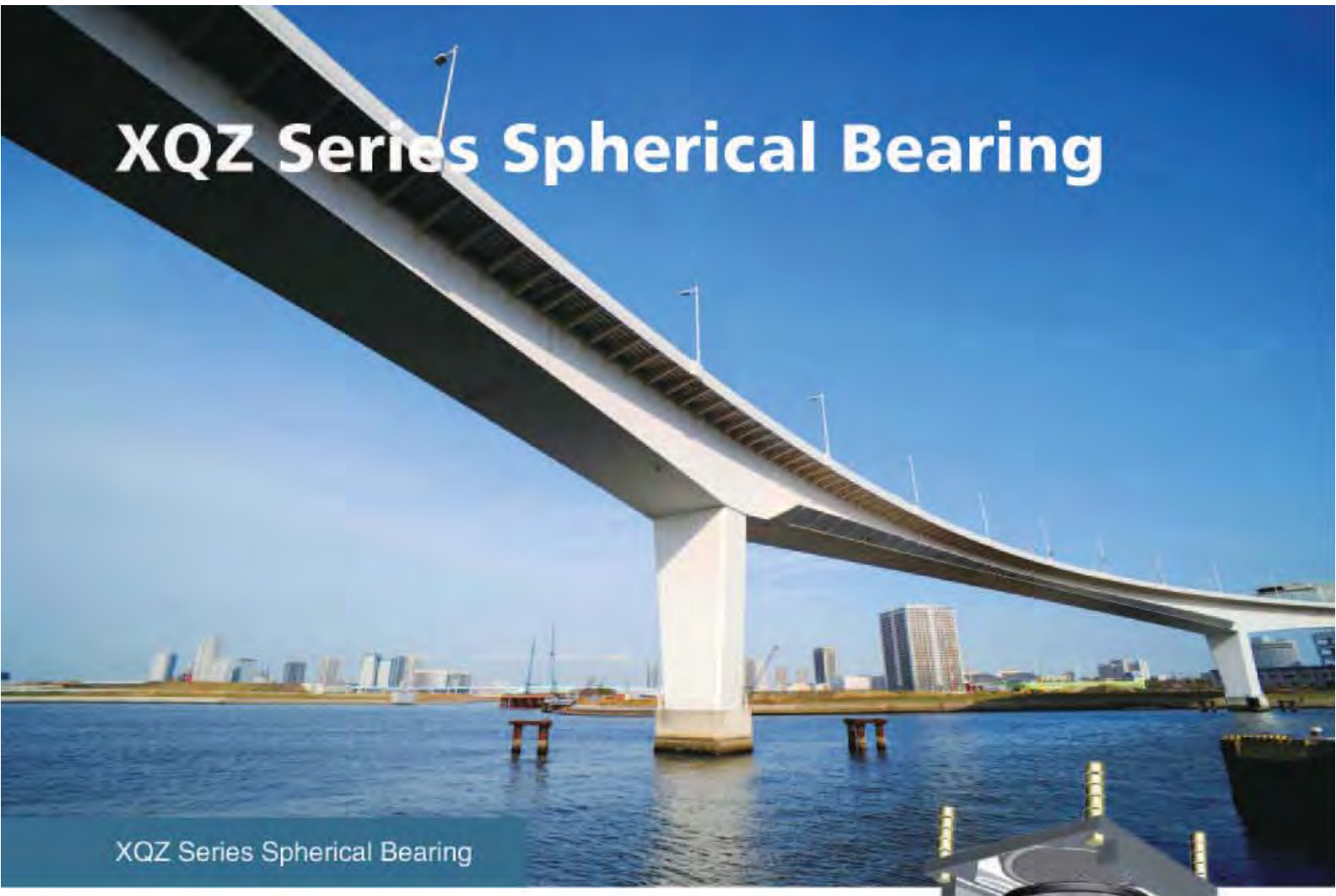
Type	Bearing rotaion θ (rad)	A (mm)	A_1 (mm)	B (mm)	B_1 (mm)	C (mm)	C_1 (mm)	D (mm)	D_1 (mm)	H (mm)	Bolt/sleeve diameter*length (mm)	Weight(kg)
QZ1000FX	0.01~0.02	400	340	320	260	330	260	330	260	79	M20 × 400	64
QZ1500FX	0.01~0.02	440	380	380	300	390	300	390	300	84	M20 × 400	88
QZ2000FX	0.01~0.02	480	420	430	340	440	340	440	340	89	M20 × 400	115
QZ2500FX	0.01~0.02	540	470	480	375	490	375	490	375	105	M24 × 460	175
QZ3000FX	0.01~0.02	570	500	520	410	530	410	530	410	110	M24 × 460	210
QZ4000FX	0.01~0.02	650	570	580	460	590	460	590	460	115	M27 × 500	275
QZ5000FX	0.01~0.02	710	610	640	500	650	500	650	500	127	M30 × 500	372
QZ6000FX	0.01~0.02	790	680	700	550	710	550	710	550	137	M33 × 500	475
QZ7000FX	0.01~0.02	840	730	760	600	770	600	770	600	147	M36 × 500	598
QZ8000FX	0.01~0.02	890	780	800	630	810	630	810	630	152	M40 × 600	692
QZ9000FX	0.01~0.02	940	820	850	670	860	670	860	670	162	M42 × 600	838
QZ10000FX	0.01~0.02	970	850	890	695	900	695	900	695	167	M42 × 600	929
QZ12500FX	0.010	1040	840	960	750	970	750	970	750	191	M45 × 600	1212
	0.015	1060	860	980	770	990	770	990	770			1263
	0.020	1080	880	1010	790	1020	790	1020	790			1331
QZ15000FX	0.010	1100	900	1040	810	1050	810	1050	810	207	M48 × 600	1525
	0.015	1120	920	1060	830	1070	830	1070	830			1580
	0.020	1140	940	1090	850	1100	850	1100	850			1660
QZ17500FX	0.010	1200	960	1100	870	1110	870	1110	870	211	M56 × 800	1806
	0.015	1230	990	1140	900	1150	900	1150	900			1919
	0.020	1260	1020	1170	920	1180	920	1180	920			2009
QZ20000FX	0.010	1280	1020	1160	920	1170	920	1170	920	227	M60 × 800	2162
	0.015	1310	1050	1200	940	1210	940	1210	940			2290
	0.020	1340	1080	1230	960	1240	960	1240	960			2395
QZ22500FX	0.020	1372	1140	1372	1140	1452	1230	1102	880	260	M64 × 800	3067
	0.040	1498	1270	1498	1270	1538	1280	1228	1000			3382
	0.060	1614	1360	1614	1360	1588	1360	1344	1110			3671
QZ25000FX	0.020	1396	1140	1396	1140	1484	1240	1124	880	270	M64 × 800	3247
	0.040	1516	1280	1516	1280	1564	1300	1244	1000			3810
	0.060	1640	1380	1640	1380	1620	1380	1364	1120			4355
QZ27500FX	0.020	1454	1210	1454	1210	1544	1300	1184	940	277	M72 × 800	3728
	0.040	1584	1340	1584	1340	1614	1370	1314	1070			4322
	0.060	1704	1460	1704	1460	1714	1470	1434	1150			4926
QZ30000FX	0.020	1504	1260	1504	1260	1670	1380	1230	94	289	M72 × 800	4169
	0.040	1640	1370	1604	1370	1720	1430	1370	1080			4840
	0.060	1774	1510	1774	1510	1800	1510	1500	1210			5545



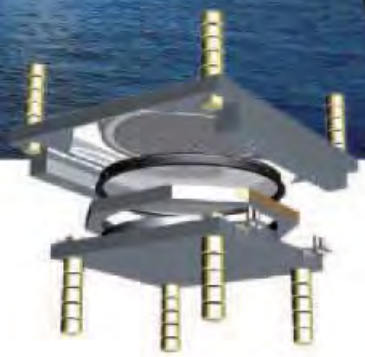
Dimensions of Anchor Bolts and Holes for
Anchor Bolts of QZ Series

Type	Anchor bolts main dimensions(mm)			
	d	D	L	L1
QZ1000	20	70	400	45
QZ1500	20	70	400	45
QZ2000	20	70	400	45
QZ2500	24	80	460	55
QZ3000	24	80	460	55
QZ4000	27	100	500	58
QZ5000	30	100	500	66
QZ6000	33	100	500	70
QZ7000	36	120	500	76
QZ8000	40	120	600	82
QZ9000	42	130	600	88
QZ10000	42	130	600	88
QZ12500	45	140	600	92
QZ15000	48	150	600	93
QZ17500	56	180	800	103
QZ20000	60	190	800	109
QZ22500	64	200	800	112
QZ25000	64	200	800	114
QZ27500	72	220	800	122
QZ30000	72	220	800	124

XQZ Series Spherical Bearing



XQZ Series Spherical Bearing



XQZ Series Spherical Bearing is a kind of new-type bearing designed and developed as per European Standard EN1337, British standard BS 5400 Part IX, and DIN4141. The bearing series features its compact and rational construction and superior comprehensive performance, and has been widely applied in the bridge structures in foreign countries. Its main properties parameters are listed as follows:

1. The designed vertical load capacity of a bearing covers a range of 1000KN ~ 150000KN, which is divided into 33classes
2. Vertical design rotation of a bearing is 0.04rad (approximately 2.3°), and it is applicable to horizontal rotation of 0.25rad (approximately 15°)
3. Horizontal load that a bearing can bear

The horizontal load capacity of fixed bearing (FX) in all directions and guided sliding bearing (SGL) in limited direction reaches 15% of vertical load capacity of the bearing.

4. The range of bearing displacement is given in the attached table.
5. Designed values of friction coefficient of bearings:

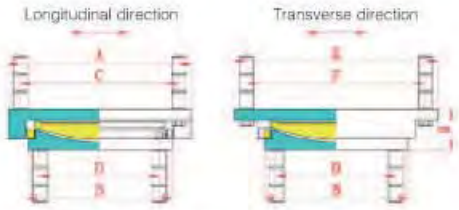
Normal temperature(-25℃~+60℃):u≤0.03

Low temperature(-40℃~-25℃):u≤0.06

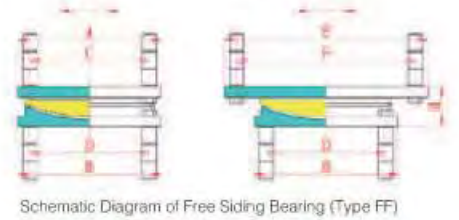
6. Range of gradient application of bearings:

The bearing can self-adapt to the gradient smaller than 6‰,For the gradients greater than 6‰,steel plates may be buried underneath the beams, or top bearing plates may be positioned as per the actual processing gradients.

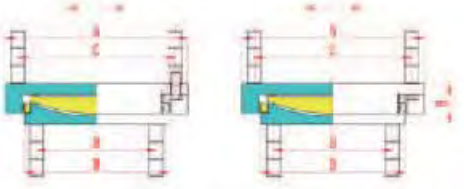
7. Special design may be adopted if the displacement and vertical/horizontal load capacity exceed relevant standard values.



Schematic Diagram of Guided Siding Bearing (Type SGL)



Schematic Diagram of Free Siding Bearing (Type FF)



Schematic Diagram of Fixed Bearing (Type FX)

Main Dimensions of Fixed Bearing (Type FX) XQZ Series

Type	Load(KN)	Main dimensions(mm)					Anchor Nuts diameter*length(mm)	Sleeve diameter*length(mm)
		A	B	C	D	H		
XQZ1000FX	1000	300	220	260	180	85	M16×55	ϕ26×150
XQZ1500FX	1500	350	270	300	220	90	M20×60	ϕ33×150
XQZ2000FX	2000	390	300	340	250	95	M20×60	ϕ33×150
XQZ2500FX	2500	430	340	370	280	100	M24×65	ϕ40×200
XQZ3000FX	3000	480	380	420	320	105	M24×65	ϕ40×200
XQZ4000FX	4000	550	430	480	360	115	M30×75	ϕ50×200
XQZ5000FX	5000	610	480	540	410	125	M30×80	ϕ50×250
XQZ6000FX	6000	660	510	570	420	135	M36×85	ϕ60×250
XQZ7000FX	7000	720	560	620	460	140	M39×90	ϕ66×250
XQZ8000FX	8000	770	600	660	490	150	M42×90	ϕ72×250
XQZ9000FX	9000	810	640	700	530	160	M42×95	ϕ72×300
XQZ10000FX	10000	850	670	730	550	165	M45×100	ϕ76×300
XQZ12500FX	12500	950	750	810	610	185	M52×110	ϕ88×300
XQZ15000FX	15000	1040	820	890	670	195	M56×120	ϕ94×350
XQZ17500FX	17500	1130	890	960	720	210	M60×125	ϕ100×350
XQZ20000FX	20000	1200	950	1020	770	220	M64×130	ϕ105×350
XQZ22500FX	22500	1270	1010	1090	830	230	M64×140	ϕ105×400
XQZ25000FX	25000	1330	1060	1130	860	240	M72×145	ϕ120×400
XQZ27500FX	27500	1390	1110	1190	910	250	M72×150	ϕ120×400
XQZ30000FX	30000	1440	1160	1240	960	260	M72×150	ϕ126×450
XQZ32500FX	32500	1510	1210	1300	1000	270	M80×165	ϕ132×450
XQZ35000FX	35000	1560	1250	1340	1030	280	M84×165	ϕ140×450
XQZ37500FX	37500	1620	1300	1400	1080	290	M84×170	ϕ140×500
XQZ40000FX	40000	1670	1340	1430	1100	300	M90×175	ϕ150×500
XQZ45000FX	45000	1770	1420	1520	1170	315	M96×190	ϕ160×550
XQZ50000FX	50000	1880	1500	1620	1240	335	M100×205	ϕ165×550
XQZ60000FX	60000	2040	1640	1750	1350	365	M106×220	ϕ175×600
XQZ70000FX	70000	2200	1770	1880	1450	400	M115×235	ϕ180×600
XQZ80000FX	80000	2340	1890	2000	1550	430	M125×250	ϕ200×650
XQZ90000FX	90000	2490	2010	2130	1650	465	M130×260	ϕ210×650
XQZ100000FX	100000	2620	2120	2250	1750	495	M136×275	ϕ220×700
XQZ125000FX	125000	2910	2370	2490	1950	535	M150×300	ϕ240×850
XQZ150000FX	150000	3200	2600	2720	2120	580	M175×330	ϕ270×950

Main Dimensions of Free Sliding Bearing (Type FF) XQZ Series

Type	Load (KN)	Longitudinal (mm)	Main dimensions(mm)						H	Anchor Nuts diameter*length (mm)	Sleeve diameter*length (mm)
			A	B	C	D	E	F			
XQZ1000FF	1000	±50/±100	280	220	240	180	300/400	260/360	85	M16×55	ϕ26×150
XQZ1500FF	1500	±50/±100	330	270	280	220	350/450	300/400	90	M20×60	ϕ33×150
XQZ2000FF	2000	±50/±100	360	300	310	250	380/480	330/430	95	M20×60	ϕ33×150
XQZ2500FF	2500	±50/±100	390	340	330	280	410/510	350/450	100	M24×65	ϕ40×200
XQZ3000FF	3000	±50/±100	430	380	370	320	460/560	400/500	105	M24×65	ϕ40×200
XQZ4000FF	4000	±50/±100	470	430	400	360	500/600	430/530	115	M30×75	ϕ50×200
XQZ5000FF	5000	±100/±150	510	480	440	410	640/740	570/670	125	M30×80	ϕ50×250
XQZ6000FF	6000	±100/±150	540	510	450	420	670/770	580/680	135	M36×85	ϕ60×250
XQZ7000FF	7000	±100/±150	580	560	480	460	720/820	620/720	140	M39×90	ϕ66×250
XQZ8000FF	8000	±100/±150	610	600	500	490	730/830	620/720	150	M42×90	ϕ72×250
XQZ9000FF	9000	±100/±150	640	640	530	530	770/870	660/760	160	M42×95	ϕ72×300
XQZ10000FF	10000	±100/±150	670	670	550	550	780/870	660/760	165	M45×100	ϕ76×300
XQZ12500FF	12500	±150/±200	750	750	610	610	970/1070	830/930	185	M52×110	ϕ88×300
XQZ15000FF	15000	±150/±200	790	820	640	670	1020/1120	870/970	195	M56×120	ϕ94×350
XQZ17500FF	17500	±150/±200	850	890	680	720	1080/1180	910/1010	210	M60×125	ϕ100×350
XQZ20000FF	20000	±150/±200	910	950	730	770	1130/1230	950/1050	220	M64×130	ϕ105×350
XQZ22500FF	22500	±150/±200	950	1010	770	830	1170/1270	990/1090	230	M64×140	ϕ105×400
XQZ25000FF	25000	±150/±200	990	1060	790	860	1210/1310	1010/1110	240	M72×145	ϕ120×400
XQZ27500FF	27500	±150/±200	1040	1110	840	910	1260/1360	1060/1160	250	M72×150	ϕ120×400
XQZ30000FF	30000	±150/±200	1080	1160	880	960	1300/1400	1100/1200	260	M72×150	ϕ126×450
XQZ32500FF	32500	±200/±250	1120	1210	910	1000	1450/1550	1240/1340	270	M80×165	ϕ132×450
XQZ35000FF	35000	±200/±250	1150	1250	930	1030	1480/1580	1260/1360	280	M84×165	ϕ140×450
XQZ37500FF	37500	±200/±250	1190	1300	970	1080	1520/1620	1300/1400	290	M84×170	ϕ140×500
XQZ40000FF	40000	±200/±250	1220	1340	980	1100	1550/1650	1310/1410	300	M90×175	ϕ150×500
XQZ45000FF	45000	±200/±250	1280	1420	1030	1170	1610/1710	1360/1460	315	M96×190	ϕ160×550
XQZ50000FF	50000	±200/±250	1350	1500	1090	1240	1680/1780	1420/1520	335	M100×205	ϕ165×550
XQZ60000FF	60000	±250/±300	1480	1640	1190	1350	1900/2000	1610/1710	365	M106×220	ϕ175×600
XQZ70000FF	70000	±250/±300	1600	1770	1280	1450	2020/2120	1700/1800	400	M115×235	ϕ180×600
XQZ80000FF	80000	±250/±300	1720	1890	1380	1550	2240/2340	1900/2000	430	M125×250	ϕ200×650
XQZ90000FF	90000	±300/±350	1820	2010	1460	1650	2350/2450	1900/2090	465	M130×260	ϕ210×650
XQZ100000FF	100000	±300/±350	1940	2120	1570	1750	2450/2550	2080/2180	495	M136×275	ϕ220×700
XQZ125000FF	125000	±350/±400	2140	2370	1720	1950	2760/2860	2340/2440	535	M150×300	ϕ240×850
XQZ150000FF	150000	±350/±400	2330	2600	1850	2120	2960/3060	2480/2580	580	M175×330	ϕ270×950

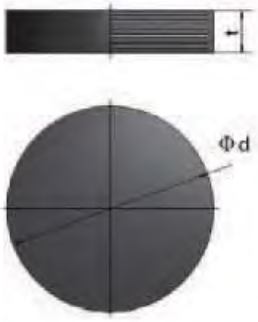
Main Dimensions of Guided Sliding Bearing (Type SGL) XQZ Series

Type	Load (KN)	Longitudinal (mm)	Main dimensions(mm)						H	Anchor Nuts diameter*length (mm)	Sleeve diameter*length (mm)
			A	B	C	D	E	F			
XQZ1000SGL	1000	±50/±100	300	220	260	180	300/400	260/360	85	M16×55	ϕ26×150
XQZ1500SGL	1500	±50/±100	350	270	300	220	350/450	300/400	90	M20×60	ϕ33×150
XQZ2000SGL	2000	±50/±100	390	300	340	250	380/480	330/430	95	M20×60	ϕ33×150
XQZ2500SGL	2500	±50/±100	430	340	370	280	410/510	350/450	100	M24×65	ϕ40×200
XQZ3000SGL	3000	±50/±100	480	380	420	320	460/560	400/500	105	M24×65	ϕ40×200
XQZ4000SGL	4000	±50/±100	550	430	480	360	500/600	430/530	115	M30×75	ϕ50×200
XQZ5000SGL	5000	±100/±150	610	480	540	410	640/740	570/670	125	M30×80	ϕ50×250
XQZ6000SGL	6000	±100/±150	660	510	570	420	670/770	580/680	135	M36×85	ϕ60×250
XQZ7000SGL	7000	±100/±150	720	560	620	460	720/820	620/720	140	M39×90	ϕ66×250
XQZ8000SGL	8000	±100/±150	770	600	660	490	730/830	620/720	150	M42×90	ϕ72×250
XQZ9000SGL	9000	±100/±150	810	640	700	530	770/870	660/760	160	M42×95	ϕ72×300
XQZ10000SGL	10000	±100/±150	850	670	730	550	780/870	660/760	165	M45×100	ϕ76×300
XQZ12500SGL	12500	±150/±200	950	750	810	610	970/1070	830/930	185	M52×110	ϕ88×300
XQZ15000SGL	15000	±150/±200	1040	820	890	670	1020/1120	870/970	195	M56×120	ϕ94×350
XQZ17500SGL	17500	±150/±200	1130	890	960	720	1080/1180	910/1010	210	M60×125	ϕ100×350
XQZ20000SGL	20000	±150/±200	1200	950	1020	770	1130/1230	950/1050	220	M64×130	ϕ105×350
XQZ22500SGL	22500	±150/±200	1270	1010	1090	830	1170/1270	990/1090	230	M64×140	ϕ105×400
XQZ25000SGL	25000	±150/±200	1330	1060	1130	860	1210/1310	1010/1110	240	M72×145	ϕ120×400
XQZ27500SGL	27500	±150/±200	1390	1110	1190	910	1260/1360	1060/1160	250	M72×150	ϕ120×400
XQZ30000SGL	30000	±150/±200	1440	1160	1240	960	1300/1400	1100/1200	260	M72×150	ϕ126×450
XQZ32500SGL	32500	±200/±250	1510	1210	1300	1000	1450/1550	1240/1340	270	M80×165	ϕ132×450
XQZ35000SGL	35000	±200/±250	1560	1250	1340	1030	1480/1580	1260/1360	280	M84×165	ϕ140×450
XQZ37500SGL	37500	±200/±250	1620	1300	1400	1080	1520/1620	1300/1400	290	M84×170	ϕ140×500
XQZ40000SGL	40000	±200/±250	1670	1340	1430	1100	1550/1650	1310/1410	300	M90×175	ϕ150×500
XQZ45000SGL	45000	±200/±250	1770	1420	1520	1170	1610/1710	1360/1460	315	M96×190	ϕ160×550
XQZ50000SGL	50000	±200/±250	1880	1500	1620	1240	1680/1780	1420/1520	335	M100×205	ϕ165×550
XQZ60000SGL	60000	±250/±300	2040	1640	1750	1350	1900/2000	1610/1710	365	M106×220	ϕ175×600
XQZ70000SGL	70000	±250/±300	2200	1770	1880	1450	2020/2120	1700/1800	400	M115×235	ϕ180×600
XQZ80000SGL	80000	±250/±300	2340	1890	2000	1550	2240/2340	1900/2000	430	M125×250	ϕ200×650
XQZ90000SGL	90000	±300/±350	2490	2010	2130	1650	2350/2450	1900/2090	465	M130×260	ϕ210×650
XQZ100000SGL	100000	±300/±350	2620	2120	2250	1750	2450/2550	2080/2180	495	M136×275	ϕ220×700
XQZ125000SGL	125000	±350/±400	2910	2370	2490	1950	2760/2860	2340/2440	535	M150×300	ϕ240×850
XQZ150000SGL	150000	±350/±400	3200	2600	2720	2120	2960/3060	2480/2580	580	M175×330	ϕ270×950

Elastomeric Bearing

Elastomeric Bearing

The Elastomeric Bearings are designed and produced strictly in accordance with the standard EN1337, British standard BS 5400 and DIN4141.
Based on our experiences in the design, manufacturing and application of all types of previous elastomeric bearings, we optimized their design parameters and construction pattern, and the comprehensive serviceability of the products are further enhanced.



Schematic Diagram of GYZ(F4)
Elastomeric Bearing

Schematic Diagram of GJZ(F4)
Elastomeric Bearing

Specification of GJZ(F4) and GYZ(F4) Series Elastomeric Bearings

Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Maximum load capacity R_{ck} (kN)	Shape factor S	GJZ、GYZ			GJZF$_4$、GYZF$_4$				
			Bearing thickness t (mm)	Displacement (braking force disregarded) Δt_1 (mm)	Displacement (braking force disregarded) Δt_2 (mm)	Bearing thickness t (mm)	Displacement of Free Sliding bearing Δt_3(mm)		Displacement of Guided Sliding bearing Δt_4(mm)	
							Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
100 × 150	101	5.48	21	5.0	7.0	23	±30	±20	±30	±3
			28	7.5	10.5	30				
100 × 200	137	6.11	21	5.0	7.0	23	±30	±20	±30	±3
			28	7.5	10.5	30				
d150	154	7.00	21	5.0	7.0	23	±30	±20	±30	±3
			28	7.5	10.5	30				
			35	10.0	14.0	37				
			42	12.5	17.5	44				
150 × 150	196	7.00	21	5.0	7.0	23	±30	±20	±30	±3
			28	7.5	10.5	30				
			35	1.0	14.0	37				
			42	12.5	17.5	44				
150 × 200	266	8.06	21	5.0	7.0	23	±30	±20	±30	±3
			28	7.5	10.5	30				
			35	10.0	14.0	37				
			42	12.5	17.5	44				
150 × 250	336	8.84	28	7.5	10.5	30	±30	±20	±30	±3
			35	10.0	14.0	37				
			42	12.5	17.5	44				
150 × 300	406	9.44	28	7.5	10.5	30	±30	±20	±30	±3
			35	10.0	14.0	37				
			42	12.5	17.5	44				
d200	284	9.50	35	10.0	14.0	37	±30	±20	±30	±3
			42	12.5	17.5	44				
			49	15.0	21.0	51				
			56	17.5	24.5	58				
200 × 200	361	9.50	35	10.0	14.0	37	±30	±20	±30	±3
			42	12.5	17.5	44				
			49	15.0	21.0	51				
			56	17.5	24.5	58				
200 × 250	456	10.6	42	12.5	17.5	44	±30	±20	±30	±3
			49	15.0	21.0	51				
			56	17.5	24.5	58				
200 × 300	551	7.17	60	8.0	11.2	32	±30	±20	±30	±3
			41	12.0	16.8	43				
			52	16.0	22.4	54				
200 × 350	646	7.62	30	8.0	11.2	32	±30	±20	±30	±3
			41	12.0	16.8	43				
			52	16.0	22.4	54				
200 × 400	741	7.98	30	8.0	11.2	32	±30	±20	±30	±3
			41	12.0	16.8	43				
			52	16.0	22.4	54				
d250	452	7.50	41	12.0	16.8	43	±60	±30	±60	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
250 × 250	576	7.50	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
250 × 300	696	8.21	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
250 × 350	816	8.79	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				

Specification of GJZ(F4) and GYZ(F4) Series Elastomeric Bearings

Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Maximum load capacity R_{ck} (kN)	Shape factor S	GJZ、GYZ			GJZF$_4$、GYZF$_4$				
			Bearing thickness t (mm)	Displacement (braking force disregarded) Δt_1 (mm)	Displacement (braking force disregarded) Δt_2 (mm)	Bearing thickness t (mm)	Displacement of Free Sliding bearing Δt_3(mm)		Displacement of Guided Sliding bearing Δt_4(mm)	
							Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
250 × 400	936	9.29	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
250 × 450	1056	9.71	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
250 × 500	1176	10.07	41	12.0	16.8	43	±50	±20	±50	±3
			52	16.0	22.4	54				
			63	20.0	28.0	65				
			74	24.0	33.6	76				
d300	661	9.06	52	16.0	22.4	54	±60	±30	±60	±3
			63	20.0	28.0	65				
			74	24.0	33.6	76				
			85	28.0	39.2	87				
300 × 300	641	9.06	52	16.0	22.4	54	±70	±30	±70	±6
			63	20.0	28.0	65				
			74	24.0	33.6	76				
			85	28.0	39.2	87				
300 × 350	986	9.78	52	16.0	22.4	54	±70	±30	±70	±5
			63	20.0	28.0	65				
			74	24.0	33.6	76				
			85	28.0	39.2	87				
300 × 400	1131	10.40	52	16.0	22.4	54	±70	±30	±70	±5
			63	20.0	28.0	65				
			74	24.0	33.6	76				
			85	28.0	39.2	87				

Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Maximum load capacity R_{ck} (kN)	Shape factor S	GJZ、GYZ			GJZF$_4$、GYZF$_4$				
			Bearing thickness t (mm)	Displacement (braking force disregarded) Δt_1 (mm)	Displacement (braking force disregarded) Δt_2 (mm)	Bearing thickness t (mm)	Displacement of Free Sliding bearing Δt_3(mm)		Displacement of Guided Sliding bearing Δt_4(mm)	
							Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
300 × 450	1276	10.92	63	20.0	28.0	65	±70	±30	±70	±3
			74	24.0	33.6	76				
			85	28.0	39.2	87				
300 × 500	1421	8.28	54	16.5	23.1	56	±70	±30	±70	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
300 × 550	1566	8.58	54	16.5	23.1	57	±70	±30	±70	±3
			69	22.0	30.8	72				
			84	27.5	38.5	87				
300 × 600	1711	8.84	54	16.5	23.1	57	±70	±30	±70	±3
			69	22.0	30.8	72				
			84	27.5	38.5	87				
d350	908	10.63	63	20.0	28.0	65	±90	±40	±90	±3
			74	24.0	33.6	76				
			85	28.0	39.2	87				
			96	32.0	44.8	98				
350 × 350	1156	10.63	63	20.0	28.0	65	±90	±40	±90	±3
			74	24.0	33.6	76				
			85	28.0	39.2	87				
			96	32.0	44.8	98				
350 × 400	1326	8.26	54	16.5	23.1	56	±90	±40	±90	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
			99	33.0	46.2	101				
350 × 450	1496	8.72	54	16.5	23.1	56	±90	±40	±90	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
			99	33.0	46.2	101				

Specification of GJZ(F4) and GYZ(F4) Series Elastomeric Bearings

Plane dimensions of bearing	Maximum load capacity	Shape factor	GJZ、GYZ			GJZF$_4$、GYZF$_4$				
			Bearing thickness	Displacement (braking force disregarded)	Displacement (braking force disregarded)	Bearing thickness	Displacement of Free Sliding bearing Δl_3(mm)		Displacement of Guided Sliding bearing Δl_4(mm)	
$l_a \times l_b$(or d) (mm)	R_{ck} (kN)	S	t (mm)	Δl_1 (mm)	Δl_2 (mm)	t (mm)	Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
350×500	1666	9.12	54	16.5	23.1	56	±90	±40	±90	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
			99	33.0	46.2	101				
350×550	1836	9.48	54	16.5	23.1	57	±90	±40	±90	±3
			69	22.0	30.8	72				
			84	27.5	38.5	87				
			99	33.0	46.2	102				
350×600	2006	9.80	54	16.5	23.1	57	±90	±40	±90	±3
			69	22.0	30.8	72				
			84	27.5	38.5	87				
			99	33.0	46.2	102				
d400	1195	8.86	54	16.5	23.1	56	±90	±40	±90	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
			99	33.0	46.2	101				
400×400	1521	8.86	54	16.5	23.1	56	±90	±40	±90	±3
			69	22.0	30.8	71				
			84	27.5	38.5	86				
			99	33.0	46.2	101				
300×450	1716	9.40	69	22.0	30.8	71	±90	±40	±90	±3
			84	27.5	38.5	86				
			99	33.0	46.7	101				
			114	38.5	53.9	116				
400×500	1911	9.87	69	22.0	30.8	71	±90	±40	±90	±3
			84	27.5	38.5	86				
			99	33.0	46.2	101				
			114	38.5	53.9	116				

Plane dimensions of bearing	Maximum load capacity	Shape factor	GJZ、GYZ			GJZF$_4$、GYZF$_4$				
			Bearing thickness	Displacement (braking force disregarded)	Displacement (braking force disregarded)	Bearing thickness	Displacement of Free Sliding bearing Δl_3(mm)		Displacement of Guided Sliding bearing Δl_4(mm)	
$l_a \times l_b$(or d) (mm)	R_{ck} (kN)	S	t (mm)	Δl_1 (mm)	Δl_2 (mm)	t (mm)	Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
400×550	2106	10.29	69	22.0	30.8	72	±90	±40	±90	±3
			84	27.5	38.5	87				
			99	33.0	46.2	102				
400×600	2301	10.67	69	22.0	30.8	72	±90	±40	±90	±3
			84	27.5	38.5	87				
			99	33.0	46.2	102				
400×650	2490	11.02	69	22.0	30.8	72	±90	±40	±90	±3
			84	27.5	38.5	87				
			99	33.0	46.2	102				
d450	1521	10.00	69	22.0	30.8	71	±110	±40	±110	±3
			84	27.5	38.5	86				
			99	33.0	46.2	101				
			114	38.5	53.9	116				
450×450	1936	10.00	69	22.0	30.8	71	±110	±40	±110	±3
			84	27.5	38.5	86				
			99	33.0	46.2	101				
			114	38.5	53.9	116				
450×500	2156	10.54	84	27.5	38.5	86	±110	±40	±110	±3
			99	33.0	46.2	101				
			114	38.5	53.9	116				
450×550	2376	11.02	84	27.5	38.5	87	±110	±40	±110	±3
			99	33.0	46.2	102				
			114	38.5	53.9	117				
450×600	2596	8.40	70	22.5	31.5	73	±110	±40	±110	±3
			90	30.0	42.0	93				
			110	37.5	52.5	113				
440×650	2816	8.69	70	22.5	31.5	73	±110	±40	±110	±3
			90	30.0	40.2	93				
			110	37.5	52.5	113				

Specification of GJZ(F4) and GYZ(F4) Series Elastomeric Bearings

Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Maximum load capacity R_{ck} (kN)	Shape factor S	GJZ、GYZ			GJZF4、GYZF4				
			Bearing thickness t (mm)	Displacement (braking force disregarded) Δ_1 (mm)	Displacement (braking force disregarded) Δ_2 (mm)	Bearing thickness t (mm)	Displacement of Free Sliding bearing Δ_3(mm)		Displacement of Guided Sliding bearing Δ_4(mm)	
							Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
d500	1886	8.17	70	22.5	31.5	72	±110	±40	±110	±3
			90	30.0	42.0	92				
			110	37.5	52.5	112				
			130	45.5	63.0	132				
500×500	2401	8.17	70	22.5	31.5	72	±130	±40	±130	±3
			90	30.0	42.0	92				
			110	37.5	52.5	112				
			130	45.0	63.0	132				
500×550	2464	8.56	70	22.5	31.5	73	±130	±40	±130	±3
			90	30.0	42.0	93				
			110	37.5	52.5	113				
			130	45.0	63.0	133				
500×600	2891	8.92	70	22.5	31.5	73	±130	±40	±130	±3
			90	30.0	42.0	93				
			110	37.5	52.5	113				
			130	45.0	63.0	133				
500×650	3136	9.25	70	22.5	31.5	73	±130	±40	±130	±3
			90	30.0	42.0	93				
			110	37.5	52.5	113				
			130	45.0	63.0	133				
500×700	3381	9.55	70	22.5	31.5	73	±130	±40	±130	±3
			90	30.0	42.0	93				
			110	37.5	52.5	113				
			130	45.0	63.0	133				
d550	2290	9.00	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.0	63.0	133				
			150	52.5	73.5	153				

Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Maximum load capacity R_{ck} (kN)	Shape factor S	GJZ、GYZ			GJZF4、GYZF4				
			Bearing thickness t (mm)	Displacement (braking force disregarded) Δ_1 (mm)	Displacement (braking force disregarded) Δ_2 (mm)	Bearing thickness t (mm)	Displacement of Free Sliding bearing Δ_3(mm)		Displacement of Guided Sliding bearing Δ_4(mm)	
							Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
550×550	2916	9.00	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
550×600	3186	9.40	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
550×650	3456	9.76	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
d600	2734	9.83	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
600×600	3481	9.83	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
600×650	3776	10.23	90	30.0	42.0	93	±130	±40	±130	±3
			110	37.5	52.5	113				
			130	45.5	63.0	133				
			150	52.5	73.5	153				
600×700	4071	10.60	110	37.5	52.5	113	±150	±40	±150	±3
			130	45.0	63.0	133				
			150	52.5	73.5	153				
600×750	4366	10.94	110	37.5	52.5	113	±150	±40	±150	±3
			130	45.5	63.0	133				
			150	52.5	73.5	153				

GYZF4

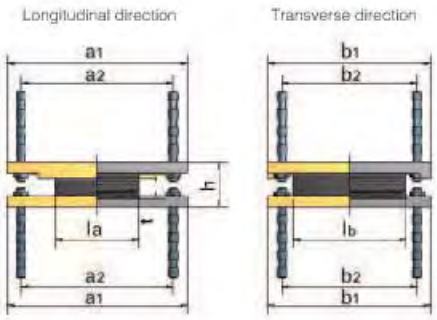
GYZ

GJZF4

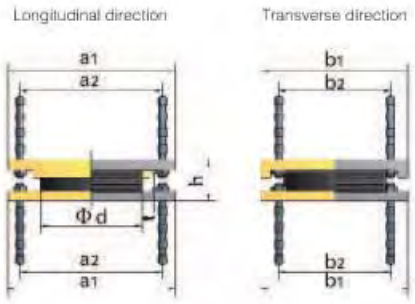
GJZ

Specification of GJZ(F4) and GYZ(F4) Series Elastomeric Bearings

Plane dimensions of bearing	Maximum load capacity	Shape factor	GJZ、GYZ			GJZF4、GYZF4				
			Bearing thickness	Displacement (braking force disregarded)	Displacement (braking force disregarded)	Bearing thickness	Displacement of Free Sliding bearing $\triangle t_d$(mm)		Displacement of Guided Sliding bearing $\triangle t_d$(mm)	
$t_a \times t_b$(or d) (mm)	R_{ck} (kN)	S	t (mm)	$\triangle t_1$ (mm)	$\triangle t_2$ (mm)	t (mm)	Longitudinal direction	Transverse direction	Longitudinal direction	Transverse direction
d650	3217	10.67	110	37.5	52.5	113	±150	±40	±150	±3
			130	45.5	63.0	133				
			150	52.5	73.5	153				
			170	60.0	84.0	173				
650×650	4096	10.67	110	37.5	52.5	113	±150	±40	±150	±3
			130	45.5	63.0	133				
			150	52.5	73.5	153				
			170	60.0	84.0	173				
650×700	4416	9.20	102	36.0	50.4	105	±150	±40	±150	±3
			125	45.5	63.0	128				
			148	54.0	75.6	151				
			171	63.0	88.2	174				
650×750	4736	9.53	102	36.0	50.4	105	±150	±40	±150	±3
			125	45.5	63.0	128				
			148	54.0	75.6	151				
			171	63.0	88.2	174				
d700	3739	9.58	102	36.0	50.4	105	±150	±40	±150	±3
			125	45.5	63.0	128				
			148	54.0	75.6	151				
			171	63.0	88.2	174				
700×700	4761	9.58	102	36.0	50.4	105	±150	±40	±150	±3
			125	45.5	63.0	128				
			148	54.0	75.6	151				
			171	63.0	88.2	174				
d750	4301	10.28	125	45.0	63.0	128	±180	±40	±180	±3
			148	54.0	75.6	151				
			171	63.0	88.2	174				
			194	72.0	100.8	197				
d800	4902	10.97	125	45.0	63.0	128	±180	±40	±180	±3
			148	54.0	75.6	151				
			171	63.0	88.2	174				
			194	72.0	100.8	197				



Schematic Diagram of GJZF4 (B)
Elastomeric bearing



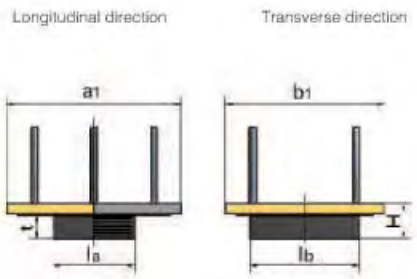
Schematic Diagram of GYZF4 (B)
Elastomeric bearing

Dimensions of Main Accessories GJZF4(B) and GYZF4(B) Series Bearings (in mm)

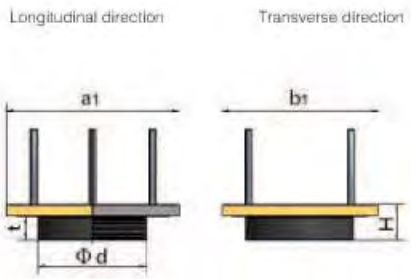
Plane dimensions of bearing $l_a \times l_b$(or d) (mm)	Dimengsions of main accessories									
	Free Sliding Bearing				Guided Sliding Bearing				Specification of anchor bolt	Bearing assembling height
	Dimengsions of upper and lower steel plates		Interval of anchor bolts		Dimengsions of upper and lower steel plates		Interval of anchor bolts			
	a_1	a_2	a_2	b_2	a_1	a_2	a_2	b_2	$\phi \times t$	h
100 × 150	270	290	220	240	270	240	220	190	M16 × 160	37+t
100 × 200	270	340	220	290	270	290	220	240	M16 × 160	37+t
d150	280	290	230	220	280	220	230	170	M16 × 160	37+t
150 × 150	320	290	270	240	320	240	270	190	M16 × 160	37+t
150 × 200	320	340	270	290	320	290	270	240	M16 × 160	37+t
150 × 250	320	390	270	340	320	340	270	290	M16 × 160	37+t
150 × 300	320	440	270	390	320	390	270	340	M16 × 160	37+t
d200	330	340	280	270	330	270	280	220	M16 × 160	37+t
200 × 200	370	340	320	290	370	290	320	240	M16 × 160	37+t
200 × 250	370	390	320	340	370	340	320	290	M16 × 160	37+t
200 × 300	370	440	320	390	370	390	320	340	M16 × 160	37+t
200 × 350	370	490	320	440	370	440	320	390	M16 × 160	37+t
200 × 400	370	540	320	490	370	490	320	440	M16 × 160	37+t
d250	440	410	390	340	440	340	390	270	M16 × 160	37+t
250 × 250	460	390	410	340	460	340	410	290	M18 × 180	37+t
250 × 300	460	440	410	390	460	390	410	340	M18 × 180	37+t
250 × 350	460	490	410	440	460	440	410	390	M18 × 180	37+t
250 × 400	460	540	410	490	460	490	410	440	M18 × 180	37+t
250 × 450	460	590	410	540	460	540	410	490	M18 × 180	37+t
250 × 500	460	640	410	590	460	590	410	540	M18 × 180	37+t
d300	490	460	440	390	490	390	440	320	M16 × 160	37+t
300 × 300	550	460	500	410	550	390	500	340	M22 × 220	37+t
300 × 350	550	510	500	460	550	440	500	390	M22 × 220	37+t
300 × 400	550	560	500	510	550	490	500	440	M22 × 220	37+t
300 × 450	550	610	500	560	550	540	500	490	M22 × 220	37+t
300 × 500	550	660	500	610	550	590	500	540	M22 × 220	37+t
300 × 550	550	710	500	660	550	640	500	590	M22 × 220	38+t
300 × 600	550	760	500	710	550	690	500	640	M22 × 220	38+t
d350	600	530	550	460	600	440	550	370	M18 × 180	37+t
350 × 350	640	530	590	480	640	440	590	390	M22 × 220	37+t
350 × 400	640	580	590	530	640	490	590	440	M22 × 220	37+t

Dimensions of Main Accessories GJZF4(B) and GYZF4(B) Series Bearings (in mm)

Plane dimensions of bearing $t_a \times t_b$(or d) (mm)	Dimengsions of main accessories									
	Free Sliding Bearing				Guided Sliding Bearing				Specification of anchor bolt	Bearing assembling height
	Dimengsions of upper and lower steel plates		Interval of anchor bolts		Dimengsions of upper and lower steel plates		Interval of anchor bolts			
	a_1	a_2	a_2	b_2	a_1	a_2	a_2	b_2	$\phi \times l$	h
350 × 450	640	630	590	580	640	540	590	490	M22 × 220	37+t
350 × 500	640	680	590	630	640	590	590	540	M22 × 220	37+t
350 × 550	640	730	590	680	640	640	590	590	M22 × 220	38+t
350 × 600	640	780	590	730	640	690	590	640	M22 × 220	38+t
d400	650	580	600	510	650	490	600	420	M18 × 180	37+t
400 × 400	690	580	640	530	690	490	640	440	M22 × 220	37+t
400 × 450	690	630	640	580	690	540	640	490	M22 × 220	37+t
400 × 500	690	680	640	630	690	590	640	540	M22 × 220	37+t
400 × 550	720	750	660	680	720	660	660	590	M24 × 240	53+t
400 × 600	720	800	660	730	720	710	660	640	M24 × 240	53+t
400 × 650	720	850	660	780	720	760	660	690	M24 × 240	53+t
d450	720	630	690	560	720	540	690	470	M22 × 220	37+t
450 × 450	810	650	750	580	810	560	750	490	M22 × 220	52+t
450 × 500	810	700	750	630	810	610	750	540	M24 × 240	52+t
450 × 550	810	750	750	680	810	660	750	590	M24 × 240	53+t
450 × 600	810	800	750	730	810	710	750	640	M24 × 240	53+t
450 × 650	810	850	750	780	810	760	750	690	M24 × 240	53+t
d500	790	680	740	610	790	590	740	520	M22 × 220	37+t
500 × 500	900	700	840	630	900	610	840	540	M24 × 240	52+t
500 × 550	900	750	840	680	900	660	840	590	M24 × 240	53+t
500 × 600	900	800	840	730	900	710	840	640	M24 × 240	53+t
500 × 650	900	850	840	780	900	760	840	690	M28 × 280	53+t
500 × 700	900	900	840	830	900	810	840	740	M28 × 280	53+t
d550	880	750	820	680	880	660	820	590	M24 × 240	53+t
550 × 550	950	750	890	680	950	660	890	590	M28 × 280	53+t
550 × 600	950	800	890	730	950	710	890	640	M28 × 280	53+t
550 × 650	950	850	890	780	950	760	890	690	M28 × 280	53+t
d600	930	800	870	730	930	710	870	640	M24 × 240	53+t
600 × 600	1000	800	940	730	1000	710	940	640	M28 × 280	53+t
600 × 650	1000	850	940	780	1000	760	940	690	M28 × 280	53+t
600 × 700	1040	900	980	830	1040	810	980	740	M30 × 300	53+t
600 × 750	1040	950	980	880	1040	860	980	790	M30 × 300	53+t
d650	1020	850	960	780	1020	760	960	690	M28 × 280	53+t
650 × 650	1090	850	1030	780	1090	760	1030	690	M30 × 300	53+t
650 × 700	1090	900	1030	830	1090	810	1030	740	M30 × 300	53+t
650 × 750	1090	950	1030	880	1090	860	1030	790	M30 × 300	53+t
d700	1070	900	1010	830	1070	810	1010	740	M28 × 280	53+t
700 × 700	1140	900	1080	830	1140	810	1080	740	M30 × 300	53+t
d750	1180	950	1120	880	1180	860	1120	790	M30 × 300	53+t
d800	1230	1000	1170	930	1230	910	1170	840	M30 × 300	53+t



Schematic Diagram of GYZF4 (X)
Elastomeric bearing



Schematic Diagram of GJZF4 (X)
Elastomeric bearing

Dimensions of Main Accessories for GJZF4(X) and GYZF4(X) Series Bearings (in mm)

Plane dimensions of bearing	Free Sliding Bearing				Guided Sliding Bearing				Anchor bolts	Bearing assembling height
	a_1	b_1	Longitudinal direction	Transverse direction	a_1	b_1	Longitudinal direction	Transverse direction		h
100 × 150	200	230	± 30	± 20	200	190	± 30	± 3	M12 × 200	22+t
100 × 200	200	280	± 30	± 20	200	240	± 30	± 3	M12 × 200	22+t
d150	250	230	± 30	± 20	250	190	± 30	± 3	M12 × 200	22+t
150 × 150	250	230	± 30	± 20	250	190	± 30	± 3	M12 × 200	22+t
150 × 200	250	280	± 30	± 20	250	240	± 30	± 3	M12 × 200	22+t
150 × 250	250	330	± 30	± 20	250	290	± 30	± 3	M12 × 200	22+t
150 × 300	250	380	± 30	± 20	250	340	± 30	± 3	M12 × 200	22+t
d200	300	280	± 30	± 20	300	240	± 30	± 3	M12 × 200	22+t
200 × 200	300	280	± 30	± 20	300	240	± 30	± 3	M12 × 200	22+t
200 × 250	300	330	± 30	± 20	300	290	± 30	± 3	M12 × 200	22+t
200 × 300	300	380	± 30	± 20	300	340	± 30	± 3	M12 × 200	22+t
200 × 350	300	430	± 30	± 20	300	390	± 30	± 3	M12 × 200	22+t
200 × 400	300	480	± 30	± 20	300	440	± 30	± 3	M12 × 200	22+t
d250	410	350	± 60	± 30	410	290	± 60	± 3	M16 × 200	22+t
250 × 250	390	330	± 50	± 20	390	290	± 50	± 3	M16 × 200	22+t
250 × 300	390	380	± 50	± 20	390	340	± 50	± 3	M16 × 200	22+t
250 × 350	390	430	± 50	± 20	390	390	± 50	± 3	M16 × 200	22+t
250 × 400	390	480	± 50	± 20	390	440	± 50	± 3	M16 × 200	22+t
250 × 450	390	530	± 50	± 20	390	490	± 50	± 3	M16 × 200	22+t
250 × 500	390	580	± 50	± 20	390	540	± 50	± 3	M16 × 200	22+t
d300	460	400	± 60	± 30	460	340	± 60	± 3	M16 × 200	22+t
300 × 300	480	400	± 70	± 30	480	340	± 70	± 3	M16 × 200	22+t
300 × 350	480	450	± 70	± 30	480	390	± 70	± 3	M16 × 200	22+t
300 × 400	480	500	± 70	± 30	480	440	± 70	± 3	M16 × 200	22+t
300 × 450	480	550	± 70	± 30	480	490	± 70	± 3	M16 × 200	22+t
300 × 500	480	600	± 70	± 30	480	540	± 70	± 3	M16 × 200	27+t
300 × 550	480	650	± 70	± 30	480	590	± 70	± 3	M16 × 200	28+t
300 × 600	480	700	± 70	± 30	480	640	± 70	± 3	M16 × 200	28+t
d350	570	470	± 90	± 40	570	390	± 90	± 3	M16 × 200	27+t
350 × 350	570	470	± 90	± 40	570	390	± 90	± 3	M16 × 200	27+t
350 × 400	570	520	± 90	± 40	570	440	± 90	± 3	M16 × 200	27+t
350 × 450	570	570	± 90	± 40	570	490	± 90	± 3	M16 × 200	27+t

Dimensions of Main Accessories for GJZF4(X) and GYZF4(X) Series Bearings (in mm)

Plane dimensions of bearing	Free Sliding Bearing				Guided Sliding Bearing				Anchor bolts	Bearing assembling height
	a_1	b_1	Longitudinal direction	Transverse direction	a_1	b_1	Longitudinal direction	Transverse direction		h
350×500	570	620	±90	±40	570	540	±90	±3	M16×200	27+t
350×550	570	670	±90	±40	570	590	±90	±3	M16×200	28+t
350×600	570	720	±90	±40	570	640	±90	±3	M16×200	28+t
d400	620	520	±90	±40	620	440	±90	±3	M16×200	27+t
400×400	620	520	±90	±40	620	440	±90	±3	M16×200	27+t
400×450	620	570	±90	±40	620	490	±90	±3	M16×200	27+t
400×500	620	620	±90	±40	620	540	±90	±3	M16×200	27+t
400×550	630	680	±90	±40	630	600	±90	±3	M16×200	33+t
400×600	630	730	±90	±40	630	650	±90	±3	M16×200	33+t
400×650	630	780	±90	±40	630	700	±90	±3	M16×200	33+t
d450	720	580	±110	±40	720	500	±110	±3	M16×200	27+t
450×450	720	580	±110	±40	720	500	±110	±3	M16×200	32+t
450×500	720	630	±110	±40	720	550	±110	±3	M16×200	32+t
450×550	720	680	±110	±40	720	600	±110	±3	M16×200	33+t
450×600	720	730	±110	±40	720	650	±110	±3	M16×200	33+t
450×650	720	780	±110	±40	720	700	±110	±3	M16×200	33+t
d500	770	630	±110	±40	770	550	±110	±3	M16×200	27+t
500×500	810	630	±130	±40	810	550	±130	±3	M16×200	32+t
500×550	810	680	±130	±40	810	600	±130	±3	M16×200	33+t
500×600	810	730	±130	±40	810	650	±130	±3	M16×200	33+t
500×650	810	780	±130	±40	810	700	±130	±3	M16×200	33+t
500×700	810	830	±130	±40	810	750	±130	±3	M16×200	33+t
d550	860	680	±130	±40	860	600	±130	±3	M16×200	33+t
550×550	860	680	±130	±40	860	600	±130	±3	M20×250	33+t
550×600	860	730	±130	±40	860	650	±130	±3	M20×250	33+t
550×650	860	780	±130	±40	860	700	±130	±3	M20×250	33+t
d600	910	730	±130	±40	910	650	±130	±3	M20×250	33+t
600×600	910	730	±130	±40	910	650	±130	±3	M20×250	33+t
600×650	910	780	±130	±40	910	700	±130	±3	M20×250	33+t
600×700	950	830	±150	±40	950	750	±150	±3	M20×250	33+t
600×750	950	880	±150	±40	950	800	±150	±3	M20×250	33+t
d650	1000	780	±150	±40	1000	700	±150	±3	M20×250	38+t
650×650	1000	780	±150	±40	1000	700	±150	±3	M20×250	38+t
650×700	1000	830	±150	±40	1000	750	±150	±3	M20×250	38+t
650×750	1000	880	±150	±40	1000	800	±150	±3	M20×250	38+t
d700	1050	830	±150	±40	1050	750	±150	±3	M20×250	38+t
700×700	1050	830	±150	±40	1050	750	±150	±3	M20×250	38+t
d750	1170	890	±180	±40	1170	810	±180	±3	M20×250	43+t
d800	1220	940	±180	±40	1220	860	±180	±3	M20×250	43+t

Bearings For Railway

Bearings For Railway

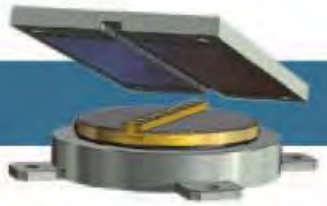
The Company has passed the certification of bearings for railway passenger dedicated lines held by CRCC. In recent years, the bearings produced by the Company have been widely applied in many of railway passenger dedicated lines in China, such as Shijiazhuang–Taiyuan Railway Passenger Dedicated line, Hefei–Wuhan Railway, Wenzhou–Fuzhou Railway, and Beijing–Shanghai High–speed Railway.

KTPZ Series Railway Bridges Pot Bearing For Passenger Special Line

The series is designed and produced to meet the demand for bearings for railway bridges of railway passenger dedicated lines, and it is divided into three sections, i.e. simply–supported T beam, simply–supported box beam, and continuous beam.

TPZB(X) Series Railway Bridges Pot Bearing For Passenger–cargo line

The series is designed for railway bridges of passenger–cargo shared lines and railway passenger dedicated lines that allow a speed per hour of 200 kilometer of lower, and it may be applied in light rail bridges as well.



CKPZ Series Railway Bridges Pot Bearing For Passenger Special line Simply–supported Beams of Commonly–used Spans

The series is applicable o the railway bridges of intercity and railway passenger dedicated lines with designed speed per hour of 350 kilometer or lower, and the passenger–cargo shared lines with designed speed per hour of 200 kilometers or lower.

Installation and Maintenance of Bearings

If the installation temperature is different from the local mean annual temperature, the value of anticipated deviation parallel to axial direction of bearings shall be determined through calculation.

To ensure easy installation, adjustment, observation, and replacement of bearings, supporting bed stone must be set up on tops of piers no matter which type of construction method and bearings are applied.

The length and width of supporting bed stone shall be 10cm greater than the length and width in the same directions of bearing bottom, and the height shall not be less than 6cm.

A reinforcement mat shall be arranged for the supporting bed stone, and the vertical reinforcing bars shall be connected to the reinforcing bars of the piers.

Grade of the cement for bed stone casting shall not be lower than #400, top surface of bed-stone concrete shall be calibrated with level bar, and the height of four corners contacting the base plate of bearing shall not exceed 2mm.

Installation Method of Welded Bearings

Set up the reserved steel plate: If it is planned to connect the bearings by welding. embedded steel plate with relatively high flatness shall be set up on the pier supporting bed-stone and beam body, and a certain number of reinforcing bars shall be arranged on the embedded steel plate .To guarantee the compactness of concrete beneath the embedded steel plate, a right amount of venting holes shall be reserved in the embedded steel plate. The side length of the embedded steel plate shall be at least 50mm greater than the side length of top/base bearing plates of corresponding bearings.

Welding: The embedded steel plate and top/base bearing plates of the bearings shall be discontinuously welded by stages according to the welding seam height and pitch specified by the designing institute or manufacturer, so as not to have the polytetrafluoroethylene slide or rubber pieces burnt out due to too high temperature. Rust-prevention spray painting treatment shall be fulfilled when welding operation is over.

Remove the temporary locking devices: Bearings usually have temporary locking devices that shall be removed when installation is completed.

Installation Method of Elastomeric Bearings

The installation of ordinary elastomeric bearings is relatively simple, and it requires only that the rubber body is aligned to the central line and emplaced properly. Elastomeric bearings with PTFE sheet are usually welded to the steel plates embedded inside beam body, so operators may refer to the installation method of welded bearings. If it is applied in cast-in-situ beam, U-shape anchor bars shall be welded to the top surface of elastomeric bearings, and then the formwork shall be assembled for concreting.

Installation Method of Bearings for Cast-in-situ Beam

Reserved holes: To pour concrete of piers(or bed stone), anchorage holes shall be reserved as per the dimensions of holes reserved for bearings and the dimensions of plane arrangement of anchorage holes of the bearings before the bearings reach the site.

Leveling: Remove the light sand on the top surface of pier bed stone, and the surface shall be clean, flat, and free of greasy dirt. If the difference in elevation of top surface of pier(or bed stone)is too great, adjustment may be conducted with epoxy mortar(epoxy resin 6101 accounts for 100, dibutyl ester accounts for 17, ethylenediamine accounts for 8, and sand accounts for 250(as per weight percentage));

Emplacement of bearings: mark longitudinal/transverse center lines on the bearings, and emplace the bearing onto a bed stone such that the center line of bearing coincide with the center line of designed position of the pier(or bed stone).

If anchor bolts or sleeves are already embedded, bearings may be emplaced directly.

If anchor blot or sleeves are not embedded, just connect the anchorage devices to the bearings, emplace the bearings according to the designed positions of the bearings, slot from sides, and grout epoxy mortar into the holes directly till the holes are full of mortar.

Beam pouring: Connect the upper anchor bolts and fix them by welding etc., and the carry out concrete pouring.Remove the temporary locking device: Bearings usually have temporary locking devices that shall be removed when installation is completed.

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Installation Method of Bearings for Precast Beam

Precast bearings wholly (including anchor bolts) into a beam body;

Reserved holes: To pour concrete of piers (or bed stone), anchorage holes shall be reserved as per the dimensions of holes reserved for bearings and he dimensions of plane arrangement of anchorage holes of the bearings before the bearings reach the site;

Leveling: Remove the light sand on the top surface of pier bed stone, and the surface shall be clean, flat, and free of greasy dirt. If the difference in elevation of top surface of pier (or bed stone) is too great, adjustment may be conducted with epoxy mortar;

Emplacement of beams: Align the anchorage connecting devices to the reserved holes and emplace the beams, slot from sides, and grout epoxy mortar into the holes till the holes are full of mortar;

Remove the temporary locking device: Bearings usually have temporary locking devices that shall be removed when installation is completed.

Maintenance of Bearings

Bearings in service shall be regularly checked and maintained every year

Check the anchorage connecting devices of bearings for shearing off, and check the bearings for exceptional displacement.

Check the polytetrafluoroethylene slides for abrasive damage.

Remove the foreign objects and dust around bearings, and wipe off the dust on the surface of stainless steel.

Remove the anchor nuts of anchor bolts of bearings. Clean, oil, and reassemble them properly so as to avoid thread rusting-in.

Carry out paint protection treatment of bearings regularly (excluding the stainless-steel sliding surfaces).

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