

POWER CREATES A WONDERFUL WORLD

QUALITY SUPPORTS A HAPPY LIFE



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BRIDGE BEARINGS & EXPANSION JOINTS



LIUZHOU OVM MACHINERY CO., LTD.
LIUZHOU ORIENT ENGINEERING RUBBER PRODUCTS CO., LTD.



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Liuzhou Orient Engineering Rubber Products Co., Ltd. a subsidiary of Liuzhou OVM Machinery Co., Ltd. is specialized in manufacture of engineering rubber products, such as bearings, expansion joints, dampers, etc. which are widely applied in works of highway and railway bridges, city viaducts, nuclear facilities and buildings. Our company has established quality management system in accordance with ISO9001:2008, meanwhile we have been certified the registry of ISO 9001 by CQC in 1995, and BSI (British Standard Institute) in 1996. We are the only organization possessing these two certificates in this field in China. In 2011, we has been awarded CE certificate for elastomeric bearings, pot bearings and spherical bearings. Our products can not only comply with Chinese standard, but also with international standard such as AASHTO, EN standard, BS standard and Japanese standard JIS.

For continuous improvement and innovation, we keep cooperate with well-known university and association in China, as well as government, such as HUAZHONG University in Wuhan, TONGJI University in Shanghai, Planning and Design Institute under the Ministry of Communications, Science Research Institute under the Ministry of Railway, Shanghai Municipal Civil Design Institute, etc. Our products include:

- Elastomeric bearing
- Pot bearing
- Spherical bearing
- Rubber expansion joints
- Steel expansion joints
- Lead rubber bearing
- Damper
- High damper rubber bearing

Our principle: Quality the first, Customer the priority.



1 Nanning Bridge, china

2 Liuzhou Shuangyong Bridge in Guangxi, china

3 The Beijing to Baotou Expressway, china

4 The Xiazhang Sea-crossing Bridge in Fujian, china





1 The Yajisha Bridge in Guangzhou, China

2 Special Highway at Xianyang international airport in Xian, China

3 Kigamboni Bridge

4 The Albuha Bridge 'Saudi Arabia

5 The New Duong Bridge 'Vietnam



1 Kigamboni Bridge

2 Sheikh Maktoum Bridge
Ajman Project U.A.E Ajman

3 Kalamchi Bridge

4 Al Wasta Bridge Over The Nile - Egypt

5 Cairo International Air port
(Terminal 3 Approach Bridge) Egypt



1



2



3



4



5



6

1 Outer Circular Highway, to the City of Colombo, Sri Lanka

2 Benazir Bhutto International Airport, Islamabad, Pakistan

3 Shanxi Shitian Highway

4 Yalu Highway

5 Iran Ahwaz 8th bridge Mf640

6 Shanxi Shitian Highway

7 Hong Kong - Zhuhai - Macao Bridge



7

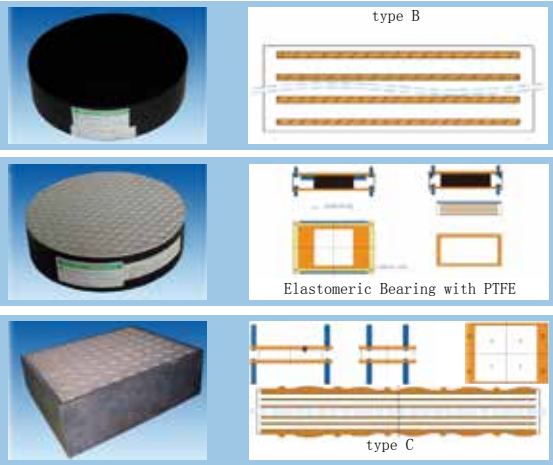


LASTOMERRIC BEARING

A laminated elastomeric bearing is a rubber block vulcanized elastomeric rubber with inner reinforced steel plates. This bearing is a kind of connection between upper structure and lower supporter. It has advantages as followings:

- Sufficient vertical rigidities to bear and transmit normal loads;
- Good flexibilities for rotation in any direction;
- Considerable shear deformation to satisfy horizontal movement;
- Perfect anti-vibration to reduce the impact of dynamic load.

An Elastomeric bearing can also be bonded with PTFE plate to satisfy large horizontal movement in one or two directions.



Physical properties of Rubberr(According with Standard AASHTO)

Items		Polychloroprene rubber			Natural rubble		
Hardness(Shore A) ASTM D2240		50±5	60±5	70±5	50±5	60±5	70±5
Tensile strength(MPa) ASTM D412		≥ 15.5			≥ 15.5		
Elongtion at break (%) ASTM D412		≥ 400	≥ 350	≥ 300	≥ 450	≥ 400	≥ 300
Peel strength of rubber bonded to steel plate(KN/m) D429, B		≥ 7.0			≥ 7.0		
Low temperature brittleness (°C) ASTM D746		≤ -40			≤ -40		
Permanent deformation at constant compression (%) ASTM D395		100°C x 22h			70°C x 22h		
		≤ 35			≤ 25		
Ozone resistance aging 20%(38°C x100h) of elongation ASTM D1149		100pphm			25pphm		
		No cracks			No cracks		
Hot air-oven Aging test ASTM D573	Testing condions (°C xh)	100°C x 70h			70°C x 168h		
	Reduction of tensile strenght, Maximum (%)	-15			-25		
	Reduction of elongation at break, Maximum (%)	-40			-25		
	Hardness changeable range, Maximum Points (Shore A)	15			10		

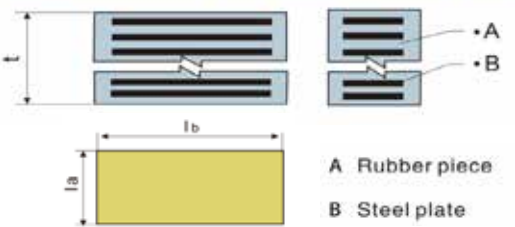
Physical properties of Rubber(According to Standard BS5400)

Item		Unit	Standard	Specified Value	
				NR	CR
Hardness		(IRHD)	BS903: Part A26	56 ~ 65	56 ~ 65
Tensile strength		(MPa)	BS903: Part A2	> 15.5	> 15.5
Elongation at break		(%)	BS903: Part A2	> 400	> 350
Peel strength of rubber bonded to steel plate		(N/mm)	BS903: Part A21	> 7	> 7
Low temperature Brittleness		(℃)	BS903: Part A25	≤ -25	≤ -25
Permanent deformation at constant compression		(%)	BS903: Part A6	≤ 30	≤ 35
NR: 70±1℃ ×22h; CR: 100±1℃ ×22h					
Ozone resistance Aging 25pphm, 20% of elongation 30±1℃ ×96h		—	BS903: Part A43	No cracks	No cracks
Aging resistance	Hardness changeable range	(IRHD)	BS903: Part A19	< + 10	< + 15
NR: 70±1℃ ×7days;	Change in tensile strength	(%)		< 15	< 15
CR: 100±1℃ ×3days	Change in elongation at break	(%)		< 20	< 40

Physical properties of Rubber (According to Standard EN1337)

Characteristics	Requirements			Test methods
G Modulus (MPa)	0.7	0.9	1.15	
Tensile strength (MPa) Moulded Test Piece Test Piece from Bearing	≥ 16 ≥ 14	≥ 16 ≥ 14	≥ 16 ≥ 14	ISO 37 Type 2
Minimum Elongation at break (%) Moulded Test Piece Test Piece from Bearing	450 400	425 375	300 250	
Minimum Tear Resistance (kN/m) CR NR	≥ 7 ≥ 5	≥ 10 ≥ 8	≥ 12 ≥ 10	ISO 34-1 Trouser (Method A)
Compression Set (%)24h; 70°C	CR ≤ 15 NR ≤ 30			ISO 815 Φ 29×12.5mm Spacer: 9.38-25%
Accelerated Aging (Maximum change from unaged value) - <u>Hardness</u> (IRHD) NR 7d, 70°C CR 3d, 100°C - <u>Tensile strength</u> (%) NR 7d, 70°C CR 3d, 100°C - <u>Elongation at break</u> (%) NR 7d, 70°C CR 3d, 100°C	-5 ~ +10 ±5 ±15 ±15 ±25 ±25			ISO 48 ISO 188
Ozone Resistance <u>Elongation</u> :30% - 96h, 40°C ±2°C NR 25pphm CR 100pphm	No cracks			ISO 1431-1

Specifications of GJZ Rectangular Bearings according to AASHTO standards



Structure drawing of GJZ rectangular bearing

La: Total width;
Lb: Total length;
T : Total thickness;
A_m: Maximum horizontal displacement;
W : Weight;
V : Vertical force;
R : Rotation

La x Lb (mm)	GJZ (JBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	A _m (mm)			
100 x 150	21	5	0.9	150	0.002
	28	7.5	1.13		0.004
100 x 200	21	5	1.16	200	0.001
	28	7.5	1.8		0.003
150 x 150	21	5	1.29	225	0.002
	28	7.5	1.7		0.004
	35	10	2.11		0.006
	42	12.5	2.5		0.007
150 x 200	21	5	1.95	300	0.001
	28	7.5	2.63		0.003
	35	10	2.86		0.005
	42	12.5	3.5		0.007
150 x250	28	7.5	3.2	375	0.002
	35	10	4		0.003
	42	12.5	4.47		0.005
150 x 300	28	7.5	3.4	450	0.001
	35	10	4.92		0.002
	42	12.5	6.1		0.003
200 x 200	35	10	4.36	400	0.003
	42	12.5	5.22		0.003
	49	15	6.08		0.004
	56	17.5	6.2		0.004
200 x 250	42	12.5	6.63	500	0.003
	49	15	7.66		0.003
	56	17.5	7.8		0.004
200 x 300	30	8	6.39	600	0.001
	41	12	7.01		0.002
	52	16	8.56		0.003
200 x 350	30	8	8	700	0.001
	41	12	8.2		0.001
	52	16	8.56		0.002
200 x 400	30	8	8.1	800	0.000
	41	12	8.36		0.001
	52	16	8.66		0.002

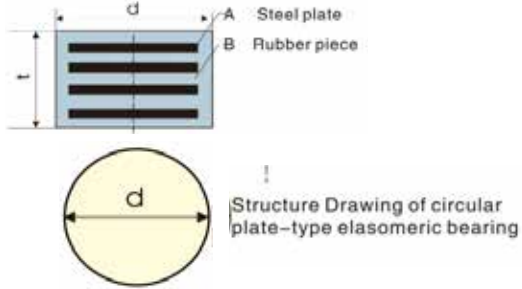
La x Lb (mm)	GJZ (JBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	A _m (mm)			
250 x 250	41	12	8.26	625	0.003
	52	16	8.45		0.005
	63	20	8.7		0.007
	74	24	9		0.008
250 x 300	41	12	9.03	750	0.002
	52	16	11.27		0.003
	63	20	13.55		0.005
	74	24	14		0.007
250 x 350	41	12	10.58	875	0.003
	52	16	13.03		0.005
	63	20	15.66		0.007
	74	24	17.02		0.008
250 x 400	41	12	12.17	1000	0.001
	52	16	15		0.002
	63	20	17.95		0.003
	74	24	19.54		0.004
250 x 450	41	12	13.57	1125	0.001
	52	16	17.05		0.001
	63	20	20.46		0.002
	74	24	24.03		0.003
250 x 500	41	12	15.1	1250	0.001
	52	16	18.98		0.001
	63	20	22.53		0.002
	74	24	25		0.003
300 x 300	52	16	13.6	900	0.003
	63	20	16.38		0.004
	74	24	19.06		0.005
	85	28	21.83		0.005
300 x 350	52	16	15.83	1050	0.002
	63	20	19.11		0.004
	74	24	27		0.004
	85	28	25.63		0.005
300 x 400	52	16	18.05	1200	0.002
	63	20	19.69		0.003
	74	24	23		0.004
	85	28	25.02		0.005
300 x 450	63	20	21.7	1350	0.002
	74	24	26		0.003
	85	28	30.98		0.004
300 x 500	54	16.5	17.61	1500	0.001
	69	22	30		0.004
	84	27.5	34		0.007
300 x 550	54	16.5	22.41	1650	0.004
	69	22	34		0.006
	84	27.5	40.12		0.007

La x Lb (mm)	GJZ (JBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	Am (mm)			
300 x 600	54	16.5	21.16	1800	0.004
	69	22	36.65		0.005
	84	27.5	44.22		0.007
350 x 350	63	20	22.45	1225	0.002
	74	24	26.26		0.002
	85	28	29.68		0.003
	96	32	33.88		0.004
350 x 400	54	16.5	17.9	1400	0.001
	69	22	23.84		0.002
	84	27.5	28.75		0.002
	99	33	33.66		0.006
350 x 450	54	16.5	21.34	1575	0.003
	69	22	26.87		0.004
	84	27.5	38.31		0.005
	99	33	48.26		0.006
350 x 500	54	16.5	25	1750	0.003
	69	22	30		0.004
	84	27.5	38.31		0.005
	99	33	40.72		0.006
350 x 550	54	16.5	26.4	1925	0.003
	69	22	39.3		0.004
	84	27.5	47.08		0.005
	99	33	53		0.006
350 x 600	54	16.5	33.6	2100	0.002
	69	22	42.25		0.003
	84	27.5	51		0.004
	99	33	59.56		0.005
400 x 400	54	16.5	28.25	1600	0.002
	69	22	32.67		0.003
	84	27.5	37.09		0.004
	99	33	41.51		0.004
400 x 450	69	22	29.9	1800	0.003
	84	27.5	37.47		0.003
	99	33	51.26		0.004
	114	38.5	56		0.005
400 x 500	69	22	34.26	2000	0.002
	84	27.5	41.32		0.003
	99	33	48.36		0.004
	114	38.5	51.93		0.005
400 x 550	69	22	44.58	2200	0.002
	84	27.5	53.71		0.003
	99	33	59		0.004

La x Lb (mm)	GJZ (JBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	Am (mm)			
400 x 600	69	22	48.62	2400	0.002
	84	27.5	58.59		0.003
	99	33	68.55		0.004
400 x 650	69	22	52.73	2600	0.002
	84	27.5	63.53		0.003
	99	33	74.33		0.004
450 x450	69	22	40.99	2025	0.002
	84	27.5	49.39		0.002
	99	33	57.79		0.003
	114	38.5	66.42		0.004
450 x 500	84	27.5	54.91	2250	0.002
	99	33	71.13		0.003
	114	38.5	89.06		0.003
450 x 550	84	27.5	60.54	2475	0.002
	99	33	70.83		0.003
	114	38.5	81.41		0.003
450 x 600	70	22.5	54.77	2700	0.002
	90	30	69.11		0.003
	110	37.5	83.77		0.006
450 x 650	70	22.5	59.4	2925	0.003
	90	30	74.94		0.005
	110	37.5	90.83		0.006
500 x 500	70	22.5	50.73	2500	0.003
	90	30	64		0.004
	110	37.5	77.57		0.005
	130	45	90.85		0.006
500 x 550	70	22.5	55.87	2750	0.003
	90	30	70.49		0.004
	110	37.5	85.44		0.005
	130	45	100.1		0.006
500 x 600	70	22.5	60.96	3000	0.002
	90	30	76.91		0.003
	110	37.5	93.22		0.004
	130	45	109.16		0.006
500 x 650	70	22.5	66.1	3250	0.002
	90	30	83.4		0.003
	110	37.5	101.08		0.004
	130	45	118.37		0.005
500 x 700	70	22.5	71.24	3500	0.003
	90	30	89.88		0.003
	110	37.5	108.94		0.004
	130	45	127.58		0.005

La x Lb (mm)	GJZ (JBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	am (mm)			
550 x 550	90	30	77.64	3025	0.003
	110	37.5	94.1		0.004
	130	45	110.21		0.004
	150	52.5	126.66		0.005
550 x 600	90	30	84.7	3300	0.003
	110	37.5	102.66		0.003
	130	45	120.23		0.004
	150	52.5	138.18		0.005
550 x650	90	30	91.85	3575	0.002
	110	37.5	111.32		0.003
	130	45	130.38		0.004
	150	52.5	149.85		0.005
600 x 600	90	30	92.41	3600	0.002
	110	37.5	112		0.003
	130	45	131.17		0.004
	150	52.5	150.76		0.004
600 x 650	90	30	100.2	3900	0.002
	110	37.5	121.44		0.003
	130	45	142.23		0.004
	150	52.5	163.47		0.004
600 x 700	110	37.5	130.9	4200	0.0020
	130	45	153.3		0.003
	150	52.5	176.19		0.004
600 x 750	110	37.5	140.35	4500	0.002
	130	45	164.37		0.003
	150	52.5	188.9		0.003
650 x 650	110	37.5	131.69	4225	0.002
	130	45	154.24		0.003
	150	52.5	177.26		0.003
	170	60	199.8		0.004
650 x 700	102	36	123.97	4550	0.003
	125	45	149.83		0.004
	148	54	175.71		0.004
	171	63	202.11		0.006
650 x 750	102	36	132.91	4875	0.003
	125	45	160.64		0.004
	148	54	188.38		0.004
	171	63	216.68		0.005
700 x 700	102	36	133.6	4900	0.002
	125	45	161.49		0.003
	148	54	189.37		0.004
	171	63	217.82		0.005

Specifications of GYZ Circular Laminated Elastomeric Bearings according to AASHTO standards



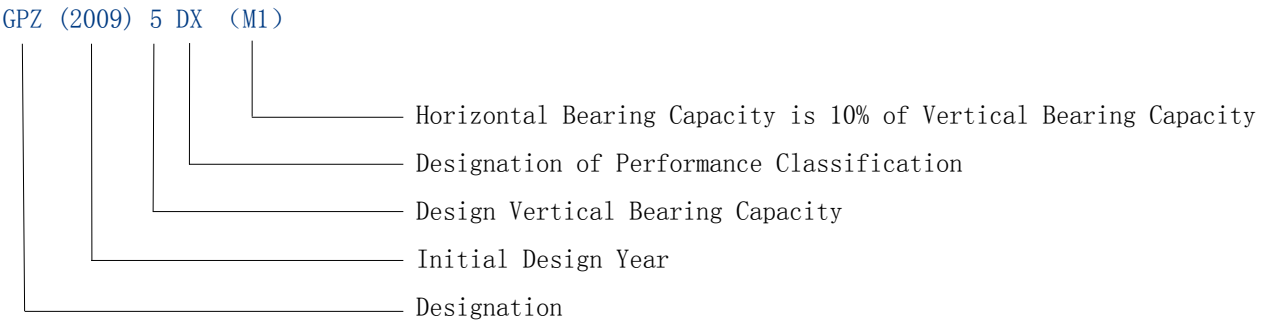
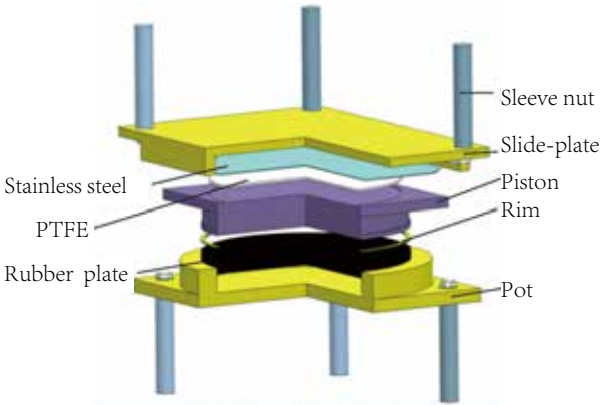
D : Bearing diameter;
T : Total thickness;
Am: Maximum horizontal displacement
W : Weight;
V : Vertical force;
R : Rotation

D (mm)	GYZ (YBZ) Series		W (Kg)	V (KN)	R(rad)
	T (mm)	Am (mm)			
150	21	5	1.02	176	0.003
	28	7.5	1.36		0.005
	35	10	1.7		0.007
	42	12.5	2.04		0.008
200	35	10	3.1	314	0.001
	42	12.5	3.72		0.002
	49	15	4.34		0.002
	56	17.5	4.96		0.003
250	41	12	5.84	490	0.005
	52	16	7.34		0.006
	63	20	8.84		0.008
	74	24	10.35		0.01
300	52	16	10.68	706	0.002
	63	20	12.86		0.003
	74	24	15.05		0.004
	85	28	17.23		0.004
350	63	20	17.63	962	0.002
	74	24	20.63		0.002
	85	28	23.62		0.002
	96	32	26.61		0.002
400	54	16.5	20.3	1257	0.001
	69	22	25.59		0.002
	84	27.5	30.88		0.002
	99	33	36.61		0.002

D (mm)	GYZ (YBZ) Series		W (Kg)	V (KN)	R (rad)
	T (mm)	Am (mm)			
450	69	22	32.52	1590	0.002
	84	27.5	39.24		0.001
	99	33	45.96		0.001
	114	38.5	52.67		0.002
500	70	22.5	40.5	1963	0.002
	90	30	51.17		0.002
	110	37.5	61.85		0.003
	130	45	72.52		0.004
550	90	30	62.09	2370	0.001
	110	37.5	75.03		0.002
	130	45	87.98		0.002
	150	52.5	100.92		0.002
600	90	30	74.05	2827	0.001
	110	37.5	89.49		0.002
	130	45	104.93		0.002
	150	52.5	120.37		0.002
650	110	37.5	105.23	3318	0.001
	130	45	123.38		0.001
	150	52.5	141.53		0.002
	170	60	159.68		0.002
700	102	36	106.28	3848	0.001
	125	45	128.64		0.001
	148	54	151.01		0.002
	171	63	173.37		0.002
750	125	45	147.87	4418	0.001
	148	54	173.58		0.001
	171	63	199.29		0.001
	194	72	224.99		0.002
800	125	45	168.44	5027	0.001
	148	54	197.72		0.001
	171	63	227		0.001
	194	72	256.29		0.001

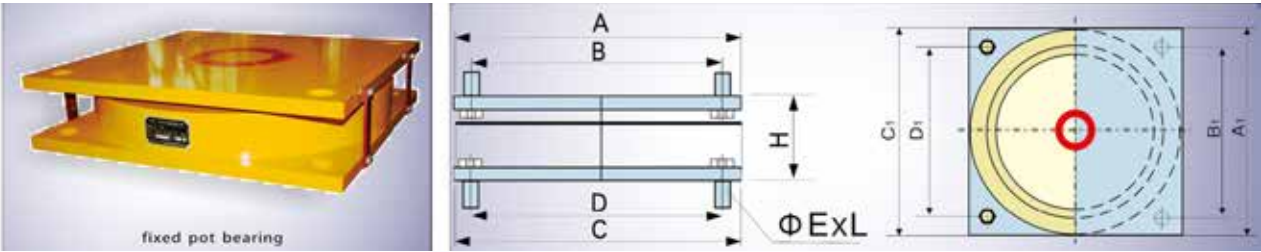
POT BEARING GPZ(2009)

Introduction
 Pot bearings can satisfy the requirements of large load capacity in three directions, great horizontal displacement and big rotation angle. Pot bearing can be designed and manufactured according to AASHTO, EN1337 as well as BS5400 Standards. Normally, the horizontal load for fixed pot bearing and sliding guided pot bearing is no more than 10% of vertical load. We can design the horizontal load as to 20% of vertical load or above as requested.



-  denotes Fixed bearing
-  denotes sliding guided bearing, and the direction of arrow is the slide direction;
-  denotes free sliding bearing, and the long arrow is the main sliding direction, while the short arrow is the minor sliding direction.

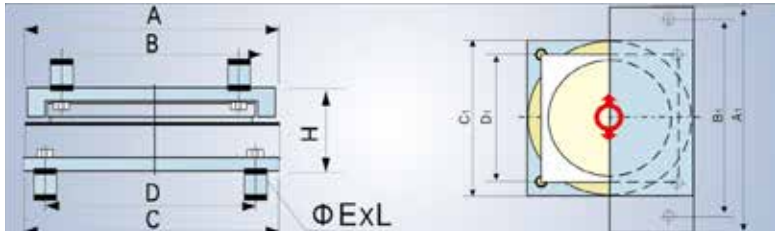
The above three symbols will be marked on the top plate of bearing correspondingly.



Type	Capacity (KN)		Structure size (Install size) mm					W. (kg)	Sleeve nut ΦE × L	R. (rad)
	V. Force	H. Force	A1、A	B1、B	C1、C	D1、D	H			
GPZ (2009) 0. 4GD (M1)	400	40	195	165	195	165	80	19	Φ20×100	0. 02
GPZ (2009) 0. 5GD (M1)	500	50	200	170	200	170	80	20	Φ20×100	0. 02
GPZ (2009) 0. 6GD (M1)	600	60	215	185	215	185	80	23	Φ20×100	0. 02
GPZ (2009) 0. 8GD (M1)	800	80	250	210	250	210	85	32	Φ20×100	0. 02
GPZ (2009) 1GD (M1)	1000	100	280	240	280	240	85	47	Φ35×150	0. 02
GPZ (2009) 1. 25GD (M1)	1250	125	305	260	305	260	90	56	Φ35×150	0. 02
GPZ (2009) 1. 5GD (M1)	1500	150	335	285	335	285	95	68	Φ35×150	0. 02
GPZ (2009) 2GD (M1)	2000	200	385	325	385	325	105	100	Φ40×150	0. 02
GPZ (2009) 2. 5GD (M1)	2500	250	430	365	430	365	110	126	Φ40×150	0. 02
GPZ (2009) 3GD (M1)	3000	300	470	395	470	395	115	152	Φ40×150	0. 02
GPZ (2009) 3. 5GD (M1)	3500	350	505	425	505	425	130	210	Φ50×200	0. 02
GPZ (2009) 4GD (M1)	4000	400	540	455	540	455	135	242	Φ50×200	0. 02
GPZ (2009) 5GD (M1)	5000	500	605	510	605	510	150	332	Φ50×200	0. 02
GPZ (2009) 6GD (M1)	6000	600	660	555	660	555	175	470	Φ60×250	0. 02
GPZ (2009) 7GD (M1)	7000	700	720	605	720	605	180	562	Φ60×250	0. 02
GPZ (2009) 8GD (M1)	8000	800	770	650	770	650	195	693	Φ60×250	0. 02
GPZ (2009) 9GD (M1)	9000	900	810	685	810	685	205	821	Φ70×300	0. 02
GPZ (2009) 10GD (M1)	10000	1000	860	740	860	740	210	935	Φ70×300	0. 02
GPZ (2009) 12. 5GD (M1)	12500	1250	950	820	950	820	235	1249	Φ70×300	0. 02
GPZ (2009) 15GD (M1)	15000	1500	1050	905	1050	905	240	1580	Φ80×350	0. 02
GPZ (2009) 17. 5GD (M1)	17500	1750	1130	975	1130	975	255	1901	Φ80×350	0. 02
GPZ (2009) 20GD (M1)	20000	2000	1205	1040	1205	1040	270	2293	Φ90×400	0. 02
GPZ (2009) 22. 5GD (M1)	22500	2250	1290	1110	1290	1110	290	2800	Φ90×400	0. 02
GPZ (2009) 25GD (M1)	25000	2500	1360	1170	1360	1170	300	3216	Φ100×400	0. 02
GPZ (2009) 27. 5GD (M1)	27500	2750	1420	1225	1420	1225	315	3621	Φ100×400	0. 02
GPZ (2009) 30GD (M1)	30000	3000	1480	1275	1480	1275	325	4029	Φ100×400	0. 02
GPZ (2009) 32. 5GD (M1)	32500	3250	1535	1325	1535	1325	340	4622	Φ120×400	0. 02
GPZ (2009) 35GD (M1)	35000	3500	1595	1375	1595	1375	350	5088	Φ120×400	0. 02
GPZ (2009) 37. 5GD (M1)	37500	3750	1660	1430	1660	1430	365	5745	Φ120×400	0. 02
GPZ (2009) 40GD (M1)	40000	4000	1710	1475	1710	1475	375	6364	Φ140×450	0. 02
GPZ (2009) 45GD (M1)	45000	4500	1810	1560	1810	1560	400	7538	Φ140×450	0. 02
GPZ (2009) 50GD (M1)	50000	5000	1900	1635	1900	1635	415	8521	Φ140×450	0. 02
GPZ (2009) 55GD (M1)	55000	5500	2000	1720	2000	1720	440	10120	Φ150×550	0. 02
GPZ (2009) 60GD (M1)	60000	6000	2080	1790	2080	1790	455	11211	Φ150×550	0. 02

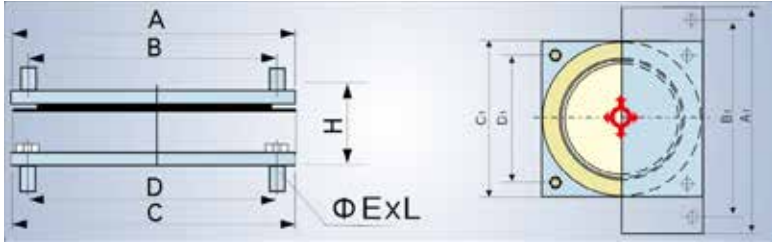
Type	Capacity (KN)		Stucture Size (Install Size) (mm)							W. *(kg)	Sleeve Nut ΦE× L	Movement Ex (mm)	R. (rad)
	V. Force	H. Force	A	B	C1 C	D1 D	A1*	B1*	H				
GPZ (2009) 0. 4DX (M1)	400	40	200	125	195	165	310	270	100	27	Φ20×100	±50	0. 02
GPZ (2009) 0. 5DX (M1)	500	50	215	140	200	170	325	285	100	29	Φ20×100	±50	0. 02
GPZ (2009) 0. 6DX (M1)	600	60	230	155	215	185	340	300	100	33	Φ20×100	±50	0. 02
GPZ (2009) 0. 8DX (M1)	800	80	265	185	250	210	370	330	105	45	Φ20×100	±50	0. 02
GPZ (2009) 1DX (M1)	1000	100	290	195	280	240	415	365	110	63	Φ35×150	±50	0. 02
GPZ (2009) 1. 25DX (M1)	1250	125	315	220	305	260	440	390	115	75	Φ35×150	±50	0. 02
GPZ (2009) 1. 5DX (M1)	1500	150	345	245	335	285	465	415	116	88	Φ35×150	±50	0. 02
GPZ (2009) 2DX (M1)	2000	200	390	275	385	325	520	460	125	126	Φ40×150	±50	0. 02
GPZ (2009) 2. 5DX (M1)	2500	250	440	315	430	365	560	500	130	158	Φ40×150	±50	0. 02
GPZ (2009) 3DX (M1)	3000	300	490	355	470	395	600	540	135	192	Φ40×150	±50	0. 02
GPZ (2009) 3. 5DX (M1)	3500	350	515	365	505	425	750	675	145	263	Φ50×200	±100	0. 02
GPZ (2009) 4DX (M1)	4000	400	545	395	540	455	780	705	150	303	Φ50×200	±100	0. 02
GPZ (2009) 5DX (M1)	5000	500	610	450	605	510	835	760	165	409	Φ50×200	±100	0. 02
GPZ (2009) 6DX (M1)	6000	600	655	480	660	555	905	815	180	543	Φ60×250	±100	0. 02
GPZ (2009) 7DX (M1)	7000	700	705	525	720	605	950	860	190	655	Φ60×250	±100	0. 02
GPZ (2009) 8DX (M1)	8000	800	760	575	770	650	1000	910	205	804	Φ60×250	±100	0. 02
GPZ (2009) 9DX (M1)	9000	900	790	585	810	685	1065	955	210	928	Φ70×300	±100	0. 02
GPZ (2009) 10DX (M1)	10000	1000	830	625	860	740	1205	1095	220	1090	Φ70×300	±150	0. 02
GPZ (2009) 12. 5DX (M1)	12500	1250	930	705	950	820	1285	1175	240	1434	Φ70×300	±150	0. 02
GPZ (2009) 15DX (M1)	15000	1500	1020	770	1050	905	1395	1365	260	1861	Φ80×350	±150	0. 02
GPZ (2009) 17. 5DX (M1)	17500	1750	1100	840	1130	975	1465	1335	280	2255	Φ80×350	±150	0. 02
GPZ (2009) 20DX (M1)	20000	2000	1170	890	1205	1040	1565	1420	290	2661	Φ90×400	±150	0. 02
GPZ (2009) 22. 5DX (M1)	22500	2250	1240	950	1290	1100	1625	1480	310	3217	Φ90×400	±150	0. 02
GPZ (2009) 25DX (M1)	25000	2500	1320	995	1360	1170	1735	1565	325	3746	Φ100×400	±150	0. 02
GPZ (2009) 27. 5DX (M1)	27500	2750	1370	1045	1420	1225	1785	1615	340	4195	Φ100×400	±150	0. 02
GPZ (2009) 30DX (M1)	30000	3000	1430	1095	1480	1275	1835	1665	350	4639	Φ100×400	±150	0. 02
GPZ (2009) 32. 5DX (M1)	32500	3250	1490	1120	1535	1325	2025	1830	370	5447	Φ120×400	±200	0. 02
GPZ (2009) 35DX (M1)	35000	3500	1550	1170	1595	1375	2075	1880	380	5989	Φ120×400	±200	0. 02
GPZ (2009) 37. 5DX (M1)	37500	3750	1610	1220	1660	1430	2125	1930	395	6716	Φ120×400	±200	0. 02
GPZ (2009) 40DX (M1)	40000	4000	1660	1250	1710	1475	2215	1995	405	7416	Φ140×450	±200	0. 02
GPZ (2009) 45DX (M1)	45000	4500	1760	1330	1810	1560	2295	2075	425	8674	Φ140×450	±200	0. 02
GPZ (2009) 50DX (M1)	50000	5000	1830	1400	1900	1635	2365	2145	440	9691	Φ140×450	±200	0. 02
GPZ (2009) 55DX (M1)	55000	5500	1920	1455	2000	1720	2480	2240	465	11463	Φ150×550	±200	0. 02
GPZ (2009) 60DX (M1)	60000	6000	2000	1525	2080	1790	2550	2310	480	12638	Φ150×550	±200	0. 02

(Dimension with * mark would be calculated and designed on request.)

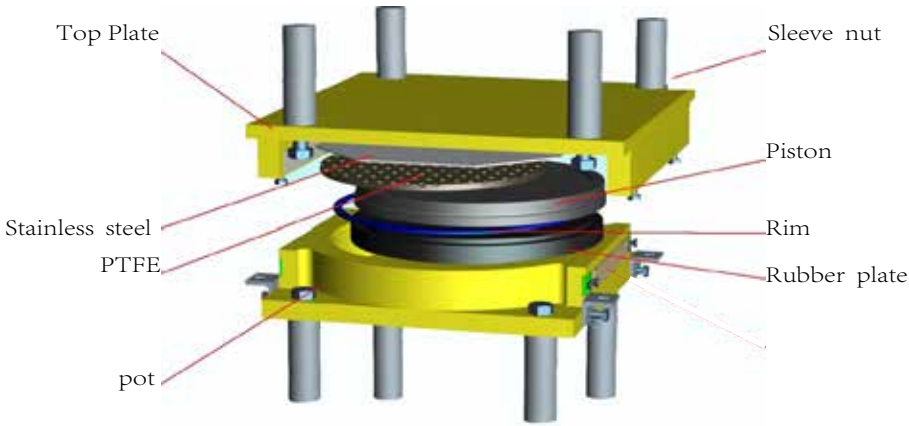


Type	Capacity (KN)		Structure Size (Install Size) (mm)								W. * (kg)	Sleeve Nut ΦE×L	Movement Ex (mm)	Movement Ey (mm)	R. (rad)
	V. Force	H. Force	A C	B	C1	D	D1	A1*	B1*	H					
GPZ (2009) 0. 4SX (M1)	400	40	250	205	185	195	140	270	225	80	22	Φ20×100	±50	±40	0. 02
GPZ (2009) 0. 5SX (M1)	500	50	265	220	200	215	155	300	255	80	26	Φ20×100	±50	±40	0. 02
GPZ (2009) 0. 6SX (M1)	600	60	280	235	215	225	170	310	265	80	29	Φ20×100	±50	±40	0. 02
GPZ (2009) 0. 8SX (M1)	800	80	300	255	250	240	200	350	305	85	37	Φ20×100	±50	±40	0. 02
GPZ (2009) 1SX (M1)	1000	100	320	275	280	260	225	380	335	85	44	Φ20×100	±50	±40	0. 02
GPZ (2009) 1. 25SX (M1)	1250	125	340	295	305	275	250	400	355	90	52	Φ20×100	±50	±40	0. 02
GPZ (2009) 1. 5SX (M1)	1500	150	360	305	330	290	270	420	365	95	64	Φ25×150	±50	±40	0. 02
GPZ (2009) 2SX (M1)	2000	200	400	345	375	320	305	440	385	100	81	Φ25×150	±50	±40	0. 02
GPZ (2009) 2. 5SX (M1)	2500	250	440	385	415	355	340	480	425	105	112	Φ25×200	±50	±40	0. 02
GPZ (2009) 3SX (M1)	3000	300	480	425	455	385	370	520	465	110	137	Φ25×200	±50	±40	0. 02
GPZ (2009) 3. 5SX (M1)	3500	350	490	410	490	400	400	640	560	115	175	Φ35×250	±100	±40	0. 02
GPZ (2009) 4SX (M1)	4000	400	525	445	525	430	430	670	590	130	227	Φ35×250	±100	±40	0. 02
GPZ (2009) 5SX (M1)	5000	500	585	505	585	475	475	730	650	140	290	Φ35×250	±100	±40	0. 02
GPZ (2009) 6SX (M1)	6000	600	640	560	640	520	520	770	690	155	382	Φ35×250	±100	±40	0. 02
GPZ (2009) 7SX (M1)	7000	700	700	600	700	570	570	830	730	165	486	Φ45×300	±100	±40	0. 02
GPZ (2009) 8SX (M1)	8000	800	740	640	740	605	605	870	770	180	597	Φ45×300	±100	±40	0. 02
GPZ (2009) 9SX (M1)	9000	900	780	680	780	655	655	900	800	185	668	Φ45×300	±100	±40	0. 02
GPZ (2009) 10SX (M1)	10000	1000	825	725	825	690	690	1040	940	195	796	Φ45×300	±150	±40	0. 02
GPZ (2009) 12. 5SX (M1)	12500	1250	920	805	920	770	770	1120	1005	215	1088	Φ50×350	±150	±40	0. 02
GPZ (2009) 15SX (M1)	15000	1500	1010	895	1010	845	845	1200	1085	225	1335	Φ50×350	±150	±40	0. 02
GPZ (2009) 17. 5SX (M1)	17500	1750	1090	975	1090	915	915	1270	1155	250	1714	Φ50×350	±150	±40	0. 02
GPZ (2009) 20SX (M1)	20000	2000	1170	1055	1170	1005	1005	1340	1225	260	2011	Φ50×350	±150	±40	0. 02
GPZ (2009) 22. 5SX (M1)	22500	2250	1240	1105	1240	1065	1065	1420	1285	280	2470	Φ60×400	±150	±40	0. 02
GPZ (2009) 25SX (M1)	25000	2500	1310	1175	1310	1125	1125	1470	1335	290	2804	Φ60×400	±150	±40	0. 02
GPZ (2009) 27. 5SX (M1)	27500	2750	1380	1245	1380	1185	1185	1520	1385	305	3275	Φ60×400	±150	±40	0. 02
GPZ (2009) 30SX (M1)	30000	3000	1440	1305	1440	1235	1235	1570	1435	315	3641	Φ60×400	±150	±40	0. 02
GPZ (2009) 32. 5SX (M1)	32500	3250	1490	1335	1490	1280	1280	1720	1565	330	4236	Φ75×450	±200	±40	0. 02
GPZ (2009) 35SX (M1)	35000	3500	1550	1395	1550	1330	1330	1770	1615	340	4660	Φ75×450	±200	±40	0. 02
GPZ (2009) 37. 5SX (M1)	37500	3750	1610	1455	1610	1380	1380	1820	1665	350	5110	Φ75×450	±200	±40	0. 02
GPZ (2009) 40SX (M1)	40000	4000	1670	1515	1670	1435	1435	1870	1715	365	5764	Φ75×450	±200	±40	0. 02
GPZ (2009) 45SX (M1)	45000	4500	1760	1585	1760	1510	1510	1950	1775	390	6842	Φ80×500	±200	±40	0. 02
GPZ (2009) 50SX (M1)	50000	5000	1840	1665	1840	158	1580	2020	1845	400	7581	Φ80×500	±200	±40	0. 02
GPZ (2009) 55SX (M1)	55000	5500	1940	1740	1940	1665	1665	2100	1900	425	8976	Φ90×550	±200	±40	0. 02
GPZ (2009) 60SX (M1)	60000	6000	2020	1820	2020	1735	1735	2170	1970	445	10196	Φ90×550	±200	±40	0. 02

(Dimension with * mark would be calculated and designed on request.)



POT BEARING GPZ(II)



GPZ (II) - 5 -DX

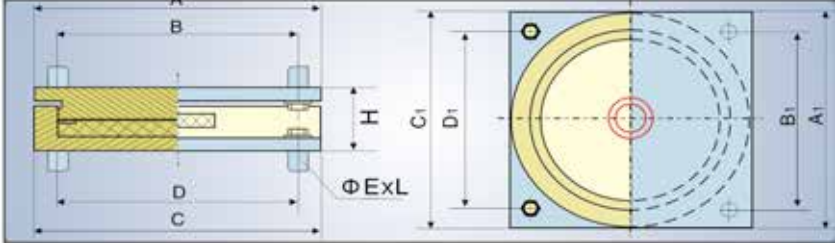
Designation of Performance Classification

Design Vertical Bearing Capacity, MN

Initial Design Year

Designation

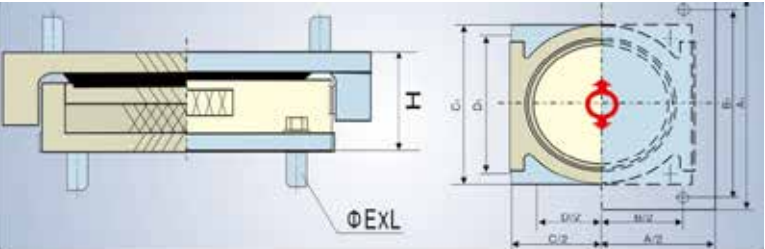
Fixed pot bearing GPZ(II)-GD according to JT391-1999 Standards.



Type	Capacity (KN)		Structure size(install size) mm					W. (kg)	sleeve nut ΦExL	R. (rad)
	V. Force	H. Force	A1、 A	B1、 B	C1、 C	D1、 D	H			
GPZ (II) 0. 8GD	800	80	250	210	250	210	70	27	Φ 20x100	0. 02
GPZ (II) 1GD	1000	100	280	235	280	235	71	34	Φ 20x100	0. 02
GPZ (II) 1. 25GD	1250	125	305	255	305	255	73	40	Φ 20x100	0. 02
GPZ (II) 1. 5GD	1500	150	335	280	335	280	74	56	φ 35×150	0. 02
GPZ (II) 2GD	2000	200	385	330	385	330	82	75	φ 35×150	0. 02
GPZ (II) 2. 5GD	2500	250	430	370	430	370	92	106	φ 35×150	0. 02
GPZ (II) 3GD	3000	300	470	400	470	400	95	129	φ 40×150	0. 02
GPZ (II) 3. 5GD	3500	350	505	420	505	420	99	151	φ 40×150	0. 02
GPZ (II) 4GD	4000	400	540	460	540	460	111	196	φ 40×150	0. 02
GPZ (II) 5GD	5000	500	605	510	605	510	120	268	φ 50×200	0. 02
GPZ (II) 6GD	6000	600	660	560	660	560	133	353	φ 50×200	0. 02
GPZ (II) 7GD	7000	700	720	610	720	610	138	426	φ 50×200	0. 02
GPZ (II) 8GD	8000	800	770	660	770	660	154	561	φ 60×250	0. 02
GPZ (II) 9GD	9000	900	810	690	810	690	158	626	φ 60×250	0. 02
GPZ (II) 10GD	10000	1000	860	740	860	740	164	718	φ 60×250	0. 02
GPZ (II) 12. 5GD	12500	1250	950	820	950	820	180	983	φ 70×300	0. 02
GPZ (II) 15GD	15000	1500	1050	900	1050	900	194	1247	φ 70×300	0. 02
GPZ (II) 17. 5GD	17500	1750	1130	960	1130	960	199	1490	φ 80×350	0. 02
GPZ (II) 20GD	20000	2000	1205	1020	1205	1020	204	1699	φ 80×350	0. 02
GPZ (II) 22. 5GD	22500	2250	1290	1100	1290	1100	228	2210	φ 90×400	0. 02
GPZ (II) 25GD	25000	2500	1360	1160	1360	1160	232	2455	φ 90×400	0. 02
GPZ (II) 27. 5GD	27500	2750	1420	1220	1420	1220	236	2690	φ 90×400	0. 02
GPZ (II) 30GD	30000	3000	1480	1270	1480	1270	239	2966	φ 100×400	0. 02
GPZ (II) 32. 5GD	32500	3250	1535	1320	1535	1320	257	3430	φ 100×400	0. 02
GPZ (II) 35GD	35000	3500	1595	1370	1595	1370	266	3783	φ 100×400	0. 02
GPZ (II) 37. 5GD	37500	3750	1660	1440	1660	1440	269	4114	φ 100×400	0. 02
GPZ (II) 40GD	40000	4000	1710	1480	1710	1480	272	4446	φ 110×450	0. 02
GPZ (II) 45GD	45000	4500	1810	1560	1810	1560	293	5344	φ 110×450	0. 02
GPZ (II) 50GD	50000	5000	1900	1640	1900	1640	302	5995	φ 110×450	0. 02
GPZ (II) 55GD	55000	5500	2000	1720	2000	1720	323	7152	φ 120×450	0. 02
GPZ (II) 60GD	60000	6000	2080	1790	2080	1790	327	7772	φ 120×450	0. 02

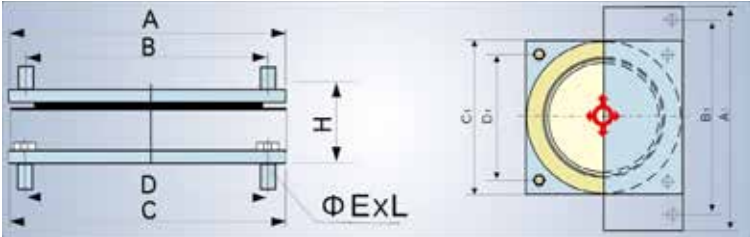
Type	Capacity (KN)		Structure Size(Install Size) (mm)							W. *(kg)	Sleeve Nut Φ ExL	Movement Ex (mm)	R. (rad)
	V. Force	H. Force	A	B	C1 C	D1 D	A1*	B1*	H				
GPZ (II) 0. 8DX	800	80	310	220	250	210	330	290	71	37	Φ 20x100	± 50	0. 02
GPZ (II) 1DX	1000	100	340	250	280	235	360	320	72	45	Φ 20x100	± 50	0. 02
GPZ (II) 1. 25DX	1250	125	365	270	305	255	380	340	74	52	Φ 20x100	± 50	0. 02
GPZ (II) 1. 5DX	1500	150	400	300	335	280	400	360	75	69	φ 35×150	± 50	0. 02
GPZ (II) 2DX	2000	200	455	330	385	330	440	400	83	93	φ 35×150	± 50	0. 02
GPZ (II) 2. 5DX	2500	250	510	380	430	370	480	430	92	127	φ 35×150	± 50	0. 02
GPZ (II) 3DX	3000	300	560	420	470	400	520	460	95	157	φ 40×150	± 50	0. 02
GPZ (II) 3. 5DX	3500	350	595	460	505	420	640	580	99	194	φ 40×150	± 100	0. 02
GPZ (II) 4DX	4000	400	630	480	540	460	670	610	111	247	φ 40×150	± 100	0. 02
GPZ (II) 5DX	5000	500	705	550	605	510	730	660	120	333	φ 50×200	± 100	0. 02
GPZ (II) 6DX	6000	600	760	610	660	560	770	700	133	427	φ 50×200	± 100	0. 02
GPZ (II) 7DX	7000	700	825	640	720	610	820	750	138	511	φ 50×200	± 100	0. 02
GPZ (II) 8DX	8000	800	880	680	770	660	870	790	154	664	φ 60×250	± 100	0. 02
GPZ (II) 9DX	9000	900	920	720	810	690	900	815	158	733	φ 60×250	± 100	0. 02
GPZ (II) 10DX	10000	1000	970	760	860	740	1040	950	164	869	φ 60×250	± 150	0. 02
GPZ (II) 12. 5DX	12500	1250	1080	840	950	820	1120	1015	180	1183	φ 70×300	± 150	0. 02
GPZ (II) 15DX	15000	1500	1190	940	1050	900	1200	1095	194	1482	φ 70×300	± 150	0. 02
GPZ (II) 17. 5DX	17500	1750	1280	1010	1130	960	1270	1150	199	1753	φ 80×350	± 150	0. 02
GPZ (II) 20DX	20000	2000	1355	1090	1205	1020	1340	1220	204	1978	φ 80×350	± 150	0. 02
GPZ (II) 22. 5DX	22500	2250	1450	1180	1290	1100	1420	1285	228	2567	φ 90×400	± 150	0. 02
GPZ (II) 25DX	25000	2500	1530	1260	1360	1160	1470	1335	232	2838	φ 90×400	± 150	0. 02
GPZ (II) 27. 5DX	27500	2750	1590	1300	1420	1220	1520	1385	236	3090	φ 90×400	± 150	0. 02
GPZ (II) 30DX	30000	3000	1660	1370	1480	1270	1570	1420	239	3385	φ 100×400	± 150	0. 02
GPZ (II) 32. 5DX	32500	3250	1725	1430	1535	1320	1720	1570	257	4017	φ 100×400	± 200	0. 02
GPZ (II) 35DX	35000	3500	1795	1480	1595	1370	1770	1620	266	4416	φ 100×400	± 200	0. 02
GPZ (II) 37. 5DX	37500	3750	1870	1540	1660	1440	1820	1670	269	4805	φ 100×400	± 200	0. 02
GPZ (II) 40DX	40000	4000	1920	1600	1710	1480	1870	1705	272	5153	φ 110×450	± 200	0. 02
GPZ (II) 45DX	45000	4500	2040	1700	1810	1560	1950	1785	293	6197	φ 110×450	± 200	0. 02
GPZ (II) 50DX	50000	5000	2130	1790	1900	1640	2020	1855	302	6885	φ 110×450	± 200	0. 02
GPZ (II) 55DX	55000	5500	2240	1870	2000	1720	2100	1920	323	8199	φ 120×450	± 200	0. 02
GPZ (II) 60DX	60000	6000	2330	1950	2080	1790	2170	1990	327	8884	φ 120×450	± 200	0. 02

(Dimension with * mark would be calculated and designed on request.)

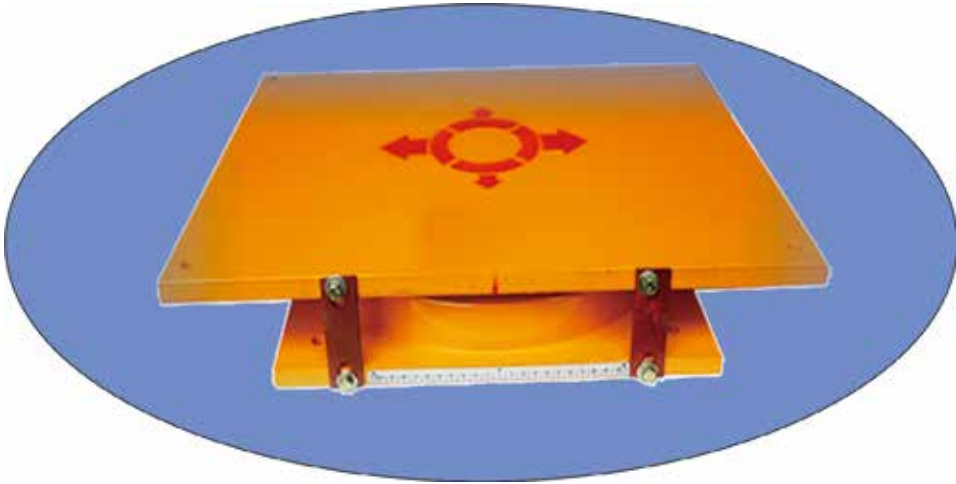


Type	Capacity (KN)		Structure Size (Install Size) (mm)								W. (kg)	Sleeve Nut Φ Ex L	Movement Ex (mm)	Movement Ey (mm)	R. (rad)
	V. Force	H. Force	A, C	B	D	C1	D1	A1*	B1*	H					
GPZ (II) 0.8SX	800	80	300	260	230	250	210	350	310	71	33	Φ 12x100	± 50	± 40	0.02
GPZ (II) 1SX	1000	100	320	280	250	280	230	380	340	72	39	Φ 12x100	± 50	± 40	0.02
GPZ (II) 1.25SX	1250	125	340	300	270	305	255	400	360	74	45	Φ 12x100	± 50	± 40	0.02
GPZ (II) 1.5SX	1500	150	360	320	290	330	270	420	380	75	53	Φ 14×150	± 50	± 40	0.02
GPZ (II) 2SX	2000	200	400	360	330	375	310	440	400	83	69	Φ 14×150	± 50	± 40	0.02
GPZ (II) 2.5SX	2500	250	440	390	370	415	350	480	430	92	97	Φ 18×150	± 50	± 40	0.02
GPZ (II) 3SX	3000	300	480	420	400	455	380	520	460	95	117	Φ 18×150	± 50	± 40	0.02
GPZ (II) 3.5SX	3500	350	490	430	400	490	400	640	580	99	141	Φ 18×150	± 100	± 40	0.02
GPZ (II) 4SX	4000	400	525	465	430	525	430	670	610	111	189	Φ 25×150	± 100	± 40	0.02
GPZ (II) 5SX	5000	500	585	515	480	585	480	730	660	120	244	Φ 25×200	± 100	± 40	0.02
GPZ (II) 6SX	6000	600	640	570	520	640	520	770	700	133	326	Φ 25×200	± 100	± 40	0.02
GPZ (II) 7SX	7000	700	690	620	570	690	570	820	750	138	391	Φ 35×200	± 100	± 40	0.02
GPZ (II) 8SX	8000	800	740	660	610	740	610	870	790	154	506	Φ 35×250	± 100	± 40	0.02
GPZ (II) 9SX	9000	900	780	695	650	780	650	900	815	158	567	Φ 35×250	± 100	± 40	0.02
GPZ (II) 10SX	10000	1000	825	735	690	825	690	1040	950	164	669	Φ 35×250	± 150	± 40	0.02
GPZ (II) 12.5SX	12500	1250	920	815	770	920	770	1120	1015	180	922	Φ 45×300	± 150	± 40	0.02
GPZ (II) 15SX	15000	1500	1010	905	850	1010	850	1200	1095	194	1153	Φ 45×300	± 150	± 40	0.02
GPZ (II) 17.5SX	17500	1750	1090	970	920	1090	920	1270	1150	199	1351	Φ 45×350	± 150	± 40	0.02
GPZ (II) 20SX	20000	2000	1170	1050	1000	1170	1000	1340	1220	204	1561	Φ 45×350	± 150	± 40	0.02
GPZ (II) 22.5SX	22500	2250	1240	1105	1050	1240	1050	1420	1285	228	1973	Φ 45×400	± 150	± 40	0.02
GPZ (II) 25SX	25000	2500	1310	1175	1120	1310	1120	1470	1335	232	2205	Φ 50×400	± 150	± 40	0.02
GPZ (II) 27.5SX	27500	2750	1380	1245	1190	1380	1190	1520	1385	236	2456	Φ 50×400	± 150	± 40	0.02
GPZ (II) 30SX	30000	3000	1440	1290	1230	1440	1230	1570	1420	239	2682	Φ 50×400	± 150	± 40	0.02
GPZ (II) 32.5SX	32500	3250	1490	1340	1280	1490	1280	1720	1570	257	3180	Φ 50×400	± 200	± 50	0.02
GPZ (II) 35SX	35000	3500	1550	1400	1340	1550	1340	1770	1620	266	3535	Φ 60×400	± 200	± 50	0.02
GPZ (II) 37.5SX	37500	3750	1610	1460	1400	1610	1400	1820	1670	269	3822	Φ 60×400	± 200	± 50	0.02
GPZ (II) 40SX	40000	4000	1670	1505	1440	1670	1440	1870	1705	272	4131	Φ 60×450	± 200	± 50	0.02
GPZ (II) 45SX	45000	4500	1760	1595	1520	1760	1520	1950	1785	293	4944	Φ 60×450	± 200	± 50	0.02
GPZ (II) 50SX	50000	5000	1840	1675	1600	1840	1600	2020	1855	302	5544	Φ 75×450	± 200	± 50	0.02
GPZ (II) 55SX	55000	5500	1940	1760	1690	1940	1690	2100	1920	323	6597	Φ 75×450	± 200	± 50	0.02
GPZ (II) 60SX	60000	6000	2020	1840	1750	2020	1750	2170	1990	327	7180	Φ 75×450	± 200	± 50	0.02

(Dimension with * mark would be calculated and designed on request.)



POT REARING QPZ

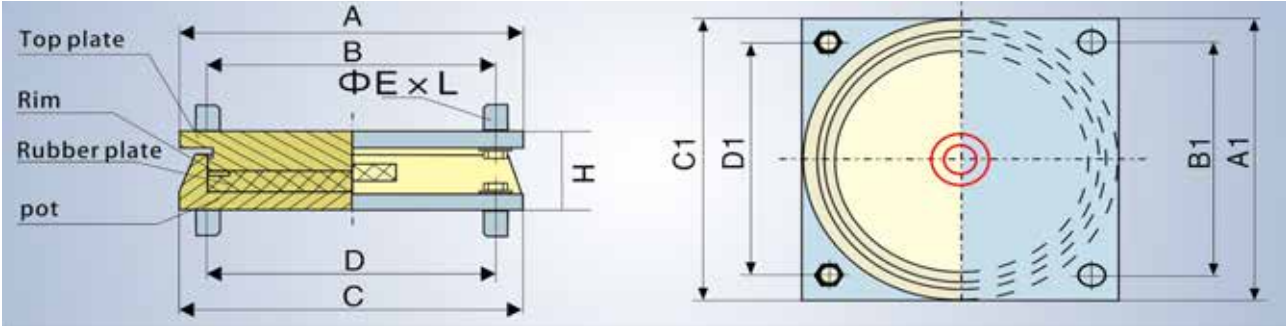


QPZ - 5 -DX

Designation of Performance Classification

Design Vertical Bearing Capacity, MN

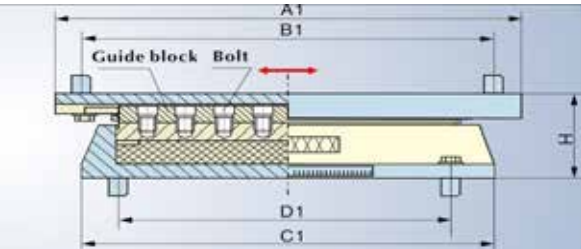
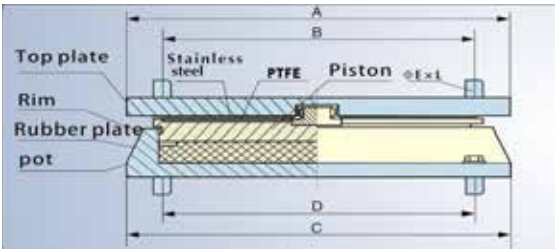
Designation



Type	Capacity (KN)		Structure size(install size) mm					sleeve nut ΦExL	W. (kg)	Ro. (rad)
	V. Force	H. Force	A1、A	B1、B	C1、C	1、D	H			
QPZ0.8GD	800	80	260	220	260	220	75	Φ35x250	42	0.02
QPZ1GD	1000	100	290	250	290	250	80	Φ35x250	51	0.02
QPZ1.25GD	1250	125	315	270	315	270	82	Φ35x250	58	0.02
QPZ1.5GD	1500	150	340	290	340	290	90	Φ35x250	71	0.02
QPZ2GD	2000	200	390	330	390	330	95	Φ35x250	90	0.02
QPZ2.5GD	2500	250	440	370	440	370	105	Φ35x250	125	0.02
QPZ3GD	3000	300	480	400	480	400	110	Φ40x250	156	0.02
QPZ3.5GD	3500	350	510	420	510	420	120	Φ40x250	187	0.02
QPZ4GD	4000	400	550	460	550	460	130	Φ40x250	238	0.02
QPZ5GD	5000	500	610	510	610	510	140	Φ50x300	318	0.02
QPZ6GD	6000	600	670	560	670	560	150	Φ50x300	399	0.02
QPZ7GD	7000	700	730	610	730	610	165	Φ50x300	507	0.02
QPZ8GD	8000	800	780	660	780	660	175	Φ60x300	637	0.02
QPZ9GD	9000	900	820	690	820	690	180	Φ60x300	706	0.02
QPZ10GD	10000	1000	880	740	880	740	190	Φ60x300	833	0.02
QPZ12.5GD	12500	1250	970	820	970	820	205	Φ70x350	1105	0.02
QPZ15GD	15000	1500	1070	900	1070	900	220	Φ70x350	1411	0.02
QPZ17.5GD	17500	1750	1150	960	1150	960	230	Φ80x350	1693	0.02
QPZ20GD	20000	2000	1220	1020	1220	1020	240	Φ80x350	1942	0.02
QPZ22.5GD	22500	2250	1310	1100	1310	1100	260	Φ90x400	2463	0.02
QPZ25GD	25000	2500	1380	1160	1380	1160	265	Φ90x400	2739	0.02
QPZ27.5GD	27500	2750	1440	1220	1440	1220	275	Φ90x400	3032	0.02
QPZ30GD	30000	3000	1500	1270	1500	1270	285	Φ100x400	3393	0.02
QPZ32.5GD	32500	3250	1550	1320	1550	1320	295	Φ100x400	3762	0.02
QPZ35GD	35000	3500	1610	1370	1610	1370	305	Φ100x400	4173	0.02
QPZ37.5GD	37500	3750	1680	1440	1680	1440	310	Φ100x400	4595	0.02
QPZ40GD	40000	4000	1730	1480	1730	1480	315	Φ110x450	4962	0.02
QPZ45GD	45000	4500	1830	1560	1830	1560	335	Φ110x450	5964	0.02
QPZ50GD	50000	5000	1920	1640	1920	1640	340	Φ110x450	6588	0.02
QPZ55GD	55000	5500	2020	1720	2020	1720	350	Φ120x450	7588	0.02
QPZ60GD	60000	6000	2100	1790	2100	1790	365	Φ120x450	8490	0.02

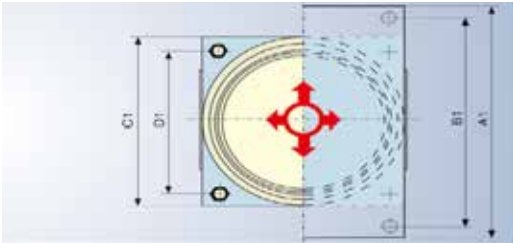
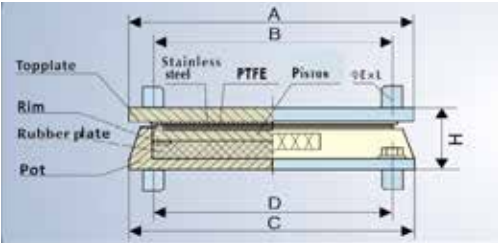
Type	Capacity (KN)		Structure Size(Install Size) (mm)							Sleeve Nut ΦExL	Movement Ex (mm)	W. *(kg)	R. (rad)
	V. Force	H. Force	A	B	C C1	D D1	A1*	B1*	H				
QPZ0.8DX	800	80	260	220	260	220	350	290	100	Φ35x250	±50	56	0.02
QPZ1DX	1000	100	290	250	290	250	370	320	105	Φ35x250	±50	67	0.02
QPZ1.25DX	1250	125	315	270	315	270	395	340	107	Φ35x250	±50	77	0.02
QPZ1.5DX	1500	150	340	290	340	290	420	360	120	Φ35x250	±50	98	0.02
QPZ2DX	2000	200	390	330	390	330	460	400	125	Φ35x250	±50	124	0.02
QPZ2.5DX	2500	250	440	370	440	370	490	440	130	Φ35x250	±50	158	0.02
QPZ3DX	3000	300	480	400	480	400	530	480	135	Φ40x250	±50	194	0.02
QPZ3.5DX	3500	350	510	420	510	420	660	600	140	Φ40x250	±100	233	0.02
QPZ4DX	4000	400	550	460	550	460	685	630	150	Φ40x250	±100	290	0.02
QPZ5DX	5000	500	610	510	610	510	735	670	160	Φ50x300	±100	378	0.02
QPZ6DX	6000	600	670	560	670	560	780	710	170	Φ50x300	±100	465	0.02
QPZ7DX	7000	700	730	610	730	610	825	760	185	Φ50x300	±100	583	0.02
QPZ8DX	8000	800	780	660	780	660	870	800	190	Φ60x300	±100	697	0.02
QPZ9DX	9000	900	820	690	820	690	910	830	200	Φ60x300	±100	799	0.02
QPZ10DX	10000	1000	880	740	880	740	1040	970	210	Φ60x300	±150	961	0.02
QPZ12.5DX	12500	1250	970	820	970	820	1130	1040	230	Φ70x350	±150	1297	0.02
QPZ15DX	15000	1500	1070	900	1070	900	1200	1120	240	Φ70x350	±150	1579	0.02
QPZ17.5DX	17500	1750	1150	960	1150	960	1270	1180	255	Φ80x350	±150	1935	0.02
QPZ20DX	20000	2000	1220	1020	1220	1020	1340	1250	265	Φ80x350	±150	2212	0.02
QPZ22.5DX	22500	2250	1310	1100	1310	1100	1420	1320	270	Φ90x400	±150	2622	0.02
QPZ25DX	25000	2500	1380	1160	1380	1160	1470	1370	275	Φ90x400	±150	2899	0.02
QPZ27.5DX	27500	2750	1440	1220	1440	1220	1520	1420	290	Φ90x400	±150	3283	0.02
QPZ30DX	30000	3000	1500	1270	1500	1270	1570	1450	300	Φ100x400	±150	3661	0.02
QPZ32.5DX	32500	3250	1550	1320	1550	1320	1720	1600	315	Φ100x400	±200	4227	0.02
QPZ35DX	35000	3500	1610	1370	1610	1370	1770	1650	320	Φ100x400	±200	4559	0.02
QPZ37.5DX	37500	3750	1680	1440	1680	1440	1820	1700	330	Φ100x400	±200	5052	0.02
QPZ40DX	40000	4000	1730	1480	1730	1480	1870	1730	335	Φ110x450	±200	5442	0.02
QPZ45DX	45000	4500	1830	1560	1830	1560	1950	1810	355	Φ110x450	±200	6482	0.02
QPZ50DX	50000	5000	1920	1640	1920	1640	2020	1880	365	Φ110x450	±200	7208	0.02
QPZ55DX	55000	5500	2020	1720	2020	1720	2100	1950	380	Φ120x450	±200	8409	0.02
QPZ60DX	60000	6000	2100	1790	2100	1790	2170	2020	390	Φ120x450	±200	9189	0.02

(Dimension with * mark would be calculated and designed on request.)



Type	Capacity (KN)		Structure Size(Install Size) (mm)									Sleeve Nut ΦExL	W. *(kg)	Movement Ex (mm)	Movement Ey (mm)	R. (rad)
	V. Force	H. Force	A	B	C	D	C C1	D D1	A1*	B1*	H					
QPZ0.8SX	800	80	300	260	260	240	300	220	350	310	75	Φ35x250	47	±50	±40	0.02
QPZ1SX	1000	100	320	280	290	270	320	245	380	340	80	Φ35x250	56	±50	±40	0.02
QPZ1.25SX	1250	125	340	300	315	290	340	270	400	360	82	Φ35x250	62	±50	±40	0.02
QPZ1.5SX	1500	150	360	320	340	310	360	290	420	380	90	Φ35x250	74	±50	±40	0.02
QPZ2SX	2000	200	400	360	380	340	400	320	440	400	95	Φ35x250	89	±50	±40	0.02
QPZ2.5SX	2500	250	440	400	420	380	440	360	480	440	105	Φ35x250	120	±50	±40	0.02
QPZ3SX	3000	300	480	430	460	400	480	390	520	470	110	Φ40x250	150	±50	±40	0.02
QPZ3.5SX	3500	350	495	440	495	410	495	410	640	590	120	Φ40x250	188	±100	±40	0.02
QPZ4SX	4000	400	535	480	535	440	535	440	670	620	130	Φ40x250	239	±100	±40	0.02
QPZ5SX	5000	500	590	530	590	490	590	490	730	670	140	Φ50x300	314	±100	±40	0.02
QPZ6SX	6000	600	645	580	645	530	645	530	770	710	150	Φ50x300	384	±100	±40	0.02
QPZ7SX	7000	700	700	640	700	580	700	580	820	760	165	Φ50x300	484	±100	±40	0.02
QPZ8SX	8000	800	750	680	750	630	750	630	870	800	175	Φ60x300	612	±100	±40	0.02
QPZ9SX	9000	900	790	720	790	660	790	660	900	830	180	Φ60x300	675	±100	±40	0.02
QPZ10SX	10000	1000	840	770	840	710	840	710	1040	970	190	Φ60x300	804	±150	±40	0.02
QPZ12.5SX	12500	1250	930	850	930	790	930	790	1120	1040	205	Φ70x350	1062	±150	±40	0.02
QPZ15SX	15000	1500	1030	950	1030	870	1030	870	1200	1120	220	Φ70x350	1357	±150	±40	0.02
QPZ17.5SX	17500	1750	1100	1010	1100	930	1100	930	1270	1180	230	Φ80x350	1601	±150	±40	0.02
QPZ20SX	20000	2000	1180	1090	1180	1010	1180	1010	1340	1250	240	Φ80x350	1864	±150	±40	0.02
QPZ22.5SX	22500	2250	1260	1160	1260	1080	1260	1080	1420	1320	260	Φ90x400	2341	±150	±40	0.02
QPZ25SX	25000	2500	1330	1230	1330	1140	1330	1140	1470	1370	265	Φ90x400	2593	±150	±40	0.02
QPZ27.5SX	27500	2750	1400	1300	1400	1210	1400	1210	1520	1420	275	Φ90x400	2904	±150	±40	0.02
QPZ30SX	30000	3000	1460	1340	1460	1260	1460	1260	1570	1450	285	Φ100x400	3248	±150	±40	0.02
QPZ32.5SX	32500	3250	1510	1390	1510	1310	1510	1310	1720	1600	295	Φ100x400	3674	±200	±50	0.02
QPZ35SX	35000	3500	1570	1450	1570	1370	1570	1370	1770	1650	305	Φ100x400	4077	±200	±50	0.02
QPZ37.5SX	37500	3750	1630	1510	1630	1430	1630	1430	1820	1700	315	Φ100x400	4494	±200	±50	0.02
QPZ40SX	40000	4000	1690	1550	1690	1460	1690	1460	1870	1730	320	Φ110x450	4901	±200	±50	0.02
QPZ45SX	45000	4500	1790	1650	1790	1550	1790	1550	1950	1810	340	Φ110x450	5880	±200	±50	0.02
QPZ50SX	50000	5000	1870	1730	1870	1630	1870	1630	2020	1880	350	Φ110x450	6501	±200	±50	0.02
QPZ55SX	55000	5500	1970	1820	1970	1720	1970	1720	2100	1950	365	Φ120x450	7632	±200	±50	0.02
QPZ60SX	60000	6000	2050	1900	2050	1780	2050	1780	2170	2020	375	Φ120x450	8360	±200	±50	0.02

(Dimension with * mark would be calculated and designed on request.)





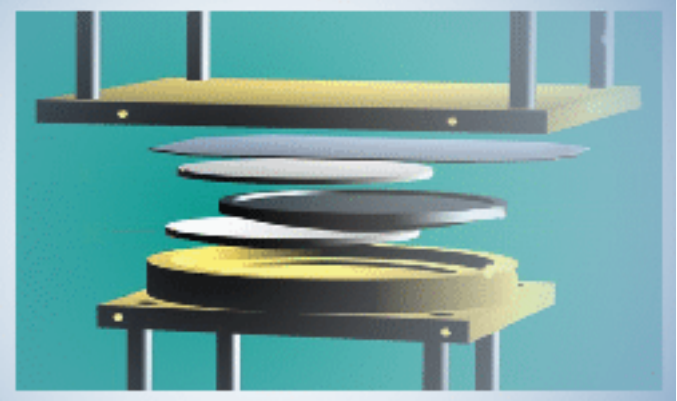
SPHERICAL BEARING TYPE QZ

Introduction

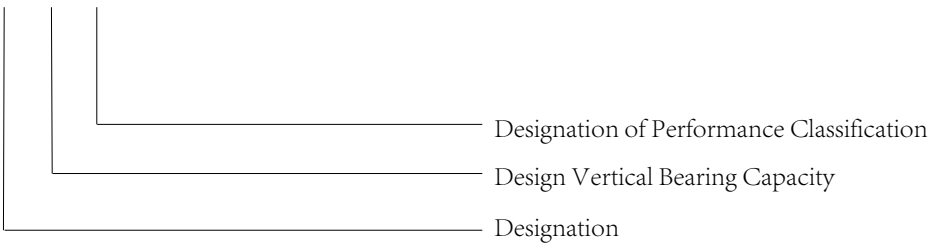
The spherical bearing not only has great capacity, large displacement, but also suitable for projects required large turning angle of 0.05rad or more in all directions, which is suitable for wide and curved bridges.

The spherical bearing transfers force through spherical surface, no contraction of load will be occurred, and the reacting force on concrete is relatively even.

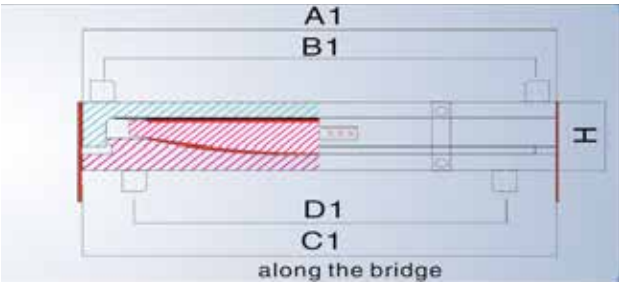
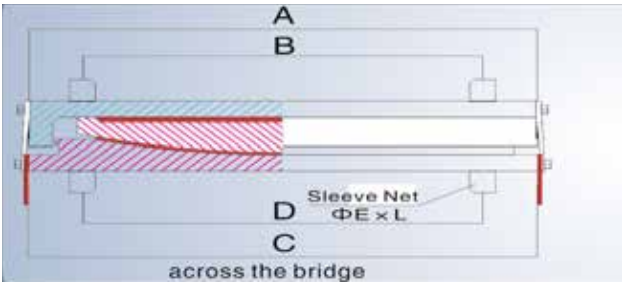
Normally, the horizontal load for spherical bearing for fixed type and sliding guided type is no more than 10% of vertical load. But we can also designed as to customer requirements.



QZ - 5 - DX



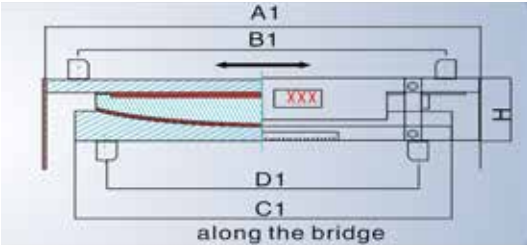
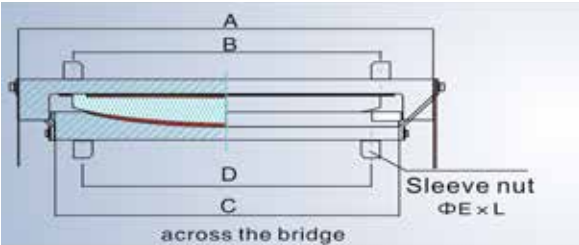
Fixed spherical bearing Type QZ-GD according to GB/T17955-2009 standards



Type	Capacity (KN)		Structure size(install size) mm							W. (kg)	sleeve nut ΦExL	R. (rad)
	V. Force	H. Force	A1 A	B	B1	C1 C	D	D1	H			
QZ0. 8GD	800	80	265	195	225	265	225	195	87	35	Φ 20x100	0. 02
QZ1GD	1000	100	300	210	260	300	260	210	89	46	Φ 20x100	0. 02
QZ1. 5GD	1500	150	350	250	300	350	300	250	89	63	Φ 35×150	0. 02
QZ2GD	2000	200	395	290	345	395	345	290	90	80	Φ 35×150	0. 02
QZ2. 5GD	2500	250	445	310	395	445	395	310	97	115	Φ 35×150	0. 02
QZ3GD	3000	300	480	340	420	480	420	340	98	134	Φ 40×150	0. 02
QZ3. 5GD	3500	350	520	375	450	520	450	375	99	159	Φ 40×150	0. 02
QZ4GD	4000	400	540	400	480	540	480	400	109	194	Φ 40×150	0. 02
QZ5GD	5000	500	605	430	530	605	530	430	117	259	Φ 50×200	0. 02
QZ6GD	6000	600	665	480	590	665	590	480	132	361	Φ 50×200	0. 02
QZ7GD	7000	700	715	510	640	715	640	510	132	418	Φ 50×200	0. 02
QZ8GD	8000	800	765	555	670	765	670	555	155	562	Φ 60×250	0. 02
QZ9GD	9000	900	810	600	720	810	720	600	156	635	Φ 60×250	0. 02
QZ10GD	10000	1000	855	630	760	855	760	630	157	710	Φ 60×250	0. 02
QZ12. 5GD	12500	1250	925	680	810	925	810	680	185	983	Φ 70×300	0. 02
QZ15GD	15000	1500	1005	690	890	1005	890	690	188	1182	Φ 70×300	0. 02
QZ17. 5GD	17500	1750	1085	750	950	1085	950	750	190	1390	Φ 80×350	0. 02
QZ20GD	20000	2000	1150	790	1020	1150	1020	790	196	1603	Φ 80×350	0. 02
QZ22. 5GD	22500	2250	1235	850	1090	1235	1090	850	211	2012	Φ 90×400	0. 02
QZ25GD	25000	2500	1290	900	1140	1290	1140	900	223	2303	Φ 90×400	0. 02
QZ27. 5GD	27500	2750	1355	960	1200	1355	1200	960	225	2564	Φ 90×400	0. 02
QZ30GD	30000	3000	1410	1010	1240	1410	1240	1010	232	2851	Φ 100×400	0. 02
QZ32. 5GD	32500	3250	1470	1070	1300	1470	1300	1070	247	3323	Φ 100×400	0. 02
QZ35GD	35000	3500	1540	1140	1370	1540	1370	1140	253	3723	Φ 100×400	0. 02
QZ37. 5GD	37500	3750	1585	1200	1410	1585	1410	1200	257	4000	Φ 100×400	0. 02
QZ40GD	40000	4000	1655	1250	1450	1655	1450	1250	262	4428	Φ 110×450	0. 02
QZ45GD	45000	4500	1760	1310	1550	1760	1550	1310	277	5344	Φ 110×450	0. 02
QZ50GD	50000	5000	1870	1380	1670	1870	1670	1380	288	6233	Φ 110×450	0. 02
QZ55GD	55000	5500	1950	1450	1720	1950	1720	1450	307	7263	Φ 120×450	0. 02
QZ60GD	60000	6000	2050	1530	1820	2050	1820	1530	308	8052	Φ 120×450	0. 02

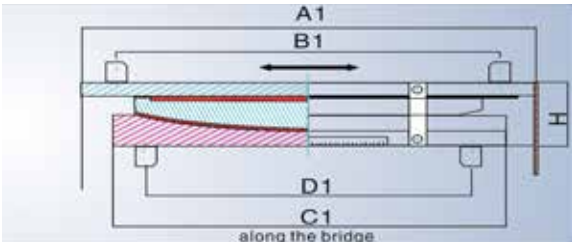
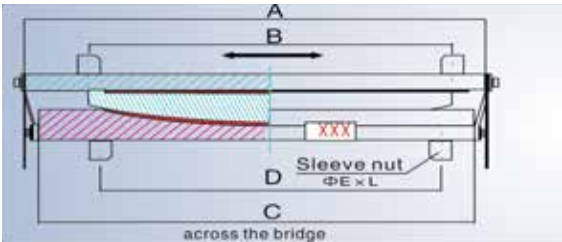
Type	Capacity (KN)		Structure Size(Install Size) (mm)							Sleeve Nut ΦExL	Movement Ex (mm)	W. * (kg)	R. (rad)
	V. Force	H. Force	A	B	C C1	D D1	A1*	B1*	H				
QZ0. 8DX	800	80	288	175	220	185	305	270	88	Φ 20x100	± 50	37	0. 02
QZ1DX	1000	100	322	195	250	210	330	295	90	Φ 20x100		46	0. 02
QZ1. 5DX	1500	150	378	230	296	245	370	330	90	Φ 35×150		70	0. 02
QZ2DX	2000	200	425	270	343	290	410	370	91	Φ 35×150		88	0. 02
QZ2. 5DX	2500	250	482	280	390	340	450	410	97	Φ 35×150		120	0. 02
QZ3DX	3000	300	517	290	425	360	480	430	98	Φ 40×150		141	0. 02
QZ3. 5DX	3500	350	556	330	460	390	510	455	99	Φ 40×150		163	0. 02
QZ4DX	4000	400	585	350	483	420	530	480	109	Φ 40×150		200	0. 02
QZ5DX	5000	500	654	380	542	465	580	520	117	Φ 50×200		274	0. 02
QZ6DX	6000	600	712	440	600	525	630	570	132	Φ 50×200		370	0. 02
QZ7DX	7000	700	769	470	647	570	670	610	132	Φ 50×200		426	0. 02
QZ8DX	8000	800	814	480	692	595	710	640	155	Φ 60×250		577	0. 02
QZ9DX	9000	900	861	520	729	635	740	670	156	Φ 60×250		640	0. 02
QZ10DX	10000	1000	906	560	764	670	770	700	157	Φ 60×250		703	0. 02
QZ12. 5DX	12500	1250	991	600	843	730	850	760	185	Φ 70×300		1010	0. 02
QZ15DX	15000	1500	1070	670	912	800	920	830	188	Φ 70×300		1195	0. 02
QZ17. 5DX	17500	1750	1158	700	990	855	980	880	190	Φ 80×350		1430	0. 02
QZ20DX	20000	2000	1227	760	1049	915	1040	940	196	Φ 80×350		1638	0. 02
QZ22. 5DX	22500	2250	1314	800	1126	975	1100	990	211	Φ 90×400		2061	0. 02
QZ25DX	25000	2500	1378	860	1176	1025	1150	1040	223	Φ 90×400		2347	0. 02
QZ27. 5DX	27500	2750	1455	910	1243	1090	1200	1090	225	Φ 90×400		2616	0. 02
QZ30DX	30000	3000	1504	910	1292	1115	1250	1100	232	Φ 100×400		2909	0. 02
QZ32. 5DX	32500	3250	1568	960	1346	1170	1300	1160	247	Φ 100×400		3347	0. 02
QZ35DX	35000	3500	1642	1020	1400	1225	1340	1200	253	Φ 100×400		3702	0. 02
QZ37. 5DX	37500	3750	1680	1050	1428	1250	1360	1220	257	Φ 100×400		3922	0. 02
QZ40DX	40000	4000	1759	1080	1497	1295	1420	1260	262	Φ 110×450		4412	0. 02
QZ45DX	45000	4500	1857	1160	1585	1385	1500	1340	277	Φ 110×450		5216	0. 02
QZ50DX	50000	5000	1973	1260	1691	1490	1580	1410	288	Φ 110×450		6063	0. 02
QZ55DX	55000	5500	2052	1290	1760	1535	1650	1460	307	Φ 120×450		7048	0. 02
QZ60DX	60000	6000	2150	1360	1848	1620	1720	1500	308	Φ 120×450		7737	0. 02

(Dimension with * mark would be calculated and designed on request.)



Type	Capacity (KN)		Structure Size(Install Size) (mm)							Sleeve Nut ΦExL	Movement Ex (mm)	W. * (kg)	R. (rad)
	V. Force	H. Force	A	B	C C1	D D1	A1*	B1*	H				
QZ0.8SX	800	80	280	250	220	185	305	270	88	Φ12×100	±50	31	0.02
QZ1SX	1000	100	305	275	250	210	330	295	90	Φ12×100		38	0.02
QZ1.5SX	1500	150	345	310	296	245	370	330	90	Φ14×150		53	0.02
QZ2SX	2000	200	385	320	343	290	410	370	91	Φ14×150		70	0.02
QZ2.5SX	2500	250	425	320	390	340	450	410	97	Φ18×150		98	0.02
QZ3SX	3000	300	455	355	425	360	480	430	98	Φ18×150		116	0.02
QZ3.5SX	3500	350	485	370	460	390	510	460	99	Φ18×150		136	0.02
QZ4SX	4000	400	505	400	483	420	530	480	109	Φ25×150		172	0.02
QZ5SX	5000	500	555	440	542	465	580	520	117	Φ25×200		226	0.02
QZ6SX	6000	600	605	480	600	525	630	570	132	Φ25×200		314	0.02
QZ7SX	7000	700	645	500	647	570	670	610	132	Φ35×200		366	0.02
QZ8SX	8000	800	685	520	692	595	710	640	155	Φ35×250		493	0.02
QZ9SX	9000	900	715	560	729	635	740	670	156	Φ35×250		544	0.02
QZ10SX	10000	1000	745	600	764	670	770	700	157	Φ35×250		593	0.02
QZ12.5SX	12500	1250	830	650	843	730	850	760	185	Φ45×300		873	0.02
QZ15SX	15000	1500	900	700	912	800	920	830	188	Φ45×300		1033	0.02
QZ17.5SX	17500	1750	960	740	990	855	980	880	190	Φ45×350		1218	0.02
QZ20SX	20000	2000	1020	800	1049	915	1040	940	196	Φ45×350		1405	0.02
QZ22.5SX	22500	2250	1080	840	1126	975	1100	990	211	Φ45×400		1738	0.02
QZ25SX	25000	2500	1130	920	1176	1025	1150	1040	223	Φ50×400		2004	0.02
QZ27.5SX	27500	2750	1180	970	1243	1090	1200	1090	225	Φ50×400		2232	0.02
QZ30SX	30000	3000	1230	980	1292	1115	1250	1100	232	Φ50×400		2487	0.02
QZ32.5SX	32500	3250	1300	1020	1346	1170	1300	1160	247	Φ50×400		2885	0.02
QZ35SX	35000	3500	1340	1080	1400	1225	1340	1200	253	Φ60×400		3180	0.02
QZ37.5SX	37500	3750	1360	1070	1428	1250	1360	1220	257	Φ60×400		3347	0.02
QZ40SX	40000	4000	1420	1150	1497	1295	1420	1260	262	Φ60×450		3737	0.02
QZ45SX	45000	4500	1505	1250	1585	1385	1500	1340	277	Φ60×450		4447	0.02
QZ50SX	50000	5000	1585	1330	1691	1490	1580	1410	288	Φ75×450		5245	0.02
QZ55SX	55000	5500	1655	1370	1760	1535	1650	1460	307	Φ75×450		6097	0.02
QZ60SX	60000	6000	1725	1420	1848	1620	1720	1500	308	Φ75×450		6696	0.02

(Dimension with * mark would be calculated and designed on request.)



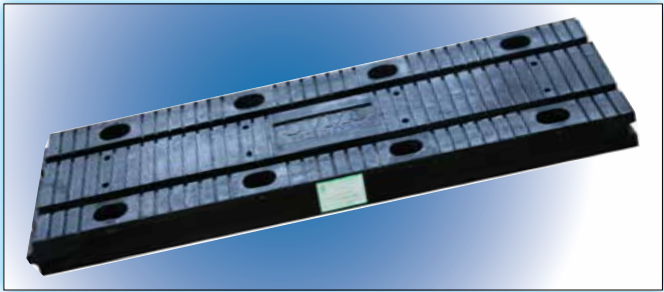




ERIES RUBBER EXPANSION JOINTS

Features and benefits

- Low shear module of rubber
- Reliable installation
- Smooth driving
- Light in weight
- Excellent waterproof function
- Applications with maximum movement



of 260mm

Physical Properties of Rubber for the Expansion Joints(According with Standard AASHTO) (CR)

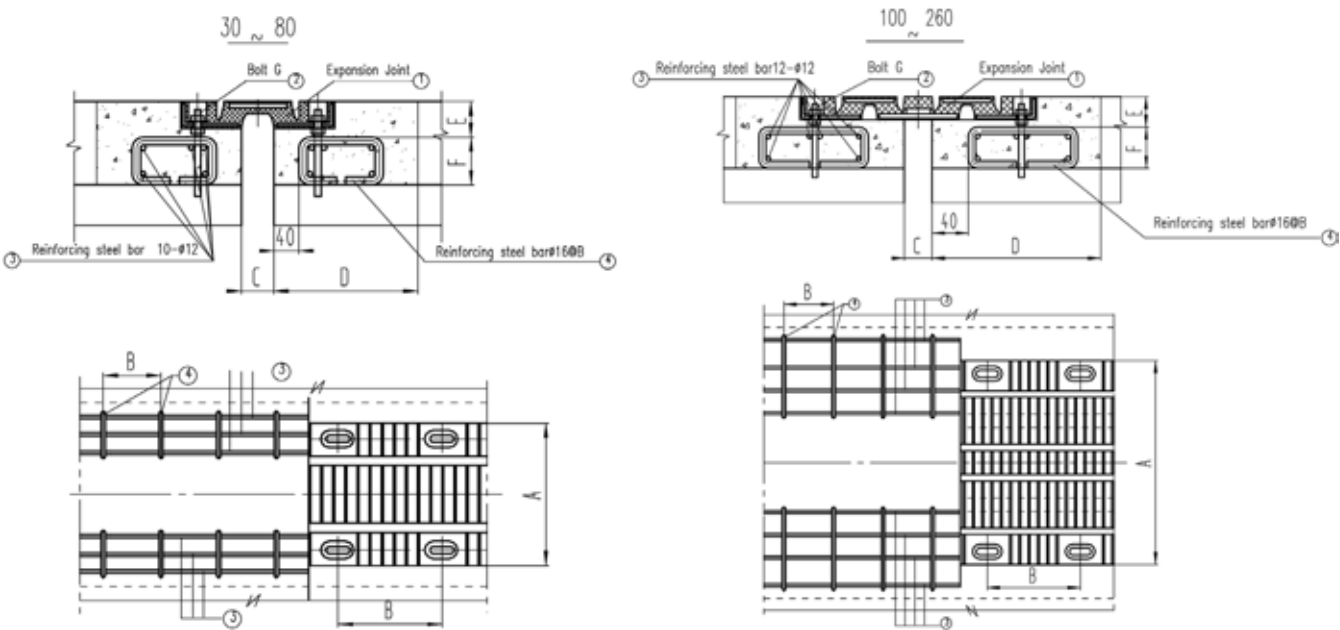
Items		Requirement
Hardness (Shore A) ASTM D2240		60±5
Tensile strength (MPa) ASTM D412		≥ 15
Elongation at break (%) ASTM D412		≥ 400
Peel strength of rubber bonded to steel plate (KN/m) ASTM D429,B		≥ 7
Permanent deformation at constant compression 70S℃ x 22h(%) ASTM D395		≤ 20
Ozone resistance:100pphm in air, 20% of elongation, 38℃ x 70h ASTM D1149		No cracks
Hot air-oven ageing test 100℃ x 70h	Reduction of tensile strength, Maximum (%)	15
	Reduction of elongationat break, Maximum(%)	40
	Hardness changeable range, Maximum Points (Shore A)	+15

(According with Standard AASHTO) (NR)

Items		Requirement
Hardness (Shore A) ASTM D2240		60±5
Tensile strength (MPa) ASTM D412		≥ 16
Elongation at break (%) ASTM D412		≥ 400
Peel strength of rubber bonded to steel plate (KN/m) ASTM D429,B		≥ 7
Permanent deformation at constant compression		≤ 40
70℃ x 22h(%) ASTM D395		
Ozone resistance:25pphm in air,20% of elongation,38℃ x 70h ASTM D1149		No cracks
Hot air-oven ageing test 70℃ x96h ASTM D573	Reduction of tensile strength, Maximum (%)	< 15
	Reduction of elongationat break, Maximum(%)	< 40
	Hardness changeable range,Maximum Points (Shore A)	-5~+15

The Parameters of Expansion Joints Installation

Type	Total movement X (mm)	A (mm)	B (mm)	C Min~Max (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Height (mm)	Weight (Kg/m)	
										CR	NR
F230	30	230	250	10 ~ 40	≥ 400	50	80	M12	35	21.5	20.8
F250	45	250	250	15 ~ 60	≥ 410	60	80	M12	45	25.2	24.2
F260	60	260	300	20 ~ 80	≥ 410	70	80	M16	50	29.4	28.4
F270	50	270	250	15 ~ 65	≥ 420	60	80	M16	42	27.4	26.5
F303	65	303	300	20 ~ 85	≥ 430	70	80	M16	50	37	35.7
F430	80	430	300	25 ~ 105	≥ 480	80	80	M20	54	57.2	55.3
F550	100	550	250	30 ~ 130	≥ 540	80	80	M20	54	84.9	82.6
F706	160	706	300	50 ~ 210	≥ 590	100	100	M22	70	138.5	134.8
F1185	200	1185	300	60 ~ 260	≥ 850	120	120	M22	90	308.5	301.2
F1185B	260	1185	300	80 ~ 340	≥ 850	160	120	M22	127	360	347.6



TRIP SEAL EXPANSION JOINTS SYSTEM

Introduction

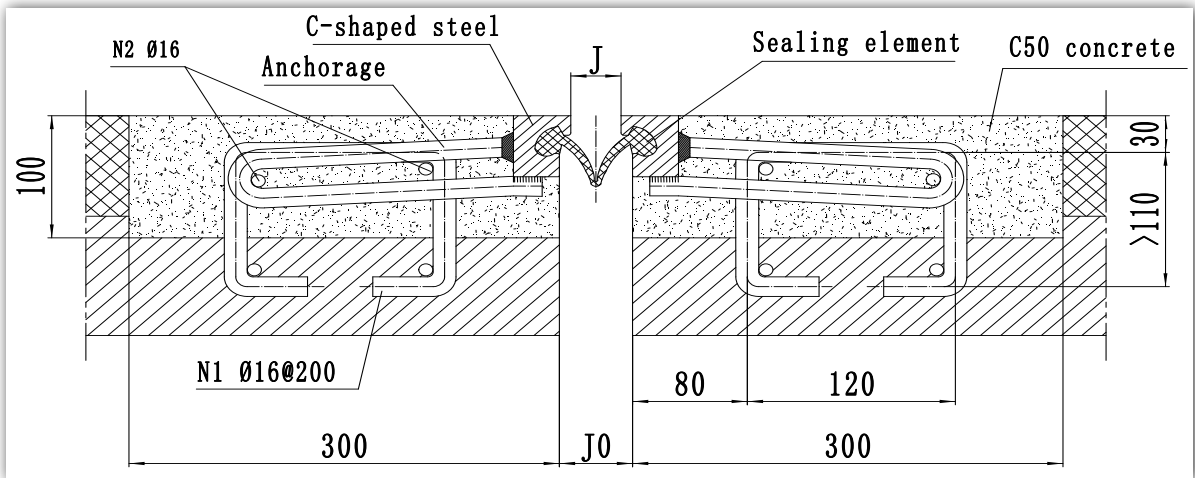
OVM strip seal expansion joint system is mainly consisted of three parts: the hot-rolled special -shaped steel profile, rubber strip seal and reinforcement bar. This kind of joint has features in simple structure, easy installation, excellent durability and reliability.

Due to its small height and simple structure, OVM strip seal expansion joint is not only suitable for replacement for old



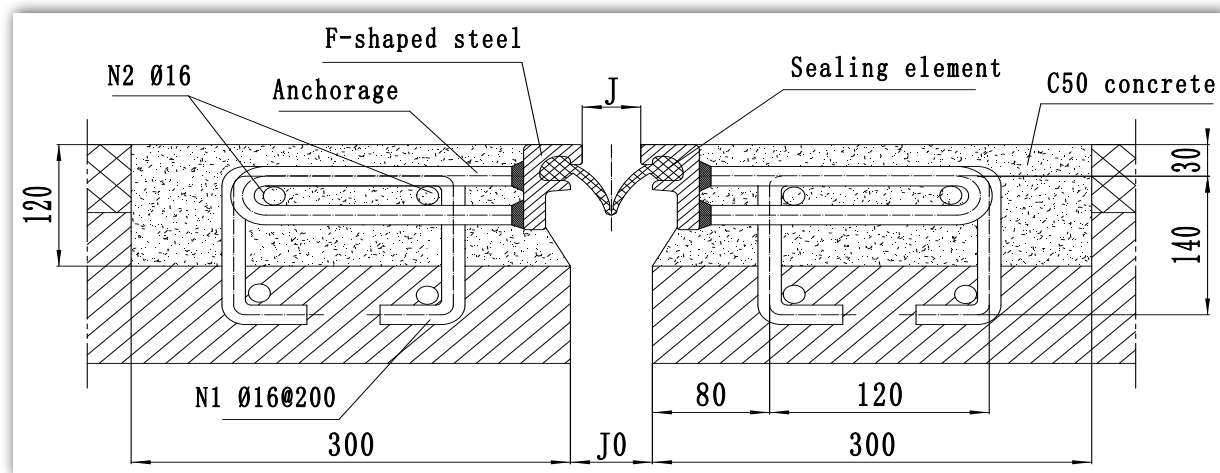
Strip seal expansion joint property and dimension

Type OVM-C



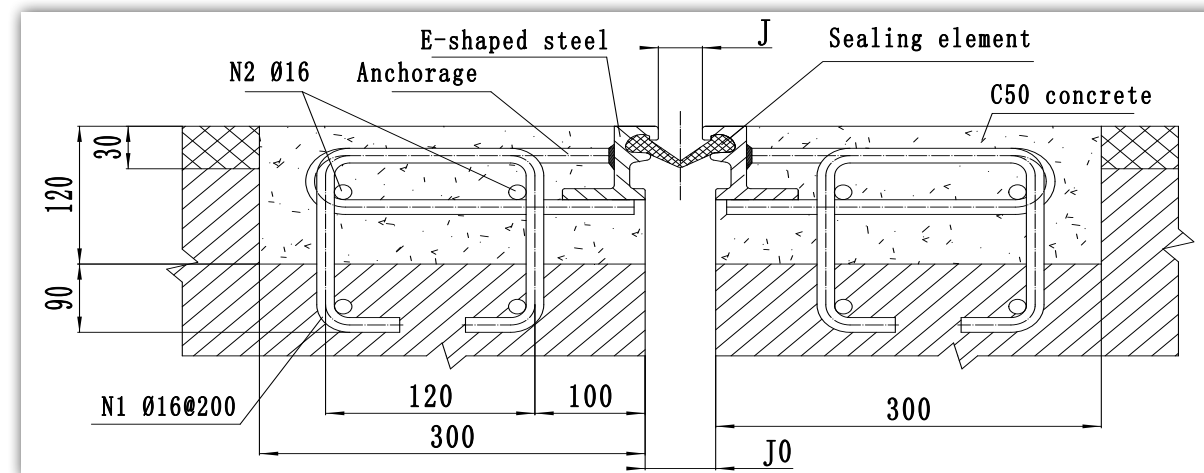
Type	Total movement (mm)	Installation dimension (mm)		Alternative anchorage bar for installation
		Dimension J0	Dimension J	
OVM-C50	50	10~60	0~50	MJ-1
OVM-C60	60	10~70	0~60	
OVM-C80	80	10~90	0~80	

Type OVM-F



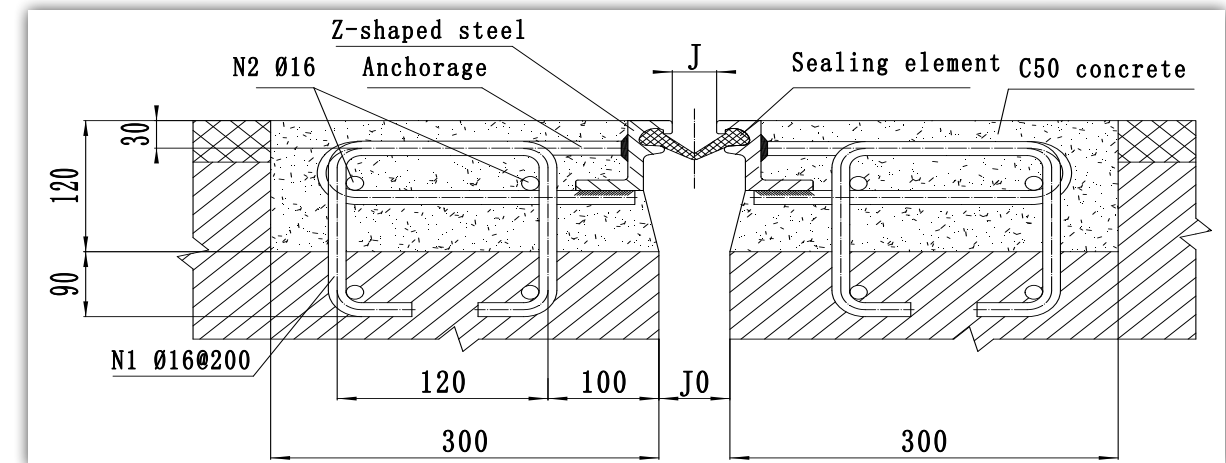
Type	Total movement (mm)	Installation dimension (mm)		Alternative anchorage bar for installation
		Dimension J0	Dimension J	
OVM-F50	50	10~60	0~50	
OVM-F60	60	10~70	0~60	
OVM-F80	80	10~90	0~80	

Type OVM-E



Type	Total movement (mm)	Installation dimension (mm)		Alternative anchorage bar for installation
		Dimension J0	Dimension J	
OVM-E50	50	10~60	0~50	
OVM-E60	60	10~70	0~60	
OVM-E80	80	10~90	0~80	

Type OVM-Z



Type	Total movement (mm)	Installation dimension (mm)		Alternative anchorage bar for installation
		Dimension J0	Dimension J	
OVM-Z50	50	10~60	0~50	
OVM-Z60	60	10~70	0~60	
OVM-Z80	80	10~90	0~80	

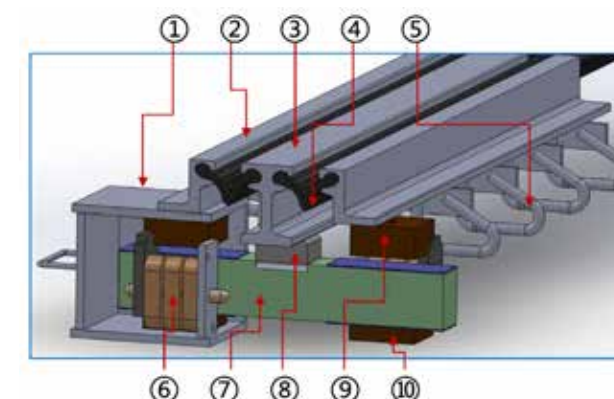
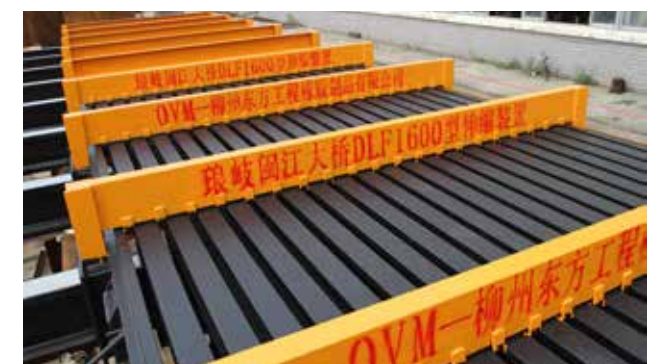


ODMAR EXPANION JOINTS TYPE MF

Introduction

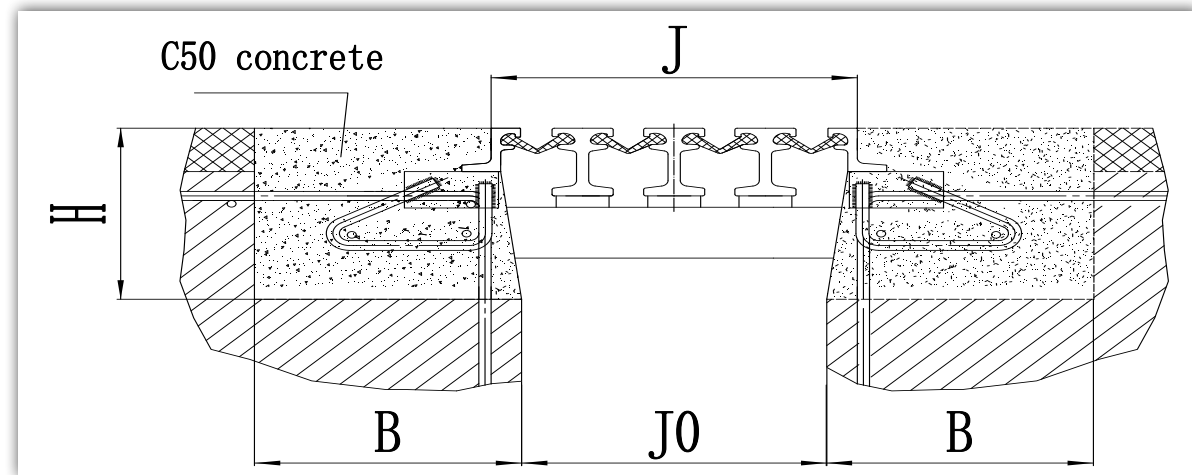
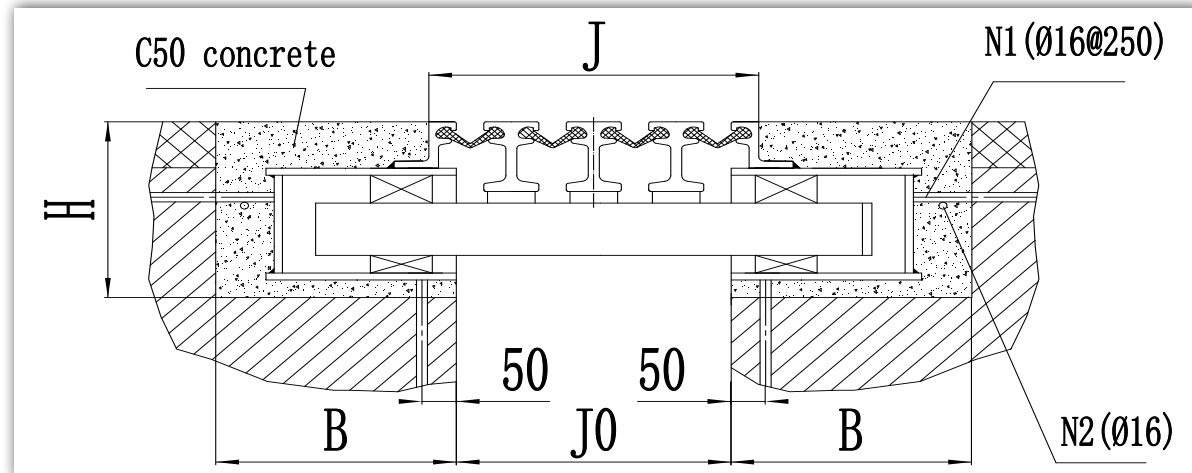
OVM Modular Expansion Joint system is developed by combining advantages of domestic and abroad products. It comprises special steel profile, rubber sealers, sliding pad, press pad, spring, displacement box and reinforcement, which is suitable for large movement bridges especially with heavy traffic.

OVM Modular Expansion Joint system has advantages of good water property, large movement, easy installation and maintenance, long service life, smooth and stable for driving, etc.



1. Support box	6. Spring
2. Edge beam	6. Support bot
3. Center beam	8. Center beam connecting block
4. Sealing element	9. Pressed Bearing
5. Anchorag	10. Bearing

Modular Joint System Technical Property and Dimension



Type	Total movement (mm)	Dimension B (mm)	Dimension H (mm)	Dimension J0	Dimension J (mm)	
					Min.	Max.
OVM-MF160	160	350	350	160	160	320
OVM-MF240	240	440	400	280	240	480
OVM-MF320	320	525	420	400	320	640
OVM-MF400	400	690	430	520	400	800
OVM-MF480	480	780	440	640	480	960
OVM-MF560	560	870	450	760	560	1120
OVM-MF640	640	960	460	880	640	1280

Notes: J0 is the installation size in the local average temperatures.

Notes: we can design larger movement modular joint system according to customer requirement.

INCER EXPANSION JOINT

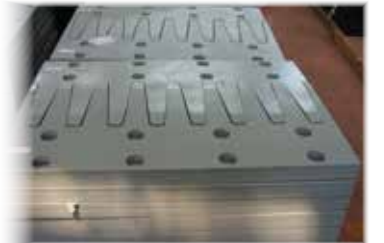
Introduction

Finger expansion joint is made up mainly of finger plate, sealing system and bolt fasteners. This kind of expansion joint has good properties. Such as, smooth ride, moisture resistance, and easy to install and replace.

Features and benefits:

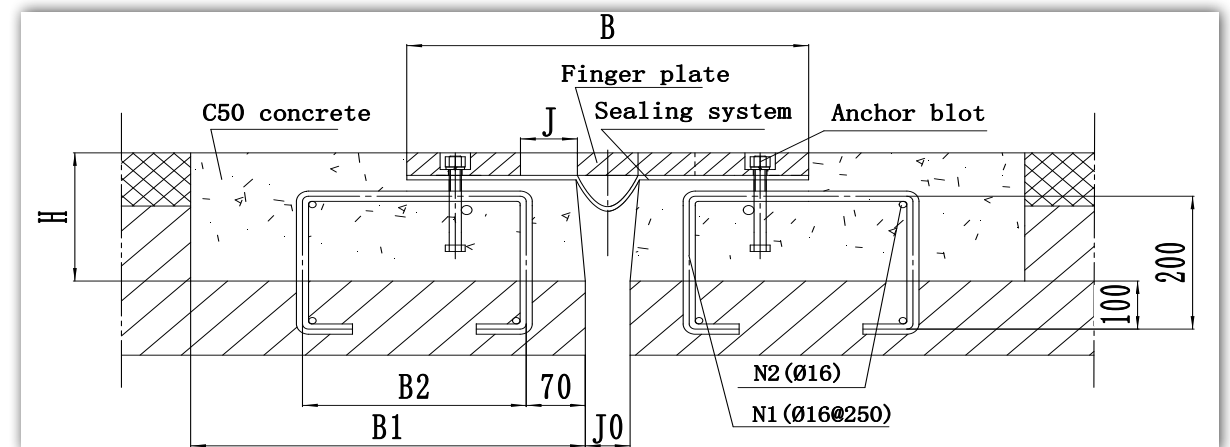
- Long service life
- Reliable installation
- Low noises
- Smooth driving
- Excellent waterproof function

Applications with maximum movement of 320mm.



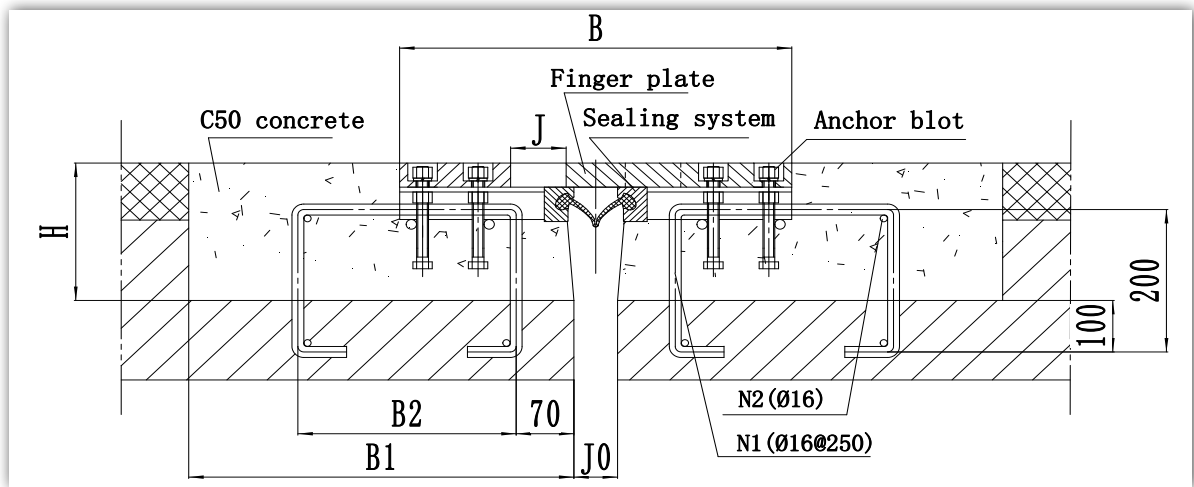
Type OVM-SWF

Finger Expansion Joint System Technical Property and Dimension



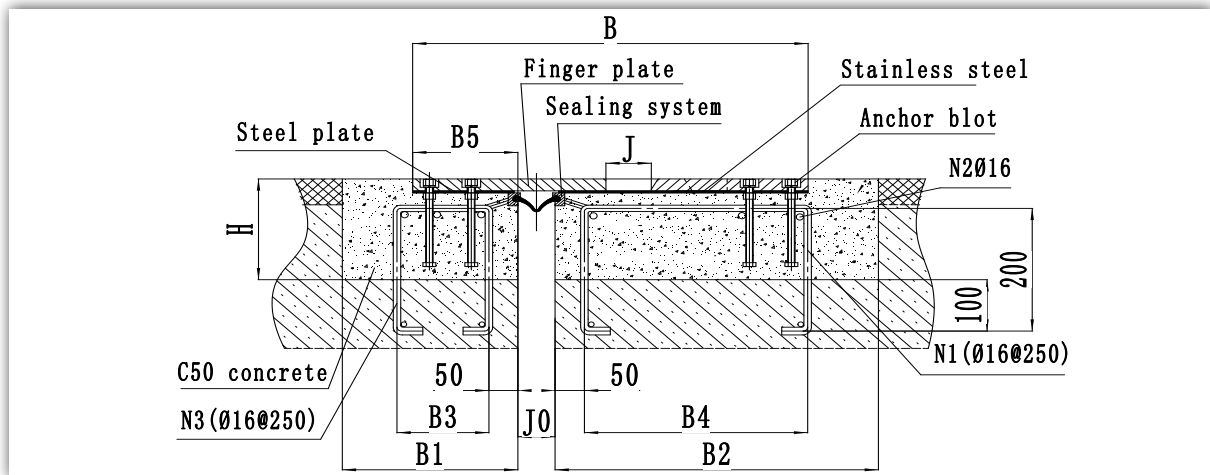
Type	Total movement (mm)	Width B (mm)	Height H (mm)	B1 (mm)	B2 (mm)	installation width J0	Gap J width (mm)	
							Min.	Max.
SWF80	80	480	≥ 200	460	290	60	15	95
SWF100	100	510	≥ 200	470	300	70	15	115
SWF120	120	540	≥ 200	480	310	80	15	135
SWF140	140	570	≥ 200	490	320	90	15	155
SWF160	160	600	≥ 200	500	330	100	15	175
SWF180	180	630	≥ 200	510	340	110	15	195
SWF200	200	660	≥ 200	520	350	120	15	215
SWF220	220	690	≥ 200	530	360	130	15	235
SWF240	240	720	≥ 250	540	370	140	15	255
SWF260	260	750	≥ 250	550	380	150	15	275
SWF280	280	780	≥ 250	560	390	160	15	295
SWF300	300	810	≥ 250	570	400	170	15	315

Type OVM-ZSF



Type	Total movement (mm)	Width B (mm)	Height H (mm)	B1 (mm)	B2 (mm)	installation width J0	Gap J width (mm)	
							Min.	Max.
ZSF80	80	480	≥ 200	520	300	60	15	95
ZSF120	120	540	≥ 200	540	320	80	15	135
ZSF160	160	600	≥ 200	560	340	100	15	175
ZSF200	200	660	≥ 200	580	360	120	15	215
ZSF240	240	820	≥ 250	650	430	140	15	255
ZSF280	280	880	≥ 250	670	450	160	15	295
ZSF320	320	960	≥ 250	700	480	180	15	335
ZSF360	360	1020	≥ 250	720	500	200	15	375

Type OVM-SF



Type	Total movement (mm)	Width B (mm)	Height H (mm)	B1 (mm)	B2 (mm)	B3 (mm)	B4 (mm)	B5 (mm)	installation width J0 (mm)	Gap J width (mm)	
										Min.	Max.
SF80	80	660	≥ 200	500	670	250	400	230	60	15	95
SF120	120	760	≥ 200	500	750	250	480	230	80	15	135
SF160	160	860	≥ 200	500	830	250	560	230	100	15	175
SF200	200	1000	≥ 200	570	910	300	670	270	120	15	215
SF240	240	1180	≥ 250	570	1070	300	750	270	140	15	255
SF280	280	1280	≥ 250	570	1150	300	830	270	160	15	295
SF320	320	1420	≥ 250	610	1230	300	830	310	180	15	335
SF360	360	1520	≥ 250	610	1310	300	830	310	200	15	375
SF400	400	1620	≥ 250	610	1390	300	830	310	220	15	415

