

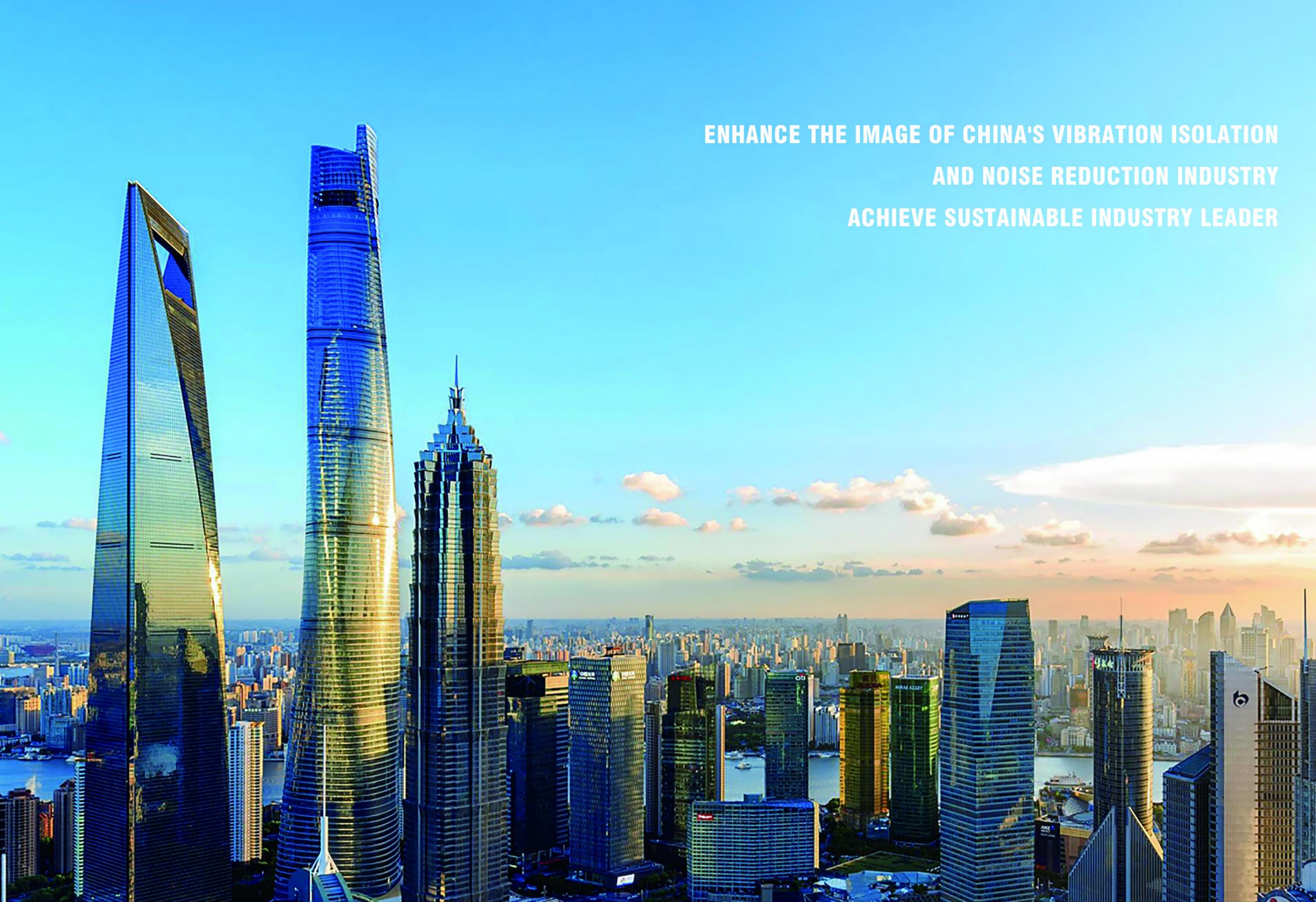


**SHANGHAI SONGJIANG
SHOCK ABSORBER
GROUP CO. LTD**



Shanghai Songjiang Shock Absorber Group Co.,Ltd
Website: www.sungkiangflex.com
E-mail: sales@songkiangflex.com
Factory Add: Shuangdian Industrial Zone, Rudong County, Nantong City,China





**ENHANCE THE IMAGE OF CHINA'S VIBRATION ISOLATION
AND NOISE REDUCTION INDUSTRY
ACHIEVE SUSTAINABLE INDUSTRY LEADER**



Catalog

Part 05	Shanghai Songjiang Absorber Group	05
Part 07	Team Style	07
Part 09	Building seismic isolation and noise reduction solutions	09
Part 11	Factory Environment	11
Part 14	Production Workshop	14
Part 15	Testing Center	15
Part 16	Warehouse Delivery	16
Part 17	Industry Case	17
Part 21	Patent certificate	21
Part 23	NR high-quality raw materials 100% raw rubber	23
Part 26	Flexible Rubber Expansion Joint After Sales Service Promised	26
Part 27	Flexible Rubber Expansion Joint	27
Part 28	Rubber Expansion Joint Piping Installation Diagram	28
Part 29	Installation Of Flexible Rubber Joint	29
Part 31	Physical Properties Of Flexible Rubber Joints	31
Part 32	Rubber Expansion Joint Burst Testing	32
Part 33	KXT Type Flexible Rubber Expansion Joints	33
Part 34	KDT Type Flanged Rubber Expansion Joints	34
Part 35	KST-F Type Double Sphere Rubber Expansion Joints	35
Part 36	KST-L Type Double Sphere Threaded Rubber Expansion Joints	36
Part 37	KYT Type Concentric Reducer Rubber Expansion Joints	37
Part 38	KPT Type Eccentric Reducer Rubber Expansion Joints	38
Part 39	KWT Type Elbow Rubber Expansion Joints	39
Part 40	KKT Type Clamp Rubber Expansion Joints	40
Part 41	ANSI/ASME B16.5 Class 150# Rubber Expansion Joints	41
Part 42	EN 1092-1 Standard Rubber Expansion Joints	42
Part 43	DIN 2501 Standard Rubber Expansion Joints	43
Part 44	UNI 2277-67 Standard Rubber Expansion Joints	44
Part 45	BS 4504 Rubber Expansion Joints	45
Part 46	Spanish Use EN1091 Standard Rubber Expansion Joint	46
Part 47	GOST 12820-80 Rubber Expansion Joint	47
Part 48	JIS 5K 10K Rubber Expansion Joint	48
Part 49	KS Rubber expansion joint	49
Part 50	AS 4087-2004 PN14/AS2129 2000 Rubber Expansion Joint	50
Part 51	SJNG Type Rubber Compensator With SAE Flanges	51
Part 52	DW Type Drinking Water Quality Standards Rubber Expansion Joint	52
Part 53	CC Type Continuous Casting And Rolling Rubber Expansion Joint	53



Catalog

Part 54	NP Type Vacuum Negative Pressure Rubber Expansion Joint	54
Part 55	LO Type Hydraulic-use Rubber Expansion Joint	55
Part 56	RE Type Devulcanized Rubber Expansion Joint	56
Part 57	CKXT Marine Flexible Single Sphere Rubber Joint	57
Part 58	CKST Marine Flexible Double Sphere Rubber Joint	58
Part 59	BL Type Wear-resistant Rubber Soft Connection	59
Part 60	Special Rubber Expansion Joint	60
Part 62	After-sales commitment of Vibration Isolator products	62
Part 63	Vibration Isolator Selection And Effect Calculation	63
Part 64	Cause Analysis Of Pump Vibration	64
Part 66	Water Pump Vibration Control Method	66
Part 70	Pump Vibration Isolator Installation Form	70
Part 73	SHM Type Adjustable Spring Vibration Isolator	73
Part 74	SCM Type Spring Damper	74
Part 75	SHA Type Low Frequency Adjustable Spring Vibration Isolator	75
Part 76	STA Spring Vibration Isolator	76
Part 77	HTA Suspension Spring Vibration Isolator	77
Part 78	GDU3 Type Pipe Clamp Rubber Vibration Isolator	78
Part 79	BE Type Rubber Vibration Isolator	79
Part 80	SCR Type Rubber Vibration Isolator	80
Part 81	STR Type Rubber Vibration Isolator	81
Part 82	STR Type Stabilizing Rubber vibration Isolator	82
Part 83	FZPT-500 Floating Platform Rubber Isolation Pad	83
Part 84	FZPT-50 Floating Platform Rubber Isolation Pad	84
Part 85	SD Type Rubber Vibration Damping Pad	85
Part 86	JA Type Rubber Vibration Isolator	86
Part 87	JY/JF Type Rubber Vibration Isolator	87
Part 88	LB Type Water Pump Inertia Base	88
Part 89	BYQ Type Matrix Spring Vibration Isolator	89
Part 90	KQJZ-A Type Damping Air Vibration Isolator	90
Part 91	KQJZ-B damping air Vibration Isolator	91
Part 92	Rubber Air Spring	92
Part 93	BGFSS Expansion Bellow GB/T 12777-2008	93
Part 96	Different Types of Braided Flexible Connectors	96
Part 97	JTW Type Stainless Steel Metal Hose	97
Part 99	ZB Type Non-metallic Fabric Expansion Joint	99
Part 100	GB/T9119-2000 flange parameters	100



SongJiang Group Introduction

Shanghai Songjiang Shock Absorber Group Co., Ltd. is a conglomerate engaged in the research, development, production, and sales of industrial vibration isolator. It enjoys high reputation and influence in industries such as petroleum, chemical, metallurgy, power, construction, thermal energy, and water supply. Product quality has always been the goal pursued by Songjiang .

Our company boasts strong technical capabilities, complete production equipment, and the ability to develop various types of vibration isolation. We have advanced laboratory equipment and sophisticated testing methods. Our rubber expansion joints have obtained ISO9001-2015 international quality system certification, OHSAS18001 occupational health system certification, ISO14001 environmental management system certification, American Bureau of Shipping (ABS) certification, and TUV certification from Germany's TUV Rheinland. We have been recognized as a Shanghai enterprise complying with safety production standards, a qualified supplier of Shanghai Pudong Water Group, and a qualified supplier of rubber expansion joints for China Nuclear Gansu Nuclear Technology. We possess qualification certificates such as edible-grade rubber expansion joint testing report, water immersion testing report, type test report, and flame retardant testing report. In 2019, we successfully provided rubber expansion joints for the Chinese commercial aircraft C919. Leveraging our years of research and production experience, we optimize and combine our products to ensure stable quality. Our product range includes flexible rubber expansion joints, spring vibration isolators, rubber vibration isolators, stainless steel metal hoses, corrugated compensators, automotive vibration isolators, and more. Our products are suitable for various applications such as water pumps, fans, air conditioning units, power generators, diesel engine units, compressors, sound systems, punching machines, power test benches, soundproof chambers, and transformers, providing fundamental vibration isolation.



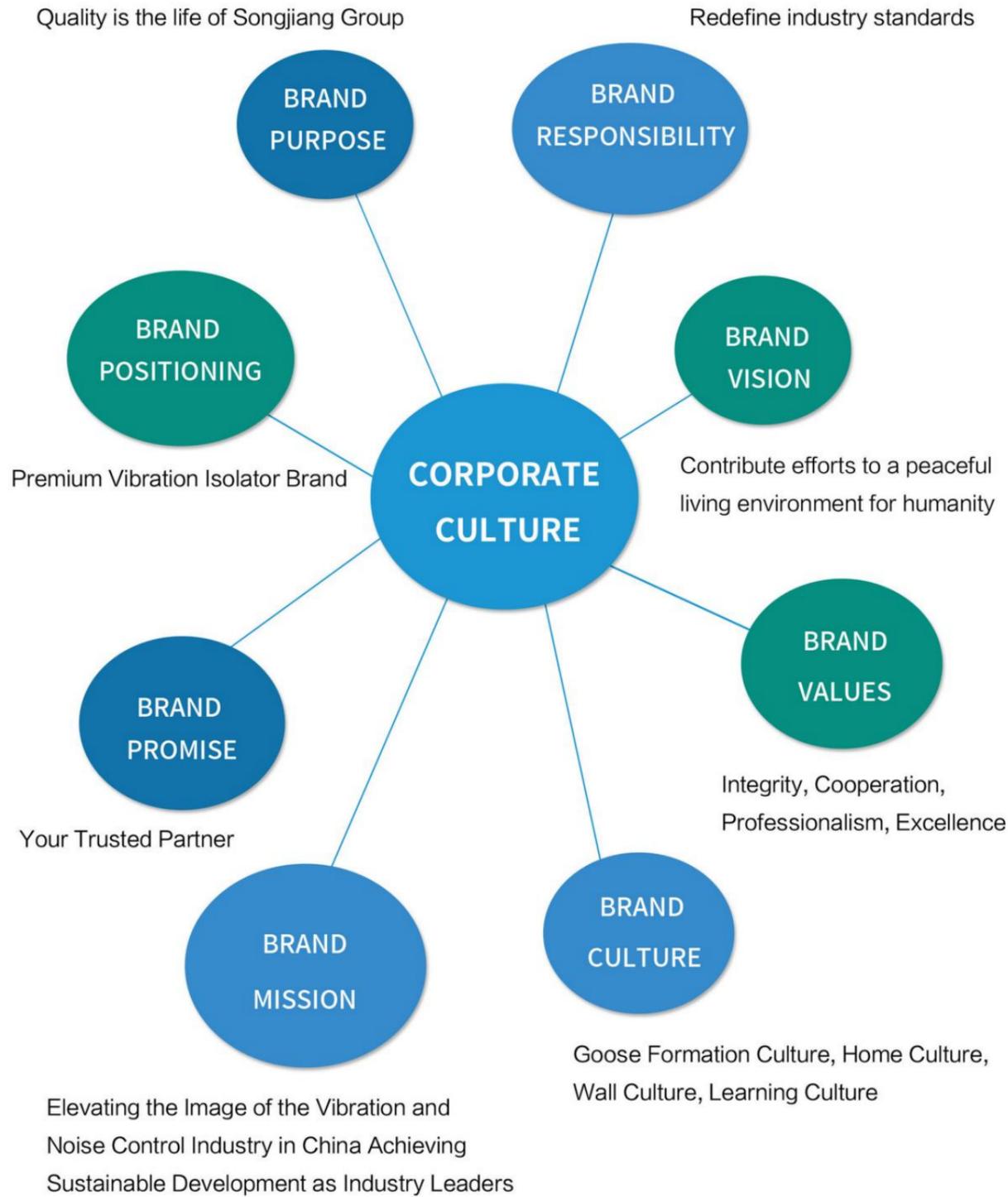
In 2017, Songjiang Group invested 120 million in the Shuangdian Industrial Zone of Nantong City to construct the "Annual Production of 1.2 Million vibration isolation Project." In December 2018, the construction was completed, and the company relocated to the Nantong factory. The new factory introduced a large number of automated intelligent equipment, including automatic batching machines, automatic feeding machines, automatic rubber refining machines, CNC feeding machines, CNC cutting machines, automatic molding machines, automatic vulcanization machines, CNC system center, CNC lathes, automatic packaging machines, automatic winding machines, and automatic wrapping machines. The Nantong factory has its own testing center equipped with 3-liter internal mixers, 6-inch open mills, rubber vulcanizers, universal tensile testers, low-temperature testers, high-temperature testers, wear resistance testers, hardness testers, water pressure testers, burst testers, fatigue testers, spectrometers, chloride ion detectors, simulated vibration test benches, and other testing and testing equipment.

Shanghai Songjiang Shock Absorber Group Co., Ltd. adheres to the motto "Quality is the life of Songjiang Group" and provides vibration isolation and noise reduction solutions to society. We contribute our efforts to create a quiet living environment for humanity.





Team Style



Tug of war



Group photo in Nantong



Employee rewards



Employee training



Outside training



Factory fire drill



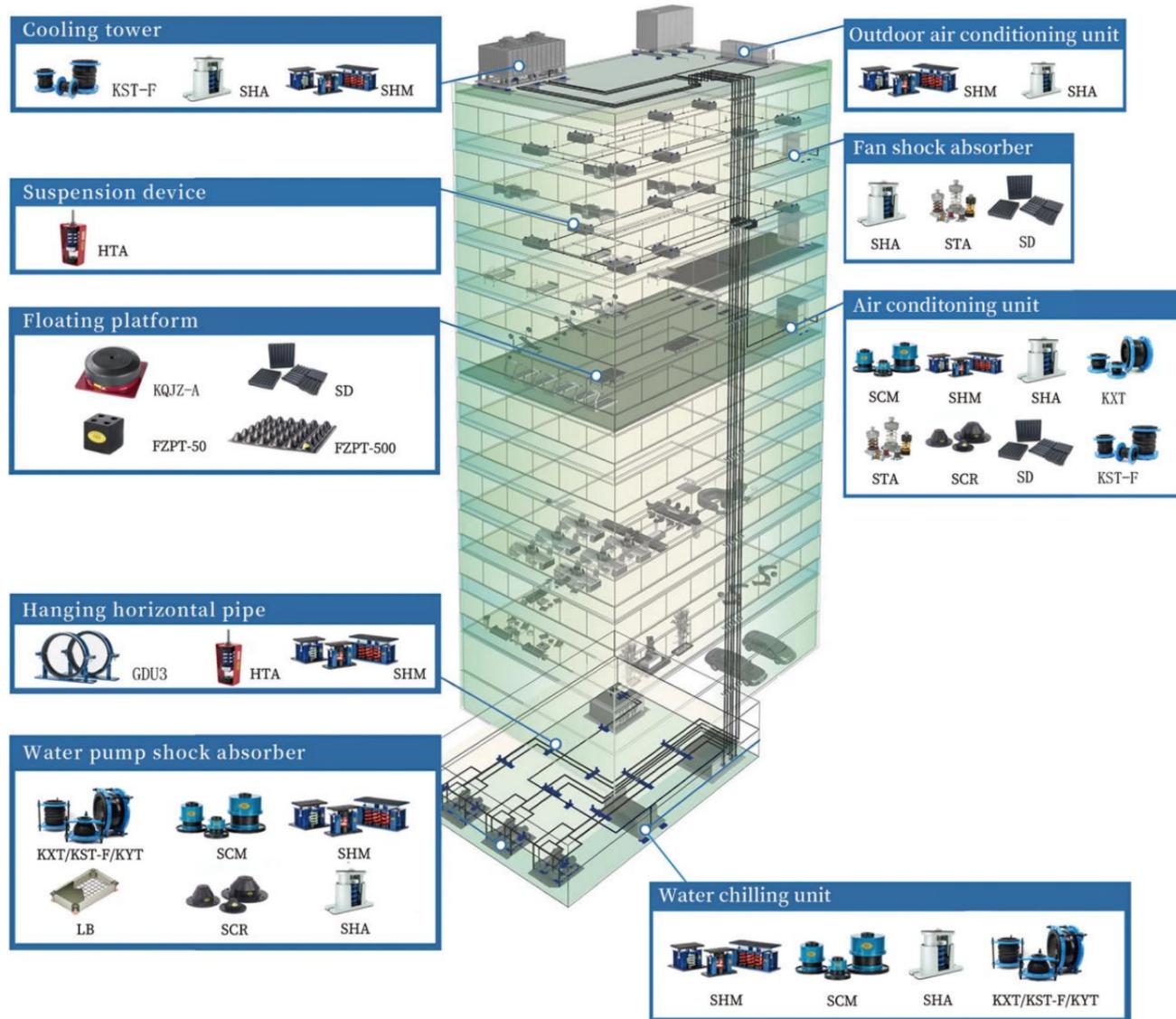
Shanghai team



Shanghai Fire Drill



Provide vibration isolation and noise reduction solutions for super high-rise buildings



MAINSTREAM PRODUCTS





▶ Factory Environment ◀



Factory gate



Factory region



Office and Exhibition Hall

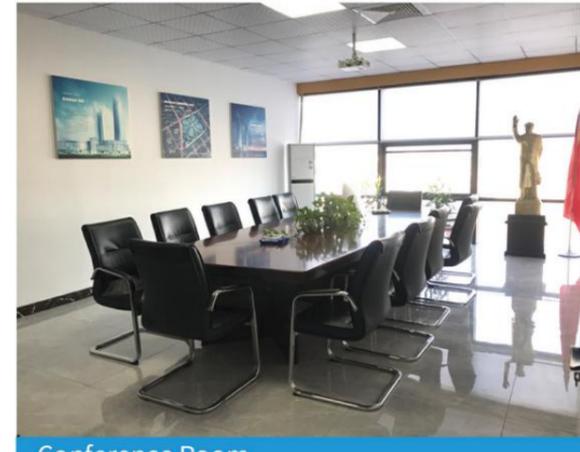


Production workshop

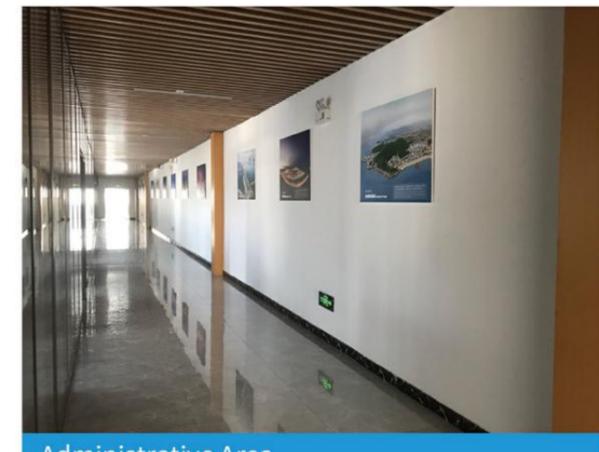
Work together Create a win-win situation



▶ Office And Exhibition ◀



Conference Room



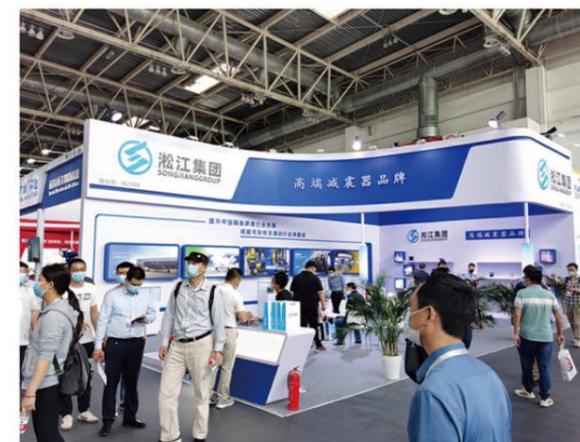
Administrative Area



Factory Reception Area



Factory Exhibition Hall



Canton Fair (Guangzhou) 2018



Flowtech(Shanghai)China 2019



► Mixing Workshop ◀



Rubber Raw Materials



Automatic Minor Ingredient Batching Machine



Automatic Major Ingredient Batching Machine



Automatic Internal Mixer



Automatic Open Mill



The Four-roll Calendering Machine



► Production Workshop ◀



Automatic Rubber Cutting Machine



Automatic Forming Machine



Rubber Expansion Joint Vulcanizing Machine



Vulcanization zone



Mold storage area



CNC system center



▶ Testing Center ◀



Rubber internal mixer testing machine



Rubber Vulcanizer



Universal Tension Testing Machine



X-ray wire position analyzer



Water pressure testing machine



Hydraulic Burst Testing Machine



▶ Warehouse Delivery ◀



Semi finished product warehouse



Semi finished product warehouse



Finished product warehouse



Goods to be packed



Goods to be packed



Items waiting to be shipped



Industry Case



上海交通大学
Shanghai Jiao Tong University



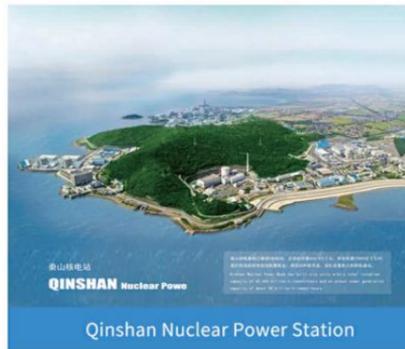
哈尔滨工业大学
HARBIN INSTITUTE OF TECHNOLOGY



武汉大学
WUHAN UNIVERSITY



Hainan Changjiang nuclear power station



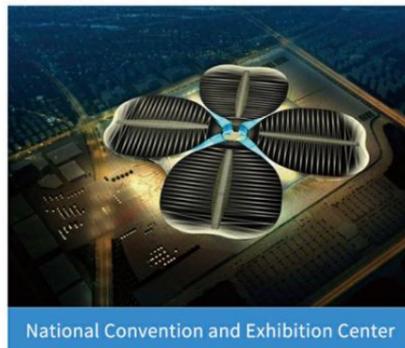
Qinshan Nuclear Power Station



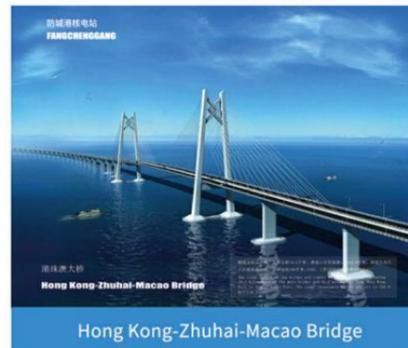
Fangchenggang nuclear power station



Beijing Daxing Airport



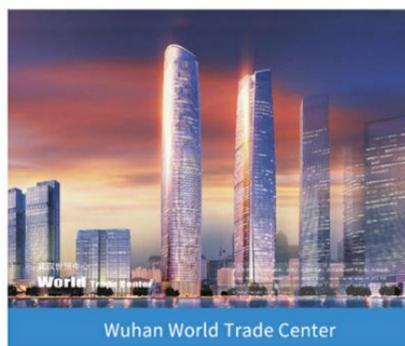
National Convention and Exhibition Center



Hong Kong-Zhuhai-Macao Bridge



Xiamen World Trade Building



Wuhan World Trade Center



Changsha IFS Center



Industry Case



Hilton



MARRIOTT



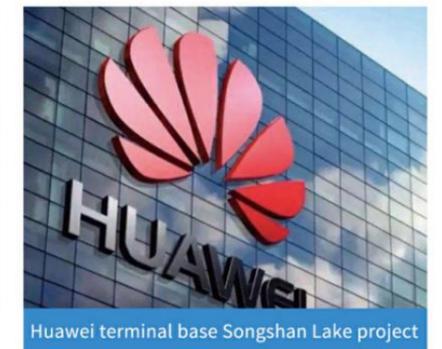
Sheraton



Alibaba Deqing computer room project



China Mobile Shanghai Jiading project



Huawei terminal base Songshan Lake project



Guangzhou Metro Line 13



China commercial aircraft C919



500 ton salvage pipe laying vessel



Yichang Three Gorges Dam Project



Uzbekistan section of Central Asia gas pipeline



Beijing ice rink of 2022 East Olympic Games



▶ Industry Case ◀



Geely Yiwu factory



FAW-Volkswagen North China Base



Beiqi Group Zhenjiang Plant



BOE projects



Foxconn Guangzhou super vision 8K project



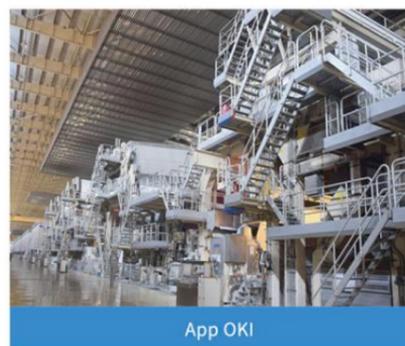
LG display Guangzhou 8.5 generation cled



LG Nanjing automobile battery factory



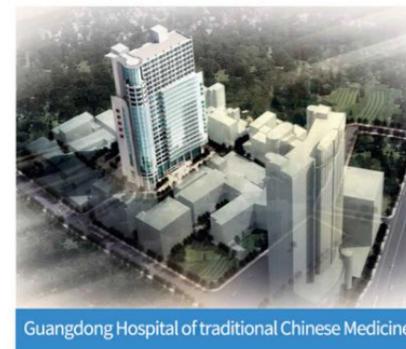
Quzhou Juhua Group



App OKI



▶ Mixing Workshop ◀



Guangdong Hospital of traditional Chinese Medicine



Shenyang New World Center



Changchun Wanda Plaza Project



Beijing Yanqing ice rink refrigerator room



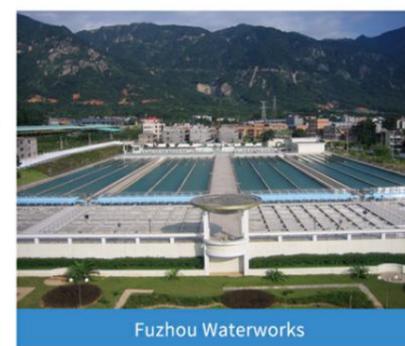
Hainan Haihua Island Project



Harbin Poseidon ocean Kingdom



Shanghai Zhuyuan sewage treatment plant



Fuzhou Waterworks



Shandong Shouguang seawater desalination



PATENT CERTIFICATE

Cooperative partner of Fortune Global 500 companies



THE NEW DESIGN HAS BEEN RECOGNIZED BY THE NATIONAL INTELLECTUAL PROPERTY RIGHTS



Appearance of the tube



Tube inner membrane



Spherical flange



Packaging appearance



Airbag upper cover



Airbag lower cover



One cylinder



NG flange

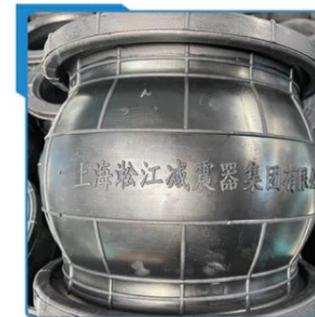


PATENT CERTIFICATE

Anti-counterfeiting must be investigated



NEW DESIGN ORIGINAL AUTHENTIC 100% ORIGINAL RUBBER



Appearance patent



Internal line patent



Traceable record



Internal structure



Precise positioning of steel wire



Sealing surface patent



OFFICIAL COMMITMENT

NO RECLAIMED RUBBER, OTHERWISE ONE COMPENSATED FOR TEN



Real Shots Pirate Pictures Punished

NR HIGH-QUALITY RAW MATERIALS 100% RAW RUBBER



Material area



Natural rubber



Well-known domestic brands



High quality kaolin



Shanghai time-honored carbon black



High quality resin



OFFICIAL COMMITMENT

NO RECLAIMED RUBBER, OTHERWISE ONE COMPENSATED FOR TEN



Real Shots Pirate Pictures Punished

NBR HIGH-QUALITY RAW MATERIALS 100% RAW RUBBER



Material area



PetroChina Nitrile Rubber



CR121 Neoprene



Sinopec Antioxidant



Shanghai Boca Carbon Black



Shanghai time-honored zinc oxide



Real shots Pirate Pictures Punished

OFFICIAL COMMITMENT

NO RECLAIMED RUBBER, OTHERWISE ONE COMPENSATED FOR TEN



C919

Rubber expansion joint

for China commercial aircraft C919



EPDM HIGH-QUALITY RAW MATERIALS 100% RAW RUBBER



Material area



Japan Mitsui 4045



Shanghai old brand zinc oxide



High quality white carbon black



Shanghai Boca Carbon Black



Shanghai Boca Carbon Black

NOT ONLY DARE TO PROMISE BUT ALSO ABLE TO DELIVER

<p>QUICK</p> <p>AFTER-SALES SERVICE</p> <p>PRIORITY AFTER-SALES SERVICE ALL SERVICE REQUESTS ARE EXPEDITED AND SPECIALLY APPROVED FOR PROCESSING, INCLUDING HOLIDAYS.</p>	<p>FAST</p> <p>TWELVE HOURS</p> <p>IF ANY QUALITY ISSUES ARISE, WE WILL PROVIDE A WRITTEN RESPONSE WITHIN TWELVE HOURS AND A RESOLUTION PLAN WITHIN TWENTY-FOUR HOURS</p>	<p>ONE</p> <p>ONE YEAR WARRANTY</p> <p>SPECIAL PRODUCT WARRANTY FOR ONE YEAR. FOR EXAMPLE: STRONG ACID-ALKALI CORROSION RESISTANCE, PARTICLE FRICTION RESISTANCE, ULTRA-HIGH TEMPERATURE RESISTANCE.</p>
<p>THREE</p> <p>THREE YEAR WARRANTY</p> <p>STANDARD TEMPERATURE, ACID AND ALKALI RESISTANCE, HYDRAULIC OIL, AND OTHER PRODUCTS ARE GUARANTEED FOR THREE YEARS.</p>	<p>FREE</p> <p>ISSUE RESOLUTION</p> <p>COMPENSATION FOR ISSUES. IN CASE OF ANY INHERENT QUALITY PROBLEMS WITH THE PRODUCT, WE WILL COVER THE SHIPPING COSTS AND PROVIDE FREE PRODUCT REPLACEMENT.</p>	<p>FIVE</p> <p>FIVE YEAR WARRANTY</p> <p>FIVE-YEAR WARRANTY FOR WATER-RELATED PRODUCTS, SUCH AS AIR CONDITIONING SYSTEMS, FIRE PROTECTION SYSTEMS, AND PLUMBING SYSTEMS.</p>



► Flexible Rubber Expansion Joint ◀

Performance characteristics:

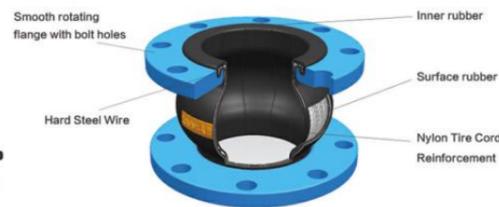
The flexible rubber expansion joint, also known as a vibration isolator, pipeline compensator, rubber bellow, or flexible joint, is a type of pipe joint with high elasticity, airtightness, resistance to media, and weather resistance. It has the following performance characteristics:

- 1、 Small size, light weight, good elasticity, easy installation, and maintenance.
- 2、 During installation, it can generate lateral, axial, and angular displacement, without being limited by the misalignment of user pipelines or non-parallel flanges.
- 3、 It can reduce the transmission of structural noise and has strong vibration absorption capability.
- 4、 Our internally developed seamless high-pressure flexible rubber joint effectively prevents corrosive media from eroding the inner wall of the flexible rubber joint in pipelines with high temperature, acid and alkali resistance, and oil resistance, thereby improving its service life.

Anti-pull support device

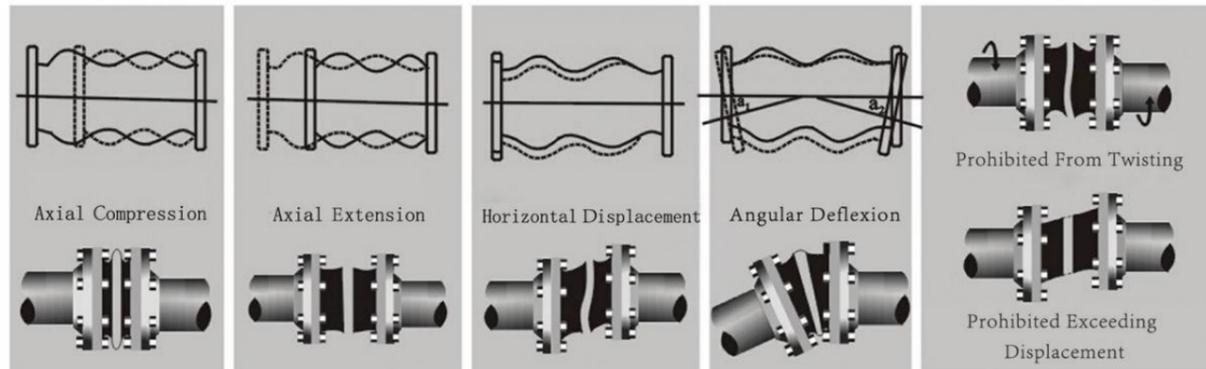


Hard Steel Wire Reinforcement



Scope of application: Due to the excellent overall performance of flexible rubber joints, they are widely used in various industries such as chemical, construction, water supply, drainage, petroleum, light and heavy industrial refrigeration, sanitation, plumbing, fire protection, and power infrastructure projects.

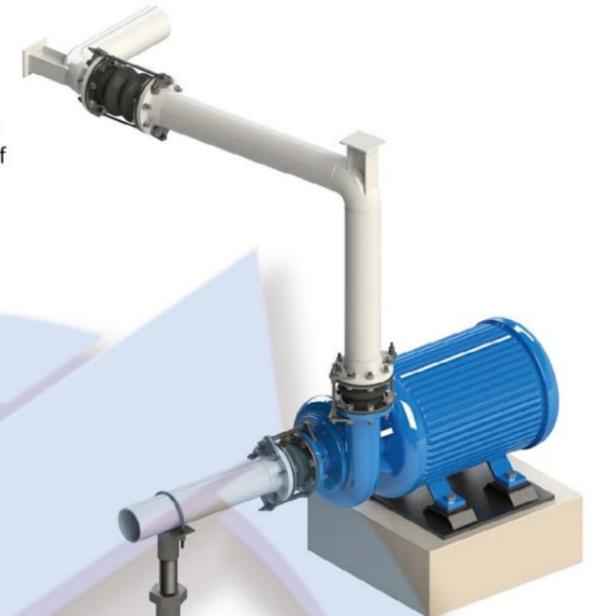
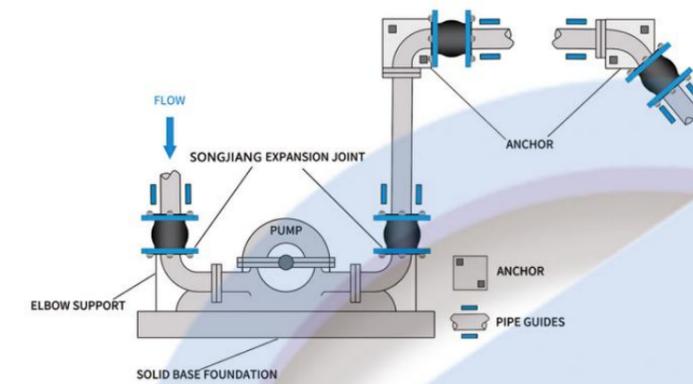
Schematic Diagram Of The Displacement Of The Flexible Rubber expansion Joint



► Rubber Expansion Joint Piping Installation Diagram ◀

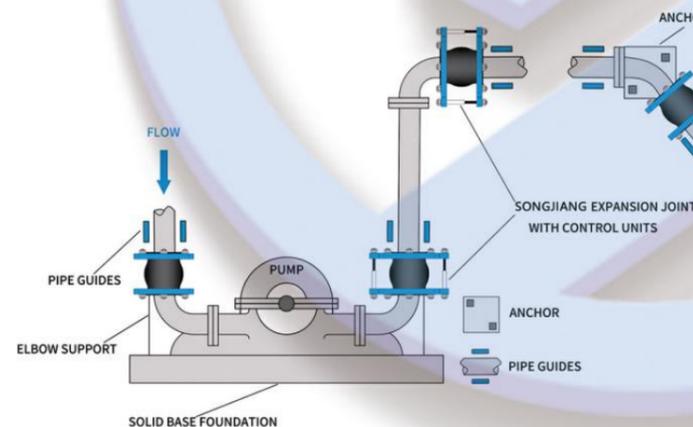
Anchoring System

Anchoring System Note: While restraining rods, control rods, or restraining rods with compression sleeves are not required in the anchoring of the pipeline system, you may need to consider their usage. In the event of a mishap, any rod configuration will be able to handle the pressure thrust of the system and reduce the likelihood of failure of the rubber expansion joints.



Non-anchored system note:

When installing the rod assembly, ensure that the external nut is in close contact with the plate during installation. The pressure thrust of the pipeline system can cause excessive elongation of the rubber expansion joint and reduce its range of motion.





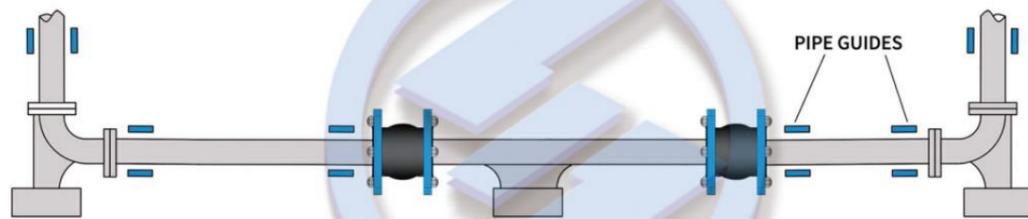
Rubber Expansion Joint Installation Instructions

Installation Notes for Rubber Expansion Joints:

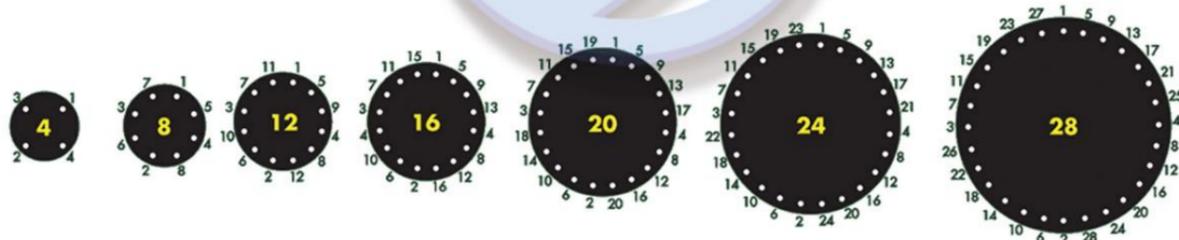
When installing rubber expansion joints on water pipelines, the design standard shown in the diagram below should be followed to prevent excessive elongation of the upper rubber expansion joint.

It is recommended to install the rubber expansion joint immediately after the fixed support is installed on the water pipeline. After installation, the water pipeline behind the rubber expansion joint must be equipped with pipe guide supports to support the pipeline.

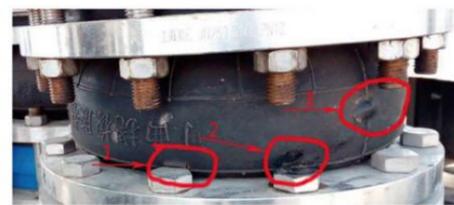
Note: The translation assumes that the instructions refer to a specific design standard mentioned in a diagram. If the diagram is available, it would be helpful to include it for accurate translation.



To gradually tighten the nuts/bolts, follow the steps in the following sequence



1. It is strictly prohibited to install the rubber expansion joint beyond its displacement limit during installation.



2. The pipeline must have fixed supports or brackets, and the force applied by the fixed brackets must be greater than the axial force.



3. The pipeline should be fixed on hangers, brackets, or anchors, and the joints should not bear the weight and axial force of the pipeline itself.



Rubber Joint Should Be Equipped With Dedicated Butterfly Valve Flange

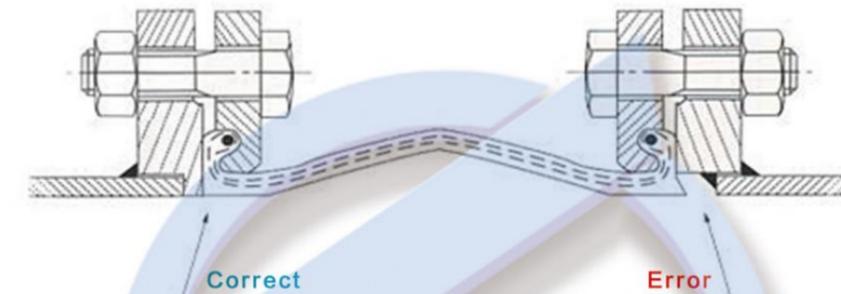
Installation Instructions:

1. Choosing the appropriate flange is crucial for achieving a reliable, durable, and secure connection method.

2. When selecting a pipe flat welding flange, please follow the standards below (specifically designed for clamp-type butterfly valve flanges):

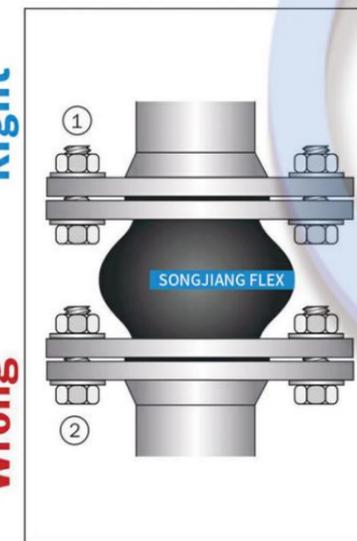
a) The inner diameter of the flange at the pipe connection must match the inner diameter of the rubber expansion joint.

b) The flange contact surface at the pipe connection should be smooth and flat, ensuring maximum sealing space. (As shown in the diagram below). If the rubber expansion joint does not have a tight seal with the pipe connection, it may result in noise, insufficient pressure resistance, water leakage, and other issues.



Right

Wrong



Arrangement with lateral expansion joints.

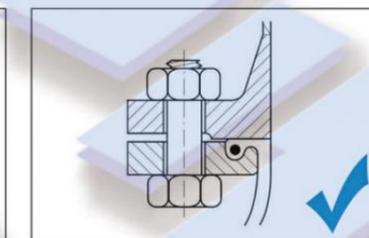


Fig. 2 Flange provided with smooth or groove sealing surface

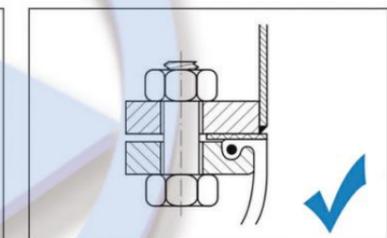


Fig. 4 Flange provided with flat sealing gasket to protect the rubber surface.

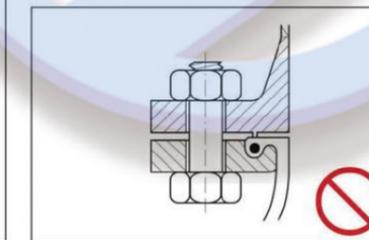


Fig. 3 Do not use flange with tongue or groove which will damage the rubber.

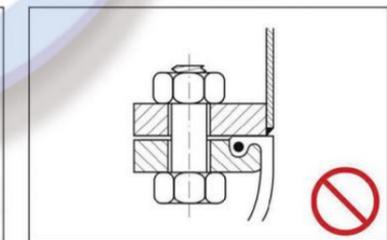


Fig. 5 Sharp edge pipe ends will damage the rubber face.

Note: Please strictly follow the installation requirements when using the rubber expansion joint product. We will not be held responsible for any consequences resulting from improper usage.



► Physical Performance Testing and Standards for Rubber Joint Material ◀

Model	Project	Index	
		Linner layer	Outer layer
1	Tensile strength (MPa)	≥12	≥13
2	Elongation at break (%)	≥450	≥500
3	Permanent set (%)	≤25	≤30
4	Brittleness temperature (°C)	≤-30	≤-30
5	Adhesive strength (kN/m)	≥2.0	≥2.0
6	Hot air aging (100°Cx18h)	≥-25	≥-25
7	Acid resistance (10%H ₂ SO ₄ x168h Room temperature)	≥-30	≥-30
		≥-30	≥-30
8	Alkali resistance (10%NaOHx168h Room temperature)	≥-30	≥-30
9	Hardness (Shore hardness A)	60±5	60±5

Note: For products with a nominal diameter greater than 100mm, the adhesive strength test for the rubber expansion joint is conducted at a test pressure of 1.5 times the working pressure, and the burst pressure is 3 times the working pressure.

Tensile strength, elongation at break, permanent set: GB/T 528

Brittleness temperature: GB/T 1682

Adhesive strength: GB/T 532

Hot air aging: GB/T 3512

Acid resistance, alkali resistance: GB/T 1690; Test liquids: 10% H₂SO₄, 10% NaOH

Hardness: GB/T 531.1

Drinking water standards: "Hygienic Safety Evaluation Specification for Drinking Water Transmission and Distribution Equipment and Protective Materials" (2001), GB 5749-2006 "HygienicStandard for Drinking Water".

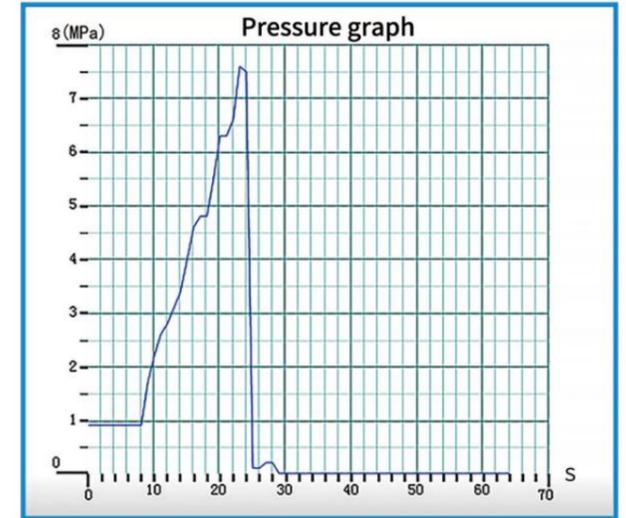
Edible grade testing standard: GB/T 4806.1-1994 "Hygienic Standard for Rubber Products Used in Food Industry"



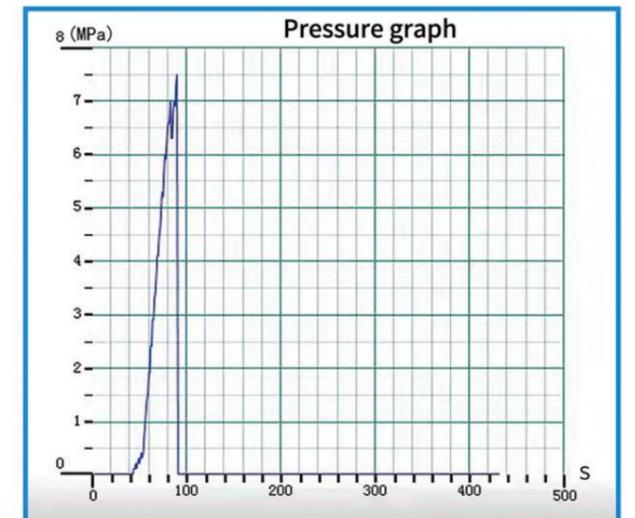
► Rubber Expansion Joint Burst Testing ◀



Single sphere rubber expansion joint burst testing

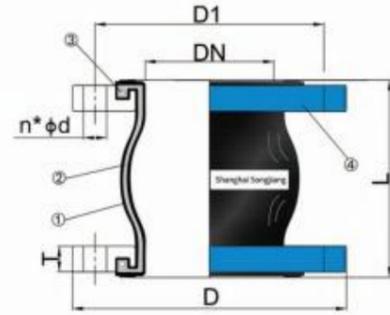


Double sphere rubber expansion joint burst testing





► KXT Type Rubber Expansion Joint ◀



NO	Name	Material
1	Inner/outer rubber	NR, NBR, EPDM, FKM Neoprene, PTFE Lining
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235, SS304, SS316, PVC, DN40 - DN200 (QT450)

Parameter Of KXT Type Flexible Rubber Expansion Joints

Nominal diameter	Length	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods	
							MM
25	1	95	6	9	9	15°	/
32	1-1/4	95	6	9	9	15°	/
40	1-1/2	95	6	10	9	15°	/
50	2	105	7	10	10	15°	/
65	2-1/2	115	7	13	11	15°	/
80	3	135	8	15	12	15°	/
100	4	150	10	19	13	15°	/
125	5	165	12	19	13	15°	/
150	6	180	12	20	14	15°	/
200	8	210	16	25	22	10°	/
250	10	230	16	25	22	10°	/
300	12	245	16	25	22	10°	/
350	14	255	16	25	22	10°	4
400	16	255	16	25	22	10°	4
450	18	255	16	25	22	5°	4
500	20	255	16	25	22	5°	5
600	24	260	16	25	22	5°	5
700	28	260	16	25	22	5°	5
800	32	260	16	25	22	5°	5
900	36	260	16	25	22	5°	6
1000	40	260	16	25	22	5°	6
1200	48	260	16	25	22	5°	6

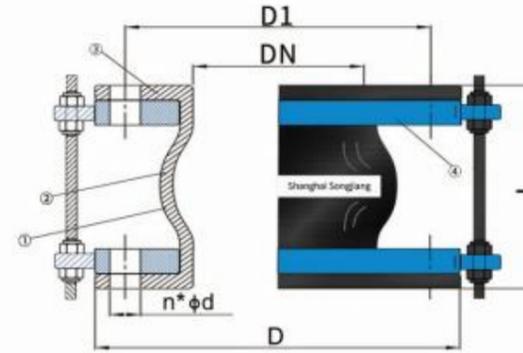
Flange parameters: GB/T 9119-2010, Check:P100



Applicable media: Air, compressed air, drinking water, wastewater, seawater, hot water, oil, acids, alkalis, etc.
 Natural rubber(NR): withstands high pressure at 80 degrees.
 Ethylene Propylene Diene Monomer rubber(EPDM): ≤120 degrees, high temperature resistance, acid-alkali resistance, corrosion resistance, seawater resistance.
 Nitrile rubber(NBR): ≤80 degrees, excellent oil resistance.
 Fluoro rubber(FKM): ≤120 degrees, high temperature resistance, oil resistance, strong acid resistance.
 Note: Different rubber materials have different functions.



► KDT Type Full-faced Rubber Flange Bellow ◀



NO	Name	Material
1	Inner/outer rubber	NR, NBR, EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316

Full-faced Rubber Flange Bellow With Control Rods



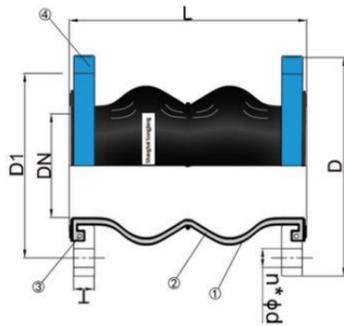
Parameter of KDT Type Full-faced Rubber Flange Bellow

Nominal diameter	Length	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods	
							MM
350	14	255	16	25	22	10°	4
400	16	255	16	25	22	10°	4
450	18	255	16	25	22	5°	4
500	20	255	16	25	22	5°	5
600	24	260	16	25	22	5°	5
700	28	260	16	25	22	5°	5
800	32	260	16	25	22	5°	5
900	36	260	16	25	22	5°	6
1000	40	260	16	25	22	5°	6
1200	48	260	16	25	22	5°	6
1400	56	350	16	25	22	5°	6
1600	64	350	16	25	22	5°	6
1800	72	350	25	35	25	2°	7
2000	80	420	25	35	25	2°	7
2200	88	420	25	35	25	2°	8
2400	96	450	25	35	25	2°	8
2600	104	500	25	35	25	2°	8
2800	112	550	25	35	25	2°	8
3000	120	550	25	35	25	2°	10
3200	128	550	25	35	25	2°	10

Flange Parameters: GB/T 9119-2010, For details: P100



► KST-F Type Double Sphere Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR,NBR,EPDM, FKM, Neoprene,PTFE Lining
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316, PVC, DN40~DN200(QT450)

Product Introduction:

The double sphere rubber expansion joint is slightly longer in installation length compared to the single sphere rubber expansion joint. Customers have the option to choose different rubber materials for production. It is suitable for some water pump equipment with high vibration frequency and noise levels, and the increased product length effectively ensures good sound insulation! The double sphere rubber expansion joint produced by Shanghai Songjiang was adopted by the Guangzhou Asian Games Village Solar Hot Water Source System in 2010, and has been used in the Delong Steel Ironmaking Workshop for many years.

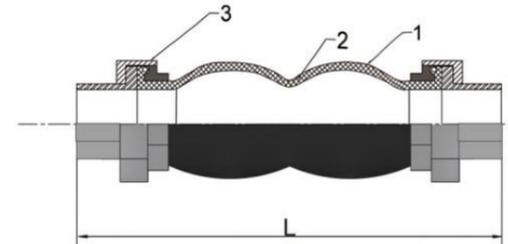
Parameter Of KST-F Type Double Sphere Rubber Expansion Joints

Nominal diameter		Length	Axial extension	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	MM	MM	MM	°	Pcs
40	1-1/2	155	25	40	40	35°	/
50	2	160	30	50	45	40°	/
65	2-1/2	170	30	50	45	40°	/
80	3	170	30	50	45	40°	/
100	4	220	35	50	40	35°	/
125	5	220	35	50	40	35°	/
150	6	220	35	50	40	35°	/
200	8	320	35	60	35	30°	3
250	10	320	35	60	35	30°	3
300	12	320	35	60	35	30°	3
350	14	320	35	60	35	30°	4
400	16	320	35	60	35	30°	4
500	20	330	35	60	35	30°	5
600	24	330	35	60	35	30°	5

Flange Parameters: GB/T 9119-2010, For details: P100



► KST-L Type Double Sphere Threaded Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR,NBR,EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Thread	Hard Steel Wire

Parameter Of KST-L Type Double Sphere Threaded Rubber Expansion Joints

Nominal diameter		Length	Axial Elongation	Axial compression	Lateral	Angular
MM	Inch	L(mm)	MM	MM	MM	°
32	1-1/4	200	6	22	22	40°
40	1-1/2	200	6	22	22	35°
50	2	200	6	22	22	25°
65	2-1/2	240	6	22	22	25°
80	3	250	6	22	22	25°

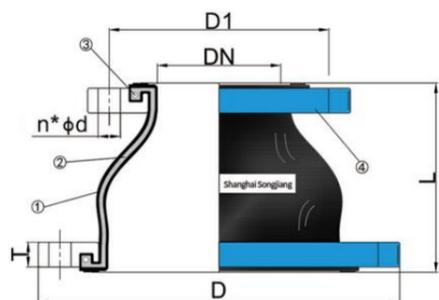
Product Introduction:

The double sphere threaded rubber joint features internal threaded couplings at both ends for connection. It is suitable for use in central air conditioning fan coils, and its increased length ensures excellent sound insulation effect. The double sphere rubber joint products produced by Shanghai Songjiang Group were adopted by the Guangzhou Asian Games Town Solar Hot Water Source System in 2010 and have been used for many years by Samsung Electronics Kunshan Factory.





► KYT Type Concentric Reducer Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR, NBR, EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316,PVC, DN40~DN200 (QT450)

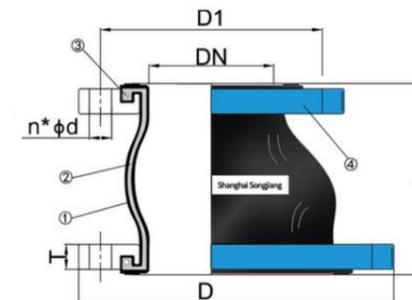
The concentric reducer rubber joint is primarily used at connection points where a change in pipe diameter is required.

Parameter Of KYT Type Concentric Reducer Rubber Expansion Joints

Nominal diameter	Length	Axial Elongation	Axial compression	Lateral	Angular	Control
MM	L(mm)	MM	MM	MM	°	Pcs
50*40	180	7	10	10	10°	/
65*40	180	7	10	10	10°	/
65*50	180	7	10	10	10°	/
80*50	180	7	10	10	10°	/
80*65	180	7	13	11	10°	/
100*50	180	7	13	11	10°	/
100*65	180	7	13	11	10°	/
100*80	180	8	15	12	10°	/
125*65	180	8	15	12	10°	/
125*80	180	8	15	12	10°	/
125*100	200	10	19	13	10°	/
150*65	200	10	19	13	10°	/
150*80	180	10	19	13	10°	/
150*100	200	10	19	13	10°	/
150*125	200	12	19	13	10°	/
200*100	200	12	19	13	10°	2
200*125	220	12	19	13	10°	2
200*150	200	12	20	14	10°	/
250*125	220	12	20	14	10°	3
250*150	220	12	20	14	10°	3
250*200	220	16	25	22	10°	3
300*150	220	16	25	22	10°	3
300*200	220	16	25	22	10°	3
300*250	220	16	25	22	10°	3
350*200	230	16	25	22	10°	4
350*250	230	16	25	22	10°	4
350*300	230	16	25	22	10°	4



► KPT Type Eccentric Reducer Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR, NBR, EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316,PVC

Parameter Of KPT Type Eccentric Reducer Rubber Expansion Joints

Nominal diameter	Length	Axial Elongation	Axial compression	Lateral	Angular
MM	L(mm)	MM	MM	MM	°
50*32	110	7	9	8	10°
50*40	110	7	9	8	10°
65*50	130	8	10	9	10°
80*50	125	8	11	10	10°
80*65	140	9	12	11	10°
100*65	140	9	12	11	10°
100*80	140	9	12	11	10°
125*100	175	12	17	14	10°
150*100	180	12	17	14	10°
200*125	220	15	20	17	10°
200*150	220	15	23	17	10°

Flange Parameters: GB/T 9119-2010, For details: P100

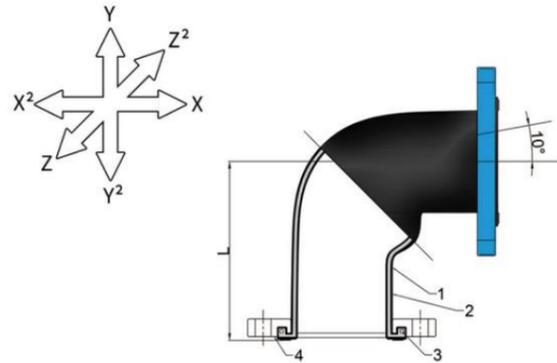
Eccentric reducer rubber expansion joints are primarily used at connection points where a change in pipe diameter is required.

Note: This product is generally not available in stock and needs to be custom ordered.





► KWT Type Elbow Rubber Expansion Joints ◀



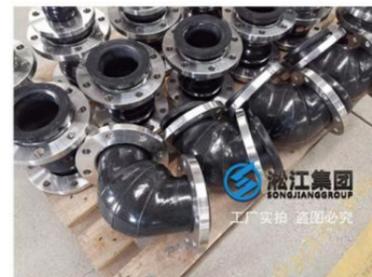
NO	Name	Material
1	Inner/outer rubber	NR, NBR, EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316,PVC

Advantages & Disadvantages Of Elbow Rubber Expansion Joints:

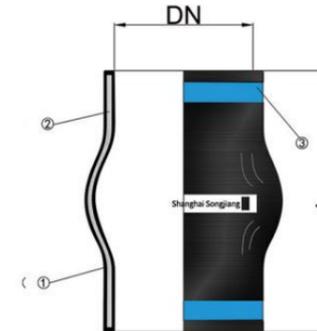
90-degree rubber elbows are widely used in piping and equipment systems to mitigate the effects of vibration, noise, and stress fluctuations, providing protection and extending the lifespan of the piping and equipment. However, they are not suitable for outdoor use or applications with stringent fire safety requirements due to the risk of cracking and other issues. It is important to select the appropriate rubber material to match different media to ensure proper functioning of the rubber elbows.

Parameter Of KWT Type Elbow Rubber Expansion Joints

Nominal diameter	Length	Allowable Movement(mm)					
		X	X ²	Y	Y ²	Z	Z ²
MM	L(mm)						
50	140	16	20	20	16	16	16
65	140	16	20	20	16	16	16
80	150	16	20	20	16	16	16
100	160	16	20	20	16	16	16
125	180	16	20	20	16	16	16
150	200	16	20	20	16	16	16
200	230	16	20	20	16	16	16



► KKT Type Clamp Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR,NBR,EPDM, FKM, SIR
2	Reinforcing cord	Nylon Tire Cord
3	Clamp ring	Q235 SS304

Parameter Of KKT Type Clamp Rubber Expansion Joints

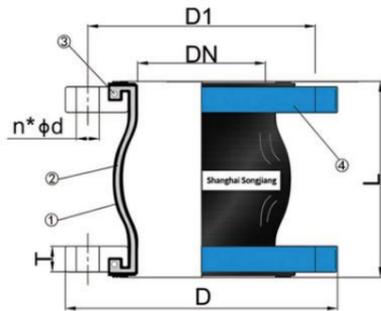
Nominal diameter	Length	Axial extension	Axial compression	Lateral	Angular	
						MM
DN50	2	168	50	30	40	40°
DN65	2-1/2	168	50	30	40	40°
DN80	3	177	50	30	40	40°
DN100	4	200	50	30	40	35°
DN125	5	220	50	30	40	35°
DN150	6	230	50	35	40	30°
DN200	8	300	60	35	35	30°
DN250	10	300	60	35	35	30°
DN300	12	300	60	35	35	30°
DN350	14	300	60	35	35	30°
DN400	16	300	60	35	35	30°
DN500	20	300	60	35	35	30°
DN600	24	300	60	35	35	30°
DN700	28	300	60	35	35	30°
DN800	32	300	60	35	35	30°
DN900	36	300	60	35	35	30°
DN1000	40	300	60	35	35	30°
DN1200	48	400	60	35	35	30°
DN1400	56	400	60	35	35	30°

Clamp rubber expansion joints are commonly used in low-pressure pipeline systems such as return oil pipes, drainage pipes, and powder conveying. The pressure should not exceed 1.0MPa. The diameter, length, thickness, and material (high temperature, hydraulic, food-grade) can be customized, with a typical lead time of 15 days. Examples of applications include return oil-pipes in wind power generation and food powder conveying.





▶ ANSI/ASME B16.5 Class 150# Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR,NBR,EPDM, FKM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235, SS304, SS316

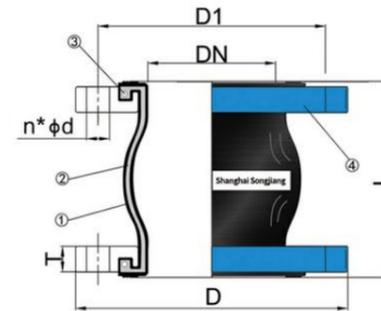
Parameter Of ANSI/ASME B16.5 Class 150# Rubber Expansion Joints

Nominal diameter		Length	Flange OD	No.Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°	Pcs
25	1	130/150	110	4	16	79.4	12	20	14	15°	/
32	1-1/4	130/150	120	4	16	88.9	12	20	14	15°	/
40	1-1/2	130/150	130	4	16	98.4	12	20	14	15°	/
50	2	130/150	150	4	18	120.7	12	20	14	15°	/
65	2-1/2	130/150	180	4	18	139.7	12	20	14	15°	/
80	3	130/150	190	4	18	152.4	12	20	14	15°	/
100	4	130/150	230	8	18	190.5	12	20	14	15°	/
125	5	130/150	255	8	22	215.9	12	20	14	15°	/
150	6	130/150	280	8	22	241.3	12	20	14	15°	/
200	8	130/150/200	345	8	22	298.5	12	20	14	15°	3
250	10	130/150/200	405	12	26	362	12	20	14	15°	3
300	12	130/200	485	12	26	431.8	16	25	22	15°	3
350	14	200	535	12	30	476.3	16	25	22	15°	4
400	16	200	600	16	30	539.8	16	25	22	15°	4
450	18	200	635	16	33	577.9	16	25	22	15°	4
500	20	200	700	20	33	635	16	25	22	15°	5

Flange Parameters: ANSI/ASME B16.5 Class 150# Standard.



▶ EN 1092-1 Standard Rubber Expansion Joints ◀



NO	Name	Material
1	Inner/outer rubber	NR,NBR,EPDM, FKM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235, SS304, SS316

Parameter Of EN 1092-1 European Standard Rubber Expansion Joints

Nominal diameter		Length	Flange OD	No.Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°	Pcs
25	1	95	115	4	14	85	6	9	9	15°	/
32	1-1/4	95	140	4	18	100	6	9	9	15°	/
40	1-1/2	95	150	4	18	110	6	10	9	15°	/
50	2	105	165	4	18	125	7	10	10	15°	/
65	2-1/2	115	185	4	18	145	7	13	11	15°	/
80	3	135	200	8	18	160	8	15	12	15°	/
100	4	150	220	8	18	180	10	19	13	15°	/
125	5	165	250	8	18	210	12	19	13	15°	/
150	6	180	285	8	22	240	12	20	14	15°	/
200	8	210	340	8	22	295	16	25	22	10°	/
250	10	230	395	12	22	350	16	25	22	10°	/
300	12	245	445	12	22	400	16	25	22	10°	/
350	14	255	505	16	22	460	16	25	22	10°	4
400	16	255	565	16	26	515	16	25	22	10°	4
450	18	255	615	20	26	565	16	25	22	5°	4
500	20	255	670	20	26	620	16	25	22	5°	5
600	24	260	780	20	30	725	16	25	22	5°	5

Flange Parameters: EN 1092-1 Standard PN10





▶ WCR Wound Rubber Expansion Joints introduce ◀



WCR Wound Rubber Expansion Joints Advantage

- 1.Higher Structural Strength:**
Manufactured by winding multiple layers of rubber and fabric reinforcement, providing superior strength and durability under pressure and deformation.
- 2.Suitable for Large-Diameter Pipelines:**
The winding process allows the production of large-diameter expansion joints, making them ideal for large pipelines and high-pressure applications, overcoming the size limitations of traditional molded joints.
- 3.Excellent Fatigue Resistance:**
Thanks to the winding forming process, these expansion joints are less prone to cracking or delamination during repeated deformation, resulting in a longer service life.
- 4.Outstanding Compensation Capability:**
Effectively absorbs axial, lateral, and angular movements, reducing stress concentration in pipeline systems and improving overall operational stability.
- 5.High Customization Flexibility:**
Rubber materials, reinforcement structures, and wall thickness can be customized according to specific operating conditions to meet different media, temperature, and pressure requirements.
- 6.Superior Corrosion Resistance:**
Various rubber materials with resistance to acids, alkalis, high temperatures, oils, and abrasion can be selected, making them suitable for diverse industrial environments.
- 7.Excellent Vibration and Noise Reduction Performance:**
The inherent elasticity and damping properties of rubber effectively reduce vibration and noise, ensuring smoother and quieter equipment operation.

Due to these advantages, wound rubber expansion joints are widely used in large-diameter pipeline systems, high-pressure pipelines, shipbuilding, chemical processing, nuclear power, hydropower, and other industrial sectors.



Oil-resistant NBR



High-temperature-resistant EPDM



Fixed flange type
(Integrallyvulcanized rubber and flange)



Same-diameter eccentric type



Double-arch (double-bellows) type



Multi-arch (multi-bellows) type



Type with control rods and limit devices



Extra-large diameter type



▶ WCR Wound Rubber Expansion Joints model selection ◀



WCR Wound Rubber Expansion Joints Bellows Type

Type	Structural diagram	Describe
Common		Suitable for above-ground standard pipelines under normal pressure.
Flat inner diameter		Suitable for pipelines with internal debris or high media flow velocity; made with high-polymer rubber.
Built in steel ring		Suitable for high-pressure applications; equipped with one steel ring.
Built in steel ring Internally flat		Suitable for high-pressure applications where the pipeline contains debris or the media flow velocity is high; equipped with one steel ring and high-polymer rubber.
Inner diameter steel ring Internally flat		Suitable for buried pipelines, negative pressure conditions, or pipelines with internal debris or high media flow velocity; equipped with one steel ring.



WCR Wound Rubber Expansion Joints Type of sealing surface

Type	Structural diagram	Describe
Convex seal		Convex sealing face with a built-in O-ring, preventing pull-out. The flanges are rotatable, allowing for easier installation.
loose flange		Fully sealed design with a larger sealing surface, effectively preventing water leakage. The loose-type split flanges require that the bolt holes on both pipeline flanges be aligned on the same centerline during installation.
Flange		Flange and sealing face vulcanized as one piece, providing high pressure resistance and effectively preventing pull-out.
Built in O-ring		Sealing face with a built-in steel ring, where the outer diameter of the steel ring does not exceed the inner diameter of the bolt holes.
Built in flange		Sealing face with an integrated internal flange, with dimensions matching the sealing surface, suitable for high-pressure applications.
Built in T-shaped tube		Flange with connecting pipe, vulcanized integrally with the sealing surface and equipped with an internal T-shaped pipe, designed for ultra-high-pressure applications.



▶ WCR Wound Rubber Expansion Joints ◀



上海松江集团
SONGJIANGFLEX
实物拍照 盗图必究

WCR Wound Rubber Expansion Joints performance parameter table

Pipeline diameter		Standard Length	Producibile length	Movement absorption for the standard				Standard pressure	MaX. pressure
DN	in	mm	mm	ax+	ax-	lat±	< ±°	bar	bar
mm				mm	mm	mm			
50	2"	150	150-500	10	20	10	10	10	80
65	2 1/2"	200	150-500	10	20	20	10	10	80
80	3"	200	150-500	10	20	20	10	10	80
100	4"	200	150-500	10	25	20	10	10	80
125	5"	200	150-500	10	25	20	10	10	50
150	6"	200	150-500	10	25	20	10	10	50
175	7"	200	150-500	15	25	20	10	10	50
200	8"	200	150-500	15	25	20	10	10	50
225	9"	200	200-500	15	25	20	10	10	50
250	10"	200	200-500	15	25	20	8	10	40
300	12"	200	200-500	15	25	20	8	10	40
350	14"	250	200-500	15	30	25	5	10	40
400	16"	250	200-500	15	30	25	8	10	40
450	18"	250	200-500	30	30	25	8	10	40
500	20"	250	200-500	30	30	25	7	10	40
550	22"	250	200-500	30	30	25	7	10	40
600	24"	250	200-500	30	30	25	5	10	40
650	26"	250	200-500	30	30	25	5	10	40
700	28"	250	200-500	30	30	25	4	10	40
750	30"	250	200-500	30	30	25	4	10	40

Flange parameters: GB/T 9124.I-2019



Pipeline diameter		Standard Length	Producibile length	Movement absorption for the standard				Standard pressure	MaX. pressure
DN	in	mm	mm	ax+	ax-	lat±	∠±°	bar	bar
mm				mm	mm	mm			
800	32"	300	250 - 500	30	30	25	4	10	40
850	34"	300	250 - 500	30	30	25	4	10	40
900	36"	300	250 - 500	30	30	25	3	10	40
1000	40"	300	250 - 500	30	30	25	3	10	40
1050	42"	350	250 - 500	30	35	25	3	10	20
1100	44"	350	250 - 500	30	35	25	3	10	20
1150	46"	350	250 - 500	30	35	25	3	10	20
1200	48"	350	250 - 500	30	35	25	2.5	10	20
1250	50"	350	250 - 500	30	35	25	2.5	10	20
1300	52"	350	250 - 500	30	35	25	2.5	10	20
1350	54"	350	250 - 500	30	35	25	2.5	10	20
1400	56"	350	250 - 500	30	35	25	2	10	20
1500	60"	350	250 - 500	30	35	25	2	10	20
1600	64"	350	250 - 500	30	35	25	2	10	20
1700	68"	350	250 - 500	30	35	25	1.5	10	20
1800	72"	350	250 - 500	30	35	25	1.5	6	20
1900	76"	350	250 - 500	30	35	25	1.3	6	20
2000	80"	350	250 - 500	30	35	25	1.3	6	20
2100	84"	350	250 - 500	30	35	25	1.2	6	20
2200	88"	350	250 - 500	30	35	25	1.2	6	20
2300	92"	350	250 - 500	30	35	25	1	6	20
2400	96"	350	250 - 500	30	35	25	1	6	20
2500	100"	350	250 - 500	30	35	25	0.8	4	20
2600	104"	350	250 - 500	30	35	25	0.8	4	20
2800	112"	350	250 - 500	30	35	25	0.7	4	20
3000	120"	350	250 - 500	30	35	25	0.7	4	20
3200	128"	350	250 - 500	25	30	20	0.6	4	20
3400	136"	350	250 - 500	25	30	20	0.6	4	20
3500	140"	350	250 - 500	25	30	20	0.5	4	20
3600	144"	350	250 - 500	25	30	20	0.5	4	16
3800	152"	350	250 - 500	25	30	20	0.4	4	16
4000	160"	350	250 - 500	25	30	20	0.4	4	16

The maximum pressure that can be manufactured in the above table is the highest pressure that can be produced. The rubber expansion joint is manufactured according to the working pressure specified in the order.



▶ WCR-L Seismic sinking Wound Rubber Expansion Joints ◀



WCR-L Seismic sinking Wound Rubber Expansion Joints performance parameter table

Pipeline diameter		Length	Number of ripples	Movement absorption for the standard				Standard pressure	MaX. pressure
DN	in			ax+	ax-	lat±	< ±°		
mm		mm	pcs	mm	mm	mm		bar	bar
20	3/4"	550	5	60	50	300	30	16	25
25	1"	550	5	60	50	300	30	16	25
32	1 1/4"	550	5	60	50	300	30	16	25
40	1 1/2"	550	5	60	50	300	30	16	25
50	2"	550	5	60	50	300	30	16	25
65	2 1/2"	650	5	60	50	300	30	16	25
80	3"	650	5	60	50	300	30	16	25
100	4"	650	5	60	50	300	30	16	25
125	5"	650	5	60	50	300	30	16	25
150	6"	650	5	60	60	300	30	16	25
200	8"	700	5	80	60	300	30	16	25
250	10"	700	5	80	60	300	20	10	16
300	12"	800	5	80	60	300	20	10	16
350	14"	900	5	80	60	300	15	10	16
400	16"	900	5	80	70	300	15	10	16
450	18"	900	5	80	70	300	15	10	16
500	20"	900	5	80	70	300	10	10	16
600	24"	1000	6	80	70	300	10	10	16

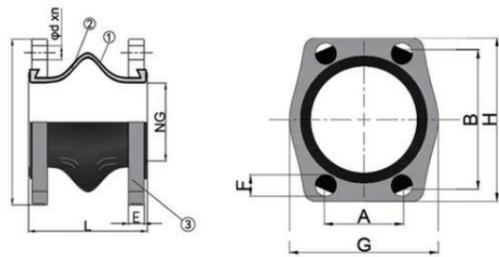
WCR-L Seismic sinking Wound Rubber Expansion Joints performance parameter table

Pipeline diameter		Length	Number of ripples	Movement absorption for the standard				Standard pressure	MaX. pressure
DN	in			ax+	ax-	lat±	< ±°		
mm		mm	pcs	mm	mm	mm		bar	bar
20	3/4"	750	7	80	50	400	30	16	25
25	1"	750	7	80	50	400	30	16	25
32	1 1/4"	750	7	80	50	400	30	16	25
40	1 1/2"	750	7	80	50	400	30	16	25
50	2"	750	7	80	50	400	30	16	25
65	2 1/2"	750	6	80	50	400	30	16	25
80	3"	750	6	80	50	400	30	16	25
100	4"	750	6	80	50	400	30	16	25
125	5"	750	6	80	50	400	30	16	25
150	6"	750	6	100	60	400	30	16	25
200	8"	850	7	100	60	400	30	16	25
250	10"	950	7	100	60	400	20	10	16
300	12"	1100	7	100	60	400	20	10	16
350	14"	1100	7	100	60	400	20	10	16
400	16"	1100	7	100	70	400	15	10	16
450	18"	1100	7	100	70	400	15	10	16
500	20"	1100	7	100	70	400	15	10	16
600	24"	1250	7	100	70	400	10	10	16

The maximum pressure that can be manufactured in the above table is the highest pressure that can be produced. The rubber expansion joint is manufactured according to the working pressure specified in the order.



► SJNG Type Rubber Compensator With SAE Flanges ◀



NO	Name	Material
1	Inner/outer rubber	NBR
2	Reinforcing cord	Nylon cord
3	Clamp ring	NG125 Carbon Steel, Al alloy 6061

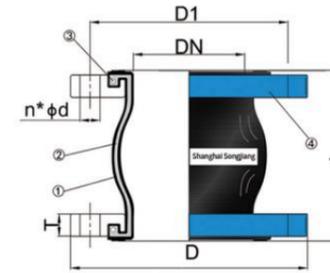
Rubber compensators are elastic connectors with turnable SAE flanges which are used for damping oscillations, vibrations, noises and movements in axial and transversal direction. Use - For all mineral oil products, crude oil, lubrication oil, cooling oil (-20°C up to 80°C, intermittent 100°C), grease, cold water, warm water up to 60°C, water/oil emulsions, fuel with 30% aromatic content. For operation in suction and return lines.



Model	Serial No	Nominal diameter		Bolt hole Distance	Flange OD	Flange Thickness	Hole bolt diameter	Flange Width	Flange Length	Length	Weight	
		Inch	MM									
K16S-25	SDKSS025	1	25	26.2	52.4	43	11	11	59	70	65	0.4
K16S-32	SDKSS032	1-1/4	32	30.2	58.7	50	11	13	73	81	65	0.5
K16S-40	SDKSS040	1-1/2	40	35.7	70.7	62	13	13	83	95	100	0.8
K16S-50	SDKSS050	2	50	42.9	77.8	72	13	13	97	103	100	1
K16S-63	SDKSS063	2-1/2	63	50.8	89	87	14	13	109	115	100	1.2
K16S-80	SDKSS080	3	80	62	106.4	104	14	17	131	136	100	1.8
K16S-90	SDKSS090	3-1/2	80	70	120.6	104	14	17	140	152	100	1.9
K16S-100	SDKSS100	4	100	77.8	130.2	130	16	17	152	162	100	2.5
K16S-125	SDKSS125	5	125	92	152.4	155	16	17	165	184	130	3



► DW Type Drinking Water Quality Standards Rubber Expansion Joint ◀



No	Name	Material
1	Inner / outer Rubber	EPDM(Food-grade)
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS30,SS316 DN40-DN200(QT450)

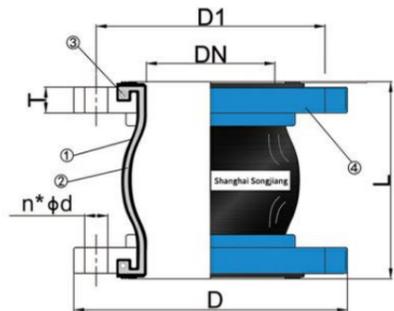
The DW-type drinking water rubber expansion joint is suitable for vibration reduction and noise reduction in high-rise domestic water no-negative pressure variable frequency water supply equipment, meeting the requirements of the national standards "Hygiene Safety Evaluation Specification for Drinking Water Transmission and Distribution Equipment and Protective Materials" and GB5749-2006 "Hygienic Standard for Drinking Water". It has successfully passed 15 inspection items. Our factory provides drinking water rubber joint products for multiple high-end water supply equipment brands at home and abroad. Starting from raw material procurement, we strictly adhere to safety standards, ensuring traceability in the production process. Our commitment to safety and quality has earned the trust of our customers.

Nominal diameter		Length	Flange OD	No.Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°	Pcs
25	1	95	115	4	14	85	6	9	9	15°	/
32	1-1/4	95	140	4	18	100	6	9	9	15°	/
40	1-1/2	95	150	4	18	110	6	10	9	15°	/
50	2	105	165	4	18	125	7	10	10	15°	/
65	2-1/2	115	185	4	18	145	7	13	11	15°	/
80	3	135	200	8	18	160	8	15	12	15°	/
100	4	150	220	8	18	180	10	19	13	15°	/
125	5	165	250	8	18	210	12	19	13	15°	/
150	6	180	285	8	22	240	12	20	14	15°	/
200	8	210	340	8	22	295	16	25	22	10°	/
250	10	230	395	12	22	350	16	25	22	10°	/
300	12	245	445	12	22	400	16	25	22	10°	/
350	14	255	505	16	22	460	16	25	22	10°	4
400	16	255	565	16	26	515	16	25	22	10°	4
450	18	255	615	20	26	565	16	25	22	5°	4
500	20	255	670	20	26	620	16	25	22	5°	5
600	24	260	780	20	30	725	16	25	22	5°	5





▶ CC Type Rubber Expansion Joint for Continuous Casting Equipment ◀



NO	Name	Material
1	Inner/outer rubber	NR
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304

Nominal diameter		Length	Flange OD	Flange Thickness	No. Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular
MM	Inch	L(mm)	D(mm)	T(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°
40	1-1/2	95/130/150	145	15	4	18	110	6	10	9	15°
50	2	105/130/150	160	15	4	18	125	7	10	10	15°
65	2-1/2	115/130/150	180	16	4	18	145	7	13	11	15°
80	3	135/130/150	195	18	8	18	160	8	15	12	15°
100	4	150/130/150	215	20	8	18	180	10	19	13	15°
125	5	165/130/150	245	20	8	18	210	12	19	13	15°
150	6	180/130/150	280	22	8	23	240	12	20	14	15°
200	8	210/130/150	335	24	12	23	295	16	25	22	10°
250	10	230/130/150	405	26	12	26	355	16	25	22	10°
300	12	245/130/200	460	28	12	26	410	16	25	22	10°

The rubber flexible joint for continuous casting is mainly used in steel plants on the continuous casting and rolling equipment, specifically on the continuous casting machine located on the casting platform. It utilizes rubber flexible joints to meet the challenges of high-speed fluctuations, high pressure, high temperature, high amplitude, high frequency, and high abrasion resistance. Our factory has collaborated with several domestic steel plants to develop a specialized rubber flexible joint for continuous casting, replacing imported counterparts.

Specifications: Amplitude: >7mm

Frequency: 350 times (1/min)

Pressure: Working pressure 1.6MPa, test pressure 2.5MPa

Media: Ordinary water

Temperature: Media 50°C; ambient temperature 30-80°C water vapor

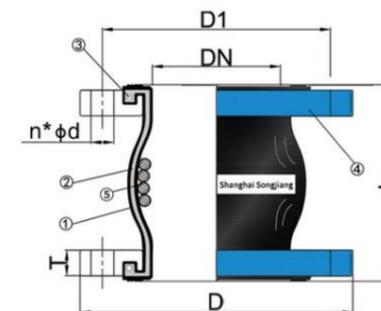
High abrasion resistance: Endures repeated wear and tear between rubber and the inner ring of the flange under high-frequency vibrations. The rubber formulation also ensures high abrasion resistance.

Note: The translation provided may not capture the technical nuances accurately.

It is recommended to consult with industry experts or professionals for precise technical translations.



▶ NP Type Vacuum Negative Pressure Rubber Expansion Joint ◀



NO	Name	Material
1	Inner/outer rubber	NR NBR EPDM
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316 DN40-DN200(QT450)
5	Anti Vacuum Negative Pressure Set	Q235,SS304,SS316

The NP type negative pressure rubber joint is mainly used on vacuum equipment, and the preferred negative pressure ring (in stock) is for DN40-DN200; DN25-DN600 can also choose negative pressure diversion or negative pressure Belt (customized for 10 days); In addition to the above three negative pressure products, our factory can also customize the rubber internal prefabricated negative pressure ring process, and a single model requires more than 10 to be customized.

Nominal diameter		Length	Flange OD	Flange Thickness	No. Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	T(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°	Pcs
25	1	95	115	13	85	4	14	6	9	9	15°	/
32	1-1/4	95	135	15	100	4	18	6	9	9	15°	/
40	1-1/2	95	145	15	110	4	18	6	10	9	15°	/
50	2	105	160	15	125	4	18	7	10	10	15°	/
65	2-1/2	115	180	16	145	4	18	7	13	11	15°	/
80	3	135	195	18	160	8	18	8	15	12	15°	/
100	4	150	215	20	180	8	18	10	19	13	15°	/
125	5	165	245	20	210	8	18	12	19	13	15°	/
150	6	180	280	22	240	8	23	12	20	14	15°	/
200	8	210	335	24	295	12	23	16	25	22	10°	/
250	10	230	405	26	355	12	26	16	25	22	10°	/
300	12	245	460	28	410	12	26	16	25	22	10°	/
350	14	255	520	30	470	16	26	16	25	22	10°	4
400	16	255	580	32	525	16	30	16	25	22	10°	4
450	18	255	640	34	585	20	30	16	25	22	5°	4
500	20	255	705	36	670	20	33	16	25	22	5°	5
600	24	260	840	38	770	20	36	16	25	22	5°	5

Flange Parameters: GB/T 9119-2010 (PN16)



Vacuum Ring Type



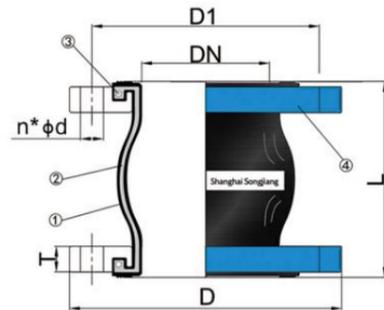
Metal Lining Type



Negative Pressure Belt Type



LO Type Hydraulic-use Rubber Expansion Joint



NO	Name	Material
1	Inner/outer rubber	NBR/Neoprene
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,SS304,SS316 DN40-DN200(QT450)

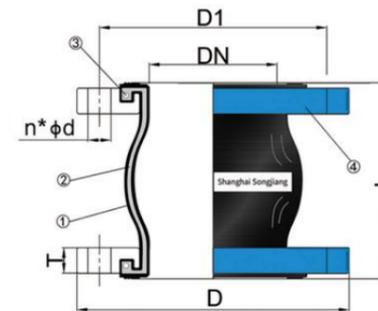
LO Type Hydraulic Rubber expansion joint is mainly used in the hydraulic system of ten-thousand-ton forging presses. It utilizes first-line brand raw materials, 100% virgin rubber, without recycled rubber. A one-to-ten compensation policy provides assurance for heavy industry applications. For detailed information on the raw materials, please refer to page 24

Nominal diameter		Length	Flange OD	Flange Thickness	No. Bolts	Bolt Hole Diameter	Flange PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	T(mm)	n(pcs)	d(mm)	D1(mm)	MM	MM	MM	°	Pcs
25	1	95	115	14	4	14	85	6	9	9	15°	/
32	1-1/4	95	135	15	4	18	100	6	9	9	15°	/
40	1-1/2	95	145	15	4	18	110	6	10	9	15°	/
50	2	105	160	15	4	18	125	7	10	10	15°	/
65	2-1/2	115	180	15	4	18	145	7	13	11	15°	/
80	3	135	195	17	8	18	160	8	15	12	15°	/
100	4	150	215	20	8	18	180	10	19	13	15°	/
125	5	165	245	19	8	18	210	12	19	13	15°	/
150	6	180	280	21	8	23	240	12	20	14	15°	/
200	8	210	335	24	12	23	295	16	25	22	10°	/
250	10	230	405	28	12	26	355	16	25	22	10°	/
300	12	245	460	28	12	26	410	16	25	22	10°	/
350	14	255	520	29	16	26	470	16	25	22	10°	4
400	16	255	565	29	16	30	525	16	25	22	10°	4
450	18	255	640	33	20	30	585	16	25	22	5°	4
500	20	255	705	35	20	33	650	16	25	22	5°	5
600	24	260	840	38	20	36	770	16	25	22	5°	5

Flange Parameters: GB/T 9119-2010(PN16)



RE Type Rubber Expansion Joint for Desulfurization



NO	Name	Material
1	Inner/outer rubber	EPDM/CR
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235

RE Type Desulfurization Rubber Expansion Joint is mainly used at the inlet and outlet of the desulfurization absorption tower slurry circulation pump. It is made from the Japanese Mitsui 4045 raw material, 100% virgin rubber, without recycled rubber. It provides safety assurance for thermal power generation. For detailed information on the raw materials, please refer to page 25.

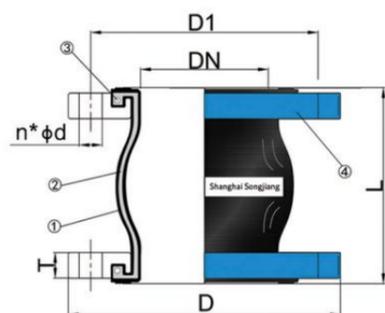
Nominal diameter		Length	Flange OD	Flange thickness	No. of bolts	φ k	PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(MM)	D(MM)	T(MM)	n(MM)	d(MM)	D1(MM)	MM	MM	MM	°	Pcs
25	1	95	115	14	4	14	85	6	9	9	15°	/
32	1-1/4	95	135	15	4	18	100	6	9	9	15°	/
40	1-1/2	95	145	15	4	18	110	6	10	9	15°	/
50	2	105	160	15	4	18	125	7	10	10	15°	/
65	2-1/2	115	180	15	4	18	145	7	13	11	15°	/
80	3	135	195	17	8	18	160	8	15	12	15°	/
100	4	150	215	20	8	18	180	10	19	13	15°	/
125	5	165	245	19	8	18	210	12	19	13	15°	/
150	6	180	280	21	8	23	240	12	20	14	15°	/
200	8	210	335	24	12	23	295	16	25	22	10°	/
250	10	230	405	28	12	26	355	16	25	22	10°	/
300	12	245	460	28	12	26	410	16	25	22	10°	/
350	14	255	520	29	16	26	470	16	25	22	10°	4
400	16	255	565	29	16	30	525	16	25	22	10°	4
450	18	255	640	33	20	30	585	16	25	22	5°	4
500	20	255	705	35	20	33	650	16	25	22	5°	5
600	24	260	840	38	20	36	770	16	25	22	5°	5

Flange parameters: GB/T 9119-2010(PN16)





► CKXT Marine Flexible Single Sphere Rubber Joint ◀



NO	Name	Material
1	Inner/outer rubber	Polar rubber
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Mild steel/stainless steel

Parameters of CKXT Marine Flexible Single Sphere Rubber joint

Nominal diameter	Length	Flange OD	Flange thickness	No. of bolts	φ k	PCD	Outer diameter of rubber sealing	Axial Elongation	Axial compression	Lateral	Angular
MM	Inch	L(mm)	D(mm)	n(mm)	d(mm)	D1(mm)	D2(mm)	MM	MM	MM	°
25	1	95	105	4	13	73	57	6	9	9	15°
32	1-1/4	95	115	6	15	83	64	6	9	9	15°
40	1-1/2	95	125	6	15	93	74	6	10	9	15°
50	2	106	135	6	15	103	84	8	10	11	15°
65	2-1/2	115	155	6	15	123	104	8	10	11	15°
80	3	136	170	8	15	138	118	10	12	13	15°
100	4	151	190	8	15	158	138	12	15	15	15°
125	5	167	215	10	15	183	164	14	18	18	15°
150	6	180	240	12	15	208	190	16	20	20	15°
200	8	190	310	12	17	273	250	16	20	20	15°
250	10	230	380	14	21	336	306	16	22	22	15°

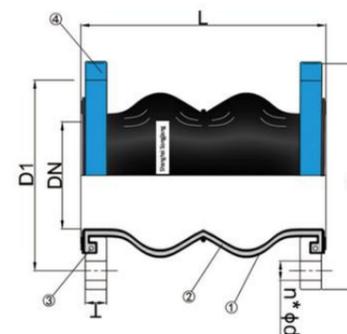
Flange parameters: CB/T 46-2007 1.0MPa

Product Description:

This product consists of an inner rubber layer, reinforced with nylon or polyester fabric, an outer rubber layer, and loose metal flanges. It features high pressure resistance, good elasticity, large displacement capacity, excellent vibration absorption and noise reduction effects, and easy installation. It can be widely used in water supply and drainage systems, HVAC systems, fire compressors, papermaking, pharmaceuticals, marine applications, water pumps, fans, and other pipeline systems.



► CKST Marine Flexible Double Sphere Rubber Joint ◀



NO	Name	Material
1	Inner/outer rubber	Polar rubber
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Mild steel/stainless steel

Parameters Of CKST Marine Flexible Double Sphere Rubber joint

Nominal diameter	Length	Flange OD	Flange thickness	No. of bolts	φ k	PCD	Outer diameter of rubber sealing	Axial Elongation	Axial compression	Lateral	Angular
MM	Inch	L(mm)	D(mm)	n(mm)	d(mm)	D1(mm)	D2(mm)	MM	MM	MM	°
25	1	150	105	4	13	73	57	30	50	45	40°
32	1-1/4	150	115	6	15	83	64	30	50	45	40°
40	1-1/2	175	125	6	15	93	74	30	50	45	40°
50	2	175	135	6	15	103	84	30	50	45	40°
65	2-1/2	175	155	6	15	123	104	30	50	45	40°
80	3	175	170	8	15	138	118	30	50	45	40°
100	4	225	190	8	15	158	138	35	50	40	35°
125	5	225	215	10	15	183	164	35	50	40	35°
150	6	225	240	12	15	208	190	35	50	40	35°
200	8	325	310	12	17	273	250	35	60	35	30°
250	10	325	380	14	21	336	306	35	60	35	30°

Flange parameters: CB/T 46-2007 1.0MPa

Product Introduction:

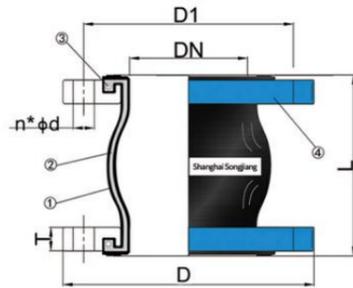
This product consists of an inner rubber layer, reinforced with nylon or polyester fabric, an outer rubber layer, and loose metal flanges. It features high pressure resistance, good elasticity, large displacement capacity, excellent vibration absorption and noise reduction effects, and easy installation. It can be widely used in water supply and drainage systems, HVAC systems, fire compressors, papermaking, pharmaceuticals, marine applications, water pumps, fans, and other pipeline systems.



Real photos Private Pictures Punished



► BL Type Abrasion-resistant Rubber Flexible Joint ◀



NO	Name	Material
1	Inner/outer rubber	SBR/NR
2	Reinforcing cord	Nylon Tire Cord
3	Reinforcing ring	Hard Steel Wire
4	Flange	Q235,304,QT450

BL Type Wear-resistant Rubber Flexible Joint is mainly used in pipeline systems that require wear resistance, such as concrete, silica sand, slurry, abrasives, and pulp. It is primarily made of SBR and NR synthetic rubber, and utilizes Cabot 220 ultra-fine carbon black to achieve high wear resistance (refer to Figure 1). Additionally, it can be used in conjunction with wear-resistant devices. The material of the wear-resistant device can be selected to match the main pipeline material, thereby achieving optimal wear resistance (Fig. 2).

Nominal diameter		Length	Flange OD	Flange thickness	φk	No. of bolts	PCD	Axial Elongation	Axial compression	Lateral	Angular	Control tie rods
MM	Inch	L(mm)	D(mm)	T(mm)	d(mm)	n(mm)	D1(mm)	MM	MM	MM	°	Pcs
50	2	105	160	15	125	4	18	7	10	10	15°	/
65	2-1/2	115	180	16	145	4	18	7	13	11	15°	/
80	3	135	195	18	160	8	18	8	15	12	15°	/
100	4	150	215	20	180	8	18	10	19	13	15°	/
125	5	165	245	20	210	8	18	12	19	13	15°	/
150	6	180	280	22	240	8	23	12	20	14	15°	/
200	8	210	335	24	295	12	23	16	25	22	10°	/
250	10	230	405	26	355	12	26	16	25	22	10°	/
300	12	245	460	28	410	12	26	16	25	22	10°	/
350	14	255	520	30	470	16	26	16	25	22	10°	4
400	16	255	580	32	525	16	30	16	25	22	10°	4
450	18	255	640	34	585	20	30	16	25	22	5°	4
500	20	255	705	36	670	20	33	16	25	22	5°	5
600	24	260	840	38	725/770	20	30/36	16	25	22	5°	5
700	28	260	910	40	840	24	30/36	16	25	22	5°	5
800	32	260	1025	43	950	24	34/39	16	25	22	5°	5
900	36	260	1125	46	1050	28	34/39	16	25	22	5°	6
1000	40	260	1255	48	1160/1170	28	36/42	16	25	22	5°	6
1200	48	260	1485	50	1390	32	39	16	25	22	5°	6

Flange parameters: GB/T 9119-2010



Wear-resistant rubber (figure 1)



Wear-resistant device (figure 2)



Wear-resistant device



► Special Rubber Expansion Joint ◀



Stainless Steel Flange: S30408,S31603



PVC Flange: Aquarium Life Support System



FKM: Mixed Medium



Brass Flange Rubber Expansion Joint



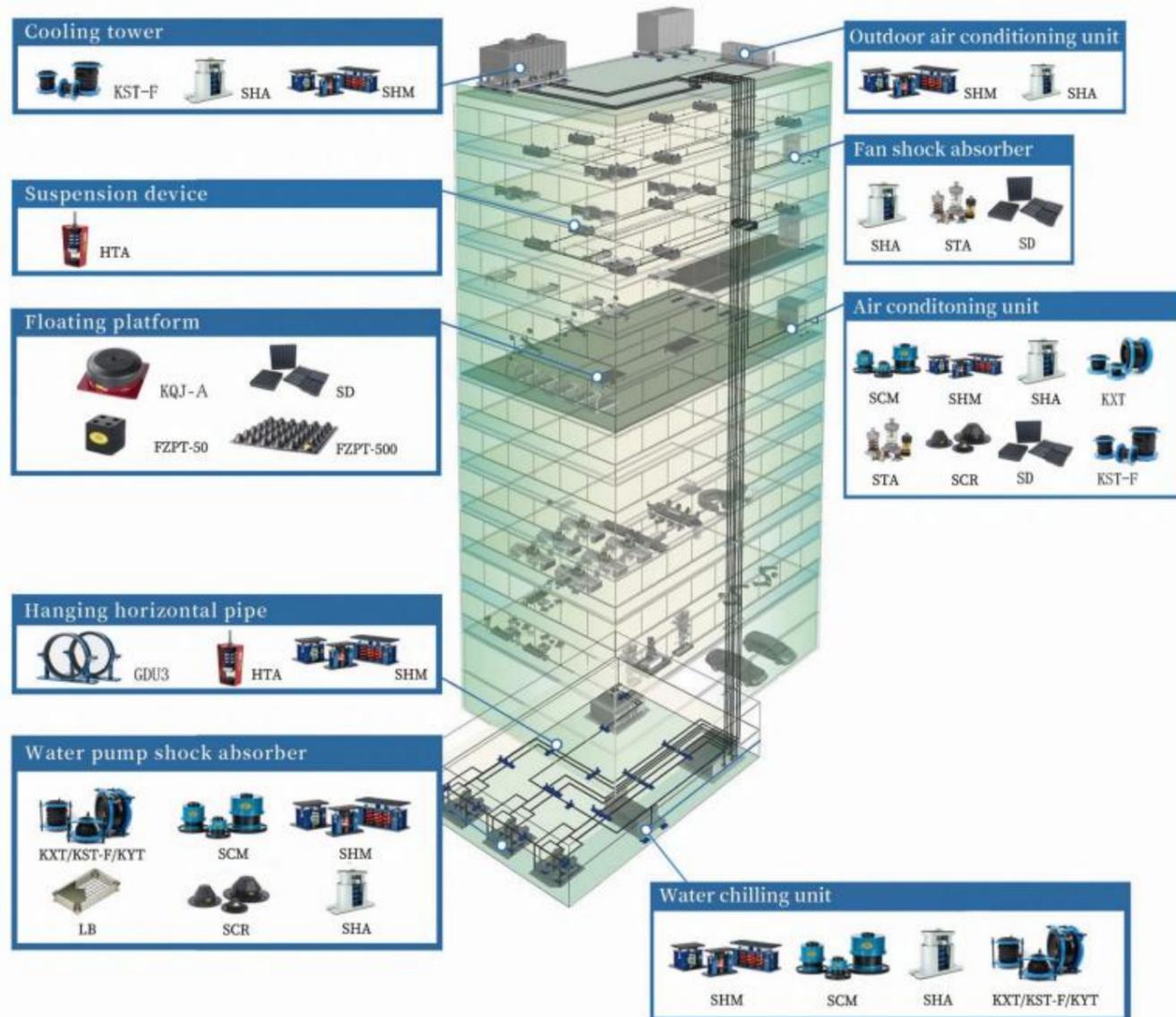
SS Flange Lined PTFE: Strong Acid-base Medium



Q235 Flange Lined PTFE: Aviation Kerosene, Oil Drilling Rig

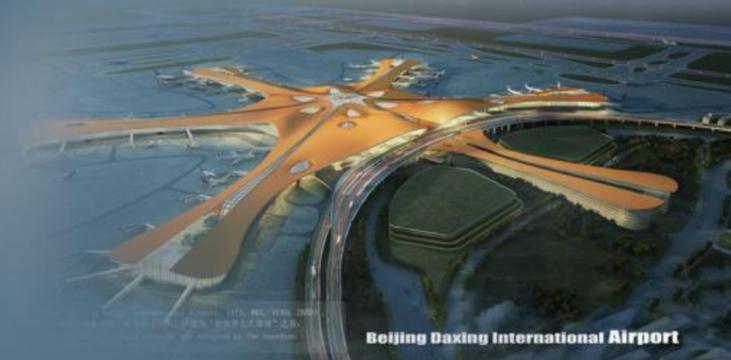


Provide vibration isolation and noise reduction solutions for super high-rise buildings



OFFICIAL PROMISE

AUTOMOBILE SPRING STEEL, SAFE AND ASSURED



Beijing Daxing International Airport



—NOT ONLY PROMISE BUT ALSO ACHIEVE—

<p>QUICK</p> <p>AFTER-SALES SERVICE</p> <p>All service requests are expedited and specially approved for processing, including holidays</p>	<p>FAST</p> <p>TWELVE HOURS</p> <p>If any quality issues arise, we will provide a written response within twelve hours and a resolution plan within twenty-four hours</p>	<p>FREE</p> <p>ISSUE RESOLUTION</p> <p>In case of any inherent quality problems with the product, we will cover the shipping costs and provide free product</p>
<p>QUIET</p> <p>DAMPING EFFECT</p> <p>The maximum achievable damping effect before and after use can reach up to 80%</p>	<p>CHECK</p> <p>SUPPORT DETECTION</p> <p>Supporting customers in conducting effectiveness testing before and after installation</p>	<p>FIVE</p> <p>FIVE-YEAR WARRANTY</p> <p>Guaranteed for up to five years for indoor use</p>



Selection and Effectiveness Calculation of Vibration Isolator

The Selection Process and Basis of Vibration Isolator:

Technical Parameters:

- Operating weight W of Vibration isolator's bearing device
(including total weight of device, weight of inertia base and safety factor)
- Vibration isolation support points N , with even number is good, the lowest horizontal pump is not less than 6, the vertical pump is generally 4
- Device speed n
- Vibration isolation damping ratio ξ
- Vibration isolation stiffness k

Calculation Basis

- Select vibration isolation model
- (a) Bearing capacity of single vibration isolator $P = \frac{W}{N}$ bearing capacity of single vibration isolator $P \geq P_2$, and the maximum shall not be greater than P_3 .

· Calculation of damping efficiency

(a) Equipment interference frequency $f = \frac{n}{60}$

(b) Natural frequency of vibration isolator $f_0 = \frac{1}{2\pi} \sqrt{\frac{K \times 980}{P}}$

(c) $T = (1-\eta) \times 100\% = \left(1 - \frac{1 + \left(2\xi \frac{f}{f_0}\right)^2}{\sqrt{\left[1 - \left(\frac{f}{f_0}\right)^2\right]^2 + \left(2\xi \frac{f}{f_0}\right)^2}} \right) \times 100\%$ Damping efficiency

If you need our company's assistance in selecting isolators or providing calculations for vibration isolation effects, please contact the Technical Department of Shanghai Songjiang Shock Absorber Group. TEL: +86 21-33666665



Analysis of Water Pump Vibration Causes

With the trend of urban construction towards high-rise buildings, there is an increasing need for pressurized water supply for daily life. Water pumps are widely used in air conditioning chilled water and cooling water circulation systems. However, the noise and vibration issues they bring about pose challenges for environmental workers in terms of control and protection. There are multiple reasons that contribute to the vibration of pump units and pump house buildings, with some factors interconnected and interacting with each other. In summary, the main causes can be categorized into the following four aspects:

Electrical Factors:

The motor is the main equipment of the pump unit. Imbalance of magnetic forces within the motor and discrepancies in other electrical systems often lead to vibration and noise.

Mechanical Factors:

Imbalance of rotating components of the motor and water pump, poor quality manufacturing, inadequate installation, asymmetric alignment of the unit's axis, excessive shaft deflection beyond permissible limits, poor mechanical strength and rigidity of components, wear and damage of bearings and sealing parts, as well as resonance caused by the occurrence of the critical rotational speed of the pump coinciding with the natural frequency of the unit, all contribute to strong vibration and noise.

Hydraulic Factors:

Uneven flow velocity and pressure distribution at the pump inlet, pressure pulsation of the working fluid at the pump inlet and outlet, fluid recirculation, deviation flow, non-rated operating conditions, and water turbidity caused by various reasons are common causes of pump unit vibration.



The dynamic transitional processes during pump startup and shutdown, valve opening and closing, changes in operating conditions, and emergency shutdown due to accidents often result in rapid changes in pressure within the water supply pipeline and water hammer effects, which frequently lead to vibration in the pump house and unit.

Hydraulic and Other Factors:

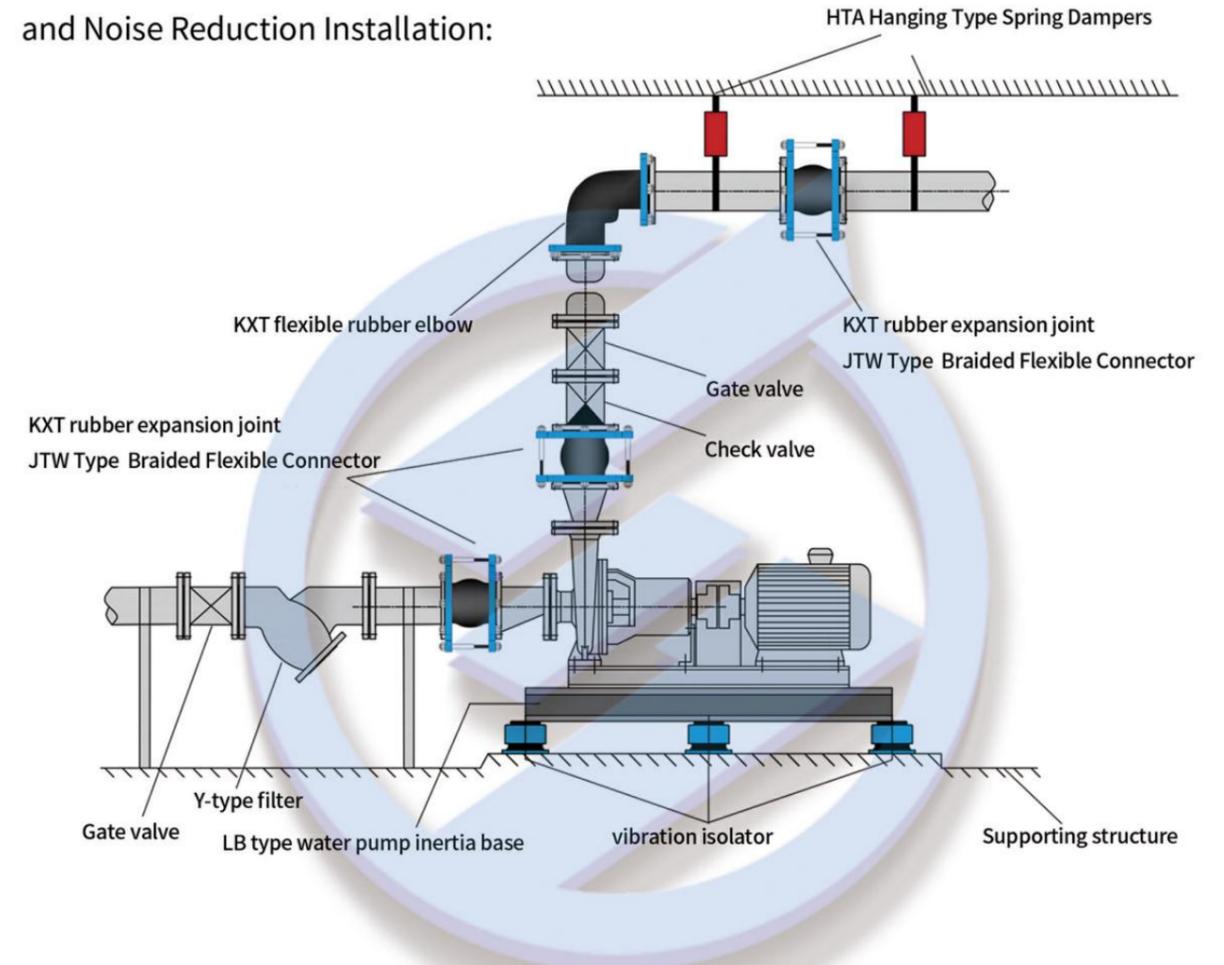
Unreasonable design of the pump unit's water intake flow path or its incompatibility with the unit, improper submergence depth of the water pump, as well as unreasonable startup and shutdown sequences of the unit, all contribute to worsened intake conditions, vortex formation, and the triggering or exacerbation of air entrainment and vibration in the unit and pump house. In the case of units that disrupt siphon vacuum cutoff during start-up, if there is difficulty in carrying air during the peak segment, it results in excessively long siphon time. Units that utilize check valve cutoff experience the issue of unreasonable check valve design, resulting in constant impact on the check valve seat. Uneven settlement of the foundation supporting the water pump and motor, or poor rigidity of the foundation, can also cause vibration in the unit.

In conclusion, there are numerous causes for water pump vibration, many of which are almost unavoidable. In fact, both the design and manufacturing processes of water pumps, as well as hydraulic design considerations, cannot completely eliminate pump vibration. Therefore, it is crucial to employ methods such as installing inertia bases and spring isolators or rubber isolators at the bottom of the water pump to achieve vibration isolation.



Methods for Water Pump Vibration Control:

Diagram for Vibration Damping and Noise Reduction Installation:



Installation of Spring Vibration Isolators

Spring vibration isolators are commonly used for pump isolation, and they offer the following advantages:

Large static deflection and low natural frequency, providing excellent low-frequency vibration isolation performance.

Resistant to corrosion from oil, water, and other substances, and their performance remains unaffected by temperature changes.

No aging or creep deformation occurs, ensuring long-term performance.



The commonly used spring vibration isolators for water pumps have a static deflection (rated compression) of typically 25mm. This deflection can be applied for pump isolation at speeds ranging from 850 to 2900rpm.

For speeds between 600 and 850rpm, it is recommended to use isolators with a deflection of 50mm. For pumps operating bellow 600rpm, it is advised to use isolators with a deflection greater than 50mm. For speeds exceeding 2900rpm, rubber vibration isolators are recommended.

Shanghai Songjiang Shock Absorber Group Co., Ltd. produces spring vibration isolators that can meet the isolation requirements of water pumps with various speeds and power levels.

◆ When the pump speed is greater than 650rpm or the motor power of the pump is less than or equal to 45KW, it is recommended to choose the following spring vibration isolators:



SCM Type Spring Isolator

◆ When the pump speed is less than or equal to 650rpm or the motor power of the pump is less than 45KW, it is recommended to choose the following spring vibration isolators:



SHM Type Adjustable Spring Isolator



SCR /STR Low-Frequency Rubber Vibration Isolators

SCR/STR low-frequency rubber vibration isolators are recommended for water pumps. These isolators are made of natural rubber and are formed by a special formulation that undergoes high-temperature vulcanization together with internal metal components. They possess excellent elasticity, low-frequency characteristics, and a long service life. Shanghai SongJiang Shock Absorber Group Co., Ltd. suggests using SCR low-frequency rubber vibration isolators for horizontal water pumps, while vertical water pumps can utilize STR low-frequency rubber vibration isolators.



SCR Type Low-Frequency Rubber Vibration Isolator



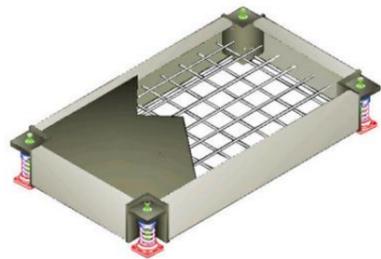
STR Type Low-Frequency Rubber Vibration Isolator



Installation of Pump Inertia Base

To reduce the amplitude of pump vibrations and effectively control the transmission of vibrations to the pipeline, when installing spring vibration isolators or rubber vibration isolators for the pump, an inertia base must be installed below the pump base. This helps increase the mass and improve the stability of the vibration isolators. The weight of the inertia base is typically 1.5 to 3 times the weight of the pump. The base frame is constructed with channel steel and filled with concrete, with bi-directional 150x150 steel reinforcement. The length and width dimensions of the base are generally based on the dimensions of the pump base, with an additional 200mm margin in the length direction and 100mm margin in the width direction.

Shanghai Songjiang Shock Absorber Group Co., Ltd. can provide free detailed design of pump inertia base CAD drawings based on customer-provided pump blueprints and offer customized inertia base products.



LB-B water pump inertia base

Effectiveness of Pump Vibration Control Measures

Depending on the type of vibration isolation method employed for the pump, the installation of spring vibration isolators can achieve a vibration reduction effect of over 95-99%, while the installation of rubber vibration isolators can achieve a vibration reduction effect of over 80%. This effectively addresses the troubles caused by pump vibrations in both daily life and industrial production.



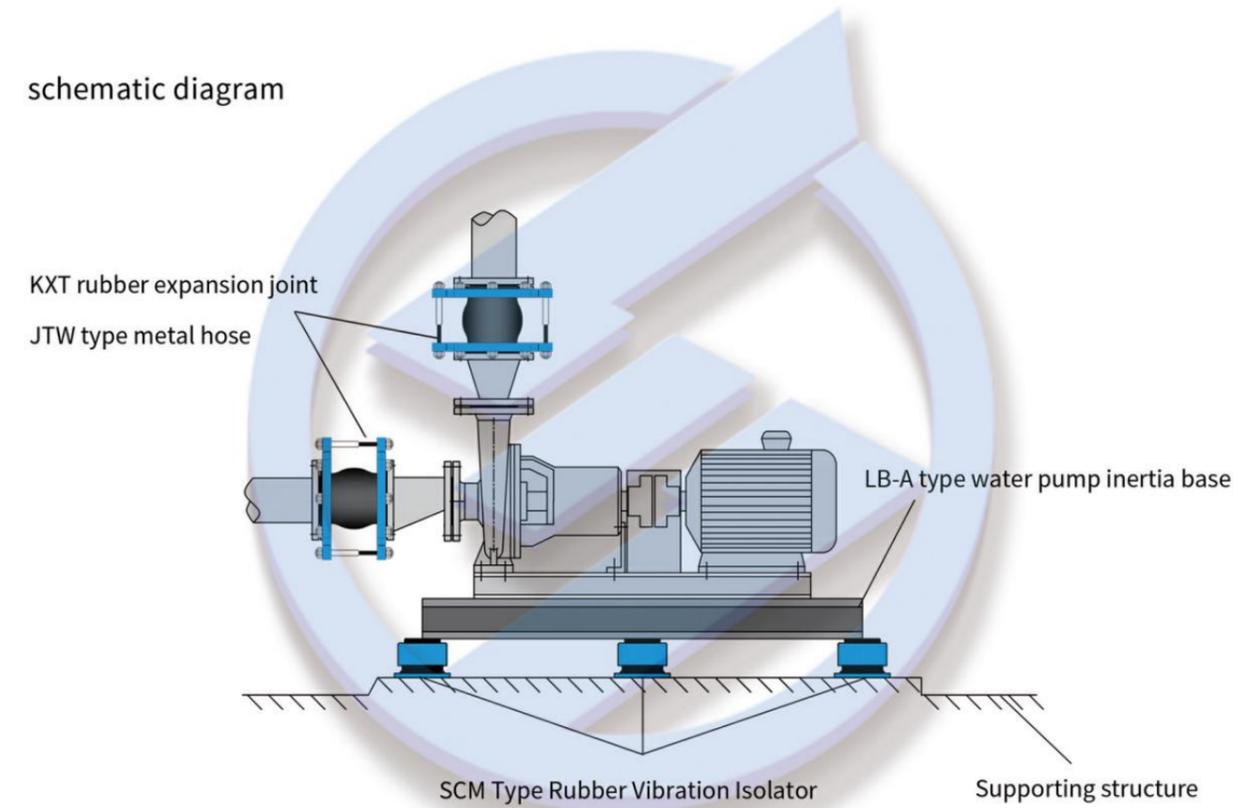
Pump Vibration Isolator Installation Methods

Vibration Isolation for Various Types of Pumps

Conventional Vibration Isolation Method:

Overview: In this method, the pump is installed on a reinforced concrete inertia base or a steel inertia base (with a thickness generally $\geq 100\text{mm}$, depending on the size of the pump), and SCM type spring vibration isolators are used. Typically, there are six or more isolators per pump (specific quantity depends on the length of the various bases and the weight of the isolation system). The isolators are generally not fixed in the vertical direction. After installation, the position of the intermediate isolator is adjusted to ensure that the height and load distribution among the isolators are consistent. KXT type flexible rubber joints or JTW type stainless steel metal hoses should be installed on the pipelines after installing SCM type spring vibration isolators for vibration reduction treatment.

schematic diagram

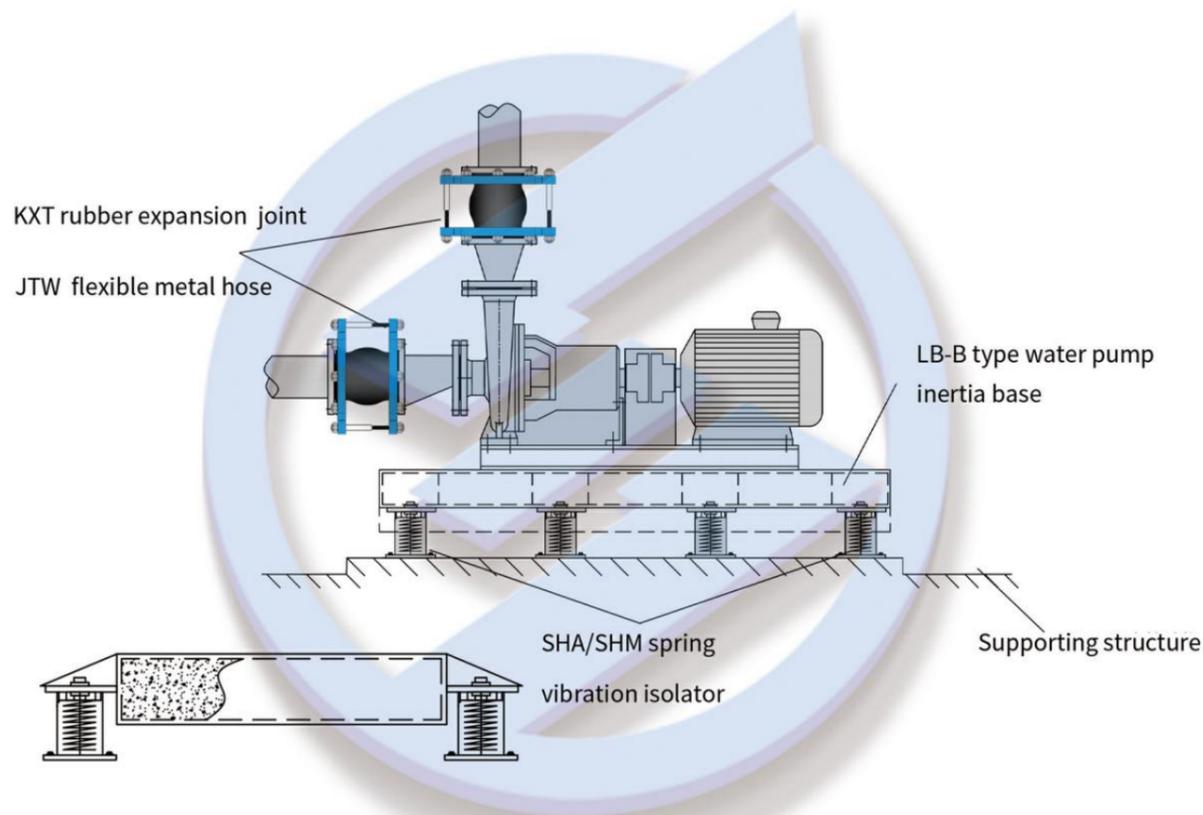




Lateral Floating Support Damping Method

Overview: The water pump is installed on top of a hybrid inertia base, which typically weighs about 1.5 to 2 times the weight of the pump. Side support brackets are provided on both sides of the base in the length direction, and SHA type or SHM type spring dampers are selected. The distance between the base bottom surface and the ground is generally about 50mm. This damping method lowers the center of gravity of the equipment, has a large counterweight, and exhibits small table oscillations, resulting in good stability of the damping equipment (which is commonly used in engineering design and application nowadays). The design and manufacture of the damping springs employ large diameter, medium diameter, and small aspect ratio springs, which have the advantages of low stress, high fatigue resistance, and long service life.

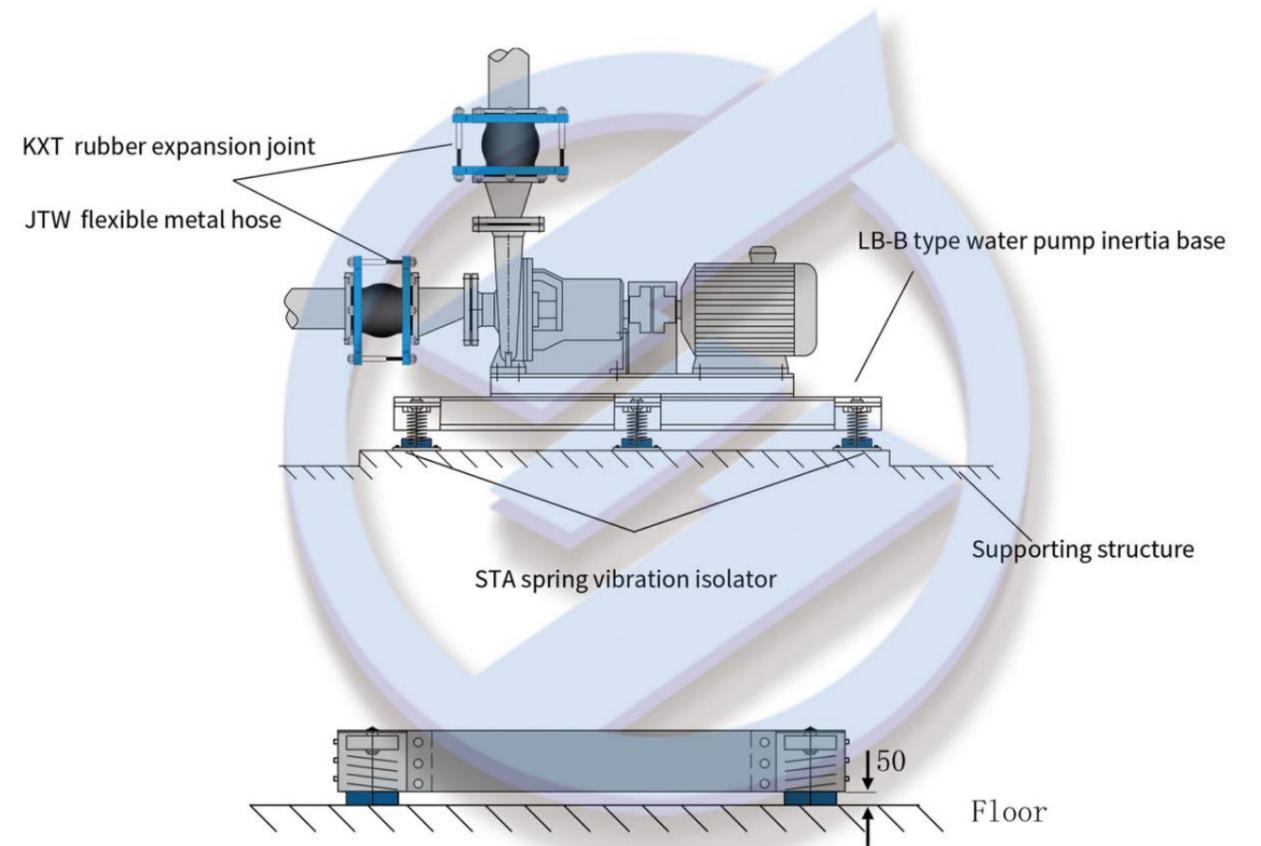
Note: The translation provided above is a direct translation of the text you provided. However, please note that some technical terms and phrases may require further context or clarification for accurate translation.



Embedded Damping Method

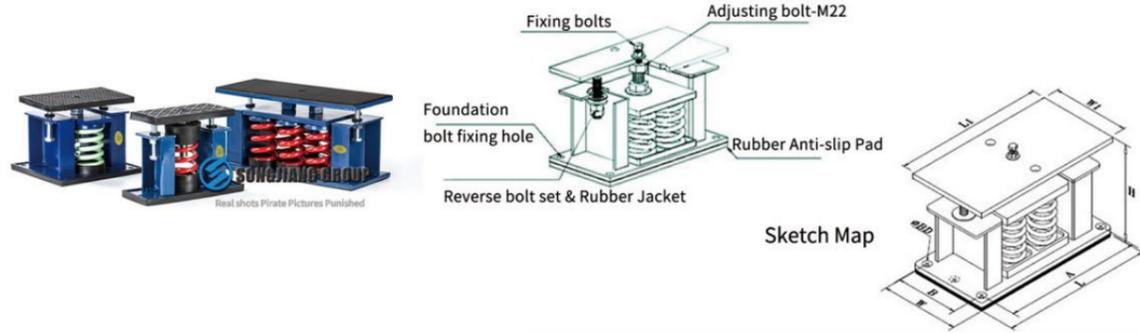
Overview: Spring dampers are installed inside the inertia base of the water pump. The weight of the inertia base is approximately 1.5 to 2 times the weight of the pump. The base has internal locations for installing the dampers, which are embedded within the base. The distance between the base bottom surface and the ground is generally around 50mm. This method provides a large counterweight for the base, resulting in minimal table oscillations, good stability of the damping equipment, and also allows for space-saving in equipment layers. The installation of the equipment is neat and aesthetically pleasing. The commonly used damper for this method is the STA-type spring damper.

Installation Diagram:





SHM Type Adjustable Spring Vibration Isolator



1. The springs are designed with low-frequency values and undergo a spray coating treatment, ensuring excellent weather resistance and effective vibration isolation.

2. Both the top and bottom are equipped with anti-slip, wear-resistant rubber and fixed bolts, significantly enhancing safety performance.

3. The installation is simple, allowing for easy adjustment of the level and height according to specific requirements.

4. It can effectively isolate vibrations from large power equipment such as chillers, cooling towers, heat pump units, and generators, thereby protecting and extending their service life.

Note: -1 refers to a combination of one set of springs, -2 refers to a combination of two sets of springs, -4 refers to a combination of four sets of springs, -6 refers to a combination of six sets of springs, -9 refers to a combination of nine sets of springs.

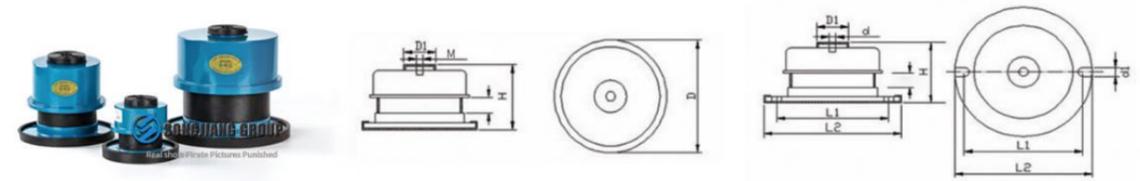
Table with 10 columns: Model, L, W, L1, W1, A, B, H, Fixing bolts, φBD. Rows include SHM-1, SHM-2, SHM-4, SHM-6, SHM-9.

Table with 4 columns: Model / Specification, Load range (kg), Vertical stiffness (kg/mm), Suitable deflection (mm). Lists various SHM models and their specifications.

We can customize products with larger load capacities and greater deflection according to the specific needs of our customers. Deflection options for customization include 50mm, 75mm, 100mm, 125mm, and 150mm



SCM Type Spring Vibration Isolator



Product Features:

The springs are designed with natural frequency values and undergo electroplating and baking paint treatment. The springs are heat-treated and stress-relieved, ensuring long service life. The main body is treated with rust protection.

The bottom is equipped with anti-slip feature. Simple installation.

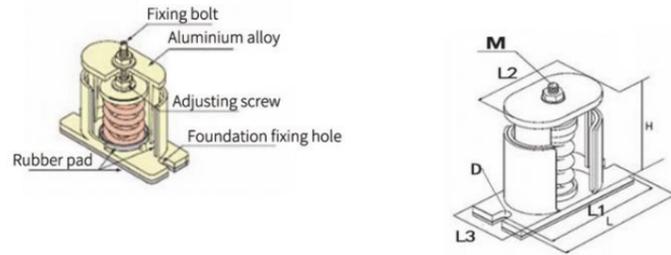
It can eliminate vibration in mechanical mechanisms and protect and prolong the lifespan of machinery. Load deflection: 25mm.

Performance Parameter Table of SCM Type Spring Vibration Isolator:

Table with 12 columns: Model, Predetermined load (KG), Optimum load (KG), Ultimate load (KG), Vertical stiffness (kg/mm), H, L1, L2, D, D1, d1, M. Lists various SCM models and their performance parameters.



▶ SHA Low-Frequency Adjustable Spring Vibration Isolator ◀



SHA Type Low-Frequency Adjustable Spring Vibration Isolator Features:

- 1.The main body is made of aluminum alloy.
- 2.Special structural design allows for height adjustment according to specific needs.
- 3.Lightweight and sturdy design, easy installation; suitable for various types of machinery for vibration isolation.
- 4.The springs are heat-treated and undergo ED rust protection, baking paint, or spray coating processes.
- 5.With a load deflection of 25mm, it can effectively eliminate mechanical vibration.

The SHA Type Low-Frequency Adjustable Spring Vibration Isolator features easy installation. There are screws and screw holes at the top and bottom of the isolator. The upper end of the spring has a height-adjustable nut, allowing for free adjustment of the height according to installation needs. The isolator is equipped with lateral rubber damping at both ends.



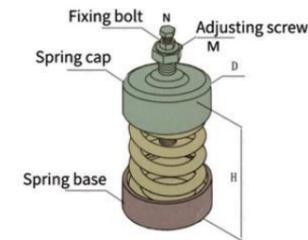
Performance Parameter Table of SHA Type Spring Vibration Isolator:

Model	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	H (mm)	D (mm)	M (mm)
SHA-S	153	123	105	71	120	12	12
SHA-M	178	135	117	76	135	12	14
SHA-L	209	175	152	88	160	16	16

Model	Bearing range KG	Vertical stiffness kg/cm=N/mm	Applicable deflection	Spring parameters (mm)				
				Wire diameter	External longitude	Height	Number of turns	Color
SHA-S-20	15~30	8	25	4.2	42	73	7.25	black
SHA-S-40	30~50	16	25	5	42	73	7.25	black
SHA-S-60	50~70	24	25	5.3	42	73	6.5	black
SHA-S-80	70~90	32	25	5.7	42	73	7.25	black
SHA-S-100	90~120	40	25	5.7	42	73	6.25	black
SHA-S-150	120~180	60	25	6.1	42	73	6	black
SHA-S-200	180~230	80	25	6.5	42	73	6.2	black
SHA-M-250	230~280	100	25	8.3	54	88	6	black
SHA-M-300	280~320	120	25	8.5	54	88	6	black
SHA-M-400	320~450	160	25	9.1	54	88	5.9	black
SHA-M-500	450~550	200	25	9.6	54	88	6	black
SHA-L-600	550~650	240	25	11.3	63	105	6	black
SHA-L-700	650~750	280	25	11.5	63	105	6	black
SHA-L-800	750~850	320	25	12	63	105	6	black
SHA-L-1000	900~1100	400	25	12.6	63	106	6	black



▶ STA Type Spring Vibration Isolator ◀



The dimension table of STA spring vibration isolator

Model	D	H	N	M
STA	83	165	12	20

Product Introduction:

- 1.The spring is designed with low-frequency values and undergoes powder coating treatment, providing excellent weather resistance and effective vibration isolation.
- 2.The spring base is made of nitrile rubber, and the spring cap is wrapped with rubber, extending its service life.
- 3.It is easy to install and can be adjusted in height and level according to actual needs.
- 4.It can be used with pedestal design and is suitable for various types of machinery equipment.
- 5.Suitable for various applications such as pumps, fans, air handling units, and pipelines.



The dimensions of STA spring vibration isolator

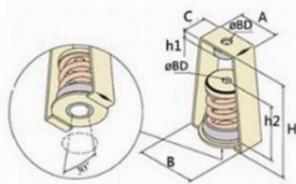
Model	Optimal load	Vertical stiffness	Frequency range
	KG	kg/mm	HZ
STA-100	100	4	2.3-4.2
STA-200	200	8	2.3-4.5
STA-300	300	12	2.6-4.5
STA-400	400	16	2.7-4.5
STA-500	500	20	2.8-4.7
STA-600	600	24	3.1-4.5
STA-700	700	28	3.1-4.5
STA-800	800	32	3.0-4.5
STA-1000	1000	40	2.9-4.3
STA-1200	1200	50	2.9-4.3



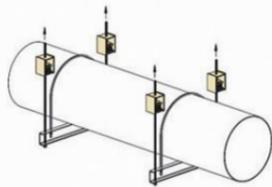
▶ HTA Type Suspended Spring Vibration Isolator ◀

The HTA isolator is manufactured through stamping processes and includes rubber components. It features electrostatic powder coating for enhanced appearance and undergoes strict quality control, including salt spray testing. CR rubber elements are added at both ends to further isolate vibration and noise. It provides a vibration reduction effect of 95% to 100%.

Applications: Suitable for vibration isolation of suspended equipment such as fans, air handling units, ducts, water pipes, and ceilings.



Model	Overall dimension(mm)						
	A	B	C	h1	h2	H	ΦBD
HTA-A	40	55	25	6	55	80	8~10
HTA-B	40	57	30	6	75	110	8~10
HTA-C	72	93	42	17	100	150	12~14
HTA-D	86	120	50	17	140	200	12~16

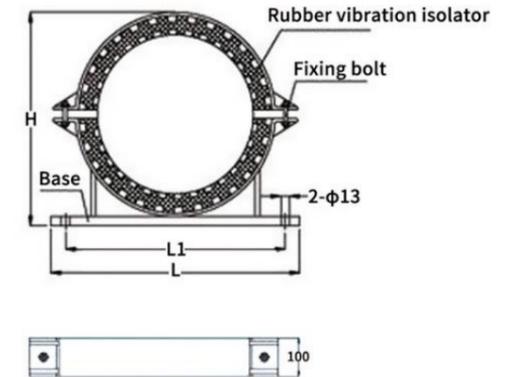


Model	Load range	Elastic coefficient	Applicable deflection
	KG	kg/mm	MM
HTA-05-A	1~10	0.2	25
HTA-10-A	5~10	0.4	25
HTA-15-A	10~15	0.6	25
HTA-25-A	15~25	0.8	25
HTA-020-B	10~20	0.8	25
HTA-030-B	20~30	1.2	25
HTA-050-B	30~50	2	25
HTA-070-C	50~80	2.8	25
HTA-090-C	80~100	3.6	25
HTA-120-C	100~130	4.8	25
HTA-150-C	130~150	6	25
HTA-180-C	150~220	7.2	25
HTA-250-C	220~280	10	25
HTA-300-C	280~320	12	25
HTA-050-D	45~55	2.1	25
HTA-100-D	100~130	4.3	25
HTA-150-D	130~160	5.3	25
HTA-200-D	160~210	7.1	25
HTA-250-D	210~260	8.7	25
HTA-300-D	260~320	10.8	25
HTA-350-D	320~360	12.1	25
HTA-400-D	360~430	14.2	25
HTA-450-D	430~470	15.8	25



▶ GDU3 Type Pipe Clamp Rubber Vibration Isolator ◀

Photo Of GDU3 Type Pipe Clamp Rubber Vibration Isolator:



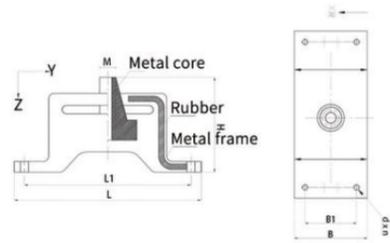
Parameter Of GDU3 Type Pipe Clamp Rubber Vibration Isolator:

Specification	L (mm)	L1 (mm)	H (mm)
GDU3-50	200	150	108
GDU3-65	220	170	128
GDU3-80	230	180	141
GDU3-100	250	200	160
GDU3-125	275	225	186
GDU3-150	325	275	236
GDU3-200	385	335	296
GDU3-250	440	390	350
GDU3-300	500	450	409
GDU3-350	550	500	461
GDU3-400	600	550	510
GDU3-450	650	600	564
GDU3-500	700	650	614
GDU3-600	800	750	714
GDU3-700	900	850	810
GDU3-800	1000	950	910
GDU3-900	1100	1050	1010
GDU3-1000	1200	1150	1110





► BE Type Rubber Vibration Isolator ◀



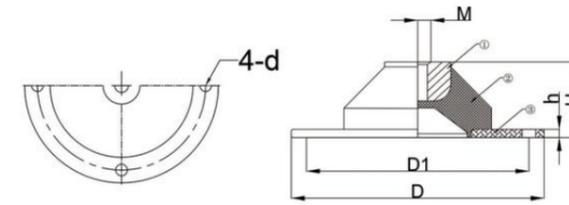
Model	Outline and connection dimension (mm)							Rated load (N)		Dynamic stiffness N/mm				Deformation(mm)	Frequency	Damping ratio		
	M	H	L1	B	B1	d	n	Z-compression	Z-strech	Y	X	Z-compression	Z-strech	Y	X	Z	Hz	C/C
BE-10	M8	40	53	36	/	7	2	100	70	120	50	40	44	96	37	3.5~5.0	10±1.5	0.07~0.11
BE-15	M8	40	53	36	/	7	2	150	100	170	70	60	67	145	55	3.5~5.0	10±1.5	0.07~0.11
BE-25	M8	40	53	40	/	7	2	250	170	300	150	100	110	241	92	3.5~5.0	10±1.5	0.07~0.11
BE-40	M10	46	68	55	/	9	2	400	280	450	200	161	178	387	148	3.5~5.0	10±1.5	0.07~0.11
BE-60	M12	50	80	65	/	9	2	600	400	700	300	242	266	580	222	3.5~5.0	10±1.5	0.07~0.11
BE-85	M14	60	99	70	/	11	2	850	600	1000	400	342	377	822	315	3.5~5.0	10±1.5	0.07~0.11
BE-120	M16	60	111	85	/	13	2	1200	800	1350	600	483	533	1280	445	3.5~5.0	10±1.5	0.07~0.11
BE-160	M18	62	114	90	/	13	2	1600	1100	1800	800	644	710	1570	560	3.5~5.0	10±1.5	0.07~0.11
BE-220	M22	62	118	100	/	15	2	2200	1500	2400	1100	880	977	2268	816	3.5~5.0	10±1.5	0.07~0.11
BE-300	M24	70	124	105	60	15	4	3000	2000	3300	1500	1210	1332	3093	1110	3.5~5.0	10±1.5	0.07~0.11
BE-400	M27	69	139	114	65	15	4	4000	2800	4300	1800	1610	1776	4120	1480	3.5~5.0	10±1.5	0.07~0.11

Main Features And Uses:

The BE isolator is a metal and rubber composite that fully protects the metal surface from corrosion. It is resistant to oil, seawater, salt spray, and sunlight, making it suitable for various environments, including land-based and marine applications. It meets US military specifications. The BE isolator has a low natural frequency, appropriate damping ratio, and higher lateral stiffness than vertical stiffness. It can be installed horizontally, inverted, or side-mounted. In horizontal placement, it offers good lateral stability. It provides automatic limiting protection against significant impacts and effectively suppresses resonance peaks. It quickly dissipates self-resonance caused by transient shock response or excessive working conditions, ensuring equipment stability without vibration. The isolator demonstrates significant vibration isolation effects across a wide range of frequencies. It is suitable for land-based and marine equipment like diesel engines, fans, pumps, air compressors, air conditioning units, precision instruments, and small-to-medium-sized machinery. It delivers excellent vibration reduction for machinery with horizontal disturbances.



► SCR Type Rubber Vibration Isolator ◀



NO	Name	Material
1	Core	Steel
2	Rubber	Natural Rubber
3	Base	Steel



Product Features and Applications:

SCR Type Low-Frequency Rubber Vibration Isolator has a natural frequency of 5 to 8 Hz within the specified load range,

A damping ratio of ≥ 0.07 , and deformation with a deviation of less than 20%.

It is suitable for vibration reduction in water pumps, fans, and compressors with a speed of 600 rpm, and particularly suitable for vibration reduction in marine equipment.

It is applicable for environments resistant to oil, seawater, sunlight, with a temperature range of -15 to +60°C.

Model	Rated Load (kg)	Static Deformation (mm)	Frequency (Hz)	Damping Ratio (C/Cc)	M(mm)	D(mm)	D1(mm)	H(mm)	h(mm)	d(mm)
SCR-30	15~30	5~12	5~7.5	>0.7	12	150	120	55	9	12
SCR-50	30~50	5~12	5~7.5	>0.7	12	150	120	55	9	12
SCR-85	50~85	5~12	5~7.5	>0.7	14	200	170	75	9	12
SCR-120	85~120	5~12	5~7.5	>0.7	14	200	170	75	9	12
SCR-150	110~150	5~12	5~7.5	>0.7	16	200	170	85	9	14
SCR-210	130~210	5~12	5~7.5	>0.7	16	200	170	85	9	14
SCR-330	210~330	5~12	5~7.5	>0.7	18	200	170	90	9	16
SCR-530	330~530	5~15	5~7.5	>0.7	18	200	170	90	9	16
SCR-650	530~650	5~15	5~7.5	>0.7	20	200	170	95	9	16
SCR-850	650~850	5~15	5~7.5	>0.7	20	200	170	95	9	16
SCR-1000	850~1000	5~15	5~7.5	>0.7	20	200	170	95	9	16
SCR-2000	1250~2000	5~18	5~7.5	>0.7	22	300	259	115	10	18
SCR-2500	1800~2500	5~18	5~7.5	>0.7	22	300	259	115	10	18
SCR-3000	2500~3000	5~18	5~7.5	>0.7	22	300	259	115	10	18



▶ STR Type Rubber Vibration Isolator ◀

Structure Diagram Of STR Type Rubber Vibration Isolator:



STR Type Rubber Vibration Isolator Parameter Table:

Model	L (mm)	W (mm)	H (mm)	CS (mm)	A (mm)	B (mm)	Load	
							Min	Max
STR-100	95	53	48	M10	77	10	50	150
STR-300	127	77	70	M12	101	14	150	450
STR-600	180	118	70	M16	149	14	450	1000

Product Features and Applications:

The STR Type Rubber Vibration Isolator has a wide load range, making it suitable for various types of machinery to effectively isolate vibration and noise.

It provides excellent anti-vibration efficiency and is made of special rubber material, ensuring excellent weather resistance and long service life.

The structure is sturdy, and installation is easy.

It is suitable for various types of mechanical equipment, including wind turbines, vibrators, transformers, generators, HVAC equipment, electronic equipment, control panels, air compressors, and other mechanical equipment.



▶ STR Type Stable Rubber Vibration Isolator ◀

Official Commitment:

Rubber Main Material: NR/NBR/CR Composite Material

Service Life: Over 5 years (under non-oil conditions)

5-Year Warranty: Indoor use is eligible for a maximum 5-year warranty

Vibration Reduction Effect: Comparative tests before and after usage can achieve up to 70% reduction

Support for Testing: Support for effectiveness testing before and after installation (third-party)

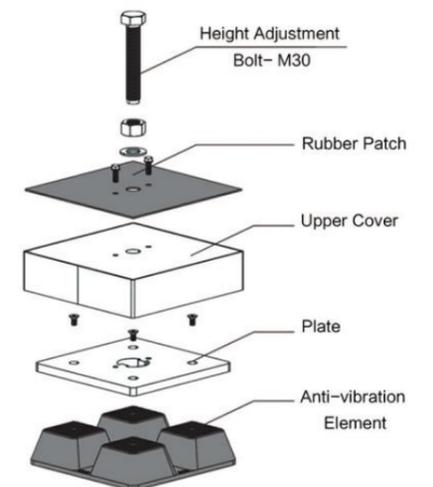
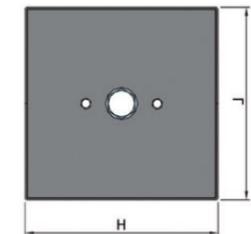
Problem Compensation: In case of quality issues, a full refund will be provided, and the cost of dismantling, installation, and transportation will be borne.

Features:

1. Effectively isolates equipment impact vibration with excellent vibration reduction effect.
2. Reduces the movement of machinery equipment after installation, maintaining stability.
3. Adjustable height to keep the equipment level.
4. Simple and convenient installation without the need for an inertia base.
5. Made with special rubber material, ensuring durability and robustness.
6. Can achieve over 80% vibration reduction even for equipment placed on higher floors.
7. Efficiently reduces vibration for equipment with high vibration reduction

Main Applications:

1. 35-300-ton C-type presses.
2. Crank, non-crank, hydraulic, and pneumatic presses.
3. Shearing machines, folding machines, large cutting machines.
4. Equipment used in high-rise buildings.
5. Slow-speed presses, forging presses, bending machines; equipment weighing over 10 tons, requiring high stability without any swinging motion can opt for this type of vibration isolator.



Model	Lenght (MM)	Width (MM)	High (MM)	Load (KG)
STRM-2000	220	220	100	2000
STRM-6000	350	350	110	6000



FZPT-500 Type Floating Construction Platform Rubber Isolation Pad

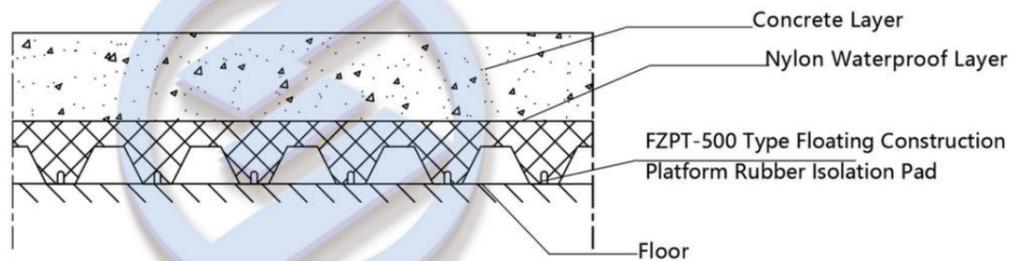
FZPT-500 Type Floating Construction Platform Rubber Isolation Pad Structure Diagram:



Product introduction:

The FZPT-500 Isolation Pad is primarily used for vibration and sound isolation of floating structures and power equipment. It effectively minimizes and isolates the transmission of vibration and noise from structural components of buildings. The product is mainly made of natural and synthetic rubber, with an intermediate reinforced layer of nylon skeleton, and is molded through high-temperature vulcanization. The lower part of the pad features holes in the protruding platform, providing certain air isolation and damping effects. It offers advantages such as a low natural frequency and excellent sound isolation performance.

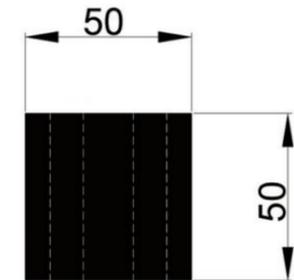
The product dimensions are 500*500mm (0.25m2/piece) with a thickness of 50mm. It can be conveniently and quickly installed in large areas by combining multiple pieces. It can also be cut into various sizes according to project requirements. The product is acid-resistant, puncture-resistant, oil-resistant, corrosion-resistant, mold-resistant, moisture-resistant, aging-resistant, and flame-retardant. It has a temperature resistance range of -20 to 90°C and a damping ratio greater than 0.08.



Model	Load KG	Deformation MM	Frequency Hz	Sound Insulation dBA	Length MM	Width MM	Product Thickness MM
FZPT-500	200~1500	3~10	7.5~13	28~35	500	500	50



FZPT-50 Type Floating Construction Platform Rubber Isolation Pad

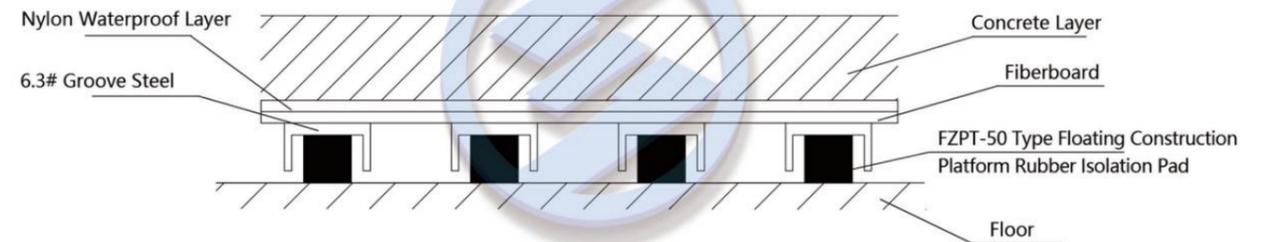


*There are 4 penetrating holes in the middle of the rubber block to increase the deformability of the product

The FZPT-50 Isolation Pad is made of natural synthetic rubber with a reinforced layer of nylon in the middle, which is formed through high-temperature vulcanization and molding. The product is resistant to acid, alkali, oil, corrosion, mold, moisture, aging, and has a temperature resistance range of -20°C to 80°C. It has a damping ratio greater than 0.08. It provides excellent vibration isolation and sound insulation performance.

This product has gained the trust and praise of users from various industries. It is widely used in the following high-vibration isolation demanding scenarios:

- Floating construction structures for sound isolation in broadcasting, film and television, recording, broadcasting, and studio halls.
- Floor sound insulation in office buildings, residential buildings, hospitals, school laboratories, and other buildings.
- Floor sound insulation in dance halls, band performances, martial arts halls, and other sports and entertainment venues.
- Vibration isolation and sound insulation in equipment rooms of various types.



Model	Load kg/m³	Deformation MM	Frequency Hz	Length MM	Width MM	Height MM	Sound Insulation dBA
FZPT-50	50~190	3~10	8~12	50	50	50	26~35



SD Type Rubber Vibration Pad

Features and Applications:

The SD vibration pad is made of high-quality rubber material and features a circular four-void pattern and shear corrugated shape. It primarily functions under shear force, offering a low natural frequency, simple structure, and easy installation. To enhance vibration reduction effectiveness, multiple layers of vibration pads can be stacked in series. It is suitable for passive vibration isolation in mechanical equipment such as water pumps, fans, compressors, chillers, and diesel generator sets.



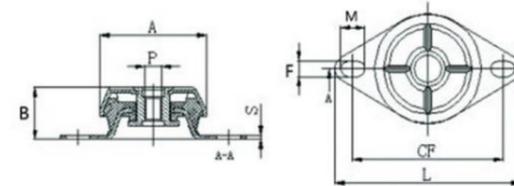
Product Dimensions: 170mm*70mm*20mm, 150mm*150mm*20mm, 120mm*120mm*20mm, 50mm*50mm*20mm

Vibration Damping Pad			Combination Diagram	Vertical Load Range KN	Vertical Load Range MM	Vertical Natural Frequency Hz	Steel Plate	
Model	No. of Layers	No. of Blocks					No. of Blocks	Size(mm)
SD-41-4				1.28~3.44	2.5~5.0	12.9~9.1	/	180*180*3
SD-61-4	1	4		3.52~9.48	2.5~5.0	12.9~9.1	/	180*180*3
SD-81-4				8.88~23.7	2.5~5.0	12.9~9.1		
SD-42-4	2	8		1.28~3.44	4.0~9.0	10.3~6.5	1	180*180*3
SD-62-4				3.52~9.48	4.0~9.0	10.3~6.5		
SD-82-4				8.88~23.7	4.0~9.0	10.3~6.5		
SD-43-4	3	12		1.28~3.44	5.5~13.0	8.4~5.4	2	180*180*3
SD-63-4				3.52~9.48	5.5~13.0	8.4~5.4		
SD-83-4				8.88~23.7	5.5~13.0	8.4~5.4		
SD-44-4	4	16		1.28~3.44	7.0~17.0	7.4~4.8	3	180*180*3
SD-64-4				3.52~9.48	7.0~17.0	7.4~4.8		
SD-84-4				8.88~23.7	7.0~17.0	7.4~4.8		
SD-45-4	5	20		1.28~3.44	8.5~21.0	7.4~4.1	4	180*180*3
SD-65-4				3.52~9.48	8.5~21.0	7.4~4.1		
SD-85-4				8.88~23.7	8.5~21.0	7.4~4.1		



JA Type Metal Encased Rubber Vibration Isolator

JA Type Metal Encased Rubber Vibration Isolator Structure Diagram:



JA Type Introduction:

The JA metal encased rubber isolator provides highly effective vibration isolation in both axial and lateral directions. It is particularly suitable for use in generators, engines, and systems, offering excellent vibration reduction. The operating range is approximately 25Hz (1,500rpm). The internal rubber is completely bonded with the metal components, providing optimal vibration isolation performance. Additionally, it is equipped with safety lock components to ensure safety.

Model	Rubber hardness IRHD	A	B	P	F*M	CF	L	S	Average load	Maximum load	Maximum compression
									Kg/mm	Kg	MM
JA633008W	40	63	30	M8	11*15	88	110	2.5	20	46	2.3
JA633008M	60	63	30	M8	11*15	88	110	2.5	52	120	2.3
JA633510W	40	63	35	M10	11*15	88	110	2.5	20	46	2.3
JA633510M	60	63	35	M10	11*15	88	110	2.5	52	120	2.3
JA783012W	45	78	30	M12	11*15	110	135	2.5	47	108	2.3
JA783012M	60	78	30	M12	11*15	110	135	2.5	116	267	2.3
JA833512W	40	83	35	M12	11*15	110	135	3	61	140	2.3
JA833512M	60	83	35	M12	11*15	110	135	3	117	270	2.3
JA833512W	40	83	35	M12	11*15	110	135	3	61	140	2.3
JA833512M	60	83	35	M12	11*15	110	135	3	117	270	2.3
JA923512W	40	92	35	M12	11*15	124	150	3	49	170	3.5
JA923512M	60	92	35	M12	11*15	124	150	3	91	320	3.5
JA1063816W	40	106	38	M16	13*19	143	175	4	71	250	3.5
JA1063816M	60	106	40	M16	13*19	143	175	4	150	450	3.5
JA1254316W	40	125	43	M16	14.5*20	156	192	4	125	500	4
JA1254316M	60	125	46	M16	14*20	156	192	4	185	740	4
JA1505016W	40	150	50	M16	14*18	182	218	4	125	750	6
JA1505016M	60	150	50	M16	14*18	182	218	4	183	1100	6
JA1505020W	40	150	50	M20	14*18	182	218	4	125	750	6
JA1505020M	60	150	55	M20	14*18	182	218	4	220	1320	6



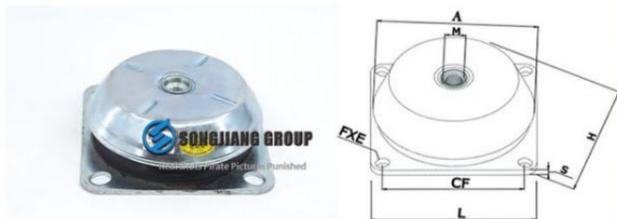
JY/JF Type Metal Encased Rubber Vibration Isolator

The JY/JF vibration isolator provides highly effective vibration reduction in both axial and lateral directions. It is especially suitable for use in generators, engines, and systems, delivering excellent vibration damping performance. The operating range is approximately 25Hz (1,500rpm).

JY Type Metal Encased Rubber Vibration Isolator

Table with 11 columns: Model, Rubber hardness (IRHD), A, H, M, F*E, CF, L, S, Maximum load (Kg), Maximum compression (MM). Rows include models like JY-150*50M16, JY-150*50M20, JY-180*60M16, JY-180*60M20.

JY Type Structural Diagram:



JF Type Structural Diagram:



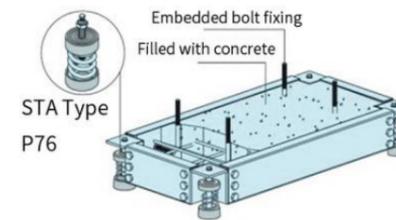
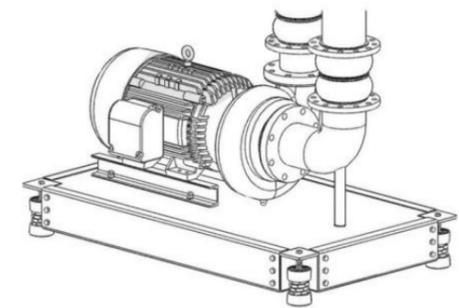
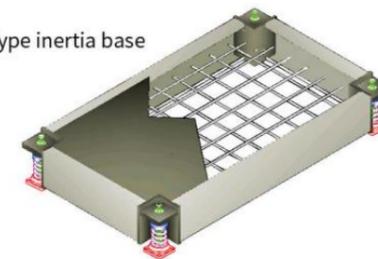
JF Type Metal Encased Rubber Vibration Isolator

Table with 11 columns: Model, Rubber hardness (IRHD), A, H, M, F*E, CF, L, S, Average load (Kg/mm), Maximum load (Kg), Maximum compression (MM). Rows include models like JF-60M12, JF-60M16, JF-60M20.

LB Type Water Pump Inertia Base

- 1. The inertia base of LB type water pump has good vibration absorption and sound insulation effect, and the efficiency can reach more than 95%.
2. The inertia base of LB type water pump has the characteristics of firm in structure and light in weight, easy to install, and there is no cement grouting work of ordinary traditional base, which saves man-hours.
3. The inertia base of the LB type water pump is designed with horizontal adjustment bolts. After the pump is installed, only the horizontal bolts need to be adjusted, and there is no need to adjust the jack or move the shock absorber.
4. It has the function of anti-earthquake design.

LB-B Type inertia base



Here is the delivery scene of LB type inertia bases from Shanghai Songjiang Factory:



LB-A Type inertia base



LB-A Type inertia base



LB-S Type inertia base



BYQ type matrix spring isolator



Applicable to: Transformer Vibration Isolation And Noise Reduction

Product Features:

The BYQ type matrix spring isolator consists of multiple sets of large outer diameter, high deformation capacity springs, upper and lower steel plates, and rubber anti-slip pads. It is primarily suitable for modernized transformer rooms, such as cloud data center transformers. The product offers significant deformation capacity, stable performance, excellent vibration reduction effects, and a lifespan of over 10 years. It provides superior vibration and noise isolation, achieving a vibration reduction rate of over 90% for transformers and a sound insulation level of 15-20dB. The lateral stiffness to vertical stiffness ratio of the isolator is greater than 1.5, ensuring excellent stability.



Another Option: See P73 : SHM type spring isolator

Model	Corresponding transformer	Rated load	Optimum deformation	Vertical stiffness	Overall dimension		
		KG	MM	(kg/mm)	L(mm)	W(mm)	H(mm)
BYQ-600	200	600	20	30	1120	200	115
BYQ-800	250	800	20	40	1120	200	115
BYQ-900	315	900	20	45	1120	200	115
BYQ-1000	400	1000	20	50	1120	200	115
BYQ-1300	500	1300	20	65	1120	200	115
BYQ-1500	630	1500	20	75	1120	200	115
BYQ-1800	800	1800	20	90	1120	200	115
BYQ-2200	1000	2200	20	110	1120	200	115
BYQ-2800	1250	2800	20	140	1120	200	115
BYQ-3300	1600	3300	20	165	1120	200	115
BYQ-4000	2000	4000	20	200	1120	200	115
BYQ-5000	2500	5000	20	250	1120	200	115

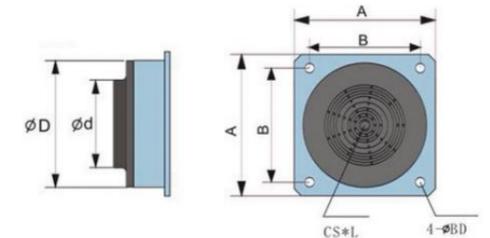
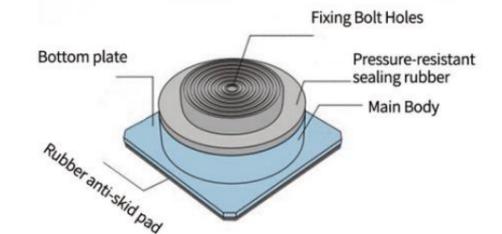


KQJZ-A Type Air Isolator

Main Applications: General punch presses, air compressors, chillers, pump units, fatigue testing equipment.

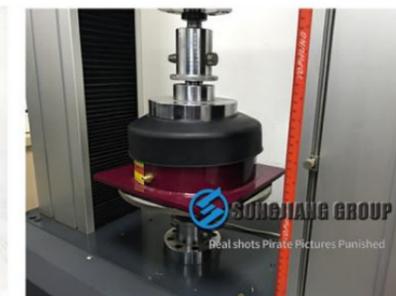
Product Features:

- 1.Natural frequency of 3Hz~5Hz, maximum operating pressure of 4.5Kg/cm².
- 2.Made of Neoprene Rubber, with excellent airtightness and integral molding.
- 3.Multi-layer rust-proof paint applied to the body.
- 4.Equipped with an oil-resistant cap to prevent common oil contamination.
- 5.Provides the best vibration reduction effect, with a vibration reduction rate of over 97% for general equipment.
- 6.Load range: 0~3500kg.



Suitable for: High-rise buildings

Model	Product Size						Load		Height	Weight
	A	B	4-BD	CS*L	D	d	Min	Max	MM	KG
KQJZ-100-A	125	100	12	M12-80L	100	50	50	100	100	2kg
KQJZ-200-A	125	100	12	M12-80L	100	60	100	200	100	2kg
KQJZ-400-A	160	125	12	M12-80L	138	90	200	400	100	4kg
KQJZ-700-A	200	160	12	M12-80L	160	115	400	700	100	6kg
KQJZ-900-A	235	180	14	M16-130L	192	132	700	900	100	8kg
KQJZ-1200-A	250	200	14	M16-130L	218	150	900	1200	100	10kg
KQJZ-1600-A	300	250	14	M16-130L	272	200	1200	1600	100	15kg
KQJZ-2000-A	350	300	14	M16-130L	324	252	1600	2000	100	20kg
KQJZ-3500-A	450	400	18	M16-130L	412	300	2000	3500	104	35kg





► KQJZ-B Type Air Dampers for Vibration Isolation ◀

Official Commitment

Rubber Material: CR (Chloroprene Rubber)

Hydraulic Material: Imported damping fluid

Service Life: Over 10 years

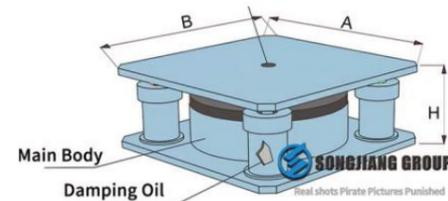
Five-Year Warranty: Indoor use is covered by a maximum 5-year warranty

Shock Absorption Effect: A comparison before and after use can achieve up to 95% improvement

Support for Testing: Support for effectiveness testing before and after installation

(third-party) Problem Compensation: In case of quality issues, a full refund will be provided,

along with coverage of dismantling and transportation costs.



Product Features:

1. Effectively suppresses excessive equipment vibration and ensures equipment stability.
2. Suitable for eliminating impact vibrations, designed with low natural frequency for excellent damping effect.
3. Made with CR (Neoprene Rubber) material, providing good weather resistance and long service life.
4. The air cushion housing is robotically welded, ensuring seamless integration between rubber and housing.
5. Excellent air tightness, avoiding frequent inflation for maintenance, making it more convenient to use.
6. Internal design includes damping mechanism to effectively prevent resonance.
7. Natural frequency of 3Hz-5Hz, damping coefficient of 0.12-13, and maximum operating pressure of 4.5kg/cm², compliant with JIS D-4101 air cushion pressure resistance testing standard.

Product Applications:

Suitable for vibration reduction and isolation of equipment with significant self-vibration, as well as equipment susceptible to vibration interference. Common applications include cutting machines, high-speed presses, injection molding machines, hydraulic presses, vacuum forming machines, die-cutting machines, fully automatic oil spraying machines, printing machines, carton indentation machines, reciprocating air compressors, material cutting machines, textile machines, embroidery machines, sewing machines, embroidery machines, forming machines, cup-making machines, CNC machine tools, shearing machines, washing machines, industrial washing machines, coordinate measuring machines, length measuring devices, 2D inspection devices, roundness measuring devices, and other equipment.

Additionally, it is suitable for applications that require higher vibration reduction effectiveness, as the swinging motion of Type B is lower compared to Type A.

Product Introduction:

The product effectively isolates the transmission of vibrations generated during equipment operation to the ground, while also preventing external vibrations from affecting precision equipment. The vibration reduction effectiveness can reach over 95%, making it suitable for use with vibration equipment placed on high floors.

Model	Load		Product Size			Natural frequency HZ	Fixing bolts CS*L
	Min	Max	A	B	H		
KQJZ-400-B	200	400	235	235	110	3~5	M12-80L
KQJZ-700-B	400	700	260	260	110	3~5	M12-80L
KQJZ-900-B	700	900	270	270	110	3~5	M16-130L
KQJZ-1200-B	900	1200	300	300	110	3~5	M16-130L
KQJZ-1600-B	1200	1600	350	350	110	3~5	M16-130L
KQJZ-2000-B	1600	2000	390	390	110	3~5	M16-130L
KQJZ-3500-B	2800	3500	500	500	115	3~5	M16-130L



► Rubber Air Spring ◀

Introduction of Rubber Air Spring

Rubber air springs, commonly known as air tires, corrugated air springs, or airbags, are precision-designed rubber fiber bellows. They do not provide force or support loads themselves but rather rely on compressed air injected by an air compressor into their interior to transmit force and provide elasticity. Depending on the stroke requirements, air springs are typically designed with 1-3 convolutions, but they can also be designed and manufactured with 4 or more convolutions when necessary. Under certain conditions, two air springs can be stacked and used together. Due to these characteristics, air springs are increasingly used in vehicles, paper machines, lifting platforms, press machine vibration conveyors, vibrating screens, air hammers, vibration test machines, foundry machinery, and other equipment or instruments that require stroke control, vibration reduction, or isolation.

Photo of Rubber Air Springs

Precision Instrument Rubber Air Spring

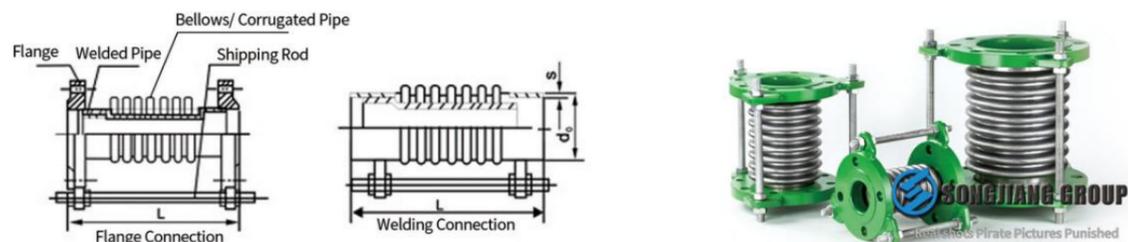


Paper Machinery Rubber Air Spring





▶ BGF SS Expansion Bellow GB/T 12777-2008 ◀



Dimensions of BGF Stainless Steel Expansion Bellow

Nominal diameter	Total length	Bellows caliber	Wave number	Wall thickness	Compensation ± Δ	Flange thickness	Number of tie rods
DN25	110	32	8	0.4	20	16	2
DN32	130	40	8	0.4	20	18	2
DN40	130	48	8	0.5	20	18	3
DN50	145	57	8	0.5	20	19	3
DN65	180	76	8	0.6	25	20	3
DN80	180	89	8	0.6	25	20	3
DN100	200	108	8	0.6	25	22	3
DN125	230	133	8	0.8	25	22	3
DN150	240	159	8	0.8	30	24	3
DN200	340	219	8	1	30	26	3
DN250	330	273	6	1.2	30	29	3
DN300	370	325	6	1.5	30	32	3
DN350	370	377	6	2	30	35	4
DN400	425	426	6	2	30	38	4
DN450	460	480	6	1.0*2	40	42	4
DN500	440	530	5	1.2*2	50	46	5
DN600	420	630	4	1.2*2	50	52	5
DN700	440	720	4	1.5*2	50	63	5
DN800	490	820	4	1.5*2	50	74	5
DN900	520	920	4	2.0*2	50	82	6
DN1000	540	1020	4	2.0*2	50	90	6
DN1200	550	1220	4	2.0*2	45	95	6



▶ BGF Stainless Steel Metal Expansion Joint ◀

The BGF stainless steel expansion bellow is mainly used in pipeline systems for food, drinking water, pharmaceutical, chemical, hydraulic, and other applications. It serves to compensate for the expansion and compression of the pipeline.

Flange and corrugated material options include SUS304, 316, and 321.

Flange connection data can be selected according to GB/T9119-2010 (P100) or other flange standards.

The product pressure options are 1.0MPa, 1.6MPa, and 2.5MPa.

The product length is the same as the standard length of P93, but custom lengths are also available. It is strictly prohibited to exceed the displacement range. It is recommended that the expansion bellow should only extend or compress within the effective compensation range and should not have lateral displacement. During construction, precautions should be taken to prevent welding heat and sparks from reaching the body of the expansion bellow.

As for the medium requirements, it is advised to install an effective device to remove chloride ions (chloride ion content should not exceed 25mg/L) at the water inlet of the pipeline to avoid excessive chloride ion content in the water, which could lead to pitting corrosion.





▶ BGF PTFE Corrugated Expansion Joint ◀

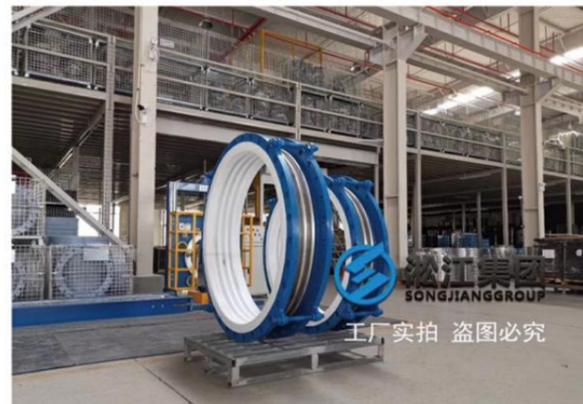
The BGF-PTFE type PTFE Corrugated Expansion Joint, also known as PTFE Expansion bellow, is primarily made of polytetrafluoroethylene (PTFE) material on the inner wall in contact with the medium. The corrugated shape allows it to have the ability to expand and contract. PTFE exhibits high resistance to strong acids, alkalis, high temperatures, and corrosive media such as oil, including gasoline, diesel, aviation kerosene, and others. It has excellent performance. Disadvantage: Not resistant to negative pressure.

How to choose:

For pressures between 0.6 to 1.6 MPa, choose a stainless steel bellows compensator lined with PTFE on the inside;

For pressures between 0.1 to 0.6 MPa, choose PTFE bellows with an outer layer of stainless steel braided mesh for protection;

For pressures below 0.1 MPa, choose PTFE bellows with an additional stainless steel ring.



▶ Different Types of Braided Flexible Connectors ◀

1. Stainless steel corrugated hose with copper threaded ends, customizable length, pressure resistance of 1.0MPa, primarily used for central air conditioning fan coils. Additionally, the copper threads can be made with stainless steel 304 material.



2. Stainless steel wire braided metal hose with stainless steel threaded ends, customizable length, pressure resistance of 2.5MPa, primarily used for various sanitary pipelines, chemical pipelines, high-temperature pipelines, and hydraulic systems.



3. Stainless steel inner-threaded nut wire braided metal hose with stainless steel threaded ends, customizable length, pressure resistance of 2.5MPa, primarily used for various sanitary, chemical, and high-temperature applications.



4. Stainless steel flexible metal hose with universal connections on both ends, pressure resistance of 2.5MPa, primarily used for various high-temperature pipelines, compressed air, hydraulic, chemical, and other applications.



5. One end with external thread and one end with internal thread and nut wire braided metal hose, customizable length, pressure resistance of 2.5MPa, primarily used for air conditioning fan coils, compressors, pharmaceutical systems.





▶ JTW Types Stainless Steel Braided Flexible Connectors ◀

The JTW type stainless steel braided flexible connectors (referred to metal hose) is a high-quality flexible pipe joint in pipeline systems. It primarily consists of a corrugated tube, wire sleeve, and flanges. The inner tube is a circular thin-walled stainless steel corrugated tube, and the outer wire sleeve is woven with stainless steel wire or strip according to certain parameters. The flanges at both ends can be fixed or loose, or one end can be fixed while the other end is loose, facilitating installation.



Specification model		Length		Offset	Braided mesh/belt	Limit
DN (mm)	in	mm	mm	mm		Pcs
DN25	1	300	34	Single Layer Metal Mesh	/	
DN32	1-1/4	300	33	Single Layer Metal Mesh	/	
DN40	1-1/2	300	32	Single Layer Metal Mesh	/	
DN50	2	300	24	Single Layer Metal Mesh	/	
DN65	2-1/2	300	24	Single Layer Metal Mesh	/	
DN80	3	300	25	Single Layer Metal Mesh	/	
DN100	4	300	22	Single Layer Metal Mesh	/	
DN125	5	300	17	Single Layer Metal Mesh	/	
DN150	6	300	14	Single Layer Metal Mesh	/	
DN200	8	300	6	Single Layer Metal Mesh	/	
DN250	10	300	5.5	Double Layer Metal Mesh	/	
DN300	12	300	5	Double Layer Metal Mesh	/	
DN350	14	300	5	Double Layer Metal Mesh	4	
DN400	16	400	5	Double Layer Steel Belt	4	
DN450	18	400	5	Double Layer Steel Belt	4	
DN500	20	400	5	Double Layer Steel Belt	5	
DN600	24	400	5	Double Layer Steel Belt	5	
DN700	28	600	4	Double Layer Steel Belt	5	

Note: The medium passing through the corrugated tube shall not exceed a chloride ion content of 25mg/L.



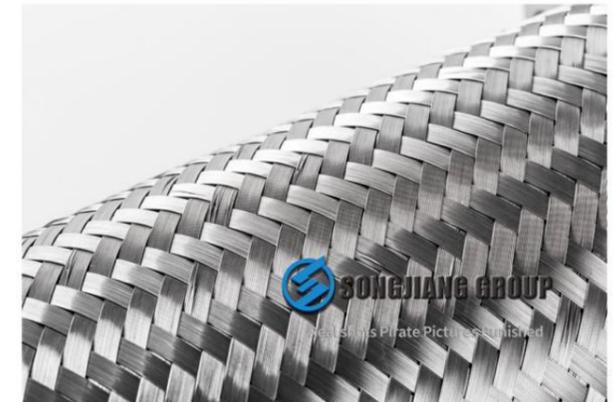
▶ JTW-SS Type Braided Flexible Connectors ◀

The JTW-SS type stainless steel braided flexible connector is mainly used in food, drinking water, pharmaceutical, chemical, hydraulic, and other pipeline systems, providing vibration reduction. Flange and intermediate pipe mesh materials can be made of stainless steel 304, 316, or 321. Flange fixation: The flanges at both ends can be fixed or loose, or one end can be fixed while the other end is loose, facilitating installation.

Flange connection data can be produced according to GB/T9119-2010 or other flange standards. Product pressure: 1.0MPa, 1.6MPa, 2.5MPa.

Product length: The standard length is the same as P97, and various lengths can also be customized. Prohibition of stretching: It is recommended that the working of the metal hose is compression, not stretching, and twisting is not allowed.

Construction precautions: When welding work is being carried out, the metal hose body must be protected from welding heat and sparks. Medium requirements: Please install an effective chloride ion removal device (chloride ion content not exceeding 25mg/L) at the water inlet of the pipeline to avoid exceeding the allowable chlorine ion content in the water, which may cause pitting corrosion.





ZB Type Fabric Expansion Joint(non-metallic flue duct)

The main material composition:

The ZB type fabric expansion joint(NMFD) is made of high-performance silicone cloth (FKM cloth), PTFE, alkali-free glass fiber cloth, excellent thermal insulation properties of ultra-fine glass wool, aluminum silicate wool (ceramic fiber blanket for high temperature), and other materials, produced through special processes.



Product Features:

Large compensation capacity: Meets multi-dimensional compensation requirements.

No thrust transmission: Absorbs thermal expansion thrust without transmitting it.

High temperature and corrosion resistance: Excellent resistance to high temperatures and corrosion.

Noise and vibration reduction: Effectively reduces noise and vibration from equipment.

Technical requirements:

The NMFD should be able to operate safely for a long period, with a service life of not less than 6 years (7500 operating hours per year). The allowable fatigue life of the non-metallic fabric expansion joint at room temperature should be no less than 1000 cycles (fatigue life safety factor not less than 15).

The NMFD should be able to absorb both axial and lateral displacements of all connected equipment and flue ducts under all operating and accident conditions.

All NMFD should be designed to be damage-free, leak-free, capable of withstanding various high-temperature displacement ranges, and should incorporate stainless steel wire mesh capable of withstanding the maximum design positive and negative pressure plus a 125-fold pressure margin.

The materials used for NMFD should be able to withstand the high temperatures of flue gas and air, as well as the corrosion and wear caused by flue gas. The sealing between the NMFD and the flue duct should be 100% airtight.

The insulation inside the NMFD should take into account the characteristics of the flue gas.

Non-metallic fabric expansion joints on flue ducts and air ducts are exposed to outdoor conditions and the materials used should meet the various original design conditions provided in this attachment. Special attention should be given to the material's ability to withstand low temperatures in outdoor winter conditions.

The external surface temperature of the NMFD's skin should not exceed 70°C.



Corresponding Flange Sizes for Flexible Rubber Expansion Joint Pressure Ratings

Flange Standard GB/T 9119-2010 OR GB/T 9119. 2000 GB/T 2506-2005

Table with columns: Nominal Diameter, 0.6MPa, 1.0 MPa, 1.6 MPa, 2.5 MPa. Rows include DN, D, D1, n-φ for various pressure ratings.

D: Flange Outer Diameter
D1: Bolt Hole Center Distance
n: Number of Flange Holes
φ d: Bolt Diameter

Table with columns: Nominal Diameter, 0.25MPa, 0.6MPa, 1.0 MPa. Rows include DN, D, D1, n-φ for various pressure ratings.

