



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

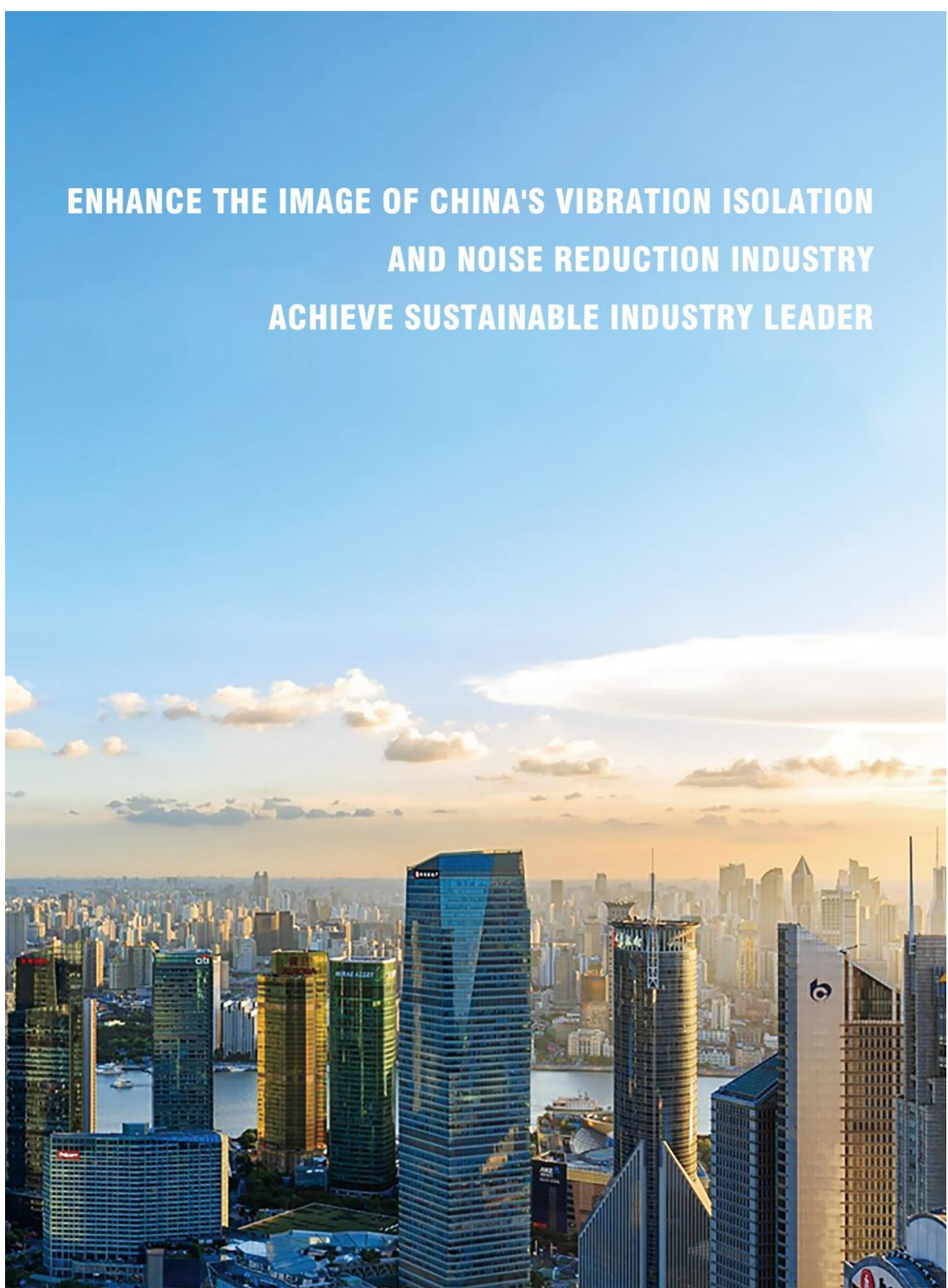


Shanghai Songjiang Shock Absorber Group Co.,Ltd

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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

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## 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 .

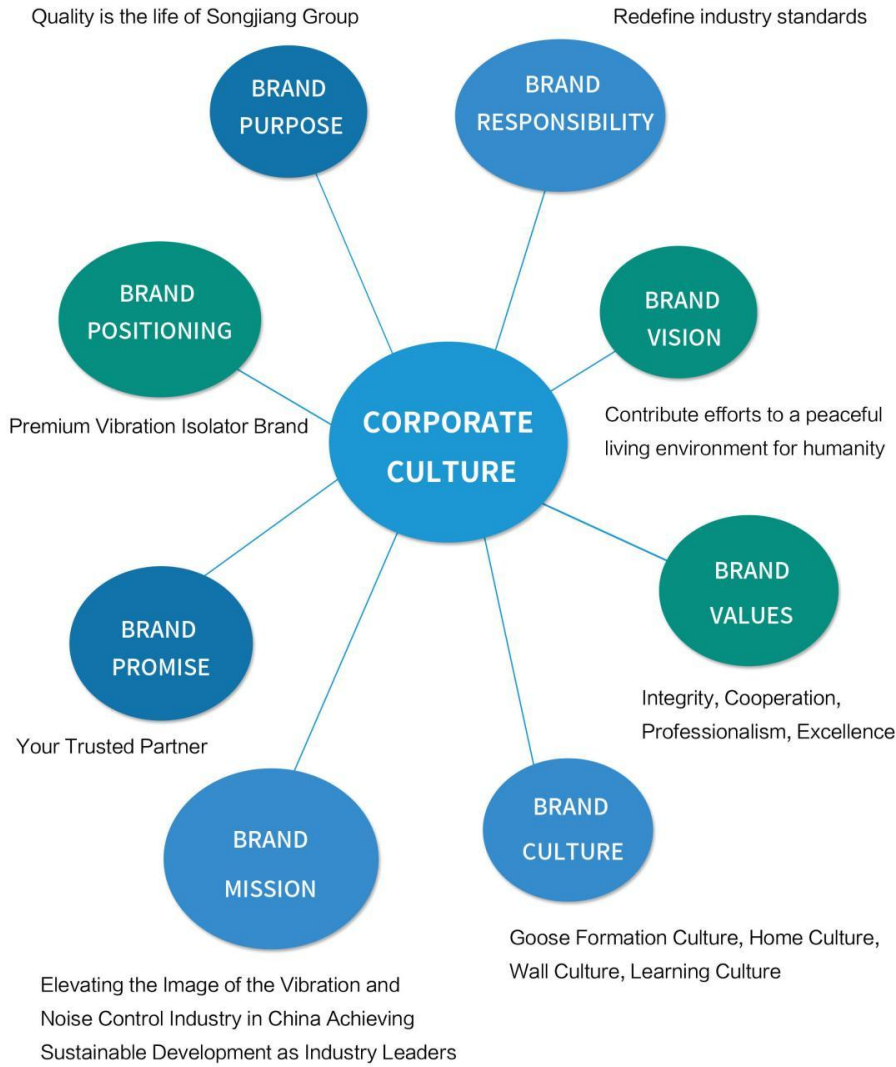
Our company boasts strong technical capabilities, complete production equipment, and the ability to develop various types of vibration isolation. We have advanced laboratory equipment and sophisticated testing methods. Our rubber expansion joints have obtained ISO9001-2015 international quality system 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



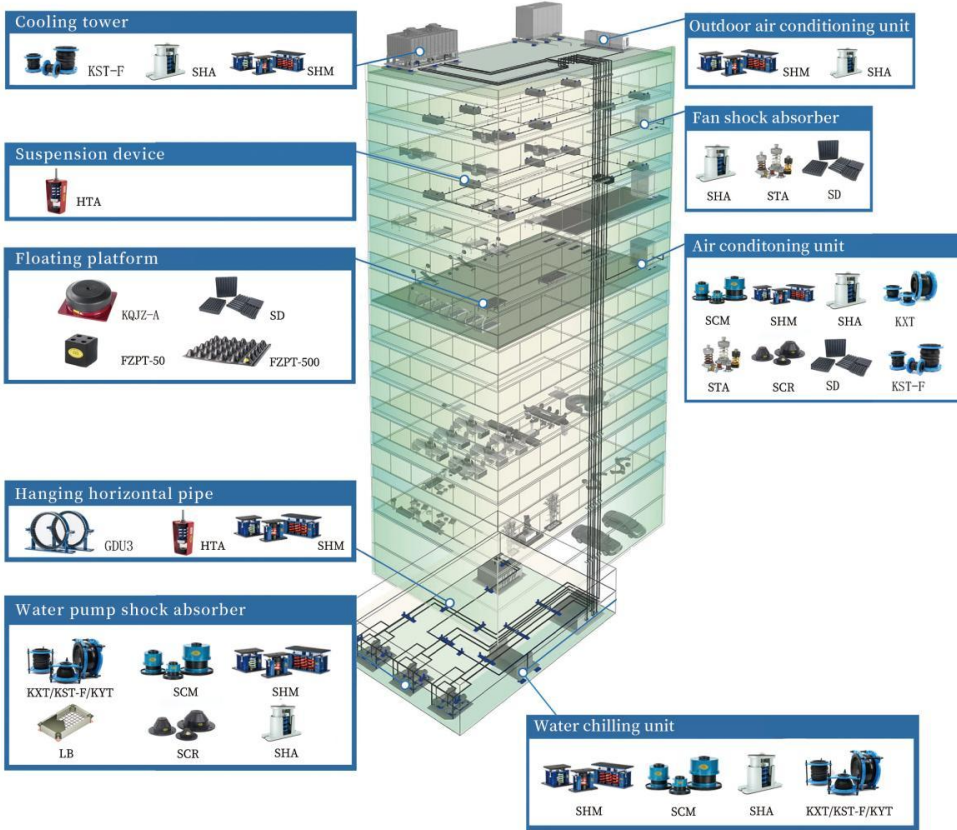
Shanghai team



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

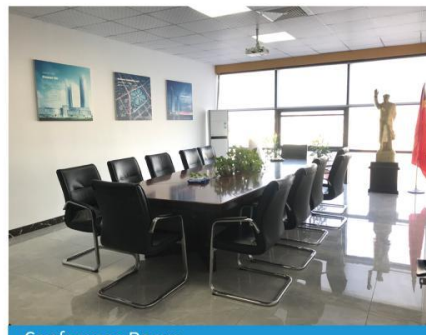


Production workshop

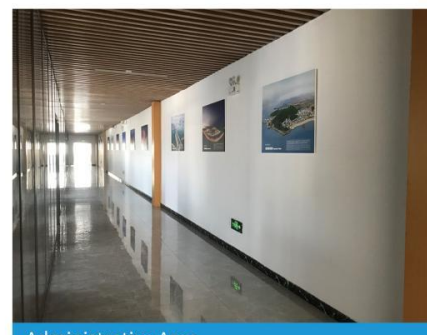
**Work together Create a win-win situation**



▶ Office And Exhibition ◀



Conference Room



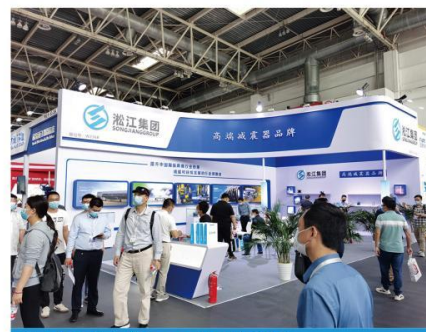
Administrative Area



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 ◀



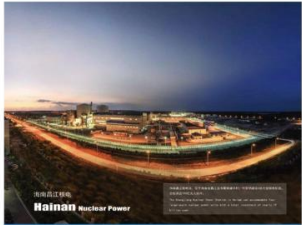
上海交通大学  
Shanghai Jiao Tong University



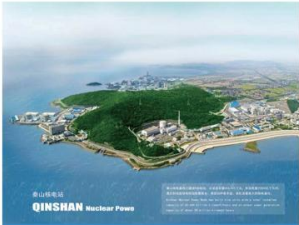
哈尔滨工业大学  
HARBIN INSTITUTE OF TECHNOLOGY



武汉大学  
WUHAN UNIVERSITY



Hainan Changjiang nuclear power station



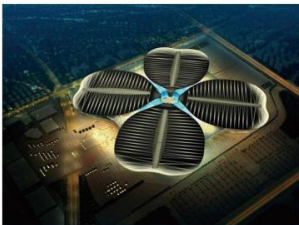
Qinshan Nuclear Power Station



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



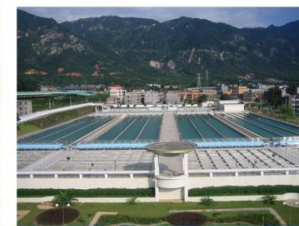
Hainan Haihua Island Project



Harbin Poseidon ocean Kingdom



Shanghai Zhuyuan sewage treatment plant



Fuzhou Waterworks



Shandong Shouguang seawater desalination



### PATENT CERTIFICATE

Cooperative partner of Fortune Global 500 companies



### PATENT CERTIFICATE

Anti-counterfeiting must be investigated



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



Appearance of the tube

Tube inner membrane

Spherical flange

Packaging appearance



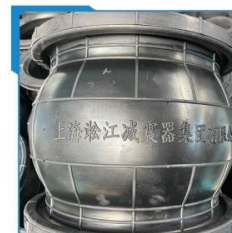
Airbag upper cover

Airbag lower cover

One cylinder

NG flange

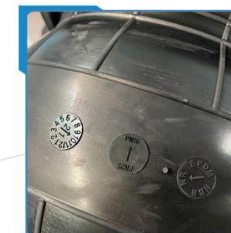
### NEW DESIGN ORIGINAL AUTHENTIC 100% ORIGINAL RUBBER



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



### OFFICIAL COMMITMENT

NO RECLAIMED RUBBER, OTHERWISE ONE COMPENSATED FOR TEN



### 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

### 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



### OFFICIAL COMMITMENT

NO RECLAIMED RUBBER, OTHERWISE ONE COMPENSATED FOR TEN



Real shots Pirate Pictures Punished

### 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



## C919

Rubber expansion joint

for China commercial aircraft C919



### NOT ONLY DARE TO PROMISE BUT ALSO ABLE TO DELIVER

|   |   |  |
|---|---|--|
| <p><b>QUICK</b></p> <p><b>AFTER-SALES SERVICE</b></p> <p>PRIORITY AFTER-SALES SERVICE<br/>ALL SERVICE REQUESTS ARE EXPEDITED AND SPECIALLY APPROVED FOR PROCESSING, INCLUDING HOLIDAYS.</p>                             | <p><b>FAST</b></p> <p><b>TWELVE HOURS</b></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><b>ONE</b></p> <p><b>ONE YEAR WARRANTY</b></p> <p>SPECIAL PRODUCT WARRANTY FOR ONE YEAR. FOR EXAMPLE: STRONG ACID-ALKALI CORROSION RESISTANCE, PARTICLE FRICTION RESISTANCE, ULTRA-HIGH TEMPERATURE RESISTANCE.</p> |
| <p><b>THREE</b></p> <p><b>THREE YEAR WARRANTY</b></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><b>FREE</b></p> <p><b>ISSUE RESOLUTION</b></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><b>FIVE</b></p> <p><b>FIVE YEAR WARRANTY</b></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

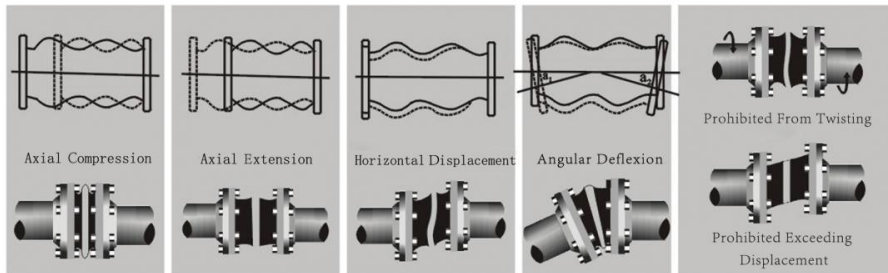


Hard Steel Wire Reinforcement



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.

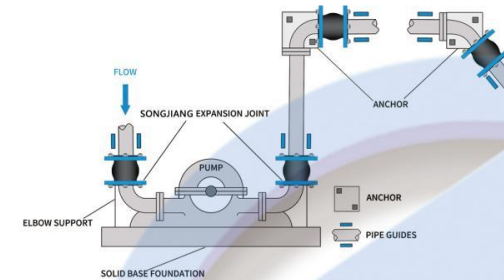
Schematic Diagram Of The Displacement Of The Flexible Rubber expansion Joint



### Rubber Expansion Joint Piping Installation Diagram

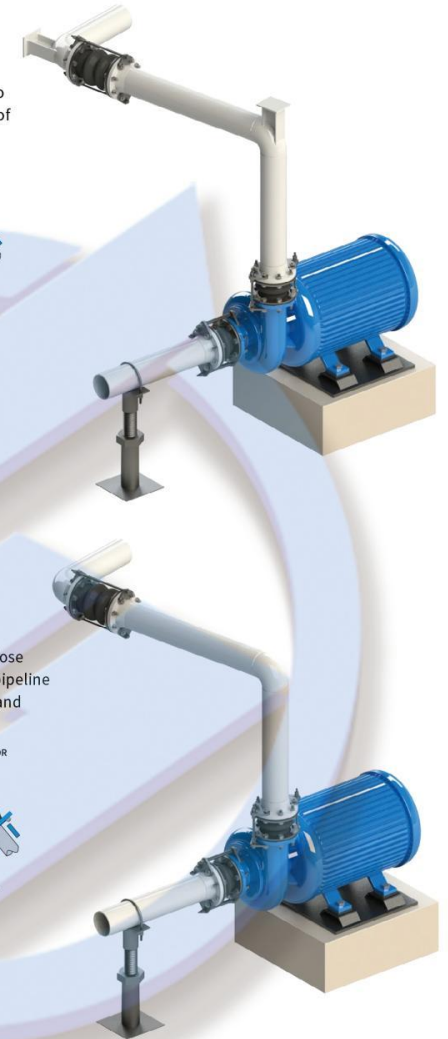
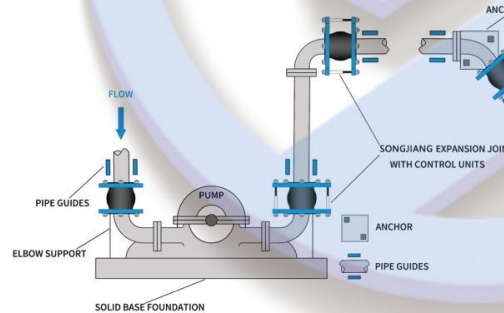
#### Anchoring System

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.





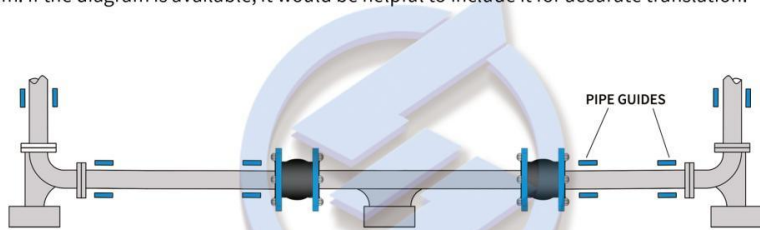
▶ Rubber Expansion Joint Installation Instructions ◀

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 ◀

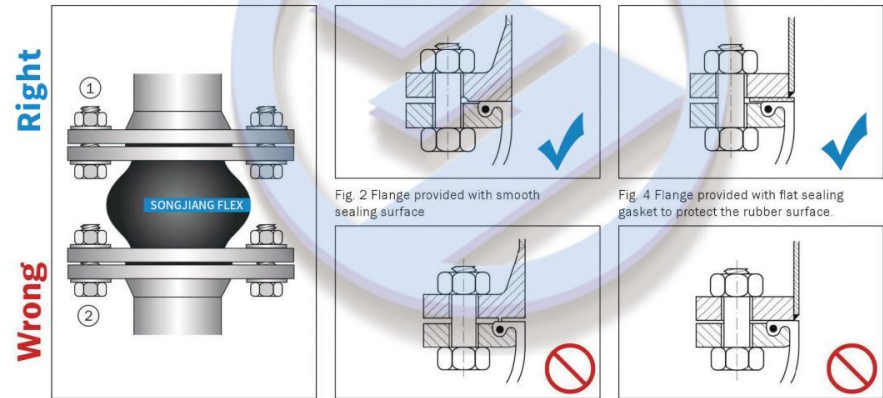
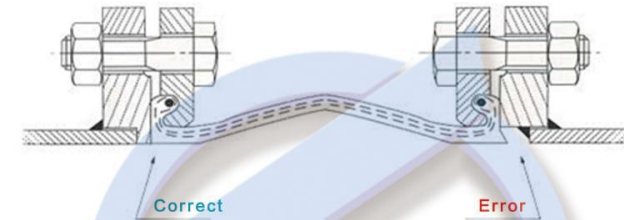
Installation Instructions:

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.



Arrangement with lateral expansion joints.

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

Fig. 2 Flange provided with smooth sealing surface

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

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 <sub>2</sub> SO <sub>4</sub> 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% H<sub>2</sub>SO<sub>4</sub>, 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" .

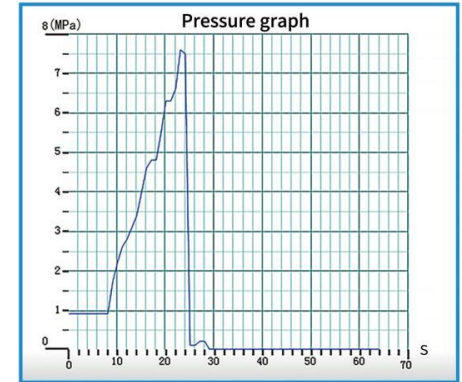
Edible grade testing standard: GB/T 4806.1-1994 "Hygienic Standard for Rubber Products Used in Food Industry"



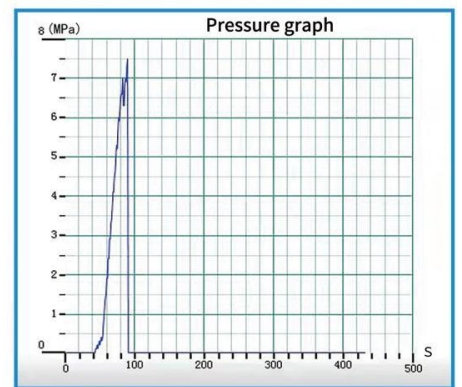
► Rubber Expansion Joint Burst Testing ◀



Single sphere rubber expansion joint burst testing

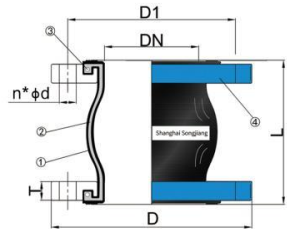


Double sphere rubber expansion joint burst testing





► 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               | Inch   | L(mm)            | MM                | MM      | °       | Pcs              |
| 25               | 1      | 95               | 6                 | 9       | 15°     | /                |
| 32               | 1-1/4  | 95               | 6                 | 9       | 15°     | /                |
| 40               | 1-1/2  | 95               | 6                 | 10      | 15°     | /                |
| 50               | 2      | 105              | 7                 | 10      | 15°     | /                |
| 65               | 2-1/2  | 115              | 7                 | 13      | 15°     | /                |
| 80               | 3      | 135              | 8                 | 15      | 15°     | /                |
| 100              | 4      | 150              | 10                | 19      | 15°     | /                |
| 125              | 5      | 165              | 12                | 19      | 15°     | /                |
| 150              | 6      | 180              | 12                | 20      | 15°     | /                |
| 200              | 8      | 210              | 16                | 25      | 10°     | /                |
| 250              | 10     | 230              | 16                | 25      | 10°     | /                |
| 300              | 12     | 245              | 16                | 25      | 10°     | /                |
| 350              | 14     | 255              | 16                | 25      | 10°     | 4                |
| 400              | 16     | 255              | 16                | 25      | 10°     | 4                |
| 450              | 18     | 255              | 16                | 25      | 5°      | 4                |
| 500              | 20     | 255              | 16                | 25      | 5°      | 5                |
| 600              | 24     | 260              | 16                | 25      | 5°      | 5                |
| 700              | 28     | 260              | 16                | 25      | 5°      | 5                |
| 800              | 32     | 260              | 16                | 25      | 5°      | 5                |
| 900              | 36     | 260              | 16                | 25      | 5°      | 6                |
| 1000             | 40     | 260              | 16                | 25      | 5°      | 6                |
| 1200             | 48     | 260              | 16                | 25      | 5°      | 6                |

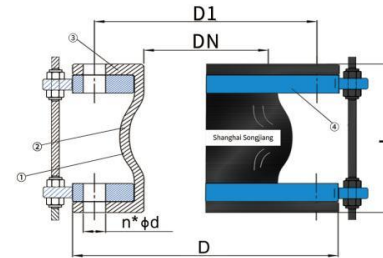
Flange parameters: GB/T 9119-2010, Check:P100



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



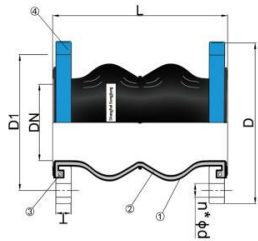
Parameter of KDT Type Full-faced Rubber Flange Bellow

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

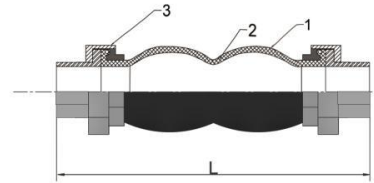
Parameter Of KST-F Type Double Sphere Rubber Expansion Joints

| Nominal diameter |       | Length | Axial extension | Axial compression | Lateral | Angular | Control tie rods |
|------------------|-------|--------|-----------------|-------------------|---------|---------|------------------|
| MM               | Inch  |        |                 |                   |         |         |                  |
| 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  |
| 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° |

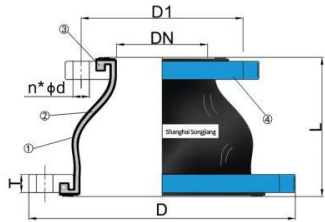
Product Introduction:

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) |

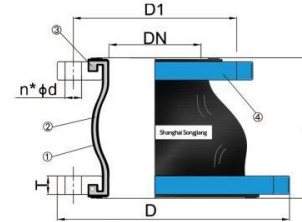
The concentric reducer rubber joint is primarily used at connection points where a change in pipe diameter is required.

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

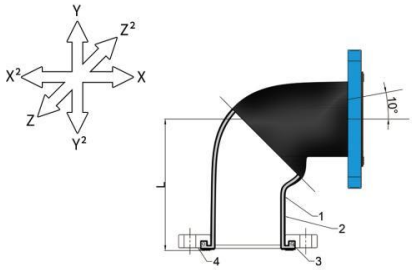
Eccentric reducer rubber expansion joints are primarily used at connection points where a change in pipe diameter is required.

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





► KWT Type Elbow Rubber Expansion Joints ◀



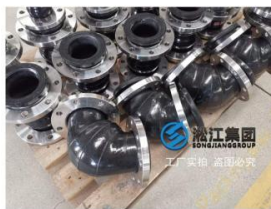
| NO | Name               | Material             |
|----|--------------------|----------------------|
| 1  | Inner/outer rubber | NR, NBR, EPDM        |
| 2  | Reinforcing cord   | Nylon Tire Cord      |
| 3  | Reinforcing ring   | Hard Steel Wire      |
| 4  | Flange             | Q235,SS304,SS316,PVC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

Advantages & Disadvantages Of Elbow Rubber Expansion Joints:

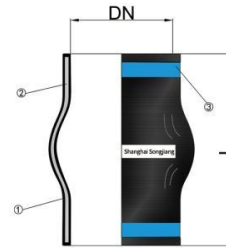
90-degree rubber elbows are widely used in piping and equipment systems to mitigate the effects of vibration, noise, and stress fluctuations, providing protection and extending the lifespan of the piping and equipment. However, they are not suitable for outdoor use or applications with stringent fire 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 <sup>2</sup> | Y  | Y <sup>2</sup> | Z  | Z <sup>2</sup> |
| 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 ◀

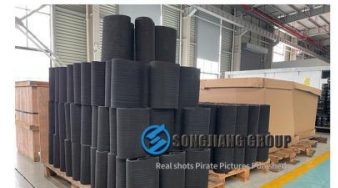


| NO | Name               | Material              |
|----|--------------------|-----------------------|
| 1  | Inner/outer rubber | NR,NBR,EPDM, FKM, SIR |
| 2  | Reinforcing cord   | Nylon Tire Cord       |
| 3  | Clamp ring         | Q235 SS304            |

Parameter Of KKT Type Clamp Rubber Expansion Joints

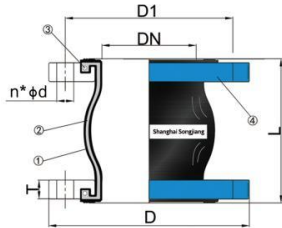
| Nominal diameter |       | Length | Axial Elongation | Axial compression | Lateral | Angular |
|------------------|-------|--------|------------------|-------------------|---------|---------|
| MM               | Inch  |        |                  |                   |         |         |
| DN50             | 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 1kg. 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.



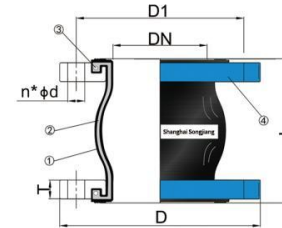


▶ ANSI/ASME B16.5 Class 150# Rubber Expansion Joints ◀



| 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 |

▶ 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 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)       | n(PCS)   | d(mm)              | D1(mm)     | MM               | MM                | MM      | °       | Pcs              |
| 25               | 1      | 130/150     | 4        | 16                 | 79.4       | 12               | 20                | 14      | 15°     | /                |
| 32               | 1-1/4  | 130/150     | 4        | 16                 | 88.9       | 12               | 20                | 14      | 15°     | /                |
| 40               | 1-1/2  | 130/150     | 4        | 16                 | 98.4       | 12               | 20                | 14      | 15°     | /                |
| 50               | 2      | 130/150     | 4        | 18                 | 120.7      | 12               | 20                | 14      | 15°     | /                |
| 65               | 2-1/2  | 130/150     | 4        | 18                 | 139.7      | 12               | 20                | 14      | 15°     | /                |
| 80               | 3      | 130/150     | 4        | 18                 | 152.4      | 12               | 20                | 14      | 15°     | /                |
| 100              | 4      | 130/150     | 8        | 18                 | 190.5      | 12               | 20                | 14      | 15°     | /                |
| 125              | 5      | 130/150     | 8        | 22                 | 215.9      | 12               | 20                | 14      | 15°     | /                |
| 150              | 6      | 130/150     | 8        | 22                 | 241.3      | 12               | 20                | 14      | 15°     | /                |
| 200              | 8      | 130/150/200 | 8        | 22                 | 298.5      | 12               | 20                | 14      | 15°     | 3                |
| 250              | 10     | 130/150/200 | 12       | 26                 | 362        | 12               | 20                | 14      | 15°     | 3                |
| 300              | 12     | 130/200     | 12       | 26                 | 431.8      | 16               | 25                | 22      | 15°     | 3                |
| 350              | 14     | 200         | 12       | 30                 | 476.3      | 16               | 25                | 22      | 15°     | 4                |
| 400              | 16     | 200         | 16       | 30                 | 539.8      | 16               | 25                | 22      | 15°     | 4                |
| 450              | 18     | 200         | 16       | 33                 | 577.9      | 16               | 25                | 22      | 15°     | 4                |
| 500              | 20     | 200         | 20       | 33                 | 635        | 16               | 25                | 22      | 15°     | 5                |

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



Parameter Of EN 1092-1 European Standard Rubber Expansion Joints

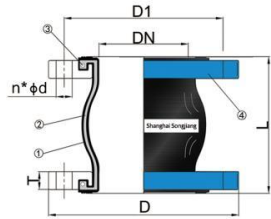
| Nominal diameter | Length | Flange OD | No.Bolts | Bolt Hole Diameter | Flange PCD | Axial Elongation | Axial compression | Lateral | Angular | Control tie rods |
|------------------|--------|-----------|----------|--------------------|------------|------------------|-------------------|---------|---------|------------------|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

Flange Parameters: EN 1092-1 Standard PN10





DIN 2501 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 DIN 2501 German 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                |

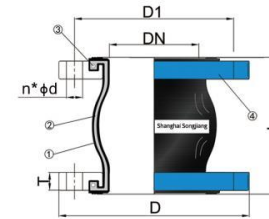
Parameter Of DIN 2501 Standard PN10 Rubber Expansion Joints



NR <80°C, Apply to water, air.  
 EPDM ≤120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤120°C, Apply to oil, strong acid corrosion.



UNI 2277-67 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 UNI 2277-67 Italian 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                |

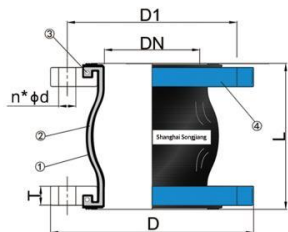
Flange Parameters: UNI 2277-67 Standard PN10



NR <80°C, Apply to water, air.  
 EPDM ≤120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤120°C, Apply to oil, strong acid corrosion.



► BS 4504 Standard Rubber Expansion Joint ◀



| 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 AS 4504 British 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)     | n(pcs)   | d(mm)              | D1(mm)     | MM               | MM                | MM      | °       | Pcs              |
| 25               | 1      | 95        | 4        | 14                 | 85         | 6                | 9                 | 9       | 15°     | /                |
| 32               | 1-1/4  | 95        | 4        | 18                 | 100        | 6                | 9                 | 9       | 15°     | /                |
| 40               | 1-1/2  | 95        | 4        | 18                 | 110        | 6                | 10                | 9       | 15°     | /                |
| 50               | 2      | 105       | 4        | 18                 | 125        | 7                | 10                | 10      | 15°     | /                |
| 65               | 2-1/2  | 115       | 4        | 18                 | 145        | 7                | 13                | 11      | 15°     | /                |
| 80               | 3      | 135       | 8        | 18                 | 160        | 8                | 15                | 12      | 15°     | /                |
| 100              | 4      | 150       | 8        | 18                 | 180        | 10               | 19                | 13      | 15°     | /                |
| 125              | 5      | 165       | 8        | 18                 | 210        | 12               | 19                | 13      | 15°     | /                |
| 150              | 6      | 180       | 8        | 22                 | 240        | 12               | 20                | 14      | 15°     | /                |
| 200              | 8      | 210       | 8        | 22                 | 295        | 16               | 25                | 22      | 10°     | /                |
| 250              | 10     | 230       | 12       | 22                 | 350        | 16               | 25                | 22      | 10°     | /                |
| 300              | 12     | 245       | 12       | 22                 | 400        | 16               | 25                | 22      | 10°     | /                |
| 350              | 14     | 255       | 16       | 22                 | 460        | 16               | 25                | 22      | 10°     | 4                |
| 400              | 16     | 255       | 16       | 26                 | 515        | 16               | 25                | 22      | 10°     | 4                |
| 450              | 18     | 255       | 20       | 26                 | 565        | 16               | 25                | 22      | 5°      | 4                |
| 500              | 20     | 255       | 20       | 26                 | 620        | 16               | 25                | 22      | 5°      | 5                |
| 600              | 24     | 260       | 20       | 30                 | 725        | 16               | 25                | 22      | 5°      | 5                |

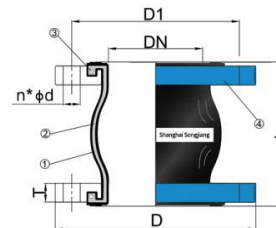
Flange parameters: BS 4504 PN10.



NR <80°C, Apply to water, air.  
 EPDM ≤ 120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤ 120°C, Apply to oil, strong acid corrosion.



► Spanish Use EN1091 Standard Rubber Expansion Joint ◀



| 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 EN1091 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)     | n(pcs)   | d(mm)              | D1(mm)     | MM               | MM                | MM      | °       | Pcs              |
| 25               | 1      | 95        | 4        | 14                 | 85         | 6                | 9                 | 9       | 15°     | /                |
| 32               | 1-1/4  | 95        | 4        | 18                 | 100        | 6                | 9                 | 9       | 15°     | /                |
| 40               | 1-1/2  | 95        | 4        | 18                 | 110        | 6                | 10                | 9       | 15°     | /                |
| 50               | 2      | 105       | 4        | 18                 | 125        | 7                | 10                | 10      | 15°     | /                |
| 65               | 2-1/2  | 115       | 4        | 18                 | 145        | 7                | 13                | 11      | 15°     | /                |
| 80               | 3      | 135       | 8        | 18                 | 160        | 8                | 15                | 12      | 15°     | /                |
| 100              | 4      | 150       | 8        | 18                 | 180        | 10               | 19                | 13      | 15°     | /                |
| 125              | 5      | 165       | 8        | 18                 | 210        | 12               | 19                | 13      | 15°     | /                |
| 150              | 6      | 180       | 8        | 22                 | 240        | 12               | 20                | 14      | 15°     | /                |
| 200              | 8      | 210       | 8        | 22                 | 295        | 16               | 25                | 22      | 10°     | /                |
| 250              | 10     | 230       | 12       | 22                 | 350        | 16               | 25                | 22      | 10°     | /                |
| 300              | 12     | 245       | 12       | 22                 | 400        | 16               | 25                | 22      | 10°     | /                |
| 350              | 14     | 255       | 16       | 22                 | 460        | 16               | 25                | 22      | 10°     | 4                |
| 400              | 16     | 255       | 16       | 26                 | 515        | 16               | 25                | 22      | 10°     | 4                |
| 450              | 18     | 255       | 20       | 26                 | 565        | 16               | 25                | 22      | 5°      | 4                |
| 500              | 20     | 255       | 20       | 26                 | 620        | 16               | 25                | 22      | 5°      | 5                |
| 600              | 24     | 260       | 20       | 30                 | 725        | 16               | 25                | 22      | 5°      | 5                |

Flange parameters: EN1091 PN10

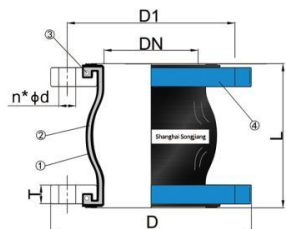


NR <80°C, Apply to water, air.  
 EPDM ≤ 120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤ 120°C, Apply to oil, strong acid corrosion.





▶ GOST 12820-80 Rubber Expansion Joint ◀



| 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 GOST 12820-80 Russian 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                |

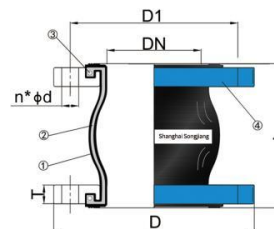
Flange parameters: GOST 12820-80 PN10



NR <80°C, Apply to water, air.  
 EPDM ≤ 120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤ 120°C, Apply to oil, strong acid corrosion.



▶ JIS 5K/10K Rubber Expansion Joint ◀



| 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 Japanese standard JIS 5K/10K Rubber Expansion Joint:

| 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              |   |
|                  |       |        | 5K        | 10K | 5K       | 10K                | 5K | 10K        | 5K  | 10K              |                   |         |         |                  |   |
| 25A              | 1     | 95     | 95        | 125 | 4        | 4                  | 12 | 19         | 75  | 90               | 6                 | 9       | 9       | 15°              | / |
| 32A              | 1-1/4 | 95     | 115       | 135 | 4        | 4                  | 15 | 19         | 90  | 100              | 6                 | 9       | 9       | 15°              | / |
| 40A              | 1-1/2 | 95     | 120       | 140 | 4        | 4                  | 15 | 19         | 95  | 105              | 6                 | 10      | 9       | 15°              | / |
| 50A              | 2     | 105    | 130       | 155 | 4        | 4                  | 15 | 19         | 105 | 120              | 7                 | 10      | 10      | 15°              | / |
| 65A              | 2-1/2 | 115    | 155       | 175 | 4        | 4                  | 15 | 19         | 130 | 140              | 7                 | 13      | 11      | 15°              | / |
| 80A              | 3     | 135    | 180       | 185 | 4        | 8                  | 19 | 19         | 145 | 150              | 8                 | 15      | 12      | 15°              | / |
| 100A             | 4     | 150    | 200       | 210 | 8        | 8                  | 19 | 19         | 165 | 175              | 10                | 19      | 13      | 15°              | / |
| 125A             | 5     | 165    | 235       | 250 | 8        | 8                  | 19 | 23         | 200 | 210              | 12                | 19      | 13      | 15°              | / |
| 150A             | 6     | 180    | 265       | 280 | 8        | 8                  | 19 | 23         | 230 | 240              | 12                | 20      | 14      | 15°              | / |
| 200A             | 8     | 210    | 320       | 330 | 8        | 12                 | 23 | 23         | 280 | 290              | 16                | 25      | 22      | 10°              | / |
| 250A             | 10    | 230    | 385       | 400 | 12       | 12                 | 23 | 25         | 345 | 355              | 16                | 25      | 22      | 10°              | / |
| 300A             | 12    | 245    | 430       | 445 | 12       | 16                 | 23 | 25         | 390 | 400              | 16                | 25      | 22      | 10°              | / |
| 350A             | 14    | 255    | 480       | 490 | 12       | 16                 | 25 | 25         | 435 | 445              | 16                | 25      | 22      | 10°              | 4 |
| 400A             | 16    | 255    | 540       | 560 | 16       | 16                 | 25 | 27         | 495 | 510              | 16                | 25      | 22      | 10°              | 4 |
| 450A             | 18    | 255    | 605       | 620 | 16       | 20                 | 25 | 27         | 555 | 565              | 16                | 25      | 22      | 5°               | 4 |
| 500A             | 20    | 255    | 655       | 675 | 20       | 20                 | 25 | 27         | 605 | 620              | 16                | 25      | 22      | 5°               | 5 |
| 600A             | 24    | 260    | 770       | 795 | 20       | 20                 | 25 | 33         | 715 | 730              | 16                | 25      | 22      | 5°               | 5 |

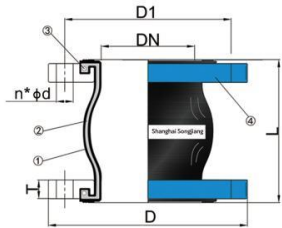
Flange parameters: JIS 5k/10k

The rubber sphere component of this product can be manufactured using different materials such as NR, NBR, EPDM, CR, FKM, etc. It can withstand high temperatures, acid and alkali environments, various weather conditions, and is compatible with hydraulic oil and other media. We have stock available for small quantities.





▶ Korean Standard KS 10Kgf/cm<sup>2</sup> Rubber Expansion Joint ◀



| 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 Korean Standard Rubber Expansion Joint

| 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              |
| 25A              | 1     | 95     | 125       | 4        | 19                 | 90         | 6                | 9                 | 9       | 15°     | /                |
| 32A              | 1-1/4 | 95     | 135       | 4        | 19                 | 100        | 6                | 9                 | 9       | 15°     | /                |
| 40A              | 1-1/2 | 95     | 140       | 4        | 19                 | 105        | 6                | 10                | 9       | 15°     | /                |
| 50A              | 2     | 105    | 155       | 4        | 19                 | 120        | 7                | 10                | 10      | 15°     | /                |
| 65A              | 2-1/2 | 115    | 175       | 4        | 19                 | 140        | 7                | 13                | 11      | 15°     | /                |
| 80A              | 3     | 135    | 185       | 8        | 19                 | 150        | 8                | 15                | 12      | 15°     | /                |
| 100A             | 4     | 150    | 210       | 8        | 19                 | 175        | 10               | 19                | 13      | 15°     | /                |
| 125A             | 5     | 165    | 250       | 8        | 23                 | 210        | 12               | 19                | 13      | 15°     | /                |
| 150A             | 6     | 180    | 280       | 8        | 23                 | 240        | 12               | 20                | 14      | 15°     | /                |
| 200A             | 8     | 210    | 330       | 12       | 23                 | 290        | 16               | 25                | 22      | 10°     | /                |
| 250A             | 10    | 230    | 400       | 12       | 25                 | 355        | 16               | 25                | 22      | 10°     | /                |
| 300A             | 12    | 245    | 445       | 16       | 25                 | 400        | 16               | 25                | 22      | 10°     | /                |
| 350A             | 14    | 255    | 490       | 16       | 25                 | 445        | 16               | 25                | 22      | 10°     | 4                |
| 400A             | 16    | 255    | 560       | 16       | 27                 | 510        | 16               | 25                | 22      | 10°     | 4                |
| 450A             | 18    | 255    | 620       | 20       | 27                 | 565        | 16               | 25                | 22      | 5°      | 4                |
| 500A             | 20    | 255    | 675       | 20       | 27                 | 620        | 16               | 25                | 22      | 5°      | 5                |
| 600A             | 24    | 260    | 795       | 24       | 33                 | 730        | 16               | 25                | 22      | 5°      | 5                |

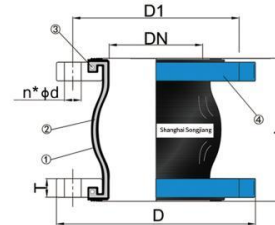
Flange parameters: KS 10Kgf/cm<sup>2</sup>.



NR <80°C, Apply to water, air.  
 EPDM ≤120°C  
 Apply to Acid-base, corrosion, seawater.  
 NBR <80°C, Apply to hydraulic oil, lubricating oil.  
 CR <90°C, Apply to oil and weather resistant.  
 FKM ≤120°C, Apply to oil, strong acid corrosion.



▶ AS 4087-2004 PN14/AS2129 2000 Rubber Expansion Joint ◀



| 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 Australian Flange Standard Rubber Expansion Joint

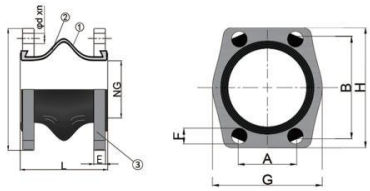
| Nominal diameter |       | Length | Flange OD | No.Bolts | Bolt Hole Diameter | Flange PCD | Axial Elongation | Axial compression | Lateral | Angular | Control tie rods |
|------------------|-------|--------|-----------|----------|--------------------|------------|------------------|-------------------|---------|---------|------------------|
| 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: AS 4087-2004 PN14/AS2129 2000





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 |

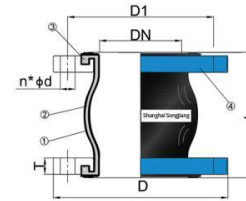
Rubber compensators are elastic connectors with turnable SAE flanges which are used for damping oscillations, vibrations, noises and movements in axial and transversal direction. Use - For all mineral oil products, crude oil, lubrication oil, cooling oil (-20°C up to 80°C, intermittent 100°C), grease, 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 | Rubber hose ID | Bolt hole Distance | Flange OD | Flange Thickness | Hole bolt diameter | Flange Width | Flange Length | Length | Weight |     |
|----------|-----------|------------------|----------------|--------------------|-----------|------------------|--------------------|--------------|---------------|--------|--------|-----|
|          |           | Inch             | MM             | A(mm)              | B(mm)     | D1(mm)           | E(mm)              | F(mm)        | G(mm)         | H(mm)  | L(mm)  | KG  |
| 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) |

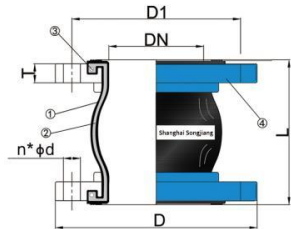
The DW-type drinking water rubber expansion joint is suitable for vibration reduction and noise reduction in high-rise domestic water non-negative pressure variable frequency water supply equipment, meeting the requirements of the national standards "Hygiene Safety Evaluation Specification for Drinking 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 16MPa, test pressure 2.5MPa

Media: Ordinary water

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

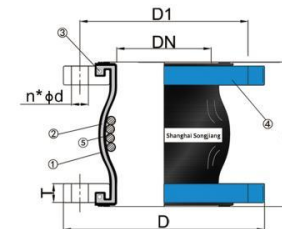
High abrasion resistance: Endures repeated wear and tear between rubber and the inner ring of the flange under high-frequency vibrations. The rubber formulation also ensures high abrasion resistance.

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<br>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



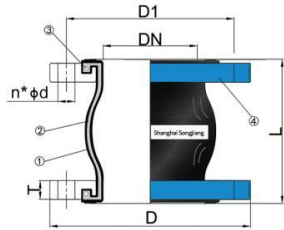
Metal Lining Type



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<br>DN40-DN200(QT450) |

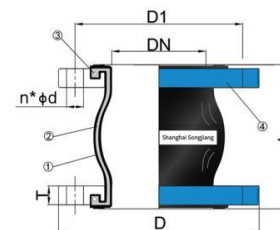
LO Type Hydraulic Rubber expansion joint is mainly used in the hydraulic system of ten-thousand-ton forging presses. It utilizes first-line brand raw materials, 100% virgin rubber, without recycled rubber. A one-to-ten compensation policy provides assurance for heavy industry applications. For detailed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

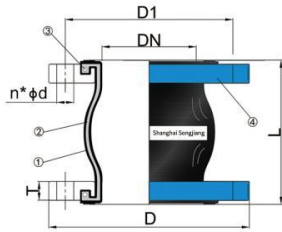
| Nominal diameter |       | Length | Flange OD | Flange thickness | No. of bolts | φk    | PCD    | Axial Elongation | Axial compression | Lateral | Angular | Control tie rods |
|------------------|-------|--------|-----------|------------------|--------------|-------|--------|------------------|-------------------|---------|---------|------------------|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

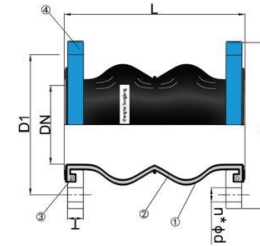
Flange parameters: CB/T 46-2007 1.0MPa

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)     | T(mm)            | n(mm)        | d(mm) | D1(mm) | D2(mm)                           | MM | MM               | MM                | °       |         |
| 25               | 1     | 150    | 105       | 14               | 4            | 13    | 73     | 57                               | 30 | 50               | 45                | 40°     |         |
| 32               | 1-1/4 | 150    | 115       | 14               | 6            | 15    | 83     | 64                               | 30 | 50               | 45                | 40°     |         |
| 40               | 1-1/2 | 175    | 125       | 14               | 6            | 15    | 93     | 74                               | 30 | 50               | 45                | 40°     |         |
| 50               | 2     | 175    | 135       | 14               | 6            | 15    | 103    | 84                               | 30 | 50               | 45                | 40°     |         |
| 65               | 2-1/2 | 175    | 155       | 14               | 6            | 15    | 123    | 104                              | 30 | 50               | 45                | 40°     |         |
| 80               | 3     | 175    | 170       | 14               | 8            | 15    | 138    | 118                              | 30 | 50               | 45                | 40°     |         |
| 100              | 4     | 225    | 190       | 14               | 8            | 15    | 158    | 138                              | 35 | 50               | 40                | 35°     |         |
| 125              | 5     | 225    | 215       | 14               | 10           | 15    | 183    | 164                              | 35 | 50               | 40                | 35°     |         |
| 150              | 6     | 225    | 240       | 14               | 12           | 15    | 208    | 190                              | 35 | 50               | 40                | 35°     |         |
| 200              | 8     | 325    | 310       | 17               | 12           | 17    | 273    | 250                              | 35 | 60               | 35                | 30°     |         |
| 250              | 10    | 325    | 380       | 21               | 14           | 21    | 336    | 306                              | 35 | 60               | 35                | 30°     |         |

Flange parameters: CB/T 46-2007 1.0MPa

Product Introduction:

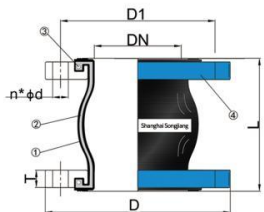
This product consists of an inner rubber layer, reinforced with nylon or polyester fabric, an outer rubber layer, and loose metal flanges. It features high pressure resistance, good elasticity, large displacement capacity, excellent vibration absorption and noise reduction effects, and easy installation. 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 Shots Private Pictures Published



► 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



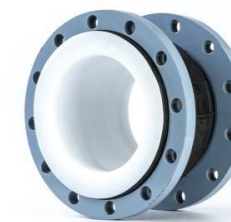
FKM: Mixed Medium



Brass Flange Rubber Expansion Joint



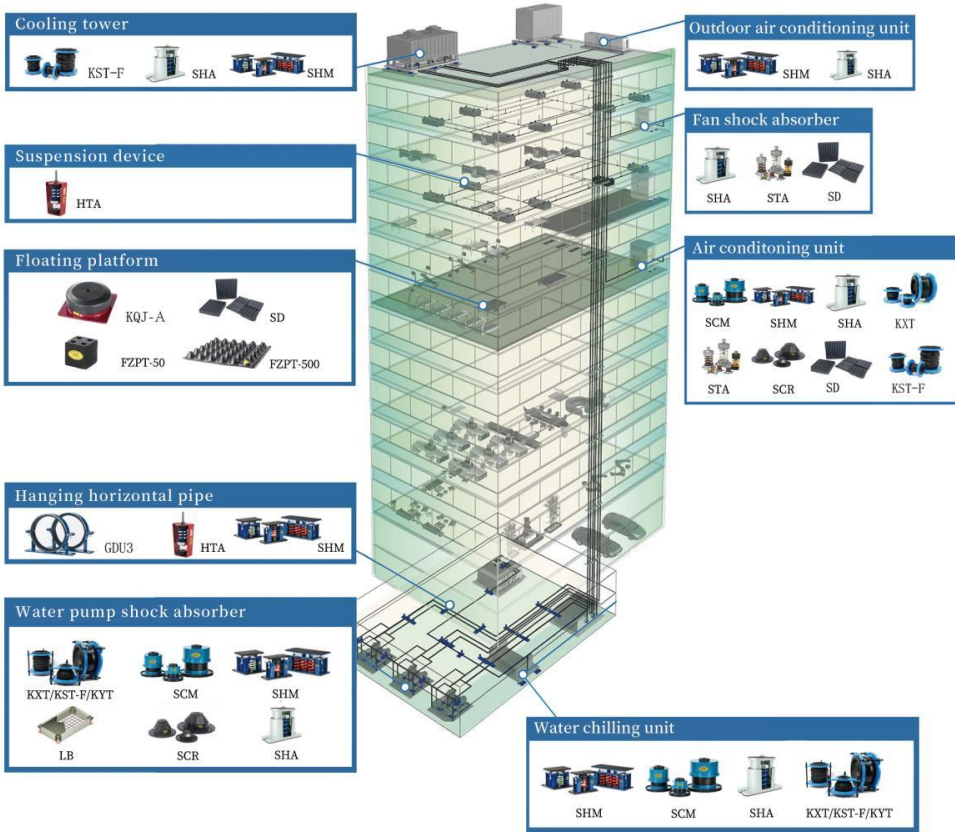
SS Flange Lined PTFE: Strong Acid-base Medium



Q235 Flange Lined PTFE: Aviation Kerosene, Oil Drilling Rig

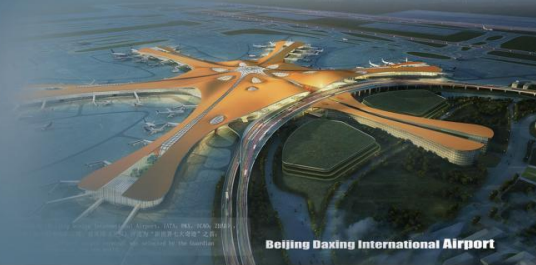


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| <p><b>QUIET</b></p> <p><b>DAMPING EFFECT</b></p> <p>The maximum achievable damping effect before and after use can reach up to 80%</p>                    | <p><b>CHECK</b></p> <p><b>SUPPORT DETECTION</b></p> <p>Supporting customers in conducting effectiveness testing before and after installation</p>                                       | <p><b>FIVE</b></p> <p><b>FIVE-YEAR WARRANTY</b></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  $\xi$
- 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:

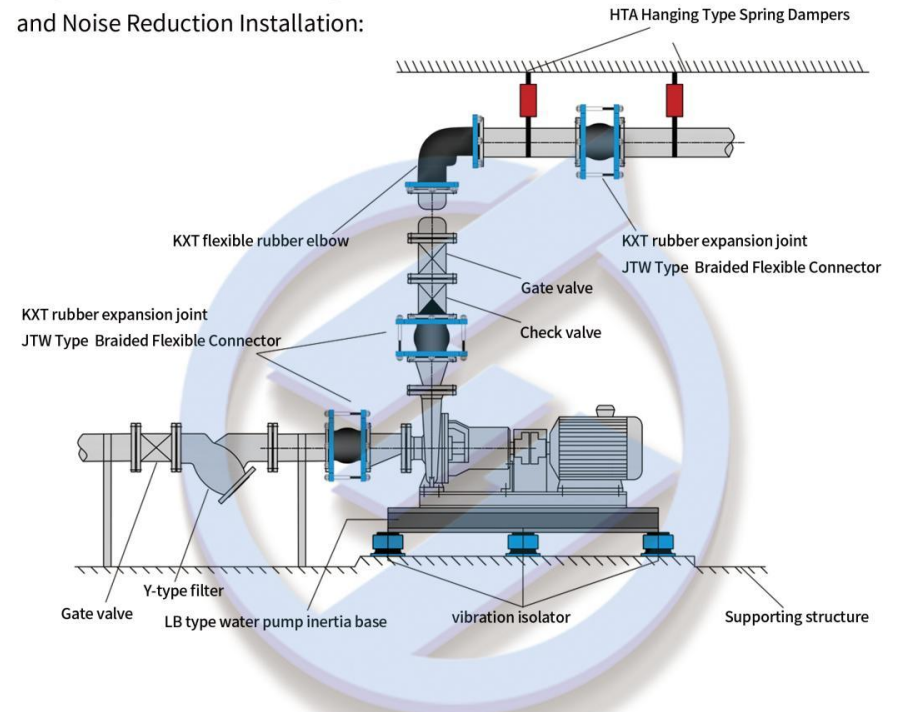
Unreasonable design of the pump unit's water intake flow path or its incompatibility with the unit, improper submergence depth of the water pump, as well as unreasonable startup and shutdown sequences of the unit, all contribute to worsened intake conditions, vortex formation, and the triggering or exacerbation 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 at 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



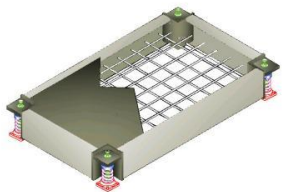
STR Type Low-Frequency Rubber Vibration Isolator



### 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.



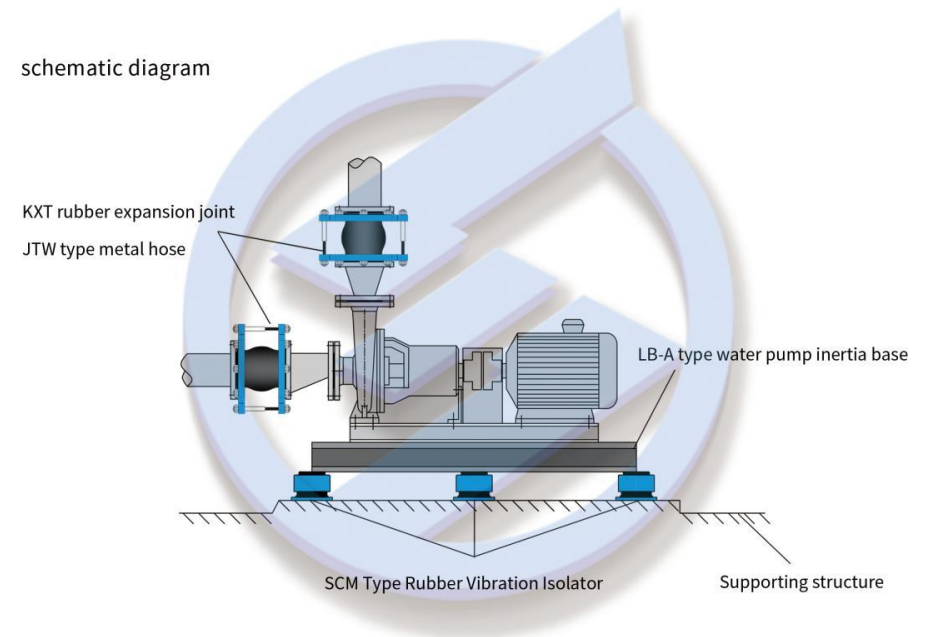
### Pump Vibration Isolator Installation Methods

#### 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



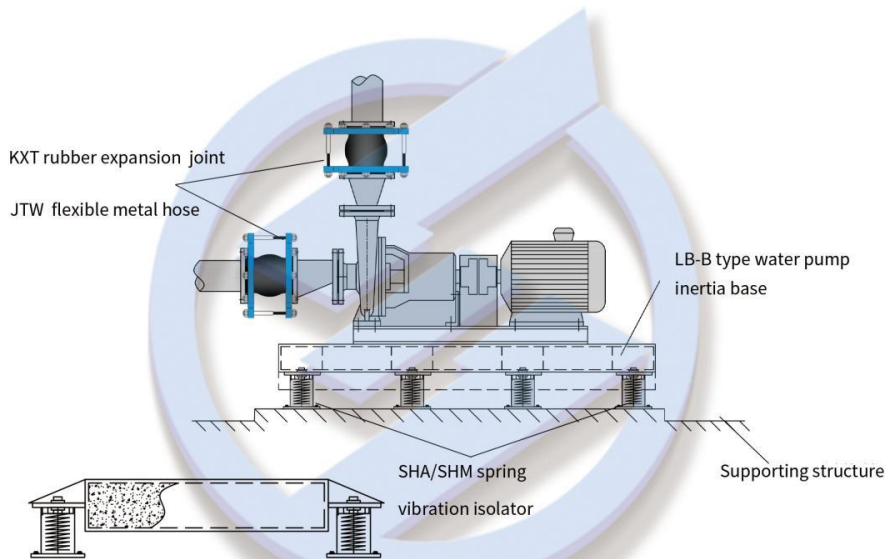


### Lateral Floating Support Damping Method

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.

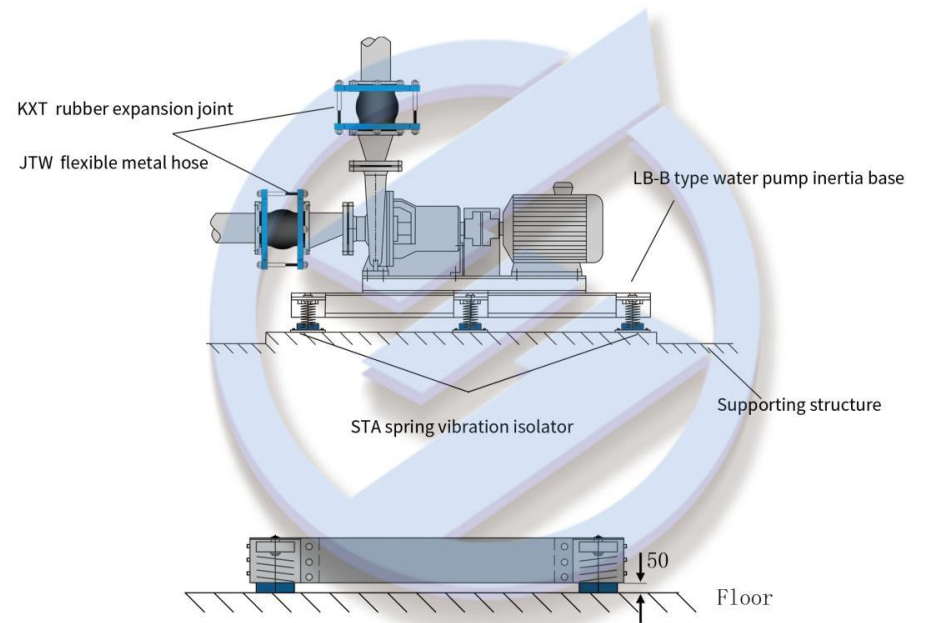
However, please note that some technical terms and phrases may require further context or clarification for accurate translation.



### Embedded Damping Method

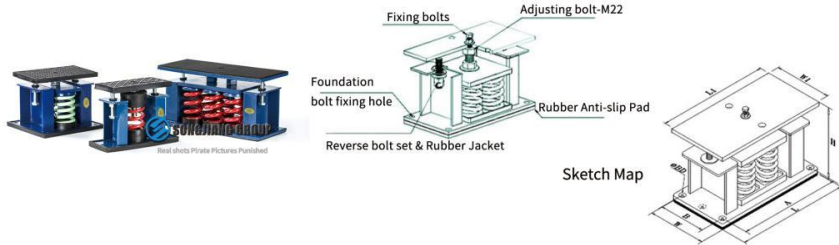
Overview: Spring dampers are installed inside the inertia base of the water pump. The weight of the inertia base is approximately 1.5 to 2 times the weight of the pump. The base has internal locations for installing the dampers, which are embedded within the base. The distance between the base bottom 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.

| Model | Overall dimension (mm) |     |     |     |     |     | Fixing bolts | φ BD |    |
|-------|------------------------|-----|-----|-----|-----|-----|--------------|------|----|
|       | L                      | W   | L1  | W1  | A   | B   |              |      |    |
| SHM-1 | 260                    | 100 | 210 | 100 | 230 | 0   | 200          | 12   | 13 |
| SHM-2 | 235                    | 220 | 235 | 140 | 195 | 180 | 200          | 14   | 13 |
| SHM-4 | 320                    | 165 | 320 | 165 | 290 | 90  | 200          | 14   | 13 |
| SHM-6 | 400                    | 170 | 400 | 170 | 370 | 90  | 200          | 18   | 13 |
| SHM-9 | 420                    | 250 | 420 | 250 | 384 | 180 | 200          | 18   | 13 |

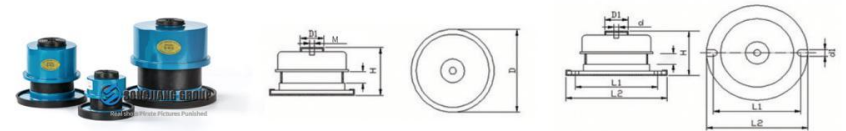
\*B value of 0 indicates that the hole center is at W/2

| Model / Specification | Load range (kg) | Vertical stiffness (kg/mm) | Suitable deflection (mm) |
|-----------------------|-----------------|----------------------------|--------------------------|
| SHM-1-100             | 80-120          | 4                          | 25                       |
| SHM-1-200             | 160-240         | 8                          | 25                       |
| SHM-1-300             | 240-360         | 12                         | 25                       |
| SHM-1-400             | 320-480         | 16                         | 25                       |
| SHM-1-500             | 400-600         | 20                         | 25                       |
| SHM-1-600             | 480-720         | 24                         | 25                       |
| SHM-1-700             | 560-840         | 28                         | 25                       |
| SHM-1-800             | 640-960         | 32                         | 25                       |
| SHM-1-900             | 720-1080        | 36                         | 25                       |
| SHM-1-1000            | 800-1200        | 40                         | 25                       |
| SHM-1-1200            | 960-1440        | 48                         | 25                       |
| SHM-2-600             | 480-720         | 24                         | 25                       |
| SHM-2-800             | 640-960         | 32                         | 25                       |
| SHM-2-1000            | 800-1200        | 40                         | 25                       |
| SHM-2-1200            | 920-1440        | 48                         | 25                       |
| SHM-2-1400            | 1120-1680       | 56                         | 25                       |
| SHM-2-1600            | 1280-1920       | 64                         | 25                       |
| SHM-2-1800            | 1440-2160       | 72                         | 25                       |
| SHM-2-2000            | 1600-2400       | 80                         | 25                       |
| SHM-2-2400            | 1920-2880       | 96                         | 25                       |
| SHM-2-2600            | 2080-2800       | 104                        | 25                       |
| SHM-2-2800            | 2240-3000       | 112                        | 25                       |
| SHM-2-3000            | 2400-3200       | 120                        | 25                       |
| SHM-4-1200            | 960-1440        | 48                         | 25                       |
| SHM-4-1600            | 1280-1920       | 64                         | 25                       |
| SHM-4-2000            | 1600-2400       | 80                         | 25                       |
| SHM-4-2400            | 1920-2880       | 96                         | 25                       |
| SHM-4-2800            | 2240-3360       | 112                        | 25                       |
| SHM-4-3200            | 2560-3840       | 128                        | 25                       |
| SHM-4-3600            | 2880-4320       | 144                        | 25                       |
| SHM-4-4000            | 3200-4800       | 160                        | 25                       |
| SHM-4-4800            | 3840-5200       | 192                        | 25                       |
| SHM-4-5200            | 4160-5600       | 208                        | 25                       |
| SHM-6-3600            | 2880-4320       | 144                        | 25                       |
| SHM-6-4200            | 3360-5040       | 168                        | 25                       |
| SHM-6-5000            | 4000-6000       | 200                        | 25                       |
| SHM-6-6000            | 4800-7200       | 240                        | 25                       |
| SHM-6-7200            | 5760-7800       | 288                        | 25                       |
| SHM-9-6300            | 5040-7560       | 252                        | 25                       |
| SHM-9-7200            | 5760-8640       | 288                        | 25                       |
| SHM-9-9000            | 7200-10800      | 360                        | 25                       |
| SHM-9-10800           | 8640-11700      | 432                        | 25                       |
| SHM-9-11700           | 9360-12600      | 468                        | 25                       |
| SHM-9-12600           | 10080-13500     | 504                        | 25                       |
| SHM-9-13500           | 10800-14400     | 540                        | 25                       |

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.

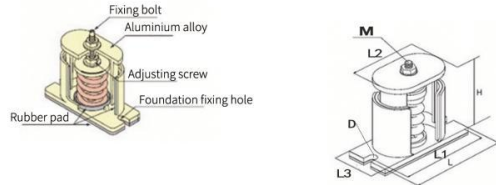
It can eliminate vibration in mechanical mechanisms and protect and prolong the lifespan of machinery. Load deflection: 25mm.

Performance Parameter Table of SCM Type Spring Vibration Isolator:

| Model    | Predetermined load | Optimum load | Ultimate load | Vertical stiffness | Overall dimensions |     |     |     |    |    |    |
|----------|--------------------|--------------|---------------|--------------------|--------------------|-----|-----|-----|----|----|----|
|          | KG                 | KG           | KG            |                    | kg/mm              | H   | L1  | L2  | D  | D1 | d1 |
| SCM-10   | 3                  | 10           | 12            | 0.5                | 70                 | 75  | 93  | 65  | 40 | 11 | 10 |
| SCM-20   | 5                  | 20           | 23            | 1                  | 70                 | 75  | 93  | 65  | 40 | 11 | 10 |
| SCM-30   | 6                  | 30           | 35            | 1.5                | 70                 | 75  | 93  | 65  | 40 | 11 | 10 |
| SCM-40   | 20                 | 40           | 46            | 2                  | 70                 | 75  | 93  | 65  | 40 | 11 | 10 |
| SCM-60   | 30                 | 60           | 69            | 3                  | 70                 | 75  | 93  | 65  | 40 | 11 | 10 |
| SCM-80   | 32                 | 80           | 90            | 3.2                | 110                | 105 | 125 | 88  | 50 | 11 | 12 |
| SCM-100  | 40                 | 100          | 112           | 4                  | 110                | 105 | 125 | 88  | 50 | 11 | 12 |
| SCM-150  | 60                 | 150          | 168           | 6                  | 110                | 105 | 125 | 88  | 50 | 11 | 12 |
| SCM-200  | 80                 | 200          | 224           | 8                  | 110                | 105 | 125 | 88  | 50 | 11 | 12 |
| SCM-250  | 125                | 250          | 288           | 12.5               | 110                | 105 | 125 | 88  | 50 | 11 | 12 |
| SCM-300  | 120                | 300          | 336           | 12                 | 145                | 145 | 165 | 130 | 50 | 13 | 14 |
| SCM-400  | 160                | 400          | 448           | 16                 | 145                | 145 | 165 | 130 | 50 | 13 | 14 |
| SCM-500  | 200                | 500          | 560           | 20                 | 145                | 145 | 165 | 130 | 50 | 13 | 14 |
| SCM-600  | 240                | 600          | 672           | 24                 | 145                | 145 | 165 | 130 | 50 | 13 | 14 |
| SCM-800  | 320                | 800          | 896           | 32                 | 150                | 210 | 245 | 190 | 70 | 15 | 16 |
| SCM-1000 | 500                | 1000         | 1150          | 50                 | 150                | 210 | 245 | 190 | 70 | 15 | 16 |
| SCM-1200 | 600                | 1200         | 1380          | 60                 | 150                | 210 | 245 | 190 | 70 | 15 | 16 |
| SCM-1500 | 750                | 1500         | 1725          | 75                 | 150                | 210 | 245 | 190 | 70 | 15 | 16 |
| SCM-2000 | 1000               | 2000         | 2300          | 100                | 150                | 210 | 245 | 190 | 70 | 15 | 16 |



▶ 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, increasing the

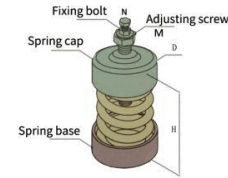
Performance Parameter Table of SHA Type Spring Vibration Isolator:

| 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     | 14     |

| Model      | Bearing range<br>KG | Vertical stiffness<br>kg/cm <sup>2</sup> /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                 | 105    | 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

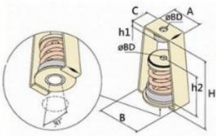
| Model    | Optimal load | Vertical stiffness | Frequency range |
|----------|--------------|--------------------|-----------------|
|          | KG           | kg/mm              | HZ              |
| STA-100  | 100          | 4                  | 2.3-4.2         |
| STA-200  | 200          | 8                  | 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         |



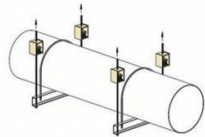
▶ HTA Type Suspended Spring Vibration Isolator ◀

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 |

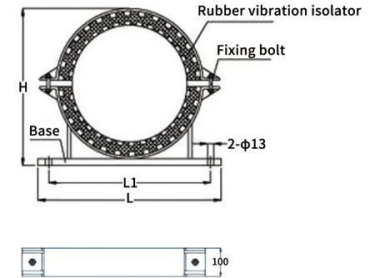


| Model     | Load range | Elastic coefficient | Applicable deflection |
|-----------|------------|---------------------|-----------------------|
|           | KG         | kg/mm               | MM                    |
| HTA-05-A  | 1~10       | 0.2                 | 25                    |
| HTA-10-A  | 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:

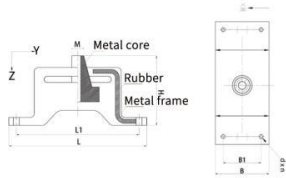
| Specification | L (mm) | L1 (mm) | H (mm) |
|---------------|--------|---------|--------|
| GDU3-50       | 200    | 150     | 108    |
| GDU3-65       | 220    | 170     | 128    |
| GDU3-80       | 230    | 180     | 141    |
| GDU3-100      | 250    | 200     | 160    |
| GDU3-125      | 275    | 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



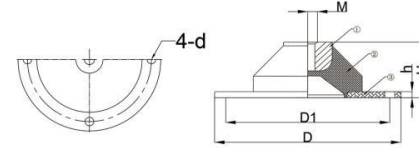
| Model  | Outline and connection dimension (mm) |    |     |     |    |    |   | Rated load (N) |          | Dynamic stiffness N/mm |      |               |          | Deformation(mm) | Frequency Hz | Damping ratio C/C |        |           |
|--------|---------------------------------------|----|-----|-----|----|----|---|----------------|----------|------------------------|------|---------------|----------|-----------------|--------------|-------------------|--------|-----------|
|        | M                                     | H  | L1  | B   | B1 | d  | n | Z-compression  | Z-strech | Y                      | X    | Z-compression | Z-strech |                 |              |                   | Y      | X         |
| 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  $\geq 0.07$ , 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

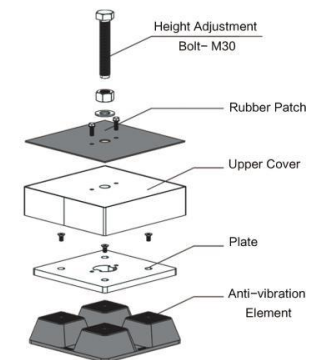
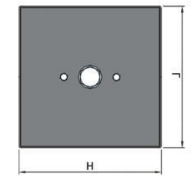
Support for Testing: Support for effectiveness testing before and after installation (third-party) Problem Compensation: In case of quality issues, a full refund will be provided, and the cost of dismantling, installation, and transportation will be borne.

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     | Length (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

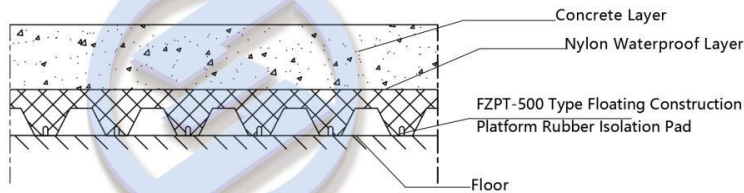
FZPT-500 Type Floating Construction Platform Rubber Isolation Pad Structure Diagram:



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.

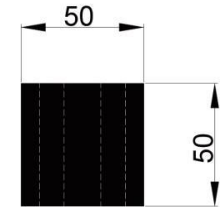
The product dimensions are 500\*500mm (0.25m2/piece) with a thickness of 50mm. It can be conveniently and quickly installed in large areas by combining multiple pieces. It can also be cut into various sizes according to project requirements. The product is acid-resistant, puncture-resistant, oil-resistant, 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<br>KG | Deformation<br>MM | Frequency<br>Hz | Sound Insulation<br>dBA | Length<br>MM | Width<br>MM | Product Thickness<br>MM |
|----------|------------|-------------------|-----------------|-------------------------|--------------|-------------|-------------------------|
| FZPT-500 | 200~1500   | 3~10              | 7.5~13          | 28~35                   | 500          | 500         | 50                      |



FZPT-50 Type Floating Construction Platform Rubber Isolation Pad

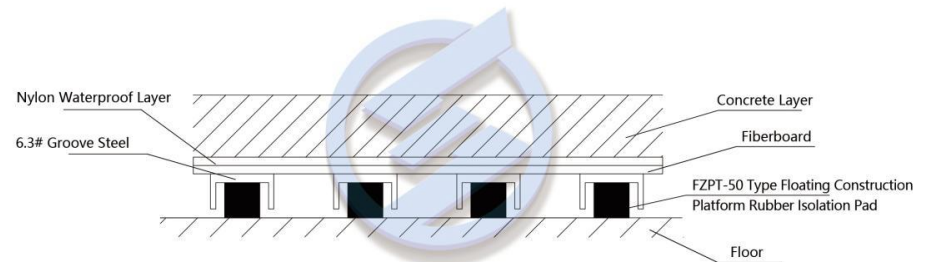


\*There are 4 penetrating holes in the middle of the rubber block to increase the deformability of the product

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<br>kg/m² | Deformation<br>MM | Frequency<br>Hz | Length<br>MM | Width<br>MM | Height<br>MM | Sound Insulation<br>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.



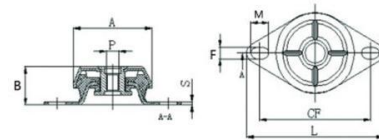
Product Dimensions: 170mm\*70mm\*20mm, 150mm\*150mm\*20mm, 120mm\*120mm\*20mm, 50mm\*50mm\*20mm

| Vibration Damping Pad |               |               | Combination Diagram | Vertical Load Range | Vertical Load Range | Vertical Natural Frequency | Steel Plate   |           |
|-----------------------|---------------|---------------|---------------------|---------------------|---------------------|----------------------------|---------------|-----------|
| Model                 | No. of Layers | No. of Blocks |                     | KN                  | MM                  | Hz                         | No. of Blocks | Size(mm)  |
| SD-41-4               |               |               |                     | 1.28~3.44           | 2.5~5.0             | 12.9~9.1                   |               |           |
| 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               |               |               |                     | 1.28~3.44           | 4.0~9.0             | 10.3~6.5                   |               |           |
| SD-62-4               | 2             | 8             |                     | 3.52~9.48           | 4.0~9.0             | 10.3~6.5                   | 1             | 180*180*3 |
| SD-82-4               |               |               |                     | 8.88~23.7           | 4.0~9.0             | 10.3~6.5                   |               |           |
| SD-43-4               |               |               |                     | 1.28~3.44           | 5.5~13.0            | 8.4~5.4                    |               |           |
| SD-63-4               | 3             | 12            |                     | 3.52~9.48           | 5.5~13.0            | 8.4~5.4                    | 2             | 180*180*3 |
| SD-83-4               |               |               |                     | 8.88~23.7           | 5.5~13.0            | 8.4~5.4                    |               |           |
| SD-44-4               |               |               |                     | 1.28~3.44           | 7.0~17.0            | 7.4~4.8                    |               |           |
| SD-64-4               | 4             | 16            |                     | 3.52~9.48           | 7.0~17.0            | 7.4~4.8                    | 3             | 180*180*3 |
| SD-84-4               |               |               |                     | 8.88~23.7           | 7.0~17.0            | 7.4~4.8                    |               |           |
| SD-45-4               |               |               |                     | 1.28~3.44           | 8.5~21.0            | 7.4~4.1                    |               |           |
| SD-65-4               | 5             | 20            |                     | 3.52~9.48           | 8.5~21.0            | 7.4~4.1                    | 4             | 180*180*3 |
| 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 | A   | B  | P   | F*M     | CF  | L   | S   | Average load | Maximum load | Maximum compression |
|------------|-----------------|-----|----|-----|---------|-----|-----|-----|--------------|--------------|---------------------|
|            | IRHD            |     |    |     |         |     |     |     | Kg/mm        | Kg           | MM                  |
| JA633008W  | 45              | 63  | 30 | M8  | 9*14    | 89  | 110 | 2.5 | 70           | 140          | 2                   |
| JA633008M  | 60              | 63  | 30 | M8  | 9*14    | 89  | 110 | 2.5 | 120          | 240          | 2                   |
| JA633010W  | 45              | 63  | 30 | M10 | 9*14    | 89  | 110 | 2.5 | 70           | 140          | 2                   |
| JA633010M  | 60              | 63  | 30 | M10 | 9*14    | 89  | 110 | 2.5 | 120          | 240          | 2                   |
| JA783010W  | 45              | 78  | 30 | M10 | 9*12    | 110 | 135 | 2.5 | 47           | 108          | 2.3                 |
| JA783010M  | 60              | 78  | 30 | M10 | 9*12    | 110 | 135 | 2.5 | 116          | 267          | 2.3                 |
| JA833010W  | 45              | 83  | 30 | M10 | 9*13    | 110 | 135 | 3   | 65           | 195          | 3                   |
| JA833010M  | 60              | 83  | 30 | M10 | 9*13    | 110 | 135 | 3   | 98           | 294          | 3                   |
| JA833012W  | 45              | 83  | 30 | M12 | 9*13    | 110 | 135 | 3   | 65           | 195          | 3                   |
| JA833012M  | 60              | 83  | 30 | M12 | 9*13    | 110 | 135 | 3   | 98           | 294          | 3                   |
| JA923512W  | 45              | 92  | 35 | M12 | 10*15   | 124 | 150 | 3   | 50           | 175          | 3.5                 |
| JA923512M  | 60              | 92  | 35 | M12 | 10*15   | 124 | 150 | 3   | 90           | 315          | 3.5                 |
| JA1063812W | 45              | 106 | 38 | M12 | 13*19   | 143 | 175 | 4   | 70           | 252          | 3.6                 |
| JA1063812M | 60              | 106 | 38 | M12 | 13*19   | 143 | 175 | 4   | 150          | 450          | 3                   |
| JA1254316W | 45              | 125 | 43 | M16 | 14.5*20 | 156 | 192 | 4   | 88           | 352          | 4                   |
| JA1254316M | 60              | 125 | 43 | M16 | 14.5*20 | 156 | 192 | 4   | 185          | 740          | 4                   |
| JA1505016W | 45              | 150 | 50 | M16 | 14*18   | 182 | 218 | 4   | 120          | 720          | 6                   |
| JA1505016M | 60              | 150 | 50 | M16 | 14*18   | 182 | 218 | 4   | 220          | 1320         | 6                   |
| JA1505020W | 45              | 150 | 50 | M20 | 14*18   | 182 | 218 | 4   | 120          | 720          | 6                   |
| JA1505020M | 60              | 150 | 50 | M20 | 14*18   | 182 | 218 | 4   | 220          | 1320         | 6                   |



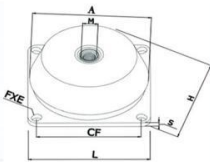
JY/JF Type Metal Encased Rubber Vibration Isolator

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).

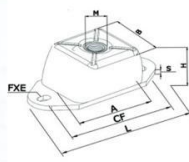
JY Type Metal Encased Rubber Vibration Isolator

| Model        | Rubber hardness |  | A   | H  | M       | F*E     | CF  | L   | S | Maximum load |    |
|--------------|-----------------|--|-----|----|---------|---------|-----|-----|---|--------------|----|
|              | IRHD            |  |     |    |         |         |     |     |   | Kg           | MM |
| JY-150*50M16 | 40              |  | 150 | 50 | M16-M20 | 14.5*17 | 132 | 170 | 4 | 650          | 4  |
| JY-150*50M16 | 50              |  | 150 | 50 | M16-M20 | 14.5*17 | 132 | 170 | 4 | 1050         | 4  |
| JY-150*50M20 | 60              |  | 150 | 50 | M16-M20 | 14.5*17 | 132 | 170 | 4 | 1300         | 4  |
| JY-150*50M20 | 70              |  | 150 | 50 | M16-M20 | 14.5*17 | 132 | 170 | 4 | 1500         | 4  |
| JY-180*60M16 | 40              |  | 180 | 60 | M16-M20 | 18.5*21 | 150 | 190 | 5 | 875          | 5  |
| JY-180*60M16 | 50              |  | 180 | 60 | M16-M20 | 18.5*21 | 150 | 190 | 5 | 1250         | 5  |
| JY-180*60M20 | 60              |  | 180 | 60 | M16-M20 | 18.5*21 | 150 | 190 | 5 | 1700         | 5  |
| JY-180*60M20 | 70              |  | 180 | 60 | M16-M20 | 18.5*21 | 150 | 190 | 5 | 2650         | 5  |

JY Type Structural Diagram:



JF Type Structural Diagram:



JF Type Metal Encased Rubber Vibration Isolator

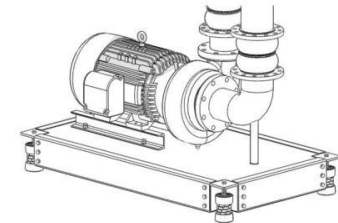
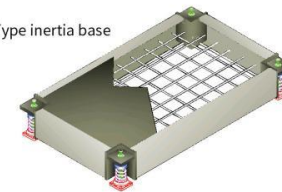
| Model    | Rubber hardness |  | A   | H  | M   | F*E   | CF  | L   | S | Average load |     | Maximum load |    | Maximum compression |  |
|----------|-----------------|--|-----|----|-----|-------|-----|-----|---|--------------|-----|--------------|----|---------------------|--|
|          | IRHD            |  |     |    |     |       |     |     |   | Kg/mm        | Kg  | MM           | MM |                     |  |
| JF-60M12 | 40              |  | 80  | 38 | M12 | 14*11 | 100 | 120 | 3 | 9            | 36  |              |    | 4                   |  |
| JF-60M12 | 50              |  | 80  | 38 | M12 | 14*11 | 100 | 120 | 3 | 13           | 52  |              |    | 4                   |  |
| JF-60M12 | 60              |  | 80  | 38 | M12 | 14*11 | 100 | 120 | 3 | 16           | 64  |              |    | 4                   |  |
| JF-60M12 | 70              |  | 80  | 38 | M12 | 14*11 | 100 | 120 | 3 | 24           | 96  |              |    | 4                   |  |
| JF-60M12 | 35              |  | 104 | 50 | M16 | 30*13 | 140 | 187 | 4 | 16           | 80  |              |    | 5                   |  |
| JF-60M12 | 45              |  | 104 | 50 | M16 | 30*13 | 140 | 187 | 4 | 24           | 120 |              |    | 5                   |  |
| JF-60M12 | 60              |  | 104 | 50 | M16 | 30*13 | 140 | 187 | 4 | 38           | 190 |              |    | 5                   |  |
| JF-60M12 | 70              |  | 104 | 50 | M16 | 30*13 | 140 | 187 | 4 | 60           | 300 |              |    | 5                   |  |
| JF-60M12 | 80              |  | 104 | 50 | M16 | 30*13 | 140 | 187 | 4 | 95           | 475 |              |    | 5                   |  |



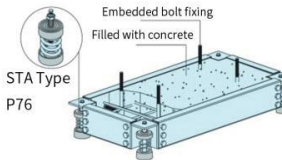
LB Type Water Pump Inertia Base

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



STA Type P76 Embedded bolt fixing Filled with concrete



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



Another Option:  
See P73 : SHM type spring isolator

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.

| Model    | Corresponding transformer | Rated load<br>KG | Optimum deformation<br>MM | Vertical stiffness<br>(kg/mm) | Overall dimension |       |       |
|----------|---------------------------|------------------|---------------------------|-------------------------------|-------------------|-------|-------|
|          |                           |                  |                           |                               | 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   |

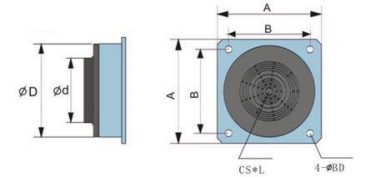
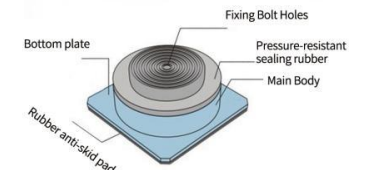


▶ KQJZ-A Type Air Isolator ◀

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

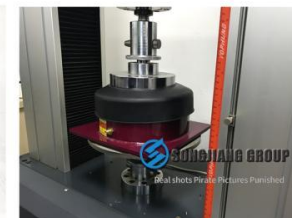
Product Features:

- 1.Natural frequency of 3Hz~5Hz, maximum operating pressure of 4.5Kg/cm<sup>2</sup>.
- 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 |     |      |          |     | d   | Load<br>Min Max | Height<br>MM | Weight<br>KG |
|-------------|--------------|-----|------|----------|-----|-----|-----------------|--------------|--------------|
|             | A            | B   | 4-BØ | CS*L     | D   |     |                 |              |              |
| 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 ◀

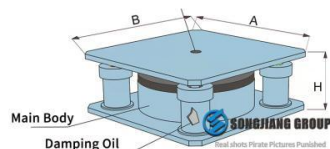
Official Commitment

- 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:

- Effectively suppresses excessive equipment vibration and ensures equipment stability.
- Suitable for eliminating impact vibrations, designed with low natural frequency for excellent damping effect.
- Made with CR (Neoprene Rubber) material, providing good weather resistance and long service life.
- The air cushion housing is robotically welded, ensuring seamless integration between rubber and housing.
- Excellent air tightness, avoiding frequent inflation for maintenance, making it more convenient to use.
- Internal design includes damping mechanism to effectively prevent resonance.
- Natural frequency of 3Hz-5Hz, damping coefficient of 0.12-1.3, and maximum operating pressure of 4.5kg/cm<sup>2</sup>, 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 | Fixing bolts |
|-------------|------|------|--------------|-----|-----|-------------------|--------------|
|             | Min  | Max  | A            | B   | H   | HZ                | CS*L         |
| 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

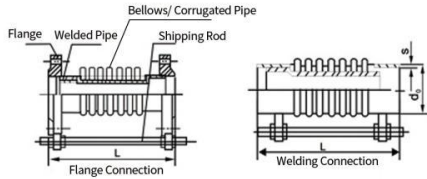


Paper Machinery Rubber Air Spring





► 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 ◀

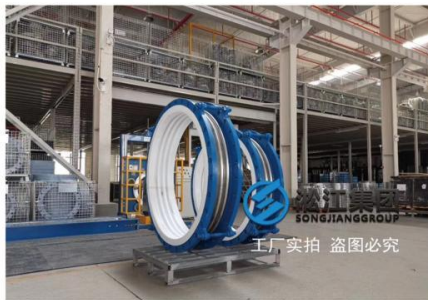
The BGF-PTFE type PTFE Corrugated Expansion Joint, also known as PTFE Expansion bellow, is primarily made of polytetrafluoroethylene (PTFE) material on the inner wall in contact with the medium. The corrugated shape allows it to have the ability to expand and contract. PTFE exhibits high resistance to 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 10kg, primarily used for central air conditioning fan coils. Additionally, the copper threads can be made with stainless



2. Stainless steel wire braided metal hose with stainless steel threaded ends, customizable length, pressure resistance of 25kg, primarily used for various sanitary pipelines, chemical pipelines, high-temperature pipelines,



3. Stainless steel inner-threaded nut wire braided metal hose with stainless steel threaded ends, customizable length, pressure resistance of 25kg, primarily used for various sanitary, chemical, and high-temperature appli-



4. Stainless steel flexible metal hose with universal connections on both ends, pressure resistance of 25kg, 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 25kg, 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     |                         | 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.



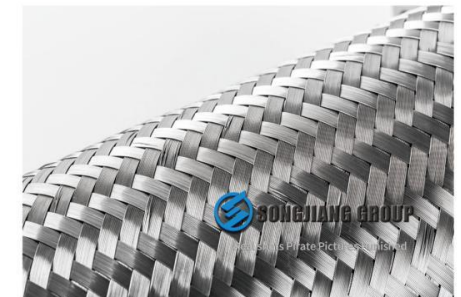
▶ JTW-SS Type Braided Flexible Connectors ◀

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.



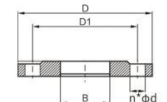
Corresponding Flange Sizes for Flexible Rubber Expansion Joint Pressure Ratings

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 each pressure rating.

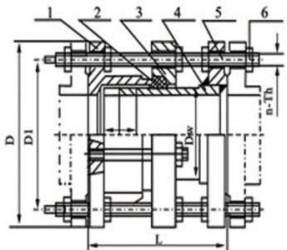
D: Flange Outer Diameter
D1: Bolt Hole Center Distance
n: Number of Flange Holes
φ d: Bolt Diameter

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





VSSJAF(C2F) Double Flange Dismantling Joint



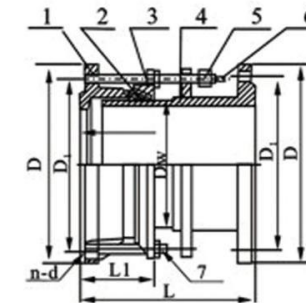
| Serial number | Name              | Number | Material Science             |
|---------------|-------------------|--------|------------------------------|
| 1             | BODY              | 1      | QT400-15/AQ235A ZG230-450、20 |
| 2             | Gasket            | 1      | NBR                          |
| 3             | Cover cap         | 1      | QT400-15/AQ235A ZG230-450、20 |
| 4             | Short pipe flange | 1      | Q235A、20、16Mn                |
| 5             | Nut               | 5n     | Q235A、20、ICr8Ni9Ti           |
| 6             | Bolt              | n      | Q235A、20、1Cr18Ni9Ti          |

| Nominal diameter<br>DN | Pipe diameter<br>DW | Outer dimensions |    | Flange connection Dimension |      |        |     |
|------------------------|---------------------|------------------|----|-----------------------------|------|--------|-----|
|                        |                     | L                | ±L | D                           | D1   | n-Th   | b   |
| 65                     | 76                  | 200              | 40 | 185                         | 145  | 4-M16  | 20  |
| 80                     | 89                  | 200              | 40 | 200                         | 160  | 8-M16  | 22  |
| 100                    | 114                 | 200              | 40 | 220                         | 180  | 8-M16  | 24  |
| 125                    | 140                 | 200              | 40 | 250                         | 210  | 8-M16  | 26  |
| 150                    | 168                 | 200              | 40 | 285                         | 240  | 8-M20  | 26  |
| 200                    | 219                 | 200              | 40 | 340                         | 295  | 8-M20  | 28  |
| 250                    | 273                 | 200              | 40 | 395                         | 350  | 12-M20 | 28  |
| 300                    | 325                 | 220              | 50 | 445                         | 400  | 12-M20 | 28  |
| 350                    | 377                 | 220              | 50 | 505                         | 460  | 16-M20 | 30  |
| 400                    | 426                 | 220              | 50 | 565                         | 515  | 16-M24 | 32  |
| 450                    | 480                 | 220              | 50 | 615                         | 565  | 20-M24 | 32  |
| 500                    | 530                 | 220              | 50 | 670                         | 620  | 20-M24 | 34  |
| 600                    | 630                 | 240              | 50 | 780                         | 725  | 20-M27 | 36  |
| 700                    | 720                 | 240              | 50 | 895                         | 840  | 24-M27 | 40  |
| 800                    | 820                 | 350              | 60 | 1015                        | 950  | 24-M30 | 44  |
| 900                    | 920                 | 350              | 60 | 1115                        | 1050 | 28-M30 | 46  |
| 1000                   | 1020                | 350              | 60 | 1230                        | 1160 | 28-M33 | 50  |
| 1200                   | 1220                | 370              | 60 | 1455                        | 1380 | 32-M36 | 56  |
| 1400                   | 1420                | 370              | 60 | 1675                        | 1590 | 36-M39 | 62  |
| 1600                   | 1620                | 380              | 60 | 1915                        | 1820 | 40-M45 | 68  |
| 1800                   | 1820                | 380              | 60 | 2115                        | 2020 | 44-M45 | 70  |
| 2000                   | 2020                | 400              | 60 | 2325                        | 2230 | 48-M45 | 74  |
| 2200                   | 2220                | 400              | 60 | 2550                        | 2440 | 52-M52 | 80  |
| 2400                   | 2420                | 400              | 60 | 2760                        | 2650 | 56-M52 | 82  |
| 2600                   | 2620                | 450              | 80 | 2960                        | 2850 | 60-M52 | 88  |
| 2800                   | 2820                | 450              | 80 | 3180                        | 3070 | 64-M52 | 94  |
| 3000                   | 3020                | 450              | 80 | 3405                        | 3290 | 68-M56 | 100 |



VSSJA-2(B2F) Double Flange Limit Dismantling Joint

| NO | Name               | Number | Material Science             |
|----|--------------------|--------|------------------------------|
| 1  | Body               | 1      | QT400-15/AQ235A ZG230-450、20 |
| 2  | Gasket             | 2      | NBR                          |
| 3  | Cover cap          | 1      | QT400-15/AQ235A ZG230-450、20 |
| 4  | Limited short tube | 1      | Q235A、20、16Mn                |
| 5  | Nut                | 5n     | Q235A、20、ICr8Ni9Ti           |
| 6  | Bolt               | n      | Q235A、20、ICr8Ni9Ti           |



| Nominal diameter<br>DN | Pipe diameter<br>Dw | Outer dimensions |     | expansion amount<br>±L | Flange connection Dimension |      |             |      |      |        |
|------------------------|---------------------|------------------|-----|------------------------|-----------------------------|------|-------------|------|------|--------|
|                        |                     | L                | L1  |                        | 0.6MPa<br>D                 | D1   | 1.0MPa<br>D | n-do |      |        |
| 65                     | 76                  | 340              | 105 | 50                     | 160                         | 130  | 4-φ14       | 180  | 145  | 4-φ18  |
| 80                     | 89                  | 340              | 105 | 50                     | 190                         | 150  | 4-φ18       | 200  | 160  | 8-φ18  |
| 100                    | 108                 | 340              | 105 | 50                     | 210                         | 170  | 4-φ18       | 220  | 180  | 8-φ18  |
| 100                    | 114                 | 340              | 105 | 50                     | 210                         | 170  | 4-φ18       | 220  | 180  | 8-φ18  |
| 125                    | 133                 | 340              | 105 | 50                     | 240                         | 200  | 8-φ18       | 250  | 210  | 8-φ18  |
| 125                    | 140                 | 340              | 105 | 50                     | 240                         | 200  | 8-φ18       | 250  | 210  | 8-φ18  |
| 150                    | 159                 | 340              | 105 | 50                     | 265                         | 225  | 8-φ18       | 285  | 240  | 8-φ22  |
| 150                    | 168                 | 340              | 105 | 50                     | 265                         | 225  | 8-φ18       | 285  | 240  | 8-φ22  |
| 200                    | 219                 | 340              | 105 | 50                     | 320                         | 280  | 8-φ18       | 340  | 295  | 8-φ22  |
| 250                    | 273                 | 340              | 105 | 50                     | 375                         | 335  | 12-φ18      | 395  | 350  | 12-φ22 |
| 300                    | 325                 | 370              | 130 | 65                     | 440                         | 395  | 12-φ22      | 445  | 400  | 12-φ22 |
| 350                    | 377                 | 370              | 130 | 65                     | 490                         | 445  | 12-φ22      | 505  | 460  | 16-φ22 |
| 400                    | 426                 | 370              | 130 | 65                     | 540                         | 495  | 16-φ22      | 565  | 515  | 16-φ26 |
| 450                    | 480                 | 370              | 130 | 65                     | 595                         | 550  | 16-φ22      | 615  | 565  | 20-φ26 |
| 500                    | 530                 | 370              | 130 | 65                     | 645                         | 600  | 20-φ22      | 670  | 620  | 20-φ26 |
| 600                    | 630                 | 370              | 130 | 65                     | 755                         | 705  | 20-φ26      | 780  | 725  | 20-φ30 |
| 700                    | 720                 | 370              | 130 | 65                     | 860                         | 810  | 24-φ26      | 895  | 840  | 24-φ30 |
| 800                    | 820                 | 590              | 220 | 130                    | 975                         | 920  | 24-φ30      | 1015 | 950  | 24-φ33 |
| 900                    | 920                 | 590              | 220 | 130                    | 1075                        | 1020 | 24-φ30      | 1115 | 1050 | 28-φ33 |
| 1000                   | 1020                | 590              | 220 | 130                    | 1175                        | 1120 | 28-φ30      | 1230 | 1160 | 28-φ36 |
| 1200                   | 1220                | 590              | 220 | 130                    | 1405                        | 1340 | 32-φ33      | 1455 | 1380 | 32-φ40 |
| 1400                   | 1420                | 590              | 220 | 130                    | 1630                        | 1560 | 36-φ36      | 1675 | 1590 | 36-φ42 |
| 1500                   | 1520                | 590              | 220 | 130                    | 1730                        | 1660 | 36-φ36      | -    | -    | -      |
| 1600                   | 1620                | 590              | 220 | 130                    | 1830                        | 1760 | 40-φ36      | 1915 | 1820 | 40-φ48 |
| 1800                   | 1820                | 590              | 220 | 130                    | 2045                        | 1970 | 44-φ40      | 2115 | 2020 | 44-φ48 |
| 2000                   | 2020                | 590              | 220 | 130                    | 2265                        | 2180 | 48-φ42      | 2325 | 2230 | 48-φ48 |
| 2200                   | 2220                | 590              | 220 | 130                    | 2475                        | 2390 | 52-φ42      | 2550 | 2440 | 52-φ56 |
| 2400                   | 2420                | 590              | 220 | 130                    | 2685                        | 2600 | 56-φ42      | 2760 | 2650 | 56-φ56 |
| 2600                   | 2620                | 600              | 240 | 140                    | 2905                        | 2810 | 60-φ48      | 2960 | 2850 | 60-φ56 |
| 2800                   | 2820                | 600              | 240 | 140                    | 3115                        | 3020 | 64-φ48      | 3180 | 3070 | 64-φ56 |
| 3000                   | 3020                | 600              | 240 | 140                    | 3315                        | 3220 | 68-φ48      | 3405 | 3290 | 68-φ60 |

Note: This dimension complies with the GB/T12465-2002 standard.