

福达首航

FUDASHOUHANG

诚信为本 优质服务

北京福达首航管道设备有限公司

Beijing fuda Shouhang Pipeline Equipment Co.,Ltd.

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中国 · 北京



北京福达首航管业

公司简介

COMPANY INTRODUCTION

北京福达首航管道设备有限公司是从事研制、开发、生产给排水材料的专业公司，主要产品有：各种管道铸铁、钢制、不锈钢、热力套管式伸缩器，可曲挠单、双球、端面全密封橡胶接头、异径橡胶接头、松套伸缩接头、单双法兰传力接头、风道橡胶（织物）补偿器，刚性、柔性防水套管，管道堵漏器，过滤（伸缩）器，各种不锈钢波纹补偿器，高级软密封闸阀、中线对夹式蝶阀、法兰式蝶阀、微阻缓闭消声止回阀、电厂专用风门以及各种管道连接器，异径接头，快速三通装置，并严格按照国家标准规范设计生产。具有安装方便，性能优越，使用寿命长等功效。

公司产品广泛用于供水、排水、污水处理、电力、冶金、城建、石油、化工环保各大、中型企业等领域的供排水事业的建设中。产品畅销全国二十几个省、市、自治区，受到广大用户的一致好评。在市场经济的浪潮中，公司依靠人才，技术和科学管理。不断探索调整发展战略，认真求实，精诚团结，以雄厚的技术力量，精良的设备，完善的质量检测体系，大胆努力开拓市场，本着增进友谊，互惠互利的原则，为用户提供可靠的产品质量和满意的服务，建立和发展长期稳定的经济技术合作关系。

我公司愿以优质的产品，周到的服务与各界朋友真诚合作，衷心期望有识之士光临指导，开展合作，共图大业！共创辉煌！



以福达首航为动力
以最高品质求生存



Beijing fuda Shouhang damping equipment limited company is engaged in the research, development, production of water supply and drainage materials Professional Company, main products are: All kinds of cast iron pipe, steel, stainless steel, thermal sleeve type compensator, flexible single, double ball, face full sealing rubber joints, ISO Diameter of rubber joints, sleeve expansion joint, force of single and double flange joint, rubber duct (fabric) compensator, rigid, flexible waterproof jacket Tube, pipe plugging device, filter (telescopic)device, various kinds of stainless steel corrugated compensator, Senior soft sealing gate valve, the midline of the folder type butterfly valve, Flange type butterfly valve, micro resistance slow closing silencing check valve, power plants special door and various pipe connector, reducers, fast three links

The design, and strictly in accordance with national standards of production. Has the advantages of convenient installation, superior performance, long service life etc. function. Company's products are widely used in water supply, drainage, sewage treatment, electricity, metallurgy, petroleum, chemical industry, urban construction and environmental protection of each big, medium The construction of water supply and drainage business enterprises in the field of. Products sold throughout twenty provinces, city, autonomous region, by the majority of users of a Praise. In the market economy tide, the company to rely on talent, technology and scientific management. Continue to explore the adjustment of development strategy, seriously Realistic, cooperate with absolute sincerity, with strong technical force, excellent equipment, perfect quality inspection system, bold efforts to open up the market. In the spirit of friendship, the principle of mutual benefit, provide a reliable product quality and satisfactory service for the user, the establishment and development of long-term stability.

The economic and technical cooperation. My company is willing to high-quality products, sincere cooperation with friends from all walks of life and thoughtful service, sincerely hope that a person with breadth of vision to guide, open Development cooperation, big industry total diagram! To create brilliant!



企业文化

ENTERPRISE CULTURE

专业是我们的技术服务！
专注是我们的市场理念！
勤奋是我们的企业精神！
创新是我们的前进准则！

最专业的技术，最信赖的品质，最优质的服务，
最合理的价格，愿成为您最佳的合作伙伴！

我们经营的不仅仅是一种产品，更是一种服务。
一切围绕客户，一切为了客户，
努力创造客户价值最大化。
努力做供水行业的最佳供应链管理者。

企业理念

THE CONCEPT OF ENTERPRISE

诚信为立足之本

创新为生存之源

服务为永恒的主题



企业资质

THE QUALIFICATION OF
THE ENTERPRISE



先进的制造设备

Advanced manufacturing technology

优秀的品质，愿与先进的制造设备与工艺，华威拥有一批先进、大型、完美的制造设备。华威追求品质保证，严格按照标准进行生产与质量控制。

产品设计制造标准：API、BS、GB、DIN、JIS。

试验与检验标准：API6D、API598、MSS-SP-55

(或根据用户指定标准)

主要大型加工设备有5米、3.5米、2.5米、1.6米立车、大型卷板机、大型高精度数显落地镗床、T611卧式镗床、T617卧式镗床、ZD100摇臂钻床、直流焊机、1250自动埋弧焊机、大型防腐成套设备，热处理设备等共计200多台套，具备了6米口径管道设备和阀门生产能力，现已成为我国中原地区最大的阀门和管道设备的制造基地。

Excellent quality, willing to work with advanced manufacturing equipment and technology, Huawei has a number of advanced, large, perfect manufacturing equipment.

Huawei pursuit of quality assurance, in strict accordance with the standards of production and quality control.

Product design and manufacturing standards: API, BS, GB, DIN, JIS.

Test and inspection standards: API6D, API598, MSS-SP-55

(Or according to user-specified criteria)

Major large-scale processing equipment 5 m, 3.5 m, 2.5 m, 1.6 m vertical lathe, large rolling machine, large-scale high-precision digital boring machine, T611 horizontal boring machine, T617 horizontal boring machine, ZD100 radial drilling machine, DC welding machine 1250 automatic submerged arc welding machine, large anti-corrosion equipment, heat treatment equipment totaling more than 200 sets, with the 6 metre diameter pipeline equipment and valve production capacity, has become China's largest manufacturing base in the Central Plains region of valves and piping equipment.

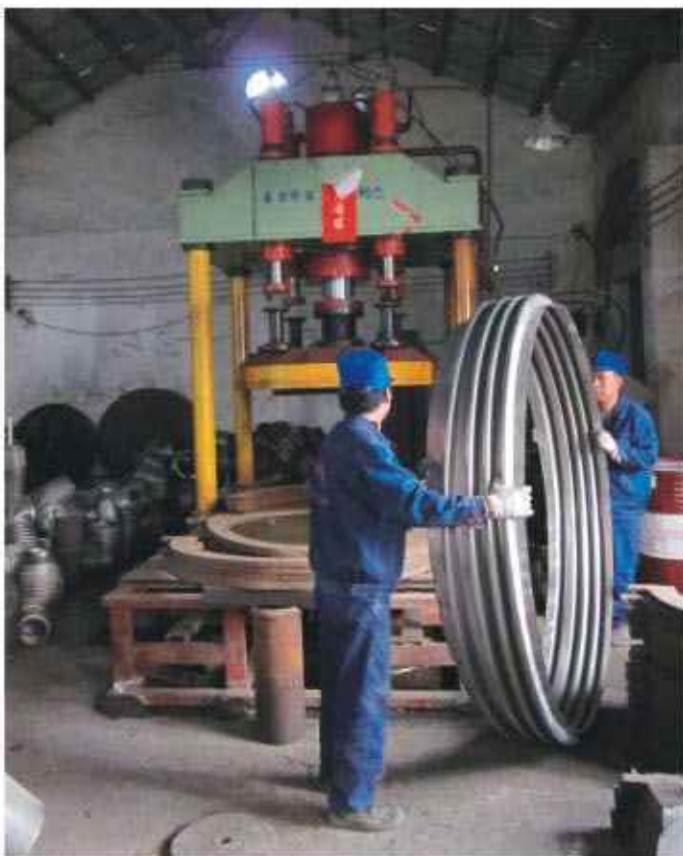




北京福达首航管道设备有限公司

团结合作 追求卓越

生产现场 Production site



安装及发货 Installation and delivery





产品索引 Product index



可曲挠橡胶接头



JGD型可曲挠橡胶接头



KST型可曲挠双球橡胶接头



JD(X)型异径橡胶接头(大小头)



JGD(KXT)型可曲挠偏心异径橡胶接头



JGD(KXT)型卡箍式橡胶接头



WTX型可曲挠橡胶弯头



可曲挠橡胶三通



负压橡胶接头



衬四氟橡胶接头



JGD-B型丝扣连接橡胶接头



JGD-B1型风机盘管橡胶接头



JGD-D型橡胶隔振垫



JGD-D1型橡胶剪切隔振器



Zd型阻尼弹簧减振器



吊架、减振器系列



嵌嵌式、法兰式橡胶鸭嘴阀



JXF型可曲挠滤污伸缩接头



可曲挠橡胶接头埋地防护装置



JDZ型通用波纹管



HF型波纹补偿器



JTW型金属软管



风机盘管接头



产品索引 Product index



P22

QMBW型直埋式波纹管



P23

ZBY直埋外压式轴向波纹补偿器



P24

JWY无约束型波纹补偿器



P25

DBHKXW型大波纹板盒型可限位伸缩补偿器



P26

FXL小拉杆横向波纹补偿器



P28

FDL大拉杆横向型波纹补偿器



P30

DW单式万向铰链型补偿器



P31

DJ单式铰链型波纹补偿器



P32

PP旁通直管压力平衡补偿器



P33

ZP直管压力平衡型波纹补偿器



P34

Wp弯管压力平衡型波纹补偿器



P35

三维球形补偿器



P01

F型压力平衡型补偿接头



P02

YTXZ型无推力旋转式补偿器



P03

TD单项热力套筒补偿器



P01

TS双项热力套筒补偿器



P02

JDZ型通用波纹管



P03

JTW型金属软管



P36

煤粉管道三向补偿器



P39

Xz免维护旋转补偿器



P40

CE金属矩形波纹补偿器



P41

矩形三波补偿器



P43

矩形圆角双波补偿器(半高)



P44

矩形圆角四波补偿器(半高)



产品索引 Product index

产品索引 Product index



P46

ZB型织物纤维补偿器
(圆形)

P47

FUB型橡胶风道补偿器



P48

ZB型织物纤维补偿器 (矩形)



P52

CS型热力管道伸缩器



P53

法兰式不限位伸缩节



P54

TTB-B系列弹性套管式
补偿器

P55

TWB系列、ZTWB系列注油式
直流介质无推力套筒补偿器

P56

E型球型补偿接头



P57

D型大挠度松套补偿接头



P58

F型压力平衡型补偿接头



P59

YTX2型无推力旋转式补偿器



P60

TD单项热力套筒补偿器



P61

TS双项热力套筒补偿器



P62

SSQ型套管式伸缩器



P63

SSJB(AY)型压盖式松套
伸缩接头

P64

SSJB-2(BY)型压盖式松套
限位伸缩接头

P64

SSJB-3(BY)型压盖式松套
限位伸缩接头

P65

VSSJA(AF)型法兰式
松套伸缩接头

P66

VSSJA-1(BF)型单法
兰松套限位伸缩接头

P67

VSSJA-2(B2F)型双法
兰松套限位伸缩接头

P68

VSSJAFG(CF)型单法
兰松套传力接头

P69

VSSJAF(C2F)型双法
兰松套传力接头

P70

VSSJAFC(CC2F)型可拆
式双法兰松套传力接头

P71

KRHD型钢制卡箍接头



P72

S312、02S404柔性、刚性防水套管



P72

BN206



P73

两侧防护刚性密闭套管



P73

两侧防护刚性密闭套管



产品索引 Product index



承口直口管道快速堵漏器

Y型管道过滤器

SSLW型滤网伸缩器

CWO除污器



D341X双法兰式双向软密封手动蝶阀

D371X对夹式双向软密封手动蝶阀

D341X双法兰式管网自锁蝶阀

D371X对夹式管网自锁蝶阀



D941X电动双法兰式蝶阀

D971X 电动对夹式蝶阀

D641X气动双法兰式蝶阀

D671X气动对夹式蝶阀



SD341X(专利产品)伸缩式双向软密封手动双法兰蝶阀

D341H法兰式硬密封手动蝶阀

D371H对夹式硬密封手动蝶阀

SD341H伸缩式硬密封手动双法兰蝶阀

CONTENTS 目录

橡胶制品系列 01/18
Rubber products series

波纹补偿器系列 19/51
Corrugated compensator series

热力补偿器系列 52/61
Heat compensator series

伸缩接头系列 62/71
Expansion joint series

防水套管系列 72/75
Waterproof casing series

阀门系列 76/81
Valve series



可曲挠橡胶接头

Flexible rubber joint

产品特性

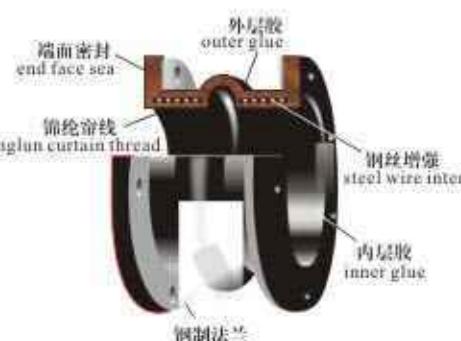
该产品主要利用橡胶的独特性能，如高弹性、高气密性、耐介质性和耐候性及耐辐射性等。采用高强度，冷热稳定性强的聚脂帘布斜交与之复合后，经高压、高温模压交联而成。内部致密度高，能承受较高压力，弹性变形效果优异。产品结构设计断面弧高、曲线长，具有较大的多向位移功能。特别适用于地质条件复杂，沉降幅度大和管道运行中冷热变化频繁易造成管道损伤的场所。利用橡胶的弹性滑动转移和变形机械力的转热散逸功能有效的消除泵、阀及管道自身的位移物理破坏。

因橡胶属不良传导材料，所以它又是一种良好的降低振动和噪声传递的理想环保产品。该产品设计内壁光滑，经实际测试，对介质的流速，流量无任何影响，并且永不生锈，基本可以免除有效运行期内的维修。

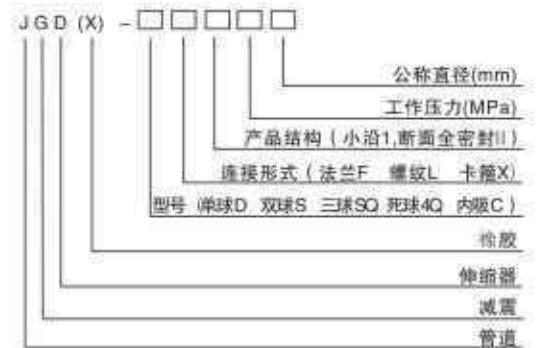
产品应用范围

由于可曲挠橡胶接头有良好的综合性能，主要用于原水和污水的提升和输送，火力发电厂的给水和冷却循环水、冶金行业的冷凝水、化工行业的化学物质的管道输送、石化行业的冷却、稀释及其它行业的长距离管线间的柔性连接。因为橡胶具有较高的耐磨性，还适用于一切行业的粒状和粉状及汽体的低温输送。

另外，为了保证工程质量，特别提请设计部门及使用单位注意，如果您将该产品设计支装于水泵的出口近端或管道的转角部位时，务请注明增设防拉脱限位装置。如果您的管道需埋设于地下，请使用我公司新增专利产品地埋防护装置。总之，只要您的使用条件中有一定隐患存在，订货时请注明使用条件，我们会及时向您提供满意的答复。

防拉脱装置
Anti-pull-off device橡胶接头剖析图
Profile chart of rubber joint

产品标记



可曲挠橡胶接头位移情况示意图 Displacement chart of flexible rubber joint



物理机械性能表 The physical and mechanical properties of the table

序号 Serial number	项目 Project	指标 index		实测值 The measured value
		内胶层 The inner rubber layer	外胶层 The outer layer	
1	拉伸强度度(MPa)≥ The tensile strength of more than or equal to (MPa)	1.2	13	13.6
2	拉断伸长率(%)≥ Elongation at break (%)≥	450	500	564
3	拉断永久变形(%)≤ Permanent deformation (%)≤	25	30	22
4	脆性温度℃≤ Brittle temperature is less than or equal to	-30	-30	-40
5	粘着强度(DN/m)≥ Adhesion strength (DN/m) ≥	20	2.0	5.6
6	热空气老化 (100度×48h) Hot air aging (100°×48h)	拉伸强度变化率% Variation rate of tensile strength%	+25-25	+25-20
		拉长率变化率% Elongated rate%	+10-30	+10-30
7	耐酸系数10%H ₂ SO ₄ × 168h≥ Acid resistant coefficient 10%H ₂ SO ₄ × 168h ≥	0.7	0.7	0.85
8	耐碱系数10%NaOH × 168h≥ Alkali resistant coefficient 168h × 10%NaOH *	0.7	0.7	0.85

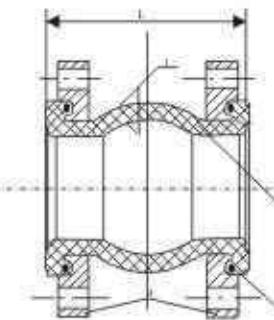
橡胶性能一览表 Rubber properties list

项目 Project	天然胶 Natural rubber	丁苯胶 Ding Benben	氯丁胶 Chloroprene rubber	丁腈胶 Ding Jingjiu	丁基胶 Ding Ji	三元乙丙胶 Siliyan terephthalate rubber	硅橡胶 Silicone rubber	氟橡胶 Fluorine rubber	海橡胶 Hypon	氯磺化聚丙烯 Chlorosulfonated polypropylene
比重加工性 The proportion of processing	0.91-0.93 ○	0.93-0.94 ○	1.15-1.25 ○	1.00-1.20 ○	0.91-0.93 △	0.86-0.87 ○	0.95-0.98 ○	1.8-1.82 △	1.11-1.18 ○	1.10-1.20 △
硬度Hardness	10-100 ○	30-100 ○	10-90 ○	15-100 ○	20-90 ○	30-90 ○	30-90 ○	50-90 ○	50-90 ○	50-85 ○
拉伸强度kg/cm ² The tensile strength of kg/cm ²	30-300 ○	50-200 ○	50-250 ○	50-250 ○	50-150 ○	50-200 ○	40-100 ○	70-200 ○	70-200 ○	70-200 ○
伸长率% Elongation	100-1000 ○	100-800 ○	100-1000 ○	100-800 ○	100-800 ○	50-500 ○	100-500 ○	100-500 ○	100-500 ○	100-600 ○
撕裂强度 Tear strength	○ ○	△ ○	○ ○	○ ○	△ ○	△-x ○	○ ○	○ ○	○ ○	○ ○
刚曲挠性 Flexure resistance	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
耐磨性 Wear resistance	○ ○	○ ○	○-○ ○	○ ○	○ ○	○ ○	△-x ○	○ ○	○ ○	○ ○
最高使用温度℃ The highest use temperature ℃	100 ○	100 ○	130 ○	130 ○	150 ○	150 ○	280 ○	300 ○	160 ○	160 ○
脆性温度℃ Brittle temperature	-50~-70 ○	-30~-60 ○	-35~-55 ○	-10~-20 ○	-30~-55 ○	-40~-60 ○	-70~-120 ○	-10~-50 ○	-20~-60 ○	-
耐老化性 Aging resistance	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
耐臭氧性 Ozone resistance	×	×	○	×	○	○	○	○	○	○
耐透气性 High permeability	○ ○	△ △	○-△ ○	○-x ○	○ ○	○ ○	○-△ ○	○-△ ○	○ ○	○ ○
汽油Gasoline	×	×	○	○	×	×	△-x ○	○	○	△
苯、强酸、弱酸 Benzene, strong acid, weak acid	×	×	×	△-x ○	×	×	△-x ○	○	△	△-x ○
强碱Alkali	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
弱碱Weak alkali	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	△ ○	○ ○

○-优 O-良 △-可 ×-不可

JGD型可曲挠橡胶接头

JGD type flexible rubber joint



示意图：
1.主体
2.内衬
3.骨架
4.法兰
注：此法兰为开槽法兰

主要连接尺寸 Main connecting dimension

公称通径DN Nominal diameter	长度L Length (mm) Inch	轴向位移 Axial displacement		横向位移 Horizontal displacement (mm) 伸长 Extension (mm)	偏转角度 Deflection angle (°)
		轴向位移 (mm) 伸长 Extension (mm)	横向位移 (mm) 压缩 Compression (mm)		
32	1 1/4	95	6	9	9
40	1 1/2	95	6	10	9
50	2	105	7	10	10
65	2 1/2	115	7	13	11
80	3	135	8	15	12
100	4	150	10	19	13
125	5	165	12	19	13
150	6	180	12	20	14
200	8	210	16	25	22
250	10	230	16	25	22
300	12	245	16	25	22
350	14	255	16	25	22
400	16	255	16	25	22
450	18	255	16	25	22
500	20	255	16	25	22
600	24	260	18	25	22
700	28	260	18	25	22
800	32	260	18	25	22
900	36	260	18	25	22
1000	40	260	18	26	24
1200	48	260	18	26	24
1400	56	350	20	28	26
1600	64	350	25	35	30
1800	72	350	25	35	30
2000	80	420	25	35	30
2200	88	420	25	35	30
2400	96	420	25	35	30
2600	104	450	25	35	30
2800	112	450	25	35	30
3000	120	500	25	35	30

注：1. DN350-1200 PN=1.0MPa 2. DN32-300 PN=1.6MPa 3. 特殊要求请来函来图订制 4. 高层给水使用本产品，管道必须有固定支撑或固定托架，否则产品应安装防拉脱装置，固定支撑或托架的力必须大于轴向力，否则也应安装防拉脱装置。

Notes: 1. DN350-1200 PN=1.0MPa

2. DN32-300 PN=1.6MPa

3. Please sent us letter and drawing for customization if you have special requirements.

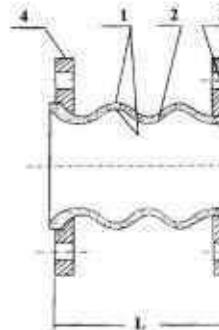
4. If this product is used for supplying water to high place, anti-pull-off device should be installed if the pipe has no fixed stay or fixed bracket or the force of fixed stay or fixed bracket is not larger than axial force.

KST型可曲挠双球橡胶接头

KST type in a flexible rubber joint double ball



示意图：
1.主体
2.内衬
3.骨架
4.法兰
注：此法兰为开槽法兰



各部分材质

序号	名称	材料
1	内、外层胶	11R, CR, EPDM, NR, NBR
2	骨架层	尼龙帘布
3	增压环	钢丝绳
4	法兰	Q235

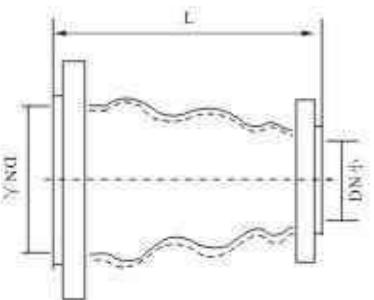
技术条件

型号	I	II	III
工作压力MPa(Kg/cm²)	1.0(10)	1.6(16)	2.5(25)
爆破压力MPa(Kg/cm²)	3.0(30)	4.8(48)	5.5(55)
真空度(Pa/mmHg)	53.3(400)	86.7(650)	100(750)
适用温度℃	-15~115, 特殊可达-30~250		
适用介质	水、海水、蒸汽、油、酸、碱等		

主要连接尺寸

公称通径DN Nominal diameter	长度L Length (mm) Inch	螺栓中心 The center of the spiral (mm)	孔径-数量 Aperture Number	轴向位移 Axial displacement		横向位移 Horizontal displacement (mm)	偏转角度 Deflection angle (°)
				伸长 Extension (mm)	压缩 Compression (mm)		
40	1 1/2	165	110	18-4	30	50	45
50	2	165	125	18-4	30	50	45
65	2 1/2	175	145	18-4	30	50	45
80	3	175	160	18-8	35	50	45
100	4	225	180	18-8	35	50	40
125	5	225	210	18-8	35	50	40
150	6	225	240	22-8	35	50	40
200	8	325	295	22-8	35	50	40
250	10	325	350	22-12	35	60	35
300	12	325	400	22-12	35	60	35
350	14	350	460	22-16	35	60	30
400	16	350	515	26-16	35	60	35
450	18	350	565	26-20	35	60	35
500	20	350	620	26-20	35	60	35
600	24	400	725	30-20	35	60	35
700	28	400	840	30-24	35	60	35
800	32	400	950	30-34	35	60	35

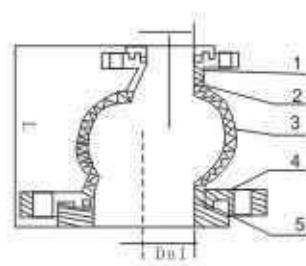
注：特殊要求可来函定制

JDX型异径橡胶接头(大小头)
JDX type reducing rubber joint (reducer)

主要连接尺寸 Main connecting dimension

公称通径 Nominal diameter DN X DN ₂	安装长度 The installation length	轴向偏移 Axial displacement		径向位移 The radial displacement ($\alpha + \alpha_2$)	
		伸长 Compression	压缩 Compression	伸长 Compression	压缩 Compression
50x32	180	20	30	45	35°
50x40	180	20	30	45	35°
65x40	180	20	30	45	35°
65x50	180	20	30	45	35°
80x40	180	20	30	45	35°
80x50	180	20	30	45	35°
80x65	180	20	30	45	35°
100x40	180	20	30	45	35°
100x50	180	20	30	45	35°
100x65	180	22	30	45	35°
100x80	180	22	30	45	35°
125x50	200	22	30	45	35°
125x65	200	22	30	45	35°
125x80	200	22	30	45	35°
125x100	200	22	30	45	35°
150x50	200	22	30	45	35°
150x65	200	22	30	45	35°
150x80	200	22	30	45	35°
150x100	200	22	30	45	35°
150x125	200	22	30	45	35°
200x80	200	22	30	40	30°
200x100	200	22	30	40	30°
200x125	200	25	30	40	30°
200x150	200	25	35	40	30°

注：DN200以上接头，高压力、高层建筑使用，管道必须有固定支撑或固定托架。否则产品必须有防拉脱装置(产品实际轴向力<反支撑力)。
Note: The joints above DN200 used in high pressure and high-rise building, anti-pull-off device should be installed if the pipe has no fixed stay or fixed bracket (actual axial force of the product is less than anti-supporting force).

JGD(KXT)型可曲挠偏心异径橡胶接头
JGD (KXT) type flexible eccentric reducer

材料表 Materials Table

序号	名称	材料
1	外胶层	11R, CR, EPDM, NR, NBR
2	内胶层	11R, CR, EPDM, NR, NBR
3	骨架层	聚酯织布
4	法兰	Q235, 304 316L
5	增压圈	钢丝圈

公称通径、长度、位移参数表

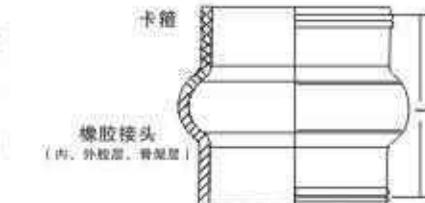
Nominal diameter, length, displacement parameters table

公称通径 Nominal diameter DN X DN ₂	安装长度 The installation length	轴向偏移 Axial displacement		径向位移 The radial displacement ($\alpha + \alpha_2$)	
		伸长 Compression	压缩 Compression	伸长 Compression	压缩 Compression
50x32	180	20	30	45	350
50x40	180	20	30	45	350
65x40	180	20	30	45	350
65x50	180	20	30	45	350
80x40	180	20	30	45	350
80x50	180	20	30	45	350
80x65	180	20	30	45	350
100x40	180	20	30	45	350
100x50	180	20	30	45	350
100x65	180	22	30	45	350
100x80	180	22	30	45	350
125x50	200	22	30	45	350
125x65	200	22	30	45	350
125x80	200	22	30	45	350
125x100	200	22	30	45	350
150x50	200	22	30	45	350
150x65	200	22	30	45	350
150x80	200	22	30	45	350
150x100	200	22	30	45	350
150x125	200	22	30	45	350
200x80	200	22	30	40	300
200x100	200	22	30	40	300
200x125	200	25	30	40	300
200x150	200	25	35	40	300

注：1.特殊要求可来函定制，法兰连接可采用GB/T9115-2000标准或者是其他国家标准。
2.是空给水使用以上产品，管道必须有固定支撑或固定托架，否者产品应安装防拉脱装置。

JGD(KXT)型卡箍式橡胶接头

JGD (KXT) type clamp rubber joint



材料表

序号	名称	材料
1	外胶层	IIR、CR、EPDM、NR、NBR
2	内胶层	IIR、CR、EPDM、NR、NBR
3	骨架层	聚脂帘布
4	卡箍	Q235 304 316L

公称通径、长度、位移参数表

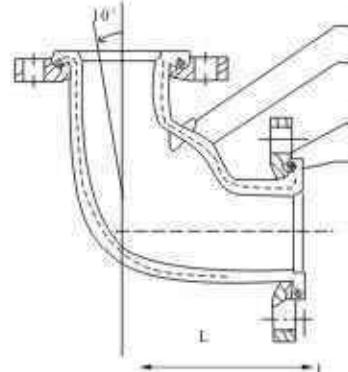
公称通径 DN Nominal diameter		安装长度	轴向伸长	轴向压缩	径向位移	偏转角度 Deflection angle ($\alpha_1 + \alpha_2$) [°]
mm	英寸	The installation length	Axial elongation	Axial compression	The radial displacement	Deflection angle ($\alpha_1 + \alpha_2$) [°]
50	2	180	7	10	10	15°
65	2.5	180	7	13	11	15°
80	3	180	8	15	12	15°
100	4	180	10	19	13	15°
125	5	180	12	19	13	15°
150	6	180	12	20	14	15°
200	8	200	16	25	22	15°
250	10	200	16	25	22	15°
300	12	200	16	25	22	15°
350	14	200	16	25	22	15°
400	16	200	16	25	22	15°
450	18	200	16	25	22	15°
500	20	200	16	25	22	15°
600	24	200	16	25	22	15°
700	28	200	16	25	22	10°
800	32	200	16	25	22	10°
900	36	200	16	25	22	10°
1000	40	200	18	25	22	10°
1200	48	200	18	25	24	10°
1400	56	200	20	26	24	10°
1600	64	200	25	26	26	10°
1800	72	200	20	26	26	10°
2000	80	200	20	26	26	10°

注：我们厂于2002年根据用户的需求研制开发了卡箍式橡胶接头，采用卡箍来代替法兰盘和螺栓，使用时，可方便地将卡箍式橡胶接头的两端分别套装在要连接的管道上，通过不锈钢卡箍将橡胶接头与管道固定连接；拆卸时松开卡箍即可。从而达到补偿管道因热胀冷缩，输水所产生的位移量之目的。它与一般的橡胶接头相比，有以下几个特点：

- 1、卡箍式橡胶接头节省了法兰盘和螺栓、节约了工程的开支。
- 2、卡箍式橡胶接头管口处不需要翻边，简化了工作效率。
- 3、卡箍式橡胶接头简化了安装维修工作，提高了工作效率。
- 4、卡箍采用不锈钢制作，具有耐腐蚀等特点通径从DN50–500mm，安装长度参照JGD(KXT)-D1执行或按照用户需要设计。
- 5、压力等级从0.25MPa–1.0MPa。

WTX型可曲挠橡胶弯头

WTX type flexible rubber bent



技术条件 Technical Conditions

型号 Type	WTX-I	WTX-II	WTX-III
项目 Item			
工作压力MPa(Kg/cm ²), Working Pressure	1.0(10)	1.6(16)	2.5(25)
爆破压力MPa(Kg/cm ²), Explosion Pressure	2.0(20)	3.2(32)	4.5(45)
真空度kPa(mmHg), Vacuum	53.3(400)	86.7(650)	100(750)
适用温度℃ Applicable Temperature℃	-15~115, (for special conditions) it can be -30~250		
适用介质 Applicable Media	Air, compressed air, water, sea water, hot water, oil, acid and alkali etc.		

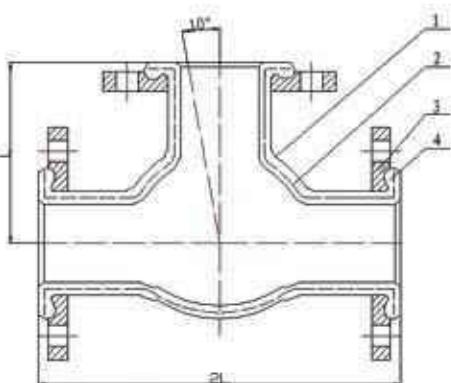
注：主要零件材料同JGD型 Note: material of main components is as same as JGD type

主要连接尺寸 Main joint dimension

公称通径 DN Nominal diameter		安装长度	轴向伸长	轴向压缩	径向位移	偏转角度 Deflection angle ($\alpha_1 + \alpha_2$) [°]
mm	英寸	The installation length	Axial elongation	Axial compression	The radial displacement	Deflection angle ($\alpha_1 + \alpha_2$) [°]
50	2	150	20	20	16	20°
65	2.5	150	20	20	16	20°
80	3	160	20	20	16	20°
100	4	170	20	20	16	20°
125	5	200	20	20	16	20°
150	6	230	20	20	16	20°
200	8	265	20	20	16	20°
250	10	280	20	20	16	20°
300	12	320	20	20	16	20°

可曲挠橡胶三通

Flexible rubber tee



技术条件 Technical Conditions

项目 Item	WTX-I	WTX-II	WTX-III
工作压力MPa(Kg/cm ²) Working Pressure	1.0(10)	1.6(16)	2.5(25)
爆破压力MPa(Kg/cm ²) Explosion Pressure	2.0(20)	3.2(32)	4.5(45)
真空度KPa(mmHg) Vacuum	53.3(400)	86.7(650)	100(750)
适用温度°C Applicable Temperature°C	-15~115, 特殊可达-30~250 -15~115, (for special conditions) it can be -30~250		
适用介质 Applicable Media	空气、压缩空气、水、海水、热水、油、酸、碱等 Air, compressed air, water, sea water, hot water, oil, acid and alkali etc.		

注：主要零件材料同JGD型 Note: material of main components is as same as JGD type

主要连接尺寸 Main joint dimension

公称通径 DN Nominal diameter		安装长度 The installation length	轴向伸长 Axial elongation	轴向压缩 Axial compression	径向位移 The radial displacement	偏转角度 Deflection angle $(\alpha_1 + \alpha_2)^\circ$
mm	英寸					
50	2	150	20	20	16	20°
65	2.5	150	20	20	16	20°
80	3	160	20	20	16	20°
100	4	170	20	20	16	20°
125	5	200	20	20	16	20°
150	6	230	20	20	16	20°
200	8	265	20	20	16	20°
250	10	280	20	20	16	20°
300	12	320	20	20	16	20°

负压橡胶接头
Negative pressure rubber joint

负压橡胶接头是能够顶得吸力的橡胶接头，简单的说就是外压大于内压(橡胶接头\软接头\橡胶减震器\避震喉)；1、耐负压橡胶接头橡胶接头根据材料不同可制成耐酸、耐碱、耐腐蚀、耐油、耐热等各个品种橡胶接头，橡胶接头适应多种介质和环境。3、橡胶接头材料属极性橡胶，橡胶接头密封性好，橡胶接头重量轻，橡胶接头安装维修方便、橡胶接头使用寿命长，橡胶接头但避免与锋利金属器械接触，以免刺破橡胶接头球体。4、橡胶接头如架空使用可配弹性支架，橡胶接头安装时螺栓要用对角法上紧。5、橡胶接头如管路压力过高时，橡胶接头应用极限螺栓将两端法兰连一起。6、橡胶接头法兰连接标准采GB4216.3~4216.5标准，可另行说明。本产品工作压力等级分0.6Mpa;1 Mpa、1.6 Mpa、2.5 Mpa。在真空使用可使用负压球体。以免球体变形，受损。

Negative pressure rubber connector is rubber joints can top suction, simple said is the external pressure is greater than the internal pressure (rubber joint\head \ soft joint rubber shock absorber, laryngeal). 1 negative pressure resistant rubber joint rubber joints according to the different materials can be made resistant to Acid and alkali resistance, corrosion resistance, oil resistance, heat resistance and other varieties of rubber joints; rubber joint to adapt to a variety of media and the environment. 3, rubber joint material is a polar rubber, rubber joint sealing, rubber joint of light weight, rubber joint installation Convenient repair, long service life of rubber joints, rubber joints but avoid contact with sharp metal instruments, so as not to puncture the rubber. The rubber ball joint. 4, rubber joints such as overhead can be used with elastic support, rubber joint installation bolt to use diagonal Method of tightening. 5, rubber joints such as the pipeline when the pressure is too high, rubber joint application limit bolts at both ends of the flange connected. 6, rubber joint flange connection standard adopted the GB4216.3~4216.5 standard, can be specified separately. The working pressure of the product Grade 0.6Mpa, 1 Mpa, 1.6 Mpa, 2.5 Mpa. The use of negative pressure ball can be used in vacuum. In order to avoid the sphere deformation, damage.

衬四氟橡胶接头
PTFE lined rubber joint

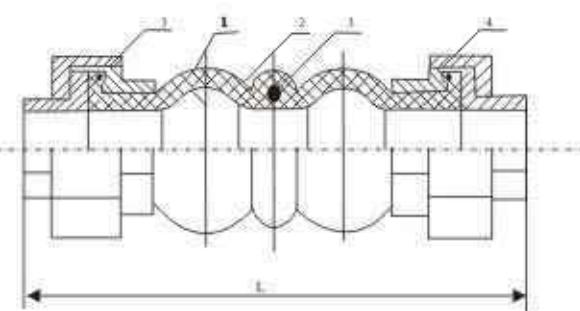
衬四氟可曲挠橡胶接头具有减振、耐高温、能挠曲、耐摩擦等特点。适用于管道错位差、位移、尺寸变化及振动部位的连接。可作贮罐、槽车等设备的给、排料管，还可作其它特殊之用。其使用范围较广泛，作用较全面。衬氟橡胶接头的四氟具有优良的化学稳定性、耐腐蚀性，是当今世界上耐腐蚀性能最佳材料之一，除熔融金属钠和液氟外，能耐其它一切化学药品，在王水中煮沸也不起变化，广泛应用于各种需要抗酸碱和有机溶剂的。密封性、高润滑不粘性、电绝缘性和良好的抗老化耐力、耐温优异（能在+250°C至-180°C的温度下长期工作）。衬氟橡胶接头适用于各种介质的管道连接。

衬四氟橡胶接头具有良好的耐酸碱、耐腐蚀性能，可以用在各种强酸强碱等介质管道中，在一些化工管道和制酸工业中具有重要的作用。

PTFE lined flexible rubber joint with vibration, high temperature resistance, flexural resistance, friction characteristics can. Suitable for connecting tubing misplacement difference, displacement, change in size and vibration parts. Can be used as a storage tank, To exhaust pipe material, tanker and other equipment, but also can be used for other special purposes. The application range is wide, function more comprehensive. Fluorine rubber joint PTFE has excellent chemical stability, corrosion resistance. Corrosion resistant material is one of the best in the world, in addition to the molten metal and liquid sodium fluoride, the ability of all other chemicals, in aqua regia in boiling does not change, widely used in anti Acid and alkali and organic solvents. Sealing, high viscosity lubrication, electric resistance and good anti-aging endurance, temperature resistance excellent insulation (can work in +250 deg.c to -180 deg.c temperature long term). Fluorine rubber Pipe joint applicable to all kinds of media connection. PTFE lined rubber joint has good acid and alkali resistance, corrosion resistance, can be used in a variety of acid and alkali medium pipes, plays an important role in some chemical pipes and acid industry.



JGD-B型丝扣连接橡胶接头
JGD-B type screwed connection rubber joint



各部分材质 material of all parts

序号 No	名称 Name	材料 Material
1	内、外层胶 Outer/inner rubber	NR, NBR, EPDM
2	主体骨架 Key frame	尼龙帘布 Nylon cord fabric
3	增压环 Pressurized ring	钢丝绳 Steel wire
4	螺纹活接头 Thread wobble joint	可锻铸铁 Forged cast iron

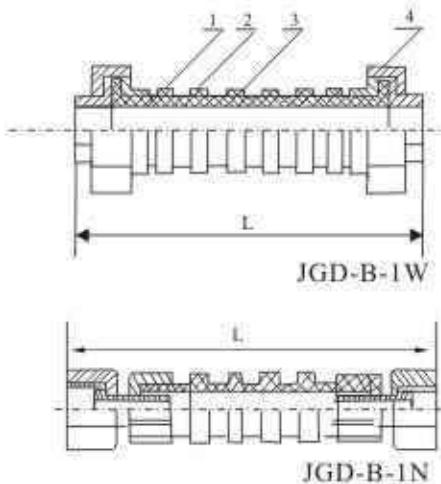
技术条件 Technical Conditions:

工作压力 Working Pressure	1.6MPa(16Kg/cm ²)	偏转角度 Deflection angle	(a+a')45°
爆破压力 Explosion Pressure	4.8MPa(48Kg/cm ²)	真空间隙 vacuum	53.3KPa(400mmHg)
适用温度 Applicable Temperature °C	-15~+115°C, 特殊可达-30~+250°C -15~115°C, (for special conditions) it can be -30~+250°C		
适用介质 Applicable Media	水、海水、热水、空气、压缩空气、油、酸、碱等化学物质 Water, sea water, hot water, air, compressed air, oil, acid, alkali etc.		

主要连接尺寸 Main joint dimension

公称通径DN Nominal diameter mm	长度L Length (mm)	轴向位移 Axial displacement		横向位移 Horizontal displacement (mm)	偏转角度 Deflection angle (a+a')°
		伸长 Extension (mm)	压缩 Compression (mm)		
20	3/4	200	5-6	22	45°
25	1	200	5-6	22	45°
32	1 1/4	200	5-6	22	45°
40	1 1/2	200	5-6	22	45°
50	2	200	5-6	22	45°
65	2 1/2	265	8-10	24	45°
80	3	285	8-10	24	45°

JGD-B1型风机盘管橡胶接头
JGD-B1 type fan coil rubber joint



产品介绍:

该产品由内层胶、多层刮胶帘子布增强、外层胶构成的橡胶管和金属活接头组成。具有耐压高、弹性好、偏转位移量大、耐老化、吸震好等特点，适用于宾馆、饭店客房的空调用各种风机盘管机组的进出口管道连接。

Product introduce: this product is composed of inner rubber, rubber hose made up multi-layer coating cord fabric and outer rubber and metallic active joint. With advantage features of high pressure resistance, good flexibility, large deflection displacement, ageing resistance and good vibration absorption, it is applied to the inlet and outlet pipe connection of the variable fan-coil unit used in air conditioner of hotels.

各部分材质 material of all parts

序号 No	名称 Name	材料 Material
1	内层胶 Inner glue	耐热橡胶 Heat resistance rubber
2	外层胶 Outer glue	耐老化橡胶 Aging resistance rubber
3	增强层 Reinforcing layer	尼龙帘布 Nylon cord fabric
4	螺纹活接头 Thread wobble joint	可锻铸铁 Forged cast iron

技术条件 Technical Conditions

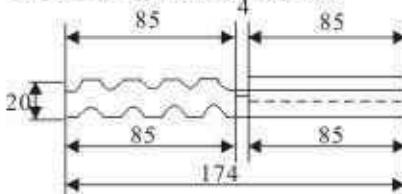
工作压力 Working Pressure	1.6MPa
爆破压力 Explosion Pressure	4.8MPa
适用温度 Applicable Temperature °C	-20~115°C
适用介质 Applicable Media	水、热水、空气 Water, hot water, air

主要连接尺寸 Main joint dimension

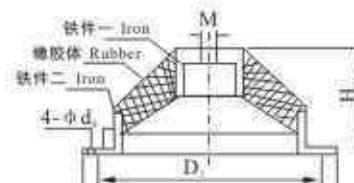
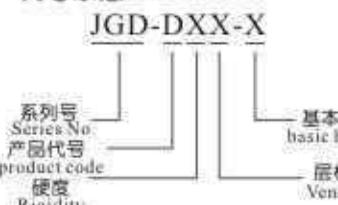
公称通径DN Nominal diameter mm	长度L Length (mm)	轴向压缩 Axial compression (mm)		轴向伸长 Axial extension (mm)	横向位移 Horizontal displacement (mm)	偏转角度 Deflection angle (a+a')°
		JGD-B-1N	JGD-B-1W			
15	180	195	10	5	20	45°
20	200	220	10	5	20	45°
25	220	240	10	5	20	45°

主要连接尺寸 Main joint dimension

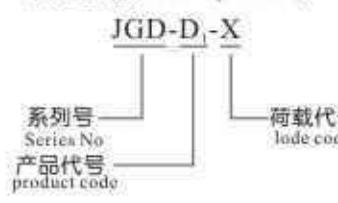
DN ₁ × DN ₂	长度Length (mm)	轴向压缩 Axial compression (mm)	轴向伸长 Axial extension (mm)	横向位移 Horizontal displacement (mm)	偏转角度 Deflection angle (a+a')°
20×15	200	10	5	25	45°
25×20	220	10	5	25	45°
32×25	220	10	5	25	45°
40×32	240	10	5	25	45°

结构示意图（基本块）
Structure chart (basic block)

代号示意 code chart



代号示意 (Code implication):



JGD-D型橡胶隔振垫

JGD-D type rubber vibration isolator

产品介绍 Product introduce

该厂生产的橡胶隔震垫种类繁多、规格齐全。便于裁切，组装灵活，可有效地抗压减震，适用于冲床、锻压机、泵、风机、压缩机、发电机、空调设备等震动设备震动大的机电设备减震安装。

主要尺寸（长×宽，单位：mm），85×42.5、85×85、131.5×85、174×85、220.5×85、263×85、174×174、263×174，每一尺寸又分40°、60°、80°三种规格，可适应不同垂向设计荷载。

Being complete in specifications and of great variety, the rubber vibration isolators produced by our factory are convenient for cutting and flexible for assembling, and they can effectively resist compression and reduce vibration, applied for the vibration absorbing installation of electromechanical devices with serious vibration such as punching machine, forging press, pump, draught fan, compressor, electric generator and air conditioning unit and so on. Main dimension (Length × width, unit: mm), 85×42.5, 85×85, 131.5×85, 174×85, 220.5×85, 263×85, 174×174, 263×174, each is divided into three specifications: 40°, 60°, 80°, which get with different vertical design load.

JGD-D型橡胶隔震垫插入损失分贝 (dB) JGD-D type rubber vibration isolator insertion loss dB (dB)

隔震垫橡胶硬度 Rigidity of rubber vibration isolating pad	隔震垫层数 Layers of pad	插入损失 (分贝) 加速度 Insertion loss (dB) acceleration		垂向荷载 Vertical loading MPa(Kg/cm ²)
		31.5~400赫兹 31.5~400Hz	线性 Linearity	
40°	1	11-30	31	0.05-0.12 (0.5-1.2)
	2	11-28	26	
	3	7-38	26	
	4	11-34	31	
60°	1	10-32	31	0.2-0.3 (2.0-3.2)
	2	6-32	31	
	3	10-33	26	
	4	8-33	31	
80°	1	5-22	8	0.4-0.8 (4.0-8.0)
	2	9-22	22	
	3	12-29	20	
	4	7-29	23	

JGD-D1型橡胶剪切隔振器

JGD-D1 type rubber cutting vibration isolator

D型橡胶剪切隔振器是由内、外钢套和中间的合成橡胶组成，经硫化呈中间圆锥体橡胶部分受剪切力，具有较大的变形范围和较低的固有频率。工作温度范围在-5~+50℃温度变化时，刚度也有所变化；阻尼比C/C₀>0.07。对于水泵、压缩机、通风机、发电组、冷冻机等机械设备的积极隔振和仪器仪表的消极隔振，都有良好的隔振效果。

D1 type rubber cutting vibration isolator is composed of internal and external steel bushing and medial synthetic rubber, after vulcanization, it appears a core in the middle and the rubber part is stressed; and there are large deformation range and low free-running frequency. The working temperature range is -5~+50℃, as the temperature changes, the rigidity changes; damping ratio is C/C₀>0.07. It has good vibration isolating effect for the active vibration isolation of water pump, compressor, ventilator, generating set and refrigerating machine and the passive vibration isolation of instruments and meters.

型 号 Type	外形尺寸 External dimension					额定荷载 额定荷载 最小-最大(kg) Rated load Min-Max	刚度 Stiffness (kg/cm ²)	变形 Distortion	固有频率 Natural frequency (Hz)	最佳荷载 Best load (kg)
	M	D	D ₁	H	d ₁					
JGD-A	M10	100	80	43	8.5	5-15	20	2-8	8-14	10
JGD-B	M10	100	80	43	8.5	10-30	36			20
JGD-A	M12	150	130	65	8.5	20-60	60	4-12	7-12	40
JGD-B	M12	150	130	65	8.5	40-120	90			80
JGD-A	M16	200	170	87	12.5	80-240	120	5-16	6-11	160
JGD-B	M16	200	170	87	12.5	160-480	200			320
JGD-A	M20	290	260	133	12.5	320-960	300	8-24	5-9	640
JGD-B	M20	290	260	133	12.5	640-1920	650			1280

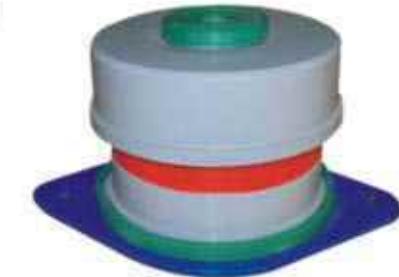
ZD型阻尼弹簧减振器

ZD type damping spring shock absorber

产品介绍 Product introduce

ZD型阻尼弹簧减振器具有弹簧减振器的低频率和橡胶减振器的大阻尼等双重优点，将两者的特点结合，消除了弹簧减振器共振时振幅激增的现象，又解决了橡胶减振器固有频率较高的难题，是积极、消极隔振的理想产品。

ZD型阻尼减振器载荷范围广、适应性强，对积极隔振、消极隔振和冲击隔振能同时产生明显效果，是一种多功能通用性隔振产品，适用于-20℃~80℃的工作环境，其正常工作载荷范围内固有频率在1.5Hz~4.9Hz之间，阻尼比为0.065。是空调、恒温设备、风机、冷却塔、冷冻机组、压缩机、水泵等承载设备的理想减振产品。



适用设备 Suitable equipment

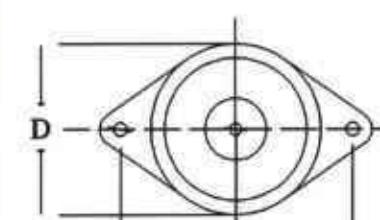
水泵、风机、冷水机组、落地式新风机、组合式空调机、柜式空调机、屋顶式空调机、离心风机。荷载范围：30~3300Kg。

ZD型阻尼弹簧减振器外形尺寸及技术特性表

ZD type damping spring damper dimensions and technical characteristics table

产品型号 Type	载荷范围 Load range (kg)	垂向刚度 Vertical stiffness (N/mm)	外形尺寸 (mm) Size and shape					
			H	D	L ₁	M ₁	M ₂	
ZD-1	30-45	16	85	132	158	M12	M12x2	
ZD-2	45-80	30	85	132	158	M12	M12x2	
ZD-3	80-120	40	85	132	158	M12	M12x2	
ZD-4	120-160	44	100	132	158	M12	M12x2	
ZD-5	160-200	54	100	132	158	M12	M12x2	
ZD-6	200-260	59	105	132	158	M12	M12x2	
ZD-7	260-320	67	105	132	158	M12	M12x2	
ZD-8	320-360	73	112	160	208	M12	M13x2	
ZD-9	360-420	89	112	160	208	M12	M13x2	
ZD-10	420-480	102	112	160	208	M12	M13x2	
ZD-11	480-550	129	115	160	208	M12	M13x2	
ZD-12	550-630	180	115	160	208	M12	M13x2	
ZD-13	630-700	196	125	193	235	M12	M13x2	
ZD-14	700-800	240	125	193	235	M16	M13x2	
ZD-15	800-900	289	125	193	235	M16	M13x2	
ZD-16	900-1050	340	128	193	235	M16	M13x2	
ZD-17	1050-1200	420	128	193	235	M16	M13x2	
ZD-18	1200-1650	502	155	245	305	M16	M15x2	
ZD-19	1650-2200	650	155	245	305	M16	M15x2	
ZD-20	2200-2750	720	155	245	305	M16	M15x2	
ZD-21	2750-3300	804	155	245	305	M16	M15x2	

注：可根据客户要求生产定做。



吊架、减振器系列

Hangers, shock absorber series



JGD-C型

HQA型

HQ型



XHS型

V型

YZ, YZG型

产品介绍

在建筑等行业中，设备或管道需要吊架或减震器。因设备产生的振动影响环境或外来的振动影响设备的情况不少。吊架、减震器系列是根据用户需求和工程设备吊装的实际需要而开发的产品，该产品具有阻尼比大、自振频率低、安装方便、对固体传声有明显的降噪效果等优点，对于各种大小设备及管道的吊装普遍适用。

Product introduction

In the construction industry, the equipment or pipeline hanger or shock absorbers need device. Because the equipment vibration generated by affecting the environment or external vibration influence. The case of a lot of sound equipment. Hangers, shock absorber series is based on the user. And the development of the actual needs and engineering equipment hoisting products, the Products with large damping ratio, low natural vibration frequency, convenient installation, on the solid Body microphone has the advantages obvious effect of noise reduction, for a variety of size Hoisting equipment and pipeline generally applicable.

主要数据 The main data:

型号 Model	承载范围N Load N	自振频率Hz The self vibration Frequency of Hz	变形范围mm Deformation range mm
HQ-30	20-30	4.8-2.8	11-30
HQ-50	30-50	4.5-3.2	12-25
HQ-80	50-80	4.9-3.5	10-20
HQ-140	80-140	4.7-3.5	10-22
HQ-200	140-200	4.6-3.3	12-23
HQ-240	200-240	4.7-3.3	12-24
HQ-300	240-300	4.7-3.2	13-25
HQ-350	300-350	4.8-3.3	13-25
HQ-400	350-400	4.8-3.2	13-25
HQA-15	8-15	4.8-3.3	11-22
HQA-30	15-30	4.2-3	13-25
HQA-40	30-40	3.8-2.7	17-30
HQA-60	40-60	3.5-2.5	20-30
HQA-80	60-80	3.5-2.5	19-35
HQA-120	80-120	3.5-2.7	19-35
HQA-160	120-160	3.6-2.7	20-30
HQA-180	160-180	3.6-2.7	20-32
HQA-200	180-200	3.9-2.6	20-33

以上产品未注明参数的均可按用户要求提供。

The above products are not specified parameters can be provided according to user requirements.

镶嵌式、法兰式橡胶鸭嘴阀

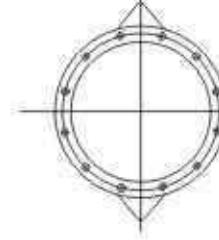
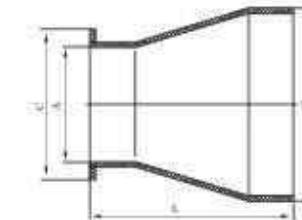
Mosaic type, flange type rubber duckbill valve



XH81



XH41



镶嵌式主要连接尺寸 Mosaic type main joint dimension

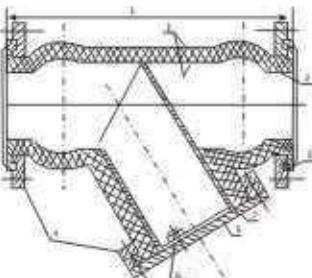
型号 type	管道公称直径 nominal diameter of pipe	长度L length	高度H height	法兰外径C external diameter of flange
XH8150-125-X	50	125	47	150
XH8180-175-X	80	175	72	200
XH81100-225-X	100	225	97	225
XH81150-320-X	150	320	47	275
XH81200-375-X	200	375	197	338
XH81250-475-X	250	475	247	400
XH81300-560-X	300	560	297	485
XH81350-625-X	350	625	344	525
XH81400-700-X	400	700	394	588
XH81450-780-X	450	780	444	625
XH81500-880-X	500	880	494	688
XH81600-1000-X	600	1000	494	800
XH81700-1000-X	700	1100	694	969
XH81800-1260-X	800	1260	794	1080
XH81900-1400-X	900	1400	894	1150
XH811000-1520-X	1000	1520	988	125
XH811200-1725-X	1200	1725	1188	1485

法兰式主要连接尺寸 Flange type main joint dimension

型号 type	管道公称直径 nominal diameter of pipe	长度L length	高度H height	法兰外径C external diameter of flange
XH4150-150-F	50	150	100	150
XH4180-220-F	80	220	140	200
XH41100-250-F	100	250	200	225
XH41150-340-F	150	340	265	275
XH41200-420-F	200	420	325	338
XH41250-520-F	250	520	425	400
XH41300-620-F	300	620	525	485
XH41350-700-F	350	700	625	525
XH41400-800-F	400	800	725	588
XH41450-900-F	450	900	825	625
XH41500-980-F	500	980	925	688
XH41600-1120-F	600	1120	1025	800
XH41700-1180-F	700	1180	1125	969
XH41800-1350-F	800	1350	1400	1080
XH41900-1500-F	900	1500	1525	1150
XH411000-1800-F	1000	1600	1725	1325
XH411200-1840-F	1200	1840	1950	1485

JXF型可曲挠滤污伸缩接头

JXF flexible dirt filtering expansion joint



各部分材质 Each part of the material

序号No.	名称Name	材料Material Science
1	内、外屏蔽The inner, outer rubber	NR, NBR, EPDM
2	主体骨架The main skeleton	尼龙帘布Nylon cord
3	增压环The booster ring	多股镀铜钢丝Multi strand copper wire
4	法兰Flange	Q235
5	堵头Plug	Q235
6	螺栓Bolt	45
7	滤网Filter	不锈钢Stainless steel

技术条件 Technology conditions

项目Project	JXF-1	JXF-1.6	JXS-1	JXS-1.6
工作压力Mpa(Kg.f/cm ²)	1(10)	1.6(16)	1(10)	1.6(16)
爆破压力Mpa(Kg.f/cm ²)	1.5(15)	2(20)	2(20)	2.4(24)
真空度Mpa(mmHg)	53.3(400)	86.7(650)	53.3(400)	86.7(650)
适用温度Applicable temperature	-15~115, 特殊可达-30~250 The special 15~115, up to -30~250			
适用介质Applicable medium	空气、压缩空气、水、海水、热水、油、酸、碱等化学物质 Air, compressed air, water, sea water, hot water, oil, acid, alkali and other chemical substances			

主要连接尺寸 Main connection dimensions (JXF)

公称通径DN Nominal diameter of DN	长英 (mm) Inch	轴向位移Axial displacement		横向压缩(mm) Transverse compression (mm)	偏转位移(±1°) Deflection
		伸长Elongation	压缩Compression		
50	2	290	15	23	8
80	3	320	20	25	8
100	4	405	20	25	8
150	6	500	22	34	8
200	8	560	23	36	8

注：JXS型为丝扣连接，JXF型为法兰连接。

Note: for the JXS type for the threaded connection, flange connection type for JXF.

可曲挠橡胶接头埋地防护装置

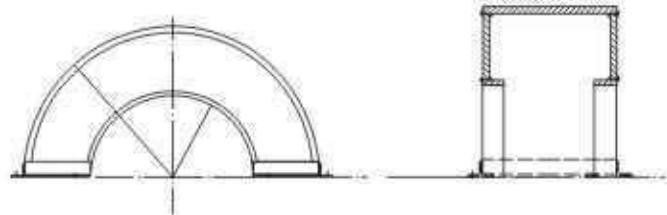
Flexible rubber joint of buried protective device

可曲挠橡胶接头埋地防护装置，周边留有充足空间，不影响橡胶接头的位移性能，更能使橡胶接头与外部填土隔离，还能使管道在该装置两端自由滑动，不产生任何阻力。管线安装完毕后经回填夯实地面照平整如初。车辆行驶、堆放重物或安装设备不受任何影响。

此埋地装置为两个半圆形中空组合而成，将橡胶头和管道平焊法兰全部装入体内，两端设有两半圆形小平面带钢骑于两侧法兰外管壁，两端立面支撑根据土层深度而定，足以承受外压负重。该装置配有一定数量对台锁紧螺栓，以备安装完毕后装配。其安装方法为：安装橡胶接头—保护装置内涂防锈漆—安装下部1/2保护装置—放上上部1/2保护装置—旋紧对合锁紧螺栓（注意安装时要使橡胶接头确保处于装置中心位置）—保护装置外涂防锈漆回填原土，下部捣实，上部夯实—三合土和垫层—铺设地面（最好在适当位置设有永久性标志，以备以后检查更换时确定位置）。

特别提醒注意：订货时务必提供埋地深度，以便我们为您设计合理的保护装置。该保护装置只要在安装时表面防腐处理做好，一般可使用30年以上。

Flexible rubber joint of buried protective device, the surrounding leave plenty of space, not affect the displacement performance of rubber joints, fork can make the rubber joint with external filling isolation, but also make the pipeline in the assembly. The free sliding ends, does not produce any resistance. Pipeline installed after backfilling ground so smooth as ever. Exercise of vehicles, piling up weights or installation of equipment is not affected. Here the embedded device into 2.5 circular hollow combined, the rubber head and pipe flange are all installed in the body, both ends are provided with two half circular small plane ride in two sides with steel flange outer tube wall, two End elevation support according to soil depth and decide, enough to withstand external pressure loading. The device is equipped with a certain number of table locking bolt, for after installation assembly. The installation method: installation of rubber joint-in the protective device coated with antirust Qiyl fit lower 1/2 protection device on the upper 1/2 protection device is screwed on the locking bolt (close attention should be installed so that the rubber joints to ensure in the device center) A protection device coated with antirust paint raw soil backfill tamping tamping, the lower part, the upper one three soil and cushion a laying on the ground (the best in the proper position is provided with a permanent marker, for later check replacement is indeed. The fixed position). Special remind note: be sure to provide the buried depth ordering, so we set the protection device for the reasonable for you. The protective device as long as the installation of surface treatment of good, generally can be used More than 30 years.

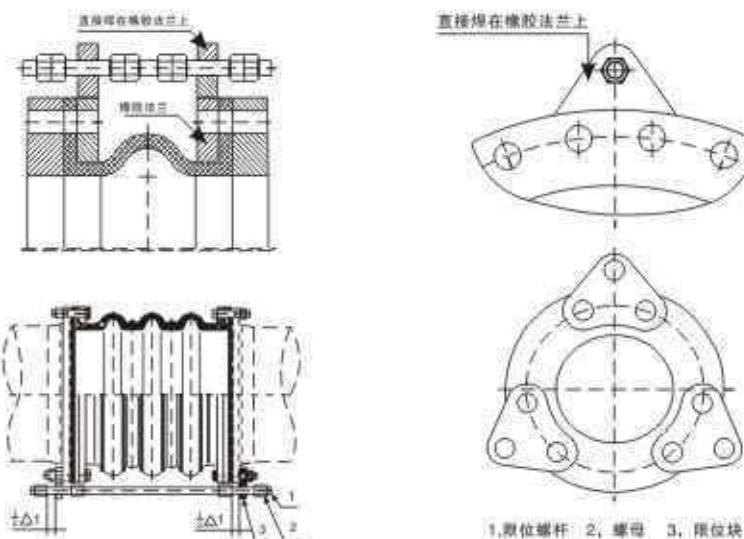


橡胶接头防拉脱限位装置

Rubber joint anti pull off limiting device

限位装置与可曲挠橡胶接头合理搭配使用，在管道一般连接中或在有位移要求的管线线路中使用时，能起到限定位移量的作用，当可曲挠橡胶接头与泵、阀相连接使用时，在可曲挠橡胶接头上配用限位装置，可起到传力作用，是钢制传力接头的理想替代产品。

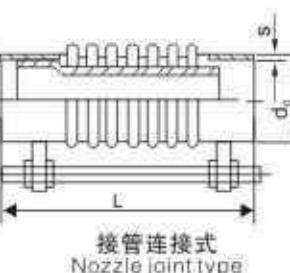
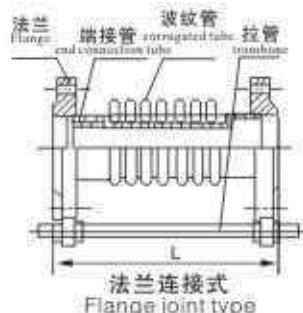
The limiting device and the flexible rubber joint used in the pipeline with a reasonable, general connection or in a pipeline in line displacement requirements, can play the role of limiting location shift, when Flexible rubber joint, valve and pump connected when in use, the flexible rubber joint is matched with a limiting device, can play a role of force transfer, which is made of steel dowel joint ideal substitution product.



1.限位螺杆 2. 螺母 3. 限位块

JDZ型通用波纹管

JDZ-type general corrugated pipe



主要连接尺寸 Main joint dimension

公称通径DN Nominal diameter	套数 Quantity of sets	压力等级MPa Pressure level					波纹管有效面积cm ² Effective area of corrugated tube	最大外径尺寸mm Maximum external diameter (mm)	长度mm Length	
		0.25	0.6	1.0	1.6	2.5				
横向补偿量mm/吊顶N/mm Axial compensation length mm/ Troughness N/mm										
32	8	25/21	22/26	20/26	18/63		16	225	160/250	264/280
32	16	50/11	46/14	41/14	36/32		16	225	224/291	316/321
40	8	25/28	22/44	20/44	18/89	15/98	23	244	164/259	269/289
40	16	50/14	46/22	41/22	36/45	31/47	23	244	230/304	319/334
50	8	25/30	22/51	20/70	18/70	15/106	37	259	172/276	282/306
50	16	50/16	46/26	41/35	36/35	31/55	37	259	240/342	347/372
65	8	33/28	30/35	26/44	22/55	15/138	55	270	215/294	300/322
65	12	42/16	38/22	34/40	31/70	55	270	260/334	340/362	
80	8	40/20	36/26	34/33	28/41	19/68	81	284	240/338	344/366
80	10	53/14	49/17	49/21	43/26	29/50	81	284	270/368	374/390
100	6	45/47	45/60	40/75	35/93	25/54	121	304	235/317	323/345
100	10	76/26	74/32	64/40	57/50	38/33	121	304	305/381	387/409
125	5	48/38	42/47	38/59	34/74	29/117	180	334	282/314	316/342
125	9	85/23	77/29	66/36	58/45	49/63	180	334	382/386	388/414
150	5	49/42	44/50	40/62	34/78	29/92	257	364	282/339	338/367
150	8	79/34	71/43	64/51	54/59	50/56	257	364	356/399	402/427
200	4	52/49	46/55	42/68	38/78	29/97	479	442	280/348	348/372
200	6	73/31	65/44	59/52	53/58	46/65	479	442	340/402	402/426
250	4	72/30	65/34	59/42	52/45	34/111	769	507	315/379	415/379
250	6	108/16	97/21	87/35	79/39	48/78	769	507	393/459	493/399
300	4	72/51	65/55	59/59	52/65	47/55	1105	562	366/427	466/467
300	6	108/32	97/35	87/37	79/41	71/47	1105	562	464/525	564/565
350	4	72/58	65/62	59/67	52/74	47/71	1307	622	397/452	497/492
350	6	108/38	97/41	87/44	79/48	71/45	1307	622	509/564	609/604
400	4	72/54	65/58	59/62	52/68	47/81	1611	700	412/478	512/518
400	6	108/36	97/39	87/43	79/47	71/47	1611	700	522/588	622/628
450	4	108/32	97/35	87/37	79/41	47/75	1972	760	403/498	503/523
450	6	162/20	145/22	131/23	118/25	71/52	1972	760	503/658	603/648
500	4	108/59	97/64	87/68	79/75	71/45	2445	835	431/523	531/554
500	6	162/34	145/37	131/39	118/43	106/28	2445	835	531/665	631/742
600	4	108/74	97/80	87/85	79/94	71/82	3534	980	478/548	578/588
600	6	162/42	145/45	131/49	118/53	106/48	3534	980	658/679	758/781
700	4	108/67	97/72	87/77	79/85	71/103	4717	1110	490	590
700	6	162/42	145/45	131/49	118/53	106/60	4717	1110	690	790
800	4	120/88	108/95	102/102	94/112	71/95	5822	1265	502	602
800	6	183/67	164/72	156/77	144/85	106/60	5822	1265	610	710
900	4	120/84	108/90	102/97	94/107	82/123	7620	1186		698
900	6	183/60	164/65	156/69	144/76	125/93	7620	1186		850
1000	4	120/91	108/98	102/105	94/116	82/117	9043	1286		692
1000	6	183/59	164/65	156/71	144/81	125/84	9043	1286		855

HF型波纹补偿器

GB/T 12777-2008



HF02-1普通型补偿器

可提供DN25-DN1600-至九波各种补偿器

· 疲劳次数: ≥5000次

· TF02-2型外观TF02-1型一样, 其壁厚与TF02-1型1mm左右, 补偿能力极承压能力较之TF02-1型强1/3至1/4



HF02-3钢衬四氟补偿器

· 可耐各种浓度酸、碱、盐。又兼有不锈钢补偿器的压力

不怕碰撞等优点

· 可提供: DN25-1600mm

· 连续疲劳寿命: 1000次

· 压力等级: PN0.6、1.0、1.6MPa

· 使用温度: ≤200°C

HF02-4型中压网套高颈复合补偿器

· 替补管道与管道中间相隔距离过大, 以代替波数太多的补偿器, 减少厂家成本费。

· 可提供: DN25-1600mm补偿器

· 疲劳次数: ≥10000次

· 压力等级: PN0.25-2.5MPa

· 使用温度: ≤220°C

HF02-1,HF02-2型补偿器

规格DN mm	三个波最大补偿能力				允许最大工作力		三波长L mm	连接法兰尺寸H0510-58/H0445-92/H020583-93/97									
	轴向△Xmm	横向△Ymm		△=0 角向	内压			TF02-1	TF02-2	负压K	PNO.25Pa		PNO.6Pa		PN1.6Pa		
		02-1	02-2		TF02-1	TF02-2					K	M n-m	K	n-m	K	M n-m	
25	12	8	10				20	0.6	0.7	57	65	75	4-M10	75	4-M10	85	4-M12
32	14</td																

JTW型金属软管

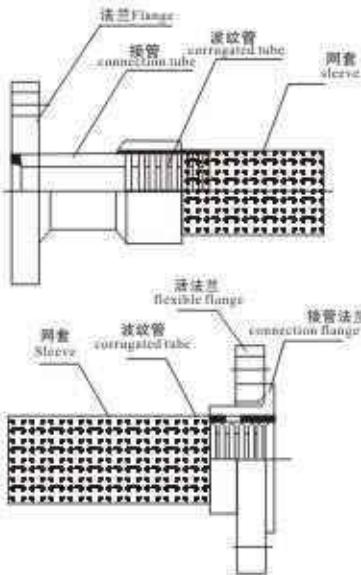
JTW type metal hose



JTW金属软管（简称软管）是现代工业管路中的一种高品质的柔性管道。它主要由波纹管、网套和接头组成。它的内管是具有螺旋形或环形的薄壁不锈钢波纹管，波纹管外层的网套，是由不锈钢丝或钢带按一定的参数编织而成。软管两端的接头或法兰是与客户管道的接头或法兰相配的。

波纹金属软管具有了良好的柔韧性、抗疲劳性、耐高温、耐高低温、耐腐蚀性等诸多特性，他相对其它软管（橡胶、塑料软管）的寿命就要高出许多，故它又具有较高的综合经济效益，随着现代工业的发展，对耐高温、耐高压的波纹金属软管的需求量亦愈来愈大。

软管使用范围：需要充分挠性的输送管，防止振动处所配管，对蒸汽、煤气、空气、重油、石油、化工药品类等均使用。



JTW-type metal hose (hose for short) is high-quality flexible pipe among the modern industrial pipes. It consists mainly of corrugated pipe, braid and joint. Its internal pipe is helical or circular thin-walled stainless steel corrugated pipe, and the braid covering the corrugated pipe is woven with stainless steel wire or steel belt according to specified parameters. The joints or flanges on both ends of the hose are matching the joints or flanges of customers' pipe.

With good flexibility, fatigue resistance, high temperature resistance, high and low temperature resistance, corrosion resistance and other many features, corrugated flexible metal pipe has a longer service life than other hose (rubber or plastic hose), so it has a high overall economic efficiency. With the development of modern industry, the demand for heat-resisting and high-pressure-resisting corrugated flexible metal pipe will become larger and larger.

Range of application: conveying pipe needing full flexibility, mating pipe for vibration prevention, and it also used in the industries of vapor, coal gas, air, heavy oil, petroleum and chemicals and so on.

公称通径 DN Nominal diameter	内径 mm D	外径mm OD		最小弯曲半径 Nominal diameter		最高工作压力 MPa Nominal pressure	
		接软管 Below	带一层网套 Cover with a layer of network	静态 Static	动态 Dynamic	一层网套 Nominal	二层网套 Nominal
8	8.8	13.2	14.4	50	110	15	20
10	11.7	16.5	17.7	65	145	15	20
15	13.5	19.5	21.1	80	180	15	20
20	20.0	27	28.6	120	270	10	15
25	27.0	34.5	36.1	160	360	6.3	10
32	32.0	40	41.6	175	400	4.0	6.3
40	39.6	52	53.6	225	510	4.0	6.3
50	49.7	62	63.6	280	640	3.0	5.0
65	61.2	80.2	81.8	410	915	3.0	5.0
80	79.0	96.3	97.9	486	1030	3.0	5.0
100	101.2	119.6	121.2	610	1340	2.5	4.0
125	124.1	145.3	146.9	700	1540	2.5	4.0
150	149.4	180.8	182.4	810	1780	2.5	4.0
200	176.0	240	243.2	1000	2000	2.5	4.0
250	248.0	290	294	1250	2500	2.5	4.0
300	298.0	350	354	1500	3000	1.6	2.5
350	347.0	400	404.8	1750	3500	1.6	2.5
400	397.6	460	464.8	2000	4000	1.6	2.5

风机盘管接头

Fan coil joint

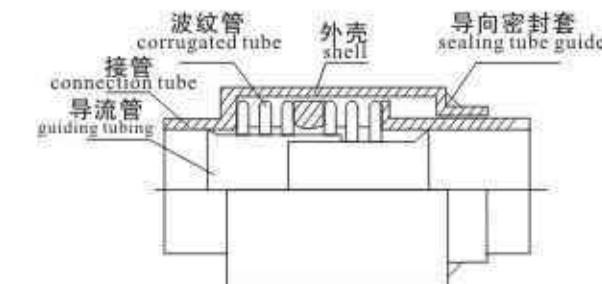
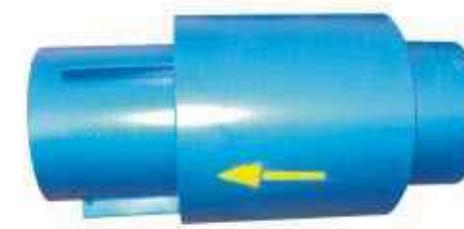


公称通径 DN Nominal diameter	长度L/mm Length	轴向压缩mm axial compression	轴向伸长mm Axial extension	横向位移mm horizontal displacement	偏转角度 Deflection angle (°)
15	280	10	5	20	45
20	280	10	5	20	45
25	280	10	5	20	45
32	280	10	5	20	45
40	300	10	5	20	45
50	300	10	5	20	45
65	300	10	5	20	45

说明：该产品材质为SUS304不锈钢，具有耐高温、高强、耐腐蚀、位移多变、减震降噪，适用于中央空调和石油、化工等行业。
Note: The material of this product is SUS304 stainless steel with the advantages of high temperature and pressure resistance, corrosion resistance, variable displacement and damping and noise abatement, applicable to central air conditioner and petro and chemicals and other industries.

QMBW型直埋式波纹管

QMBW-type direct-buried corrugated pipe

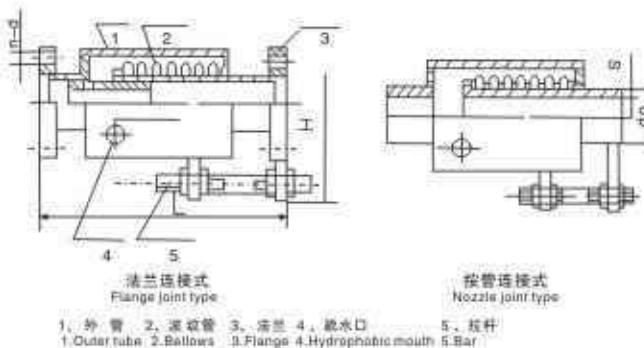


主要连接尺寸 Main joint dimension

公称通径 DN Nominal diameter	螺栓 Quantity of nuts	压力等级(MPa) Pressure level					波纹管有效 面积(cm ²) Effective area of corrugated tube	最大外径尺寸 Maximum external diameter (mm)	接口端尺寸 Size of connection end (mm)	总长 Total length (mm)	
		0.25	0.6	1.0	1.6	2.5					
50	8	14/153	12/318	12/635	11/1310	37	120	Φ57×3.5	361		
50	16	27/276	24/158	24/318	23/655	37	120	Φ57×3.5	445		
50	32	52/38	48/79	48/159	46/228	37	120	Φ57×3.5	621		
65	8	19/213	18/213	18/424	16/841	55	159	Φ73×4	377		
65	12	30/142	29/142	27/283	25/421	55	159	Φ73×4	425		
65	24	60/71	58/107	54/142	50/211	55	159	Φ73×4	581		
80	8	30/179	30/179	29/358	27/650	81	162	Φ89×4	430		
80	10	54/143	37/143	37/286	32/325	81	162	Φ89×4	466		
80	20	108/72	74/72	74/143	64/163	81	162	Φ89×4	660		
100	6	34/138	34/277	33/417	32/817	121	180	Φ108×4	410		
100	10	56/83	56/166	56/250	54/409	121	180	Φ108×4	492		
100	20	112/42	112/83	112/125	108/125	121	180	Φ108×4	712		
125	5	37/136	36/272	36/408	33/801	180	221	Φ133×4	410		
125	9	66/76	65/151	65/227	60/401	180	221	Φ133×4	412		
125	18	132/38	130/76	130/114	126/114	180	221	Φ133×4	711		
150	5	49/100	49/200	48/300	45/456	257	245	Φ159×4.5	433		
150	8	88/63	78/125	77/188	71/286	257	245	Φ159×4.5	518		
150	16	159/32	156/63	154/94	142/143	130/211	257	245	Φ159×4.5	756	
200	4	58/95	56/193	56/288	56/480	56/800	479	327	Φ219×6	475	
200	6	86/63	85/128	84/320	80/927	479	327	Φ219×6	553		
200	12	172/32	170/64	170/96	168/160	160/200	479	327	Φ219×6	800	
250	4	75/170	74/343	63/588	53/830	50/1856	769	404	Φ273×8	500	
250	6	112/113	110/228	95/392	86/620	78/927	769	404	Φ273×8	620	
250	12	220/57	220/114	190/196	160/310	156/464	769	404	Φ273×8	984	
300	4	73/250	72/503	65/830	57/1253	54/2142	1105	451	Φ325×8	584	
300	6	110/167	109/335	97/553	85/835	80/1071	1105	451	Φ325×8	713	
300	12	220/84	218/168	194/277	170/418	160/536	1105	451	Φ325×8	1116	
350											

ZBY直埋外压式轴向波纹补偿器

ZBY buried outside pressure type axial corrugated compensator



设计安装数据表 Data sheet for design installation

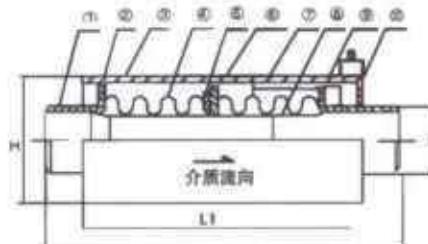
通径 DN Nominal diameter	长度 mm	波数 Wave number	压力等级MPA Pressure level			波纹管有效面积 Effective area of corrugated tube	最大外径尺寸mm Maximum external diameter
			0.6	1.0	1.6		
轴向补偿量mm/刚度N/m Axial compensation length mm/rigidity N/mm							
50	432	10	41/231	39/255	37/286	81	Φ270
	654	20	82/116	78/126	74/143		
65	488	10	41/231	39/255	37/286	82	Φ290
	756	20	82/116	78/126	74/143		
80	506	9	56/196	53/232	50/278	121	Φ308
	789	18	112/98	108/116	100/139		
100	532	8	61/167	57/218	54/256	180	Φ336
	789	16	122/84	114/109	108/128		
125	616	8	82/278	78/301	75/320	257	Φ368
	966	16	164/129	156/151	150/160		
150	950	8	124/125	112/154	89/330	535	Φ450
	1540	16	250/56	210/87	160/113		
200	950	8	130/155	100/126	70/409	779	Φ505
	1550	16	250/75	200/113	160/205		
250	1080	8	161/111	130/182	105/378	1075	Φ566
	1800	18	320/51	260/94	201/179		
300	1090	8	161/138	130/194	100/338	1269	Φ600
	1820	16	320/54	260/100	200/168		
350	1090	8	165/165	132/221	99/438	1619	Φ676
	1820	16	320/71	250/121	200/218		
400	1110	8	162/164	132/290	101/468	2008	Φ710
	1840	16	310/76	251/145	190/268		
450	1110	8	152/131	124/329	100/532	2428	Φ768
	1840	16	301/81	251/170	190/245		
500	1475	6	190/180	150/515	150/765	3473	Φ875
	2450	12	371/90	300/175	300/298		
600	1540	6	195/231	150/754	140/765	4766	Φ1090
	2540	12	391/121	290/364	280/480		
700	1540	6	200/222	155/601	150/833	6068	Φ1190
	2540	12	400/112	300/400	290/478		
800	1540	6	201/200	164/497	150/897	7528	Φ1290
	2540	12	400/135	321/451	299/583		
900	1605	6	220/206	230/635	220/765	9328	Φ1460
	2685	12	430/154	460/337	442/388		
1000	1605	6	220/356	230/615	220/763	118	Φ1560
	2685	12	430/268	460/303	442/418		
1100	1605	6	210/273	230/654	221/754	13066	Φ1660
	2685	12	428/187	460/347	442/414		
1200	1605	6	210/308	230/757	221/832	15170	Φ1760
	2685	12	420/104	460/488	443/601		
1300	1605	6	220/356	230/864	221/864	17432	Φ1860
	2685	12	410/132	450/432	435/626		
1400	1605	6	212/398	231/645	226/889	19851	Φ1960
	2685	12	410/198	450/466	430/665		
1500	1605	6	201/321	230/978	220/978	22427	Φ2060

JWY无约束型波纹补偿器

JWY unconstrained corrugated compensator



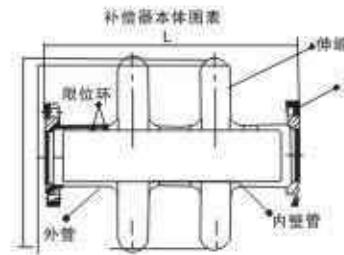
1. 工作接管 2. 主定向法兰
3. 定向保护套 4. 波纹管
5. 导流套 6. 导向套
7. 次定向法兰 8. 内封
9. 限位环 10. 中间法兰



通径 DN Nominal diameter	波数 Wave number	波数 Wave number			波纹管有效面积 Effective area of corrugated tube	接管端口尺寸 Over the port size mm	总长 Total length L mm
		1.0	1.6	2.5			
50	8	12/318	12/635	11/1310	37	Φ57×3.5	350
	16	24/158	24/318	23/655			480
	32	48/79	48/159	46/328			620
65	8	18/213	18/424	15/847	55	Φ73×4	440
	12	27/142	27/283	25/421			520
	24	54/107	54/142	50/211			600
80	8	28/358	28/358	27/650	81	Φ89×4	470
	10	35/286	33/286	32/325			510
	20	70/143	70/143	64/163			680
100	8	38/417	33/417	32/817	121	Φ108×4	500
	10	45/250	43/417	42/409			540
	20	72/125	70/125	69/205			700
125	8	52/227	50/227	48/401	180	Φ133×4	540
	150	56/188	54/286	50/423			550
200	8	64/192	60/320	56/927	479	Φ219×6	600
	250	73/392	70/620	65/927			640
300	8	88/553	85/835	80/1071	1105	Φ325×8	660
	350	68/560	65/84				

DBHKXW型大波纹板盒型可限位伸缩补偿器

One-time buried corrugated compensator



产品说明:

板盒型可限位式管道补偿器是管道安装的重要部件之一，该补偿器具有体积小，安装方便，占地面积小，降低劳动强度，省工、省力、省料，实用性强等优点，伸缩量在60~120mm。不渗、不漏、无填料，伸缩性能好，安全可靠并能节省维修工作量，同时安装时可不设胀力井，降低工程造价，该补偿器结构新颖、合理，无易损件，体积小，重量轻，便于安装运输是管道安装理想的产品。

设计安装数据表

序号 Serial number	规格 Specifications	通径DN Nominal diameter	补偿量 The amount of compensation (mm)	跨顶直径 (mm) The diameter	产品长度L (mm) Product length
1	1.2"二波	32	60±30	170	245
2	1.5"二波	40	60±30	190	255
3	2"二波	50	60±30	300	325
4	2.5"二波	65	60±30	320	336
5	3"二波	80	60±30	360	340
6	4"二波	100	60±30	400	350
7	5"二波	125	60±30	433	360
8	6"二波	150	60±30	477	385
9	8"二波	200	60±30	527	390
10	10"二波	250	60±30	579	420
11	12"二波	300	60±30	635	435
12	14"二波	350	60±30	635	440
13	16"二波	400	60±30	760	460
14	18"二波	450	60±30	810	460
15	20"二波	500	120±60	860	460
16	2"四波	50	120±60	300	590
17	2.5"四波	65	120±60	360	610
18	3"四波	80	120±60	360	610
19	4"四波	100	120±60	400	625
20	5"四波	125	120±60	433	625
21	6"四波	150	120±60	477	700
22	8"四波	200	120±60	527	705
23	10"四波	250	120±60	579	830
24	12"四波	300	120±60	635	820
25	14"四波	350	120±60	635	885
26	16"四波	400	120±60	760	900
27	18"四波	450	120±60	810	950
28	20"四波	500	120±60	860	950

设计、施工须知:

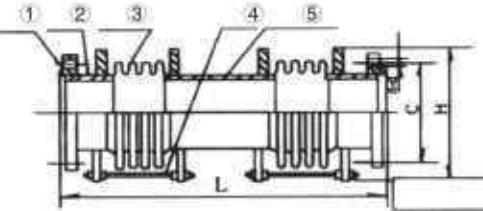
- 1、本产品使用压力在16MPa以下，使用介质热水、蒸汽、煤气、各种油，温度与管道相同高层建筑使用最佳；
- 2、本产品最大推力0.8~1.2T，使用疲劳寿命6500次；
- 3、本产品可广泛应用于架空管道、地沟管道、直埋管道；
- 4、补偿器转向支架可设可不设；
- 5、本产品只限轴向安装使用（直线管道）；
- 6、本产品用于地沟管道时不用砌补偿器井；
- 7、安装时严禁在补偿器的伸缩盒上点火；
- 8、本产品二波予拉25mm~30mm，四波予拉50mm~60mm；
- 9、实践证明在高温水热力管网中，60m以上应设二波伸缩器一个，120米以上应设四波伸缩器一个，蒸汽管道应按设计标准30m以内安装二波伸缩一个。

FXL小拉杆横向波纹补偿器

FXL draw horizontal corrugated compensator



1 法兰
2 接管
3 波体
4 拉杆
5 中间管



主要连接尺寸

公称通径 DN	压力0.6MPa		压力1.0MPa		压力1.6MPa		有效面积 A cm ²	焊接端管 d×t mm	总长 L mm	重量 kg F/H
	轴向位移 轴向刚度 mm	横向位移 横向刚度 mm	轴向位移 轴向刚度 mm	横向位移 横向刚度 mm	轴向位移 轴向刚度 mm	横向位移 横向刚度 mm				
100	32/170	96/8.0	28/252	86/9.6	26/302	78/12	154	08/4	1000	30
		200/2.0		180/2.5		162/3.1				1500
		306/0.89		27/1.1		284/1.3				2000
		411/0.50		370/0.6		333/0.75				2500
125	33/170	83/18	31/204	78/21.6	29/245	75/25.9	180	33/4	1000	39
		115/6.8		109/8.2		103/9.8				1500
		198/3.5		188/4.2		178/5.0				2000
		269/1.8		255/2.2		242/2.6				2500
150	32/290	65/21	30/348	61/25.2	27/417	58/30.2	299	59/45	1000	42
		136/54		129/6.5		122/7.8				1500
		107/2.4		197/2.9		186/3.5				2000
		279/1.4		265/1.68		251/2.1				2500
200	48/326	72/47	43/391	68/56.4	40/469	65/70.5	531	18/6	1000	72
		160/11		152/13.2		144/16.5				1500
		250/5.0		237/6.0		225/7.5				2000
		341/2.8		324/3.4		291/4.1				2500
250	46/400	127/20	43/480	114/25	38/576	108/30	774	73/8	1500	121
		199/9.0		179/10.8		170/13.5				2000
		271/5.0		257/6.0		231/7.5				2500
		343/3.2		325/3.8		293/4.6				3000
300	59/336	134/25	56/403	127/30	50/483	121/36	1069	25/8	1500	146
		213/11		202/13.2		192/15.8				2000
		290/6.0		277/7.2		263/8.6				2500
		372/3.8		353/4.6		335/5.4				3000

FXL小拉杆横向波纹补偿器 FXL draw horizontal corrugated compensator

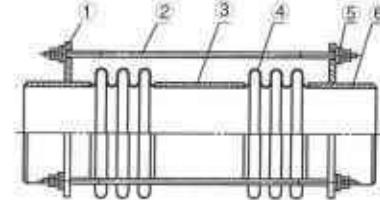
主要连接尺寸

公称通径DN	压力0.6MPa		压力1.0MPa		压力1.6MPa		有效面积A cm ²	焊接端管d×t mm	总长L mm	重量KG F/H
	轴向位移 mm	横向位移 mm	轴向位移 mm	横向位移 mm	轴向位移 mm	横向位移 mm				
350	58/366	107/40	55/402	102/44	52/442	96/48	1263	77×8	1500	171
		178/16		167/18		161/22			2000	208
		250/8.5		237/10		226/12			2500	245
		322/5.3		306/6.9		290/9.6			3000	282
		92/58		87/63		83/69			1500	192
400	57/415	154/23	54/48	142/25	51/492	135/27	1612	26×8	2000	235
		215/12		204/13		196/15			2500	278
		278/7.7		264/9		250/11			3000	321
		81/80	52/456	77/88	49/484	73/96	1995	78×8	1500	218
		135/32		128/35		122/38			2000	268
450	55/415	189/17		180/19		171/21			2500	319
		243/11		230/12		218/13			3000	370
		36/241	72/895	32/260	58/984	29/281	2625	29×10	1400	535
		68/896		62/96		56/104			1700	581
		102/42		92/45		83/49			2000	627
		125/28		113/30		102/32			2200	658
		166/18		149/19		134/21			2500	704
		198/12		178/13		160/14			2800	750
		42/208		38/224		34/242			3200	957
600	94/820	71/102	85/886	64/110	75/948	58/118	3590	30×10	1500	648
		106/47		95/51		86/55			1800	702
		135/30		121/32		111/35			2200	775
		168/21		156/23		141/25			2500	830
		199/14		183/15		168/17			2800	884
		44/208		38/224		34/242			3200	957

FDL大拉杆横向型波纹补偿器 FDL big rod horizontal corrugated compensator



1.端板；2.拉杆；
3.中间管；4.波纹管；
5.球面、锥面垫圈；6.端管



使用说明：

大拉杆横向型波纹补偿器可以补偿弯曲管段的横向位移和量值不大的角位移，通常不用来补偿角位移。该补偿器由接管、二个波纹管以及大拉杆等零件构成。它能吸收管系任意平面内的横向位移。位移球面螺母绕球面垫圈转动，同时拉杆还具有承受内压推力能力。

工作温度≤420℃疲劳寿命1500次

公称通径DN mm	波数	压力等级MPa	横向补偿量mm/刚度N/mm						最大外径尺寸mm	
			产品长度mm							
			1200	1500	2000	2500	3000	3500		
100	4+4	0.25	177/2.2	243/1.2	354/0.6	465/0.3			310	
		0.6	177/2.2	243/1.2	341/0.6	47/0.3			310	
		1.0	163/2.2	224/1.2	325/0.6	427/0.3			310	
		1.6	91/4	127/2	187/1	247/0.6			310	
		2.5	94/8	132/5	194/2	256/1			310	
125	4+4	0.25	181/2.8	251/1.5	369/0.7	487/0.4			360	
		0.6	172/2.8	239/1.5	351/0.7	463/0.4			360	
		1.0	161/2.8	224/1.5	330/0.7	435/0.4			360	
		1.6	99/11	140/6	209/3	277/2			360	
		2.5	99/11	113/6	197/3	262/2			360	
150	4+4	0.25	190/6	278/3.2	410/1.6	542/1.0			410	
		0.6	186/6	259/3.2	382/1.6	508/1.0			410	
		1.0	122/10	170/6	251/3	332/2			410	
		1.6	108/12	15/36	230/3	307/2			410	
		2.5	82/22	117/12	176/5	234/3			410	
200	4+4	0.25	155/9.4	220/4.9	327/2.25	435/1.4			480	
		0.6	138/9.4	196/4.9	291/2.25	388/1.0			480	
		1.0	101/20	143/11	213/5	283/3			480	
		1.6	75/42	108/21	164/10	220/6			480	
		2.5	59/69	86/35	130/16	176/9			480	
250	4+4	0.25	164/10.2	239/5.1	367/2.4	494/1.5			580	
		0.6	128/21	188/10	287/5	387/3			580	
		1.0	109/35	159/18	243/8	328/5			580	
		1.6	76/68	116/33	182/14	249/8			580	
		2.5	64/122	98/58	154/25	210/14			580	
300	4+4	0.25	14/17.6	174/8.4	287/3.7	379/2			660	
		0.6	94/50	144/24	228/0	313/6			660	
		1.0		127/39	202/17	277/10	352/6		660	
		1.6		169/28	169/28	234/15	298/10		660	
		2.5	91/113	148/47	215/26</td					

FDL大拉杆横向型波纹补偿器

FDL big rod type transverse corrugated compensator

工作温度≤420℃疲劳寿命1500次

公称通径 DN mm	波数 n	压力等级 Mpa	横向补偿量mm/刚度N/mm						最大外径 尺寸 mm	
			产品总长mm							
			1200	1500	2000	2500	3000	3500		
350	4+4	0.25	100/26	157/14	254/5	352/3			760	
		0.6	83/73	130/34	210/14	292/8			760	
		1.0		117/54	190/23	263/13	337/8		760	
		1.6		95/95	160/38	225/20	291/13		760	
		2.5		81/158	135/63	190/34	246/21		760	
400	4+4	0.25		146/16	238/7	330/4	423/2		780	
		0.6		122/45	199/19	276/10	354/7		780	
		1.0		109/74	177/31	246/17	315/11		780	
		1.6		85/130	144/52	202/28	262/17		780	
		2.5		112/88	157/47	203/29	250/20	780		
450	4+4	0.25		134/20	216/8	299/5	383/3		870	
		0.6		129/40	208/17	289/9	369/6		870	
		1.0		109/68	176/29	244/16	312/10		870	
		1.6		115/9	162/48	210/29	258/20	870		
		2.5		86/198	122/105	158/65	193/44	870		
500	4+4	0.25		123/26	199/11	277/6	355/4	920		
		0.6		119/53	193/22	267/12	342/8	920		
		1.0		99/90	160/38	222/21	285/13	920		
		1.6		101/127	143/66	188/41	229/27	920		
		2.5		76/284	107/149	140/91	172/62	920		
600	4+4	0.25		111/54	188/22	265/12	342/7	1010		
		0.6		108/108	181/43	256/23	331/14	1010		
		1.0		83/220	319/88	197/47	254/29	1010		
		1.6		98/182	143/93	187/56	232/38	1010		
		2.5		82/307	119/157	156/95	193/63	1010		
700	4+4	0.25		98/82	166/32	236/17	305/11	1140		
		0.6		161/64	228/34	295/21	263/14	1140		
		1.0		117/132	185/70	214/43	264/29	1140		
		1.6		81/287	199/144	157/86	196/57	1140		
		2.5		146/45	208/24	271/15	334/10	1240		
800	4+4	0.25			141/93	201/49	262/30	323/20	1240	
		0.6			102/182	146/95	190/59	235/40	1240	
		1.0			69/402	103/290	137/119	170/79	1240	
		1.6			184/49	249/28	314/18	370		
900	4+4	0.25			179/97	242/56	305/37	370		
		0.6			139/171	188/98	237/64	370		
		1.0			103/369	139/213	176/139	370		
		1.6			194/52	266/30	340/19	1500		
1000	4+4	0.25			194/104	266/59	340/38	1500		
		0.6			148/185	204/106	260/68	1500		
		1.0			108/416	148/237	189/153	1500		
		1.6								

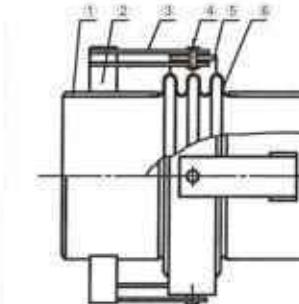
注：通径超过Φ1000的大拉杆横向型波纹补偿器请提供相应的参数，如需法兰连接按照JB81-59标准，可根据用户要求或其他标准供货。

DW单式万向铰链型补偿器

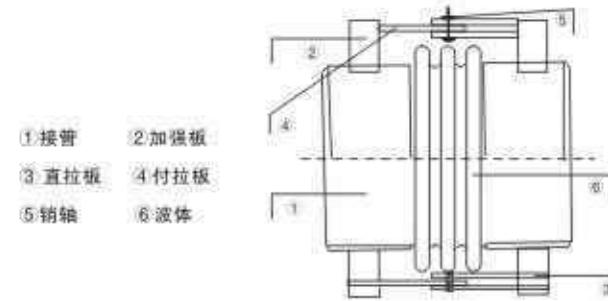
DW single universal hinge type compensator



①端管 ②立板
③铰链板 ④销轴
⑤万向环 ⑥波纹管



序号	通径 DN	波数 n	横向补偿量mm/横向刚度N/mm						径向最大 外形尺寸 mm	接管端口尺寸		产品重量Kg						
			产品总长mm							法兰尺寸		产品总长mm						
			1200	1500	2000	2500	3000	mm		C	N-D	1200	1500	2000	2500	3000		
1	100	4+4	91/4	127/2	187/1	274/06		330		Φ1804	46	55	71	86				
2									Φ180	8-Φ180	56	65	81	96				
3	125	4+4	99/11	140/6	209/3	277/2		335		Φ13314	66	83	101	118				
4									Φ210	8-Φ18	79	96	114	131				
5	150	4+4	108/12	153/6	230/3	307/2		380		Φ159×4.5	75	97	107	129				
6									Φ240	8-Φ23	91	113	123	145				
7	200	3+3	75/42	108/21	164/10	220/6		450		Φ219×6	102	124	161	198				
8									Φ295	12-Φ23	122	144	181	218				
9	250	3+3	76/68	116/33	182/14	244/8		525		Φ273×8	152	182	230	280				
10									Φ355	12-Φ25	183	213	261	311				
11	300	3+3			104/66	169/28	234/15	299/10	585		Φ325×8	242	307	372	437			
12									Φ410	12-Φ25	278	343	408	473				
13	350	3+3			160/38	225/20	291/13		662		Φ377×8	259	324	389	454			



DJ单式铰链型波纹补偿器
DJ unitary hinged bellows compensator

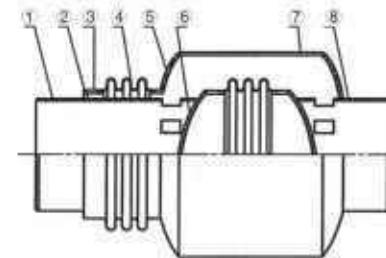
通径 DN	压力等级MPa				
	0.25	0.6	1.0	1.6	2.5
	长度mm轴向补偿量mm/(度)刚度N.m/度				
150	600/±8.9/12	600/±5.0/23	600/±4.3/36	600/±3.47/76	600/±3.07/87
200	600/±8.9/36	600/±6.4/50	850/±5.1/115	650/±4.3/115	700/±3.5/278
250	600/±8.9/36	600/±4.9/79	650/±3.6/200	650/±3.3/320	700/±3.8/489
300	650/±7.2/36	650/±4.9/109	650/±4.0/278	150/±3.5/488	750/±3.2/594
350	350/±7.0/49	650/±3.9/109	700/±3.3/314	750/±2.8/765	800/±2.7/832
400	650/±5.5/78	660/±4.2/123	700/±3.5/502	750/±2.6/987	850/±3.0/1186
450	750/±5.9/98	750/±3.4/293	750/±2.9/754	850/±2.9/167	1000/±2.2/1312
500	750/±5.0/120	750/±3.3/469	750/±2.2/987	850/±1.9/153	1000/±2.3/2145
600	850/±6.1/187	850/±4.4/399	900/±3.2/1869	1000/±2.9/1150	1100/±2.0/2254
700	850/±5.9/185	850/±4.2/577	950/±3.8/768	1100/±3.0/150	
800	900/±5.5/455	900/±3.4/764	1000/±3.9/1665	1100/±2.6/2987	
900	900/±4.9/364	900/±3.3/105	1100/±3.8/1582	1200/±2.2/3398	
1000	1000/±5.1/948	1000/±3.2/2020	1100/±2.9/5648	1200/±2.5/5064	
1100	1000/±4.2/765	1000/±3.1/2525	1100/±2.8/7589	1300/±2.6/7356	
1200	1000/±4.9/769	1000/±2.8/3386	1200/±3.1/9870	1400/±2.9/7598	
1400	1100/±3.1/1396	1100/±2.2/5648	1200/±2.2/16630		
1500	1100/±3.8/1884	1100/±2.1/6489	1300/±2.5/13353		

PP旁通直管压力平衡补偿器

PP by-pass straight pipe pressure balance compensator



1 进口端管
2 进口端环
3 导流筒
4 限位环
5 端接管
6 波纹管
7 外管
8 出口端管



一、产品特点：

- 具有吸收内压推力的能力，自平衡性较ZP型优越；
- 刚度小、导向性好；
- 外形尺寸小，经济性好；
- 产品安装无方向性要求。

二、产品使用与安装注意事项：

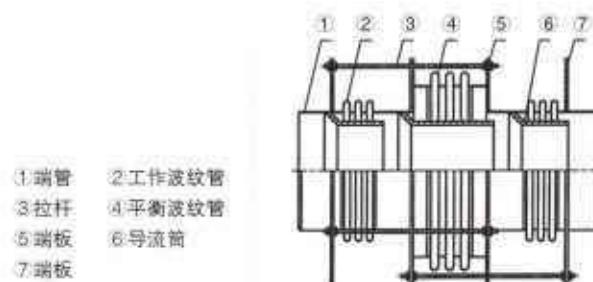
- 为减少弹性反力，产品均已作50%的预拉伸，安装时不必再预拉；
- 安装时，注意疏水口必须朝下；
- 现场安装完后，须将小拉杆拆除。

主要数据

公称通径DN mm	波数 n	轴向补偿量 X_0 mm	轴向刚度 K_x N/mm	径向外形 最大尺寸 mm	产品长度Lmm 联接型式接管J		法兰 F
					设计压为PN=0.6~1.6MPa		
100	16	77	212	230	1114	1124	
	32	154	106		1577	1587	
125	16	80	241	280	1175	1185	
	32	160	121		1640	1650	
150	16	80	274	325	1215	1225	
	32	160	137		1680	1690	
200	16	122	424	426	1576	1600	
	32	244	212		2222	2246	
250	16	120	494	529	1670	1694	
	32	240	247		2310	2334	
300	16	154	439	630	1915	1940	
	32	308	220		2668	2692	
350	16	153	491	670	2010	2034	
	32	306	246		2763	2787	
400	16	151	543	720	2128	2152	
	32	302	272		2885	2910	
450	16	149	598	820	2174	2200	
	32	298	299		2925	2950	
500	16	146	654	920	2270	2294	
	32	292	327		3018	3042	
600	16	168	734	1120	3010	3034	
	32	336	367		4178	4200	
700	12	166	1067	1220	3272	3300	
	24	332	534		4516	4540	
800	12	163	1173	1320	3452	3476	
	24	326	578		4693	4717	
900	12	160	1286	1520	3680	3684	
	24	320	643		4930	4954	
1000	12	199	959	1620	3870	3894	
	24	398	480		5159	5183	
1100	12	196	1035	1720	4028	4060	
	24	392	518		5316	5340	
1200	12	194	1111	1920	4188	4212	
	24	388	556		5474	5500	

ZP直管压力平衡型波纹补偿器

ZP straight pipe pressure balance type corrugated compensator



一、产品特点：

该膨胀节的两端各有一个工作波管，中间有一个平衡波纹管，膨胀节通过受力构件（大拉杆或舌管）来承受内压推力，因此管系只需中间固定支架。此样膨胀节只能吸收轴向位移。

二、产品使用与安装注意事项：

1. 此类膨胀节一般应用在架空的直管线上。
2. 膨胀节安装完后，所有的小拉杆须拆除。
3. 为减少膨胀节对座的弹性反力，在安装前可对此样膨胀节进行预拉或预压（可通过调整其上的小拉杆实现）。

公称通径 DN mm	波纹管		轴向补偿量 X_x mm	轴向刚度 K_{X_x} N/mm	径向外形 最大尺寸 mm	产品长度Lmm		产品 类型
	总波数 n	$n/2n_1$ n_1 -大管波数 n_2 -小管波数				接管J	法兰F	
设计压力PN=0.25MPa(2.5kgf/cm²) 疲劳寿命[N]=1000次 设计温度t=20°C								
600	12	4/8	82	1050	1173	2000	2024	ZP
	18	6/12	123	700		2300	2324	
	24	8/16	165	525		2700	2724	
700	12	4/8	82	1347	1331	2000	2024	WP
	18	6/12	123	898		2300	2324	
	24	8/12	163	674		2700	2724	
800	12	4/8	98	1003	1474	2000	2024	WP
	18	6/12	146	668		2300	2324	
	24	8/16	195	501		2700	2724	
900	12	4/8	106	1075	1634	2000	2024	WP
	18	6/12	159	716		2300	2324	
	24	6/16	212	537		2700	2724	
1000	12	4/8	108	1136	1806	2000	2024	WP
	18	6/12	162	758		2300	2324	
	24	6/16	215	568		2700	2724	
1100	12	4/8	102	1404	2016	2100	2124	WP
	18	6/12	154	936		2450	2474	
	24	8/16	205	702		2900	2924	
1200	12	4/8	110	1246	2170	2100	2124	WP
	18	6/12	165	831		2450	2474	
	24	8/16	220	623		2900	2924	

WP弯管压力平衡型波纹补偿器

WP bent pipe pressure balance type corrugated compensator



一、产品工作特点：

此类膨胀节的前部（通道端）有两个工作波纹管，可以吸收来自弯管段产生的横向位移，后部（平衡端）有一个平衡波纹管，它可以吸收来自直管段的轴向位移。当弯管段产生横向位移时，大拉杆上球面螺母绕球面垫圈转动，同时大拉杆承受内压的推力。因此该膨胀节常用于泵、罐、压缩机、气轮机出口处，以减少对上述设备的作用力。

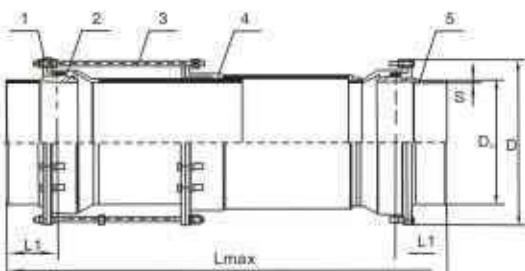
二、产品使用、安装注意事项：

1. 内衬筒方向应与介质流向一致（膨胀节上有流向标志）；
2. 现场安装完后，须拆除小拉杆；
3. 为了减少支座受力，产品在安装时可进行“预变形”。轴向即可预拉伸或预压缩；横向即进行冷紧，冷紧是取实际补偿量的一半即 $\frac{1}{2} Y$ ，在横向变形的反方向进行冷紧。

公称通径 DN mm	通道端 波数 n	通道端 波数 n	补偿量mm		轴向 单波刚度 K_{X_x} N/mm	横向 总刚度 K_y N/mm	尺寸mm		产品总长Lmm	产品 类型
			轴向 X_x mm	横向 Y_y mm			A	B		
设计压力PN=0.2MPa(2kgf/cm²) 疲劳寿命N=10³次 设计温度t=20°C 工作温度T≤150°C										
1000	10 (4+4)	6	1393	71	1393	1490	3090	1020	4790	4802
					1594	1700	3190	1120	4965	4977
					1594	1590	3290	1220	5140	5152
					1700	1682	3390	1320	5315	5327
	10 (5+5)	7	1774	101	1807	1807	3780	1420	5870	5882
					1807	1867	3880	1520	6045	6057
					1867	1960	4180	1620	6436	6448
					1960	1960	4340	1720	6761	6773
					1960	1774	4440	1820	6936	6948
					2000	1867	4540	1920	7111	7123
设计压力PN=0.6MPa(6kgf/cm²) 疲劳寿命N=10³次 设计温度t=20°C 工作温度T≤150°C										
1200	8 (4+4)	6	2651	154	2651	2811	2288	700	3756	3777
					2974	2974	238	3198	3940	3952
					4106	4382	211	1100	5085	5097
					4106	4680	265	3298	5260	5272
	10 (5+5)	7	4985	243	4985	4021	3648	1300	5735	5747
					4985	4021	226	3748	1400	5910
					4985	4261	209	4048	1500	6295
					4985	4261	209	4048	1600	6307
					4985	4261	209	4048	1600	6307
					4985	4261	209	4048	1600	6307

三维球形补偿器

Three dimensional spherical compensator



1-压盖 2-伸缩管 3-限位拉杆 4-壳体 5-球形接头

一、结构简图及工作原理

该产品结构如图所示，主要由壳体、球形接头、伸缩管、限位拉杆及基础件等组成。

工作原理：利用两端球形接头的转动和中间伸缩接管的轴向位移来吸收（或补偿）管道多维方向的变形，密封式采用压盖压实壳体内部密封圈的方式，使其密封可靠，结构合理，使用维护方便，重量轻，适用范围广，深受用户的好评，能较好地满足大型电站锅炉煤粉管道以及其他具有多维变化补偿需求的场合。

A. diagram of the structure and working principle.

The structure of the product as shown in the figure, is mainly composed of a casing, a spherical joint, a telescopic tube, a limiting rod and basic components. Working principle: using spherical joints at both ends of the axial displacement of the rotating and middle telescopic connecting pipe to absorb (or compensation) deformation multidimensional direction of the pipeline, sealed by the shell gland compaction Department of the sealing ring, the sealing is reliable, reasonable structure, convenient use and maintenance, light weight, wide application range, well received by users, and can better meet the requirements of large power plant boilers, pulverized coal pipe Road and other demand compensation multi-dimensional change of situation.

二、主要技术指标

1、工作压力：0.35MPa

2、工作温度： $\leq 220^{\circ}\text{C} / \leq 450^{\circ}\text{C}$

3、补偿量：轴向（50mm~300mm）

角向（ $\pm 4^{\circ}$ ~ $\pm 8^{\circ}$ ）

Two, the main technical indicators

1, working pressure: 0.35MPa

2, working temperature: less than 220 DEG C / less than or equal to 450 DEG C.

3, the amount of compensation: axial (50mm~300mm)

Angular (plus or minus 4 degrees to + 8 degrees).

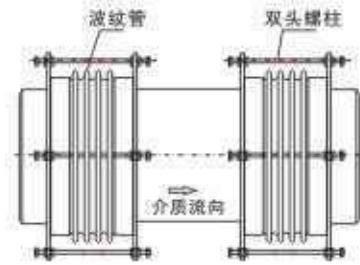
三、主要连接尺寸及参数

Three, the main connection dimensions and parameters.

序号	公称通径DN (mm)	最大伸缩量 (mm)	最大偏转角度 (θ°)	Dw (mm)	S (mm)	D (mm)	L1(mm)	Lmax(mm)
1	200	50~300	$\pm 4^{\circ}$ ~ $\pm 8^{\circ}$	219	8	325	95	1000~3000
2	250			273	8	380	105	
3	300			325	8	450	115	
4	350			377	8	515	140	
5	400			426	10	585	150	
6	450			478	10	635	155	
7	500			530	10	705	165	
8	550			580	10	740	170	
9	600			630	10	810	175	
10	700			720	10	900	205	
11	800			820	10	1000	230	

煤粉管道三向补偿器

D-LD2000-65301-65339



一、概况

煤粉管道三向补偿器主要用于电厂锅炉送粉管道，吸收锅炉炉膛向下热膨胀和炉膛的横向膨胀及送粉管道的热位移。本补偿器能吸收任意方向位移。

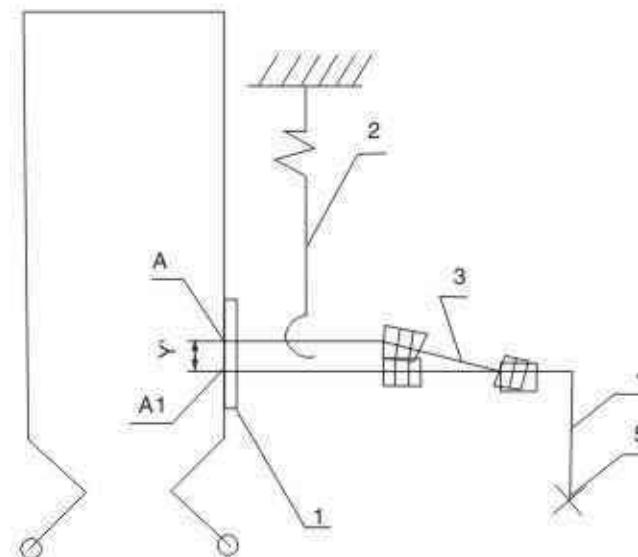
本部件一般装设在燃烧器入口水平或垂直送粉管道上。

1、水平布置

标号：D-LD2000-65301-65339

补偿器位移形式：主要吸收横向位移和少量轴向位移。

为减少磨损和流阻，本部件一般在现场按冷紧状态安装（又称偏装），冷紧量Y一般按燃烧器接口热态时向下膨胀量的50%~100%，如下图示：



1—端烧器

2—恒力吊支架

3—三维补偿器

4—送粉管道

5—固定管架

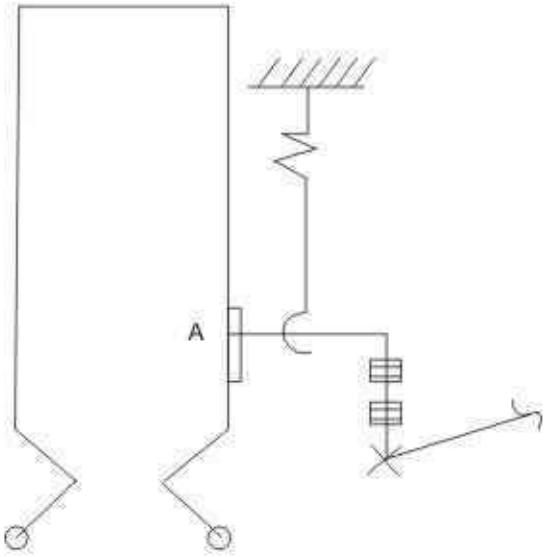
A-冷态位置

A1-热态位置

2、垂直布置

标号：D-LD2000-65341-65379

补偿器位移形式：主要吸收轴向位移和较小横向位移。为减少A点受力，本部件在制造厂家出厂前进行预拉伸，如下图示：



二、性能参数

- 1、使用压力(P)：≤0.1MPa (设计爆破压力≥0.35MPa)；
- 2、使用温度 (t)：0 ~ 350°C；
- 3、波纹管结构：奥氏体不锈钢板双层结构，内层0Cr17Ni14Mo2，外层0Cr18Ni9 (GB3280)
- 4、产品刚度参数表中列出的刚度均系20°C时的刚度,由下表得到实际温度下对应的刚度：

工作温度 (°C)	20	100	150	200	250	300	350	400	400
刚度修正系数 f_k	1.0	0.99	0.98	0.97	0.95	0.93	0.90	0.86	0.84
刚度值	$K_x = f_k \times K_{x_0}$ $K_y = f_k \times K_{y_0}$								

5、补偿量

补偿同时吸收轴向位移X、横向位移Y，应满足 $X \leq X_0$, $Y \leq Y_0$ ，参数表中所列的轴向补偿量主要为压缩位移。

6、疲劳寿命

参数表中所列补偿量对应的疲劳寿命≥1000次。

7、连接方式：对焊连接

三、订货时需提供的参数

- 1、送粉管道的外径×壁厚；
- 2、产品的长度及补偿量。

煤粉管道三向补偿器连接尺寸

序号	标号	公称通径	外径×壁厚 $D_w \times S$ (mm)	轴向 补偿量 X_0 (mm)	横向 补偿量 Y_0 (mm)	轴向刚度 K_x (N/mm)	横向刚度 K_y (N/mm)	L (mm)	径向最大 外形尺寸 A (mm)	质量 (kg)
1	D-LD2000-65301	200	219×8	50	180	117	8	1500	440	293
2	D-LD2000-65302	250	273×9	50	170	130	12		490	329
3	D-LD2000-65303	300	325×10	50	155	143	17		540	348
4	D-LD2000-65304	350	377×10	50	140	156	23		590	380
5	D-LD2000-65305	400	426×10	50	125	170	29		640	420
6	D-LD2000-65306	200	219×8	50	280	117	4		440	319
7	D-LD2000-65307	250	273×9	50	260	130	6		490	357
8	D-LD2000-65308	300	325×10	50	230	143	8		540	394
9	D-LD2000-65309	350	377×10	60	190	156	10		590	432
10	D-LD2000-65310	400	426×10	60	170	170	13		640	480
11	D-LD2000-65311	450	480×10	70	220	148	16	2000	710	644
12	D-LD2000-65312	500	530×10	70	220	154	20		760	702
13	D-LD2000-65313	550	580×10	70	210	157	23		810	765
14	D-LD2000-65314	600	630×10	70	210	161	27		870	828
15	D-LD2000-65315	18"	457.2×9.525	70	220	148	16		710	629
16	D-LD2000-65316	20"	508×9.525	70	220	154	20		760	687
17	D-LD2000-65317	22"	558.8×9.525	70	210	157	23		810	750
18	D-LD2000-65318	24"	609.6×9.525	70	210	161	27		870	813
19	D-LD2000-65319	200	219×8	60	340	117	2		440	344
20	D-LD2000-65320	250	273×9	60	310	130	3		490	393
21	D-LD2000-65321	300	325×10	60	280	143	4	2500	540	440
22	D-LD2000-65322	350	377×10	60	260	156	6		590	485
23	D-LD2000-65323	400	426×10	60	230	170	8		640	539
24	D-LD2000-65324	450	480×10	70	310	148	9		710	711
25	D-LD2000-65325	500	530×10	70	300	154	11		760	776
26	D-LD2000-65326	550	580×10	70	290	157	13		810	846
27	D-LD2000-65327	600	630×10	70	290	161	15		870	917
28	D-LD2000-65328	18"	457.2×9.525	70	310	148	9		710	693
29	D-LD2000-65329	20"	508×9.525	70	300	154	11		760	758
30	D-LD2000-65330	22"	558.8×9.525	70	290	157	13		810	828
31	D-LD2000-65331	24"	609.6×9.525	70	290	161	15	3000	870	899
32	D-LD2000-65332	450	480×10	80	370	148	6		710	777
33	D-LD2000-65333	500	530×10	80	360	154	7		760	851
34	D-LD2000-65334	550	580×10	80	350	157	8		810	928
35	D-LD2000-65335	600	630×10	80	340	161	9		870	105
36	D-LD2000-65336	18"	457.2×9.525	80	370	148	6		710	756
37	D-LD2000-65337	20"	508×9.525	80	360	154	7		760	830
38	D-LD2000-65338	22"	558.8×9.525	80	350	157	8		810	907
39	D-LD2000-65339	24"	609.6×9.525	80	340	161	9		810	984

XZ免维护旋转补偿器

XZ maintenance free rotating compensator

免维护旋转补、封座外套、柔性石墨填料、螺母螺栓N个压簧组合、填料压盖及弹簧压紧法兰构成：所述填料压紧法兰与压紧上法兰之间设有压簧，压紧法兰纵截面为U型的槽圈。U型槽圈中以及内导管右端面两个定环之间设有与变径管相配合运动的滚珠式滚动环。

Maintenance free rotation compensation, the sealing base coat, flexible graphite packing, nuts and bolts N spring combination, the packing gland and the spring pressing flange form; the pressure spring is provided with the packing gland flange and pressing on the flange between the groove ring type U longitudinal section of a pressing flange. And the reducer pipe is matched with the motion of the ball rolling ring is arranged between the U type groove ring and inner catheter right end surfaces of the two ring.

工作原理：

免维护旋转补偿器和旋转补偿器产品使用都是靠填料腔内的柔性填料进行密封。产品使用过程中每旋转一次填料就会磨损一点，当磨损量达到一定值时，产品就会出现泄漏。免维护旋转补偿器因在填料压紧法兰上方增加了一组弹簧，当填料出现微量磨损时，依靠压紧弹簧的张力给予补偿，从而延长产品发生泄漏时间（泄漏时间延后3-5年）。当磨损量超过弹簧张力补偿量时，只需扳紧弹簧压紧法兰上方的螺帽即可，不需要停气修复，运行无数次限制，不易产生泄漏，从而大大提高供气单位和用气单位的社会经济效益。该产品在0.0Mpa的压力下补偿5000次不产生泄漏，密封效果优越。

免维护式旋转补偿器的密封填料采用目前国内最先进的填料，耐温-60°C~800°C，由于补偿器的内套管外部和外套管内部焊有挡环，两挡环之间设有减小摩擦力的(滚动环)滚珠，减小了内套管对密封填料的磨损。且由于补偿器装置上多组弹簧的自然张力推压着填料压盖法兰，使磨损极为轻微的密封填料永远处于紧凑状态，从而使管道中的液体或气体介质不产生泄漏，当填料磨损量大时，弹簧张力无法满足调整，可用外力对弹簧压紧进行调整从而达到不停止工作状态下达到所要求的密封效果，所以本产品克服了其它同类产品的不足，原有的旋转式、套管式补偿器当填料磨损后无法得到及时补偿调整本免维护式补偿器因为使用了内管和变径管为同径，使介质能够畅通、畅流、解决于上述问题。

The working principle of:

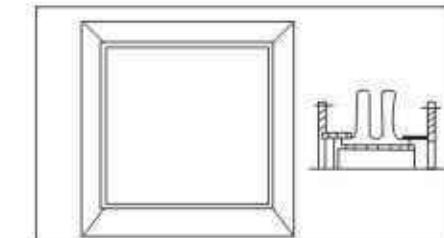
Maintenance free rotating compensator and the rotating compensator product use is to rely on flexible filler packing chamber sealing. Products used in the process of each spin Turn a little will wear a little, when the wear amount reaches a certain value, the leakage of products will appear. Maintenance free rotating compensator for the packing gland A group of spring to increase the flange above, when the filler had little wear, by the pressing spring tension compensation, so as to prolong the product leak (leak time delay time 3-5 years). When the amount of wear Over the spring tension compensation amount, just pull tension spring clamping flange above the nut can, do not need to stop the gas repair, running unlimited, being not easy to leak, thereby greatly improving the air supply unit and Gas unit of social and economic benefit. This product is 5000 time compensation does not produce leakage under the pressure of 0.0Mpa, the sealing effect is excellent.

Free sealing filler is currently the most advanced packing air maintenance rotary compensator, resistance to temperature of -60 DEG C and 800 C, because the inner casing and the outer casing external internal welding compensator with a baffle ring, the two retaining ring installed in the decrease of the friction (rolling ring) ball, decreases the inner sleeve on the abrasion of the sealing filler. And because of the natural tension multiple spring compensator device pushes a gland flange, so wear extremely slight sealing filler forever in a compact state, so that the liquid or gas medium in the pipe does not produce leakage, when the filler wear quantity is big, the tension of the spring can not meet the adjustment, available external force on the spring pressure Tight adjusted so as to achieve does not stop working state to achieve the required sealing effect, so the product overcomes the defects of other products of the same type, rotary type, sleeve type compensator original when the packing wear Unable to get timely compensation adjustment of the maintenance free type compensator for the use of the inner pipe and variable diameter pipe for the same size, so that the medium can flow. Shun, to solve the above problem.



CE金属矩形波纹补偿器

CE metal rectangular corrugated compensator



设计安装数据表 Data sheet for design installation

端面尺寸LpxLs(m) Face dimensions LxLs(m)		1000X800		1500X800		2000X800		2500X800		3000X800	
波数n Wave number n	补偿量Xo(MM) Compensation for displacement	2	24	2	4	2	4	2	4	2	4
总长 General L (MM)	42	2	2	42	21	42	21	42	21	42	21
	L0	310	470	310	470	310	470	310	470	310	470
	L2	360	520	360	520	360	520	360	520	360	520
	L3	410	570	410	570	410	570	410	570	410	570
轴向刚度 Axial stiffness	L4	460	620	460	620	460	620	460	620	460	620
	0.0211	0.0106	0.0211	0.0106	0.0211	0.0106	0.0211	0.0106	0.0211	0.0106	0.0106
	Kx(kg/cm/mm)	XL	XL								

端面尺寸LpxLs(m) Face dimensions LxLs(m)		3500X800		4000X800		5000X800		4500X1120		3171X2715	
波数n Wave number n	补偿量Xo(MM) Compensation for displacement	2	4	2	4	2	4	2	4	2	4
总长 General L (MM)	42	38	21	38	21	38	21	38	21	38	21
	L0	310	470	310	470	310	470	310	470	310	470
	L2	360	520	360	520	360	520	360	520	360	520
	L3	410	570	410	570	410	570	410	570	410	570
轴向刚度 Axial stiffness	L4	460	620	460	620	460	620	460	620	460	620
	0.0211	0.0357	0.0211	0.0357	0.0211	0.0357	0.0211	0.0357	0.0211	0.0357	0.0211
	Kx(kg/cm/mm)	XL	XL	XL	XL	XL	XL	XL	XL	XL	XL

安装要求

1. 安装前，应先检查波纹管膨胀节的型号，规格及管道的支座配置必须符合设计要求。
2. 对带内衬的膨胀节，应注意使内衬筒方向与介质流动方向一致(按膨胀节的流向标志安装)。平面角向型膨胀节的铰链流动平面应于位移平面一致。
3. 需要进行“冷紧”的膨胀节，其预变形所用的辅助构件，应在管系安装完毕后拆除。
4. 管系安装完毕立即拆除膨胀节上用做安装运输保护的辅助定位机构及固件，并按设计要求将限位装置调到规定的位置，使管系在环境条件下有足够的补偿能力。
5. 除设计要求豫拉压或“冷紧”的豫变形外，严禁用使波纹管变形的方法来调整管道的安装偏差。以免影响膨胀节的正常功能，降低使用寿命和增加管系，设备接管及支撑构件的载荷。
6. 膨胀节所有的活动原件不得被外部构件卡死或限制其活动部位的正常工作。
7. 安装过程中不允许焊渣飞溅到波纹管表面和使波纹管受到其他机械损伤。
8. 对用于气体介质的膨胀节及其连接管道，作水压试验时，要考虑充水时是否需要对膨胀节的检查。
9. 水压试验用水必须洁净，无腐蚀性，并控制水中的氯离子的含量不超过25ppm。水压试验结束后，应尽快排尽波纹中的积水，并迅速将波壳的内表面吹干。

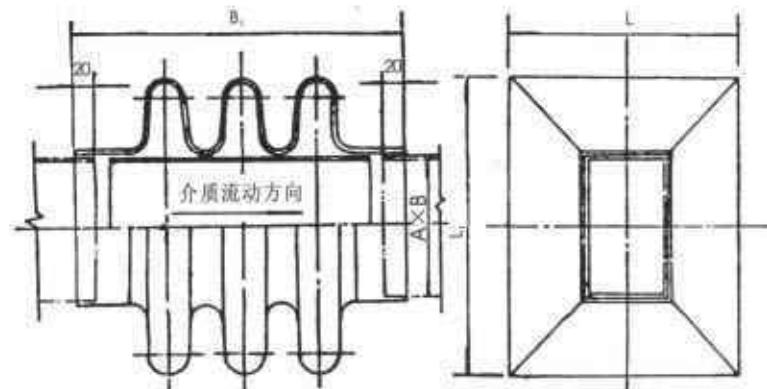
Installation requirement:

1. Before installation, one should check the model of the expansion joints and the specifications of the corrugated pipe, and make sure that the abutment allocation of the pipe must comply with the design requirements.
2. For the expansion joints with inner liner, one should pay attention to make the internal shell be in the same directions that the medium flowing (install in accordance with the flow direction mark of the expansion joints).
3. For the expansion joints needing cold tightening, the auxiliary components used for predeformation should be demolished after the installation of pipes is finished.
4. After the installation of pipe, the auxiliary locating mechanism and firmware used for installation transportation and protection on the expansion joints should be demolished immediately.
5. It is strictly forbidden to adjust the installation deviation of pipe with the method of deforming the corrugated pipe with the exception of deformation of the pre-tension and compression required by the design or ?cold tightened? predeformation, in order to avoid influencing the normal function of expansion joints, reducing the service life and increasing the load of pipe, equipment and bracing components.
6. All the active original components of the expansion joints should not be blocked by external components, the active parts' normal work and should not be limited.
7. During the installation, it is not allowed that the welding slag splashed on the surface of the corrugated pipe or the corrugated pipe got damaged by other machines.
8. For the expansion joints used for gas medium and their connecting pipes, when conducting hydrostatic test, one should consider whether to check the expansion joints when filling water.
9. The water used for hydrostatic test must be clean, non-corrosive and the chloride ion contents in it should not more than 25ppm. After the hydrostatic test, one should drain the water in the corrugation as soon as possible and blow dry the inner surface of the corrugation shell rapidly.



矩形三波补偿器

Three rectangular wave compensator



序号	标号	公称通径DN	A	B	L	B ₁	L ₁	质量(kg)
		毫米						
1	D-LD2000-63201	300x400	300	400	709	609	54	54
2	D-LD2000-63202	300x500		500	809			61
3	D-LD2000-63203	300x600		600	909			67
4	D-LD2000-63204	300x700		700	1009			73
5	D-LD2000-63205	400x500	400	500	809	709	67	67
6	D-LD2000-63206	400x600		600	909			73
7	D-LD2000-63207	400x700		700	1009			80
8	D-LD2000-63208	400x800		800	1109			86
9	D-LD2000-63209	500x600	500	600	909	809	80	80
10	D-LD2000-63210	500x800		800	1109			92
11	D-LD2000-63211	500x900		900	1209			98
12	D-LD2000-63212	500x1000		1000	1413			156
13	D-LD2000-63213	600x700	600	700	1009	909	92	92
14	D-LD2000-63214	600x800		800	1109			98
15	D-LD2000-63215	600x900		900	1313			156
16	D-LD2000-63216	700x600	700	500	809			86
17	D-LD2000-63217	700x700		700	1009			98
18	D-LD2000-63218	700x800		800	1213			156
19	D-LD2000-63219	800x600	800	800	1213	1213	166	166
20	D-LD2000-63220	800x1200		1200	1613			202
21	D-LD2000-63221	800x1600		1600	2013			239
22	D-LD2000-63222	900x400	900	400	709			92
23	D-LD2000-63223	900x700		700	1113	1313	166	166
24	D-LD2000-63224	900x1200		1200	1613			212

矩形三波补偿器

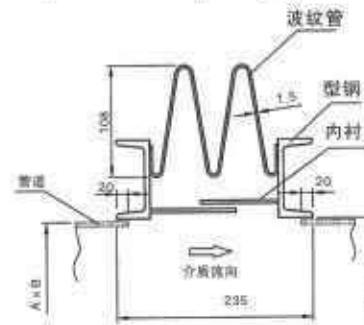
D-LD2000-63262-63298
Three rectangular wave compensator

序号	标号	公称通径DN	A	B	L	B ₁	L ₁	重量(kg)
		毫米						
1	D-LD2000-63262	2400x1200	2400	1200	1613	536	2813	251.8
2	D-LD2000-63263	2400x1400		1400	1813			265.1
3	D-LD2000-63264	2400x1600		1600	2013			278.5
4	D-LD2000-63265	2400x1800		1800	2213			291.8
5	D-LD2000-63266	2400x2000		2000	2413			305.2
6	D-LD2000-63267	2600x1600	2600	1600	2013	3013	3113	291.8
7	D-LD2000-63268	2600x1800		1800	2213			305.2
8	D-LD2000-63269	2600x2000		2000	2513			464.6
9	D-LD2000-63270	2600x2200		2200	2713			483.7
10	D-LD2000-63271	2800x1800	2800	1800	2313	3313	3613	464.6
11	D-LD2000-63272	2800x2000		2000	2513			483.7
12	D-LD2000-63273	2800x2200		2200	2713			502.8
13	D-LD2000-63274	2800x2400		2400	2913			521.9
14	D-LD2000-63275	3000x2000	3000	2000	2513	3713	4113	205.8
15	D-LD2000-63276	3000x2400		2400	2913			540.7
16	D-LD2000-63277	3000x2600		2600	3113			559.8
17	D-LD2000-63278	3200x2200	3200	2200	2713			540.7
18	D-LD2000-63279	3200x2600		2600	3113			577.9
19	D-LD2000-63280	3200x3000		3000	3513			616.9
20	D-LD2000-63281	3600x2400	3600	2400	2913			598
21	D-LD2000-63282	3600x2800		2800	3313			635.9
22	D-LD2000-63283	3600x3200		3200	3713			674.1
23	D-LD2000-63284	4000x2800	4000	2800	3313			674.1
24	D-LD2000-63285	4000x3000		3000	3513			693
25	D-LD2000-63286	4000x3200		3200	3713			712.1
26	D-LD2000-63287	4500x3000	4500	3000	3513			740.6
27	D-LD2000-63288	4500x3400		3400	3913	5013	5513	778.7
28	D-LD2000-63289	4500x4000		4000	4513			835.8
29	D-LD2000-63290	5000x3400	5000	3400	3913			826.3
30	D-LD2000-63291	5000x3800		3800	4313			864.3
31	D-LD2000-63292	5000x4200		4200	4713			902.4
32	D-LD2000-63293	5500x3600	5500	3600	4113			891
33	D-LD2000-63294	5500x4200		4200	4713			949.2
34	D-LD2000-63295	5500x4800		4800	5313			1006.3
35	D-LD2000-63296	6000x4000	6000	4000	4513			978.6
36	D-LD2000-63297	6000x4600		4600	5113			1035.6
37	D-LD2000-63298	6000x5000		5000	5513			1073.7

矩形圆角双波补偿器（半高）

D-LD2000-64634-64666

Rectangle with rounded corners, double wave compensator (a high)



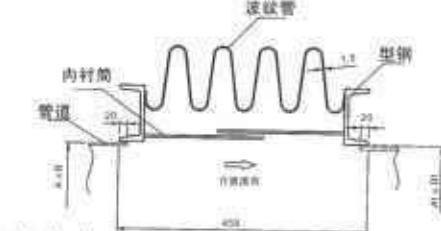
矩形圆角双波补偿器（半高）

序号	标号	公称通径(A×B) (mm)	A1 (mm)	B1 (mm)	A2 (mm)	B2 (mm)	重量 (kg)
1	D-LD2000-64634	2000×1800		1804	2140	331	
2	D-LD2000-64635	2000×2000		2004	2340	348	
3	D-LD2000-64636	2200×1200		1204	1540	298	
4	D-LD2000-64637	2200×1400		1404	1740	315	
5	D-LD2000-64638	2200×1600		1604	1940	331	
6	D-LD2000-64639	2200×1800		1804	2140	348	
7	D-LD2000-64640	2200×2000		2004	2340	364	
8	D-LD2000-64641	2200×1200		1204	1540	315	
9	D-LD2000-64642	2400×1400		1404	1740	331	
10	D-LD2000-64643	2400×1600		1604	1940	348	
11	D-LD2000-64644	2400×1800		1804	2140	364	
12	D-LD2000-64645	2400×2000		2004	2340	380	
13	D-LD2000-64646	2600×1600		1604	1940	364	
14	D-LD2000-64647	2600×1800		1804	2140	380	
15	D-LD2000-64648	2600×2000		2004	2340	397	
16	D-LD2000-64649	2600×2200		2204	2540	414	
17	D-LD2000-64650	2800×1800		1804	2140	397	
18	D-LD2000-64651	2800×2000		2004	2340	414	
19	D-LD2000-64652	2800×2200		2204	2540	431	
20	D-LD2000-64653	2800×2400		2404	2740	447	
21	D-LD2000-64654	3000×2000		2004	2340	431	
22	D-LD2000-64655	3000×2400		2404	2740	533	
23	D-LD2000-64656	3000×2600		2604	2940	553	
24	D-LD2000-64657	3200×2200		2204	2540	533	
25	D-LD2000-64658	3200×2600		2604	2940	572	
26	D-LD2000-64659	3200×3000		3004	3340	610	
27	D-LD2000-64660	3600×2400		2404	2740	591	
28	D-LD2000-64661	3800×2800		2804	3140	629	
29	D-LD2000-64662	3800×3200		3204	3540	667	
30	D-LD2000-64663	4000×2800		2805	3141	668	
31	D-LD2000-64664	4000×3000		3005	3341	687	
32	D-LD2000-64665	4000×3200		3205	3541	706	
33	D-LD2000-64666	4500×3000	4505	3005	4841	3341	735

矩形圆角双波补偿器（半高）

D-LD2000-64634-64666

Rectangle with rounded corners, double wave compensator (a high)

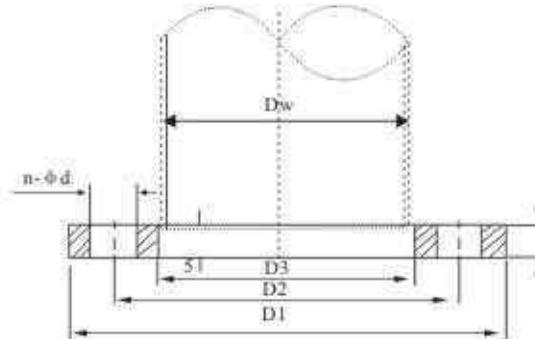


矩形圆角双波补偿器（半高）

序号	标号	公称通径(A×B) (mm)	A1 (mm)	B1 (mm)	A2 (mm)	B2 (mm)	质量 (kg)
1	D-LD2000-66334	2000×1800		1804			2144
2	D-LD2000-66335	2000×2000		2004			2344
3	D-LD2000-66336	2000×1200					1544
4	D-LD2000-66337	2000×1400					1744
5	D-LD2000-66338	2000×1800					1944
6	D-LD2000-66339	2200×1800					2144
7	D-LD2000-66340	2200×2000					2344
8	D-LD2000-66341	2400×1200					1544
9	D-LD2000-66342	2400×1400					1744
10	D-LD2000-66343	2400×1600					1944
11	D-LD2000-66344	2400×1800					2144
12	D-LD2000-66345	2400×2000					2344
13	D-LD2000-66346	2600×1800					1944
14	D-LD2000-66347	2600×1800					2144
15	D-LD2000-66348	2600×2000					2344
16	D-LD2000-66349	2600×2200					2544
17	D-LD2000-66350	2800×1800					2144
18	D-LD2000-66351	2800×2000					2344
19	D-LD2000-66352	2800×2200					2544
20	D-LD2000-66353	2800×2400					2744
21	D-LD2000-66354	3000×2000					2344
22	D-LD2000-66355	3000×2400					2744
23	D-LD2000-66356	3000×2600					2944
24	D-LD2000-66357	3200×2200					2544
25	D-LD2000-66358	3200×2600					2944
26	D-LD2000-66359	3200×3000					3144
27	D-LD2000-66360	3600×2400					2744
28	D-LD2000-66361	3600×2800					3144
29	D-LD2000-66362	3600×3200					3544
30	D-LD2000-66363	4000×2800					3145
31	D-LD2000-66364	4000×3000					3345
32	D-LD2000-66365	4000×3200					3545
33	D-LD2000-66366	4500×3000	4505	3005	4845	3345	991

ZB型织物纤维补偿器（圆形）

ZB type fabric fiber compensator (circular)



主要连接尺寸 Main joint dimension

圆形产品规格 specification of round product	DW	D ₁	D ₂	D ₃	b	n	φd
	mm						
Φ108	108	200	164	110		4	10
Φ159	159	251	215	161		8	10
Φ219	219	311	275	211			10
Φ273	273	385	330	275			10
Φ325	325	427	385	327			10
Φ377	377	479	435	379			12
Φ426	426	528	490	429			12
Φ480	480	595	540	483			12
Φ530	530	645	600	533			12
Φ630	630	745	700	633			12
Φ720	720	843	800	723			12
Φ820	820	943	900	823			14
Φ920	920	1043	1000	923			14
Φ1020	1020	1153	1100	1023			14
Φ1120	1120	1253	1200	1123			14
Φ1220	1220	1353	1300	1223			14
Φ1320	1320	1453	1400	1323			14
Φ1420	1420	1553	1500	1423			14
Φ1820	1820	1963	1910	1823			16
Φ2020	2020	2363	2310	2223			16
Φ2220	2220	2363	2310	2223			16
Φ2420	2420	2563	2510	2423			16
Φ2820	2820	2983	2915	2823	20	44	18
Φ3220	3220	3883	3315	3223		52	18
Φ3620	3620	3783	3715	3623		56	18

安装要求：1、法兰螺栓应逐步均匀地加压拧紧，所有螺丝松紧度尽可能一致。使用条件恶劣的场合，除加平垫外可添加弹簧垫圈，以防螺母松动。2、补偿器与配套平焊法兰之间应按工作温度选用相应橡胶石棉垫片。3、在试行时，应将补偿器限位螺丝作适当调整，便于产品伸长和压缩。4、焊接连接时，应将限位螺丝适当松动，防止将补偿器限位板拉弯或产品变形。5、焊接作业时作遮盖物遮住橡胶（织物）表面，防止焊渣损伤产品。

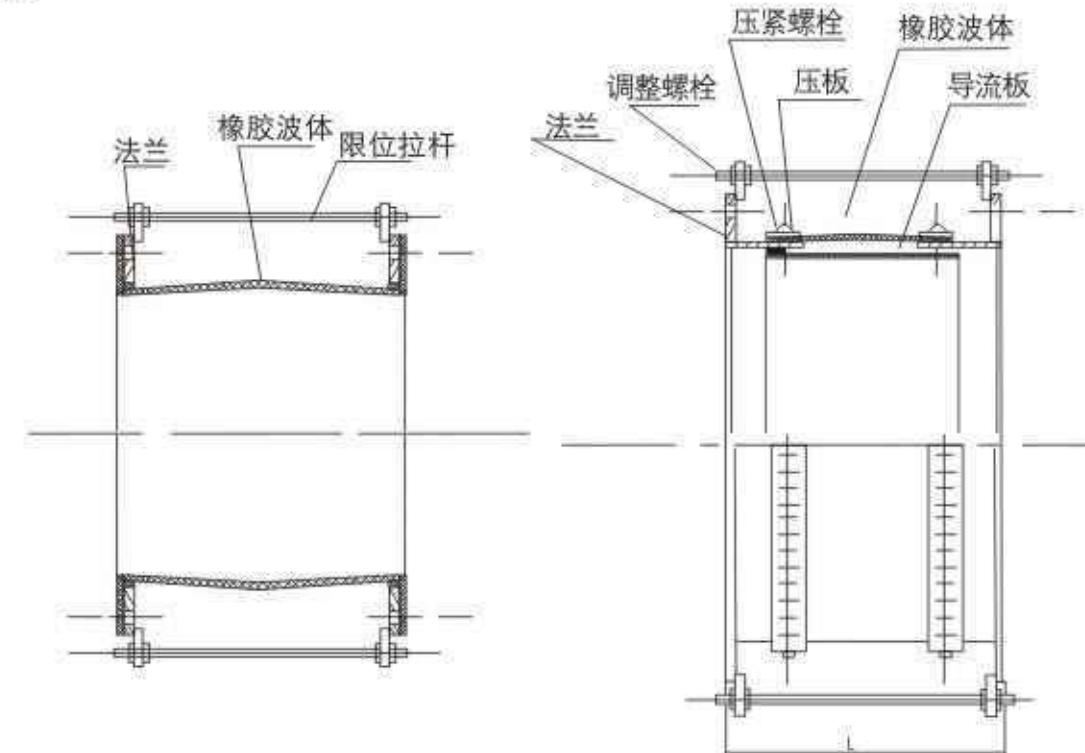
Installation requirements: 1. The flange bolt should be pressurized and screw down evenly gradually, and the tightness of all the carriage bolts are as nearly as possible. If they are used in bad conditions, spring washer can be added besides plain washer to avoid the nuts loosening. 2. Corresponding asbestos-rubber gasket should be selected and used between the compensator and mating slip-on welding flange according to the working temperature. 3. When trying out, one should make appropriate adjustments to the limit screw of the compensator for the convenience of elongation and compression of the products. 4. When connecting the welding pipe, should properly loose the limit screw to prevent the stretch bending of compensator limit board or the deformation of products. 5. When welding, the rubber (fabric) surface should be covered with covering to prevent the products from damage.

FUB型橡胶风道补偿器

FUB type rubber duct compensator



产品结构



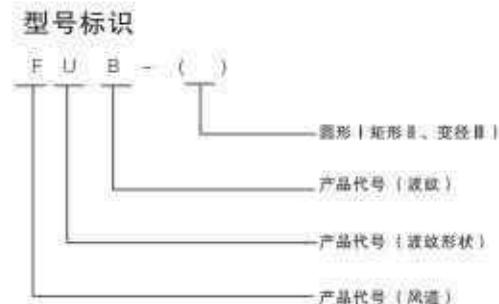
FDZ部分规格连接尺寸表

D1	D2	D3	连接螺孔	
			Φ	N
600	650	676	12	16
800	860	910	15	16
1000	1065	1110	15	15
1200	1270	1330	15	24
1600	1660	1700	15	28
2000	2070	2020	15	32

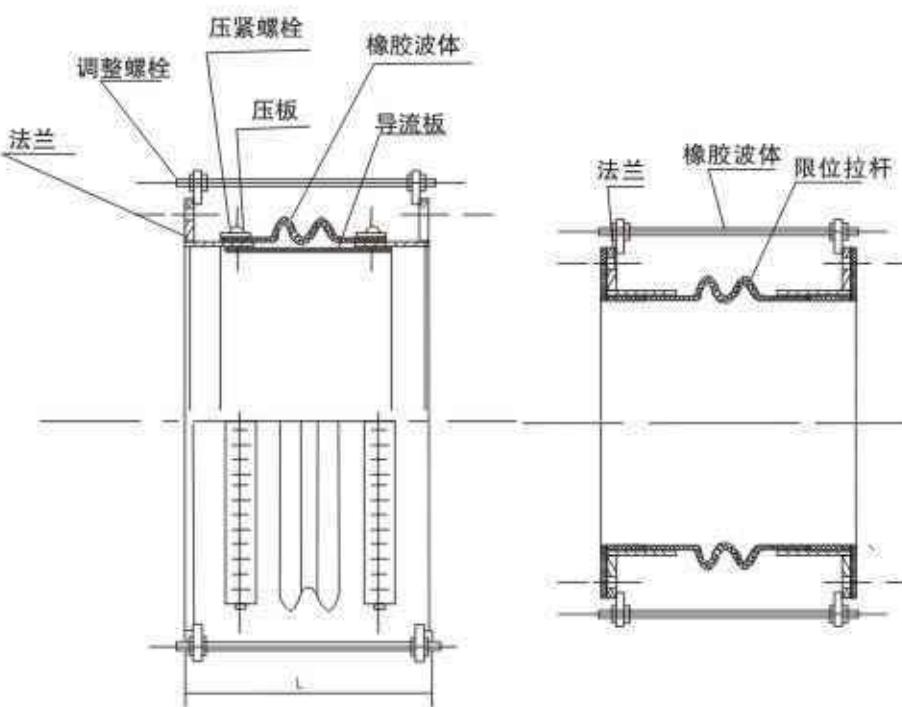
材料表

序号	名称	材料
1	法兰	0236
2	内、外胶层	天然合成橡胶
3	增强层	挂胶纤维织物

FUB型橡胶风道补偿器



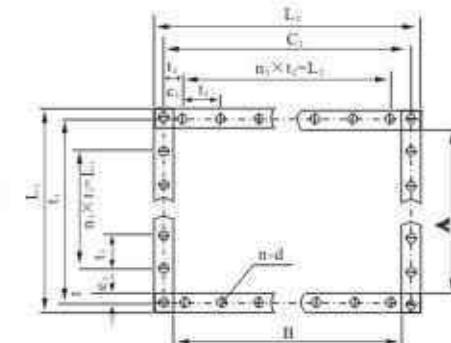
产品结构



材料表

序号	名称	材料	数量
1	法兰	Q235扁钢、角钢	2件
2	内、外胶层	天然胶、硅胶	1件
3	增强层	挂胶纤维织物	2-4层
4	接管	0235 A3	2套
5	导流管	0235 A3	1套
6	压板	0235 A3	1件

ZB型织物纤维补偿器（矩形）



主要连接尺寸 Main joint dimension

密封橡胶推荐选用表

Recommended optional sealing rubber sheet

流体 Fluid	天然胶 NR	丁基胶 Butyl rubber	丁腈胶 NBR	氯丁胶 Neoprene	乙丙胶 Ethylene-propylene rubber	硅胶 Silicone	氟胶 Teflon rubber	氯醇橡胶 Epichlorohydrin rubber			
名称 Name	NR	LLR	NBR	CR	EPT	SI	-	CHR	CHC		
海水 Seawater	90	AB	AB	AB	AB	-	-	AB	AB		
温泉水 Hot water	90	-	AB	AB	AB	-	-	-	-		
蒸汽 Steam	130	-	AB	-	-	AB	-	-	-		
氨水 Ammonia	RT	AB	-	AB	AB	--	AB	-	-		
氨水 Ammonia (30%)	RT	AB	-	-	AB	AB	-	-	-		
盐酸 Hydrochloric acid(10%)	RT	AB	AB	AB	AB	-	AB	AB	AB		
干氯气 Dry chlorine	RT	-	-	-	-	-	AB	-	-		
湿氯气 Wet chlorine	RT	-	-	-	-	-	-	-	-		
硝酸 Nitric acid(10%)	RT	-	-	B	AB	-	-	AB	-	-	
硫酸 Sulfuric acid(10%)	RT	-	AB	-	AB	AB	-	AB	-	-	
硫酸 Sulfuric acid(30%)	RT	-	-	-	AB	AB	AB	-	-	-	
酒精 Alcohol	RT	AB	AB	AB	AB	-	AB	-	-	-	
苛性钠 Caustic soda(50%)	RT	AB	AB	AB	AB	-	AB	AB	AB	-	
润滑油 Lubricating oil	70	-	-	AB	-	-	AB	AB	AB	-	
燃料油 Fuel Oil	RT	-	-	AB	-	-	-	AB	AB	AB	-
重油 Heavy oil	RT	-	-	AB	-	-	AB	AB	AB	-	-
汽油 Gasoline	RT	-	-	-	-	-	-	-	-	-	-
挥发油 Volatile oil	RT	-	-	-	-	-	AB	-	-	-	-
焦油 Tar	RT	-	-	-	-	-	AB	-	-	-	-
氧气 Oxygen	RT	-	-	-	-	AB	AB	AB	AB	-	-
二氧化碳 Carbon dioxide	RT	AB	AB	AB	AB	-	AB	AB	AB	-	-
二氧化硫 Sulfur dioxide	RT	-	AB	AB	AB	-	AB	-	-	-	-
天然气 Natural gas	RT	-	-	AB	AB	-	-	AB	-	-	-
焦炉煤气 COG	RT	-	-	-	-	-	-	-	-	-	-
发生煤炉气 Occurring gas stove	RT	-	-	AB	-	-	-	-	-	-	-
高炉煤气 Blast furnace gas	RT	-	-	AB	AB	-	-	-	-	-	-
真空管路 Vacuum line	RT	-	-	-	AB	-	-	-	-	-	-
食品饮料 Food and Drink.	RT	AB	-	-	-	-	AB	-	-	-	-

注：1、“RT”为常温，“AB”为推荐使用，

“B”为根据条件使用。

2、硅橡胶、氟橡胶价格昂贵因此部分流体
本标不推荐使用，并请慎重选用。

3、上表为蝶阀产品主要橡胶品种。

工况代号 Main joint dimension

代号	P	J	Y	S
适用介质	普通介质	酸碱	油品	食品医药
示例	水、空气、液 体、泥浆等， 非腐蚀性介质	强碱溶液或酸 性碱性介质	矿物油类 动植物类有 机溶剂	食品医药等

美国标准

设计标准：AWWA C504-80

连接法兰：ANSI B16.5-1992

结构长度：ANSI B16.10

阀门的检验与试验按API598

德国标准：

标准：DIN 3354

连接法兰:DIN2532,GB/T17241.6-1998

结构长度：DIN3202,BS5155

试验标准：DIN:3230,ZBJ16006-90

工作温度：

三元乙丙≤120℃

丁腈橡胶≤80℃

氟橡胶≤160℃

对夹式系列蝶阀尺寸表（二）

Wafer type butterfly valve series size table (B)

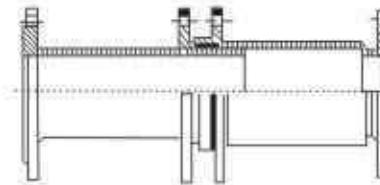
双向软密封手动对夹式蝶阀(D371X)、对夹式硬密封手动蝶阀(D371H)、对夹式管网自锁蝶阀(GD371X)、电动对夹式蝶阀(D971X)、气动对夹式蝶阀(D671X)、对夹式管网自锁蝶阀(GD371X)

Bidirectional soft sealing manual wafer type butterfly valve (D371X); on the folder type hard seal butterfly valve, manual (D371H) on the clip pipe self-locking butterfly valve (GD371X), electric clip on butterfly valve (D971X), Pneumatic clip on butterfly valve (D671X), on the clip hedgerow network self-locking butterfly valve (GD371X)

规格 DN	H1	H2	H3	L	Φ	0.6MPa				1.0MPa				1.6MPa					
						D	D ₁	n-d	螺栓	H	D	D ₁	n-d	螺栓	H	D	D ₁	n-d	螺栓
100	115	242	80	64	150	210	170	4-Φ18	4-M16	482	220	180	8-Φ18	8-M16	482	220	180	8-Φ18	8-M16
125	130	245	80	70	150	240	200	8-Φ18	8-M16	500	250	210	8-Φ18	8-M16	500	250	210	8-Φ18	8-M16
150	145	277	80	76	150	265	225	8-Φ18	8-M16	547	285	240	8-Φ22	8-M20	547	285	240	8-Φ18	8-M16
200	175	320	95	89	200	320	280	8-Φ18	8-M16	653	340	295	8-Φ22	8-M20	653	340	295	12-Φ22	12-M20
250	210	350	95	114	200	375	335	12-Φ18	12-M16	722	395	350	12-Φ22	12-M20	722	405	355	12-Φ26	12-M24
300	240	350	95	114	250	440	395	12-Φ22	12-M20	827	445	400	12-Φ22	12-M20	827	460	410	12-Φ26	12-M24
350	262	438	95	127	250	490	445	12-Φ22	12-M20	885	505	460	16-Φ22	16-M20	885	520	470	16-Φ26	16-M24
400	290	480	115	140	320	540	495	16-Φ22	16-M20	1000	565	515	16-Φ26	16-M24	1000	580	525	16-Φ30	16-M27
450	315	505	115	152	320	595	550	16-Φ22	16-M20	1052	615	565	20-Φ26	20-M24	1052	640	585	20-Φ30	20-M27
500	350	540	115	152	320	645	600	20-Φ22	20-M20	1122	670	620	20-Φ26	20-M24	1122	715	650	20-Φ33	20-M30
600	400	640	160	178	500	755	705	20-Φ26	20-M24	1215	780	725	20-Φ30	20-M27	1215	840	770	20-Φ36	20-M33
700	460	720	160	229	500	860	810	24-Φ26	24-M24	1360	895	840	24-Φ30	24-M27	1360	910	840	24-Φ36	24-M33
800	520	770	270	241	500	975	920	24-Φ30	24-M27	1580	1015	950	24-Φ33	24-M30	1580	1025	950	24-Φ39	24-M36
900	570	830	270	241	500	1075	1020	24-Φ30	24-M27	1670	1115	1050	28-Φ33	28-M30	1670	1125	1050	28-Φ39	28-M36
1000	640	900	270	300	500	1175	1120	28-Φ30	28-M27	1810	1230	1160	28-Φ36	28-M33	1810	1255	1170	28-Φ42	28-M39
1200	771	1029	285	360	500	1405	1340	32-Φ33	32-M30	2085	1455	1380	32-Φ39	32-M36	2085	1485	1390	32-Φ48	32-M4

CS型热力管道伸缩器

CS thermal pipeline expansion bend



安装注意事项:

- 1、安装前松开压盘螺栓。将伸缩器拉长至安装长度(见上图),然后对角法拧紧压盘螺栓,切勿压偏;
- 2、本伸缩器应安装在管道的直线段上两个固定支架之间,为保证伸缩器正常伸缩并防止拉脱,应设有导向支架及档件。

Cautions on installation:

1. Before installation, loosen the presser-plate bolts. Pull the expansion bend to the installation length (refer to the above drawing), and then fasten the presser-plate bolts with diagonal method and be sure not to compress them inclined to one side.
2. The expansion bend should be installed between two fixing brackets in the straight-line segment of the pipeline; to ensure that the expansion bend should expand and contract normally and to avoid being pulled off, the guide support and engaging element should be set up.

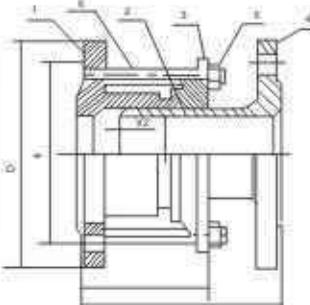
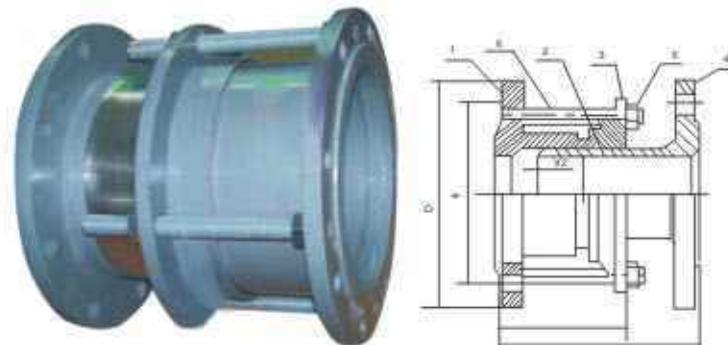
设计安装数据表

Design and installation datasheet

公称通径 DN minimum length	补偿量 minimum length	最小长度 min. minimum length	最大长度 long minimum length	安装长度 L minimum length
40	250	400	650	525
50	250	400	650	525
65	250	420	670	545
80	250	420	670	545
100	250	435	685	560
125	250	435	685	560
150	250	435	685	560
200	260	460	720	590
250	260	460	720	590
300	270	490	760	625
350	270	490	760	625
400	280	520	800	660
450	280	520	800	660
500	300	550	850	700
600	310	570	880	725
700	320	605	925	765
800	330	640	970	805
900	340	670	1010	840
1000	350	700	1050	875
1200	360	740	1100	920
1400	370	780	1150	965
1600	380	820	1200	1010

法兰式不限位伸缩节

Flange-type unlimited expansion bend



材料表

序号 Flange	名称 Flange	数量 Flange	材料 Flange
1	本体 The Body	1	HT200 QT40-15 Q235
2	密封圈 The Gasket	1	丁腈橡胶 Nitrile rubber
3	压盘 The Presser-plate	1	HT200 QT40-15 Q235
4	套管法兰 The Flange	1	HT200 QT40-15 Q235
5	螺母 The Nut		30#钢 30# steel
6	螺栓 The Bolt		30#钢 30# steel

产品性能及用途

我公司生产的热力系列补偿器,采用国家标准制造,产品重量轻、补偿量大、结构简单、密封性极佳,它能有效地补偿管道因热胀冷缩造成的管道位移和折裂。能和各种阀门配套使用,使阀门装卸更便捷,很好的增加了管线运行的安全可靠性。

Product performance and use:

The heat series compensator produced by our company is manufactured in accordance with the national standard, with light weight, large compensation amount, simple structure, and excellent sealing quality; it can effectively compensate for the displacement and fracture of the pipeline caused by thermal expansion and cold contraction. It can be used together with various valves, facilitating the valve installation and removal and increasing the security and reliability of pipeline operation very well.

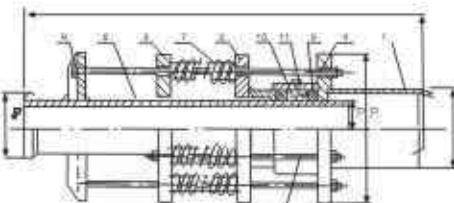
设计安装数据表

Design and installation datasheet

DN (mm)	法兰连接尺寸 Flange connection size			安装尺寸 Installation dimensions			重量 (公斤) The shortest length of the
	D	半 Half	n-d	最短长度 The shortest length of the	安装长度 The shortest length of the	最大长度 The shortest length of the	
50	165	125	4-18	170	200	230	60 9.8
65	185	145	4-18	170	200	230	60 12.1
80	200	160	8-18	170	200	230	60 14.23
100	220	180	8-18	225	260	295	70 19.55
120	250	210	8-18	225	260	295	70 23
150	285	240	8-22	225	260	295	70 30.55
200	340	295	8-22	225	260	295	70 40.7
250	395	350	12-22	225	260	295	70 53.5
300	445	400	12-22	280	330	380	100 75.5
350	505	460	16-22	280	330	380	100 91
400	565	515	16-26	280	330	380	100 112
450	615	565	20-26	280	330	380	100 127
500	670	620	20-26	300	360	420	120 147
600	780	725	20-30	300	360	420	120 235
700	895	840	24-30	300	360	420	120 269
800	1015	950	24-33	300	360	420	120 326
900	1115	1050	28-33	335	400	465	130 394
1000	1230	1160	28-33	335	400	465	130 451
1200	1455	1380	32-39	335	400	465	130 648
1400	1675	1590	36-42	345	420	495	150 869
1600	1915	1820	40-48	345	420	495	150 1175
1800	2115	2020	44-48	360	440	520	160 1406
2000	2325	2230	48-48	360	440	520	160 1649

TTB-B系列弹性套管式补偿器

TTB-B series elastic sleeve-type compensator



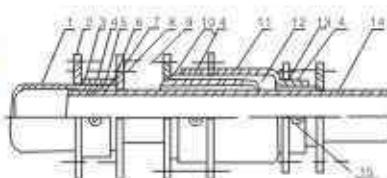
产品数据: Product data

公称直径 D _n Maximum Length	芯管内径 D Maximum Length	外壳外径 D ₁ Maximum Length	芯管内径 D ₂ Maximum Length	法兰外径 D ₃ Maximum Length	填料长度 B Maximum Length	补偿量△L max Maximum Length	安装长度 max Maximum Length
15	14	32	18	95	36	150	665
20	18	38	23	105	36	150	665
25	24	45	30	115	36	150	665
32	30	50	36	120	36	150	665
{36}	33	54	43	125	36	200	785
40	41	60	48	130	36	200	785
50	47	73	55	160	56	200	785
65	63	83	71	180	56	200	785
{70}	65	89	74	190	56	200	785
80	78	102	87	195	56	200	785
100	96	121	106	215	56	250	915
125	118	146	131	245	56	250	915
150	143	176	157	280	56	250	915
{175}	176	219	192	355	70	300	940
200	201	245	217	335	70	300	1040
{225}	225	264	243	390	70	350	1055
250	253	291	270	390	70	350	1155
300	303	346	322	440	91	400	1175
350	353	400	373	500	91	400	1315
400	404	454	424	565	91	400	1315
450	458	506	478	615	91	450	1320
500	508	556	528	670	91	450	1420
600	606	664	628	780	91	450	1435
700	698	754	720	880	91	450	1440
800	796	858	820	995	112	500	1570
900	896	958	920	1095	112	500	1570
1000	994	1058	1020	1195	112	500	1570
1100	1096	1168	1124	1295	112	500	1580
1200	1196	1268	1224	1395	112	500	1610
1300	1294	1368	1324	1495	112	500	1610
1400	1394	1468	1424	1595	112	500	1610
1600	1590	1670	1624	1795	112	500	1620
{1700}	1690	1770	1724	1895	112	500	1620
1800	1786	1874	1824	1995	112	500	1640
2000	1986	2078	2024	2195	112	500	1640

注: 当工作压力不是1.6Mpa时, 其摩擦力 $P_f = \frac{PC}{1.6} \times P_{160}$ Note: when the operating pressure is not 1.6Mpa, its friction $= \frac{PC}{1.6} \times P_{160}$

TWB系列、ZTWB系列 注油式直流介质无推力套筒补偿器

TWB series and ZTWB series oiling DC
medium zero-thrust sleeve compensator



- 后套管体2. 固定法兰3. 定型石墨填料4. 注油池
5. 填料室6. 填料压紧圈7. 压盖法兰8. 压盖螺栓
9. 连接螺栓10. 汽室填料室11. 汽室体12. 汽室
13. 汽室小填料室14. 伸缩管15. 注油孔
1. rear sleeve body 2.mounting flange 3.Typing graphite packing 4.oiling pool 5.packing room 6.packing clamp ring 7.gland flange 8.gland screw 9.connection screw 10.packing room of steam chamber 11. steam chamber body 12. steam chamber 13. small packing room of steam chamber 14.expansion pipe 15.oiling hole

工作原理

该设计结构上巧妙的利用一个密环形汽室, 这个汽室内分别有两个环形受压面, 一个足固定的汽室内端面, 另一个是密闭在汽室内的伸缩管肩部环形面, 随伸缩管是可移动的。这个可移动的环形受压面的面积恰好和伸缩管横截面积相等, 判\ 倍器工作时, 在介质压力的作用下, 环形面上的压力和伸缩管横截面的压力是相等, 而方向相反, 因此两压力相互抵消。这样一来, 在设计支架中仅考虑倍器压紧填料的摩擦力, 对固定支架的推力计算中, 就不再计算由工作介质压力, 而引起的对固定支架的推力。因此固定支架属减载式支架, 可节省大量支架材料, 也节省人力和财力。

Operation principle:

The design cleverly uses a enclosed circular steam room in structure; Inside the steam room, there are two circular compression surfaces (one is the fixed end face inside the steam room, and the other is the shoulder circular face of expansion pipe enclosed in the steam room), which are movable with the expansion pipe. The area of the movable circular compression face is just equal to the cross-sectional area of the expansion pipe. When the compensator is in operation, under the medium pressure, the pressures on the circular face and on the cross section of the expansion pipe are equal in force but opposite in direction, and thus the two pressures cancel out each other. As a result, in the design of brackets, it is only necessary to consider the friction of compressing the packing by the compensator, in the thrust calculation of fixing brackets, the thrust on the fixing brackets, caused by the pressure of working medium, should no longer be calculated. Therefore, the fixation brackets belong to the load-shedding brackets, which can save a lot of bracket materials, as well as the human and financial resources.

公称通径 DN(mm) Nominal diameter	补偿量 △Max(mm) The amount of compensation	外形尺寸 Size and shape		
		管外径D (mm) Tube diameter D (mm)	最大直径DMax (mm) The maximum diameter (mm)	安装长度LMax (mm) The installation length (mm)
25	150	32	116	1190
30	150	38	124	1190
40	150	45	136	1190
50	200	57	150	1400
65	200	73	172	1400
70	200	76	178	1400
80	200	89	194	1400
100	250	108	240	1640
125	250	133	274	1640
150	250	159	310	1640
200	250	219	390	1640
250	300	273	466	1910
300	300	325	556	1910
350	300	377	628	1910
400	350	426	708	2230
500	400	529	856	2400
600	400	630	994	2400
700	400	720	1130	2400
800	450	820	1268	2650
900	450	920	1406	2650
1000	450	1020	1552	2650

Installation requirements:

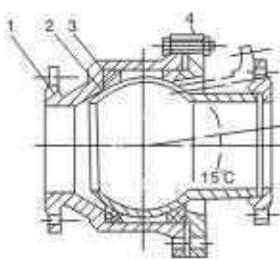
- When the thickness of pipe wall welded with the two ends of the compensator is not less than 6mm, the beveled edge must be processed; after welding, the water pressure leakage inspection should be conducted according to the requirements.
- The sliding brackets and fixation brackets should be installed according to the design; the use of ZTWB type has no difference except that the thrust caused by the pressure of working medium should not be calculated. To ensure that the pipeline makes no lateral displacement but the axial displacement, guiding slide bracket should be generally installed at both ends of the compensator; and fixation bracket should be installed at the pipeline corner.
- The heat insulation protective structure of the compensator goes the same way as the pipeline, and no binding force should be generated at the telescopic part of expansion pipe.
- The compensator can be installed with the maximum installation length LM3x under a variety of environmental temperatures, unnecessary to make expansion or contraction.

安装要求

- (1)与补偿器两端相焊接的管段壁厚 ≥ 6 mm时, 必须进行坡口处理, 焊后按要求进行水压检漏试验
- (2)滑动支架和固定支架根据设计安装, 使用ZTWB型, 除不计算介质工作压力的推力外, 其余相同, 为确保管道无侧向位移, 而沿轴向伸缩, 补偿器两端一般应安装导向滑动支架, 在管道转弯处, 必须安装固定支架,
- (3)补偿器的保温防护结构均与管道同路, 但对伸缩管伸缩部分, 不可产生约束力、
- (4)本补偿器在各种环境气温下, 均可按最大安装长度LM3x进行安装, 不需予以拉伸或压缩,

E型球型补偿接头

E-type flange ball-joint



序号 No.	名称 Name	数量 Quantity	材料 Material
1	球型管 Ball-tube	1	ZG230-450, Q235A 20, QT400-15
2	压盖 Gland	1	ZGG230-450, Q235A 20, QT400-15
3	螺栓 Bolt	N	Q235A, 35 1Cr18Ni9Ti
4	螺母 Nut	N	Q235A, 20 1Cr18Ni9Ti
5	密封圈 Sealing ring	Z	NBR
6	本体 Ontology	1	ZG230-450, Q235A 20, QT400-15

性能特点

球形补偿接头主要适用于地面沉降大、震动大、地形复杂的管道连接，安装在管道上后。球体可以以回转中心在90度范围内自由转动，来补偿管道因地基沉降、热胀冷缩引起的挠曲。具有补偿量大，占据空间小，流体阻力小，安装方便，综合成本低等优点。

Performance features:

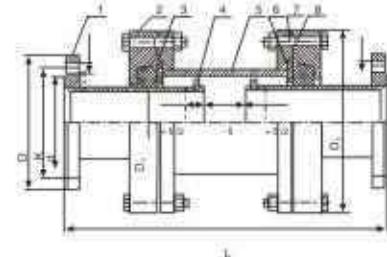
The spherical compensation joints are mainly applied to piping connection with large land subsidence, large vibration and complex terrain; after installed in the pipe, the sphere can turn freely within the angle 90° centering on the rotation center, so as to compensate for the piping deflection due to foundation settlement, thermal expansion and cold contraction. It has the following excellent features: large compensation amount, small volume, small fluid resistance, easy installation, low comprehensive cost, etc.

球形补偿接头的基本尺寸 Spherical joints compensate for the basic dimensions

公称尺寸 Nominal Size DN	D _o	L	B	法兰连接尺寸 Flange connection size								
				0.6Mpa			1.0Mpa			1.6Mpa		
				D	K	N-de	D	K	N-de	D	K	N-de
100	282	290	15	210	170	4-Φ18	220	180	8-Φ18	220	180	8-Φ19
150	346	320		265	225	8-Φ18	285	240	8-Φ22	285	240	8-Φ23
200	410	382		320	280	8-Φ18	340	295	8-Φ22	340	295	12-Φ23
250	464	410		375	335	12-Φ18	395	350	12-Φ22	405	355	12-Φ27
300	535	430		440	395	12-Φ22	445	400	12-Φ22	460	410	12-Φ27
350	607	470		490	445	12-Φ22	505	460	16-Φ22	520	470	16-Φ27
400	668	550		540	495	16-Φ22	565	515	16-Φ26	580	525	16-Φ30
450	728	600		585	550	16-Φ22	615	565	20-Φ26	640	585	20-Φ30
500	798	689		645	600	20-Φ22	670	620	20-Φ26	715	650	20-Φ34
600	918	725		755	705	20-Φ26	780	725	20-Φ30	840	770	20-Φ37
700	1056	800		860	810	24-Φ26	895	840	24-Φ30	910	840	24-Φ37
800	1160	893		975	920	24-Φ30	1015	950	24-Φ33	1025	950	24-Φ40
900	1310	920		1075	1020	24-Φ30	1115	1050	28-Φ33	1125	1050	28-Φ39
1000	1433	975		1175	1120	28-Φ30	1230	1160	28-Φ33	1255	1170	28-Φ42
1200	1693	1125	13	1405	1340	32-Φ33	1455	1380	32-Φ39	1485	1390	32-Φ48
1400	1842	1290		1630	1560	36-Φ36	1675	1590	36-Φ42	-	-	-
1600	2164	1385		1830	1760	40-Φ38	1915	1820	40-Φ48	-	-	-
1800	2400	1580	12	2045	1970	44-Φ39	2115	2020	44-Φ48	-	-	-
2000	2730	1870		2265	2180	48-Φ42	2325	2230	48-Φ48	-	-	-
2200	2910	1950		2475	2390	52-Φ42	2550	2440	52-Φ56	-	-	-
2400	3135	2080		2685	2600	56-Φ42	2760	2650	56-Φ56	-	-	-

D型大挠度松套补偿接头

D-type connector compensation for large deflection of loose sets



性能特点

大挠度松套补偿接头是在吸收国外先进的技术并结合我国国情基础上研究开发的一种新型管道连接器。其主要结构有短管法兰、压盖、滑动管和密封装置等组成。它采用独特的抗轴力设计，结构简单、密封性能可靠、抗拉脱力强。具有较大的可挠量和伸缩量，适用于工况恶劣，地形复杂场合的管道。

Performance features :

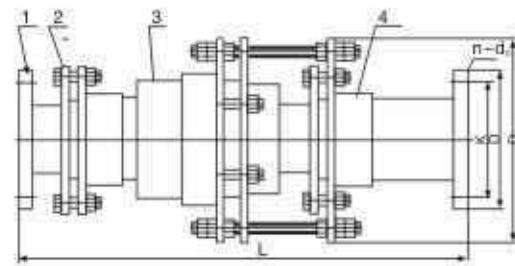
The large-deflection sleeve compensation joint is new type of pipe connector developed through absorbing foreign advanced technology and on the basis of combining the actual national situation. Its main structure includes short-tube flange, gland, slide tube, sealing device and so on. It uses the unique anti-axial force design, with simple structure, reliable sealing performance, and strong tensile strength. With relatively large flexible capacity and telescopic capacity, it is applicable to the pipelines in areas with harsh working conditions and complex terrain.

序号 No.	名称 Name	数量 Quantity	材 料 Material
1	短管法兰 Short-tube flange	2	Q235, 20, 不锈钢 Q235, 20, Stainless
2	压盖 Gland	2	Q235, 20, 不锈钢 Q235, 20, Stainless
3	密封圈 Ring	2	NBR, FPM, NBR, FPM, NBR
4	限位块 Limit block	2	Q235, 20, Q235, 20
5	本体 Ontology	1	Q235, 20, 不锈钢 Q235, 20, Stainless
6	挡圈 Coclip	2	Q235, 20, Q235, 20
7	螺栓 Bolt	1	Q235, 35, 不锈钢 Q235, 35, Stainless
8	密封条 Seal	2	NBR, FPM, NBR, FPM, NBR

公称尺寸 Nominal Size DN	D _o	L	B	法兰连接尺寸 Flange connection size								
				0.6Mpa			1.0Mpa			1.6Mpa		
D	K	N-de	D	K	N-de	D	K	N-de	D	K	N-de	
100	520	305	210	170	4-Φ18	220	180	8-Φ18	220	180	8-Φ19	
200	560	415	320	280	8-Φ18	340	295	8-Φ23	340	295	12-Φ23	
300	605	530	440	395	12-Φ23	445	400	12-Φ23	460	410	12-Φ27	
400	660	645	540	495	16-Φ23	565	515	16-Φ27	580	525	16-Φ30	
500	670	750	645	600	20-Φ23	670	620	20-Φ27	715	650	20-Φ33	
600	720	870	755	705	20-Φ27	780	725	20-Φ30	840	770	20-Φ36	
700	750	960	880	810	24-Φ27	895	840	24-Φ30	910	840	24-Φ36	
800	810	1085	975	920	24-Φ30	1015	950	24-Φ33	1025	950	24-Φ39	
900	855	1185	1075	1020	24-Φ30	1115	1050	28-Φ33	1125	1050	28-Φ39	
1000	950	1305	1175	1120	28-Φ30	1230	1160	28-Φ36	1255	1170	28-Φ42	
1200	1000											

F型压力平衡型补偿接头

F-type connector pressure balanced compensation



性能特点

普通补偿接头为承插式的，轴向伸缩接头本身无法承受介质内压产生的盲板力，所以必须考虑管路的固定，即支架。除了必要的固家静与支撑外，支架主要承受的是热胀冷缩和介质内部压力所产生的推力，特别是管路拐弯及三通、四通的位置，支架的造价非常高。为了降低支架造价又能满足使用要求，主要用于在吸收轴向位移的同时能平衡内压推力的补偿接头。

Performance features:

The general compensation joints are in spigot and socket form; the axial expansion joints themselves can not bear blind force generated by internal pressure of the medium, so the pipeline fixation, namely the bracket, must be taken into account. In addition to the necessary solid silence and support, the bracket mainly withstands the thrust generated by the expansion and contraction and the internal pressure of the medium; the cost of brackets are very high, especially in the position of piping bend, T-joint and cross joint. In order to reduce the bracket costs and to meet the application requirements, the compensation joints, which can absorb axial displacement and meanwhile balance the thrust of internal pressure, are mainly used.

公称尺寸 DN Nominal size	外径尺寸 External dimension	伸缩量 δ Expansion amount	法兰连接尺寸 Flange connection size								
			0.6Mpa			1.0Mpa			1.6Mpa		
			D	K	n-do	D	K	N-do	D	K	N-do
100	350	±70	210	170	4-Φ18	220	180	8-Φ18	220	180	8-Φ18
150	400		265	225	8-Φ18	285	240	8-Φ23	285	240	8-Φ23
200	475		320	280		340	295		340	295	12-Φ23
250	540		375	335	12-Φ18	395	360	12-Φ23	405	365	12-Φ27
300	620		440	395	12-Φ23	445	400		460	410	16-Φ27
350	680		490	445	12-Φ23	505	460	16-Φ23	520	470	16-Φ27
400	770		540	495	16-Φ23	565	515	16-Φ27	580	525	16-Φ30
450	860		595	550	16-Φ23	615	565	20-Φ27	640	585	20-Φ30
500	920		645	600	20-Φ23	670	620	20-Φ27	715	660	20-Φ33
600	1050		755	705	20-Φ27	780	725	20-Φ30	840	770	20-Φ36
700	1200	±80	860	810	24-Φ27	895	840	24-Φ30	910	840	24-Φ36
800	1360		975	920	24-Φ30	1015	960	24-Φ33	1025	960	24-Φ39
900	1520		1075	1020	24-Φ30	1115	1050	28-Φ33	1125	1050	28-Φ39
1000	1640		1175	1120	28-Φ30	1230	1160	28-Φ36	1255	1170	28-Φ42
1200	1950	2200	1405	1340	32-Φ30	1455	1380	32-Φ37	1485	1390	32-Φ48

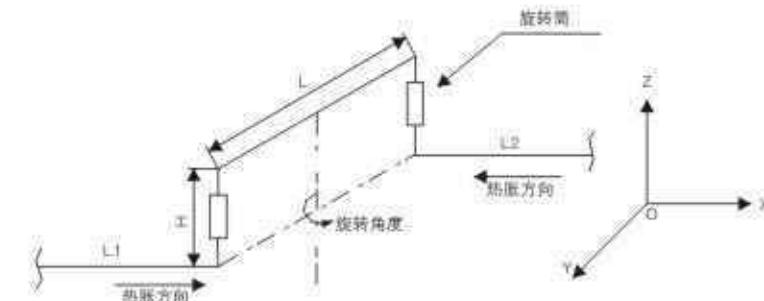
YTXZ型无推力旋转式补偿器

YTXZ type no thrust rotary compensator

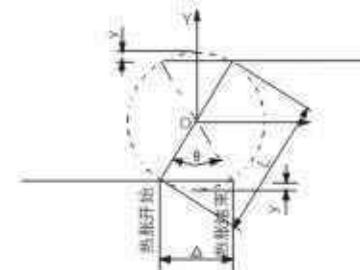


YTXZ型系列旋转式补偿器的特点

- 补偿量大，一组旋转补偿器补偿能力可达1800mm；
- 没有节制压力产生的内压推力，因而补偿器两段的固定支架可以做的较小；
- 采用双重密封结构，密封填料优越，长期运行不需要维护，工作性能可靠；
- 耐压强度高，安全性能好，最高压力可达10MPa，最高温度540℃；
- 安装方便，热量损失小，性价比高；
- 本补偿器有两种基本组合，数十种变化。



图一II型组合补偿器立体图(平行布置)



图二II型组合补偿器平面图

YTXZ型系列旋转补偿器的补偿原理，是通过成双旋转转筒和L型臂形能力偶，使大小相等、方向相反的一对力，由力臂围绕着Z轴中心旋转，以达到力偶两边热管道产生的热膨胀量的吸收。

当在吸收热膨胀量时，在力偶臂旋转到θ出现热管道发生最大的摆动y值，因此补偿器第一只导向支架的距离要加大。

虽然吸收热胀随着转角θ或力偶臂L的加大而增加，但为了阻止y摆动过大，对θ值不超过表三的推荐值，L值在条件许可的情况下尽量选择大一些，一般在2-6米范围内为宜。

序号 No. Serial number	公称通径(DN) Nominal diameter	接口尺寸(D) Interface size	最大外径尺寸(D1) The biggest size	产品长度(L) Product length
1	50	57	142	225
2	80	89	190	250
3	100	108	220	250
4	125	133	240	280
5	150	159	275	280
6	200	219	335	300
7	250	273	395	300
8	300	325	450	350
9	350	377	510	350
10	400	426	560	350
11	450	480	610	380
12	500	530	670	380
13	600	690	760	400

<本公司旋转补偿器已生产至DN1800以上,DN650以上此表未列出>

TD单项热力套筒补偿器

TD single thermal sleeve compensator



单项套筒式补偿器结构尺寸及补偿量

Structural dimensions and compensation amount of single sleeve-type compensator

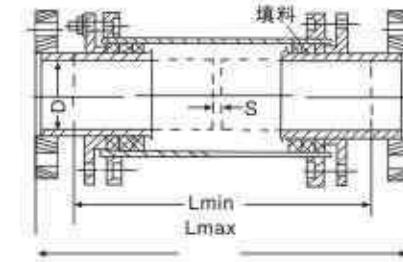
公称通径 DN (mm) Nominal diameter	D1	D1	D2	D3	补偿量(mm) The amount of compensation	最小长度(mm) The minimum length	最大长度(mm) The maximum length	安装长度(mm) The installation length
mm								
100	108	100	133	190	150	380	530	460
125	133	125	159	251	150	380	530	460
150	159	150	194	250	150	380	530	460
200	219	205	273	345	150	380	530	460
250	273	259	325	395	150	380	530	460
300	325	311	377	450	200	460	660	560
350	377	363	426	500	200	460	660	560
400	426	421	478	560	200	460	660	560
450	478	464	529	610	200	460	660	560
500	529	515	594	675	250	520	770	640
600	630	614	704	780	250	520	770	640
700	720	704	794	875	250	520	770	640

单项热力套筒补偿器数据表 Single thermal sleeve compensator Data Sheet

公称通径(DN) Nominal diameter (DN)	补偿量(mm) The amount of compensation	最小长度(mm) The minimum length	最大长度(mm) The maximum length	安装长度(mm) The installation length
40	120	350	470	410
50	120	350	470	410
65	120	350	470	410
80	120	350	470	410
100	150	380	530	460
125	150	380	530	460
150	150	380	530	460
200	150	380	530	460
250	150	380	530	460
300	200	460	660	560
350	200	460	660	560
400	200	460	660	560
450	200	460	660	560
500	250	520	770	640
600	250	520	770	640
700	250	520	770	640
800	300	600	900	750

TS双项热力套筒补偿器

TS double thermal sleeve compensator



套筒式补偿器安装时应注意:

- (1) 安装前要检查填料是否填满, 如不满时应补添, 压紧。
- (2) 如发现套管有锈蚀或拉伸不动现象时, 应将套管拆开清洗后再组装, 填料如已硬化应进行更换。
- (3) 安装时先将套管抽出, 抽出长度应按设计的伸缩数字预拉伸。拉伸后要详细核对间隙S(见表和图)的有效尺寸, 这项检查每个套筒式补偿器都要进行, 以免发生故障。
- (4) 套筒式补偿器应安装在固定支架附近, 将套管外壳一端朝向管道的固定支架, 伸缩套管一端与产生热胀缩的管子相连, 为保证管子与补偿器同心, 补偿器的伸缩端方向必须设1~2个导向支架。
- (5) 填料函应用机油浸过的渗有石墨粉的石棉绳填塞, 石棉绳应逐圈装入, 逐圈压紧, 各环的接口应相互错开, 石棉绳的粗细应不于小填料函的间隙。

Note the following items when installing the sleeve-type compensator:

- (1) Before installation, check whether the packing is filled up; if not, add the packing and compress it.
- (2) If the sleeve is found to have rust or hard to stretch, assemble it again after dismantling and cleaning it; if the packing has hardened, it should be replaced..
- (3) When installing, firstly draw out the sleeve, and the extracted length should be pre-stretched according to the designed expansion figure. After the stretching, check carefully the effective size of the clearance S (refer to the table and drawing); the inspection should be carried out for every sleeve-type compensator in order to avoid failure. (4) The sleeve-type compensator should be installed near the fixation bracket; make one end of the sleeve shell towards the fixation bracket of pipeline, and connect one end of expansion sleeve with the pipe producing thermal expansion and contraction; to ensure the pipe is concentric with the compensator, 1~2 guiding bracket(s) should be set up in the direction of telescopic end of the compensator.
- (5) The packing box should be stuffed with asbestos cord permeated with graphite powder which has been impregnated with engine oil; the asbestos cord should be stuffed and compressed from coil to coil; the interface of each ring should be staggered mutually, and the thickness of asbestos cord should not be less than the gap of small packing box.

双项套筒补偿器数据表 Datasheet of double sleeve compensator

公称通径(DN) Nominal diameter	补偿量(mm) The amount of compensation	最小长度(mm) The minimum length	最大长度(mm) The maximum length	安装长度(mm) The installation length
40	150	350	500	425
50	150	350	500	425
65	150	350	500	425
80	150	350	500	425
100	200	400	600	500
125	200	400	600	500
150	200	400	600	500
200	200	400	600	500
250	250	450	600	460
300	250	450	660	560
350	250	450	660	560
400	250	450	660	560
450	250	480	660	560
500	250	480	770	640
600	300	600	770	640
700	300	600	770	640
800	300	600	900	750

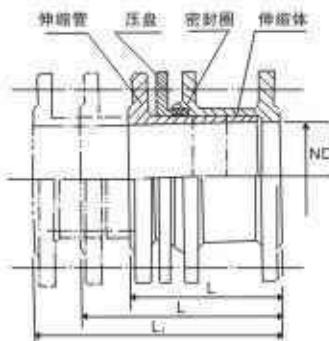
SSQ型套管式伸缩器

SSQ type sleeve type telescopic device

SSQ-1型限位伸缩器



结构示意图



SSQ-2型限位伸缩器 SSQ-3型限位伸缩器



说明:

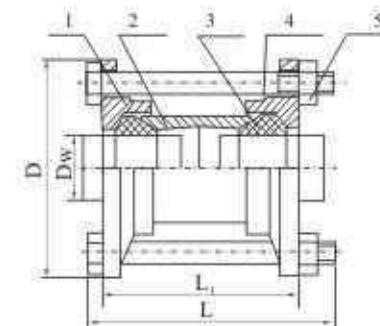
- 改系列产品为各种给排水管道、水塔、水泵、水表、阀门的安装拆换提供了极大方便，给长距离管路因温差引起的伸缩起到了很好的调节作用。
- 安装前须松开压盘螺栓，将该器拉至安装长度，然后用对角法拧紧，切勿压扁，如架空使用两端须安装相应的固定支架。

Explain:

For it provides great convenience to open 1. modified products plumbing, water tower, water pump, for a variety of water meter, valve installation, for long distance pipeline expansion caused by temperature difference plays a good regulation.
 2, before installation shall release the pressure plate bolt, the drawing device to the installation length, and then use the diagonal tightening, not compressed, such as overhead using both ends must be fixed bracket corresponding.

SSJB(AY)型压盖式松套伸缩接头

SSJB (AY) gland bush telescopic joint



序号 No.	名称 Name	数量 Quantity	材料 Material
1	压盖 Cover	2	QT400-15, Q235A, ZG230-450, 1Cr13, 20
2	套筒 Sleeve	1	Q235A, 20, 16Mn, 1Cr18Ni9Ti
3	密封圈 Gasket	2	NBR, CR, EPDM, NR
4	螺栓 Bolt	n	Q235A, 35, 1Cr18Ni9Ti
5	螺母 Nut	n	Q235A, 20, 1Cr18Ni9Ti

主要连接尺寸 Main connecting dimension

公称通径DN nominal diameter	管子外径DW external diameter	外部尺寸 external dimension			N-TH	
		长度 Length L	L	D	0.25-1.6Mpa	2.5-6.4Mpa
65	76			155		
80	89			165		
100	108			195		
100	114			225		
125	133			225		
125	140			255		
150	159			255		
150	168			255		
200	219			310		
225	245			335		
250	273			375		
300	325			440		
350	355			490		
350	377			490		
400	406			540		
400	426			540		
450	457			590		
450	480			590		
500	508			645		
500	530			645		
600	610			750		
600	630			750		
700	720			855		
800	820			970		
900	920			1070		
1000	1020			1170		
1200	1220			1365		
1400	1420			1590		
1500	1520			1690		
1600	1620			1795		
1800	1820			2000		
2000	2020			2200		
2200	2220			2420		
2400	2420			2635		
2600	2620			2835		
2800	2820			3040		
3000	3020			3240		
3200	3220			3440		
3400	3420			3640		
3600	3620			3860		
3800	3820			4080		
4000	4020			4300		

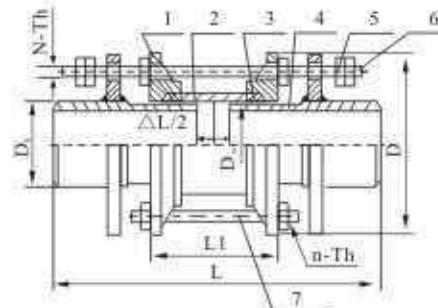
注：本尺寸符合GB/T12465-2007标准 Note: the size meets standard GB/T12465-2007

SSJB-2(BY)压盖式松套限位伸缩接头
SSJB-3(BY)压盖式松套限位伸缩接头SSJB-2 (BY) cover limited telescopic joint
SSJB-3 (BY) cover limited telescopic joint

SSJB-2

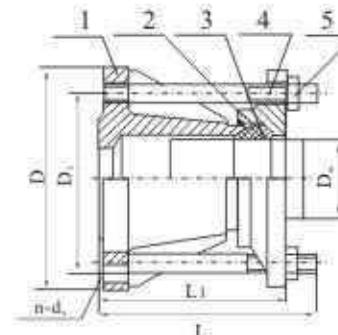


SSJB-3



序号 No.	名称 Name	数量 Quantity	材料 Material
1	压盖 follower	2	QT450-10, Q235A
2	套筒 sleeve	1	NBR
3	密封圈 Gasket	2	QT450-10, Q235A
4	限位短管 limited short pipe	2	Q235A
5	螺母 nut	n	Q235A, 20#
6	长螺栓 long stud	n	Q235A, 35#
7	短螺栓 short stud	n	Q235A, 35#

公称通径DN nominal diameter	管子外径DW External diameter of pipe		外形尺寸 Shape dimension		伸缩量 ▲ L compensation length	n-Th.	
	DW	De	D	L	L ₁	0.6~1.6MPa	2.5MPa
65	76	76	155			2-M12	
80	89	89	165			2-M12	
100	108	108	195			2-M16	
100	114	114	195			2-M16	
125	133	133	225			2-M16	
125	140	140	225			3-M20	
150	159	159	255			4-M20	
150	168	168	255			5-M20	
200	219	219	310			5-M20	
250	273	273	375			6-M20	
300	325	325	440			6-M24	
350	377	377	490			7-M24	
400	426	426	540			8-M24	
450	483	483	590			9-M24	
500	530	530	645			10-M27	
600	630	630	750			11-M27	
700	720	720	850			12-M27	
800	820	820	965			13-M27	
900	920	920	1065			14-M30	
1000	1020	1020	1165			15-M30	
1200	1220	1220	1365			16-M33	
1400	1420	1428	1590			17-M33	
1500	1520	1528	1690			18-M33	
1600	1620	1628	1795			19-M33	
1800	1820	1828	2000			20-M33	
2000	2020	2030	2200			21-M36	
2200	2220	2230	2420				
2400	2420	2430	2635				
2600	2620	2630	2835				
2800	2820	2830	3040				
3000	3020	3030	3240				
3200	3220	3230	3440				
3400	3420	3432	3640				
3600	3620	3632	3860				
3800	3820	3832	4080				
4000	4020	4034	4300				

VSSJA(AF)型法兰式松套伸缩接头
VSSJA (AF) flange telescopic joint

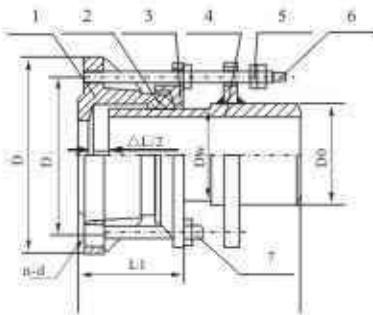
序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT400-15, Q235A, ZG230-450, 1Cr13, 20
2	压盖 Cover	1	QT400-15, Q235A, 20, ZG230-450, 1Cr13
3	密封圈 Gasket	2	NBR, CR, EPDM, NR
4	螺柱 Bolt	n	Q235A, 35, 1Cr18Ni9Ti
5	螺母 Nut	n	Q235A, 20, 1Cr18Ni9Ti

主要连接尺寸 Main connecting dimension

公称通径DN nominal diameter	管子外径DW External diameter of pipe	长度 Length	法兰连接尺寸 Flange connection size								
			0.25MPa			0.6MPa			1.0MPa		
11	1	D	D ₁	n-d ₁	D	D ₁	n-d ₁	D	D ₁	n-d ₁	
65	76	105	118	160	130	4-φ14	160	130	185	145	4-φ18
80	89	105	123	190	150	4-φ18	190	150	200	160	8-φ18
100	108	120	210	170	210	170	210	170	220	180	8-φ22
100	114	125	240	200	240	200	265	225	250	210	8-φ22
125	133	125	265	225	265	225	320	280	340	295	12-φ22
125	140	130	320	280	320	280	395	355	445	400	12-φ22
150	159	150	355	445	355	445	490	445	505	460	16-φ22
150	168	155	406	495	406	495	540	495	565	515	16-φ26
200	219	160	457	550	457	550	595	550	615	565	20-φ26
250	273	160	508	600	508	600	645	600	670	620	20-φ30
300	325	160	530	610	530	610	755	705	780	725	20-φ30
350	377	160	600	630	600	630	860	810	895	840	24-φ30
400	426	160	630	720	630	720	975	920	1015	950	24-φ33
450	483	160	700	820	700	820	1075	1020	1115	1050	28-φ33
500	530	160	700	920	700	920	1175	1120	1230	1160	28-φ36
600	630	160	720	1020	720	1020	1375	1320	1455	1380	32-φ39
700	720	160	720	1120	720	1120	1400	1340	1575	1500	36-φ42
800	820	160	720	1220	720	1220	1575	1520	1630	1575	36-φ42
900	920	160	720	1420	720	1420	1790	1730	1830	1760	40-φ48
1000	1020	160	720	1620	720	1620	1900	1930	2045	1970	44-φ48
1200	1220	160	720	2000	2020	2000	2190	2130	2265	2180	48-φ42
1400	1420	160	720	2200	2220	2200	2405	2340	2475	2390	52-φ42
1500	1520	160	720	2400	2420	2400	2605	2540	2550	2440	52-φ46
1600	1620	160	720	2600	2620	2600	2805	2740	2905	281	

VSSJA-1(BF)型单法兰松套限位伸缩接头

VSSJA-1 (BF) single flange limited telescopic joint



序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT450-10, Q235A
2	密封圈 Gasket	1	NBR
3	压盖 follower	1	QT450-10, Q235A
4	限位短管 limited short pipe	1	Q235A
5	螺母 nut	4n	Q235A, 20#
6	长螺栓 long stud	n	Q235A, 35#
7	短螺栓 short stud	n	Q235A, 35#

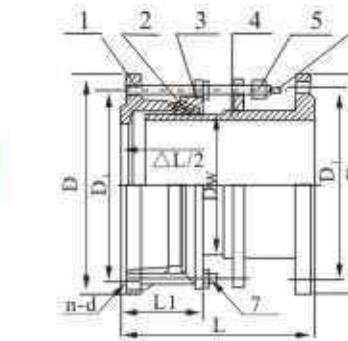
主要连接尺寸 Main connecting dimension

公称通径DN nominal diameter	管子外径DW external diameter of pipe		外形尺寸 external dimension		伸缩量 ▲ L compensation length	法兰连接尺寸 Flange connection size								
						0.6MPa			1.0MPa					
	Dw	Dg	L	L1		D	D1	n-dg	D	D1	n-dg			
65	76	76			340	105	50	160	130	4-Φ14	185	145	4-Φ18	
80	89	89				190	150		200	160		220	180	
100	108	108				210	170	4-Φ18	220	180		220	180	
100	114	114				210	170		220	180		220	180	
125	133	133				240	200		250	210		250	210	
125	140	140				240	200		250	210		250	210	
150	159	159				265	225		285	240		285	240	
150	168	168				265	225		285	240		285	240	
200	219	219				320	280		340	295		320	280	
250	273	273				375	335	12-Φ18	395	350		375	335	
300	325	325				440	395	12-Φ22	445	400		440	395	12-Φ22
350	377	377				490	445		505	460	16-Φ22	490	445	16-Φ22
400	426	426				540	495	16-Φ22	565	515	16-Φ26	540	495	16-Φ26
450	480	480				595	550		615	565	20-Φ26	595	550	20-Φ26
500	530	530				645	600	20-Φ22	670	620	20-Φ26	645	600	20-Φ26
600	630	630				755	705	20-Φ26	780	725		755	705	20-Φ30
700	720	720				860	810	24-Φ26	895	840	20-Φ30	860	810	24-Φ30
800	820	820				975	920	24-Φ30	1015	950	24-Φ30	975	920	24-Φ33
900	920	920				1075	1020		1115	1050	24-Φ33	1075	1020	
1000	1020	1020				1175	1120	28-Φ30	1230	1160	28-Φ33	1175	1120	28-Φ36
1200	1220	1220				1405	1340	32-Φ33	1455	1380	28-Φ36	1405	1340	32-Φ40
1400	1420	1420				1630	1580		1675	1590	32-Φ40	1630	1560	36-Φ36
1500	1520	1528				1730	1680		1780	1660	36-Φ42	1730	1660	
1600	1620	1628				1830	1760	40-Φ36	1915	1820		1830	1760	40-Φ48
1800	1820	1828				2045	1970	44-Φ40	2115	2020	40-Φ48	2045	1970	44-Φ48
2000	2020	2030				2265	2180	48-Φ42	2325	2230	44-Φ48	2265	2180	48-Φ48
2200	2220	2230				2475	2390	52-Φ42	2550	2440	48-Φ48	2475	2390	52-Φ56
2400	2420	2430				2685	2600	56-Φ42	2760	2650	52-Φ56	2685	2600	56-Φ56
2600	2620	2630				2905	2810	60-Φ48	2960	2850	56-Φ56	2905	2810	60-Φ56
2800	2820	2830				3115	3020	64-Φ48	3180	3070	64-Φ56	3115	3020	64-Φ56
3000	3020	3030				3315	3220	68-Φ48	3405	3290	64-Φ56	3315	3220	68-Φ60
3200	3220	3230				3525	3430	72-Φ48				3525	3430	72-Φ60
3400	3420	3430				3735	3640	76-Φ48				3735	3640	76-Φ48
3600	3620	3630				3970	3860	80-Φ56				3970	3860	80-Φ56

注：本尺寸符合GB/T12465-2007标准 Note: the size meets standard GB/T12465-2007.

VSSJA-2(B2F)型双法兰松套限位伸缩接头

VSSJA-2 (B2F) double flange limited telescopic joint



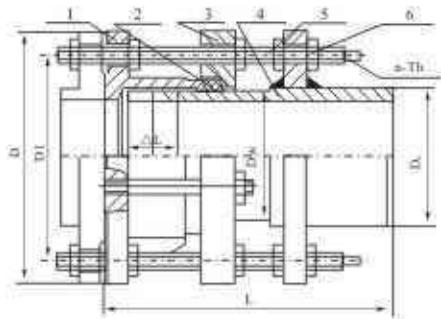
序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT450-10, Q235A
2	密封圈 Gasket	1	NBR
3	压盖 follower	1	QT450-10, Q235A
4	限位短管 limited short pipe	1	Q235A
5	螺母 nut	4n	Q235A, 20#
6	长螺栓 long stud	n	Q235A, 35#
7	短螺栓 short stud	n	Q235A, 35#

主要连接尺寸 Main connecting dimension

公称通径DN nominal diameter	管子外径DW External diameter of pipe		外形尺寸 external dimension		伸缩量 ▲ L compensation length	法兰连接尺寸 Flange connection size								
						0.6MPa			1.0MPa					
	Dw	Dg	L	L1		D	D1	n-dg	D	D1	n-dg			
65	76	76			340	105	50	160	130	4-Φ14	185	145	4-Φ18	
80	89	89				190	150		200	160		220	180	
100	108													

VSSJAFG(CF)型单法兰松套传力接头

VSSJAFG (CF) single flange power delivery joint



序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT450-10, Q235A
2	密封圈 Gasket	1	NBR
3	压盖 follower	1	QT450-10, Q235A
4	限位短管 limited short pipe	1	Q235A
5	螺栓 bolt	n	Q235A, 35#
6	螺母 nut	Tn	Q235A, 20#

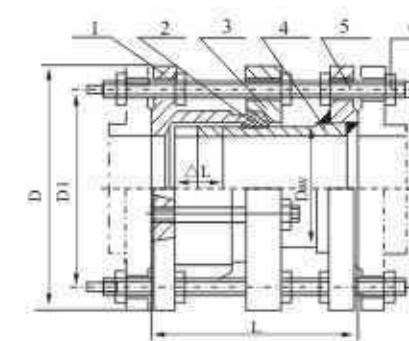
主要连接尺寸 Main connecting dimension:

公称通径DN nominal diameter	管子外径DW External diameter of pipe	外形尺寸 external dimension	法兰连接尺寸 Flange connection size								
			0.6MPa				1.0MPa				
DW	De	L	▲L	D	D	n-Th	b	D	D	n-Th	b
65	76	76		160	130	4-M12	16	185	145	4-M16	20
80	89	89		190	150	4-M16	18	200	160	4-M16	22
100	114	114		210	170	18	220	180	8-M16	24	
125	140	140		240	200	20	250	210	8-M16	26	
150	168	168		265	225	20	285	240	8-M20	28	
200	219	219		320	280	22	340	295	8-M20	28	
250	273	273		375	335	12-M16	24	395	350	12-M20	28
300	325	325		440	395	12-M20	24	445	400	12-M20	28
350	377	377		490	445	26	505	460	16-M20	30	
400	426	426		540	495	16-M20	28	565	515	16-M24	32
450	480	480		595	550	28	615	565	20-M24	32	
500	530	530		645	600	20-M20	30	670	620	20-M24	34
600	630	630		755	705	20-M24	30	780	725	20-M27	36
700	720	720		860	810	24-M24	32	895	840	24-M27	40
800	820	820		975	920	24-M27	34	1015	950	24-M30	44
900	920	920		1075	1020	24-M27	36	1115	1050	28-M30	46
1000	1020	1020		1175	1120	28-M27	36	1230	1160	28-M33	50
1200	1220	1220		1405	1340	32-M30	40	1455	1380	32-M36	56
1400	1420	1428		1630	1560	36-M33	44	1675	1590	36-M39	62
1600	1620	1628		1830	1760	40-M33	48	1915	1820	40-M45	68
1800	1820	1828		2045	1970	44-M36	50	2115	2020	44-M45	70
2000	2020	2030		2265	2180	48-M39	54	2325	2230	48-M45	74
2200	2220	2230		2475	2390	52-M39	60	2550	2440	52-M52	80
2400	2420	2430		2685	2600	56-M39	62	2760	2650	56-M52	82
2600	2620	2630		2905	2810	60-M45	64	2960	2850	60-M52	88
2800	2820	2830		3115	3020	64-M45	68	3180	3070	64-M52	94
3000	3020	3030		3315	3220	68-M45	70	3405	3290	68-M56	100
3200	3220	3230		3525	3430	72-M45	76				

注: 本尺寸符合GB/T12465-2007标准 Note: the size meets standard GB/T12465-2007

VSSJAF(C2F)型双法兰松套传力接头

VSSJAF (C2F) double flange power delivery joint



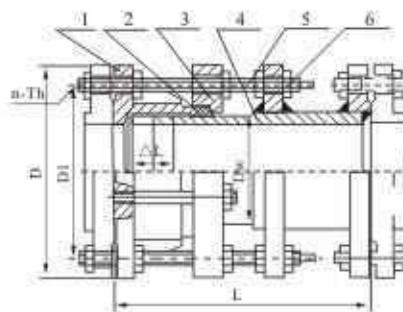
序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT450-10, Q235A
2	密封圈 Gasket	1	NBR
3	压盖 follower	1	QT450-10, Q235A
4	限位短管 limited short pipe	1	Q235A
5	螺栓stud	n	Q235A, 35#
6	螺母nut	Tn	Q235A, 20#

主要连接尺寸 Main connecting dimension:

公称通径DN nominal diameter	管子外径DW External diameter of pipe	外形尺寸 Shape dimension	法兰连接尺寸 Flange connection size								
			0.6MPa				1.0MPa				
DW	De	L	▲L	D	D	n-Th	b	D	D	n-Th	b
65	76			160	130	4-M12	16	185	145	4-M16	20
80	89			190	150	4-M16	18	200	160	4-M16	22
100	114			210	170	18	220	180	8-M16	24	
125	140			240	200	20	250	210	8-M16	26	
150	168			265	225	20	285	240	8-M20	28	
200	219			320	280	22	340	295	8-M20	28	
250	273			375	335	12-M16	24	395	350	12-M20	28
300	325			440	395	12-M20	24	445	400	12-M20	28
350	377			490	445	26	505	460	16-M20	30	
400	426			540	495	16-M20	28	565	515	16-M24	32
450	480			595	550	28	615	565	20-M24	32	
500	530			645	600	20-M20	30	670	620	20-M24	34
600	630			755	705	20-M24	30	780	725	20-M27	36
700	720			860	810	24-M24	32	895	840	24-M27	40
800	820			975	920	24-M27	34	1015	950	24-M30	44
900	920			1075	1020	24-M27	36	1115	1050	28-M30	46
1000	1020			1175	1120	28-M27	36	1230	1160	28-M33	50
1200	1220			1405	1340	32-M30	40	1455	1380	32-M36	56
1400	1420			1630	1560	36-M33	44	1675	1590	36-M39	62
1600	1620			1830	1760	40-M33	48	1915			

VSSJAFC(CC2F)型可拆式双法兰松套传力接头

VSSJAFC (CC2F) detachable double flange power delivery joint



序号 No.	名称 Name	数量 Quantity	材料 Material
1	本体 Valve body	1	QT450-10, Q235A
2	密封圈 Gasket	1	NBR
3	压盖 follower	1	QT450-10, Q235A
4	限位短管 Limited short pipe	1	Q235A
5	螺栓 stud	n	Q235A, 35#
6	螺母 nut	n	Q235A, 20#

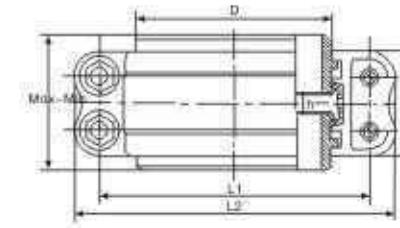
主要连接尺寸 Main connecting dimension

公称通径DN nominal diameter	管道外径DW External diameter of pipe	外形尺寸 external dimension	法兰连接尺寸 Flange connection size							
			0.6MPa			1.0MPa				
L	▲L	D	D ₁	n-Th ₁	b	D ₂	D ₃	n-Th ₂	b	
65	76	400	160	130	4-M12	16	185	145	4-M16	20
80	89		190	150	4-M16	18	200	160		22
100	114		210	170		18	220	180	8-M16	24
125	140		240	200		20	250	210		26
150	168		265	225	8-M16	20	285	240	8-M20	26
200	219		320	280		22	340	295		28
250	273		375	335	12-M16	24	395	350	12-M20	28
300	325		440	395	12-M20	24	445	400	12-M20	28
350	377	420	490	445		26	505	460	16-M20	30
400	426		540	495	16-M20	28	565	515	16-M24	32
450	480		595	550		28	615	565	20-M24	32
500	530		645	600	20-M20	30	670	620	20-M24	34
600	630		755	705	20-M24	30	780	725	20-M27	36
700	720	440	860	810	24-M24	32	895	840	24-M27	40
800	820		975	920	24-M27	34	1015	950	24-M30	44
900	920		1075	1020	24-M27	36	1115	1050	28-M30	46
1000	1020		1175	1120	28-M27	36	1230	1160	28-M33	50
1200	1220	650	1405	1340	32-M30	40	1455	1380	32-M36	56
1400	1420		1630	1560	36-M33	44	1675	1590	36-M39	62
1600	1620		1830	1760	40-M33	48	1915	1820	40-M45	68
1800	1820		2045	1970	44-M36	50	2115	2020	44-M45	70
2000	2020	670	2265	2180	48-M39	54	2325	2230	48-M45	74
2200	2220		2475	2390	52-M39	60	2550	2440	52-M52	80
2400	2420		2685	2600	56-M39	62	2760	2660	56-M52	82
2600	2620		2905	2810	60-M45	64	2960	2850	60-M52	88
2800	2820	730	3115	3020	64-M45	68	3180	3070	64-M52	94
3000	3020		3315	3220	68-M45	70	3405	3290	68-M56	100
3200	3220		3525	3430	72-M45	76				

注：本尺寸符合GB/T12465-2007标准 Note: the size meets standard GB/T12465-2007.

KRHD型钢制卡箍接头

KRHD steel clamp joint



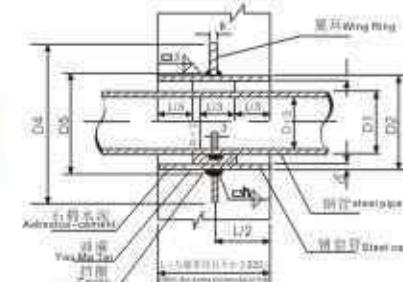
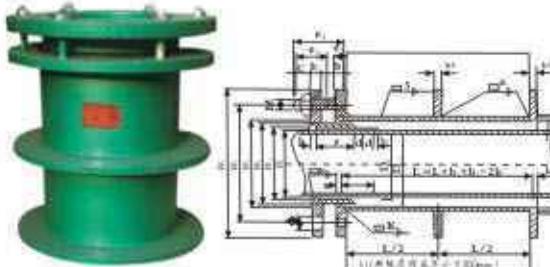
主要安装尺寸 (单位: mm)

Main installation dimensions (unit: mm) PN1.6、2.5、4.0、6.4MPa

外径接管 DN External diameter of connection tube (mm)	公称通径DN nominal diameter (mm)	允许弯曲轴向负荷 permitted axial load (kgf)	补偿量 Compensation length (mm)	最大外径 permitted outer diameter (mm)	最小长度 minimum length (mm)	安装长度 Installation length (mm)	最大长度 length (mm)	匹配带 matching bar (mm)
89	80	2680	20	17.90	90	100	110	M12×60
108	100	3550	20	15.06	90	100	110	M14×60
133	125	4620	20	13.05	95	105	115	M14×60
159	150	5530	20	12.09	100	110	120	M14×60
194	175	7370	20	10.51	100	110	120	M16×60
219	200	9370	20	9.33	106	116	126	M16×75
245	225	11750	20	8.36	112	122	132	M16×80
273	250	14620	20	7.51	117	127	137	M18×90
325	300	20680	20	6.32	120	130	140	M18×100
377	350	27875	20	5.45	125	135	145	M18×100
426	400	35600	20	4.80	130	140	150	M18×110
480	450	45180	20	4.28	135	145	155	M18×110
530	500	55120	20	3.88	140	150	160	M18×120
630	600	65900	22	3.27	145	155	165	M18×120
720	700	70170	22	2.86	150	160	170	M20×120
820	800	84400	22	2.51	155	165	175	M20×130
920	900	106200	22	2.24	160	170	180	M20×130
1020	1000	116870	22	2.02	165	175	185	M20×130
1220	1200	130600	24	1.69	170	180	190	M22×140
1420	1400	146200	24	1.45	175	185	195	M22×140
1620	1600	158300	24	1.27	180	190	200	M22×140
1820	1800	166000	24	1.13	185	195	205	M22×150
2020	2000	179000	24	1.01	190	200	210	M24×150
2220	2200	187000	26	1.01	195	205	215	M24×150
2420	2400	196000	26	1.01	200	210	220	M24×150
2620	2600	206000	26	1.01	205	215	225	M24×160
2830	2800	253300	26	1.01	210	220	230	M27×160
3020	3000	260100	26	1.01	215	225	235	M27×160
3220	3200	286900	26	1.01	220	230	240	M27×180

S312、02S404柔性、刚性防水套管

S312, 02S404 flexible and rigid waterproof sleeve



S312、02S404型防水套管主要用于管道穿过墙壁之处有震动或有严密防水要求的工况，它一方面有利于管道的安装拆卸以及防渗防漏，另一方面也保护了建筑物不受水和震动的损害。

S312_02S404 waterproof sleeves are mainly used under the working conditions where there is vibration or strict waterproof requirement at the place where the pipeline passes through the wall. On the one hand, it is conducive to the pipeline installation and removal, as well as anti seepage and anti leakage; on the other hand, it also protects the buildings from the damage caused by water and vibration.

安装数据表 Design and Installation Dimension Table

名称 Name	柔性防水套管 Flexible waterproof casing			刚性防水套管 Rigid waterproof casing		
	型号 Model	S312-R			S312-G	
DN		长度 Length	适用 墙体 厚度 For Wall Thickness	适用 管子 外径 For tube Outer Diameter	长度 (接管 厚度) Length (With Thickness)	适用管子外径 For tube O.D.
50	380	300	60	177	200	60
70	380	300	73	190	200	73
80	384	300	89	217	200	89
100	384	300	108	236	200	108
125	386	300	133	257	200	133
150	386	300	159	280	200	159
200	386	300	219	350	200	219
250	388	300	273	402	200	273
300	388	300	325	462	200	325
350	392	300	377	511	200	377
400	392	300	426	565	200	426
450	394	300	480	615	200	480
500	394	300	530	673	200	530
600	407	300	630	787	200	630
700	409	300	720	877	200	720
800	411	300	820	987	200	820
900	413	300	920	1087	200	920
1000	415	300	1020	1187	200	1020

注：1. 订货时务必标明型号及墙壁厚度和插入管的外径。

2. 大口径特殊要求可按客户要求制造。

3. 本表尺寸为选择标注，订货时欢迎咨询。

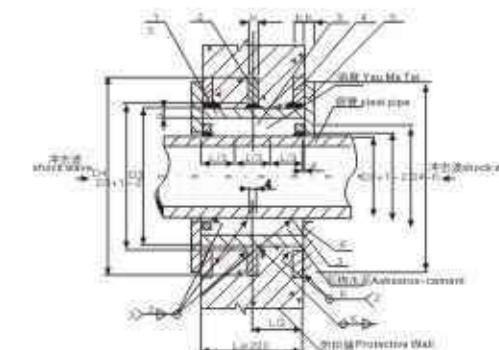
Notes: 1. When placing an order, be sure to state the models, wall thickness and outer diameter of insertion pipe.

2. Large-caliber special requirements can be met according to customers' requests.

3. The dimensions in the table size are entered selectively; when ordering the products, you are welcome to make consultation.

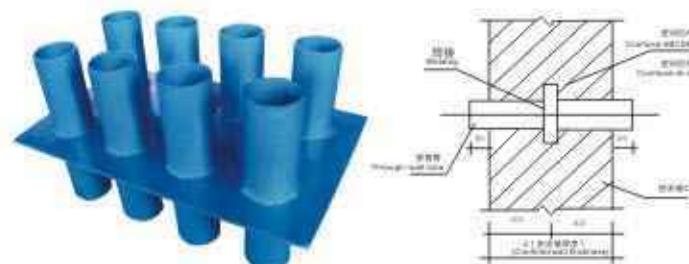
两侧防护刚性密闭套管

Both sides of the rigid airtight protective sleeve

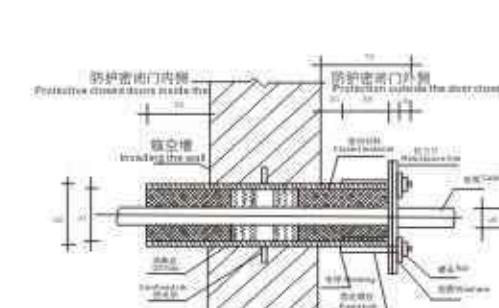


主安装数据表 Main installation datasheet

DN	D1	D2	D3	D4	D5	D6	D7	I	I ₁	I ₂	I ₃	I ₄	I ₅	I ₆	I ₇	I ₈	K
50	60	95	65	145	200	81	65	/	72	30	3.5	4	8	65	86	4	4-M12
65	76	114	80	165	220	96	65	25	72	30	3.75	4	8	80	105	4	4-M12
80	89	127	95	180	235	115	65	25	76	38	4	4	10	95	118	4	4-M16
100	108	146	114	200	255	134	65	25	76	38	4	4.5	10	114	136	4	4-M16
125	133	180	140	235	290	160	65	25	76	38	4	6	10	140	167	6	6-M16
150	159	203	165	260	315	185	65	25	76	38	4.5	6	10	165	190	6	6-M16
200	219	265	226	320	375	246	65	25	76	38	6	6	10	226	252	6	6-M16



(肋接) 密闭管和密封尺寸表 Flange connection size			
序号 No.	镀锌钢管 Galvanized steel pipe		管壁尺寸 Pipe size L (mm)
	公称直径 (mm) Nominal diameter	外径 (mm) Outer diameter	
1	20	26.8	50
2	25	33.5	50
3	32	42.3	60
4	40	48	75
5	50	60	100
6	70	75.5	125
7	80	88.5	150
8	100	114	200



保护管和抗力片尺寸表 Protection tube and resistance sheet size							
序号 No.	名称 Name	规格 Specification	数量 Number	备注 Remarks			
				d1	d2	d3	备注 Remarks
1	保护管 Protection tube	无缝钢管 Seamless钢管	1	D45	39	45	90 3
2	保护管 Protection tube	镀锌钢管 Galvanized Steel Pipe	2	D57	50	57	100 3.5
3	固定螺栓 Fixed bolt	M6,L=55mm	3	D89	82	89	130 3.5
4	固定螺栓 Fixed bolt	M6,L=55mm	2	SC40	41	48	90 3.5
5	固定螺栓 Fixed bolt	M6,L=55mm	2	SC60	53	60	100 3.5
6	抗力片 Resistance film	厚6mm 6mm thick	2	SC80	80.5	88.5	130 4

1. 本图用于防护密闭门门框上的电缆明线穿墙，也适用于其它位置电缆线穿越防护密闭墙。
2. 抗力片电缆槽d0必需严格按电缆处理后的外径开设，槽口必需光滑。
3. 铠装电缆穿闭管时不得剥去铠装。

1. This drawing is used in the open wire wall feed-through above the doorframe of the protective light door, and it also applies to the protective enclosed wall feed-through of cable wires in other locations.

2. The resistance sheet cable channel d0 must be set up in accordance with the outer diameter of the processed cable, and the notch must be smooth.

3. The armored cable cannot be stripped off the armor when passing through the closed pipe.

软密封蝶阀

Soft seal butterfly valve

D341X 0.6/1.0/1.6MPa双法兰式双向软密封手动蝶阀
D341X 0.6/1.0/1.6MPa dual bidirectional soft sealing flange manual butterfly



D371X 0.6/1.0/1.6MPa对夹式双向软密封手动蝶阀
D371X 0.6/1.0/1.6MPa Wafer soft seal bi-manual butterfly



D341X 0.6/1.0/1.6MPa双法兰式管网自锁蝶阀
D341X 0.6/1.0/1.6MPa double flanged pipe network self-locking butterfly



软密封蝶阀

Soft seal butterfly valve

D371X 0.6/1.0/1.6MPa对夹式管网自锁蝶阀
D371X 0.6/1.0/1.6MPa clip-pipe network self-locking butterfly



D941X 0.6/1.0/1.6MPa电动双法兰式蝶阀
D941X 0.6/1.0/1.6MPa electric double flanged butterfly valve



D971X 0.6/1.0/1.6MPa电动对夹式蝶阀
D971X 0.6/1.0/1.6MPa Electric Wafer Butterfly



软密封蝶阀

Soft seal butterfly valve

D641X 0.6/1.0/1.6MPa气动双法兰式蝶阀
D641X 0.6/1.0/1.6MPa pneumatic double flanged butterfly valve



D671X 0.6/1.0/1.6MPa气动对夹式蝶阀
D671X 0.6/1.0/1.6MPa Pneumatic wafer butterfly valve



SD341X 0.6/1.0/1.6MPa(专利产品)伸缩式双向软密封手动双法兰蝶阀
SD341X 0.6/1.0/1.6MPa (patent products) retractable bi-manual dual flanged soft-sealed butterfly valve



硬密封蝶阀

Hard sealing butterfly valve

D341H 0.6/1.0/1.6MPa法兰式硬密封手动蝶阀
D341X 0.6/1.0/1.6MPa manual butterfly hard seal flange



D371H 0.6/1.0/1.6MPa对夹式硬密封手动蝶阀
D371H 0.6/1.0/1.6MPa Wafer hard seal butterfly valve manually



SD341H 0.6/1.0/1.6MPa伸缩式硬密封手动双法兰蝶阀
SD341H 0.6/1.0/1.6MPa manual dual retractable hard sealing butterfly valve flange



