KISTLER®

RUBBER, FLEX DRAIN, STAINLESS STEEL, EXPANSION JOINT



A Specialist for Rubber & Stainless Steel

EXPANSION JOINT

KISTLER FLEXIBLE

FEATURES

KISTLER is a molded ball-shaped bellow with a streamlined flowing arch that reduces turbulence and withstands surge pressure without shattering due to it's tensile strength. It will nether crack nor fracture under repeated flexing, it gas a remarkable long life expectancy even under adverse conditions due to the finest construction and process design with high grade materials of construction synthetic rubber, fabric and steel cord used in their manufacture.

Standard : ASTM F1123-87, GBT26121-2010

REFORCING STEEL CORD

Steel Cord is wrapped in the center inside the bellow end, to force the bellow and to contact perfectly with the flange.

REINFORCING FABRIC (I)

The tough nylon fabric also has the benefits of high strength and flexibility.



SYNTHETIC RUBBER TUBE

High grade synthetic rubber used is resistant to most hydrocabons and excellent against olis, gasoline, alkali and dilute.

REINFORCING FABRIC (II)

Tough nylon fabric is wrapped around the bellow tube to increase the arch and instill a high working and burst pressure.

CERTIFICATE ISO 9001 : 2016

and Physical Testing Laboratory of TISTR



KISTLER EXPANSION JOINT ensures the best quality at a reasonable price to satisfy customers. Please contact us to discuss your requirements.

Thailand Institute of Scientific and Technological Research (TISTR)

Physical Testing Laboratory Industrial Metrology and Testing Service Centre

Request No. 24-61/0732 1/2 MTC.No. 24-61/0732

REPORT ON TESTING AND ANALYSIS

Submitted by: ACP INTERTRADE CO.,LTD.

Address : 399/63 Moo 13,Soi King -Kaew 25/1,King-Kaew Road,T.Rachatheva,A.Bangple,Samutprakarn 10540

Condition of testing item :KISTLER Flexible Jiont.

Testing/analysis of : KISTLER Flexible Jiont.

Date of receipt : 26 September 2018 **Date of testing : 14 November 2018**

Method of testing/analysis : Pressure Test

Condition of testing/analysis : Temperature 27-30 ° C Relative humidity 55-60%

Result of testing/analysis : -

Specimen Code	Results
KISTLER Flexible Jiont Double Sphere Union End Type EPDM,Model KDU,Size 1"	at 250psi(15min) pass
KISTLER Flexible Jiont Double Sphere Thread End Type EPDM,Model KDT,Size 1"	at250psi(15min) pass
KISTLER Flexible Jiont Double Sphere Union End Type EPDM,Model KDU,Size 1"	Burt Pressure >650psi
KISTLER Flexible Jiont Double Sphere Thread End Type EPDM,Model KDT,Size 1"	Burt Pressure >800psi

Sumalee Boonpach

The results relate only to the items tested or calibrated.
Advertising the Report/Certificate and publicity of the results except in full are prohibited unless written permission is obtained from the governor of TISTR.

Head Office
35 Mu 3 Tambon Khlong Ha, Amphoe Khlong Luang, Changwat Pathumthani 12120, Thailand
Tel. (66) 0 2577 9000
Fax. (66) 0 2577 9009
E-mail : rumpai@tistr.or.th Website:www.tistr.or.th

Office/Laboratory
Soi 1C, Bangpoo Industrial Estate, Sukhumvit Road, Amphoe Muang, Changwat Samutprakan 10280, Thailand
Tel. (66) 0 2323 1672-80 ext. 115, 116
Fax. (66) 0 2323 9165
E-mail : mtc@tistr.or.th

Office
196 Phahonyothin Road, Chatuchak, Bangkok 10900, Thailand
Tel. (66) 0 2579 1121-30 ext. 5219, 5225, 5217
Fax. (66) 0 2579 8592
E-mail : sumalee@tistr.or.th

Request No. 24-61/0732 **2/2** **MTC.No. 24-61/0732**

REPORT ON TESTING AND ANALYSIS

Result of testing/analysis : -

Specimen Code	Results
KISTLER Flexible Jiont Single Sphere Type EPDM,Model KS,Flange JIS 10K,Size 4"	at 450psi(15min) pass
KISTLER Flexible Jiont Double Sphere With Ring Type EPDM,Model KDR,Flange JIS 10K,Size 4"	at 450psi(15min) pass
KISTLER Flexible Jiont Single Sphere Type EPDM,Model KS,Flange JIS 10K,Size 4"	Burt Pressure 775psi
KISTLER Flexible Jiont Double Sphere With Ring Type EPDM,Model KDR,Flange JIS 10K,Size 4"	Burt Pressure 625psi

TESTED/ANALYSED BY : Prasaln Boonpacl

(Mr.Prasaln Boonpachr)

APPROVED BY: _____

(Mr. Sittipong Lohwirakorn)

Director

PHYSICAL TESTING LABORATORY

Ref.20242610926038230O1

Date : 22 November 2018

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E-mail : sumalee@tistr.or.th

KISTLER®

SINGLE-SPHERE HIGH-PRESSURE RUBBER EXPANSION JOINT

With Floating Flanges

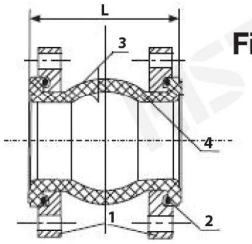


Fig. KS



KISTLER Series KS

Spherical moulded expansion joint are designed for piping systems to absorb pipe movements, relieve stress reduce system noise/vibration, compensate for misalignment/offset and to protect rotating mechanical equipment against start-up surge forces. Single sphere bellows are inherently stronger than the conventional hand-built style spool arch type. The spherical design reduces turbulence, sediment build-up and allows smooth, quiet flow. Internal pressure within a “sphere” is exerted evenly in all directions, distriduting forces evenly over a large area. The floationg metal flanges on the expansion joint freely rotate for easy installtion, compensating for mating flange misalignment.

Series KS connectors have EPDM cover, providing excellent resistance to sunlight, ozone, oxidation and resistant. The unit has EPDM tube, which is good for hot & cold water service and mild chemicals. With a temperature raing of -20°C to 100°C, the standard size range from 1.1/4” to 12” I.D. can be with working pressure at 300 psi. and size 14” to 48” have working pressure at 150 psi.

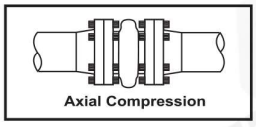
MATERIALS

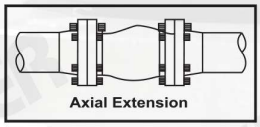
ITEM NO.	DESCRIPTION	MATERIAL
1	Flange	Carbon Steel / Stainless Steel
2	Wire	Carbon Steel Wire
3	Elastomer	Synthetic Rubber (EPDM)
4	Reinforcing Fabric	Nylon Cord Fabric

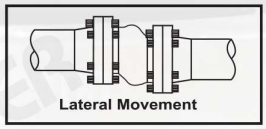
TECHNICAL CONDITION

Model	KS	
Size I.D.	1.1/4” - 12”	14” - 48”
Working Pressure	300 psi.	150 psi.
Burst Pressure	775 psi.	342 psi.
Vacuum Rating	650 mm/Hg	
Temperature	-20°C to 100°C	

ALLOWABLE MOVEMENTS







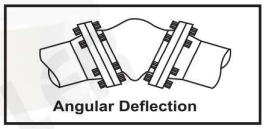


TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

Normal core diameter DN		Length (L) (mm.)	Axial displacement		Lateral (mm.)	Angular
(mm.)	(inch.)		Compression (mm.)	Extension (mm.)		
32	1.1/4”	95	9	6	9	15°
40	1.1/2”	95	10	6	9	15°
50	2”	105	10	7	10	15°
65	2.1/2”	115	13	7	11	15°
80	3”	135	15	8	12	15°
100	4”	150	19	10	13	15°
125	5”	165	19	12	13	15°
150	6”	180	20	12	14	15°
200	8”	210	25	16	22	15°
250	10”	230	25	16	22	15°
300	12”	245	25	16	22	15°
350	14”	255	25	16	22	15°
400	16”	255	25	16	22	15°
450	18”	255	25	16	22	15°
500	20”	255	25	16	22	15°
600	24”	260	25	16	22	15°
700	28”	260	25	16	22	10°
800	32”	260	25	16	22	10°
900	36”	260	25	16	22	10°
1000	40”	260	25	16	22	10°
1200	48”	260	26	18	24	10°

NOTE : 1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.
2. Standard rated working pressure is 20 bars (up to 300 mm.) and 10 bars (for larger size than 300 mm.)
3. Applicable fluids : Air, Compressed air, water, sea water, hot water, weak acid, alkalis, etc.
4. Flange drilling : JIS, DIN, ANSI, BS and other standard drilling for your specification.
5. Tolerances for installation should not over 30% of Allowable movements.

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KISTLER®

DOUBLE-SPHERE HIGH PRESSURE RUBBER EXPANSION JOINT WITH RING

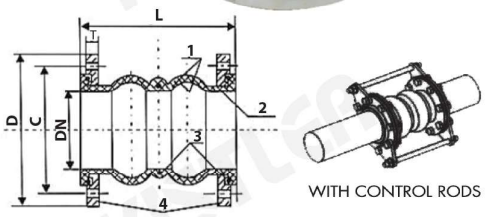
With Floating Flanges

KISTLER Series KDR

Double sphere are designed for piping systems to absorb pipe movements, relieve stress, reduce system noise/vibration, compensate for misalignment/offset and to protect rotating mechanical equipment against start-up surge forces. The KSITLER Series KDR rubber expansion joint can be made from different rubber materials depending on media and application. They are desiged to take up axial, lateral, angular and torsional movements along with vibrations in piping. KISTLER Engineers can solve anticipated problems of vibration, noise, shock, corrosion, abrasion, stresses and space by incorporating rubber expansion joints into designed piping systems. The steel flanges easily rotate on the bellows which makes it easier to line up the bolt holes during installation when mating flanges are out of line. With a temperature rating of -20°C to 100°C, the standard size range from 1.1/2" to 12" I.D. can be with the working pressure at 300 psi. and size 14" to 48" have working pressure at 150 psi.

Fig. KDR





WITH CONTROL RODS

MATERIALS

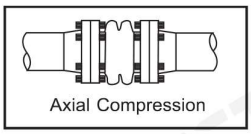
ITEM NO.	DESCRIPTION	MATERIAL
1	Outer Cover, Inner Tube	Synthetic Rubber (EPDM)
2	Reinforcing Fabric	Synthetic Fiber
3	Wire, Reinforcing Ring	Carbon Steel Wire
4	Flange	Carbon Steel / Stainless Steel

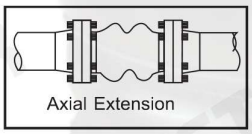
TECHNICAL CONDITION

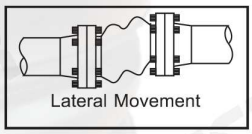
Model	KDR	
Size I.D.	1.1/2" - 12"	14" - 48"
Working Pressure	300 psi	150 psi
Burst Pressure	625 psi	342 psi
Vacuum Rating	650 mm/Hg	
Temperature	-20°C to 100°C	

Installed with control rods to prevent internal pressure and motion by over limit usage and vacuum dropping. Control rods and reinforcing ring unit must be installed when pressure (test surge, operating, starting a pump, etc.) exceeds the rating.

Allowable Movements


Axial Compression


Axial Extension


Lateral Movement

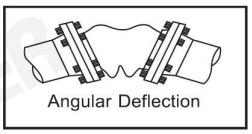

Angular Deflection

TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

Normal core diameter DN		Length (L) (mm.)	Axial displacement		Lateral (mm.)	Angular
(mm.)	(inch.)		Compression (mm.)	Extension (mm.)		
40	1.1/2"	165	50	30	45	35°
50	2"	165	50	30	45	35°
65	2.1/2"	170	50	30	45	35°
80	3"	175	50	30	45	35°
100	4"	225	50	35	40	35°
125	5"	225	50	35	40	35°
150	6"	225	50	35	40	35°
200	8"	325	60	35	35	30°
250	10"	325	60	35	35	30°
300	12"	325	60	35	35	30°
350	14"	340	50	40	30	30°
400	16"	350	50	40	30	30°
450	18"	350	50	40	30	30°
500	20"	350	50	40	30	30°
600	24"	400	50	40	30	30°
700	28"	400	50	40	30	20°
800	32"	400	50	40	30	20°
900	36"	400	50	40	30	20°
1000	40"	400	50	40	30	20°
1200	48"	400	50	40	30	20°

NOTE : 1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.
2. Standard rated working pressure is 20 bars (up to 300 mm.) and 10 bars (for larger size than 300 mm.)
3. Applicable fluids : Air, Compressed air, water, sea water, hot water, weak acid, alkalis, etc.
4. Flange drilling : JIS, DIN, ANSI, BS and other standard drilling for your specification.
5. Tolerances for installation should not over 30% of Allowable movements.

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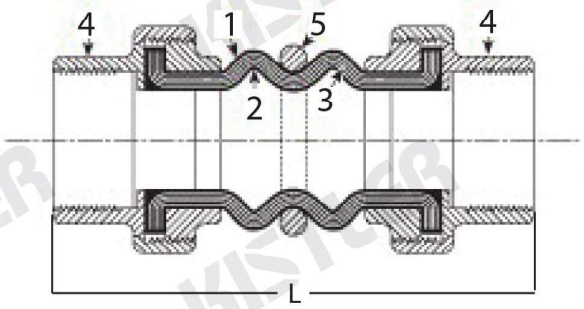
KISTLER®

DOUBLE-SPHERE RUBBER EXPANSION JOINT WITH RING

With Union End

Fig. KDU





KISTLER Series KDU

Style molded rubber expansion joints are the choice when an economical threaded pipe connection is needed. The KDU is engineered to absorb thermal movement, offset and misalignment in piping systems. The KDU style is and excellent choice to absorb and isolate vibration. Use the KDU to protect your system from start-up forces as well as to the design of the KDU having a rubber body it eliminates metal contact stopping the electrolytic process. The KDU comes standard with galvanized ductile iron female unions. The KDU rubber expansion joint comes standard and in stock in 100% EPDM 100% NBR for same day shipment. The body components (tube/cover) are also available in a combination of the following additional materials on special order: Neoprene, EPDM, Chlorobutyl, Nitrile, Hypalon, Viton, Natural Rubber etc. Please see the materials table to determine what materials is best for your application, The KDU is also available on special request with the following female union threads BSPT.

TECHNICAL CONDITION

Model	KDU
Size I.D.	1/2"- 3"
Working Pressure	232 Psi
Burst Pressure	650 Psi
Vacuum Rating	400 mm/Hg
Temperature	- 20^{0}C to 100^{0}C

MATERIALS

ITEM NO.	DESCRIPTION	MATERIAL
1,2	Elastomer	Synthetic Rubber(EPDM)
3	Reinforcing Fabric	Nylon Fabric
4	Union	Malleable Iron
5	Pressurized Ring	Steel Wire

TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

Normal core diameter		Length (L)	Axial displacement		Lateral	Angular
(mm)	(inch.)	(mm)	Compression(mm)	Extension(mm)	(mm)	
15	(1/2")	200	22	6	22	45°
20	(3/4")	200	22	6	22	45°
25	(1")	200	22	6	22	45°
32	(1.1/4")	200	22	6	22	45°
40	(1.1/2")	200	22	6	22	45°
50	(2")	200	22	6	22	45°
65	(2.1/2")	265	24	10	24	45°
80	(3")	285	24	10	24	45°

NOTE : 1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.

2. Union : Standard item employs BS Union with materials FB32 and FCD40. Also can supply ANSI, DIN and other standard.

3. Applicable fluids : Water, Warm water, Sea water, Weak acids, Alkalis, etc.

5. Tolerances for installation should not over 30% of Allowable movements.

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KISTLER®

TWIN-SPHERE RUBBER EXPANSION JOINT WITH RING

Theads End

KISTLER Series KDT

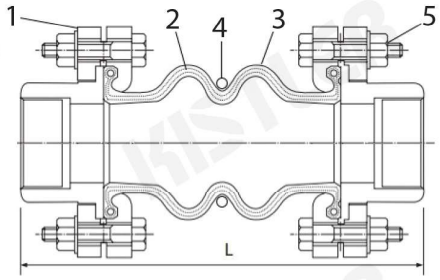
Threaded connection flexible rubber expansion joint, also known as air condition flexible hose, it is a kind of flexible rubber joints, belongs to flexible connectors of metal pipelines. Threaded connection rubber joint composed of inner rubber layer, chinlon tyre fabrics enhancement layar and outer rubber layer, then by molding vulcanization and combine with screw thread. Inner rubber layer directly bear abrasion and corrosion of medium delivered outer rubber layer protect rubber joint from being damaged and corroded by external environmental, enhancement layer is the pressure-bearing layer, giving rubber joint strength and stiffness, the working pressure of rubber joint depends on material and structure of enhancement layer. General rubber joint's inner and outer rubber layer use EPDM, oil resistant rubber joint use NBR, Acid base resistant, high temperature resistant rubber joint use EPDM. Thread type includes internal thread and external thread, internal thread is the commonly used thread connection method. thread connection rubber joint has high elasticity, high gas tightness, medium resistant and weather resistant, widely used in water supply, steam supply, oil supply, air condition, draught fan and other pipe fittings.

Advantages

1. Threaded connection rubber joint has small volume and light weight.
2. Threaded connection rubber joint has good elasticity, easy to install and maintain.
3. Generate lateral, axial and angle direction displacement.
4. Reduce stucture transmit noise, strong vibration absorption ability.
5. High density inside the rubber joint, be able to bear higher pressure and has better elastic defor mation ability.

Fig. KDT





MATERIALS

ITEM NO.	DESCRIPTION	MATERIAL
1	Threads	Malleable Iron
2	Reinforcing Fabric	Nylon Fabric
3	Elastomer	Synthetic Rubber(EPDM)
4	Pressurized Ring	Steel Wire
5	Bolt Nut	Malleable Iron

TECHNICAL CONDITION

Model	KDT
Size I.D.	1/2"- 2"
Working Pressure	250 Psi
Burst Pressure	800 Psi
Vacuum Rating	400 mm/Hg
Temperature	-20°C to 100°C

TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

Normal core diameter		Length (L)	Axial displacement		Lateral	Angular
(mm)	(inch.)	(mm)	Compression(mm)	Extension(mm)	(mm)	
15	(1/2")	200	22	6	22	45°
20	(3/4")	200	22	6	22	45°
25	(1")	200	22	6	22	45°
32	(1.1/4")	200	22	6	22	45°
40	(1.1/2")	200	22	6	22	45°
50	(2")	200	22	6	22	45°

NOTE : 1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.

2. Union : Standard item employs BS Union with materials FB32 and FCD40. Also can supply ANSI, DIN and other standard.

3. Applicable fluids : Water, Warm water, Sea water, Weak acids, Alkalis, etc.

5. Tolerances for installation should not over 30% of Allowable movements.

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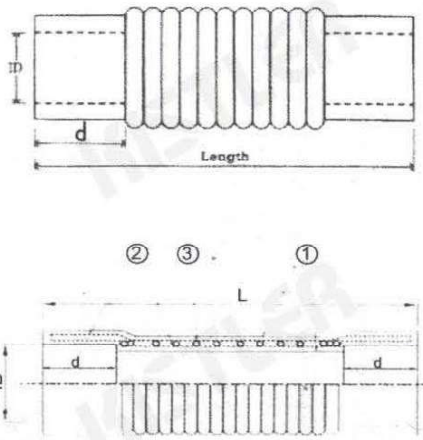


Fig. KL-FD



FEATURES :

1. Movement Flexdrain is desinged to absorb the lateral movement of pipes by connecting the pipe ends and capable to installation for drainage, underground, non-corrosive sewage or low pressure service with to the high technology. The spiral spring steel wire rod reinforcement and high quality rubber, selected and steel reforcing wire.

2. Simple Installation Flex drain reduce cost and installation time with stainless steel hose clamps.

3. Applications To be used in most of water drainage and corrosive sewage or low pressure system to compensate the differential settlement and pipe expansion.

SPECIFICATION & STRUCTURES :

NO.	PART	MATERIALS
1	Inner & Outer Rubber	Natural Rubber (Option : EPDM, NBR)
2	Reinforced Cord	Fabric Nylon Tire Cord
3	Spiral Reinforcement	High Carbon Steel

PERFORMANCE

Working Pressure	5 Kgf/cm^2
Working Temp.	- 20 to 80℃
Test Max. Pressure	10 Kgf/cm^2

DIMENSION AND ALLOWABLE MOVEMENT

Unit : mm.

Size	ID	OD	L	d	Allowable Displacement		
					Lateral	Elongation	Compression
40	50.8	69.6	300	50	50	10	10
50	63.5	79.5	300	50	50	10	10
65	76.2	95.0	300	80	50	10	10
80	88.9	104.9	300	80	50	10	10
100	114.3	130.3	300	100	50	10	10
125	139.7	157.7	300	100	50	10	10
150	165.1	181.1	300	120	50	10	10
200	215.9	231.9	450	125	50	10	10
250	266.7	282.7	600	150	50	10	10
300	317.5	333.5	600	150	50	10	10

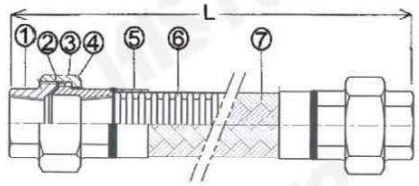
Note : - Pipe outside diameters must be clean and smooth.
- Pipelines should be axially aligned in order to achieve the intened services.
- Long length are available upon request. Please contact us for more information.

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With Union Ending

Working Pressure 10 bar or up.

Fig. KL-301 (Union)





MATERIALS

DRAWING NO.	DESCRIPTION	MATERIALS (Corrugate) SUS304	MATERIALS (Corrugate) SUS316, 316L, 321
1, 2, 4	Union Screw, Nut, Sleeve	FCMB	FCMB, SUS304, SUS316
3	Packing	Gasket	Gasket
5, 7	Collar, Wire Braid	SUS304	SUS304
6	Corrugated Hose	SUS304	SUS316, SUS316L, SUS321

* Union

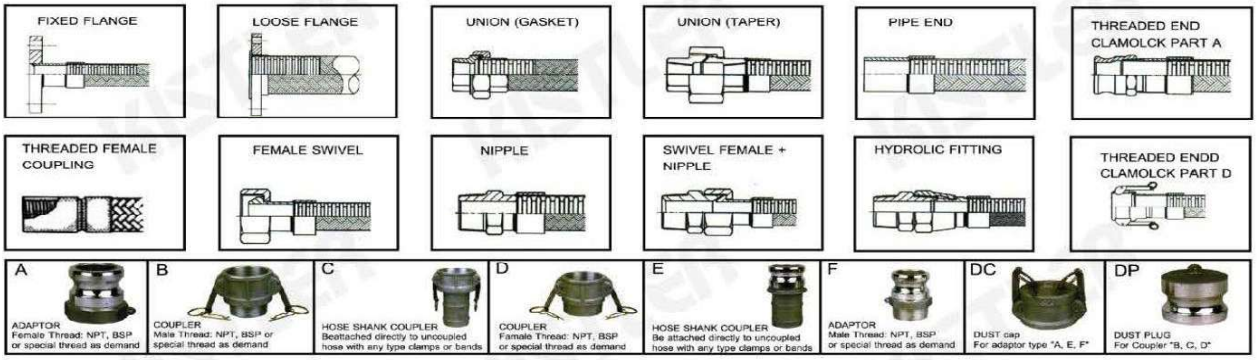
Type / Matrials	FCMB	SUS	Max. Temperature
Union Gasket	GASKET	PTFE	220°C
Union Taper	BRONZE	SUS	250°C

PERFORMANCE OF CORRUGATE with Braid

SIZE Inch. (mm)	Dimension (mm.)		Type of Corrugate	Type of Braid	Dynamic Bend Radius (mm.)	Number of Braids	Max.Working Pressure kgf/cm (at 20°C)	
	ID	OD					SUS304	SUS316, 316L, 321
1/4" (8)	6	11.6 13.5	Annular	wire	110	1 2	175 200	175 200
3/8" (10)	10	16.5 18.0	Annular	wire	160	1 2	100 120	100 120
1/2" (15)	12	22.0 24.0	Annular	wire	210	1 2	95 105	95 105
3/4" (20)	20	30.0 32.0	Annular	wire	220	1 2	60 80	60 80
1" (25)	25	38.0 40.0	Annular	wire	230	1 2	40 65	50 65
1.1/4"(32)	32	46.5 49.0	Annular	wire	270	1 2	40 60	40 60
1.1/2"(40)	40	55.0 58.0	Annular	wire	310	1 2	34 46	40 58
2" (50)	50	70.0 73.0	Annular	wire	340	1 2	31 43	35 45
2.1/2"(65)	65	85.0 88.0	Annular	wire	500	1 2	27 37	30 40
3" (80)	80	100.0 103.0	Annular	wire	600	1 2	20 30	24 34
4" (100)	100	131.0 134.0	Annular	wire	710	1 2	15 18	20 26

Application Fluid : Oil, Water, Hot Water, Steam, Gas, Air, Chemicals, etc.
Remerks : 1. Type of end connection can offer by custom request.
2. Test Pressure at 1.5 of Max. Working Pressure and Burst Pressure at 4 of Max. Working Pressure.

Fig. KL-304

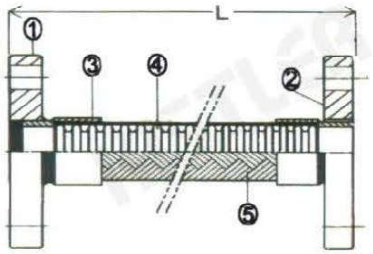


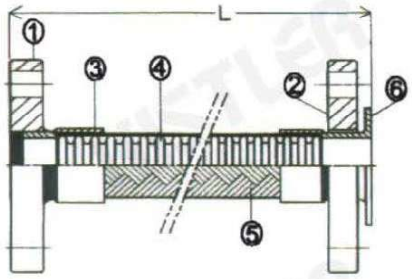
Buna N: Buna N is standard. It is generally recommended for petroleum derivates, neutral or slightly acidic salt solutions, alcohols ethers, glycois, fats, oils and greases. This compound should give good service from -40 ° F to +250 ° F

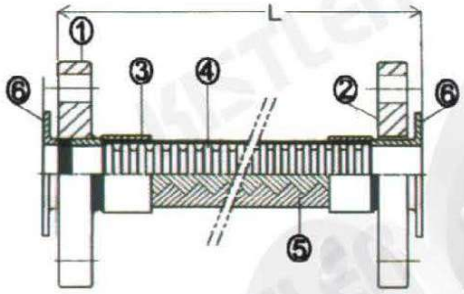
neoprene: Recommended for alkaline and acid salt solutions and aldehydes such as for maldehyde. For food service. White neoprene is also available. Temperature recommended -40 ° F to +250 ° F

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Working Pressure 10 bar or up.







MATERIALS Fig. KL-302 (Fixed-Fixed)

DRAWING NO.	DESCRIPTION	MATERIALS (Corrugate) SUS304	MATERIALS (Corrugate) SUS316, 316L, 321
1	Fixed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
2	Fixed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
3	Collar	SUS304	SUS304
4	Corrugated Hose	SUS304	SUS316,SUS316L,SUS321
5	Wire Braid	SUS304	SUS304

MATERIALS Fig. KL-303 (Fixed-Loosed)

DRAWING NO.	DESCRIPTION	MATERIALS (Corrugate) SUS304	MATERIALS (Corrugate) SUS316, 316L, 321
1	Fixed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
2	Loosed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
3	Collar	SUS304	SUS304
4	Corrugated Hose	SUS304	SUS316,SUS316L,SUS321
5	Wire Braid	SUS304	SUS304
6	Lap Joint	SUS304	SS400,SUS304,SUS316

MATERIALS Fig. KL-303L (Loosed-Loosed)

DRAWING NO.	DESCRIPTION	MATERIALS (Corrugate) SUS304	MATERIALS (Corrugate) SUS316, 316L, 321
1	Loosed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
2	Loosed Flange	SS400,SUS304,SUS316	SS400,SUS304,SUS316
3	Collar	SUS304	SUS304
4	Corrugated Hose	SUS304	SUS316,SUS316L,SUS321
5	Wire Braid	SUS304	SUS304
6	Lap Joint	SUS304	SS400,SUS304,SUS316

* Flange ; Material = SS400, SS400(Galv.), SUS304, SUS316, SUS316L, SUS321

PERFORMANCE OF CORRUGATE with Braid

SIZE Inch. (mm)	Dimension (mm.) ID	Dimension (mm.) OD	Type of Corrugate	Type of Braid	Dynamic Bend Radius (mm.)	Number of Braids	Max.Working Pressure kgf/cm (at 20°C) SUS304	Max.Working Pressure kgf/cm (at 20°C) SUS316, 316L, 321
1/4" (8)	6	11.6 13.5	Annular	wire	110	1 2	175 200	175 200
3/8" (10)	10	16.5 18.0	Annular	wire	160	1 2	100 120	100 120
1/2" (15)	12	22.0 24.0	Annular	wire	210	1 2	95 105	95 105
3/4" (20)	20	30.0 32.0	Annular	wire	220	1 2	60 80	60 80
1" (25)	25	38.0 40.0	Annular	wire	230	1 2	40 65	50 65
1.1/4"(32)	32	46.5 49.0	Annular	wire	270	1 2	40 60	40 60
1.1/2"(40)	40	55.0 58.0	Annular	wire	310	1 2	34 46	40 58
2" (50)	50	70.0 73.0	Annular	wire	340	1 2	31 43	35 45
2.1/2"(65)	65	85.0 88.0	Annular	wire	500	1 2	27 37	30 40
3" (80)	80	100.0 103.0	Annular	wire	600	1 2	20 30	24 34
4" (100)	100	131.0 134.0	Annular	wire	710	1 2	15 18	20 26
5" (125)	125	156.0 159.0	Annular	wire	850	1 2	12 14	14 17
6" (150)	150	178.0 181.0	Annular	wire	1,050	1 2	10 12	10 12
8" (200)	200	238.0 241.0	Annular	wire	1,100	1 2	10 12	10 12
10" (250)	250	290.0 293.0	Annular	wire	1,220	1 2	10 12	10 12
12" (300)	300	342.0 345.0	Annular	wire	1,420	1 2	10 12	10 12

Application Fluid : Oil, Water, Hot Water, Steam, Gas, Air, Chemicals, etc.
Remarks : 1. Type of end connection can offer by custom request.
2. Test Pressure at 1.5 of Max. Working Pressure and Burst Pressure at 4 of Max. Working Pressure.

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