



3

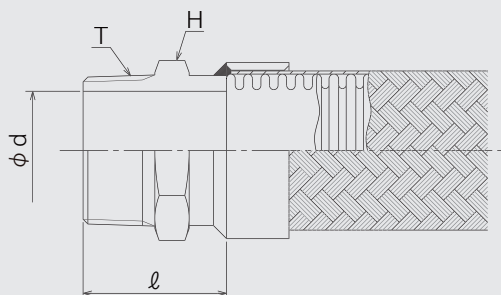
General purpose

Joints/Accessories/Special models/Guide to order

Flexible hoses are used to transfer a wide range of fluids including gaseous fluids, such as air, steam and gases, and liquids, such as water, oils and chemicals. The hoses function for reciprocation of piping systems, absorption of thermal expansion and vibration and centering of piping.

Male fixed screw (Type SM joint)

RX-01



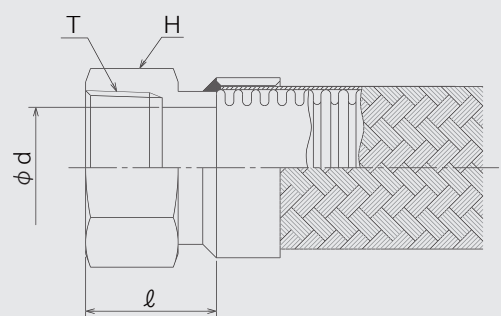
Standard dimensions

Nominal diameter		T	d	ℓ	H
A	B				
8	1/4	R1/4	6	23	Hexagonal, flat 14
10	3/8	R3/8	10	25	// 19
15	1/2	R1/2	12	31	// 22
20	3/4	R3/4	19	33	// 29
25	1	R1	25	40	// 35
32	1 1/4	R1 1/4	32	43	// 46
40	1 1/2	R1 1/2	38	46	// 50
50	2	R2	50	50	Octagonal, flat 63

※Joint material: SUS304 (For other materials, please consult us.)

Female fixed screw (Type SF joint)

RX-09



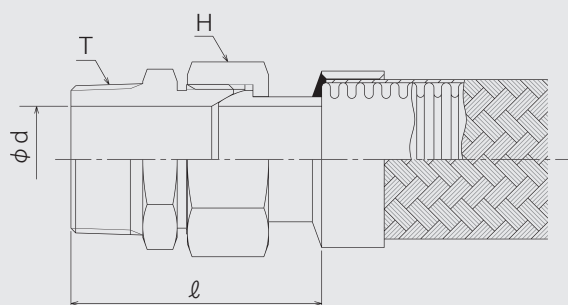
Standard dimensions

Nominal diameter		T	d	ℓ	H
A	B				
8	1/4	Rc1/4	6	21	Hexagonal, flat 17
10	3/8	Rc3/8	10	22	// 21
15	1/2	Rc1/2	12	28	// 26
20	3/4	Rc3/4	19	30	// 32
25	1	Rc1	25	36	// 38
32	1 1/4	Rc1 1/4	32	39	// 46
40	1 1/2	Rc1 1/2	38	41	// 54
50	2	Rc2	50	48	Octagonal, flat 67

※Joint material: SUS304 (For other materials, please consult us.)

Male loose screw (Type SNM joint)

RX-07



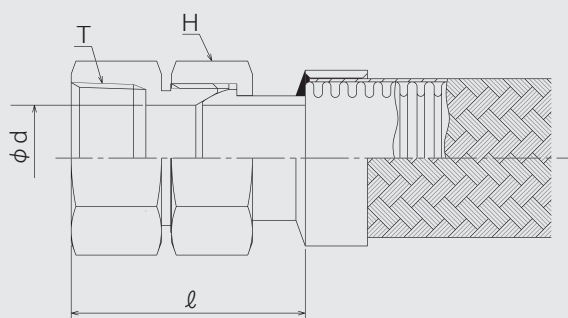
Standard dimensions

Nominal diameter		T	d	l	H
A	B				
8	1/4	R1/4	5	39.5	Hexagonal, flat 17
10	3/8	R3/8	8	44.5	// 21
15	1/2	R1/2	11	56	// 26
20	3/4	R3/4	16	61	// 32
25	1	R1	22	70	// 38
32	1 1/4	R1 1/4	29	80	// 46
40	1 1/2	R1 1/2	34	80	// 54
50	2	R2	46	92	Octagonal, flat 67

※Joint material: SUS304 (For other materials, please consult us.)

Female loose screw (Type SNF joint)

RX-08



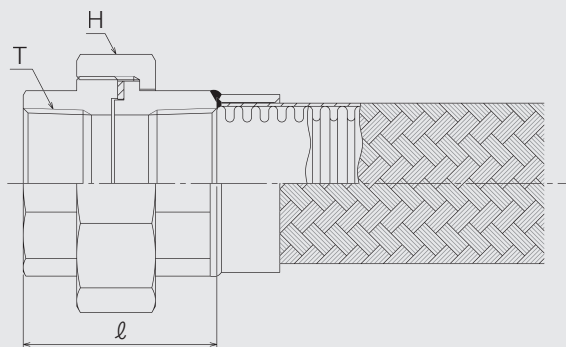
Standard dimensions

Nominal diameter		T	d	l	H
A	B				
8	1/4	Rc1/4	5	37.5	Hexagonal, flat 17
10	3/8	Rc3/8	8	41.5	// 21
15	1/2	Rc1/2	11	53	// 26
20	3/4	Rc3/4	16	57	// 32
25	1	Rc1	22	66	// 38
32	1 1/4	Rc1 1/4	29	76	// 46
40	1 1/2	Rc1 1/2	34	76	// 54
50	2	Rc2	46	88	Octagonal, flat 67

※Joint material: SUS304 (For other materials, please consult us.)

Union joint (Type U joint)

RX-02



Standard dimensions

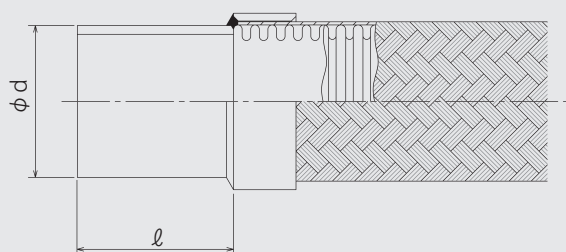
Nominal diameter		T	ℓ	H
A	B			
8	1/4	Rc1/4	34	Octagonal, flat 32
10	3/8	Rc3/8	37	// 38
15	1/2	Rc1/2	40	// 41
20	3/4	Rc3/4	48.5	// 50
25	1	Rc1	52	Decagonal, flat 59
32	1•1/4	Rc1•1/4	56	// 69
40	1•1/2	Rc1•1/2	60	// 78
50	2	Rc2	67	// 93

※Joint material: SUS304 (For other materials, please consult us.)

※Gasket material: Non-asbestos (For other materials, please consult us.)

Pipe joint (Type P joint)

RX-21



Standard dimensions

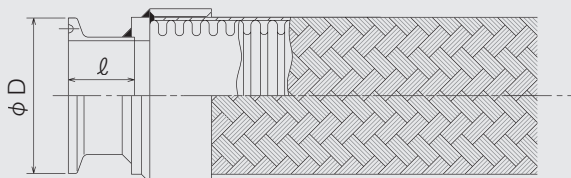
Nominal diameter		d	ℓ	Pipe
A	B			
8	1/4	13.8	30	For the pipe thickness, see the technical document (7-10).
10	3/8	17.3	30	
15	1/2	21.7	30	
20	3/4	27.2	30	
25	1	34.0	50	
32	1•1/4	42.7	50	
40	1•1/2	48.6	50	
50	2	60.5	50	

※The pipe material specified by the user can be used.

※Other than pipe length (ℓ) can be fabricated.

Ferrule

RX-20



Standard dimensions

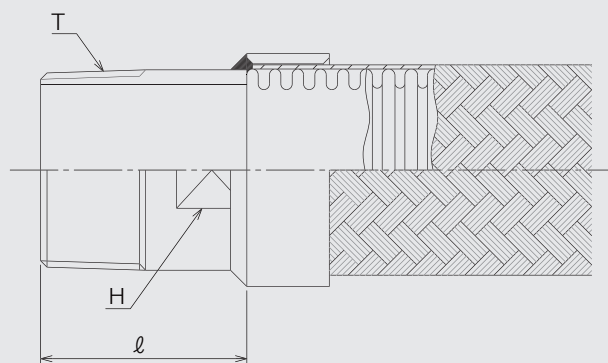
Nominal diameter		D	ℓ
A	B		
8	1/4	34	17.3
10	3/8	34	17.3
15	1/2	34	17.3
20	3/4	50.5	20.5
25	1	50.5	20.5
32	1 1/4	50.5	20.5
40	1 1/2	50.5	20.5
50	2	64	20.5

※The list is for IDF/ISO Ferrule.

※For other ferrule types and materials, please consult us.

Pipe nipple

RX-22



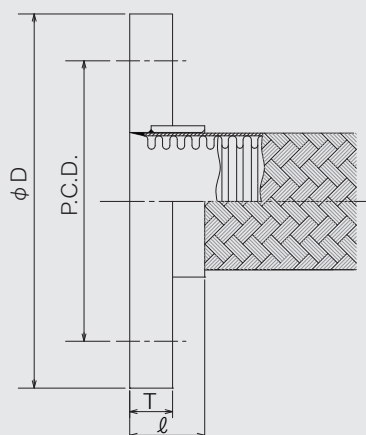
Standard dimensions

Nominal diameter		T	ℓ	H
A	B			
65	2 1/2	R2 1/2	70	Dihedral flat 74
80	3	R3	78	// 86
100	4	R4	90	// 112

※Joint material SUS304 (For other materials, please consult us)

Fixed flange (Type R1)

RX-04



■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
10	3/8	17.5	90	65	12
15	1/2	17	95	70	12
20	3/4	22	100	75	14
25	1	24	125	90	14
32	1-1/4	28	135	100	16
40	1-1/2	28	140	105	16
50	2	33	155	120	16
65	2-1/2	34	175	140	18

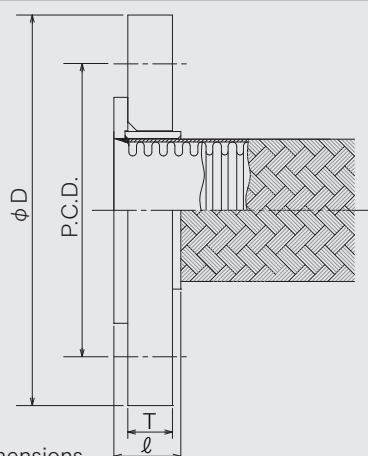
※The list is for the dimensions of JIS10K.

※Other flanges can be responded.



Loose flange (Type R1)

RX-03



■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
10	3/8	16	90	65	12
15	1/2	16	95	70	12
20	3/4	18.5	100	75	14
25	1	20.5	125	90	14
32	1-1/4	24	135	100	16
40	1-1/2	24	140	105	16
50	2	29.5	155	120	16
65	2-1/2	29.5	175	140	18

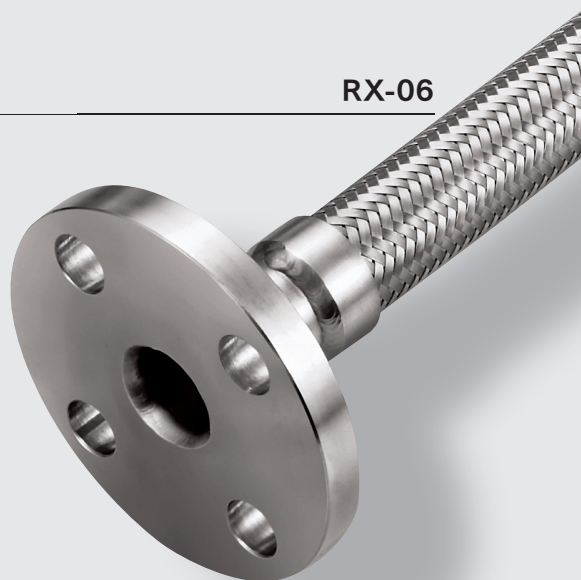
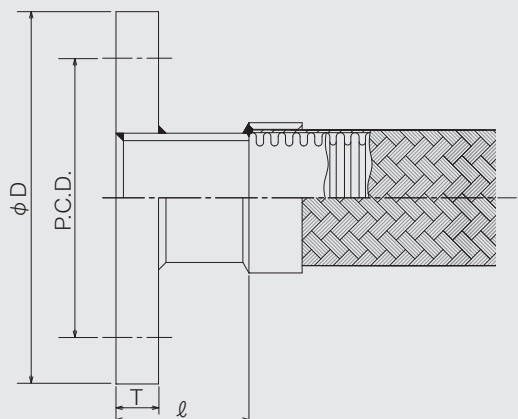
※The list is for the dimensions of JIS10K.

※Other flanges can be responded.



Fixed flange (Type R2)

RX-06



■ Standard dimensions

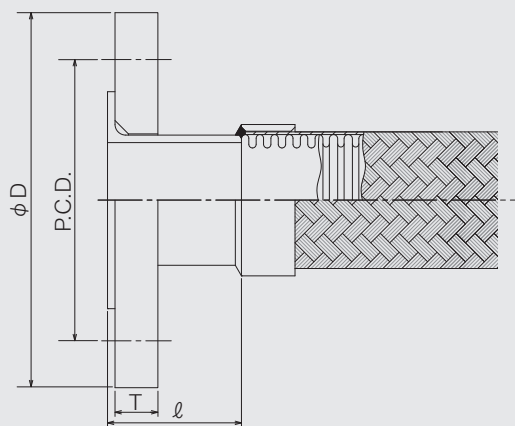
Nominal diameter		l	D	P.C.D.	T
A	B				
10	3/8	30	90	65	12
15	1/2	30	95	70	12
20	3/4	30	100	75	14
25	1	50	125	90	14
32	1-1/4	50	135	100	16
40	1-1/2	50	140	105	16
50	2	50	155	120	16
65	2-1/2	50	175	140	18

※The list is for the dimensions of JIS10K.

※Other flanges can be responded.

Loose flange (Type R2)

RX-05



■ Standard dimensions

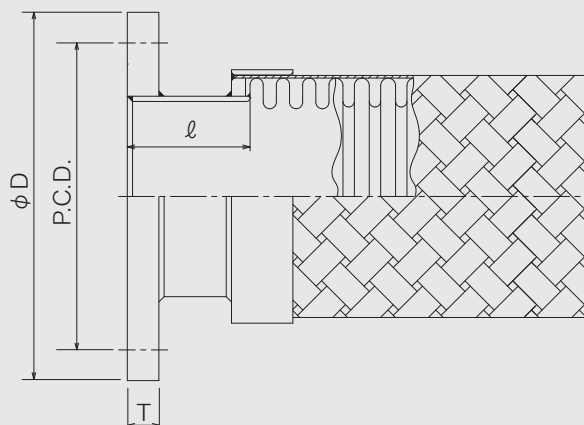
Nominal diameter		l	D	P.C.D.	T
A	B				
10	3/8	30	90	65	12
15	1/2	30	95	70	12
20	3/4	30	100	75	14
25	1	50	125	90	14
32	1-1/4	50	135	100	16
40	1-1/2	50	140	105	16
50	2	50	155	120	16
65	2-1/2	50	175	140	18

※The list is for the dimensions of JIS10K.

※Other flanges can be responded.

Fixed flange (Type R3)

RX-14



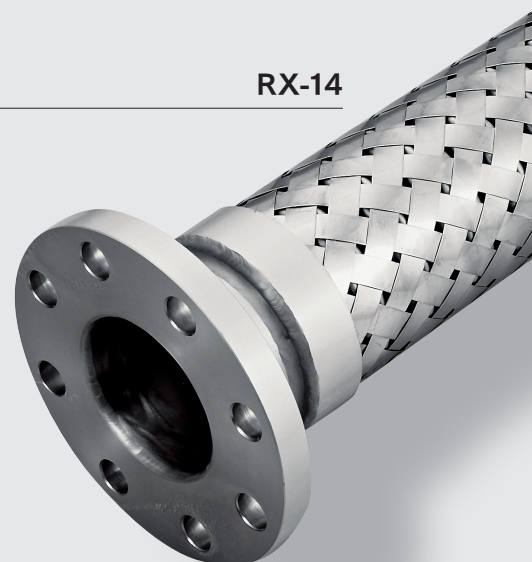
■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
80	3	65	185	150	18
100	4	70	210	175	18
125	5	75	250	210	20
150	6	85	280	240	22
200	8	90	330	290	22
250	10	100	400	355	24

※The list is for the dimensions of JIS10K.

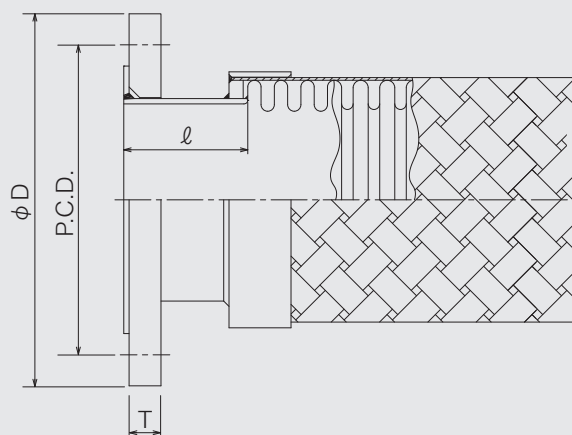
※Other flanges can be responded.

※Up to 500A can be fabricated.



Loose flange (Type R3)

RX-13



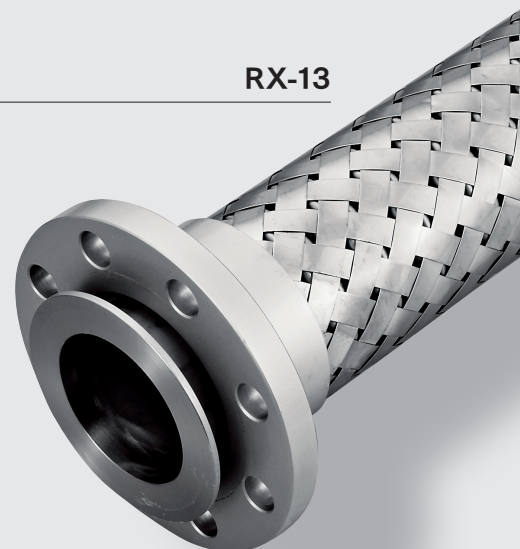
■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
80	3	65	185	150	18
100	4	70	210	175	18
125	5	75	250	210	20
150	6	85	280	240	22
200	8	90	330	290	22
250	10	100	400	355	24

※The list is for the dimensions of JIS10K.

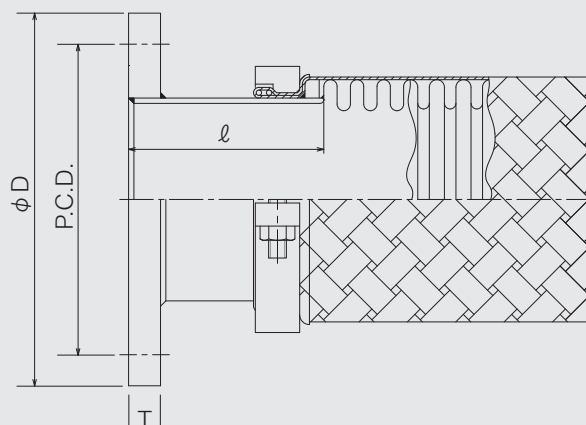
※Other flanges can be responded.

※Up to 500A can be fabricated.



Fixed flange (Type R4)

RX-16



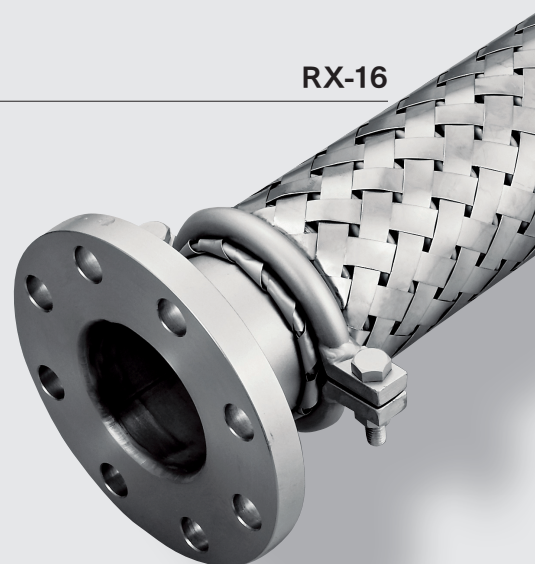
■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
80	3	100	185	150	18
100	4	110	210	175	18
125	5	120	250	210	20
150	6	120	280	240	22
200	8	140	330	290	22
250	10	140	400	355	24

※The list is for the dimensions of JIS10K.

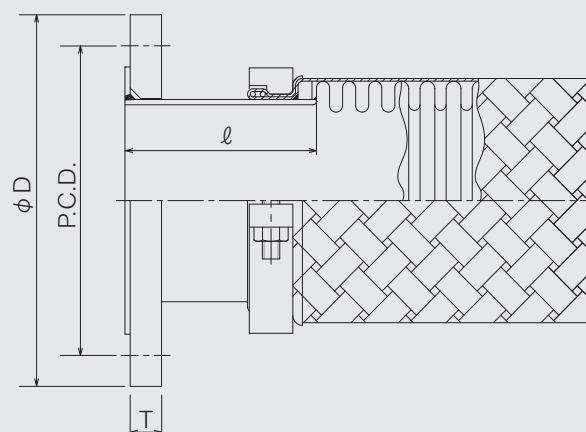
※Other flanges can be responded.

※Up to 500A can be fabricated.



Loose flange (Type R4)

RX-15



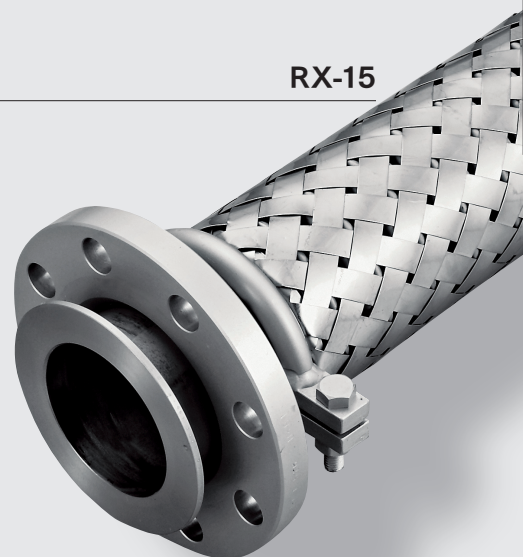
■ Standard dimensions

Nominal diameter		l	D	P.C.D.	T
A	B				
80	3	100	185	150	18
100	4	110	210	175	18
125	5	120	250	210	20
150	6	120	280	240	22
200	8	140	330	290	22
250	10	140	400	355	24

※The list is for the dimensions of JIS10K.

※Other flanges can be responded.

※Up to 500A can be fabricated.



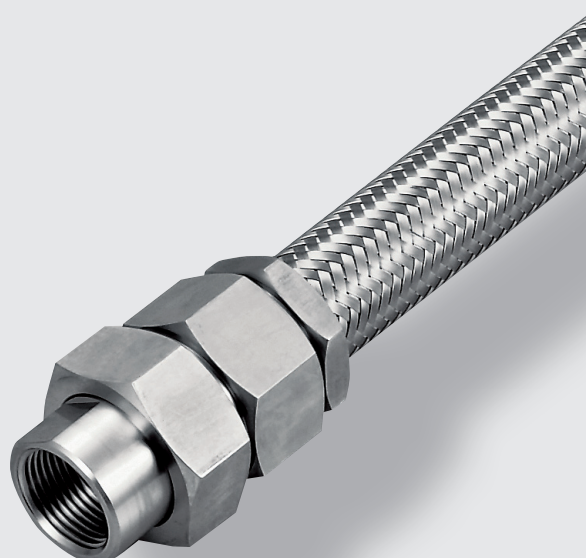
Unwelded Male loose screw (Type HUM joint)

RX-31



Unwelded Female loose screw (Type HUF joint)

RX-32



Type SM joint + Quick coupling

RX-55



Type SM joint + Lever coupling

RX-66



※For the joint type and material, please consult us.

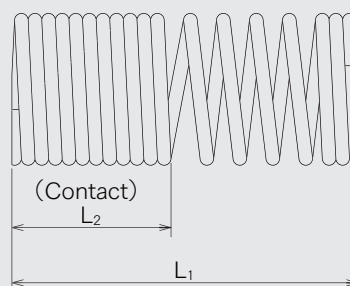
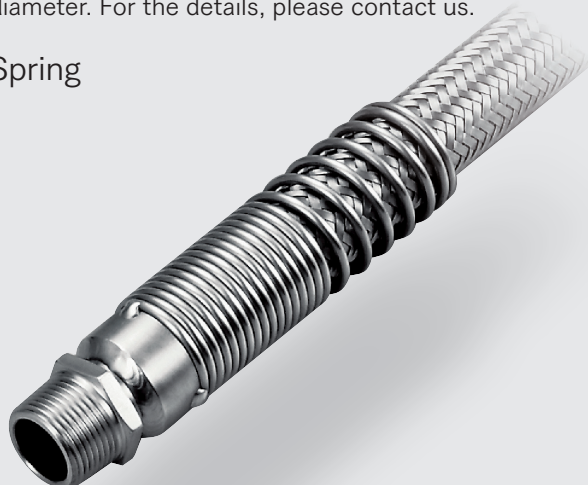
※For the joint type and material, please consult us.

Accessories

■ External protective parts

These parts are designed to protect tubes from local bending and external factors. The parts include springs, helical tubes and hale. These parts may not be applied to tubes depending on the diameter. For the details, please contact us.

Spring



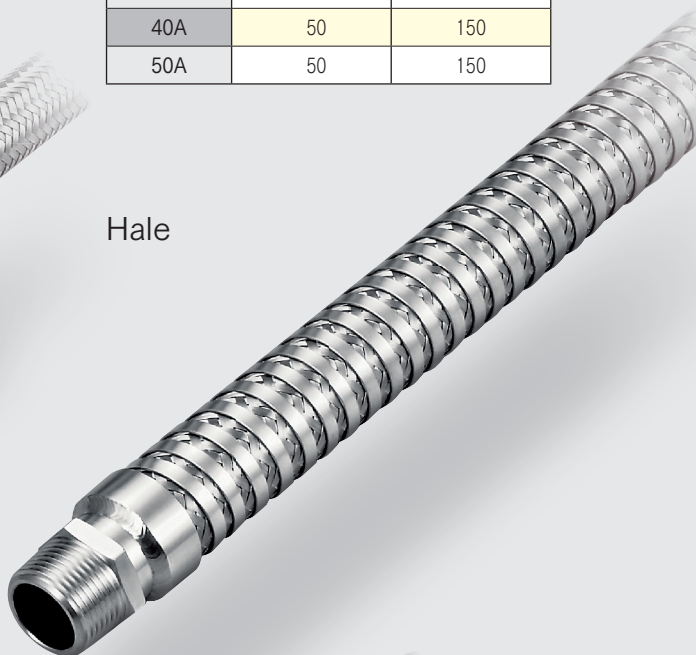
■ Standard dimensions

Nominal diameter	L ₂	L ₁
8A	30	100
10A	30	100
15A	30	100
20A	50	150
25A	50	150
32A	50	150
40A	50	150
50A	50	150

Helical tube



Hale



■ Heat-shrinkable rubber

Flexible hoses can be closely coated with the cylindrical rubber tubes to prevent ingress of water and moisture.



Vibration absorber

■ These hoses are used to absorb vibration on piping close to a refrigerator compressor. Mainly, they are installed at the inlet and outlet of refrigerant piping compressor and the opposite side is firmly fixed. Then, vibration transmission to the piping beyond the fixed point can be prevented.

■ Compatible with new refrigerant

■ Standard specifications

Material	Hose, braid SUS304
Tube end	C1220T
Working pressure	Please refer to the list.
Working temperature	100°C
Allowable vibrating amplitude	±200 μm

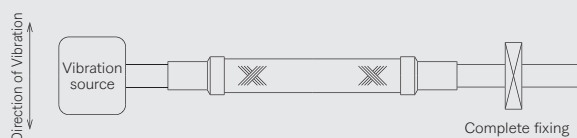
■ JIS B 8607 Refrigerant type and maximum working pressure

Type	Max.working pressure	Examples of refrigerant
1	3.45MPa	R22、R134a、R404A、R407C、R507A etc.
2	4.30MPa	R410A、R32
3	4.80MPa	Refrigerant which is over 4.30MPa and less than 4.80MPa

Installation Method

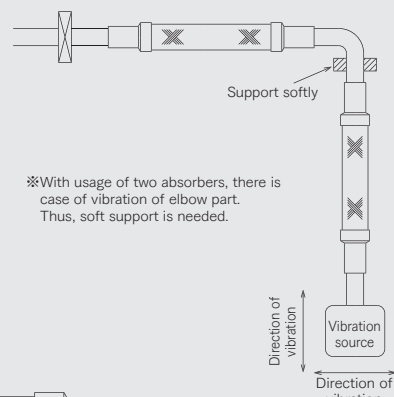
Usage of one absorber

Please install an absorber at right angle to the direction of vibration.

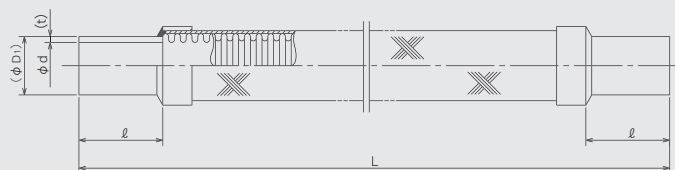


Usage of two absorbers

When vibration is not in one direction, it is effective to use two absorbers together with 90° elbow part.



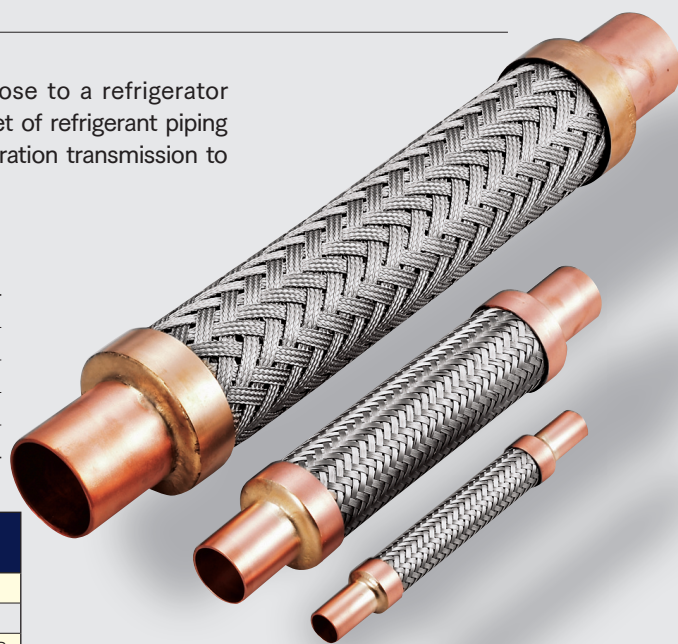
Standard dimensions



F-No.	Connecting pipe	Tube end				Overall length	Max.working pressure (MPa)
	B	d	(t)	(D ₁)	ℓ	L	
F-3	1/4"	6.46	1.57	9.6	13	191	4.8
F-5	3/8"	9.63	1.585	12.8	16	210	4.8
F-7	1/2"	12.81	1.595	16.0	19	229	4.8
F-9	5/8"	15.99	1.555	19.1	22.5	248	4.8
F-11	3/4"	19.16	1.57	22.3	26	255	4.8
F-13	3/4"	19.16	1.57	22.3	29	287	4.8
F-15	7/8"	22.33	1.585	25.5	32	293	4.3
F-16	1"	25.53	1.835	29.2	35	311	4.3
F-17	1·1/8"	28.64	2.08	32.8	38	330	4.3
F-18	1·1/4"	31.88	2.36	36.6	40	351	4.3
F-19	1·3/4"	34.99	2.505	40.0	42	376	4.3

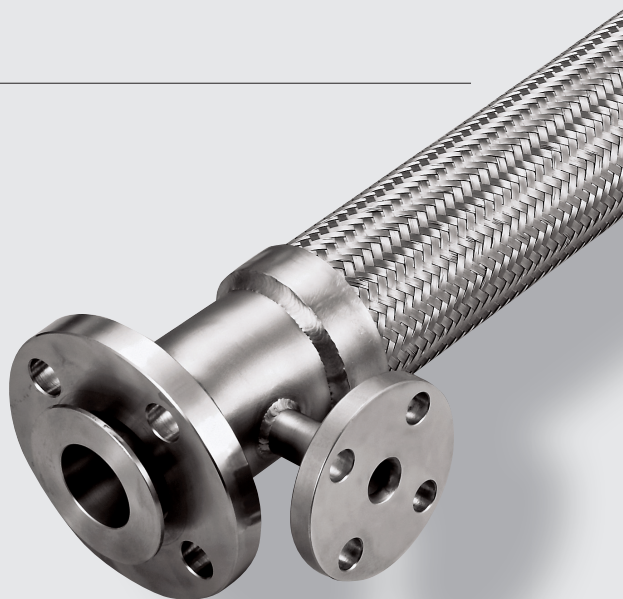
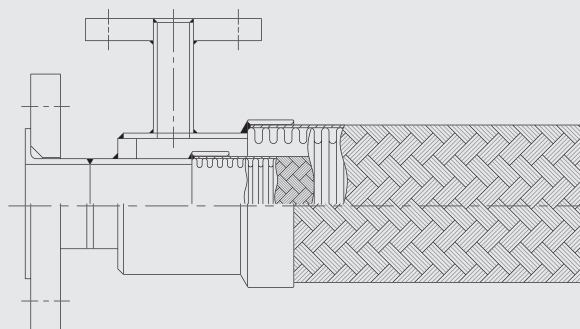
※For other sizes, please consult us.

※Rubber coating is possible. Please refer to P.24.



Jacket type

- 2-layer flexible hose consisting of an inner tube and an outer tube between which a heating medium or steam can be fed to heat a high-viscosity fluid, such as heavy oil and asphalt, so that the fluid will not be solidified by lowered temperature during transfer. Both semi-jacket type and full-jacket type can be fabricated.



For marine use (NK, etc.)

- Classification societies in various countries determine the acceptability of ships and give approval to the ships. According to the international rules, each ship owner shall receive approval of any of the classification societies to secure the safety of human life and property at sea and to prevent marine pollution. The object of approval is equipment related directly to navigation of ship, and the flexible hoses for fuel, lubricant and cooling water are included in the equipment. Our company has supplied flexible hoses approved by the classification societies in various countries to users for many years. (Classification societies from which we have received type approval: ABS, BV, CCS, CR, DNV GL, KR, LR, NK and RINA)



Flexible hoses for tank trucks

- These flexible hoses are connected to tank trucks to load and unload fluids. They are applicable to a wide range of fluids in tanks, including chemicals, hazardous substances, liquid nitrogen and liquid oxygen.



Guide to order flexible hose

		Example of entry		Entry field	
Nominal diameter (A)		25			
Overall length (mm)		1000			
Joint model	Upstream side	JIS20k-25RF(loose)			
	Downstream side	NPT1, externally threaded,Fixed			
Quantity (pieces)		5			
		Internal	External	Internal	External
Pressure (MPa)		1.5	—		
Temperature (°C)		100	—		
Fluid		Nitrogen gas	Atmosphere		
Repeated displacement		☒ Will occur ☐ Will not occur		☐ Will occur	☐ Will not occur
Vibration		☐ Will occur ☒ Will not occur		☐ Will occur	☐ Will not occur
Installation condition※1		Straight			
Life cycle (times)		10000			
Constant bending radius (mm)		—			
Repeated bending radius (mm)		—			
Lateral displacement (mm)		50			
Frequency (Hz)/amplitude (mm)		/			
Material	hose	SUS304			
	Braid	SUS304			
	Joint 1 on upstream side	SUS304(pipe)			
	Joint 2 on upstream side	SUSF304			
	Joint 1 on downstream side	SUS304			
	Joint 2 on downstream side	—			
	Certificates for materials	☒ Required ☐ Not required		☐ Required	☐ Not required
Applicable standards, laws and regulations		High Pressure Gas Safety Act			
Additional inspections		☒ Dye penetrant test (PT) ☐ Radiographic test (RT)		☐ Dye penetrant test (PT)	☐ Radiographic test (RT)
Other requirements		④ Fit a spring for reinforcing the root. Your standard length is acceptable. ④ Fit a nameplate showing the serial number and manufacturing date.			

※In inapplicable fields, enter -.

※1:For the installation condition, see also pages 95 ~ 97 of the catalog.