

Stainless Steel Pipe Fittings



Fittings/Ball Valves/Needle Valves for Stainless Steel Pipes

–Thread Conversion (PT–NPT) Type–

CAD Data Folder Name: Joints

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Stainless Steel Pipe Fittings -Plug- **SKPG**

Select D dimension same as that of stainless steel pipe fitting. **M** SUS316

Part Number	D	Opposite Side Nut H	Unit Price Qty. 1~9	Qty. 10~
4	13	1,200	910	
6	14	1,000	720	
6.35 (1/4 Inch)	14.29	1,000	720	
8	17	1,040	760	
9.53 (3/8 Inch)	17.46	1,040	760	
10	19	1,100	820	
12	22	1,460	1,160	
12.7 (1/2 Inch)	22.23	1,460	1,160	

Stainless Steel Pipe Fittings -Ferrule Pack- **SKFP**

Front Ferrule Back Ferrule

*Front and back ferrules come in a set of one each. **M** SUS316

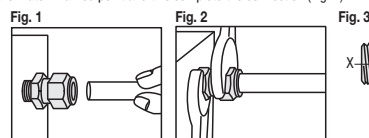
Part Number	D	Unit Price 1~9 Pkgs.~	10 Pkgs.~
4	620	390	
6	620	390	
6.35 (1/4 inch)	620	390	
8	620	390	
9.53 (3/8 inch)	620	390	
10	650	410	
12	870	550	
12.7 (1/2 inch)	870	550	

Tightening procedure of joint portion

- (1) With a nut attached, insert the pipe through the nut hole all the way into the fitting. (Fig.1). In that case, pipe end should touch the body at B (see components figure).
- (2) Tighten the nut until it cannot be turned with fingers, then provide a match mark on the body and nut.
- (3) Holding the body with a wrench, give the nut appropriate number of turns beyond the match marked point and this complete the connection (Fig. 2).

Tightening beyond Match Mark.

D: Pipe Outer Dia.	No. of turning times beyond Match Mark
4	3/4 Turn
6, 6.35 (1/4 Inch), 8, 9.53 (3/8 Inch), 10, 12, 12.7 (1/2 Inch)	1-1/4 Turn

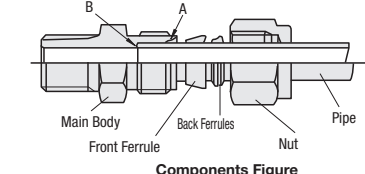


[Disconnection · Reconnection]

To disconnect the pipe, provide a match mark at the fully tightened position of the nut with a marker as shown in Fig.3, and then remove the nut. To reconnect, tighten the nut slightly further (Y) beyond match marked position (X–X1). By repeating further tightening by 15 degrees at each time, at least 25 times of disconnection and reconnection is possible without impairing the function.

Joint Portion Structure · Applicable Pipe Specification

A stainless steel pipe fitting is composed of a body, a front ferrule, a back ferrule and a nut. Operating temperature range of Stainless Steel Pipe Fitting is –196–600°C.



Allowable Operating Pressure by Thickness of Stainless Steel Pipe (MPa)

Pipe Outer Dia. (mm)	0.8	1.0	1.2	1.5	2.0	2.5
4	56.1	71.9	—	—	—	—
6	35.9	46.1	56.6	72.6	—	—
8	26.4	33.6	41.1	53.0	—	—
10	20.8	26.4	32.2	41.2	—	—
12	17.2	21.8	26.5	33.8	46.7	—
16	—	—	19.5	24.8	33.8	43.4

Stainless Steel Pipe Fittings -Reducer- **SKRD**

M SUS316

Part Number	D	D1	L	L1	E	E1	F	ℓ	Opposite Side Body h	Nut H	Unit Price Qty. 1~9	Qty. 10~
4	6	38.8	16.5	2.7	4.0	13.9	32.0	12	13	1,530	1,220	
6	4	38.3	15.0	4.8	2.5	15.4	31.8	14	14	1,610	1,300	
8	8	41.7	17.2	4.8	6.4	15.4	34.2	14	14	1,340	1,040	
10	10	42.5	18.0	4.8	8.0	15.4	35.0	14	14	1,340	1,040	
6.35 (1/4 Inch)	9.53 (3/8 Inch)	40.8	18.0	4.8	7.1	15.4	33.3	12.7	14.29	1,340	1,000	
12.7 (1/2 Inch)	12.7 (1/2 Inch)	46.5	23.5	4.8	9.9	15.4	38.0	14.29	14.29	1,600	1,290	
8	4	40.7	15.0	6.4	2.5	16.3	33.2	17	17	1,470	1,160	
6	6	42.2	16.5	6.4	4.0	16.3	34.7	17	17	1,640	1,330	
10	10	43.7	18.0	6.4	8.0	16.3	36.2	17	17	1,490	1,190	
12	12	48.2	23.5	6.4	9.5	16.3	41.7	17	17	1,640	1,330	
9.53 (3/8 Inch)	6.35 (1/4 Inch)	41.5	16.5	7.1	4.8	17.0	34.0	15.88	17.46	1,640	1,390	
12.7 (1/2 Inch)	12.7 (1/2 Inch)	48.5	23.5	7.1	9.9	17.0	41.0	15.88	17.46	1,850	1,520	
6	6	44.3	16.5	7.9	4.0	17.3	36.5	19	19	1,790	1,470	
8	8	44.2	17.2	7.9	6.4	17.3	36.4	19	19	1,790	1,470	
10	10	51.3	23.5	7.9	9.5	17.3	43.5	19	19	1,850	1,520	
12.7 (1/2 Inch)	6.35 (1/4 Inch)	45.8	16.5	10.4	4.8	23.0	35.5	20.64	22.23	2,530	2,160	
9.53 (3/8 Inch)	9.53 (3/8 Inch)	47.3	18.0	10.4	7.1	23.0	37.0	20.64	22.23	2,210	1,860	

*L and F are dimensions for hand clamping.

Order Example

Part Number – D1

SKPG6 SKRD6.35 – 9.53

Days to Ship

1 Day Next day shipping P.91

*Same day shipping is available by request for orders received before 5pm.

Stainless Steel Pipe Fittings -Nipple- **SKNP**

M SUS316

Stainless Steel Pipe Fittings -Adapter- **SKAD**

M SUS316

Stainless Steel Pipe Fittings -Coupling- **SKKP**

M SUS316

Ball Valves for Stainless Steel Pipes **SKBF** (Standard Type) **SKBFR** (Oil Free)

(SKBFR only)

*Bottom tap is not attached to SKBF type.

Part Number	D	L	L1	E	T	T1	t	W	W1	F	B	Opp. Side Nut H	Mass (g)	Unit Price Qty. 1~9	Qty. 10~
6	73	58	4.8	36.5	10.5	10.5	45	28	15.4	19	14	180	7,530	7,150	
8	75	60	4.8	36.5	10.5	10.5	45	28	16.3	19	17	190	7,920	7,540	
10	85.4	69.8	7.1	41.7	13	13	54	33	17.3	24	19	270	10,310	9,930	
12	96.4	76	10.0	51.5	17	15	70	44	22.9	30	22	460	12,890	11,900	

Part Number		L	L ₁	E	T	T ₁	t	W	W ₁	F	B	Opp. Side Nut H	M (Coarse)	P	P ₁	Mass (g)	Unit Price Qty. 1~9	Qty. 10~
Type	D																	
SKBFR (Oil Free)	6.35 (1/4 Inch)	73	58	4.8	37	10.5	10.5	45	28	15.4	21	14.28	M3 Depth 5	15	15	180	9,270	8,890
	9.53 (3/8 Inch)	85	70	7.1	42.2	13	13	54	33	17	24	17.46		18	18	260	12,180	11,800
	12.7 (1/2 Inch)	97	76	10	52	17	15	70	44	23	30	22.22		24	22	470	18,590	18,210

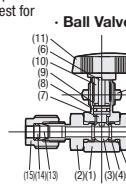
*Refer to P.1653 for tightening procedure and structure of joint portion · applicable pipe specification.

Features of Ball Valves

- Compact and light Valves for Stainless Steel Pipes.
- SKBFR is Oil Free specification, which is the best for high precision gas piping.

Condition of Use

Applicable Fluid Water, Air, Various Kinds of Gas
Operating Temp. Range –10–80°C
Max. Operating Pressure SKBF 4.9MPa (50kgf/cm²) or less
SKBFR (Oil Free) 0.98MPa (10kgf/cm²) or less



Name of Parts, Material List

Part No.	Name of Parts	M	Pc.
(1)	Body	SCS14	1
(2)	Caps	SUS316	2
(3)	Ball	SUS316	1
(4)	Shields	Fluoro Resin (P-PTFE)	2
(5)	O-Rings	Fluoro Rubber (FKM)	2
(6)	Stem	SUS316	1
(7)	Washer	Fluoro Resin (PTFE)	1
(8)	O-Ring	Fluoro Rubber	1
(9)	Washer	Fluoro Resin (PCTFE)	1
(10)	Ground	SUS304	1
(11)	Handle	(SKBF) Polycarbonate (SKBFR) Nylon, C3604	1
(12)	Nut	SUS304	1
(13)	Front Ferrule	SUS316	2
(14)	Back Ferrule	SUS316	2
(15)	Nuts	SUS316	2

Features of Needle Valves

- By turning the handle, it enables to fine adjust the flow rate and stop it completely.

Condition of Use

Applicable Fluid Water · Air · Various Kinds of Gas
Operating Temp. Range –20–230°C
Max. Operating Pressure 20.6MPa (210kgf/cm²) or less

Part Number	T1 (NPT)	T2 (PT)	H	L	E	Unit Price Qty. 1~9	Qty. 10~
11	1/8	1/8	11.11	25.5	4.8	1,020	820
22	1/4	1/4	14.28	35.5	7.1	1,070	860
33	3/8	3/8	17.46	36.5	9.6	1,550	1,240
44	1/2	1/2	22.22	47.0	12.0	2,130	1,710
66	3/4	3/4	26.98	47.0	15.8	2,810	2,390

Part Number	T1 (NPT)	T2 (PT)	H	L	E	Unit Price Qty. 1~9	Qty. 10~
11	1/8	1/8	14.28	28.0	4.8	1,200	960
22	1/4	1/4	19.05	35.5	7.1	1,610	1,370
33	3/8	3/8	22.22	38.5	9.6	1,990	1,690
44	1/2	1/2	26.98	49.5	12.0	2,900	2,460
66	3/4	3/4	33.33	51.5	15.8	5,130	4,620

Part Number	T1 (NPT)	T2 (PT)	H	L	Unit Price Qty. 1~9	Qty. 10~
11	1/8	1/8	14.28	20.5	1,500	1,200
22	1/4	1/4	19.05	30.0	1,830	1,560
33	3/8	3/8	22.22	33.0	2,340	1,990
44	1/2	1/2	26.98	39.5	3,300	2,810
66	3/4	3/4	33.33	41.0	3,850	3,460

Condition of Use
Permissible Fluid Water (Pure Water), Air, Gas and Lubricant
Operating Temperature Range –196–360°C
Normal Operating Pressure 20.6MPa (210kgf/cm²) or less

Needle Valves for Stainless Steel Pipes **SKVBN**

Part Number	D	L	L1	T	T1	T2	t	W	F	B	Opp. Side Nut H	Mass (g)	Unit Price Qty. 1~9	Qty. 10~
6	59.4	44.4	60	12	3	10.5	38	15.4	17.5	14	260	8,380	8,000	
8	59.4	44.4	60	12	3	10.5	38	16.3	17.5	17	265	8,780	8,400	
10	66.4	50.8	71	14.5	4	14.5	48	17.3	20.6	19	270	11,580	10,980	
12	71.2	50.8	71	14.5	4	14.5	48	22.9	20.6	22	280	12,140	11,500	

Order Example

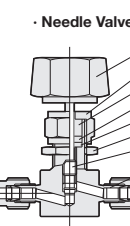
Part Number

SKNP11 SKBF8 SKBFR6.35 SKVBN10

Days to Ship

1 Day Next day shipping P.91

*Same day shipping is available by request for orders received before 5pm.



Part No.	Name of Parts	M	Pc.
(1)	Body	SUS316	1
(2)	Stem	SUS316	1
(3)	Packing Ring	SUS316	1
(4)	Packing	Fluoro Resin (PTFE)	1
(5)	Ground	SUS316	1
(6)	Nut	SUS316	1
(7)	Lock Nut	SUS316	1
(8)	Handle	Phenol Resin	1