

Stainless Steel Pipe Fittings



Fittings/Ball Valves/Needle Valves for Stainless Steel Pipes

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

RoHS Select D dimension same as that of stainless steel pipe fitting. 316 Stainless Steel

Part Number Type	D	Opposite Side Nut H	Unit Price	
			Qty. 1-9	Qty. 10~
SKPG	4	13		
	6	14		
	6.35 (1/4 Inch)	14.29		
	8	17		
	9.53 (3/8 Inch)	17.46		
	10	19		
12	22			
12.7 (1/2 Inch)	22.23			

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

RoHS 316 Stainless Steel

Part Number Type	D	D1	L	L1	E	E1	F	ℓ	Opposite Side		Unit Price	
									Body h	Nut H	Qty. 1-9	Qty. 10~
SKRD	4	6	38.8	16.5	2.7	4.0	13.9	32.0	12	13		
		4	39.3	15.0	4.8	2.5	15.4	31.8	14	14		
		8	41.7	17.2	4.8	6.4	15.4	34.2	14	14		
	6.35 (1/4 Inch)	10	42.5	18.0	4.8	8.0	15.4	35.0	14	14		
		6.35 (3/8 Inch)	40.8	18.0	4.8	7.1	15.4	33.3	12.7	14.29		
		12.7 (1/2 Inch)	46.5	23.5	4.8	9.9	15.4	39.0	14.29	14.29		
	8	4	40.7	15.0	6.4	2.5	16.3	33.2	17	17		
		6	42.2	16.5	6.4	4.0	16.3	34.7	17	17		
		10	43.7	18.0	6.4	8.0	16.3	36.2	17	17		
	9.53 (3/8 Inch)	12	49.2	23.5	6.4	9.5	16.3	41.7	17	17		
		6.35 (1/4 Inch)	41.5	16.5	7.1	4.8	17.0	34.0	15.88	17.46		
		12.7 (1/2 Inch)	48.5	23.5	7.1	9.9	17.0	41.0	15.88	17.46		
10	6	44.3	16.5	7.9	4.0	17.3	36.5	19	19			
	8	44.2	17.2	7.9	6.4	17.3	36.4	19	19			
	12	51.3	23.5	7.9	9.5	17.3	43.5	19	19			
12.7 (1/2 Inch)	6.35 (3/8 Inch)	45.8	16.5	10.4	4.8	23.0	35.5	20.64	22.23			
	9.53 (3/8 Inch)	47.3	18.0	10.4	7.1	23.0	37.0	20.64	22.23			

*L and F are dimensions for hand clamping.

Order Example Part Number - D1
SKPG6 - 4
SKRD6.35 - 9.53

Days to Ship

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

RoHS *Front and back ferrules come in a set of one each. 316 Stainless Steel

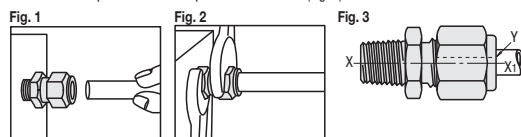
Part Number Type	D	Unit Price	
		1-9 Pkgs.	10 Pkgs.~
SKFP	4		
	6		
	6.35 (1/4 inch)		
	8		
	9.53 (3/8 inch)		
	10		
12			
12.7 (1/2 inch)			

Tightening procedure of joint portion

- 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).
- Tighten the nut until it cannot be turned with fingers, then provide a match mark on the body and nut.
- 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

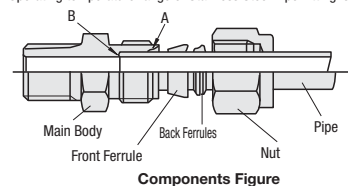


[Disconnection · Reconnection]

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.



[Applicable Pipe Specification]

- Applicable Type of Pipe: Stainless Steel Pipe
- Stainless steel pipes for piping (JIS G3459) subject to 304 Stainless Steel and 316 Stainless Steel for stainless steel pipes
- Outer Diameter Tolerance ±0.1mm
- Pipe Surface Hardness HV190 or less (HRB90 or Less)
- Thickness Tolerance ±10%
- Outside Ellipse (Max.O.D. - Min.O.D.) 0.1mm or Less
- Pipe Outer Diameter and Minimum Thickness (mm)

Pipe Outer Dia. (mm)	04	06	06.35 (1/4 Inch)	08	09.53 (3/8 Inch)	10	10.12	12.7 (1/2 Inch)
Min. Thickness	0.8	0.71	1.0	0.89	1.0	1.2	1.0	

*Surface Condition of Pipes: No harmful defect, such as rough surface, etc.

Pipe Outer Dia. (mm)	Thickness (mm)			
	0.89	1.0	1.25	1.5
6.35 (1/4 Inch)	35.5	40.4	52.0	63.8
9.53 (3/8 Inch)	23.1	26.1	33.3	40.7
12.7 (1/2 Inch)	18.1	20.5	26	31.7

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

Pipe Outer Dia. (mm)	Thickness (mm)				
	0.8	1.0	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

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

RoHS 316 Stainless Steel

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

RoHS 316 Stainless Steel

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

RoHS 316 Stainless Steel

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

RoHS *Bottom tap is not attached to SKBF type.

Part Number Type	D	L	L1	E	T	T1	t	W	W1	F	B	Opp. Side Nut H	Mass (g)	Unit Price	
														Qty. 1-9	Qty. 10~
SKBF	6	73	58	4.8	36.5	10.5	10.5	45	28	15.4	19	14	180		
	8	75	60	4.8	36.5	10.5	10.5	45	28	16.3	19	17	190		
	10	85.4	69.8	7.1	41.7	13	13	54	33	17.3	24	19	270		
12	96.4	76	10.0	51.5	17	15	70	44	22.9	30	22	470			

Part Number Type	D	L	L1	E	T	T1	t	W	W1	F	B	Opp. Side Nut H	M (Coarse)	P	P1	Mass (g)	Unit Price	
																	Qty. 1-9	Qty. 10~
SKBFR (Oil Free)	6.35 (1/4 Inch)	73	58	4.8	37	10.5	10.5	45	28	15.4	21	14.28		15	15	180		
	9.53 (3/8 Inch)	85	70	7.1	42.2	13	13	54	33	17	24	17.46	MC Depth 5	18	18	260		
	12.7 (1/2 Inch)	97	76	10	52	17	15	70	44	23	30	22.22		24	22	470		

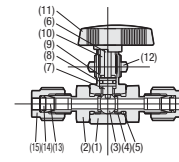
*Refer to P.1653 for tightening procedure and structure of joint portion · applicable pipe specification.

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.

Name of Parts, Material List

Ball Valve



Part No.	Name of Parts	Material	Pc.
(1)	Body	JIS-SC14	1
(2)	Caps	316 Stainless Steel	2
(3)	Ball	316 Stainless Steel	1
(4)	Sheets	Fluorine Resin (RF-PTFE)	2
(5)	O-Rings	Fluoro Rubber (FKM)	2
(6)	Stem	316 Stainless Steel	1
(7)	Washer	Fluoro Resin (PTFE)	1
(8)	O-Ring	Fluoro Rubber	1
(9)	Washer	Fluoro Resin (PTFE)	1
(10)	Ground	304 Stainless Steel	1
(11)	Handle	(SKBF) Polycarbonate (SKBFR) Nylon (C2014 Brass (JIS)	1
(12)	Nut	304 Stainless Steel	1
(13)	Front Ferrule	316 Stainless Steel	2
(14)	Back Ferrule	316 Stainless Steel	2

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

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 Type	No.	T1 (NPT)	T2 (PT)	H	L	E	Unit Price	
							Qty. 1-9	Qty. 10~
SKNP	11	1/8	1/8	11.11	25.5	4.8		
	22	1/4	1/4	14.28	35.5	7.1		
	33	3/8	3/8	17.46	36.5	9.6		
	44	1/2	1/2	22.22	47.0	12.0		
	66	3/4	3/4	26.98	47.0	15.8		

Part Number Type	No.	T1 (NPT)	T2 (PT)	H	L	E	Unit Price	
							Qty. 1-9	Qty. 10~
SKAD	11	1/8	1/8	14.28	28.0	4.8		
	22	1/4	1/4	19.05	35.5	7.1		
	33	3/8	3/8	22.22	38.5	9.6		
	44	1/2	1/2	26.98	49.5	12.0		
	66	3/4	3/4	33.33	51.5	15.8		

Part Number Type	No.	T1 (NPT)	T2 (PT)	H	L	E	Unit Price	
							Qty. 1-9	Qty. 10~
SKKP	11	1/8	1/8	14.28	20.5			
	22	1/4	1/4	19.05	30.0			
	33	3/8	3/8	22.22	33.0			
	44	1/2	1/2	26.98	39.5			
	66	3/4	3/4	33.33	41.0			

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**

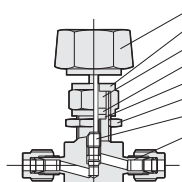
RoHS

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

Order Example Part Number
SKNP11
SKBF8
SKBFR6.35
SKVBN10

Days to Ship

Needle Valve



Part No.	Name of Parts	Material	Pc.
(1)	Body	316 Stainless Steel	1
(2)	Stem	316 Stainless Steel	1
(3)	Packing Ring	316 Stainless Steel	1
(4)	Packing	Fluoro Resin (PTFE)	1
(5)	Ground	316 Stainless Steel	1
(6)	Nut	316 Stainless Steel	1
(7)	Lock Nut	316 Stainless Steel	1
(8)	Handle	Phenol	1