

# Steel Pipes for Hydraulic Piping / Hydraulic Bite-Type Fittings

Connector / Elbow Nipples / Unions / Elbow / Tees

Steel Pipes for Hydraulic Piping **OST**

Material: OST-2 (STPS-2 (JIS B2351))

Part Number	L	t
Type	1 mm Increment	
<b>OST</b>	6	1.0
	8	1.0
	10	1.2
	12	1.5

Part Number Example **OST8 - L250**

**Hydraulic Bite-Type Fittings – Connector**

Type: **KTGS** Material: Body, Nut: 1025 Carbon Steel; Sleeve: STKM Pipe Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Elbow Nipples**

Type: **KTGE** Material: Body, Nut: 1025 Carbon Steel; Sleeve: STKM Pipe Steel Surface Treatment: Trivalent Chromate

No. 6-1, 8-1, 8A-3, 10A-4, 15A-6 Others

RoHS 10

**Hydraulic Bite-Type Fittings – Unions**

Type: **KTGR** Material: Body, Nut: 1025 Carbon Steel; Sleeve: STKM Pipe Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Elbow**

Type: **KTGLB** Material: Body, Nut: 1025 Carbon Steel; Sleeve: STKM Pipe Steel Surface Treatment: Trivalent Chromate

No. 6 No. 8, 10, 12

RoHS 10

**Hydraulic Bite-Type Fittings – Tees**

Type: **KTGTE** Material: Body, Nut: 1025 Carbon Steel; Sleeve: STKM Pipe Steel Surface Treatment: Trivalent Chromate

RoHS 10

Part Number	Applicable Pipe O.D. D	T R (PT)	E	Ref. Dia. G	Tightening by Hand Approx. L	Hex Socket H <sub>1</sub> H	F	ℓ
6-1	6	1/8	4	3.97	34.5	14 14	7	28
6-2	6	1/4	4	6.01	37.5	17 14	7	33
8-1	8	1/8	4	3.97	35.5	17 17	7	29
8-2	8	1/4	6	6.01	37.5	17 17	7	33
10-2	10	1/4	7	6.01	38.5	17 19	7	33
10-3	10	3/8	8	6.35	39.0	19 19	7	34
12-2	12	1/4	7	6.01	38.5	19 22	7	33
6A-2	10.5	1/4	7	6.01	34.5	17 19	7	33
8A-3	13.8	3/8	9	6.35	40	22 24	7.5	37
10A-4	17.3	1/2	12	8.16	44.5	27 32	8	41
15A-6	21.7	3/4	16	9.53	48	32 36	9	45

Use No.6A, 8A, 10A, 15A with the same No. of SUT, STPG, P.3332.  
Sleeves of No.6A, 8A, 10A, 15A is different from those for KTGSL P.3373.  
No. 8, 10 and 12 have approx. 1.4mm protrusion for improving pressure resistance.

Part Number	Applicable Pipe O.D. D	T R (PT)	E	E <sub>1</sub>	Position of Gauge Dia. G	Tightening by Hand Approx. L	L <sub>1</sub>	Wrench Flats h	Hex Square Size H	F	ℓ
6-1	6	1/8	4	4	3.97	30.5	14	14	14	7	20
6-2	6	1/4	4	4.5	6.01	33.5	17	17	14	7	23
8-1	8	1/8	6	4	3.97	33.5	16	17	17	7	23
8-2	8	1/4	6	6.5	6.01	33.5	18	17	17	7	23
10-2	10	1/4	8	7.5	6.01	34.5	19	17	19	7	23
10-3	10	3/8	8	8.5	6.35	35.5	19.5	19	19	7	24
12-2	12	1/4	10	7.5	6.01	35.5	20	19	22	7	24
6A-2	10.5	1/4	8	7	6.01	34.5	19	17	19	7	23
8A-3	13.8	3/8	11	9	6.35	40	22.5	22	24	7.5	28
10A-4	17.3	1/2	14	12	8.16	45	30	27	32	8	32
15A-6	21.7	3/4	18	16	9.53	47	32.5	32	36	9	34

Part Number	Applicable Pipe Outer Diameter D	E	Hex Socket H <sub>1</sub> H	F	ℓ	Tightening by Hand Approx. L
6	6	4	14 14	7	30	51
8	8	6	17 17	7	31	52
10	10	8	17 19	7	31	54
12	12	10	19 22	7	31	54

Part Number	Applicable Pipe Outer Diameter D	E	Wrench Flats h	Hex Socket H	F	ℓ	Tightening by Hand Approx. L
6	6	4	14	14	7	20	30.5
8	8	6	17	17	7	23	33.5
10	10	8	17	19	7	23	34.5
12	12	10	19	22	7	24	35.5

Part Number	Applicable Pipe O.D. D	E	Wrench Flats h	Hex Socket H	F	ℓ	Tightening by Hand Approx. L
6	6	4	14	14	7	20	30.5
8	8	6	17	17	7	23	33.5
10	10	8	17	19	7	23	34.5
12	12	10	19	22	7	24	35.5

# Bite Hydraulic Pipe Fittings

Reducers / Connector / Sleeve / Nuts

**Hydraulic Bite-Type Fittings – Reducers**

Type: **KTGRE** Material: Body, Nut: 1025 Carbon Steel; Sleeve: Carbon Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Reverse Flow Prevention Union**

Type: **KTGZR** Material: Main Body, Nut: 1025 Carbon Steel or Equivalent; Sleeve: Carbon Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Reverse Flow Prevention Connectors**

Type: **KTGZC** Material: Main Body, Nut: 1025 Carbon Steel or Equivalent; Sleeve: Carbon Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Sleeve**

Type: **KTGSL** Material: Carbon Steel Surface Treatment: Trivalent Chromate

RoHS 10

**Hydraulic Bite-Type Fittings – Nuts**

Type: **KTGNT** Material: 1025 Carbon Steel Surface Treatment: Trivalent Chromate

RoHS 10

## Specifications (KTGZR, KTGZC)

Applicable Pipe Dia.	Max. Operating Pressure	Operating Temperature Range
10, 12 mm	10, 12	3 MPa -20~120°C

## Specifications (Other Than Above)

Applicable Pipe Dia.	Max. Operating Pressure	Operating Temperature Range
8 mm	8	50 MPa -20~250°C
6A	10.5	
10, 12 mm	10, 12	
8A	13.8	
10A	17.3	40 MPa
15A	21.7	

Part Number	Applicable Nominal Dia. of Fitting A <sub>1</sub>	Applicable Pipe O.D. D	E	Hex Socket		F	ℓ	Tightening by Hand Approx. L	
Type	No.			H <sub>1</sub>	H				
<b>KTGRE</b>	8-6	8	6	4	14	14	7	39	49.5
	10-6	10	6	4	14	14	7	40	50.5
	10-8	10	8	6	17	17	7	40	50.5
	12-6	12	6	4	14	14	7	41	51.5
	12-8	12	8	6	17	17	7	41	51.5
	12-10	12	10	8	17	19	7	41	52.5

Part Number	Applicable Pipe O.D. D	Rating Flow ℓ/min	Cracking Pressure Mpa	Hex Socket		F	ℓ	Tightening by Hand Approx. L	
Type	No.			H <sub>1</sub>	H				
<b>KTGZR</b>	10-05	10	18	0.05	24	19	7	49	72
	10-45			0.45					
	12-05	12	18	0.05	24	22	7	51	74
	12-45			0.45					

Feature: Fitting with a built-in reverse flow prevention structure.

Part Number	App. Pipe O.D. D	Rating Flow ℓ/min	Cracking Pressure Mpa	T R(PT)	Position of Gauge Dia. G	Hex Socket H <sub>1</sub> H	F	ℓ	Tightening by Hand Approx. L		
<b>KTGZC</b>	10-05	10	18	0.05	1/4	6.01	24	19	7	53	58.5
	10-45			0.45							
	12-05	12	18	0.05	3/8	6.35	24	22	7	55	60
	12-45			0.45							

Feature: Fitting with a built-in reverse flow prevention structure.

Part Number		A	ℓ
Type	No.		
<b>KTGSL</b>	6	6	14
	8	8	14
	10	10	15
	12	12	15

Part Number		D	T	H Hex Socket	L
Type	No.				
<b>KTGNT</b>	6	7.3	M12 x 1.5	14	15
	8	9.3	M14 x 1.5	17	15
	10	11.3	M16 x 1.5	19	16
	12	13.3	M18 x 1.5	22	16

Part Number Example **KTGS8-1 KTRG6**

## Applicable Pipes

- JIS G 3454 Carbon Steel or Equivalent Pipe for Pressure Service STPG370
- JIS G 3455 Carbon Steel or Equivalent Pipe for High Pressure Service STS370
- JIS G 3456 Carbon Steel or Equivalent Pipe for High Temperature Service STP370
- JIS G 3459 Stainless Steel Pipe for Plumbing 304 Stainless Steel and 316 Stainless Steel
- Japan Fluid Power Association Standard JOHS-102 Accurate Carbon Steel Pipes for Hydraulics OST