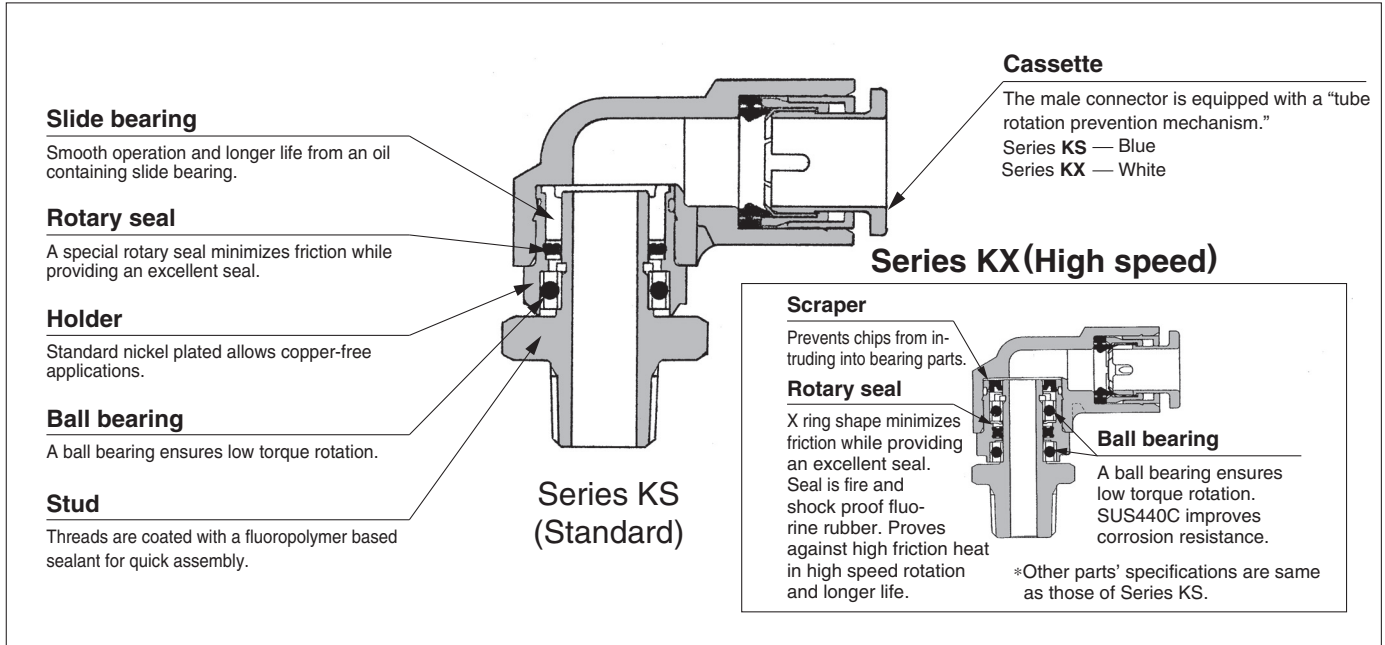


# Rotary One-touch Fittings

## Series *KS/KX*

(Standard)

(High Speed)

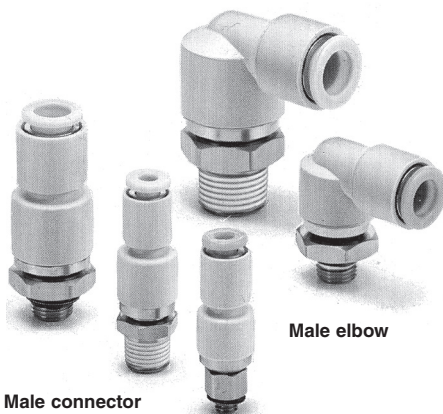


### Low torque rotation style Rotary One-touch fittings

Applicable to use for oscillating and rotating sections in robots.

Brass parts are all electroless nickel plated.

Thread sealant is standard.



### Applicable Tubing

Tube material <sup>(1)</sup>	Nylon, Soft nylon, Polyurethane
Tube O.D.	ø4, ø6, ø8, ø10, ø12

Note1) Be careful about the max. operating pressure for Soft nylon and Polyurethane.

### Specifications

Operating fluid	Air
Max. operating pressure	1.0MPa
Max. operating vacuum pressure	-100kPa
Proof pressure	3.0MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Thread	JIS B0203, JIS B0209

### Rotating Torque/Allowable Number of Rotations

Applicable tube O.D.	ø4	ø6	ø8	ø10	ø12	
Rotating torque (Nm) <sup>(1)</sup>	0.006	0.012	0.014	0.020	0.022	
Allowable number of rotations (rpm)	Series <b>KS</b>	500	500	400	300	250
	Series <b>KX</b>	1500	1200	1200	1000	1000

Note1) Value under pressure 0.5MPa



### Component Materials

Principal element	Series <b>KS</b>	Series <b>KX</b>
Body	PBT	
Stud, Holder, Guide	C3604BD (electroless nickel plated), SUS304	
Chuck, Retainer	Stainless steel (SUS304) <sup>(1)</sup>	
Collet, Release button, Snap ring	Polyacetal	
O ring, Packing	NBR	
Rotary seal	NBR	FPM
Slide bearing	Oil-containing polyacetal	—
Scraper	—	NBR
Ball bearing	Bearing steel	Stainless (SUS440C)
Gasket	Stainless steel (SUS304), NBR	

Note1) Retainer (C) of Series KX: C3604BD (electroless nickel plated)

# Series KS/KX

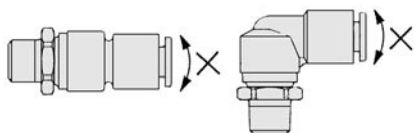
## Series KS/Series KX

Model	Connection thread	Applicable tube O.D. (mm)				
		ø4	ø6	ø8	ø10	ø12
Male connector <b>KSH</b> <b>KXH</b> 	M5	●	●			
	M6	●	●			
	R(PT) 1/8	●	●	●		
	R(PT) 1/4		●	●	●	
	R(PT) 3/8			●	●	●
	R(PT) 1/2				●	●
Male elbow <b>KSL</b> <b>KXL</b> 	M5	●	●			
	M6	●	●			
	R(PT) 1/8	●	●	●		
	R(PT) 1/4		●	●	●	
	R(PT) 3/8			●	●	●
	R(PT) 1/2				●	●

## Precautions

### Caution

① Minimize the load shown below to protect the ball bearing. A flexible polyurethane tube is recommended.



# Rotary One-touch Fittings Series *KS/KX*

## Male connector: KSH (Standard)

<M5, M6>



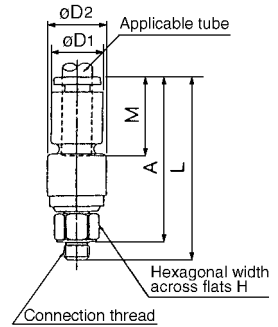
<R(PT)>



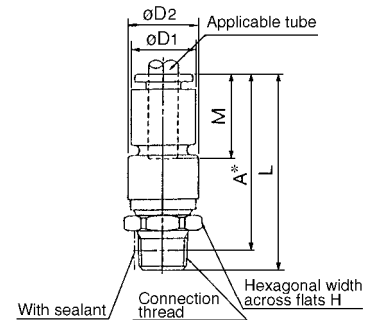
Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	A	M	Min. hole dia.	Effective area (mm <sup>2</sup> )		Weight (g)	
										Nylon	Urethane		
4	M5	KSH04-M5	8	10.4	12	36.5	33	16	2.5	4.0	4.0	9	
	M6	KSH04-M6	8			37						34	14
	1/8	KSH04-01S	12			37.1						34	14
6	M5	KSH06-M5	8	12.8	14	37.5	33.5	17	2.5	4.0	4.0	12	
	M6	KSH06-M6	8			38						34	17
	1/8	KSH06-01S	14			38.6						35.5	17
	1/4	KSH06-02S	14			42						36.5	23
8	1/8	KSH08-01S	8	15.2	17	43.1	40	18.5	6	26.1	18.0	23	
	1/4	KSH08-02S	17			46.5						41	29
	3/8	KSH08-03S	17			46.9						41.5	37
10	1/4	KSH10-02S	8	18.5	22	53.5	48	21	7	36.3	29.5	55	
	3/8	KSH10-03S	22			53.9						48.5	63
	1/2	KSH10-04S	22			56.6						49.5	81
12	3/8	KSH12-03S	8	20.9	24	55.9	50.5	22	8	46.1	16.1	75	
	1/2	KSH12-04S	24			59.1						52	92

\*Reference dimensions after R(PT) thread installation.

<M5, M6>



<R(PT)>



## Male connector: KXH (High speed)

<M5, M6>



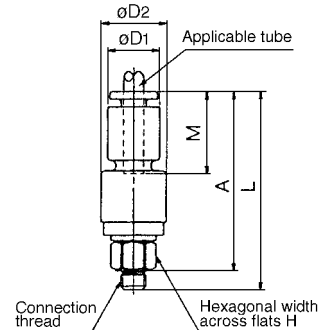
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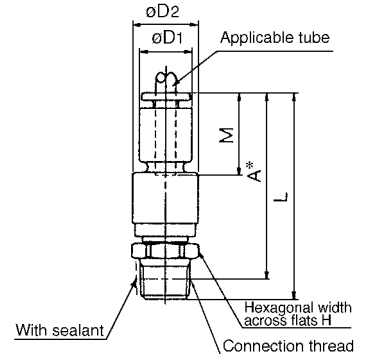
Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	A	M	Min. hole dia.	Effective area (mm <sup>2</sup> )		Weight (g)	
										Nylon	Urethane		
4	M5	KXH04-M5	8	10.4	13	38.5	35	16	2.5	4.0	4.0	11	
	M6	KXH04-M6	8			39						36	16
	1/8	KXH04-01S	12			39.1						36	16
6	M5	KXH06-M5	8	12.8	15	39.5	36	17	2.5	4.0	4.0	15	
	M6	KXH06-M6	8			40						36	15
	1/8	KXH06-01S	14			41.1						38	20
	1/4	KXH06-02S	14			44.5						39	26
8	1/8	KXH08-01S	8	15.2	18	45.1	42	18.5	6	26.1	18.0	28	
	1/4	KXH08-02S	17			48.5						43	34
	3/8	KXH08-03S	17			48.9						44	42
10	1/4	KXH10-02S	8	18.5	23.5	57.5	52	21	7	36.3	29.5	68	
	3/8	KXH10-03S	22			57.9						52	76
	1/2	KXH10-04S	22			61.1						53	94
12	3/8	KXH12-03S	8	20.9	26	58.9	54	22	8	46.1	46.1	88	
	1/2	KXH12-04S	24			62.1						55	105

\*Reference dimensions after R(PT) thread installation.

<M5, M6>



<R(PT)>



# Series KS/KX

## Male elbow: KSL (Standard)

<M5, M6>

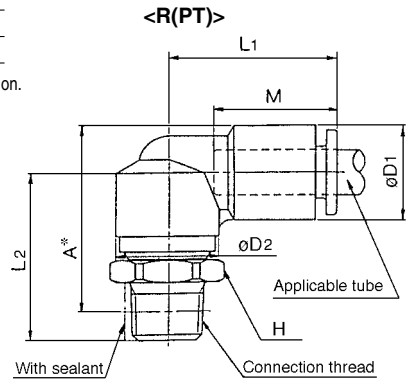
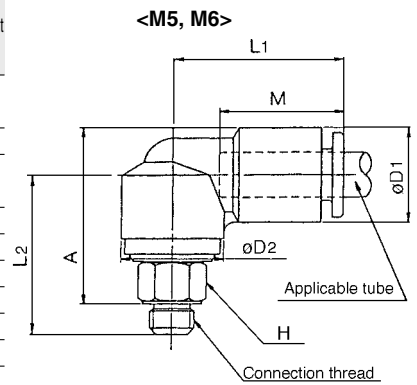


<R(PT)>



Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2		A	M	Min. hole dia.	Effective area (mm <sup>2</sup> )		Weight (g)
							Nylon	Urethane						
4	M5	KSL04-M5	8	10.4	12	21	20.5	22	16	2.5	3.5	3.5	9	
	M6	KSL04-M6	8				21	23.5					14	
	1/8	KSL04-01S	12				21.1	23.5					14	
6	M5	KSL06-M5	8	12.8	14	23	21	23.5	17	2.5	3.5	3.5	12	
	M6	KSL06-M6	8				21.5	24					12	
	1/8	KSL06-01S	14				22.1	25.5					17	
	1/4	KSL06-02S	14				25.5	26.5					23	
	1/8	KSL08-01S	17				25.6	30					23	
8	1/4	KSL08-02S	17	15.2	17	26	29	31	18.5	6	21.6	14.9	29	
	3/8	KSL08-03S	17				29.9	32					38	
	1/4	KSL10-02S	22				33.5	37.5					56	
10	3/8	KSL10-03S	22	18.5	22	31.5	33.9	38	21	7	30.5	25.0	64	
	1/2	KSL10-04S	22				37.1	39.5					82	
	3/8	KSL12-03S	24				35.4	40.5					76	
12	1/2	KSL12-04S	24	20.9	24	34	38.6	42	22	8	35.1	35.1	93	

\*Reference dimensions after R(PT) thread installation.



## Male elbow: KXL (High speed)

<M5, M6>



<R(PT)>



Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2		A	M	Min. hole dia.	Effective area (mm <sup>2</sup> )		Weight (g)
							Nylon	Urethane						
4	M5	KXL04-M5	8	10.4	13	22	22.5	24	16	2.5	3.5	3.5	11	
	M6	KXL04-M6	8				23	25					16	
	1/8	KXL04-01S	12				23.1	25					16	
6	M5	KXL06-M5	8	12.8	15	24	23.5	26	17	2.5	3.5	3.5	15	
	M6	KXL06-M6	8				24	28					20	
	1/8	KXL06-01S	14				24.1	28					26	
	1/4	KXL06-02S	14				27.5	29					26	
	1/8	KXL08-01S	17				28.1	32					28	
8	1/4	KXL08-02S	17	15.2	18	27	31.5	33	18.5	6	21.6	14.9	34	
	3/8	KXL08-03S	17				31.9	34					43	
	1/4	KXL10-02S	22				37.5	42					69	
10	3/8	KXL10-03S	22	18.5	23.5	32	37.9	42	21	7	30.5	25.0	77	
	1/2	KXL10-04S	22				41.1	43					95	
	3/8	KXL12-03S	24				38.9	44					89	
12	1/2	KXL12-04S	24	20.9	26	35	42.1	45	22	8	35.1	35.1	106	

\*Reference dimensions after R(PT) thread installation.

