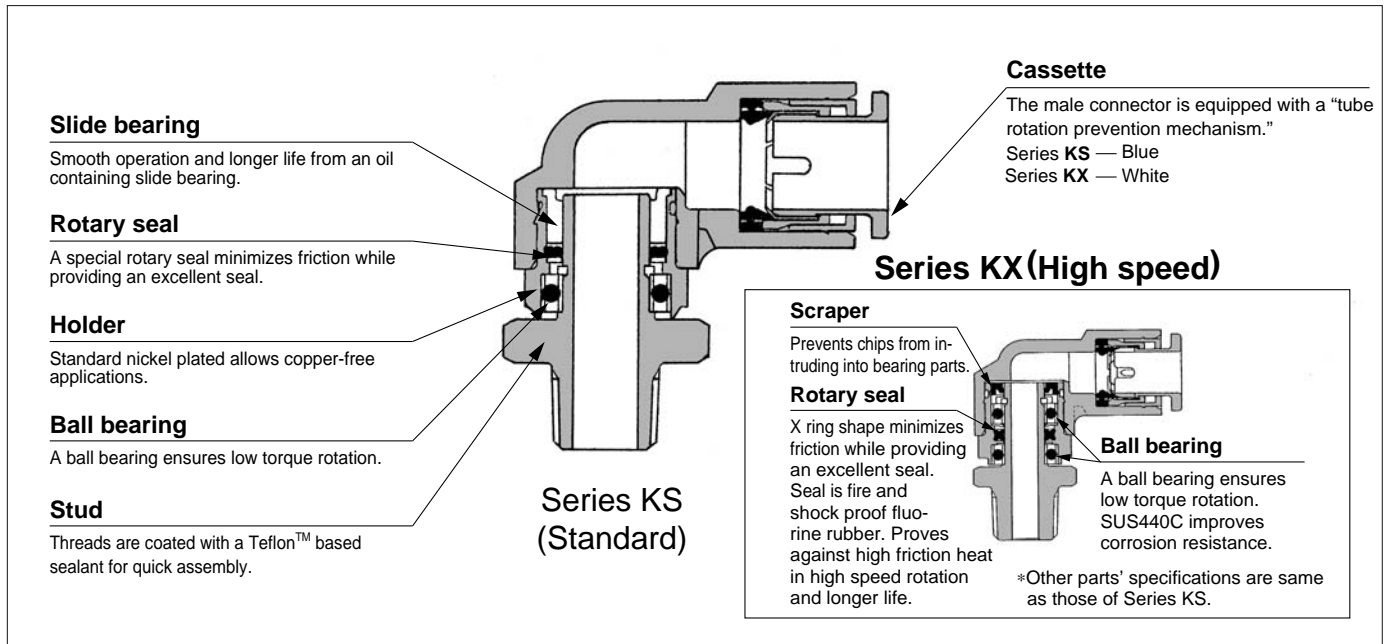


Rotary One-touch Fittings

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 ⁽¹⁾	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) ⁽¹⁾	0.006	0.012	0.014	0.020	0.022	
Allowable number of rotations (rpm)	Series KS	500	500	400	300	250
	Series KX	1500	1200	1200	1000	1000



Note1) Value under pressure 0.5MPa

Component Materials

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

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

Series KS/Series KX

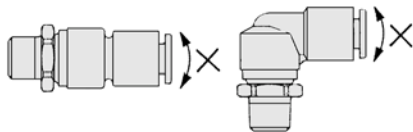
Model	Connection thread	Applicable tube O.D. (mm)				
		ø4	ø6	ø8	ø10	ø12
Male connector KSH KXH 	M5	●	●			
	M6	●	●			
	R(PT) 1/8	●	●	●		
	R(PT) 1/4		●	●	●	
	R(PT) 3/8			●	●	●
	R(PT) 1/2				●	●
Male elbow KSL KXL 	M5	●	●			
	M6	●	●			
	R(PT) 1/8	●	●	●		
	R(PT) 1/4		●	●	●	
	R(PT) 3/8			●	●	●
	R(PT) 1/2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

Precautions

Be sure to read before handling.
Refer to p.0-26 and 0-27 for Safety Instructions and common precautions on the products mentioned in this catalogue, and refer to p.2.0-7 and 2.0-8 for more detailed precautions of every series.

Caution

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



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Series KS/KX

Male connector: KSH (Standard)

<M5, M6>



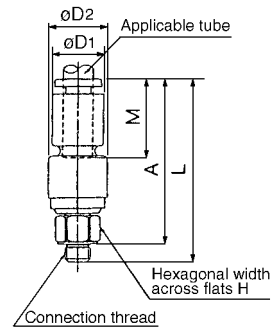
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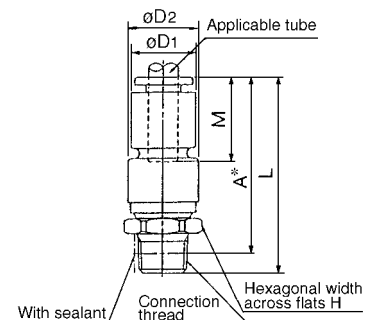
Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	A	M	Min. hole dia.	Effective area (mm ²)		Weight (g)	
										Nylon	Urethane		
4	M5	KSH04-M5	8	10.4	12	36.5	33	16	2.5	4.0	4.0	9	
	M6	KSH04-M6	37										
	1/8	KSH04-01S	12			38							34
6	M5	KSH06-M5	8	12.8	14	37.5	33.5	17	2.5	4.0	4.0	12	
	M6	KSH06-M6	38			34							
	1/8	KSH06-01S	14			39.5							35.5
	1/4	KSH06-02S	42.5			36.5							
8	1/8	KSH08-01S	8	15.2	17	44	40	18.5	6	26.1	18.0	23	
	1/4	KSH08-02S	17			47							41
	3/8	KSH08-03S	48			41.5							
10	1/4	KSH10-02S	17	18.5	22	54	48	21	7	36.3	29.5	55	
	3/8	KSH10-03S	22			55							48.5
	1/2	KSH10-04S	57.5			49.5							
12	3/8	KSH12-03S	24	20.9	24	57	50.5	22	8	46.1	16.1	75	
	1/2	KSH12-04S	60			52							

*Reference dimensions after R(PT) thread installation.

<M5, M6>



<R(PT)>



Male connector: KXH (High speed)

<M5, M6>



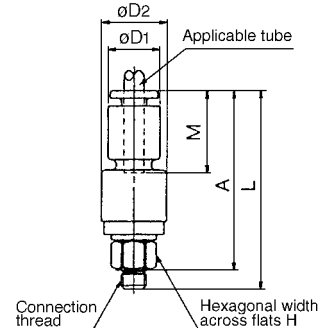
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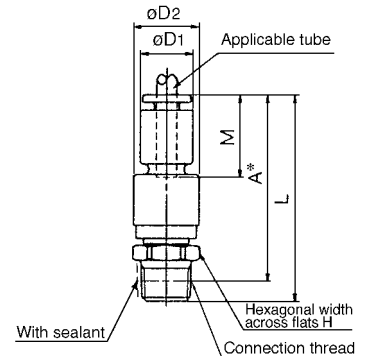
Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	A	M	Min. hole dia.	Effective area (mm ²)		Weight (g)	
										Nylon	Urethane		
4	M5	KXH04-M5	8	10.4	13	38.5	35	16	2.5	4.0	4.0	11	
	M6	KXH04-M6	39										
	1/8	KXH04-01S	12			40							36
6	M5	KXH06-M5	8	12.8	15	39.5	36	17	2.5	4.0	4.0	15	
	M6	KXH06-M6	40			36							
	1/8	KXH06-01S	14			42							38
	1/4	KXH06-02S	45			39							
8	1/8	KXH08-01S	8	15.2	18	46	42	18.5	6	26.1	18.0	28	
	1/4	KXH08-02S	17			49							43
	3/8	KXH08-03S	50			44							
10	1/4	KXH10-02S	17	18.5	23.5	58	52	21	7	36.3	29.5	68	
	3/8	KXH10-03S	22			59							52
	1/2	KXH10-04S	62			53							
12	3/8	KXH12-03S	24	20.9	26	60	54	22	8	46.1	46.1	88	
	1/2	KXH12-04S	63			55							

*Reference dimensions after R(PT) thread installation.

<M5, M6>



<R(PT)>



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

Male elbow: KSL (Standard)

<M5, M6>

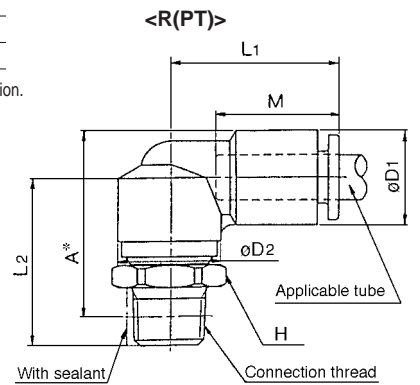
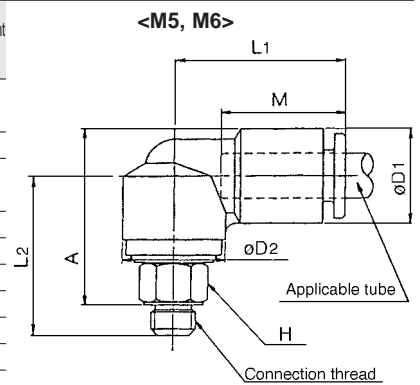


<R(PT)>



Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A	M	Min. hole dia.	Effective area (mm ²)		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	12				21						23.5	14
	1/8	KSL04-01S	12				22						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	14				21.5						24	17
	1/8	KSL06-01S	14				23						25.5	17
	1/4	KSL06-02S	14				26						26.5	23
	3/8	KSL06-03S	14				26.5						30	23
8	1/8	KSL08-01S	17	15.2	17	26	29.5	31	18.5	6	21.6	14.9	29	
	1/4	KSL08-02S	17				31						32	38
	3/8	KSL08-03S	17				31						32	38
10	1/4	KSL10-02S	22	18.5	22	31.5	34	37.5	21	7	30.5	25.0	56	
	3/8	KSL10-03S	22				35						38	64
	1/2	KSL10-04S	22				38						39.5	82
12	3/8	KSL12-03S	24	20.9	24	34	36.5	40.5	22	8	35.1	35.1	76	
	1/2	KSL12-04S	24				39.5						42	93

*Reference dimensions after R(PT) thread installation.



Male elbow: KXL (High speed)

<M5, M6>

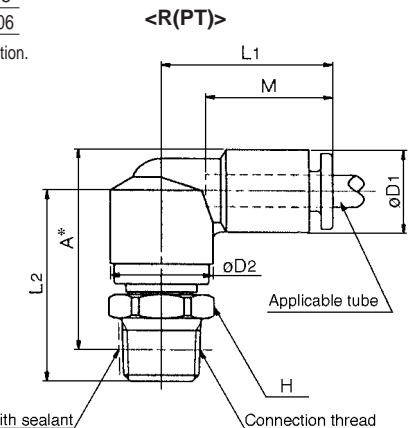
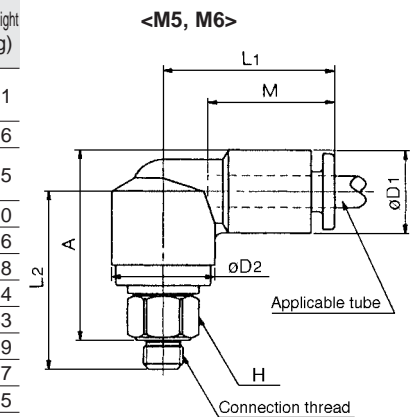


<R(PT)>



Tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A	M	Min. hole dia.	Effective area (mm ²)		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	12				23						24	16
	1/8	KXL04-01S	12				24						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	14				24						26	20
	1/8	KXL06-01S	14				25						28	26
	1/4	KXL06-02S	14				28						29	28
	3/8	KXL06-03S	14				29						32	28
8	1/8	KXL08-01S	17	15.2	18	27	32	33	18.5	6	21.6	14.9	34	
	1/4	KXL08-02S	17				32						33	43
	3/8	KXL08-03S	17				33						34	43
10	1/4	KXL10-02S	22	18.5	23.5	32	38	42	21	7	30.5	25.0	69	
	3/8	KXL10-03S	22				39						43	77
	1/2	KXL10-04S	22				42						43	95
12	3/8	KXL12-03S	24	20.9	26	35	40	44	22	8	35.1	35.1	89	
	1/2	KXL12-04S	24				43						45	106

*Reference dimensions after R(PT) thread installation.



K□

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H□

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MS

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