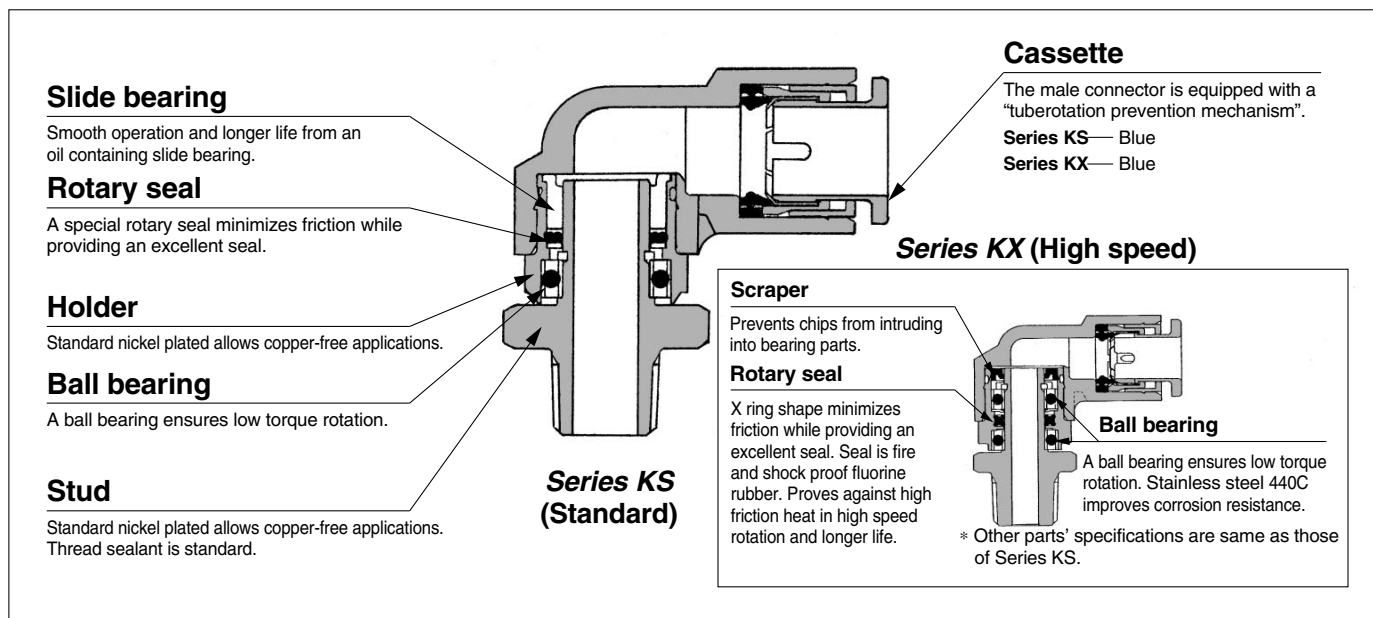


Rotary One-touch Fittings

Standard Type/High Speed Type

Series *KS/KX*



Low torque rotation style Rotary One-touch fittings

Applicable to use for
oscillating and rotating
sections in robots.

Copper-free specifications
Brass parts are all
electroless nickel plated.

Thread seal is standard.



Applicable Tubing

Tubing material ^{Note)}	Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø4, ø6, ø8, ø10, ø12



Note) Use caution about the max. operating pressure for soft nylon and polyurethane.

Specifications

Fluid	Air
Maximum operating pressure	1.0 MPa
Operating vacuum pressure	−100 kPa
Proof pressure	3.0 MPa
Ambient and fluid temperature	−5 to 60°C (No freezing)
Thread	JIS B 0203 (Taper thread for piping), JIS B 0209, class 2 (Metric coarse thread)

Rotating Torque/Allowable Number of Rotations

Applicable tubing O.D.		ø4	ø6	ø8	ø10	ø12
Rotating torque (N·m) ^{Note)}	Series KS	0.006	0.012	0.014	0.020	0.022
	Series KX	8.4	8.4	6.7	5	4.2
Allowable number of rotations		25	20	20	16.7	16.7



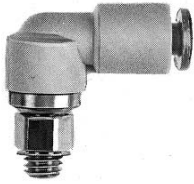
Note) Rotating torque under pressure 0.5 MPa

Principal Parts Material

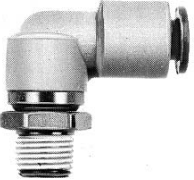
Model	Series KS	Series KX
Body	PBT	
Stud, Holder, Guide	C3604BD (Electroless nickel plated), Stainless steel 304	
Chuck, Retainer	Stainless steel (Stainless steel 304) ⁽¹⁾ (Retainer (C) of Series KX: C3604BD (electroless nickel plated))	
Collet, Release button, Snap ring	Polyacetal	
O-ring, Packing	NBR	
Rotary seal	NBR	FPM
Slide bearing	Oil-containing polyacetal	—
Scraper	—	NBR
Ball bearing	Bearing steel	Stainless steel 440C
Gasket	Stainless steel (Stainless steel 304), NBR	

Male Elbow: KSL (Standard)

<M5, M6>



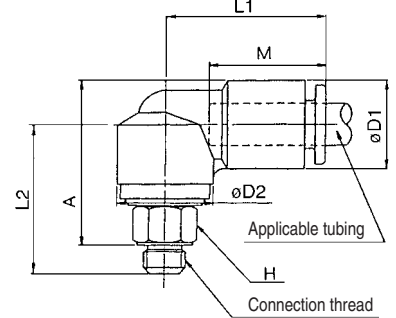
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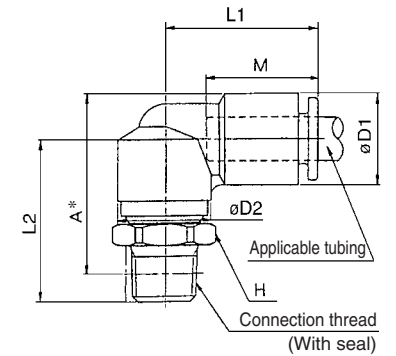
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	D1	D2	L1	L2	A	M	Min. port size	Effective area (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KSL04-M5	8	10.4	12	21	20.5	22	16	2.5	3.5	3.5	9
	M6 x 1	KSL04-M6	21				22						
	1/8	KSL04-01S	12				22	23.5					
6	M5 x 0.8	KSL06-M5	8	12.8	14	23	21	23.5	17	2.5	3.5	3.5	12
	M6 x 1	KSL06-M6	21.5				24	3		5.0	5.0		
	1/8	KSL06-01S	23				25.5	4		8.6	8.6		
	1/4	KSL06-02S	26				26.5						
	1/8	KSL06-01S	14				26					26.5	
8	1/8	KSL08-01S	17	15.2	17	26	26.5	30	18.5	6	21.6	14.9	23
	1/4	KSL08-02S	29.5				31	29					
	3/8	KSL08-03S	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					35	38					64
	1/2	KSL10-04S					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					39.5	42					93

* Reference dimensions after R thread installation.

<M5, M6>



<R>



K□

M□

H□

D□

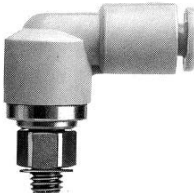
MS

T□

VMG

Male Elbow: KXL (High speed)

<M5, M6>



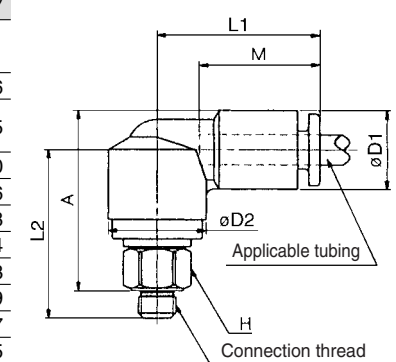
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Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	D1	D2	L1	L2	A	M	Min. port size	Effective area (mm ²)		Weight (g)	
											Nylon	Urethane		
4	M5 x 0.8	KXL04-M5	8	10.4	13	22	22.5	24	16	2.5	3.5	3.5	11	
	M6 x 1	KXL04-M6	23				16							
	1/8	KXL04-01S	12				24						25	16
6	M5 x 0.8	KXL06-M5	8	12.8	15	24	23.5	26	17	2.5	3.5	3.5	15	
	M6 x 1	KXL06-M6	24				3			5.0	5.0	20		
	1/8	KXL06-01S	14				25			28	4	8.6	8.6	26
	1/4	KXL06-02S					28			29	28			
	1/8	KXL08-01S					29			32	34			
8	1/4	KXL08-02S	17	15.2	18	27	32	33	18.5	6	21.6	14.9	34	
	3/8	KXL08-03S					33	34					43	
	1/4	KXL10-02S					38	39					42	69
10	3/8	KXL10-03S	22	18.5	23.5	32	42	43	21	7	30.5	25.0	77	
	1/2	KXL10-04S					42						44	95
	3/8	KXL12-03S					24						20.9	26
1/2	KXL12-04S	43	45	106										

* Reference dimensions after R thread installation.

<M5, M6>



<R>

