



S Couplers

# Series **KK/**KK13



Series KK

Series KK13

# S Couplers Series **KK/KK13**

## Series **KK**

### Male thread type

Series	Body size	Connection thread size R				
		1/8	1/4	3/8	1/2	3/4
<b>KK3</b>	1/8	●	●			
<b>KK4</b>	1/4	●	●	●	●	
<b>KK6</b>	1/2			●	●	●

### Female thread type

Series	Body size	Connection thread size Rc			
		1/8	1/4	3/8	1/2
<b>KK3</b>	1/8	●			
<b>KK4</b>	1/4		●	●	
<b>KK6</b>	1/2			●	●

### Nut fitting type

Series	Body size	Applicable hose I.D./O.D. mm					
		5/8	6/9	6.5/10	8/12	8.5/12.5	11/16
<b>KK3</b>	1/8	●	●	●			
<b>KK4</b>	1/4	●	●	●	●	●	
<b>KK6</b>	1/2				●	●	●

### One-touch fitting type

Series	Body size	Applicable tubing O.D. mm					
		4	6	8	10	12	16
<b>KK3</b>	1/8	●	●	●	●		
<b>KK4</b>	1/4		●	●	●	●	●
<b>KK6</b>	1/2					●	●

Manufactured by Rectus

## Series **KK13**

RECTUS 

Series	Connection type	Connection thread size R, Rc				Applicable hose I.D.			
		1/8	1/4	3/8	1/2	1/4"	5/16"	3/8"	1/2"
<b>KK13</b>	Male thread type	●	●	●	●				
	Female thread type		●*	●	●				
	Barb fitting type					●	●	●	●

\* Also available with G threads.



# Compact with High Flow Rate

## S Couplers

# Series KK



### Employs a unique connection method

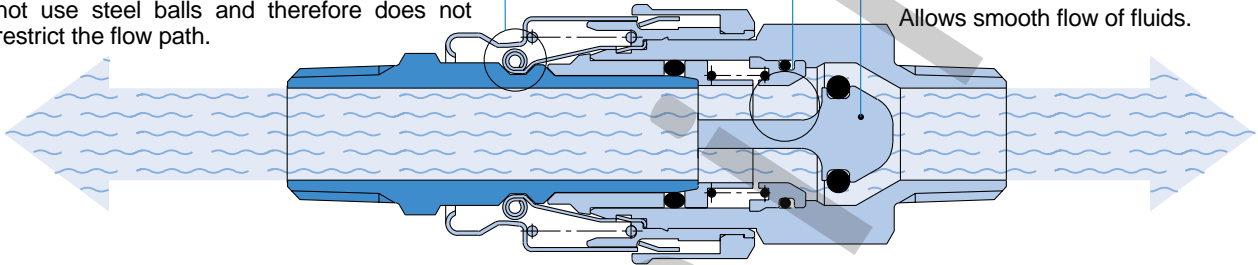
A slim body design and large effective area are achieved with a construction that does not use steel balls and therefore does not restrict the flow path.

### No spring located in the flow path

Loss of effective area is minimized because there is no valve spring to block the flow path.

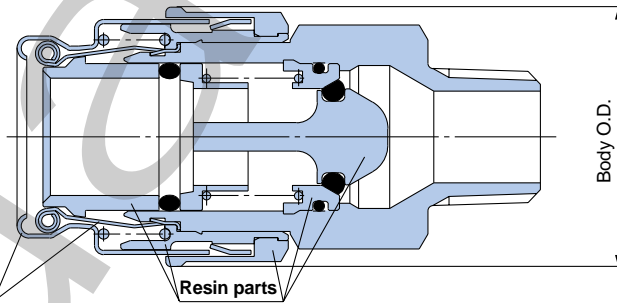
### Check valve end configuration facilitates rectifying effect

Allows smooth flow of fluids.



### Light weight

Together with a reduction of the body size, pressing parts and resin parts are used to achieve an overall weight reduction.



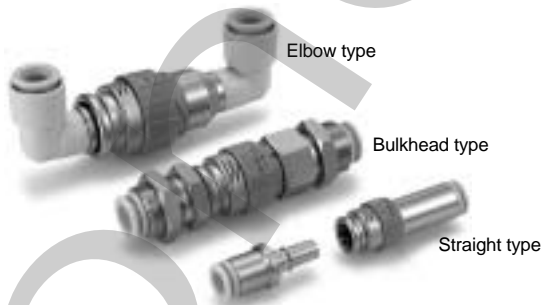
Series	Plug no.	Socket no.	Effective area mm <sup>2</sup> Note 1)	Body O.D. mm	Weight g Note 2)
Series <b>KK3</b>	KK3P-01MS	KK3S-01MS	20	ø18.2	18.9
Series <b>KK4</b>	KK4P-02MS	KK4S-02MS	39	ø25.4	41.3
Series <b>KK6</b>	KK6P-04MS	KK6S-04MS	82	ø31.2	87.7

Note 1) Values when plug and socket are connected.

Note 2) Values for socket only.

### One-touch fitting type standardized

Three types from ø4 to ø16 added to series.

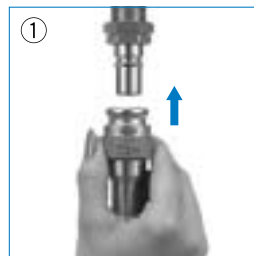


### Flow is possible from the plug side or socket side.

### Fluids: Air and Water

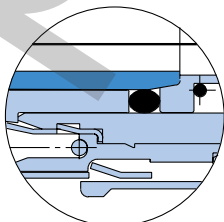
### One-touch connection

Simple connection with one hand simplifies work.



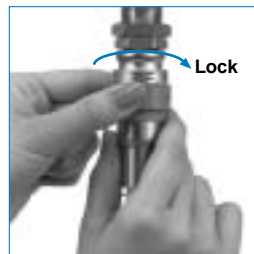
### Low leakage seal construction

Reliable sealing is achieved by surface contact.



### Sleeve lock mechanism

Prevents accidents caused by unexpected separation.




Variations

 **Plug (P)**


Male thread type

Body size	Port size	Part no.
1/8	R 1/8	<b>KK3P-01MS</b>
	R 1/4	<b>-02MS</b>
1/4	R 1/8	<b>KK4P-01MS</b>
	R 1/4	<b>-02MS</b>
	R 3/8	<b>-03MS</b>
	R 1/2	<b>-04MS</b>
1/2	R 3/8	<b>KK6P-03MS</b>
	R 1/2	<b>-04MS</b>
	R 3/4	<b>-06MS</b>




Female thread type

Body size	Port size	Part no.
1/8	Rc 1/8	<b>KK3P-01F</b>
1/4	Rc 1/4	<b>KK4P-02F</b>
	Rc 3/8	<b>-03F</b>
1/2	Rc 3/8	<b>KK6P-03F</b>
	Rc 1/2	<b>-04F</b>




Nut fitting type (for fiber reinforced urethane hose)

Body size	Applicable hose I.D./O.D. mm	Part no.
1/8	5/8	<b>KK3P-50N</b>
	6/9	<b>-60N</b>
	6.5/10	<b>-65N</b>
1/4	5/8	<b>KK4P-50N</b>
	6/9	<b>-60N</b>
	6.5/10	<b>-65N</b>
	8/12	<b>-80N</b>
	8.5/12.5	<b>-85N</b>
1/2	8/12	<b>KK6P-80N</b>
	8.5/12.5	<b>-85N</b>
	11/16	<b>-110N</b>




Straight type with One-touch fitting

Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3P-04H</b>
	6	<b>-06H</b>
	8	<b>-08H</b>
	10	<b>-10H</b>
1/4	6	<b>KK4P-06H</b>
	8	<b>-08H</b>
	10	<b>-10H</b>
	12	<b>-12H</b>
1/2	12	<b>KK6P-12H</b>
	16	<b>-16H</b>




Elbow type with One-touch fitting

Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3P-04L</b>
	6	<b>-06L</b>
	8	<b>-08L</b>
	10	<b>-10L</b>
1/4	6	<b>KK4P-06L</b>
	8	<b>-08L</b>
	10	<b>-10L</b>
	12	<b>-12L</b>
1/2	12	<b>KK6P-12L</b>
	16	<b>-16L</b>



Bulkhead type with One-touch fitting


Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3P-04E</b>
	6	<b>-06E</b>
	8	<b>-08E</b>
	10	<b>-10E</b>
1/4	6	<b>KK4P-06E</b>
	8	<b>-08E</b>
	10	<b>-10E</b>
	12	<b>-12E</b>
1/2	12	<b>KK6P-12E</b>
	16	<b>-16E</b>



**Socket (S)** 


Male thread type

Body size	Port size	Part no.
1/8	R 1/8	<b>KK3S-01MS</b>
	R 1/4	<b>-02MS</b>
1/4	R 1/8	<b>KK4S-01MS</b>
	R 1/4	<b>-02MS</b>
	R 3/8	<b>-03MS</b>
	R 1/2	<b>-04MS</b>
1/2	R 3/8	<b>KK6S-03MS</b>
	R 1/2	<b>-04MS</b>
	R 3/4	<b>-06MS</b>




Female thread type

Body size	Port size	Part no.
1/8	Rc 1/8	<b>KK3S-01F</b>
1/4	Rc 1/4	<b>KK4S-02F</b>
	Rc 3/8	<b>-03F</b>
1/2	Rc 3/8	<b>KK6S-03F</b>
	Rc 1/2	<b>-04F</b>




Nut fitting type (for fiber reinforced urethane hose)

Body size	Applicable hose I.D./O.D. mm	Part no.
1/8	5/8	<b>KK3S-50N</b>
	6/9	<b>-60N</b>
	6.5/10	<b>-65N</b>
1/4	5/8	<b>KK4S-50N</b>
	6/9	<b>-60N</b>
	6.5/10	<b>-65N</b>
	8/12	<b>-80N</b>
	8.5/12.5	<b>-85N</b>
1/2	8/12	<b>KK6S-80N</b>
	8.5/12.5	<b>-85N</b>
	11/16	<b>-110N</b>




Straight type with One-touch fitting

Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3S-04H</b>
	6	<b>-06H</b>
	8	<b>-08H</b>
	10	<b>-10H</b>
1/4	6	<b>KK4S-06H</b>
	8	<b>-08H</b>
	10	<b>-10H</b>
	12	<b>-12H</b>
1/2	12	<b>KK6S-12H</b>
	16	<b>-16H</b>



Elbow type with One-touch fitting

Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3S-04L</b>
	6	<b>-06L</b>
	8	<b>-08L</b>
	10	<b>-10L</b>
1/4	6	<b>KK4S-06L</b>
	8	<b>-08L</b>
	10	<b>-10L</b>
	12	<b>-12L</b>
1/2	12	<b>KK6S-12L</b>
	16	<b>-16L</b>



Bulkhead type with One-touch fitting

Body size	Applicable tubing O.D. mm	Part no.
1/8	4	<b>KK3S-04E</b>
	6	<b>-06E</b>
	8	<b>-08E</b>
	10	<b>-10E</b>
1/4	6	<b>KK4S-06E</b>
	8	<b>-08E</b>
	10	<b>-10E</b>
	12	<b>-12E</b>
1/2	12	<b>KK6S-12E</b>
	16	<b>-16E</b>



# S Couplers

## Series *KK*



### Specifications

<b>Fluid</b>	Air, Water (standard industrial water)
<b>Operating pressure range</b>	0 to 1.0MPa
<b>Proof pressure</b>	1.5MPa
<b>Ambient and fluid temperature</b>	-5 to 60°C
<b>Plating, Sealant</b>	Electroless nickel plated (copper-free application), With male thread sealant

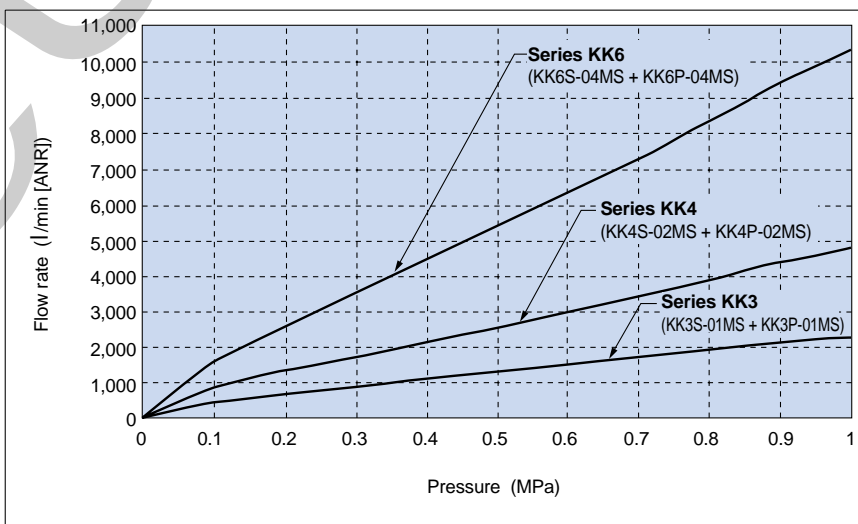
### Performance

<b>Plug and socket connection</b>	One-touch connection and release
<b>Check valve</b>	Socket: Built-in check valve (standard)
<b>Sleeve lock mechanism</b>	Manual locking type (standard)

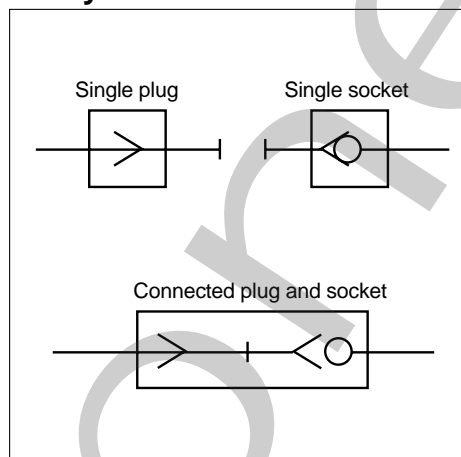
### Effective Area

Body size	Plug	Socket	Effective area mm <sup>2</sup>
1/8	KK3P-01MS	KK3S-01MS	20
1/4	KK4P-02MS	KK4S-02MS	39
1/2	KK6P-04MS	KK6S-04MS	82

### Flow Characteristics



### JIS symbols



How to Order

**KK 4 S-02 M S**

• Body size

3	1/8
4	1/4
6	1/2

• Socket/Plug designation

S	Socket
P	Plug

• Connection type

Symbol	Type
M	Male thread
F	Female thread
N	With nut fitting
H	Straight with One-touch fitting
L	Elbow with One-touch fitting
E	Bulkhead with One-touch fitting

• With sealant (male thread)

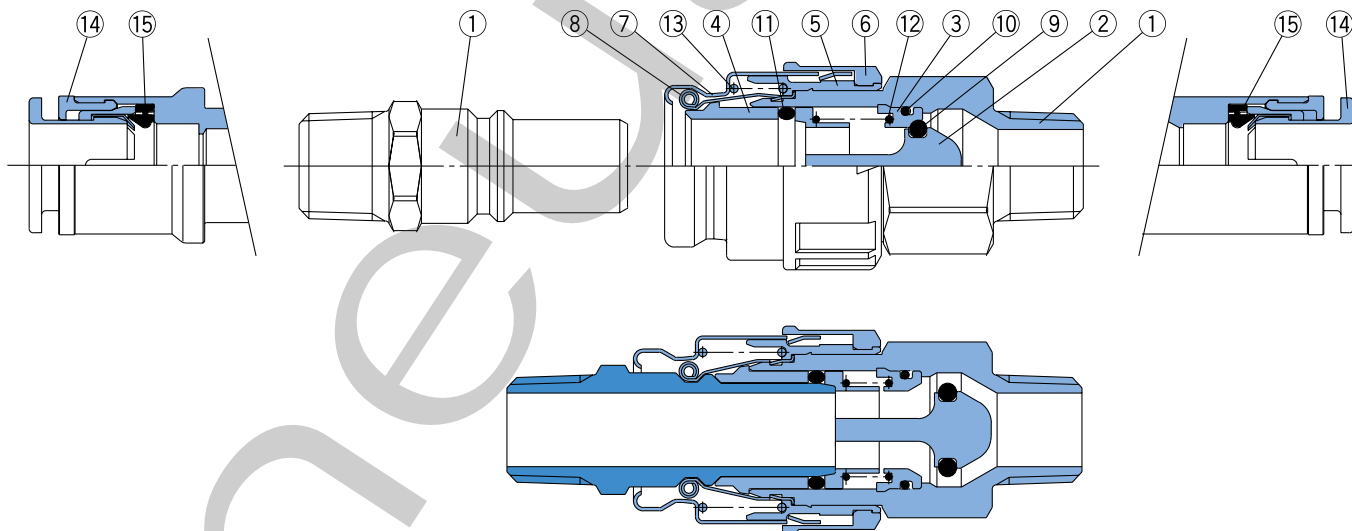
• Piping port size variation

Male/Female thread type		One-touch fitting type		Nut fitting type	
Symbol	Thread size	Symbol	Tubing O.D. mm	Symbol	Hose O.D./I.D. mm
01	R, Rc 1/8	04	ø4	50	8/5
02	R, Rc 1/4	06	ø6	60	9/6
03	R, Rc 3/8	08	ø8	65	10/6.5
04	R, Rc 1/2	10	ø10	80	12/8
06	R, Rc 3/4	12	ø12	85	12.5/8.5
		16	ø16	110	16/11

Construction

<With One-touch fitting>

<With One-touch fitting>



Plug

No.	Description	Material	Note
1	Stem	Brass	Electroless nickel plated
14	Cassette	—	
15	Seal	NBR	

Socket

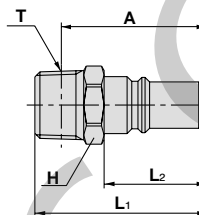
No.	Description	Material	Note
1	Body	Brass	Electroless nickel plated
2	Valve	PBT	
3	Valve seat	PBT	
4	Collar	PBT	
5	Spacer	PBT	
6	Lock ring	PBT	
7	Sleeve	Cold rolled carbon steel sheet	Electroless nickel plated
8	Chuck	Stainless steel	
9	Valve O-ring	FPM	
10	Valve seat O-ring	NBR	
11	Plug O-ring	NBR	
12	Valve spring	Stainless steel	
13	Sleeve spring	Stainless steel	
14	Cassette	—	
15	Seal	NBR	



# Series KK

## Dimensions/Plug (P)

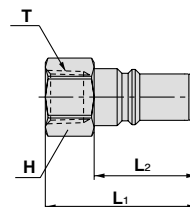
### Male thread type



Body size	Model	T Connection male thread	H Width across flats	L <sub>1</sub>	L <sub>2</sub>	A*	Min. bore	Effective area mm <sup>2</sup>	Weight g
1/8	KK3P-01MS	R 1/8	10	30.4	18.4	26.4	6	22.6	8.4
	-02MS	R 1/4		33.4		27.4			14.2
1/4	KK4P-01MS	R 1/8	14	37	25.2	33	9	50.9	17
	-02MS	R 1/4		40.2		34.2			20.2
	-03MS	R 3/8	17	42.2		35.7			32.5
	-04MS	R 1/2	22	46.2		38.2			57.4
1/2	KK6P-03MS	R 3/8	19	48	31	41.5	11	76.0	44.7
	-04MS	R 1/2	22	52		44	13	106.2	53.7
	-06MS	R 3/4	27	55		45.5			94.4

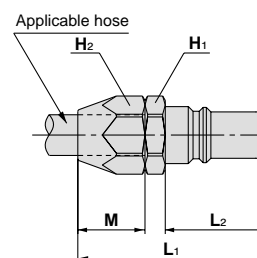
\* Reference dimension for R threads after installation.

### Female thread type



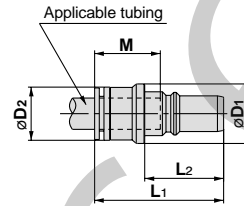
Body size	Model	T Connection female thread	H Width across flats	L <sub>1</sub>	L <sub>2</sub>	Min. bore	Effective area mm <sup>2</sup>	Weight g
1/8	KK3P-01F	Rc 1/8	14	28.3	18.4	6	22.6	10.4
1/4	KK4P-02F	Rc 1/4	17	37.2	25.2	9	50.9	23.9
	-03F	Rc 3/8	19	39.8				24.6
1/2	KK6P-03F	Rc 3/8	19	43.3	31	13	106.2	28.6
	-04F	Rc 1/2	24	50.2				43.9

### Nut fitting type (for urethane hose with fiber reinforcement)



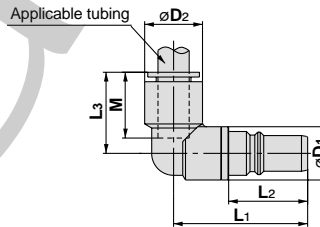
Body size	Model	Applicable hose I.D./O.D. mm	H <sub>1</sub> Width across flats	H <sub>2</sub> Width across flats	L <sub>1</sub>	L <sub>2</sub>	M	Min. bore	Effective area mm <sup>2</sup>	Weight g
1/8	KK3P-50N	5/8	14	14	36.1	18.4	13.7	4.5	12.7	21.4
	-60N	6/9		17	39.9		16.5	5.4	18.3	38.8
	-65N	6.5/10		17	43.9		16.5	5.9	21.9	35.9
1/4	KK4P-50N	5/8	17	14	43.9	25.2	13.7	4.5	12.7	34.7
	-60N	6/9		17			46.7	16.5	5.4	18.3
	-65N	6.5/10	17	47.6	16.5		5.9	21.9	45.1	
	-80N	8/12	19	19	47.6		17.4	7.4	34.4	53.2
	-85N	8.5/12.5						7.8	38.2	55.6
1/2	KK6P-80N	8/12	19	19	53.4	31	7.4	34.4	60.5	
	-85N	8.5/12.5					7.8	38.2	62.8	
	-110N	11/16					24	24	57.2	20.1

**Straight type  
with One-touch fitting**



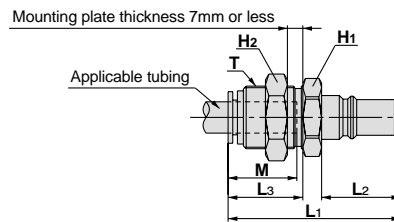
Body size	Model	Applicable tubing O.D. mm	$\phi D_1$	$\phi D_2$	L <sub>1</sub>	L <sub>2</sub>	M	Min. bore	Effective area mm <sup>2</sup>		Weight g	
									Urethane tubing	Nylon tubing		
1/8	KK3P-04H	ø4	12	10	35.4	18.4	16	3.2	3.9	5.6	7.9	
	-06H	ø6	14	12			17	4.7	10.1	12.8	9.1	
	-08H	ø8	16	14			38.6	18.5	6	15.7	22.6	13.2
	-10H	ø10	19	17			39.7	21		22.6		17.6
1/4	KK4P-06H	ø6	14	12	46.2	25.2	17	4.7	10.1	12.8	22.3	
	-08H	ø8	16	14			18.5	6.2	19.8	22.6	23.0	
	-10H	ø10	19	17			21	7.7	27.6	35.3	27.1	
	-12H	ø10	19	17			47.5	22	9	40.2	50.9	30.0
1/2	KK6P-12H	ø12	21	19	56.1	31	22	9.2	41.2	—	44.4	
	-16H	ø16	26	25.7			25	13	—	106.2	50.7	

**Elbow type  
with One-touch fitting**



Body size	Model	Applicable tubing O.D. mm	$\phi D_1$	$\phi D_2$	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	M	Min. bore	Effective area mm <sup>2</sup>		Weight g	
										Urethane tubing	Nylon tubing		
1/8	KK3P-04L	ø4	10	10.4	31.6	18.4	18	16	3	3.7	5.3	7.2	
	-06L	ø6		12.8	32.8		20	17	4.5	10.1	11.4	8.0	
	-08L	ø8		15.2	34		23	18.5	6	15.0	16.8	9.7	
	-10L	ø10		17	18.5		36	26.5		21	18.0	18.5	23.0
1/4	KK4P-06L	ø6	14	12.8	40.2	25.2	20	17	4.5	10.1	11.4	19.6	
	-08L	ø8		15.2	41.4		23	18.5	6	17.5	19.8	21.3	
	-10L	ø10		17	18.5		42.8	26.5	21	7.5	24.7	27.5	25.7
	-12L	ø10		17	44		28.5	22	9	29.0	29.6	28.0	
1/2	KK6P-12L	ø12	19	20.9	49.9	31	28.5	22	9	38.1	39.7	40.3	
	-16L	ø16	21	26.5	53.5		34	25	13	—	58.7	48.7	

**Bulkhead type  
with One-touch fitting**



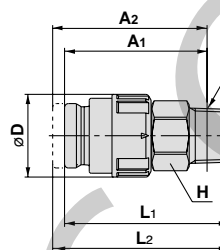
Body size	Model	Applicable tubing O.D. mm	T Threads	H <sub>1</sub> Width across flats	H <sub>2</sub> Width across flats	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	M	Min. bore	Effective area mm <sup>2</sup>		Weight g	
											Urethane tubing	Nylon tubing		
1/8	KK3P-04E	ø4	M12 x 1	14	14	39.3	18.4	16.9	16	3.2	3.9	5.6	16.6	
	-06E	ø6	M14 x 1	17	17	40.2		16.8	17	4.7	10.1	12.8	22.3	
	-08E	ø8	M16 x 1		19	43.4		20	18.5	6	15.7	22.6	30.2	
	-10E	ø10	M20 x 1	22	24	46.4		22	21		22.6		22.6	54.7
1/4	KK4P-06E	ø6	M14 x 1	17	17	47	25.2	16.8	17	4.7	10.1	12.8	30.6	
	-08E	ø8	M16 x 1		19	50.2		20	18.5	6.2	19.8	22.6	38.2	
	-10E	ø10	M20 x 1		22	24		53.2	22	21	7.7	27.6	35.3	61.4
	-12E	ø10	M22 x 1		24	27		54.2	23	22	9	40.2	50.9	75.2
1/2	KK6P-12E	ø12	M22 x 1	24	27	60.1	31	23	22	9.2	41.2	—	86.1	
	-16E	ø16	M28 x 1.5	30	32	62.6		24.5	25	13	—	106.2	125.0	



# Series KK

## Dimensions/Socket (S)

### Male thread type

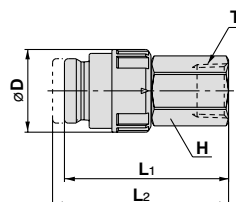


(mm)

Body size	Model	T Connection male thread	H Width across flats	øD	L <sub>1</sub>	L <sub>2</sub> When connected	A <sub>1</sub> *	A <sub>2</sub> * When connected	Min. bore	Effective area mm <sup>2</sup>	Weight g
1/8	KK3S-01MS	R 1/8	14	18.2	37.5	40	33.5	36	6	19.1	18.9
	-02MS	R 1/4					31.5	34	9	21.1	18.0
1/4	KK4S-01MS	R 1/8	19	25.4	50.4	54.1	46.4	50.1	6	22.9	44.7
	-02MS	R 1/4					45	48.7	9	35.9	41.3
	-03MS	R 3/8	50		53.7	11	40.4	48.1			
	-04MS	R 1/2	49.7		53.4	13	42.7	58.4			
1/2	KK6S-03MS	R 3/8	24	31.2	60.2	65.5	53.7	59	11	71.7	85.5
	-04MS	R 1/2					52.2	57.5	13	80.1	87.7
	-06MS	R 3/4	27		50.7	56	15	81.6	110.9		

\* Reference dimension for R threads after installation.

### Female thread type

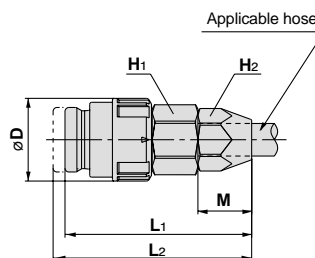


(mm)

Body size	Model	T Connection female thread	H Width across flats	øD	L <sub>1</sub>	L <sub>2</sub> When connected	Min. bore	Effective area mm <sup>2</sup>	Weight g
1/8	KK3S-01F	Rc 1/8	14	18.2	36	38.5	8.2	20.6	22.4
1/4	KK4S-02F	Rc 1/4	19	25.4	50.4	54.1	10.9	36.6	54.1
	-03F	Rc 3/8					14.4	42.7	43.4
1/2	KK6S-03F	Rc 3/8	24	31.2	58.6	63.9	14.4	80.9	91.2
	-04F	Rc 1/2					61	66.3	18

### Nut fitting type

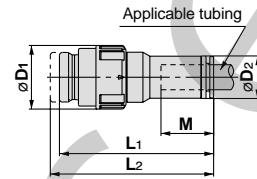
(for urethane hose with fiber reinforcement)



(mm)

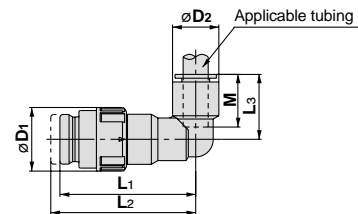
Body size	Model	Applicable hose I.D./O.D. mm	H <sub>1</sub> Width across flats	H <sub>2</sub> Width across flats	øD	L <sub>1</sub>	L <sub>2</sub> When connected	M	Min. bore	Effective area mm <sup>2</sup>	Weight g	
1/8	KK3S-50N	5/8	14	14	18.2	42.6	45.1	13.7	4.5	12.2	30.9	
	-60N	6/9	17	17					5.4	18.3	47.5	
	-65N	6.5/10							5.9	19.2	45.2	
1/4	KK4S-50N	5/8	19	14	25.4	54.1	57.8	13.7	4.5	12.2	53.0	
	-60N	6/9		17					17	5.4	20.4	66.5
	-65N	6.5/10								5.9	24.1	64.0
	-80N	8/12		19					19	7.4	35.1	65.7
	-85N	8.5/12.5								7.8	36.6	68.3
1/2	KK6S-80N	8/12	24	24	31.2	66	71.3	17.4	7.4	36.6	105.1	
	-85N	8.5/12.5							7.8	41.2	107.8	
	-110N	11/16							10.2	68.4	117.4	

**Straight type  
with One-touch fitting**



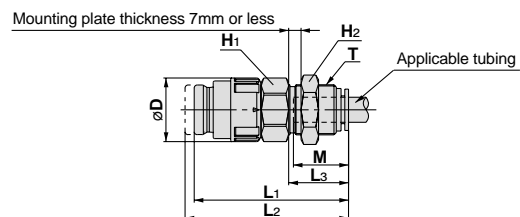
Body size	Model	Applicable tubing O.D. mm	$\phi D_1$	$\phi D_2$	$L_1$	$L_2$ When connected	M	Min. bore	Effective area mm <sup>2</sup>		Weight g
									Urethane tubing	Nylon tubing	
1/8	KK3S-04H	$\phi 4$	18.2	10	46.6	49.1	16	3.2	3.8	5.8	21.3
	-06H	$\phi 6$		12	47.1	49.6	17	4.7	10.4	13.4	23.2
	-08H	$\phi 8$		14	48.9	51.4	18.5	6.2	16.8	18.9	26.1
	-10H	$\phi 10$		17	49.9	52.4	21	7.7	19.1	19.1	35.9
1/4	KK4S-06H	$\phi 6$	25.4	12	58.2	61.9	17	4.7	10.4	13.4	48.6
	-08H	$\phi 8$		14	60.1	63.8	18.5	6.2	18.3	21.8	48.5
	-10H	$\phi 10$		17	61.5	65.2	21	7.7	27.0	29.4	52.0
	-12H	$\phi 12$		19	62.5	66.2	22	9.2	30.5	32.0	56.6
1/2	KK6S-12H	$\phi 12$	31.2	19	70.1	75.4	22	9.2	42.7	48.8	81.7
	-16H	$\phi 16$		25.7	72.3	77.6	25	13.2	53.4	62.5	97.5

**Elbow type  
with One-touch fitting**



Body size	Model	Applicable tubing O.D. mm	$\phi D_1$	$\phi D_2$	$L_1$	$L_2$ When connected	$L_3$	M	Min. bore	Effective area mm <sup>2</sup>		Weight g
										Urethane tubing	Nylon tubing	
1/8	KK3S-04L	$\phi 4$	18.2	10.4	41.7	44.2	18	16	3	3.7	5.3	22.0
	-06L	$\phi 6$		12.8	42.9	45.4	20	17	4.5	10.1	11.4	22.8
	-08L	$\phi 8$		15.2	43.1	45.6	23	18.5	6	15.0	16.8	23.8
	-10L	$\phi 10$		18.5	42.9	45.4	26.5	21	7.5	18.0	18.5	33.2
1/4	KK4S-06L	$\phi 6$	25.4	12.8	54.3	58	20	17	4.5	10.1	11.4	50.7
	-08L	$\phi 8$		15.2	55.5	59.2	23	18.5	6	17.5	19.8	50.3
	-10L	$\phi 10$		18.5	54.2	57.9	26.5	21	7.5	24.7	27.5	51.9
	-12L	$\phi 12$		20.9	55.4	59.1	28.5	22	9	29.0	29.6	54.2
1/2	KK6S-12L	$\phi 12$	31.2	20.9	66.3	71.6	28.5	22	9	38.1	39.7	89.0
	-16L	$\phi 16$		26.5	66.9	72.2	34	25	13	50.3	58.7	91.1

**Bulkhead type  
with One-touch fitting**

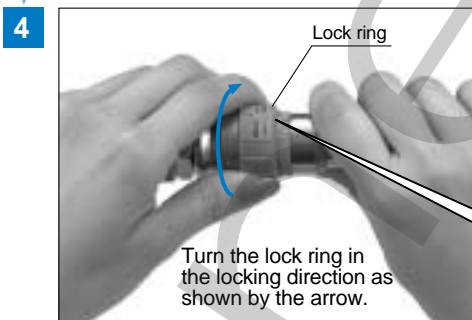
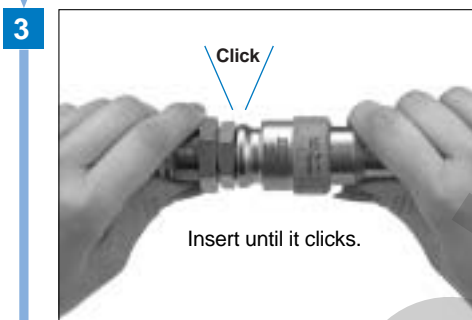
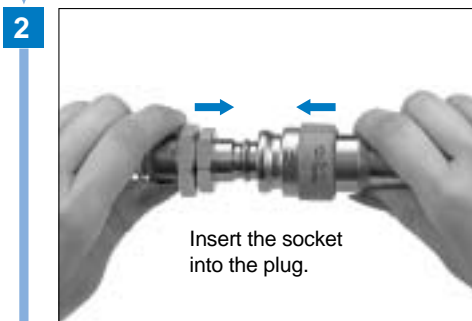
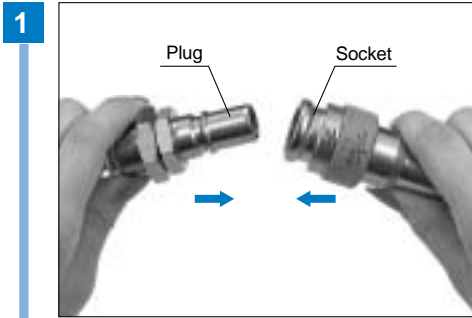


Body size	Model	Applicable tubing O.D. mm	T Threads	$H_1$ Width across flats	$H_2$ Width across flats	$\phi D$	$L_1$	$L_2$ When connected	$L_3$	M	Min. bore	Effective area mm <sup>2</sup>		Weight g
												Urethane tubing	Nylon tubing	
1/8	KK3S-04E	$\phi 4$	M12 x 1	14	14	18.2	46.6	49.1	16.9	16	3.2	3.8	5.8	27.8
	-06E	$\phi 6$	M14 x 1	17	17		47.1	49.6	16.8	17	4.7	10.4	13.4	38.2
	-08E	$\phi 8$	M16 x 1	19	19		49	51.5	20	18.5	6.2	16.8	18.9	42.2
	-10E	$\phi 10$	M20 x 1	22	24		49.9	52.4	22	21	7.7	19.1	19.1	67.1
1/4	KK4S-06E	$\phi 6$	M14 x 1	19	17	25.4	58.2	61.9	16.8	17	4.7	10.4	13.4	54.4
	-08E	$\phi 8$	M16 x 1	19	19		60.1	63.8	20	18.5	6.2	18.3	21.8	57.8
	-10E	$\phi 10$	M20 x 1	22	24		61.7	65.4	22	21	7.7	27.0	29.4	84.0
	-12E	$\phi 12$	M22 x 1	24	27		62.7	66.4	23	22	9.2	30.5	32.0	102.9
1/2	KK6S-12E	$\phi 12$	M22 x 1	24	27	31.2	70.1	75.4	23	22	9.2	42.7	48.8	113.6
	-16E	$\phi 16$	M28 x 1.5	30	32		72.5	77.8	24.5	25	13.2	53.4	62.5	180.8

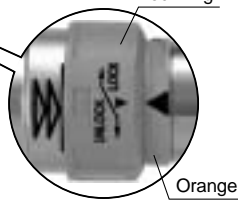
# Series KK

## Operating Procedure

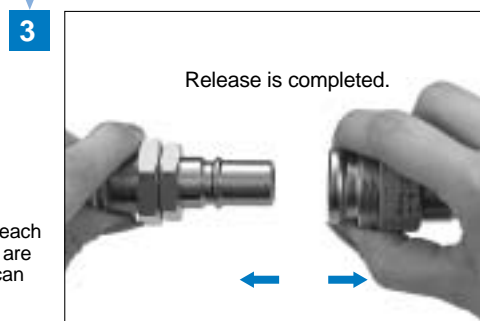
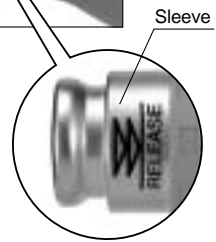
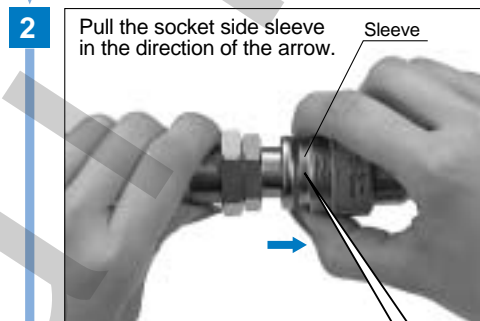
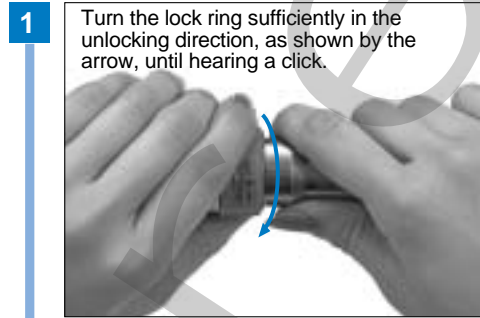
### <Connection>



When the two ► marks face each other, the plug and the socket are locked. The locked condition can be confirmed with the visible orange section.

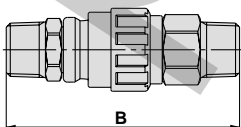


### <Release>



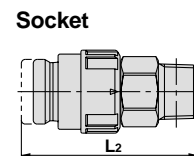
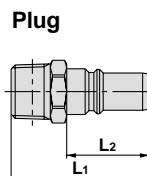
## Calculation of Connected Plug and Socket Dimension

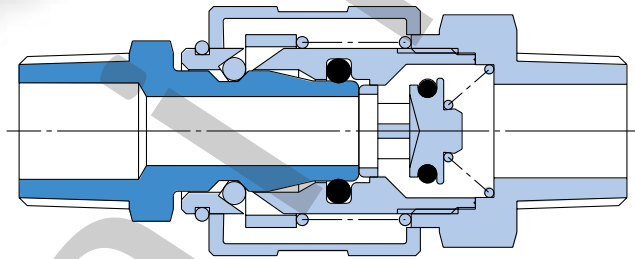
Overall length of connected plug and socket  $B = \text{Plug } (L_1 - L_2) + \text{Socket } (L_2) + 0.5$



Example)  
Overall length of KK3P-01MS (plug) and KK3S-01MS (socket) when they are connected.

Plug  $(30.4 - 18.4) + \text{Socket } (39.4) + 0.5 = 51.9\text{mm}$





## One-touch connection

- Can be connected by simply pushing the plug into the socket.
- Manipulation with one hand improves work efficiency.

Flow is possible from the plug side or socket side.

O-ring seal construction for outstanding air tightness and durability


## Variations



Plug P


### Male thread type

Port size	Part no.
R 1/8	KK13P-01M
R 1/4	-02M
R 3/8	-03M
R 1/2	-04M




### Female thread type

Port size	Part no.
Rc 1/4	KK13P-02F
Rc 3/8	-03F
Rc 1/2	-04F
G1/4	-G02F



### Barb fitting type

Applicable hose I.D.	Part no.
1/4"	KK13P-07B
5/16"	-09B
3/8"	-11B
1/2"	-13B




Socket S



### Male thread type

Port size	Part no.
R 1/8	KK13S-01M
R 1/4	-02M
R 3/8	-03M
R 1/2	-04M




### Female thread type

Port size	Part no.
Rc 1/4	KK13S-02F
Rc 3/8	-03F
Rc 1/2	-04F



### Barb fitting type

Applicable hose I.D.	Part no.
1/4"	KK13S-07B
5/16"	09B
3/8"	-11B
1/2"	-13B



# S Couplers

# Series *KK13*

Manufactured by  
**Rectus**



## Specifications

Fluid	Air Note 1)
Operating pressure range	0 to 1.5MPa
Proof pressure	2MPa
Ambient and fluid temperature	-5 to 60°C
Plating	Nickel plated external metal parts

Note 1) Cannot be used with water.

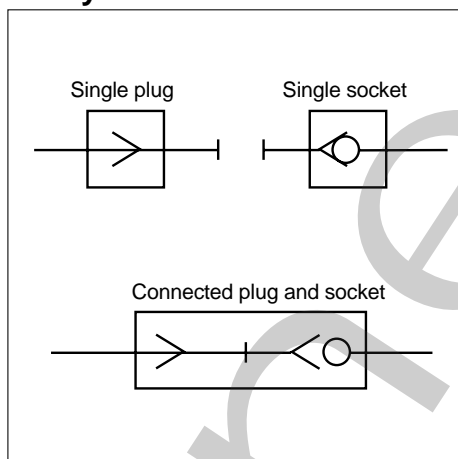
## Performance

Plug and socket connection	One-touch connection and release
Check valve	Socket: Built-in check valve (standard)

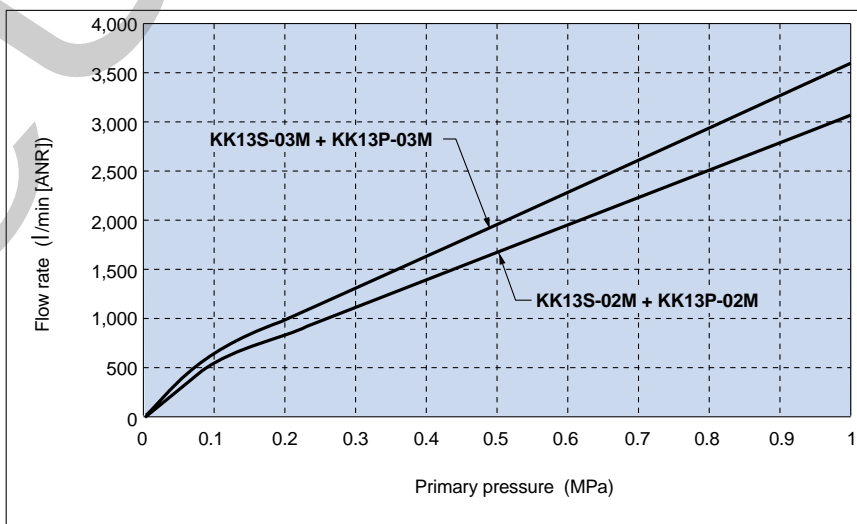
## Effective Area

Body size	Plug	Socket	Effective area mm <sup>2</sup>
1/4	KK13P-02M	KK13S-02M	24.1
	KK13P-03M	KK13S-03M	31.1

## JIS symbols



## Flow Characteristics



How to Order

**KK 13 S-02 M**

Series 13

Socket/Plug designation

<b>S</b>	Socket
<b>P</b>	Plug

Connection type

<b>M</b>	Male thread
<b>F</b>	Female thread
<b>B</b>	With barb fitting

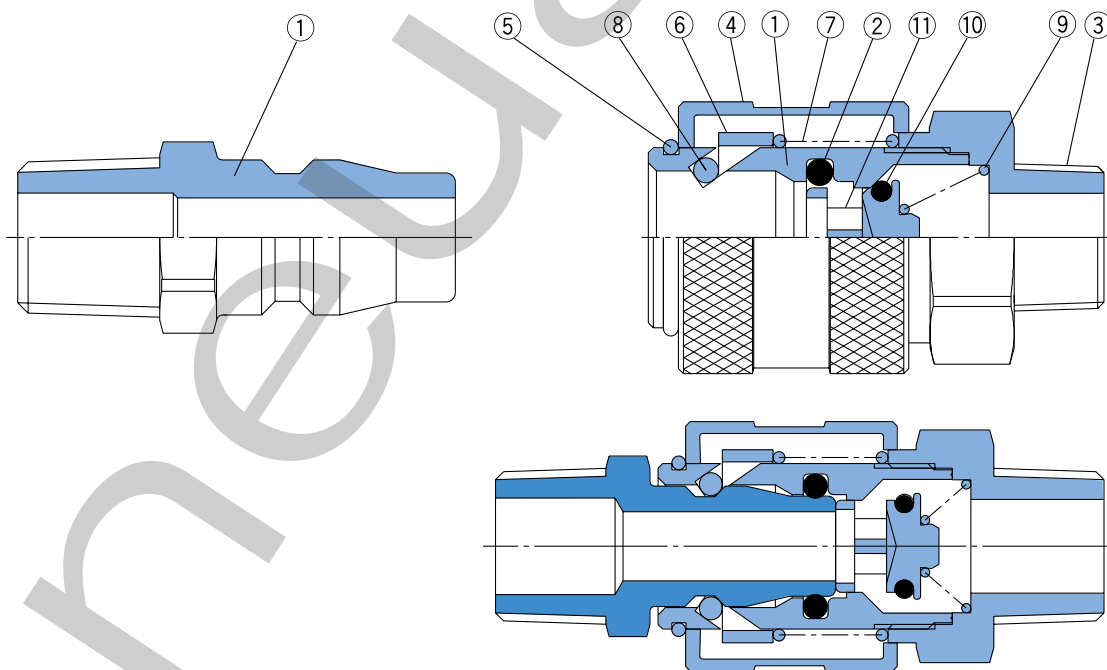
Port size variation

Symbol	Thread size
<b>01</b>	R, Rc 1/8
<b>02</b>	R, Rc 1/4
<b>03</b>	R, Rc 3/8
<b>04</b>	R, Rc 1/2
<b>G02</b>	G1/4

Barb fitting type

Symbol	Hose I.D.
<b>07</b>	1/4"
<b>09</b>	5/16"
<b>11</b>	3/8"
<b>13</b>	1/2"

Construction



Plug

No.	Description	Material	Note
1	Stem	Steel	Nickel plated

Socket

No.	Description	Material	Note
1	Coupling body	Brass	Nickel plated
2	Plug O-ring	NBR	
3	Body	Brass	Nickel plated
4	Sleeve	Brass	Nickel plated
5	Snap ring	Stainless steel	
6	Collar	Brass	
7	Sleeve spring	Stainless steel	
8	Locking pin	Stainless steel	
9	Valve spring	Stainless steel	
10	Valve O-ring	NBR	
11	Valve	Brass	

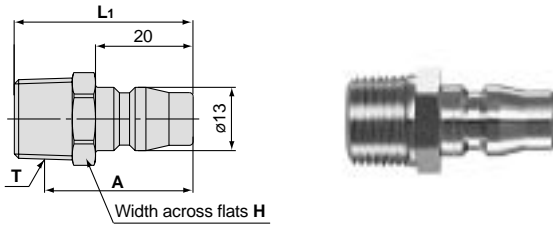


# Series KK

## Dimensions

### Plug (P)

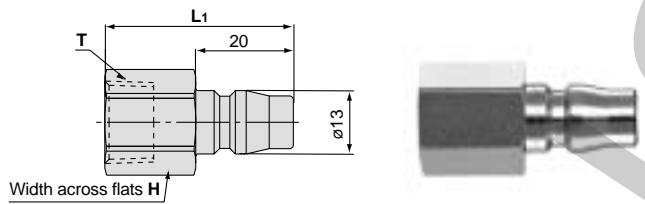
#### Male thread type



Model	T Connection male threads	H Width across flats	L <sub>1</sub>	A*	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13P-01M	R 1/8	14	34	30	6	22.6	18
-02M	R 1/4	17	37	31	7.5	35.3	22
-03M	R 3/8	17		30.6			27
-04M	R 1/2	22	44	35.8			51

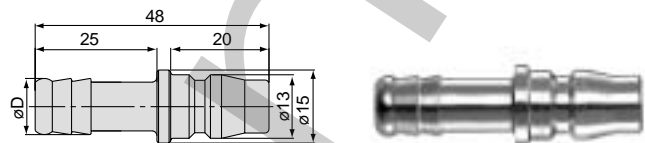
\* Reference dimension after installation.

#### Female thread type



Model	T Connection female threads	H Width across flats	L <sub>1</sub>	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13P-02F	Rc 1/4	17	35.5	7.5	35.3	27
-03F	Rc 3/8	19	39			32
-04F	Rc 1/4	24	42.5			51
-G02F	G 1/4	17	32			27

#### Barb fitting type (for rubber hose)

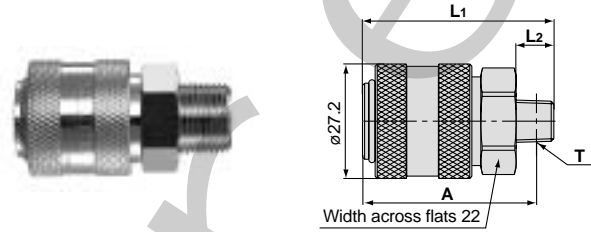


Model	Applicable hose I.D.	øD	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13P-07B	1/4"	7.5	4.1	10.6	17
-09B	5/16"	9.4	6	22.6	18
-11B	3/8"	11.5	7.5	35.3	21
-13B	1/2"	14.5			25

Refer to page 9 for calculation of the connected plug and socket dimension.

### Socket (S)

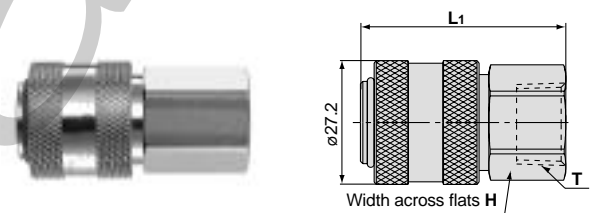
#### Male thread type



Model	T Connection male threads	L <sub>1</sub>	A*	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13S-01M	R 1/8	45.5	41.5	6	19.0	81
-02M	R 1/4	48.5	42.5	7	24.1	86
-03M	R 3/8		42.1	10.2	31.1	89
-04M	R 1/2	53	44.8		32.1	108

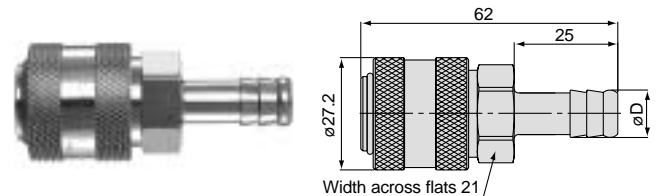
\* Reference dimension after installation.

#### Female thread type



Model	T Connection female threads	H Width across flats	L <sub>1</sub>	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13S-02F	Rc 1/4	22	47	10.5	25.7	103
-03F	Rc 3/8	24	52	10.2	31.1	107
-04F	Rc 1/2		55.5		32.1	117

#### Barb fitting type (for rubber hose)



Model	Applicable hose I.D.	øD	Min. bore	Effective area mm <sup>2</sup>	Weight g
KK13S-07B	1/4"	7.5	4.1	8.0	81
-09B	5/16"	9.5	6	16.1	83
-11B	3/8"	11.5	8	25.4	88
-13B	1/2"	14.5	10.2	31.9	

# Related Equipment

## Tube Couplers

### Series *KC*

**One-touch fitting stops the air flow when tubing is removed.**

(Built-in self seal mechanism)

**Copper-free specification**

(Electroless nickel plated)



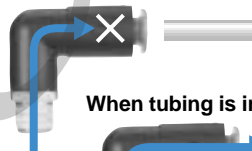
### Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D. mm	ø4, ø6, ø8, ø10, ø12

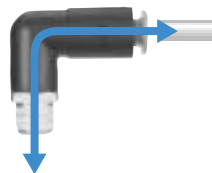
### Specifications

Fluid	Air	
Maximum operating pressure	1.0MPa	
Proof pressure	3.0MPa	
Ambient and fluid temperature	-5 to 60°C (with no freezing)	
Threads	Mounting section	JIS B0203 (taper threads for piping)
	Nut section	JIS B0211, Class 2 (metric fine screw threads)
Thread sealant (standard)	With sealant	
Copper-free specification (standard)	All brass parts electroless nickel plated	

When tubing is removed



When tubing is installed



POWER  
AIRE