

Employs a unique connection method •

A slim body design and large effective area are

**S** Couplers

# Series KK

The pulling strength for the plugs and sockets has been improved.

as strong as the conventional models

We standardized the product with a sleeve cover. Changing the lock ring material to a shock absorbent PBT further improved the shock absorbent performance.

No spring located in the flow path Lock ring ● Shock absorbent PBT Loss of effective area is minimized because there is no valve spring to block the flow path.

> **Check valve end configuration** facilitates rectifying effect

> > Reliable sealing is achieved by surface

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achieved with a construction that does not use steel balls and therefore does not restrict the flow path. Allows smooth flow of fluids. Low leakage seal construction Sleeve cover

(Except for Series KK2)

#### 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 (mm²) Note 1)	Body O.D. (mm)	Mass (g) Note 2)
Series KK2	KK2P-M5M	KK2S-M5M	3.8	ø10.0	6.1
Series KK3	KK3P-01MS	KK3S-01MS	20	ø20.2	20.1
Series KK4	KK4P-02MS	KK4S-02MS	39	ø28.0	44.1
Series KK6	KK6P-04MS	KK6S-04MS	82	ø31.6	90.1

Note 1) Values when plug and socket are connected. Note 2) Values for socket only.

#### ■ One-touch fitting type standardized

Four types from Ø3.2 to Ø16 added to series.



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

contact.

■ Fluids: Air and Water

#### ■ One-touch connection

Simple connection with one hand simplifies work.





#### ■ Sleeve lock mechanism

Prevents accidents caused by unexpected separation.

Note) Except for M5 type (Series KK2).





## **S Couplers**

# Series KK



JIS Symbol
Single plug

#### **Specifications**

Fluid	Air, Water	
Operating Note) pressure range	KK2: -100 kPa to 1 MPa KK3: -90 kPa to 1 MPa KK4/6: 0 to 1 MPa	
Proof pressure	1.5 MPa	
Ambient and fluid temperature	Air: -5 to 60°C Water: 5 to 40°C (No freezing)	
Plating, Sealant	Electroless nickel plated (copper-free and fluorine-free application), With male thread sealant	

Note) Do not use the S couplers with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

#### **Performance**

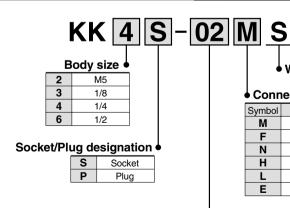
Plug and socket connection	One-touch connection and release	
Check valve	Socket: Built-in check valve (standard)	
Sleeve lock mechanism Note)	Manual locking type (standard)	

Note) Series KK2 is not provided with lock mechanism.

#### **Effective Area**

Body size	Plug	Socket	Effective area mm <sup>2</sup>
M5	KK2P-M5M	KK2S-M5M	3.8
1/8	KK3P-01MS	KK3S-01MS	20
1/4	KK4P-02MS	KK4S-02MS	39
1/2	KK6P-04MS	KK6S-04MS	82

#### **How to Order**



### • With sealant (male thread)

#### Connection type

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

#### Piping port size variation

Male/Female thread type				
Symbol	Thread size			
M5	M5 x 0.8			
01	R, Rc 1/8			
02	R, Rc 1/4			
03	R, Rc 3/8			
04	R, Rc 1/2			
06	R, Rc 3/4			

One-touch fitting type		
Symbol	Applicable tubing O.D. mm	
23	ø3.2	
04	ø4	
06	ø6	
08	ø8	
10	ø10	
12	ø12	
16	ø16	

Nut fitting type				
Symbol Applicable hose I.D./O.D. n				
50	5/8			
60	6/9			
65	6.5/10			
80	8/12			
85	8.5/12.5			
110	11/16			



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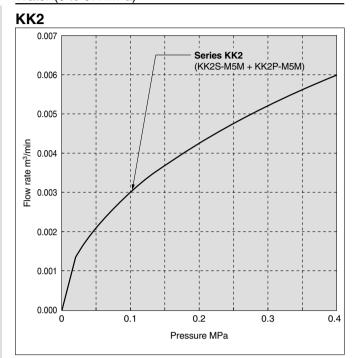
### Series KK

#### **Flow Characteristics**

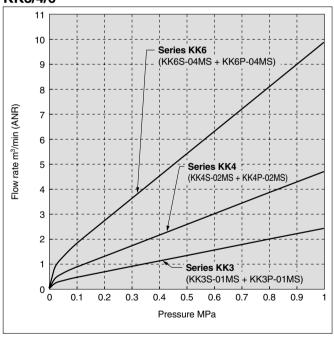
#### Air (0 to 1 MPa)

#### KK2 0.50 Series KK2 0.45 (KK2S-M5M + KK2P-M5M) 0.40 0.35 Flow rate m<sup>3</sup>/min (ANR) 0.30 0.25 0.20 0.15 0.10 0.05 0.00 0.7 0.2 0.3 0.4 0.5 0.6 8.0 0.9 Pressure MPa

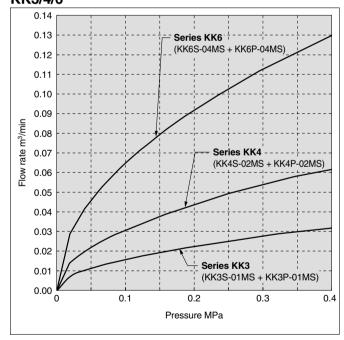
#### Water (0 to 0.4 MPa)



#### KK3/4/6



#### KK3/4/6



## s Couplers $\it Series~KK$

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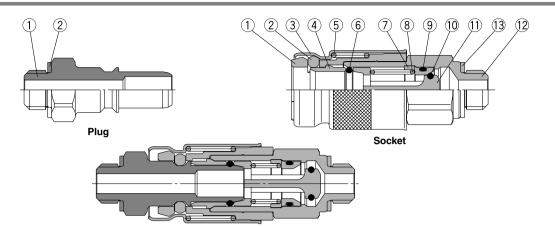
LQ

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#### Construction





#### Plug

No.	Description	Material	Note
1	Stem	C3604	Electroless nickel plated
2	Gasket	Stainless steel 304, NBR	

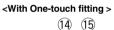
#### **Series KK2 Spare Parts**

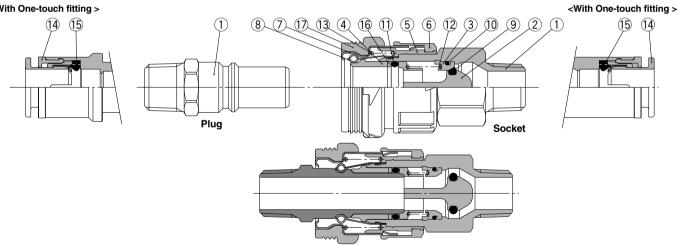
Description	Part no.	No.
Gasket	M FCO	Plug <sup>②</sup>
Gasket	M-5G2	Socket(13)

#### Socket

No.	Description	Material	Note
1	Spacer	PBT	
2	Chuck	PBT	
3	Sleeve	C2680	Electroless nickel plated
4	Collar	C3604	Electroless nickel plated
5	Sleeve spring	Stainless steel 304	
6	Plug O-ring	NBR	
7	Valve seat	PBT	
8	Valve spring	Stainless steel 304	
9	Valve seat O-ring	NBR	
10	Valve O-ring	FKM	
11	Valve	PBT	
12	Socket body	C3604	Electroless nickel plated
13	Gasket	Stainless steel 304, NBR	

#### KK3/4/6





#### Plug

No.	Description	Material	Note
1	Stem	C3604	Electroless nickel plated
14	Cassette	_	
15	Seal	NBB	

#### Series KK/KKH Spare Parts

Description	Part no.	No.
Sleeve cover	KK3S-P01	
	KK4S-P01	Socket <sup>17</sup>
	KK6S-P01	

#### Socket

No.	Description	Material	Note
1	Body	C3604	Electroless nickel plated
2	Valve	PBT	
3	Valve seat	PBT	
4	Collar	PBT	
5	Spacer	PBT	
6	Lock ring	Shock absorbent PBT	
7	Sleeve	Cold rolled carbon steel sheet	Electroless nickel plated
- 8	Chuck	Stainless steel 304	
9	Valve O-ring	FKM	
10	Valve seat O-ring	NBR	
11	Plug O-ring	NBR	
12	Valve spring	Stainless steel 304	
13	Sleeve spring	Stainless steel 304	
14	Cassette	_	
15	Seal	NBR	
16	Collar 2	Stainless steel 304	
17	Sleeve cover	Weather resistant NBR	