

S Coupler

Energy saving due to reduction of pressure loss

Cv factor increased by 39%

(Compared with the existing model*)

(Thread R1/4 type: Cv=1.9)

*Existing model: KK13 series

**Plug
insertion force
Decreased by
22% (20 N)**

(Compared with the existing model* at 0.5 MPa)

**Lightweight
Reduced by
14% (12 g)**

(Compared with the existing model*)

**Compact
Shortened by
4% (1.7 mm)**

(Compared with the existing model*)

Plug
Reduction of gouges,
deformations and
abrasions due to
heat treatment

Usable in bi-directional flows

With sealant

Standard feature for
male thread type

Sleeve
Reduction of gouges, deformations
and abrasions due to heat
treatment

Valve

Reduction of pressure loss
due to special configuration

O-ring

Prevention of air leakage and
elimination of noise due to seal
around the plug

*Existing model: KK13 series

PAT. PEND.



NPP-E08-7

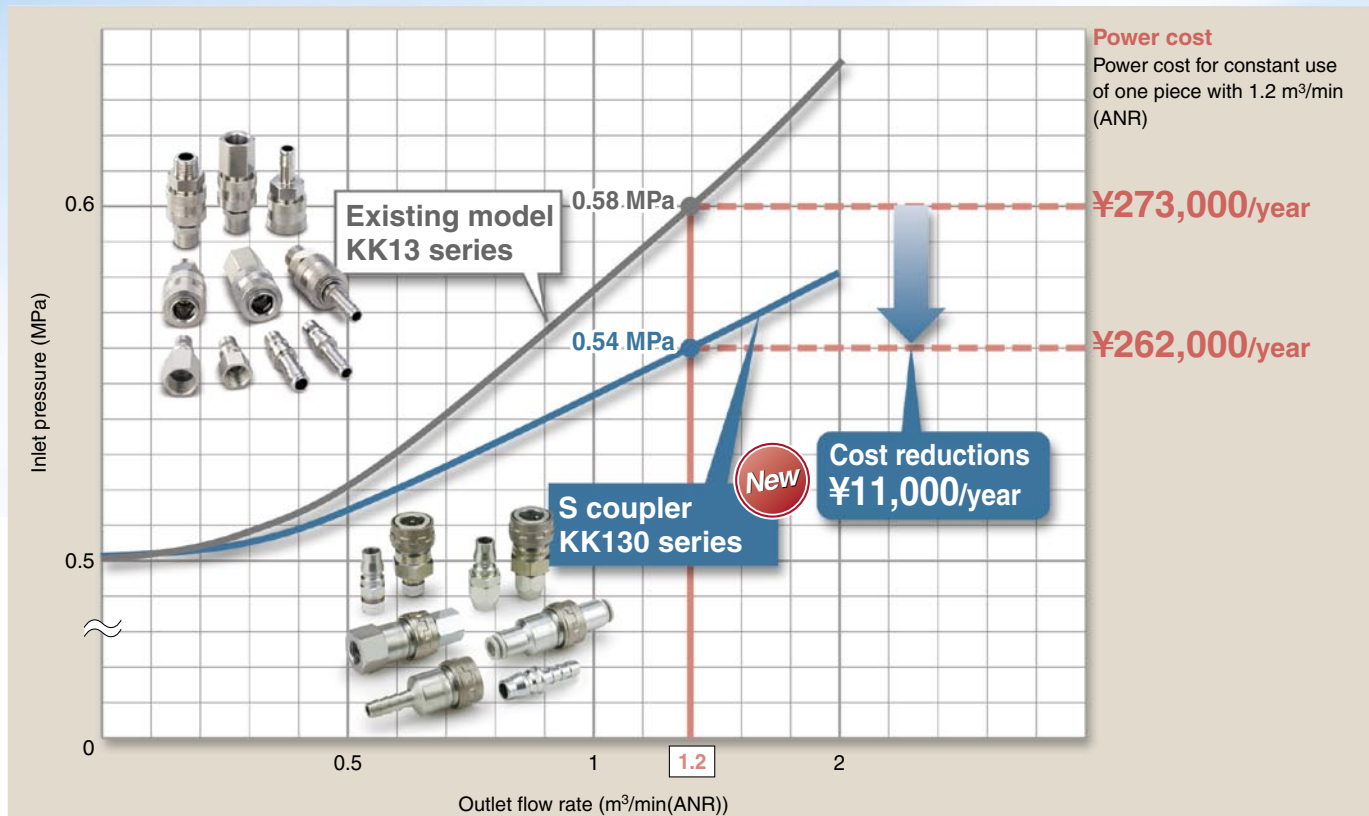
Series KK130

Energy and cost reduction

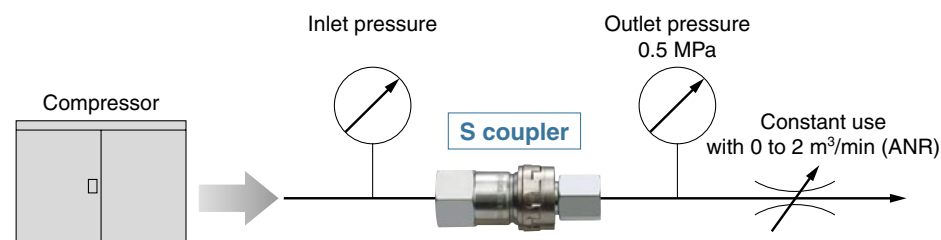


Due to a lower pressure loss compared with the existing model (KK13 series), even if you reduce the inlet pressure in an air-blow application, the equivalent outlet pressure and flow rate can be obtained. Reduction of air consumption and compressor power consumption gives you the benefit of reduced costs.

Air consumption versus inlet pressure/compressor power cost (per one piece of S coupler)

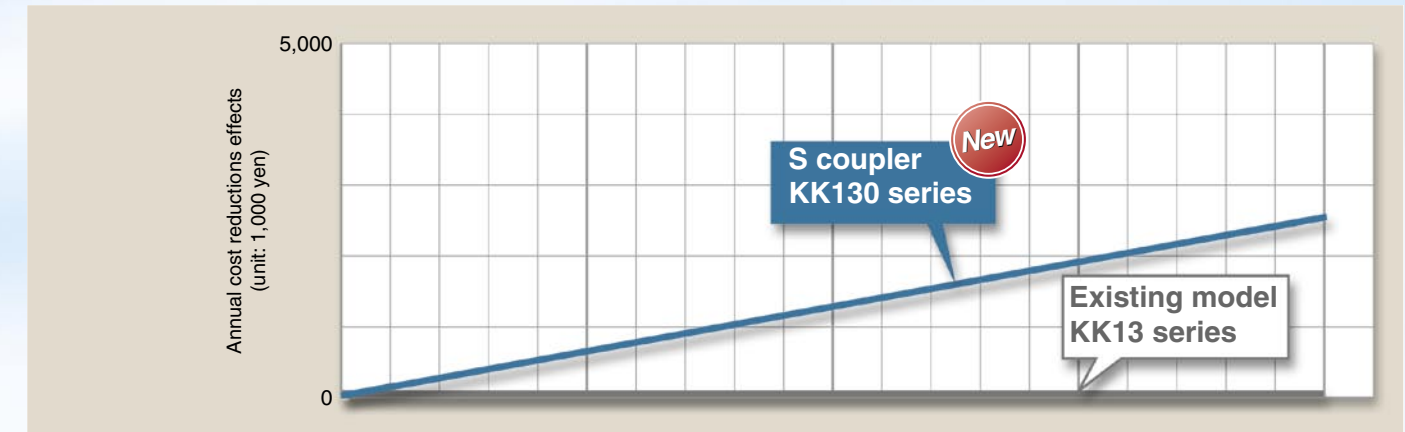


Conditions
Outlet operating pressure: 0.5 MPa
Compressor efficiency: 0.7
Power cost: 15 yen/kWh
Annual operation hours: 2500 hours



Cost reduction effects by S coupler in a factory-wide view

In terms of a factory-wide view, substantial reduction in costs can be achieved.

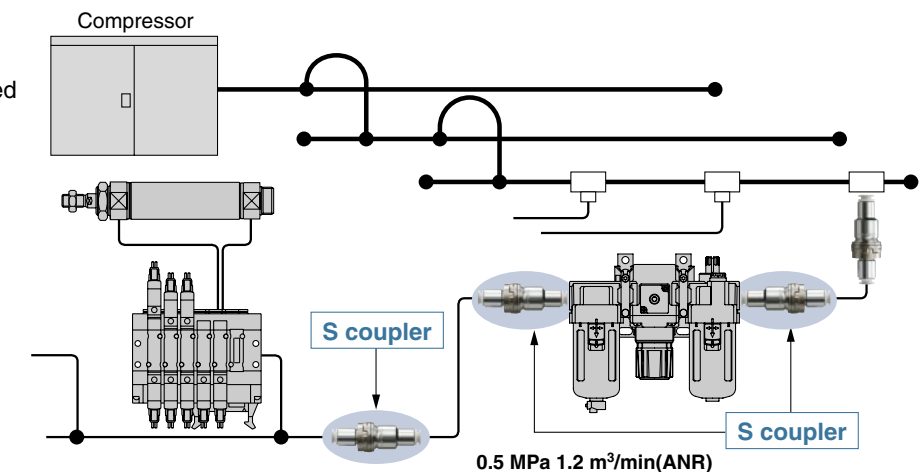


Quantity of S couplers used in the whole factory	(piece)	500	1,000	1,500	2,000
Air consumption by the whole factory	(m ³ /hr (ANR))	3,600	7,200	10,800	14,400
Compressor capacity for the whole factory	(kWh)	650	1,300	1,950	2,600

Note) Relationship between total compressor capacity and air consumption is provided as a general guideline.

Conditions

50% of all air consumed by factory passes through four S couplers which are connected to a branched line of the terminal end.
Outlet operating pressure: 0.5 MPa
Air consumption by a branched line of the terminal end: 1.2 m³/min (ANR)
Air consumption hours: 20% of annual operation hours (2500 hours)
Compressor efficiency : 0.7
Power cost : 15 yen/kWh
Compressor performance : 8 m³/kWh



Series KK130

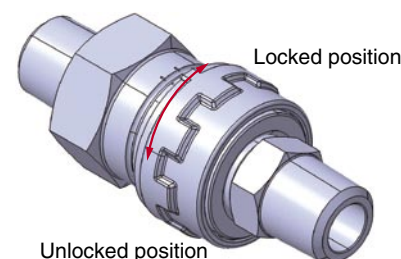
■With one-touch fitting type standardized



Metric size : $\phi 6, \phi 8, \phi 10, \phi 12$
Inch size : $\phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$

■With lock mechanism (semi-standard)

Prevention of release by an abrupt impact
Locked or unlocked position can be held by a sleeve with a detent.
Easy installation or removal even in a dark place where locked position marking is invisible.

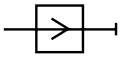


Specifications

Fluid	Air ^{Note)}
Operating pressure range	0 to 1.5 MPa With one-touch fitting type: 0 to 1.0 MPa
Proof pressure	2.0 MPa
Ambient and fluid temperature	-20 to 80°C (No freezing) With one-touch fitting type: -5 to 60°C (No freezing)
Plating	Sleeve: Electroless nickel plated Other exterior metallic parts: Zinc chromated
Seal	Male thread with sealant

Note) Not applicable to water

Series KK130 Variations



Plug (P)

Male thread

	Port size	Model
	R1/8	KK130P-01MS
	R1/4	-02MS
	R3/8	-03MS
	R1/2	-04MS
	NPT1/8	-N01MS
	NPT1/4	-N02MS
	NPT3/8	-N03MS
NPT1/2	-N04MS	

Female thread

	Port size	Model
	Rc1/8	KK130P-01F
	Rc1/4	-02F
	Rc3/8	-03F
	Rc1/2	-04F
	NPT1/8	-N01F
	NPT1/4	-N02F
	NPT3/8	-N03F
NPT1/2	-N04F	

With barb fitting (for rubber hose)

	Nominal size of hose	Model
	6(1/4")	KK130P-07B
	8(1/4")	-09B
	9(3/8")	-11B
	12(1/2")	-13B

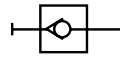
*(): Applicable hose I.D.

With nut fitting (for fiber reinforced urethane hose)

	Applicable hose I.D./O.D.	Model
	5/8	KK130P-50N
	6/9	-60N
	6.5/10	-65N
	8/12	-80N
	8.5/12.5	-85N
	11/16	-110N

With one-touch fitting

	Metric size	Applicable tubing O.D.	Model
		6	KK130P-06H
		8	-08H
		10	-10H
	Inch size	12	-12H
		1/4"	-07H
		5/16"	-09H
		3/8"	-11H
		1/2"	-13H



Socket (S)

Male thread

	Port size	Model
	R1/8	KK130S-01MS
	R1/4	-02MS
	R3/8	-03MS
	R1/2	-04MS
	NPT1/8	-N01MS
	NPT1/4	-N02MS
	NPT3/8	-N03MS
NPT1/2	-N04MS	

Female thread

	Port size	Model
	Rc1/8	KK130S-01F
	Rc1/4	-02F
	Rc3/8	-03F
	Rc1/2	-04F
	NPT1/8	-N01F
	NPT1/4	-N02F
	NPT3/8	-N03F
NPT1/2	-N04F	

With barb fitting (for rubber hose)

	Nominal size of hose	Model
	6(1/4")	KK130S-07B
	8(1/4")	-09B
	9(3/8")	-11B
	12(1/2")	-13B

*(): Applicable hose I.D.

With nut fitting (for fiber reinforced urethane hose)

	Applicable hose I.D./O.D.	Model
	5/8	KK130S-50N
	6/9	-60N
	6.5/10	-65N
	8/12	-80N
	8.5/12.5	-85N
	11/16	-110N

With one-touch fitting

	Metric size	Applicable tubing O.D.	Model
		6	KK130S-06H
		8	-08H
		10	-10H
	Inch size	12	-12H
		1/4"	-07H
		5/16"	-09H
		3/8"	-11H
		1/2"	-13H

SMC Corporation

Akihabara UDX 15F,
4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN
Phone: 03-5207-8249 Fax: 03-5298-5362
URL <http://www.smcworld.com>
© 2009 SMC Corporation All Rights Reserved

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

D-KS

1st printing NQ printing NQ 13750KS Printed in Japan.

This catalog is printed on recycled paper with concern for the global environment.