

# Nozzles for Blowing

# KN Series

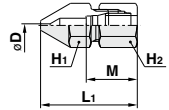


## Nozzle with self-align fitting/KN

(mm)



Model	Nozzle size øD	Applicable tubing O.D.	Width across flats		L <sub>1</sub>	M	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KN-04-100	ø1	ø4	10	10	27	15	13
KN-04-150	ø1.5	ø4	10	10	27.7	15	14
KN-06-100	ø1	ø6	12	12	30.1	16	19
KN-06-150	ø1.5	ø6	12	12	30.8	16	20
KN-06-200	ø2	ø6	12	12	31.5	16	22
KN-08-150	ø1.5	ø8	14	14	33.8	16	28
KN-08-200	ø2	ø8	14	14	34.6	16	30
KN-10-250	ø2.5	ø10	14	17	35.6	17	35
KN-10-300	ø3	ø10	14	17	36.3	17	36
KN-10-350	ø3.5	ø10	14	17	37.1	17	37
KN-10-400	ø4	ø10	14	17	29.5	17	30
KN-10-600	ø6	ø10	14	17	27.7	17	28
KN-12-350	ø3.5	ø12	17	19	40.4	17	54
KN-12-400	ø4	ø12	17	19	41.3	17	55
KN-12-600	ø6	ø12	17	19	31.2	17	40
KN-16-400	ø4	ø16	22	24	40.1	17	77
KN-16-600	ø6	ø16	22	24	38.4	17	79
KN-20-400	ø4	ø20	26	27	45.6	17	117
KN-20-600	ø6	ø20	26	27	43.9	17	112



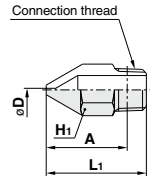
## Nozzle with male thread/KN

(mm)



Model	Nozzle size øD	Connection thread	Width across flats		L <sub>1</sub>	A*	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KN-R01-100	ø1	R 1/8	10	21.4	17.4	8	
KN-R01-150	ø1.5	R 1/8	10	21	17	8	
KN-R02-100	ø1	R 1/4	14	31.4	25.4	19	
KN-R02-150	ø1.5	R 1/4	14	31	25	20	
KN-R02-200	ø2	R 1/4	14	30.5	24.5	21	
KN-R02-250	ø2.5	R 1/4	14	30.1	24.1	21	
KN-R02-600	ø6	R 1/4	14	27.1	21.1	22	
KN-R03-400	ø4	R 3/8	17	31.8	25.4	36	
KN-R03-600	ø6	R 3/8	17	30.1	23.7	37	
KN-R04-400	ø4	R 1/2	22	41.8	33.6	75	
KN-R04-600	ø6	R 1/2	22	40.1	31.8	76	
KN-R06-600	ø6	R 3/4	27	49.6	40.1	149	
KN-R06-800	ø8	R 3/4	27	47.8	38	152	
KN-R10-800	ø8	R 1	36	62.8	52.4	328	

\* Reference dimensions after R thread installation.

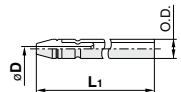


## Copper extension nozzle/KNL

(mm)



Model	Nozzle size øD	Outside diameter	L <sub>1</sub>	Weight (g)
KNL3-06-150	ø1.5	ø6	300	43
KNL3-06-200	ø2	ø6	300	43
KNL3-08-200	ø2	ø8	300	61
KNL3-08-250	ø2.5	ø8	300	61
KNL3-10-250	ø2.5	ø10	300	94
KNL3-10-300	ø3	ø10	300	94
KNL6-06-150	ø1.5	ø6	600	84
KNL6-06-200	ø2	ø6	600	84
KNL6-08-200	ø2	ø8	600	117
KNL6-08-250	ø2.5	ø8	600	117
KNL6-10-250	ø2.5	ø10	600	183
KNL6-10-300	ø3	ø10	600	183



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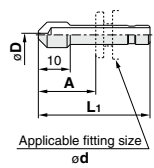
## Nozzle for One-touch fitting/KN

(mm)



**Connecting products with metal rods**  
Products with metal rods cannot be connected to the KQ2 series One-touch fittings. If connected, the metal rod cannot be retained by the chuck of the One-touch fitting and products with metal rods may project during pressurization, causing serious personal injury or accident.  
For details about One-touch fittings that can connect products with metal rods, contact SMC.

Model	Nozzle size øD	Applicable fitting size ød	L <sub>1</sub>	A	Weight (g)
KN-Q06-100	ø1	ø6	35	18	5
KN-Q06-150	ø1.5	ø6	35	18	5
KN-Q06-200	ø2	ø6	35	18	5
KN-Q08-150	ø1.5	ø8	39	20.5	9
KN-Q08-200	ø2	ø8	39	20.5	9
KN-Q10-200	ø2	ø10	43	22	16
KN-Q10-250	ø2.5	ø10	43	22	16
KN-Q12-250	ø2.5	ø12	45.5	24	23
KN-Q12-300	ø3	ø12	45.5	24	23

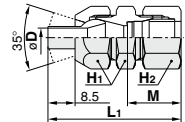


## Pivoting nozzle with self-align fitting/KNK

(mm)



Model	Nozzle size øD	Applicable tubing O.D.	Width across flats		L <sub>1</sub>	M	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KNK-10-400	ø4	ø10	17	17	41.7	17	44
KNK-10-600	ø6	ø10	17	17	41.7	17	44
KNK-12-400	ø4	ø12	17	19	41.2	17	44
KNK-12-600	ø6	ø12	17	19	41.2	17	44
KNK-16-400	ø4	ø16	17	24	41.8	17	64
KNK-16-600	ø6	ø16	17	24	41.8	17	64
KNK-20-400	ø4	ø20	17	27	43.8	17	77
KNK-20-600	ø6	ø20	17	27	43.8	17	77



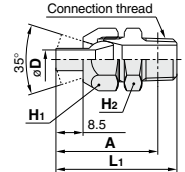
## Pivoting nozzle with male thread/KNK

(mm)



Model	Nozzle size øD	Connection thread	Width across flats		L <sub>1</sub>	A*	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KNK-R02-400	ø4	R 1/4	17	17	38	31.9	32
KNK-R02-600	ø6	R 1/4	17	17	38	31.9	32
KNK-R03-400	ø4	R 3/8	17	17	39	32.4	40
KNK-R03-600	ø6	R 3/8	17	17	39	32.4	40
KNK-R04-400	ø4	R 1/2	17	22	42.2	34.1	54
KNK-R04-600	ø6	R 1/2	17	22	42.2	34.1	54

\* Reference dimensions after R thread installation.



## High efficiency nozzle/KNH

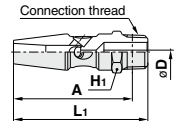
(mm)



Model	Nozzle size øD	Connection thread	Width across flats		L <sub>1</sub>	A*	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KNH-R02-100	ø1	R 1/4	14	14	52	46	38
KNH-R02-150	ø1.5	R 1/4	14	14	52	46	38
KNH-R02-200	ø2	R 1/4	14	14	52	46	38

\* Reference dimensions after R thread installation.

Amplifies the air blow flow rate (When operated at 0.5 MPa: amplifies by 2 to 3 times)

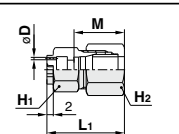


## Low noise nozzle with self-align fitting/KNS

(mm)



Model	Nozzle size øD	Applicable tubing O.D.	Width across flats		L <sub>1</sub>	M	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KNS-08-075-4	ø0.75 x 4	ø8	12	14	24.3	16	17
KNS-08-100-4	ø1 x 4	ø8	12	14	24.3	16	17
KNS-10-075-4	ø0.75 x 4	ø10	14	17	24	17	24
KNS-10-090-8	ø0.9 x 8	ø10	14	17	24	17	24
KNS-10-100-4	ø1 x 4	ø10	14	17	24	17	24



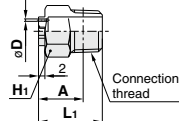
## Low noise nozzle with male thread/KNS

(mm)



Model	Nozzle size øD	Connection thread	Width across flats		L <sub>1</sub>	A*	Weight (g)
			H <sub>1</sub>	H <sub>2</sub>			
KNS-R01-075-4	ø0.75 x 4	R 1/8	12	18	14	9	9
KNS-R01-100-4	ø1 x 4	R 1/8	12	18	14	9	9
KNS-R01-090-8	ø0.9 x 8	R 1/8	12	18	14	9	9
KNS-R02-075-4	ø0.75 x 4	R 1/4	14	20	14	13	13
KNS-R02-090-8	ø0.9 x 8	R 1/4	14	20	14	13	13
KNS-R02-100-4	ø1 x 4	R 1/4	14	20	14	13	13
KNS-R02-110-8	ø1.1 x 8	R 1/4	14	20	14	13	13

\* Reference dimensions after R thread installation.



## Sensing Heads

### Standard sensing head/KNP

Model	Nozzle size øD	Applicable tubing O.D.	Width across flats		M	L1	L2	Weight (g)
			H1	H2				
<b>KNP-1</b>	ø2.5	ø4	5	8	13.3	64.6	986.7	7

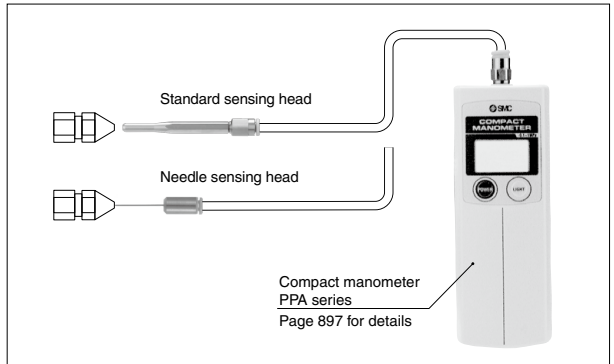
\* A 1 m polyurethane tube is included.

### Needle sensing head/KNP

Model	Nozzle size øD	Applicable tubing O.D.	D2	M	L1	L2	L3	Weight (g)

\* A 1 m polyurethane tube is included.

Use to measure workpiece collision pressure.



## Principal Parts Material

### KN, KNK, KNH, KNS

Body, nut	C3604
Sleeve (Self-align fitting type)	C2700
Nozzle (Pivoting type)	Stainless steel 303

### KNL

Pipe	C1220T-0
Nozzle	C3604

### KNP-1

Pressure spindle	Stainless steel 303
One-touch fittings	POM, NBR, Stainless steel 303, Stainless steel 304
Polyurethane tube (ø4, 1 m)	Polyurethane

### KNP-2

Pipe	Stainless steel 304
One-touch fittings	POM, NBR, Stainless steel 304
Polyurethane tube (ø4, 1 m)	Polyurethane

## Specifications

### Nozzle (KN, KNK, KNH, KNS, KNL)

<b>Applicable tubing material</b>	Nylon, Soft nylon, Flexible copper pipe (C1220T-O), OST pipe	
<b>Applicable tubing O.D.</b>	ø4, ø6, ø8, ø10, ø12, ø16, ø20	
<b>Fluid</b>	Air, Coolant	
<b>Maximum operating pressure</b>	1 MPa (0.3 MPa with OST pipe)	
<b>Ambient and fluid temperature</b>	-5 to 60°C (No freezing)	
<b>Threads</b>	<b>Mounting</b>	JISB0203 (taper threads for piping)
	<b>Nut</b>	JISB0205 (Metric fine thread)
<b>Seal on the threads</b>	None	
<b>Copper-free (Standard)</b>	Brass parts are all electroless nickel plated.	

### Sensing head (KNP)

<b>Applicable tubing O.D.</b>	ø4
<b>Fluid</b>	Air
<b>Maximum operating pressure (at 20°C)</b>	0.8 MPa
<b>Ambient and fluid temperature</b>	-5 to 60°C (No freezing)

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