Пневмопистолет

VMG

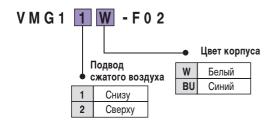
- Низкие потери давления менее 1%
- Постоянное усилие нажатия на рычаг, не зависящее от рабочего давления
- Два варианта цвета корпуса белый или темно-синий
- Два варианта подвода воздуха сверху или снизу
- Широкий выбор сменных сопел серии KN



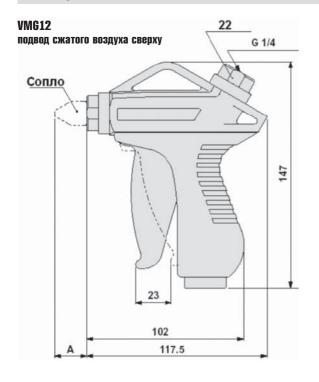
Рабочая среда	Сжатый воздух
Рабочий диапазон давления (МПа)	0~1.0
Испытательное давление (МПа)	1.5
Рабочий диапазон температур (°C)	-5~60
Эквивалентное сечение (мм²)	26 (без сопла)
Присоединительная резьба	G1/4
Присоединительная резьба для сопла	Rc1/4
Bec (r)	180

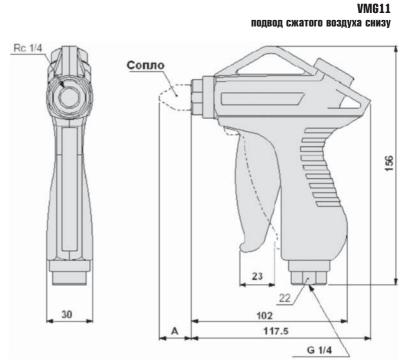


Номер для заказа



Размеры

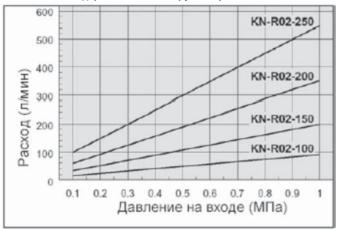




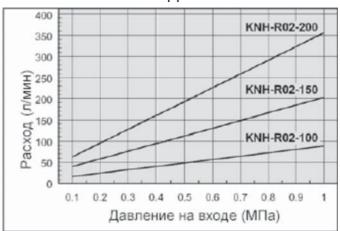


Характеристики расхода

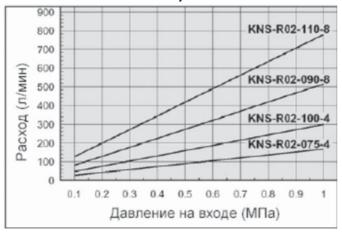
Стандартное сопло с наружной резьбой



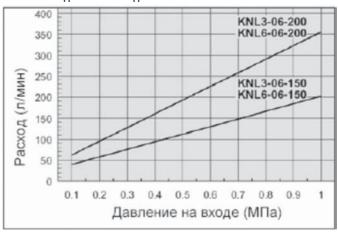
Сопло повышенной эффективности



Сопло с пониженным шумом



Удлиненное медное сопло



Сменные сопла (серия KN)

Тип сопла	Номер для заказа	Диаметр сопла (мм)	Внешний вид
Стандартное сопло	KN-R02-100	1	
с наружной резьбой	KN-R02-150	1.5	
	KN-R02-200	2	O COLOR
	KN-R02-250	2.5	
Сопло	KNH-R02-100	1	
повышенной эффективности	KNH-R02-150	1.5	
	KNH-R02-200	2	
Сопло	KNS-R02-075-4	0.75x4	
с пониженным шумом	KNS-R02-090-8	0.9x8	AT THE REAL PROPERTY.
	KNS-R02-100-4	1 x4	
	KNS-R02-110-8	1.1x8	
Удлиненное медное сопло	KNL3-06-150	1.5 (длина 300)	
(для монтажа требуется фитинг:	KNL3-06-200	2 (длина 300)	
H06-02)	KNL6-06-150	1.5 (длина 600)	
	KNL6-06-200	2 (длина 600)	

Сопла заказываются отдельно.

Blow Gun



New

20% reduction in power consumption

with the SMC "Blow gun" + "S coupler" + "Coil tube"

*10% reduction with the "Blow gun (VMG)" only

New

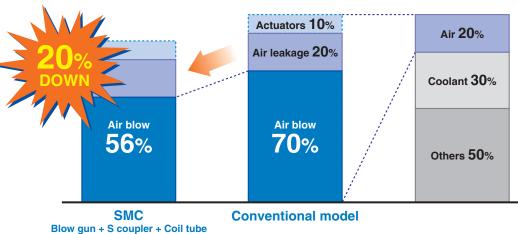
With cover

Extension nozzle

Added 100 mm and 150 mm lengths

Pressure loss 100 or less

■ Amount of electricity used in a factory



The electricity used by compressors for air accounts for **approximately 20**% of that consumed by the entire factory. Also, 70% of the air consumed in the process is used for air blowing. SMC blow guns have minimal pressure loss compared with conventional models, so they can achieve equivalent performance at lower pressures and with less volume of air consumption. As a result, it is possible to achieve a 20% reduction in power consumption.

Series VMG

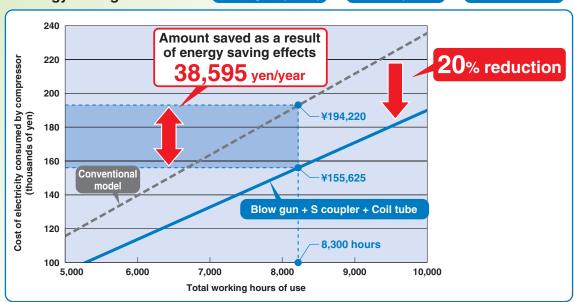


Energy Saving Pneumatic System Proposal

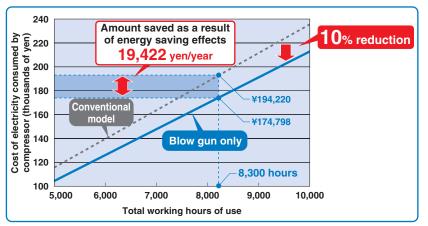
Energy Saving Effects

When the yearly total working hours spent on air blowing amounts to 8,300 hours, use of conventional models results in power consumption costs totaling 194,220 yen. When using the SMC system (Blow gun + S coupler + Coil tube), however, the yearly cost is reduced to 155,625 yen, for a total yearly saving of 38,595 yen, or 20% of the total.

Energy saving effects with Blow gun (VMG) + S coupler + Coil tube



Energy saving effects with Blow gun (VMG) only



Calculation conditions

Blowing distance: 100 mm
 Impact pressure: 0.011 MPa

· Cost of electricity: 15 yen/kWh

Work model

• Blow time: 10 seconds

• Frequency: 12 times/hour

• Working hours: 10 hours/day

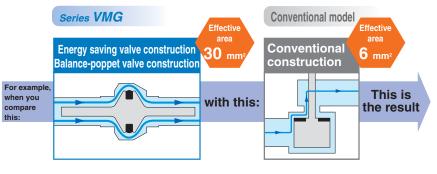
• Working days: 250 days/year

• Units used: 100

• Resulting total working hours: 8,300 hours

Valve Construction and Pressure Loss

Straighter flowing fluid "improves pressure loss!"





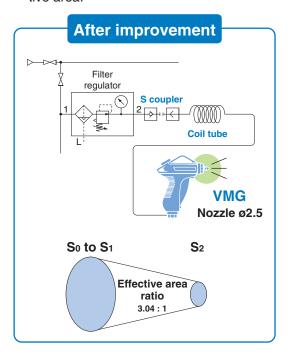


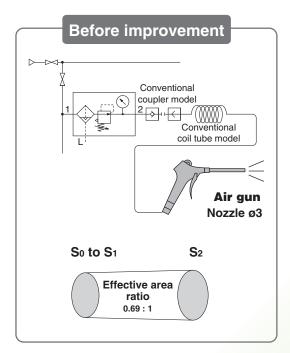


SMC helps you work toward a revolutionized production system with a focus on saving-energy.

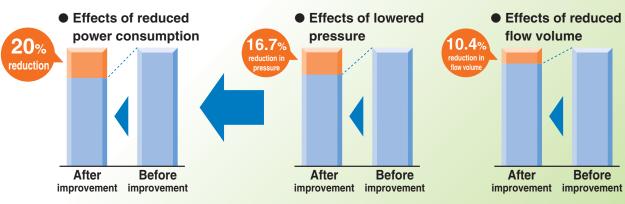
Example of Improvement

Review the air-blow job and change to the SMC blow gun, S coupler and coil tube to create a larger effective area.





		After improvement	Before improvement
Equipment	Coupler	S coupler	Conventional model
	Piping	TCU1065-1-20-X6	Conventional coil tube model (I.D. Ø5, equivalent length 5 m)
	Air gun	VMG (Nozzle size Ø2.5)	Conventional model (Nozzle size Ø3)
	Coupler, Piping (S ₀)	13.45 mm ²	5.1 mm ²
Effective area	Air gun (S ₁)	30 mm²	6 mm²
area	Nozzle (S ₂)	4.4 mm ²	6.3 mm ²
Effective area ratio (S ₀ to S ₁ : S ₂)		3.04 : 1	0.69 : 1
Impact pressure		0.011 MPa (at a distance of 100 mm)	0.011 MPa (at a distance of 100 mm)
Regulator pre	essure	0.4 MPa	0.5 MPa
Pressure inside nozzle		0.385 MPa	0.276 MPa
Compressor pressure		ompressor pressure 0.5 MPa	
Air consumption		257 dm³/min (ANR)	287 dm³/min (ANR)
Power consumption by compressor		1.25 kW	1.56 kW

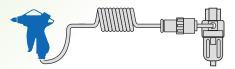




Blow Gun, Coil Tube and S Coupler Selection

accordance with the distance

Energy saving effects are enhanced through the appropriate blow gun model selection in accordance with the distance from the target object.

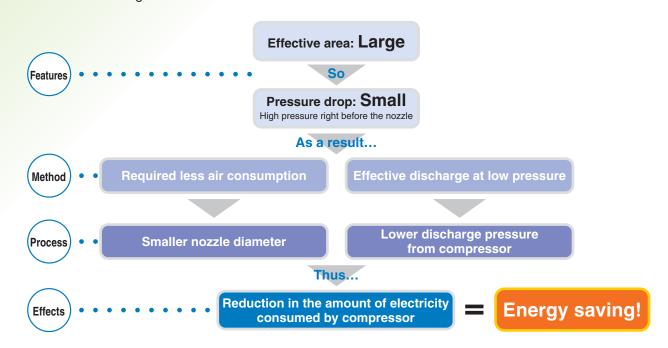


Distance	Recommended system				
Distance	Blow gun	Nozzle size	Fitting	Coil tube*	S coupler
Up to 20 mm	VMG1□□-02-01	ø 1	KQ2H06-02S	TCU0604□-1-20-X6	KK4P-06H
Up to 40 mm	VMG1□□-02-02	ø1.5	KQ2H06-02S	TCU0604□-1-20-X6	KK4P-06H
Up to 60 mm	VMG1□□-02-03	ø 2	KQ2H08-02S	TCU0805□-1-20-X6	KK4P-08H
Over 60 mm	VMG1□□-02-04	ø 2.5	KQ2H10-02S	TCU1065□-1-20-X6	KK4P-10H

*□: B (Black), W (White), R (Red), BU (Blue), Y (Yellow), G (Green), C (Clear), YR (Orange)

Energy Saving Flow

Air guns with an effective area around 6 mm² are most commonly used. But the SMC blow gun achieves a 30 mm² effective area.



Related Product

For pressure loss improvement **S coupler:** Series KK

Improved fitting's restrictor and leakage



connection and fixation With a structure that employs no steel balls, the coupler achieves a slim body without narrowing of the channel, allowing coverage of a wide effective area

■ Special method of

minimal unevenness By not blocking the channel with the valve spring, the loss of effective area can be minimized

■ Seal structure with minimal leakage

The surface-to-surface design allows super-tight sealing.

Conical structure of check valve tip

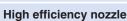
■ Smooth channel with

This structure achieves smooth flow through the channel.







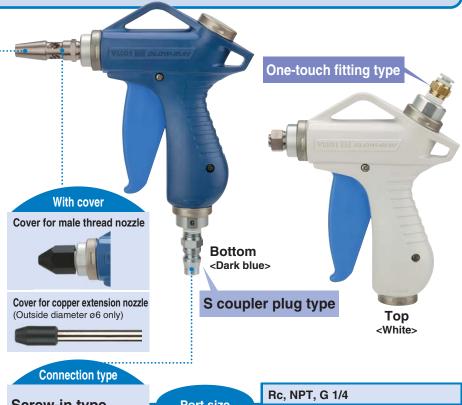




* Making use of Bernoulli effect and achieving high efficiency

Copper extension nozzle

Nozzle length: 100 mm, 150 mm, 300 mm, 600 mm Secures more power even at a greater distance from a workpiece.



Screw-in type

S coupler plug type

One-touch fitting type

Port size

Rc, NPT, G 3/8

Plug part no.

KK4P-02MS

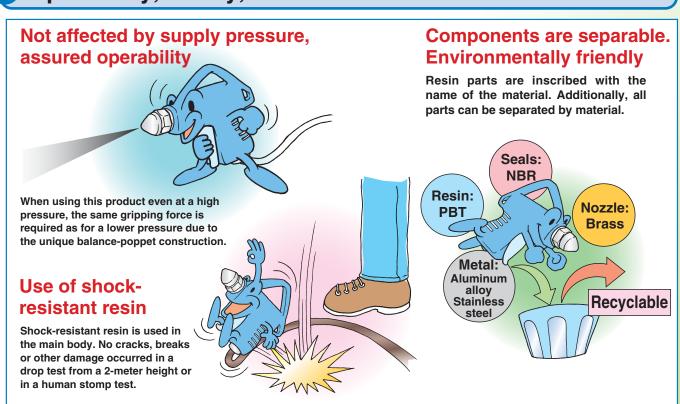
KK130P-02MS

Applicable tube O.D.

Metric size: Ø6, Ø8, Ø10

Inch size: Ø1/4", Ø5/16", Ø3/8"

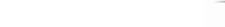
Operability, Safety, Environment



Blow Gun

Series VMG





How to Order

VMG 1 1 W - 02 - 32

	Piping entry
1	Bottom
2	Тор

Body color

	Body color s
W	White
BU	Dark blue

Connection size

Symbol	Piping connection method	Size ar	nd model no.
02			Rc1/4
03			Rc3/8
N02	Threaded	Thread size	NPT1/4
N03	Tilleaded	Trileau Size	NPT3/8
F02			G1/4
F03			G3/8
11	S coupler	Model no. of	KK4P-02MS
12	plug	coupler used	KK130P-02MS
H06	Metric size		KQ2H06-02S
H08	one-touch fitting	Model no. of fitting used	KQ2H08-02S
H10	one-touch litting	illing useu	KQ2H10-02S
H07	Inch size	Model no. of fitting used	KQ2H07-35S
H09			KQ2H09-35S
H11	One-touch litting	inting useu	KQ2H11-35S

- Note 1) S coupler and fitting are included in the same package.
- Note 2) Port size is Rc1/4 if using the S coupler plug.
- Note 3) The blow gun port size is Rc1/4 if using the metric size one-touch fitting.
- Note 4) The blow gun port size is NPT1/4 if using the inch size one-touch fitting.

Specifications

Fluid	Air		
Operating pressure range	0 to 1.0 MPa		
Proof pressure	1.51	MРа	
Ambient and fluid temperature	−5 to 60°C (No freezing)		
Flow-rate characteristics (With nozzle removed)	C (dm³/s·bar): 6.0, b: 0.25 (Effective area: 30 mm²)		
Port size	Rc, NPT, G 1/4, 3/8		
Piping entry	Bottom Top		
Nozzle port size	Rc1/4		
Weight (Main unit only)	165 g		
Operational force (when the valve is fully open)	7 N		

With nozzle cover (Only for male thread nozzle, ø6 extension nozzle)

	,
Nil	None
С	With nozzle cover/HNBR
CF	With nozzle cover/Fluororubber

Nozzie				
Symbol	Type	Nozzle size	Nozzle part no.	
Nil	W	ithout nozzle/		
01		ø1	KN-R02-100	
02		ø1.5	KN-R02-150	
03		ø2	KN-R02-200	
04	Male thread nozzle	ø2.5	KN-R02-250	
05		ø3	VMG1-R02-300	
06		ø3.5	VMG1-R02-350	
07		ø4	VMG1-R02-400	
11		ø1	KNH-R02-100	
12	High efficiency nozzle	ø1.5	KNH-R02-150	
13		ø2	KNH-R02-200	
21		ø0.75 x 4	KNS-R02-075-4	
22	Low noise nozzle	ø0.9 x 8	KNS-R02-090-8	
23	with male thread	ø1 x 4	KNS-R02-100-4	
24		ø1.1 x 8	KNS-R02-110-8	

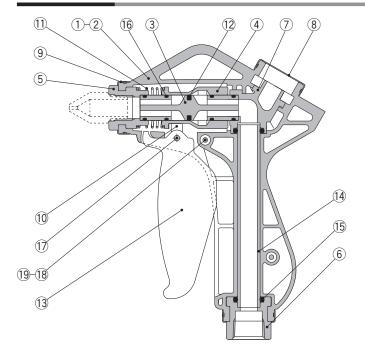
Extension nozzle

Symbol	Type	Nozzle length	Nozzle size	Nozzle part no.
31		200	ø1.5	VMG1-06-150-300
32		300 mm	ø2	VMG1-06-200-300
33	ø6 copper	COO	ø1.5	VMG1-06-150-600
34	extension	600 mm	ø2	VMG1-06-200-600
35	nozzle Note)	100 mm	ø1.5	VMG1-06-150-100
36		100 mm	ø2	VMG1-06-200-100
37		150 mm	ø1.5	VMG1-06-150-150
38		130 111111	ø2	VMG1-06-200-150
41			ø2.5	VMG1-08-250-100
42		100 mm	ø3	VMG1-08-300-100
43			ø3.5	VMG1-08-350-100
44			ø2.5	VMG1-08-250-150
45	ø8 copper	150 mm	ø3	VMG1-08-300-150
46	extension		ø3.5	VMG1-08-350-150
47	nozzle Note)		ø2.5	VMG1-08-250-300
48		300 mm	ø3	VMG1-08-300-300
49			ø3.5	VMG1-08-350-300
50			ø2.5	VMG1-08-250-600
51		600 mm	ø3	VMG1-08-300-600
52			ø3.5	VMG1-08-350-600

Note) Part number for set of extension nozzle and fitting. Extension nozzle and fitting are included in the same package.

Refer to "How to attach extension nozzle" in the operation manual for assembly procedures.

Construction



Component F	arts
--------------------	------

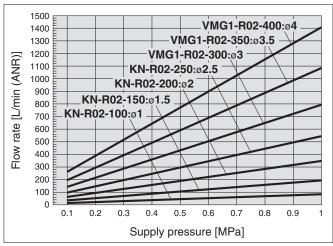
COIII	ponent i arto		
No.	Description	Material	Note
1	Body L	PBT	
2	Body R	PBT	
3	Main valve	PBT	
4	Valve guide	POM	
5	Nozzle holder	Aluminium alloy	Anodized
6	Port	Aluminium alloy	Anodized
7	Elbow	PBT	Only for the VMG12□
8	Cover	Stainless steel	
9	Ring	Stainless steel	
10	Arm	PBT	
11	Spring	Stainless steel	
12	Main valve seal	HNBR	
13	Lever	PBT	
14	Piping (bottom)	РОМ	Only for the VMG11 Combined with the elbow 7.
15	O-ring	NBR	
16	O-ring	NBR	
17	Parallel pin	Stainless steel	
18	Cross recessed round head screw	Stainless steel	
19	Hexagon nut	Stainless steel	

Note) Grease is used on rubber and sliding sections.

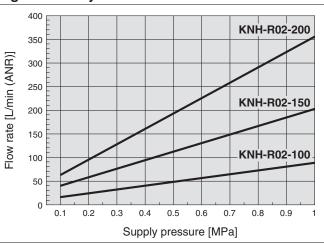
Flow-rate Characteristics

Note) Values when the main valve is fully open

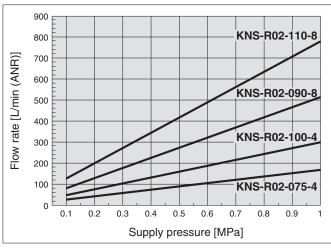
Male thread nozzle



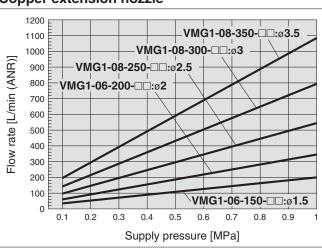
High efficiency nozzle



Low noise nozzle with male thread

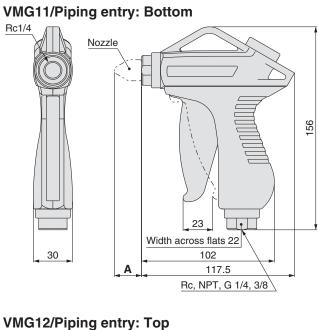


Copper extension nozzle

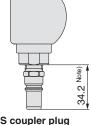


Series VMG

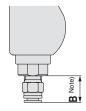
Dimensions



Note) Reference dimensions after installation



32



S coupler plug mounting (KK4P-02MS)

S coupler plug mounting (KK130P-02MS)

One-touch fitting mounting (Series KQ2H)

Rc1/4

Symbol

01

33

34

35

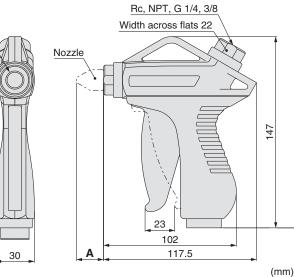
36

37

38

ø6 copper

Type



Nozzle part no.

KN-R02-100

S coupler plug mounting (KK4P-02MS)



170.8

One-touch fitting

mounting (KK130P-02MS)

mounting (Series KQ2H)

C Note)

02			KN-R02-150	ø1.5	23
03	Male thread		KN-R02-200	ø2	22.5
04	nozzle		KN-R02-250	ø2.5	22.1
05	1102216		VMG1-R02-300	ø3	22
06			VMG1-R02-350	ø3.5	21.5
07			VMG1-R02-400	ø4	21.5
11	Ligh officions		KNH-R02-100	ø1	
12	High efficiency nozzle		KNH-R02-150	ø1.5	44
13			KNH-R02-200	ø2	
21			KNS-R02-075-4	ø0.75 x 4	
22	Low noise nozzle		KNS-R02-090-8	ø0.9 x 8	12
23	with male thread		KNS-R02-100-4	ø1 x 4	12
24			KNS-R02-110-8	ø1.1 x 8	
31	Nozz	le length:	VMG1-06-150-300	ø1.5	298
32	300	mm	VMG1-06-200-300	ø2	290

VMG1-06-150-600

VMG1-06-200-600

VMG1-06-150-100

VMG1-06-200-100

VMG1-06-150-150

VMG1-06-200-150

22.5	
22.1	
22	
21.5	
44	
12	
298	
598	

98

148

A Note)

23.4

Nozzle size

ø1.5

ø1.5

ø1.5

ø2

ø2

ø2

					(mm)
Symbol	Туре		Nozzle part no.	Nozzle size	A Note)
41			VMG1-08-250-100	ø2.5	
42		Nozzle length: 100 mm	VMG1-08-300-100	ø3	98
43		100 11111	VMG1-08-350-100	ø3.5	
44	1	Nozzle length:	VMG1-08-250-150	ø2.5	
45			VMG1-08-300-150	ø3	148
46	ø8 copper		VMG1-08-350-150	ø3.5	
47	extension nozzle ^{Note)}		VMG1-08-250-300	ø2.5	
48		Nozzle length: 300 mm	VMG1-08-300-300	ø3	298
49		300 11111	VMG1-08-350-300	ø3.5	
50			VMG1-08-250-600	ø2.5	
51		Nozzle length: 600 mm	VMG1-08-300-600	ø3	598
52		000 11111	VMG1-08-350-600	ø3.5	

- /	-	m	
- (111	ш	

Туре	One-touch fitting model	B Note)	C Note)
Metric size	KQ2H06-02S	17	158
	KQ2H08-02S	20.5	161.5
one-touch fitting	KQ2H10-02S	27.5	168
Inch size	KQ2H07-35S	17	158
one-touch fitting	KQ2H09-35S	20.5	161.5
	KQ2H11-35S	27.5	168

Note) Reference dimensions after installation

Nozzle length:

600 mm

100 mm

Nozzle length:

extension nozzle Note) Nozzle length:

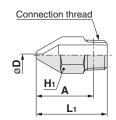
Dimensions: Nozzles/Series KN

Male thread nozzle: KN

(mm)



Part no.	Nozzle size	Connection	Width across flats		A *	
raitiio.	D	thread	H ₁	L ₁	A	
KN-R02-100	ø1			31.4	25.4	
KN-R02-150	ø1.5		14	31	25	
KN-R02-200	ø2	R1/4		30.5	24.5	
KN-R02-250	ø2.5			30.1	24.1	
VMG1-R02-300	ø3			30	24	
VMG1-R02-350	ø3.5			29.5	23.5	
VMG1-R02-400	ø4			29.5	23.5	

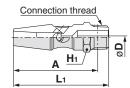


High efficiency nozzle: KNH

(mm)



Part no.	Nozzle size D	Connection thread	Width across flats	L ₁	A *
KNH-R02-100	ø1				
KNH-R02-150	ø1.5	R1/4	14	52	46
KNH-R02-200	ø2				

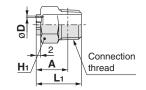


Low noise nozzle with male thread: KNS

(mm)



Part no.	Nozzle size D	Connection thread	Width across flats	L ₁	A *
KNS-R02-075-4	ø0.75 x 4				
KNS-R02-090-8	ø0.9 x 8	D4/4	14	20	14
KNS-R02-100-4	ø1 x 4	R1/4			
KNS-R02-110-8	ø1.1 x 8				



Copper extension nozzle set

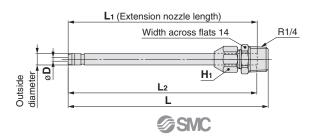
(mm)



Part no.		Nozzle size D	Outside diameter	L ₁	L2 Note1)	L Note1)	Width across flats
VMG1-06-150-	100	ø1.5		100	100	100	
VMG1-06-200-	100	ø2		100	100	106	
VMG1-06-150-	150	ø1.5		150	150	150	
VMG1-06-200-	150	ø2	~6	150	150	156	12
VMG1-06-150-	300	ø1.5	ø6 -	300	300	306	12
VMG1-06-200-	300	ø2		300	300	300	
VMG1-06-150-	600	ø1.5		600 600	600	606	
VMG1-06-200-	600	ø2			000		
VMG1-08-250-	100	ø2.5					
VMG1-08-300-	100	ø3		100	100	106	
VMG1-08-350-	100	ø3.5					
VMG1-08-250-	150	ø2.5					
VMG1-08-300-	150	ø3		150	150	156	
VMG1-08-350-	150	ø3.5	ø8				14
VMG1-08-250-	300	ø2.5	٥٥				14
VMG1-08-300-	300	ø3		300	300	306	
VMG1-08-350-	300	ø3.5					
VMG1-08-250-	600	ø2.5					
VMG1-08-300-	600	ø3		600	600	606	
VMG1-08-350-	600	ø3.5					

Note 1) Reference dimensions after installation

Note 2) Copper extension nozzle and self-align fitting are included in the same package, (but unassembled). Refer to "How to attach extension nozzle" in the operation manual for assembly procedures.



^{*} Reference dimensions after R thread installation

^{*} Reference dimensions after R thread installation

^{*} Reference dimensions after R thread installation

Series VMG

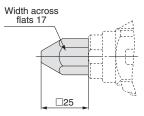
Dimensios: Nozzle Cover

Cover for male thread nozzle

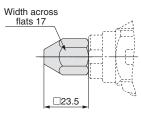
(mm)



Nozzle cover part no.	Material	Applicable blow gun model		
Nozzie cover part no.	Ivialeriai	Model	Nozzle type	
P5670129-01	HNBR	VMG1□□-□-01 to 04	Male thread nozzle	
P5670129-01F	Fluororubber	VMG100-01 to 04	ø1 to ø2.5	
P5670129-02	HNBR	VMG1□□-□-05 to 07	Male thread nozzle	
P5670129-02F	Fluororubber	VMG100-05 t0 07	ø3 to ø4	



VMG1□-□□-1 to 04



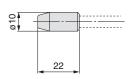
VMG1□-□□-05 to 07

Cover for copper extension nozzle

(mm)



Nozzle cover part no.	Material	Applicable blow gun model		
Nozzie cover part no.	Ivialeriai	Model	Nozzle type	
P5670129-11	HNBR	VMG1□□-□-31 to 38	ø6 copper	
P5670129-11F	Fluororubber	VIVIG 131 (0 38	extension nozzle	



VMG1□-□□-31 to 38



Series VMG Specific Product Precautions 1

Be sure to read this before handling.

Selection

△Warning

1. Check the specifications.

The products in this catalog are designed to be used in compressed air systems only. If the products are used in an environment where pressure or temperature is out of the specified range, damage and/or malfunction may result. Do not use under such conditions.

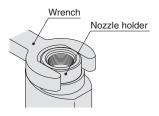
∧Caution

 Do not apply the blow gun to flammable, explosive or toxic substances such as gas, fuel gas or refrigerant. Such substances may exude from inside the blow gun.

Mounting

Marning

- Install a stop valve on the supply pressure side of the blow gun to enable emergency shut off in case of unexpected leakage or damage.
- 2. When installing a nozzle on the blow gun, wrap pipe tape around the threads of the nozzle.
- 3. When installing the nozzle, secure the nozzle holder of the blow gun by applying a wrench of 22 mm width across flats to the two chamfered surfaces of the holder without applying force to the body. Then, tighten the nozzle with force within the torque range below. As a guideline, it is equivalent to 2 to 3 additional turns with a tool after manual tightening.



Nozzle tightening torque range 12 to 14 N·m

Insufficient tightening may cause loosening of the nozzle.

Piping

∧ Caution

1. Check the model, type and size before installation.

Also, confirm that there is no scratches, gouges or cracks on the product.

2. Before piping

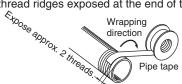
Before piping, it should be thoroughly blown out with air (flushing) or washed to remove chips, cutting oil and other debris from inside the pipe.

Piping

⚠ Caution

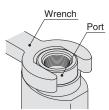
3. Wrapping of pipe tape

When screwing together pipes and fittings, etc., be certain that chips from the pipe threads and sealing material do not get inside the blow gun. Also, when the pipe tape is used, leave 1.5 to 2 thread ridges exposed at the end of the threads.



4. When tightening the threads, secure the nozzle holder of the blow gun by applying a wrench of 22 mm width across flats to the two chamfered surfaces of the holder without applying force to the body. Then, tighten the nozzle with torque specified in the table below. As a guideline, it is equivalent to 2 to 3 additional turns with a tool after manual tightening.

Be careful that tightening with torque beyond the ranges in the table below may cause damage to the body.



Male thread	Tightening torque N·m
R1/4	12 to 14
R3/8	22 to 24

- 5. Allow extra length when connecting a tube to accommodate changes in tube length due to pressure.
- Confirm that no twisting, turning or tensile force or moment load is applied to the port or tube. This may cause fittings to fracture or tubes to be crushed, burst or come loose.
- 7. Do not abrade, entangle or scratch the tube. This may cause the tube to be crushed, burst or come loose.

Lubrication

△Warning

1. Do not lubricate the product.

It may contaminate or damage the target object.

Air Supply

△Warning

1. Use clean air.

Do not use compressed air which includes chemicals, synthetic oils containing organic solvents, salt or corrosive gases, etc., as it can cause damage or malfunction.





Series VMG Specific Product Precautions 2

Be sure to read this before handling.

Air Supply

∧ Caution

1. Install air filters.

Install air filters at the upstream side of blow gun. Choose the filtration degree of 5 μm or finer.

2. Install an after-cooler, air dryer or water droplet separator, etc.

Air excessive drainage may cause a malfunction of blow gun and contaminate or damage the target object. To prevent this, install an after-cooler, air dryer or water droplet separator, etc.

Operating Environment

△Warning

- 1. Do not use in an atmosphere of corrosive gases, chemicals, sea water, water or water vapor or in an environment where such substances may adhere.
- 2. Provide shading in an environment where the product is exposed to the sunlight.
- 3. Do not use in an environment where a heat source is at a close distance.
- 4. Do not use in an environment where static electricity is a problem. It may cause malfunction or failure of the system. Please contact SMC for use in such an environment.
- Do not use in an environment where spatters are generated. There is danger of fires caused by spattering. Please contact SMC for use in such an environment.
- 6. Do not use in an environment where the product is exposed to cutting oil, lubricating oil or coolant oil. Please contact SMC for use in an environment where the product is exposed to such liquid as cutting oil, lubricating oil or coolant oil.

Maintenance

⚠ Caution

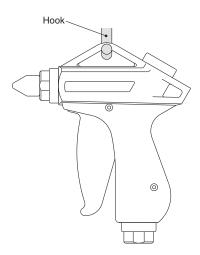
- 1. In periodical inspections, check the following items and replace the parts if necessary.
 - a) Scratches, gouges, abrasion, corrosion
 - b) Air leakage
 - c) Twisting, crushing and turning of connected tubes
 - d) Hardening, deterioration and softening of connected tubes
 - e) Loosening of nozzles
- 2. When removing the product, first stop the pressure supply, exhaust compressed air in the piping and check the condition of atmospheric release.
- Do not disassemble or remodel the body of the product.

Handling

Marning

- 1. To prevent lurching of the nozzle due to air pressure, confirm that the nozzle is not loosened or rattling by pulling it by hand before operation.
- 2. Make sure to wear safety goggles to protect yourself from splashed substances.
- 3. Do not direct the tip of the nozzle at the face or other parts of a human body. It may cause danger to personnel.
- 4. Do not use the product to clean or remove toxic substances or chemicals.
- Do not drop, step on or hit the product. It may cause damage to the product.
- 6. Do not use the product to disturb public order or public hygiene.
- 7. This product is not a toy.
- 8. After blowing, make sure to hang the product on a hook, etc.

If leaving the product in a dusty place, particles will enter the product and may result in a malfunction.



- When the blow gun is used or stored, confirm that no twisting, turning or tensile force or moment load is applied to the port or tube. This may cause fittings to fracture or tubes to be crushed, burst or come loose.
- 10. When attaching a nozzle cover, align the hex parts of the nozzle and nozzle cover before covering. When attaching an extension nozzle cover, confirm that the nozzle tip is completely inserted into the extension nozzle cover.
- 11. Do not use a nozzle cover or extension nozzle cover if it is cracked or does not fit securely, and replace with a new cover.