Series variation

Silencer

● High damping effect and 2 types of materials

Model / appearance	Model no.	Port size (R)															Effective sectional area (mm^2)	Flow (ℓ/min) ANR 0.5MPa	Applicable cylinder bore size (mm)	Page
		M3	M5	1/8	1/4	3/8	1/2	3/4	1	11/4	11/2	2	φ6	φ8	φ10	φ12				
● Metering valve with silencer 	SMW2-6A			●													5.6	370	φ 20 to φ 50	894
	SMW2-8A				●												9.9	660	φ 32 to φ 75	
	FMS-M5		●														4	250	φ 6 to φ 15	896
	SMW-10A					●											25	1700	φ 50 to φ 100	
	SMW-15A						●										39	2600	φ 50 to φ 100	
● Small bore size type 	SL-M5		●														5	300	φ 6 to φ 15	898
● Resin body type 	SLW-6A/6N			●													10	650	φ 20 to φ 80	
	SLW-8A/8N				●												20	1300	φ 32 to φ 80	
	SLW-10A/10N					●											30	2000	φ 50 to φ 100	
	SLW-15A/15N						●										75	4850	φ 50 to φ 100	
● High noise reduction, small bore size, resin body type 	SLW-8A-H				●												15	1000	φ 32 to φ 80	900
	SLW-10A-H					●											30	2000	φ 50 to φ 100	
	SLW-15A-H						●										50	3250	φ 50 to φ 100	
● Large flow rate, small bore size, resin body type 	SLW-8L				●												30	2000 and over	φ 32 to φ 80	901
	SLW-10L					●											60	4000 and over	φ 50 to φ 100	
● High noise reduction, compact type 	SLW-6S			●													12	800	φ 20 to φ 80	902
	SLW-8S				●												30	1900	φ 32 to φ 80	
	SLW-20S							●									90	6000	φ 100 to φ 200	903

Model / appearance	Model no.	Port size (Rc or R)															Effective sectional area (mm^2)	Flow (ℓ/min) ANR 0.5MPa	Applicable cylinder bore size (mm)	Page
		M3	M5	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	φ6	φ8	φ10	φ12				
● Push-in type 	SLW-H6												●				7	455	φ 20 to φ 40	904
	SLW-H8													●			8.5	550		
	SLW-H10														●		17.5	1135		
	SLW-H12															●	25.5	1655		
● Miniature type 	SLM-M3	●															1	60 and over	φ 6 or less	905
	SLM-M5		●														5	350 and over	φ 6 to φ 15	
● Aluminum body type 	SL-8A				●												36	2400	φ 50 to φ 100	906
	SL-10A					●											48	3200	φ 63 to φ 140	
	SL-15A						●										61	4100	φ 75 to φ 180	
	SL-20A							●									160	12000	φ 100 to φ 250	
	SL-25A								●								210	14000	φ 140 to φ 250	
	SL-32A									●							280	18000	φ 140 to φ 450	
	SL-40A										●						320	21000	φ 140 to φ 450	
	SL-50A											●					500	33000	φ 300 to φ 450	

Safety precautions

Always read this section before starting use.
Refer to Intro 67 for general precautions, and to "⚠ Safety Precautions" in this section for details on each series.

Design & Selection

⚠CAUTION

■ Use this product in accordance with the specifications range.
Consult with CKD when using the product for special applications.

- The exhaust port could plug if the silencer is clogged. Design safely to prevent the system from malfunctioning.
- Use with exceeding the specifications range may result in insufficient performance, and safety can not be secured.
- This product could not use in special applications and environment.
  For example, use for special applications including nuclear energy, railway, aircraft, marine vessel, vehicle, medical equipment, equipment, or applications coming into contact with beverage or food, amusement equipment, emergency shutoff circuits, press machine, brake circuits, or for safeguard.

■ Confirm that the product will withstand the working environment.

- This product cannot be used in environments where functional obstacles could occur.
  Such environments include high temperatures, a chemical atmosphere, or where chemicals, vibration, moisture, water drip, or gas are present.

Installation & Adjustment

Piping

⚠CAUTION

■ When connecting pipes, wrap sealing tape in the opposite direction from threads starting 2 mm inside from the end of piping threads.

- If sealing tape protrudes from pipe threads, it could be cut when screwed in. This could cause the tape to enter the pneumatic components and lead to faults.

■ Apply adequate torque when connecting pipes.

- To prevent air leak and to protect thread.
- Refer to the text for adequate torque of each series.

■ Install the silencer so that exhaust air does not blow directly into eyes.

■ Do not apply lateral load to the main unit during or after installation.

■ Secure space around the silencer for installation and removal.

■ Handling push-in joints and tubes

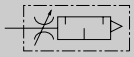
- Refer to Cautions of joint and tube, and "Safety Precautions" (pages 936 to 939) for handling push-in joints and tubes.

Metering valve with silencer

SMW2 Series

● Port size: R1/8 to R1/4

JIS symbol



Features

- Compact, light weight, high flow
  Volume reduced by 50%, and weight reduced by 80% compared with conventional series, while maximum effective sectional area in the class is achieved.
- Damping effect 23dB (A) and over
  P.P. sintering element with high damping effect integrated into the body to maintain low noise level.
- Provided push lock type needle
  Knob with push lock mechanism enables easy and secure locking.
- Environmental friendly design
  Using plastic material only, sorting at disposing is eliminated.

Specifications

Descriptions	SMW2-6A	SMW2-8A
Working fluid	Compressed air	
Max. working pressure MPa	0.7	
Min. working pressure MPa	0	
Withstanding pressure MPa	1.05	
Fluid temperature ℃	5 to 60	
Ambient temperature ℃	-10 to 60 (no freezing)	
Ambient humidity %RH	85 or less	
Port size R	1/8	1/4
Product weight g	4.5	5
Applicable cylinder bore size mm	ϕ 20 to ϕ 50	ϕ 32 to ϕ 75
Number of needle turn	9	
Damping effect (Note 2) dB (A)	23 and over	28 and over
Flow (Note 1) ℓ/min. (ANR)	370	660
Effective sectional area mm^2	5.6	9.9

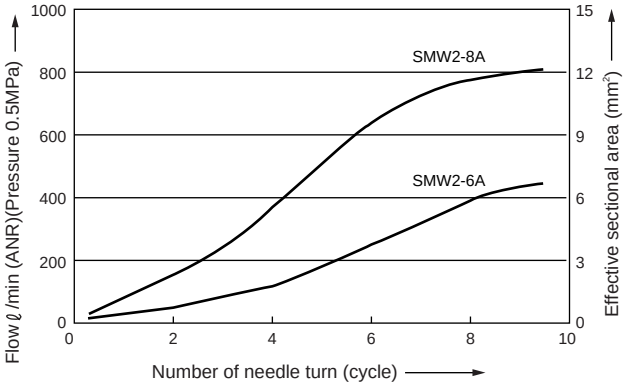
Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Damping effect at maximum flow rate is shown.

How to order

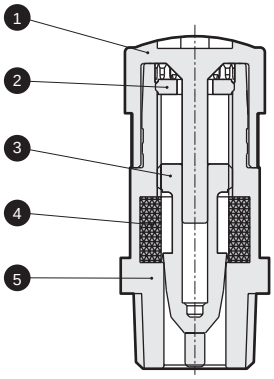
SMW2 - 6A

Symbol	Descriptions
Ⓐ **Port size**	
6A	R1/8
8A	R1/4

Flow characteristics



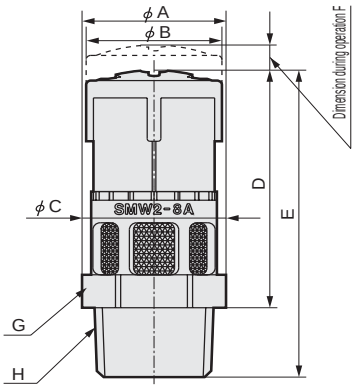
Internal structure and parts list



No.	Parts name	Material
1	Knob	PBT
2	Guide ring	Polyamide
3	Needle	Polyamide
4	Element	PP sintering resin
5	Body	Polyamide

Dimensions

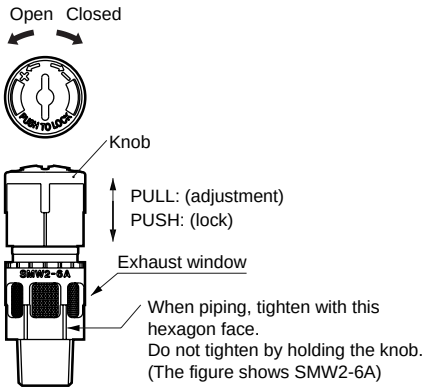
CAD



Symbol / Model no.	A	B	C	D	E	F	G Opposite side of hex.	H Port size
SMW2-6A	13.5	14.9	13.8	27.4	35.4	2.9	12	R1/8
SMW2-8A	15.8						14	R1/4

How to use

- The needle lock is released when the knob is pulled, and is locked when pressed.
- Pull the knob and the release the lock before adjusting the flow rate.
  The knob opens when turned to the right and closes when turned to the left.
- Return the knob to the closed state, and gradually open it to adjust speed.
- After adjusting speed, press the knob and confirm that the needle is locked.



Safety precautions

Design & Selection

- This product cannot be used as a stop valve with zero leakage.
  Due to structure, a few leakage could occur.

- Depending on air quality (dew point), the exhaust port could freeze due to adiabatic expansion.

Installation & Adjustment

- The needle is designed to open and close by turning lightly with the fingers.
  Turning the needle too far when fully opened or closed could damage internal parts.

- Return the knob to the closed state, and gradually open it to adjust speed. If the needle is open, the actuator could pop out suddenly and cause a hazard.

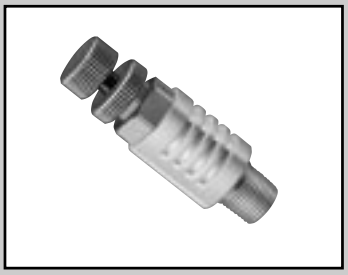
- The tightening torque for the pipe thread is shown in Table 1.
  Screws loosen easily under high temperatures, so when the ambient temperature is 40℃ and over, mount with the upper torque limit (1.0N·m).

Model no.	Tightening torque (N·m)
SMW2-6A	0.5 to 1.0
SMW2-8A	0.5 to 1.0

Table 1. Recommended tightening torque

- When piping, use a tool and tighten with the hexagon face below the exhaust window.
  Do not tighten or remove pipes with the knob.
  Internal damage could result.

- Sealant is not applied on threads. If use in this state, screws do not loose but some leakage could result. When using in middle speed range, wrap sealing tape around the joint.

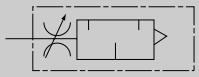


Metering valve with silencer

FMS/SMW Series

● Port size: M5/R3/8/R1/2

JIS symbol



CAD

Specifications

Descriptions	FMS-M5	SMW-10A	SMW-15A
Working fluid	Compressed air		
Max. working pressure MPa	0.7		
Min. working pressure MPa	0		
Withstanding pressure MPa	1.05		
Fluid temperature ℃	5 to 60 (no freezing Note 3)		
Ambient temperature ℃	-10 to 60 (no freezing)		
Port size R	M5	3/8	1/2
Product weight g	6	125	170
Applicable cylinder bore size mm	ϕ 6 to ϕ 15	ϕ 50 to ϕ 100	ϕ 50 to ϕ 100
Number of needle turn	10	19	19
Damping effect Note 2 dB	20 and over		
Flow Note 1 ℓ/min. (ANR)	250	1700	2600
Effective sectional area mm^2	4	25	39

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Damping effect at maximum flow rate is shown.
Note 3: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

FMS – M5

Ⓐ Port size

Symbol	Descriptions
Ⓐ **Port size**	
M5	M5 x 0.8

Note: Sales unit is 2 pieces/1 bag.

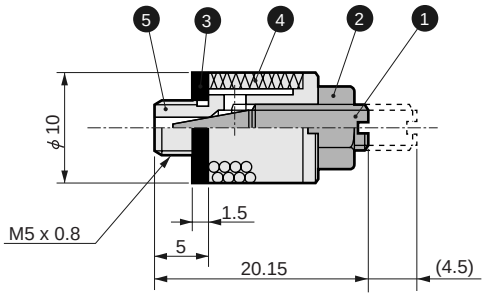
SMW – 10A

Ⓐ Port size

Symbol	Descriptions
Ⓐ **Port size**	
10A	R3/8
15A	R1/2

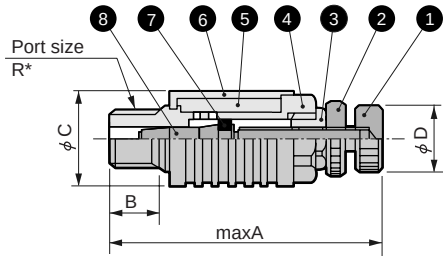
Internal structure and parts list / dimensions CAD

● FMS-M5



No.	Parts name	Material
1	Needle	Brass
2	Lock nut	Brass
3	Gasket	Nitrile rubber
4	filter	Bronze casting
5	Valve body	Brass

● SMW-10A/15A

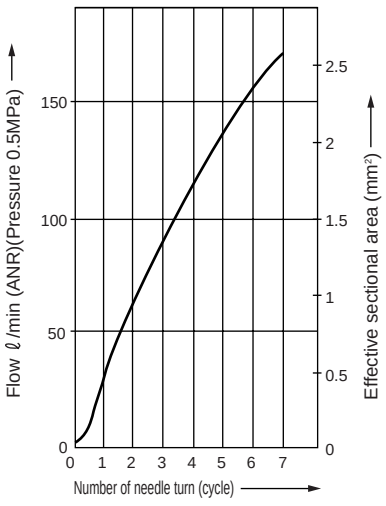


Model no.	A	B	C	D	Port size
SMW-10A	85	12	25	16	R3/8
SMW-15A	98	15	28	16	R1/2

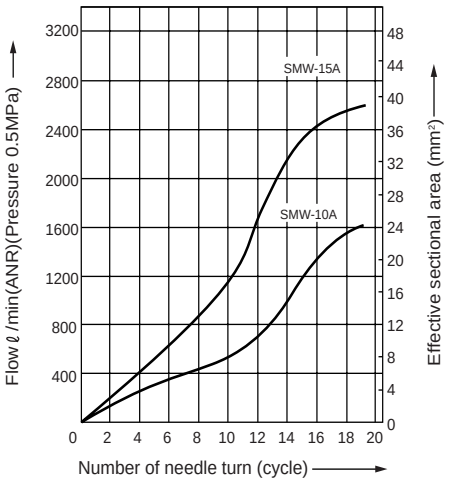
No.	Parts name	Material	No.	Parts name	Material
1	Knob	Brass	5	Sound absorbing	Felt
2	Lock nut	Brass	6	Guard	Polyamide resin
3	Gland nut	Brass	7	O ring	Nitrile rubber
4	Shaft	Brass	8	Spindle	Brass

Flow characteristics

● FMS



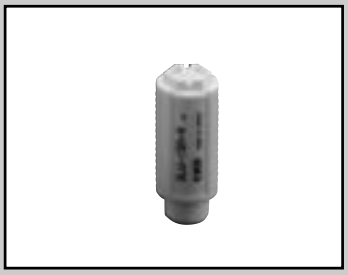
● SMW-10A·15A



Safety Precautions

● Tightening torque

Thread size	Tightening torque (N·m)
M5	1.0
R3/8	3.0
R1/2	3.0



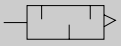
Silencer Small bore size type resin body type

SL/SLW Series

Damping effect 30dB (A) and over

● Port size: M5/R1/8 to R1/2

JIS symbol



RoHS CAD

Specifications

Descriptions	SL-M5	SLW-6A SLW-6N	SLW-8A SLW-8N	SLW-10A SLW-10N	SLW-15A SLW-15N
Working fluid	Compressed air				
Max. working pressure MPa	1.0				
Min. working pressure MPa	0				
Withstanding pressure MPa	1.5				
Fluid temperature ℃	5 to 60 (no freezing Note 2)				
Ambient temperature ℃	-10 to 60 (no freezing)				
Port size R/NPT/G	M5	1/8	1/4	3/8	1/2
Product weight g	5	3.5	7.5	15	21
Applicable cylinder bore size mm	φ6 to φ15	φ20 to φ80	φ32 to φ80	φ50 to φ100	φ50 to φ100
Damping effect dB	20 and over	30 and over			
Flow Note 1 ℓ/min. (ANR)	300	650	1300	2000	4850
Effective sectional area mm^2	5	10	20	30	75

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SL – M5

Ⓐ Port size	
M5	M5 x 0.8

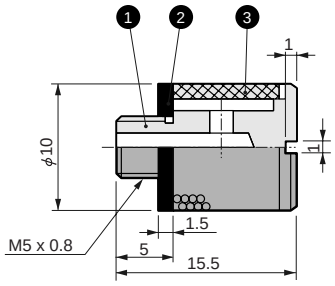
Note: Sales unit is 2 pcs/bag.

SLW – 6A

Ⓐ Port size	
6A	R1/8
6N	NPT1/8
6G	G1/8
8A	R1/4
8N	NPT1/4
8G	G1/4
10A	R3/8
10N	NPT3/8
10G	G3/8
15A	R1/2
15N	NPT1/2
15G	G1/2

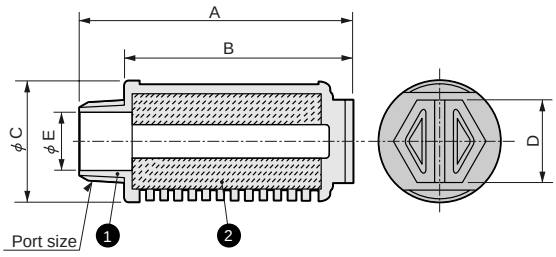
Internal structure and parts list / dimensions CAD

● SL-M5



No.	Parts name	Material
1	Body	Brass
2	Gasket	Nitrile rubber
3	Element	Brass sintering

● SLW-6A/8A/10A/15A



No.	Parts name	Material	Color
1	Body	Polyamide resin (flame resistant resin *)	White
2	Element	PP sintering resin	White

* Equivalent to UL94 standards V-O

Model no.	A	B	C	D	E	Port size	
						A	N
SLW-6*	34	28	16.5	10	7	R1/8	NPT1/8
SLW-8*	44.5	36	20	13	8.5	R1/4	NPT1/4
SLW-10*	58.5	48.5	25.5	17	12	R3/8	NPT3/8
SLW-15*	71.4	58.4	28	19	15	R1/2	NPT1/2

Safety Precautions

● Use tightening torque as strong as human hand. (Refer to the table below for tightening torque.)

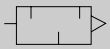
Thread size	Tightening torque (N·m)
M5	1.0
R1/8	1.0
R1/4	2.5
R3/8	3.0
R1/2	3.0

Silencer High noise reduction small bore size resin body type

SLW-*A-H Series

● Port size: R1/4 to R1/2

JIS symbol



RoHS

Specifications

Descriptions	SLW-8A-H	SLW-10A-H	SLW-15A-H
Working fluid	Compressed air		
Max. working pressure MPa	1.0		
Min. working pressure MPa	0		
Withstanding pressure MPa	1.5		
Fluid temperature ℃	5 to 60 (no freezing Note 2)		
Ambient temperature ℃	-10 to 60 (no freezing)		
Port size R	1/4	3/8	1/2
Product weight g	7.5	15	21
Applicable cylinder bore size mm	ϕ 32 to ϕ 80	ϕ 50 to ϕ 100	ϕ 50 to ϕ 100
Damping effect dB (A)	40 and over		
Flow Note 1 ℓ/min (ANR)	1000	2000	3250
Effective sectional area mm^2	15	30	50

Note 1: Flow rate is atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLW – 8A – H

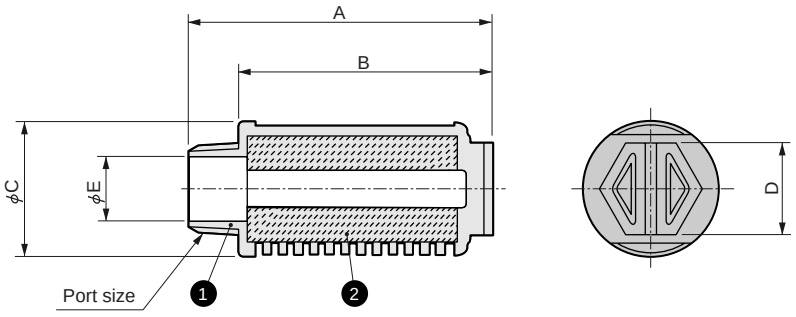
Ⓐ Port size	
8A	R1/4
10A	R3/8
15A	R1/2

Safety Precautions

● Use tightening torque as strong as human hand. (Refer to the table below for tightening torque.)

Thread size	Tightening torque (N·m)
R1/4	2.5
R3/8	3.0
R1/2	3.0

Internal structure and parts list / dimensions



No.	Parts name	Material	Color
1	Body	Polyamide resin (flame resistant resin *)	White
2	Element	PP sintering resin	Light yellow

* Equivalent to UL94 standards V-O

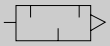
Model no.	A	B	C	D	E	Port size
SLW-8A-H	44.5	36	20	13	8.5	R1/4
SLW-10A-H	58.5	48.5	25.5	17	12	R3/8
SLW-15A-H	71.4	58.4	28	19	15	R1/2

Silencer Large flow rate small bore size resin body type

SLW-*L Series

● Port size: R1/4, R3/8

JIS symbol



RoHS

Specifications

Descriptions		SLW-8L	SLW-10L
Working fluid		Compressed air	
Max. working pressure	MPa	1.0	
Min. working pressure	MPa	0	
Withstanding pressure	MPa	1.5	
Fluid temperature	℃	5 to 60 (no freezing Note 2)	
Ambient temperature	℃	- 10 to 60 (no freezing)	
Port size	R	1/4	3/8
Product weight	g	15	19.5
Applicable cylinder bore size	mm	ϕ 32 to ϕ 80	ϕ 50 to ϕ 100
Damping effect	dB (A)	30 and over	
Flow Note 1	ℓ/min (ANR)	2000	4000
Effective sectional area	mm²	30	60

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLW – 8L

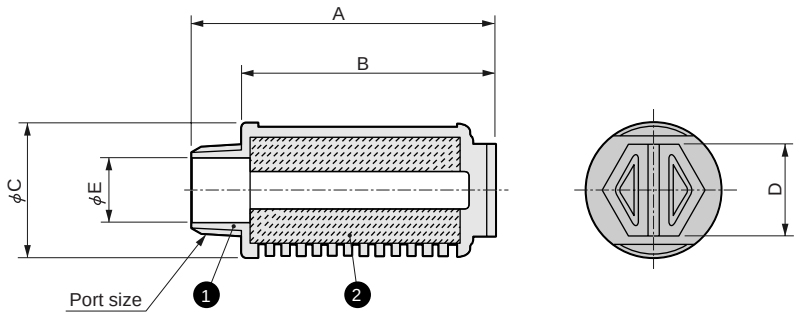
Ⓐ Port size	
8L	R1/4
10L	R3/8

Safety Precautions

● Use tightening torque as strong as human hand. (Refer to the table below for tightening torque.)

Thread size	Tightening torque (N·m)
R1/4	2.5
R3/8	3.0

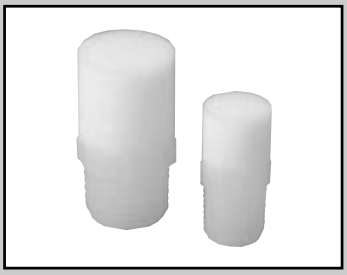
Internal structure and parts list / dimensions



No.	Parts name	Material	Color
1	Body	Polyamide resin (flame resistant resin *)	White
2	Element	PP sintering resin	White

* Equivalent to UL94 standards V-O

Model no.	A	B	C	D	E	Port size
SLW-8L	57.4	48.5	25.5	17	8.5	R1/4
SLW-10L	68.2	58.4	28	19	12	R3/8

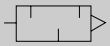


Silencer High noise reduction compact type

SLW-6S/8S Series

Compact type, light weight, damping effect 25dB(A) and over

JIS symbol



RoHS CAD

Specifications

Descriptions	SLW-6S	SLW-8S
Working fluid	Compressed air	
Max. working pressure MPa	1.0	
Min. working pressure MPa	0	
Withstanding pressure MPa	1.5	
Fluid temperature ℃	5 to 60 (no freezing Note 2)	
Ambient temperature ℃	-10 to 60 (no freezing)	
Port size R	1/8	1/4
Product weight g	1.0	2.0
Applicable cylinder bore size mm	ϕ 20 to ϕ80	ϕ 32 to ϕ80
Damping effect dB[A]	25 and over	28 and over
Flow Note 1) ℓ/min (ANR)	800	1900
Effective sectional area mm²	12	30

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.

Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLW – 8 S

Ⓐ Port size	
6	R1/8
8	R1/4

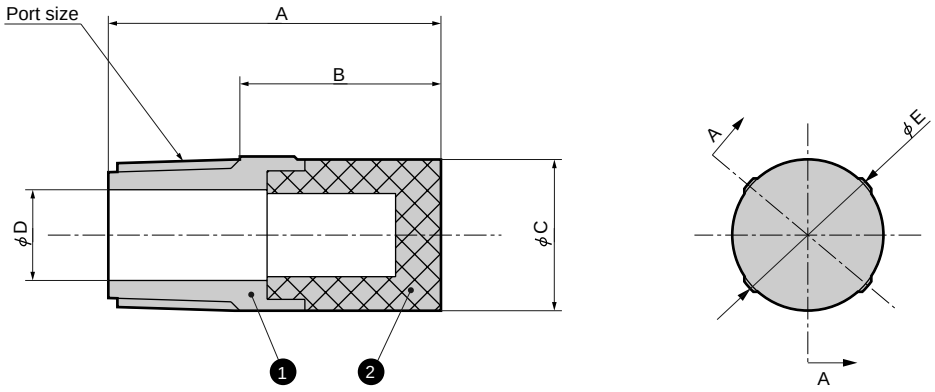
Safety precautions

Using tightening torque as strong as human hand.

(Refer to the table below for tightening torque.)

Thread size	Tightening torque (N·m)
R1/8	0.1 to 0.15
R1/4	0.15 to 0.25

Dimensions and internal structure CAD



Cross section A-A

No.	Parts name	Material	Color
1	Body	PP	White
2	Element	PP sintering resin	White

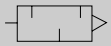
Model no.	Port size	A	B	C	D	E
SLW-6S	R1/8	22	13.3	10.5	6	10.5
SLW-8S	R1/4	28	19	14.8	9	15.4

Silencer High noise reduction compact type

SLW-20S Series

Compact type, damping effect 30dB (A) and over

JIS symbo



RoHS

Specifications

Descriptions	SLW-20S
Working fluid	Compressed air
Max. working pressure MPa	1.0
Min. working pressure MPa	0
Withstanding pressure MPa	1.5
Fluid temperature ℃	5 to 60 (no freezing Note 2)
Ambient temperature ℃	-10 to 60 (no freezing)
Port size R	3/4
Product weight g	20
Applicable cylinder bore size mm	ϕ 100 to ϕ 200
Damping effect dB[A]	30 and over
Flow Note 1) ℓ/min (ANR)	6000
Effective sectional area mm^2	90

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLW - 20 S

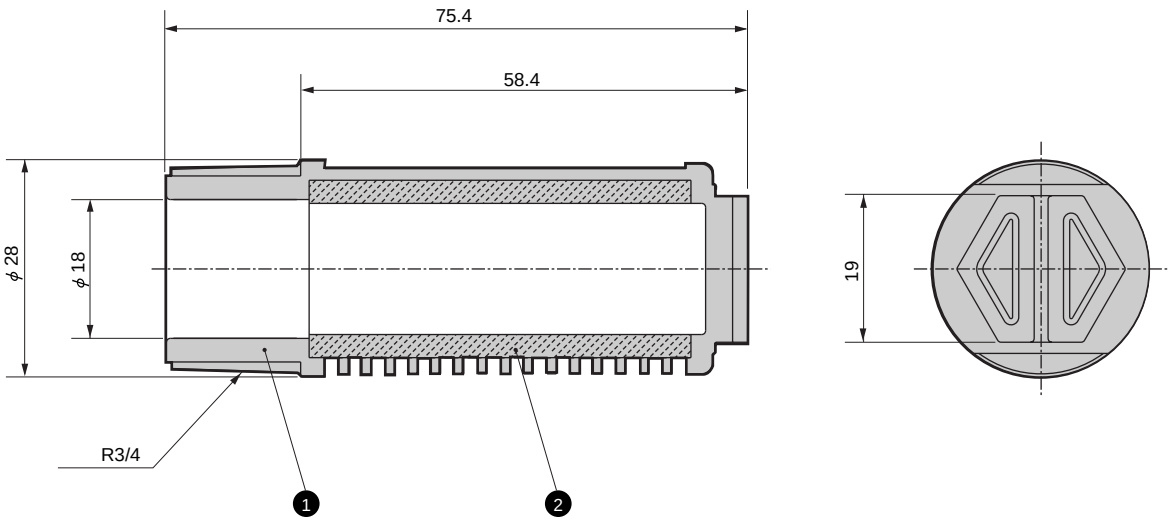
Ⓐ Port size	
20	R3/4

Safety precautions

Using tightening torque as strong as human hand.
(Refer to the table below for tightening torque.)

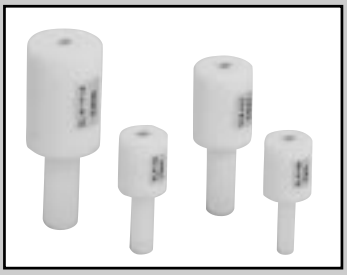
Thread size	Tightening torque (N·m)
R3/4	3.0

Dimensions and internal structure



No.	Parts name	Material	Color
1	Body	Polyamide resin (flame resistant resin *)	White
2	Element	PP sintering resin	White

* Equivalent to UL94 standards V-O

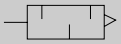


Silencer Push-in type

SLW-H* Series

● Joint port size: φ6, φ8, φ10, φ12

JIS symbol



RoHS

Specifications

Descriptions	SLW-H6	SLW-H8	SLW-H10	SLW-H12
Working fluid	Compressed air			
Max. working pressure MPa	0.7			
Min. working pressure MPa	0			
Withstanding pressure MPa	1.05			
Fluid temperature ℃	5 to 60 (no freezing Note 2)			
Ambient temperature ℃	-10 to 60 (no freezing)			
Joint port size	φ6	φ8	φ10	φ12
Product weight g	3.5	3.5	6.2	12.5
Damping effect dB (A)	20 and over			
Flow Note 1 ℓ/min	455	550	1135	1655
Effective sectional area mm²	7	8.5	17.5	25.5

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.

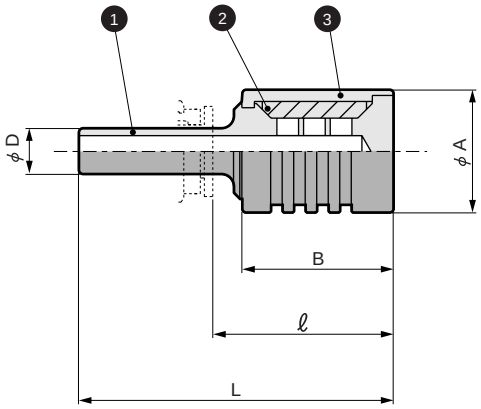
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLW - H6

Ⓐ Port size	
H6	φ6
H8	φ8
H10	φ10
H12	φ12

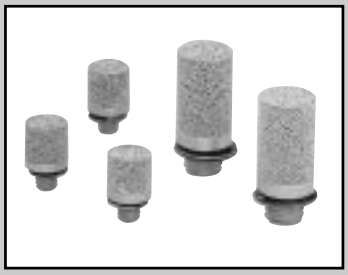
Dimensions and internal structure



No.	Parts name	Material
1	Shaft	Polyamide resin
2	Element	Felt
3	Guard	Polyamide resin

Model no.	A	B	D	L	ℓ*
SLW-H6	16	20	φ6	41	23.5
SLW-H8	16	20	φ8	42	23
SLW-H10	20	27	φ10	53	31.5
SLW-H12	25	37	φ12	66	43

* Dimensions apply for CKD joints (GW Series).

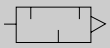


Silencer Miniature type

SLM Series

Compact type, damping effect 20dB (A) and over

JIS symbol



RoHS CAD

Specifications

Descriptions	SLM-M3	SLM-M5
Working fluid	Compressed air	
Max. working pressure MPa	1.0	
Min. working pressure MPa	0	
Withstanding pressure MPa	1.5	
Fluid temperature ℃	5 to 60 (no freezing Note 2)	
Ambient temperature ℃	-10 to 60 (no freezing)	
Port size	M3	M5
Product weight g	1.0	3.0
Applicable cylinder bore size mm	ϕ 6 or less	ϕ 6 to ϕ 15
Damping effect dB[A]	20 and over	
Flow Note 1) ℓ/min (ANR)	60	350
Effective sectional area mm²	1	5

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.

Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SLM - M3

Ⓐ Port size

Ⓐ Port size	
M3	M3
M5	M5

Note: Sales unit is 10 pieces/1 bag.

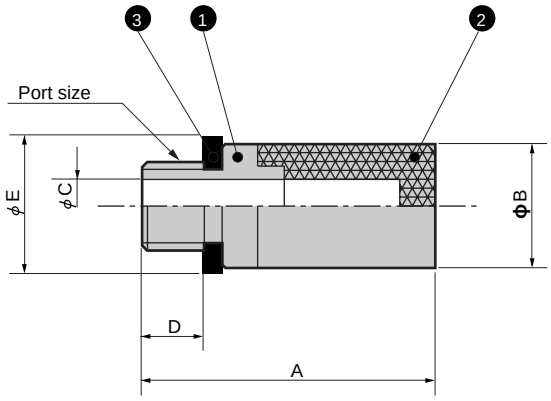
Safety precautions

- Use tightening torque as strong as human hand. (Refer to the table below to tighten.)

Thread size	Tightening torque (N·m)
M3	0.1 to 0.15
M5	0.2 to 0.25

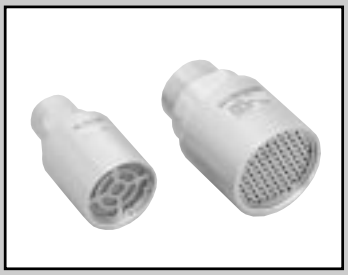
- Avoid use in areas with high vibration or impact. Provide measures against loosening in such areas.

Dimensions and internal structure CAD



No.	Parts name	Material	Color
1	Body	Copper alloy	Silver
2	Element	Bronze sintering body	Silver
3	Gasket	Nitrile rubber + steel	-

Model no.	A	B	C	D	E	Port size
SLM-M3	9	5.5	1.4	2.6	4.9	M3 x 0.5
SLM-M5	16.5	7	3	3.4	7.8	M5 x 0.8



Silencer Metal body type

SL Series

● Port size: R1/4 to R2

JIS symbol

RoHS CAD

Features

● SL-8A to 25A has been upgraded, integrating the entire series in a lightweight, compact design.
· Weight ratio (SL-8A to 25A) reduced by 50% or more compared to conventional CKD model
● The replaceable element extends product life.
● The product is eco-friendly.
· Chromate treatment (hexavalent chrome) has been eliminated.
· Paint has been eliminated.
· Segregated disposal is possible.
● Damping effect 20dB (A) and over

Specifications

Descriptions	SL-8A	SL-10A	SL-15A	SL-20A	SL-25A	SL-32A	SL-40A	SL-50A
Working fluid	Air							
Max. working pressure MPa	0.9							
Min. working pressure MPa	0							
Withstanding pressure MPa	1.35							
Fluid temperature ℃	5 to 60 (no freezing Note 2)							
Ambient temperature ℃	-10 to 60 (no freezing)							
Port size R	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Product weight g	75	100	105	245	250	500	500	800
Applicable cylinder bore size	ϕ50 to ϕ100	ϕ63 to ϕ140	ϕ75 to ϕ180	ϕ100 to ϕ250	ϕ140 to ϕ250	ϕ140 to ϕ450	ϕ140 to ϕ450	ϕ300 to ϕ450
Damping effect dB[A]	20 and over							
Flow Note 1 m³/min (ANR)	2.4	3.2	4.1	12	14	19	21	33
Effective sectional area mm²	36	48	61	160	210	280	320	500

Note 1: The flow is an atmospheric pressure conversion value at 0.5MPa.
Note 2: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SL - 8A

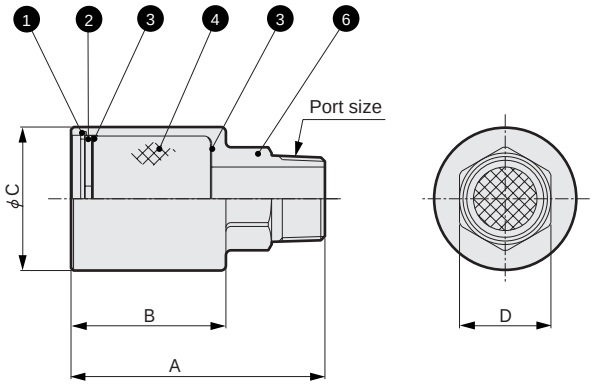
● Element for replacement

SL - 8A - EL

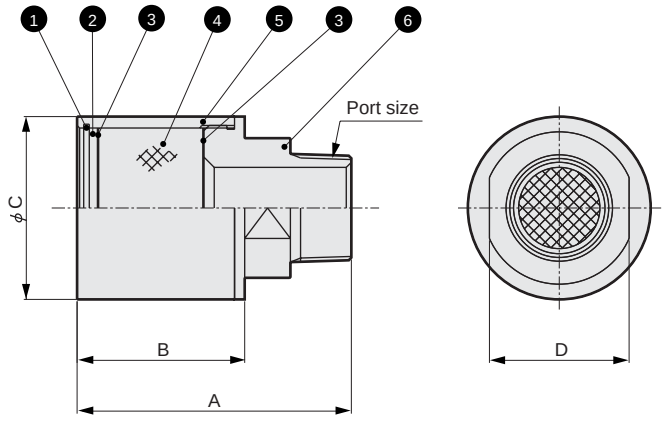
Ⓐ Port size	
8A	R 1/4
10A	R 3/8
15A	R 1/2
20A	R 3/4
25A	R1
32A	R1 1/4
40A	R1 1/2
50A	R2

Dimensions / internal structure and main parts list CAD

● SL-8A to 25A



● SL-32A to 50A



Model no.	Port size	A	B	φC	D
SL-8A	R1/4	64	41	30	17
SL-10A	R3/8	74.5	49.5	36	24
SL-15A	R1/2	77.5	49.5	36	24
SL-20A	R3/4	98	61	56	36
SL-25A	R1	100	61	56	36
SL-32A	R1 1/4	108	66	72	55
SL-40A	R1 1/2	108	66	72	55
SL-50A	R2	120	70	89	70

No.	Parts name	Material
1	C type snap ring	Steel (8A to 25A)
		Stainless steel (32A to 50A)
2	Punching metal	Steel
3	Wire net	Stainless steel
4	Element	Vinylidene chloride (8A to 25A)
		Urethane (32A to 50A)
5	Case	Aluminum alloy
6	Body	Aluminum alloy

Safety precautions

· Tighten with the appropriate torque when connecting pipes.
· Check that the snap ring does not pop off when removed or attached.
· Assemble the snap ring accurately when replacing the element.
Parts used inside could pop out and cause problems if assembly is not complete.
· Depending on work, the silencer could clog and reduce exhaust.
Service the product by replacing the element regularly.
· Silencing values are based on JIS Standards.
Silencing could vary with the type of circuit and pressure used.

(Recommended tightening torque)

Port thread	Tightening torque N·m
R1/4	6 to 8
R3/8	13 to 15
R1/2	16 to 18
R3/4	19 to 40
R1	41 to 70
R1 1/4	43 to 75
R1 1/2	45 to 80
R2	47 to 85