

# Silencer

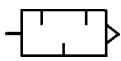
## AN□00/AN□02/AN□03/25/AN

### Standard

#### Series AN□00

Over 30dB(A) noise reduction  
Low back pressure  
Compact and easy mounting

JIS symbol



### Specifications

Fluid	Compressed air
Max.operating pressure	1.0MPa
Noise reduction	30dB(A) or more
Ambient and fluid temperature	5 to 60°C*

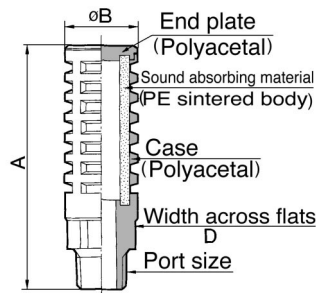
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

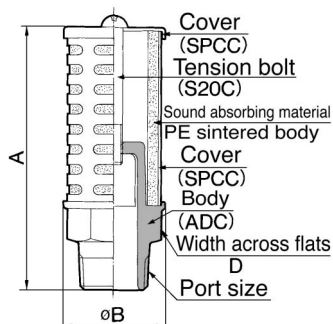
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
AN200-02	1/4	35	17	63	22	19
AN300-03	3/8	60	25	84	25	22
AN400-04	1/2	90	35	92	30	27
AN500-06	3/4	160	165	107	46	36
AN600-10	1	270	225	132	50	41
AN700-12	1 1/4	440	490	200	74	55
AN800-14	1 1/2	590	580	233	74	60
AN900-20	2	960	820	263	86	70

Note) NPT thread is also available. Specify "N" after "AN□00-". (Ex.: AN200-N02)

### Construction/Parts/Dimensions AN200 to 400



### AN500 to 900

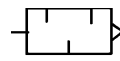


### High noise reduction style

#### Series AN□02

Over 35dB(A) noise reduction  
Case is UL94-V0 Grade  
Flame resistance material

JIS symbol



### Specifications

Fluid	Compressed air
Max.operating pressure	1.0MPa
Noise reduction	35dB(A) or more
Ambient and fluid temperature	5 to 60°C*

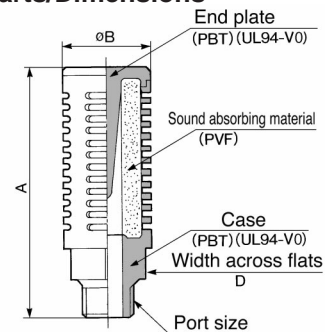
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

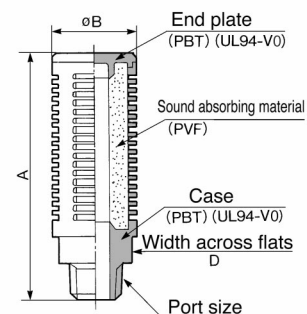
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
AN202-02	1/4	35	16	64	22	19
AN302-03	3/8	60	33	84	28	24
AN402-04	1/2	90	47	95	34	24

Note) NPT thread is also available. Specify "N" after "AN□02-". (Ex.: AN200-N02)

### Construction/Parts/Dimensions AN202



### AN302/402

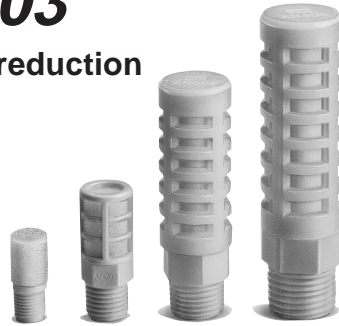
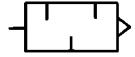


# AN□00/AN□02/AN□03/25/AN

## Compact style Series AN□03

Over 25dB(A) noise reduction  
Space saving  
Compact style

JIS symbol



### Specifications

Operating fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction	25dB(A) or more
Ambient and fluid temperature	5 to 60°C*

\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

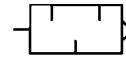
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
AN103-01	1/8	10	1	23.5	11	—
AN203-02	1/4	15	3	36	16	14
AN303-03	3/8	35	17	66	22	19
AN403-04	1/2	60	25	84	25	22

Note) NPT thread is also available. Specify "N" after "AN□03-".  
(Ex.: AN103-N01)

## Metal case style Series 25

Exhaust in only one direction.  
Prevents scattering of mist and noise.

JIS symbol



### Specifications

Operating fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction	19dB(A) or more
Ambient and fluid temperature	5 to 60°C*

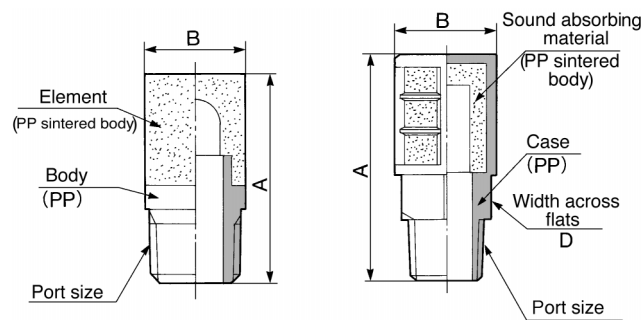
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

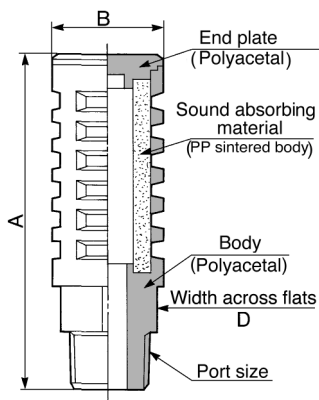
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
2504-002	1/4	33.9	111	62	30	24
2505-003	3/8	45.9	106	64	30	24
2506-004	1/2	50.0	113	68	30	24
2507-006	3/4	105.6	310	88.5	48	35
2508-010	1	129.6	514	97.5	60	41
2510-002	1/4	17.2	57	54	22	19
2511-003	3/8	17.2	55	56	22	19

Note) NPT thread is also available. Specify "N" after "25□□-".  
(Ex.: 2504-N002)

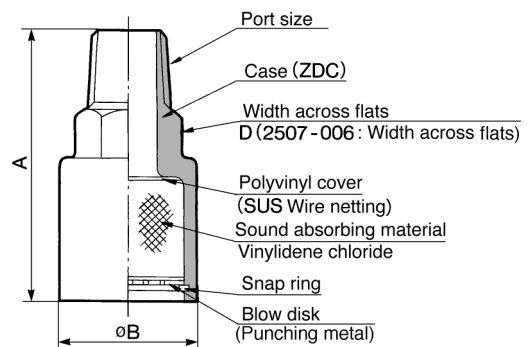
### Construction/Parts/Dimensions AN103 AN203



### AN303/403



### Construction/Parts/Dimensions



CAD AN200 to 900.....SAN, #1 to #8  
AN202 to 402.....SAN, #9 to #11  
AN103 to 403.....SAN, #12 to #15

VEX

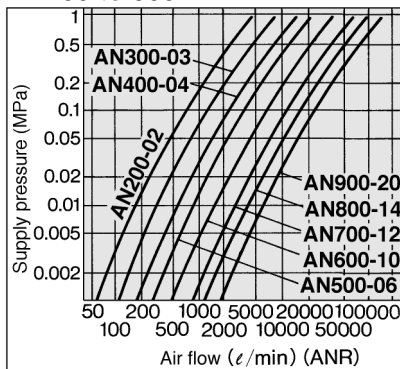
AN

AMC

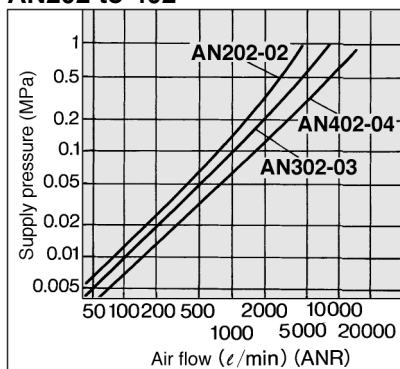
# AN□00/AN□02/AN□03/25/AN

## Flow Characteristics (Initial conditions)

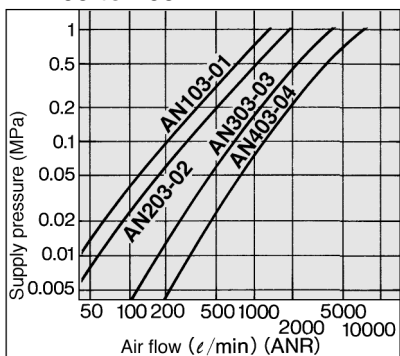
### AN200 to 900



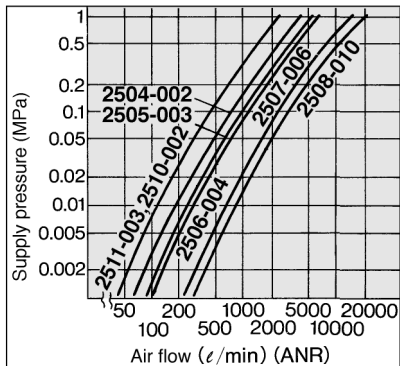
### AN202 to 402



### AN103 to 403



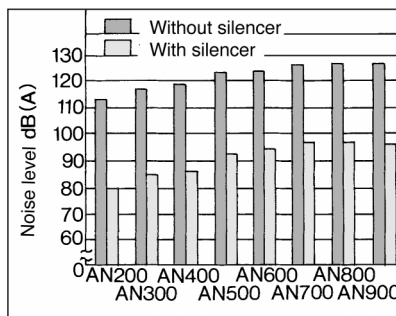
### 2504 to 2511



## Noise Level (Initial conditions)

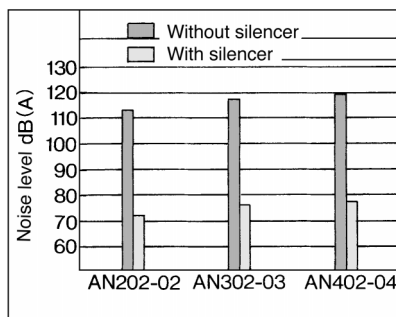
### AN200 to 900

Condition: 0.5MPa at supply pressure of solenoid valve  
Measurement distance: AN200 to 500→1m AN600 to 700→2m  
AN800 to 900→3m



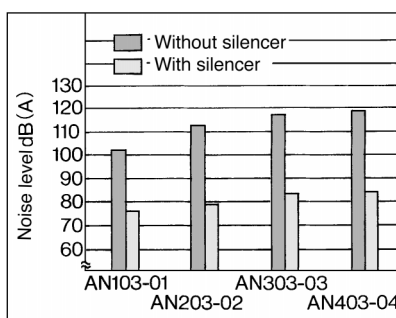
### AN202 to 402

Condition: 0.5MPa at supply pressure of solenoid valve  
Measurement distance: 1m



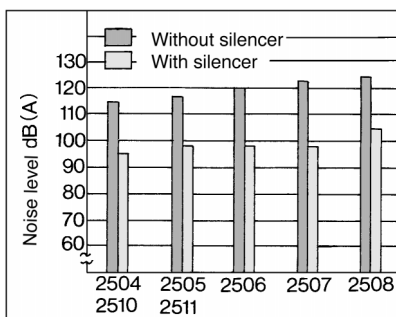
### AN103 to 403

Condition: 0.5MPa at supply pressure of solenoid valve  
Measurement distance: 1m



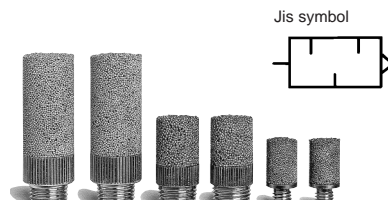
### 2504 to 2511

Condition: 0.5MPa at supply pressure of solenoid valve  
Measurement distance: 1m



## (BC Sintered Body) Series AN

Ideal for the exhaust of a compact valve or pilot air.



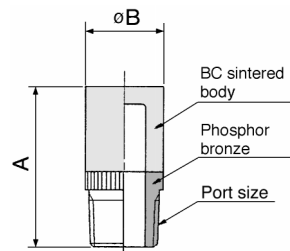
## Specifications/Model

Model	AN101	AN110	AN120	AN120
Specifications	-01	-01	-M3	-M5
Port size	R(PT) 1/8	R(PT) 1/8	M3	M5
Noise reduction dB(A)	16	21	13	18
Fluid	Compressed air			
Max. operating press	1.0MPa			
Ambient and fluid temperature	5 to 50°C*			
Effective area (mm <sup>2</sup> )	20	35	1	5
Weight (g)	9.5	20	1	3.3
Dimensions (mm)	A	22.5	38	9
	B	11	13	6

Note) NPT thread for AN101 and AN110 is also available. Model no. of NPT thread is AN101-N01 and AN110-N01.

\* It can operate in temperatures between -10° to 150°C if there is no risk of the moisture in the air freezing.

## Construction/Parts/Dimensions



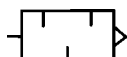
AN101-01.....SAN, #16
AN110-01.....SAN, #17
AN120-M3.....SAN, #18
AN120-M5.....SAN, #19

## One-touch Fitting Connection Style

### Series AN□□□-KM□□

Can connect with One-touch fitting directly

JIS symbol



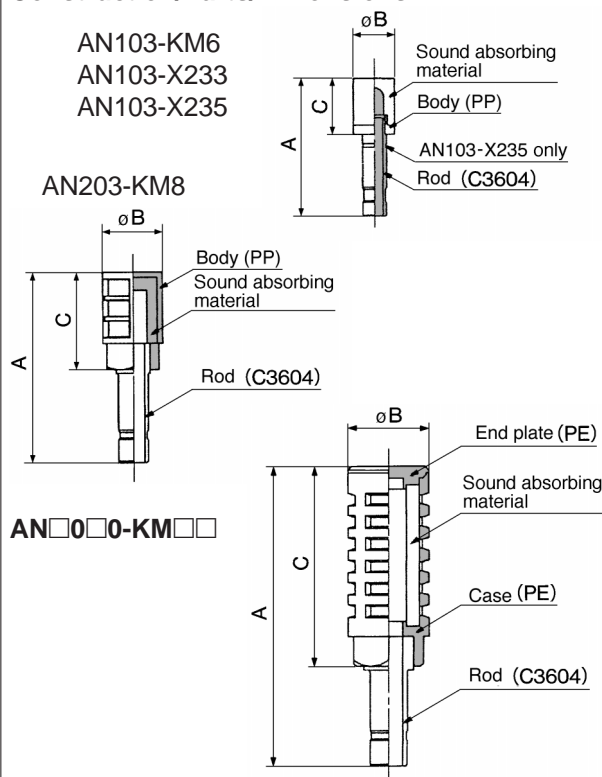
### Specifications

Fluid	Compressed air
Max. operating pressure	1.0MPa
Ambient and fluid temperature	5 to 60°C

### Model

Model	Applicable One-touch fitting size	Noise reduction dB(A)	Effective area (mm <sup>2</sup> )	Dimensions (mm)		
				A	B	C
AN103-KM6	ø6 (Series KQ)	25	7	37	11	15
AN103-X233	ø6 (Series KQ)					
AN103-X235	ø1/4" (Series KQ)					
AN203-KM8	ø8 (Series KQ)	30	14	51	16	26
AN200-KM8	ø8 (Series KQ)					
AN200-KM10	ø10 (Series KQ)					
AN300-KM10	ø10 (Series KQ)					
AN300-KM12	ø12 (Series KQ)					

### Construction/Parts/Dimensions



### ⚠ Precautions

Be sure to read before handling. Refer to p.0-33 to 0-36 for Safety Instructions and common precautions.

### Design

#### ⚠ Warning

① The exhaust port could become blocked by the clogging of the silencer. Therefore, make sure to provide a safe design so as not to cause the system as a whole to malfunction.

#### ⚠ Caution

① The silencing effect could vary depending on the pneumatic circuit or the pressure that is used.

### Mounting

#### ⚠ Caution

- ① If the silencer body (case) is made of plastic and is BC sintered: To mount on a valve, hold the end of the body (the side that is not threaded) with your fingers and screw it in. After some resistance is felt, use a wrench that matches the wrench flats of the hexagon portion to tighten it an additional 1/4 turn. (If the silencer is not provided with a hexagon portion, manually tighten it firmly.)
- ② If the silencer body is made of metal (except the BC sintered style), tighten it at the torque given below.

Connection thread	Applicable tightening torque (Nm)
Rc(PT) 1/4	12 to 14
Rc(PT) 3/8	22 to 24
Rc(PT) 1/2	28 to 30
Rc(PT) 3/4	28 to 30
Rc(PT)1	36 to 38
Rc(PT)1 1/4	40 to 42
Rc(PT)1 1/2	48 to 50
Rc(PT)2	48 to 50

- ③ Make sure not to apply a lateral load to the body during or after the installation.

### Maintenance/Inspection

#### ⚠ Caution

- ① Never disassemble the silencer. The silencing material is not replaceable.
- ② If the exhaust speed drops and the system performance decreases due to clogging, replace with a new silencer. Make sure to verify the operating conditions of the actuator at least once a day.

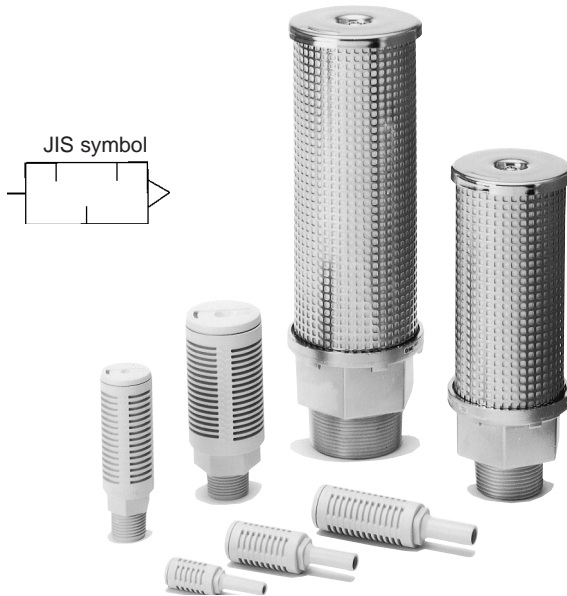
VEX

AN

AMC

# 40dB(A): High Noise Reduction Silencer Series ANA1

A high noise reduction style silencer keeps the noise level inside a plant below 85dB(A).



## How to Order

AN A1 - 03

### Port size

Symbol	Port size	Connection
01	1/8	Screw-in*
02	1/4	
03	3/8	
04	1/2	
06	3/4	
10	1	
12	1 1/4	
20	2	
C08 (ø8 One-touch fittings size)		One-touch
C10 (ø10 One-touch fittings size)		
C12 (ø12 One-touch fittings size)		

\* Only R (PT) is available.

### Series

Symbol	Noise reduction level
A1	40dB(A)

## Specifications

Fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction effect	40dB(A)
Ambient and fluid temperature	5 to 60°C



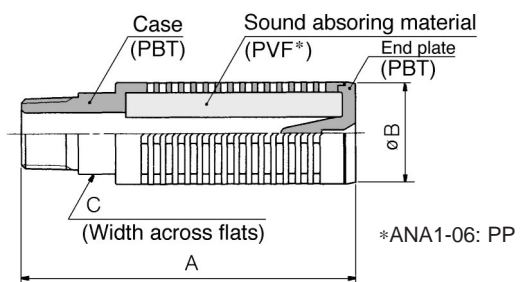
Refer to p.5.2-4 for precautions on these products.

## Model (Screw-in connection)

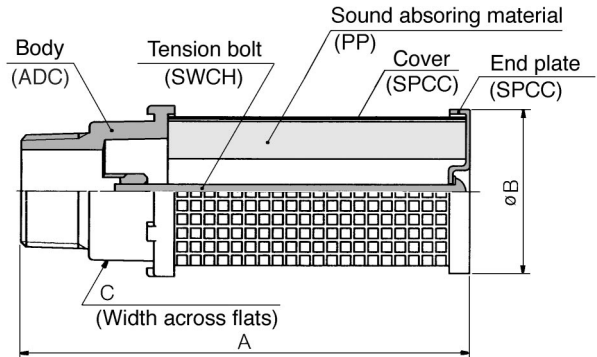
Model	Port size	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	C
ANA1-01	1/8	10	4	37	16	—
ANA1-02	1/4	15	14	64	22	18
ANA1-03	3/8	35	22	84	25	21
ANA1-04	1/2	60	36	98	30	24
ANA1-06	3/4	90	110	111	46	36
ANA1-10	1	160	180	132	50	41
ANA1-12	1 1/4	280	544	200	74	60
ANA1-14	1 1/2	450	612	230	74	60
ANA1-20	2	610	873	271	86	70

## Construction/Parts/Dimensions

### ANA1-01 to 06



### ANA1-01 to 20

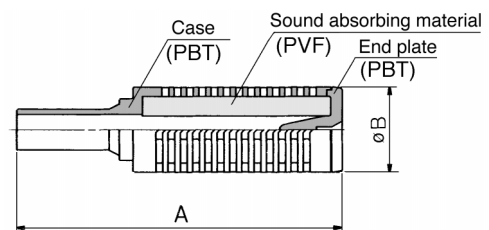


## Model (One-touch fitting connection)

Model	One-touch fitting size	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)	
				A	B
ANA1-C08	ø8	11	5	58	16
ANA1-C10	ø10	15	13	76	22
ANA1-C12	ø12	33	19	95	25

## Construction/Dimensions

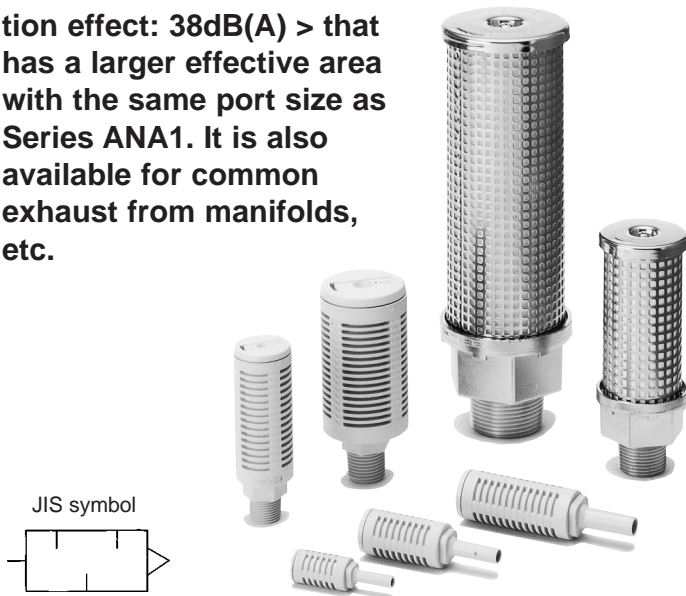
### ANA1-C08 to C12



# 38dB(A): High Noise Reduction Silencer

# Series ANB1

Series ANB1 <noise reduction effect: 38dB(A)> that has a larger effective area with the same port size as Series ANA1. It is also available for common exhaust from manifolds, etc.



## How to Order

AN B1 - 03

### Port size

Symbol	Port size	Connection
01	1/8	Screw-in*
02	1/4	
03	3/8	
04	1/2	
06	3/4	
10	1	
12	1 1/4	
14	1 1/2	One-touch
C06	(ø6 One-touch fittings size)	
C08	(ø8 One-touch fittings size)	
C10	(ø10 One-touch fittings size)	

\* Only R (PT) is available.

### Series

Symbol	Noise reduction level
B1	38dB(A)

## Specifications

Fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction effect	38dB(A)
Ambient and fluid temperature	5 to 60°C



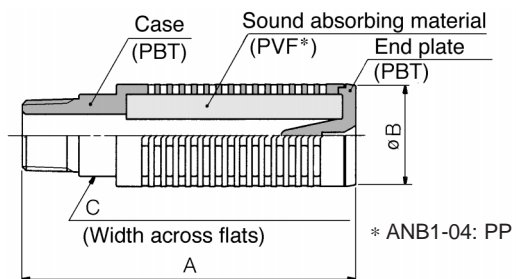
Refer to p.5.2-4 for precautions on these products

## Model (Screw-in connection)

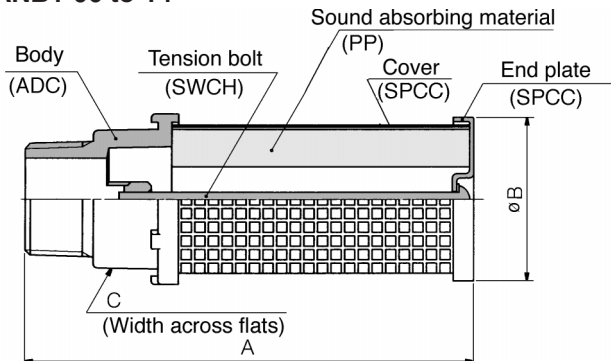
Model	Port size	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	C
ANB1-01	1/8	15	10	51	22	—
ANB1-02	1/4	35	22	81	25	18
ANB1-03	3/8	60	35	93	30	21
ANB1-04	1/2	90	94	107	46	24
ANB1-06	3/4	160	175	133	50	41
ANB1-10	1	280	462	190	74	41
ANB1-12	1 1/4	450	612	230	74	60
ANB1-14	1 1/2	610	871	271	86	70

## Construction/Parts/Dimensions

### ANB1-01 to 04



### ANB1-06 to 14

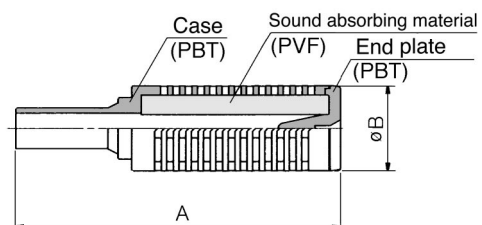


## Model (One-touch fitting connection)

Model	One-touch fitting size	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)	
				A	B
ANB1-C06	ø6	8	5	52	16
ANB1-C08	ø8	13	12	73	22
ANB1-C10	ø10	28	28	94	25

## Construction/Dimensions

### ANB1-C06 to C10



VEX

AN

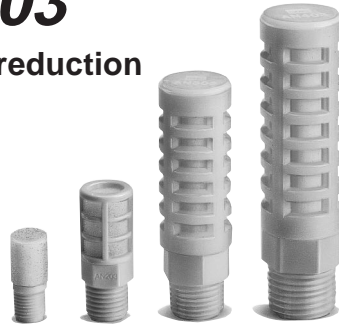
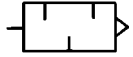
AMC

# AN□00/AN□02/AN□03/25/AN

## Compact style Series AN□03

Over 25dB(A) noise reduction  
Space saving  
Compact style

JIS symbol



### Specifications

Operating fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction	25dB(A) or more
Ambient and fluid temperature	5 to 60°C*

\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

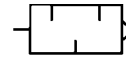
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
AN103-01	1/8	10	1	23.5	11	—
AN203-02	1/4	15	3	36	16	14
AN303-03	3/8	35	17	66	22	19
AN403-04	1/2	60	25	84	25	22

Note) NPT thread is also available. Specify "N" after "AN□03-".  
(Ex.: AN103-N01)

## Metal case style Series 25

Exhaust in only one direction.  
Prevents scattering of mist and noise.

JIS symbol



### Specifications

Operating fluid	Compressed air
Max. operating pressure	1.0MPa
Noise reduction	19dB(A) or more
Ambient and fluid temperature	5 to 60°C*

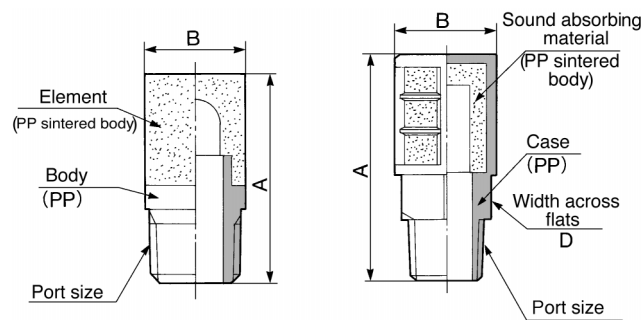
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

### Model

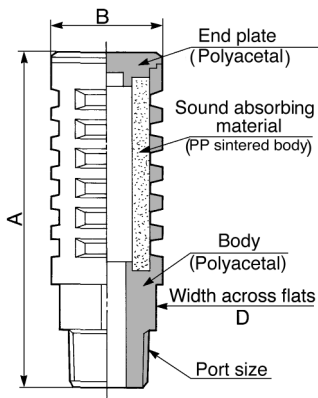
Model	Port size R(PT)	Effective area (mm <sup>2</sup> )	Weight (g)	Dimensions (mm)		
				A	B	D
2504-002	1/4	33.9	111	62	30	24
2505-003	3/8	45.9	106	64	30	24
2506-004	1/2	50.0	113	68	30	24
2507-006	3/4	105.6	310	88.5	48	35
2508-010	1	129.6	514	97.5	60	41
2510-002	1/4	17.2	57	54	22	19
2511-003	3/8	17.2	55	56	22	19

Note) NPT thread is also available. Specify "N" after "25□□-".  
(Ex.: 2504-N002)

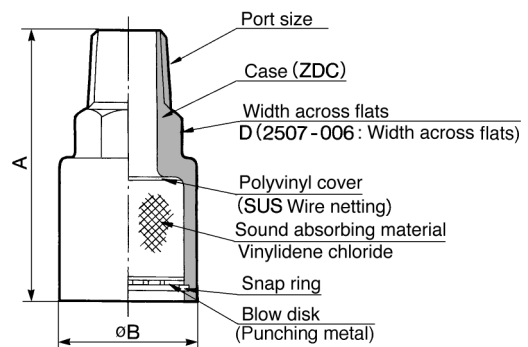
### Construction/Parts/Dimensions AN103 AN203



### AN303/403



### Construction/Parts/Dimensions



CAD AN200 to 900.....SAN, #1 to #8  
AN202 to 402.....SAN, #9 to #11  
AN103 to 403.....SAN, #12 to #15

VEX

AN

AMC