

# Silencer

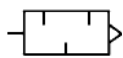
## AN□00/AN□02/AN□03/25/AN

### Standard

#### Series AN□00

Over 30dB(A) noise reduction  
Low backpressure  
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 *     |

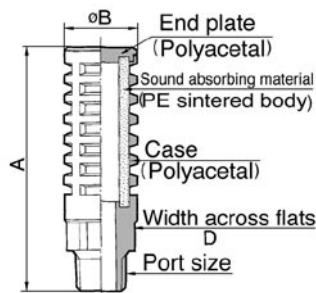
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

#### Model

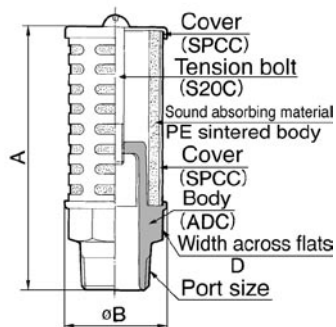
| Model    | Port size<br>R (PT) | Effective area<br>(mm <sup>2</sup> ) | Weight<br>(g) | Dimensions (mm) |    |    |
|----------|---------------------|--------------------------------------|---------------|-----------------|----|----|
|          |                     |                                      |               | 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           | 127             | 50 | 41 |
| AN700-12 | 1 1/4               | 440                                  | 490           | 186             | 74 | 50 |
| AN800-14 | 1 1/2               | 590                                  | 580           | 217             | 74 | 55 |
| AN900-20 | 2                   | 960                                  | 820           | 256             | 86 | 65 |

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

#### Construction/Parts/Dimensions AN200 to 400



#### AN500 to 900

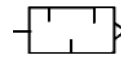


### High noise reduction style

#### 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 *     |

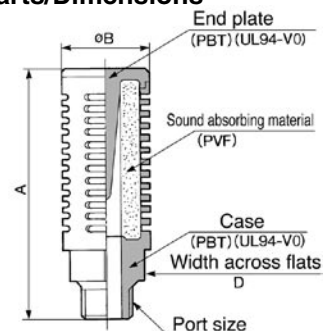
\* It can operate in temperatures between -10 to 60°C if there is no risk of the moisture in the air freezing.

#### Model

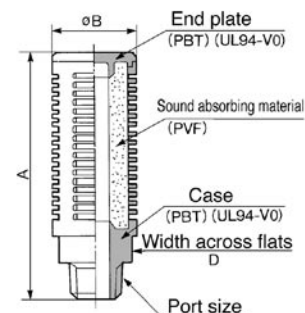
| Model    | Port size<br>R (PT) | Effective area<br>(mm <sup>2</sup> ) | Weight<br>(g) | Dimensions (mm) |    |    |
|----------|---------------------|--------------------------------------|---------------|-----------------|----|----|
|          |                     |                                      |               | 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



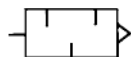
# AN□00/AN□02/AN□03/25/AN

## Compactstyle

### Series AN□03

Over25dB(A)noisereduction  
Spacesaving  
Compactstyle

JISsymbol



#### Specifications

|                            |               |
|----------------------------|---------------|
| Operatingfluid             | Compressedair |
| Max.operatingpressure      | 1.0MPa        |
| Noisereduction             | 25dB(A)ormore |
| Ambientandfluidtemperature | 5to60°C *     |

\*Itcanoperateintemperaturesbetween-10to60°Cifthereisno riskofthemoistureintheairfreezing.

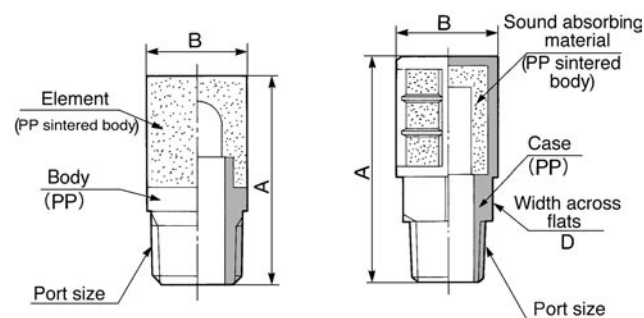
#### Model

| Model    | Portsize<br>R(PT) | Effectivearea<br>(mm <sup>2</sup> ) | Weight<br>(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 |

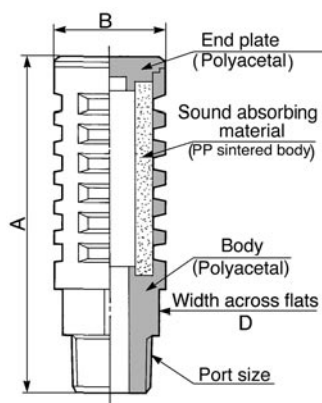
Note)NPTthreadisalsoavailable.Specify"N"after"AN□03-".  
(Ex.:AN103-N01)

#### Construction/Parts/Dimensions

##### AN103 AN203



##### AN303/403

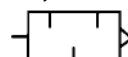


## Metalcasestyle

### Series 25

Exhaustinonlyonedirection.  
Preventsscattering  
ofmistandnoise.

JISsymbol



#### Specifications

|                            |               |
|----------------------------|---------------|
| Operatingfluid             | Compressedair |
| Max.operatingpressure      | 1.0MPa        |
| Noisereduction             | 19dB(A)ormore |
| Ambientandfluidtemperature | 5to60°C *     |

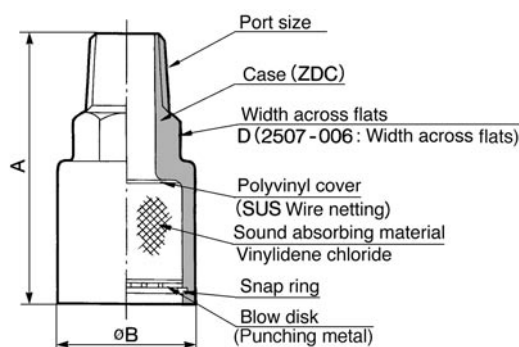
\*Itcanoperateintemperaturesbetween-10to60°Cifthereisno riskofthemoistureintheairfreezing.

#### Model

| Model    | Portsize<br>R(PT) | Effectivearea<br>(mm <sup>2</sup> ) | Weight<br>(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)NPTthreadisalsoavailable.Specify"N"after"25□□-".  
(Ex.:2504-N002)

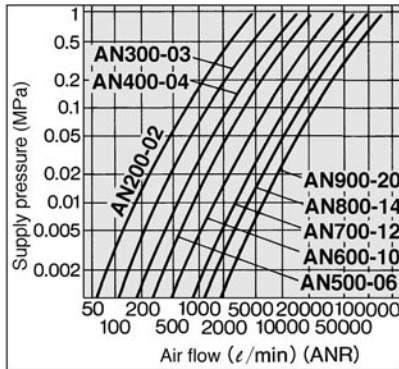
#### Construction/Parts/Dimensions



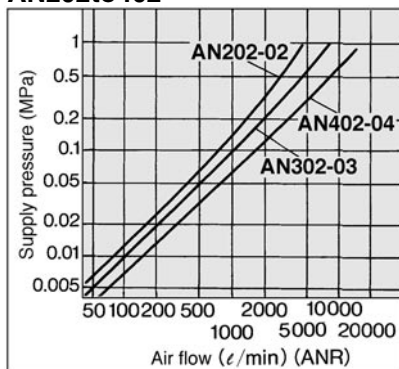
# AN□00/AN□02/AN□03/25/AN

## Flow Characteristics (Initial conditions)

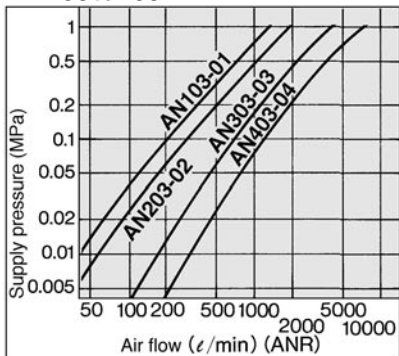
### AN200to900



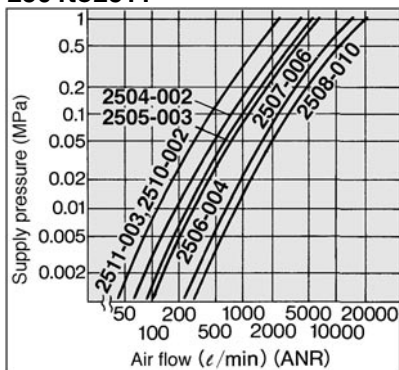
### AN202to402



### AN103to403



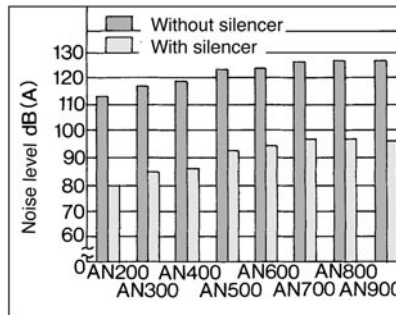
### 2504to2511



## Noise Level (Initial conditions)

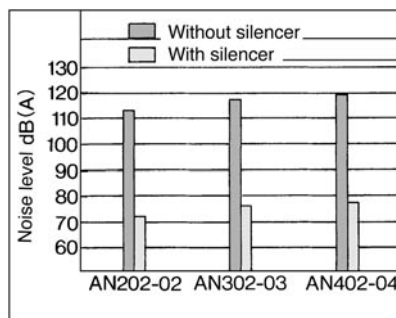
### AN200to900

Condition: 0.5MPa supply pressure of solenoid valve  
Measurement distance: AN200to500→1m AN600to700→2m  
AN800to900→3m



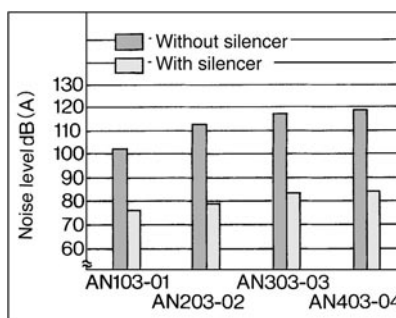
### AN202to402

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



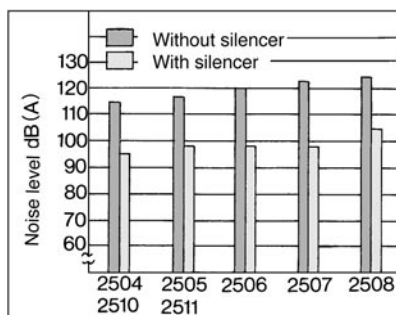
### AN103to403

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



### 2504to2511

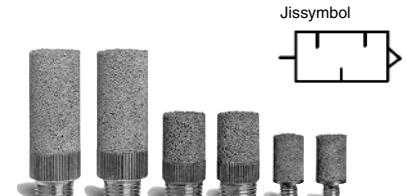
Condition: 0.5MPa supply pressure of solenoid valve  
Measurement distance: 1m



## (BCSinteredBody)

## Series AN

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



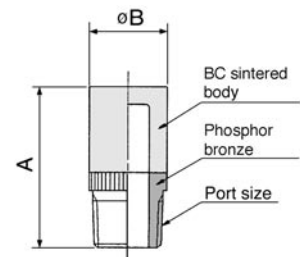
## Specifications/Model

| Model                         | AN101          | AN110        | AN120 | AN120 |
|-------------------------------|----------------|--------------|-------|-------|
| Specifications                | -01            | -01          | -M3   | -M5   |
| Port size                     | R(PT)<br>1/8   | R(PT)<br>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 (mm²)          | 20             | 35           | 1     | 5     |
| Weight (g)                    | 9.5            | 20           | 1     | 3.3   |
| Dimensions (mm)               | A              | 21           | 34    | 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 at temperatures between -10°C to 150°C if there is no risk of the moisture in the air freezing.

## Construction/Parts/Dimensions



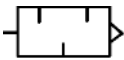
# AN□00/AN□02/AN□03/25/AN

## One-touch Fitting Connection Style

### Series AN□□□-KM□□

Can connect with One-touch fitting directly

JIS symbol



### Specifications

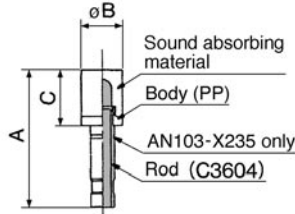
|                               |                |
|-------------------------------|----------------|
| Fluid                         | Compressed air |
| Max. operating pressure       | 1.0 MPa        |
| Ambient and fluid temperature | 5 to 60°C      |

### Model

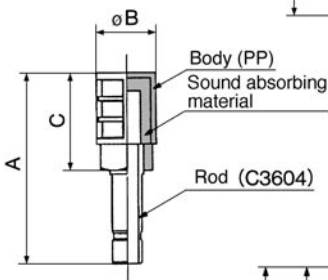
| Model      | Applicable One-touch fitting size | Noise reduction dB(A) | Effective area (mm <sup>2</sup> ) | Dimensions (mm) |    |    |
|------------|-----------------------------------|-----------------------|-----------------------------------|-----------------|----|----|
|            |                                   |                       |                                   | 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                                | 45              | 13 | 20 |
| AN200-KM8  | ø8 (Series KQ)                    |                       | 20                                | 73              | 22 | 49 |
| AN200-KM10 | ø10 (Series KQ)                   |                       | 26                                | 76              | 22 | 49 |
| AN300-KM10 | ø10 (Series KQ)                   |                       | 30                                | 90              | 25 | 63 |
| AN300-KM12 | ø12 (Series KQ)                   |                       | 41                                | 91              | 25 | 63 |

### Construction/Parts/Dimensions

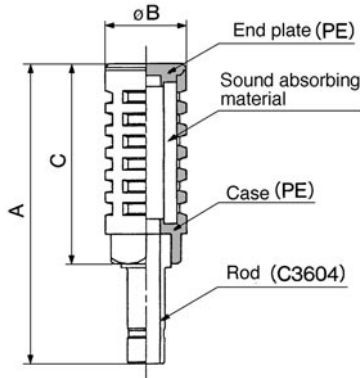
AN103-KM6  
AN103-X233  
AN103-X235



AN203-KM8



AN□0□0-KM□□



## ⚠ 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

- 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.)
- 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                          |

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

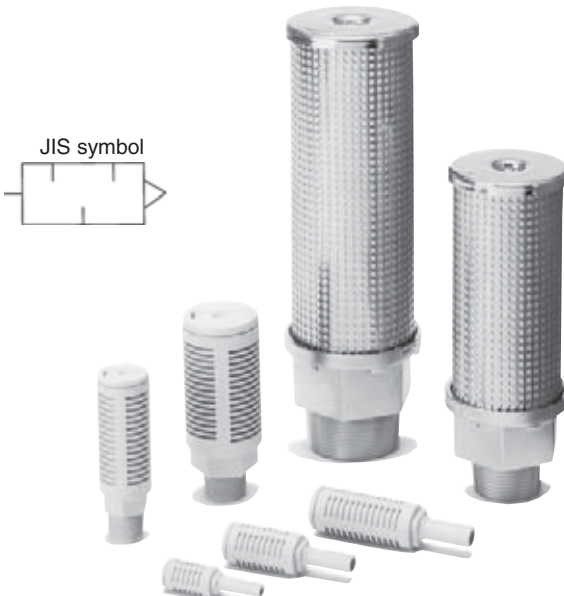
### Maintenance/Inspection

#### ⚠ Caution

- Never disassemble the silencer. The silencing material is not replaceable.
- 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.

# 42dB(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     |            |
| 14                                | 1 1/2     |            |
| 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     | 42dB(A)               |

## Specifications

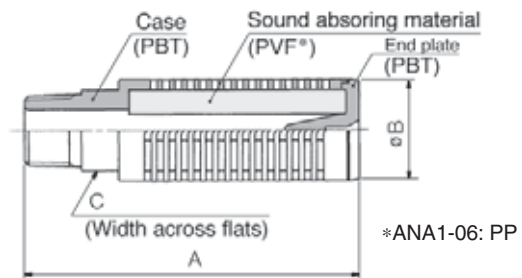
|                               |                |
|-------------------------------|----------------|
| Fluid                         | Compressed air |
| Max. operating pressure       | 1.0MPa         |
| Noise reduction effect        | 42dB(A)        |
| Ambient and fluid temperature | 5 to 60°C      |

## Model (Screw-in connection)

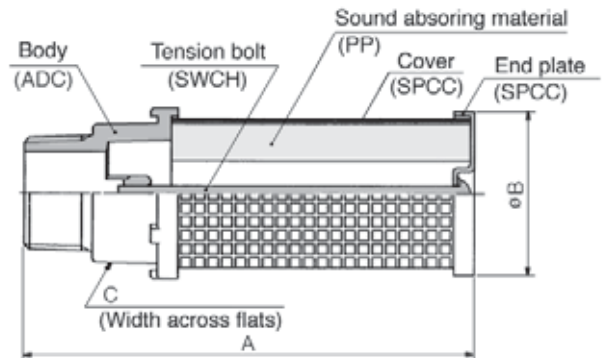
| Model   | Port size | Effective area (mm²) | Weight (g) | Dimensions (mm) |    |    |
|---------|-----------|----------------------|------------|-----------------|----|----|
|         |           |                      |            | A               | B  | C  |
| ANA1-01 | 1/8       | 10                   | 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



### ANA1-10 to 20

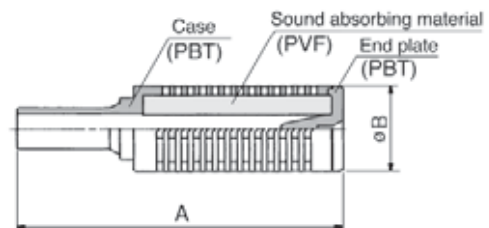


## Model (One-touch fitting connection)

| Model    | One-touch fitting size | Effective area (mm²) | 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

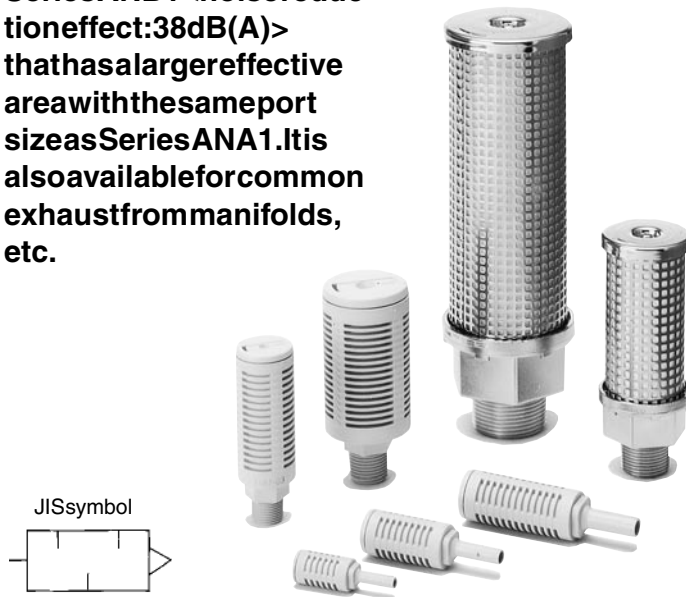
### ANA1-C08 to C12



# 40dB(A):High Noise Reduction Silencer

## Series ANB1

Series ANB1 <noise reduction effect: 38dB(A)> that has a large 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     |            |
| C06 (ø6 One-touch fitting size)  |           | One-touch  |
| C08 (ø8 One-touch fitting size)  |           |            |
| C10 (ø10 One-touch fitting size) |           |            |

\*Only R(PT) is available.

#### Series

| Symbol | Noise reduction level |
|--------|-----------------------|
| B1     | 38dB(A)               |

### Specifications

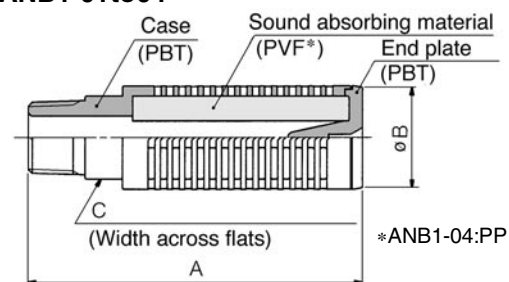
|                               |                |
|-------------------------------|----------------|
| Fluid                         | Compressed air |
| Max. operating pressure       | 1.0MPa         |
| Noise reduction effect        | 40dB(A)        |
| Ambient and fluid temperature | 5 to 60°C  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

### Model (Screw-in connection)

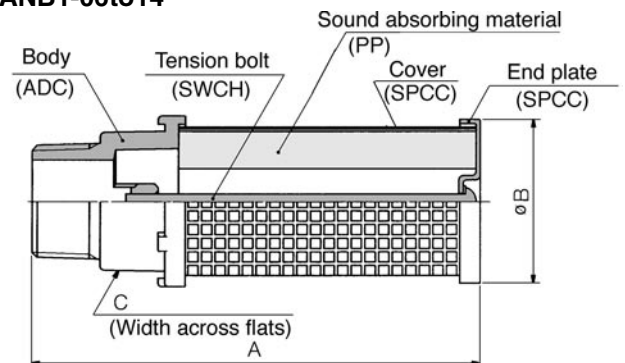
| Model   | Port size | Effective area (mm <sup>2</sup> ) | Weight (g) | Dimensions (mm) |    |    |
|---------|-----------|-----------------------------------|------------|-----------------|----|----|
|         |           |                                   |            | A               | B  | C  |
| 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

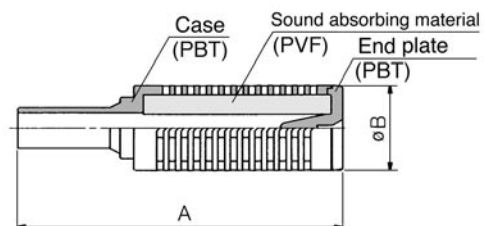


### Model (One-touch fitting connection)

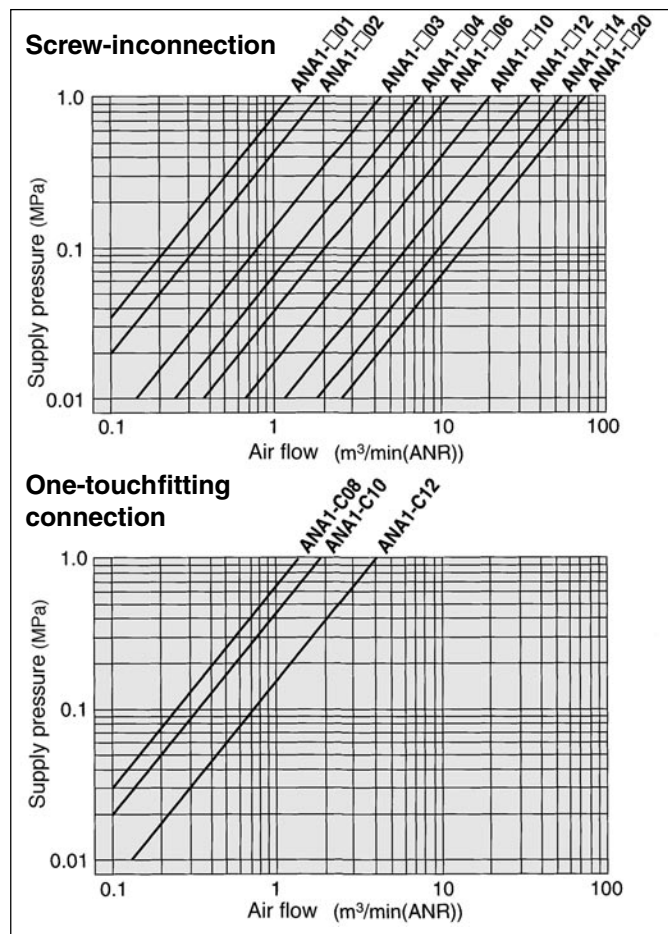
| Model    | One-touch fitting size | Effective area (mm <sup>2</sup> ) | Weight (g) | Dimensions (mm) |    |
|----------|------------------------|-----------------------------------|------------|-----------------|----|
|          |                        |                                   |            | 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

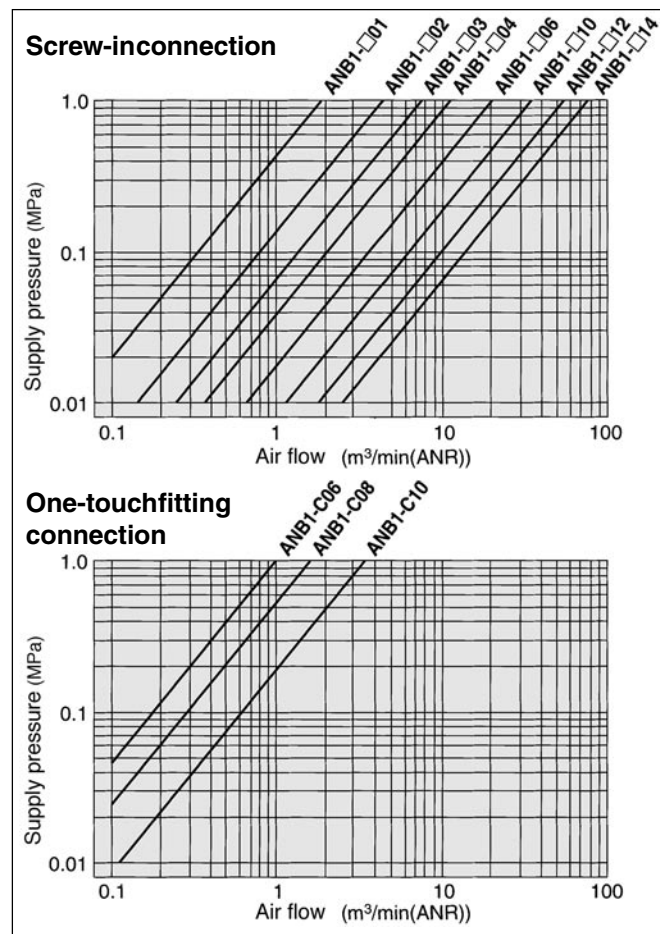
#### ANB1-C06 to C10



FlowCharacteristics/ANA1(Initialconditions)



FlowCharacteristics/ANB1(Initialconditions)



NoiseLevel(Initialconditions)

