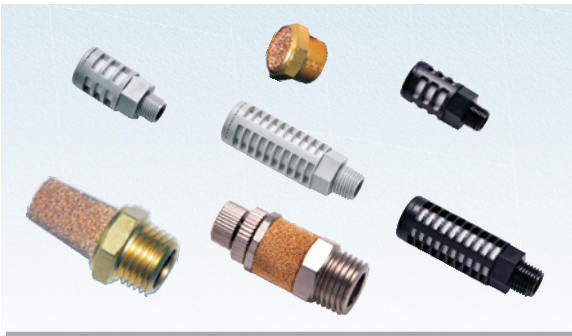




### Product feature

#### BSL, BSLM, BESL series

1. This silencers have excellent noise silencing performance.
2. The installation of the silencer is simple and convenient, and the connecting portion is reliable and durable.
3. It is easy to adjust the exhaust flow of the throttling type silencer.

#### PAL, PALM series

1. The silencer body is made of plastic.
2. The mini type silencer has the characteristics of small volume and compact structure.

### Ordering code

#### BSL 01

##### Silencer Type

|                             |
|-----------------------------|
| BSL: Universal silencer     |
| BSLM: Mini Silencer         |
| BESL: Throttling silencer   |
| PAL: Plastic silencer       |
| PALM: Mini plastic Silencer |

##### Standard color

| Type   | Color code   | Color definition                |
|--------|--------------|---------------------------------|
| PAL    | Blank: grey  | Top cover: grey<br>Body: gray   |
| PALM   | D: Black     | Top cover: black<br>Body: black |
| Others | No such code |                                 |

##### Thread connection

|              |
|--------------|
| M5: M5 × 0.8 |
| 01: 1/8"     |
| 02: 1/4"     |
| 03: 3/8"     |
| 04: 1/2"     |

### Configuration table of tubing thread.

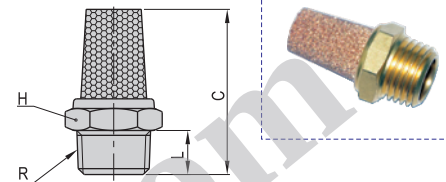
| Product series | M5 | 01 | 02 | 03 | 04 |
|----------------|----|----|----|----|----|
| BSL            | ●  | ●  | ●  | ●  | ●  |
| BSLM           | ●  | ●  | ●  | ●  | ●  |
| BESL           | ●  | ●  | ●  | ●  | ●  |
| PAL            | ●  | ●  | ●  | ●  | ●  |
| PALM           | ●  | ●  | ●  | ●  | ●  |

### Specification

| Model                | BSLM5                             | BSL01  | BSL02  | BSL03  | BSL04 | BSLMM5   | BSLM01 | BSLM02 | BSLM03 | BSLM04 |
|----------------------|-----------------------------------|--------|--------|--------|-------|----------|--------|--------|--------|--------|
| Thread connection    | M5 × 0.8                          | 1/8"   | 1/4"   | 3/8"   | 1/2"  | M5 × 0.8 | 1/8"   | 1/4"   | 3/8"   | 1/2"   |
| Silencing effect(dB) | 15                                | 10     | 10     | 10     | 10    | 15       | 12     | 12     | 12     | 12     |
| Model                | BESL01                            | BESL02 | BESL03 | BESL04 | PAL01 | PAL02    | PAL03  | PAL04  | PALM01 | PALM02 |
| Thread connection    | 1/8"                              | 1/4"   | 3/8"   | 1/2"   | 1/8"  | 1/4"     | 3/8"   | 1/2"   | 1/8"   | 1/4"   |
| Silencing effect(dB) | 10                                | 10     | 10     | 10     | 25    | 25       | 25     | 25     | 25     | 25     |
| Operating pressure   | 0~9kgf/cm <sup>2</sup> (0~0.9MPa) |        |        |        |       |          |        |        |        |        |
| Negative pressure    | -750mmHg(10Torr)                  |        |        |        |       |          |        |        |        |        |
| Proof pressure       | 1.5MPa                            |        |        |        |       |          |        |        |        |        |
| Temperature range    | 0~60℃                             |        |        |        |       |          |        |        |        |        |

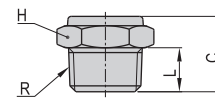
### Dimensions

#### BSL series



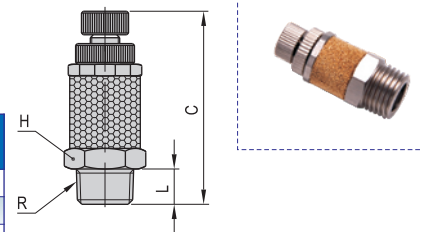
| Model\Item | R        | L   | C    | H(Across flat) |
|------------|----------|-----|------|----------------|
| BSLM5      | M5 × 0.8 | 3.5 | 19.5 | 8              |
| BSL01      | 1/8"     | 6   | 24   | 12             |
| BSL02      | 1/4"     | 8   | 30   | 15             |
| BSL03      | 3/8"     | 9   | 38.5 | 19             |
| BSL04      | 1/2"     | 12  | 47.5 | 22             |

#### BSLM series



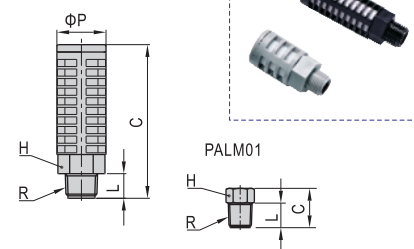
| Model\Item | R        | L   | C    | H(Across flat) |
|------------|----------|-----|------|----------------|
| BSLMM5     | M5 × 0.8 | 3.5 | 9.5  | 8              |
| BSLM01     | 1/8"     | 6   | 11   | 11             |
| BSLM02     | 1/4"     | 8   | 13.5 | 15             |
| BSLM03     | 3/8"     | 9   | 15.5 | 19             |
| BSLM04     | 1/2"     | 12  | 20.5 | 22             |

#### BESL series



| Model\Item | R    | L  | C       | H(Across flat) |
|------------|------|----|---------|----------------|
| BESL01     | 1/8" | 6  | 40.5 33 | 12             |
| BESL02     | 1/4" | 8  | 42.5 35 | 14             |
| BESL03     | 3/8" | 9  | 49 41.5 | 17             |
| BESL04     | 1/2" | 12 | 61 53.5 | 24             |

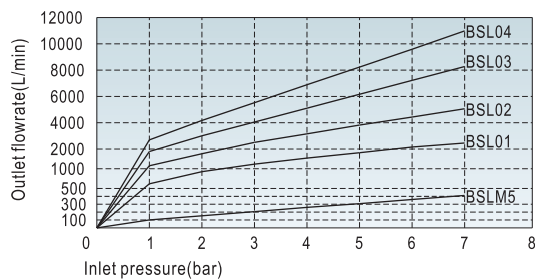
#### PAL, PALM series



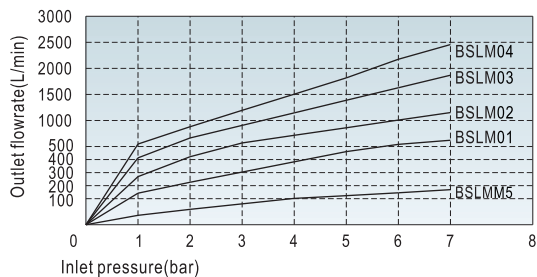
| Model\Item | R    | ΦP | L  | C    | H(Across flat) |
|------------|------|----|----|------|----------------|
| PAL01      | 1/8" | 16 | 7  | 33   | 14             |
| PALM01     | 1/8" | —  | 10 | 16   | 10             |
| PAL02      | 1/4" | 20 | 10 | 62.5 | 17             |
| PALM02     | 1/4" | 16 | 10 | 36   | 14             |
| PAL03      | 3/8" | 26 | 12 | 68   | 24             |
| PAL04      | 1/2" | 28 | 12 | 73   | 24             |

### Flowrate characteristic

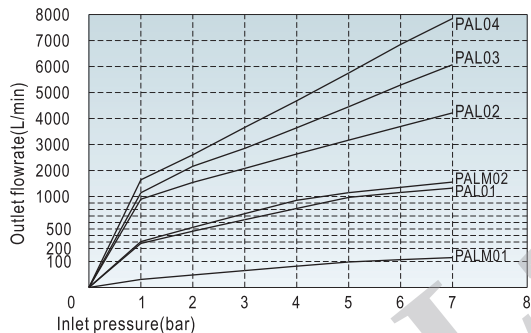
#### BSL series



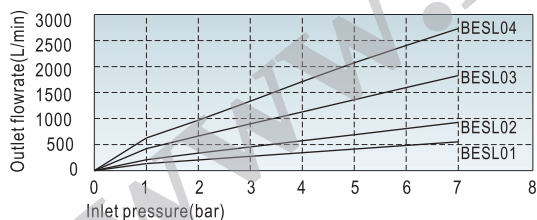
#### BSLM series



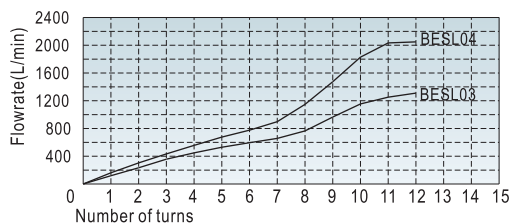
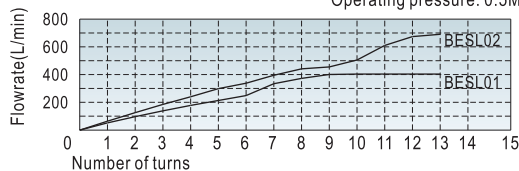
#### PAL, PALM series



#### BESL series (inlet pressure and outlet flowrate) Throttling bolt completely open

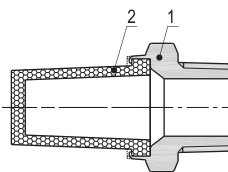


#### BESL series (Flowrate of controlled flow channel) Operating pressure: 0.5MPa



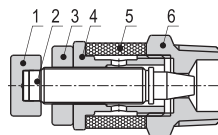
### Inner structure

#### Model: BSL



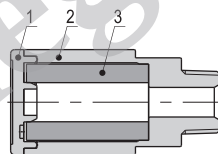
| NO. | Name                  | Material                 |
|-----|-----------------------|--------------------------|
| 1   | Body                  | HPb59-1                  |
| 2   | Sound absorbing cover | Copper particle sintered |

#### Model: BESL



| NO. | Name              | Material                 |
|-----|-------------------|--------------------------|
| 1   | Adjusting cap     | Aluminum alloy           |
| 2   | Throttling column | Aluminum alloy           |
| 3   | Locking cap       | Aluminum alloy           |
| 4   | Locking ring      | Aluminum alloy           |
| 5   | Silencer ring     | Copper particle sintered |
| 6   | Silencer body     | Brass                    |

#### Model: PAL



| NO. | Name                    | Material           |
|-----|-------------------------|--------------------|
| 1   | Silencer top cover      | POM                |
| 2   | Silencer body           | POM                |
| 3   | Silencer filter element | Polyethylene fiber |



Silencer