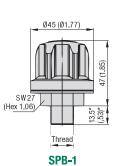
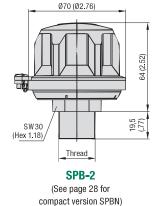
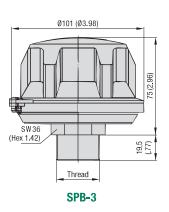
# **Plastic Filler Breather** Types SPB-1 / 2 / 3 (Threaded Version)





\* for thread type N12: 16,0 (.63)





#### **Characteristics**

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

#### Features

- Available with 3 different cap diameters
- Threaded version, equipped with male BSP thread (ISO 228) or male NPT thread (ANSI B1.20.1)
- Operating temperature range:
  - -40 °C ... +120 °C / -40 °F ... +248 °F

#### **Materials**

- Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

# **Accessories / Options**

- Pressurisation up to 0,7 bar / 10 PSI (not available for SPB-1)
- Air filter element
- Anti-splash feature
- Plastic dipstick with integrated anti-splash feature
- Plastic dipstick with integrated magnet
- Oil Demister (not available for SPB-1)

Please see pages 26 and 47 for details.

#### **Maximum Air Flow Rate**

- 0,15 m³/min / 5.30 cfm for SPB-1
- 0,40 m³/min / 14,13 cfm for SPB-2
- 1,00 m³/min / 35.31 cfm for SPB-3

Please see page 27 for detailed air flow curves.

### Installation

Recommended mounting spaces: Ø48 mm / Ø1.89 in for SPB-1, Ø90 mm / Ø3.54 in for SPB-2, and Ø122 mm / Ø4.80 in for SPB-3

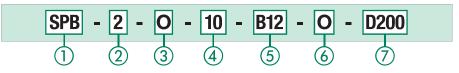
# **Thread Options**

| Threa                        | b    | SPB-1 | SPB-2 | SPB-3 | Code |
|------------------------------|------|-------|-------|-------|------|
| ad                           | G1/4 | •     | 0     | 0     | B04  |
| Male BSP Thread<br>(ISO 228) | G3/8 | •     | •     | 0     | B06  |
|                              | G1/2 | •     | •     | •     | B08  |
|                              | G3/4 | 0     | •     | •     | B12  |
| Ĕ                            | G1   | 0     | 0     | •     | B16  |

| Thread              |     | SPB-1 | SPB-2 | SPB-3 | Code |
|---------------------|-----|-------|-------|-------|------|
| ad _                | 1/4 | •     | 0     | 0     | N04  |
| <b>Threa</b> (20.1) | 3/8 | •     | 0     | 0     | N06  |
|                     | 1/2 | •     | 0     | 0     | N08  |
| Male NP1<br>(ANSI B | 3/4 | •     | •     | •     | N12  |
| <b>≅</b> ⊴          | 1   | 0     | 0     | •     | N16  |

Standard Option

### **Order Codes**



# 1) Type SPB Plastic Filler Breather Threaded version; Cap diameter Ø45 mm (Ø1.77 in) 1 Threaded version; Cap diameter Ø70 mm (Ø2.76 in) Threaded version; Cap diameter Ø101 mm (Ø3.98 in) 3

# ③ Pressurisation

| Without pressurisation (standard option) | 0     |
|--|-------|
| Pressurised at 0,2 bar / 3 PSI           | B0.2  |
| Pressurised at 0,35 bar / 5 PSI          | B0.35 |
| Pressurised at 0,7 bar / 10 PSI          | B0.7  |

Type SPB-1 is only available without pressurisation. Please see page 26 for details.

## (4) Air Filter Element (Material / Micron Rating)

| - | All Tillor Elothone (matorial /     | mioron manig |
|---|-------------------------------------|--------------|
|   | 10 µm Foam / PUR (standard option)  | 10           |
|   | 40 μm Foam / PUR                    | 40           |
|   | 3 µm Inorganic Glass-Fibre, pleated | E03          |
|   | 10 µm Filter Paper, pleated         | L10          |

Options E03 and L10 are only available for type SPB-3. Contact STAUFF for alternative materials / micron ratings.

# (5) Connection Thread (Male)

| G1/4 (for SPB-1 only)       | B04 |
|-----------------------------|-----|
| G3/8 (for SPB-1 and 2 only) | B06 |
| G1/2 (for SPB-1, 2 and 3)   | B08 |
| G3/4 (for SPB-2 and 3 only) | B12 |
| G1 (for SPB-3 only)         | B16 |
| 1/4NPT (for SPB-1 only)     | N04 |
| 3/8NPT (for SPB-1 only)     | N06 |
| 1/2 NPT (for SPB-1 only)    | N08 |
| 3/4NPT (for SPB-1, 2 and 3) | N12 |
| 1 NPT (for SPB-3 only)      | N16 |

# 6 Anti-Splash Feature

| With anti-splash feature (standard option) | Α |
|--|---|
| Without anti-splash feature                | 0 |

The anti-splash feature for the SPB-1, can only be achieved in conjunction with a dipstick, but is not available for the SPB-1 with connection sizes B04 and N04. Please see page 26 for details.

# 7 Dipstick

|       | Plastic dipstick (200 mm / 7.88 in)  |
|-------|--------------------------------------|
| D200  | with integrated anti-splash feature  |
| D300  | Plastic dipstick (300 mm / 11.81 in) |
|       | with integrated anti-splash feature  |
| D300M | Plastic dipstick (300 mm / 11.81 in) |
|       | with integrated magnet               |
| -     | Without dipstick                     |

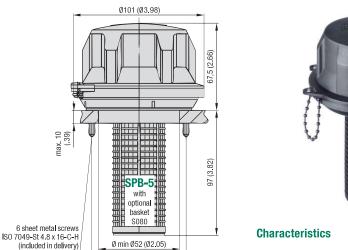
A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. Please see page 26 for details.

Dimensional drawings: All dimensions in mm (in).





# Plastic Filler Breather Types SPB-4 / 5 (Flange Version)



Clamping jaw installation to a single mounting hole

optional

Ø min. Ø63 (Ø2.48)

Ø101 (Ø3.98)

Installation to a six-hole bolt pattern with flange interface similar to DIN 24557, Part 2

BCD Ø73±0,2 (2.87±.01)

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

#### **Features**

- Cap diameter of Ø101 mm / Ø3.98 in
- Either for clamping installation (with 3 clamping jaws and cross-drive screws) or with a six-hole bolt pattern
- Operating temperature range:
   -40 °C ... +120 °C / -40 °F ... +248 °F

#### Materials

- Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

# **Accessories / Options**

- Plastic basket (800 µm)
- Pressurisation up to 0,7 bar / 10 PSI
- Air filter element
- Anti-splash feature
- Plastic dipstick with integrated anti-splash feature
- Plastic dipstick with integrated magnet

Please see page 26 for details.

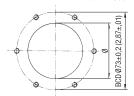
#### **Maximum Air Flow Rate**

■ 1,00 m³/min / 35.31 cfm for SPB-4 / 5

Please see page 27 for detailed air flow curves.

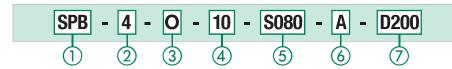
#### Installation

- Recommended mounting space: Ø122 mm / Ø4.80 in
- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2 (type SPB-5):



- 6 sheet metal screws (ISO 7049-St 4.8 x 16-C-H) are included in delivery (type SPB-5); can be replaced by regular M5 socket cap screws (ISO 4762), if required
- Recommended diameters of the screw holes, depending on the sheet thickness of the reservoir (type SPB-5): Ø4,0 mm / Ø.16 in at a thickness of 1,20 mm / .05 in, Ø4,1 mm / Ø.16 in at a thickness of 2,00 mm / .08 in, Ø4,3 mm / Ø.17 in at a thickness of 4,00 mm / .16 in, and Ø4,4 mm / Ø.17 in at a thickness of 5,00 mm / .20 in

#### **Order Codes**



5



# ② Version

Bayonet version for clamping jaw installation to a single mounting hole;
Cap diameter Ø101 mm (Ø3.98 in)
Bayonet Version with six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2;
Cap diameter Ø101 mm (Ø3.98 in)

# (3) Pressurisation

| Without pressurisation (standard option) | 0     |
|--|-------|
| Pressurised at 0,2 bar / 3 PSI           | B0.2  |
| Pressurised at 0,35 bar / 5 PSI          | B0.35 |
| Pressurised at 0.7 bar / 10 PSI          | B0.7  |

Please see page 26 for details.

# (4) Air Filter Element (Material / Micron Rating)

| 10 µm Foam / PUR (standard option)  | 10  |
|-------------------------------------|-----|
| 40 μm Foam / PUR                    | 40  |
| 3 µm Inorganic Glass-Fibre, pleated | E03 |
| 10 µm Filter Paper, pleated         | L10 |

Contact STAUFF for alternative materials / micron ratings.

#### (5) Basket Option

| Plastic basket (105 mm / 4.13 in)   | S080  |
|---|-------|
| Telescopic plastic basket<br>(max. 205 mm / max. 8.07 in)                                 | S200  |
| Plastic basket with flange interface<br>similar to DIN 24557, part 2<br>(95 mm / 3.74 in) | S095P |
| Without basket  | Х     |

Option S095P is only available for type SPB-5. Please see page 26 for details.

# (6) Anti-Splash Feature

| ) | Anti-opiasii i cature                      |   |  |
|---|--|---|--|
|   | With anti-splash feature (standard option) | Α |  |
|   | Without anti-splash feature                | 0 |  |

# ⑦ Dipstick

|       | DI 11 11 11 1 (000 ( ) ( ) ( )       |  |
|-------|--------------------------------------|--|
| D200  | Plastic dipstick (200 mm / 7.88 in)  |  |
|       | with integrated anti-splash feature  |  |
| D300  | Plastic dipstick (300 mm / 11.81 in) |  |
|       | with integrated anti-splash feature  |  |
| D300M | Plastic dipstick (300 mm / 11.81 in) |  |
|       | with integrated magnet               |  |
| -     | Without dipstick                     |  |
|       |                                      |  |

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. When choosing a combination of a basket and a dipstick, the dipstick has to be at least 15 mm / .59 in shorter than the basket.

Please see page 26 for details.

Dimensional drawings: All dimensions in mm (in),