



**Rexroth**  
Bosch Group

## Breather filter

**RE 51415/02.09** 1/10  
Replaces: 08.08  
RE 51416

Types TLF I...; TLF II...; TLF III...

Nominal size: TLF I; II; III 1 - 25 to 8 - 250  
Connections up to DN 250  
Operating temperature -20 °C to +100 °C



### Table of contents

| Content  | Page  |
|--|-------|
| Application                                    | 1     |
| Design, maintenance intervals, and spare parts | 2     |
| Ordering details                               | 3, 4  |
| Unit dimensions                                | 5...7 |
| Characteristic curves                          | 8     |

### Application

- Filtration and dehumidification of the intake air of industrial systems.
- Avoidance of initial damage in pumps and bearings and system components.

## Design

Dismountable filter housing for ventilation with internal, exchangeable filter element. Filter elements H10XL up to a filtration rating of 10 µm with glass fiber mat and P... up to 25 µm with paper mat.

Materials as per spare parts list.

### Designs:

**TLF I...:** with internal screw-in thread,

**TLF II...:** with external screw-in thread,

**TLF III...:** with external screw-in thread and filling filter (screen basket 130 µm).

**TLF I 7-125:** with DIN flange,

**TLF I 8-250:** with DIN flange,

**TLF III 7-125:** with DIN flange and filling filter (screen basket 130 µm).

## Maintenance intervals

| Fields of application of the filter | Environmental conditions average dust content | Maintenance interval |
|-------------------------------------|---|----------------------|
| General mechanical engineering      | 9...25 mg/m <sup>3</sup>                      | 4,000 h              |
| Heavy industry                      | 50...80 mg/m <sup>3</sup>                     | 3,000 h              |
| Mobile hydraulics                   | 30...100 mg/m <sup>3</sup>                    | 3,000 h              |

## Spare parts nominal sizes 1-25 to 6-80

| Part | Piece | Size Description   | Material | TLF I, TLF II, TLF III                                |               |               |               |               |               |
|------|-------|--------------------|----------|---|---------------|---------------|---------------|---------------|---------------|
|      |       |                    |          | 1-25  | 2-32          | 3-40          | 4-50          | 5-65          | 6-80          |
| 1    | 1     | Cover              | Steel    | Please indicate ordering information "Filter"         |               |               |               |               |               |
| 2    | 1     | Wing nut           | Steel    | Part No. 4349   |               |               |               |               |               |
| 3    | 1     | Filter element     | various  | Please indicate ordering information "Filter Element" |               |               |               |               |               |
| 4    | 1     | Lower housing part | various  | Please indicate ordering information "Filter"         |               |               |               |               |               |
| 5    | 1     | Filling piece      | Al       | Part No. 3650   | Part No. 3658 | Part No. 3659 | Part No. 3660 | Part No. 3661 | Part No. 3662 |
| 6    | 1     | Filling screen     | Steel    | Part No. 3651   | Part No. 3663 | Part No. 3664 | Part No. 3665 | Part No. 3666 | Part No. 3667 |

All part nos. BRFS-specific.

Filling piece and filling screen only available as unit.

## Spare parts nominal sizes 7-125, 8-250

| Part           | Piece | Size Description   | Material | TLF I/TLF III 7-125                                   | TLF I 8-250 |
|----------------|-------|--------------------|----------|---|-------------|
|                |       |                    |          | 1   | 1           |
| 2              | 1     | Wing nut           | Steel    | Part No. 5233   |             |
| 3              | 1     | Filter element     | various  | Please indicate ordering information "Filter Element" |             |
| 4              | 1     | Lower housing part | various  | Please indicate ordering information "Filter"         |             |
| 6              | 1     | Filling screen     | various  | Part no. 5784   | —           |
| 7              | 1     | Seal               | NBR      | Please indicate ordering information "Filter"         |             |
| 8              | 1     | Seal               | NBR      | Please indicate ordering information "Filter"         |             |
| Weight (in kg) |       |                    |          | 8.0   | 33.0        |

All part numbers. BRFS specific.

## Ordering details of the filter nominal sizes 1-25 to 6-80

|  |  |     |     |   |   |      |   |   |
|--|--|-----|-----|---|---|------|---|---|
|  |  | - S | - 0 | 0 | 0 | 0-00 | 0 | 0 |
|--|--|-----|-----|---|---|------|---|---|

**Design**  
Tank breather filter...  
with internal thread connection = TLF I...  
with external thread connection = TLF II...  
with external thread connection and filling screen = TLF III...

**Nom. size**  
TLF I, II, III... = 1-25 2-32 3-40  
4-50 5-65 6-80

**Filtration rating in µm nominal**  
Paper, non-cleanable P10, P25 = P...  
**absolute (ISO 16889)**  
Micro glass, non-cleanable H10XL = H10XL

**Pressure differential**  
Max. admissible pressure differential of the filter element Standard = S

**Element model**  
Standard adhesive T = 80 °C = 0...  
Standard material = ...0

**Solenoid**  
without = 0

**Complementary details**  
0 = without

**Material**  
0 = Standard

**Seal**  
0 = Polyurethane adhesive  
M = NBR seal

**Connection**  
00 = Standard

**Clogging indicator**  
0 = without

**Bypass valve**  
0 = without

**Ordering example:**  
TLF III 3 - 40 P10-S00-000-00M00

## Ordering details of the filter element nominal size 1-25 to 6-80

|    |  |     |       |
|----|--|-----|-------|
| 7. |  | - S | - 0 - |
|----|--|-----|-------|

**Filter element Design**  
Design = 7.

**Filter element size**  
NG1-25, 2-32 = 002  
NG3-40, 4-50, 5-65 = 004  
NG6-80 = 006

**Filtration rating in µm nominal**  
Paper, non-cleanable P10, P25 = P...  
**absolute (ISO 16889)**  
Micro glass, non-cleanable H10XL = H10XL

**Pressure differential**  
Max. admissible pressure differential of the filter element Standard = S

**Seal**  
0 = Polyurethane adhesive  
M = NBR seal

**Bypass valve**  
0 = without

**Element model**  
0... = Standard adhesive T = 80 °C  
...0 = Standard material

**Ordering example:**  
7.004 P10-S00-0-M

## Ordering details of the filter nominal sizes 7-125, 8-250

|  |  |  |     |     |   |   |    |   |   |   |
|--|--|--|-----|-----|---|---|----|---|---|---|
|  |  |  | - S | - 0 | 0 | 0 | 00 | M | 0 | 0 |
|--|--|--|-----|-----|---|---|----|---|---|---|

**Design**  
Tank breather filter with DIN flange connection = TLF I...  
Tank breather filter with DIN flange connection and filling screen = TLF III...

**Nom. size**  
TLF I, III = 7-125  
TLF I = 8-250

**Filtration rating in µm nominal**  
Paper, non-cleanable P10, P25 = P...  
**absolute (ISO 16889)**  
Micro glass, non-cleanable H10XL = H10XL

**Pressure differential**  
Max. admissible pressure differential of the filter element Standard = S

**Element model**  
Standard adhesive T = 80 °C = 0...  
Standard material = ...0

**Solenoid**  
without = 0

**Complementary details**  
without 0 =

**Material**  
Standard 0 =

**Seal**  
NBR seal M =

**Connection**  
Standard 00 =

**Clogging indicator**  
without 0 =

**Bypass valve**  
without 0 =

**Ordering example:**  
TLF III 7 - 125 P10-S00-000-00M00

## Ordering details of the filter element nominal sizes 7-125, 8-250

|  |    |  |     |     |     |
|--|----|--|-----|-----|-----|
|  | 7. |  | - S | - 0 | - M |
|--|----|--|-----|-----|-----|

**Filter element**  
Design = 7.

**Filter element size**  
NG7-125 = 007  
NG8-250 = 008

**Filtration rating in µm nominal**  
Paper, non-cleanable P10, P25 = P...  
**absolute (ISO 16889)**  
Micro glass, non-cleanable H10XL = H10XL

**Pressure differential**  
Max. admissible pressure differential of the filter element Standard = S

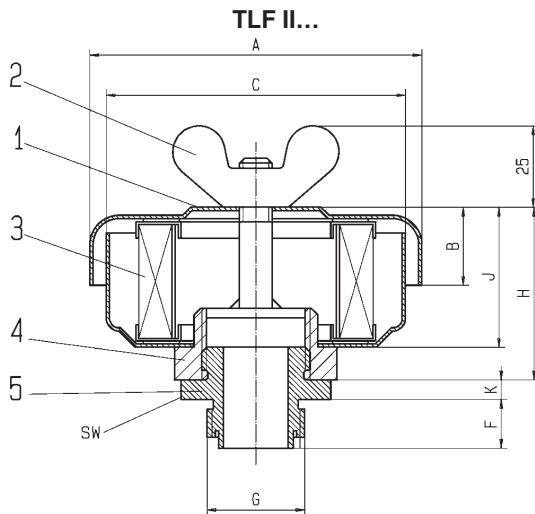
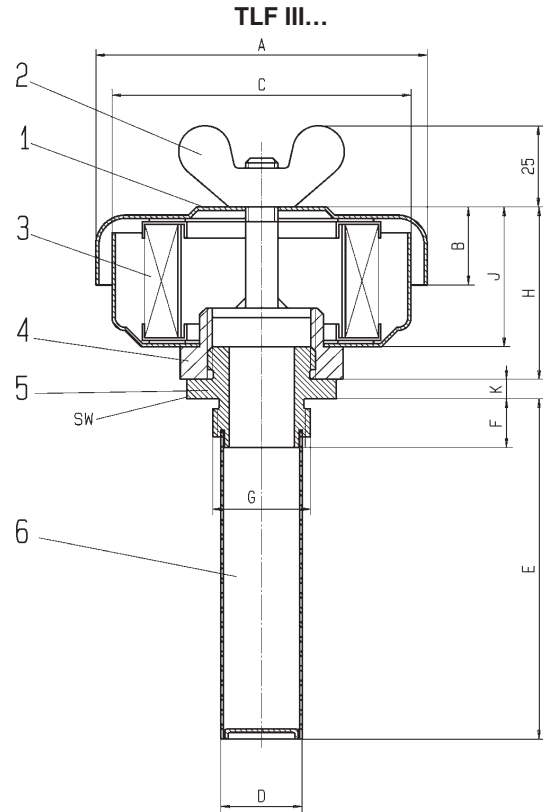
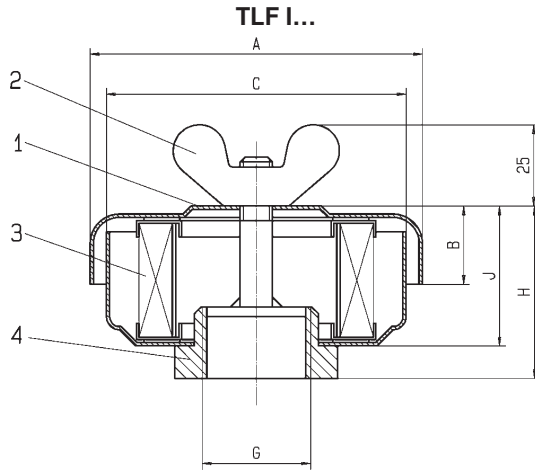
**Seal**  
NBR seal M =

**Bypass valve**  
without 0 =

**Element model**  
0... = Standard adhesive T = 80 °C  
...0 = Standard material

**Ordering example:**  
7.007 P10-S00-0-M

## Unit dimensions nominal sizes 1-25 to 6-80



Design with filling piece

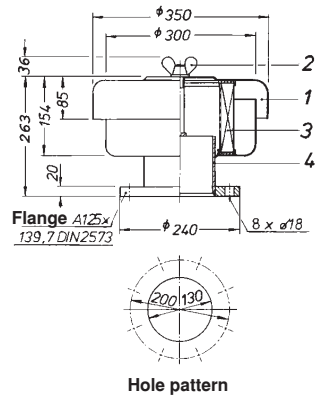
Design with filling piece  
and filling screen

## Unit dimensions nominal sizes 1-25 to 6-80 (dimensions in mm)

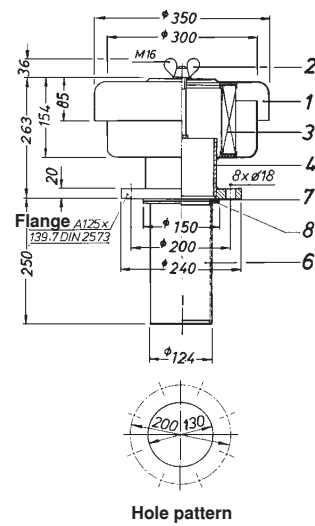
| Size         | Weight in kg | A     | B  | C     | D     | E   | F     | G     | H     | J  | K     | SW |    |
|--------------|--------------|-------|----|-------|-------|-----|-------|-------|-------|----|-------|----|----|
| TLF I 1-25   | 0.5          | Ø 104 | 24 | Ø 92  | —     | —   | —     | G 1   | 53    | 43 | —     | —  |    |
| TLF I 2-32   | 0.6          |       |    |       |       |     |       | G 1 ¼ | 63    |    |       |    |    |
| TLF I 3-40   | 2.1          | Ø 177 | 46 | Ø 162 |       |     |       | G 1 ½ | 90    | 80 |       |    |    |
| TLF I 4-50   | 2.1          |       |    |       |       |     |       | G 2   |       |    |       |    |    |
| TLF I 5-65   | 2.1          |       |    |       |       |     |       | G 2 ½ |       |    |       |    |    |
| TLF I 6-80   | 2.4          |       |    |       |       |     |       | Ø 210 |       |    |       |    | 45 |
| TLF II 1-25  | 0.6          | Ø 104 | 24 | Ø 92  | —     | —   | 25    | G 1   | 53    | 43 | 6     | 46 |    |
| TLF II 2-32  | 0.7          |       |    |       |       |     |       | G 1 ¼ | 63    |    |       | 55 |    |
| TLF II 3-40  | 2.3          | Ø 177 | 46 | Ø 162 |       |     | 26    | G 1 ½ | 90    | 80 | 7     | 60 |    |
| TLF II 4-50  | 2.3          |       |    |       |       |     |       | G 2   |       |    |       | 75 |    |
| TLF II 5-65  | 2.3          |       |    |       |       |     | Ø 210 | 45    | Ø 190 | 28 | G 2 ½ | 8  | 90 |
| TLF II 6-80  | 2.7          |       |    |       |       |     |       |       |       | 30 | G 3   | 88 | 78 |
| TLF III 1-25 | 0.7          | Ø 104 | 24 | Ø 92  | Ø 28  | 107 | 25    | G 1   | 53    | 43 | 6     | 46 |    |
| TLF III 2-32 | 0.8          |       |    |       | Ø 34  | 131 |       | G 1 ¼ | 63    |    |       | 55 |    |
| TLF III 3-40 | 2.5          | Ø 177 | 46 | Ø 162 | Ø 42  | 155 | 26    | G 1 ½ | 90    | 80 | 7     | 60 |    |
| TLF III 4-50 | 2.5          |       |    |       | Ø 53  | 185 |       | G 2   |       |    |       | 75 |    |
| TLF III 5-65 | 2.5          |       |    |       | Ø 67  | 217 | 28    | G 2 ½ | 8     | 90 |       |    |    |
| TLF III 6-80 | 2.8          |       |    |       | Ø 210 | 45  | Ø 190 | Ø 82  | 254   | 30 | G 3   | 88 | 78 |

## Unit dimensions nominal sizes 7-125, 8-250

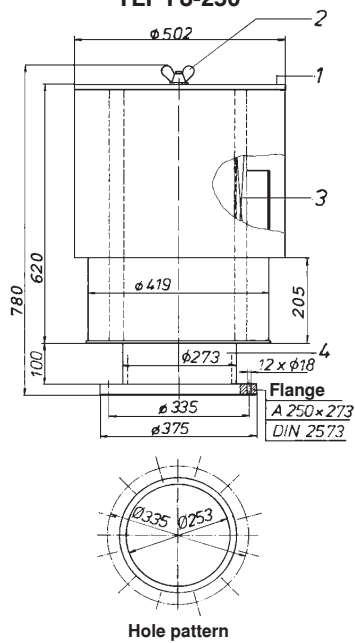
**TLF I 7-125**



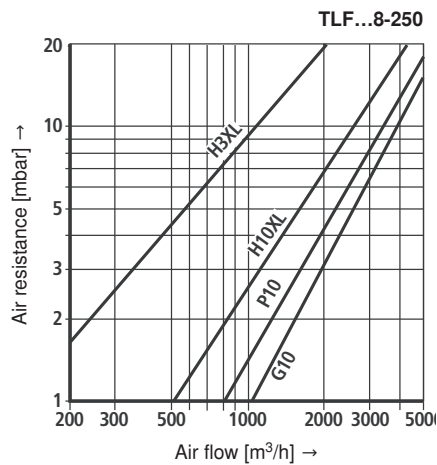
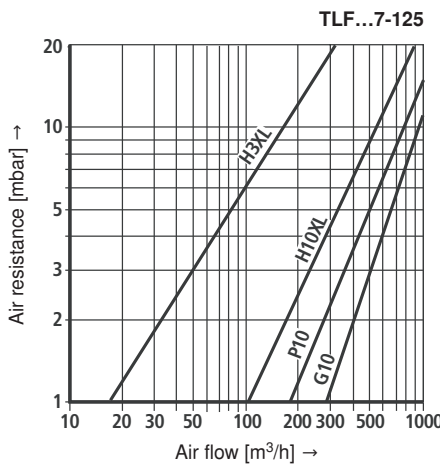
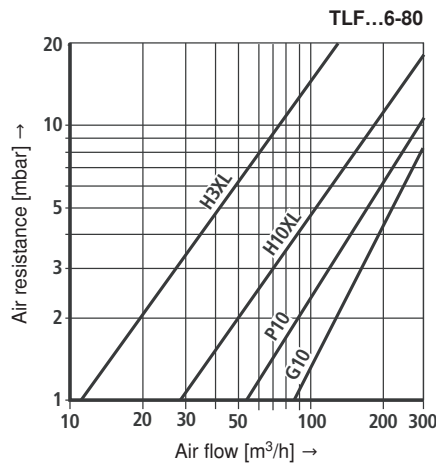
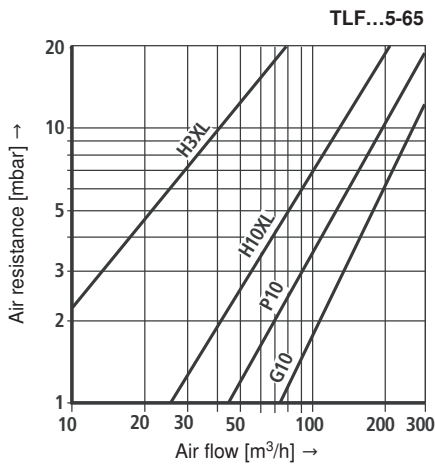
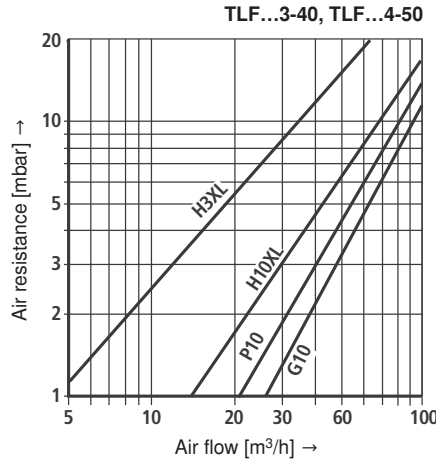
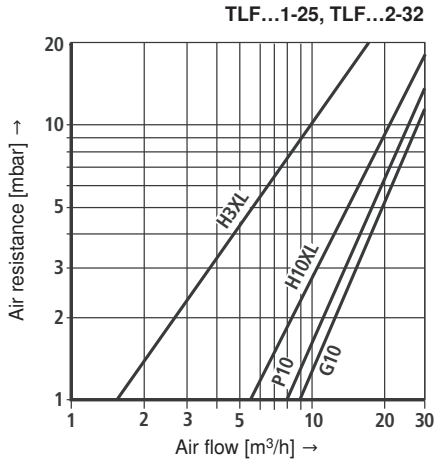
**TLF III 7-125**



**TLF I 8-250**



**Characteristic curves** (measured at test temperature = 20 °C)



## Notes

---

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth AG. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.