# Inline filter OAFA

# Characteristics

**At a glance**

The inline filter is used to filter out dirt particles in the air in suction nozzles via a filter cartridge.The filter cartridge is located in a transparent housing so that the contamination level of the filter insert can be determined.

- Can also be used for battery applications thanks to F1A conformity

Note:Do not clean the housing with polar solvents (e.g. alcohol).

**Diagrams** Link oafa

The diagrams shown in this document are also available online. These can be used to display precise values.

# Type code

| 001 | Series | |
|---|---|---|
| **OAFA** | Inline filter | |

| 002 | Design | |
|---|---|---|
| **C** | Inline | |

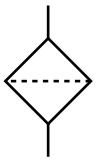
| 003 | Vacuum connection 1 | |
|---|---|---|
| **Q4** | Push-in connector 4 mm | |
| **Q6** | Push-in connector 6 mm | |
| **Q8** | Push-in connector 8 mm | |

| 004 | Vacuum connection 2 | |
|---|---|---|
| **E** | Same size as connection 1 | |

| 005 | Filter design | |
|---|---|---|
| **F** | 10 µm | |
| **E** | 40 µm | |

# Datasheet

## General technical data



| | | | |
|---|---|---|---|
| Nominal size | 4 mm | 6 mm | 8 mm |
| Pneumatic connection | For tubing O.D. 4 mm | For tubing O.D. 6 mm | For tubing O.D. 8 mm |
| Grade of filtration | 10 µm, 40 µm | | |
| Mounting position | optional | | |
| Type of mounting | In-line installation | | |

## Operating and environmental conditions

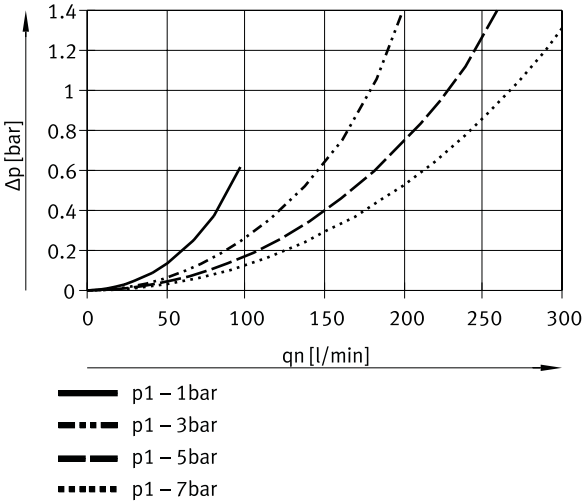
| | |
|---|---|
| Operating pressure | -0.1 ... 1 MPa |
| Operating pressure | -1 ... 10 bar |
| Operating pressure | -14.5 ... 145 psi |
| Operating medium | Air |
| Ambient temperature | 0 ... 60°C |
| Corrosion resistance class CRC [1] | 1 - Low corrosion stress |
| Instructions on use | The housing should not be cleaned with polar solvents (such as alcohol). |

1) More information www.festo.com/x/topic/crc

## Materials

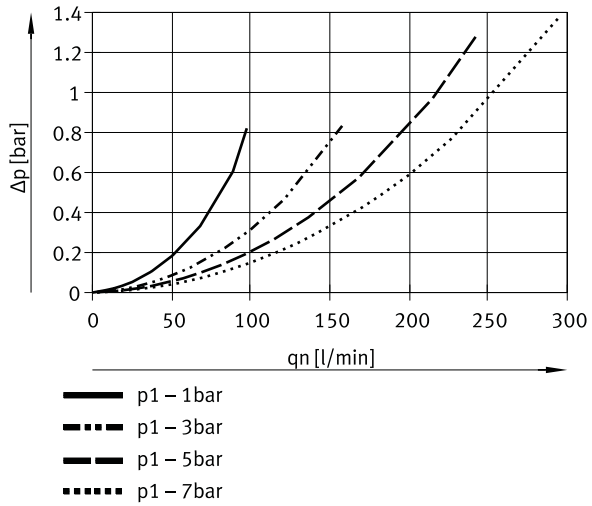
| | |
|---|---|
| Material housing | PA |
| Material seals | HNBR |
| Material filter | PE |
| Note on materials | RoHS-compliant |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Suitability for the production of Li-ion batteries | Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni |

## Normal flow rate qn as a function of differential pressure Δp (OAFA-C-Q4-E-E)

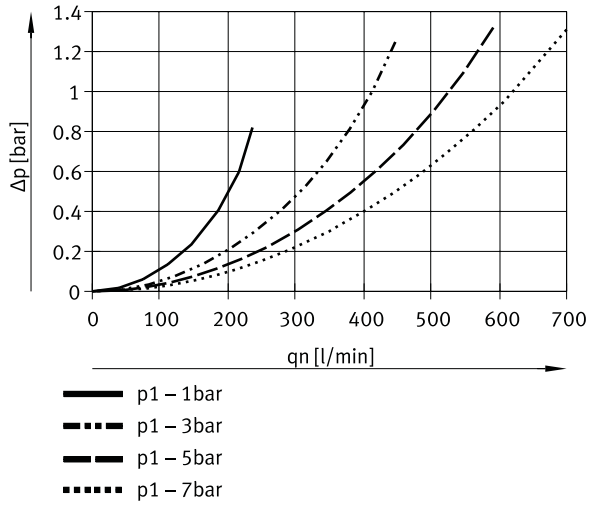


# Datasheet

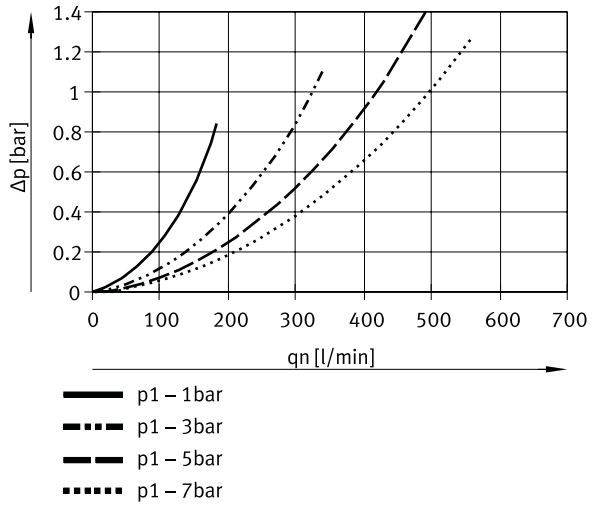
**Normal flow rate qn as a function of differential pressure Δp (OAFA-C-Q4-E-F)**




**Normal flow rate qn as a function of differential pressure Δp (OAFA-C-Q6-E-E)**

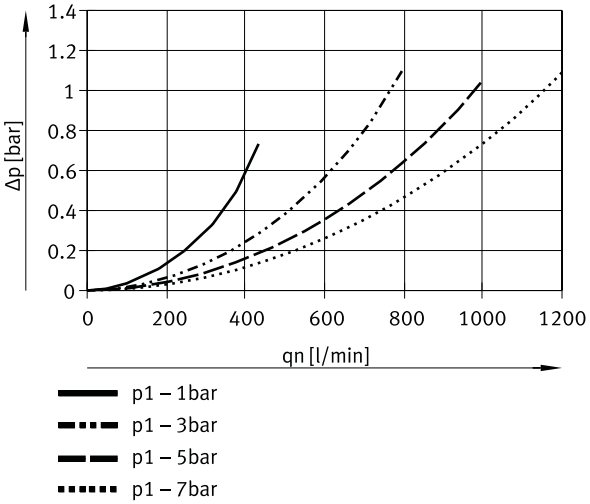



**Normal flow rate qn as a function of differential pressure Δp (OAFA-C-Q6-E-F)**

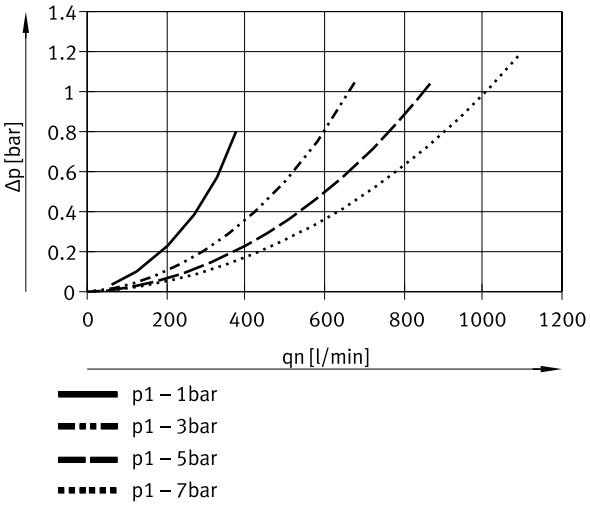


# Datasheet

**Normal flow rate qn as a function of the differential pressure Δp (OAFA-C-Q8-E-E)**

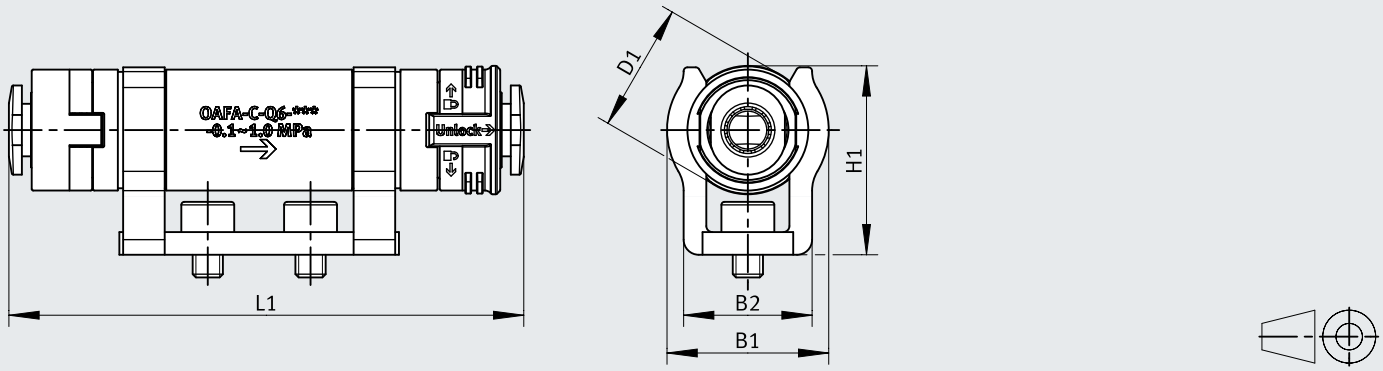



**Normal flow rate qn as a function of differential pressure Δp (OAFA-C-Q8-E-F)**



# Dimensions

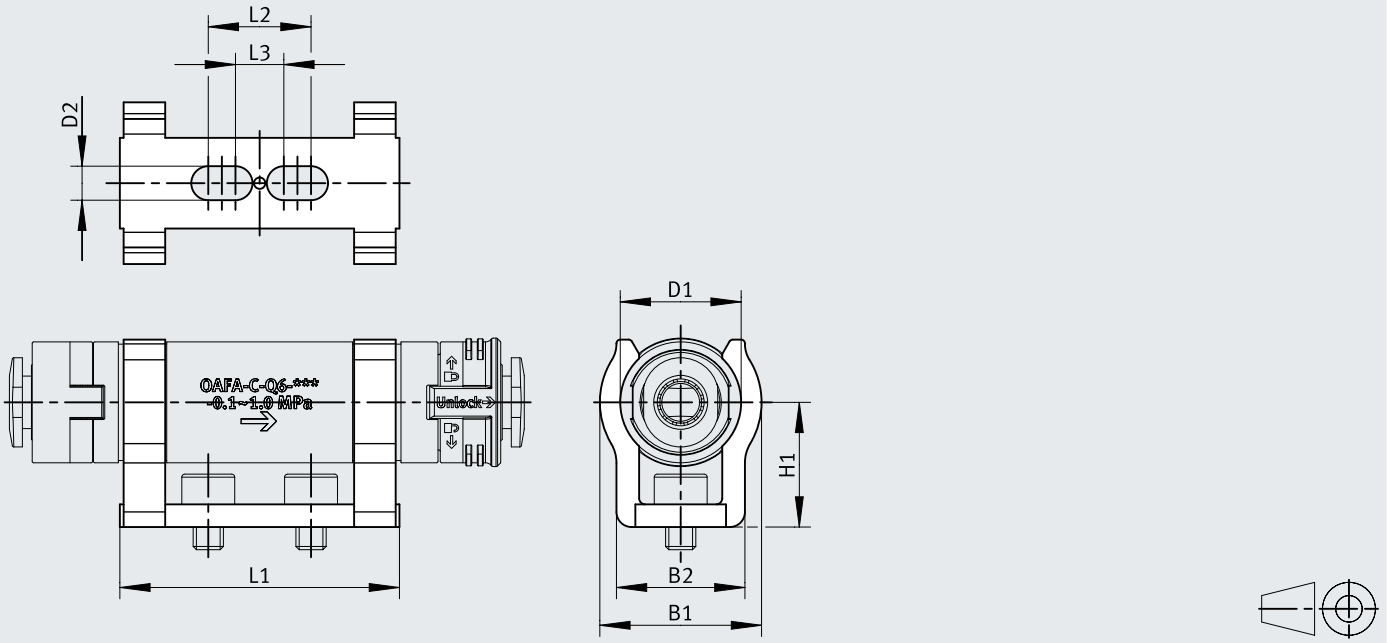
**Dimensions – Inline filter OAFA** Download CAD data www.festo.com




| | B1 | B2 | D1<br>ø | H1 | L1 |
|---|---|---|---|---|---|
| OAFA-C-Q4-E-F | 14,7 | 11 | 12 | 17,5 | 61,7 |
| OAFA-C-Q4-E-E | 14,7 | 11 | 12 | 17,5 | 61,7 |
| OAFA-C-Q6-E-F | 21,4 | 17 | 17 | 25 | 68,1 |
| OAFA-C-Q6-E-E | 21,4 | 17 | 17 | 25 | 68,1 |
| OAFA-C-Q8-E-F | 28 | 21 | 23,6 | 32,8 | 71,9 |
| OAFA-C-Q8-E-E | 28 | 21 | 23,6 | 32,8 | 71,9 |

# Dimensions

**Dimensions – Mounting bracket OAMM** Download CAD data www.festo.com




| | B1 | B2 | D1<br>ø | D2 | H1 | L1 | L2 | L3 |
|---|---|---|---|---|---|---|---|---|
| OAMM-A2-A-Q4 | 14,7 | 11 | 10,7 | 3,5 | 11,5 | 32 | 25 | 21 |
| OAMM-A2-A-Q6 | 14,7 | 11 | 15,4 | 4,5 | 16,5 | 37 | 13,6 | 6,4 |
| OAMM-A2-A-Q810 | 21,4 | 17 | 22 | 4,5 | 21 | 39 | 19,3 | 8,7 |

# Ordering data

**Ordering information – Vacuum filter OAFA**

| | Pneumatic connection | Grade of filtration | Product weight | Part no. | Type |
|---|---|---|---|---|---|
| | For tubing O.D. 4 mm | 10 µm | 5.4 g | **8212637** | **OAFA-C-Q4-E-F** |
| | | 40 µm | | **8212638** | **OAFA-C-Q4-E-E** |
| | For tubing O.D. 6 mm | 10 µm | 11 g | **8212640** | **OAFA-C-Q6-E-F** |
| | | 40 µm | | **8212641** | **OAFA-C-Q6-E-E** |
| | For tubing O.D. 8 mm | 10 µm | 22.3 g | **8212643** | **OAFA-C-Q8-E-F** |
| | | 40 µm | | **8212644** | **OAFA-C-Q8-E-E** |

# Accessories

**Mounting bracket OAMM**

| | Type of mounting | Max. tightening torque | Suitability for the production of Li-ion batteries [1] | Product weight | Part no. | Type |
|---|---|---|---|---|---|---|
| | Via through-hole for M3 screw | 0.26 Nm | F1a | 1.36 g | **8228731** | **OAMM-A2-A-Q4** |
| | Via through-hole for M4 screw | 0.4 Nm | | 3.7 g | **8228730** | **OAMM-A2-A-Q6** |
| | | | | 5.63 g | **8228729** | **OAMM-A2-A-Q810** |

1) Suitable for battery production

**Filter cartridge OAFC (10 µm)**

| | Grade of filtration | Suitability for the production of Li-ion batteries [1] | Product weight | Size of pack | Part no. | Type |
|---|---|---|---|---|---|---|
| | 10 µm | F1a | 0.37 g | 5 | **8224526** | **OAFC-A2-Q4-E-F** |
| | | | 1.3 g | | **8224529** | **OAFC-A2-Q6-E-F** |
| | | | 2.37 g | | **8224532** | **OAFC-A2-Q810-E-F** |

1) Suitable for battery production

**Filter cartridge OAFC (40 µm)**

| | Grade of filtration | Suitability for the production of Li-ion batteries [1] | Product weight | Size of pack | Part no. | Type |
|---|---|---|---|---|---|---|
| | 40 µm | F1a | 0.37 g | 5 | **8224527** | **OAFC-A2-Q4-E-E** |
| | | | 1.3 g | | **8224530** | **OAFC-A2-Q6-E-E** |
| | | | 2.37 g | | **8224533** | **OAFC-A2-Q810-E-E** |

1) Suitable for battery production