

## Service unit combination without lubricator LFR

**FESTO**



## Characteristics

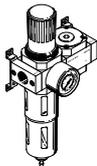
### At a glance

Service units for unlubricated compressed air supply.

- Rotary knob with latch
- Pressure gauge with outer scale in bar and inner scale in psi
- Mounting bracket included in the scope of delivery

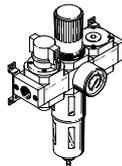
### Service unit combination

[KA] Filter regulator, branching module



Three connections are available

[KB] Filter regulator, branching module, on/off valve manually operated

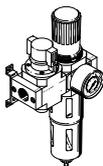


The operating pressure can be switched on or off.

Three connections are available

An additional quick exhaust valve is required at the service unit outlet for safe exhausting of the system

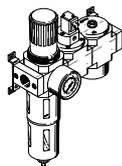
[KC] On/off valve manually operated, filter regulator



The operating pressure can be switched on or off.

An additional quick exhaust valve is required at the service unit outlet for safe exhausting of the system

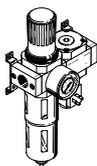
[KD] Filter regulator, on/off valve electrically operated, 24 V DC, soft-start valve pneumatically operated



When the unit is switched off, quick exhausting ensures rapid pressure reduction

Gradual pressure build-up prevents sudden, unpredictable movements

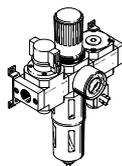
[KE] Filter regulator, branching module, soft-start valve pneumatically operated



Two connections are available.

Electrical pressure monitoring with adjustable switching pressure

[KF] On/off valve manually operated, filter regulator, branching module with pressure switch



The operating pressure can be switched on or off.

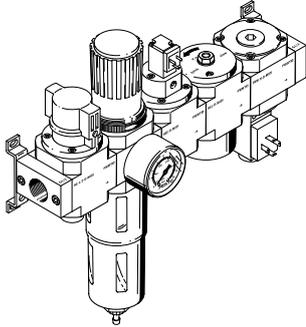
Two connections are available.

Electrical pressure monitoring with adjustable switching pressure

An additional quick exhaust valve is required at the service unit outlet for safe exhausting of the system

## Characteristics

[KG] On/off valve manually operated, filter regulator, on/off valve electrically operated, 24 V DC, soft-start valve pneumatically operated, branching module with pressure switch



Two connections are available.

Gradual pressure build-up prevents sudden, unpredictable movements

Electrical pressure monitoring with adjustable switching pressure

An additional quick exhaust valve is required at the service unit outlet for safe exhausting of the system

## Type code

|            |                  |  |
|------------|------------------|--|
| <b>001</b> | <b>Series</b>    |  |
| <b>LFR</b> | Filter regulator |  |

|            |                             |  |
|------------|-----------------------------|--|
| <b>002</b> | <b>Pneumatic connection</b> |  |
| <b>1/8</b> | Female thread G1/8          |  |
| <b>1/4</b> | Female thread G1/4          |  |
| <b>3/8</b> | Female thread G3/8          |  |
| <b>1/2</b> | Female thread G1/2          |  |
| <b>3/4</b> | Female thread G3/4          |  |

|            |                 |  |
|------------|-----------------|--|
| <b>003</b> | <b>Version</b>  |  |
| <b>D</b>   | D series, metal |  |

|            |   |  |
|------------|---|--|
| <b>004</b> | <b>Function</b>   |  |
|            | Directly actuated pressure regulator (MICRO, MINI, MIDI), pilot actuated pressure regulator (only MAXI) |  |
| <b>DI</b>  | Directly actuated pressure regulator with integrated return flow function (only MAXI)                   |  |

|             |  |  |
|-------------|--|--|
| <b>005</b>  | <b>Size</b>                                      |  |
| <b>MINI</b> | Grid dimension 40 mm (without connecting plates) |  |
| <b>MIDI</b> | Grid dimension 55 mm (without connecting plates) |  |
| <b>MAXI</b> | Grid dimension 66 mm (without connecting plates) |  |

|            |   |  |
|------------|---|--|
| <b>006</b> | <b>Service unit combination</b>   |  |
| <b>KB</b>  | Filter regulator, branching module, on/off valve manually operated  |  |
| <b>KA</b>  | Filter regulator, branching module  |  |
| <b>KC</b>  | On/off valve manually operated, filter regulator  |  |
| <b>KG</b>  | On/off valve manually operated, filter regulator, on/off valve electrically operated, 24 V DC, soft-start valve pneumatically operated, branching module with pressure switch |  |
| <b>KF</b>  | On/off valve manually operated, filter regulator, branching module with pressure switch   |  |
| <b>KE</b>  | Filter regulator, branching module, soft-start valve pneumatically operated   |  |
| <b>KD</b>  | Filter regulator, on/off valve electrically operated, 24 V DC, soft-start valve pneumatically operated  |  |

|            |                         |  |
|------------|-------------------------|--|
| <b>007</b> | <b>Condensate drain</b> |  |
|            | Manually rotating       |  |
| <b>A</b>   | Fully automatic         |  |

## Datasheet

| Technical data LFR-...-KA   |   |                            |             |  |             |                    |             |
|---|---|----------------------------|-------------|--|-------------|--------------------|-------------|
| Size  | Maxi  |                            |             | Midi   |             | Mini               |             |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |                    |             |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |                    |             |
| Grade of filtration   | 40 µm   |                            |             |  |             |                    |             |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |                    |             |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |                    |             |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |                    |             |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.05 ... 1.2 MPa  |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.5 ... 12 bar  |                            |             |  |             |                    |             |
| Pressure regulation range   | 7.25 ... 174 psi  |                            |             |  |             |                    |             |
| Max. pressure hysteresis  | 0.02 MPa  | 0.03 MPa                   | 0.025 MPa   | 0.02 MPa   | 0.015 MPa   |                    |             |
| Max. pressure hysteresis  | 0.2 bar   | 0.3 bar                    | 0.25 bar    | 0.2 bar  | 0.15 bar    |                    |             |
| Max. pressure hysteresis  | 2.9 psi   | 4.35 psi                   | 3.625 psi   | 2.9 psi  | 2.175 psi   |                    |             |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |                    |             |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             | 22 cm <sup>3</sup> |             |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 5,200 l/min<br>9,200 l/min  | 5,800 l/min<br>9,400 l/min | 1,850 l/min | 2,620 l/min  | 3,050 l/min | 720 l/min          | 1,140 l/min |
| Operating pressure  | 0.1 ... 1.6 MPa   |                            |             |  |             |                    |             |
| Operating pressure  | 1 ... 16 bar  |                            |             |  |             |                    |             |
| Operating pressure  | 14.5 ... 232 psi  |                            |             |  |             |                    |             |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |                    |             |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |                    |             |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |                    |             |

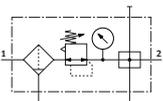
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

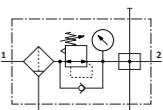
3) More information: visit [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KA (condensate drain, manual, rotating)

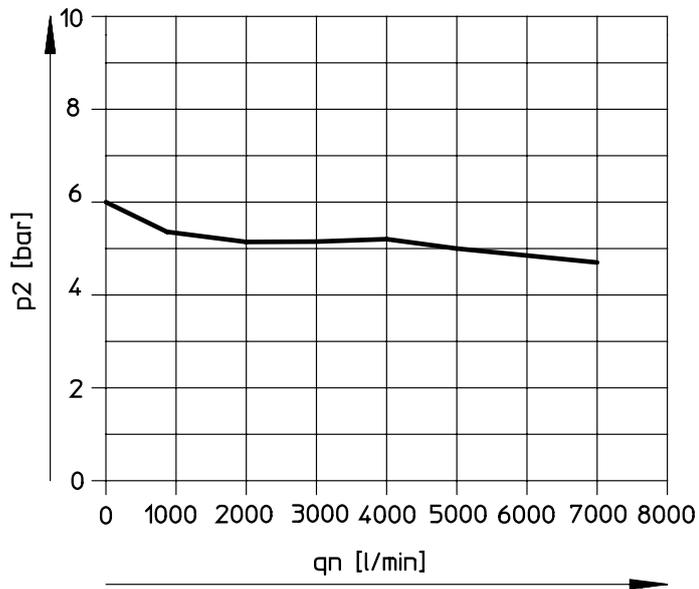


## Function LFR-...-MAXI-KA (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10$  bar) – LFR-1/2-D-DI-MAXI-KA(-A)



## Datasheet

| Technical data LFR-...-KB   |   |                            |             |  |             |                    |             |
|---|---|----------------------------|-------------|--|-------------|--------------------|-------------|
| Size  | Maxi  |                            |             | Midi   |             | Mini               |             |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |                    |             |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |                    |             |
| Grade of filtration   | 40 µm   |                            |             |  |             |                    |             |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |                    |             |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |                    |             |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |                    |             |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.05 ... 1.2 MPa  |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.5 ... 12 bar  |                            |             |  |             |                    |             |
| Pressure regulation range   | 7.25 ... 174 psi  |                            |             |  |             |                    |             |
| Max. pressure hysteresis  | 0.01 MPa  | 0.02 MPa                   | 0.025 MPa   | 0.035 MPa  | 0.02 MPa    |                    |             |
| Max. pressure hysteresis  | 0.1 bar   | 0.2 bar                    | 0.25 bar    | 0.35 bar   | 0.2 bar     |                    |             |
| Max. pressure hysteresis  | 1.45 psi  | 2.9 psi                    | 3.625 psi   | 5.075 psi  | 2.9 psi     |                    |             |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |                    |             |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             | 22 cm <sup>3</sup> |             |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 5,400 l/min<br>8,000 l/min  | 7,000 l/min<br>8,400 l/min | 1,720 l/min | 2,420 l/min  | 2,920 l/min | 700 l/min          | 1,050 l/min |
| Operating pressure  | 0.1 ... 1.6 MPa   |                            |             |  |             |                    |             |
| Operating pressure  | 1 ... 16 bar  |                            |             |  |             |                    |             |
| Operating pressure  | 14.5 ... 232 psi  |                            |             |  |             |                    |             |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |                    |             |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |                    |             |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |                    |             |

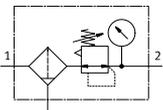
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

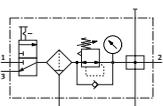
3) More information [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KB (with condensate drain, manual, rotating)

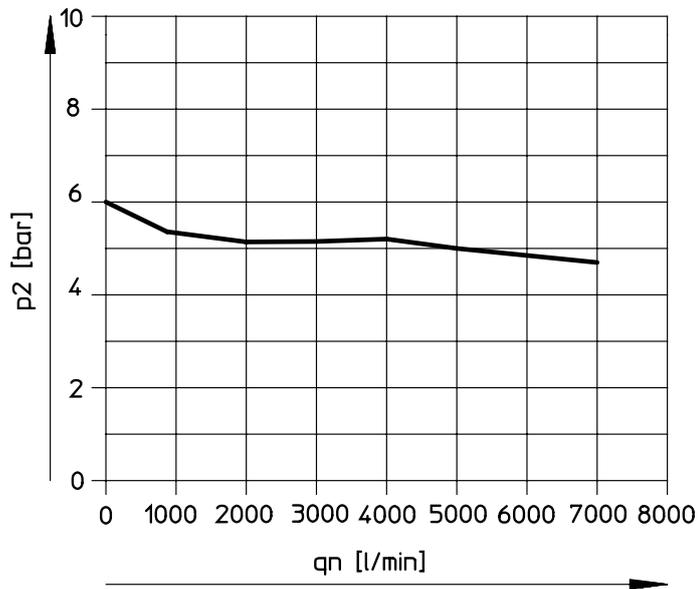


## Function LFR-...-MAXI-KB (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10$  bar) – LFR-1/2-D-DI-MAXI-KB(-A)



## Datasheet

| Technical data LFR-...-KC   |   |                            |             |  |             |           |                    |  |
|---|---|----------------------------|-------------|--|-------------|-----------|--------------------|--|
| Size  | Maxi  |                            |             | Midi   |             |           | Mini               |  |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |           |                    |  |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |           |                    |  |
| Grade of filtration   | 40 µm   |                            |             |  |             |           |                    |  |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |           |                    |  |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |           |                    |  |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |           |                    |  |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 0.05 ... 1.2 MPa  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 0.5 ... 12 bar  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 7.25 ... 174 psi  |                            |             |  |             |           |                    |  |
| Max. pressure hysteresis  | 0.02 MPa  |                            |             |  |             |           |                    |  |
| Max. pressure hysteresis  | 0.2 bar   |                            |             |  |             |           |                    |  |
| Max. pressure hysteresis  | 2.9 psi   |                            |             |  |             |           |                    |  |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |           |                    |  |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             |           | 22 cm <sup>3</sup> |  |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 4,800 l/min<br>8,100 l/min  | 5,400 l/min<br>8,400 l/min | 1,900 l/min | 2,700 l/min  | 3,150 l/min | 750 l/min | 1,150 l/min        |  |
| Operating pressure  | 0.1 ... 1.6 MPa   |                            |             |  |             |           |                    |  |
| Operating pressure  | 1 ... 16 bar  |                            |             |  |             |           |                    |  |
| Operating pressure  | 14.5 ... 232 psi  |                            |             |  |             |           |                    |  |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |           |                    |  |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |           |                    |  |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |           |                    |  |

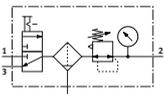
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

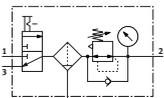
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4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KC (condensate drain, manual, rotating)

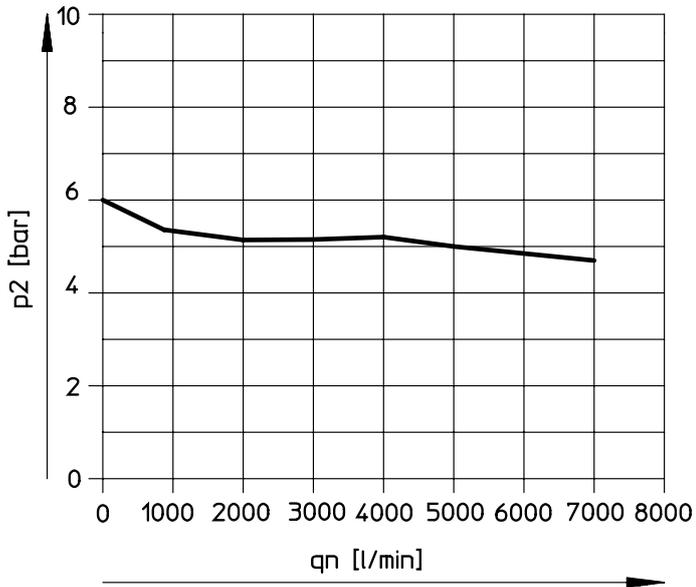


## Function LFR-...-MAXI-KC (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10 \text{ bar}$ ) – LFR-1/2-D-DI-MAXI-KC(-A)



## Datasheet

| Technical data LFR-...-KD   |   |                            |             |  |             |                    |           |
|---|---|----------------------------|-------------|--|-------------|--------------------|-----------|
| Size  | Maxi  |                            |             | Midi   |             | Mini               |           |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4      |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4      |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |                    |           |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |                    |           |
| Grade of filtration   | 40 µm   |                            |             |  |             |                    |           |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |                    |           |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |                    |           |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |                    |           |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |                    |           |
| Pressure regulation range   | 0.25 ... 1.2 MPa  |                            |             |  |             |                    |           |
| Pressure regulation range   | 2.5 ... 12 bar  |                            |             |  |             |                    |           |
| Pressure regulation range   | 36.25 ... 174 psi   |                            |             |  |             |                    |           |
| Max. pressure hysteresis  | 0.03 MPa  | 0.02 MPa                   | 0.025 MPa   |  | 0.015 MPa   |                    |           |
| Max. pressure hysteresis  | 0.3 bar   | 0.2 bar                    | 0.25 bar    |  | 0.15 bar    |                    |           |
| Max. pressure hysteresis  | 4.35 psi  | 2.9 psi                    | 3.625 psi   |  | 2.175 psi   |                    |           |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |                    |           |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             | 22 cm <sup>3</sup> |           |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 3,000 l/min<br>4,300 l/min  | 2,800 l/min<br>5,000 l/min | 1,440 l/min | 1,890 l/min  | 2,000 l/min | 595 l/min          | 730 l/min |
| Operating pressure  | 0.3 ... 1.6 MPa   |                            |             |  |             |                    |           |
| Operating pressure  | 3 ... 16 bar  |                            |             |  |             |                    |           |
| Operating pressure  | 43.5 ... 232 psi  |                            |             |  |             |                    |           |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |                    |           |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |                    |           |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |                    |           |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |                    |           |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |                    |           |

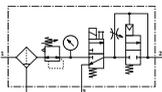
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

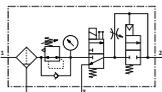
3) More information: visit [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KD (with condensate drain, manual, rotating)

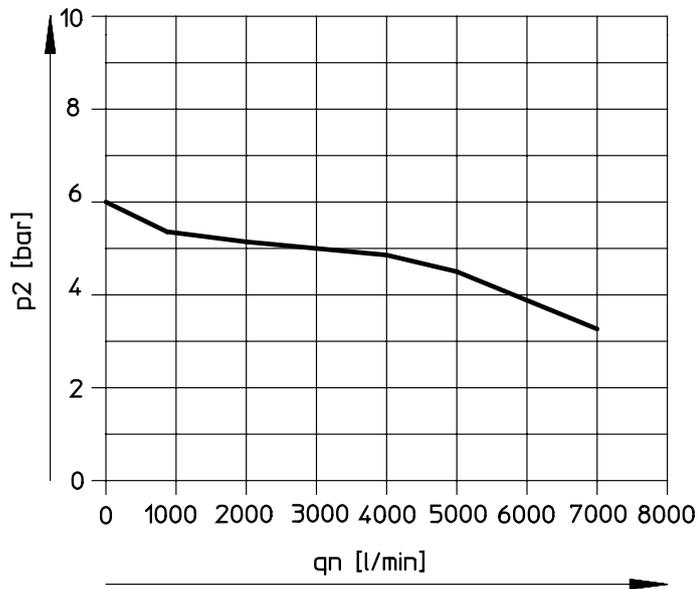


## Function LFR-...-MAXI-KD (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10$  bar) – LFR-1/2-D-DI-MAXI-KA(-A)



## Datasheet

| Technical data LFR-...-KE   |   |                            |             |  |             |                    |             |
|---|---|----------------------------|-------------|--|-------------|--------------------|-------------|
| Size  | Maxi  |                            |             | Midi   |             | Mini               |             |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8               | G1/4        |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |                    |             |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |                    |             |
| Grade of filtration   | 40 µm   |                            |             |  |             |                    |             |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |                    |             |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |                    |             |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |                    |             |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.05 ... 1.2 MPa  |                            |             |  |             |                    |             |
| Pressure regulation range   | 0.5 ... 12 bar  |                            |             |  |             |                    |             |
| Pressure regulation range   | 7.25 ... 174 psi  |                            |             |  |             |                    |             |
| Max. pressure hysteresis  | 0.02 MPa  | 0.03 MPa                   | 0.025 MPa   | 0.02 MPa   | 0.015 MPa   |                    |             |
| Max. pressure hysteresis  | 0.2 bar   | 0.3 bar                    | 0.25 bar    | 0.2 bar  | 0.15 bar    |                    |             |
| Max. pressure hysteresis  | 2.9 psi   | 4.35 psi                   | 3.625 psi   | 2.9 psi  | 2.175 psi   |                    |             |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |                    |             |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             | 22 cm <sup>3</sup> |             |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 9,200 l/min   | 6,000 l/min<br>9,400 l/min | 1,850 l/min | 2,620 l/min  | 3,050 l/min | 720 l/min          | 1,140 l/min |
| Operating pressure  | 0.1 ... 1.6 MPa   |                            |             |  |             |                    |             |
| Operating pressure  | 1 ... 16 bar  |                            |             |  |             |                    |             |
| Operating pressure  | 14.5 ... 232 psi  |                            |             |  |             |                    |             |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |                    |             |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |                    |             |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |                    |             |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |                    |             |

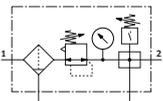
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

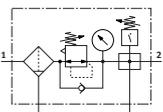
3) More information: visit [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KE (with condensate drain, manual, rotating)

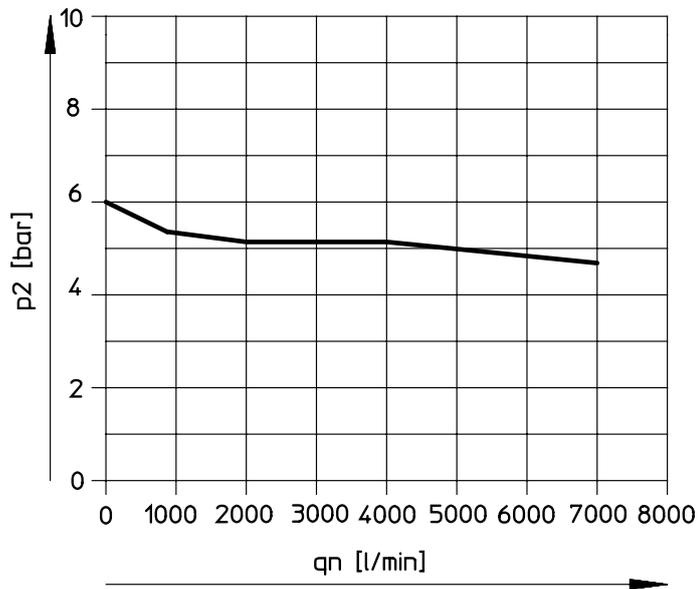


## Function LFR-...-MAXI-KE (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10 \text{ bar}$ ) – LFR-1/2-D-DI-MAXI-KE(-A)



## Datasheet

| Technical data LFR-...-KF   |   |                            |             |  |             |           |                    |  |
|---|---|----------------------------|-------------|--|-------------|-----------|--------------------|--|
| Size  | Maxi  |                            |             | Midi   |             |           | Mini               |  |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |           |                    |  |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |           |                    |  |
| Grade of filtration   | 40 µm   |                            |             |  |             |           |                    |  |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |           |                    |  |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |           |                    |  |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |           |                    |  |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 0.05 ... 1.2 MPa  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 0.5 ... 12 bar  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 7.25 ... 174 psi  |                            |             |  |             |           |                    |  |
| Max. pressure hysteresis  | 0.02 MPa  |                            | 0.025 MPa   | 0.03 MPa   | 0.025 MPa   | 0.02 MPa  |                    |  |
| Max. pressure hysteresis  | 0.2 bar   |                            | 0.25 bar    | 0.3 bar  | 0.25 bar    | 0.2 bar   |                    |  |
| Max. pressure hysteresis  | 2.9 psi   |                            | 3.625 psi   | 4.35 psi   | 3.625 psi   | 2.9 psi   |                    |  |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |           |                    |  |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             |           | 22 cm <sup>3</sup> |  |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 8,000 l/min   | 6,000 l/min<br>8,400 l/min | 1,720 l/min | 2,420 l/min  | 2,920 l/min | 700 l/min | 1,050 l/min        |  |
| Operating pressure  | 0.1 ... 1.6 MPa   |                            |             |  |             |           |                    |  |
| Operating pressure  | 1 ... 16 bar  |                            |             |  |             |           |                    |  |
| Operating pressure  | 14.5 ... 232 psi  |                            |             |  |             |           |                    |  |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |           |                    |  |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |           |                    |  |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |           |                    |  |

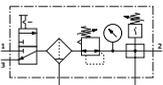
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

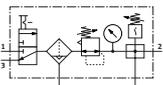
3) More information: visit [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

### Function LFR-...-MINI/MIDI-KF (condensate drain, manual, rotating)

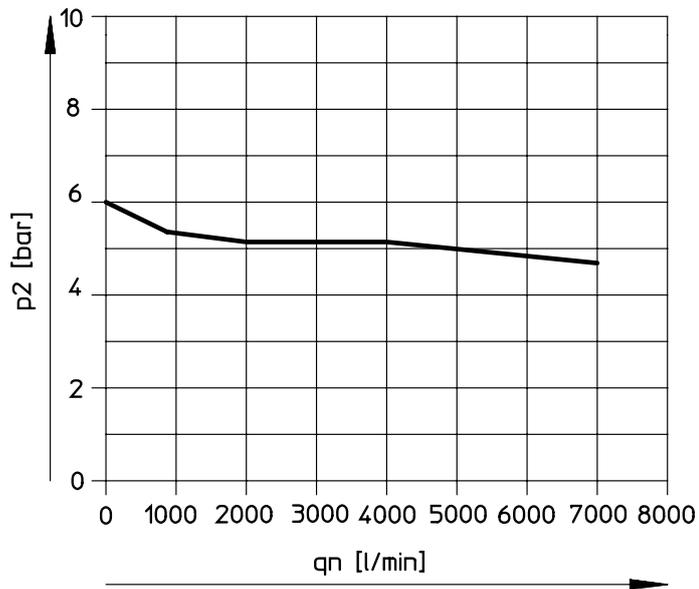


### Function LFR-...-MAXI-KF (with condensate drain, manual, rotating)



## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10$  bar) – LFR-1/2-D-DI-MAXI-KF(-A)



## Datasheet

| Technical data LFR-...-KG   |   |                            |             |  |             |           |                    |  |
|---|---|----------------------------|-------------|--|-------------|-----------|--------------------|--|
| Size  | Maxi  |                            |             | Midi   |             |           | Mini               |  |
| Pneumatic connection, port 1  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Pneumatic connection, port 2  | G1/2  | G3/4                       | G1/4        | G3/8   | G1/2        | G1/8      | G1/4               |  |
| Type of mounting  | Either:<br>In-line installation<br>With accessories   |                            |             |  |             |           |                    |  |
| Mounting position   | Vertical +/-5°  |                            |             |  |             |           |                    |  |
| Grade of filtration   | 40 µm   |                            |             |  |             |           |                    |  |
| Air purity class at output  | Compressed air to ISO 8573-1:2010 [6:8:4]<br>Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |                            |             | Compressed air to ISO 8573-1:2010 [7:8:4]<br>Inert gases |             |           |                    |  |
| Bowl guard  | Metal bowl guard  |                            |             |  |             |           |                    |  |
| Condensate drain  | Fully automatic<br>Manually rotating  |                            |             |  |             |           |                    |  |
| Actuator lock   | Rotary knob with detent   |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 0.25 ... 1.2 MPa  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 2.5 ... 12 bar  |                            |             |  |             |           |                    |  |
| Pressure regulation range   | 36.25 ... 174 psi   |                            |             |  |             |           |                    |  |
| Max. pressure hysteresis  | 0.025 MPa   |                            |             | 0.02 MPa   |             | 0.015 MPa |                    |  |
| Max. pressure hysteresis  | 0.25 bar  |                            |             | 0.2 bar  |             | 0.15 bar  |                    |  |
| Max. pressure hysteresis  | 3.625 psi   |                            |             | 2.9 psi  |             | 2.175 psi |                    |  |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL)               | With pressure gauge   |                            |             |  |             |           |                    |  |
| Max. condensate volume <sup>1)</sup>                                | 43 cm <sup>3</sup> ; 80 cm <sup>3</sup>   |                            |             | 43 cm <sup>3</sup>                                       |             |           | 22 cm <sup>3</sup> |  |
| Standard nominal flow rate (standardised to DIN 1343) <sup>2)</sup> | 2,500 l/min<br>4,200 l/min  | 3,000 l/min<br>4,900 l/min | 1,370 l/min | 1,680 l/min  | 1,740 l/min | 575 l/min | 715 l/min          |  |
| Operating pressure  | 0.3 ... 1.6 MPa   |                            |             |  |             |           |                    |  |
| Operating pressure  | 3 ... 16 bar  |                            |             |  |             |           |                    |  |
| Operating pressure  | 43.5 ... 232 psi  |                            |             |  |             |           |                    |  |
| Operating medium  | Compressed air to ISO 8573-1:2010 [:-:-]<br>Inert gases   |                            |             |  |             |           |                    |  |
| Ambient temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Media temperature   | -10 ... 60°C  |                            |             |  |             |           |                    |  |
| Corrosion resistance class CRC <sup>3)</sup>                        | 2 - Moderate corrosion stress   |                            |             |  |             |           |                    |  |
| LABS (PWIS) conformity <sup>4)</sup>                                | VDMA24364-B1/B2-L   |                            |             |  |             |           |                    |  |

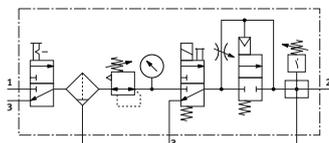
1) Low value: LFR-...-D-DI

2) Low value: LFR-...-D-DI

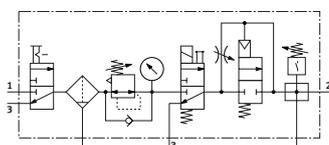
3) More information: visit [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

4) Additional material specifications → datasheet for the individual devices

## Function LFR-...-MINI/MIDI-KG (with condensate drain, manual, rotating)

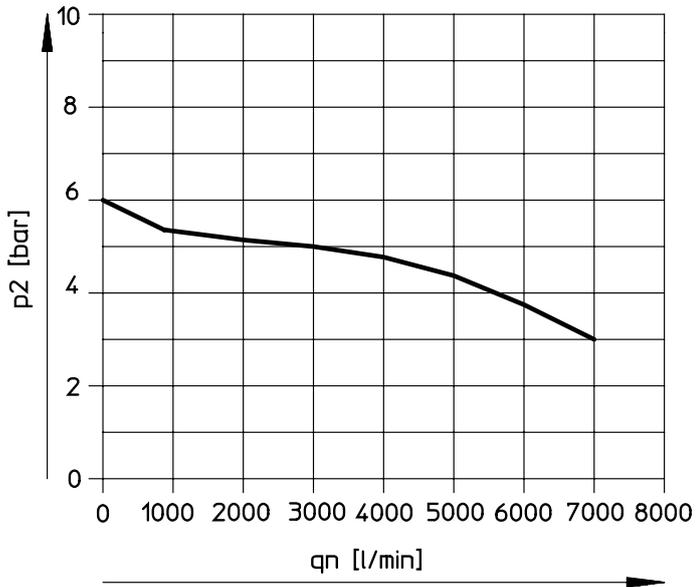


## Function LFR-...-MAXI-KG (with condensate drain, manual, rotating)



## Datasheet

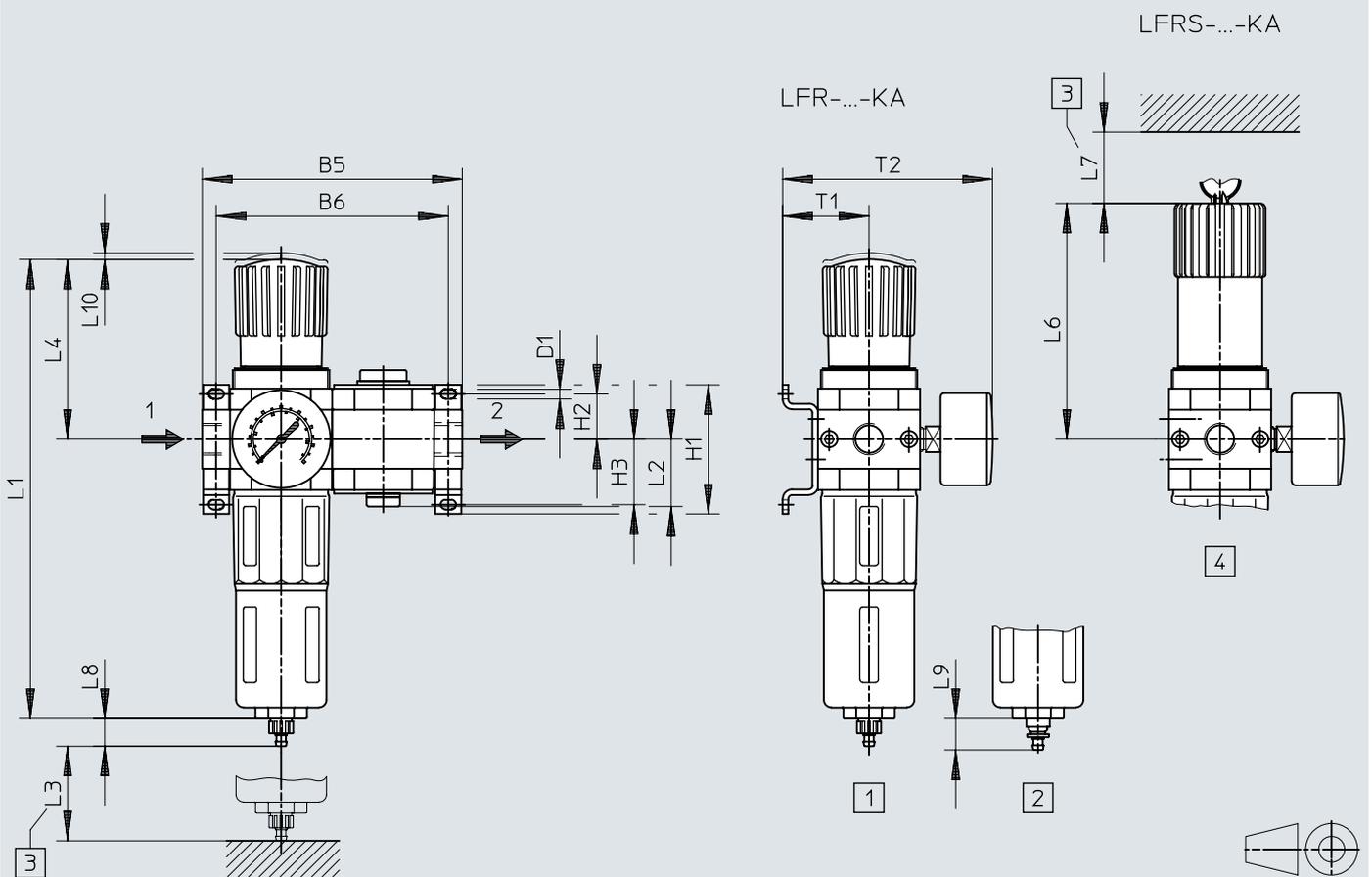
Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 10$  bar) – LFR-1/2-D-DI-MAXI-KG(-A)



# Dimensions

Dimensions – LFR...-KA

Download CAD data [www.festo.com](http://www.festo.com)



- [1] Manual condensate drain
- [2] Fully automatic condensate drain for plastic tubing PUN-6/PAN-6
- [3] Installation dimension
- [4] Lockable

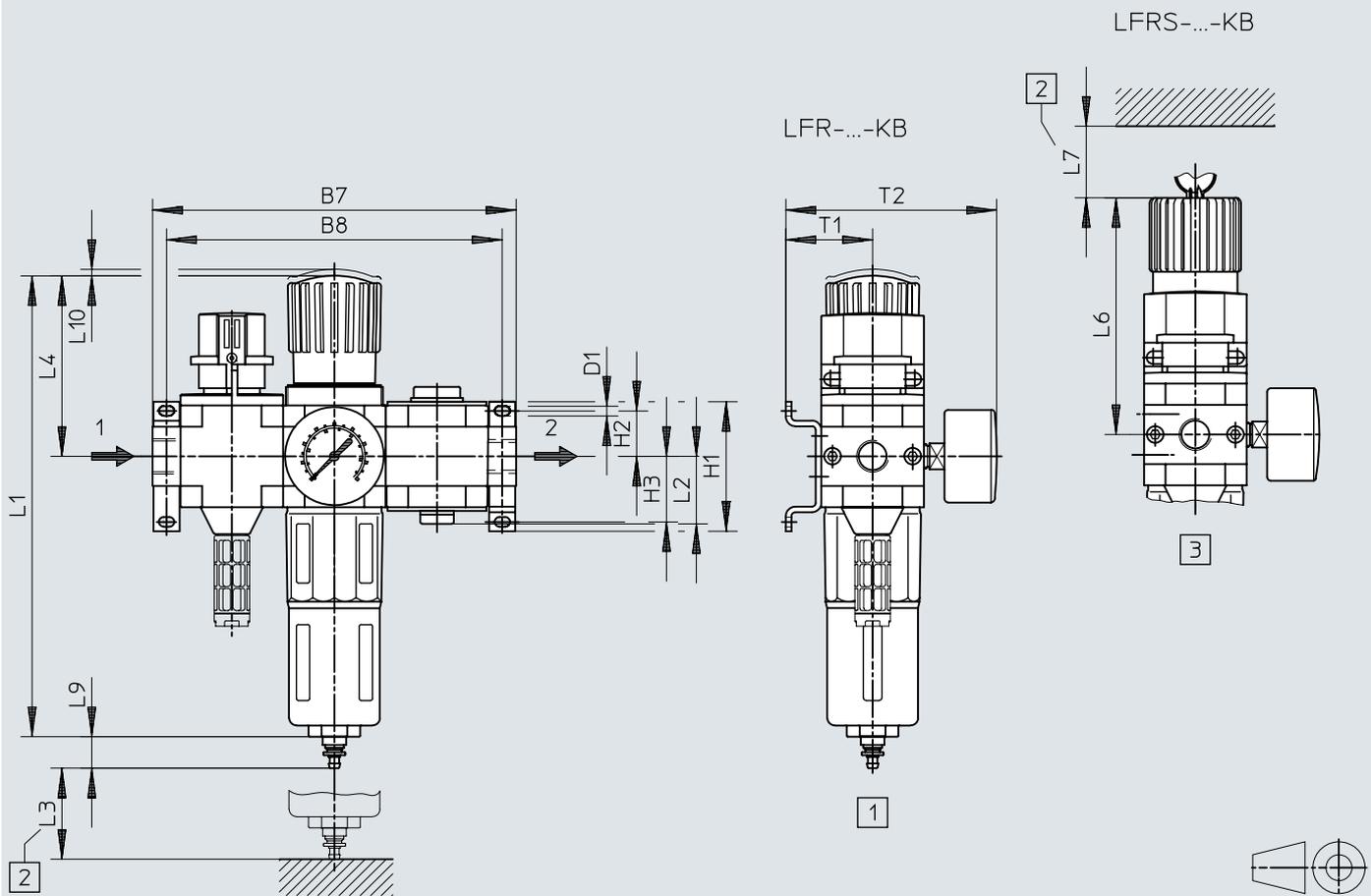
|                         | B5  | B6  | D1  | H1 | H2   | H3   | L1  | L2   | L3 | L4  | L6  | L7 | L8 | L9 | L10 | T1 | T2  |
|-------------------------|-----|-----|-----|----|------|------|-----|------|----|-----|-----|----|----|----|-----|----|-----|
| LFR...-D-MINI-KA (A)    | 104 | 92  | 4,3 | 43 | 17,5 | 17,5 | 193 | 28   | 60 | 68  | 98  | 60 | 15 | 19 | 3   | 39 | 95  |
| LFR...-D-MIDI-KA (A)    | 140 | 125 | 5,3 | 70 | 24,5 | 35,5 | 250 | 36,5 | 80 | 99  | 130 | 60 | 15 | 19 | 3   | 47 | 114 |
| LFR...-D-MAXI-KA (A)    | 162 | 146 | 5,3 | 70 | 24,5 | 35,5 | 252 | 42   | 90 | 82  | 111 | 60 | 15 | 19 | 3   | 53 | 126 |
| LFR...-D-DI-MAXI-KA (A) |     |     |     |    |      |      | 275 |      |    | 105 | 135 |    |    |    |     |    |     |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

## Dimensions

Dimensions – LFR-...-KB

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- [1] Condensate drain
- [2] Installation dimension
- [3] Lockable

|                          | B7  | B8  | D1  | H1 | H2   | H3   | L1  | L2   | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  |
|--------------------------|-----|-----|-----|----|------|------|-----|------|----|-----|-----|----|----|-----|----|-----|
| LFR-...-D-MINI-KB (A)    | 144 | 132 | 4,3 | 43 | 17,5 | 17,5 | 193 | 28   | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  |
| LFR-...-D-MIDI-KB (A)    | 195 | 180 | 5,3 | 70 | 24,5 | 35,5 | 250 | 36,5 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 |
| LFR-...-D-MAXI-KB (A)    | 228 | 212 | 5,3 | 70 | 24,5 | 35,5 | 252 | 42   | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 |
| LFR-...-D-DI-MAXI-KB (A) |     |     |     |    |      |      | 275 |      |    | 105 | 135 |    |    |     |    |     |

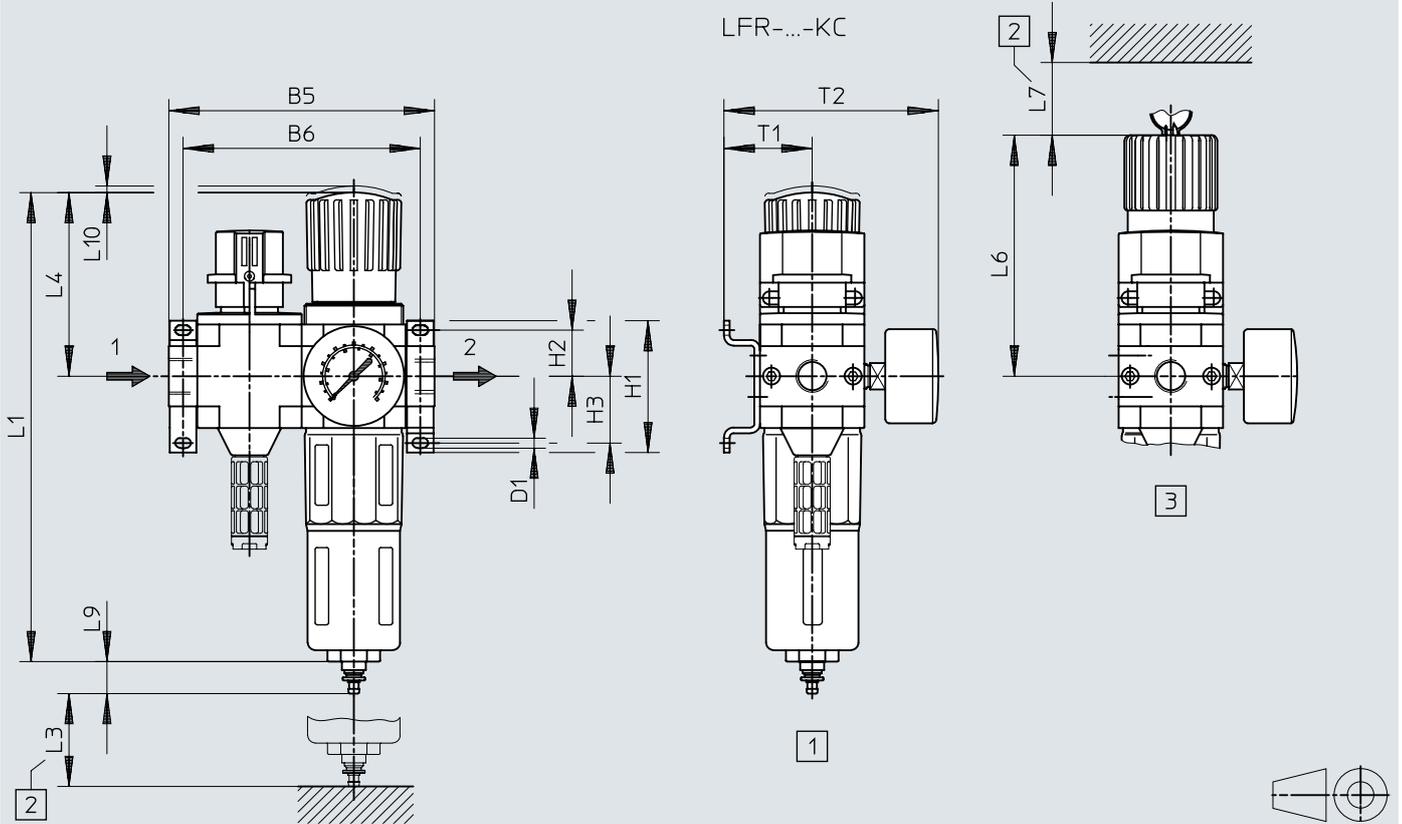
1) Note: This product complies with ISO 1179-1 and ISO 228-1.

# Dimensions

Dimensions – LFR...-KC

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LFRS...-KC



- [1] Condensate drain
- [2] Installation dimension
- [3] Lockable

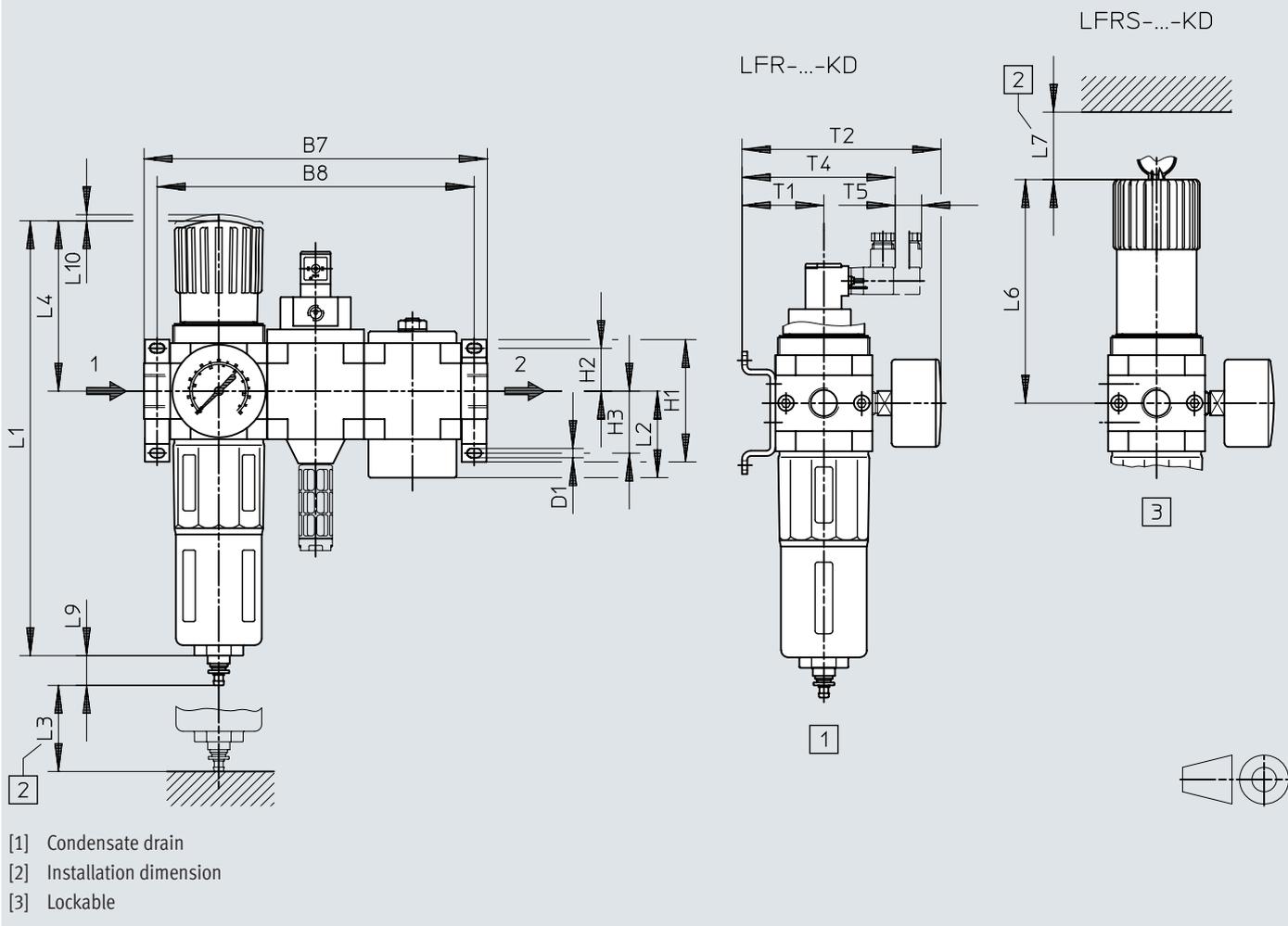
|                         | B5  | B6  | D1  | H1 | H2   | H3   | L1  | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  |
|-------------------------|-----|-----|-----|----|------|------|-----|----|-----|-----|----|----|-----|----|-----|
| LFR...-D-MINI-KC (A)    | 104 | 92  | 4,3 | 43 | 17,5 | 17,5 | 193 | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  |
| LFR...-D-MIDI-KC (A)    | 140 | 125 | 5,3 | 70 | 24,5 | 35,5 | 250 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 |
| LFR...-D-MAXI-KC (A)    | 162 | 146 | 5,3 | 70 | 24,5 | 35,5 | 252 | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 |
| LFR...-D-DI-MAXI-KC (A) |     |     |     |    |      |      | 275 |    | 105 | 135 |    |    |     |    |     |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

## Dimensions

Dimensions – LFR-...-KD

Download CAD data [www.festo.com](http://www.festo.com)



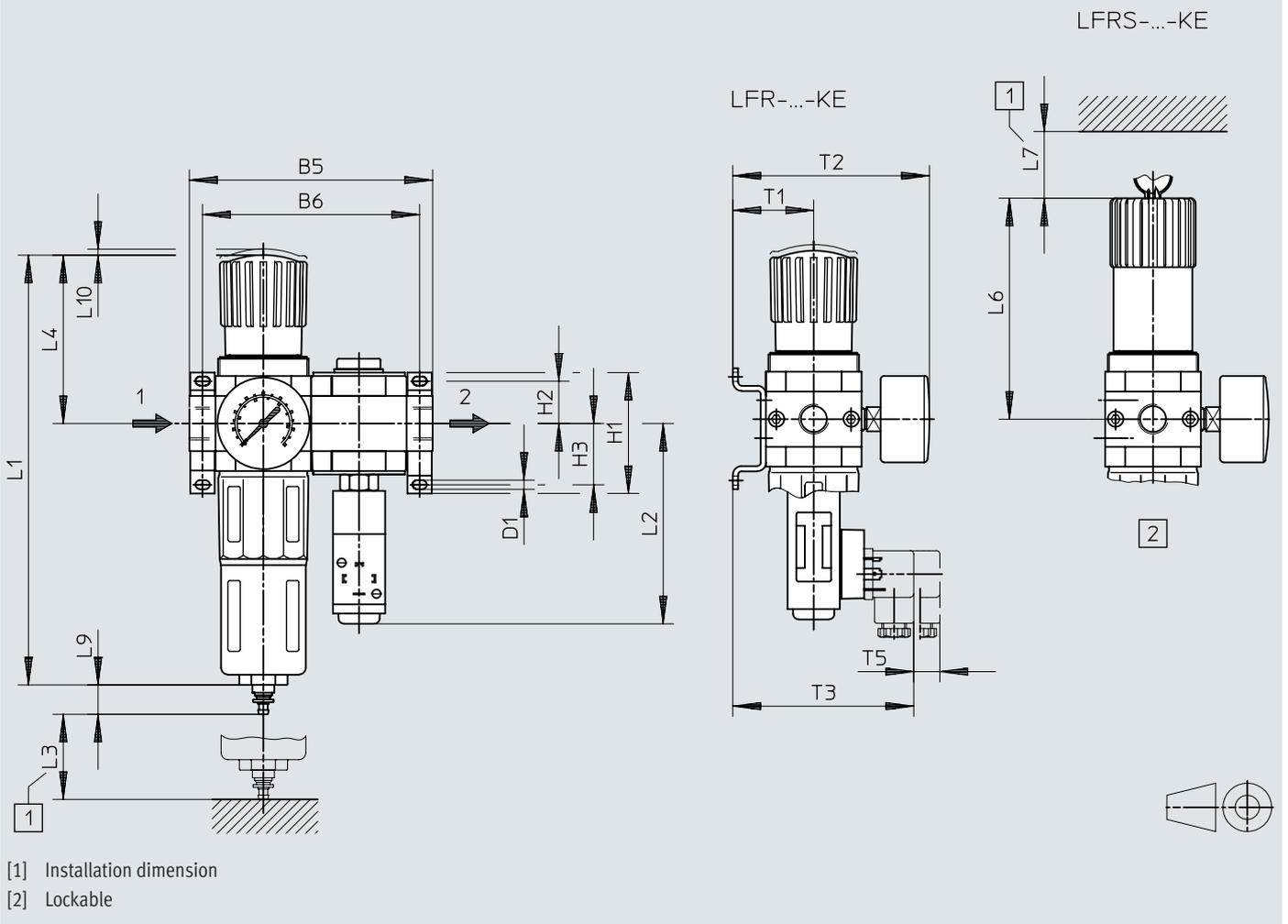
|                          | B7  | B8  | D1  | H1 | H2   | H3   | L1  | L2   | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  | T4 | T5 |
|--------------------------|-----|-----|-----|----|------|------|-----|------|----|-----|-----|----|----|-----|----|-----|----|----|
| LFR-...-D-MINI-KD (A)    | 144 | 132 | 4,3 | 43 | 17,5 | 17,5 | 193 | 36   | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  | 78 | 15 |
| LFR-...-D-MIDI-KD (A)    | 195 | 180 | 5,3 | 70 | 24,5 | 35,5 | 250 | 49,5 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 | 86 | 15 |
| LFR-...-D-MAXI-KD (A)    | 228 | 212 | 5,3 | 70 | 24,5 | 35,5 | 252 | 56,4 | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 | 92 | 15 |
| LFR-...-D-DI-MAXI-KD (A) |     |     |     |    |      |      | 275 |      |    | 105 | 135 |    |    |     |    |     |    |    |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

## Dimensions

Dimensions – LFR...-KE

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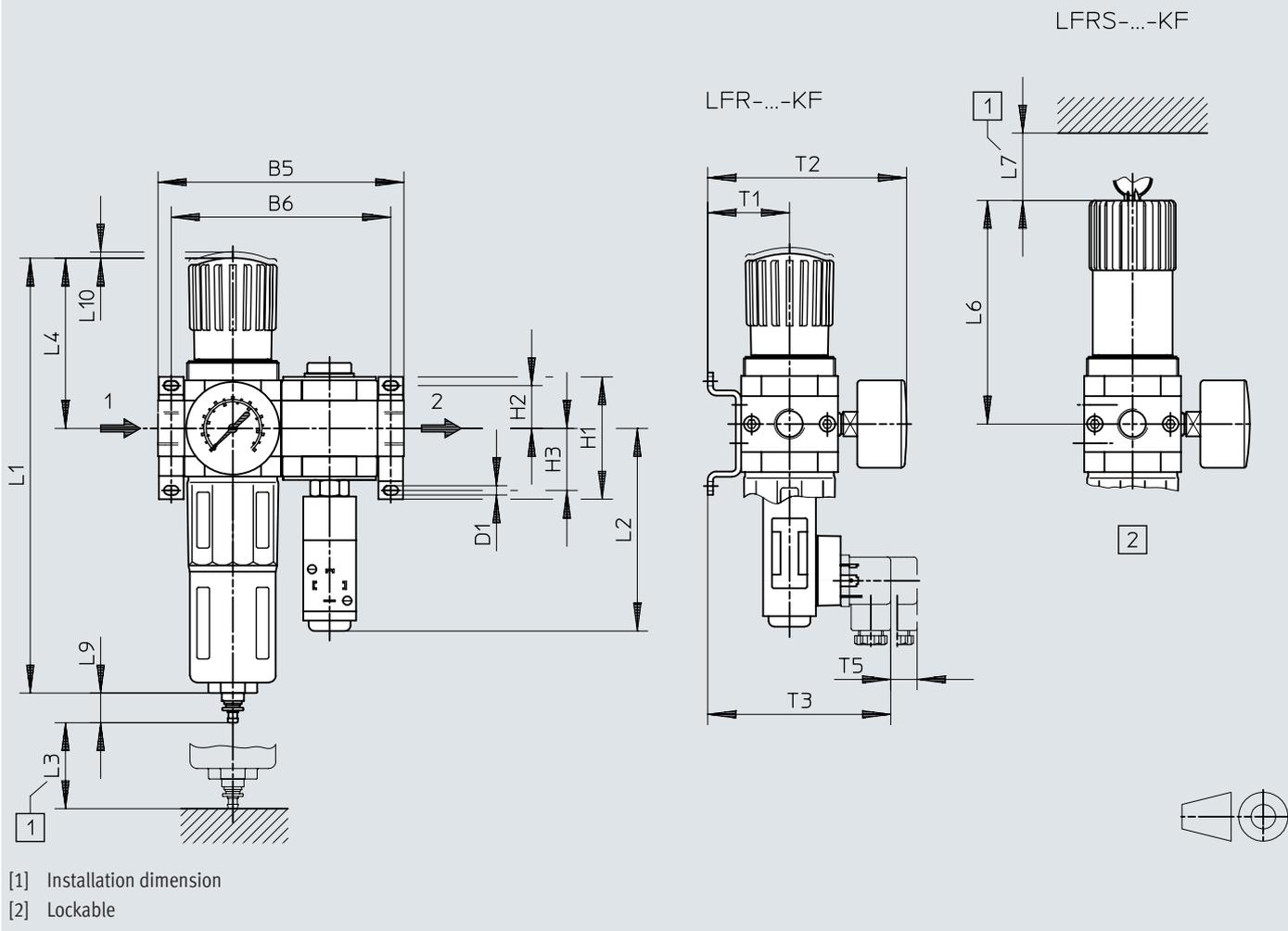
|                         | B5  | B6  | D1  | H1 | H2   | H3   | L1  | L2  | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  | T3  | T5 |
|-------------------------|-----|-----|-----|----|------|------|-----|-----|----|-----|-----|----|----|-----|----|-----|-----|----|
| LFR...-D-MINI-KE (A)    | 104 | 92  | 4,3 | 43 | 17,5 | 17,5 | 193 | 108 | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  | 97  | 15 |
| LFR...-D-MIDI-KE (A)    | 140 | 125 | 5,3 | 70 | 24,5 | 35,5 | 250 | 117 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 | 109 | 15 |
| LFR...-D-MAXI-KE (A)    | 162 | 146 | 5,3 | 70 | 24,5 | 35,5 | 252 | 122 | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 | 111 | 15 |
| LFR...-D-DI-MAXI-KE (A) |     |     |     |    |      |      | 275 |     |    | 105 | 135 |    |    |     |    |     |     |    |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

## Dimensions

Dimensions – LFR-...-KF

Download CAD data [www.festo.com](http://www.festo.com)



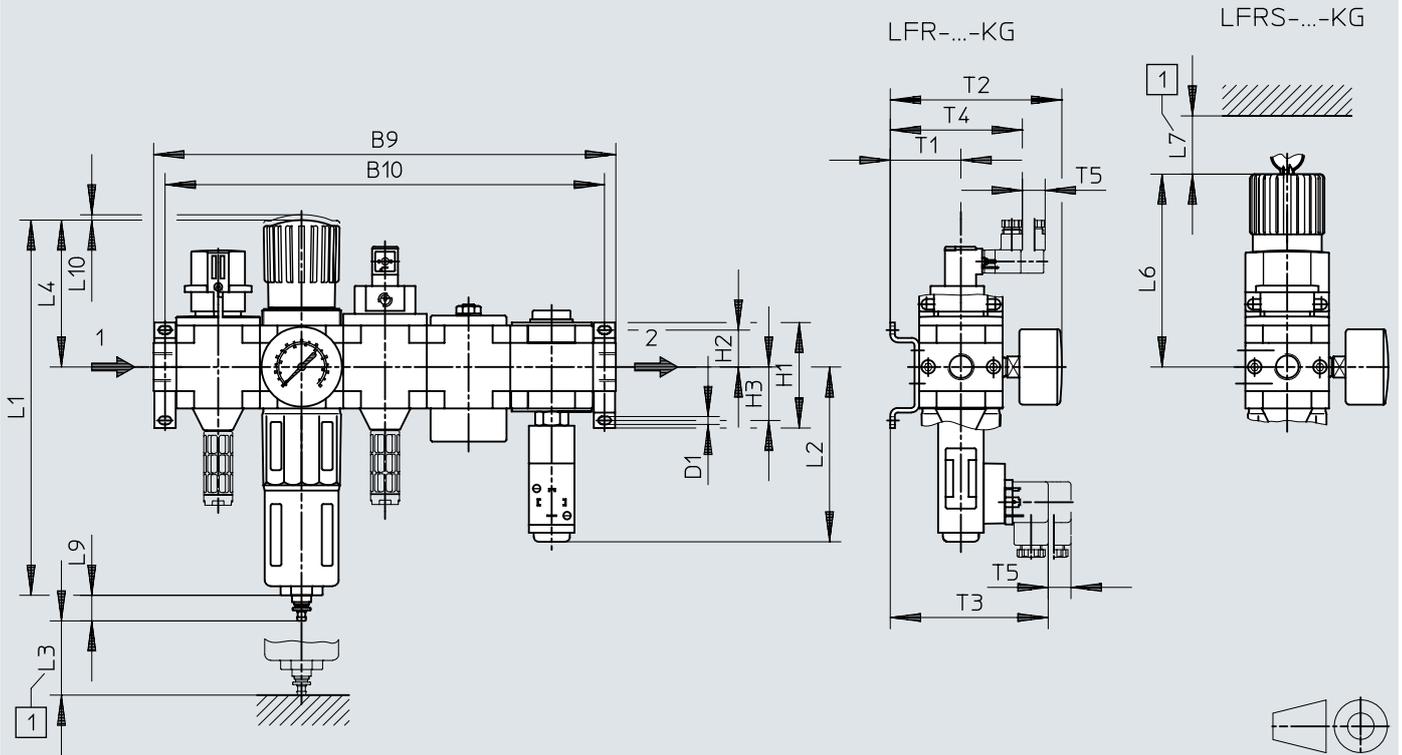
|                          | B7  | B8  | D1  | H1 | H2   | H3   | L1  | L2  | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  | T3  | T5 |
|--------------------------|-----|-----|-----|----|------|------|-----|-----|----|-----|-----|----|----|-----|----|-----|-----|----|
| LFR-...-D-MINI-KF (A)    | 144 | 132 | 4,3 | 43 | 17,5 | 17,5 | 193 | 108 | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  | 97  | 15 |
| LFR-...-D-MIDI-KF (A)    | 195 | 180 | 5,3 | 70 | 24,5 | 35,5 | 250 | 117 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 | 105 | 15 |
| LFR-...-D-MAXI-KF (A)    | 228 | 212 | 5,3 | 70 | 24,5 | 35,5 | 252 | 122 | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 | 111 | 15 |
| LFR-...-D-DI-MAXI-KF (A) |     |     |     |    |      |      | 275 |     |    | 105 | 135 |    |    |     |    |     |     |    |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

# Dimensions

Dimensions – LFR...-KG

Download CAD data [www.festo.com](http://www.festo.com)

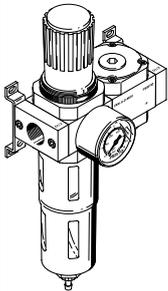


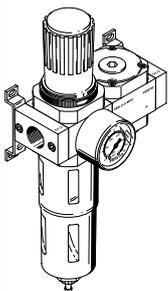
[1] Installation dimension

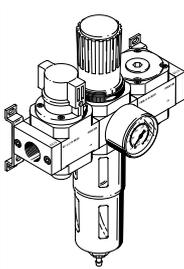
|                         | B9  | B10 | D1  | H1 | H2   | H3   | L1  | L2  | L3 | L4  | L6  | L7 | L9 | L10 | T1 | T2  | T3  | T4 | T5 |
|-------------------------|-----|-----|-----|----|------|------|-----|-----|----|-----|-----|----|----|-----|----|-----|-----|----|----|
| LFR...-D-MINI-KG (A)    | 224 | 212 | 4,3 | 43 | 17,5 | 17,5 | 193 | 108 | 60 | 68  | 98  | 60 | 19 | 3   | 39 | 95  | 97  | 78 | 15 |
| LFR...-D-MIDI-KG (A)    | 305 | 290 | 5,3 | 70 | 24,5 | 35,5 | 250 | 117 | 80 | 99  | 130 | 60 | 19 | 3   | 47 | 114 | 105 | 86 | 15 |
| LFR...-D-MAXI-KG (A)    | 360 | 344 | 5,3 | 70 | 24,5 | 35,5 | 252 | 122 | 90 | 82  | 111 | 60 | 19 | 3   | 53 | 126 | 111 | 92 | 15 |
| LFR...-D-DI-MAXI-KG (A) |     |     |     |    |      |      | 275 |     |    | 105 | 135 |    |    |     |    |     |     |    |    |

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

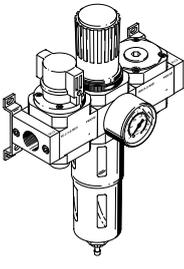
Ordering data

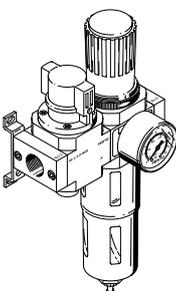
| LFR...-D-...-KA  |      |                              |                              |                     |                   |                     |                   |
|--|------|------------------------------|------------------------------|---------------------|-------------------|---------------------|-------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight      | Part no.          | Type                |                   |
|  | Maxi | G1/2                         | G1/2                         | 2,400 g             | 186040            | LFR-1/2-D-MAXI-KA-A |                   |
|  |      |                              |                              |                     |                   | 186039              | LFR-1/2-D-MAXI-KA |
|  |      | G3/4                         | G3/4                         |                     | 185717            | LFR-3/4-D-MAXI-KA   |                   |
|  |      |                              |                              |                     | 185718            | LFR-3/4-D-MAXI-KA-A |                   |
|  | Midi | G1/4                         | G1/4                         | 1,800 g             | 185711            | LFR-1/4-D-MIDI-KA   |                   |
|  |      |                              |                              |                     | 185712            | LFR-1/4-D-MIDI-KA-A |                   |
|  |      | G3/8                         | G3/8                         |                     | 185713            | LFR-3/8-D-MIDI-KA   |                   |
|  |      |                              |                              |                     | 185714            | LFR-3/8-D-MIDI-KA-A |                   |
|  |      | G1/2                         | G1/2                         |                     | 185716            | LFR-1/2-D-MIDI-KA-A |                   |
|  | Mini | G1/8                         | G1/8                         | 800 g               | 185715            | LFR-1/2-D-MIDI-KA   |                   |
|  |      |                              |                              |                     | 185708            | LFR-1/8-D-MINI-KA-A |                   |
|  |      | G1/4                         | G1/4                         |                     | 185707            | LFR-1/8-D-MINI-KA   |                   |
|  |      |                              | 185709                       |                     | LFR-1/4-D-MINI-KA |                     |                   |
|  |      |                              | 185710                       | LFR-1/4-D-MINI-KA-A |                   |                     |                   |

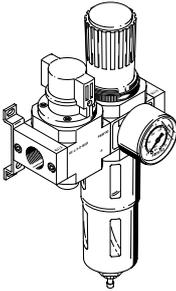
| LFR...-D-DI-...-KA (with directly actuated pressure regulator)                    |      |                              |                              |                |          |                        |                      |
|---|------|------------------------------|------------------------------|----------------|----------|------------------------|----------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type                   |                      |
|  | Maxi | G1/2                         | G1/2                         | 2,600 g        | 192454   | LFR-1/2-D-DI-MAXI-KA-A |                      |
|   |      |                              |                              |                |          | 192440                 | LFR-1/2-D-DI-MAXI-KA |
|   |      | G3/4                         | G3/4                         |                | 192461   | LFR-3/4-D-DI-MAXI-KA-A |                      |
|   |      |                              |                              |                |          |                        |                      |

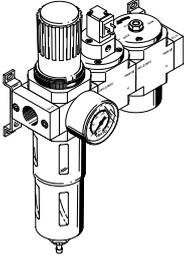
| LFR...-D-...-KB  |      |                              |                              |                   |          |                     |                   |
|--|------|------------------------------|------------------------------|-------------------|----------|---------------------|-------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight    | Part no. | Type                |                   |
|  | Maxi | G1/2                         | G1/2                         | 3,300 g           | 186042   | LFR-1/2-D-MAXI-KB-A |                   |
|  |      |                              |                              |                   |          | 186041              | LFR-1/2-D-MAXI-KB |
|  |      | G3/4                         | G3/4                         |                   | 185729   | LFR-3/4-D-MAXI-KB   |                   |
|  |      |                              |                              |                   | 185730   | LFR-3/4-D-MAXI-KB-A |                   |
|  | Midi | G1/4                         | G1/4                         | 2,200 g           | 185724   | LFR-1/4-D-MIDI-KB-A |                   |
|  |      |                              |                              |                   | 185723   | LFR-1/4-D-MIDI-KB   |                   |
|  |      | G3/8                         | G3/8                         |                   | 185725   | LFR-3/8-D-MIDI-KB   |                   |
|  |      |                              |                              |                   | 185726   | LFR-3/8-D-MIDI-KB-A |                   |
|  |      | G1/2                         | G1/2                         |                   | 185727   | LFR-1/2-D-MIDI-KB   |                   |
|  | Mini | G1/8                         | G1/8                         | 1,000 g           | 185728   | LFR-1/2-D-MIDI-KB-A |                   |
|  |      |                              |                              |                   | 185719   | LFR-1/8-D-MINI-KB   |                   |
|  |      | G1/4                         | G1/4                         |                   | 185720   | LFR-1/8-D-MINI-KB-A |                   |
|  |      |                              |                              |                   | 185722   | LFR-1/4-D-MINI-KB-A |                   |
|  |      |                              | 185721                       | LFR-1/4-D-MINI-KB |          |                     |                   |

## Ordering data

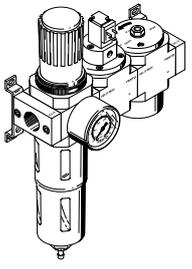
| LFR-...-D-DI-...-KB (with directly actuated pressure regulator)                   |      |                              |                              |                |                        |                        |
|---|------|------------------------------|------------------------------|----------------|------------------------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no.               | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 3,500 g        | 192455                 | LFR-1/2-D-DI-MAXI-KB-A |
|   |      |                              |                              |                | 192441                 | LFR-1/2-D-DI-MAXI-KB   |
|   | G3/4 | G3/4                         | 192448                       |                | LFR-3/4-D-DI-MAXI-KB   |                        |
|   |      |                              | 192462                       |                | LFR-3/4-D-DI-MAXI-KB-A |                        |

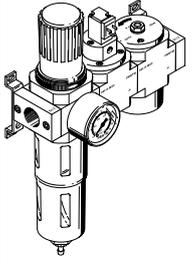
| LFR-...-D-...-KC   |      |                              |                              |                     |          |                     |                     |                   |
|--|------|------------------------------|------------------------------|---------------------|----------|---------------------|---------------------|-------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight      | Part no. | Type                |                     |                   |
|  | Maxi | G1/2                         | G1/2                         | 2,300 g             | 186044   | LFR-1/2-D-MAXI-KC-A |                     |                   |
|  |      |                              |                              |                     | 186043   | LFR-1/2-D-MAXI-KC   |                     |                   |
|  |      | G3/4                         | G3/4                         |                     | 185741   | LFR-3/4-D-MAXI-KC   |                     |                   |
|  |      |                              |                              |                     | 185742   | LFR-3/4-D-MAXI-KC-A |                     |                   |
|  | Midi | G1/4                         | G1/4                         | 1,600 g             | 185736   | LFR-1/4-D-MIDI-KC-A |                     |                   |
|  |      |                              |                              |                     | 185735   | LFR-1/4-D-MIDI-KC   |                     |                   |
|  |      | G3/8                         | G3/8                         |                     | 185737   | LFR-3/8-D-MIDI-KC   |                     |                   |
|  |      |                              |                              |                     | 185738   | LFR-3/8-D-MIDI-KC-A |                     |                   |
|  | G1/2 | G1/2                         | 185740                       | LFR-1/2-D-MIDI-KC-A |          |                     |                     |                   |
|  |      |                              | 185739                       | LFR-1/2-D-MIDI-KC   |          |                     |                     |                   |
|  |      |                              | Mini                         | G1/8                | G1/8     | 700 g               | 185731              | LFR-1/8-D-MINI-KC |
|  |      |                              |                              |                     |          | 185732              | LFR-1/8-D-MINI-KC-A |                   |
| G1/4   | G1/4 | 185734                       | LFR-1/4-D-MINI-KC-A          |                     |          |                     |                     |                   |
|  |      | 185733                       | LFR-1/4-D-MINI-KC            |                     |          |                     |                     |                   |

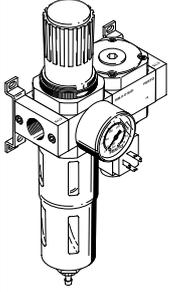
| LFR-...-D-DI-...-KC (with directly actuated pressure regulator)                     |      |                              |                              |                |                        |                        |
|---|------|------------------------------|------------------------------|----------------|------------------------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no.               | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 2,600 g        | 192442                 | LFR-1/2-D-DI-MAXI-KC   |
|   |      |                              |                              |                | 192456                 | LFR-1/2-D-DI-MAXI-KC-A |
|   | G3/4 | G3/4                         | 192463                       |                | LFR-3/4-D-DI-MAXI-KC-A |                        |
|   |      |                              | 192449                       |                | LFR-3/4-D-DI-MAXI-KC   |                        |

| LFR-...-D-...-KD  |      |                              |                              |                |          |                   |
|---|------|------------------------------|------------------------------|----------------|----------|-------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type              |
|  | Maxi | G1/2                         | G1/2                         | 3,100 g        | 186045   | LFR-1/2-D-MAXI-KD |

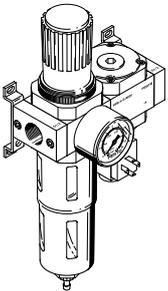
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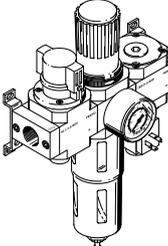
| LFR...-D-...-KD  |      |                              |                              |                |                     |                     |
|--|------|------------------------------|------------------------------|----------------|---------------------|---------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no.            | Type                |
|  | Maxi | G1/2                         | G1/2                         | 3,100 g        | 186046              | LFR-1/2-D-MAXI-KD-A |
|  |      | G3/4                         | G3/4                         |                | 185753              | LFR-3/4-D-MAXI-KD   |
|  |      |                              |                              |                | 185754              | LFR-3/4-D-MAXI-KD-A |
|  | Midi | G1/4                         | G1/4                         | 2,100 g        | 185747              | LFR-1/4-D-MIDI-KD   |
|  |      |                              |                              |                | 185748              | LFR-1/4-D-MIDI-KD-A |
|  |      | G3/8                         | G3/8                         |                | 185750              | LFR-3/8-D-MIDI-KD-A |
|  |      |                              |                              |                | 185749              | LFR-3/8-D-MIDI-KD   |
|  |      | G1/2                         | G1/2                         |                | 185751              | LFR-1/2-D-MIDI-KD   |
|  | Mini | G1/8                         | G1/8                         | 900 g          | 185744              | LFR-1/8-D-MINI-KD-A |
|  |      |                              |                              |                | 185743              | LFR-1/8-D-MINI-KD   |
| G1/4   |      | G1/4                         | 185745                       |                | LFR-1/4-D-MINI-KD   |                     |
|  |      |                              | 185746                       |                | LFR-1/4-D-MINI-KD-A |                     |

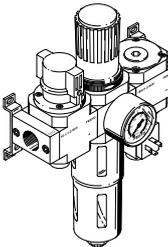
| LFR...-D-DI-...-KD (with directly actuated pressure regulator)                    |      |                              |                              |                |          |                        |
|---|------|------------------------------|------------------------------|----------------|----------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 3,300 g        | 192443   | LFR-1/2-D-DI-MAXI-KD   |
|   |      |                              |                              |                | 192457   | LFR-1/2-D-DI-MAXI-KD-A |
|   |      | G3/4                         | G3/4                         |                | 192450   | LFR-3/4-D-DI-MAXI-KD   |

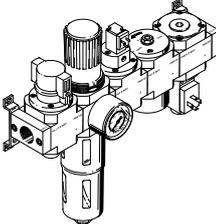
| LFR...-D-...-KE  |      |                              |                              |                     |                     |                     |
|--|------|------------------------------|------------------------------|---------------------|---------------------|---------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight      | Part no.            | Type                |
|  | Maxi | G1/2                         | G1/2                         | 2,400 g             | 186048              | LFR-1/2-D-MAXI-KE-A |
|  |      |                              |                              |                     | 186047              | LFR-1/2-D-MAXI-KE   |
|  |      | G3/4                         | G3/4                         |                     | 185766              | LFR-3/4-D-MAXI-KE-A |
|  | Midi | G1/4                         | G1/4                         | 2,000 g             | 185765              | LFR-3/4-D-MAXI-KE   |
|  |      |                              |                              |                     | 185760              | LFR-1/4-D-MIDI-KE-A |
|  |      | G3/8                         | G3/8                         |                     | 185759              | LFR-1/4-D-MIDI-KE   |
|  |      |                              |                              |                     | 185761              | LFR-3/8-D-MIDI-KE   |
|  |      | G1/2                         | G1/2                         |                     | 185762              | LFR-3/8-D-MIDI-KE-A |
|  | Mini | G1/8                         | G1/8                         | 1,000 g             | 185764              | LFR-1/2-D-MIDI-KE-A |
|  |      |                              |                              |                     | 185763              | LFR-1/2-D-MIDI-KE   |
| G1/4   |      | G1/4                         | 185756                       |                     | LFR-1/8-D-MINI-KE-A |                     |
|  |      |                              | 185755                       |                     | LFR-1/8-D-MINI-KE   |                     |
|  |      |                              | 185758                       | LFR-1/4-D-MINI-KE-A |                     |                     |
|  |      |                              | 185757                       | LFR-1/4-D-MINI-KE   |                     |                     |

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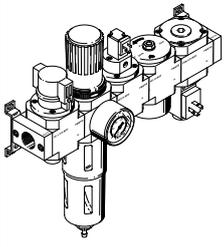
| LFR-...-D-DI-...-KE (with directly actuated pressure regulator)                   |      |                              |                              |                |          |                        |
|---|------|------------------------------|------------------------------|----------------|----------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 2,600 g        | 192458   | LFR-1/2-D-DI-MAXI-KE-A |
|   |      |                              |                              |                | 192444   | LFR-1/2-D-DI-MAXI-KE   |
|   |      | G3/4                         | G3/4                         |                | 192465   | LFR-3/4-D-DI-MAXI-KE-A |

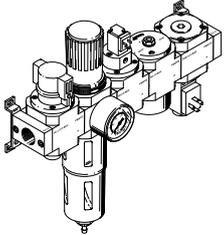
| LFR-...-D-...-KF   |      |                              |                              |                     |                   |                     |
|--|------|------------------------------|------------------------------|---------------------|-------------------|---------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight      | Part no.          | Type                |
|  | Maxi | G1/2                         | G1/2                         | 3,300 g             | 186050            | LFR-1/2-D-MAXI-KF-A |
|  |      |                              |                              |                     | 186049            | LFR-1/2-D-MAXI-KF   |
|  |      | G3/4                         | G3/4                         |                     | 185777            | LFR-3/4-D-MAXI-KF   |
|  | Midi | G1/4                         | G1/4                         | 2,400 g             | 185778            | LFR-3/4-D-MAXI-KF-A |
|  |      |                              |                              |                     | 185772            | LFR-1/4-D-MIDI-KF-A |
|  |      | 185771                       | LFR-1/4-D-MIDI-KF            |                     |                   |                     |
|  |      | 185773                       | LFR-3/8-D-MIDI-KF            |                     |                   |                     |
|  |      | 185774                       | LFR-3/8-D-MIDI-KF-A          |                     |                   |                     |
|  | G1/2 | G1/2                         | 185775                       | LFR-1/2-D-MIDI-KF   |                   |                     |
|  |      |                              | 185776                       | LFR-1/2-D-MIDI-KF-A |                   |                     |
|  | Mini | G1/8                         | G1/8                         | 1,200 g             | 185767            | LFR-1/8-D-MINI-KF   |
|  |      |                              |                              |                     | 185768            | LFR-1/8-D-MINI-KF-A |
| G1/4   |      | G1/4                         | 185769                       |                     | LFR-1/4-D-MINI-KF |                     |
|  |      |                              | 185770                       | LFR-1/4-D-MINI-KF-A |                   |                     |

| LFR-...-D-DI-...-KF (with directly actuated pressure regulator)                     |      |                              |                              |                        |          |                        |
|---|------|------------------------------|------------------------------|------------------------|----------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight         | Part no. | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 3,500 g                | 192459   | LFR-1/2-D-DI-MAXI-KF-A |
|   |      |                              |                              |                        | 192445   | LFR-1/2-D-DI-MAXI-KF   |
|   | G3/4 | G3/4                         | 192466                       | LFR-3/4-D-DI-MAXI-KF-A |          |                        |
|   |      |                              | 192452                       | LFR-3/4-D-DI-MAXI-KF   |          |                        |

| LFR-...-D-...-KG  |      |                              |                              |                |          |                     |
|---|------|------------------------------|------------------------------|----------------|----------|---------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type                |
|  | Maxi | G1/2                         | G1/2                         | 5,200 g        | 186052   | LFR-1/2-D-MAXI-KG-A |

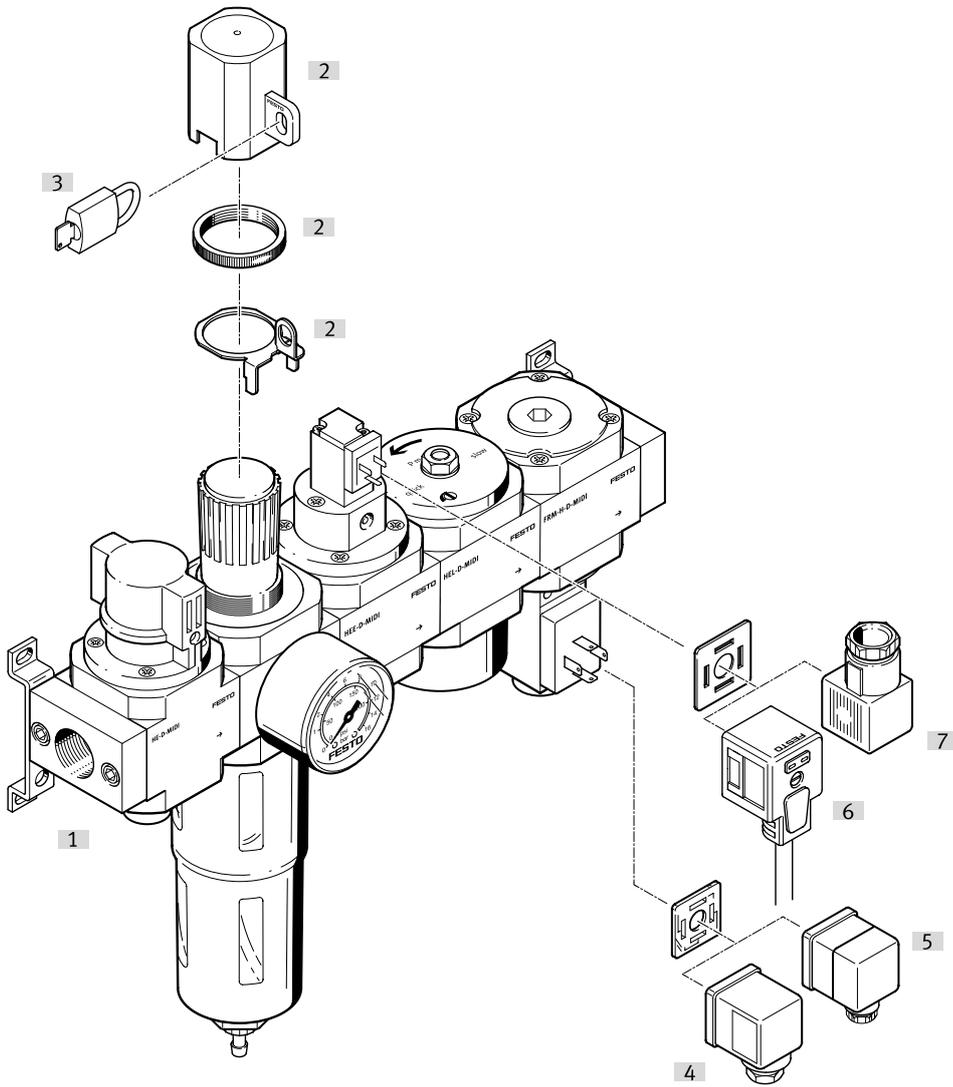
Ordering data

| LFR-...-D-...-KG   |      |                              |                              |                |                     |                     |
|--|------|------------------------------|------------------------------|----------------|---------------------|---------------------|
|  | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no.            | Type                |
|  | Maxi | G1/2                         | G1/2                         | 5,200 g        | 186051              | LFR-1/2-D-MAXI-KG   |
|  |      | G3/4                         | G3/4                         |                | 185790              | LFR-3/4-D-MAXI-KG-A |
|  |      |                              |                              |                | 185789              | LFR-3/4-D-MAXI-KG   |
|  | Midi | G1/4                         | G1/4                         | 3,400 g        | 185783              | LFR-1/4-D-MIDI-KG   |
|  |      |                              |                              |                | 185784              | LFR-1/4-D-MIDI-KG-A |
|  |      | G3/8                         | G3/8                         |                | 185785              | LFR-3/8-D-MIDI-KG   |
|  |      |                              |                              |                | 185786              | LFR-3/8-D-MIDI-KG-A |
|  |      | G1/2                         | G1/2                         |                | 185788              | LFR-1/2-D-MIDI-KG-A |
|  | Mini |                              |                              | 1,500 g        | 185787              | LFR-1/2-D-MIDI-KG   |
|  |      | G1/8                         | G1/8                         |                | 185780              | LFR-1/8-D-MINI-KG-A |
|  |      |                              | 185779                       |                | LFR-1/8-D-MINI-KG   |                     |
| G1/4   |      | G1/4                         | 185782                       |                | LFR-1/4-D-MINI-KG-A |                     |
|  |      |                              |                              | 185781         | LFR-1/4-D-MINI-KG   |                     |

| LFR-...-D-DI-...-KG (with directly actuated pressure regulator)                   |      |                              |                              |                |          |                        |
|---|------|------------------------------|------------------------------|----------------|----------|------------------------|
|   | Size | Pneumatic connection, port 1 | Pneumatic connection, port 2 | Product weight | Part no. | Type                   |
|  | Maxi | G1/2                         | G1/2                         | 5,400 g        | 192446   | LFR-1/2-D-DI-MAXI-KG   |
|   |      |                              |                              |                | 192460   | LFR-1/2-D-DI-MAXI-KG-A |
|   |      | G3/4                         | G3/4                         |                | 192453   | LFR-3/4-D-DI-MAXI-KG   |
|   |      |                              |                              |                | 192467   | LFR-3/4-D-DI-MAXI-KG-A |

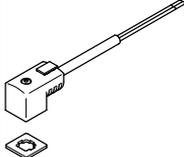
## Peripherals

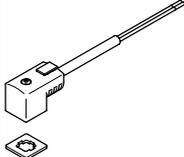
### Service unit LFR-K

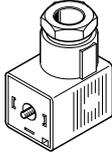


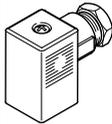
| Accessories                           |                      | → Link                |
|---------------------------------------|----------------------|-----------------------|
| Type/order code                       | Description          |                       |
| [1] Service unit LFR-K                |                      | <a href="#">lfr-k</a> |
| [2] Regulator lock LRVS               |                      | <a href="#">32</a>    |
| [3] Padlock LRVS-D                    |                      | <a href="#">33</a>    |
| [4] Plug socket MSSD-C                |                      | <a href="#">32</a>    |
| [5] Angled plug socket PEV-...-WD-LED |                      | <a href="#">32</a>    |
| [6] Plug socket with cable KMEB-1     |                      | <a href="#">32</a>    |
| [7] Plug socket MSSD-EB               |                      | <a href="#">32</a>    |
| [8] Filter cartridge LFP              | Without illustration | <a href="#">33</a>    |

## Accessories

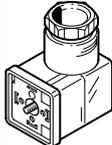
| Plug socket with cable KMEB 230V AC  |                              |              |          |                  |
|--|------------------------------|--------------|----------|------------------|
|  | Nominal operating voltage AC | Cable length | Part no. | Type             |
|  | 230 V                        | 2.5 m        | 151690   | KMEB-1-230AC-2.5 |
|  |                              | 5 m          | 151691   | KMEB-1-230AC-5   |

| Plug socket with cable KMEB 24V DC   |                              |              |          |                   |
|--|------------------------------|--------------|----------|-------------------|
|  | Nominal operating voltage DC | Cable length | Part no. | Type              |
|  | 24 V                         | 2.5 m        | 151688   | KMEB-1-24-2.5-LED |
|  |                              | 5 m          | 151689   | KMEB-1-24-5-LED   |
|  |                              | 10 m         | 193457   | KMEB-1-24-10-LED  |

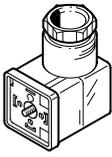
| Plug socket MSSD-C  |   |               |          |           |
|---|---|---------------|----------|-----------|
|   | Electrical connection   | Cable fitting | Part no. | Type      |
|  | 3-pin, Angled socket, Type A, To DIN EN 175301-803, Square design MSC, Square design MSN1 | Pg 9          | 171157   | MSSD-C-4P |

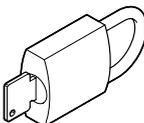
| Plug socket MSSD-EB  |   |          |         |  |
|--|---|----------|---------|--|
|  | Electrical connection   | Part no. | Type    |  |
|  | 3-pin, Socket, Angled socket, Type C, To DIN EN 175301-803, To DIN EN 61984, Square design MSEB, Square design MSN2 | 151687   | MSSD-EB |  |

| Regulator lock LRVS  |  |                        |                |          |                |
|--|--|------------------------|----------------|----------|----------------|
|  | Size                                     | LABS (PWIS) conformity | Product weight | Part no. | Type           |
|  | Grid dimension 40 mm (without sub-bases) | VDMA24364-B1/B2-L      | 40 g           | 193781   | LRVS-D-MINI    |
|  | Grid dimension 55 mm (without sub-bases) |                        | 60 g           | 193782   | LRVS-D-MIDI    |
|  | Grid dimension 66 mm (without sub-bases) |                        | 36 g           | 193784   | LRVS-D-DI-MAXI |
|  |  |                        | 56 g           | 193783   | LRVS-D-MAXI    |

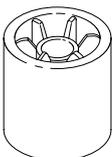
| Angled plug socket PEV   |                              |                              |                             |          |                   |
|--|------------------------------|------------------------------|-----------------------------|----------|-------------------|
|  | Operational voltage range AC | Operational voltage range DC | Switching status indication | Part no. | Type              |
|  |                              | 15 ... 30 V                  | Yellow LED, Green LED       | 164274   | PEV-1/4-WD-LED-24 |

## Accessories

| Angled plug socket PEV  |                              |                              |                             |               |                           |
|---|------------------------------|------------------------------|-----------------------------|---------------|---------------------------|
|   | Operational voltage range AC | Operational voltage range DC | Switching status indication | Part no.      | Type                      |
|  | 150 ... 230 V                | 140 ... 180 V                | Yellow LED, Green LED       | <b>164275</b> | <b>PEV-1/4-WD-LED-230</b> |

| Padlock LRVS-D  |  |                        |                |               |               |
|---|--|------------------------|----------------|---------------|---------------|
|   | Corrosion resistance class CRC <sup>1)</sup> | LABS (PWIS) conformity | Product weight | Part no.      | Type          |
|  | 2 - Moderate corrosion stress                | VDMA24364-B1/B2-L      | 120 g          | <b>193786</b> | <b>LRVS-D</b> |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

| Filter cartridge LFP   |      |                     |               |                  |  |
|--|------|---------------------|---------------|------------------|--|
|  | Size | Grade of filtration | Part no.      | Type             |  |
|  | 4    | 40 µm               | <b>534502</b> | <b>MS4-LFP-E</b> |  |