

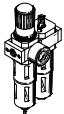

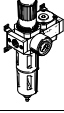
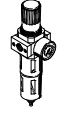
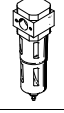
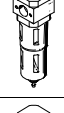
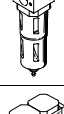


Filter regulators LFR/LFRS, D series



# Filter regulators LFR/LFRS, D series, metal design



Product range overview D series service units, metal design

| Type                                                                                                                               | Size  | Pneumatic connection |    |      |      |      |      |      |    |     |     | Pressure regulation range [bar] |            |            | Grade of filtration [µm] |   |   |    |
|------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|----|------|------|------|------|------|----|-----|-----|---------------------------------|------------|------------|--------------------------|---|---|----|
|                                                                                                                                    |       | M5                   | M7 | G1/8 | G1/4 | G3/8 | G1/2 | G3/4 | G1 | QS4 | QS6 | 0.5<br>...                      | 0.5<br>... | 2.5<br>... | 0.01                     | 1 | 5 | 40 |
| <b>Service units</b>                                                                                                               |       |                      |    |      |      |      |      |      |    |     |     |                                 |            |            |                          |   |   |    |
| <b>FRC/FRCS</b><br>                               | Micro | ■                    | ■  | ■    | -    | -    | -    | -    | -  | ■   | ■   | ■                               | -          | -          | -                        | - | ■ | -  |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
| <b>Service unit combinations</b>                                                                                                   |       |                      |    |      |      |      |      |      |    |     |     |                                 |            |            |                          |   |   |    |
| <b>FRC-K</b><br>                                 | Micro | -                    | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - |    |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | -    | -    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
| <b>LFR-K<br/>LFRS-K</b><br>                     | Micro | -                    | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - |    |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | -    | -    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | ■  |
| <b>Individual devices</b>                                                                                                          |       |                      |    |      |      |      |      |      |    |     |     |                                 |            |            |                          |   |   |    |
| <b>Filter regulators<br/>LFR/LFRS</b><br>       | Micro | ■                    | ■  | ■    | -    | -    | -    | -    | -  | ■   | ■   | ■                               | -          | -          | -                        | - | ■ | -  |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | ■                               | ■          | -          | -                        | - | ■ | ■  |
| <b>Filters<br/>LF</b><br>                       | Micro | ■                    | ■  | ■    | -    | -    | -    | -    | -  | ■   | ■   | -                               | -          | -          | -                        | - | ■ | -  |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | -                               | -          | -          | -                        | - | ■ | ■  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | -                               | -          | -          | -                        | - | ■ | ■  |
| <b>Fine and micro filters<br/>LFMA/LFMB</b><br> | Micro | -                    | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - |    |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
| <b>Active carbon filters<br/>LFX</b><br>        | Micro | -                    | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - |    |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - | -  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | -                               | -          | -          | -                        | - | - | -  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | -                               | -          | -          | -                        | - | - | -  |
| <b>Filter combinations<br/>LFMBA</b><br>        | Micro | -                    | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -          | -          | -                        | - | - |    |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | -                               | -          | ■          | ■                        | - | - | -  |
| <b>Pressure regulators<br/>LR/LRS</b><br>       | Micro | ■                    | ■  | ■    | -    | -    | -    | -    | -  | ■   | ■   | ■                               | -          | -          | -                        | - | - | -  |
|                                                                                                                                    | Mini  | -                    | -  | ■    | ■    | ■    | -    | -    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | -  |
|                                                                                                                                    | Midi  | -                    | -  | -    | ■    | ■    | ■    | ■    | -  | -   | -   | ■                               | ■          | -          | -                        | - | - | -  |
|                                                                                                                                    | Maxi  | -                    | -  | -    | -    | -    | ■    | ■    | ■  | -   | -   | ■                               | ■          | -          | -                        | - | - | -  |

# Filter regulators LFR/LFRS, D series, metal design

Product range overview D series service units, metal design

| Type                                | Size  | Bowl guard       |              | Condensate drain |                |                 | Pressure indication |                        | Actuator lock           |                                  | Supply voltage |          |          | Options                                                                   |                                                                        |                                 | → Page/<br>Internet |
|-------------------------------------|-------|------------------|--------------|------------------|----------------|-----------------|---------------------|------------------------|-------------------------|----------------------------------|----------------|----------|----------|---------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------|---------------------|
|                                     |       | Metal bowl guard | Plastic bowl | Manual rotary    | Semi-automatic | Fully automatic | With pressure gauge | Without pressure gauge | Rotary knob with detent | Rotary knob with integrated lock | 24 V DC        | 110 V AC | 230 V AC | Directly actuated pressure regulator with integrated return flow function | Pilot actuated pressure regulator with integrated return flow function | Differential pressure indicator |                     |
| <b>Service units</b>                |       |                  |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 |                     |
| FRC/FRCS                            | Micro | -                | ■            | ■                | ■              | -               | ■                   | ■                      | ■                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               | frc                 |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | ■                                                                         | ■                                                                      | -                               |                     |
| <b>Service unit combinations</b>    |       |                  |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 |                     |
| FRC-K                               | Micro | -                |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 | frc                 |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | -                                | ■              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | -                                | ■              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | -                                | ■              | -        | -        | ■                                                                         | ■                                                                      | -                               |                     |
| LFR-K<br>LFRS-K                     | Micro | -                |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 | lfr                 |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | ■                                | ■              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | ■                                | ■              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | ■                   | -                      | ■                       | ■                                | ■              | -        | -        | ■                                                                         | ■                                                                      | -                               |                     |
| <b>Individual devices</b>           |       |                  |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 |                     |
| Filter regulators<br>LFR/LFRS       | Micro | -                | ■            | ■                | ■              | -               | ■                   | ■                      | ■                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               | 6                   |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | ■                                                                         | ■                                                                      | -                               |                     |
| Filters<br>LF                       | Micro | -                | ■            | ■                | ■              | -               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               | lf                  |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
| Fine and micro filters<br>LFMA/LFMB | Micro | -                |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 | lfma, lfmb          |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
| Active carbon filters<br>LFX        | Micro | -                |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 | lfx                 |
|                                     | Mini  | ■                | -            | -                | -              | -               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | ■                | -            | -                | -              | -               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | ■                | -            | -                | -              | -               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               |                     |
| Filter combinations<br>LFMBA        | Micro | -                |              |                  |                |                 |                     |                        |                         |                                  |                |          |          |                                                                           |                                                                        |                                 | lfmba               |
|                                     | Mini  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
|                                     | Midi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
|                                     | Maxi  | ■                | -            | ■                | -              | ■               | -                   | -                      | -                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | ■                               |                     |
| Pressure regulators<br>LR/LRS       | Micro | -                | -            | -                | -              | -               | ■                   | ■                      | ■                       | -                                | -              | -        | -        | -                                                                         | -                                                                      | -                               | lr                  |
|                                     | Mini  | -                | -            | -                | -              | -               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | ■                                                                         | -                                                                      | -                               |                     |
|                                     | Midi  | -                | -            | -                | -              | -               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | ■                                                                         | -                                                                      | -                               |                     |
|                                     | Maxi  | -                | -            | -                | -              | -               | ■                   | ■                      | ■                       | ■                                | -              | -        | -        | ■                                                                         | ■                                                                      | -                               |                     |

# Filter regulators LFR/LFRS, D series, metal design



Product range overview D series service units, metal design

| Type                                            | Size | Pneumatic connection |    |      |      |      |      |      |    |     |     | Pressure regulation range [bar] |                  |   |
|-------------------------------------------------|------|----------------------|----|------|------|------|------|------|----|-----|-----|---------------------------------|------------------|---|
|                                                 |      | M5                   | M7 | G1/8 | G1/4 | G3/8 | G1/2 | G3/4 | G1 | QS4 | QS6 | 0.5<br>...<br>7                 | 0.5<br>...<br>12 |   |
| <b>Individual devices</b>                       |      |                      |    |      |      |      |      |      |    |     |     |                                 |                  |   |
| Pressure regulators<br><b>LRB/LRBS</b>          |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | -    | ■    | -    | -    | -  | -   | -   | -                               | ■                | ■ |
|                                                 |      | Midi                 | -  | -    | -    | -    | ■    | -    | -  | -   | -   | -                               | ■                | ■ |
|                                                 |      | Maxi                 | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
| Pressure regulator combinations<br><b>LRB-K</b> |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | -    | ■    | ■    | -    | -  | -   | -   | -                               | ■                | ■ |
|                                                 |      | Midi                 | -  | -    | -    | -    | ■    | ■    | -  | -   | -   | -                               | ■                | ■ |
|                                                 |      | Maxi                 | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
| Lubricators<br><b>LOE</b>                       |      | Micro                | ■  | ■    | ■    | -    | -    | -    | -  | -   | ■   | ■                               | -                | - |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| On-off valves<br><b>HE</b>                      |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| On-off valves, electrical<br><b>HEE</b>         |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| On-off valves, pneumatic<br><b>HEP</b>          |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| Soft-start valves<br><b>HEL</b>                 |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| Membrane air dryers<br><b>LDM1</b>              |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Midi                 | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| Branching modules<br><b>FRM</b>                 |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | ■    | ■    | ■    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | ■    | ■    | ■    | ■  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | ■    | ■  | ■   | -   | -                               | -                | - |
| Distributor block<br><b>FRZ</b>                 |      | Micro                | -  |      |      |      |      |      |    |     |     |                                 |                  |   |
|                                                 |      | Mini                 | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Midi                 | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -                | - |
|                                                 |      | Maxi                 | -  | -    | -    | -    | -    | -    | -  | -   | -   | -                               | -                | - |

# Filter regulators LFR/LFRS, D series, metal design

Product range overview D series service units, metal design

| Type                                            | Size  | Bowl guard       |              | Pressure indication |                        | Actuator lock           |                                  | Supply voltage |          |          | Options             |                 | → Page/<br>Internet |
|-------------------------------------------------|-------|------------------|--------------|---------------------|------------------------|-------------------------|----------------------------------|----------------|----------|----------|---------------------|-----------------|---------------------|
|                                                 |       | Metal bowl guard | Plastic bowl | With pressure gauge | Without pressure gauge | Rotary knob with detent | Rotary knob with integrated lock | 24 V DC        | 110 V AC | 230 V AC | Non-return function | Pressure switch |                     |
| <b>Individual devices</b>                       |       |                  |              |                     |                        |                         |                                  |                |          |          |                     |                 |                     |
| Pressure regulators<br><b>LRB/LRBS</b>          | Micro | -                | -            | -                   | ■                      | ■                       | ■                                | -              | -        | -        | -                   | -               | lrb                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | ■                       | ■                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | ■                       | ■                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | ■                       | ■                                | -              | -        | -        | -                   | -               |                     |
| Pressure regulator combinations<br><b>LRB-K</b> | Micro | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               | lrb                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
| Lubricators<br><b>LOE</b>                       | Micro | -                | ■            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               | loe                 |
|                                                 | Mini  | ■                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | ■                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | ■                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
| On-off valves<br><b>HE</b>                      | Micro | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               | he                  |
|                                                 | Mini  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | ■                       | -                                | -              | -        | -        | -                   | -               |                     |
| On-off valves, electrical<br><b>HEE</b>         | Micro | -                | -            | -                   | ■                      | -                       | -                                | ■              | ■        | ■        | -                   | -               | hee                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | ■              | ■        | ■        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | ■              | ■        | ■        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | -                       | -                                | ■              | ■        | ■        | -                   | -               |                     |
| On-off valves, pneumatic<br><b>HEP</b>          | Micro | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               | hep                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
| Soft-start valves<br><b>HEL</b>                 | Micro | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               | hel                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
| Membrane air dryers<br><b>LDM1</b>              | Micro | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               | ldm1                |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | ■                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
| Branching modules<br><b>FRM</b>                 | Micro | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | ■                   | ■               | frm                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | ■                   | ■               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | ■                   | ■               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | ■                   | ■               |                     |
| Distributor block<br><b>FRZ</b>                 | Micro | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               | frz                 |
|                                                 | Mini  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Midi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |
|                                                 | Maxi  | -                | -            | -                   | ■                      | -                       | -                                | -              | -        | -        | -                   | -               |                     |

# Filter regulators LFR/LFRS, D series, metal design

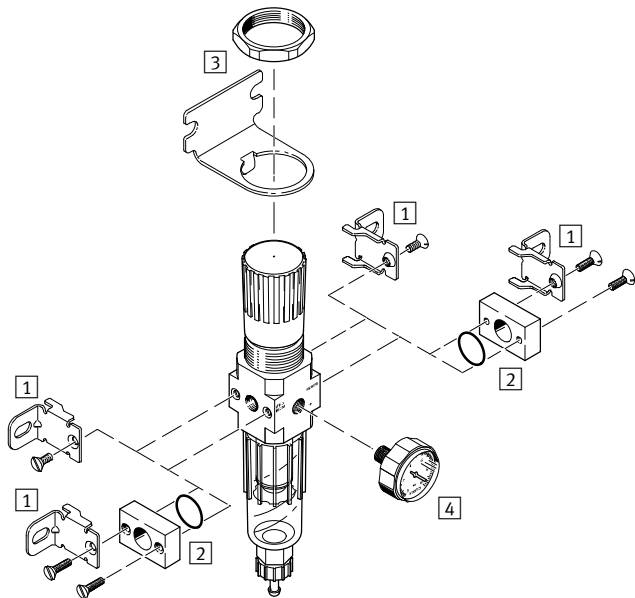
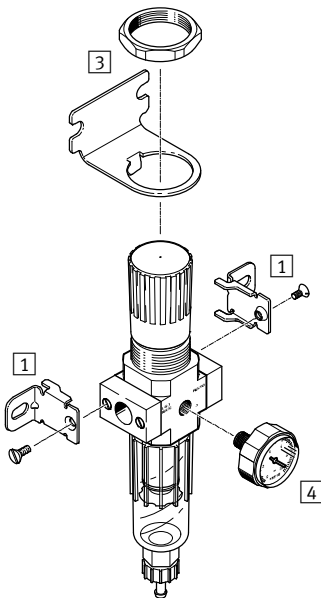
Peripherals overview



## Micro

Individual unit with connection plates,  
connection size G $\frac{1}{8}$ , QS-4 or QS-6

Individual unit without connection plates, for service unit combination  
connection thread M5 or M7 in housing



| Mounting attachments and accessories |                        |                           |                        |                           |                     |
|--------------------------------------|------------------------|---------------------------|------------------------|---------------------------|---------------------|
|                                      | Individual unit        |                           | Combination            |                           | → Page/<br>Internet |
|                                      | with connection plates | without connection plates | with connection plates | without connection plates |                     |
| 1 Mounting bracket HFOE              | ■                      | ■                         | ■                      | ■                         | hfoe-d              |
| 2 Connecting plate kit PBL           | -                      | ■                         | -                      | ■                         | pbl                 |
| 3 Mounting bracket HRS               | ■                      | ■                         | ■                      | ■                         | hrs-d               |
| 4 Pressure gauge MA-27               | ■                      | ■                         | ■                      | ■                         | 32                  |

# Filter regulators LFR/LFRS, D series, metal design

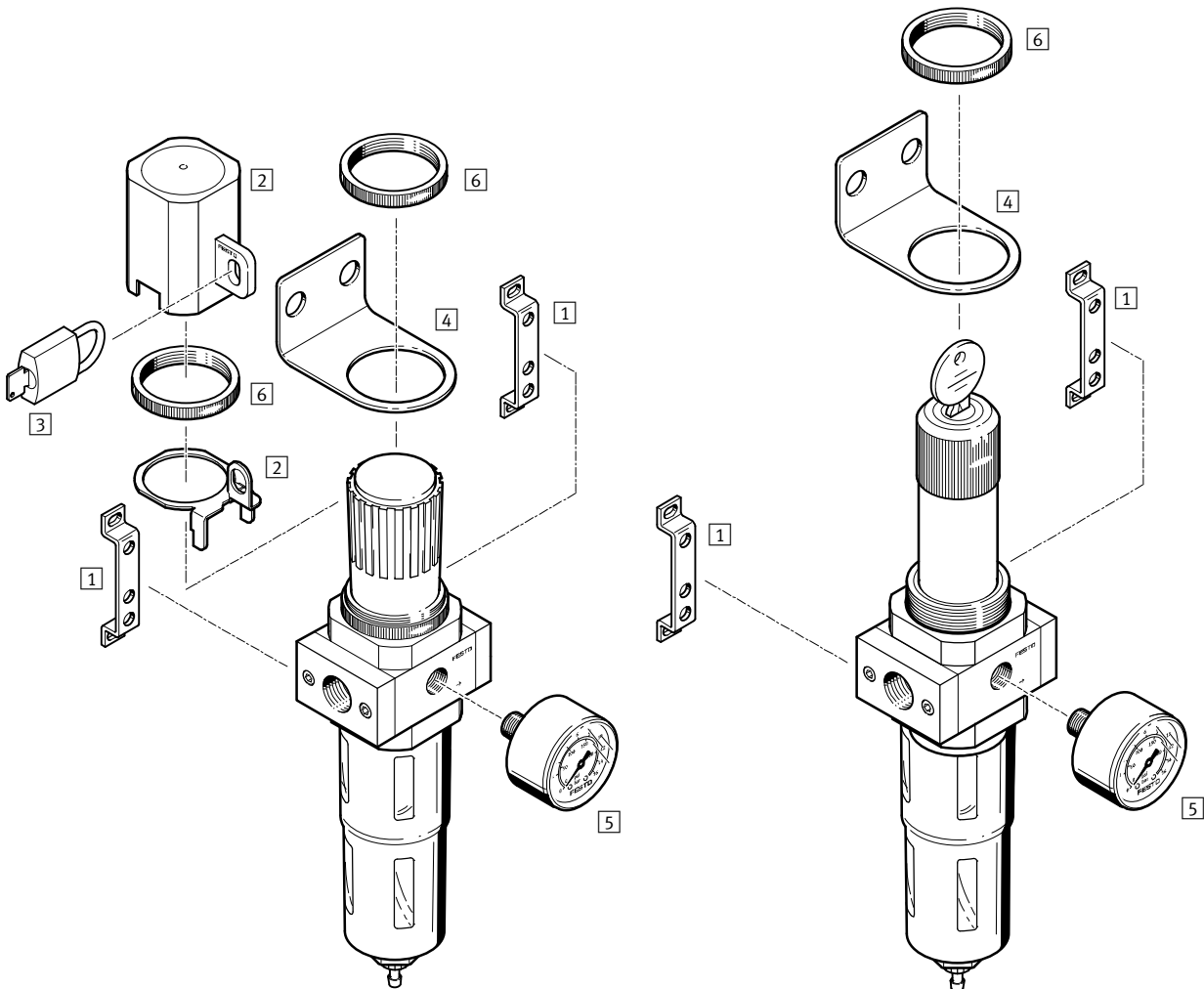
Peripherals overview

FESTO

Mini/Midi/Maxi

Filter regulator LFR

Filter regulator LFRS, lockable



| Mounting attachments and accessories |                                                    | Rotary knob with detent | Rotary knob, lockable | → Page/<br>Internet |
|--------------------------------------|----------------------------------------------------|-------------------------|-----------------------|---------------------|
| 1                                    | Mounting bracket<br>HFOE                           | ■                       | ■                     | hfoe-d              |
| 2                                    | Regulator lock<br>LRVS                             | ■                       | -                     | lrvs-d              |
| 3                                    | Padlock<br>LRVS-D                                  | ■                       | -                     | lrvs-d              |
| 4                                    | Mounting bracket<br>HR-D                           | ■                       | ■                     | hr-d                |
| 5                                    | Pressure gauge<br>MA/PAGN                          | ■                       | ■                     | 32                  |
| 6                                    | Knurled nut (included in scope of delivery)<br>HMR | ■                       | ■                     | -                   |

# Filter regulators LFR/LFRS, D series, metal design

Type codes

LFR - 3/8 - D - 7 - - - 0 - - - MIDI - A - -

## Basic function

|      |                            |
|------|----------------------------|
| LFR  | Filter regulator           |
| LFRS | Filter regulator, lockable |

## Pneumatic connection

|                  |                                               |
|------------------|-----------------------------------------------|
| MICRO (LFR only) |                                               |
| M5               | Connecting thread M5 in housing               |
| M7               | Connecting thread M7 in housing               |
| 1/8              | Connecting plates with connecting thread G1/8 |
| QS4              | Connecting plates with push-in connector QS-4 |
| QS6              | Connecting plates with push-in connector QS-6 |
| MINI             |                                               |
| 1/8              | Connecting plates with connecting thread G1/8 |
| 1/4              | Connecting plates with connecting thread G1/4 |
| 3/8              | Connecting plates with connecting thread G3/8 |
| MIDI             |                                               |
| 1/4              | Connecting plates with connecting thread G1/4 |
| 3/8              | Connecting plates with connecting thread G3/8 |
| 1/2              | Connecting plates with connecting thread G1/2 |
| 3/4              | Connecting plates with connecting thread G3/4 |
| MAXI             |                                               |
| 1/2              | Connecting plates with connecting thread G1/2 |
| 3/4              | Connecting plates with connecting thread G3/4 |
| 1                | Connecting plates with connecting thread G1   |

## Series

|   |        |
|---|--------|
| D | Series |
|---|--------|

## Pressure regulation range

|   |                                   |
|---|-----------------------------------|
| 7 | 0.5 ... 7 bar (0.05 ... 0.7 MPa)  |
|   | 0.5 ... 12 bar (0.05 ... 1.2 MPa) |

## Grade of filtration

|    |       |
|----|-------|
|    | 40 µm |
| 5M | 5 µm  |

## Pressure gauge

|   |                        |
|---|------------------------|
|   | With pressure gauge    |
| 0 | Without pressure gauge |

## Function (optional)

|    |                                                                                       |
|----|---------------------------------------------------------------------------------------|
| DI | Directly actuated pressure regulator with integrated return flow function (MAXI only) |
|----|---------------------------------------------------------------------------------------|

## Size

|       |                                                  |
|-------|--------------------------------------------------|
| MICRO | Grid dimension 25 mm (without connecting plates) |
| MINI  | Grid dimension 40 mm (without connecting plates) |
| MIDI  | Grid dimension 55 mm (without connecting plates) |
| MAXI  | Grid dimension 66 mm (without connecting plates) |

## Condensate drain

|   |                 |
|---|-----------------|
|   | Turned manually |
| H | Semi-automatic  |
| A | Fully automatic |

## Display unit of the pressure gauge

|     |                    |
|-----|--------------------|
|     | Outer scale in bar |
| MPA | Outer scale in MPa |

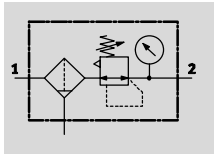


# Filter regulators LFR/LFRS, D series, metal design

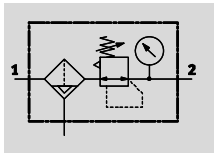
Technical data

## LFR/LFRS

Manual rotary condensate drain, with pressure gauge

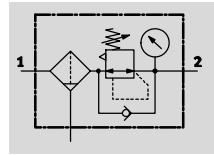


Semi or fully automatic condensate drain, with pressure gauge

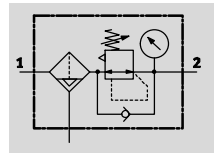


## LFR/LFRS-...-DI-MAXI

Manual rotary condensate drain, with pressure gauge



Fully automatic condensate drain, with pressure gauge



- - Flow rate  
110 ... 11,000 l/min
- - Temperature range  
-10 ... +60 °C
- - Operating pressure  
1 ... 16 bar (0.1 ... 1.6 MPa)

- Space-saving design with filter and regulator in a single unit
- Good particle separation and high flow rate
- Good regulating characteristics with minimal hysteresis

- Two pressure regulation ranges: 0.5 ... 7 bar (0.05 ... 0.7 MPa) and 0.5 ... 12 bar (0.05 ... 1.2 MPa)
- Two pressure gauge connections for flexible installation
- Setting values are secured by locking the rotary knob

- With manual, semi-automatic or fully automatic condensate drain
- Choice of filter cartridges: 5 µm or 40 µm
- New filter cartridges → 31
- Pressure sensor (optional) → 32

| General technical data                    |                                                                                     |                                                               |                        |                  |
|-------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------|------------------|
| Size                                      | Micro                                                                               | Mini                                                          | Midi                   | Maxi             |
| Pneumatic connection 1, 2 <sup>1)</sup>   | M5 <sup>2)</sup> , M7 <sup>2)</sup> , G1/8, QS-4 <sup>3)</sup> , QS-6 <sup>3)</sup> | G1/8, G1/4, G3/8                                              | G1/4, G3/8, G1/2, G3/4 | G1/2, G3/4, G1   |
| Design                                    | Filter regulator with/without pressure gauge                                        |                                                               |                        |                  |
| Type of mounting                          | Via accessories<br>In-line installation                                             |                                                               |                        |                  |
| Assembly position                         | Vertical ±5°                                                                        |                                                               |                        |                  |
| Grade of filtration [µm]                  | 5                                                                                   | 5<br>40                                                       |                        |                  |
| Air purity class at the output            | Compressed air according to ISO 8573-1:2010 [6:8:4] (grade of filtration 5 µm)      |                                                               |                        |                  |
|                                           | Compressed air according to ISO 8573-1:2010 [7:8:4] (grade of filtration 40 µm)     |                                                               |                        |                  |
|                                           | Inert gases                                                                         |                                                               |                        |                  |
| Bowl guard                                | - Metal bowl guard                                                                  |                                                               |                        |                  |
| Condensate drain                          | Manual rotary<br>Semi-automatic Fully automatic                                     |                                                               |                        |                  |
| Regulator lock                            | Rotary knob with detent<br>- Rotary knob with integrated lock                       |                                                               |                        |                  |
| Pressure regulation range [bar]           | 0.5 ... 7 (0.05 ... 0.7 MPa)                                                        | 0.5 ... 7 (0.05 ... 0.7 MPa)<br>0.5 ... 12 (0.05 ... 1.2 MPa) |                        |                  |
| Max. hysteresis [bar]                     | 0.3 (0.03 MPa)                                                                      | 0.2 (0.02 MPa)                                                |                        | 0.4 (0.04 MPa)   |
| Pressure indication                       | Via pressure gauge                                                                  |                                                               |                        |                  |
|                                           | M5 prepared                                                                         | G1/8 prepared                                                 | G1/4 prepared          | G1/4 prepared    |
| Max. condensate volume [cm <sup>3</sup> ] | 3                                                                                   | 22                                                            | 43                     | 80 <sup>4)</sup> |

1) Connecting plates with connecting thread  
 2) Without connecting plates, connecting thread in housing  
 3) Connecting plates with push-in connector  
 4) The max. condensate volume for the LFR/LFRS-...-DI-MAXI is 43 cm<sup>3</sup>.  
 - - Note: This product conforms to ISO 1179-1 and to ISO 228-1

# Filter regulators LFR/LFRS, D series, metal design

Technical data

| Standard nominal flow rate $q_{mN}^{(1)}$ [l/min] |                                     |     |                 |      |      |     |
|---------------------------------------------------|-------------------------------------|-----|-----------------|------|------|-----|
| Size                                              | Micro                               |     |                 |      |      |     |
| Pneumatic connection 1, 2                         | M5                                  | M7  | G $\frac{1}{8}$ | QS-4 | QS-6 |     |
| Pressure regulation range                         | 0.5 ... 7 bar<br>(0.05 ... 0.7 MPa) | 110 | 280             | 410  | 150  | 410 |

- 1) Measured at  $p_1 = 10$  bar (1 MPa),  $p_2 = 6$  bar (0.6 MPa) and  $\Delta p = 1$  bar (0.1 MPa).  
A minimum flow rate of 125 l/min is required for correct operation.

| Standard nominal flow rate $q_{mN}^{(1)}$ [l/min] |                                                     |                 |                 |                 |                 |                 |                 |                 |                                |                                 |                                 |
|---------------------------------------------------|-----------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------------------|---------------------------------|---------------------------------|
| Size                                              | Mini                                                |                 |                 | Midi            |                 |                 |                 | Maxi            |                                |                                 |                                 |
| Pneumatic connection 1, 2                         | G $\frac{1}{8}$                                     | G $\frac{1}{4}$ | G $\frac{3}{8}$ | G $\frac{1}{4}$ | G $\frac{3}{8}$ | G $\frac{1}{2}$ | G $\frac{3}{4}$ | G $\frac{1}{2}$ | G $\frac{3}{4}$                | G1                              |                                 |
| Pressure regulation range, grade of filtration    | 0.5 ... 7 bar<br>(0.05 ... 0.7 MPa),<br>40 $\mu$ m  | 900             | 1,500           | 1,700           | 2,100           | 3,200           | 3,900           | 4,000           | 9,500<br>(7,600) <sup>2)</sup> | 10,000<br>(7,700) <sup>2)</sup> | 11,000<br>(7,800) <sup>2)</sup> |
|                                                   | 0.5 ... 12 bar<br>(0.05 ... 1.2 MPa),<br>5 $\mu$ m  | 650             | 1,200           | 1,350           | 1,600           | 2,400           | 2,600           | 2,600           | 7,500<br>(4,000) <sup>2)</sup> | 7,600<br>(5,800) <sup>2)</sup>  | 8,000<br>(6,000) <sup>2)</sup>  |
|                                                   | 0.5 ... 12 bar<br>(0.05 ... 1.2 MPa),<br>40 $\mu$ m | 750             | 1,400           | 1,600           | 2,000           | 3,100           | 3,400           | 3,400           | 9,400<br>(4,500) <sup>2)</sup> | 9,700<br>(6,800) <sup>2)</sup>  | 10,000<br>(7,000) <sup>2)</sup> |

- 1) Measured at  $p_1 = 10$  bar (1 MPa),  $p_2 = 6$  bar (0.6 MPa) and  $\Delta p = 1$  bar (0.1 MPa).  
A minimum flow rate of 125 l/min is required for correct operation.  
2) For the LR/LRS-...-DI.

| Operating and environmental conditions       |                                                           |  |                                                           |                                                           |
|----------------------------------------------|-----------------------------------------------------------|--|-----------------------------------------------------------|-----------------------------------------------------------|
| Condensate drain                             | Manual rotary                                             |  | Semi-automatic                                            | Fully automatic                                           |
| Size                                         | Micro                                                     |  | Micro                                                     | Mini/Midi/Maxi                                            |
| Operating pressure [bar]                     | 1 ... 10 (0.1 ... 1 MPa)                                  |  | 1 ... 10 (0.1 ... 1 MPa)                                  | 2 ... 12 (0.2 ... 1.2 MPa)                                |
| Operating medium                             | Compressed air in accordance with ISO 8573-1:2010 [7:9:-] |  | Compressed air in accordance with ISO 8573-1:2010 [7:9:-] | Compressed air in accordance with ISO 8573-1:2010 [7:9:-] |
|                                              | Inert gases                                               |  |                                                           |                                                           |
| Ambient temperature [°C]                     | -10 ... +60                                               |  |                                                           | +5 ... +60                                                |
| Temperature of medium [°C]                   | -10 ... +60                                               |  |                                                           | +5 ... +60                                                |
| Storage temperature [°C]                     | -10 ... +60                                               |  |                                                           |                                                           |
| Corrosion resistance class CRC <sup>1)</sup> | 2                                                         |  |                                                           |                                                           |
| Certification                                | Germanischer Lloyd                                        |  |                                                           |                                                           |

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

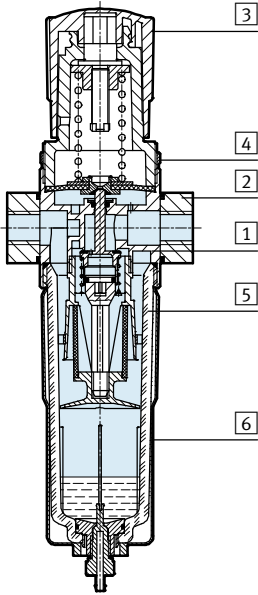
| Weight [g]             |                   |                  |      |       |                                              |               |
|------------------------|-------------------|------------------|------|-------|----------------------------------------------|---------------|
| Size                   | Micro             |                  | Mini | Midi  | Maxi                                         |               |
|                        | Connecting thread | Connecting plate |      |       | Connection G $\frac{1}{2}$ , G $\frac{3}{4}$ | Connection G1 |
| With pressure gauge    |                   |                  |      |       |                                              |               |
| LFR-...                | 104               | 124              | 460  | 920   | 1,370                                        | 1,470         |
| LFR-...-DI             | -                 | -                | -    | -     | 1,670                                        | 1,670         |
| LFRS-...               | -                 | -                | 560  | 1,160 | 1,470                                        | 1,570         |
| LFRS-...-DI            | -                 | -                | -    | -     | 1,950                                        | 1,950         |
| Without pressure gauge |                   |                  |      |       |                                              |               |
| LFR-...                | 94                | 114              | 410  | 830   | 1,300                                        | 1,400         |
| LFR-...-DI             | -                 | -                | -    | -     | 1,600                                        | 1,600         |
| LFRS-...               | -                 | -                | 510  | 1,070 | 1,400                                        | 1,500         |
| LFRS-...-DI            | -                 | -                | -    | -     | 1,880                                        | 1,880         |

# Filter regulators LFR/LFRS, D series, metal design

Technical data

## Materials

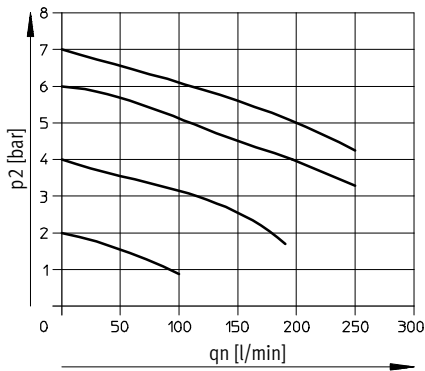
Sectional view



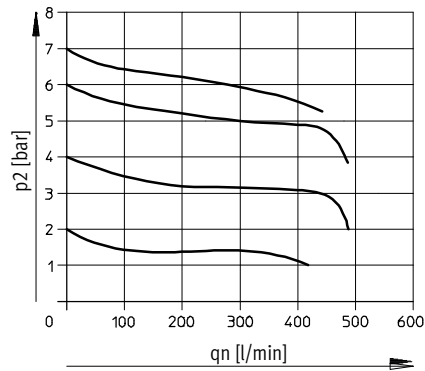
| Size                | Micro                   | Mini/Midi/Maxi          |                                    |
|---------------------|-------------------------|-------------------------|------------------------------------|
|                     |                         | With pressure gauge     | Without pressure gauge             |
| 1 Housing           | Wrought aluminium alloy | Die-cast zinc           |                                    |
| 2 Connecting plates | Wrought aluminium alloy | Die-cast zinc/aluminium |                                    |
| 3 Regulating knob   | POM                     | PA                      |                                    |
| 4 Knurled nut       | -                       | Aluminium               |                                    |
| 5 Bowl              | PC                      | PC                      |                                    |
| 6 Metal bowl guard  | -                       | Aluminium               |                                    |
| - Seals             | NBR                     | NBR                     |                                    |
| Note on materials   | RoHS-compliant          | RoHS-compliant          | Free of copper and PTFE (LFR only) |

## Standard flow rate qn as a function of the output pressure p2

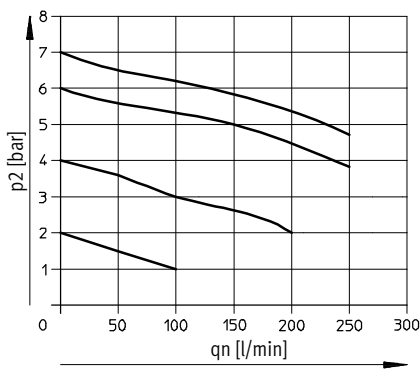
LFR-M5-...-MICRO



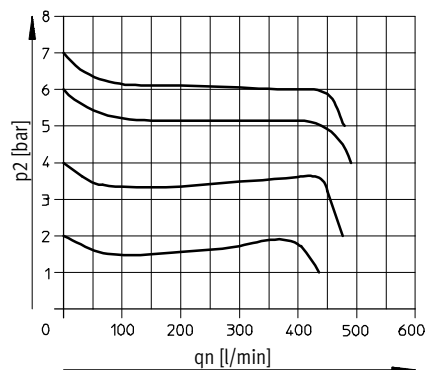
LFR-M7-...-MICRO -B



LFR-QS4-...-MICRO



LFR-QS6-...-MICRO and LFR-1/8-...-MICRO



Primary pressure p1 = 10 bar (1 MPa)

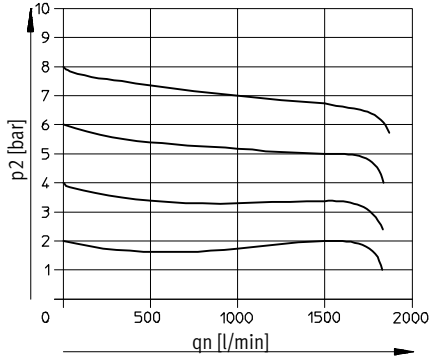
# Filter regulators LFR/LFRS, D series, metal design

Technical data

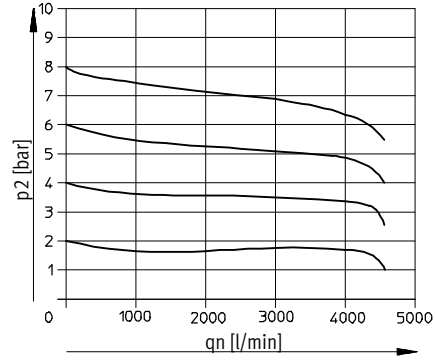


## Standard flow rate $q_n$ as a function of the output pressure $p_2$

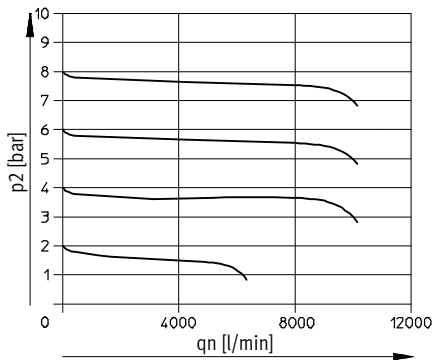
LFR/LFRS-1/4-D-MINI



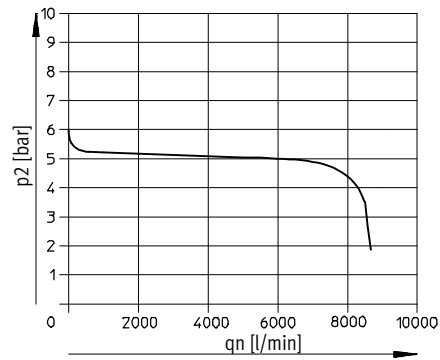
LFR/LFRS-1/2-D-MIDI



LFR/LFRS-1-D-MAXI



LFR/LFRS-1-D-DI-MAXI



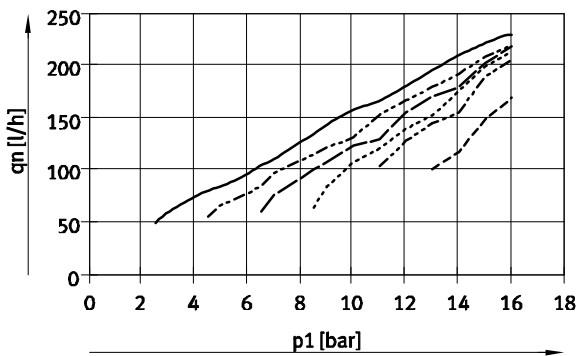
Primary pressure  $p_1 = 10 \text{ bar (1 MPa)}$

Note

In order to improve control behaviour, primary-pressure dependent internal air consumption is provided on the LFR/LFRS-...-MAXI.

## Internal air consumption $q_n$ as a function of input pressure $p_1$

LFR/LFRS-...-MAXI



- $p_2 = 2 \text{ bar (0.2 MPa)}$
- - -  $p_2 = 4 \text{ bar (0.4 MPa)}$
- · -  $p_2 = 6 \text{ bar (0.6 MPa)}$
- · ·  $p_2 = 8 \text{ bar (0.8 MPa)}$
- - -  $p_2 = 10 \text{ bar (1 MPa)}$
- · -  $p_2 = 12 \text{ bar (1.2 MPa)}$

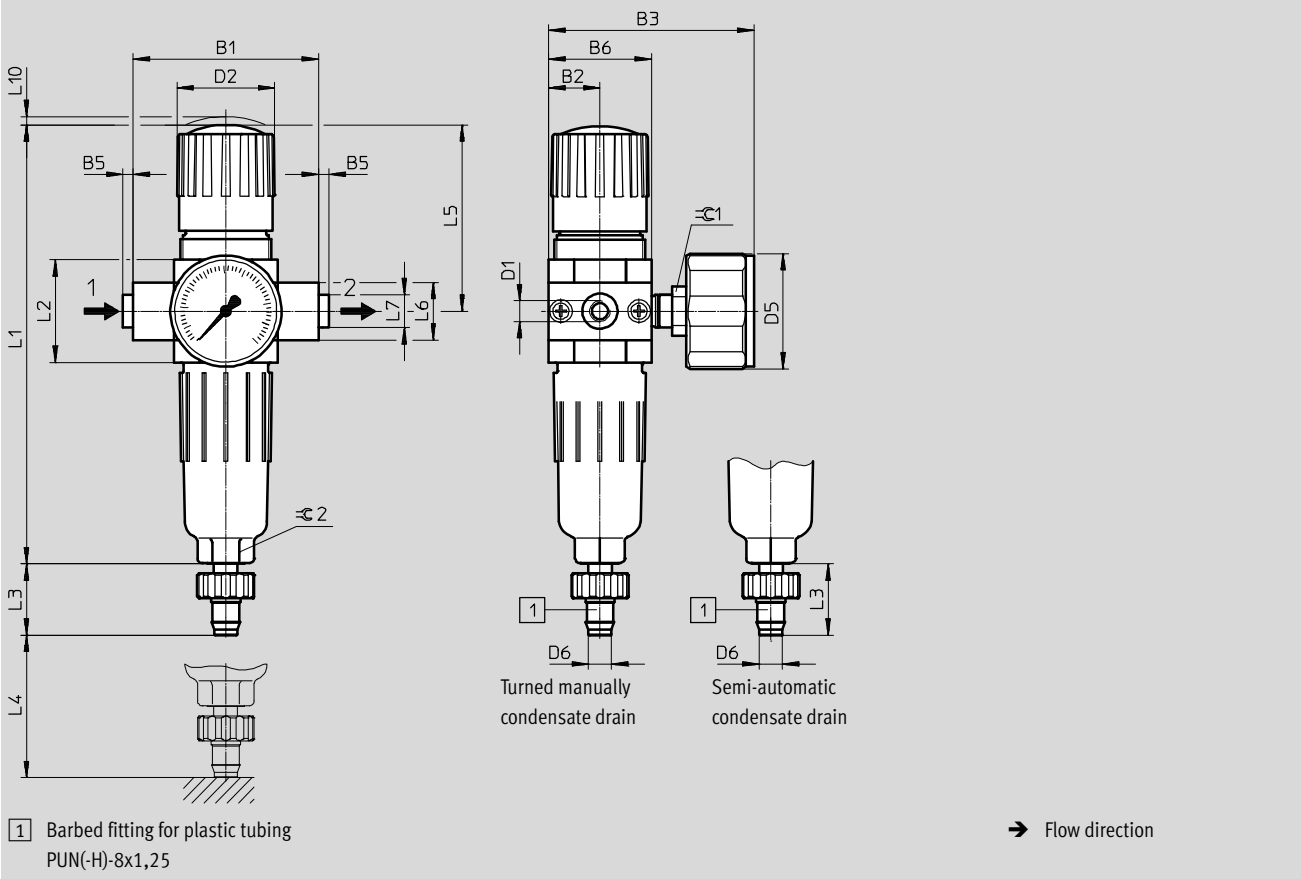
# Filter regulators LFR/LFRS, D series, metal design

Technical data

## Dimensions

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Micro



| Type                   | B1 | B2   | B3 | B5   | B3 | D1   | D2<br>∅ | D5<br>∅ | D6<br>∅ |
|------------------------|----|------|----|------|----|------|---------|---------|---------|
| LFR-M5-...-MICRO (H)   | 25 | 12.5 | 50 | -    | 25 | M5   | ~24     | 28      | 5.6     |
| LFR-M7-...-MICRO (H) B |    |      |    |      |    | M7   |         |         |         |
| LFR-1/8-...-MICRO (H)  | 45 | 12.5 | 50 | -2.5 | 25 | G1/8 | ~24     | 28      | 5.6     |
| LFR-QS4-...-MICRO (H)  |    |      |    |      |    | QS-4 |         |         |         |
| LFR-QS6-...-MICRO (H)  |    |      |    |      |    | QS-6 |         |         |         |

| Type                   | L1    | L2 | L3    | L4<br>min. | L5 | L6 | L7  | L10 | ∅ 1 | ∅ 2 |
|------------------------|-------|----|-------|------------|----|----|-----|-----|-----|-----|
| LFR-M5-...-MICRO (H)   | 107.5 | 26 | ~17.3 | 60         | 46 | 14 | -   | 2   | 12  | 12  |
| LFR-M7-...-MICRO (H) B |       |    |       |            |    |    |     |     |     |     |
| LFR-1/8-...-MICRO (H)  |       |    |       |            |    |    |     |     |     |     |
| LFR-QS4-...-MICRO (H)  |       |    |       |            |    |    | ~8  |     |     |     |
| LFR-QS6-...-MICRO (H)  |       |    |       |            |    |    | ~10 |     |     |     |

Note: This product conforms to ISO 1179-1 and to ISO 228-1

# Filter regulators LFR/LFRS, D series, metal design

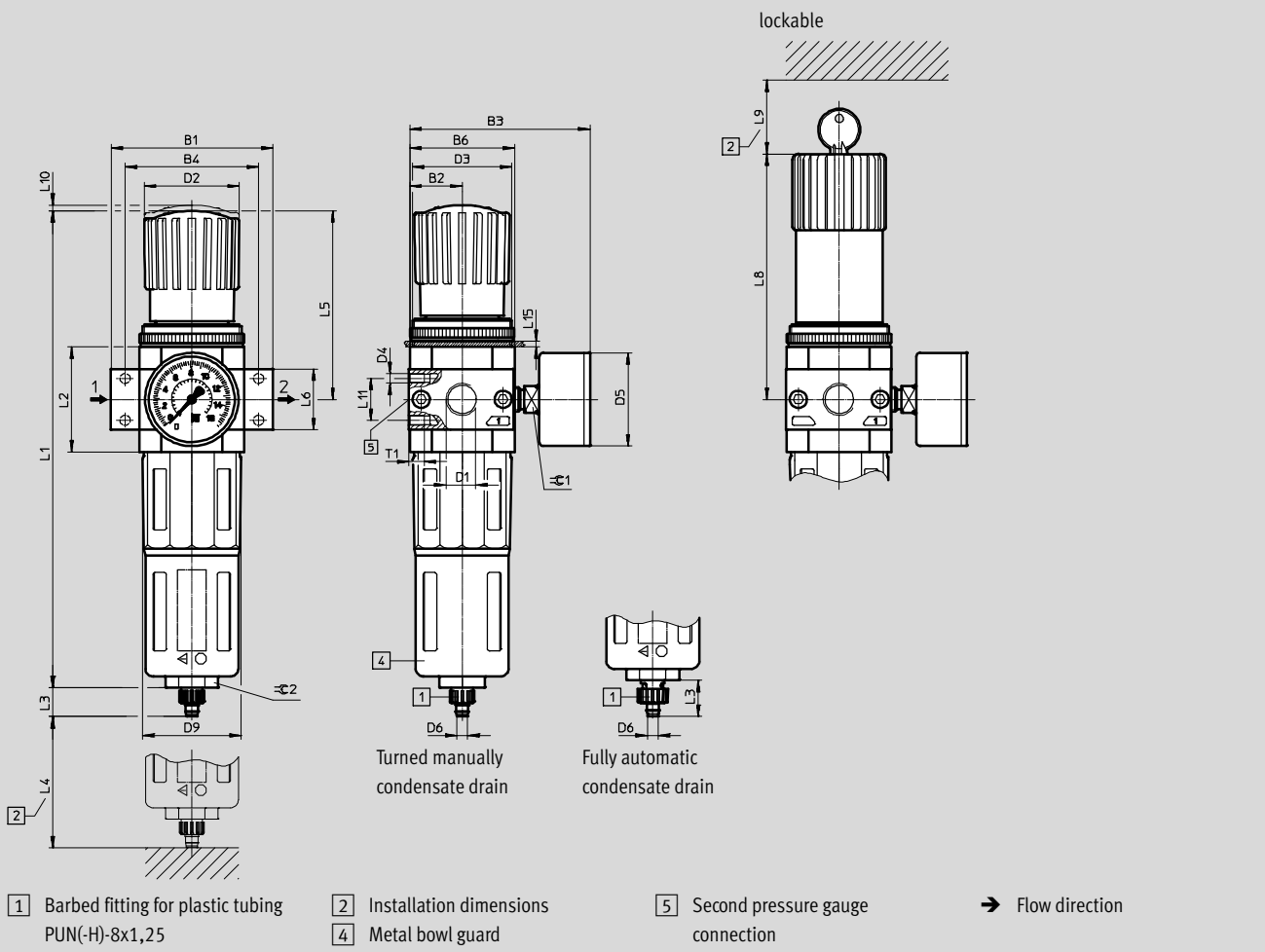
Technical data

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## Dimensions

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Mini/Midi/Maxi



| Type                       | B1  | B2   | B3    | B4  | B6 | D1   | D2 | D3      | D4 | D5 | D6  | D9 |    |         |
|----------------------------|-----|------|-------|-----|----|------|----|---------|----|----|-----|----|----|---------|
|                            |     |      |       |     |    |      | ∅  |         |    | ∅  | ∅   | ∅  |    |         |
| <b>Mini</b>                |     |      |       |     |    |      |    |         |    |    |     |    |    |         |
| LFR/LFRS-1/8-D-MINI (A)    | 64  | 20   | 76    | ~52 | 40 | G1/8 | 31 | M36x1.5 | M4 | 41 | 5.6 | 38 |    |         |
| LFR/LFRS-1/4-D-MINI (A)    |     |      |       |     |    | G1/4 |    |         |    |    |     |    |    |         |
| LFR/LFRS-3/8-D-MINI (A)    | 70  |      |       |     |    | G3/8 |    |         |    |    |     |    |    |         |
| <b>Midi</b>                |     |      |       |     |    |      |    |         |    |    |     |    |    |         |
| LFR/LFRS-1/4-D-MIDI (A)    | ~85 | 27.5 | ~94.5 | ~70 | 55 | G1/4 | 50 | M52x1.5 | M5 | 49 | 5.6 | 52 |    |         |
| LFR/LFRS-3/8-D-MIDI (A)    |     |      |       |     |    | G3/8 |    |         |    |    |     |    |    |         |
| LFR/LFRS-1/2-D-MIDI (A)    |     |      |       |     |    | G1/2 |    |         |    |    |     |    |    |         |
| LFR/LFRS-3/4-D-MIDI (A)    |     |      |       |     |    | G3/4 |    |         |    |    |     |    |    |         |
| <b>Maxi</b>                |     |      |       |     |    |      |    |         |    |    |     |    |    |         |
| LFR/LFRS-1/2-D-MAXI (A)    | 96  | 33   | 106   | 80  | 66 | G1/2 | 31 | M36x1.5 | M5 | 49 | 5.6 | 65 |    |         |
| LFR/LFRS-1/2-D-DI-MAXI (A) |     |      | 105   |     |    |      | 49 | M52x1.5 |    |    |     |    |    |         |
| LFR/LFRS-3/4-D-MAXI (A)    |     |      | 106   |     |    | 105  | 91 | G3/4    |    |    |     |    | 31 | M36x1.5 |
| LFR/LFRS-3/4-D-DI-MAXI (A) |     |      | 105   |     |    |      |    |         |    |    |     |    | 49 | M52x1.5 |
| LFR/LFRS-1-D-MAXI (A)      | 116 |      | 106   |     |    | G1   | 31 | M36x1.5 |    |    |     |    |    |         |
| LFR/LFRS-1-D-DI-MAXI (A)   |     |      | 105   |     |    |      | 49 | M52x1.5 |    |    |     |    |    |         |

– Note: This product conforms to ISO 1179-1 and to ISO 228-1

# Filter regulators LFR/LFRS, D series, metal design

Technical data

| Type                       | L1    | L2         | L3                    | L4<br>min. | L5   | L6         | L8  | L9 | L10 | L11<br>±0.2 | L15<br>max. | T1<br>min. | ≈C 1 | ≈C 2 |
|----------------------------|-------|------------|-----------------------|------------|------|------------|-----|----|-----|-------------|-------------|------------|------|------|
| <b>Mini</b>                |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-1/8-D-MINI (A)    | 192.9 | 40         | 15 (19) <sup>1)</sup> | 60         | ~69  | 20         | 98  | 60 | 3   | 11          | 3           | 7          | 14   | 22   |
| LFR/LFRS-1/4-D-MINI (A)    |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-3/8-D-MINI (A)    |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| <b>Midi</b>                |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-1/4-D-MIDI (A)    | 250   | 55<br>±0.1 | 15 (19) <sup>1)</sup> | 80         | 99   | 32<br>±0.3 | 130 | 60 | 3   | 22          | 5           | 8          | 14   | 24   |
| LFR/LFRS-3/8-D-MIDI (A)    |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-1/2-D-MIDI (A)    |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-3/4-D-MIDI (A)    |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| <b>Maxi</b>                |       |            |                       |            |      |            |     |    |     |             |             |            |      |      |
| LFR/LFRS-1/2-D-MAXI (A)    | 252   | 66         | 15 (19) <sup>1)</sup> | 90         | 82   | 32         | 111 | 60 | 3   | 22          | 4           | 8          | 14   | 24   |
| LFR/LFRS-1/2-D-DI-MAXI (A) | 275   |            |                       |            | ~105 | 32         | 135 |    | 4   |             |             |            |      |      |
| LFR/LFRS-3/4-D-MAXI (A)    | 252   |            |                       |            | 82   | 32         | 111 |    | 3   |             |             |            |      |      |
| LFR/LFRS-3/4-D-DI-MAXI (A) | 275   |            |                       |            | ~105 | 36         | 135 |    | 4   |             |             |            |      |      |
| LFR/LFRS-1-D-MAXI (A)      | 252   |            |                       |            | 82   | 40         | 111 |    | 3   |             |             |            |      |      |
| LFR/LFRS-1-D-DI-MAXI (A)   | 275   |            |                       |            | ~105 | 41         | 135 |    | 4   |             |             |            |      |      |

1) Value in brackets applies to the fully automatic condensate drain.

# Filter regulators LFR/LFRS, D series, metal design

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Technical data

| <b>Ordering data</b>                                       |       |                                                         |                                                |
|------------------------------------------------------------|-------|---------------------------------------------------------|------------------------------------------------|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa) |       |                                                         |                                                |
| Condensate drain                                           | Size  | Connection                                              | Grade of filtration 5 µm                       |
|                                                            |       |                                                         | Part No.    Type                               |
| <b>With pressure gauge, outer scale in bar</b>             |       |                                                         |                                                |
| Turned manually                                            | Micro | Without connecting plates, connecting thread in housing |                                                |
|                                                            |       | M5                                                      | 526273    LFR-M5-D-7-5M-MICRO                  |
|                                                            |       | M7                                                      | 534184    LFR-M7-D-7-5M-MICRO-B                |
|                                                            |       | Connecting plates with connecting thread                |                                                |
|                                                            |       | G $\frac{1}{8}$                                         | 526277    LFR- $\frac{1}{8}$ -D-7-5M-MICRO     |
|                                                            |       | Connecting plates with push-in connector                |                                                |
|                                                            |       | QS-4                                                    | 526289    LFR-QS4-D-7-5M-MICRO                 |
|                                                            |       | QS-6                                                    | 526293    LFR-QS6-D-7-5M-MICRO                 |
| Semi-automatic                                             | Micro | Without connecting plates, connecting thread in housing |                                                |
|                                                            |       | M5                                                      | 526274    LFR-M5-D-7-5M-MICRO-H                |
|                                                            |       | M7                                                      | 534185    LFR-M7-D-7-5M-MICRO-H-B              |
|                                                            |       | Connecting plates with connecting thread                |                                                |
|                                                            |       | G $\frac{1}{8}$                                         | 526278    LFR- $\frac{1}{8}$ -D-7-5M-MICRO-H   |
|                                                            |       | Connecting plates with push-in connector                |                                                |
|                                                            |       | QS-4                                                    | 526290    LFR-QS4-D-7-5M-MICRO-H               |
|                                                            |       | QS-6                                                    | 526294    LFR-QS6-D-7-5M-MICRO-H               |
| <b>Without pressure gauge</b>                              |       |                                                         |                                                |
| Turned manually                                            | Micro | Without connecting plates, connecting thread in housing |                                                |
|                                                            |       | M5                                                      | 526275    LFR-M5-D-7-0-5M-MICRO                |
|                                                            |       | M7                                                      | 534186    LFR-M7-D-7-0-5M-MICRO-B              |
|                                                            |       | Connecting plates with connecting thread                |                                                |
|                                                            |       | G $\frac{1}{8}$                                         | 526279    LFR- $\frac{1}{8}$ -D-7-0-5M-MICRO   |
|                                                            |       | Connecting plates with push-in connector                |                                                |
|                                                            |       | QS-4                                                    | 526291    LFR-QS4-D-7-0-5M-MICRO               |
|                                                            |       | QS-6                                                    | 526295    LFR-QS6-D-7-0-5M-MICRO               |
| Semi-automatic                                             | Micro | Without connecting plates, connecting thread in housing |                                                |
|                                                            |       | M5                                                      | 526276    LFR-M5-D-7-0-5M-MICRO-H              |
|                                                            |       | M7                                                      | 534187    LFR-M7-D-7-0-5M-MICRO-H-B            |
|                                                            |       | Connecting plates with connecting thread                |                                                |
|                                                            |       | G $\frac{1}{8}$                                         | 526280    LFR- $\frac{1}{8}$ -D-7-0-5M-MICRO-H |
|                                                            |       | Connecting plates with push-in connector                |                                                |
|                                                            |       | QS-4                                                    | 526292    LFR-QS4-D-7-0-5M-MICRO-H             |
|                                                            |       | QS-6                                                    | 526296    LFR-QS6-D-7-0-5M-MICRO-H             |



# Filter regulators LFR/LFRS, D series, metal design

Technical data

| Ordering data                                                                                                                  |                                                             |            |                          |                         |                           |                      |                      |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------|--------------------------|-------------------------|---------------------------|----------------------|----------------------|
| Pressure regulation range 0.5 ... 12 bar (0.05 ... 1.2 MPa), rotary knob with detent, connecting plates with connecting thread |                                                             |            |                          |                         |                           |                      |                      |
| Condensate drain                                                                                                               | Size                                                        | Connection | Grade of filtration 5 µm |                         | Grade of filtration 40 µm |                      |                      |
|                                                                                                                                |                                                             |            | Part No.                 | Type                    | Part No.                  | Type                 |                      |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                    |                                                             |            |                          |                         |                           |                      |                      |
| Turned manually                                                                                                                | Mini                                                        | G1/8       | 162718                   | LFR-1/8-D-5M-MINI       | 159630                    | LFR-1/8-D-MINI       |                      |
|                                                                                                                                |                                                             | G1/4       | 162719                   | LFR-1/4-D-5M-MINI       | 159631                    | LFR-1/4-D-MINI       |                      |
|                                                                                                                                |                                                             | G3/8       | 162720                   | LFR-3/8-D-5M-MINI       | 162682                    | LFR-3/8-D-MINI       |                      |
|                                                                                                                                | Midi                                                        | G1/4       | 186483                   | LFR-1/4-D-5M-MIDI       | 186481                    | LFR-1/4-D-MIDI       |                      |
|                                                                                                                                |                                                             | G3/8       | 162721                   | LFR-3/8-D-5M-MIDI       | 159582                    | LFR-3/8-D-MIDI       |                      |
|                                                                                                                                |                                                             | G1/2       | 162722                   | LFR-1/2-D-5M-MIDI       | 159584                    | LFR-1/2-D-MIDI       |                      |
|                                                                                                                                |                                                             | G3/4       | 162723                   | LFR-3/4-D-5M-MIDI       | 162683                    | LFR-3/4-D-MIDI       |                      |
|                                                                                                                                | Maxi                                                        | G1/2       | 186491                   | LFR-1/2-D-5M-MAXI       | 186489                    | LFR-1/2-D-MAXI       |                      |
|                                                                                                                                |                                                             | G3/4       | 162724                   | LFR-3/4-D-5M-MAXI       | 159632                    | LFR-3/4-D-MAXI       |                      |
|                                                                                                                                |                                                             | G1         | 162725                   | LFR-1-D-5M-MAXI         | 159633                    | LFR-1-D-MAXI         |                      |
|                                                                                                                                | With pressure gauge, outer scale in MPa, inner scale in bar |            |                          |                         |                           |                      |                      |
|                                                                                                                                | Turned manually                                             | Mini       | G1/8                     | 8002316                 | LFR-1/8-D-5M-MINI-MPA     | 8002278              | LFR-1/8-D-MINI-MPA   |
| G1/4                                                                                                                           |                                                             |            | 8002317                  | LFR-1/4-D-5M-MINI-MPA   | 8002279                   | LFR-1/4-D-MINI-MPA   |                      |
| G3/8                                                                                                                           |                                                             |            | 8002318                  | LFR-3/8-D-5M-MINI-MPA   | 8002296                   | LFR-3/8-D-MINI-MPA   |                      |
| Midi                                                                                                                           |                                                             | G1/4       | 8002373                  | LFR-1/4-D-5M-MIDI-MPA   | 8002372                   | LFR-1/4-D-MIDI-MPA   |                      |
|                                                                                                                                |                                                             | G3/8       | 8002319                  | LFR-3/8-D-5M-MIDI-MPA   | 8002258                   | LFR-3/8-D-MIDI-MPA   |                      |
|                                                                                                                                |                                                             | G1/2       | 8002320                  | LFR-1/2-D-5M-MIDI-MPA   | 8002260                   | LFR-1/2-D-MIDI-MPA   |                      |
|                                                                                                                                |                                                             | G3/4       | 8002321                  | LFR-3/4-D-5M-MIDI-MPA   | 8002297                   | LFR-3/4-D-MIDI-MPA   |                      |
| Maxi                                                                                                                           |                                                             | G1/2       | 8002377                  | LFR-1/2-D-5M-MAXI-MPA   | 8002376                   | LFR-1/2-D-MAXI-MPA   |                      |
|                                                                                                                                |                                                             | G3/4       | 8002322                  | LFR-3/4-D-5M-MAXI-MPA   | 8002280                   | LFR-3/4-D-MAXI-MPA   |                      |
|                                                                                                                                |                                                             | G1         | 8002323                  | LFR-1-D-5M-MAXI-MPA     | 8002281                   | LFR-1-D-MAXI-MPA     |                      |
| With pressure gauge, outer scale in MPa, inner scale in bar                                                                    |                                                             |            |                          |                         |                           |                      |                      |
| Fully automatic                                                                                                                |                                                             | Mini       | G1/8                     | 8002324                 | LFR-1/8-D-5M-MINI-A-MPA   | 8002282              | LFR-1/8-D-MINI-A-MPA |
|                                                                                                                                | G1/4                                                        |            | 8002325                  | LFR-1/4-D-5M-MINI-A-MPA | 8002283                   | LFR-1/4-D-MINI-A-MPA |                      |
|                                                                                                                                | G3/8                                                        |            | 8002326                  | LFR-3/8-D-5M-MINI-A-MPA | 8002298                   | LFR-3/8-D-MINI-A-MPA |                      |
|                                                                                                                                | Midi                                                        | G1/4       | 8037020                  | LFR-1/4-D-5M-MIDI-A-MPA | 8002374                   | LFR-1/4-D-MIDI-A-MPA |                      |
|                                                                                                                                |                                                             | G3/8       | 8002327                  | LFR-3/8-D-5M-MIDI-A-MPA | 8002259                   | LFR-3/8-D-MIDI-A-MPA |                      |
|                                                                                                                                |                                                             | G1/2       | 8002328                  | LFR-1/2-D-5M-MIDI-A-MPA | 8002261                   | LFR-1/2-D-MIDI-A-MPA |                      |
|                                                                                                                                |                                                             | G3/4       | 8002329                  | LFR-3/4-D-5M-MIDI-A-MPA | 8002299                   | LFR-3/4-D-MIDI-A-MPA |                      |
|                                                                                                                                | Maxi                                                        | G1/2       | 8025567                  | LFR-1/2-D-5M-MAXI-A-MPA | 8002378                   | LFR-1/2-D-MAXI-A-MPA |                      |
|                                                                                                                                |                                                             | G3/4       | 8002330                  | LFR-3/4-D-5M-MAXI-A-MPA | 8002284                   | LFR-3/4-D-MAXI-A-MPA |                      |
|                                                                                                                                |                                                             | G1         | 8002331                  | LFR-1-D-5M-MAXI-A-MPA   | 8002285                   | LFR-1-D-MAXI-A-MPA   |                      |

# Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

| Ordering data                                                                                                                 |                 |                 |                           |                                    |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|---------------------------|------------------------------------|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa), rotary knob with detent, connecting plates with connecting thread |                 |                 |                           |                                    |
| Condensate drain                                                                                                              | Size            | Connection      | Grade of filtration 40 µm |                                    |
|                                                                                                                               |                 |                 | Part No.                  | Type                               |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                   |                 |                 |                           |                                    |
| Turned manually                                                                                                               | Mini            | G $\frac{1}{8}$ | 162702                    | LFR- $\frac{1}{8}$ -D-7-MINI       |
|                                                                                                                               |                 | G $\frac{1}{4}$ | 162703                    | LFR- $\frac{1}{4}$ -D-7-MINI       |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 162704                    | LFR- $\frac{3}{8}$ -D-7-MINI       |
|                                                                                                                               | Midi            | G $\frac{1}{4}$ | 186487                    | LFR- $\frac{1}{4}$ -D-7-MIDI       |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 162705                    | LFR- $\frac{3}{8}$ -D-7-MIDI       |
|                                                                                                                               |                 | G $\frac{1}{2}$ | 162706                    | LFR- $\frac{1}{2}$ -D-7-MIDI       |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 162707                    | LFR- $\frac{3}{4}$ -D-7-MIDI       |
|                                                                                                                               | Maxi            | G $\frac{1}{2}$ | 186495                    | LFR- $\frac{1}{2}$ -D-7-MAXI       |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 162708                    | LFR- $\frac{3}{4}$ -D-7-MAXI       |
|                                                                                                                               |                 | G1              | 162709                    | LFR-1-D-7-MAXI                     |
| Fully automatic                                                                                                               |                 |                 |                           |                                    |
| Fully automatic                                                                                                               | Mini            | G $\frac{1}{8}$ | 162710                    | LFR- $\frac{1}{8}$ -D-7-MINI-A     |
|                                                                                                                               |                 | G $\frac{1}{4}$ | 162711                    | LFR- $\frac{1}{4}$ -D-7-MINI-A     |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 162712                    | LFR- $\frac{3}{8}$ -D-7-MINI-A     |
|                                                                                                                               | Midi            | G $\frac{1}{4}$ | 186488                    | LFR- $\frac{1}{4}$ -D-7-MIDI-A     |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 162713                    | LFR- $\frac{3}{8}$ -D-7-MIDI-A     |
|                                                                                                                               |                 | G $\frac{1}{2}$ | 162714                    | LFR- $\frac{1}{2}$ -D-7-MIDI-A     |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 162715                    | LFR- $\frac{3}{4}$ -D-7-MIDI-A     |
|                                                                                                                               | Maxi            | G $\frac{1}{2}$ | 186496                    | LFR- $\frac{1}{2}$ -D-7-MAXI-A     |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 162716                    | LFR- $\frac{3}{4}$ -D-7-MAXI-A     |
|                                                                                                                               |                 | G1              | 162717                    | LFR-1-D-7-MAXI-A                   |
| With pressure gauge, outer scale in MPa, inner scale in bar                                                                   |                 |                 |                           |                                    |
| Turned manually                                                                                                               | Mini            | G $\frac{1}{8}$ | 8002300                   | LFR- $\frac{1}{8}$ -D-7-MINI-MPA   |
|                                                                                                                               |                 | G $\frac{1}{4}$ | 8002301                   | LFR- $\frac{1}{4}$ -D-7-MINI-MPA   |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 8002302                   | LFR- $\frac{3}{8}$ -D-7-MINI-MPA   |
|                                                                                                                               | Midi            | G $\frac{3}{8}$ | 8002303                   | LFR- $\frac{3}{8}$ -D-7-MIDI-MPA   |
|                                                                                                                               |                 | G $\frac{1}{2}$ | 8002304                   | LFR- $\frac{1}{2}$ -D-7-MIDI-MPA   |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 8002305                   | LFR- $\frac{3}{4}$ -D-7-MIDI-MPA   |
|                                                                                                                               | Maxi            | G $\frac{3}{4}$ | 8002306                   | LFR- $\frac{3}{4}$ -D-7-MAXI-MPA   |
|                                                                                                                               |                 | G1              | 8002307                   | LFR-1-D-7-MAXI-MPA                 |
|                                                                                                                               | Fully automatic |                 |                           |                                    |
| Fully automatic                                                                                                               | Mini            | G $\frac{1}{8}$ | 8002308                   | LFR- $\frac{1}{8}$ -D-7-MINI-A-MPA |
|                                                                                                                               |                 | G $\frac{1}{4}$ | 8002309                   | LFR- $\frac{1}{4}$ -D-7-MINI-A-MPA |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 8002310                   | LFR- $\frac{3}{8}$ -D-7-MINI-A-MPA |
|                                                                                                                               | Midi            | G $\frac{1}{4}$ | 8002375                   | LFR- $\frac{1}{4}$ -D-7-MIDI-A-MPA |
|                                                                                                                               |                 | G $\frac{3}{8}$ | 8002311                   | LFR- $\frac{3}{8}$ -D-7-MIDI-A-MPA |
|                                                                                                                               |                 | G $\frac{1}{2}$ | 8002312                   | LFR- $\frac{1}{2}$ -D-7-MIDI-A-MPA |
|                                                                                                                               |                 | G $\frac{3}{4}$ | 8002313                   | LFR- $\frac{3}{4}$ -D-7-MIDI-A-MPA |
|                                                                                                                               | Maxi            | G $\frac{3}{4}$ | 8002314                   | LFR- $\frac{3}{4}$ -D-7-MAXI-A-MPA |
|                                                                                                                               |                 | G1              | 8002315                   | LFR-1-D-7-MAXI-A-MPA               |

# Filter regulators LFR/LFRS, D series, metal design

Technical data

| Ordering data                                                                                                                  |      |            |                          |                                     |                           |                                  |
|--------------------------------------------------------------------------------------------------------------------------------|------|------------|--------------------------|-------------------------------------|---------------------------|----------------------------------|
| Pressure regulation range 0.5 ... 12 bar (0.05 ... 1.2 MPa), rotary knob with detent, connecting plates with connecting thread |      |            |                          |                                     |                           |                                  |
| Condensate drain                                                                                                               | Size | Connection | Grade of filtration 5 µm |                                     | Grade of filtration 40 µm |                                  |
|                                                                                                                                |      |            | Part No.                 | Type                                | Part No.                  | Type                             |
| Without pressure gauge                                                                                                         |      |            |                          |                                     |                           |                                  |
| Turned manually                                                                                                                | Mini | G1/8       | 192610                   | LFR-1/8-D-5M-O-MINI <sup>1)</sup>   | 162686                    | LFR-1/8-D-O-MINI <sup>1)</sup>   |
|                                                                                                                                |      | G1/4       | 192611                   | LFR-1/4-D-5M-O-MINI <sup>1)</sup>   | 162687                    | LFR-1/4-D-O-MINI <sup>1)</sup>   |
|                                                                                                                                |      | G3/8       | 192612                   | LFR-3/8-D-5M-O-MINI <sup>1)</sup>   | 162688                    | LFR-3/8-D-O-MINI <sup>1)</sup>   |
|                                                                                                                                | Midi | G1/4       | 192613                   | LFR-1/4-D-5M-O-MIDI <sup>1)</sup>   | 186482                    | LFR-1/4-D-O-MIDI <sup>1)</sup>   |
|                                                                                                                                |      | G3/8       | 192614                   | LFR-3/8-D-5M-O-MIDI <sup>1)</sup>   | 162689                    | LFR-3/8-D-O-MIDI <sup>1)</sup>   |
|                                                                                                                                |      | G1/2       | 192615                   | LFR-1/2-D-5M-O-MIDI <sup>1)</sup>   | 162690                    | LFR-1/2-D-O-MIDI <sup>1)</sup>   |
|                                                                                                                                |      | G3/4       | 192616                   | LFR-3/4-D-5M-O-MIDI <sup>1)</sup>   | 162691                    | LFR-3/4-D-O-MIDI <sup>1)</sup>   |
|                                                                                                                                | Maxi | G1/2       | 192617                   | LFR-1/2-D-5M-O-MAXI <sup>1)</sup>   | 186490                    | LFR-1/2-D-O-MAXI <sup>1)</sup>   |
|                                                                                                                                |      | G3/4       | 192618                   | LFR-3/4-D-5M-O-MAXI <sup>1)</sup>   | 162692                    | LFR-3/4-D-O-MAXI <sup>1)</sup>   |
|                                                                                                                                |      | G1         | 192619                   | LFR-1-D-5M-O-MAXI <sup>1)</sup>     | 162693                    | LFR-1-D-O-MAXI <sup>1)</sup>     |
| Fully automatic                                                                                                                |      |            |                          |                                     |                           |                                  |
| Fully automatic                                                                                                                | Mini | G1/8       | 192620                   | LFR-1/8-D-5M-O-MINI-A <sup>1)</sup> | 162694                    | LFR-1/8-D-O-MINI-A <sup>1)</sup> |
|                                                                                                                                |      | G1/4       | 192621                   | LFR-1/4-D-5M-O-MINI-A <sup>1)</sup> | 162695                    | LFR-1/4-D-O-MINI-A <sup>1)</sup> |
|                                                                                                                                |      | G3/8       | 192622                   | LFR-3/8-D-5M-O-MINI-A <sup>1)</sup> | 162696                    | LFR-3/8-D-O-MINI-A <sup>1)</sup> |
|                                                                                                                                | Midi | G1/4       | 192623                   | LFR-1/4-D-5M-O-MIDI-A <sup>1)</sup> | 186485                    | LFR-1/4-D-O-MIDI-A <sup>1)</sup> |
|                                                                                                                                |      | G3/8       | 192624                   | LFR-3/8-D-5M-O-MIDI-A <sup>1)</sup> | 162697                    | LFR-3/8-D-O-MIDI-A <sup>1)</sup> |
|                                                                                                                                |      | G1/2       | 192625                   | LFR-1/2-D-5M-O-MIDI-A <sup>1)</sup> | 162698                    | LFR-1/2-D-O-MIDI-A <sup>1)</sup> |
|                                                                                                                                |      | G3/4       | 192626                   | LFR-3/4-D-5M-O-MIDI-A <sup>1)</sup> | 162699                    | LFR-3/4-D-O-MIDI-A <sup>1)</sup> |
|                                                                                                                                | Maxi | G1/2       | 192627                   | LFR-1/2-D-5M-O-MAXI-A <sup>1)</sup> | 186493                    | LFR-1/2-D-O-MAXI-A <sup>1)</sup> |
|                                                                                                                                |      | G3/4       | 192628                   | LFR-3/4-D-5M-O-MAXI-A <sup>1)</sup> | 162700                    | LFR-3/4-D-O-MAXI-A <sup>1)</sup> |
|                                                                                                                                |      | G1         | 192629                   | LFR-1-D-5M-O-MAXI-A <sup>1)</sup>   | 162701                    | LFR-1-D-O-MAXI-A <sup>1)</sup>   |

1) Free of copper and PTFE

| Ordering data                                                                                                                 |      |            |                           |                                    |  |  |
|-------------------------------------------------------------------------------------------------------------------------------|------|------------|---------------------------|------------------------------------|--|--|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa), rotary knob with detent, connecting plates with connecting thread |      |            |                           |                                    |  |  |
| Condensate drain                                                                                                              | Size | Connection | Grade of filtration 40 µm |                                    |  |  |
|                                                                                                                               |      |            | Part No.                  | Type                               |  |  |
| Without pressure gauge                                                                                                        |      |            |                           |                                    |  |  |
| Turned manually                                                                                                               | Mini | G1/8       | 192590                    | LFR-1/8-D-7-O-MINI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G1/4       | 192591                    | LFR-1/4-D-7-O-MINI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G3/8       | 192592                    | LFR-3/8-D-7-O-MINI <sup>1)</sup>   |  |  |
|                                                                                                                               | Midi | G1/4       | 192593                    | LFR-1/4-D-7-O-MIDI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G3/8       | 192594                    | LFR-3/8-D-7-O-MIDI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G1/2       | 192595                    | LFR-1/2-D-7-O-MIDI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G3/4       | 192596                    | LFR-3/4-D-7-O-MIDI <sup>1)</sup>   |  |  |
|                                                                                                                               | Maxi | G1/2       | 192597                    | LFR-1/2-D-7-O-MAXI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G3/4       | 192598                    | LFR-3/4-D-7-O-MAXI <sup>1)</sup>   |  |  |
|                                                                                                                               |      | G1         | 192599                    | LFR-1-D-7-O-MAXI <sup>1)</sup>     |  |  |
| Fully automatic                                                                                                               |      |            |                           |                                    |  |  |
| Fully automatic                                                                                                               | Mini | G1/8       | 192600                    | LFR-1/8-D-7-O-MINI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G1/4       | 192601                    | LFR-1/4-D-7-O-MINI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G3/8       | 192602                    | LFR-3/8-D-7-O-MINI-A <sup>1)</sup> |  |  |
|                                                                                                                               | Midi | G1/4       | 192603                    | LFR-1/4-D-7-O-MIDI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G3/8       | 192604                    | LFR-3/8-D-7-O-MIDI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G1/2       | 192605                    | LFR-1/2-D-7-O-MIDI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G3/4       | 192606                    | LFR-3/4-D-7-O-MIDI-A <sup>1)</sup> |  |  |
|                                                                                                                               | Maxi | G1/2       | 192607                    | LFR-1/2-D-7-O-MAXI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G3/4       | 192608                    | LFR-3/4-D-7-O-MAXI-A <sup>1)</sup> |  |  |
|                                                                                                                               |      | G1         | 192609                    | LFR-1-D-7-O-MAXI-A <sup>1)</sup>   |  |  |

1) Free of copper and PTFE

# Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

| Ordering data                                                                                                                                                                                              |      |                 |                          |                                      |                           |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|--------------------------|--------------------------------------|---------------------------|-----------------------------------|
| Pressure regulation range 0.5 ... 12 bar (0.05 ... 1.2 MPa), directly actuated diaphragm regulator with integrated return flow function, rotary knob with detent, connecting plates with connecting thread |      |                 |                          |                                      |                           |                                   |
| Condensate drain                                                                                                                                                                                           | Size | Connection      | Grade of filtration 5 µm |                                      | Grade of filtration 40 µm |                                   |
|                                                                                                                                                                                                            |      |                 | Part No.                 | Type                                 | Part No.                  | Type                              |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                                                                                                |      |                 |                          |                                      |                           |                                   |
| Turned manually                                                                                                                                                                                            | Maxi | G $\frac{1}{2}$ | 192370                   | LFR- $\frac{1}{2}$ -D-5M-DI-MAXI     | 192368                    | LFR- $\frac{1}{2}$ -D-DI-MAXI     |
|                                                                                                                                                                                                            |      | G $\frac{3}{4}$ | 192376                   | LFR- $\frac{3}{4}$ -D-5M-DI-MAXI     | 192374                    | LFR- $\frac{3}{4}$ -D-DI-MAXI     |
|                                                                                                                                                                                                            |      | G1              | 192382                   | LFR-1-D-5M-DI-MAXI                   | 192380                    | LFR-1-D-DI-MAXI                   |
| Fully automatic                                                                                                                                                                                            | Maxi | G $\frac{1}{2}$ | 192388                   | LFR- $\frac{1}{2}$ -D-5M-DI-MAXI-A   | 192386                    | LFR- $\frac{1}{2}$ -D-DI-MAXI-A   |
|                                                                                                                                                                                                            |      | G $\frac{3}{4}$ | 192394                   | LFR- $\frac{3}{4}$ -D-5M-DI-MAXI-A   | 192392                    | LFR- $\frac{3}{4}$ -D-DI-MAXI-A   |
|                                                                                                                                                                                                            |      | G1              | 192400                   | LFR-1-D-5M-DI-MAXI-A                 | 192398                    | LFR-1-D-DI-MAXI-A                 |
| Without pressure gauge                                                                                                                                                                                     |      |                 |                          |                                      |                           |                                   |
| Turned manually                                                                                                                                                                                            | Maxi | G $\frac{1}{2}$ | 192371                   | LFR- $\frac{1}{2}$ -D-5M-O-DI-MAXI   | 192369                    | LFR- $\frac{1}{2}$ -D-O-DI-MAXI   |
|                                                                                                                                                                                                            |      | G $\frac{3}{4}$ | 192377                   | LFR- $\frac{3}{4}$ -D-5M-O-DI-MAXI   | 192375                    | LFR- $\frac{3}{4}$ -D-O-DI-MAXI   |
|                                                                                                                                                                                                            |      | G1              | 192383                   | LFR-1-D-5M-O-DI-MAXI                 | 192381                    | LFR-1-D-O-DI-MAXI                 |
| Fully automatic                                                                                                                                                                                            | Maxi | G $\frac{1}{2}$ | 192389                   | LFR- $\frac{1}{2}$ -D-5M-O-DI-MAXI-A | 192387                    | LFR- $\frac{1}{2}$ -D-O-DI-MAXI-A |
|                                                                                                                                                                                                            |      | G $\frac{3}{4}$ | 192395                   | LFR- $\frac{3}{4}$ -D-5M-O-DI-MAXI-A | 192393                    | LFR- $\frac{3}{4}$ -D-O-DI-MAXI-A |
|                                                                                                                                                                                                            |      | G1              | 192401                   | LFR-1-D-5M-O-DI-MAXI-A               | 192399                    | LFR-1-D-O-DI-MAXI-A               |

| Ordering data                                                                                                                                                                                             |      |                 |                          |      |                           |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|--------------------------|------|---------------------------|-------------------------------------|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa), directly actuated diaphragm regulator with integrated return flow function, rotary knob with detent, connecting plates with connecting thread |      |                 |                          |      |                           |                                     |
| Condensate drain                                                                                                                                                                                          | Size | Connection      | Grade of filtration 5 µm |      | Grade of filtration 40 µm |                                     |
|                                                                                                                                                                                                           |      |                 | Part No.                 | Type | Part No.                  | Type                                |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                                                                                               |      |                 |                          |      |                           |                                     |
| Turned manually                                                                                                                                                                                           | Maxi | G $\frac{1}{2}$ | –                        |      | 192372                    | LFR- $\frac{1}{2}$ -D-7-DI-MAXI     |
|                                                                                                                                                                                                           |      | G $\frac{3}{4}$ | –                        |      | 192378                    | LFR- $\frac{3}{4}$ -D-7-DI-MAXI     |
|                                                                                                                                                                                                           |      | G1              | –                        |      | 192384                    | LFR-1-D-7-DI-MAXI                   |
| Fully automatic                                                                                                                                                                                           | Maxi | G $\frac{1}{2}$ | –                        |      | 192390                    | LFR- $\frac{1}{2}$ -D-7-DI-MAXI-A   |
|                                                                                                                                                                                                           |      | G $\frac{3}{4}$ | –                        |      | 192396                    | LFR- $\frac{3}{4}$ -D-7-DI-MAXI-A   |
|                                                                                                                                                                                                           |      | G1              | –                        |      | 192402                    | LFR-1-D-7-DI-MAXI-A                 |
| With pressure gauge, outer scale in MPa, inner scale in bar                                                                                                                                               |      |                 |                          |      |                           |                                     |
| Turned manually                                                                                                                                                                                           | Maxi | G1              | –                        |      | 8002399                   | LFR-1-D-7-DI-MAXI-MPA               |
| Without pressure gauge                                                                                                                                                                                    |      |                 |                          |      |                           |                                     |
| Turned manually                                                                                                                                                                                           | Maxi | G $\frac{1}{2}$ | –                        |      | 192373                    | LFR- $\frac{1}{2}$ -D-7-O-DI-MAXI   |
|                                                                                                                                                                                                           |      | G $\frac{3}{4}$ | –                        |      | 192379                    | LFR- $\frac{3}{4}$ -D-7-O-DI-MAXI   |
|                                                                                                                                                                                                           |      | G1              | –                        |      | 192385                    | LFR-1-D-7-O-DI-MAXI                 |
| Fully automatic                                                                                                                                                                                           | Maxi | G $\frac{1}{2}$ | –                        |      | 192391                    | LFR- $\frac{1}{2}$ -D-7-O-DI-MAXI-A |
|                                                                                                                                                                                                           |      | G $\frac{3}{4}$ | –                        |      | 192397                    | LFR- $\frac{3}{4}$ -D-7-O-DI-MAXI-A |
|                                                                                                                                                                                                           |      | G1              | –                        |      | 192403                    | LFR-1-D-7-O-DI-MAXI-A               |

# Filter regulators LFR/LFRS, D series, metal design

Technical data

| Ordering data                                                                                                                           |                 |            |                          |                        |                           |                     |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------|--------------------------|------------------------|---------------------------|---------------------|---------------------|
| Pressure regulation range 0.5 ... 12 bar (0.05 ... 1.2 MPa), rotary knob with integrated lock, connecting plates with connecting thread |                 |            |                          |                        |                           |                     |                     |
| Condensate drain                                                                                                                        | Size            | Connection | Grade of filtration 5 µm |                        | Grade of filtration 40 µm |                     |                     |
|                                                                                                                                         |                 |            | Part No.                 | Type                   | Part No.                  | Type                |                     |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                             |                 |            |                          |                        |                           |                     |                     |
| Turned manually                                                                                                                         | Mini            | G1/8       | 194704                   | LFRS-1/8-D-5M-MINI     | 194696                    | LFRS-1/8-D-MINI     |                     |
|                                                                                                                                         |                 | G1/4       | 194716                   | LFRS-1/4-D-5M-MINI     | 194708                    | LFRS-1/4-D-MINI     |                     |
|                                                                                                                                         |                 | G3/8       | 194728                   | LFRS-3/8-D-5M-MINI     | 194720                    | LFRS-3/8-D-MINI     |                     |
|                                                                                                                                         | Midi            | G1/4       | 194740                   | LFRS-1/4-D-5M-MIDI     | 194732                    | LFRS-1/4-D-MIDI     |                     |
|                                                                                                                                         |                 | G3/8       | 194752                   | LFRS-3/8-D-5M-MIDI     | 194744                    | LFRS-3/8-D-MIDI     |                     |
|                                                                                                                                         |                 | G1/2       | 194764                   | LFRS-1/2-D-5M-MIDI     | 194756                    | LFRS-1/2-D-MIDI     |                     |
|                                                                                                                                         |                 | G3/4       | 194776                   | LFRS-3/4-D-5M-MIDI     | 194768                    | LFRS-3/4-D-MIDI     |                     |
|                                                                                                                                         | Maxi            | G1/2       | 194788                   | LFRS-1/2-D-5M-MAXI     | 194780                    | LFRS-1/2-D-MAXI     |                     |
|                                                                                                                                         |                 | G3/4       | 194800                   | LFRS-3/4-D-5M-MAXI     | 194792                    | LFRS-3/4-D-MAXI     |                     |
|                                                                                                                                         |                 | G1         | 194812                   | LFRS-1-D-5M-MAXI       | 194804                    | LFRS-1-D-MAXI       |                     |
|                                                                                                                                         | Fully automatic |            |                          |                        |                           |                     |                     |
|                                                                                                                                         | Fully automatic | Mini       | G1/8                     | 194706                 | LFRS-1/8-D-5M-MINI-A      | 194697              | LFRS-1/8-D-MINI-A   |
| G1/4                                                                                                                                    |                 |            | 194718                   | LFRS-1/4-D-5M-MINI-A   | 194709                    | LFRS-1/4-D-MINI-A   |                     |
| G3/8                                                                                                                                    |                 |            | 194730                   | LFRS-3/8-D-5M-MINI-A   | 194721                    | LFRS-3/8-D-MINI-A   |                     |
| Midi                                                                                                                                    |                 | G1/4       | 194742                   | LFRS-1/4-D-5M-MIDI-A   | 194733                    | LFRS-1/4-D-MIDI-A   |                     |
|                                                                                                                                         |                 | G3/8       | 194754                   | LFRS-3/8-D-5M-MIDI-A   | 194745                    | LFRS-3/8-D-MIDI-A   |                     |
|                                                                                                                                         |                 | G1/2       | 194766                   | LFRS-1/2-D-5M-MIDI-A   | 194757                    | LFRS-1/2-D-MIDI-A   |                     |
|                                                                                                                                         |                 | G3/4       | 194778                   | LFRS-3/4-D-5M-MIDI-A   | 194769                    | LFRS-3/4-D-MIDI-A   |                     |
| Maxi                                                                                                                                    |                 | G1/2       | 194790                   | LFRS-1/2-D-5M-MAXI-A   | 194781                    | LFRS-1/2-D-MAXI-A   |                     |
|                                                                                                                                         |                 | G3/4       | 194802                   | LFRS-3/4-D-5M-MAXI-A   | 194793                    | LFRS-3/4-D-MAXI-A   |                     |
|                                                                                                                                         |                 | G1         | 194814                   | LFRS-1-D-5M-MAXI-A     | 194805                    | LFRS-1-D-MAXI-A     |                     |
| Without pressure gauge                                                                                                                  |                 |            |                          |                        |                           |                     |                     |
| Turned manually                                                                                                                         |                 | Mini       | G1/8                     | 194705                 | LFRS-1/8-D-5M-O-MINI      | 194698              | LFRS-1/8-D-O-MINI   |
|                                                                                                                                         | G1/4            |            | 194717                   | LFRS-1/4-D-5M-O-MINI   | 194710                    | LFRS-1/4-D-O-MINI   |                     |
|                                                                                                                                         | G3/8            |            | 194729                   | LFRS-3/8-D-5M-O-MINI   | 194722                    | LFRS-3/8-D-O-MINI   |                     |
|                                                                                                                                         | Midi            | G1/4       | 194741                   | LFRS-1/4-D-5M-O-MIDI   | 194734                    | LFRS-1/4-D-O-MIDI   |                     |
|                                                                                                                                         |                 | G3/8       | 194753                   | LFRS-3/8-D-5M-O-MIDI   | 194746                    | LFRS-3/8-D-O-MIDI   |                     |
|                                                                                                                                         |                 | G1/2       | 194765                   | LFRS-1/2-D-5M-O-MIDI   | 194758                    | LFRS-1/2-D-O-MIDI   |                     |
|                                                                                                                                         |                 | G3/4       | 194777                   | LFRS-3/4-D-5M-O-MIDI   | 194770                    | LFRS-3/4-D-O-MIDI   |                     |
|                                                                                                                                         | Maxi            | G1/2       | 194789                   | LFRS-1/2-D-5M-O-MAXI   | 194782                    | LFRS-1/2-D-O-MAXI   |                     |
|                                                                                                                                         |                 | G3/4       | 194801                   | LFRS-3/4-D-5M-O-MAXI   | 194794                    | LFRS-3/4-D-O-MAXI   |                     |
|                                                                                                                                         |                 | G1         | 194813                   | LFRS-1-D-5M-O-MAXI     | 194806                    | LFRS-1-D-O-MAXI     |                     |
|                                                                                                                                         | Fully automatic |            |                          |                        |                           |                     |                     |
|                                                                                                                                         | Fully automatic | Mini       | G1/8                     | 194707                 | LFRS-1/8-D-5M-O-MINI-A    | 194699              | LFRS-1/8-D-O-MINI-A |
| G1/4                                                                                                                                    |                 |            | 194719                   | LFRS-1/4-D-5M-O-MINI-A | 194711                    | LFRS-1/4-D-O-MINI-A |                     |
| G3/8                                                                                                                                    |                 |            | 194731                   | LFRS-3/8-D-5M-O-MINI-A | 194723                    | LFRS-3/8-D-O-MINI-A |                     |
| Midi                                                                                                                                    |                 | G1/4       | 194743                   | LFRS-1/4-D-5M-O-MIDI-A | 194735                    | LFRS-1/4-D-O-MIDI-A |                     |
|                                                                                                                                         |                 | G3/8       | 194755                   | LFRS-3/8-D-5M-O-MIDI-A | 194747                    | LFRS-3/8-D-O-MIDI-A |                     |
|                                                                                                                                         |                 | G1/2       | 194767                   | LFRS-1/2-D-5M-O-MIDI-A | 194759                    | LFRS-1/2-D-O-MIDI-A |                     |
|                                                                                                                                         |                 | G3/4       | 194779                   | LFRS-3/4-D-5M-O-MIDI-A | 194771                    | LFRS-3/4-D-O-MIDI-A |                     |
| Maxi                                                                                                                                    |                 | G1/2       | 194791                   | LFRS-1/2-D-5M-O-MAXI-A | 194783                    | LFRS-1/2-D-O-MAXI-A |                     |
|                                                                                                                                         |                 | G3/4       | 194803                   | LFRS-3/4-D-5M-O-MAXI-A | 194795                    | LFRS-3/4-D-O-MAXI-A |                     |
|                                                                                                                                         |                 | G1         | 194815                   | LFRS-1-D-5M-O-MAXI-A   | 194807                    | LFRS-1-D-O-MAXI-A   |                     |

# Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

| Ordering data                                                                                                                          |      |                 |                           |                                   |
|----------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|---------------------------|-----------------------------------|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa), rotary knob with integrated lock, connecting plates with connecting thread |      |                 |                           |                                   |
| Condensate drain                                                                                                                       | Size | Connection      | Grade of filtration 40 µm |                                   |
|                                                                                                                                        |      |                 | Part No.                  | Type                              |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                            |      |                 |                           |                                   |
| Turned manually                                                                                                                        | Mini | G $\frac{1}{8}$ | 194700                    | LFRS- $\frac{1}{8}$ -D-7-MINI     |
|                                                                                                                                        |      | G $\frac{1}{4}$ | 194712                    | LFRS- $\frac{1}{4}$ -D-7-MINI     |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194724                    | LFRS- $\frac{3}{8}$ -D-7-MINI     |
|                                                                                                                                        | Midi | G $\frac{1}{4}$ | 194736                    | LFRS- $\frac{1}{4}$ -D-7-MIDI     |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194748                    | LFRS- $\frac{3}{8}$ -D-7-MIDI     |
|                                                                                                                                        |      | G $\frac{1}{2}$ | 194760                    | LFRS- $\frac{1}{2}$ -D-7-MIDI     |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194772                    | LFRS- $\frac{3}{4}$ -D-7-MIDI     |
|                                                                                                                                        | Maxi | G $\frac{1}{2}$ | 194784                    | LFRS- $\frac{1}{2}$ -D-7-MAXI     |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194796                    | LFRS- $\frac{3}{4}$ -D-7-MAXI     |
| G1                                                                                                                                     |      | 194808          | LFRS-1-D-7-MAXI           |                                   |
| Fully automatic                                                                                                                        |      |                 |                           |                                   |
| Fully automatic                                                                                                                        | Mini | G $\frac{1}{8}$ | 194702                    | LFRS- $\frac{1}{8}$ -D-7-MINI-A   |
|                                                                                                                                        |      | G $\frac{1}{4}$ | 194714                    | LFRS- $\frac{1}{4}$ -D-7-MINI-A   |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194726                    | LFRS- $\frac{3}{8}$ -D-7-MINI-A   |
|                                                                                                                                        | Midi | G $\frac{1}{4}$ | 194738                    | LFRS- $\frac{1}{4}$ -D-7-MIDI-A   |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194750                    | LFRS- $\frac{3}{8}$ -D-7-MIDI-A   |
|                                                                                                                                        |      | G $\frac{1}{2}$ | 194762                    | LFRS- $\frac{1}{2}$ -D-7-MIDI-A   |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194774                    | LFRS- $\frac{3}{4}$ -D-7-MIDI-A   |
|                                                                                                                                        | Maxi | G $\frac{1}{2}$ | 194786                    | LFRS- $\frac{1}{2}$ -D-7-MAXI-A   |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194798                    | LFRS- $\frac{3}{4}$ -D-7-MAXI-A   |
| G1                                                                                                                                     |      | 194810          | LFRS-1-D-7-MAXI-A         |                                   |
| Without pressure gauge                                                                                                                 |      |                 |                           |                                   |
| Turned manually                                                                                                                        | Mini | G $\frac{1}{8}$ | 194701                    | LFRS- $\frac{1}{8}$ -D-7-O-MINI   |
|                                                                                                                                        |      | G $\frac{1}{4}$ | 194713                    | LFRS- $\frac{1}{4}$ -D-7-O-MINI   |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194725                    | LFRS- $\frac{3}{8}$ -D-7-O-MINI   |
|                                                                                                                                        | Midi | G $\frac{1}{4}$ | 194737                    | LFRS- $\frac{1}{4}$ -D-7-O-MIDI   |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194749                    | LFRS- $\frac{3}{8}$ -D-7-O-MIDI   |
|                                                                                                                                        |      | G $\frac{1}{2}$ | 194761                    | LFRS- $\frac{1}{2}$ -D-7-O-MIDI   |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194773                    | LFRS- $\frac{3}{4}$ -D-7-O-MIDI   |
|                                                                                                                                        | Maxi | G $\frac{1}{2}$ | 194785                    | LFRS- $\frac{1}{2}$ -D-7-O-MAXI   |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194797                    | LFRS- $\frac{3}{4}$ -D-7-O-MAXI   |
| G1                                                                                                                                     |      | 194809          | LFRS-1-D-7-O-MAXI         |                                   |
| Fully automatic                                                                                                                        |      |                 |                           |                                   |
| Fully automatic                                                                                                                        | Mini | G $\frac{1}{8}$ | 194703                    | LFRS- $\frac{1}{8}$ -D-7-O-MINI-A |
|                                                                                                                                        |      | G $\frac{1}{4}$ | 194715                    | LFRS- $\frac{1}{4}$ -D-7-O-MINI-A |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194727                    | LFRS- $\frac{3}{8}$ -D-7-O-MINI-A |
|                                                                                                                                        | Midi | G $\frac{1}{4}$ | 194739                    | LFRS- $\frac{1}{4}$ -D-7-O-MIDI-A |
|                                                                                                                                        |      | G $\frac{3}{8}$ | 194751                    | LFRS- $\frac{3}{8}$ -D-7-O-MIDI-A |
|                                                                                                                                        |      | G $\frac{1}{2}$ | 194763                    | LFRS- $\frac{1}{2}$ -D-7-O-MIDI-A |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194775                    | LFRS- $\frac{3}{4}$ -D-7-O-MIDI-A |
|                                                                                                                                        | Maxi | G $\frac{1}{2}$ | 194787                    | LFRS- $\frac{1}{2}$ -D-7-O-MAXI-A |
|                                                                                                                                        |      | G $\frac{3}{4}$ | 194799                    | LFRS- $\frac{3}{4}$ -D-7-O-MAXI-A |
| G1                                                                                                                                     |      | 194811          | LFRS-1-D-7-O-MAXI-A       |                                   |

# Filter regulators LFR/LFRS, D series, metal design

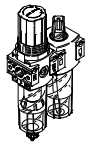
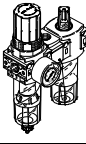
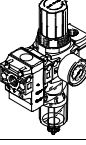
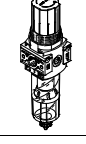

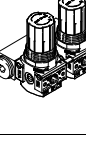
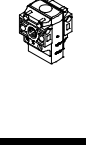
Technical data

| Ordering data                                                                                                                                                                                                       |      |            |                          |                           |                           |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|--------------------------|---------------------------|---------------------------|------------------------|
| Pressure regulation range 0.5 ... 12 bar (0.05 ... 1.2 MPa), directly actuated diaphragm regulator with integrated return flow function, rotary knob with integrated lock, connecting plates with connecting thread |      |            |                          |                           |                           |                        |
| Condensate drain                                                                                                                                                                                                    | Size | Connection | Grade of filtration 5 µm |                           | Grade of filtration 40 µm |                        |
|                                                                                                                                                                                                                     |      |            | Part No.                 | Type                      | Part No.                  | Type                   |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                                                                                                         |      |            |                          |                           |                           |                        |
| Turned manually                                                                                                                                                                                                     | Maxi | G1/2       | 194818                   | LFRS-1/2-D-5M-DI-MAXI     | 194816                    | LFRS-1/2-D-DI-MAXI     |
|                                                                                                                                                                                                                     |      | G3/4       | 194824                   | LFRS-3/4-D-5M-DI-MAXI     | 194822                    | LFRS-3/4-D-DI-MAXI     |
|                                                                                                                                                                                                                     |      | G1         | 194830                   | LFRS-1-D-5M-DI-MAXI       | 194828                    | LFRS-1-D-DI-MAXI       |
| Fully automatic                                                                                                                                                                                                     | Maxi | G1/2       | 194836                   | LFRS-1/2-D-5M-DI-MAXI-A   | 194834                    | LFRS-1/2-D-DI-MAXI-A   |
|                                                                                                                                                                                                                     |      | G3/4       | 194842                   | LFRS-3/4-D-5M-DI-MAXI-A   | 194840                    | LFRS-3/4-D-DI-MAXI-A   |
|                                                                                                                                                                                                                     |      | G1         | 194848                   | LFRS-1-D-5M-DI-MAXI-A     | 194846                    | LFRS-1-D-DI-MAXI-A     |
| Without pressure gauge                                                                                                                                                                                              |      |            |                          |                           |                           |                        |
| Turned manually                                                                                                                                                                                                     | Maxi | G1/2       | 194819                   | LFRS-1/2-D-5M-O-DI-MAXI   | 194817                    | LFRS-1/2-D-O-DI-MAXI   |
|                                                                                                                                                                                                                     |      | G3/4       | 194825                   | LFRS-3/4-D-5M-O-DI-MAXI   | 194823                    | LFRS-3/4-D-O-DI-MAXI   |
|                                                                                                                                                                                                                     |      | G1         | 194831                   | LFRS-1-D-5M-O-DI-MAXI     | 194829                    | LFRS-1-D-O-DI-MAXI     |
| Fully automatic                                                                                                                                                                                                     | Maxi | G1/2       | 194837                   | LFRS-1/2-D-5M-O-DI-MAXI-A | 194835                    | LFRS-1/2-D-O-DI-MAXI-A |
|                                                                                                                                                                                                                     |      | G3/4       | 194843                   | LFRS-3/4-D-5M-O-DI-MAXI-A | 194841                    | LFRS-3/4-D-O-DI-MAXI-A |
|                                                                                                                                                                                                                     |      | G1         | 194849                   | LFRS-1-D-5M-O-DI-MAXI-A   | 194847                    | LFRS-1-D-O-DI-MAXI-A   |

| Ordering data                                                                                                                                                                                                      |      |            |                          |      |                           |                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|--------------------------|------|---------------------------|--------------------------|
| Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa), directly actuated diaphragm regulator with integrated return flow function, rotary knob with integrated lock, connecting plates with connecting thread |      |            |                          |      |                           |                          |
| Condensate drain                                                                                                                                                                                                   | Size | Connection | Grade of filtration 5 µm |      | Grade of filtration 40 µm |                          |
|                                                                                                                                                                                                                    |      |            | Part No.                 | Type | Part No.                  | Type                     |
| With pressure gauge, outer scale in bar, inner scale in psi                                                                                                                                                        |      |            |                          |      |                           |                          |
| Turned manually                                                                                                                                                                                                    | Maxi | G1/2       | -                        | -    | 194820                    | LFRS-1/2-D-7-DI-MAXI     |
|                                                                                                                                                                                                                    |      | G3/4       | -                        | -    | 194826                    | LFRS-3/4-D-7-DI-MAXI     |
|                                                                                                                                                                                                                    |      | G1         | -                        | -    | 194832                    | LFRS-1-D-7-DI-MAXI       |
| Fully automatic                                                                                                                                                                                                    | Maxi | G1/2       | -                        | -    | 194838                    | LFRS-1/2-D-7-DI-MAXI-A   |
|                                                                                                                                                                                                                    |      | G3/4       | -                        | -    | 194844                    | LFRS-3/4-D-7-DI-MAXI-A   |
|                                                                                                                                                                                                                    |      | G1         | -                        | -    | 194850                    | LFRS-1-D-7-DI-MAXI-A     |
| Without pressure gauge                                                                                                                                                                                             |      |            |                          |      |                           |                          |
| Turned manually                                                                                                                                                                                                    | Maxi | G1/2       | -                        | -    | 194821                    | LFRS-1/2-D-7-O-DI-MAXI   |
|                                                                                                                                                                                                                    |      | G3/4       | -                        | -    | 194827                    | LFRS-3/4-D-7-O-DI-MAXI   |
|                                                                                                                                                                                                                    |      | G1         | -                        | -    | 194833                    | LFRS-1-D-7-O-DI-MAXI     |
| Fully automatic                                                                                                                                                                                                    | Maxi | G1/2       | -                        | -    | 194839                    | LFRS-1/2-D-7-O-DI-MAXI-A |
|                                                                                                                                                                                                                    |      | G3/4       | -                        | -    | 194845                    | LFRS-3/4-D-7-O-DI-MAXI-A |
|                                                                                                                                                                                                                    |      | G1         | -                        | -    | 194851                    | LFRS-1-D-7-O-DI-MAXI-A   |

# Filter regulators LFR, D series, polymer

Product range overview D series service units, polymer

| Type                                  | Size                                                                                | Pneumatic connection |    | Pressure regulation range [bar] | Grade of filtration [µm] |    |   |
|---------------------------------------|-------------------------------------------------------------------------------------|----------------------|----|---------------------------------|--------------------------|----|---|
|                                       |                                                                                     | G¼                   | G½ |                                 | 5                        | 40 |   |
| <b>Service units</b>                  |                                                                                     |                      |    |                                 |                          |    |   |
| FRC                                   |    | Mini                 | ■  | -                               | ■                        | ■  | ■ |
| <b>Service unit combinations</b>      |                                                                                     |                      |    |                                 |                          |    |   |
| FRC-K                                 |   | Mini                 | ■  | -                               | ■                        | -  | ■ |
| LFR-K                                 |  | Mini                 | ■  | -                               | ■                        | -  | ■ |
| <b>Individual devices</b>             |                                                                                     |                      |    |                                 |                          |    |   |
| Filter regulators LFR                 |  | Mini                 | ■  | -                               | ■                        | ■  | ■ |
| Pressure regulators LR                |  | Mini                 | ■  | -                               | ■                        | -  | - |
| Pressure regulator combinations LRB-K |  | Mini                 | -  | ■                               | ■                        | -  | - |
| On-off valves HE                      |  | Mini                 | ■  | -                               | -                        | -  | - |



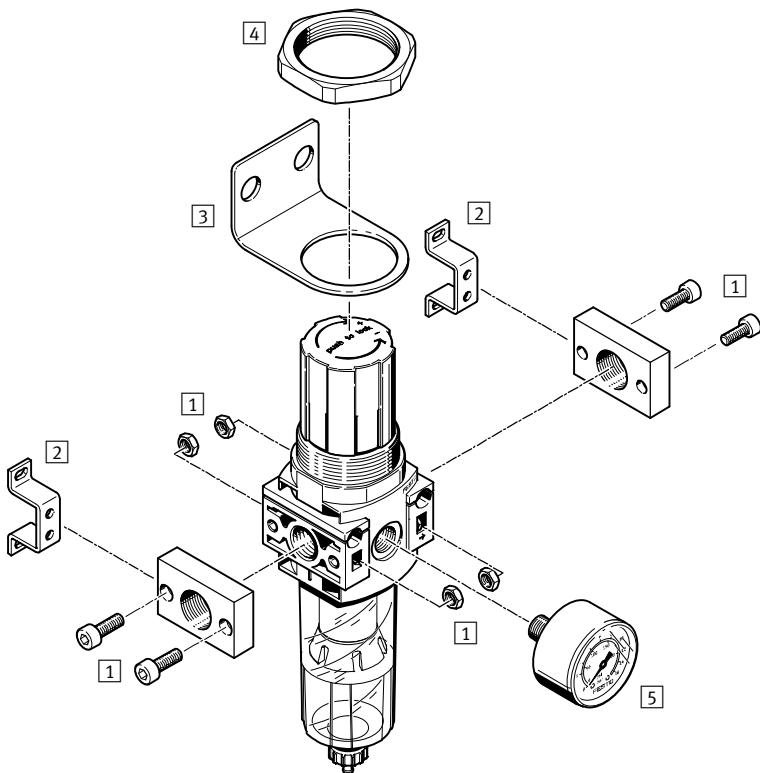
# Filter regulators LFR, D series, polymer

Product range overview D series service units, polymer

| Type                                            | Size | Condensate drain |                | Pressure display    |                        | Actuator lock | Regulating functions   |                           | → Page/<br>Internet |
|-------------------------------------------------|------|------------------|----------------|---------------------|------------------------|---------------|------------------------|---------------------------|---------------------|
|                                                 |      | Manual rotary    | Semi-automatic | With pressure gauge | Without pressure gauge |               | With secondary venting | With return flow function |                     |
| <b>Service units</b>                            |      |                  |                |                     |                        |               |                        |                           |                     |
| FRC                                             | Mini | ■                | ■              | ■                   | -                      | ■             | ■                      | ■                         | frc                 |
| <b>Service unit combinations</b>                |      |                  |                |                     |                        |               |                        |                           |                     |
| FRC-K                                           | Mini | ■                | -              | ■                   | -                      | ■             | ■                      | ■                         | frc                 |
| LFR-K                                           | Mini | ■                | -              | ■                   | -                      | ■             | ■                      | ■                         | lfr                 |
| <b>Individual devices</b>                       |      |                  |                |                     |                        |               |                        |                           |                     |
| Filter regulators<br><b>LFR</b>                 | Mini | ■                | ■              | ■                   | ■                      | ■             | ■                      | ■                         | 26                  |
| Pressure regulators<br><b>LR</b>                | Mini | -                | -              | ■                   | ■                      | ■             | ■                      | ■                         | lr                  |
| Pressure regulator combinations<br><b>LRB-K</b> | Mini | -                | -              | -                   | ■                      | ■             | ■                      | ■                         | lrb                 |
| On-off valves<br><b>HE</b>                      | Mini | -                | -              | -                   | ■                      | -             | -                      | -                         | he                  |

# Filter regulators LFR, D series, polymer

Peripherals overview



| Mounting attachments and accessories |                             | → Page/<br>Internet |
|--------------------------------------|-----------------------------|---------------------|
| 1                                    | Connecting plate kit<br>PBL | pbl                 |
| 2                                    | Mounting bracket<br>HFOE    | hfoe-d              |
| 3                                    | Mounting bracket<br>HR-D    | hr-d                |
| 4                                    | Hex nut<br>HMR              | hmr-d               |
| 5                                    | Pressure gauge<br>MA/PAGN   | 32                  |

# Filter regulators LFR, D series, polymer

Type codes

LFR – ¼ – DB – 7 – 5M – 0 – MINI – H

**Basic function**

|     |                  |
|-----|------------------|
| LFR | Filter regulator |
|-----|------------------|

**Pneumatic connection**

|   |           |
|---|-----------|
| ¼ | Thread G¼ |
|---|-----------|

**Series**

|    |        |
|----|--------|
| DB | Series |
|----|--------|

**Pressure regulation range**

|   |                                  |
|---|----------------------------------|
| 7 | 0.5 ... 7 bar (0.05 ... 0.7 MPa) |
|---|----------------------------------|

**Grade of filtration**

|    |       |
|----|-------|
|    | 40 µm |
| 5M | 5 µm  |

**Pressure gauge**

|   |                        |
|---|------------------------|
|   | With pressure gauge    |
| 0 | Without pressure gauge |

**Size**

|      |  |
|------|--|
| MINI |  |
|------|--|

**Condensate drain**

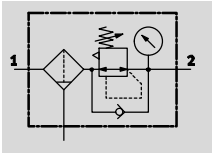
|   |                |
|---|----------------|
|   | Manual rotary  |
| H | Semi-automatic |

# Filter regulators LFR, D series, polymer

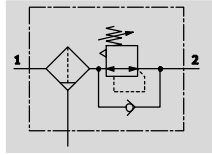
Technical data

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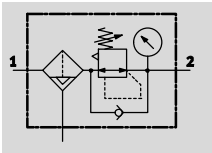
Manual rotary condensate drain,  
with pressure gauge



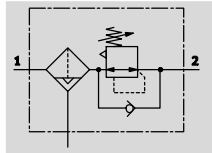
Manual rotary condensate drain,  
without pressure gauge



Semi-automatic condensate drain,  
with pressure gauge



Semi-automatic condensate drain,  
without pressure gauge



- Flow rate  
500 ... 1,200 l/min
- Temperature range  
-5 ... +50 °C
- Operating pressure  
1.5 ... 10 bar  
(0.15 ... 1 MPa)

- Space-saving design with filter and regulator in a single unit
- Good particle separation and high flow rate

- Good regulating characteristics with minimal hysteresis
- With manual or semi-automatic condensate drain

- Setting values are secured by locking the rotary knob
- Choice of filter cartridges: 5 µm or 40 µm
- New filter cartridges → 31

| General technical data          |                                                                                 |                                         |
|---------------------------------|---------------------------------------------------------------------------------|-----------------------------------------|
| Size                            | Mini                                                                            |                                         |
|                                 | with pressure gauge                                                             | without pressure gauge                  |
| Pneumatic connection 1, 2       | G¼                                                                              |                                         |
| Design                          | Filter regulator with pressure gauge                                            | Filter regulator without pressure gauge |
| Regulating function             | With return flow function, with secondary venting                               |                                         |
| Type of mounting                | Inline installation                                                             |                                         |
|                                 | Via through-holes                                                               |                                         |
|                                 | Via mounting bracket                                                            |                                         |
| Assembly position               | Vertical ±5°                                                                    |                                         |
| Grade of filtration [µm]        | 5                                                                               |                                         |
|                                 | 40                                                                              |                                         |
| Air purity class at the output  | Compressed air according to ISO 8573-1:2010 [6:8:4] (grade of filtration 5 µm)  |                                         |
|                                 | Compressed air according to ISO 8573-1:2010 [7:8:4] (grade of filtration 40 µm) |                                         |
|                                 | Inert gases                                                                     |                                         |
| Condensate drain                | Manual rotary                                                                   |                                         |
|                                 | Semi-automatic                                                                  |                                         |
| Regulator lock                  | Rotary knob with detent                                                         |                                         |
| Pressure regulation range [bar] | 0.5 ... 7 (0.05 ... 0.7 MPa)                                                    |                                         |
| Max. hysteresis [bar]           | 0.5 (0.05 MPa)                                                                  |                                         |
| Pressure indication             | Via pressure gauge                                                              | G¼ prepared                             |
| Pressure gauge connection       | G¼                                                                              |                                         |

| Standard nominal flow rate <sup>1)</sup> qnN [l/min] |                     |         |
|------------------------------------------------------|---------------------|---------|
| Size                                                 | Mini                |         |
|                                                      | Grade of filtration | 5 µm    |
| 40 µm                                                |                     | ≥ 1,200 |

1) Measured at p1 = 10 bar (1 MPa), p2 = 6 bar (0.6 MPa) and Δp = 1 bar (0.1 MPa).

# Filter regulators LFR, D series, polymer

Technical data

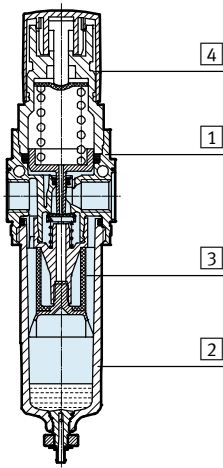
| Operating and environmental conditions       |                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------|
| Size                                         | Mini                                                                       |
| Operating pressure [bar]                     | 1.5 ... 10 (0.15 ... 1 MPa)                                                |
| Operating medium                             | Compressed air in accordance with ISO 8573-1:2010 [--:9:--]<br>Inert gases |
| Ambient temperature [°C]                     | -5 ... +50                                                                 |
| Temperature of medium [°C]                   | -5 ... +50                                                                 |
| Corrosion resistance class CRC <sup>1)</sup> | 1                                                                          |

1) Corrosion resistance class CRC 1 to Festo standard FN 940070  
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

| Weight [g]       |      |
|------------------|------|
| Size             | Mini |
| Filter regulator | 200  |

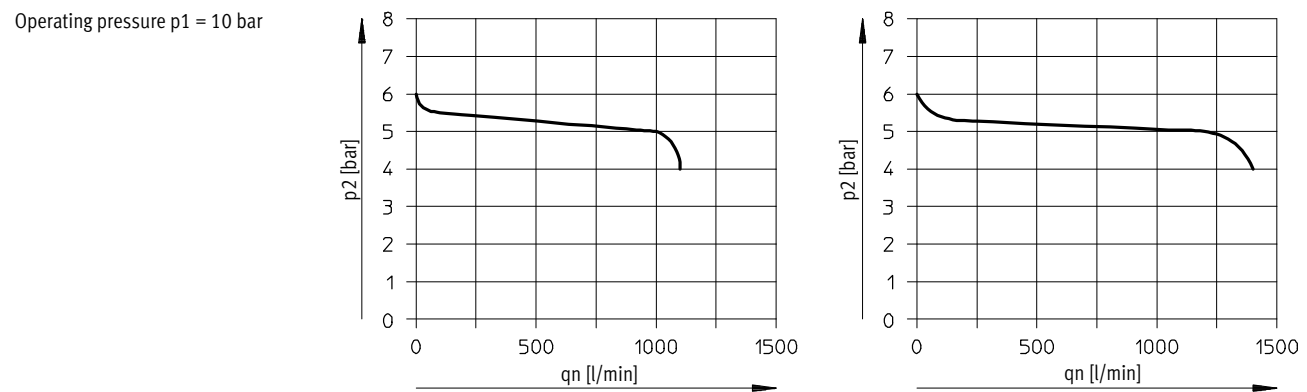
## Materials

Sectional view



| Filter regulator  | Mini           |
|-------------------|----------------|
| 1 Housing         | PA-reinforced  |
| 2 Bowl            | PC             |
| 3 Filter          | PE             |
| 4 Rotary knob     | POM            |
| - Seals           | NBR            |
| Note on materials | RoHS-compliant |

## Standard flow rate $q_n$ as a function of output pressure $p_2$



Note  
Slight leakage at the output has been taken into account in the design. It improves the control behaviour of the non pre-pressure compensated controller. In a few cases leakage may amount to 500 l/h.

# Filter regulators LFR, D series, polymer

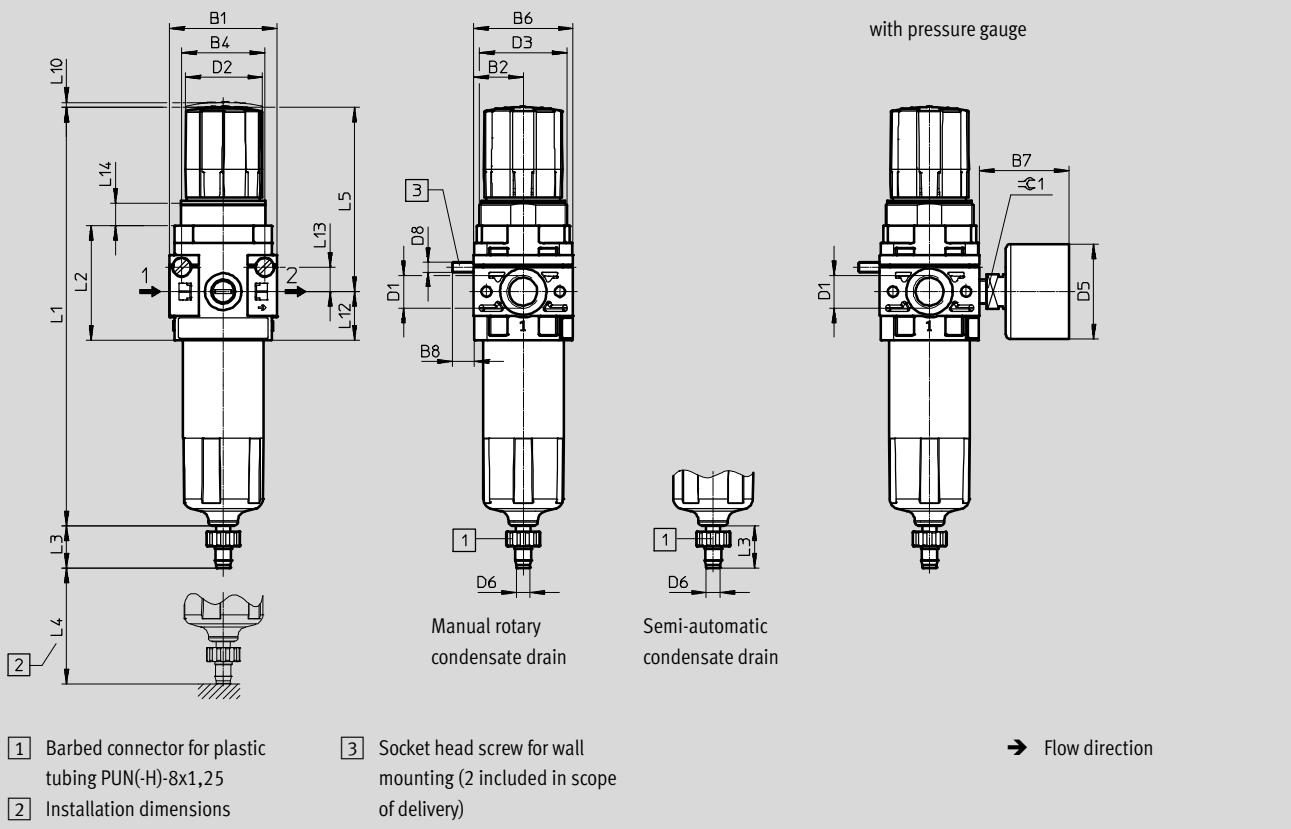
Technical data

FESTO

## Dimensions

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

Mini



| Type     | B1 | B2   | B4 | B6 | B7<br>max. | B8 | D1 | D2<br>∅ | D3      | D5<br>∅ | D6<br>∅ | D8 |
|----------|----|------|----|----|------------|----|----|---------|---------|---------|---------|----|
| LFR-¼-DB | 44 | 20.5 | 34 | 41 | 37         | 9  | G¼ | 32      | M36x1.5 | 39      | 5.6     | M4 |

| Type     | L1    | L2 | L3   | L4<br>min. | L5 | L10 | L12 | L13 | L14 | ≈ 1 |
|----------|-------|----|------|------------|----|-----|-----|-----|-----|-----|
| LFR-¼-DB | 171.7 | 47 | 17.3 | 60         | 76 | 2   | 20  | 10  | 9   | 14  |

## Ordering data

Pressure regulation range 0.5 ... 7 bar (0.05 ... 0.7 MPa)

| Condensate drain | Size | Connection | Grade of filtration 5 µm |      | Grade of filtration 40 µm |      |
|------------------|------|------------|--------------------------|------|---------------------------|------|
|                  |      |            | Part No.                 | Type | Part No.                  | Type |

With pressure gauge, outer scale in bar, inner scale in psi

|                |      |    |               |                             |               |                          |
|----------------|------|----|---------------|-----------------------------|---------------|--------------------------|
| Manual rotary  | Mini | G¼ | <b>539689</b> | <b>LFR-¼-DB-7-5M-MINI</b>   | <b>539685</b> | <b>LFR-¼-DB-7-MINI</b>   |
| Semi-automatic | Mini | G¼ | <b>539690</b> | <b>LFR-¼-DB-7-5M-MINI-H</b> | <b>539686</b> | <b>LFR-¼-DB-7-MINI-H</b> |

Without pressure gauge

|                |      |    |               |                               |               |                            |
|----------------|------|----|---------------|-------------------------------|---------------|----------------------------|
| Manual rotary  | Mini | G¼ | <b>537644</b> | <b>LFR-¼-DB-7-5M-O-MINI</b>   | <b>537647</b> | <b>LFR-¼-DB-7-O-MINI</b>   |
| Semi-automatic | Mini | G¼ | <b>537646</b> | <b>LFR-¼-DB-7-5M-O-MINI-H</b> | <b>537645</b> | <b>LFR-¼-DB-7-O-MINI-H</b> |

## Filter regulators LFR/LFRS, D series

Accessories

**FESTO**

Filter cartridges, D series, metal design



| Ordering data |                             |          |                |
|---------------|-----------------------------|----------|----------------|
| Size          | Grade of filtration<br>[μm] | Part No. | Type           |
| Micro         | 5                           | 526818   | LFP-D-MICRO-5M |
| Mini          | 5 (colour: blue)            | 159640   | LFP-D-MINI-5M  |
|               | 40 (colour: white)          | 363665   | LFP-D-MINI-40M |
| Midi          | 5 (colour: blue)            | 159594   | LFP-D-MIDI-5M  |
|               | 40 (colour: white)          | 363667   | LFP-D-MIDI-40M |
| Maxi          | 5 (colour: blue)            | 159641   | LFP-D-MAXI-5M  |
|               | 40 (colour: white)          | 363664   | LFP-D-MAXI-40M |

Filter cartridges, D series, polymer





| Ordering data |                             |          |                |
|---------------|-----------------------------|----------|----------------|
| Size          | Grade of filtration<br>[μm] | Part No. | Type           |
| Mini          | 5                           | 547957   | LFP-DB-MINI-5M |
|               | 40                          | 534502   | MS4-LFP-E      |

# Filter regulators LFR/LFRS, D series

Accessories

**FESTO**

| Ordering data – Pressure gauge MA                                                 |                                 |                      |                  |               |                                              |                                          |
|-----------------------------------------------------------------------------------|---------------------------------|----------------------|------------------|---------------|----------------------------------------------|------------------------------------------|
|                                                                                   | Nominal size                    | Pneumatic connection | Indicating range |               | Part No.                                     | Type                                     |
|                                                                                   |                                 |                      | Outer scale      | Inner scale   |                                              |                                          |
|  | Pressure gauge MA               |                      |                  |               |                                              | Technical data → Internet: ma            |
|                                                                                   | 27                              | M5                   | 0 ... 10 bar     | –             | <b>526323</b>                                | <b>MA-27-10-M5</b>                       |
|                                                                                   | 40                              | G $\frac{1}{8}$      | 0 ... 10 bar     | 0 ... 145 psi | <b>359874</b>                                | <b>MA-40-10-<math>\frac{1}{8}</math></b> |
|                                                                                   |                                 |                      | 0 ... 16 bar     | 0 ... 232 psi | <b>345395</b>                                | <b>MA-40-16-<math>\frac{1}{8}</math></b> |
|                                                                                   | 50                              | G $\frac{1}{4}$      | 0 ... 10 bar     | 0 ... 145 psi | <b>359873</b>                                | <b>MA-50-10-<math>\frac{1}{4}</math></b> |
|                                                                                   |                                 |                      | 0 ... 16 bar     | 0 ... 232 psi | <b>356759</b>                                | <b>MA-50-16-<math>\frac{1}{4}</math></b> |
|                                                                                   | Pressure gauge PAGN             |                      |                  |               |                                              | Technical data → Internet: pagn          |
|                                                                                   | 40                              | G $\frac{1}{8}$      | 0 ... 1 MPa      | 0 ... 10 bar  | <b>8000222</b>                               | <b>PAGN-40-1M-G18</b>                    |
|                                                                                   |                                 |                      | 0 ... 1.6 MPa    | 0 ... 16 bar  | <b>8000223</b>                               | <b>PAGN-40-1.6M-G18</b>                  |
|                                                                                   | 50                              | G $\frac{1}{4}$      | 0 ... 1 MPa      | 0 ... 10 bar  | <b>8000224</b>                               | <b>PAGN-50-1M-G14</b>                    |
|                                                                                   |                                 |                      | 0 ... 1.6 MPa    | 0 ... 16 bar  | <b>8000225</b>                               | <b>PAGN-50-1.6M-G14</b>                  |
|                                                                                   | Pressure gauge MA, DIN EN 837-1 |                      |                  |               |                                              | Technical data → Internet: ma            |
| 40                                                                                | R $\frac{1}{8}$                 | 0 ... 10 bar         | 0 ... 145 psi    | <b>162835</b> | <b>MA-40-10-<math>\frac{1}{8}</math>-EN</b>  |                                          |
|                                                                                   | G $\frac{1}{4}$                 | 0 ... 10 bar         | 0 ... 145 psi    | <b>183900</b> | <b>MA-40-10-G<math>\frac{1}{4}</math>-EN</b> |                                          |
| Flanged pressure gauge FMA, DIN EN 837-1                                          |                                 |                      |                  |               | Technical data → Internet: fma               |                                          |
| 40                                                                                | G $\frac{1}{4}$                 | 0 ... 10 bar         | 0 ... 145 psi    | <b>159596</b> | <b>FMA-40-10-<math>\frac{1}{4}</math>-EN</b> |                                          |
|                                                                                   |                                 | 0 ... 16 bar         | 0 ... 232 psi    | <b>159597</b> | <b>FMA-40-16-<math>\frac{1}{4}</math>-EN</b> |                                          |
| 50                                                                                | G $\frac{1}{4}$                 | 0 ... 10 bar         | 0 ... 145 psi    | <b>159599</b> | <b>FMA-50-10-<math>\frac{1}{4}</math>-EN</b> |                                          |
|                                                                                   |                                 | 0 ... 16 bar         | 0 ... 232 psi    | <b>159600</b> | <b>FMA-50-16-<math>\frac{1}{4}</math>-EN</b> |                                          |

| Ordering data – Pressure sensor SPAU                                                                                                                                                                                               |                             |                              |                 |                       |                                           |                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|-----------------|-----------------------|-------------------------------------------|-------------------------------------------|
|                                                                                                                                                                                                                                    | Pneumatic connection        | Switching output             | Display type    | Electrical connection | Part No.                                  | Type                                      |
| Pressure sensor SPAU for direct mounting on the service unit with pressure gauge connection (adapter for pneumatic connection included in scope of delivery), pressure measuring range 0 ... 10 bar, relative pressure measurement |                             |                              |                 |                       |                                           |                                           |
|                                                                                                                                                 | Male thread R $\frac{1}{8}$ | 2x PNP or 2x NPN, switchable | Illuminated LCD | M8x1, 4-pin           | <b>8001203</b>                            | <b>SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D</b>  |
|                                                                                                                                                                                                                                    |                             |                              |                 | M12x1, 4-pin          | <b>8001206</b>                            | <b>SPAU-P10R-T-R18M-L-PNLK-PNVBA-M12D</b> |
|                                                                                                                                                                                                                                    | Male thread R $\frac{1}{4}$ | M8x1, 4-pin                  |                 | <b>8001209</b>        | <b>SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D</b>  |                                           |
|                                                                                                                                                                                                                                    |                             | M12x1, 4-pin                 |                 | <b>8001208</b>        | <b>SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D</b> |                                           |