

Filter regulators LFR/LFRS, D series

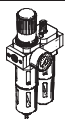
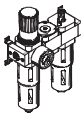
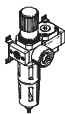
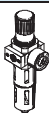
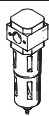
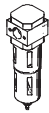
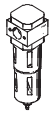
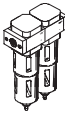
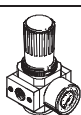
FESTO



Filter regulators LFR/LFRS, D series, metal design

FESTO

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 ...	0.5 ...	2.5 ...	0.01	1	5	40
Service units																			
FRC/FRCS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	■	–	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	■	–	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	–	■	–	–	–	■	■
Service unit combinations																			
FRC-K		Micro	–																
		Mini	–	–	■	■	–	–	–	–	–	–	■	■	–	–	–	■	
		Midi	–	–	–	■	■	■	–	–	–	–	■	■	–	–	–	■	
		Maxi	–	–	–	–	–	■	■	–	–	–	■	■	–	–	–	■	
LFR-K LFRS-K		Micro	–																
		Mini	–	–	■	■	–	–	–	–	–	–	■	■	–	–	–	■	
		Midi	–	–	–	■	■	■	–	–	–	–	■	■	–	–	–	■	
		Maxi	–	–	–	–	–	■	■	–	–	–	■	■	–	–	–	■	
Individual devices																			
Filter regulators LFR/LFRS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	■	■	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	■	■	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	■	■	–	–	–	■	■
Filters LF		Micro	■	■	■	–	–	–	–	–	■	■	–	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	■	■
Fine and micro filters LFMA/LFMB		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	■	■	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	■	■	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	■	■	–	–	
Active carbon filters LFX		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	–	
Filter combinations LFMBA		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	■	■	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	■	■	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	■	■	–	–	
Pressure regulators LR/LRS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	–	
		Mini	–	–	■	■	■	–	–	–	–	–	■	■	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	■	■	–	–	–	–	

Filter regulators LFR/LFRS, D series, metal design

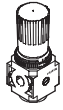
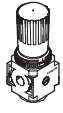
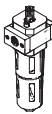
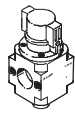
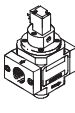
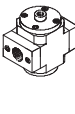
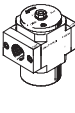
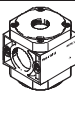
Product range overview D series service units, metal design

Type	Size	Bowl guard		Condensate drain			Pressure indication		Actuator lock		Supply voltage			Options			→ Page/ 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	
Service units																	
FRC/FRCS	Micro	–	■	■	■	–	■	■	■	–	–	–	–	–	–	–	frc
	Mini	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	■	■	■	–	–	–	■	■	–	
Service unit combinations																	
FRC-K	Micro	–															frc
	Mini	■	–	■	–	■	■	–	■	–	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	–	■	–	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	–	■	–	–	–	–	■	■	–	
LFR-K LFRS-K	Micro	–															lfr
	Mini	■	–	■	–	■	■	–	■	■	■	–	–	–	–	–	
	Midi	■	–	■	–	■	■	–	■	■	■	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	–	■	■	■	–	–	■	■	–	
Individual devices																	
Filter regulators LFR/LFRS	Micro	–	■	■	■	–	■	■	■	–	–	–	–	–	–	–	6
	Mini	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	■	■	■	–	–	–	■	■	–	
Filters LF	Micro	–	■	■	■	–	–	–	–	–	–	–	–	–	–	–	lf
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
Fine and micro filters LFMA/LFMB	Micro	–															lfma, lfmb
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
Active carbon filters LFX	Micro	–															lfx
	Mini	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Midi	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Maxi	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Filter combinations LFMBA	Micro	–															lfmba
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
Pressure regulators LR/LRS	Micro	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	lr
	Mini	–	–	–	–	–	■	■	■	■	–	–	–	■	–	–	
	Midi	–	–	–	–	–	■	■	■	■	–	–	–	■	–	–	
	Maxi	–	–	–	–	–	■	■	■	■	–	–	–	■	■	–	

Filter regulators LFR/LFRS, D series, metal design

FESTO

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 ... 7	0.5 ... 12
Individual devices														
Pressure regulators LRB/LRBS		Micro	—											
		Mini	—	—	—	■	—	—	—	—	—	—	■	■
		Midi	—	—	—	—	■	—	—	—	—	—	■	■
		Maxi	—											
Pressure regulator combinations LRB-K		Micro	—											
		Mini	—	—	—	■	■	—	—	—	—	—	■	■
		Midi	—	—	—	—	■	■	—	—	—	—	■	■
		Maxi	—											
Lubricators LOE		Micro	■	■	■	—	—	—	—	—	■	■	—	—
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
On-off valves HE		Micro	—											
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
On-off valves, electrical HEE		Micro	—											
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
On-off valves, pneumatic HEP		Micro	—											
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
Soft-start valves HEL		Micro	—											
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
Membrane air dryers LDM1		Micro	—											
		Mini	—											
		Midi	—											
		Maxi	—	—	—	—	—	—	■	■	■	—	—	—
Branching modules FRM		Micro	—											
		Mini	—	—	■	■	■	—	—	—	—	—	—	—
		Midi	—	—	—	■	■	■	■	—	—	—	—	—
		Maxi	—	—	—	—	—	■	■	■	—	—	—	—
Distributor block FRZ		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/ 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	
Individual devices													
Pressure regulators LRB/LRBS	Micro	-											lrb
	Mini	-	-	-	■	■	■	-	-	-	-	-	
	Midi	-	-	-	■	■	■	-	-	-	-	-	
	Maxi	-	-										
Pressure regulator combinations LRB-K	Micro	-											lrb
	Mini	-	-	-	■	■	-	-	-	-	-	-	
	Midi	-	-	-	■	■	-	-	-	-	-	-	
	Maxi	-	-										
Lubricators LOE	Micro	-	■	-	■	-	-	-	-	-	-	-	loe
	Mini	■	-	-	■	-	-	-	-	-	-	-	
	Midi	■	-	-	■	-	-	-	-	-	-	-	
	Maxi	■	-	-	■	-	-	-	-	-	-	-	
On-off valves HE	Micro	-											he
	Mini	-	-	-	■	■	-	-	-	-	-	-	
	Midi	-	-	-	■	■	-	-	-	-	-	-	
	Maxi	-	-	-	■	■	-	-	-	-	-	-	
On-off valves, electrical HEE	Micro	-											hee
	Mini	-	-	-	■	-	-	■	■	■	-	-	
	Midi	-	-	-	■	-	-	■	■	■	-	-	
	Maxi	-	-	-	■	-	-	■	■	■	-	-	
On-off valves, pneumatic HEP	Micro	-											hep
	Mini	-	-	-	■	-	-	-	-	-	-	-	
	Midi	-	-	-	■	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	
Soft-start valves HEL	Micro	-											hel
	Mini	-	-	-	■	-	-	-	-	-	-	-	
	Midi	-	-	-	■	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	
Membrane air dryers LDM1	Micro	-											ldm1
	Mini	-											
	Midi	-											
	Maxi	■	-	-	■	-	-	-	-	-	-	-	
Branching modules FRM	Micro	-											frm
	Mini	-	-	-	■	-	-	-	-	-	■	■	
	Midi	-	-	-	■	-	-	-	-	-	■	■	
	Maxi	-	-	-	■	-	-	-	-	-	■	■	
Distributor block FRZ	Micro	-	-	-	■	-	-	-	-	-	-	-	frz
	Mini	-	-	-	■	-	-	-	-	-	-	-	
	Midi	-	-	-	■	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	

Filter regulators LFR/LFRS, D series, metal design

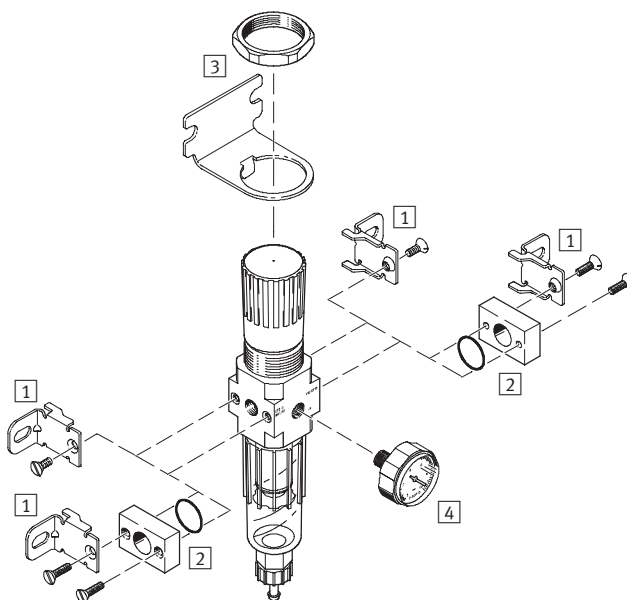
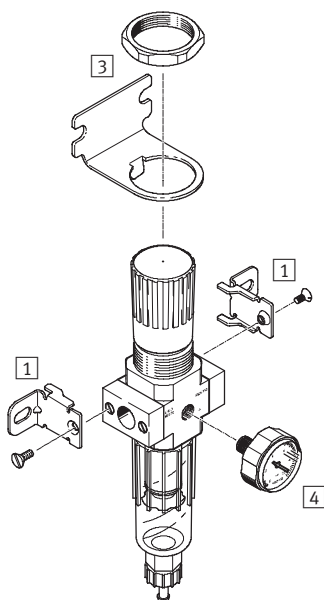
Peripherals overview

FESTO

Micro

Individual unit with connection plates,
connection size G $\frac{1}{8}$, QS4 or QS6

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



Mounting attachments and accessories					
	Individual unit		Combination		→ Page/ 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	■	■	■	■	35

Filter regulators LFR/LFRS, D series, metal design

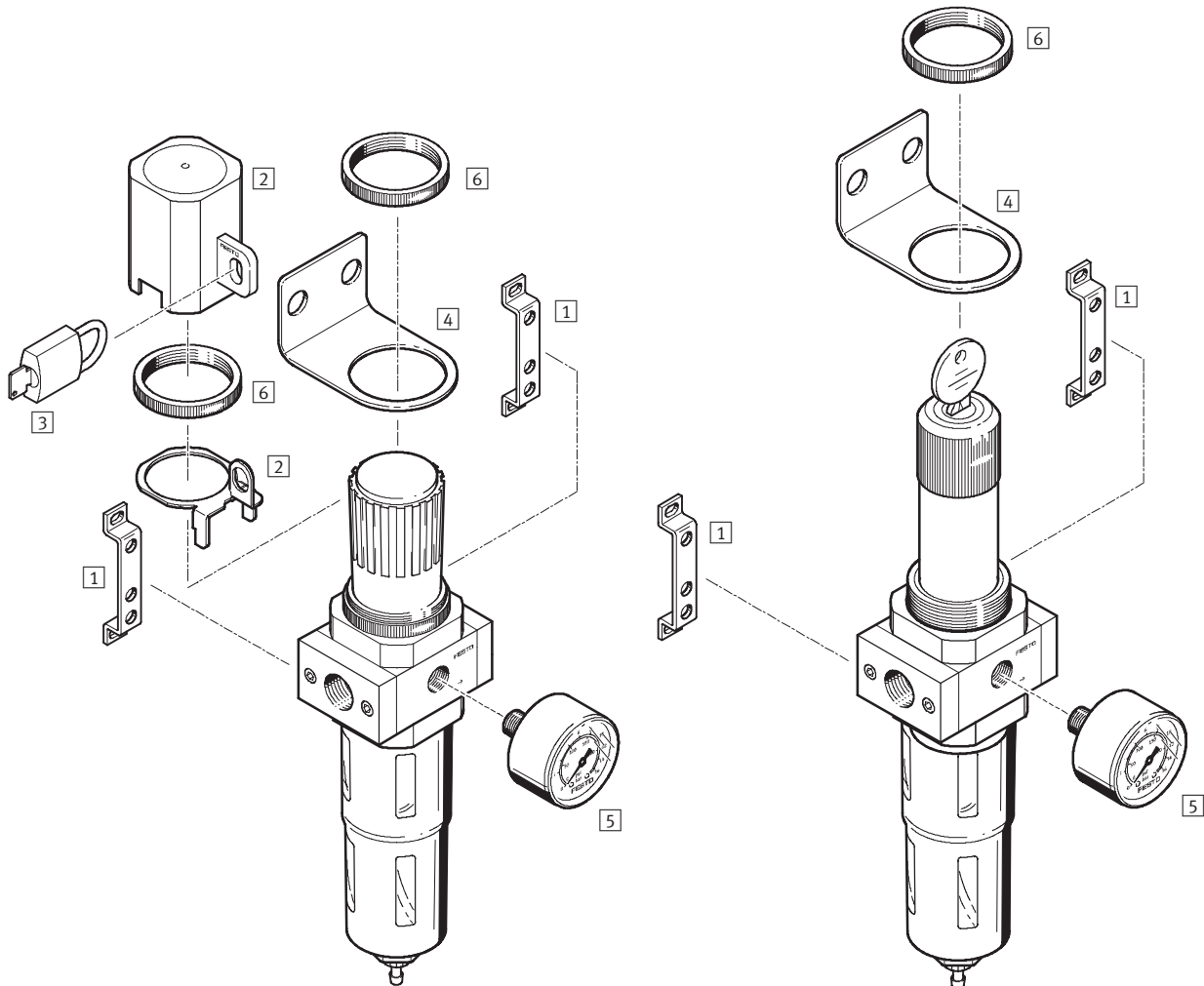
Peripherals overview

FESTO

Mini/Midi/Maxi

Filter regulator LFR

Filter regulator LFRS, lockable



Mounting attachments and accessories			
	Rotary knob with detent	Rotary knob, lockable	→ Page/ Internet
1 Mounting bracket HFOE	■	■	hfoe-d
2 Regulator lock LRVS	■	-	lrvs-d
3 Padlock LRVS-D	■	-	lrvs-d
4 Mounting bracket HR-D	■	■	hr-d
5 Pressure gauge MA	■	■	35
6 Knurled nut (included in scope of delivery) HMR	■	■	-

Filter regulators LFR/LFRS, D series, metal design

FESTO

Type codes

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

Basic function	
LFR	Filter regulator
LFRS	Filter regulator, lockable

Pneumatic connection	
M5	Thread M5
M7	Thread M7
QS4	Push-in fitting QS4
QS6	Push-in fitting QS6
1/8	Thread G1/8
1/4	Thread G1/4
3/8	Thread G3/8
1/2	Thread G1/2
3/4	Thread G3/4
1	Thread G1

Series	
D	Series

Pressure regulation range	
	0.5 ... 12 bar
7	0.5 ... 7 bar

Grade of filtration	
	40 µm
5M	5 µm

Pressure gauge	
	With pressure gauge
0	Without pressure gauge

Function (Maxi size only)	
DI	Directly actuated pressure regulator with integrated return flow function

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

Filter regulators LFR/LFRS, D series, metal design

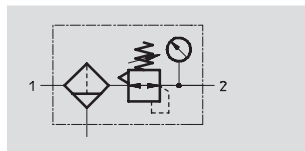
FESTO

Technical data

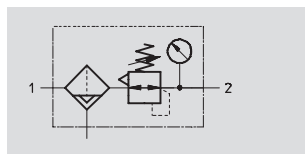
Function

LFR/LFRS-...-D-...

Condensate drain
turned manually

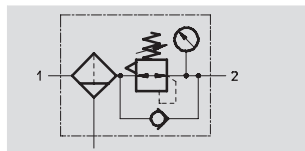


semi- or fully automatic

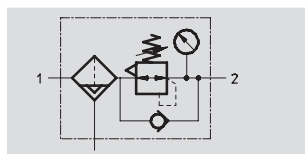


LFR/LFRS-...-D-DI-MAXI

Condensate drain
turned manually



fully automatic



-  Flow rate
110 ... 11000 l/min
-  Temperature range
-10 ... +60 °C
-  Input pressure
1 ... 16 bar



- 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 and 0.5 ... 12 bar
- Two pressure gauge connections for flexible installation
- With manual, semi-automatic or fully automatic condensate drain
- Setting values are secured by locking the rotary knob
- Choice of filter cartridges: 5 µm or 40 µm
- New filter cartridges → 34
- Pressure sensor (optional) → 35

General technical data															
Size	Micro					Mini			Midi				Maxi		
Pneumatic connection	M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium	Compressed air					Compressed air									
Design	Directly actuated diaphragm regulator					Directly actuated diaphragm regulator							Pilot actuated piston regulator		
													Directly actuated diaphragm regulator		
Type of mounting	Via accessories					Via accessories									
	In-line installation					In-line installation									
	Front panel mounting					Front panel mounting									
Assembly position	Vertical ±5°					Vertical ±5°									
Grade of filtration [µm]	5					5 or 40									
Max. hysteresis [bar]	0.3					0.2							0.4		
Pressure regulation range [bar]	0.5 ... 7					0.5 ... 7									
						0.5 ... 12									
Pressure indication	Via pressure gauge					Via pressure gauge									
	M5 prepared					G1/8 prepared			G1/4 prepared			G1/2 prepared			
Max. condensate volume [cm³]	3					22			43				80 ¹⁾		
Input pressure [bar]															
Condensate drain	turned manually	1 ... 10				1 ... 16									
	semi-automatic	1 ... 10				–									
	fully automatic	–				2 ... 12									

1) The max. condensate volume for the LFR/LFRS-...-DI-MAXI is 43 cm³.

• Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Standard nominal flow rate ¹⁾ qnN [l/min]					
Connection	Female thread		Connecting plate		
	M5	M7	G1/8	QS4	QS6
Micro					
LFR	110	280	410	150	410

1) Measured at p1 = 10 bar, p2 = 6 bar and Δp = 1 bar.

Standard nominal flow rate ¹⁾ qnN [l/min]						
Connection	G1/8	G1/4	G3/8	G1/2	G3/4	G1
Mini						
LFR/LFRS-...-D-...	750	1400	1600	–	–	–
LFR/LFRS-...-D-7-...	900	1500	1700	–	–	–
LFR/LFRS-...-D-5M-...	650	1200	1350	–	–	–
Midi						
LFR/LFRS-...-D-...	–	2000	3100	3400	3400	–
LFR/LFRS-...-D-7-...	–	2100	3200	3900	4000	–
LFR/LFRS-...-D-5M-...	–	1600	2400	2600	2600	–
Maxi						
LFR/LFRS-...-D-...	–	–	–	9400	9700	10000
LFR/LFRS-...-D-7-...	–	–	–	9500	10000	11000
LFR/LFRS-...-D-5M-...	–	–	–	7500	7600	8000
Maxi – Directly actuated diaphragm regulator with integrated return flow function						
LFR/LFRS-...-D-...-DI	–	–	–	4500	6800	7000
LFR/LFRS-...-D-7-...-DI	–	–	–	7600	7700	7800
LFR/LFRS-...-D-5M-...-DI	–	–	–	4000	5800	6000

1) Measured at p1 = 10 bar, p2 = 6 bar and Δp = 1 bar.

Filter regulators LFR/LFRS, D series, metal design

Technical data

FESTO

Screw-in depth of connecting thread [mm]					
Connection	M5	M7	G $\frac{1}{8}$	QS4	QS6
Micro					
In housing	5	6	–	–	–
In connecting plates	–	–	8	–	–

Ambient conditions				
Size	Micro	Mini	Midi	Maxi
Ambient temperature [°C]	–10 ... +60			
Temperature of medium [°C]	–10 ... +60			
Corrosion resistance class CRC ¹⁾	2			

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weight [g]						
Size	Micro		Mini	Midi	Maxi	
	Female thread	Connecting plate			Connection G½, G¾	Connection G1
With pressure gauge						
LFR- ...	74	94	460	920	1370	1470
LFR-...-DI	–	–	–	–	1670	1670
LFRS-...	–	–	560	1160	1470	1570
LFRS-...-DI	–	–	–	–	1950	1950
Without pressure gauge						
LFR-...	64	84	410	830	1300	1400
LFR-...-DI	–	–	–	–	1600	1600
LFRS-...	–	–	510	1070	1400	1500
LFRS-...-DI	–	–	–	–	1880	1880

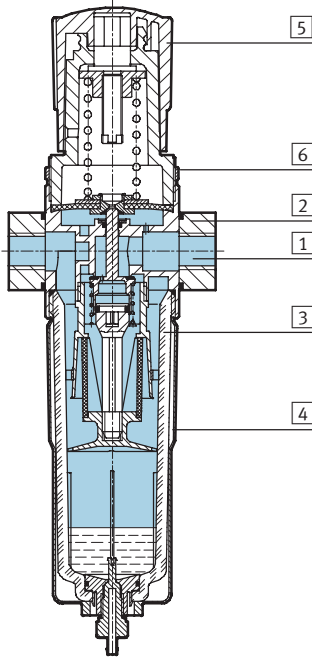
Filter regulators LFR/LFRS, D series, metal design

Technical data

FESTO

Materials

Sectional view



Filter regulator	Micro	Mini/Midi/Maxi
1 Housing	Wrought aluminium alloy	Die-cast zinc
2 Connecting plates	Wrought aluminium alloy	Die-cast zinc/aluminium
3 Bowl	Polycarbonate	Polycarbonate
4 Metal bowl guard	–	Aluminium
5 Regulating knob	Polyacetal	Polyacetal
6 Knurled nut	Wrought aluminium alloy	Aluminium
– Seals	Nitrile rubber	Nitrile rubber
Note on materials	–	Designs free of copper and PTFE → Ordering data

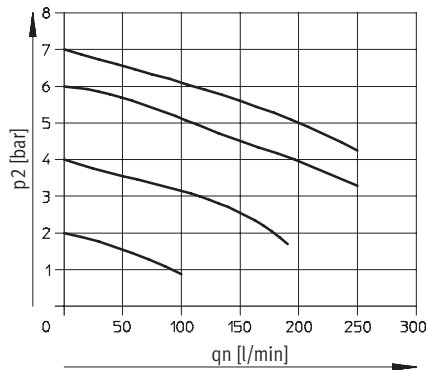
Filter regulators LFR/LFRS, D series, metal design

Technical data

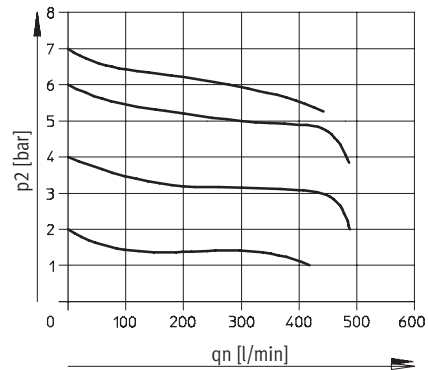
FESTO

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

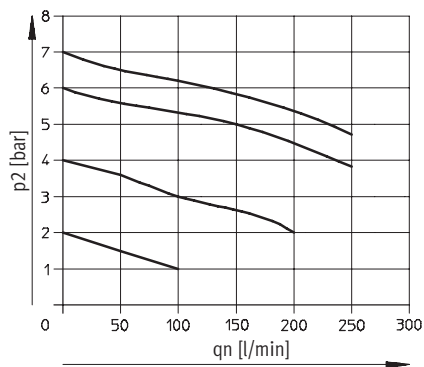
LFR-M5-...-MICRO



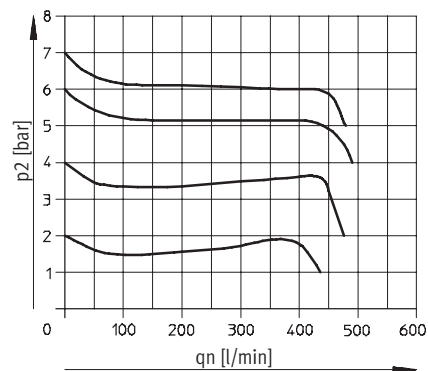
LFR-M7-...-MICRO B



LFR-QS4-...-MICRO



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



Primary pressure $p_1 = 10$ bar

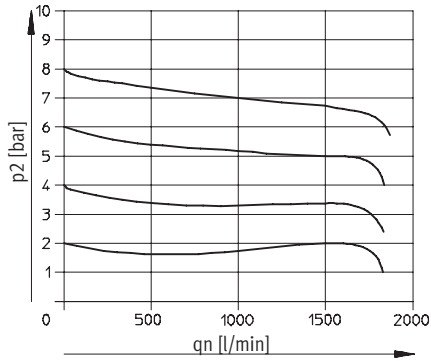
Filter regulators LFR/LFRS, D series, metal design

FESTO

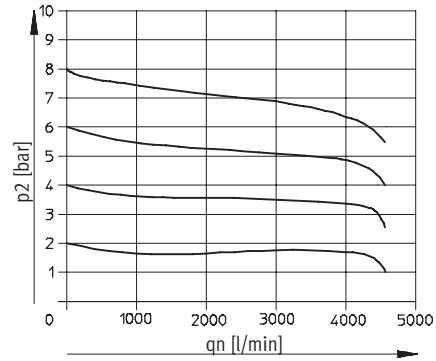
Technical data

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

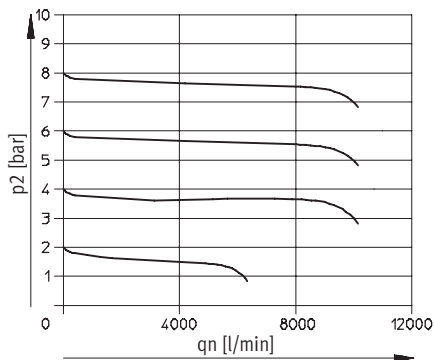
LFR/LFRS-1/4-D-MINI



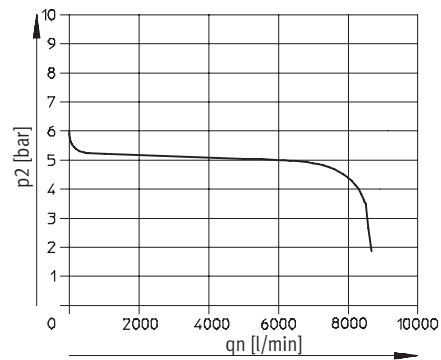
LFR/LFRS-1/2-D-MIDI



LFR/LFRS-1-D-MAXI



LFR/LFRS-1-D-DI-MAXI



Primary pressure $p_1 = 10$ bar

-  - Note

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

Filter regulators LFR/LFRS, D series, metal design

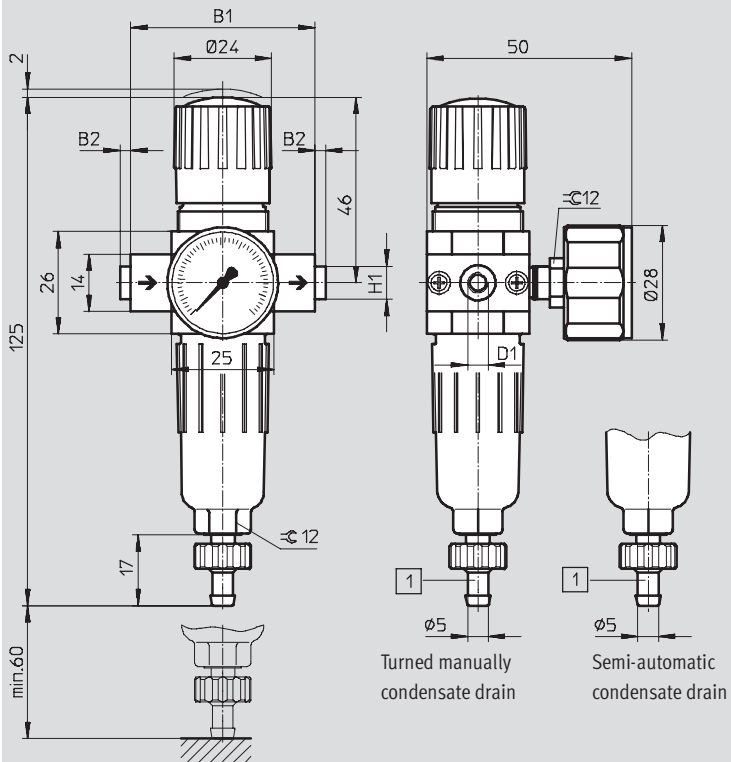
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

Micro



1 Barbed fitting for plastic tubing
type PCN-4

→ Flow direction

Type	B1	B2	D1	H1
LFR-M5-...-MICRO (H)	25	-	M5	-
LFR-M7-...-MICRO (H) B			M7	
LFR-1/8-...-MICRO (H)			G1/8	
LFR-QS4-...-MICRO (H)	45	~2.5	QS4	~8
LFR-QS6-...-MICRO (H)			QS6	~10

• Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Filter regulators LFR/LFRS, D series, metal design

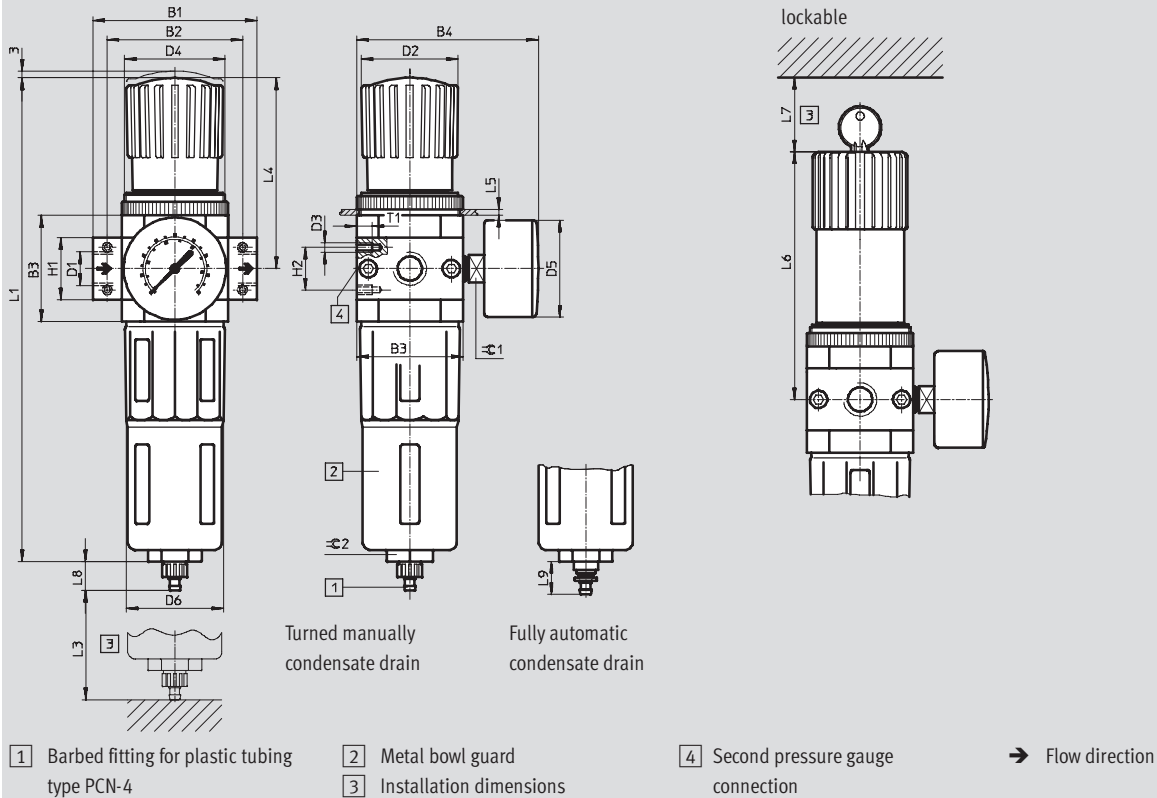
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

Mini/Midi/Maxi



Type	B1	B2	B3	B4	D1	D2 Ø	D3	D4	D5 Ø	D6 Ø
Mini										
LFR/LFRS-1/8-D-MINI (A)	64	52	40	76	G1/8	31	M4	M36x1.5	41	38
LFR/LFRS-1/4-D-MINI (A)					G1/4					
LFR/LFRS-3/8-D-MINI (A)	70				G3/8					
Midi										
LFR/LFRS-1/4-D-MIDI (A)	85	70	55	95	G1/4	50	M5	M52x1.5	50	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					
Maxi										
LFR/LFRS-1/2-D-MAXI (A)	96	80	66	107	G1/2	31	M5	M36x1.5	50	65
LFR/LFRS-1/2-D-DI-MAXI (A)					49	M52x1.5				
LFR/LFRS-3/4-D-MAXI (A)					31	M36x1.5				
LFR/LFRS-3/4-D-DI-MAXI (A)					49	M52x1.5				
LFR/LFRS-1-D-MAXI (A)	116	91			G1	31		M36x1.5		
LFR/LFRS-1-D-DI-MAXI (A)					49	M52x1.5				

• • Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Type	H1	H2	L1	L3	L4	L5 max.	L6	L7	L8	L9	T1	≡ 1	≡ 2
Mini													
LFR/LFRS-1/8-D-MINI (A)	20	11	193	60	68	3	98	60	15	19	7	14	22
LFR/LFRS-1/4-D-MINI (A)													
LFR/LFRS-3/8-D-MINI (A)													
Midi													
LFR/LFRS-1/4-D-MIDI (A)	32	22	250	80	99	5	130	60	15	19	8	14	24
LFR/LFRS-3/8-D-MIDI (A)													
LFR/LFRS-1/2-D-MIDI (A)													
LFR/LFRS-3/4-D-MIDI (A)													
Maxi													
LFR/LFRS-1/2-D-MAXI (A)	32	22	252	90	82	4	111	60	15	19	8	14	24
LFR/LFRS-1/2-D-DI-MAXI (A)			275		105		135						
LFR/LFRS-3/4-D-MAXI (A)			252		82		111						
LFR/LFRS-3/4-D-DI-MAXI (A)			275		105		135						
LFR/LFRS-1-D-MAXI (A)	40		252		82		111						
LFR/LFRS-1-D-DI-MAXI (A)			275		105		135						

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Ordering data				
Pressure regulation range 0.5 ... 7 bar				
Condensate drain	Size	Connection	Grade of filtration 5 µm	
			Part No.	Type
With pressure gauge				
Turned manually	Micro	Without threaded connecting plates, connecting thread in housing		
		M5	526 273	LFR-M5-D-7-5M-MICRO
		M7	534 184	LFR-M7-D-7-5M-MICRO B
		With threaded connecting plates		
		G $\frac{1}{8}$	526 277	LFR- $\frac{1}{8}$ -D-7-5M-MICRO
		With connecting plate and push-in fitting		
		QS4	526 289	LFR-QS4-D-7-5M-MICRO
		QS6	526 293	LFR-QS6-D-7-5M-MICRO
Semi-automatic	Micro	Without threaded connecting plates, connecting thread in housing		
		M5	526 274	LFR-M5-D-7-5M-MICRO-H
		M7	534 185	LFR-M7-D-7-5M-MICRO-H B
		With threaded connecting plates		
		G $\frac{1}{8}$	526 278	LFR- $\frac{1}{8}$ -D-7-5M-MICRO-H
		With connecting plate and push-in fitting		
		QS4	526 290	LFR-QS4-D-7-5M-MICRO-H
		QS6	526 294	LFR-QS6-D-7-5M-MICRO-H
Without pressure gauge				
Turned manually	Micro	Without threaded connecting plates, connecting thread in housing		
		M5	526 275	LFR-M5-D-7-0-5M-MICRO
		M7	534 186	LFR-M7-D-7-0-5M-MICRO B
		With threaded connecting plates		
		G $\frac{1}{8}$	526 279	LFR- $\frac{1}{8}$ -D-7-0-5M-MICRO
		With connecting plate and push-in fitting		
		QS4	526 291	LFR-QS4-D-7-0-5M-MICRO
		QS6	526 295	LFR-QS6-D-7-0-5M-MICRO
Semi-automatic	Micro	Without threaded connecting plates, connecting thread in housing		
		M5	526 276	LFR-M5-D-7-0-5M-MICRO-H
		M7	534 187	LFR-M7-D-7-0-5M-MICRO-H B
		With threaded connecting plates		
		G $\frac{1}{8}$	526 280	LFR- $\frac{1}{8}$ -D-7-0-5M-MICRO-H
		With connecting plate and push-in fitting		
		QS4	526 292	LFR-QS4-D-7-0-5M-MICRO-H
		QS6	526 296	LFR-QS6-D-7-0-5M-MICRO-H

Filter regulators LFR/LFRS, D series, metal design

Technical data

FESTO

Ordering data							
Pressure regulation range 0.5 ... 12 bar, metal bowl guard							
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm		
			Part No.	Type	Part No.	Type	
With pressure gauge							
Turned manually	Mini	G $\frac{1}{8}$	162 718	LFR- $\frac{1}{8}$ -D-5M-MINI	159 630	LFR- $\frac{1}{8}$ -D-MINI	
		G $\frac{1}{4}$	162 719	LFR- $\frac{1}{4}$ -D-5M-MINI	159 631	LFR- $\frac{1}{4}$ -D-MINI	
		G $\frac{3}{8}$	162 720	LFR- $\frac{3}{8}$ -D-5M-MINI	162 682	LFR- $\frac{3}{8}$ -D-MINI	
	Midi	G $\frac{1}{4}$	186 483	LFR- $\frac{1}{4}$ -D-5M-MIDI	186 481	LFR- $\frac{1}{4}$ -D-MIDI	
		G $\frac{3}{8}$	162 721	LFR- $\frac{3}{8}$ -D-5M-MIDI	159 582	LFR- $\frac{3}{8}$ -D-MIDI	
		G $\frac{1}{2}$	162 722	LFR- $\frac{1}{2}$ -D-5M-MIDI	159 584	LFR- $\frac{1}{2}$ -D-MIDI	
		G $\frac{3}{4}$	162 723	LFR- $\frac{3}{4}$ -D-5M-MIDI	162 683	LFR- $\frac{3}{4}$ -D-MIDI	
	Maxi	G $\frac{1}{2}$	186 491	LFR- $\frac{1}{2}$ -D-5M-MAXI	186 489	LFR- $\frac{1}{2}$ -D-MAXI	
		G $\frac{3}{4}$	162 724	LFR- $\frac{3}{4}$ -D-5M-MAXI	159 632	LFR- $\frac{3}{4}$ -D-MAXI	
		G1	162 725	LFR-1-D-5M-MAXI	159 633	LFR-1-D-MAXI	
	Fully automatic	Mini	G $\frac{1}{8}$	162 726	LFR- $\frac{1}{8}$ -D-5M-MINI-A	159 634	LFR- $\frac{1}{8}$ -D-MINI-A
G $\frac{1}{4}$			162 727	LFR- $\frac{1}{4}$ -D-5M-MINI-A	159 635	LFR- $\frac{1}{4}$ -D-MINI-A	
G $\frac{3}{8}$			162 728	LFR- $\frac{3}{8}$ -D-5M-MINI-A	162 684	LFR- $\frac{3}{8}$ -D-MINI-A	
Midi		G $\frac{1}{4}$	186 486	LFR- $\frac{1}{4}$ -D-5M-MIDI-A	186 484	LFR- $\frac{1}{4}$ -D-MIDI-A	
		G $\frac{3}{8}$	162 729	LFR- $\frac{3}{8}$ -D-5M-MIDI-A	159 583	LFR- $\frac{3}{8}$ -D-MIDI-A	
		G $\frac{1}{2}$	162 730	LFR- $\frac{1}{2}$ -D-5M-MIDI-A	159 585	LFR- $\frac{1}{2}$ -D-MIDI-A	
		G $\frac{3}{4}$	162 731	LFR- $\frac{3}{4}$ -D-5M-MIDI-A	162 685	LFR- $\frac{3}{4}$ -D-MIDI-A	
Maxi		G $\frac{1}{2}$	186 494	LFR- $\frac{1}{2}$ -D-5M-MAXI-A	186 492	LFR- $\frac{1}{2}$ -D-MAXI-A	
		G $\frac{3}{4}$	162 732	LFR- $\frac{3}{4}$ -D-5M-MAXI-A	159 636	LFR- $\frac{3}{4}$ -D-MAXI-A	
		G1	162 733	LFR-1-D-5M-MAXI-A	159 637	LFR-1-D-MAXI-A	
Without pressure gauge							
Turned manually	Mini	G $\frac{1}{8}$	192 610	LFR- $\frac{1}{8}$ -D-5M-O-MINI ¹⁾	162 686	LFR- $\frac{1}{8}$ -D-O-MINI ¹⁾	
		G $\frac{1}{4}$	192 611	LFR- $\frac{1}{4}$ -D-5M-O-MINI ¹⁾	162 687	LFR- $\frac{1}{4}$ -D-O-MINI ¹⁾	
		G $\frac{3}{8}$	192 612	LFR- $\frac{3}{8}$ -D-5M-O-MINI ¹⁾	162 688	LFR- $\frac{3}{8}$ -D-O-MINI ¹⁾	
	Midi	G $\frac{1}{4}$	192 613	LFR- $\frac{1}{4}$ -D-5M-O-MIDI ¹⁾	186 482	LFR- $\frac{1}{4}$ -D-O-MIDI ¹⁾	
		G $\frac{3}{8}$	192 614	LFR- $\frac{3}{8}$ -D-5M-O-MIDI ¹⁾	162 689	LFR- $\frac{3}{8}$ -D-O-MIDI ¹⁾	
		G $\frac{1}{2}$	192 615	LFR- $\frac{1}{2}$ -D-5M-O-MIDI ¹⁾	162 690	LFR- $\frac{1}{2}$ -D-O-MIDI ¹⁾	
		G $\frac{3}{4}$	192 616	LFR- $\frac{3}{4}$ -D-5M-O-MIDI ¹⁾	162 691	LFR- $\frac{3}{4}$ -D-O-MIDI ¹⁾	
	Maxi	G $\frac{1}{2}$	192 617	LFR- $\frac{1}{2}$ -D-5M-O-MAXI ¹⁾	186 490	LFR- $\frac{1}{2}$ -D-O-MAXI ¹⁾	
		G $\frac{3}{4}$	192 618	LFR- $\frac{3}{4}$ -D-5M-O-MAXI ¹⁾	162 692	LFR- $\frac{3}{4}$ -D-O-MAXI ¹⁾	
		G1	192 619	LFR-1-D-5M-O-MAXI ¹⁾	162 693	LFR-1-D-O-MAXI ¹⁾	
	Fully automatic	Mini	G $\frac{1}{8}$	192 620	LFR- $\frac{1}{8}$ -D-5M-O-MINI-A ¹⁾	162 694	LFR- $\frac{1}{8}$ -D-O-MINI-A ¹⁾
G $\frac{1}{4}$			192 621	LFR- $\frac{1}{4}$ -D-5M-O-MINI-A ¹⁾	162 695	LFR- $\frac{1}{4}$ -D-O-MINI-A ¹⁾	
G $\frac{3}{8}$			192 622	LFR- $\frac{3}{8}$ -D-5M-O-MINI-A ¹⁾	162 696	LFR- $\frac{3}{8}$ -D-O-MINI-A ¹⁾	
Midi		G $\frac{1}{4}$	192 623	LFR- $\frac{1}{4}$ -D-5M-O-MIDI-A ¹⁾	186 485	LFR- $\frac{1}{4}$ -D-O-MIDI-A ¹⁾	
		G $\frac{3}{8}$	192 624	LFR- $\frac{3}{8}$ -D-5M-O-MIDI-A ¹⁾	162 697	LFR- $\frac{3}{8}$ -D-O-MIDI-A ¹⁾	
		G $\frac{1}{2}$	192 625	LFR- $\frac{1}{2}$ -D-5M-O-MIDI-A ¹⁾	162 698	LFR- $\frac{1}{2}$ -D-O-MIDI-A ¹⁾	
		G $\frac{3}{4}$	192 626	LFR- $\frac{3}{4}$ -D-5M-O-MIDI-A ¹⁾	162 699	LFR- $\frac{3}{4}$ -D-O-MIDI-A ¹⁾	
Maxi		G $\frac{1}{2}$	192 627	LFR- $\frac{1}{2}$ -D-5M-O-MAXI-A ¹⁾	186 493	LFR- $\frac{1}{2}$ -D-O-MAXI-A ¹⁾	
		G $\frac{3}{4}$	192 628	LFR- $\frac{3}{4}$ -D-5M-O-MAXI-A ¹⁾	162 700	LFR- $\frac{3}{4}$ -D-O-MAXI-A ¹⁾	
		G1	192 629	LFR-1-D-5M-O-MAXI-A ¹⁾	162 701	LFR-1-D-O-MAXI-A ¹⁾	

1) Free of copper and PTFE

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Ordering data				
Pressure regulation range 0.5 ... 7 bar, metal bowl guard				
Condensate drain	Size	Connection	Grade of filtration 40 µm	
			Part No.	Type
With pressure gauge				
Turned manually	Mini	G $\frac{1}{8}$	162 702	LFR- $\frac{1}{8}$ -D-7-MINI
		G $\frac{1}{4}$	162 703	LFR- $\frac{1}{4}$ -D-7-MINI
		G $\frac{3}{8}$	162 704	LFR- $\frac{3}{8}$ -D-7-MINI
	Midi	G $\frac{1}{4}$	186 487	LFR- $\frac{1}{4}$ -D-7-MIDI
		G $\frac{3}{8}$	162 705	LFR- $\frac{3}{8}$ -D-7-MIDI
		G $\frac{1}{2}$	162 706	LFR- $\frac{1}{2}$ -D-7-MIDI
		G $\frac{3}{4}$	162 707	LFR- $\frac{3}{4}$ -D-7-MIDI
	Maxi	G $\frac{1}{2}$	186 495	LFR- $\frac{1}{2}$ -D-7-MAXI
		G $\frac{3}{4}$	162 708	LFR- $\frac{3}{4}$ -D-7-MAXI
G1		162 709	LFR-1-D-7-MAXI	
Fully automatic	Mini	G $\frac{1}{8}$	162 710	LFR- $\frac{1}{8}$ -D-7-MINI-A
		G $\frac{1}{4}$	162 711	LFR- $\frac{1}{4}$ -D-7-MINI-A
		G $\frac{3}{8}$	162 712	LFR- $\frac{3}{8}$ -D-7-MINI-A
	Midi	G $\frac{1}{4}$	186 488	LFR- $\frac{1}{4}$ -D-7-MIDI-A
		G $\frac{3}{8}$	162 713	LFR- $\frac{3}{8}$ -D-7-MIDI-A
		G $\frac{1}{2}$	162 714	LFR- $\frac{1}{2}$ -D-7-MIDI-A
		G $\frac{3}{4}$	162 715	LFR- $\frac{3}{4}$ -D-7-MIDI-A
	Maxi	G $\frac{1}{2}$	186 496	LFR- $\frac{1}{2}$ -D-7-MAXI-A
		G $\frac{3}{4}$	162 716	LFR- $\frac{3}{4}$ -D-7-MAXI-A
G1		162 717	LFR-1-D-7-MAXI-A	
Without pressure gauge				
Turned manually	Mini	G $\frac{1}{8}$	192 590	LFR- $\frac{1}{8}$ -D-7-O-MINI ¹⁾
		G $\frac{1}{4}$	192 591	LFR- $\frac{1}{4}$ -D-7-O-MINI ¹⁾
		G $\frac{3}{8}$	192 592	LFR- $\frac{3}{8}$ -D-7-O-MINI ¹⁾
	Midi	G $\frac{1}{4}$	192 593	LFR- $\frac{1}{4}$ -D-7-O-MIDI ¹⁾
		G $\frac{3}{8}$	192 594	LFR- $\frac{3}{8}$ -D-7-O-MIDI ¹⁾
		G $\frac{1}{2}$	192 595	LFR- $\frac{1}{2}$ -D-7-O-MIDI ¹⁾
		G $\frac{3}{4}$	192 596	LFR- $\frac{3}{4}$ -D-7-O-MIDI ¹⁾
	Maxi	G $\frac{1}{2}$	192 597	LFR- $\frac{1}{2}$ -D-7-O-MAXI ¹⁾
		G $\frac{3}{4}$	192 598	LFR- $\frac{3}{4}$ -D-7-O-MAXI ¹⁾
G1		192 599	LFR-1-D-7-O-MAXI ¹⁾	
Fully automatic	Mini	G $\frac{1}{8}$	192 600	LFR- $\frac{1}{8}$ -D-7-O-MINI-A ¹⁾
		G $\frac{1}{4}$	192 601	LFR- $\frac{1}{4}$ -D-7-O-MINI-A ¹⁾
		G $\frac{3}{8}$	192 602	LFR- $\frac{3}{8}$ -D-7-O-MINI-A ¹⁾
	Midi	G $\frac{1}{4}$	192 603	LFR- $\frac{1}{4}$ -D-7-O-MIDI-A ¹⁾
		G $\frac{3}{8}$	192 604	LFR- $\frac{3}{8}$ -D-7-O-MIDI-A ¹⁾
		G $\frac{1}{2}$	192 605	LFR- $\frac{1}{2}$ -D-7-O-MIDI-A ¹⁾
		G $\frac{3}{4}$	192 606	LFR- $\frac{3}{4}$ -D-7-O-MIDI-A ¹⁾
	Maxi	G $\frac{1}{2}$	192 607	LFR- $\frac{1}{2}$ -D-7-O-MAXI-A ¹⁾
		G $\frac{3}{4}$	192 608	LFR- $\frac{3}{4}$ -D-7-O-MAXI-A ¹⁾
G1		192 609	LFR-1-D-7-O-MAXI-A ¹⁾	

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, directly actuated diaphragm regulator with integrated return flow function						
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
With pressure gauge						
Turned manually	Maxi	G½	192 370	LFR-½-D-5M-DI-MAXI	192 368	LFR-½-D-DI-MAXI
		G¾	192 376	LFR-¾-D-5M-DI-MAXI	192 374	LFR-¾-D-DI-MAXI
		G1	192 382	LFR-1-D-5M-DI-MAXI	192 380	LFR-1-D-DI-MAXI
Fully automatic	Maxi	G½	192 388	LFR-½-D-5M-DI-MAXI-A	192 386	LFR-½-D-DI-MAXI-A
		G¾	192 394	LFR-¾-D-5M-DI-MAXI-A	192 392	LFR-¾-D-DI-MAXI-A
		G1	192 400	LFR-1-D-5M-DI-MAXI-A	192 398	LFR-1-D-DI-MAXI-A
Without pressure gauge						
Turned manually	Maxi	G½	192 371	LFR-½-D-5M-O-DI-MAXI	192 369	LFR-½-D-O-DI-MAXI
		G¾	192 377	LFR-¾-D-5M-O-DI-MAXI	192 375	LFR-¾-D-O-DI-MAXI
		G1	192 383	LFR-1-D-5M-O-DI-MAXI	192 381	LFR-1-D-O-DI-MAXI
Fully automatic	Maxi	G½	192 389	LFR-½-D-5M-O-DI-MAXI-A	192 387	LFR-½-D-O-DI-MAXI-A
		G¾	192 395	LFR-¾-D-5M-O-DI-MAXI-A	192 393	LFR-¾-D-O-DI-MAXI-A
		G1	192 401	LFR-1-D-5M-O-DI-MAXI-A	192 399	LFR-1-D-O-DI-MAXI-A

Ordering data						
Pressure regulation range 0.5 ... 7 bar, directly actuated diaphragm regulator with integrated return flow function						
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
With pressure gauge						
Turned manually	Maxi	G½	–		192 372	LFR-½-D-7-DI-MAXI
		G¾	–		192 378	LFR-¾-D-7-DI-MAXI
		G1	–		192 384	LFR-1-D-7-DI-MAXI
Fully automatic	Maxi	G½	–		192 390	LFR-½-D-7-DI-MAXI-A
		G¾	–		192 396	LFR-¾-D-7-DI-MAXI-A
		G1	–		192 402	LFR-1-D-7-DI-MAXI-A
Without pressure gauge						
Turned manually	Maxi	G½	–		192 373	LFR-½-D-7-O-DI-MAXI
		G¾	–		192 379	LFR-¾-D-7-O-DI-MAXI
		G1	–		192 385	LFR-1-D-7-O-DI-MAXI
Fully automatic	Maxi	G½	–		192 391	LFR-½-D-7-O-DI-MAXI-A
		G¾	–		192 397	LFR-¾-D-7-O-DI-MAXI-A
		G1	–		192 403	LFR-1-D-7-O-DI-MAXI-A

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Ordering data						
Pressure regulation range 0.5 ... 12 bar, lockable						
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
With pressure gauge						
Turned manually	Mini	G $\frac{1}{8}$	194 704	LFRS- $\frac{1}{8}$ -D-5M-MINI	194 696	LFRS- $\frac{1}{8}$ -D-MINI
		G $\frac{1}{4}$	194 716	LFRS- $\frac{1}{4}$ -D-5M-MINI	194 708	LFRS- $\frac{1}{4}$ -D-MINI
		G $\frac{3}{8}$	194 728	LFRS- $\frac{3}{8}$ -D-5M-MINI	194 720	LFRS- $\frac{3}{8}$ -D-MINI
	Midi	G $\frac{1}{4}$	194 740	LFRS- $\frac{1}{4}$ -D-5M-MIDI	194 732	LFRS- $\frac{1}{4}$ -D-MIDI
		G $\frac{3}{8}$	194 752	LFRS- $\frac{3}{8}$ -D-5M-MIDI	194 744	LFRS- $\frac{3}{8}$ -D-MIDI
		G $\frac{1}{2}$	194 764	LFRS- $\frac{1}{2}$ -D-5M-MIDI	194 756	LFRS- $\frac{1}{2}$ -D-MIDI
		G $\frac{3}{4}$	194 776	LFRS- $\frac{3}{4}$ -D-5M-MIDI	194 768	LFRS- $\frac{3}{4}$ -D-MIDI
	Maxi	G $\frac{1}{2}$	194 788	LFRS- $\frac{1}{2}$ -D-5M-MAXI	194 780	LFRS- $\frac{1}{2}$ -D-MAXI
		G $\frac{3}{4}$	194 800	LFRS- $\frac{3}{4}$ -D-5M-MAXI	194 792	LFRS- $\frac{3}{4}$ -D-MAXI
		G1	194 812	LFRS-1-D-5M-MAXI	194 804	LFRS-1-D-MAXI
Fully automatic	Mini	G $\frac{1}{8}$	194 706	LFRS- $\frac{1}{8}$ -D-5M-MINI-A	194 697	LFRS- $\frac{1}{8}$ -D-MINI-A
		G $\frac{1}{4}$	194 718	LFRS- $\frac{1}{4}$ -D-5M-MINI-A	194 709	LFRS- $\frac{1}{4}$ -D-MINI-A
		G $\frac{3}{8}$	194 730	LFRS- $\frac{3}{8}$ -D-5M-MINI-A	194 721	LFRS- $\frac{3}{8}$ -D-MINI-A
	Midi	G $\frac{1}{4}$	194 742	LFRS- $\frac{1}{4}$ -D-5M-MIDI-A	194 733	LFRS- $\frac{1}{4}$ -D-MIDI-A
		G $\frac{3}{8}$	194 754	LFRS- $\frac{3}{8}$ -D-5M-MIDI-A	194 745	LFRS- $\frac{3}{8}$ -D-MIDI-A
		G $\frac{1}{2}$	194 766	LFRS- $\frac{1}{2}$ -D-5M-MIDI-A	194 757	LFRS- $\frac{1}{2}$ -D-MIDI-A
		G $\frac{3}{4}$	194 778	LFRS- $\frac{3}{4}$ -D-5M-MIDI-A	194 769	LFRS- $\frac{3}{4}$ -D-MIDI-A
	Maxi	G $\frac{1}{2}$	194 790	LFRS- $\frac{1}{2}$ -D-5M-MAXI-A	194 781	LFRS- $\frac{1}{2}$ -D-MAXI-A
		G $\frac{3}{4}$	194 802	LFRS- $\frac{3}{4}$ -D-5M-MAXI-A	194 793	LFRS- $\frac{3}{4}$ -D-MAXI-A
		G1	194 814	LFRS-1-D-5M-MAXI-A	194 805	LFRS-1-D-MAXI-A
Without pressure gauge						
Turned manually	Mini	G $\frac{1}{8}$	194 705	LFRS- $\frac{1}{8}$ -D-5M-O-MINI	194 698	LFRS- $\frac{1}{8}$ -D-O-MINI
		G $\frac{1}{4}$	194 717	LFRS- $\frac{1}{4}$ -D-5M-O-MINI	194 710	LFRS- $\frac{1}{4}$ -D-O-MINI
		G $\frac{3}{8}$	194 729	LFRS- $\frac{3}{8}$ -D-5M-O-MINI	194 722	LFRS- $\frac{3}{8}$ -D-O-MINI
	Midi	G $\frac{1}{4}$	194 741	LFRS- $\frac{1}{4}$ -D-5M-O-MIDI	194 734	LFRS- $\frac{1}{4}$ -D-O-MIDI
		G $\frac{3}{8}$	194 753	LFRS- $\frac{3}{8}$ -D-5M-O-MIDI	194 746	LFRS- $\frac{3}{8}$ -D-O-MIDI
		G $\frac{1}{2}$	194 765	LFRS- $\frac{1}{2}$ -D-5M-O-MIDI	194 758	LFRS- $\frac{1}{2}$ -D-O-MIDI
		G $\frac{3}{4}$	194 777	LFRS- $\frac{3}{4}$ -D-5M-O-MIDI	194 770	LFRS- $\frac{3}{4}$ -D-O-MIDI
	Maxi	G $\frac{1}{2}$	194 789	LFRS- $\frac{1}{2}$ -D-5M-O-MAXI	194 782	LFRS- $\frac{1}{2}$ -D-O-MAXI
		G $\frac{3}{4}$	194 801	LFRS- $\frac{3}{4}$ -D-5M-O-MAXI	194 794	LFRS- $\frac{3}{4}$ -D-O-MAXI
		G1	194 813	LFRS-1-D-5M-O-MAXI	194 806	LFRS-1-D-O-MAXI
Fully automatic	Mini	G $\frac{1}{8}$	194 707	LFRS- $\frac{1}{8}$ -D-5M-O-MINI-A	194 699	LFRS- $\frac{1}{8}$ -D-O-MINI-A
		G $\frac{1}{4}$	194 719	LFRS- $\frac{1}{4}$ -D-5M-O-MINI-A	194 711	LFRS- $\frac{1}{4}$ -D-O-MINI-A
		G $\frac{3}{8}$	194 731	LFRS- $\frac{3}{8}$ -D-5M-O-MINI-A	194 723	LFRS- $\frac{3}{8}$ -D-O-MINI-A
	Midi	G $\frac{1}{4}$	194 743	LFRS- $\frac{1}{4}$ -D-5M-O-MIDI-A	194 735	LFRS- $\frac{1}{4}$ -D-O-MIDI-A
		G $\frac{3}{8}$	194 755	LFRS- $\frac{3}{8}$ -D-5M-O-MIDI-A	194 747	LFRS- $\frac{3}{8}$ -D-O-MIDI-A
		G $\frac{1}{2}$	194 767	LFRS- $\frac{1}{2}$ -D-5M-O-MIDI-A	194 759	LFRS- $\frac{1}{2}$ -D-O-MIDI-A
	G $\frac{3}{4}$	194 779	LFRS- $\frac{3}{4}$ -D-5M-O-MIDI-A	194 771	LFRS- $\frac{3}{4}$ -D-O-MIDI-A	
	Maxi	G $\frac{1}{2}$	194 791	LFRS- $\frac{1}{2}$ -D-5M-O-MAXI-A	194 783	LFRS- $\frac{1}{2}$ -D-O-MAXI-A
		G $\frac{3}{4}$	194 803	LFRS- $\frac{3}{4}$ -D-5M-O-MAXI-A	194 795	LFRS- $\frac{3}{4}$ -D-O-MAXI-A
G1		194 815	LFRS-1-D-5M-O-MAXI-A	194 807	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, lockable				
Condensate drain	Size	Connection	Grade of filtration 40 µm	
			Part No.	Type
With pressure gauge				
Turned manually	Mini	G1⁄8	194 700	LFRS-1⁄8-D-7-MINI
		G1⁄4	194 712	LFRS-1⁄4-D-7-MINI
		G3⁄8	194 724	LFRS-3⁄8-D-7-MINI
	Midi	G1⁄4	194 736	LFRS-1⁄4-D-7-MIDI
		G3⁄8	194 748	LFRS-3⁄8-D-7-MIDI
		G1⁄2	194 760	LFRS-1⁄2-D-7-MIDI
		G3⁄4	194 772	LFRS-3⁄4-D-7-MIDI
	Maxi	G1⁄2	194 784	LFRS-1⁄2-D-7-MAXI
		G3⁄4	194 796	LFRS-3⁄4-D-7-MAXI
		G1	194 808	LFRS-1-D-7-MAXI
Fully automatic	Mini	G1⁄8	194 702	LFRS-1⁄8-D-7-MINI-A
		G1⁄4	194 714	LFRS-1⁄4-D-7-MINI-A
		G3⁄8	194 726	LFRS-3⁄8-D-7-MINI-A
	Midi	G1⁄4	194 738	LFRS-1⁄4-D-7-MIDI-A
		G3⁄8	194 750	LFRS-3⁄8-D-7-MIDI-A
		G1⁄2	194 762	LFRS-1⁄2-D-7-MIDI-A
		G3⁄4	194 774	LFRS-3⁄4-D-7-MIDI-A
	Maxi	G1⁄2	194 786	LFRS-1⁄2-D-7-MAXI-A
		G3⁄4	194 798	LFRS-3⁄4-D-7-MAXI-A
		G1	194 810	LFRS-1-D-7-MAXI-A
Without pressure gauge				
Turned manually	Mini	G1⁄8	194 701	LFRS-1⁄8-D-7-O-MINI
		G1⁄4	194 713	LFRS-1⁄4-D-7-O-MINI
		G3⁄8	194 725	LFRS-3⁄8-D-7-O-MINI
	Midi	G1⁄4	194 737	LFRS-1⁄4-D-7-O-MIDI
		G3⁄8	194 749	LFRS-3⁄8-D-7-O-MIDI
		G1⁄2	194 761	LFRS-1⁄2-D-7-O-MIDI
		G3⁄4	194 773	LFRS-3⁄4-D-7-O-MIDI
	Maxi	G1⁄2	194 785	LFRS-1⁄2-D-7-O-MAXI
		G3⁄4	194 797	LFRS-3⁄4-D-7-O-MAXI
		G1	194 809	LFRS-1-D-7-O-MAXI
Fully automatic	Mini	G1⁄8	194 703	LFRS-1⁄8-D-7-O-MINI-A
		G1⁄4	194 715	LFRS-1⁄4-D-7-O-MINI-A
		G3⁄8	194 727	LFRS-3⁄8-D-7-O-MINI-A
	Midi	G1⁄4	194 739	LFRS-1⁄4-D-7-O-MIDI-A
		G3⁄8	194 751	LFRS-3⁄8-D-7-O-MIDI-A
		G1⁄2	194 763	LFRS-1⁄2-D-7-O-MIDI-A
		G3⁄4	194 775	LFRS-3⁄4-D-7-O-MIDI-A
	Maxi	G1⁄2	194 787	LFRS-1⁄2-D-7-O-MAXI-A
		G3⁄4	194 799	LFRS-3⁄4-D-7-O-MAXI-A
		G1	194 811	LFRS-1-D-7-O-MAXI-A

Filter regulators LFR/LFRS, D series, metal design

FESTO

Technical data

Ordering data						
Pressure regulation range 0.5 ... 12 bar, directly actuated diaphragm regulator with integrated return flow function, lockable						
Condensate drain	Size	Connection	Grade of filtration 5 µm			Grade of filtration 40 µm
			Part No.	Type		Part No.
With pressure gauge						
Turned manually	Maxi	G½	194 818	LFRS-½-D-5M-DI-MAXI		194 816 LFRS-½-D-DI-MAXI
		G¾	194 824	LFRS-¾-D-5M-DI-MAXI		194 822 LFRS-¾-D-DI-MAXI
		G1	194 830	LFRS-1-D-5M-DI-MAXI		194 828 LFRS-1-D-DI-MAXI
Fully automatic	Maxi	G½	194 836	LFRS-½-D-5M-DI-MAXI-A		194 834 LFRS-½-D-DI-MAXI-A
		G¾	194 842	LFRS-¾-D-5M-DI-MAXI-A		194 840 LFRS-¾-D-DI-MAXI-A
		G1	194 848	LFRS-1-D-5M-DI-MAXI-A		194 846 LFRS-1-D-DI-MAXI-A
Without pressure gauge						
Turned manually	Maxi	G½	194 819	LFRS-½-D-5M-O-DI-MAXI		194 817 LFRS-½-D-O-DI-MAXI
		G¾	194 825	LFRS-¾-D-5M-O-DI-MAXI		194 823 LFRS-¾-D-O-DI-MAXI
		G1	194 831	LFRS-1-D-5M-O-DI-MAXI		194 829 LFRS-1-D-O-DI-MAXI
Fully automatic	Maxi	G½	194 837	LFRS-½-D-5M-O-DI-MAXI-A		194 835 LFRS-½-D-O-DI-MAXI-A
		G¾	194 843	LFRS-¾-D-5M-O-DI-MAXI-A		194 841 LFRS-¾-D-O-DI-MAXI-A
		G1	194 849	LFRS-1-D-5M-O-DI-MAXI-A		194 847 LFRS-1-D-O-DI-MAXI-A

Ordering data					
Pressure regulation range 0.5 ... 7 bar, directly actuated diaphragm regulator with integrated return flow function, lockable					
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm
			Part No.	Type	Part No.
With pressure gauge					
Turned manually	Maxi	G½	–		194 820 LFRS-½-D-7-DI-MAXI
		G¾	–		194 826 LFRS-¾-D-7-DI-MAXI
		G1	–		194 832 LFRS-1-D-7-DI-MAXI
Fully automatic	Maxi	G½	–		194 838 LFRS-½-D-7-DI-MAXI-A
		G¾	–		194 844 LFRS-¾-D-7-DI-MAXI-A
		G1	–		194 850 LFRS-1-D-7-DI-MAXI-A
Without pressure gauge					
Turned manually	Maxi	G½	–		194 821 LFRS-½-D-7-O-DI-MAXI
		G¾	–		194 827 LFRS-¾-D-7-O-DI-MAXI
		G1	–		194 833 LFRS-1-D-7-O-DI-MAXI
Fully automatic	Maxi	G½	–		194 839 LFRS-½-D-7-O-DI-MAXI-A
		G¾	–		194 845 LFRS-¾-D-7-O-DI-MAXI-A
		G1	–		194 851 LFRS-1-D-7-O-DI-MAXI-A

Filter regulators LFR/LFRS, D series, metal design

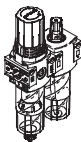
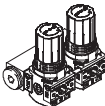
Technical data

FESTO

Filter regulators LFR, D series, polymer

Product range overview D series service units, polymer

FESTO

Type		Size	Pneumatic connection			Pressure regulation range [bar]	Grade of filtration [µm]	
			G1/8	G1/4	G1/2		5	40
Service units								
FRC		Mini	■	■	–	■	■	■
Individual devices								
Filter regulators LFR		Mini	■	■	–	■	■	■
Pressure regulators LR		Mini	■	■	–	■	–	–
Pressure regulator combinations LRB-K		Mini	–	–	■	■	–	–

Filter regulators LFR, D series, polymer

Product range overview D series service units, polymer

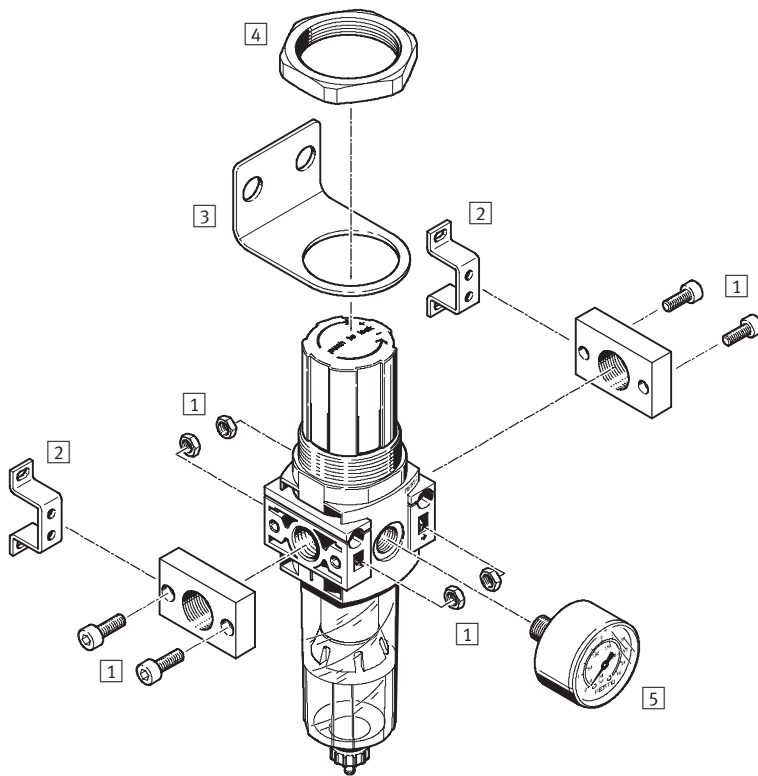
FESTO

Type	Size	Condensate drain		Pressure display		Actuator lock	Regulating functions		→ Page/ Internet
		Manual rotary	Semi-automatic	With pressure gauge	Without pressure gauge	Rotary knob with detent	With secondary venting	With return flow function	
Service units									
FRC	Mini	■	■	■	–	■	■	■	frc
Individual devices									
Filter regulators LFR	Mini	■	■	■	■	■	■	■	28
Pressure regulators LR	Mini	–	–	■	■	■	■	■	lr
Pressure regulator combinations LRB-K	Mini	–	–	–	■	■	■	■	lrb

Filter regulators LFR, D series, polymer

Peripherals overview

FESTO



Mounting attachments and accessories

	→ Page/ Internet
1 Connecting plate kit PBL	pbl
2 Mounting bracket HFOE	hfoe-d
3 Mounting bracket HR-D	hr-d
4 Hex nut HMR	hmr-d
5 Pressure gauge MA	35

Filter regulators LFR, D series, polymer

FESTO

Type codes

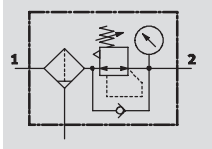
		LFR	–	1/8	–	DB	–	7	–	5M	–	0	–	MINI	–	H
Basic function																
LFR	Filter regulator															
Pneumatic connection																
1/8	Thread G1/8															
1/4	Thread G1/4															
Series																
DB	Series															
Pressure regulation range																
7	0.5 ... 7 bar															
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

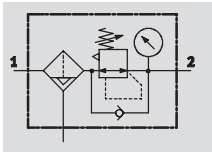
FESTO

Technical data

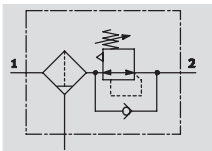
Function
with pressure gauge
Condensate drain
manual rotary



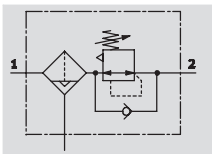
semi-automatic



without pressure gauge
Condensate drain
manual rotary



semi-automatic



-  - Flow rate
500 ... 1200 l/min
-  - Temperature range
-5 ... +50 °C
-  - Input pressure
1.5 ... 10 bar



- 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 → 34

General technical data				
Size	Mini			
	with pressure gauge		without pressure gauge	
Pneumatic connection	G1/8	G1/4	G1/8	G1/4
Operating medium	Compressed air			
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 or 40		5 or 40	
Max. hysteresis [bar]	0.5			
Input pressure [bar]	1.5 ... 10			
Pressure regulation range [bar]	0.5 ... 7			
Pressure indication	Via pressure gauge		G1/8 prepared	
Pressure gauge connection	G1/8			

Standard nominal flow rate ¹⁾ qnN [l/min]			
Pneumatic connection		G1/8	G1/4
Mini			
Grade of filtration	5 µm	≥ 500	≥ 1000
	40 µm	≥ 700	≥ 1200

1) Measured at p1 = 10 bar, p2 = 6 bar and Δp = 1 bar.

Filter regulators LFR, D series, polymer

FESTO

Technical data

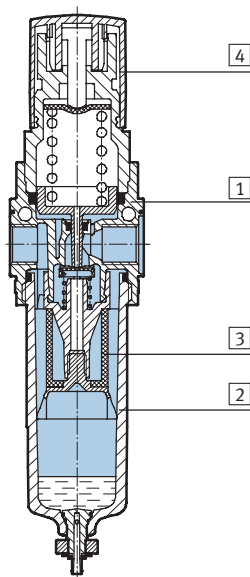
Ambient conditions		
Size		Mini
Ambient temperature	[°C]	−5 ... +50
Temperature of medium	[°C]	−5 ... +50
Corrosion resistance class	CRC ¹⁾	1

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weight [g]	
Size	
Filter regulator	200

Materials

Sectional view



Filter regulator	Mini
1 Housing	Polyamide, reinforced
2 Bowl	Polycarbonate
3 Filter	Polyethylene
4 Rotary knob	Polyacetate
– Seals	Nitrile rubber

Filter regulators LFR, D series, polymer

Technical data

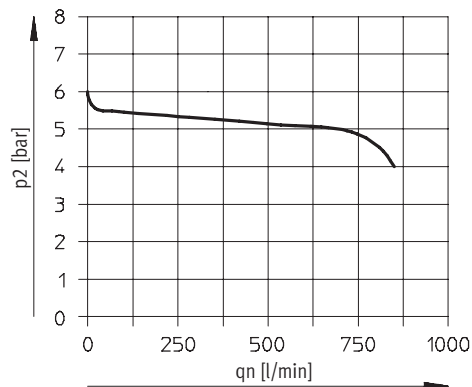
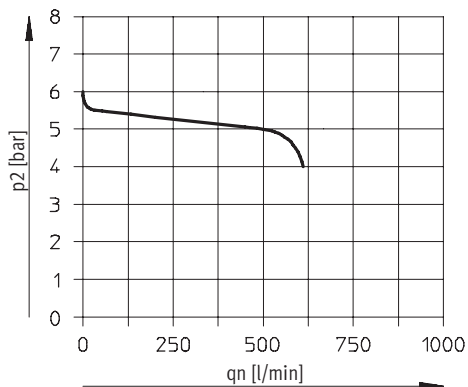
FESTO

Standard flow rate q_n as a function of output pressure p_2

Pneumatic connection $G\frac{1}{8}$

Grade of filtration $5\ \mu\text{m}$

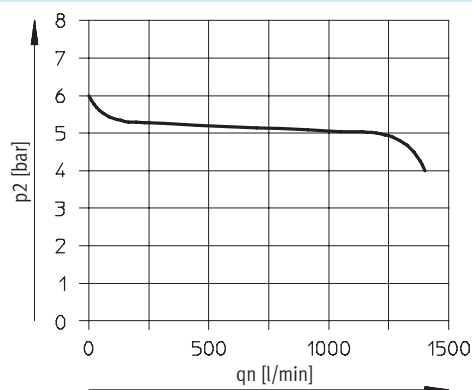
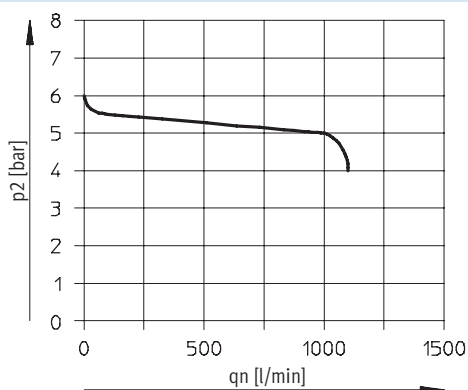
Grade of filtration $40\ \mu\text{m}$



Pneumatic connection $G\frac{1}{4}$

Grade of filtration $5\ \mu\text{m}$

Grade of filtration $40\ \mu\text{m}$



Primary pressure $p_1 = 10\ \text{bar}$

-  - Note

In order to improve control behaviour, primary-pressure dependent internal air consumption is provided.

Filter regulators LFR, D series, polymer

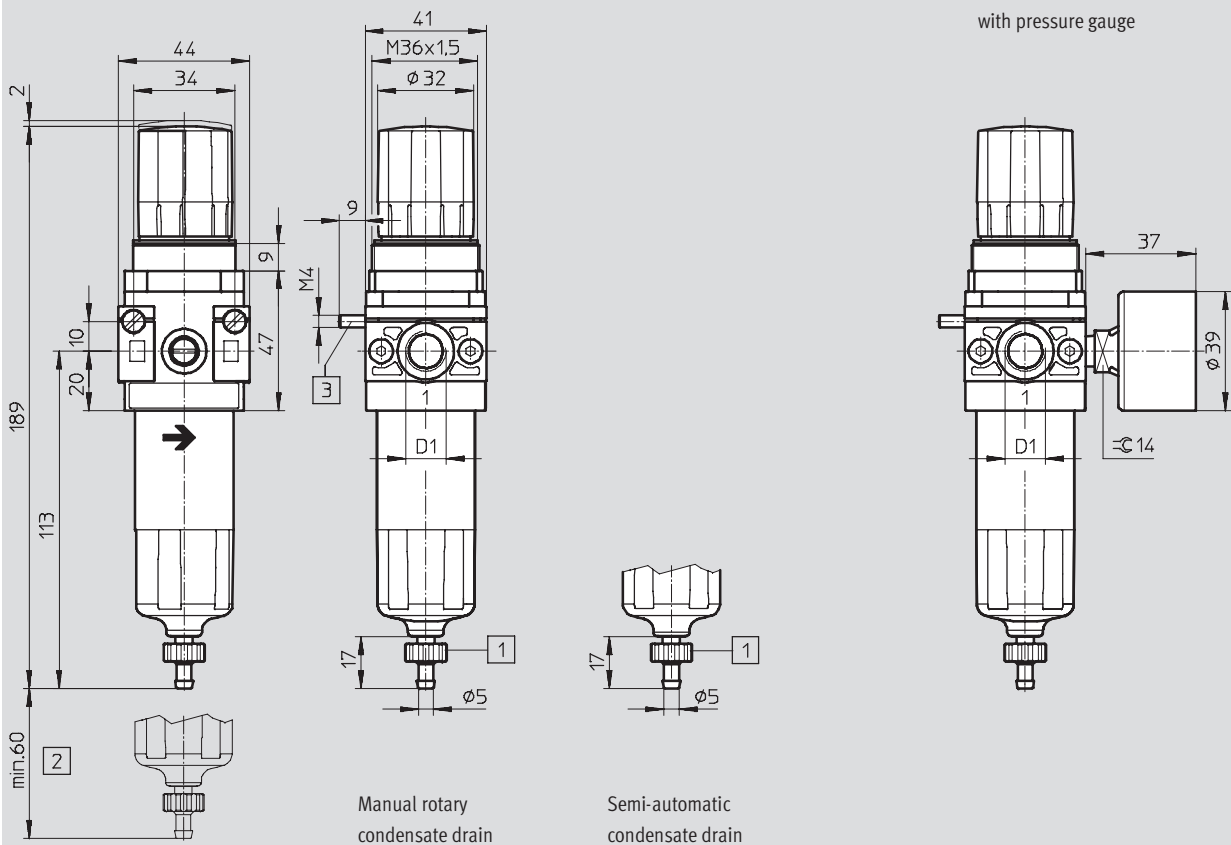
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

Mini



1 Barbed connector for plastic tubing PCN-4

2 Installation dimensions

3 Socket head screw for wall mounting (2 included in scope of delivery)

→ Flow direction

Type	D1
LFR-1/8-DB	G1/8
LFR-1/4-DB	G1/4

Ordering data

Pressure regulation range 0.5 ... 7 bar

Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
With pressure gauge						
Manual rotary	Mini	G1/8	539 687	LFR-1/8-DB-7-5M-MINI	539 683	LFR-1/8-DB-7-MINI
		G1/4	539 689	LFR-1/4-DB-7-5M-MINI	539 685	LFR-1/4-DB-7-MINI
Semi-automatic	Mini	G1/8	539 688	LFR-1/8-DB-7-5M-MINI-H	539 684	LFR-1/8-DB-7-MINI-H
		G1/4	539 690	LFR-1/4-DB-7-5M-MINI-H	539 686	LFR-1/4-DB-7-MINI-H
Without pressure gauge						
Manual rotary	Mini	G1/8	537 648	LFR-1/8-DB-7-5M-O-MINI	537 651	LFR-1/8-DB-7-O-MINI
		G1/4	537 644	LFR-1/4-DB-7-5M-O-MINI	537 647	LFR-1/4-DB-7-O-MINI
Semi-automatic	Mini	G1/8	537 650	LFR-1/8-DB-7-5M-O-MINI-H	537 649	LFR-1/8-DB-7-O-MINI-H
		G1/4	537 646	LFR-1/4-DB-7-5M-O-MINI-H	537 645	LFR-1/4-DB-7-O-MINI-H

Filter regulators LFR/LFRS, D series

Accessories

FESTO

Filter cartridges, D series, metal design



Ordering data			
Size	Grade of filtration [µm]	Part No.	Type
Micro	5	526 818	LFP-D-MICRO-5M
	40	363 665	LFP-D-MINI-40M
Mini	5	159 640	LFP-D-MINI-5M
	40	363 665	LFP-D-MINI-40M
Midi	5	159 594	LFP-D-MIDI-5M
	40	363 667	LFP-D-MIDI-40M
Maxi	5	159 641	LFP-D-MAXI-5M
	40	363 664	LFP-D-MAXI-40M

Filter cartridges, D series, polymer



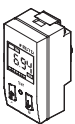
Ordering data			
Size	Grade of filtration [µm]	Part No.	Type
Mini	5	547 957	LFP-DB-MINI-5M
	40	534 502	MS4-LFP-E

Filter regulators LFR/LFRS, D series

Accessories

FESTO

Ordering data – Pressure gauge MA						
	Nominal size	Pneumatic connection	Indicating range		Part No.	Type
			[bar]	[psi]		
	Pressure gauge MA				Technical data → Internet: ma	
	27	M5	0 ... 10	–	526 323	MA-27-10-M5
	40	G1/8	0 ... 10	0 ... 145	359 874	MA-40-10-1/4
			0 ... 16	0 ... 232	345 395	MA-40-16-1/4
	50	G1/4	0 ... 10	0 ... 145	359 873	MA-50-10-1/4
			0 ... 16	0 ... 232	356 759	MA-50-16-1/4
	Pressure gauge MA, DIN EN 837-1				Technical data → Internet: ma	
	40	R1/8	0 ... 10	0 ... 145	162 835	MA-40-10-1/8-EN
		G1/4	0 ... 10	0 ... 145	183 900	MA-40-10-G1/4-EN
	Flanged pressure gauge FMA, DIN EN 837-1				Technical data → Internet: fma	
	40	G1/4	0 ... 10	0 ... 145	159 596	FMA-40-10-1/4-EN
			0 ... 16	0 ... 232	159 597	FMA-40-16-1/4-EN
	50	G1/4	0 ... 10	0 ... 145	159 599	FMA-50-10-1/4-EN
			0 ... 16	0 ... 232	159 600	FMA-50-16-1/4-EN

Ordering data – Pressure sensor SDE1					Technical data → Internet: sde1	
	Pneumatic connection	Electrical output	Electrical connection	Display	Part No.	Type
Pressure sensor SDE1 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 $\frac{1}{8}$	1 switch output PNP	M8x1, 3-pin	LCD	192 026	SDE1-D10-G2-R18-C-P1-M8
		2 switch outputs PNP	M8x1, 4-pin	LCD	192 027	SDE1-D10-G2-R18-C-P2-M8
	Male thread R $\frac{1}{4}$	1 switch output PNP	M8x1, 3-pin	LCD	192 028	SDE1-D10-G2-R14-C-P1-M8
		2 switch outputs PNP	M8x1, 4-pin	LCD	192 029	SDE1-D10-G2-R14-C-P2-M8