

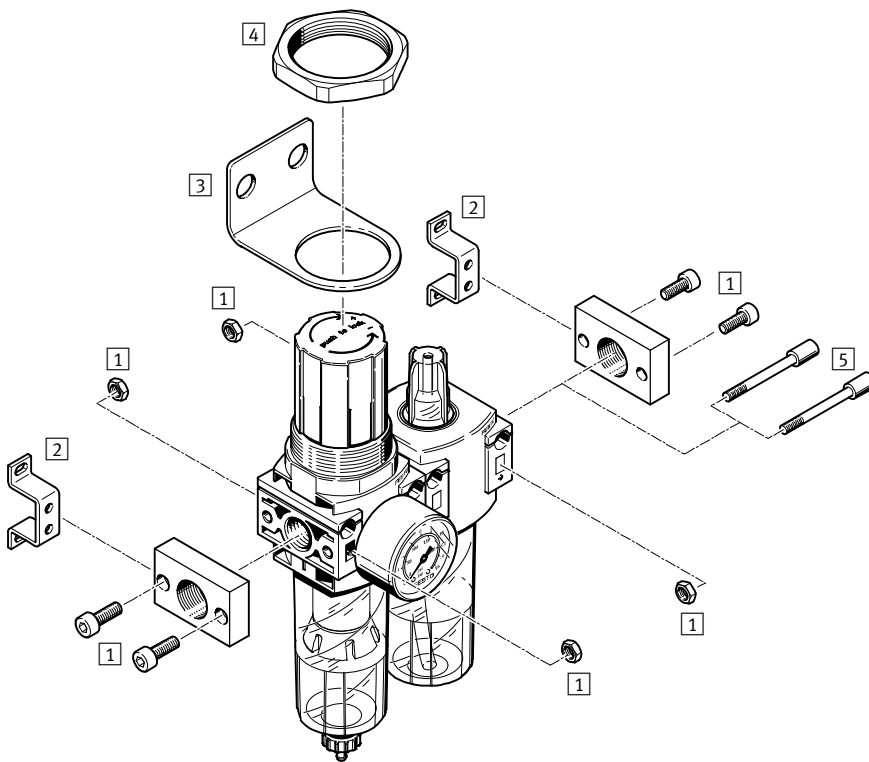
Service units FRC, D series, polymer

Product range overview D series service units, polymer

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

Service units FRC, D series, polymer

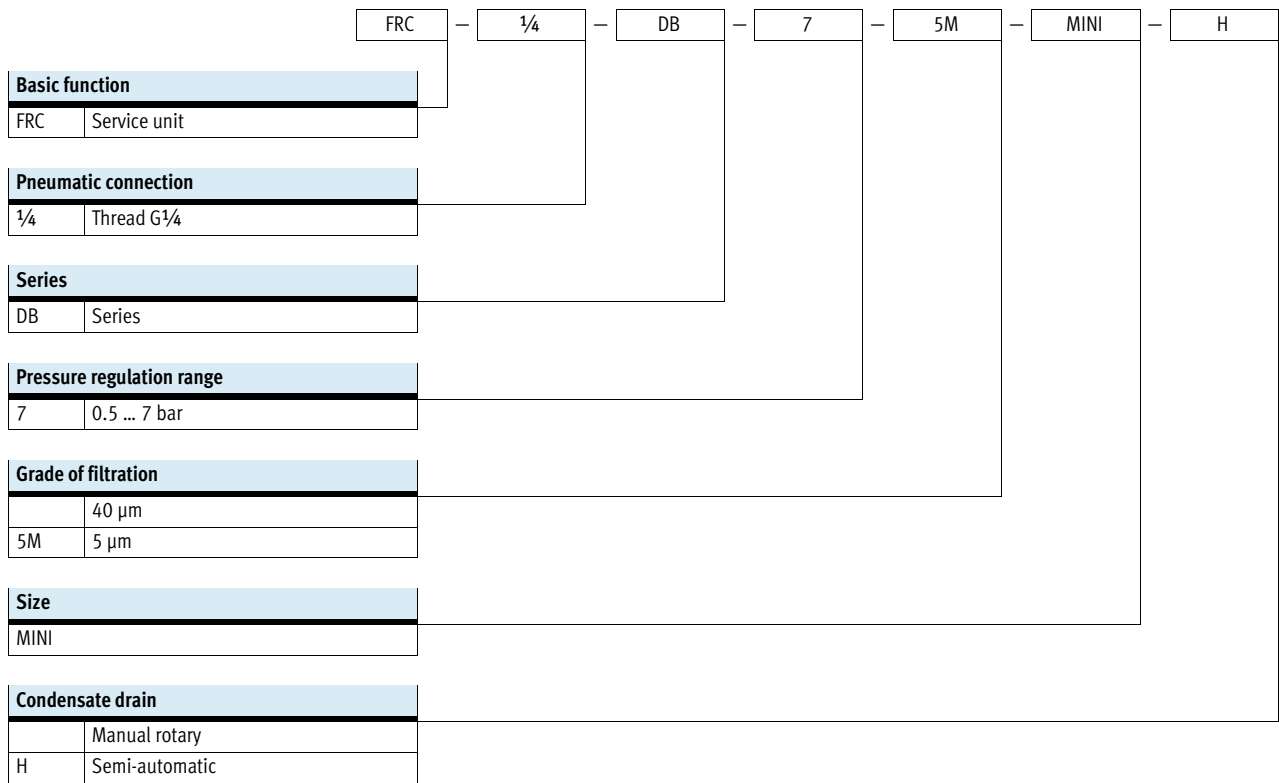
Peripherals overview



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	Threaded pin FRB	frb-db

Service units FRC, D series, polymer

Type codes

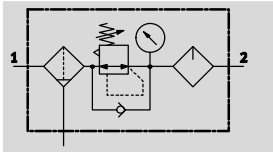


Service units FRC, D series, polymer

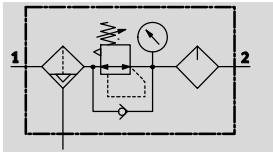
Technical data





FESTO

Manual rotary condensate drain



Semi-automatic condensate drain



-  - Flow rate
400 ... 650 l/min
-  - Temperature range
-5 ... +50 °C
-  - Operating pressure
1.5 ... 10 bar
-  - www.festo.com



- Filter, regulator and lubricator functions in a single unit
- High flow rate and highly efficient removal of contaminants
- Good regulating characteristics with minimal pressure hysteresis
- Setting values are secured by means of the rotary knob with detent
- With manual or semi-automatic condensate drain
- New filter cartridges → 31

The following oils are recommended for Festo components:

Viscosity range to ISO 3448 class VG 32
32 mm²/s (cSt) at 40 °C

- Festo special oil → 32
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

General technical data	
Size	Mini
Pneumatic connection	G ¹ / ₄
Design	Filter/regulator/lubricator
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 in accordance with ISO 8573-1:2010 [6:8--] (Grade of filtration 5 µm) Compressed air in accordance with ISO 8573-1:2010 [7:8--] (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
Max. hysteresis [bar]	0.5
Pressure indication	Via pressure gauge
Pressure gauge connection	G ¹ / ₈

Standard nominal flow rate ¹⁾ qnN [l/min]		
Size	Mini	
Grade of filtration	5 µm	≥ 550
	40 µm	≥ 650

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

• 125 l/min must be available for the semi automatic condensate drain to close correctly.

Service units FRC, D series, polymer

Technical data

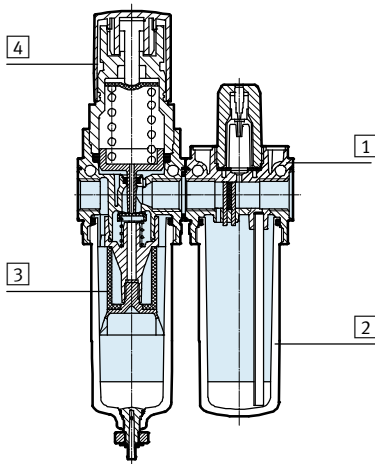
Operating and environmental conditions	
Size	Mini
Operating pressure [bar]	1.5 ... 10
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [---:--] Inert gases
Ambient temperature [°C]	-5 ... +50
Temperature of medium [°C]	-5 ... +50
Storage temperature [°C]	-5 ... +50
Corrosion resistance class CRC ¹⁾	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
Service unit	300

Materials

Sectional view

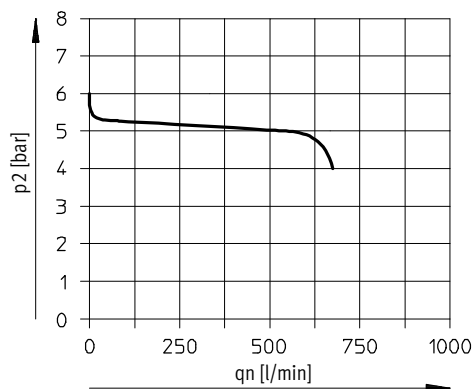


Size	Mini
1 Housing	PA, reinforced
2 Bowl	PC
3 Filter	PE
4 Rotary knob	POM
- Seals	NBR

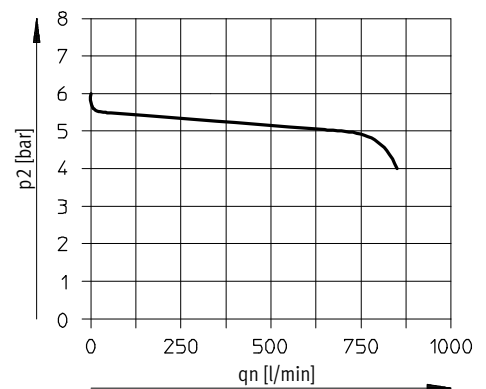
Standard flow rate q_n as a function of output pressure p_2

Operating pressure $p_1 = 10$ bar

Grade of filtration 5 μ m



Grade of filtration 40 μ m



-  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.

Service units FRC, D series, polymer

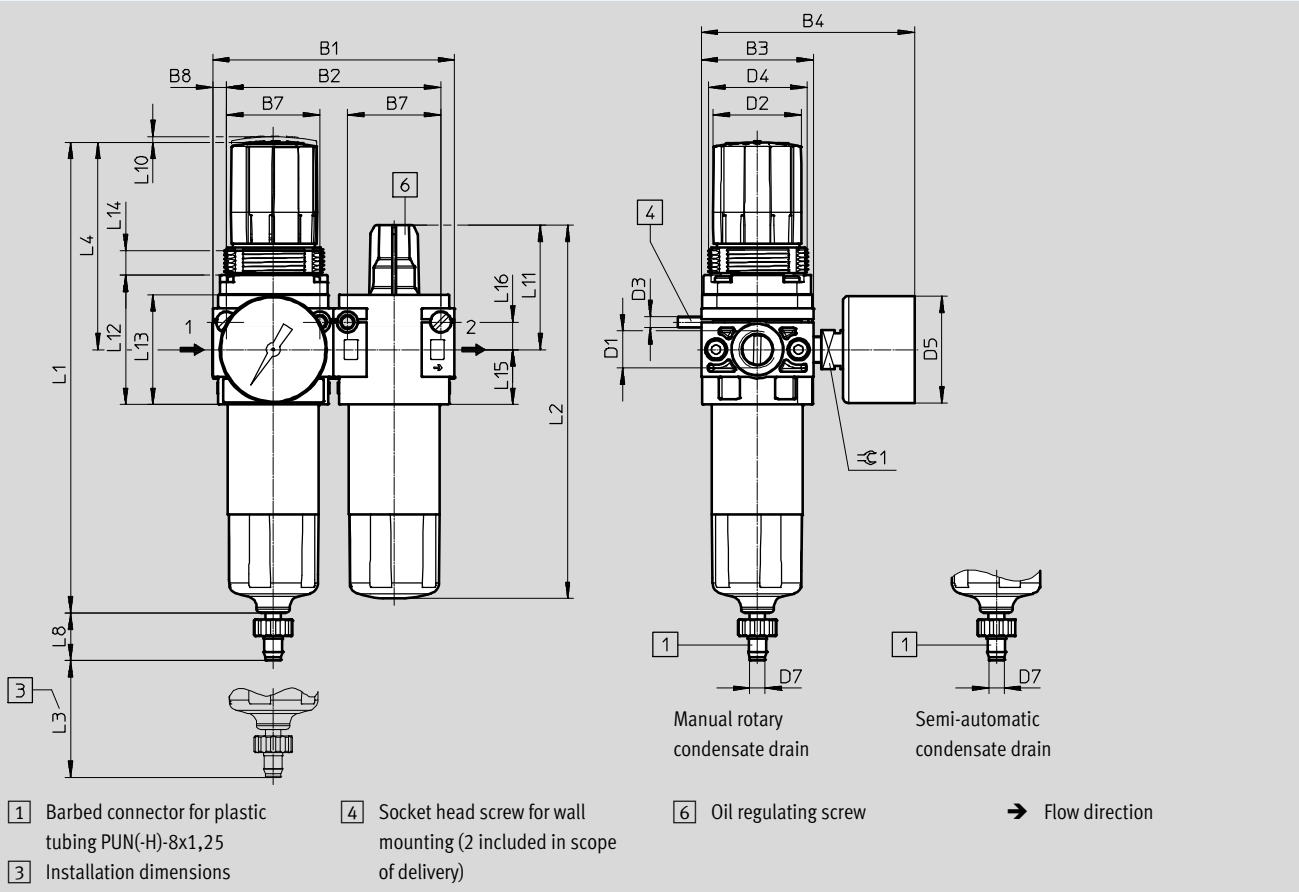
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

Mini



Type	B1	B2	B3	B4	B7	B8	D1	D2	D3	D4	D5	D7
FRC-1/4-DB	88	78	41	78	34	5	G1/4	32	M4	M36x1.5	39	5.6

Type	L1	L2	L3	L4	L8	L10	L11	L12	L13	L14	L15	L16	±0.1
FRC-1/4-DB	171.7	136	12	76	17.3	2	45	47	40	9	20	10	14

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, outer scale in bar, inner scale in psi						
Manual rotary	Mini	G1/4	537658	FRC-1/4-DB-7-5M-MINI	537654	FRC-1/4-DB-7-MINI
Semi-automatic	Mini	G1/4	537660	FRC-1/4-DB-7-5M-MINI-H	537656	FRC-1/4-DB-7-MINI-H