

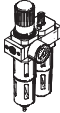
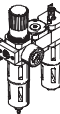
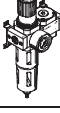
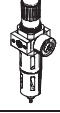
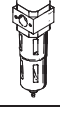




Branching modules FRM/Distributor blocks FRZ, D series



Branching modules FRM/Distributor blocks FRZ, 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 ... | 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 | - | - | - | - | - | ■ | ■ | ■ | - | - | - | ■ | ■ | - | - | - | - |

Branching modules FRM/Distributor blocks FRZ, 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 | - | ■ | ■ | ■ | - | ■ | ■ | ■ | - | - | - | - | - | - | - | lfr |
| | 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 | - | - | - | - | - | ■ | ■ | ■ | ■ | - | - | - | ■ | ■ | - | |

Branching modules FRM/Distributor blocks FRZ, 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 ... 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 | - | | | | | | | | | | | |

Branching modules FRM/Distributor blocks FRZ, 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 | - | - | - | ■ | - | - | - | - | - | ■ | ■ | 6 |
| | Mini | - | - | - | ■ | - | - | - | - | - | ■ | ■ | |
| | Midi | - | - | - | ■ | - | - | - | - | - | ■ | ■ | |
| | Maxi | - | - | - | ■ | - | - | - | - | - | ■ | ■ | |
| Distributor block FRZ | Micro | - | - | - | ■ | - | - | - | - | - | - | - | 12 |
| | Mini | - | - | - | ■ | - | - | - | - | - | - | - | |
| | Midi | - | - | - | ■ | - | - | - | - | - | - | - | |
| | Maxi | - | - | - | ■ | - | - | - | - | - | - | - | |

Branching modules FRM, D series, metal design

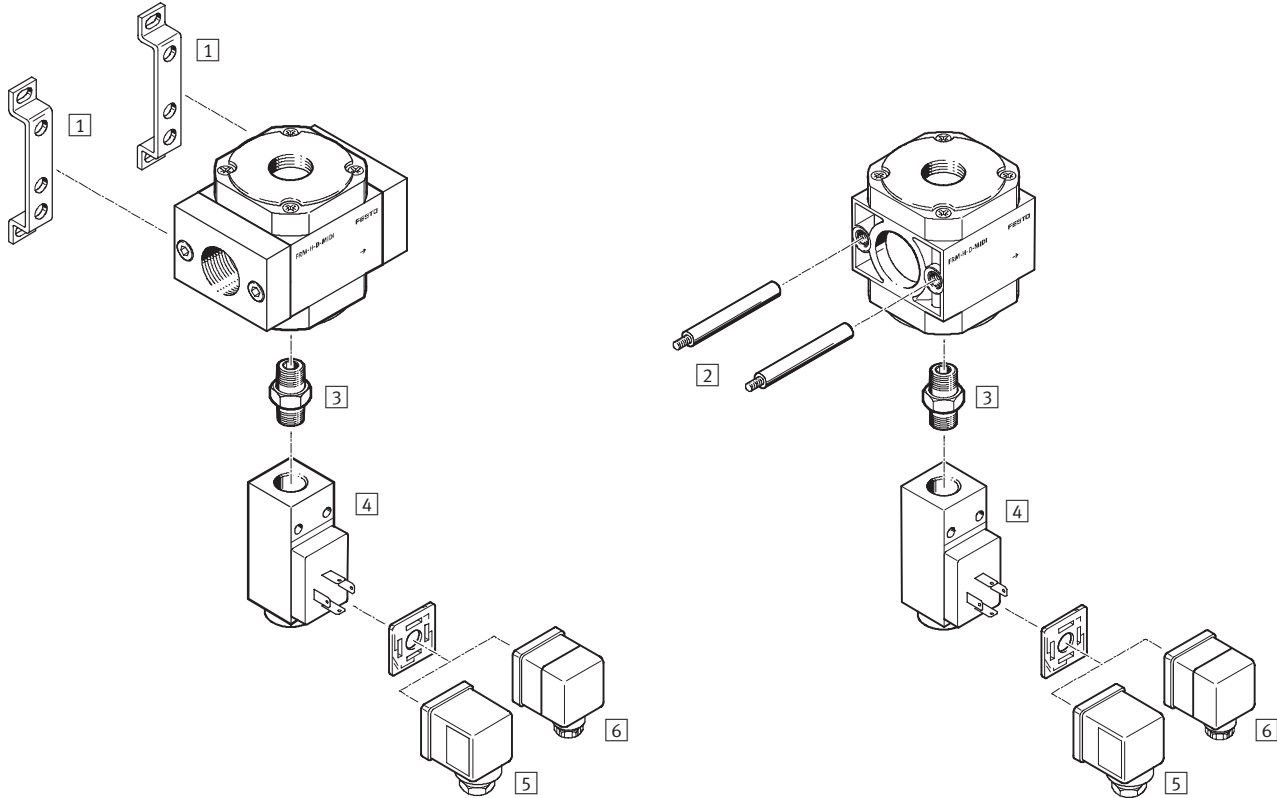
Peripherals overview

FESTO

Mini/Midi/Maxi

Individual unit with connection plates

Individual unit without connection plates, for service unit combination



| 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 Threaded pin (included in scope of delivery) FRB | - | - | ■ | ■ | frb-d |
| 3 Double nipple ESK | ■ | ■ | ■ | ■ | 14 |
| 4 Pressure switches PEV | ■ | ■ | ■ | ■ | 14 |
| 5 Plug socket MSSD-C | ■ | ■ | ■ | ■ | 14 |
| 6 Angled plug socket PEV-...-WD-LED | ■ | ■ | ■ | ■ | 14 |

Branching modules FRM, D series, metal design

Type codes



Basic function

| | |
|-----|------------------|
| FRM | Branching module |
|-----|------------------|

Non-return function/pressure switch

| | |
|---|-------------------------------------|
| | Standard |
| H | With integrated non-return function |
| Y | With pressure switch |

Pneumatic connection

| | |
|-----|---------------------------|
| | Without connection plates |
| 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 |
|---|--------|


Size

| | |
|------|---|
| MINI | Grid dimension 40 mm (without connection plates) |
| MIDI | Grid dimension 55 mm (without connection plates) |
| MAXI | Grid dimension 66 mm (without connection plates) |

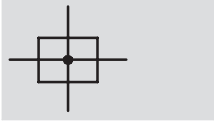
Branching modules FRM, D series, metal design


Technical data

Function

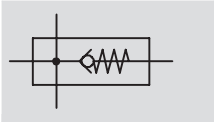
-  - Flow rate
1,300 ... 20,000 l/min


Standard



-  - Temperature range
-10 ... +60 °C

With non-return function




-  - Operating pressure
0 ... 16 bar



- An integrated non-return valve prevents return flow of lubricated compressed air
- Branching module for compressed air distribution for attachment of additional modules (pressure regulator, pressure switch, etc.)
- Several additional air connections for greater flexibility
- Can be used as an intermediate distributor for varying air qualities

| General technical data | | | | | | | | | | |
|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----|
| Size | Mini | | | Midi | | | | Maxi | | |
| Pneumatic connection 1 ¹⁾ | G ¹ / ₈ | G ¹ / ₄ | G ³ / ₈ | G ¹ / ₄ | G ³ / ₈ | G ¹ / ₂ | G ³ / ₄ | G ¹ / ₂ | G ³ / ₄ | G1 |
| Pneumatic connection 2 ¹⁾ | G ¹ / ₈ | G ¹ / ₄ | G ³ / ₈ | G ¹ / ₄ | G ³ / ₈ | G ¹ / ₂ | G ³ / ₄ | G ¹ / ₂ | G ³ / ₄ | G1 |
| Pneumatic connection 3 | G ¹ / ₄ | | | G ¹ / ₂ | | | | G ³ / ₄ | | |
| Pneumatic connection 4 | G ¹ / ₄ | | | | | | | | | |
| Operating medium | Filtered compressed air | | | | | | | | | |
| Design | Branching module | | | | | | | | | |
| Type of mounting | Via accessories | | | | | | | | | |
| | In-line installation | | | | | | | | | |
| Assembly position | Any | | | | | | | | | |
| Operating pressure [bar] | | | | | | | | | | |
| Standard | 0 ... 16 | | | | | | | | | |
| With non-return function | 0.15 ... 16 | | | 0.2 ... 16 | | | | 0.25 ... 16 | | |
| With pressure switch | 0 ... 12 | | | | | | | | | |

1) with connection plates

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

Branching modules FRM, D series, metal design

Technical data

| Standard nominal flow rate ¹⁾ qnN [l/min] | | | | | | | | |
|--|------|---------------------------|------------------------|-------|-------|--------|--------|--------|
| Port | | Without connection plates | With connection plates | | | | | |
| | | | G1/8 | G1/4 | G3/8 | G1/2 | G3/4 | G1 |
| Standard | | | | | | | | |
| In main flow direction 1 → 2 | Mini | 3,300 | 1,500 | 3,300 | 3,300 | – | – | – |
| | Midi | 8,200 | – | 3,500 | 7,000 | 8,200 | 8,800 | – |
| | Maxi | 20,000 | – | – | – | 11,700 | 20,000 | 17,400 |
| With non-return function | | | | | | | | |
| In main flow direction 1 → 2 | Mini | 2,000 | 1,300 | 2,000 | 2,100 | – | – | – |
| | Midi | 5,600 | – | 3,400 | 5,500 | 5,600 | 5,500 | – |
| | Maxi | 15,000 | – | – | – | 9,600 | 15,000 | 13,400 |
| With pressure switch | | | | | | | | |
| In main flow direction 1 → 2 | Mini | 3,300 | – | – | – | – | – | – |
| | Midi | 8,200 | – | – | – | – | – | – |
| | Maxi | 20,000 | – | – | – | – | – | – |

1) Measured at p1 = 6 bar and Δp = 1 bar.

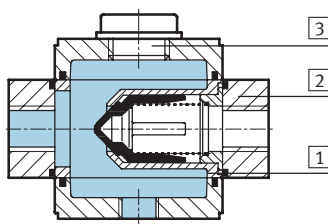
| Ambient conditions | | | |
|--|-------------|------|------|
| Size | Mini | Midi | Maxi |
| Ambient temperature [°C] | –10 ... +60 | | |
| Temperature of medium [°C] | –10 ... +60 | | |
| Storage temperature [°C] | –10 ... +60 | | |
| Corrosion resistance class CRC ¹⁾ | 2 | | |

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.

| Weights [g] | | | | | | | | |
|-------------------------|--|---------------------------|------------------------|------|------|-------|-------|-------|
| Port | | Without connection plates | With connection plates | | | | | |
| | | | G1/8 | G1/4 | G3/8 | G1/2 | G3/4 | G1 |
| Mini | | | | | | | | |
| Without pressure switch | | 210 | 290 | 280 | 290 | – | – | – |
| With pressure switch | | 590 | – | – | – | – | – | – |
| Midi | | | | | | | | |
| Without pressure switch | | 520 | – | 770 | 760 | 740 | 710 | – |
| With pressure switch | | 900 | – | – | – | – | – | – |
| Maxi | | | | | | | | |
| Without pressure switch | | 900 | – | – | – | 1,160 | 1,120 | 1,230 |
| With pressure switch | | 1,280 | – | – | – | – | – | – |

Materials

Sectional view



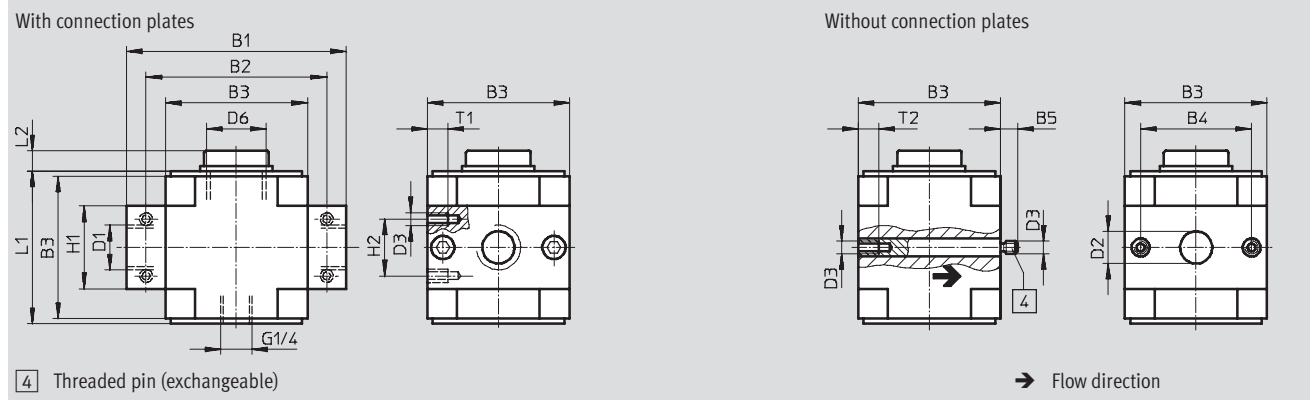
| Branching module | |
|--|---|
| 1 | Housing Die-cast zinc |
| 2 | Connection plates Die-cast zinc |
| 3 | Cover plate Galvanised steel |
| – | Seals Nitrile rubber, polyvinyl chloride |
| Note on materials Free of copper, PTFE and silicone | |

Branching modules FRM, D series, metal design

Technical data

Dimensions Download CAD data → www.festo.com

Mini/Midi/Maxi

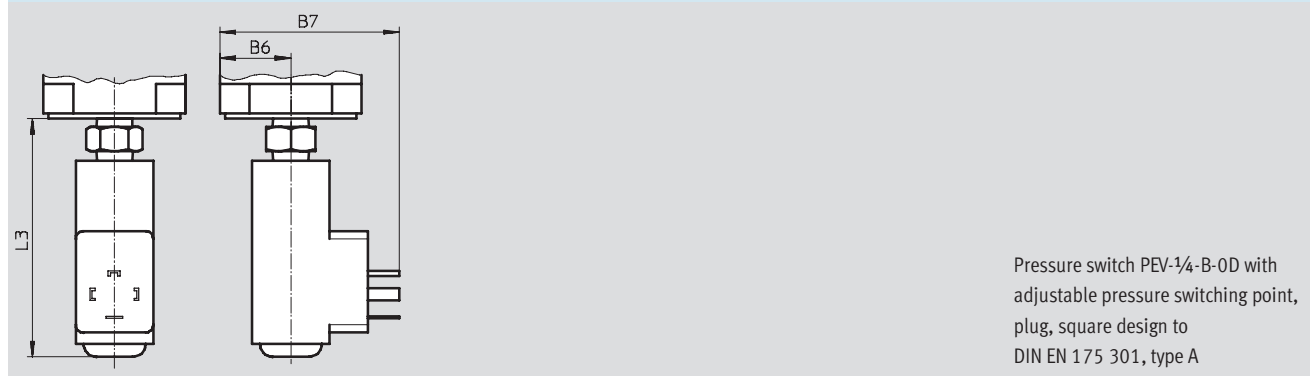


| Type | B1 | B2 | B3 | B4 | B5 | D1 | D2 Ø | D3 | D6 | H1 | H2 | L1 | L2 | T1 | T2 |
|----------------|-----|----|----|----|-----|------|---------|----|------|----|----|----|----|----|----|
| Mini | | | | | | | | | | | | | | | |
| FRM-1/8-D-MINI | 64 | 52 | 40 | 30 | - | G1/8 | - | M4 | G1/4 | 20 | 11 | 42 | 7 | 7 | - |
| FRM-1/4-D-MINI | | | | | | G1/4 | | | | | | | | | |
| FRM-3/8-D-MINI | 70 | | | | | G3/8 | | | | | | | | | |
| FRM-D-MINI | - | - | | | 5.8 | - | 11 | | | | | | | - | 10 |
| Midi | | | | | | | | | | | | | | | |
| FRM-1/4-D-MIDI | 85 | 70 | 55 | 43 | - | G1/4 | - | M5 | G1/2 | 32 | 22 | 59 | 8 | 8 | - |
| FRM-3/8-D-MIDI | | | | | | G3/8 | | | | | | | | | |
| FRM-1/2-D-MIDI | | | | | | G1/2 | | | | | | | | | |
| FRM-3/4-D-MIDI | | | | | | G3/4 | | | | | | | | | |
| FRM-D-MIDI | - | - | | | 6.8 | - | 24 | | | | | | | - | 11 |
| Maxi | | | | | | | | | | | | | | | |
| FRM-1/2-D-MAXI | 96 | 80 | 66 | 46 | - | G1/2 | - | M5 | G3/4 | 32 | 22 | 70 | 8 | 8 | - |
| FRM-3/4-D-MAXI | | | | | | G3/4 | | | | | | | | | |
| FRM-1-D-MAXI | 116 | 91 | | | | G1 | | | | | | | | | |
| FRM-D-MAXI | - | - | | | 6.8 | - | 30 | | | | | | | - | 11 |

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

Dimensions – Pressure switch PEV Download CAD data → www.festo.com

Mini/Midi/Maxi Technical data → Internet: pev-1/4



Pressure switch PEV-1/4-B-0D with adjustable pressure switching point, plug, square design to DIN EN 175 301, type A

| Type | B6 | B7 | L3 |
|--------------|------|------|------|
| FRM-Y-D-MINI | 20 | 62 | 92.3 |
| FRM-Y-D-MIDI | 27.5 | 69.5 | 92.3 |
| FRM-Y-D-MAXI | 33 | 75 | 92.3 |

Branching modules FRM, D series, metal design

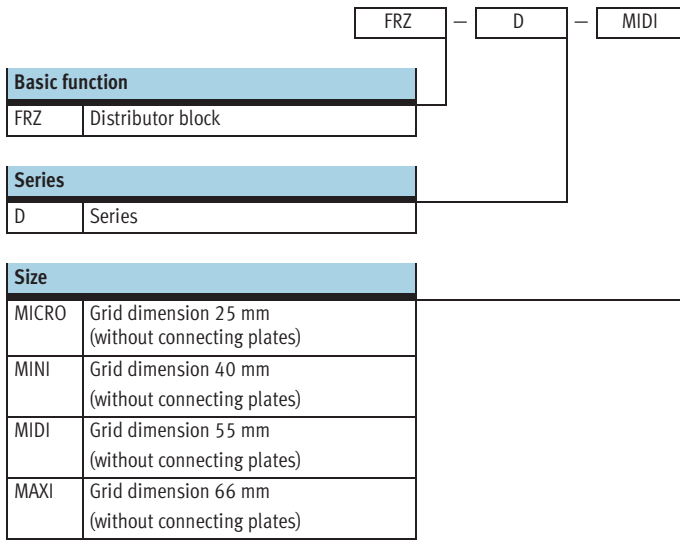
Technical data

| Ordering data – Without connection plates | | | | | | |
|---|----------|------------|-------------------------------------|--------------|-----------------------------------|--------------|
| Size | Standard | | With integrated non-return function | | With pressure switch PEV-1/4-B-0D | |
| | Part No. | Type | Part No. | Type | Part No. | Type |
| Mini | 170684 | FRM-D-MINI | 170687 | FRM-H-D-MINI | 542184 | FRM-Y-D-MINI |
| Midi | 170685 | FRM-D-MIDI | 170688 | FRM-H-D-MIDI | 542185 | FRM-Y-D-MIDI |
| Maxi | 170686 | FRM-D-MAXI | 170689 | FRM-H-D-MAXI | 542186 | FRM-Y-D-MAXI |

| Ordering data – With connection plates | | | | | |
|--|------|----------|----------------|-------------------------------------|------------------|
| Size | Port | Standard | | With integrated non-return function | |
| | | Part No. | Type | Part No. | Type |
| Mini | G1/8 | 164949 | FRM-1/8-D-MINI | 162788 | FRM-H-1/8-D-MINI |
| | G1/4 | 164950 | FRM-1/4-D-MINI | 162789 | FRM-H-1/4-D-MINI |
| | G3/8 | 164951 | FRM-3/8-D-MINI | 162790 | FRM-H-3/8-D-MINI |
| Midi | G1/4 | 186523 | FRM-1/4-D-MIDI | 186525 | FRM-H-1/4-D-MIDI |
| | Gy | 164952 | FRM-3/8-D-MIDI | 162791 | FRM-H-3/8-D-MIDI |
| | G1/2 | 164953 | FRM-1/2-D-MIDI | 162792 | FRM-H-1/2-D-MIDI |
| | G3/4 | 164954 | FRM-3/4-D-MIDI | 162793 | FRM-H-3/4-D-MIDI |
| Maxi | G1/2 | 186524 | FRM-1/2-D-MAXI | 186526 | FRM-H-1/2-D-MAXI |
| | G3/4 | 164955 | FRM-3/4-D-MAXI | 162794 | FRM-H-3/4-D-MAXI |
| | G1 | 164956 | FRM-1-D-MAXI | 162795 | FRM-H-1-D-MAXI |

Distributor blocks FRZ, D series, metal design

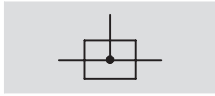
Type codes



Distributor blocks FRZ, D series, metal design

Technical data

Function

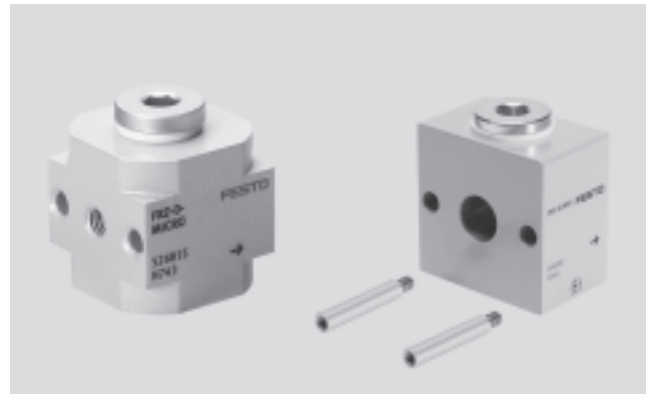


Additional air connections can be used to branch off filtered, unlubricated compressed air, e.g. to supply air barriers, sensors and control systems, or for especially clean air in combination with micro filter LFM.

Materials:

Housing: Aluminium

Cover plate: Galvanised steel



Dimensions Download CAD data → www.festo.com

Micro Mini/Midi/Maxi

4 Threaded pin (exchangeable) → Flow direction

| Type | B1 | B3 | B4 | B5 | B6 | D1 Ø | D2 | D3 | D4 | T2 |
|-------------|----|----|----|----|-----|---------|----|----|----|----|
| Mini | | | | | | | | | | |
| FRZ-D-MINI | 30 | 40 | 30 | 6 | 4.5 | 12 | G¼ | M4 | G¼ | 12 |
| Midi | | | | | | | | | | |
| FRZ-D-MIDI | 35 | 55 | 43 | 7 | 6 | 16 | G¼ | M5 | G½ | 8 |
| Maxi | | | | | | | | | | |
| FRZ-D-MAXI | 40 | 65 | 30 | 7 | 6 | 22 | G¼ | M5 | G¾ | 10 |




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


| Ordering data | | |
|------------------------------------|----------|-------------|
| Distributor block | | |
| Size | Part No. | Type |
| Without threaded connecting plates | | |
| Micro | 526815 | FRZ-D-MICRO |
| Mini | 162786 | FRZ-D-MINI |
| Midi | 159592 | FRZ-D-MIDI |
| Maxi | 162787 | FRZ-D-MAXI |


Branching modules FRM/Distributor blocks FRZ, D series


FESTO

Accessories

| Ordering data – Pressure switch PEV | | | | Technical data → Internet: pev-1/4 | |
|---|----------------------|------------------------------|---|------------------------------------|----------------------|
| | Pneumatic connection | Pressure switching point | Electrical connection | Part No. | Type |
|  | G1/4 | Adjustable with visual scale | Plug, square design to DIN EN 175 301, type A | 161760 | PEV-1/4-SC-0D |
|  | G1/4 | Adjustable | Plug, square design to DIN EN 175 301, type A | 175250 | PEV-1/4-B-0D |
|  | G1/4 | Adjustable | Plug socket MSSD-C-4P | 10773 | PEV-1/4-B |

| Ordering data – Angled socket PEV | | | | | Technical data → Internet: pev-1/4 | |
|---|--------------------|-------------------------|-----------------------|--------------------------|------------------------------------|---------------------------|
| | Description | Operating voltage range | Electrical connection | Switching status display | Part No. | Type |
|  | for PEV-1/4-...-0D | 15 ... 30 V DC | 4-pin | Yellow LED | 164274 | PEV-1/4-WD-LED-24 |
| | | ≤ 230 V AC | 4-pin | Yellow LED | 164275 | PEV-1/4-WD-LED-230 |
| | | ≤ 180 V DC | | | | |

| Ordering data – Plug socket MSSD-C-4P | | | | | Technical data → Internet: mssd-c-4p | |
|---|--------------------|-------------------------|-----------------------|-----------------------------------|--------------------------------------|------------------|
| | Description | Operating voltage range | Electrical connection | Type of mounting cable connection | Part No. | Type |
|  | for PEV-1/4-...-0D | ≤ 250 V AC/DC | 3-pin | Clamping screws | 171157 | MSSD-C-4P |

| Ordering data – Double nipple ESK | | | | | |
|---|--|----------------------|------|---------------|--------------------|
| | Description | Pneumatic connection | | Part No. | Type |
|  | Adjustable for angular compensation • For retro-fitting pressure switch PEV to branching module FRM | R1/4 | R1/4 | 151521 | ESK-1/4-1/4 |