



TRIO DFR/LS Connect 2425

Backwash filter with pressure reducing valve and leakage protection

The SYR TRIO DFR/LS Connect is a combination of a semi-automatic backwashable filter according to DIN EN 13443-1, a pressure reducer according to DIN EN 1567 and a leakage protection according to DIN 3553.

Once the integrated leakage protection of the TRIO DFR/LS Connect has been activated, it permanently and reliably monitors the installation.

The TRIO DFR/LS is part of the CONNECT SYSTEM. It has integrated WiFi, a LAN connection and is controlled via SYR App and smartphone. The TRIO DFR/LS Connect fits on the SYR flange program. The flange can be mounted vertically and horizontally. The scope of delivery includes a flange gasket, hexagon socket screws for flange mounting and a mounting key.

The Trio DFR/LS is installed on SYR connection flange (DN 20 to 32) (page 52)

- Prevents pitting and corrosion
- Backwash system with strong efficiency
- Reliably regulates water pressure
- Complete pressure reducer cartridge for quick maintenance
- Integrated WiFi/LAN
- Control and monitoring via SYR app
- Notifications via push message/email (online mode)
- Reliably protects against expensive water damage and wastage
- Leakage protection self-learning phase can be activated
- Several user profiles adjustable
- Can be used with the NeoSoft Connect soft water system and/or the SafeFloor Connect floor sensors can be connected
- Fits on the SYR flange system

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	30 °C
Fluid	potable water
Mounting position	horizontal main axis
Flow rate according to DIN EN 1567	
DN 20	2.3 m ³ /h at Δp 1.1 bar
DN 25	3.6 m ³ /h at Δp 1.1 bar
DN 32	3.6 m ³ /h at Δp 1.1 bar
Electricity supply	5 V / 50 Hz
Battery	4 x 1.5 V AA (LR6)
Standard wireless protocol	WiFi 2.4 GHz / WPA/WPA2
Protection class	IPX3

Order-No.

TRIO DFR/LS Connect 2425	2425.00.000
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Accessories

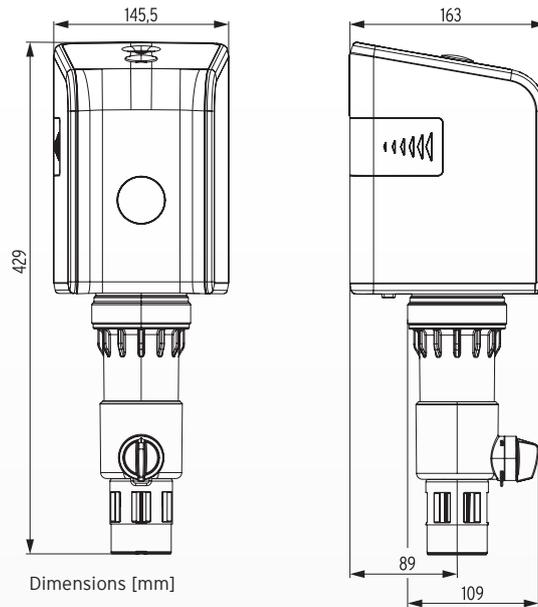
		Order-No.
Flange	DN 20	2315.20.200
	DN 25	2315.25.200
	DN 32	2315.32.200

Spare parts

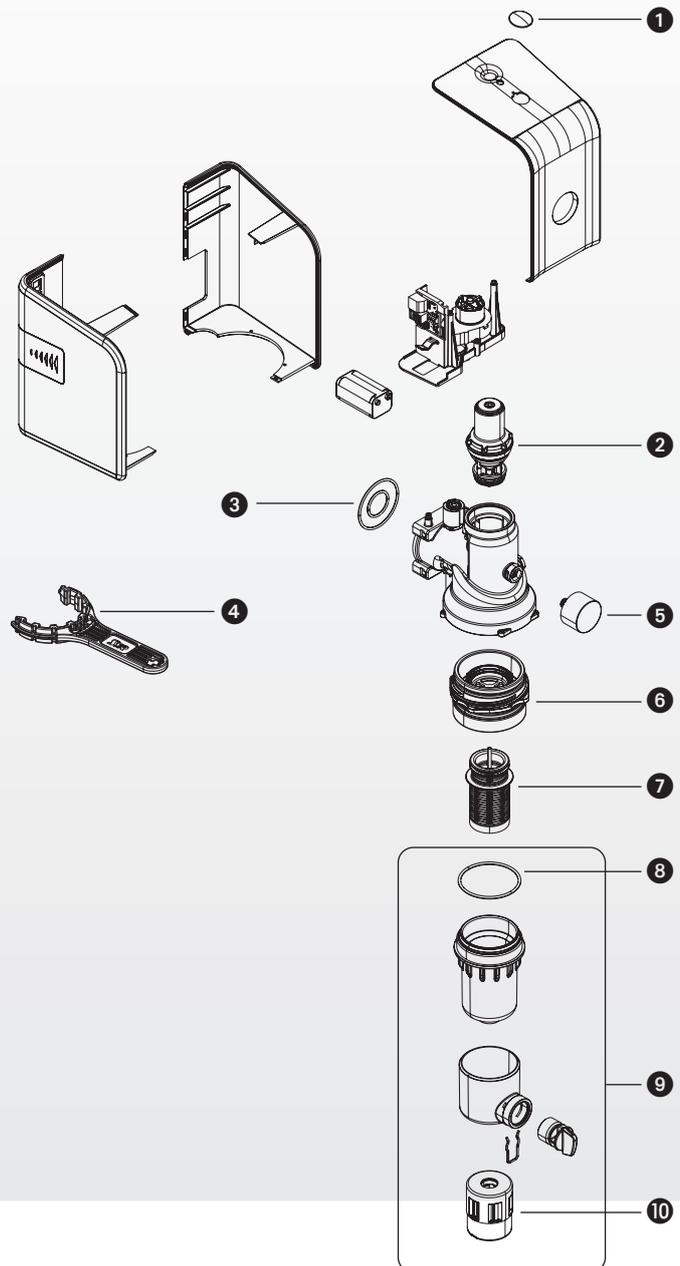
Adapter for filter cup	2425.00.911
Filter cup complete	2425.00.912
Filter element	2425.00.909
Gasket set	2425.00.903
Key for filter cup	2425.00.907
O-ring for filter cup	2425.00.904
Plug	2425.00.908
Pressure gauge	2425.00.906
Pressure reducer	2425.00.902
Tundish	2315.01.921



TRIO DFR/LS Connect Internet-based Filter and Leakage Protection



- 1 Plug
- 2 Pressure reducer
- 3 Flange seal
- 4 Key for filter
- 5 Manometer
- 6 Adapter for filter cup
- 7 Filter element
- 8 O-ring
- 9 Filter cup complete
- 10 Tundish





SafeTech Connect 2422

Leakage protection with monitoring function

The SafeTech Connect leakage protection is installed at the point of entry downstream of the water meter.

The SafeTech Connect continuously measures flow, pressure and temperature and determines the hardness range of the water. If the unit detects unusual consumption and the set values are exceeded the SafeTech shuts off the water supply immediately. The micro leakage test allows to detect even the smallest leaks. During a self-learning phase it monitors individual consumption patterns and allows to easily adjust the settings.

Additionally the SafeTech Connect can be linked with several wireless floor sensors SafeFloor Connect.

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	60 °C
Fluid	potable water
Mounting position	any
Flow rate	
DN 20	6.4 m ³ /h at Δp 1.0 bar
DN 25	7.3 m ³ /h at Δp 1.0 bar
DN 32	7.7 m ³ /h at Δp 1.0 bar
Electricity supply	12V DC
Battery	1 x 6LR61 (9V Block)
Buffer battery (on board)	1 x CR 2032
Standard wireless protocol	WiFi
Network support	TCPIP/IPv4, upgradable to TCPIP/IPv6 MQTT via Port 8883
Protection class	IPX3

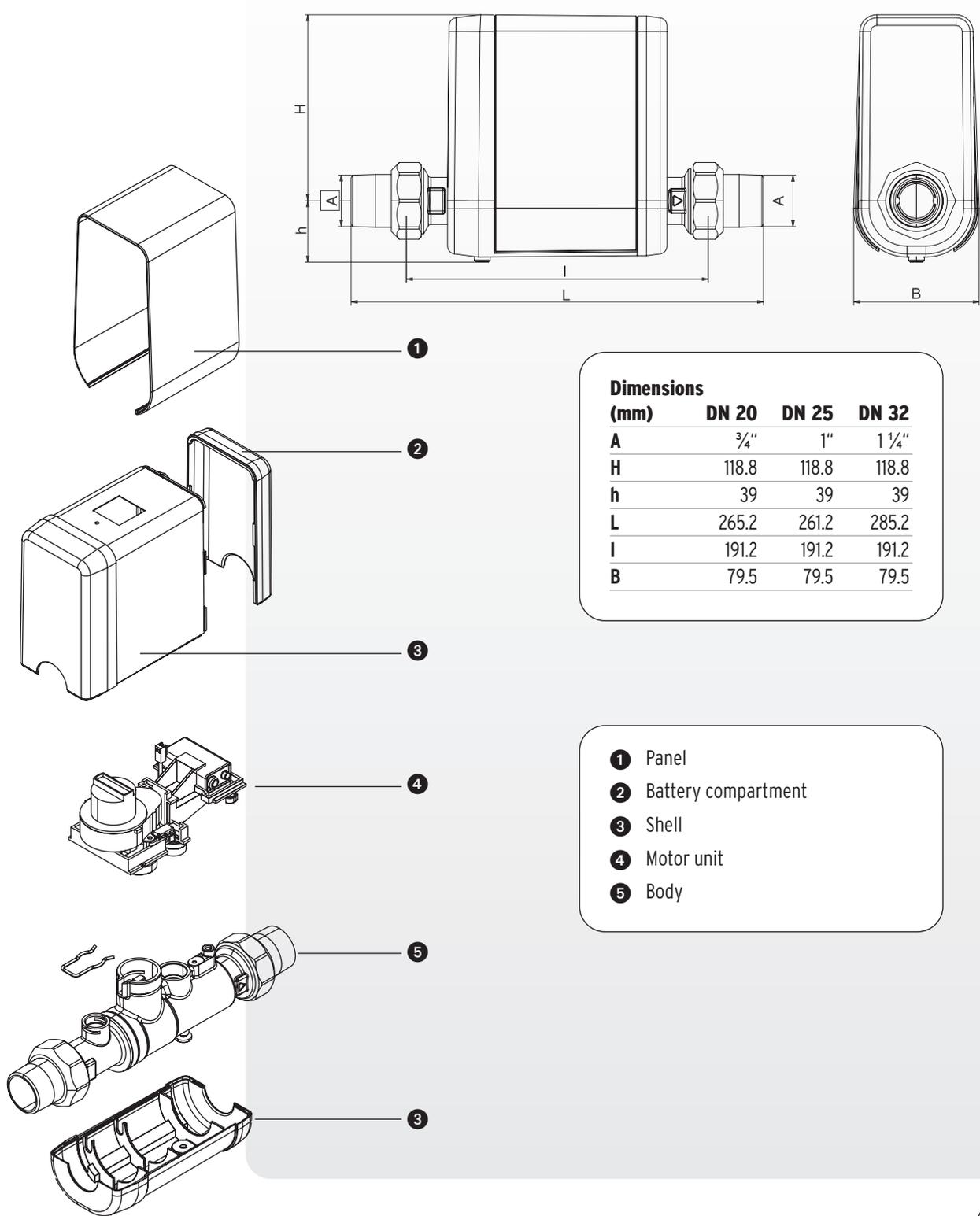
Order-No.

SafeTech Connect	DN 20	2422.20.200
	DN 25	2422.25.200
	DN 32	2422.32.200

- The free SYR app enables full function control with many features
- Notifications via e-mail in online mode
- Vacation monitoring and special absence function
- As 'swarm' for the protection of line sections, apartment buildings and larger objects
- Can control multiple SafeFloor sensors
- Motor-controlled shut-off valve without pressure surges
- Emergency opening function
- In case of power failure emergency operation by battery (max. 4 weeks)
- Determines water hardness, measures water pressure and temperature
- Installation directly in the pipeline - robust, sturdy brass screw fitting
- Several user profiles adjustable



Spare parts	Order-No.
DC built-in socket with wire	2422.00.905
Pressure sensor with wire	2422.00.902
Conductivity measuring cartridge	2422.00.901
Reed contact	2422.00.903
Strainer	2422.00.900
Temperature sensor	2422.00.904



Dimensions (mm)

	DN 20	DN 25	DN 32
A	3/4"	1"	1 1/4"
H	118.8	118.8	118.8
h	39	39	39
L	265.2	261.2	285.2
I	191.2	191.2	191.2
B	79.5	79.5	79.5

- 1 Panel
- 2 Battery compartment
- 3 Shell
- 4 Motor unit
- 5 Body





SafeFloor Connect 2422 Wireless floor sensor

The SafeFloor Connect wireless floor sensor is used for critical and/or particularly special monitoring applications. If the smart sensor detects water on the floor, a too low room temperature or a too high humidity, it warns you with a flashing LED and a warning sound and reports this to your smartphone or tablet.

Several SafeFloor Connect sensors can be used. With the help of the SafeTech Connect leakage protection (page 14), the SafeTech+ Connect leakage protection (page 12) or the TRIO DFR/LS (page 10) the sensors can be managed. In this case the SafeTech Connect or the SafeTech+ Connect works as a control centre, registers the received data and becomes active accordingly.

Technical specifications

Standard wireless protocol	WiFi 2.4 GHz WPA/WPA2 protected
Battery	2 x AA 1.5 Mignon
Network support	TCP/IP/IPv4
Protection class	IPX 4

Order-No.

SafeFloor Connect	2422.00.200
2	

- The SafeFloor can be controlled via Internet or WiFi using the SYR app.
- Notifications via e-mail in online mode
- Measures air humidity, temperature and water leakage

Filter technology



The DRUFI+ DFR/FR can be upgraded with the automatic backwash RSA (page 74) to a fully automatic system!

DESIGN PLUS

powered by: ISH



Product movie

DRUFI+ DFR 2315 and FR 2315 Backwash filter

DRUFI+ DFR Semi-automatic backwash filter with pressure reducing valve, pressure gauge, tundish (according to EN 1717), outlet pressure adjustment range 1.5 to 6 bar (factory set to 4 bar). Molded seal, screws and Allen key for the assembly included.

DRUFI+ FR Semi-automatic backwash filter with tundish (according to EN 1717). Molded seal, screws and Allen key for the assembly included.

Do not forget to order the SYR connection flange DN 20 to 32 (page 52)!

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	30 °C
Fluid	potable water
Flow rate DFR	
DN 20	2.3 m ³ /h at Δp 1.1 bar
DN 25	3.6 m ³ /h at Δp 1.1 bar
DN 32	5.8 m ³ /h at Δp 1.1 bar
Flow rate FR	
DN 20	3.0 m ³ /h at Δp 0.2 bar
DN 25	3.8 m ³ /h at Δp 0.2 bar
DN 32	3.9 m ³ /h at Δp 0.2 bar
DN 20	4.9 m ³ /h at Δp 0.5 bar
DN 25	6.1 m ³ /h at Δp 0.5 bar
DN 32	6.3 m ³ /h at Δp 0.5 bar
Mounting position	any, with angle tundish (accessories) also in horizontal position
Mesh width	90 μm
ABP.-No.	
DFR	P-IX 6952/I
FR	P-IX 6951/I

Order-No.

DRUFI+ DFR	2315.01.200
DRUFI+ FR	2315.01.201

- Prevents pitting and corrosion
- New backwash system with high efficiency
- Memory function: maintenance indicator as a reminder when backwashing is due
- Accessory: automatic backwash system RSA, no tools required when mounting



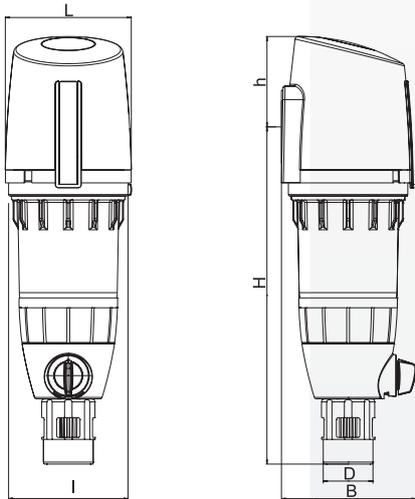
SYR expert advice

Use the angle tundish to mount the DRUFI in horizontal position!



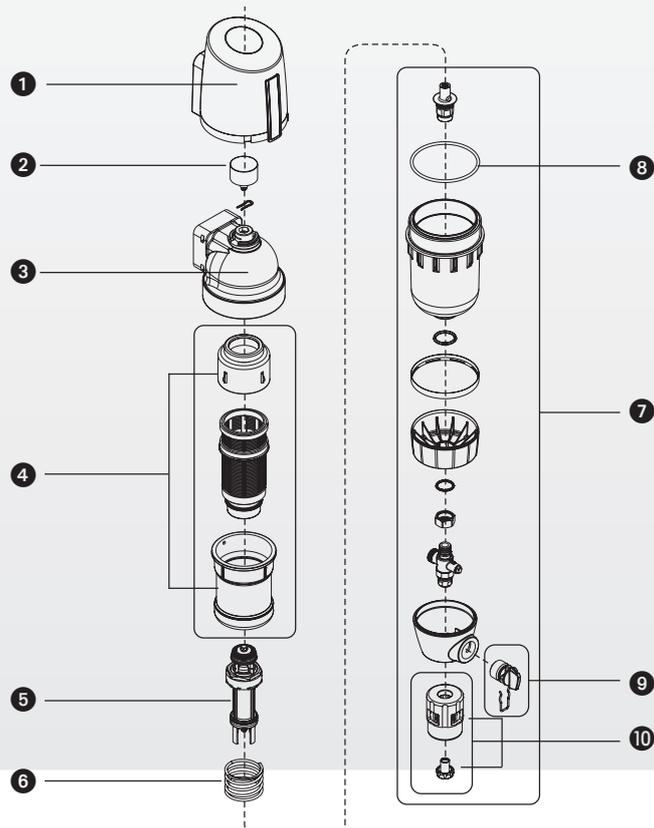
Dimensions (mm)

H	341.5
h	92
L	127
I	120
D	50
B	135



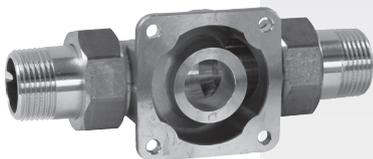
- 1 Cover
- 2 Pressure gauge
- 3 Valve body
- 4 Filter insert
- 5 Pressure reducing cartridge
- 6 Spring
- 7 Filter cup
- 8 O-ring for filter cup
- 9 Backwash knob
- 10 Tundish

Accessories		Order-No.
Connection flange	DN 20	2315.20.200
	DN 25	2315.25.200
	DN 32	2315.32.200
Assembly key for filter cup		2000.25.907
Angle tundish		2315.01.924
Spare parts		
Pressure reducing cartridge, up to 2015 retrofitting and replacement set		2315.01.925
Pressure reducing cartridge, from 2016 retrofitting and replacement set		2315.01.970
Filter insert, stainless steel filter mesh (90 µm) and O-ring for filter cup (40 µm)		2315.00.930
		(20 µm) 2315.01.965
Valve body	DFR	2315.01.918
	FR	2315.00.929
Guide sleeve	FR	2315.00.932
Spring	DFR, FR	2315.00.961
Cover		2315.01.919
Pressure gauge for DRUFI+ 0 - 10 bar		2315.01.920
Filter cup up to 2015	DFR	2315.01.914
	FR	2315.01.915
Filter cup from 2016	DFR	2315.01.971
O-ring for filter cup		2315.01.922
Flange seal		2315.00.931
Backwash knob		2315.01.923
Tundish		2315.01.921



SYR Flange program

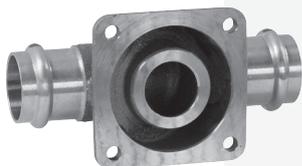
SYR's well-thought-out flange program perfectly fits the respective products. All flanges can be mounted in horizontal or vertical pipes.



Universal flange

For DRUFI+, SYR Softener and SafeTech+ as well as other SYR articles. Casing made of hot-stamped brass, with threaded unions on both sides, any mounting position.

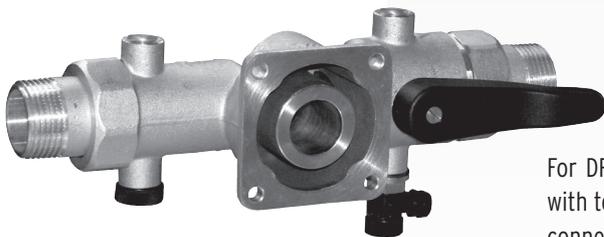
Universal flange	Order-No.
DN 20 Thread union	2315.20.200
DN 25 Thread union	2315.25.200
DN 32 Thread union	2315.32.200



Press flange

For DRUFI+, SYR Softener and SafeTech+ as well as other SYR articles. Casing made of gunmetal, with press fittings on both sides (Viega Press-System for the use in copper and stainless steel installations), any mounting position.

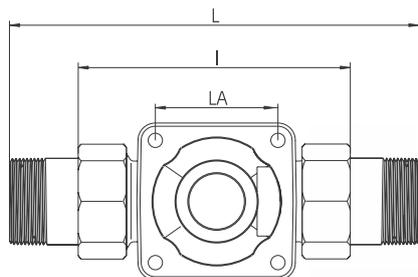
Press flange	Order-No.
22 mm	2315.20.025
28 mm	2315.25.025
35 mm	2315.32.025



Domestic water unit flange 2000 Plus

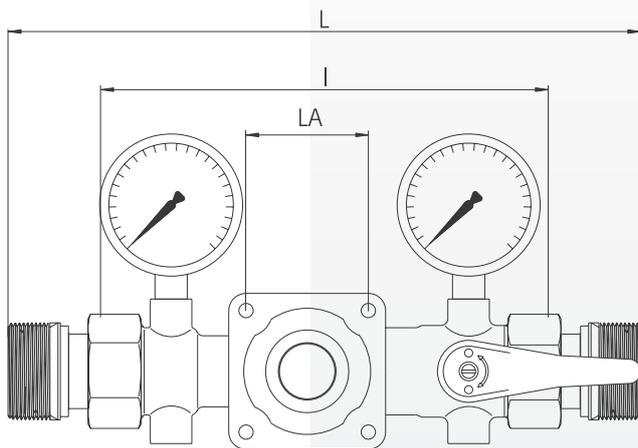
For DRUFI+ as well as other SYR articles. Casing made of gunmetal. Check valve with test device, shut-off valve for maintenance (ball valve), drain of main line and connections for inlet and outlet pressure manometer, with threaded unions on both sides, any mounting position. Inlet and outlet pressure manometers with vertical connection.

HWS-Flange 2000 Plus	Order-No.
DN 20 Thread union	2000.20.015
DN 25 Thread union	2000.25.015
DN 32 Thread union	2000.32.015



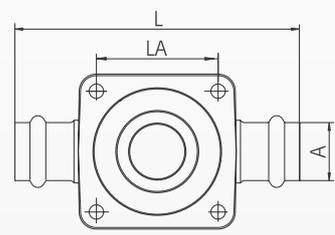
Dimensions Nominal size			
(mm)	DN 20	DN 25	DN 32
L	155	170	191
l	90	100	105
LA	53	53	53

Accessories Universal flange	Order-No.
Unions	
DN 20	0812.20.900
DN 25	0812.25.900
DN 32	0812.32.900



Dimensions Nominal size			
(mm)	DN 20	DN 25	DN 32
L	229	234	250
l	164	164	164
LA	53	53	53

Accessories DWU-Flange	Order-No.
Unions	
DN 20	0814.20.900
DN 25	0812.25.900
DN 32	0816.32.900
Spare parts DWU-Flange	
Pressure gauge	
10 bar	2000.00.906
25 bar	2000.00.907
Check valve	2000.00.910
Manometer plug	0828.08.000
Drain plug	2315.00.920
Isolating valve	2000.00.920



Dimensions Nominal size			
(mm)	DN 20	DN 25	DN 32
A	22	28	35
L	124	128	128
LA	53	53	53



Ratio DFR



Ratio FR

Ratio DFR 5315 and FR 5315 Manual Backwash filter

Ratio DFR Backwash filter with pressure reducing valve. Outlet pressure adjustment range 1.5 to 6 bar. Preset to 4 bar. Complies with the European standards. Body made of high-quality brass alloy.

Ratio FR Backwash filter. Complies with the European standards. Body made of high-quality brass alloy.

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	30 °C
Fluid	potable water
Flow rate DFR	
DN 15	1.3 m ³ /h at Δp 1.1 bar
DN 20	2.3 m ³ /h at Δp 1.1 bar
DN 25	2.3 m ³ /h at Δp 1.1 bar
Flow rate FR	
DN 15	2.0 m ³ /h at Δp 0.2 bar
DN 20	2.3 m ³ /h at Δp 0.2 bar
DN 25	3.0 m ³ /h at Δp 0.2 bar
DN 15	3.4 m ³ /h at Δp 0.5 bar
DN 20	4.4 m ³ /h at Δp 0.5 bar
DN 25	5.2 m ³ /h at Δp 0.5 bar
Mounting position	main axis vertical
Mesh width	90 μm

Order-No.

Ratio DFR	DN 15	5315.15.004
	DN 20	5315.20.004
	DN 25	5315.25.004
Ratio FR	DN 15	5315.15.005
	DN 20	5315.20.005
	DN 25	5315.25.005

Accessories

Assembly key for filter cup	5315.00.902
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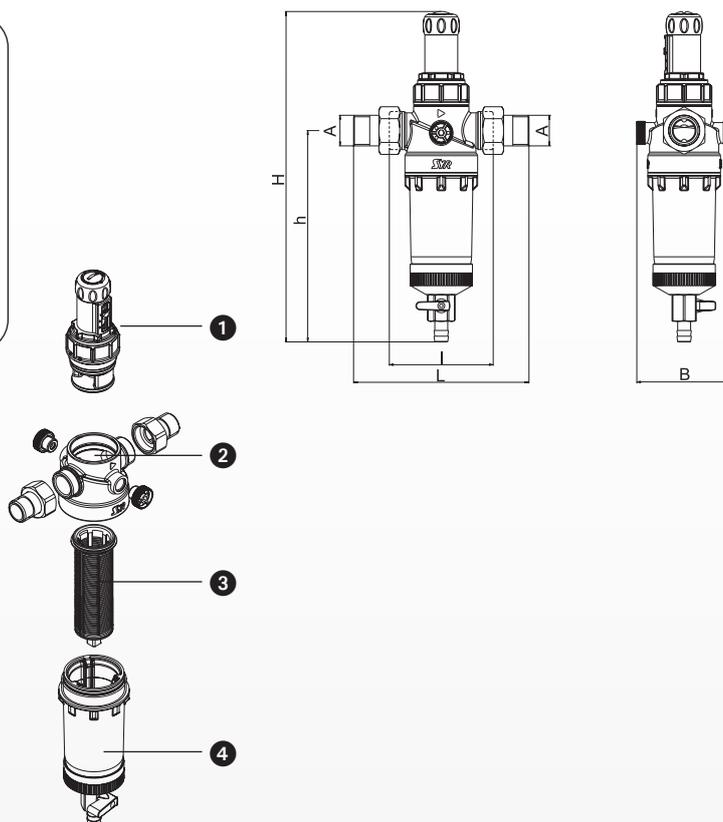
Spare parts

Plug	5315.00.901
Filter cup	5315.00.904
Filter element	5315.00.903
Pressure reducing cartridge	5315.00.900

Ratio DFR / FR 5315 Manual Backwash filter

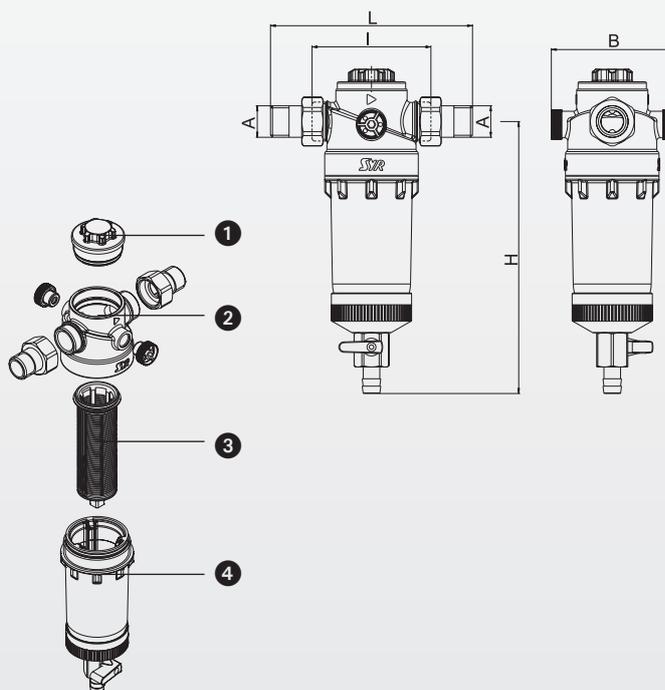
Dimensions (mm)	Nominal size DFR		
	DN 15	DN 20	DN 25
A	R 1/2"	R 3/4"	R 1"
H	288.5	288.5	288.5
h	184.5	184.5	184.5
L	136	152	170
I	80	90	100
B	82	82	82

- 1 Pressure reducing cartridge
- 2 Valve body
- 3 Filter element
- 4 Filter cup



Dimensions (mm)	Nominal size FR		
	DN 15	DN 20	DN 25
A	R 1/2"	R 3/4"	R 1"
H	184.5	184.5	184.5
L	136	152	170
I	80	90	100
B	82	82	82

- 1 Plug
- 2 Valve body
- 3 Filter element
- 4 Filter cup





Ratio Vario DFR 5315 and FR 5315 Manual Backwash filter

Ratio DFR Backwash filter with pressure reducing valve and fully rotatable integrated connection flange. Outlet pressure adjustment range 1.5 to 6 bar. Preset to 4 bar.

Ratio FR Backwash filter with fully rotatable integrated connection flange.

Do not forget to order the SYR Vario flange DN 15 to DN 25!

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	30 °C
Fluid	potable water
Flow rate DFR	
DN 15	1.3 m ³ /h at Δp 1.1 bar
DN 20	2.3 m ³ /h at Δp 1.1 bar
DN 25	2.3 m ³ /h at Δp 1.1 bar
Flow rate FR	
DN 15	2.0 m ³ /h at Δp 0.2 bar
DN 20	2.3 m ³ /h at Δp 0.2 bar
DN 25	3.0 m ³ /h at Δp 0.2 bar
DN 15	3.4 m ³ /h at Δp 0.5 bar
DN 20	4.4 m ³ /h at Δp 0.5 bar
DN 25	5.2 m ³ /h at Δp 0.5 bar
Mounting position	any (by rotatable flange)
Mesh width	90 μm

	Order-No.
Ratio Vario DFR	5315.00.000
Ratio Vario FR	5315.00.001
Flange DN 15	5315.15.008
Flange DN 20	5315.20.008
Flange DN 25	5315.25.008

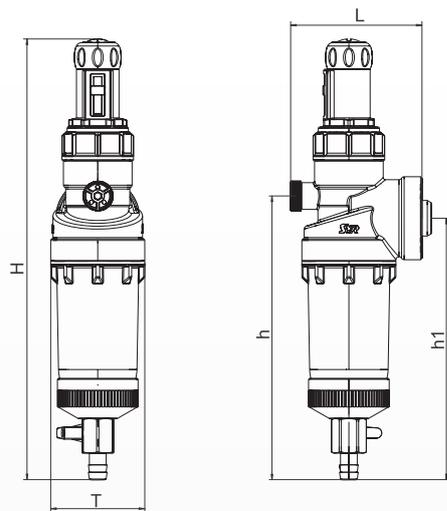
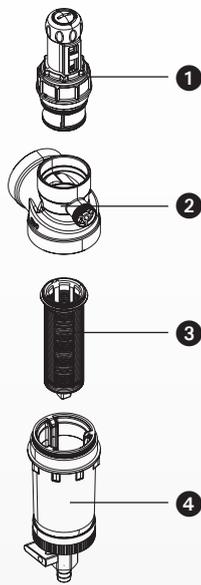
Accessories	Order-No.
Assembly key for filter cup	5315.00.902
Spare parts	
Plug	5315.00.901
Filter cup	5315.00.904
Filter element	5315.00.903
Pressure reducing cartridge	5315.00.900

Ratio Vario DFR / Vario FR 5315 Manual Backwash filter

Dimensions Nominal size DFR (mm)

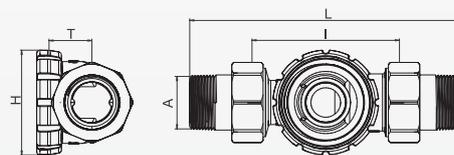
H	297
h	191
h1	176
L	88
T	63

- 1 Pressure reducing cartridge
- 2 Valve body
- 3 Filter element
- 4 Filter cup



Dimensions Nominal size (mm)

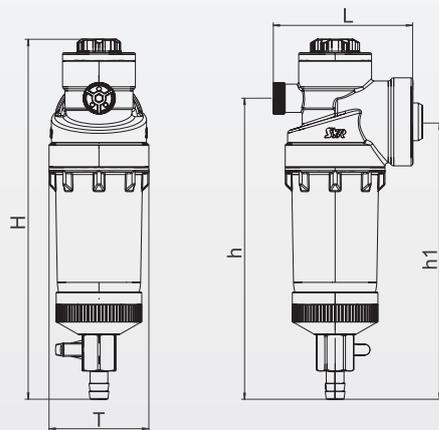
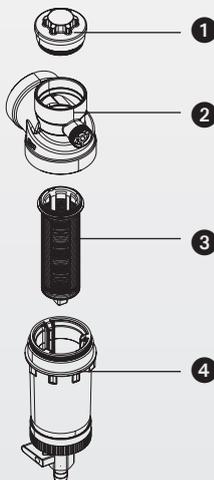
Dimensions (mm)	Nominal size		
	DN 15	DN 20	DN 25
A	R 1/2"	R 3/4"	R 1"
L	160	157	165
I	95	95	95
H	64	64	64
T	23	23	23



Dimensions Nominal size FR (mm)

H	230
h	191
h1	176
L	88
T	63

- 1 Plug
- 2 Valve body
- 3 Filter element
- 4 Filter cup





JETFI 1998 Backwash filter

High-quality impeller filter. Flange made of high-quality brass alloy.

Technical specifications

Min. operating pressure	2 bar
Max. operating pressure	16 bar
Max. operating temperature	30 °C
Fluid	potable water
Flow rate	
DN 20	1.6 m ³ /h at Δp 0.2 bar
DN 20	2.6 m ³ /h at Δp 0.5 bar
Mounting position	main axis vertical tundish facing downwards
Mesh width	40 μm

Order-No.

JETFI, DN 20	1998.20.200
JETFI, DN 25	1998.25.200

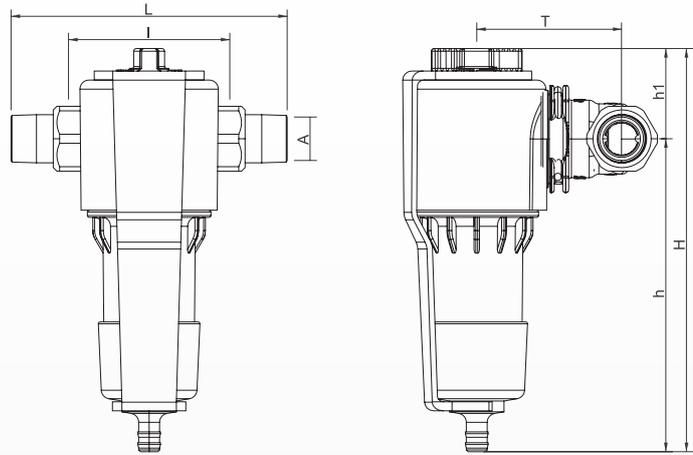
Spare parts

Order-No.

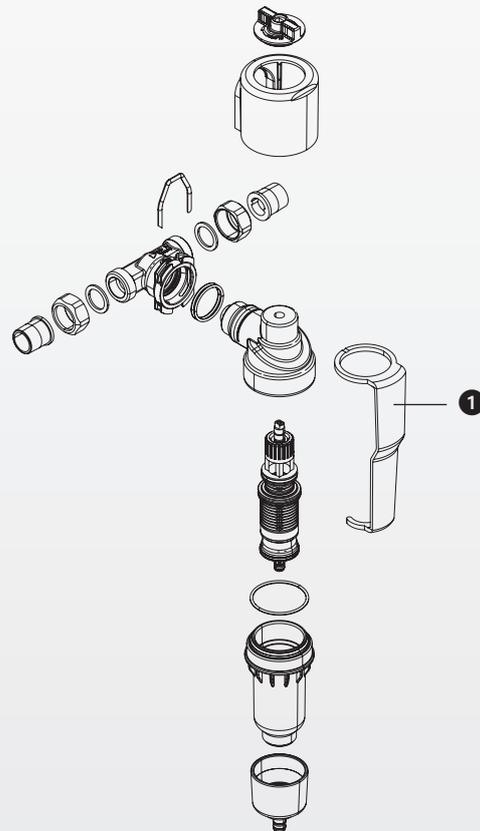
Bracket	1998.00.900
Flange cover	1998.00.903

**Dimensions
(mm)**

A	R 3/4"
H	224
h	174
h1	50
T	80
L	152
l	90



1 Bracket





POU Smart 7315 Backwashable Compact Filter

Backwashable 3-in-1 potable water filter composed of a dirt particle filter, an activated carbon filter and a bacteria filter designed to be used immediately upstream of the draw-off point (e.g. under the kitchen sink). Connecting piece cold water 3/8" male included.

Technical specifications

Operating pressure	max. 10 bar
Connecting size	DN 10
Max. operating temperature	30 °C
Fluid	potable water
Flow rate	400l at Δp 1.0 bar
Capacity	ca. 15.000 litre*

* depends on water composition

POU max 7315

POU max 7315	Order-No.
POU Smart with tap	7315.10.010
POU Smart w/o tap	7315.10.011

Order-No.

Spare parts

Spare parts	Order-No.
Cartridge POU Smart	7315.00.914

Order-No.

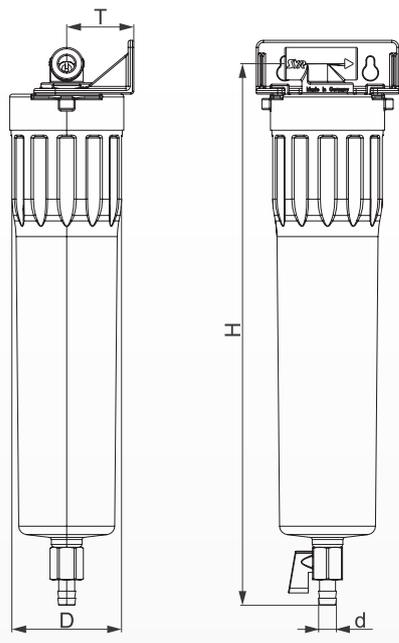
SYR Tips for Pro`s

It is recommended by customer to install a side angle valve water meter to monitor the capacity of the cartridge.

POU Smart 7315 Backwashable Compact Filter

Dimensions (mm)

H	415
T	45
B	100
D	75
d	11



- 1 Tap
- 2 Wall-bracket
- 3 Body
- 4 Cartridge
- 5 Filter cup

