

# FR314ST-FR338ST-FR312ST

Stainless steel AISI 316L filter regulator  
for air, gas and liquid



## FEATURES

Filter regulator for inlet pressure up to 30 bar (435 psi) in the standard version..

Connections 1/4"-F, 3/8"-F, 1/2"-F and.

Outlet pressure is controlled by a rubber diaphragm. Main valve is balanced.

Filtration: 5 µm or 50 µm.

Available versions with automatic drain SAI (up to 16 bar) or manual drain SM (up to 30 bar). The drain is not available for greater inlet pressure and for gas and liquid versions.

Available the ATEX 2014/34/EU version.

Brand  $\text{CE} \text{ II2GcIICTX}$

$\text{CE} \text{ II2DcIIICTX}$ .

For use in potentially explosive atmospheres zones: 1, 21, 2, 22 (not for mines and zone 0).

Available the EAC-EX TP TC 012/2011 versions for the Russian market.

The product complies with the directive 2014/68/EU PED.

## SPECIFICATIONS

FR314ST-FR338ST weight: ~1,5 Kg (~3,3 lb)

FR312ST-FR334ST weight: ~2,1 Kg (~4,6 lb)

Standard version operating temperature: -20°C ÷ +60°C (-4°F ÷ +140F)

Main valve leakage classification: VI (bubble tight)

Flow coefficient: FR314ST-FR338ST - 50µm: Kv=0.67 Nm<sup>3</sup>/h Cv = 0.78 US gal/min

5µm: Kv=0.56 Nm<sup>3</sup>/h Cv = 0.66 US gal/min

FR312ST- 50µm: Kv=1.27 Nm<sup>3</sup>/h Cv = 1.48 US gal/min

5µm: Kv=0.51 Nm<sup>3</sup>/h Cv = 0.59 US gal/min

Degree of protection: IP25

Bowl capacity FR314ST-FR338ST: 140 cc (4,7 fluid ounce)

Bowl capacity FR312ST: 200 cc (6,7 fluid ounce)

¼" ports for outlet pressure gauge

Overpressure relieving function (not for gas and liquids)

## MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Filter cartridges 5 and 50 µm: stainless steel AISI 316L

Main valve spring: stainless steel AISI 302

Adjusting spring: stainless steel AISI 302 (not in contact with the fluid)

Diaphragm: two coupled diaphragms NBR+PTFE, PTFE in contact with the fluid

O-Rings: FPM (other compounds available on request)

Main valve gasket: FPM

## ACCESSORIES

Gauges: accuracy class 1.6

Ring-nut FR314ST-FR338ST

Ring-nut FR312ST

Kit bracket and lock-nut FR314ST-FR338ST

Kit bracket and lock-nut FR312ST

Not relieving version

Automatic drain Kit (only for air)

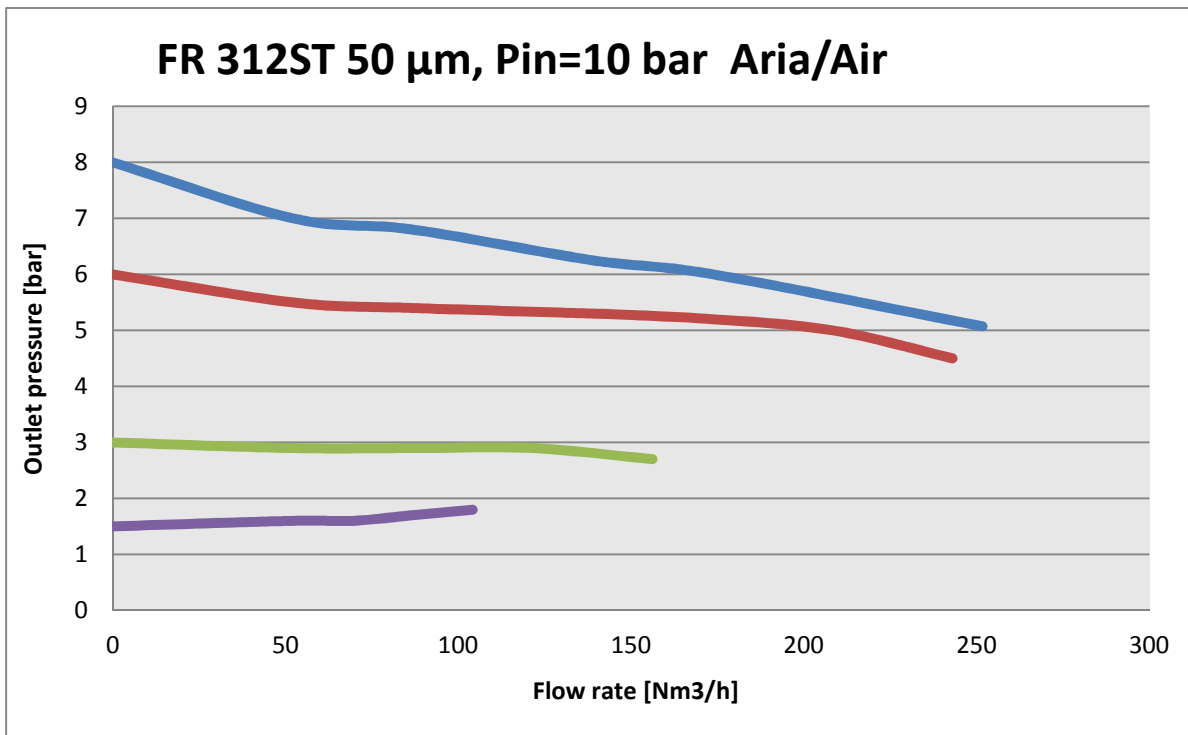
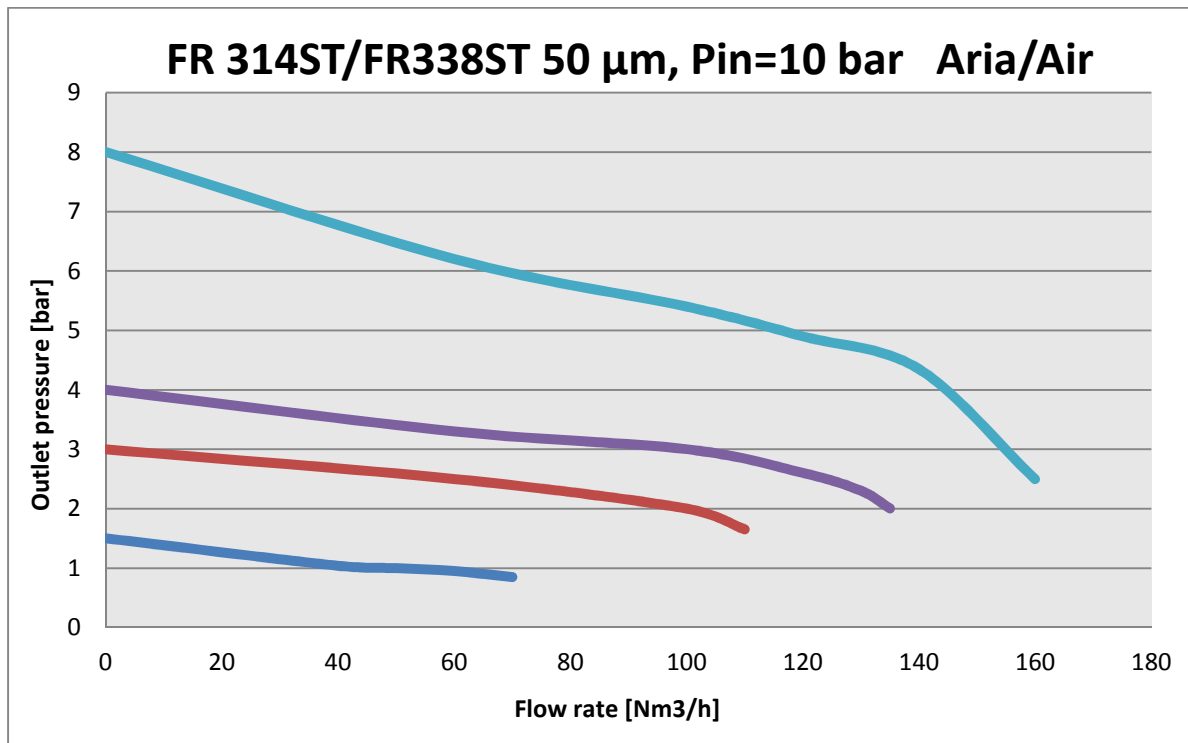
## SPARE PARTS

Gauges

Filter cartridges

Complete kit: filter cartridges, O-rings, complete main valve

## Flow charts



## Generating the product code

FR ST INOX 314-312-338			
AA BB CC D E FF			
AA	Attacchi / Connections IN/OUT	L0	G 3/8-F
		N0	G1/4-F
		P0	G1/2-F
BB	Tazza / Bowl	31	Tazza imbutita SAI -PS 16bar
		32	Tazza imbutita SM -PS 30bar
		33	Tazza imbutita TAPPO -PS 50bar
CC	Intervallo uscita / Outlet range	D0	Pout 0,8÷8 bar
		E0	Pout 1,5÷15 bar
D	Filtrante / Filter	C	5µm AISI 316L
		H	50µm AISI 316L
E	Marchiato / Marked	I0	ID
		Z0	Dir.ATEX 2014/34/EU
FF	Accessori/ Accessories	00	Nessun accessorio / No accessories

### CODE COMPOSITION EXAMPLE

**4S3# N0 32 E0 H I 00**

**4S3#:** Filter regulator in stainless steel ST

**N0:** FR314 ST connection G1/4-F

**32:** Manual drain maximum inlet pressure 30 bar

**E0:** Outlet pressure range 1,5-15 bar

**H:** Filtration 50 µm

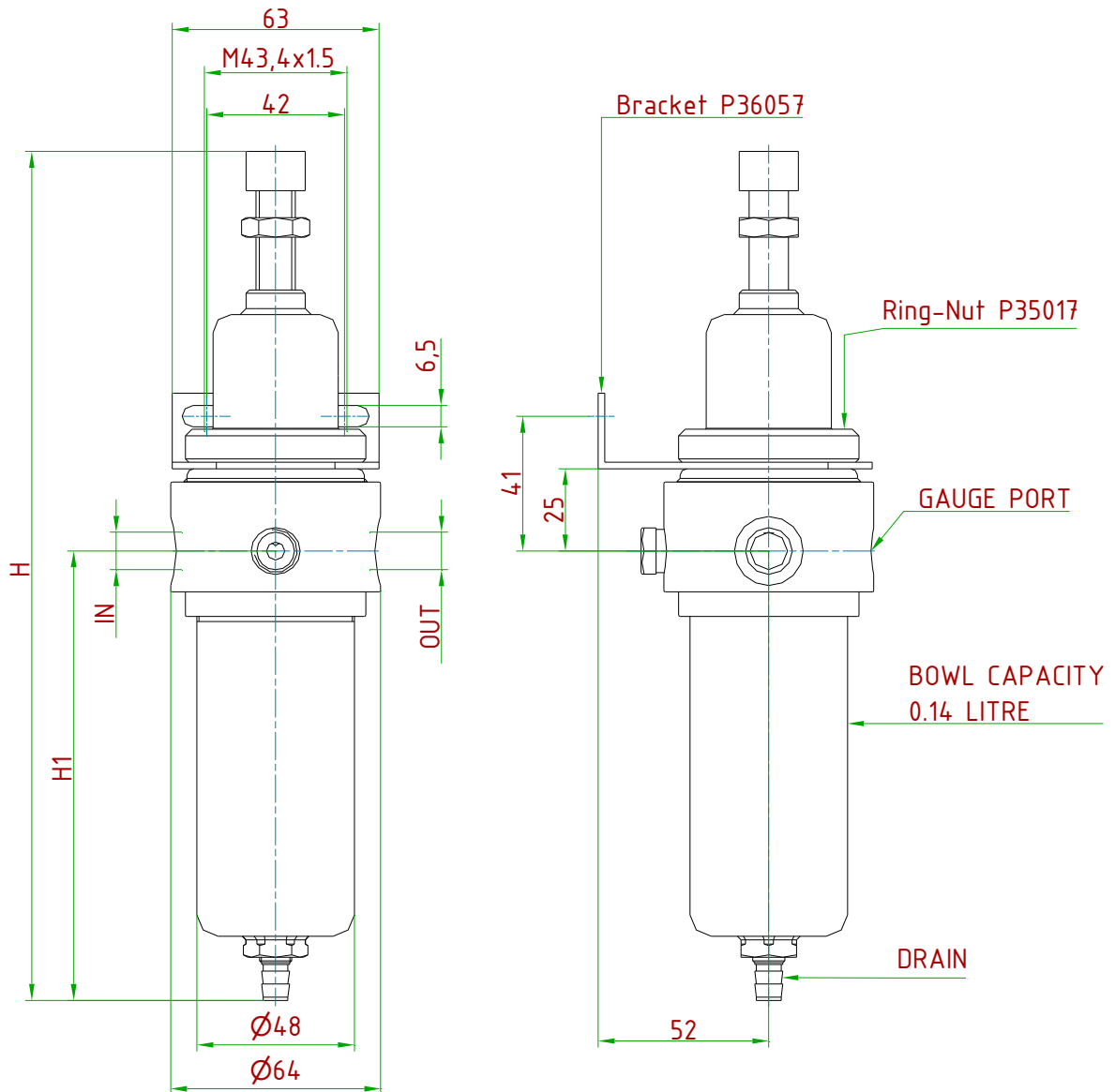
**I:** ID

**00:** No accessories

# Technical drawings (all dimensions in mm)

Bracket to be ordered separately: Kit order number M13302

TYPE	IN/OUT	GAUGE PORT
FR314ST 1/4" GF	G1/4-F	G1/4-F
FR338ST 3/8" GF	G3/8-F	G1/4-F
FR314ST 1/4" NPTF	1/4"NPT-F	1/4"NPT-F
FR338ST 3/8" NPTF	3/8"NPT-F	1/4"NPT-F



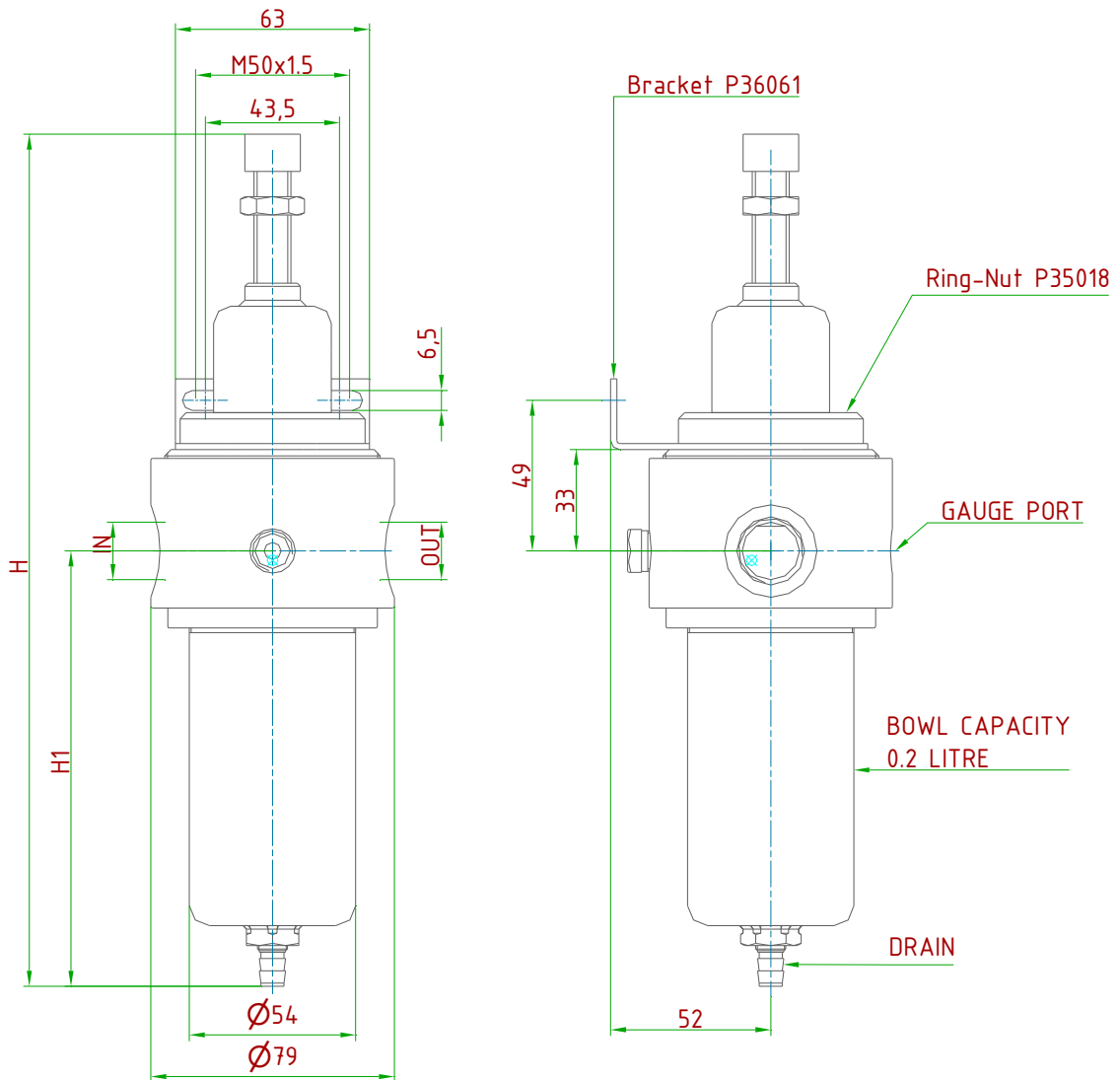
PS [bar]	DRAIN	H	H1
16	AUTOMATIC	~259	137
30	MANUAL	~254	132
50	CAP	~246	124

GAS FILTRATION	
CARTRIDGE	MATERIAL
5 µm	AISI 316L
50 µm	AISI 316L

# Technical drawings (all dimensions in mm)

Bracket to be ordered separately: Kit order number M13304

TYPE	IN/OUT	GAUGE PORT
FR312ST 1/2" GF	G1/2-F	G1/4-F
FR312ST 1/2" NPTF	1/2"NPT-F	1/4"NPT-F



PS [bar]	DRAIN	H	H1
16	AUTOMATIC	~268	141
30	MANUAL	~263	136
50	CAP	~255	128

GAS FILTRATION	
CARTRIDGE	MATERIAL
5 µm	AISI 316L
50 µm	AISI 316L

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**FILTER REGULATOR\_4S3(FR314-338-312ST)\_EN\_04**



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