

FR314ST-FR338ST-FR312ST-FR334ST

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 3/4"-F.

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 version.

Brand  II 2GDc IICX.

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

The product complies with the directive 97/23/CE 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 Nm³/h Cv = 0,78 US gal/min

5µm: Kv=0.56 Nm³/h Cv = 0,66 US gal/min

FR312ST-FR334ST - 50µm: Kv=1.25 Nm³/h Cv = 1,46 US gal/min

5µm: Kv=1.06 Nm³/h Cv = 1,24 US gal/min

Degree of protection: IP25

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

Bowl capacity FR312ST-FR334ST: 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: P35017030304

Ring-nut FR312ST-FR334ST: P35018030304

Kit bracket and lock-nut FR314ST-FR338ST: M13302

Kit bracket and lock-nut FR312ST-FR334ST: M13304

Not relieving version

Not balanced main valve version

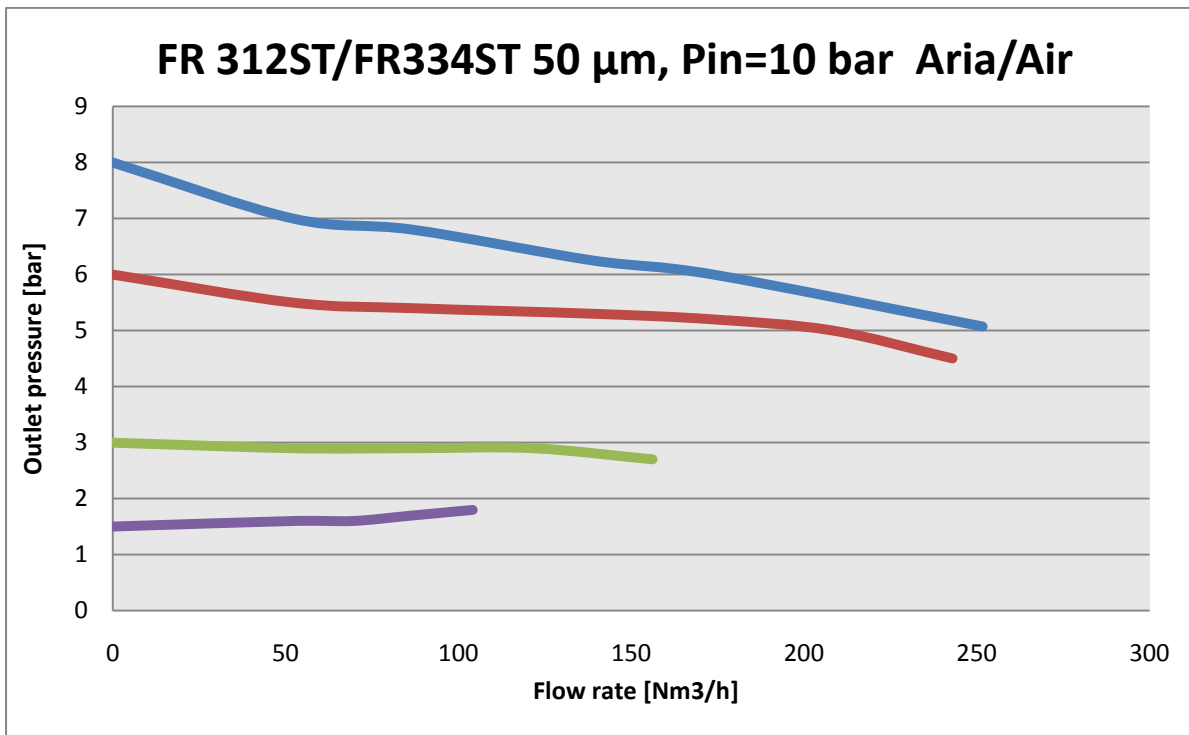
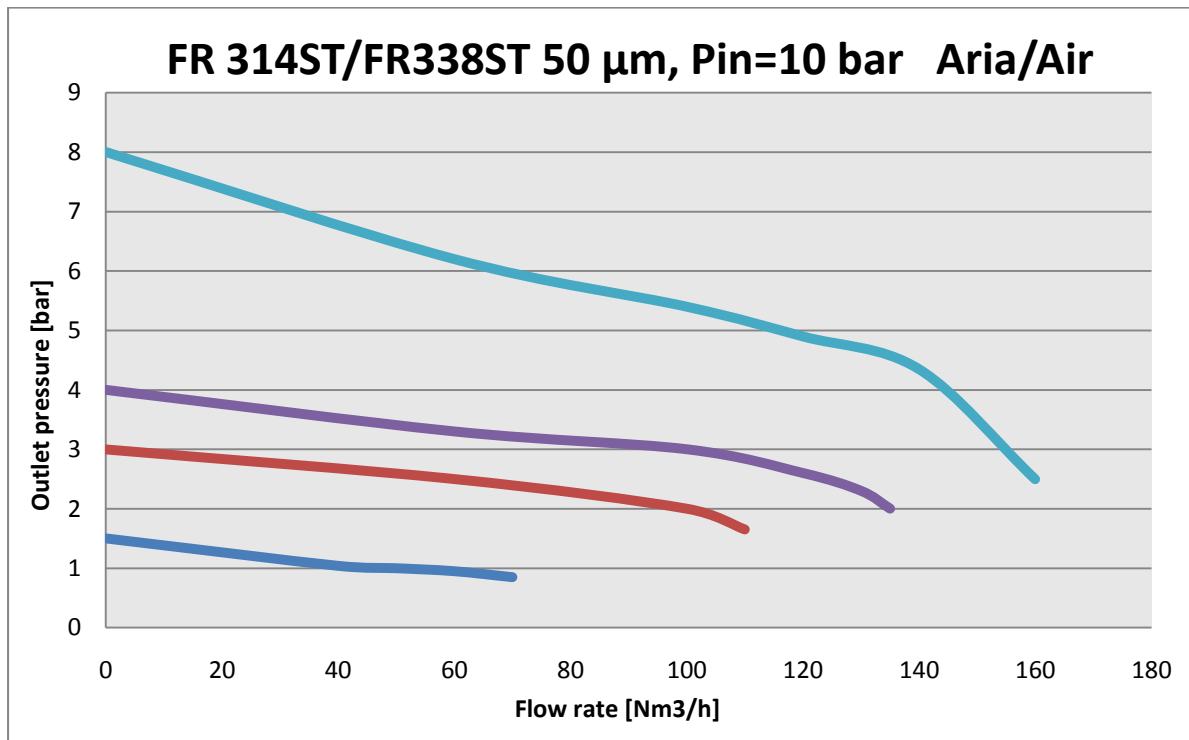
SPARE PARTS

Gauges

Filter cartridges

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

flow charts



available model types

Filtri/Regolatori Filters/Regulators

Filtri/regolatori per media pressione (max 30/50 bar) in acciaio inox 316 L Medium pressure filters/regulators (max 30/50 bar) of stainless steel 316 L

Corpo in acciaio da lavorazione di barra / Body of stainless steel by machining bar
Tazza in acciaio inox 316L stampata / Drawn bowl of stainless steel 316L

TYPE	PS bar	P.Out bar	CONNECTIO N	FILTRATION RATE	BOWL	DRAIN	RELIEVIN G	CODE	MEDIUM
									FR 314 ST
FR 314 ST	30	0,8-8 1,5-15	G 1/4-F 1/4 NPT-F	50 µm	140 cc	SM	S	4S3#N0	Aria
									FR 338 ST
FR 338 ST	30	0,8-8 1,5-15	G 3/8-F 3/8 NPT-F	50 µm	140 cc	SM	S	4S3#L0	Aria
									FR 312 ST
FR 312 ST	30	0,8-8 1,5-15	G 1/2-F 1/2 NPT-F	50 µm	200 cc	SM	S	4S3#P0	Aria
									FR 334 ST
FR 334 ST	30	0,8-8 1,5-15	G 3/4-F 3/4 NPT-F	50 µm	200 cc	SM	S	4S3#Q0	Aria

SM= Scarico Manuale / Manual Drain

ESECUZIONI DIVERSE DA STANDARD / EXECUTIONS DIFFERENT FROM STANDARD

Pressione entrata 50 bar / Inlet pressure 50 bar

Pressione uscita P.out diversa da standard / Outlet pressure different from standard

Versione non Relieving / Non Relieving execution

Versione per Gas / Execution for gas different from Air

Convogliamento su campana / Venting on bonnet

Esecuzione con tappo (PS max 50 bar) solo per Aria / Cap drain (PS max 50 bar) only for Air

Esecuzione con Scarico Automatico interno (PS max 16 bar) solo per Aria / Automatic drain (PS max 16 bar) only for Air

Esecuzione con filtrazione 5 micron / Filtration rate 5 micron

Esecuzione con filtrazione 25 micron / Filtration rate 25 micron

O-ring secondo FDA / O-ring in accordante to FDA

O-ring diversi da standard - EPDM / O-ring different from standard - EPDM

Membrana INOX Relieving / INOX Diaphragm for Relieving

Stampigliatura su specifica del cliente / Not standard branding

Versione ATEX / ATEX version

Temperatura diversa da standard / Temperature different from standard

ACCESSORI / ACCESSORIES

Kit scarico automatico C55002480311 / Kit for automatic drain C55002480311

ACCESSORI FR314ST-FR338ST / ACCESSORIES FR314ST-FR338ST

Ghiera P35017030304 / Ring nut P35017030304

Kit staffa + ghiera M13302 / Kit bracket + Ring nut M13302

ACCESSORI FR312ST-FR334ST / ACCESSORIES FR312ST-FR334ST

Ghiera P35018030304 / Ring nut P35018030304

Kit staffa + ghiera M13304 / Kit bracket + Ring nut M13304

generating the product code

FR ST INOX 314-312			
AA BB CC D E FF			
AA	Attacchi / Connections	L0	FR338ST IN/OUT G 3/8-F
		N0	FR314ST IN/OUT G 1/4-F
		P0	FR312ST IN/OUT G 1/2-F
		Q0	FR334ST IN/OUT G 3/4-F
BB	Tazza / Bowl	31	Tazza imbutita SAI - PS 16 bar
		32	Tazza imbutita SM - PS 30 bar
		33	Tazza imbutita TAPPO - PS 50 bar
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	I	ID
		Z	Dir ATEX 94/9 CE
FF	Accessori / Accessories	00	Nessun accessorio

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

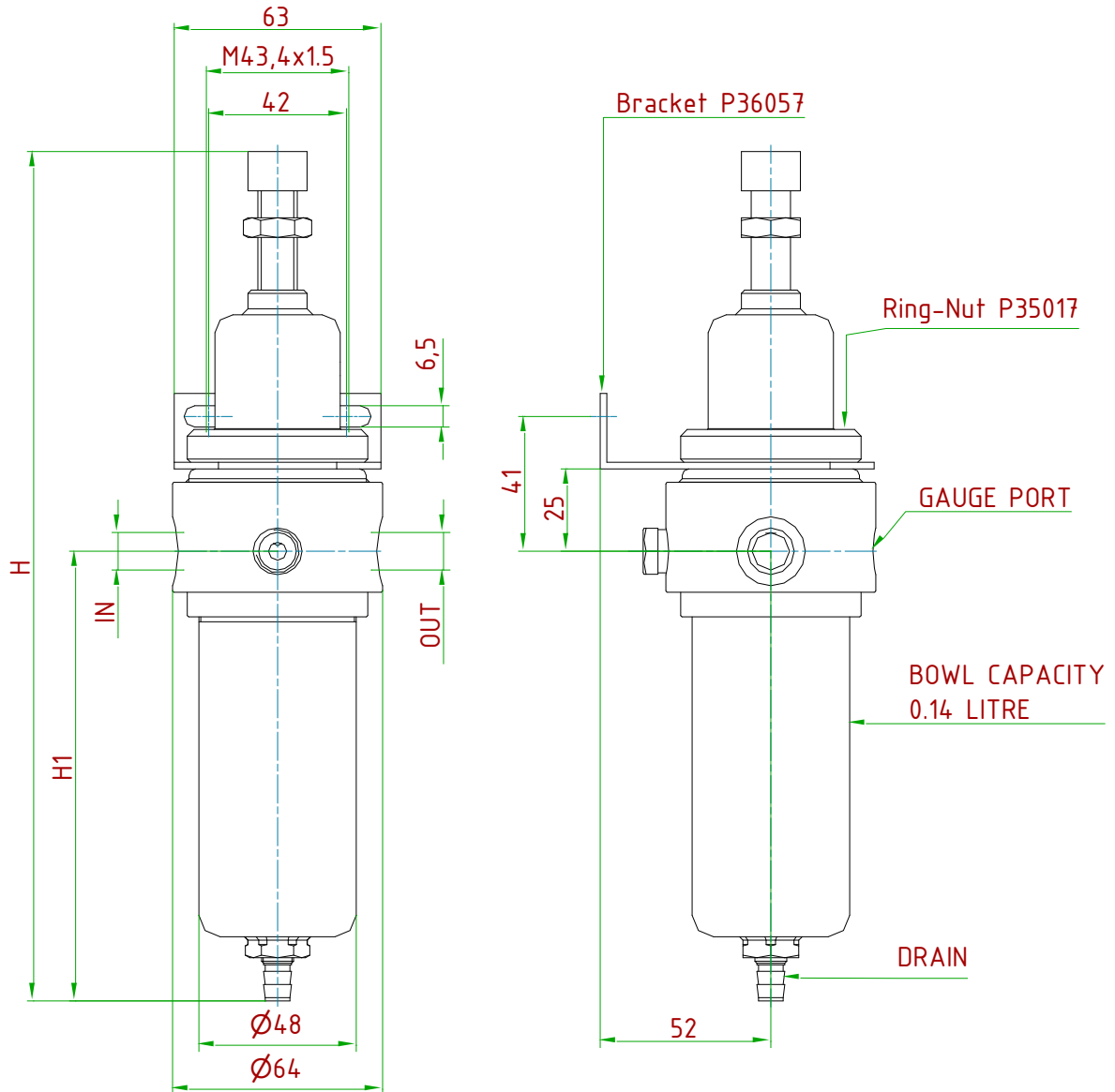
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00: No accessories

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



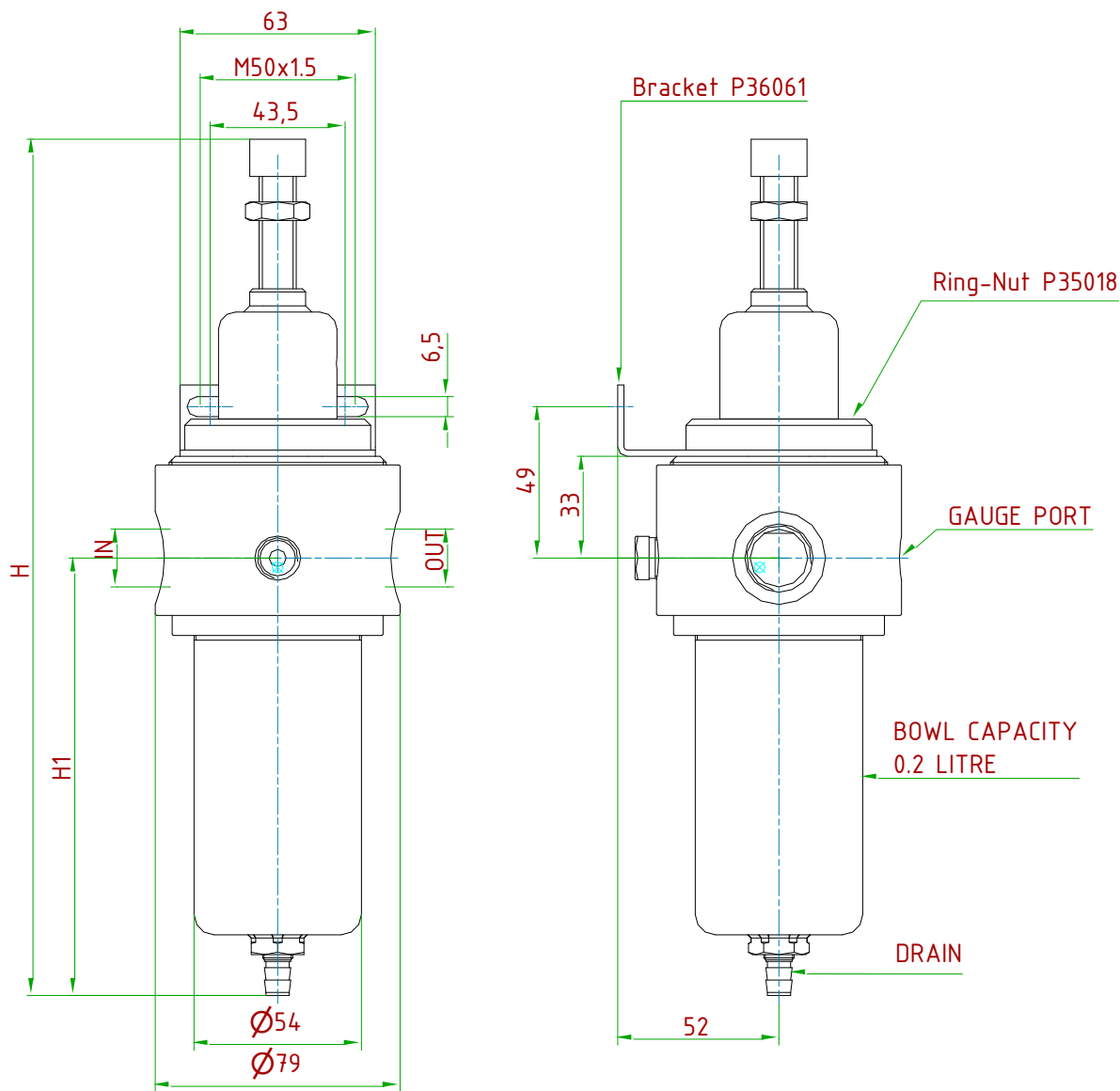
PS [bar]	DRAIN	H	H1
16	AUTOMATIC	~259	137
30	MANUAL	~254	132
50	CAP	~246	124

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
FR334ST 3/4" GF	G3/4-F	G1/4-F
FR312ST 1/2" NPTF	1/2"NPT-F	1/4"NPT-F
FR334ST 3/4" NPTF	3/4"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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