







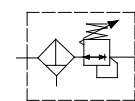


Copper free aluminum alloy 3/4"-1"NPT filter regulator – FR serie

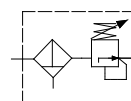
Filtro regolatore da 3/4"- 1"NPT in lega di alluminio esente rame- serie FR

- Suitable for automation equipment to onshore, offshore, pharmaceutical, medical and food applications
- Full material traceability
- Excellent stability and repeatability
- Accurate adjustment and high flow capacity
- ATEX 2014/34/UE  II 2G Ex h IIC T6/T5 Gb X
II 2D Ex h IIIC T85°C/T100°C Db X
-  &  approved / IP66 / SIL - IEC 61508 

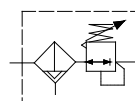
- Adatto per automazione in applicazioni marine, petrolchimiche, farmaceutiche, medicali e alimentari
- Completa rintracciabilità dei materiali
- Eccellente stabilità e ripetibilità
- Precise regolazioni ed elevate portate
- ATEX 2014/34/UE  II 2G Ex h IIC T6/T5 Gb X
II 2D Ex h IIIC T85°C/T100°C Db X
- Approvato  ed  / IP66 / SIL - IEC 61508 



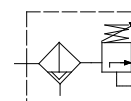
Manual Drain Relieving



Manual Drain Non Relieving



Automatic Drain Relieving



Automatic Drain Non Relieving

| | |
|--|---|
| Media / Fluido | Compressed air, inert gases, sweet and sour gases |
| Port thread / Connessioni | 3/4"-1" NPT |
| Gauge Connection Connessione manometro | 1/4"NPT (1/8"NPT option) |
| Filtering element Elemento filtrante | 5, 25, 40 micron in st. st. 316 |
| Max inlet pressure / Pressione massima di ingresso | 25bar (16bar automatic drain version) |
| Drain valve/ Scarico condensa | Manual or automatic |
| Flow rate (@10bar inlet, 6bar regulated, delta P=1bar) / Portata | 11500dm3/min Cv=11.5 |
| Working temperature / Temperatura di esercizio | -20°C up to 80°C (NBR); -25°C up to 90°C (FKM); -40°C up to 80°C (EPDM); -60° up tp 90°C (FVMQ)* |
| Regulated pressure Pressioni regolate | 0.2/2, 0.2/4, 0.4/8, 0.4/10, 0.4/12bar |

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

*Special version in HNBR (WT -60°C + 90°C)

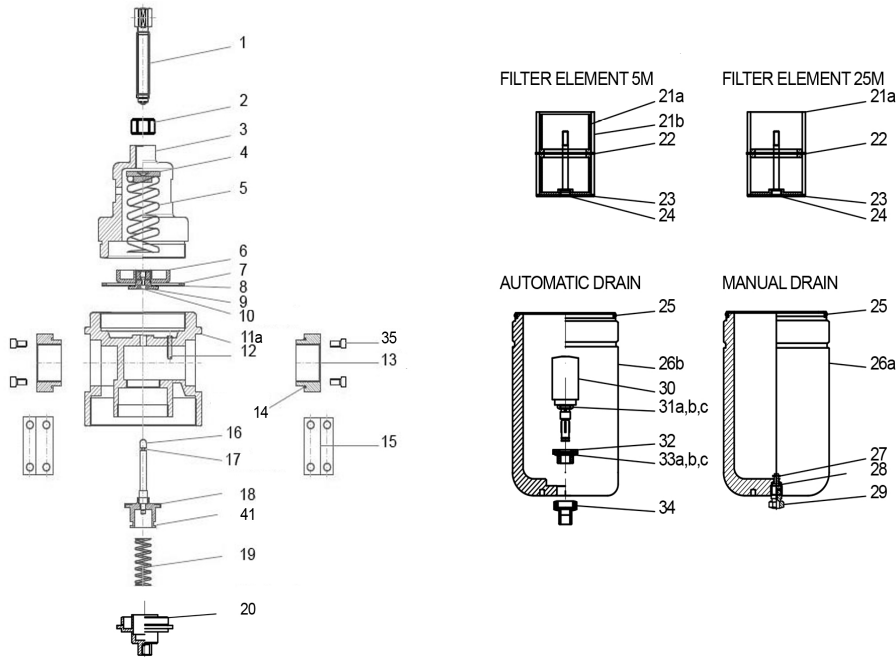
It provides excellent regulation and filtering for a wide range of applications. Rugged and corrosion-resistant – made of aluminum alloy and SS AISI304/316 / Permette un'accurata regolazione e filtraggio per una vasta gamma di applicazioni. Robusto e resistente alla corrosione – Costruito lega di alluminio ed AISI316

| BUILDING MATERIALS | Materiali costruttivi |
|---|---|
| Body, bonnet, bowl in tropicalized copper free aluminum alloy | Corpo, coperchio, tazza in lega di alluminio esente rame tropicalizzata |
| Internals, bracket, lock and panel nuts, fixing screws in stainless steel | Vite di regolazione, staffa, dadi di bloccaggio e pannello, viti di fissaggio in acciaio inossidabile |
| 5, 25 & 40 micron filtering element in AISI316 SS | Elementi filtranti da 5, 25 e 40micron in AISI316 |
| Diaphragm & seals in elastomer | Diaframma e guarnizioni in elastomero |

Product exploded view

Esploso del prodotto

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| Pos. | Q.ty | Description | Descrizione |
|------|------|-----------------------------|-----------------------------|
| 1 | 1 | ADJUSTMENT SCREW | VITE DI REGOLAZIONE |
| 2 | 1 | LOCK ADJUSTMENT NUT | DADO FISSAGGIO REGOLAZIONE |
| 3 | 1 | BONNET | TAZZA SUPERIORE |
| 4 | 1 | UPPER SPRING SEAT | SEDE SUPERIORE MOLLA |
| 5 | 1 | ADJUSTMENT SPRING | MOLLA DI REGOLAZIONE |
| 6 | 1 | LOWER SPRING RESET | RESET INFERIORE MOLLA |
| 7 | 1 | SLIP RING | SLIP RING |
| 8 | 1 | DIAPHRAGM | DIAFRAMMA |
| 9 | 1 | VALVE SEAT | SEDE VALVOLA |
| 10 | 1 | O'RING (ONLY FOR RELIEVING) | O'RING (SOLO PER RELIEVING) |
| 11a | 1 | BODY | CORPO |
| 12 | 1 | SIPHON | SIFONE |
| 13 | 2 | CONNECTION | TERMINALI FILETTATI |
| 14 | 2 | O'RING | O'RING |
| 15 | 2 | BRACKET | STAFFA |
| 16 | 1 | VALVE STEAM | CORPO VALVOLA |
| 17 | 1 | O'RING | O'RING |
| 18 | 1 | VALVE | VALVOLA |
| 19 | 1 | VALVE SPRING | MOLLA VALVOLA |
| 20 | 1 | FILTER ELEMENT SUPPORT | SUPPORTO ELE. FILTRANTE |
| 21a | 2 | FILTER ELEMENT 5 MICRON | ELEMENTO FILTRANTE 5 MIC |
| 21b | 2 | FILTER ELEMENT 25 MICRON | ELEMENTO FILTRANTE 25 MIC |
| 22 | 1 | FILTER ELEMENT RING | ANELLO ELEMENTO FILTRANTE |
| 23 | 1 | FILTER ELEMENT PLUG | FONDELLO ELEMENTO FILTRANTE |
| 24 | 1 | FILTER ELEMENT SCREW | VITE ELEMENTO FILTRANTE |
| 25 | 1 | O'RING BOWL | O'RING TAZZA |
| 26a | 1 | MANUAL DRAIN BOWL | TAZZA SCARICO MANUALE |
| 26b | 1 | AUTOMATIC DRAIN BOWL | TAZZA SCARICO AUTOMATICO |
| 27 | 1 | BENZIN | ANELLO BENZIN |
| 28 | 1 | O'RING DRAIN | O'RING DRAIN |
| 29 | 1 | MANUAL DRAIN | SCARICO MANUALE |
| 30 | 1 | AUTOMATIC DRAIN | SCARICO AUTOMATICO |
| 31 | 1 | O'RING AUTO DRAIN | O'RING SCARICO AUTO |
| 32 | 1 | AUTOMATIC DRAIN SEAT | SEDE SCARICO AUTOMATICO |
| 33 | 1 | O'RING AUTO DRAIN | O'RING SCARICO AUTO |
| 34 | 1 | AUTOMATIC DRAIN SEAT | SEDE SCARICO AUTOMATICO |
| 35 | 8 | SCREW M5x16 DIN 912 A2 | VITI M5X16 |
| 41 | 1 | O'RING VALVE | O'RING |

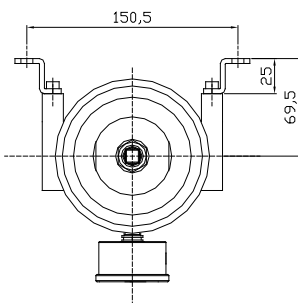
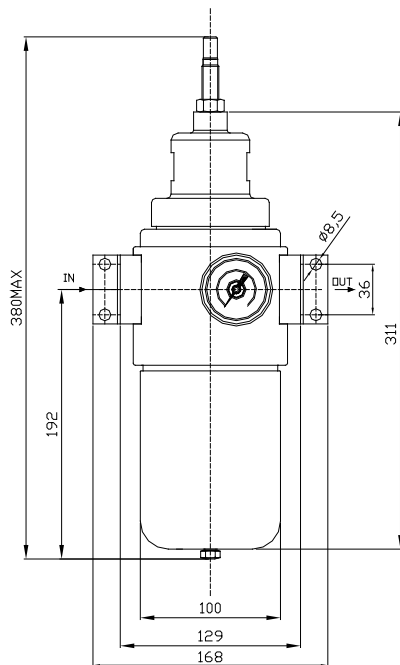
BT-FR16AL/C22B

Overall dimension

Dimensioni di ingombro

Manual drain

Scarico manuale

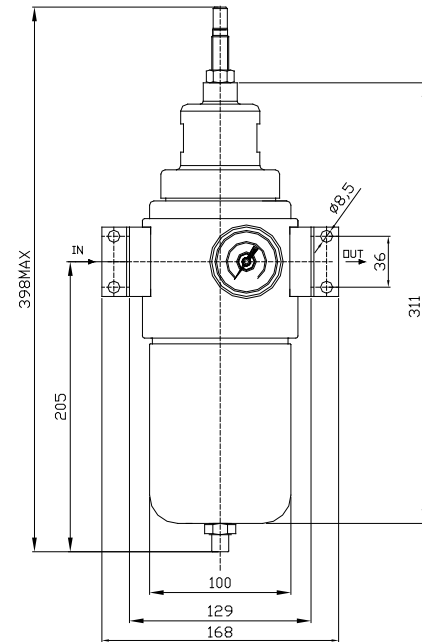
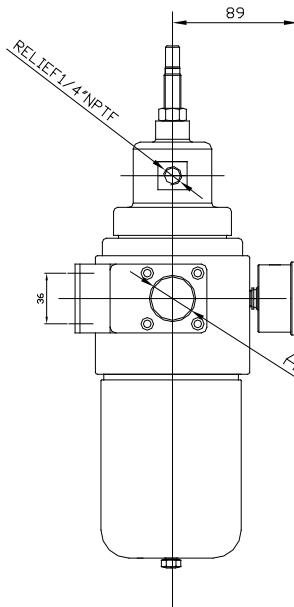


FR12 A = 3/4"

FR16 A = 1"

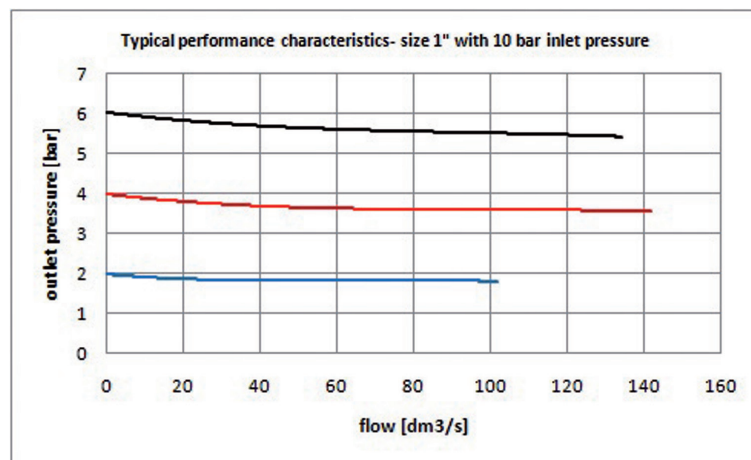
Automatic drain

Scarico automatico



Note for automatic drain / Nota per scarico automatico:

- max inlet pressure 16bar / massima pressione di utilizzo 16bar
- not recommended for $T < 2^{\circ}\text{C}$ / non raccomandato per $T < 2^{\circ}\text{C}$



Accessories and repair kit

Accessori e ricambi

| | |
|---|--|
| Maintenance kit / Kit manutenzione | Items K-FR12-* -AL-** [3/4"] K-F216-* -AL-** [1"] |
| Pressure gauge DN40mm, SS case, Bar+psi+kpa range / Manometro DN40mm, cassa inox, scala Bar+psi+kpa | 0-2bar MBSNP4S2PN3S 0-4bar MBSNP4S2PN05 0-10bar MBSNP4S2PN07 |
| Bracket / Staffa | SQ-FR16 |
| Anti-tamper kit / Kit anti-manomissione | KTAM04-08 |

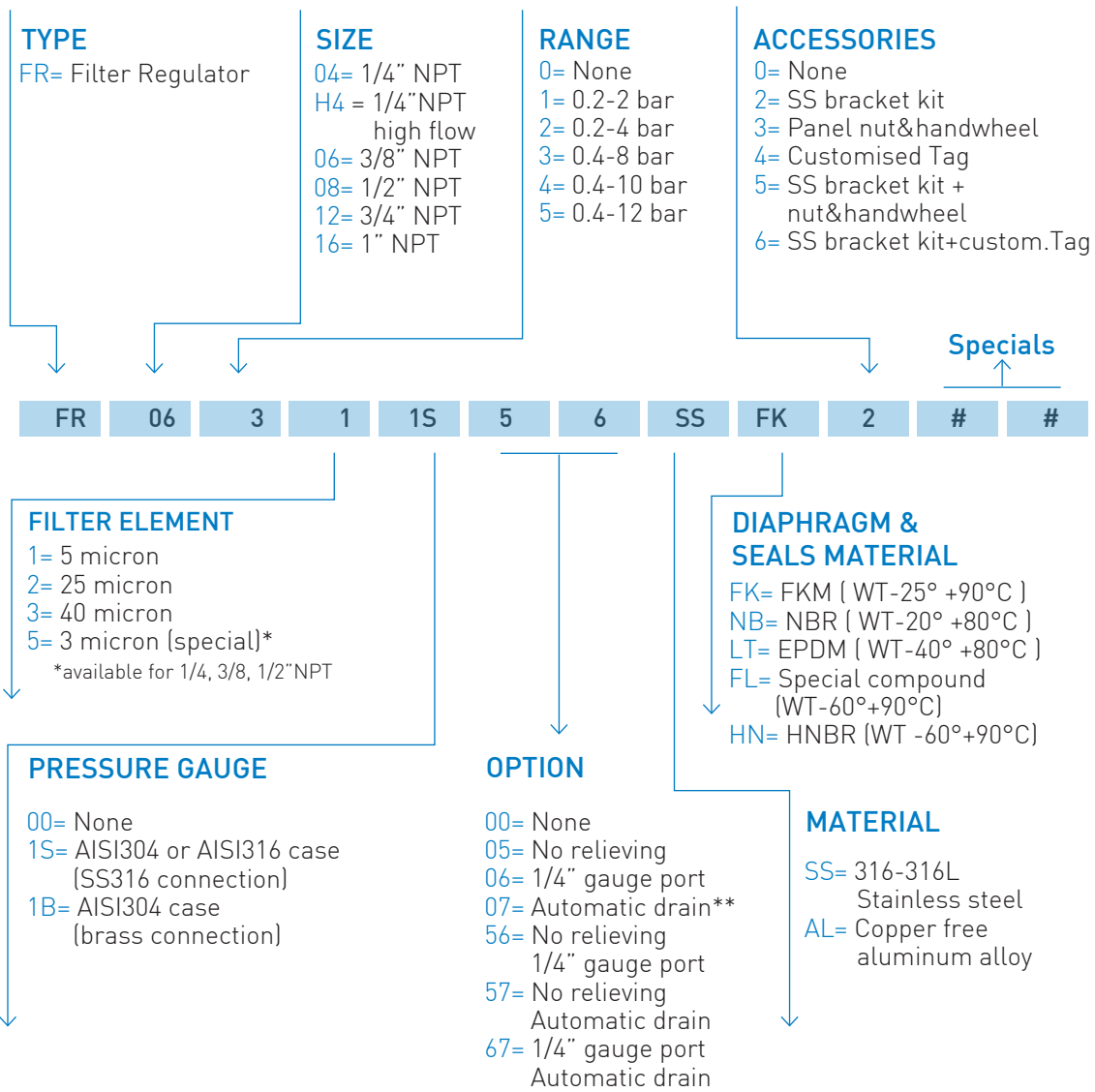
* Refers to filter element option: 1→5 micron 2→25 micron 3→40 micron

** Refers to seals type: FK→FKM NB→NBR LT→EPDM FL→FVMQ HN→HNBR

Ordering information - Filter regulators

Come ordinare - Filtri regolatori

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CODE EXAMPLES

| | | | | | | | | | | |
|----|----|---|---|----|---|---|----|----|---|--|
| FR | 08 | 3 | 3 | 1S | 0 | 7 | SS | FK | 2 | |
|----|----|---|---|----|---|---|----|----|---|--|

1/2" NPT, SS316, 0 to 8 bar range, filter regulator, with 40 micron filtering element, relieving, SS pressure gauge, automatic drain, ss bracket kit and FKM diaphragm & seals
Filtro regolatore da 1/2" NPT in AISI316, range regolato 0/8 bar, elemento filtrante da 40 micron, manometro tutto inox, relieving, scarico condensa automatico, staffa inox, diaframma e tenute in FKM

| | | | | | | | | | | |
|----|----|---|---|----|---|---|----|----|---|--|
| FR | 06 | 3 | 1 | 00 | 0 | 0 | SS | FK | 0 | |
|----|----|---|---|----|---|---|----|----|---|--|

3/8" NPT, SS316, 0 to 8 bar range, filter regulator, with 5 micron filtering element, relieving and FKM diaphragm & seals
Filtro regolatore da 3/8" NPT in AISI316, range regolato 0/8 bar, elemento filtrante da 5 micron, relieving, diaframma e tenute in FKM

**** Nota for automatic drain: use not recommended for T 2°C (under this T the moisture in the medium could freeze and cause drain malfunction or breaking) / Nota per scarico automatico: uso non raccomandato per T 2°C (sotto questa T la condensa può ghiacciare e causare malfunzionamenti o rotture).**

01-FR/22A