FEATURES

- Stainless Steel Filter, Regulator and Filter Regulator intended for corrosive environment and suitable for use in potentially explosive atmosphere caused by gases, vapours, mists and / or dust according to new ATEX directive 2014/34/EU.
- SAFETY CODE: II 2GD IIC T100°C (T5), with 90°C ambient temperature II 2GD IIC T85°C (T6), with 75°C ambient temperature (ZONE 1-21) Explosion group IIC
- CU-TR certified for potentially explosive atmospheres
- Functional Safety: IEC 61508, SIL certified
- Comply with the European Essential Health and Safety Requirements (EN13643-1)
- All internal metal parts made of 316 / 316L stainless steel
- Built-in overpressure relieving function, non-relieving option available
- Quick Relief available (1), allowing downstream pressure in the actuator or other instrument to exhaust in the event if supply pressure is lost
- 316L Stainless Steel body, bonnet and bowl
- Internal springs made of INCONEL® to suit sour gas environment complying to NACE MR0175 / ISO 15156 (2)

BEENEFITS

- Precise tuning and regulation - using dual spring design (3)(4)
- Improved regulation accuracy - with pitot tube feedback (3)(4)
- Longer lifespan - using rolling diaphragm
- Effective moisture removal - using fin diverters to create centrifugal action (3)
- Long lasting product labelling - laser etched marking on stainless steel bowl

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Fluids</th>
<th>Compact</th>
<th>High Flow (1/4 - 1/2)</th>
<th>High Flow (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance to NACE for sour Gas environment</td>
<td>No</td>
<td>Yes (as an option)</td>
<td></td>
</tr>
<tr>
<td>Quick Relief</td>
<td>No</td>
<td>Yes (5) (as an option)</td>
<td></td>
</tr>
<tr>
<td>Ports</td>
<td>1/4</td>
<td>1/4 &amp; 1/2</td>
<td>3/4 &amp; 1</td>
</tr>
<tr>
<td>Threads</td>
<td>NPT</td>
<td>G as an option</td>
<td></td>
</tr>
<tr>
<td>Pressure range (inlet)</td>
<td>0 - 20 bar (Manual Drain)</td>
<td>2.5 - 11 bar (Auto Drain)</td>
<td>0.5 - 10 bar</td>
</tr>
<tr>
<td>Regulating pressure (outlet)</td>
<td>By hexagonal head screw with nut</td>
<td></td>
<td>&lt; 0.32 bar</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>&lt; 0.32 bar</td>
<td>&lt; 0.2 bar</td>
<td>&lt; 0.25 bar</td>
</tr>
<tr>
<td>Filtering capacity</td>
<td>25 µm &amp; 5 µm</td>
<td>40 µm, 25 µm &amp; 5 µm</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40°C to +90°C</td>
<td>-60°C</td>
<td>-60°C</td>
</tr>
<tr>
<td>Low temperature option</td>
<td>-50°C</td>
<td>-60°C</td>
<td>-60°C</td>
</tr>
<tr>
<td>Condensate Drain</td>
<td>Manual &amp; Automatic</td>
<td></td>
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</tbody>
</table>

CONSTRUCTION

<table>
<thead>
<tr>
<th>Compact</th>
<th>High Flow (1/4 - 1/2)</th>
<th>High Flow (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body, bonnet &amp; bowl</td>
<td>AISI 316L SS</td>
<td></td>
</tr>
<tr>
<td>Bowl capacity</td>
<td>25 cm³</td>
<td>75 cm³</td>
</tr>
<tr>
<td>Filtering element</td>
<td>AISI 316 SS</td>
<td></td>
</tr>
<tr>
<td>Diaphragm</td>
<td>LT FPM</td>
<td>HNBR</td>
</tr>
<tr>
<td>Elastomers</td>
<td>FPM</td>
<td></td>
</tr>
</tbody>
</table>
### PRODUCT CODE

<table>
<thead>
<tr>
<th>Product series</th>
<th>342</th>
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</thead>
<tbody>
<tr>
<td>Revision letter</td>
<td>A = Initial release</td>
</tr>
<tr>
<td>F/R/Fr type</td>
<td>8 = SS Filter Regulator (FR) 9 = Filter (F) 3 = Regulator (R)</td>
</tr>
<tr>
<td>Pressure relief / vent hole</td>
<td>0 = Non relief diaphragm type 2 = Ø M5 thread 4 = Ø 1/8 NPT</td>
</tr>
<tr>
<td>Certifications &amp; approvals</td>
<td>0 = ATEX 1/21 1 = ATEX 1/21 + CUTR 2 = ATEX 1/21 + NACE 3 = ATEX 1/21 + NACE + CUTR</td>
</tr>
</tbody>
</table>

#### Options
- AD = Automatic Drain
- AN = Automatic Drain with 1/8 NPT connection
- G = 316 SS pressure gauge
- K = Quick Relief
- LT = Low Temperature
- MB = 316L SS Mounting Brackets

**AD + AN is not a possible combination**
**LT + AD/AN is not a possible combination**

#### Filtration/port size
- 1 = High Flow 1/4 NPT 25 µm or Regulator only
- 2 = High Flow 1/4 G 25 µm or Regulator only
- 3 = High Flow 1/2 NPT 25 µm or Regulator only
- 4 = High Flow 1/2 G 25 µm or Regulator only
- 5 = High Flow 1/4 NPT 5 µm
- 6 = High Flow 1/4 G 5 µm
- 7 = High Flow 1/2 NPT 5 µm
- 8 = High Flow 1/2 G 5 µm
- 9 = Compact Basic Flow 1/4 NPT 25 µm
- A = Compact Basic Flow 1/4 G 25 µm
- B = Compact Basic Flow 1/4 NPT 5 µm
- C = Compact Basic Flow 1/4 G 5 µm
- D = High Flow 3/4 NPT 25 µm or Regulator only
- E = High Flow 3/4 G 25 µm or Regulator only
- F = High Flow 1 NPT 25 µm or Regulator only
- G = High Flow 1 G 25 µm or Regulator only
- H = High Flow 3/4 NPT 40 µm
- J = High Flow 3/4 G 40 µm
- K = High Flow 1 NPT 40 µm
- L = High Flow 1 G 40 µm
- M = High Flow 3/4 NPT 5 µm
- N = High Flow 3/4 G 5 µm
- P = High Flow 1 NPT 5 µm
- Q = High Flow 1 G 5 µm

**NOTES:**
- Please refer to our online configurator for option combinations availability
- 40 µm, 25 µm & 5 µm filtration are not applicable for standalone regulator
- 1/8” port size for compact SSFR is also available upon request
- Standard regulating pressure is 0.5 - 10 bar, 0.5 - 2.5 bar is also available upon request

#### ORDERING EXAMPLE
1. Compact low temperature stainless steel Filter Regulator (1/4 NPT, 25 µm filtration) with low temperature pressure gauge & mounting bracket
   - Product Code: 342A8209GLTMB
2. High-Flow stainless steel Filter Regulator (1/4 NPT, 25 µm filtration) with Auto Drain, pressure gauge & mounting bracket
   - Product Code: 342A8201ADGMB
3. High-Flow stainless steel Filter Regulator (3/4 NPT, 25 µm filtration) with Auto Drain, pressure gauge & mounting bracket
   - Product Code: 342A820DADGMB

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All leaflets are available on: [www.asco.com](http://www.asco.com)
MAXIMUM FLOW VALUES

<table>
<thead>
<tr>
<th>Construction Type</th>
<th>Maximum Flow Values Following ISO Standards 5782, 6358 and 6953</th>
<th>Compact</th>
<th>High Flow (1/4 - 1/2)</th>
<th>High Flow (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1/4 NPT</td>
<td>1/4 NPT</td>
<td>1/2 NPT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 μm</td>
<td>25 μm</td>
<td>5 μm</td>
</tr>
<tr>
<td>Filter</td>
<td>Inlet pressure = 6,3 bar and ΔP = 1 bar</td>
<td>-</td>
<td>-</td>
<td>1780</td>
</tr>
<tr>
<td>Regulator</td>
<td>Inlet pressure = 10 bar, setpoint = 6,3 bar and ΔP = 1 bar</td>
<td>-</td>
<td>-</td>
<td>3120</td>
</tr>
<tr>
<td>Filter Regulator</td>
<td>Inlet pressure = 10 bar, setpoint = 6,3 bar and ΔP = 1 bar</td>
<td>1280</td>
<td>1400</td>
<td>2380</td>
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</table>

AUTO DRAIN

<table>
<thead>
<tr>
<th></th>
<th>COMPACT SS FR</th>
<th>HIGH FLOW SSFR (1/4 - 1/2)</th>
<th>HIGH FLOW SSFR (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum inlet pressure</td>
<td>11 bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating pressure</td>
<td>2,5 - 11 bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0°C to +60°C</td>
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</tr>
<tr>
<td>Metal parts</td>
<td>316L SS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elastomers</td>
<td>FPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float material</td>
<td>Rigid Polyurethane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float material</td>
<td>PP material</td>
<td>Rigid Polyurethane</td>
<td></td>
</tr>
<tr>
<td>Adapter (316 SS) for 1/8 NPT</td>
<td>conversion 'AN' as option</td>
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</table>

PRESSURE GAUGE

<table>
<thead>
<tr>
<th></th>
<th>COMPACT SS FR</th>
<th>HIGH FLOW SSFR (1/4 - 1/2)</th>
<th>HIGH FLOW SSFR (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum inlet pressure</td>
<td>11 bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating pressure</td>
<td>2,5 - 11 bar</td>
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<td></td>
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<tr>
<td>Operating temperature</td>
<td>0°C to +60°C</td>
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<td></td>
</tr>
<tr>
<td>Metal parts</td>
<td>316L SS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elastomers</td>
<td>FPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float material</td>
<td>Rigid Polyurethane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float material</td>
<td>PP material</td>
<td>Rigid Polyurethane</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>316 Stainless Steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP65; Safety glass; Fixed crimped case to avoid accidental dismounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kit number</td>
<td>C325937</td>
<td>C325938</td>
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</table>

MOUNTING BRACKET

<table>
<thead>
<tr>
<th></th>
<th>COMPACT SS FR</th>
<th>HIGH FLOW SSFR (1/4 - 1/2)</th>
<th>HIGH FLOW SSFR (3/4 - 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>316L Stainless Steel</td>
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<td></td>
</tr>
<tr>
<td>Kit number</td>
<td>C117877</td>
<td>C117813</td>
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</tr>
<tr>
<td>Option</td>
<td>Auto Drain</td>
<td>0,015</td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>Adapter for Auto Drain</td>
<td>0,020</td>
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</tr>
<tr>
<td>Pressure Gauge</td>
<td>0,164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting Bracket</td>
<td>0,079</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INSTALLATION

- Installation/Maintenance instructions are included with each Filter/Regulator
- Air flow direction indicated by IN/OUT as well as inlet & outlet indicators
- Pipe connection has standard thread according to NPT (ANSI 1.20.3)

All leaflets are available on: www.asco.com
DIMENSIONS(mm), WEIGHT(kg)

FILTER

FILTER REGULATOR

REGULATOR

MOUNTING BRACKET

SAFETY RELIEF TABLE:

PORT SIZE ØD

4-MOUNTING HOLES

1/4" NPT PRESSURE GAUGE CONNECTION (HIGH FLOW)
1/8" NPT PRESSURE GAUGE CONNECTION (COMPACT)

* Note: Mounting hole size M6 for High-Flow 1/4, 1/2, 3/4 & 1 SS FR and mounting hole size M5 for Compact SS FR

DIMENSIONS(mm), WEIGHT(kg)

SPARE PARTS KITS

<table>
<thead>
<tr>
<th>Type</th>
<th>Diameter</th>
<th>Filtering Capacity</th>
<th>Spare Parts Kit Number Standard</th>
<th>Spare Parts Kit Number Low Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPACT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filter</td>
<td>1/4</td>
<td>25 µm</td>
<td>C325921</td>
<td>C325996</td>
</tr>
<tr>
<td>Regulator</td>
<td>1/4</td>
<td>5 µm</td>
<td>C325922</td>
<td>C325997</td>
</tr>
<tr>
<td>HIGH FLOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filter</td>
<td>1/4</td>
<td>25 µm</td>
<td>C325309</td>
<td>C325351</td>
</tr>
<tr>
<td>Regulator</td>
<td>1/4</td>
<td>5 µm</td>
<td>C325311</td>
<td>C325355</td>
</tr>
<tr>
<td>Filter</td>
<td>1/2</td>
<td>25 µm</td>
<td>C325305</td>
<td>C325353</td>
</tr>
<tr>
<td>Regulator</td>
<td>1/2</td>
<td>5 µm</td>
<td>C325307</td>
<td>C325357</td>
</tr>
<tr>
<td>Filter</td>
<td>3/4</td>
<td>40 µm</td>
<td>C326171</td>
<td>C326174</td>
</tr>
<tr>
<td>Regulator</td>
<td>3/4</td>
<td>5 µm</td>
<td>C326178</td>
<td>C326181</td>
</tr>
<tr>
<td>Filter</td>
<td>1</td>
<td>25 µm</td>
<td>C326172</td>
<td>C326175</td>
</tr>
<tr>
<td>Regulator</td>
<td>1</td>
<td>5 µm</td>
<td>C326173</td>
<td>C326176</td>
</tr>
</tbody>
</table>

All leaflets are available on: www.asco.com
PRESSURE DROP vs. AIR FLOW CURVES

High Flow St. steel filter 1/2” NPT Ref. : 342A9007
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 1/2” NPT Ref. : 342A9003
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 1/4” NPT Ref. : 342A9005
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 1/4” NPT Ref. : 342A9001
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 3/4” NPT Ref. : 342A920M
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 3/4” NPT Ref. : 342A920D
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar

All leaflets are available on: www.asco.com
PRESSURE DROP vs. AIR FLOW CURVES

High Flow St. steel filter 3/4" NPT Ref. : 342A920H
Filtration 40 µm with P inlet 4 - 6.3 - 8 - 10 bar

High Flow St. steel filter 1" NPT Ref. : 342A920P
Filtration 5 µm with P inlet 4 - 6.3 - 8 bar

High Flow St. steel regulator 1/2" NPT Ref. : 342AA401
P inlet 10 b - setpoint 4 - 6.3 - 8 bar

High Flow St. steel regulator 1/4" NPT Ref. : 342AA401
P inlet 10 b - setpoint 4 - 6.3 - 8 bar
PRESSURE DROP vs. AIR FLOW CURVES

High Flow St. steel regulator 3/4" NPT Ref.: 342AA20D
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

High Flow St. steel regulator 1" NPT Ref.: 342AA20F
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

High Flow St. steel filter regulator 1/2" NPT Ref.: 342A8203
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

High Flow St. steel filter regulator 1/4" NPT Ref.: 342A8201
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

High Flow St. steel filter regulator 1/2" NPT Ref.: 342A8207
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

High Flow St. steel filter regulator 1/4" NPT Ref.: 342A8205
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

All leaflets are available on: www.asco.com
PRESSURE DROP vs. AIR FLOW CURVES

Compact St. steel filter regulator 1/4" NPT Ref : 342A820B
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1 2 3 4 5 6 7

Air Flow (dm³/s)

0 500 1000 1500 2000 2500 3000

l/min (ANR)

0 500 1000 1500 2000 2500 3000

Compact St. steel filter regulator 1/4" NPT Ref. : 342A8209
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1 2 3 4 5 6 7

Air Flow (dm³/s)

0 500 1000 1500 2000 2500 3000

l/min (ANR)

0 500 1000 1500 2000 2500 3000

High Flow St. steel filter regulator 1" NPT Ref : 342A820K
Filtration 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1 2 3 4 5 6 7

Air Flow (dm³/s)

0 25 50 75 100 125 150 175 200

l/min (ANR)

0 25 50 75 100 125 150 175 200

High Flow St. steel filter regulator 1" NPT Ref : 342A820F
Filtration 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1 2 3 4 5 6 7

Air Flow (dm³/s)

0 25 50 75 100 125 150 175 200

l/min (ANR)

0 25 50 75 100 125 150 175 200

High Flow St. steel filter regulator 3/4" NPT Ref : 342A820H
Filtration 5 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1 2 3 4 5 6 7

Air Flow (dm³/s)

0 25 50 75 100 125 150 175 200

l/min (ANR)

0 25 50 75 100 125 150 175 200

All leaflets are available on: www.asco.com
PRESSURE DROP vs. AIR FLOW CURVES

High Flow St. steel filter regulator 3/4” NPT Ref : 342A820D
Filtration 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000

Air Flow (dm³/s)

0 25 50 75 100 125 150 175 200

High Flow St. steel filter regulator 3/4” NPT Ref : 342A820M
Filtration 5 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

Outlet Pressure (bar)

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000

Air Flow (dm³/s)

0 25 50 75 100 125 150 175 200

All leaflets are available on: www.asco.com