

B38P

High flow filter/regulator (Stainless steel)



- > **Port size: 1/4" ... 1"**
(NPT, ISO G)
- > **High flow filter/regulator designed for use in corrosive environment**
- > **Applications include marine environment, oil and gas productions**
- > **Metallic parts meet NACE* Standard MR-01-75**
* National Association of Corrosion Engineers – recognised oil-field recommendation for resistance to sulphide stress cracking common in well-head and other corrosive environments
- > **ATEX approved**

Technical features

Medium:

Compressed air only

Maximum inlet pressure:

31 bar (449 psi) (manual drain)
17 bar (246 psi) (auto drain)

Outlet pressure range:

0,5 ... 10 bar (7 ... 145 psi)

Flow:

40 dm³/s
(Port size: 1/4" and 3/8")
75 dm³/s or 100 dm³/s
(Port size: 1/2" and 1")

Element:

5, 25 or 40 µm

Port sizes:

1/4 NPT, 3/8 NPT, 1/2 NPT,
1 NPT
G1/4, G3/8, others on request
1/4 NPT (gauge) and
1/4 NPT (automatic drain)

Drain:

Manual or automatic
Automatic drain operation
conditions (float operated):
To close: > 0,3 bar (4.35 psi)
To open: < 0,2 bar (2.9 psi)
Minimum air flow required to
close 1 dm³/s

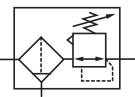
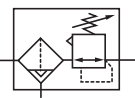
Ambient/Media temperature:

FPM seals:
-20 ... +80°C (-4 ... +176 °F)
NBR seals:
-40 ... +80°C (-40 ... +176 °F)
Air supply must be dry enough
to avoid ice formation at
temperatures below +2°C
(+35 °F).

Materials:

Body, bowl, bonnet, filter
element and adjusting screw:
316 stainless steel
Elastomers: FPM or NBR

Technical data, standard model, relieving and panel nut

Symbol	Port size	Outlet pressure *1) (bar)	Element (µm)	Flow *2) (dm ³ /s)	Drain	Weight (kg)	Model (with bracket install on unit)	Model (without bracket)
	1/4 NPT	0,5 ... 10	5	40	Manual	1,61	B38P-252-B1MA	B38P-254-B1MA
	3/8 NPT	0,5 ... 10	5	40	Manual	1,60	B38P-352-B1MA	B38P-354-B1MA
	1/2 NPT	0,5 ... 7	40	100	Manual	2,21	B38P-442-M3KA	B38P-444-M3KA
	1/2 NPT	0,5 ... 10	40	75	Manual	2,21	B38P-442-M3MA	B38P-444-M3MA
	1 NPT	0,5 ... 7	40	100	Manual	2,04	B38P-842-M3KA	B38P-844-M3KA
	1 NPT	0,5 ... 10	40	75	Manual	2,04	B38P-842-M3MA	B38P-844-M3MA
	1/4 NPT	0,5 ... 10	5	40	Automatic	1,74	B38P-252-A1MA	B38P-254-A1MA
	3/8 NPT	0,5 ... 10	5	40	Automatic	1,73	B38P-352-A1MA	B38P-354-A1MA
	1/2 NPT	0,5 ... 7	40	100	Automatic	2,41	B38P-442-A3KA	B38P-444-A3KA
	1/2 NPT	0,5 ... 10	40	75	Automatic	2,41	B38P-442-A3MA	B38P-444-A3MA
	1 NPT	0,5 ... 7	40	100	Automatic	2,24	B38P-842-A3KA	B38P-844-A3KA
	1 NPT	0,5 ... 10	40	75	Automatic	2,24	B38P-842-A3MA	B38P-844-A3MA

*1) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

*2) Typical flow with 10 bar inlet pressure, 6,3 bar set pressure and a 1 bar drop from set.

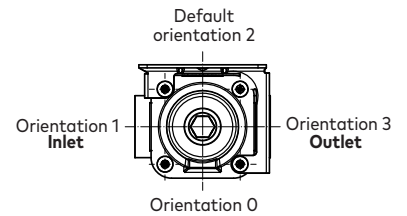
Option selector

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
1"	8
Temperature range	Substitute
-20 ... +80°C (FPM seals)	5
-40 ... +80°C (NBR seals)	4
Bracket *1)	Substitute
With	0
With	1
With (default position)	2
With	3
Without	4

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Thread form *2)	Substitute
NPT	A
ISO G parallel	G
Output pressure range	Substitute
0,5 ... 10 bar	M
0,5 ... 7 bar	K
Element	Substitute
5 µm	1
25 µm	2
40 µm	3
Drain	Substitute
Automatic	A
Manual short bowl (For 1/4" or 3/8" port)	B
Manual medium bowl (For 1/2" or 1" port)	M

*1) Bracket is installed on filter/
regulator unit in default orientation
2. Refer to dimensional drawings at
page 6 for more bracket directions.



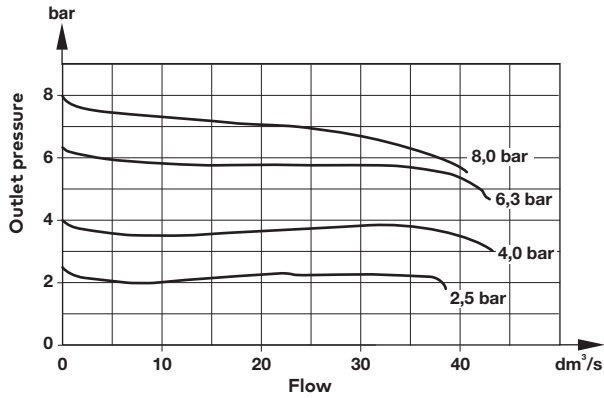
*2) 1/2" & 1" NPT are available with NPT
thread only.

Other versions:

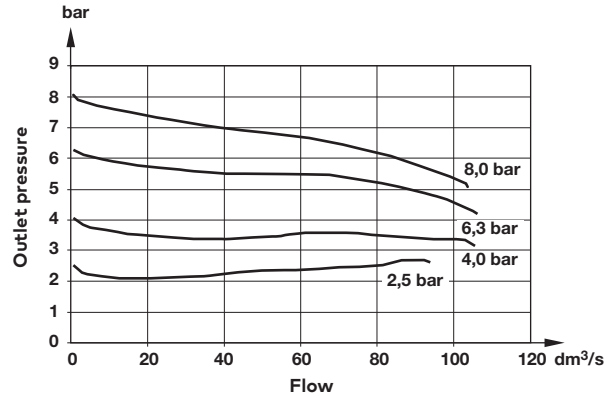
B38P-454-T1MA & B38P-454-T3MA
automatic inner stainless steel thread
filter regulator on request.

Flow characteristics

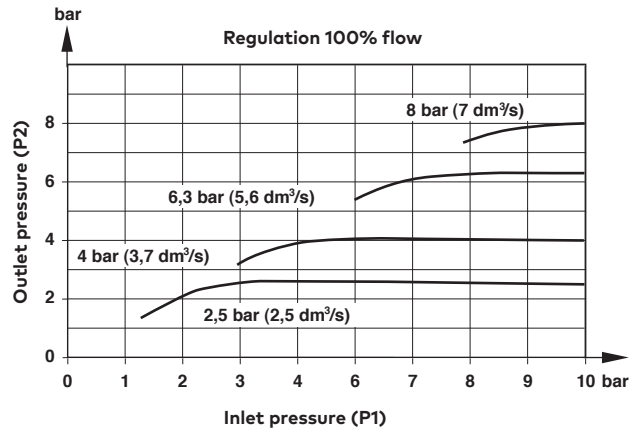
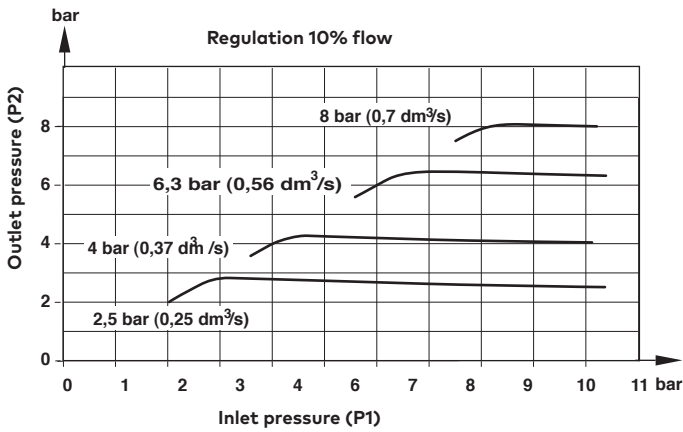
Inlet pressure: 10 bar, filter element: 5 µm, port size: 1/4 NPT



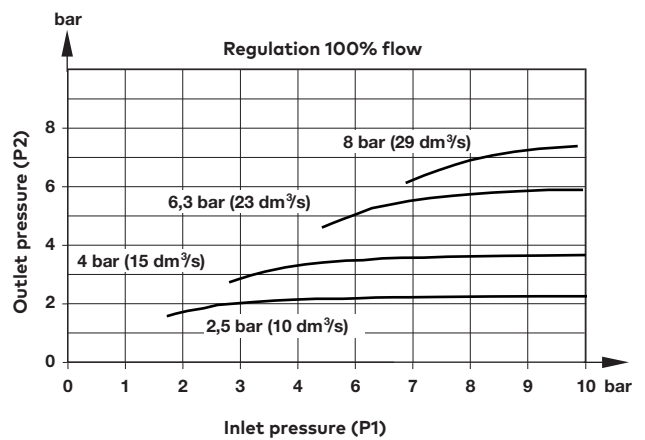
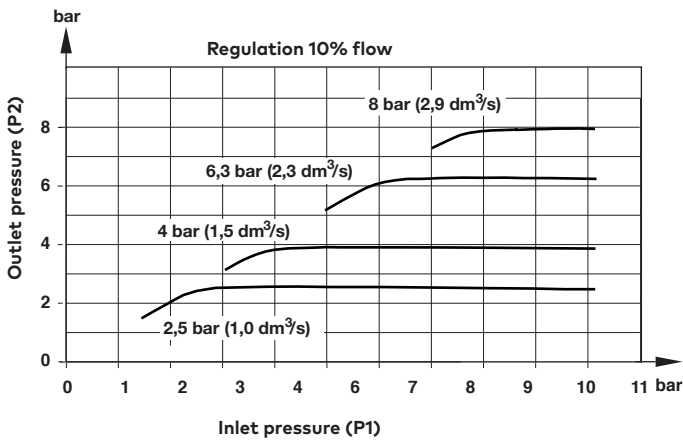
Inlet pressure: 10 bar, filter element: 40µm, port size: 1/2 NPT



Regulating characteristics (1/4" version)



Regulating characteristics (1/2" version)



Accessories

Mounting bracket



A1923-201

Gauge *1)



18-015-913 (0 ... 6 bar, -40 ... 65°C)
18-015-909 (0 ... 10 bar, -40 ... 65°C)

*1) Stainless steel items not strictly to NACE standard MR-01-75.

Plastic adjusting knob



74630-04

Spare parts

Port size: 1/4" & 3/8"



A1923-S01 (manual drain, FPM)
A1923-S02 (auto drain, FPM)
A1923-S03 (manual drain, NBR)
A1923-S04 (auto drain, NBR)

Port size: 1/2" & 1"



A1923-S05 (manual drain, FPM)
A1923-S06 (auto drain, FPM)
A1923-S07 (manual drain, NBR)
A1923-S08 (auto drain, NBR)

Filter element

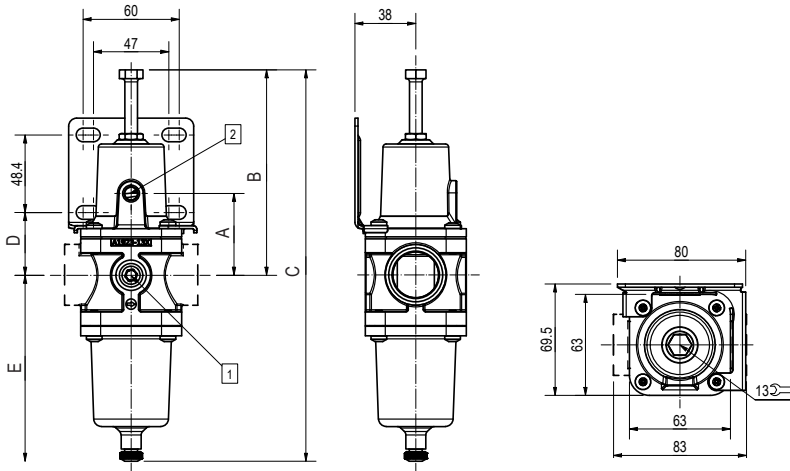


5 µm: 5984-01
25 µm: A080874-02
40 µm: A080874-03

Dimensions

Manual drain, with bracket

Dimensions in mm
Projection/First angle



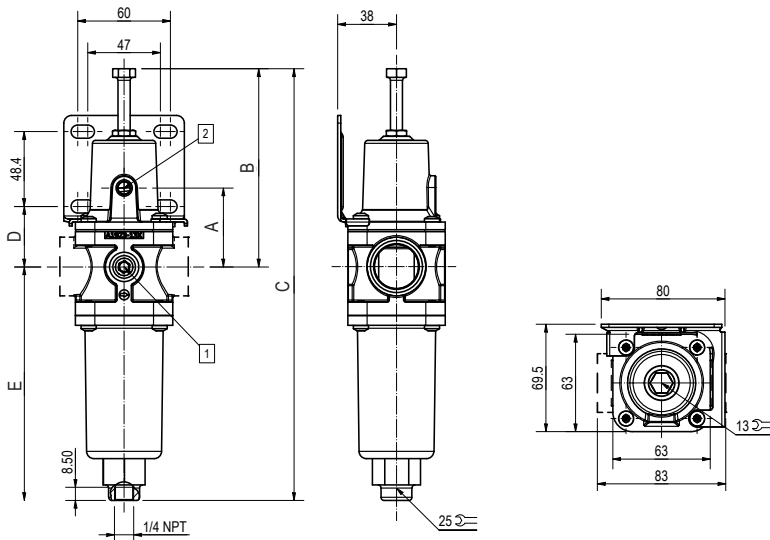
Minimum clearance required to remove bowl

- 1 1/4 NPT Gauge port
- 2 1/8 NPT Exhaust port

Note: Dash line is for 1/2" - 1" only

Port size	Drain type	bracket	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
1/4	Manual	With	48	117	200	30.6	113
3/8	Manual	With	48	117	200	30.6	113
1/2	Manual	With	52	125	226	39	153
1	Manual	With	52	125	226	39	153
1/4	Manual	Without	48	117	200	-	113
3/8	Manual	Without	48	117	200	-	113
1/2	Manual	Without	52	125	226	-	153
1	Manual	Without	52	125	226	-	153

Auto drain, With bracket



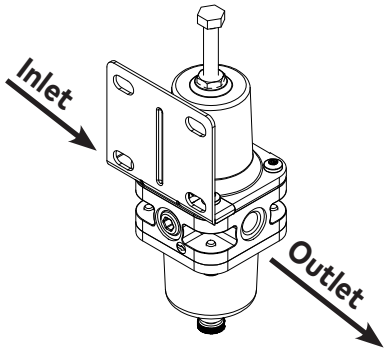
Minimum clearance required to remove bowl

- 1 1/4 NPT Gauge port
- 2 1/8 NPT Exhaust port

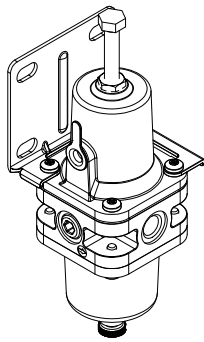
Note: Dash line is for 1/2" - 1" only

Port size	Drain type	bracket	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
1/4	Auto	with	48	117	251	30.6	172
3/8	Auto	with	48	117	251	30.6	172
1/2	Auto	with	52	125	278	39	190
1	Auto	with	52	125	278	39	190
1/4	Auto	without	48	117	251	-	172
3/8	Auto	without	48	117	251	-	172
1/2	Auto	without	52	125	278	-	190
1	Auto	without	52	125	278	-	190

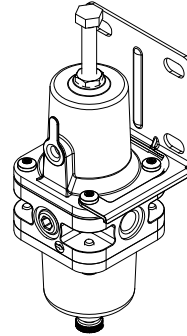
Bracket Directions



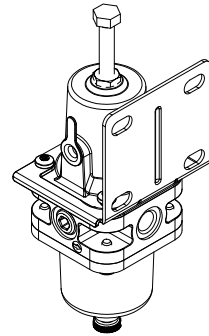
Orientation 0
B38P-**0-****



Orientation 1
B38P-**1-****

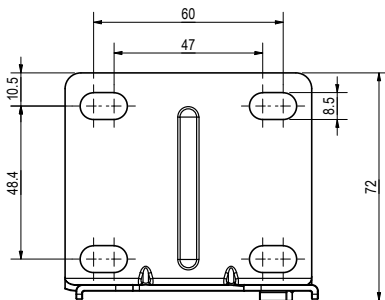
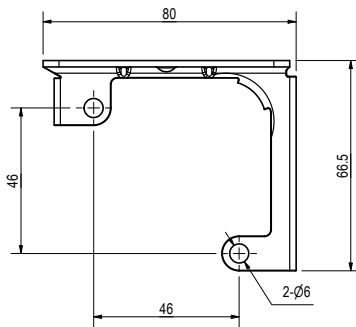


Orientation 2
B38P-**2-****
(Default direction)



Orientation 3
B38P-**3-****

Bracket



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.