

Industrial Automation

IMI Norgren

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

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Symbol	Port size	Outlet pressure *1) (bar)	Element (µm)	Flow *2) (dm3/s)	Drain	Weight (kg)	Model (with bracket install on unit)	Model (without bracket)
3	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	0.57	40	100	Manual	2,21	B38P-442-M3KA	B38P-444-M3KA
	1/2 NPT	0.510	40	75	Manual	2,21	B38P-442-M3MA	B38P-444-M3MA
	1 NPT	0.57	40	100	Manual	2,04	B38P-842-M3KA	B38P-844-M3KA
	1 NPT	0.510	40	75	Manual	2,04	B38P-842-M3MA	B38P-844-M3MA
1	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	0.57	40	100	Automatic	2,41	B38P-442-A3KA	B38P-444-A3KA
	1/2 NPT	0.510	40	75	Automatic	2,41	B38P-442-A3MA	B38P-444-A3MA
	1 NPT	0.57	40	100	Automatic	2,24	B38P-842-A3KA	B38P-844-A3KA
	1 NPT	0.510	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.

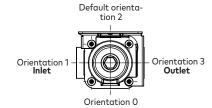
^{*2)} Typical flow with 10 bar inlet pressure, 6,3 bar set pressure and a 1 bar drop from set.



Option selector B38P-★★★-★★★ Port size Substitute Thread form *2) Substitute 1/4" 2 Α 3/8 ISO G parallel G 1/2" 4 Output pressure range Substitute 1" 8 0,5 ... 10 bar Μ Temperature range Substitute 0,5 ... 7 bar К -20 ... +80°C (FPM seals) 5 Substitute Element -40 ... +80°C (NBR seals) 4 5 µm 1 25 µm Bracket *1) Substitute 2 40 µm With 0 3 With 1 ➤ Drain Substitute Automatic With (default position) 2 Α Manual short bowl (For 1/4" or 3/8" port) В With 3 Without 4 Manual medium bowl Μ

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

(For 1/2" or 1" port)



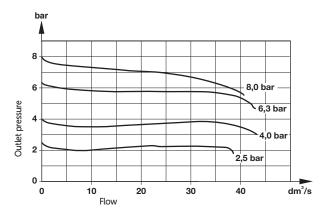
*2) 1/2" & 1" NPT are available with NPT thread only.

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

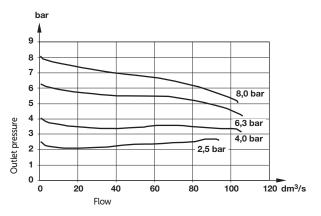


Flow characteristics

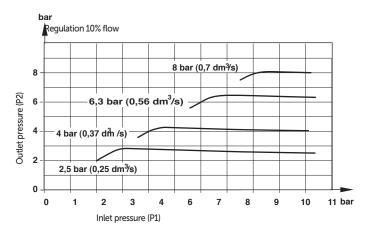
Inlet pressure: 10 bar, filter element: 5 µm, port size: 1/4 NPT

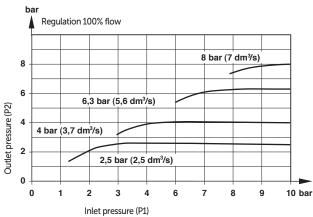


Inlet pressure: 10 bar, filter element: 40µm, port size: 1/2 NPT

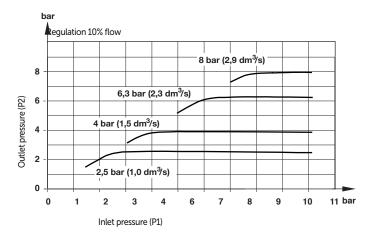


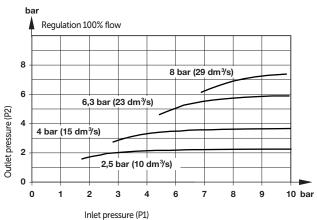
Regulating characteristics (1/4" version)





Regulating characteristics (1/2" version)







Accessories





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: 5984-0125 μm: A080874-0240 μm: A080874-03

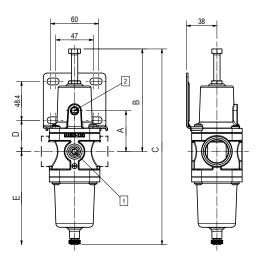


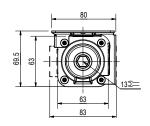
Dimensions Manual drain, with bracket

Dimensions in mm Projection/First angle







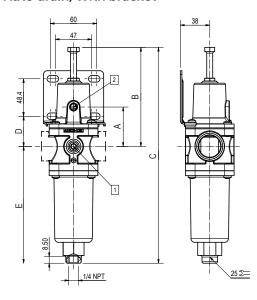


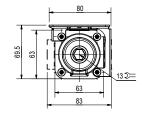
Minimum clearance required to remove bowl
1/4 NPT Gauge port
1/8 NPT Exhaust port

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





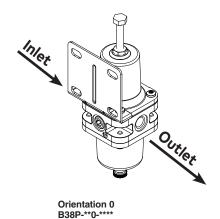
Minimum clearance required to remove bowl 1/4 NPT Gauge port 1/8 NPT Exhaust port

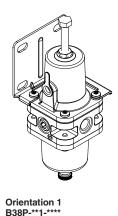
Note: Dash line is for 1/2" - 1" only

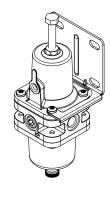
Port size	Drain type	bracket	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
1/4	Auto	with	48	117	251	30.6	172
3/8	Auto	with	48	117	251	30.6	172
1/2	Auto	with	52	125	278	39	190
1	Auto	with	52	125	278	39	190
1/4	Auto	without	48	117	251	-	172
3/8	Auto	without	48	117	251	-	172
1/2	Auto	without	52	125	278	-	190
1	Auto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

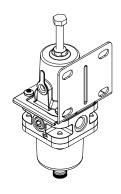


Bracket Directions





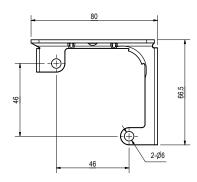


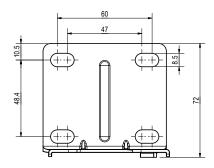


Orientation 2 B38P-**2-**** (Default direction)

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 Norgren.

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.