

# B38

## Precision filter/regulator (stainless steel)



- > Port size: 1/4 NPT
- > Designed for use in corrosive environments
- > Metallic parts meet NACE\* Standard MR-01-75
- > Applications include marine environment, oil and gas production, chemical and food processing, medical analysis
- > Model for precision regulation and high flow

\* National Association of Corrosion Engineers – recognised oil-field recommendation for resistance to sulphide stress cracking common in well-head and other corrosive environments



### Technical features

#### Medium:

Compressed air only

#### Maximum inlet pressure:

31 bar (450 psig) (manual drain)

17 bar (247 psig) (autodrain)

#### Outlet pressure range:

0,04 ... 2 bar ( 0,5 ... 29 psig)

0,07 ... 4 bar (1 ... 58 psig)

0,25 ... 7 bar (3.6 ... 102 psig)

0,4 ... 10 bar (5.8 ... 145 psig)

#### Element:

5 or 25 µm

#### Port sizes:

1/4 NPT

1/4 NPT (gauge)

1/8 NPT (relief)

1/4 NPT (automatic drain)

#### Drain:

Manual or automatic

Automatic drain operation conditions (float operated):

To close: > 0,3 bar,

To open: < 0,2 bar

Minimum air flow required to close 1 dm<sup>3</sup>/s

#### Standard compliances:

II 2G Ex h IIC T6 Gb

II 2D Ex h IIIC T85° Db

#### Ambient/Media temperature:

-40 ... +80°C (-40 ... +176 °F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+36 °F)

#### Materials:

Body, bowl, bonnet & adjusting screw: stainless steel

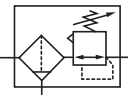
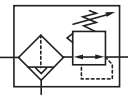
Filter element: High density

PUR (25 µm),

Stainless steel (5 µm)

Elastomers: Synthetic rubber

### Technical data, standard models, relieving and panel nut

Symbol	Port size	Outlet pressure (bar)	Element (µm)	Flow * (dm <sup>3</sup> /s)	Drain	Weight (kg)	Model
	1/4 NPT	0,25 ... 7	25	8	Manual	1,4	B38-244-B2KA
	1/4 NPT	0,07 ... 4	25	8	Manual	1,4	B38-244-B2FA
	1/4 NPT	0,25 ... 7	25	8	Automatic	1,6	B38-244-A2KA
	1/4 NPT	0,07 ... 4	25	8	Automatic	1,6	B38-244-A2FA

\* Typical flow with 7 bar inlet pressure, 1 bar set pressure and a 0,05 bar drop from set.

### Option selector

**B38-24★-★★★A**

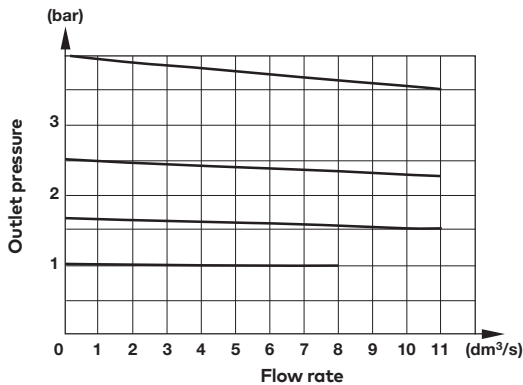
Diaphragm & mounting	Substitute
Relieving	0
Non-relieving	1
Relieving with neck mounting bracket	2
Non-relieving with neck mounting bracket	3
Relieving with panel nut	4
Non-relieving with panel nut	5

Outlet pressure adjustment ranges (bar)*	Substitute
0,04 ... 2	C
0,07 ... 4	F
0,25 ... 7	K
0,4 ... 10	M
Element	Substitute
5 µm	1
25 µm	2
Drain	Substitute
Automatic - long bowl	A
Manual - short bowl	B
Manual - long bowl	M

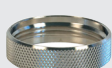




\* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

### Flow characteristics

Inlet pressure: 7 bar, filter element: 25 µm, port size: 1/4 NPT






### Accessories

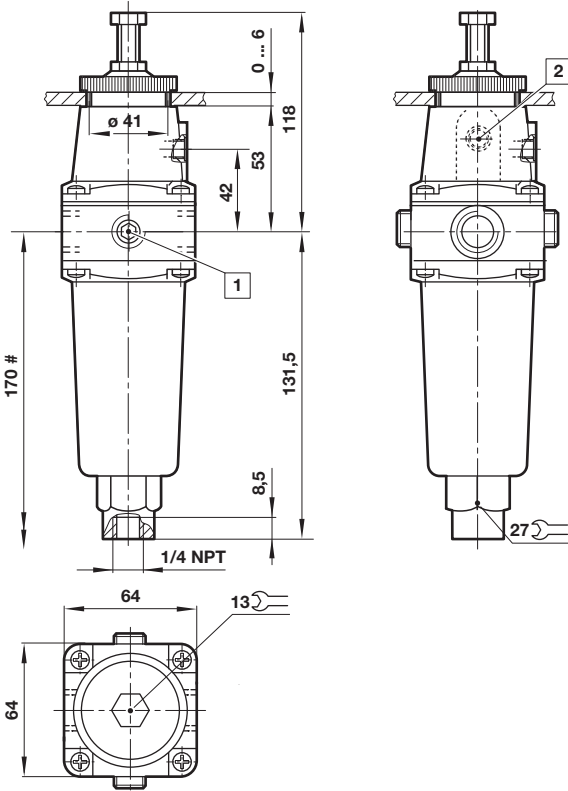
Panel nut	Neck mounting bracket	Neck mounting bracket	Gauge *1)	Plastic adjusting knob
				
5988-02	5989-02	18-001-973 (includes panel nut)	18-015-913 (0 ... 6 bar, -40 ... 65°C) 18-015-909 (0 ... 10 bar, -40 ... 65°C)	74630-04

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

### Service kits

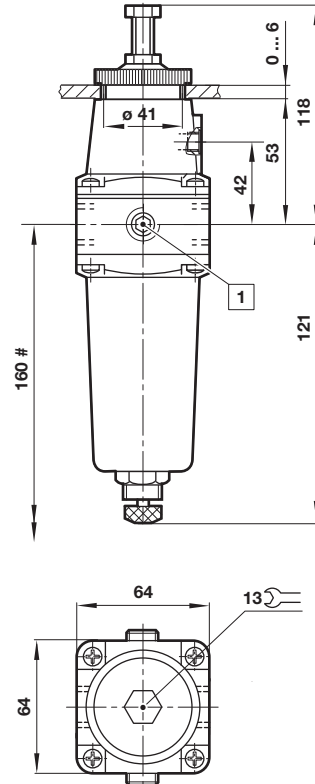
Filter element	Valve assembly and diaphragm	Drain kit
		
B38-100S(5) (5 µm element)	R38-100R (2 bar relieving)	3000-90 (automatic)
B38-100S(25) (25 µm element)	R38-101R (4 and 7 bar relieving)	
	R38-102R (10 bar relieving)	
	R38-100NR (2 bar non-relieving)	
	R38-101NR (4 and 7 bar non-relieving)	
	R38-102NR (10 bar non-relieving)	

### Dimensions Automatic drain

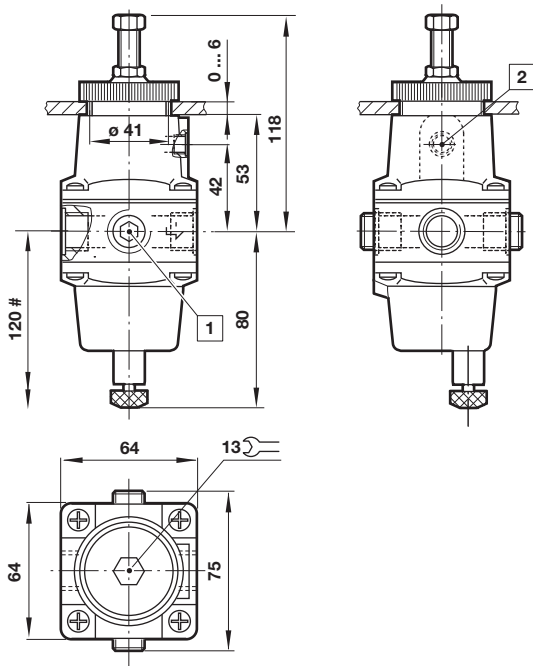


### Manual drain, long bowl

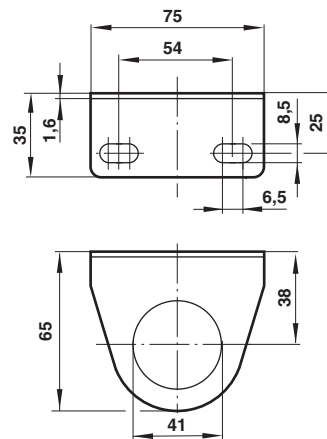
Dimensions in mm  
Projection/First angle



### Manual drain, short bowl



### Neck mounting bracket



# Minimum clearance required to remove bowl

1 1/4 NPT Gauge port

2 1/8 NPT Relief port

## 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 Ltd.

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.