- **Port size: 1/4 PTF**
- **Designed for use in corrosive environments**
- **Adjusting knob has snap-action lock**
- **Applications include marine environment, oil and gas production, chemical and industrial compressed air systems**
- **Metallic parts meet NACE***

* National Association of Corrosion Engineers (NACE) MR-01-75) defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

Technical features

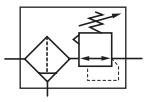
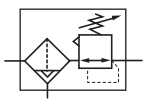
Medium:
Compressed air or neutral gases
Other media on request
Operating pressure:
20 bar max (290 psi)
Pressure range:
0,3 ... 8,5 bar (4 ... 123 psi),
0,3 ... 3,5 bar (4 ... 50 psi)

Element:
5 or 40 µm
Diaphragm:
Relieving or non-relieving
Typical flow:
see below
Gauge ports:
1/8 PTF

Ambient/Media temperature:
Actetal bonnet
-25 ... 66°C (-13 ...+150 °F)
T-handle
-25 ... 80°C (-13 ...+176 °F)
-40°C (-40 °F) version on request
Air supply must be dry enough to avoid ice formation at temperatures below 2°C (+35 °F).

Materials:
Body, valve and bowl: 1.4104 (316) stainless steel
Bonnet: 1.4104 (316) stainless steel with T-handle or Acetal adjusting knob
Valve seat: Acetal
Springs: 1.4319 (302) stainless steel
Drain: stainless steel or Acetal
Element: sintered PE
Elastomers: FPM, automatic drain NBR

Technical data, standard models

Symbol	Port size	Pressure range (bar)	Flow * (dm^3/s)	Diaphragm	Element (µm)	Bonnet type	Drain type (material)	Weight (kg)	Model
	1/4 PTF	0,3 ... 8,5	7	Relieving	5	Knob (Acetal)	Manual (Acetal)	0,38	B05-233-M1LA
	1/4 PTF	0,3 ... 8,5	7	Relieving	5	T-handle (stainless steel)	Manual (stainless steel)	0,54	B05-238-M1LA
	1/4 PTF	0,3 ... 8,5	7	Relieving	5	Knob (Acetal)	Automatic (stainless steel)	0,38	B05-233-A1LA

* Flow with 5 µm element, 10 bar inlet pressure, 6,3 bar set pressure and 1 bar droop form set.

Option selector

B05-2★★-★★★A

Bonnet	Substitute
Relieving, acetal knob	33
Non relieving, acetal knob	35
Relieving, stainless steel T-handle	38 *1)
Non-relieving, stainless steel T-handle	41 *1)
Drain	**Substitute**
Automatic (stainless steel)	A
Manual (Acetal)	M

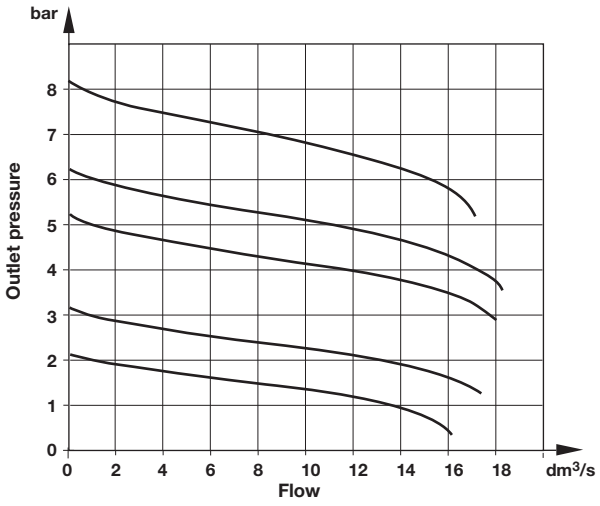
*1) Options 38 and 41 have stainless steel manual drains as standard.

Outlet pressure adjustment ranges *	Substitute
0,3 ... 3,5 bar	E
0,3 ... 8,5 bar	L
Element	**Substitute**
5 µm	1
40 µm	2

* 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.

Air flow characteristics

B05 – Port size: 1/4 PTF, inlet pressure: 12 bar, pressure range: 0,3 ... 8,5 bar, 5 µm element



Accessories

Panel nut	Gauge, 0 ... 10 bar, Ø 40 mm, Port size: 1/8 PTF
	
2962-89 (Acetal)	18-013-844 *1)

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

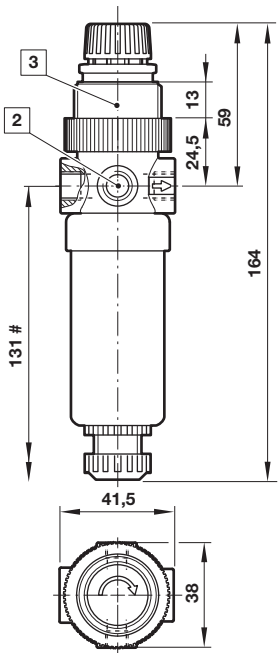
Spares kit

Service kit

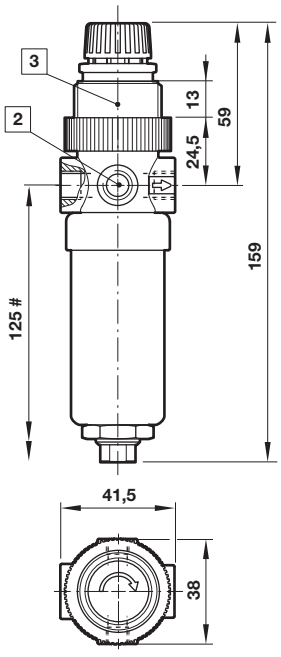
3820-08 (relieving)
3820-09 (non-relieving)

Dimensions in mm
Projection/First angle

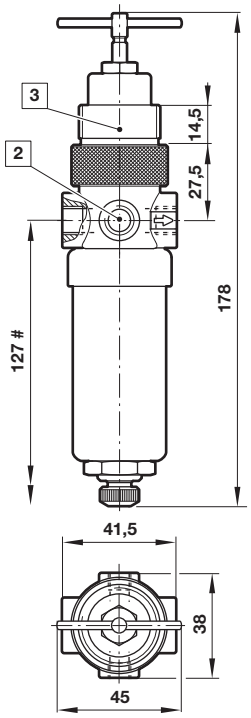
Filter/Regulator with Acetal knob and manual drain



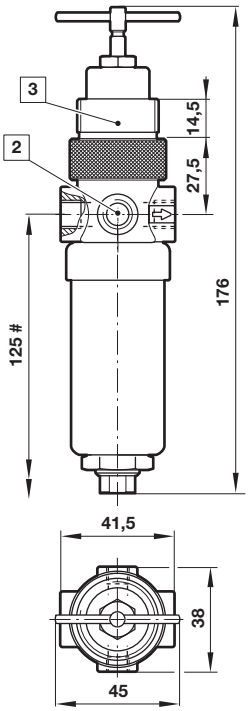
Filter/Regulator with Acetal knob and automatic drain



Filter/Regulator with stainless steel T-handle and manual drain



Filter/Regulator with stainless steel T-handle and automatic drain



Minimum clear distance required to remove bowl.

2 Gauge port: 1/8 PTF, standard units are shipped with two plugs for sealing gauge ports.

3 Panel mounting hole diameter 30 mm, Panel thickness 0 ... 6 mm

Warning

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- **Port size: 1/2 PTF**
- **Metallic parts meet NACE***
- **Applications include marine environment, oil and gas production, chemical and industrial compressed air systems**

* National Association of Corrosion Engineers (NACE) MR-01-75) defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

Technical features

Medium:
Compressed air
Operating pressure:
17 bar max (246 psi)

Filter element:
25 or 5 µm
Port sizes:
1/2 PTF

Ambient/Media temperature:
-20 ... +80°C (-4 ... +176 °F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35 °F)

Materials:
Body & bowl: stainless steel
Filter element: PE or sintered stainless steel
Elastomers: Synthetic rubber

Technical data, standard model

Symbol	Port size	Filter element (µm)	Material	Flow *1) (dm³/s)	Drain	Weight (kg)	Model
	1/2 PTF	25	PE	46	Manual	1,88	F22-400-M7DA
	1/2 PTF	25	PE	46	Automatic	1,84	F22-400-A7DA

*1) Typical flow with 25µm element at 6.3 bar inlet pressure and 0.35 bar pressure drop.

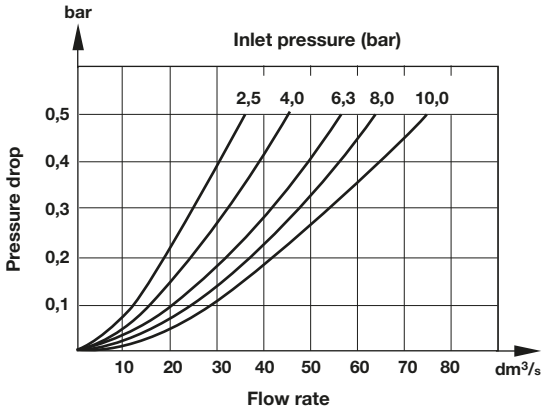
Option selector

F22-400-★★DA

Drain	Substitute
Automatic	**A**
Manual	**M**

Filter element	Substitute
5 µm, stainless steel	**1**
25 µm, stainless steel	**2**
5 µm, polyethylene	**6**
25 µm, polyethylene	**7**

Flow characteristics



Accessories

Wall mounting bracket

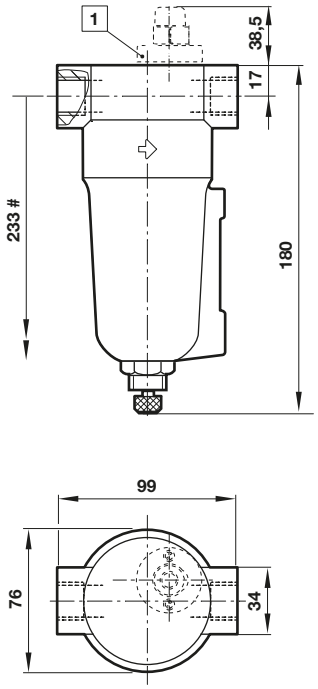
18-001-962

Spares kit

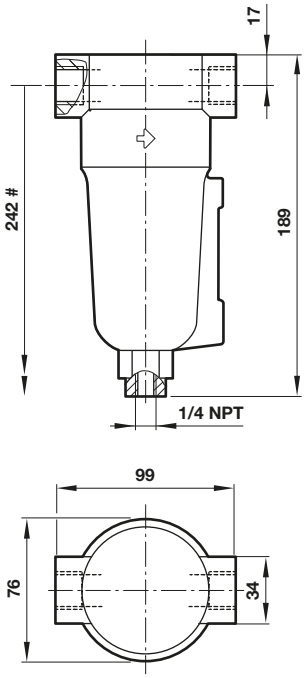
	Filter element	Service kit, manual drain	Service kit, automatic drain	Automatic drain
				
25 µm	4338-99 (polyethylene)	F22-100M	F22-100A	3000-90
5 µm	4338-01 (polyethylene)			

Dimensions

Manual drain

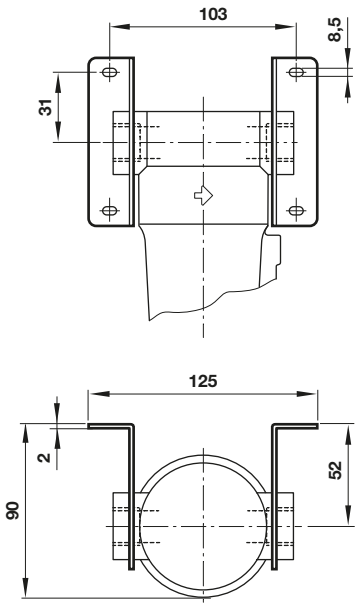


Automatic drain



Wall mounting bracket

Dimensions in mm
Projection/First angle



Minimum clearance required to remove bowl

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- **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

Technical features

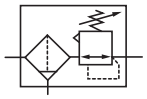
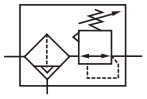
Medium:
Compressed air only
Maximum inlet pressure:
31 bar (450 psig) (manual drain)
17 bar (247 psig) (auto drain)
Outlet pressure range:
0,5 ... 7 bar (7 ... 102 psig)
0,5 ... 10 bar (7 ... 145 psig)
Flow:
40 dm^3/s (Port size: 1/4” and 3/8”)
75 dm^3/s or 100 dm^3/s
(Port size: 1/2” and 1”)
Element:
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 psig)
To open: < 0,2 bar (2,9 psig)
Minimum air flow required to close 1 dm^3/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 (+36°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
	1/4 NPT	0,5 ... 10	5	40	Manual	1,61	B38P-254-B1MA
	3/8 NPT	0,5 ... 10	5	40	Manual	1,60	B38P-354-B1MA
	1/2 NPT	0.5 …7	40	100	Manual	2,21	B38P-444-M3KA
	1/2 NPT	0.5 …10	40	75	Manual	2,21	B38P-444-M3MA
	1 NPT	0.5 …7	40	100	Manual	2,04	B38P-844-M3KA
	1 NPT	0.5 …10	40	75	Manual	2,04	B38P-844-M3MA
	1/4 NPT	0,5 ... 10	5	40	Automatic	1,74	B38P-254-A1MA
	3/8 NPT	0,5 ... 10	5	40	Automatic	1,73	B38P-354-A1MA
	1/2 NPT	0.5 …7	40	100	Automatic	2,41	B38P-444-A3KA
	1/2 NPT	0.5 …10	40	75	Automatic	2,41	B38P-444-A3MA
	1 NPT	0.5 …7	40	100	Automatic	2,24	B38P-844-A3KA
	1 NPT	0.5 …10	40	75	Automatic	2,24	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 *1)	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	Substitute
Inclusive	2
Without	4

*1) 3/4" port size on request

Other versions:
B38P-454-T1MA / B38P-454-T3MA /B38P-254-T1MA / B38P-254-T3MA automatic inner stainless steel thread filter regulator on request.

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 (Standard)	A
Automatic (SST stem)	T
Manual short bowl *3)	B
Manual medium bowl *4)	M

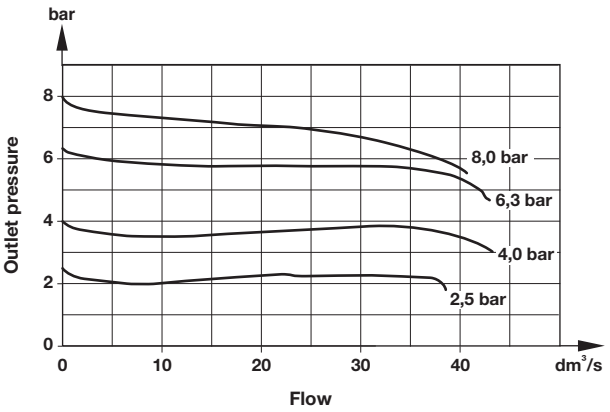
*2) 1/2" & 1" NPT thread provided only

*3) Manual short bowl used for 1/4" & 3/8" port size only.

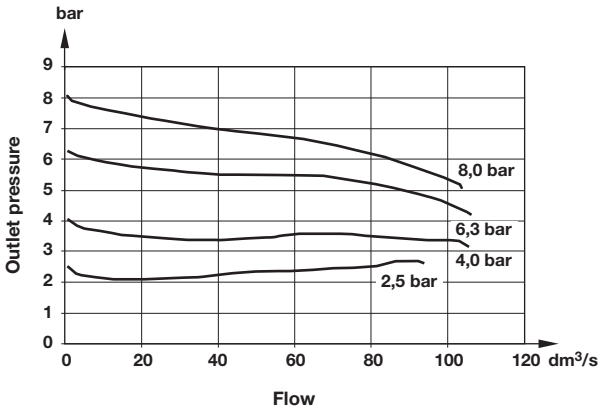
*4) Manual medium bowl used for 1/2" & 1" port size only.

Flow characteristics

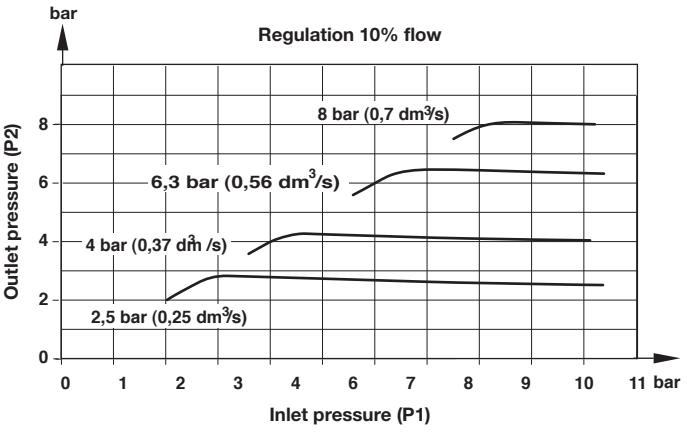
Inlet pressure: 10 bar, filter element: 5 µm, port size: 1/4 NPT

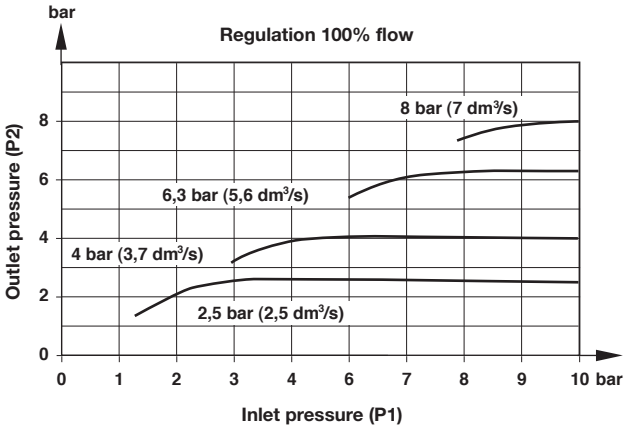


Inlet pressure: 10 bar, filter element: 40µm, port size: 1/2 NPT

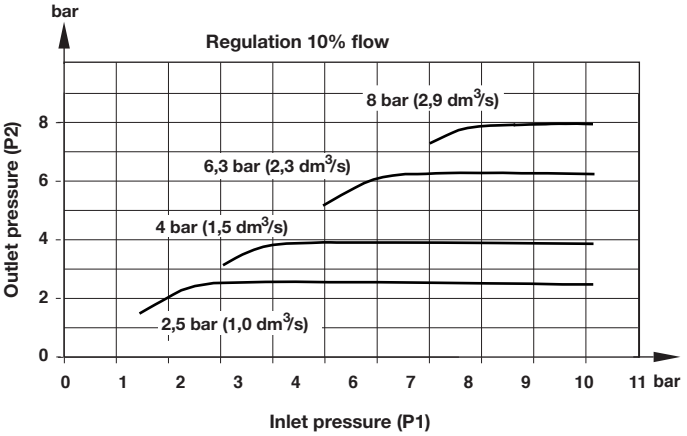


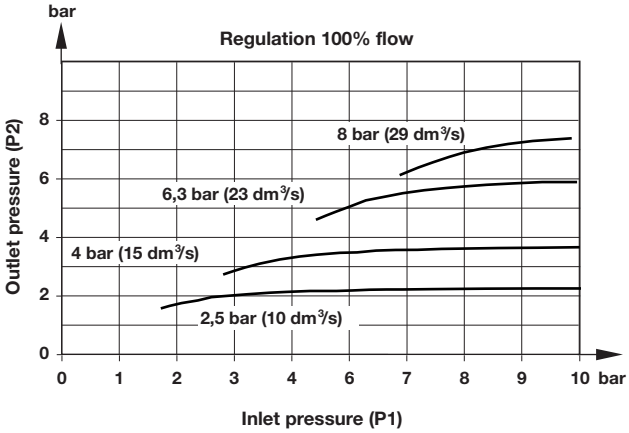
Regulating characteristics (1/4” version)



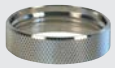
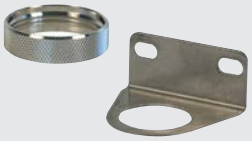


Regulating characteristics (1/2” version)





Accessories

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

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

Spare parts

Spare parts	Spare parts
	
Port size: 1/4" & 3/8"	**Port size: 1/2" & 1"**
A080823-01 (manual drain, FPM)	A1425-S01 (manual drain, FPM)
A080823-03 (manual drain, NBR)	A1425-S02 (manual drain, NBR)
A080823-02 (auto drain, FPM)	A1425-S03 (auto drain, FPM)
A080823-04 (auto drain, NBR)	A1425-S04 (auto drain, NBR)

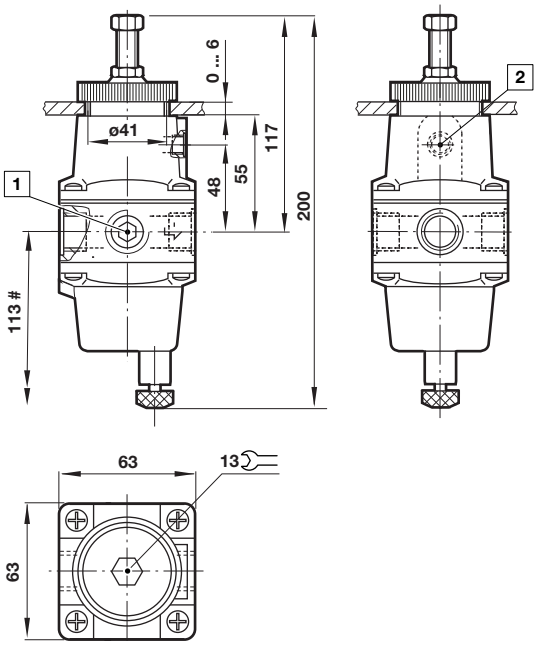
Filter element

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

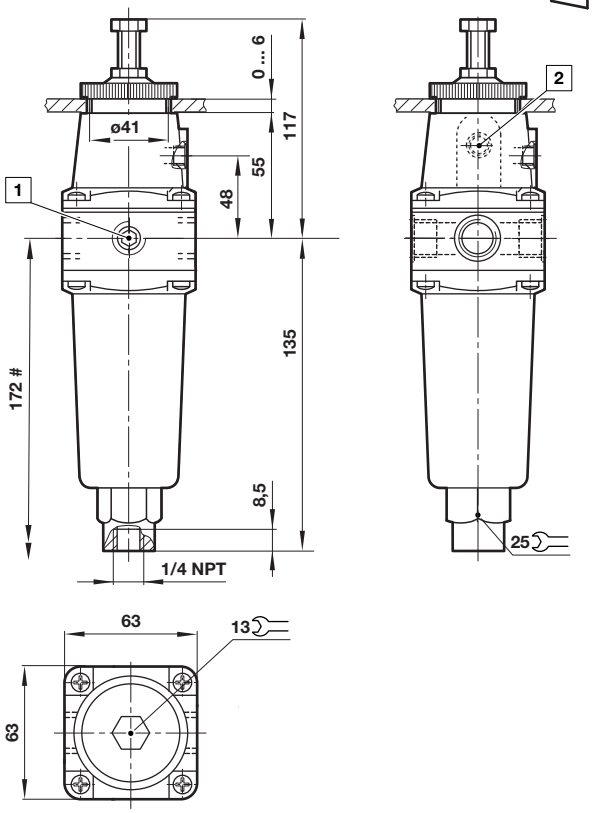
Dimensions

Dimensions in mm
Projection/First angle

Manual drain (1/4", 3/8")



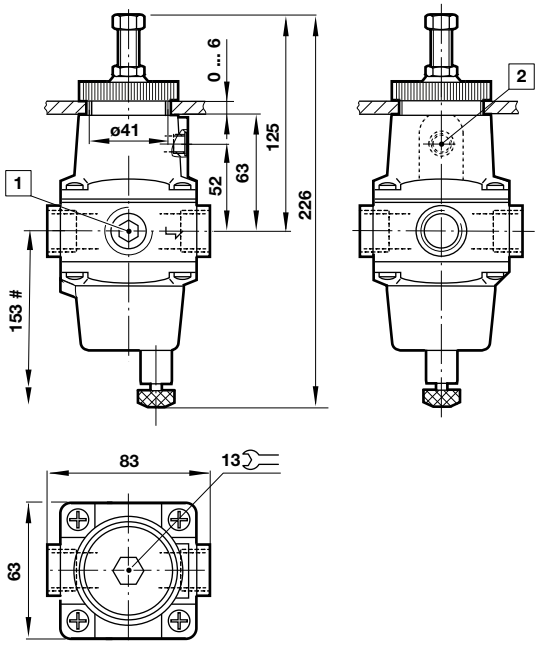
Auto drain (1/4", 3/8")



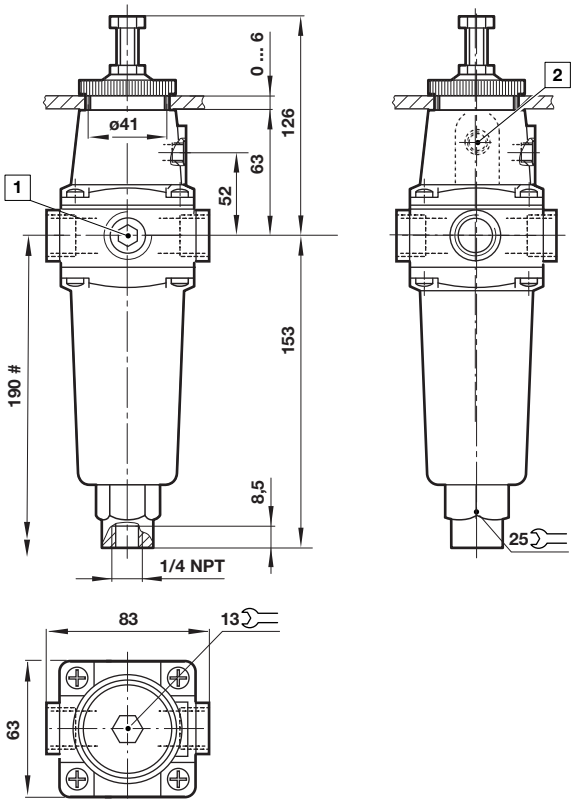
Minimum clearance required to remove bowl
1 1/4 NPT Gauge port
2 1/8 NPT Exhaust port

Manual drain (1/2”, 1”)

Dimensions in mm
Projection/First angle

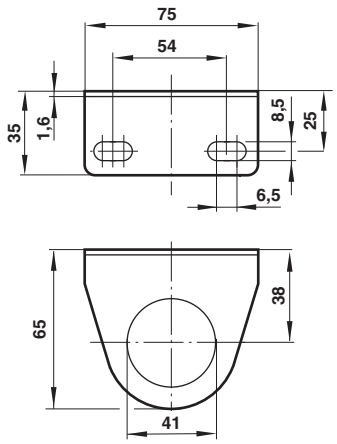


Auto drain (1/2”, 1”)



\# Minimum clearance required to remove bowl
1 1/4 NPT Gauge port
2 1/8 NPT Exhaust port

Neck mounting bracket



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- **Port size: 1/4 PTF**
- **Designed for use in corrosive environment**
- **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

- **Applications include marine environment, oil and gas production, chemical and food processing, medical analysis**
- **Model for precision regulation and high flow**

Technical features

Medium:
Compressed air only
Maximum inlet pressure:
31 bar (449 psi)

Outlet pressure range:
0,04 ... 2 bar (0,5 ... 29 psi),
0,07 ... 4 bar (1 ... 58 psi),
0,25 ... 7 bar (3,6 ... 101 psi),
0,4 ...10 bar (5 ... 145 psi)

Port sizes:
1/4 PTF
1/4 PTF (gauge), 1/8 PTF (relief)
Ambient/Media temperature:
-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 & adjusting screw: stainless steel
Elastomers: Synthetic rubber

Technical data, standard model, relieving

Symbol	Port size	Outlet pressure (bar)	Flow * (dm^3/s)	Weight (kg)	Model
	1/4 PTF	0,04 ... 2	8	1,1	R38-240-RNCA
	1/4 PTF	0,07 ... 4	8	1,1	R38-240-RNFA

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

Option selector

R38-24★-★N★A

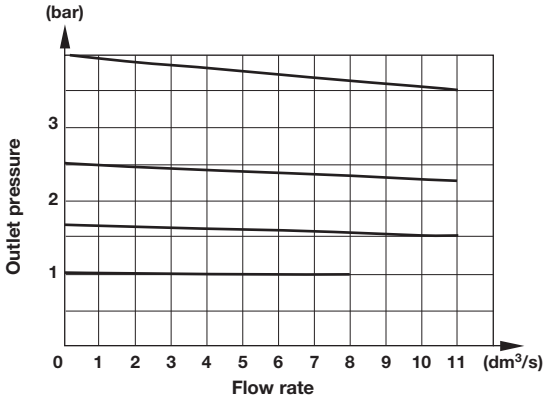
Mounting	Substitute
None	0
Neck mounting bracket	1
Panel nut	2
Diaphragm	**Substitute**
Relieving	R
Non relieving	N

Outlet pressure adjustment ranges (bar)*	Substitute
0,04 ... 2	C
0,07 ... 4	F
0,25 ... 7	K
0,4 ... 10	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, port size: 1/4 PTF



Spares kit

Valve assembly and diaphragm

Description	Model
2 bar relieving	R38-100R
4 and 7 bar relieving	R38-101R
10 bar relieving	R38-102R
2 bar non-relieving	R38-100NR
4 and 7 bar non-relieving	R38-101NR
10 bar non-relieving	R38-102NR

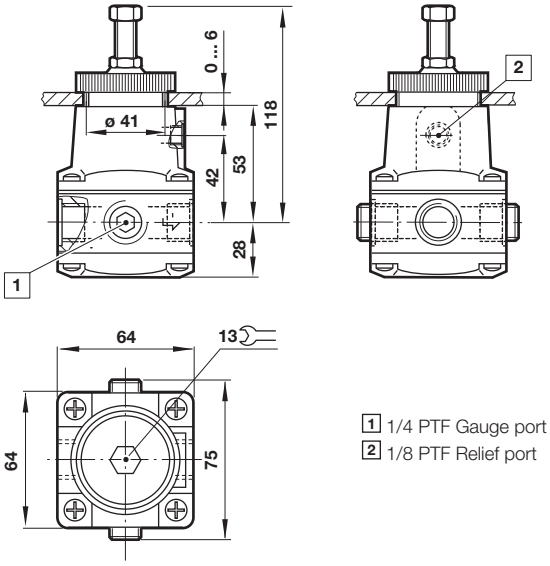
Accessories

Panel nut	Neck mounting bracket	Neck mounting bracket	Gauge *	Plastic adjusting knob
				
5988-02	5989-02	18-001-973 (includes panel nut)	18-013-913 (0 ... 6 bar)	74630-04
			18-013-909 (0 ... 10 bar)	

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

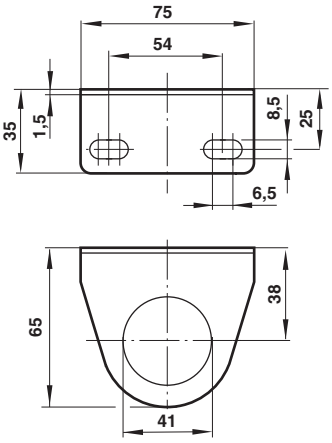
Dimensions in mm
Projection/First angle

Dimensions



1 1/4 PTF Gauge port
2 1/8 PTF Relief port

Neck mounting 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 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.

- **Port size: 1/2 PTF**
- **Applications include marine environment, oil and gas production, chemical and industrial compressed air systems**
- **Balanced valve for accurate and rapid response to flow demand and line pressure changes**
- **Metallic parts meet NACE *1)**

*1) National Association of Corrosion Engineers (NACE) MR-01-75) defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

Technical features

Medium:
Compressed air only
Operating pressure:
20 bar max (290 psi)

Pressure range:
0,4 ... 10 bar (5,8 ... 145 psi),
0 ... 4 bar (0 ... 58 psi),
2 ...16 bar (29 ... 232 psi)
Port sizes:
1/2 PTF
1/4 PTF (gauge)

Ambient/Media temperature:
-20 ... +80°C (-4 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:
Body, bonnet & adjusting screw: Stainless steel
Elastomers: Synthetic rubber

Technical data, standard model, relieving

Symbol	Port size	Pressure range (bar)	Flow *2) (dm³/s)	Weight (kg)	Model
	1/2 PTF	0,4 ... 10	50	1,52	R22-401-RNMA

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

Option selector

R22-401-★N★A

Diaphragm	Substitute
Relieving	R
Non-relieving	N

Pressure ranges *3)	Substitute
0,4 ... 10 bar	M
0 ... 4 bar	F
2 ... 16 bar	S

*3) 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.

Accessories

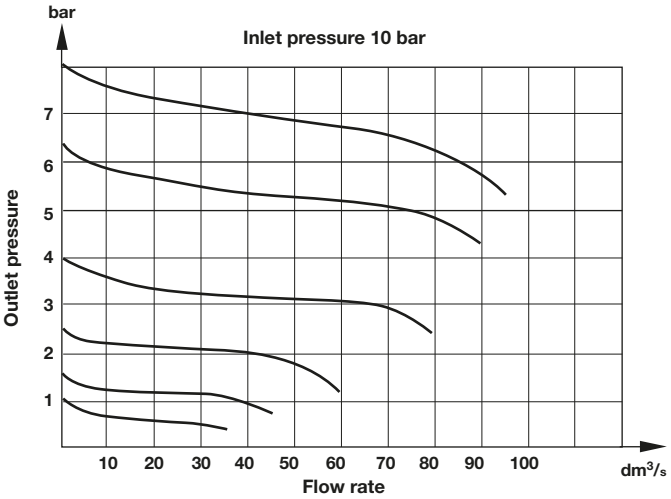
Wall mounting bracket	Gauge *4)
	
18-001-962	18-013-913 (0 ... 6 bar)
	18-013-909 (0 ... 10 bar)

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

Spares kit

Valve assembly and diaphragm	
	
Relieving	R22-100R

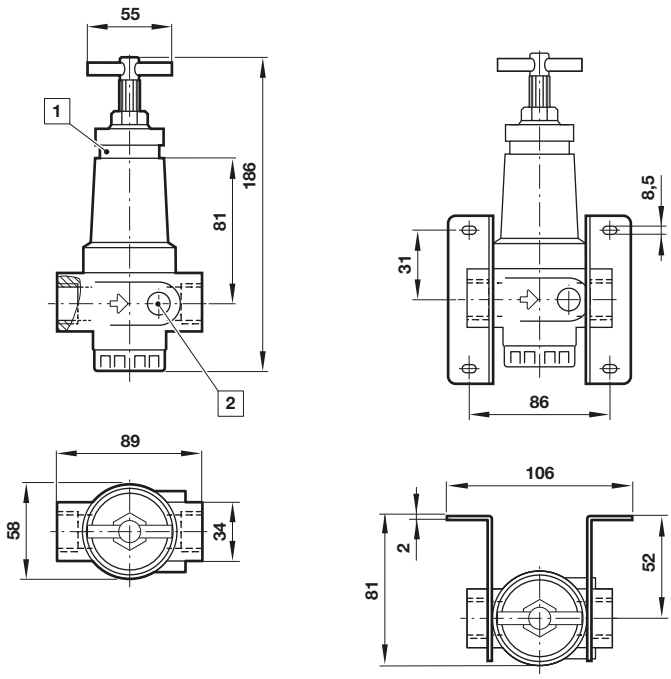
Flow characteristics



Dimensions

Dimensions in mm
Projection/First angle

Wall mounting bracket



1 Panel hole ø 40 mm, thickness 0 ... 10 mm
2 1/4 PTF gauge port

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IMI Precision Engineering, Norgren Inc.

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- **Port size: 1/2 PTF**
- **Applications include marine environment, oil and gas production, chemical and industrial compressed air systems**
- **Metallic parts meet NACE ***

* National Association of Corrosion Engineers (NACE) MR-01-75) defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

Technical features

Medium:
Compressed air
Operating pressure:
17 bar max (246 psi)

Start point:
1,7 dm³/s at 6,3 bar (51 psi)
Port sizes:
1/2 PTF

Ambient/Media temperature:
-20 ... +80°C (-4 ... +176 °F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35 °F).

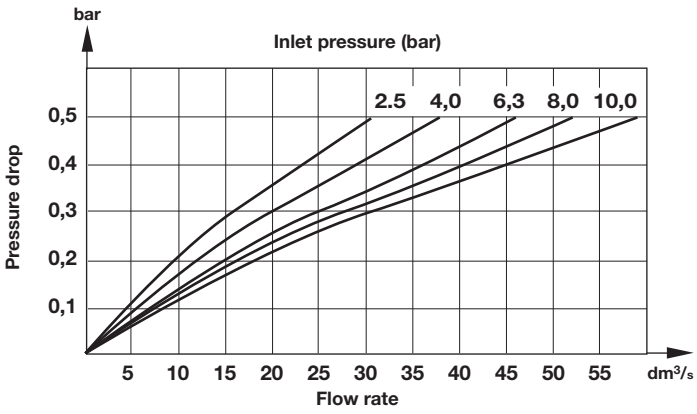
Materials:
Body & bowl: stainless steel
Elastomers: Synthetic rubber

Technical data, standard model

Symbol	Port size	Flow *1) (dm³/s)	Weight (kg)	Model
	1/2 PTF	48	1,93	L22-400-OP8A

*1) Flow with 6,3 bar inlet pressure and a 0,5 bar drop from set.

Flow characteristics



Accessories

Wall mounting bracket

18-001-962

Spares kit

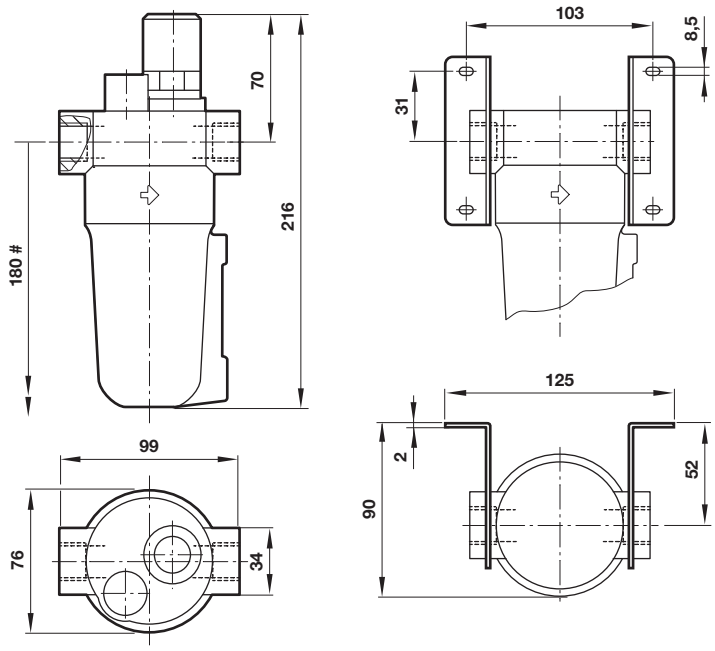
Service kit

L22-100

Dimensions

Dimensions in mm
Projection/First angle

Wall mounting bracket



Minimum clearance required to remove bowl

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