

B52G, B54G 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 ... 10bar (7 ... 145psi)
0,5 ... 7bar (7 ... 100psi)

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,
3/4 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

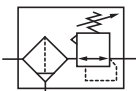
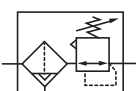
Ambient/Media temperature:

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

Symbol	Port size	Outlet pressure *1 (bar)	Element (µm)	Flow *2 (dm ³ /s)	Drain	Seals	Weight (kg)	Model (with bracket install on unit)	Model (without bracket)
	1/4 NPT	0,5 ... 10	5	40	Manual	FPM	1,61	B52G-2AD-DG1-FMJ	B52G-2AD-DG1-FMK
	3/8 NPT	0,5 ... 10	5	40	Manual	FPM	1,60	B52G-3AD-DG1-FMJ	B52G-3AD-DG1-FMK
	1/2 NPT	0,5 ... 7	40	100	Manual	NBR	2,21	B54G-4AD-DM3-RKJ	B54G-4AD-DM3-RKK
	1/2 NPT	0,5 ... 10	40	75	Manual	NBR	2,21	B54G-4AD-DM3-RMJ	B54G-4AD-DM3-RMK
	1 NPT	0,5 ... 7	40	100	Manual	NBR	2,04	B54G-8AD-DM3-RKJ	B54G-8AD-DM3-RKK
	1 NPT	0,5 ... 10	40	75	Manual	NBR	2,04	B54G-8AD-DM3-RMJ	B54G-8AD-DM3-RMK
	1/4 NPT	0,5 ... 10	5	40	Automatic	FPM	1,74	B52G-2AD-AC1-FMJ	B52G-2AD-AC1-FMK
	3/8 NPT	0,5 ... 10	5	40	Automatic	FPM	1,73	B52G-3AD-AC1-FMJ	B52G-3AD-AC1-FMK
	1/2 NPT	0,5 ... 7	40	100	Automatic	NBR	2,41	B54G-4AD-AC3-RKJ	B54G-4AD-AC3-RKK
	1/2 NPT	0,5 ... 10	40	75	Automatic	NBR	2,41	B54G-4AD-AC3-RMJ	B54G-4AD-AC3-RMK
	1 NPT	0,5 ... 7	40	100	Automatic	NBR	2,24	B54G-8AD-AC3-RKJ	B54G-8AD-AC3-RKK
	1 NPT	0,5 ... 10	40	75	Automatic	NBR	2,24	B54G-8AD-AC3-RMJ	B54G-8AD-AC3-RMK

*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

B5★G-★★D-★ ★★-★ ★★

Nominal unit size	Substitute
1/4"	2
1/2"	4
Port thread size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
1"	8
Thread form *1)	Substitute
NPT	A
ISO G	V
Adjustment	Substitute
Hexagon	D
Drain Type	Substitute
Automatic, plastic	A
Manual, Stainless steel	D

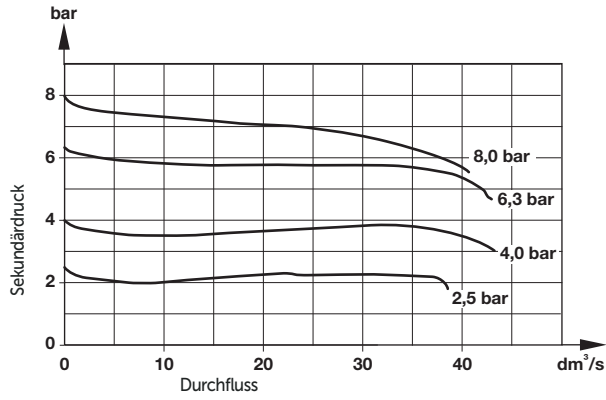
Bracket*2)	Substitute
With	J
Without	K
Outlet pressure	Substitute
7 bar (100psi)	K
10 bar (145 psi)	M
Temperature range	Substitute
-40 ... +80°C (NBR seals)	R
-20 ... +80°C (FPM seals)	F
Element	Substitute
5 µm	1
25 µm	2
40 µm	3
Bowl	Substitute
Metal long (for auto drain)	C
Metal standard (for B54G manual drain)	M
Metal short (for B52G manual drain)	G

*1) SS1/2" to 1" only available with NPT thread. 1/4" and 3/8" available with NPT - optionally also with ISO G thread on request.

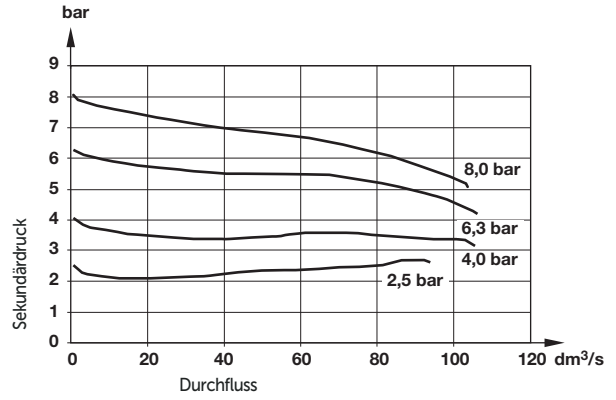
*2) Please be aware this is a body mounted bracket and not a bonnet mounted bracket and is not backwards compatible

Flow characteristics

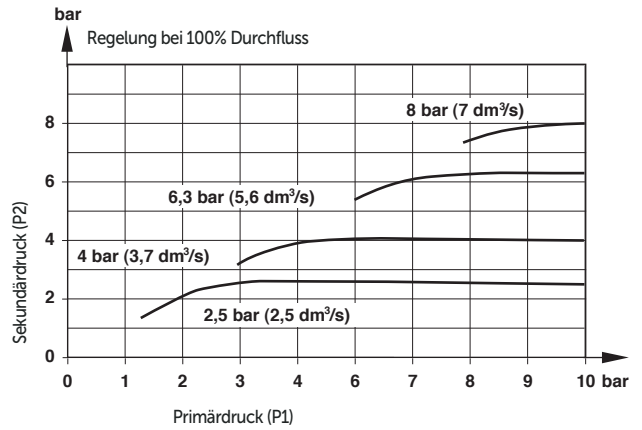
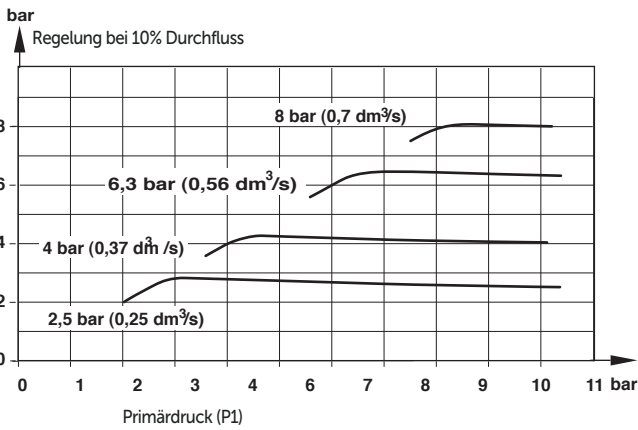
Inlet pressure: 10 bar, filter element: 5 µm, port size: 1/4 NPT



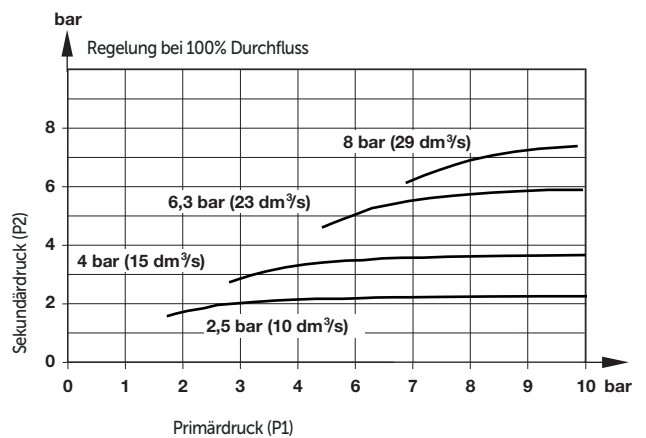
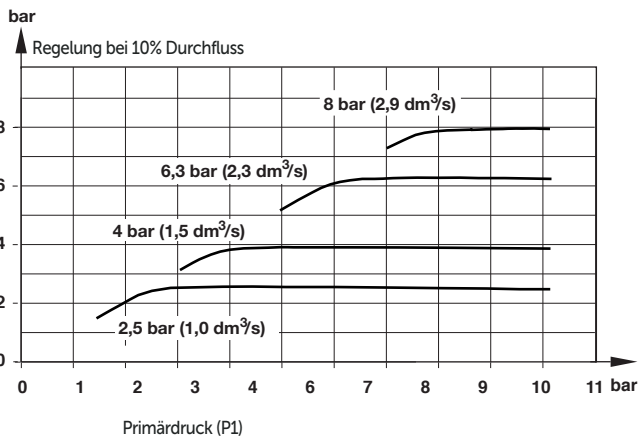
Inlet pressure: 10 bar, filter element: 40µm, port size: 1/2 NPT



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



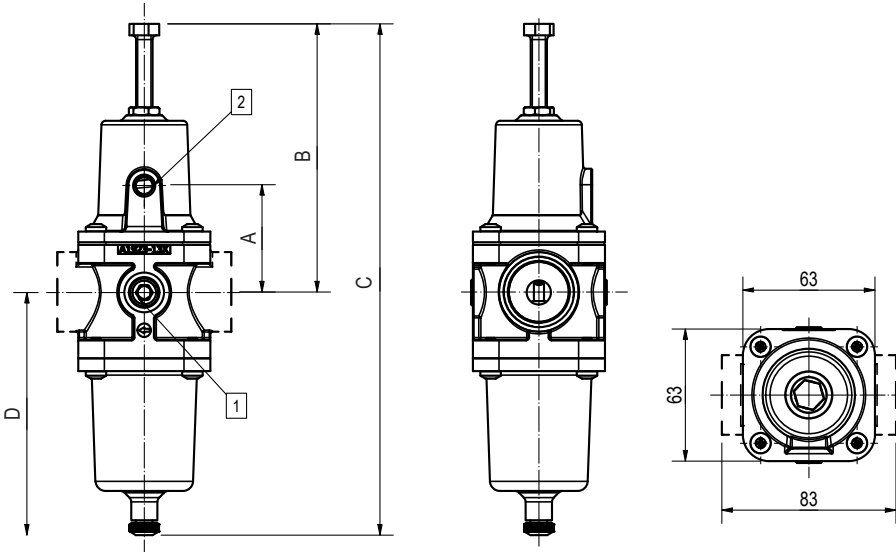
5 µm: 5984-01

25 µm: A080874-02

40 µm: A080874-03

Dimensions Manual drain

Dimensions in mm
Projection/First angle

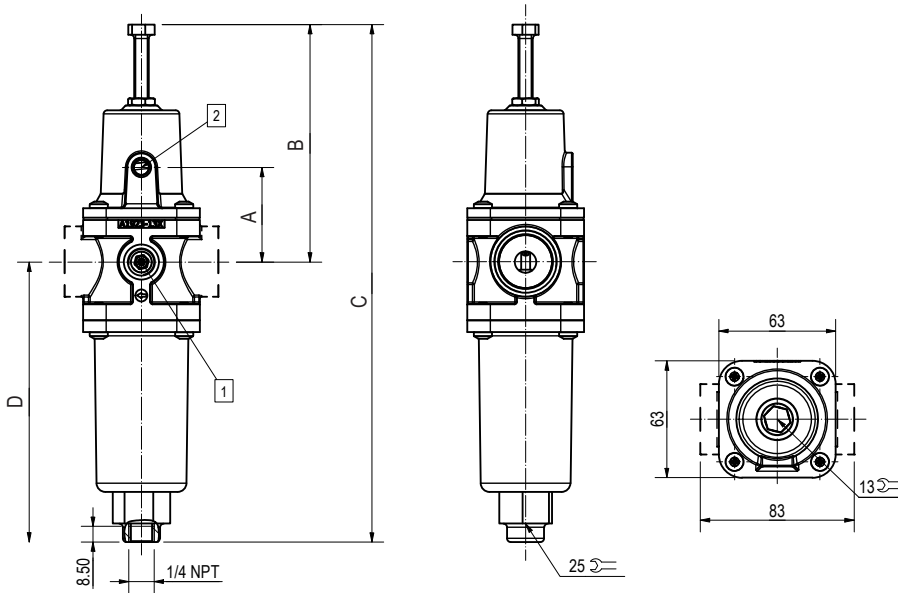


Minimum clearance required to remove bowl
 1 1/4 NPT Gauge port
 2 1/8 NPT Exhaust port

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

Port size	Drain type	bracket	A (mm)	B (mm)	C (mm)	D (mm)
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

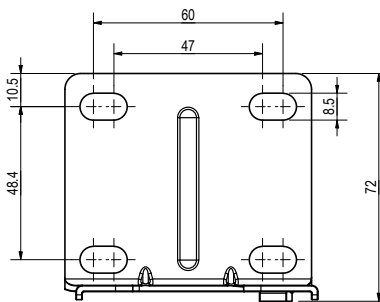
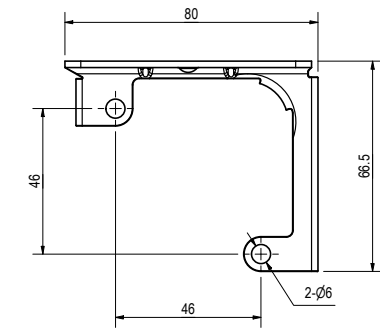


Minimum clearance required to remove bowl
 1 1/4 NPT Gauge port
 2 1/8 NPT Exhaust port

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

Port size	Drain type	bracket	A (mm)	B (mm)	C (mm)	D (mm)
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



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.