

## Series MH1



AVENTICS™ Series MH1

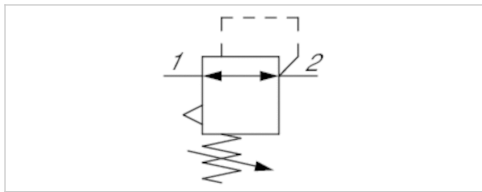


# Pressure regulator, Series MH1-RGS

- G 1/4 G 1/2
- Qn = 325-2000 l/min
- Standard pressure regulator
- Activation Mechanical
- suitable for use in food processing



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	0.5 ... 17 bar
Ambient temperature min./max.	-30 ... 80 °C
Medium temperature min./max.	-30 ... 80 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	0.5 ... 9 bar
Pressure supply	single
Activation	Mechanical
Weight	See table below



## Technical data

Part No.	Port	Flow	Max. pressure gauge Ø in blocked state	Weight	Fig.
		Qn			
R432034650	G 1/4	325 l/min	50 mm	0.3 kg	Fig. 1
R432034657	G 1/2	2000 l/min	50 mm	1.01 kg	Fig. 2

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

## Technical information

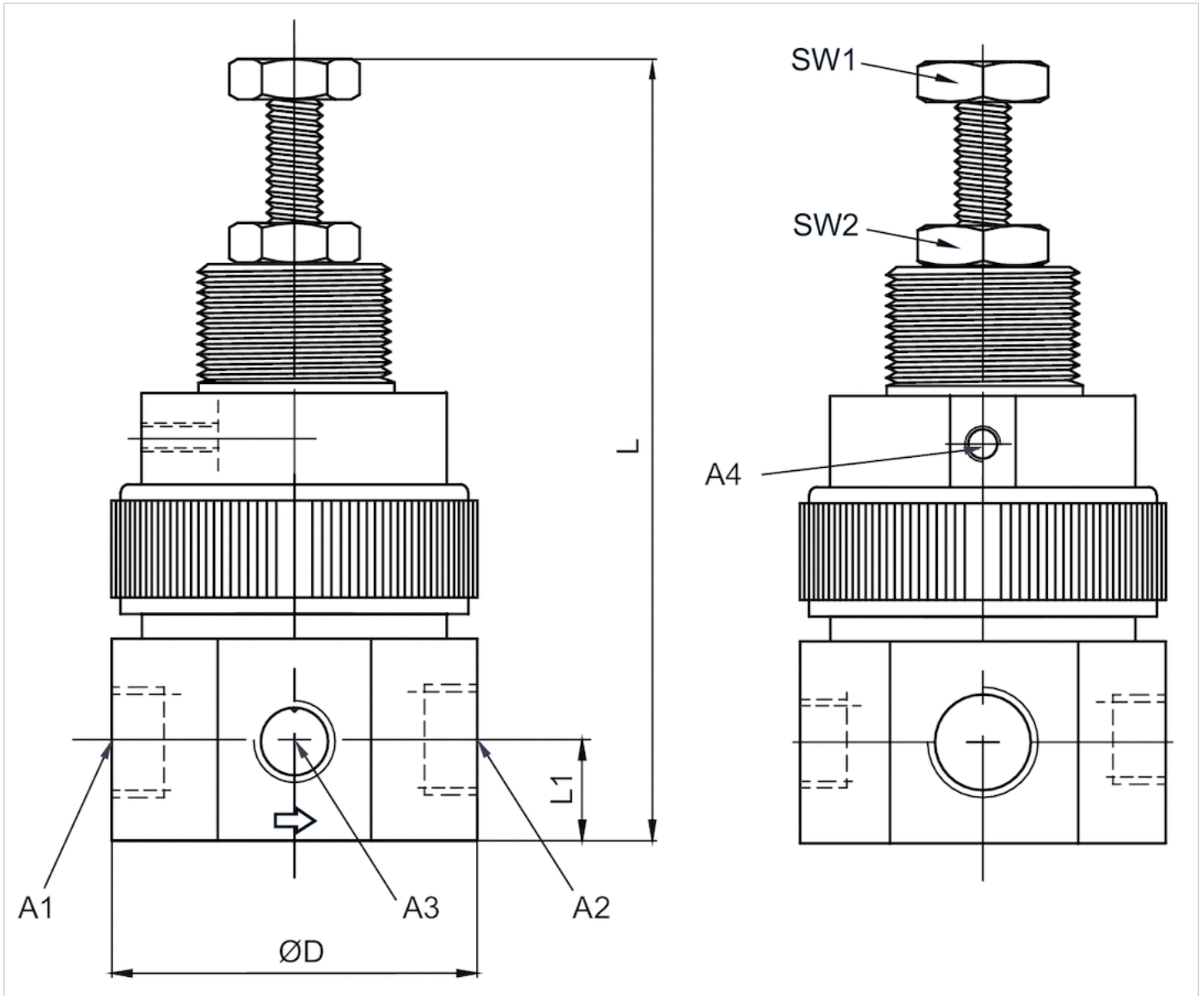
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

## Technical information

Material	
Housing	Stainless steel, acid-proof
Seals	Acrylonitrile butadiene rubber

## Dimensions

Dimensions, Fig. 1



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A4 = relieving exhaust

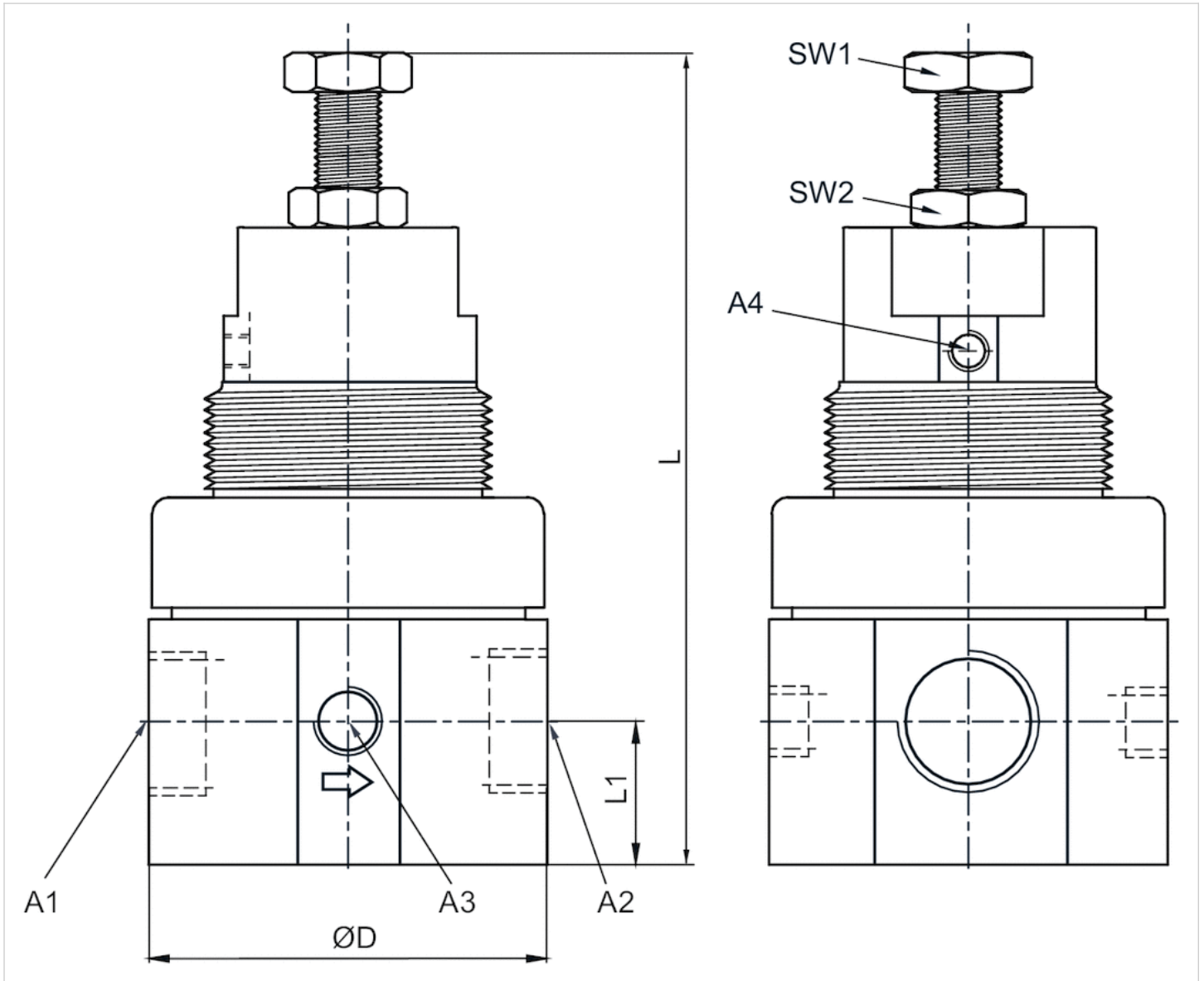
## Dimensions in mm

A1	A2	A3	A4	L *)	L1	ØD	SW1	SW2
G 1/4	G 1/4	G 1/8	M5	85	9.9	35.8	10	10

\*) max.

## Dimensions

Dimensions, Fig. 2



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A4 = relieving exhaust

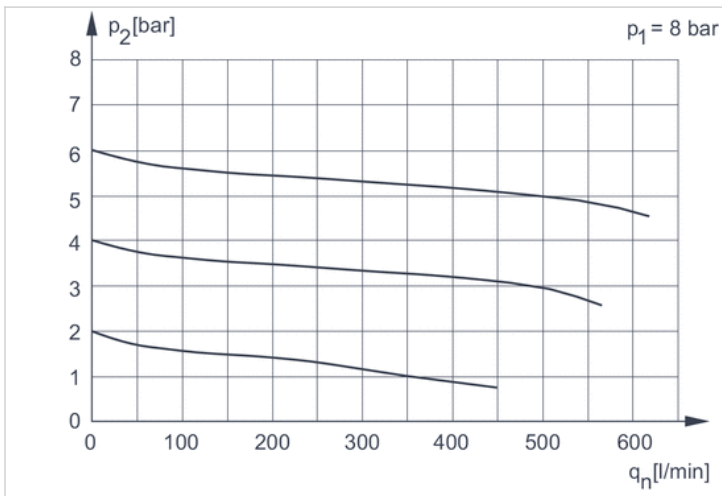
## Dimensions in mm

A1	A2	A3	A4	L *)	L1	ØD	SW1	SW2
G 1/2	G 1/2	G 1/8	M5	121	20.6	57.5	13	13

\*) max.

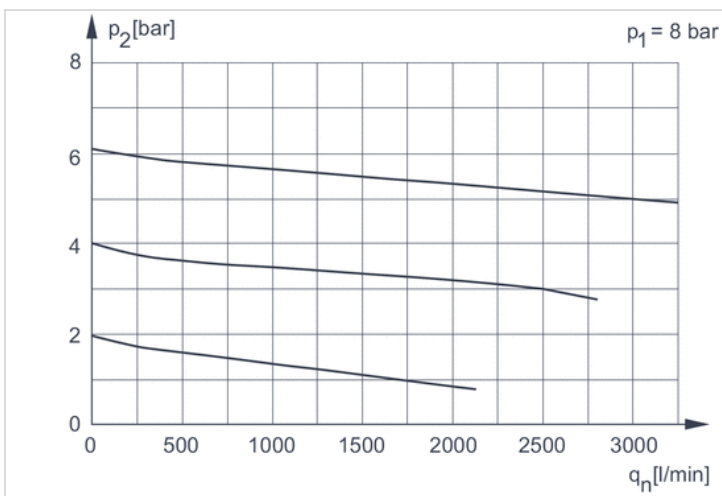
## Diagrams

Flow rate characteristic, Fig. 1



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

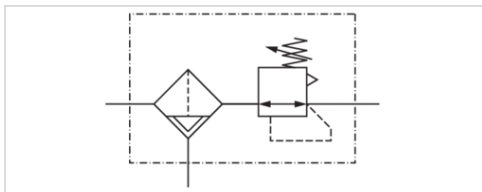
Flow rate characteristic, Fig. 2



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

# Filter pressure regulator, Series MH1-FRE

- G 1/4 G 1/2
- filter porosity 5 µm
- suitable for use in food processing



Version	1-part
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	0.5 ... 17 bar
Ambient temperature min./max.	-30 ... 80 °C
Medium temperature min./max.	-30 ... 80 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator
Adjustment range min./max.	0.5 ... 9 bar
Pressure supply	single
Filter element	exchangeable
Condensate drain	semi-automatic, open without pressure
Weight	See table below

## Technical data

Part No.	Port	filter porosity	Flow	Filter reservoir volume
			Qn	
R432034652	G 1/4	5 µm	310 l/min	100 cm³
R432034659	G 1/2	5 µm	3000 l/min	240 cm³

Part No.	Condensate drain	Weight	Fig.
R432034652	semi-automatic, open without pressure	0.65 kg	Fig. 1
R432034659	semi-automatic, open without pressure	2.57 kg	Fig. 2

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

## Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

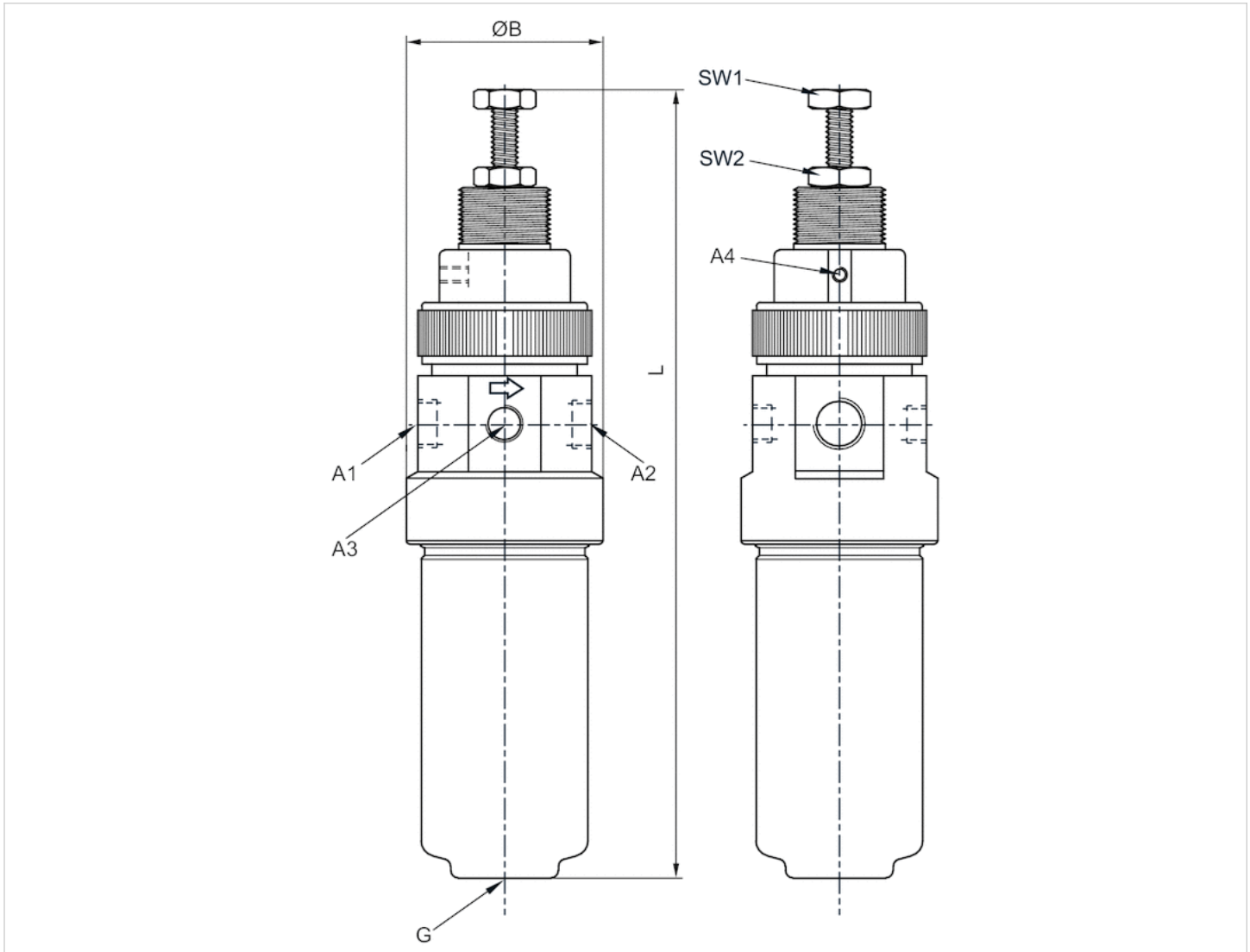
## Technical information

Material	
Housing	Stainless steel, acid-proof
Seals	Acrylonitrile butadiene rubber

Material	
Filter insert	Polyethylene

## Dimensions

### Dimensions, Fig. 1



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A4 = relieving exhaust
- G = Condensate drain

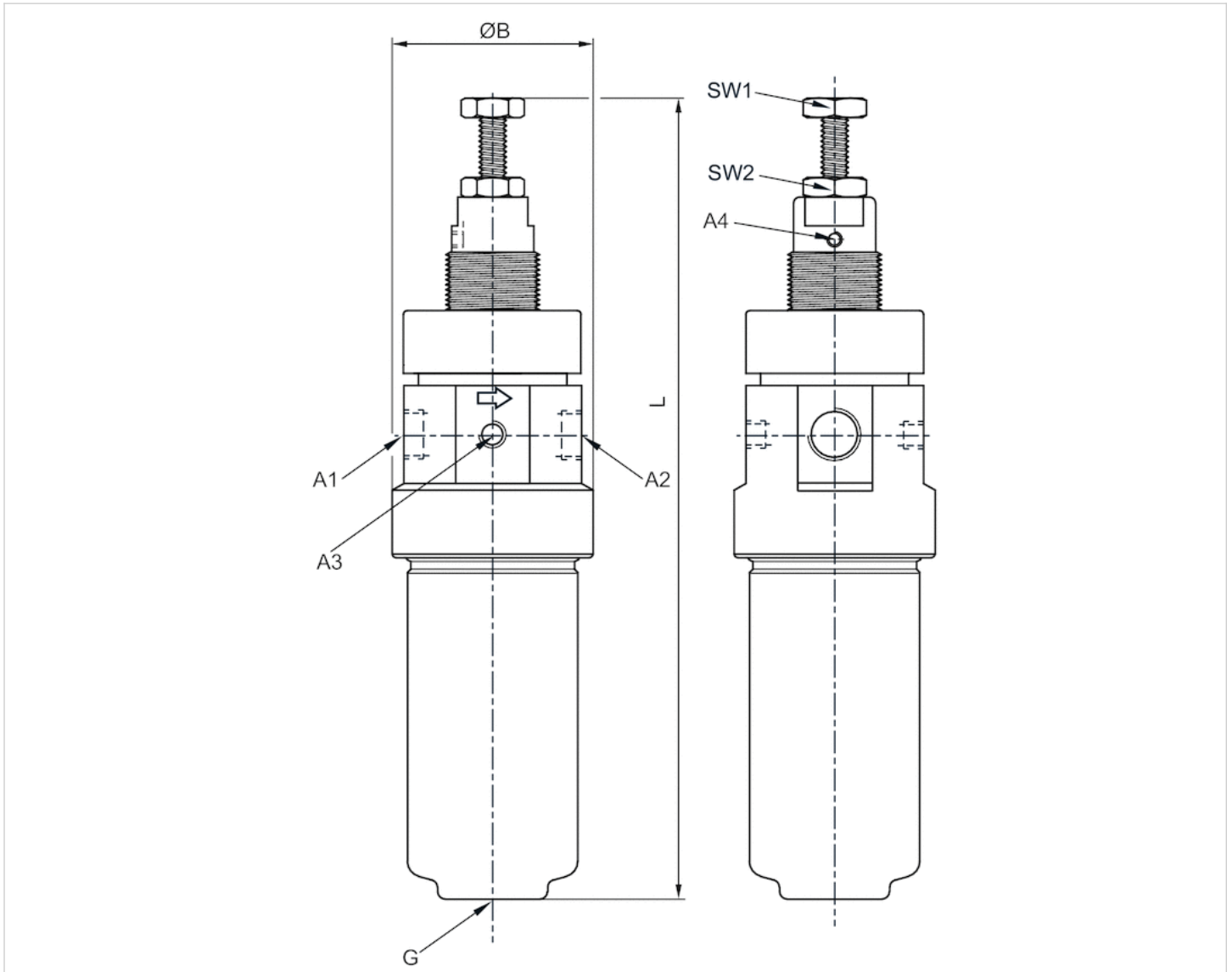
### Dimensions in mm

A1	A2	A3	A4	L *)	ØB	G	SW1	SW2
G 1/4	G 1/4	G 1/8	M5	170	40.6	G1/8	10	10

\*) max.

## Dimensions

Dimensions, Fig. 2



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A4 = relieving exhaust
- G = Condensate drain

## Dimensions in mm

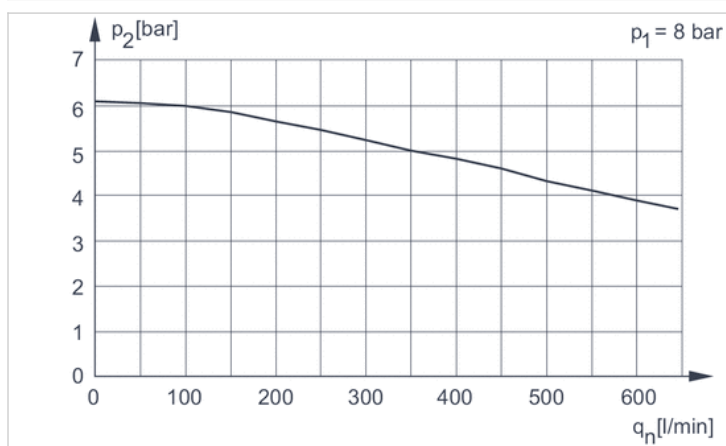
A1	A2	A3	A4	L *)	ØB	G	SW1	SW2
G 1/2	G 1/2	G 1/8	M5	252	63.5	G1/8	13	13

\*) max.



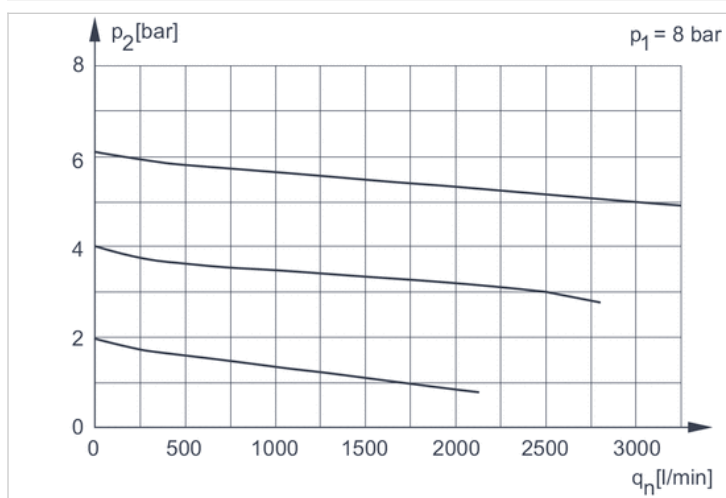
## Diagrams

### Flow rate characteristic, Fig. 1



$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

### Flow rate characteristic, Fig. 2



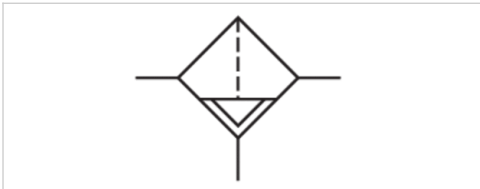
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

# Filter, Series MH1-FLS

- G 1/4 G 1/2
- filter porosity 5  $\mu\text{m}$
- suitable for use in food processing



Version	Standard filter
Parts	Filter
Mounting orientation	vertical
Working pressure min./max.	0.5 ... 17 bar
Ambient temperature min./max.	-30 ... 80 °C
Medium temperature min./max.	-30 ... 80 °C
Medium	Compressed air Neutral gases
Filter element	exchangeable
filter porosity	5 $\mu\text{m}$
Condensate drain	semi-automatic, open without pressure
Weight	See table below



## Technical data

Part No.	Port	Flow Qn	Weight	Fig.
R432034653	G 1/4	850 l/min	0.51 kg	Fig. 1
R432034660	G 1/2	3800 l/min	2.01 kg	Fig. 2

Nominal flow Qn with secondary pressure p2 = 6 bar at  $\Delta p = 1$  bar

## Technical information

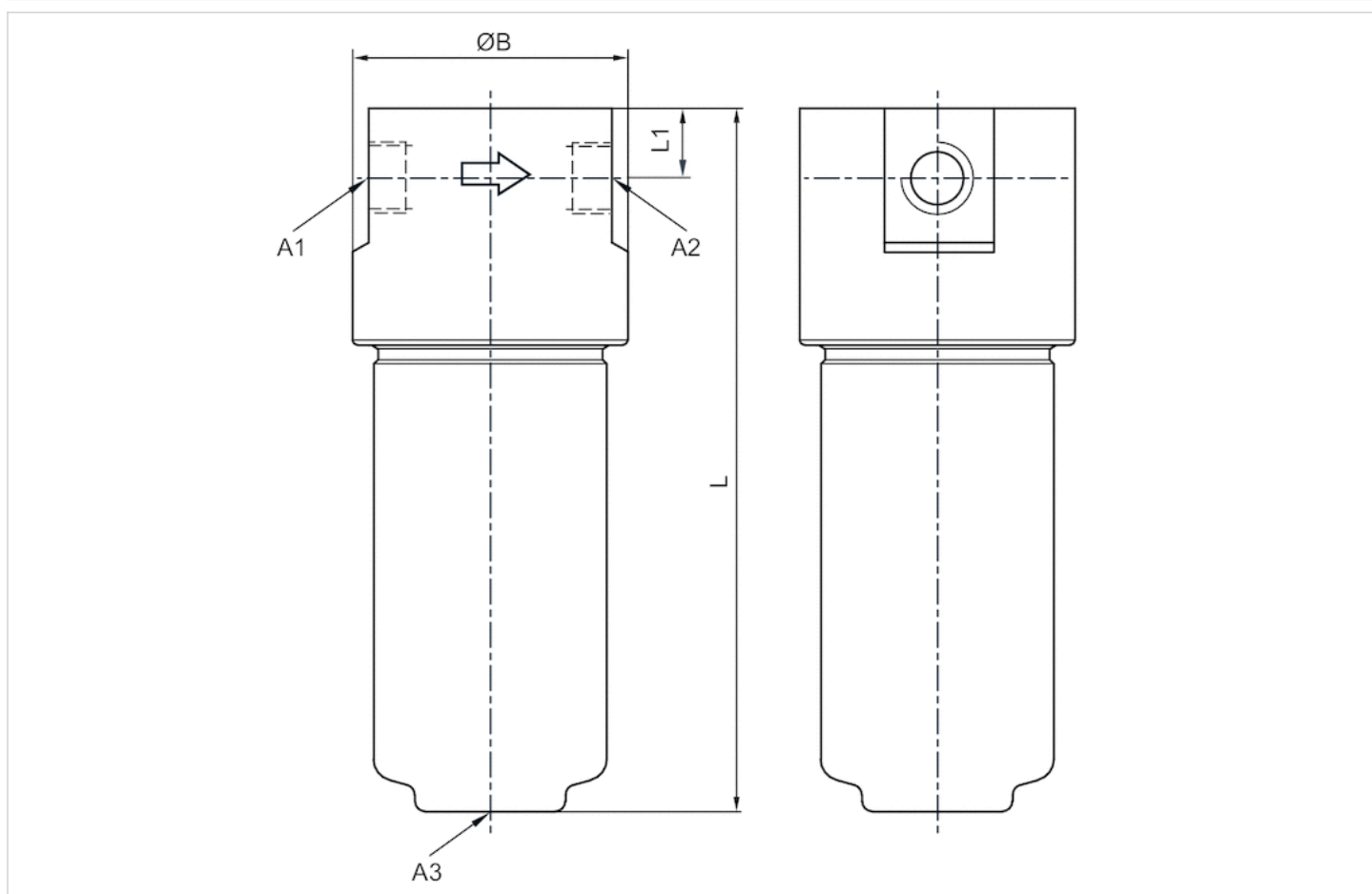
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

## Technical information

Material	
Housing	Stainless steel, acid-proof
Reservoir	Stainless steel, acid-proof
Filter insert	Melamine impregnated cellulose

## Dimensions

### Dimensions



A1 = input

A2 = output

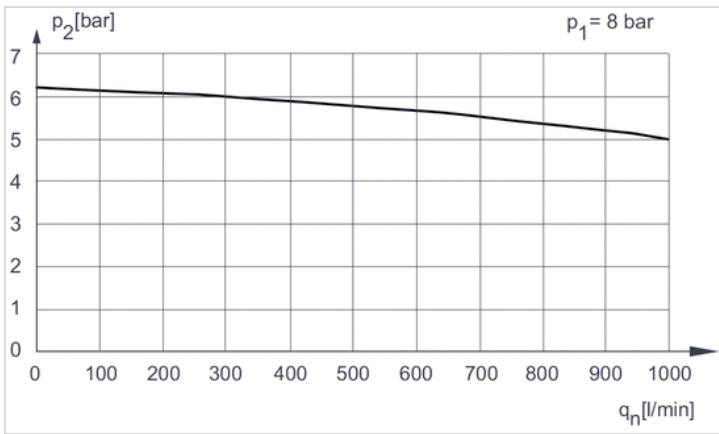
A3 = condensate drain

### Dimensions in mm

A1	A2	A3	L	L1	ØB
G 1/4	G 1/4	G 1/8	139.7	10.2	40.6
G 1/2	G 1/2	G 1/8	198.1	17.5	63.5

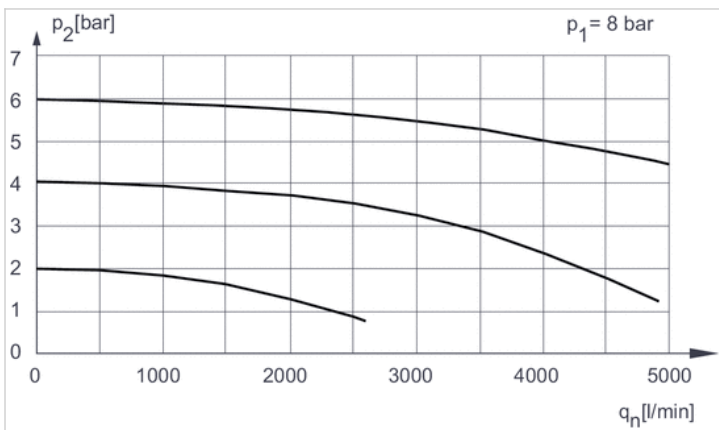
## Diagrams

Flow rate characteristic, Fig. 1



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

Flow rate characteristic, Fig. 2



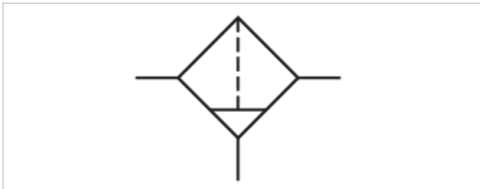
p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

# Microfilter, Series MH1-FLC

- G 1/4 G 1/2
- filter porosity 0.01  $\mu\text{m}$
- suitable for use in food processing



Version	Microfilter
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	0.5 ... 17 bar
Ambient temperature min./max.	-30 ... 80 °C
Medium temperature min./max.	-30 ... 80 °C
Medium	Compressed air Neutral gases
Filter element	exchangeable
filter porosity	0.01 $\mu\text{m}$
Condensate drain	semi-automatic, open without pressure
Weight	See table below



## Technical data

Part No.	Port	Flow Qn	Weight	Fig.
R432034654	G 1/4	170 l/min	0.51 kg	Fig. 1
R432034661	G 1/2	680 l/min	2.01 kg	Fig. 2

Nominal flow Qn with secondary pressure p2 = 6 bar at  $\Delta p = 0.2$  bar

## Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

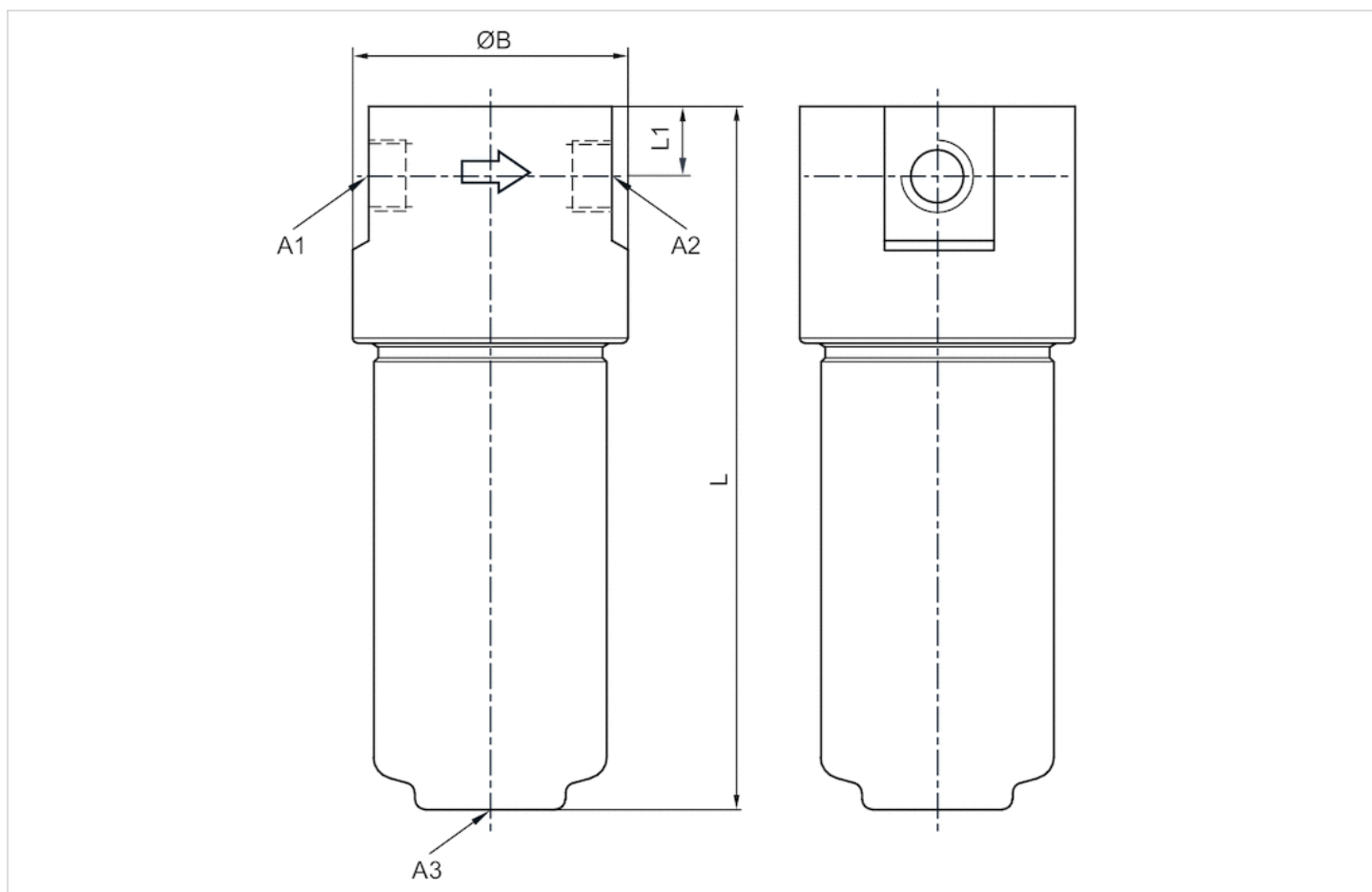
Recommended pre-filtering 5  $\mu\text{m}$

## Technical information

Material	
Housing	Stainless steel, acid-proof
Reservoir	Stainless steel, acid-proof
Filter insert	Borosilicate glass fiber

## Dimensions

### Dimensions



A1 = input

A2 = output

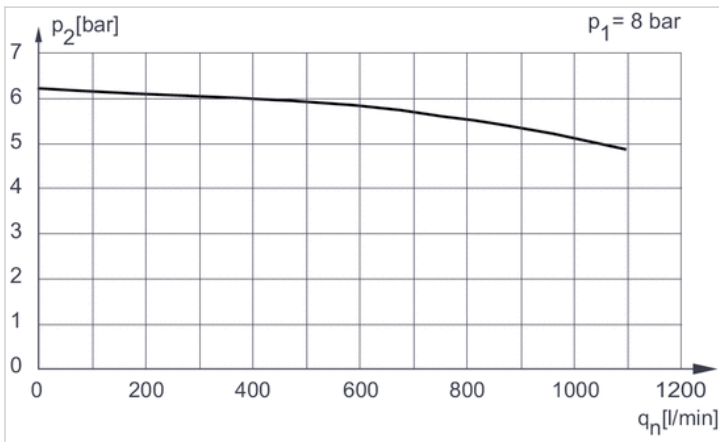
A3 = condensate drain

### Dimensions in mm

A1	A2	A3	L	L1	$\varnothing B$
G 1/4	G1/4	G1/8	104.9	10.2	40.6
G 1/2	G1/2	G1/8	160	17.5	63.5

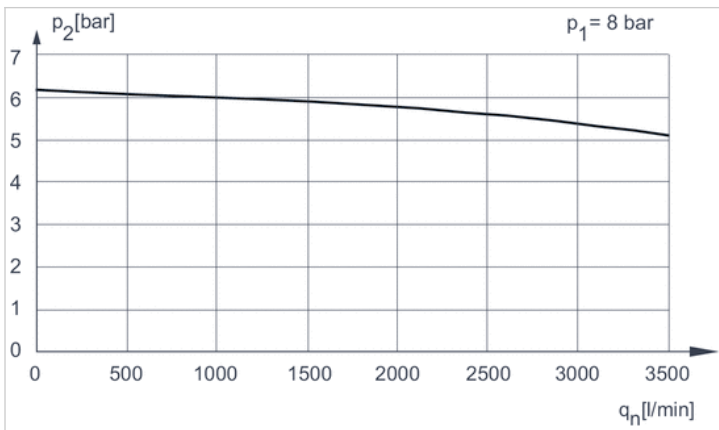
## Diagrams

Flow rate characteristic, Fig. 1



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

Flow rate characteristic, Fig. 2



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

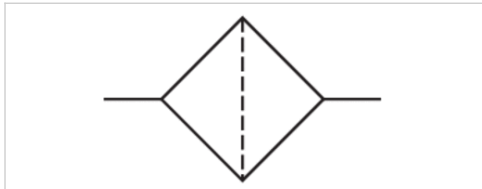
# Active carbon filter, Series MH1-FLA

- G 1/4 G 1/2

- suitable for use in food processing



Version	Active carbon filter
Parts	Active carbon filter
Mounting orientation	vertical
Working pressure min./max.	0 ... 17 bar
Ambient temperature min./max.	-30 ... 80 °C
Medium temperature min./max.	-30 ... 80 °C
Medium	Compressed air Neutral gases
Filter element	exchangeable
Weight	See table below



## Technical data

Part No.	Port	Flow Qn	Weight	Fig.
R432034655	G 1/4	170 l/min	0.42 kg	Fig. 1
R432034662	G 1/2	680 l/min	1.65 kg	Fig. 2

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0.2 bar

## Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Recommended pre-filtering 0.01 μm

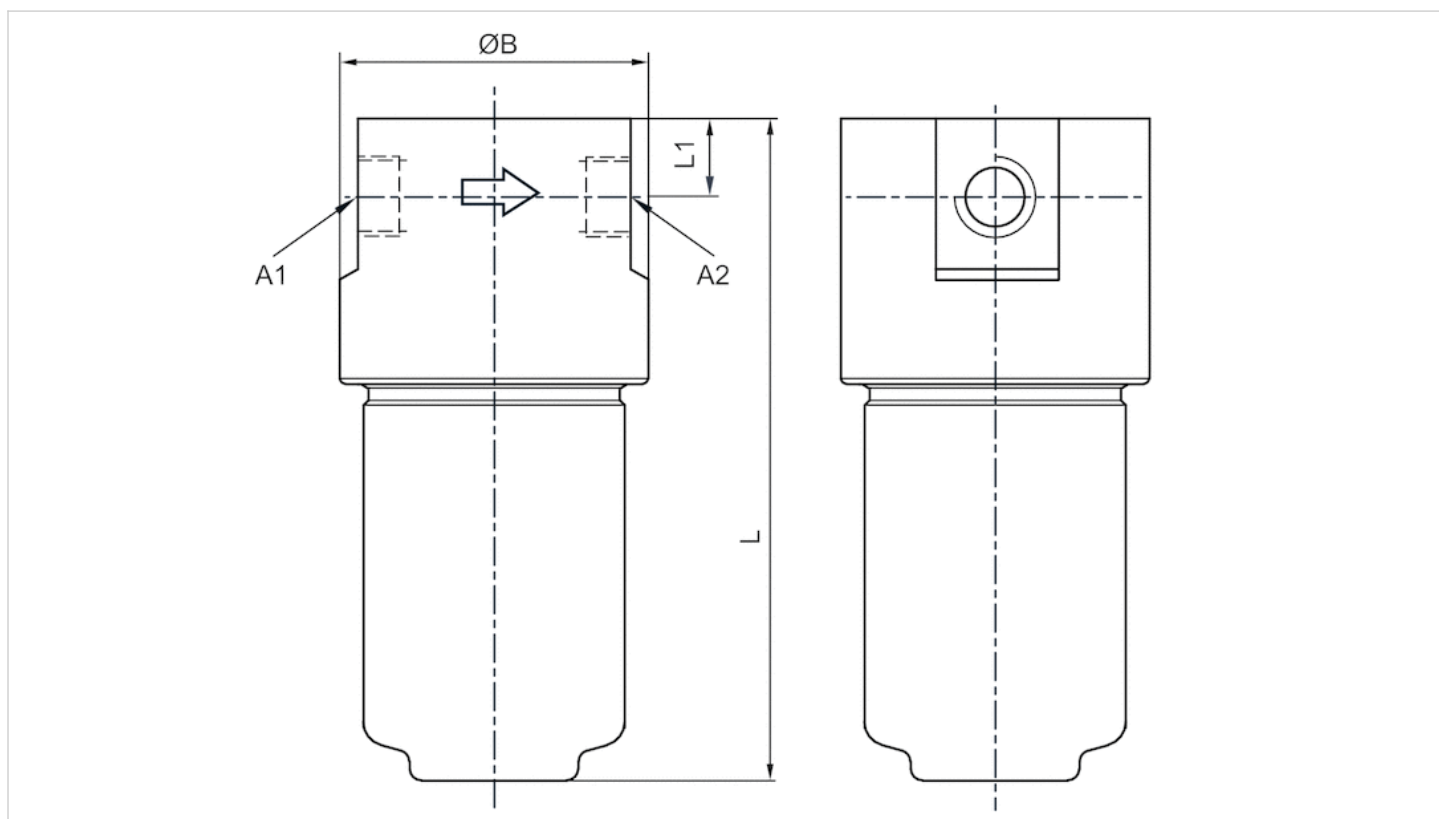
## Technical information

Material	
Housing	Stainless steel, acid-proof
Reservoir	Stainless steel, acid-proof
Filter insert	Active carbon



## Dimensions

### Dimensions



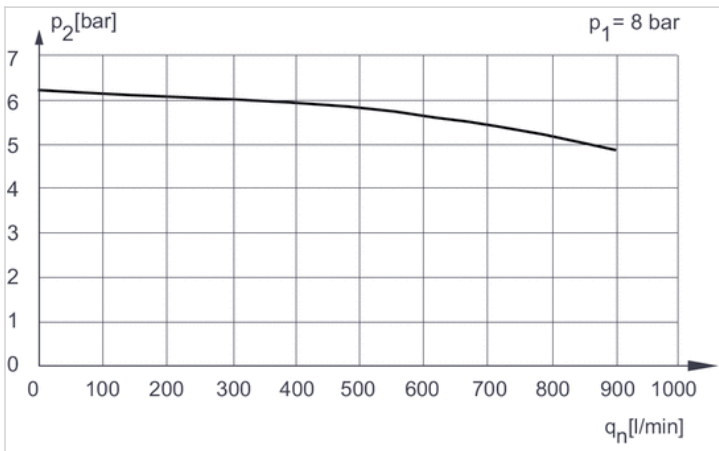
A1 = input  
A2 = output

### Dimensions in mm

A1	A2	L	L1	ØB
G 1/4	G 1/4	121.9	10.2	40.6
G 1/2	G 1/2	152.4	17.5	63.5

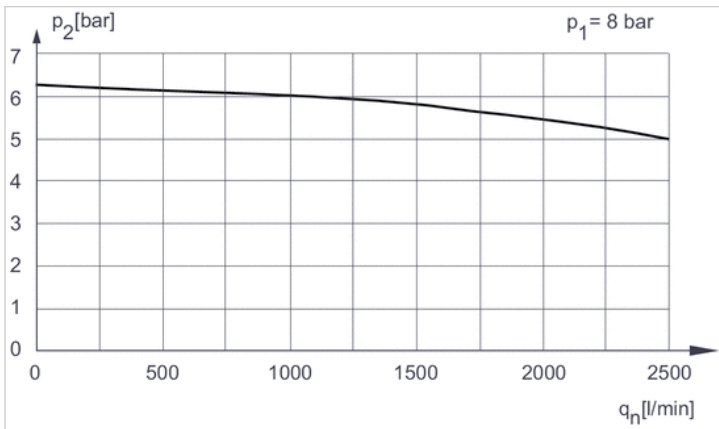
## Diagrams

Flow rate characteristic, Fig. 1



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

Flow rate characteristic, Fig. 2



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow

# 3/4-way ball valve

- Internal thread



Version

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Ball valve

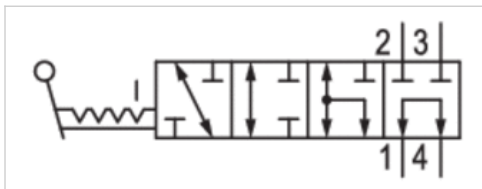
0 ... 14 bar

-10 ... 100 °C

-10 ... 100 °C

Compressed air

The delivered product varies from that in the illustration. See the drawing for an exact description.



## Technical data

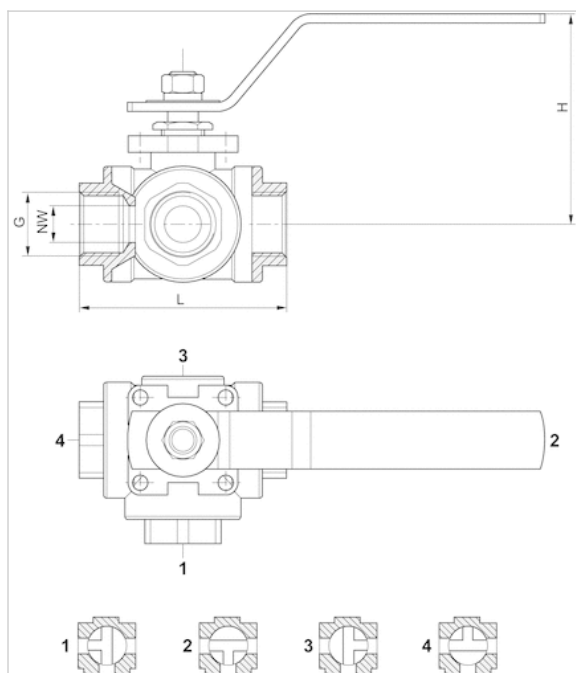
Part No.	Port 1
R412010722	G 1/4
R412010723	G 1/2

## Technical information

Material	
Housing	Stainless steel
Seals	Polytetrafluorethylene
Hand lever	Stainless steel, Plastic sheathing, blue

## Dimensions

### Dimensions



## Dimensions

Part No.	Port G	G	NW	L	H
R412010722	G 1/4	G 1/4	8	79	63
R412010723	G 1/2	G 1/2	12	68	66

# Double nipple

- R 1/4 R 1/2  
- FPT-C-RDO



Working pressure min./max.

0 ... 150 bar

Ambient temperature min./max.

-20 ... 150 °C

Weight per piece

See table below

## Technical data

Part No.	Port G	Delivery unit	Weight per piece
R412010691	R 1/4	2 piece	0.015 kg
R412010692	R 1/2	2 piece	0.039 kg

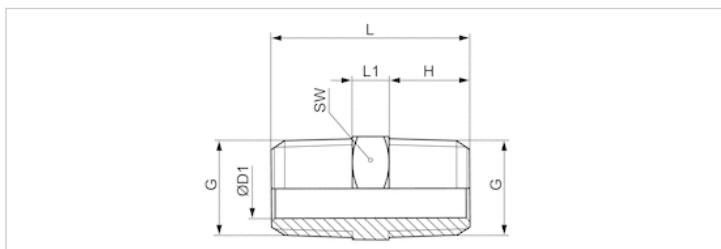
## Technical information

Material

Material	Stainless steel
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## Dimensions

Dimensions



## Dimensions

Part No.	Port G	ØD1	H	L	L1	SW
R412010691	R 1/4	8.5	11	27	5	14
R412010692	R 1/2	15	14	34	6	22

# Elbow fitting

- Internal thread
- G 1/4 G 1/2
- External thread
- R 1/4 R 1/2
- FPT-S-RLT



Working pressure min./max. -0.95 ... 16 bar  
 Ambient temperature min./max. -20 ... 150 °C

## Technical data

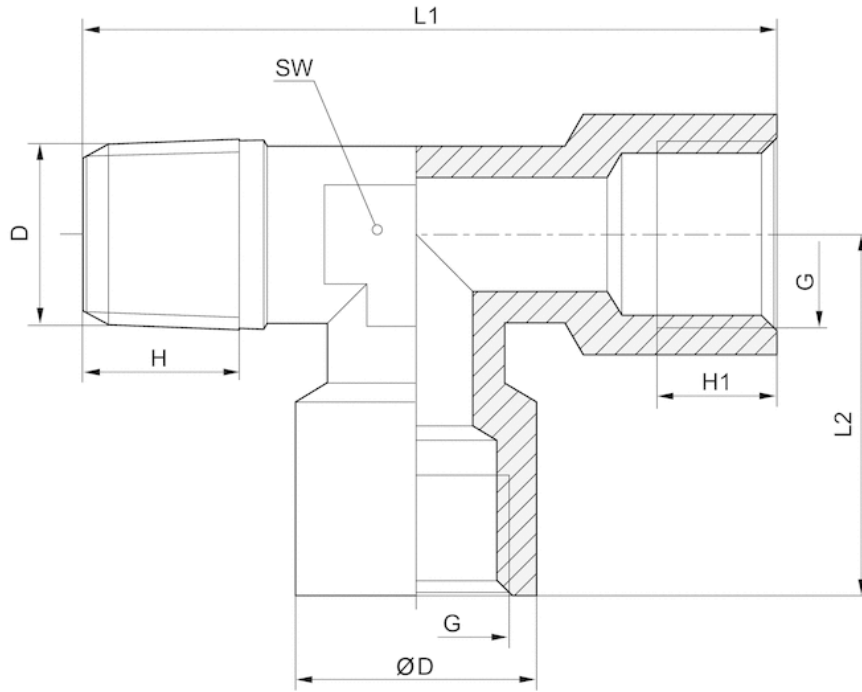
Part No.	Port G	Port D
R412010724	G 1/4	R 1/4
R412010725	G 1/2	R 1/2

## Technical information

Material	
Material	Stainless steel

## Dimensions

### Dimensions



## Dimensions

Part No.	Port D	Port G	H	H1	L1	L2	Ø D	SW
R412010724	R 1/4	G 1/4	11	11	47.5	24.5	24.5	12
R412010725	R 1/2	G 1/2	14	15	61.5	32	25.5	20

# Mounting bracket, Series MH1-MBR-...-W02



Ambient temperature min./max. -10 ... 50 °C  
 Weight 0.065 kg

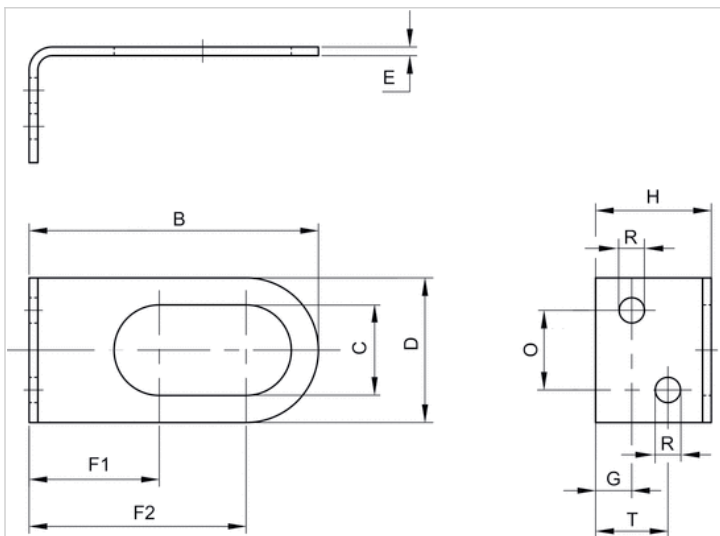
## Technical data

Part No.	
	R432034656
	R432034663

## Technical information

Material	
Housing	Stainless steel

## Dimensions





## Dimensions

Part No.	B	C	D	E	F1	F2	G	H	O	R	T	Weight
R432034656	63.5	19.9	31.8	1,9	28.6	47.6	8	25.4	17.5	5.6	15.9	0.065 kg
R432034663	83.4	42.9	57.2	2,3	41.3	57.2	12.7	44.5	25.4	6.7	25.4	0.065 kg

# Panel nut, Series MH1-MBR-...-W06

- for MH1, MH1 - inch



Ambient temperature min./max.

-10 ... 50 °C

## Technical data

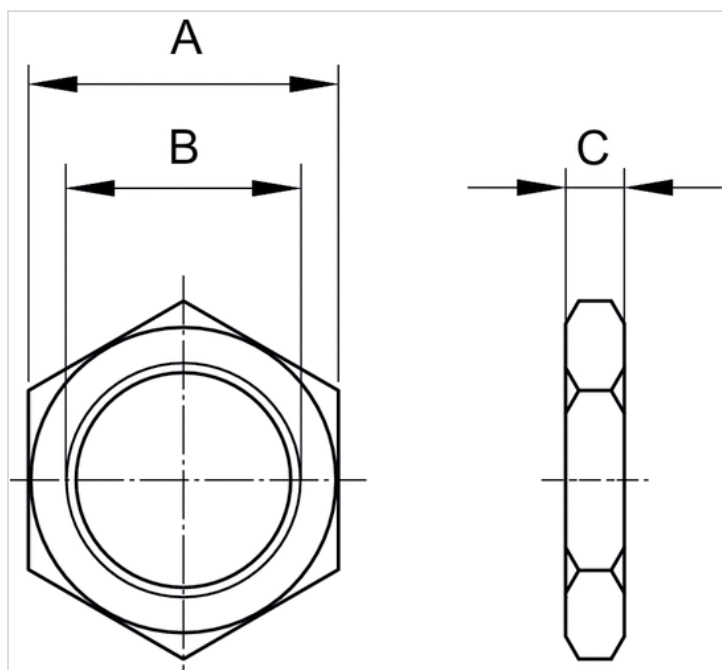
Part No.	for
R432034687	MH1, MH1 - inch
R432034688	MH1, MH1 - inch

## Technical information

Material	
Housing	Stainless steel

## Dimensions

### Dimensions in mm

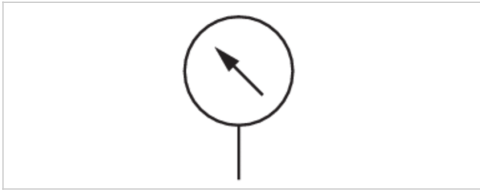


## Dimensions

Part No.	für Serie	Port	A	B	C
R432034687	MH1, MH1 - inch	R 1/4	25.4	3/4 - 16 UNF	4.8
R432034688	MH1, MH1 - inch	R 1/2	50.8	1 5/8 - 12 UNF	6.4

# Pressure gauge, Series PG1-SFB

- Back port
- Background color White
- Scale color Black, Grey
- Units bar
- Units psi



Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Class	2,5
Protection class according to EN 60529	IP54
Ambient temperature min./max.	-25 ... 60 °C
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Black
Secondary scale unit (inside)	psi
Secondary scale color (inside)	Grey
Background color	White
Pointer color	Black
Weight	0.091 kg

## Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value	
R412010678	R 1/8	50 mm	0 ... 10	0 ... 12	0 ... 12 bar	0.2	1)
R412010679	R 1/8	50 mm	0 ... 10	0 ... 12	0 ... 12 bar	0.2	2)

1) Polycarbonate viewing window

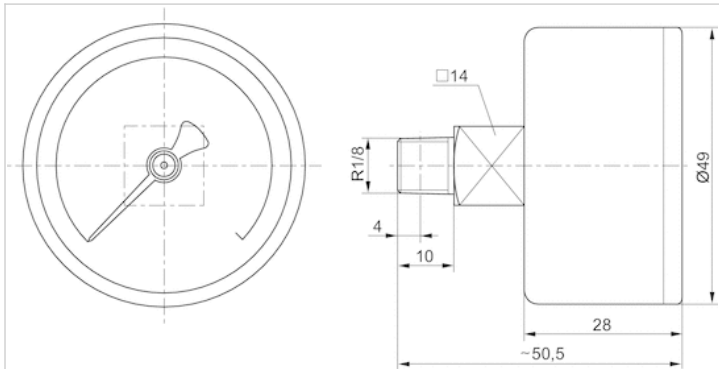
2) Safety glass viewing window

## Technical information

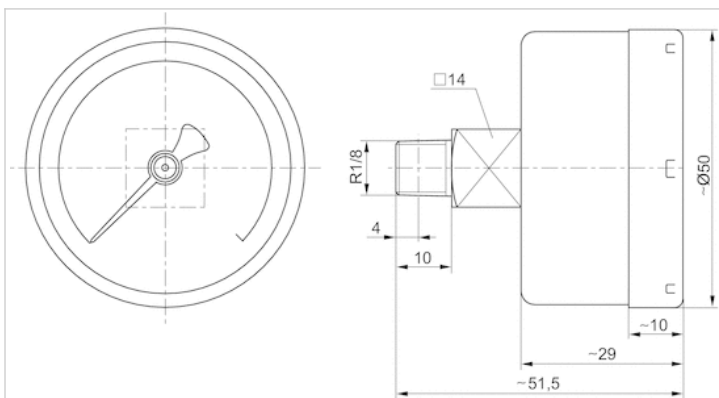
Material	
Housing	Stainless steel
Thread	Stainless steel
pointer	Stainless steel

## Dimensions

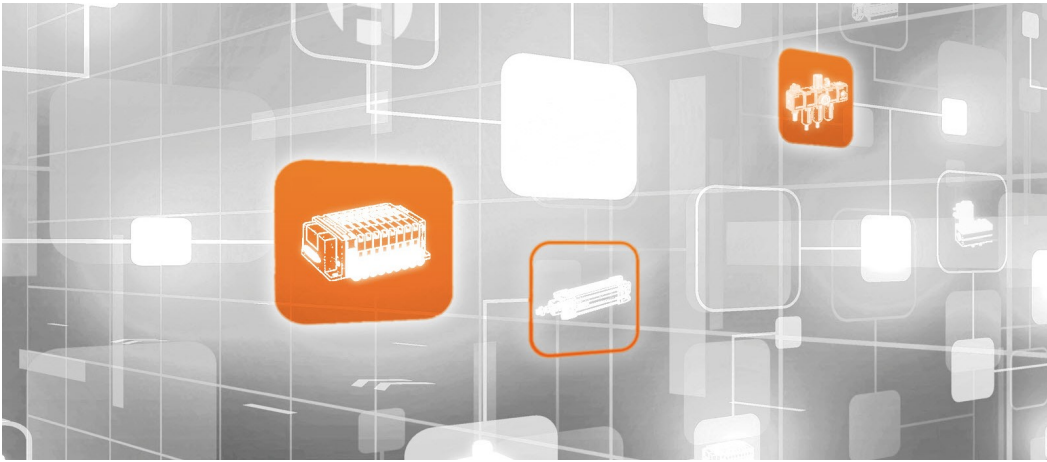
### Dimensions, Fig. 1, Polycarbonate viewing window



### Dimensions, Fig. 2, Safety glass viewing window



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