F82G – General purpose filter Excelon® Plus Modular System

> **Port size: 1/4" & 3/8"** (ISO G/PTF)

> **Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products**

> **5 or 40 micron particle and high efficiency water removal (> 95%)**

> **Double safety lock bowl**

> **Metal bowl with prismatic liquid level indicator lens**

> **Light weight polycarbonate bowl**

> **Air purity classes in accordance to ISO8573-1:2010: 7:8:4 (40µm) 6:8:4 (5µm)**

> ⟨Ex⟩ **DoC in accordance with 2014/34/EU/ATEX**

Technical features

Medium:
Compressed air only
Maximum supply pressure:
Polycarbonate bowl: 10 bar (145 psi)
Metal bowl: 17 bar (246 psi)
Filter element:
5 µm & 40 µm
Port size:
G1/4, G3/8
1/4 PTF, 3/8 PTF

Flow:
23 dm³/s (port size 1/4") and 27dm³/s (port size 3/8") at inlet pressure 6.3bar (91psi) and a Δp 0,5 bar (7,25 psi) pressure drop. Filter element 40µm
Drain:
Manual or automatic
Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 0,35 bar (5 psi)
Bowl pressure required to open drain: ≤ 0,2 bar (2,9 psi)
Minimum air flow required to close drain: 1dm³/s.

Ambient/Media temperature:
Polycarbonate bowl:
-10 ... +60°C (14 ... +140°F)
Metal bowl:
-20 ... +65°C (-4 ... +149°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).
Atex:
Filters F82 are in conformity with Atex 2014/34/EU
⟨Ex⟩ II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

Materials:
Body: Die cast aluminium
Body covers: ABS
Transparent Bowl : Polycarbonate with Polypropylene Guard.
Metal Bowl: Die cast Zinc with PA liquid level indicator lens
Filter element: sintered PP
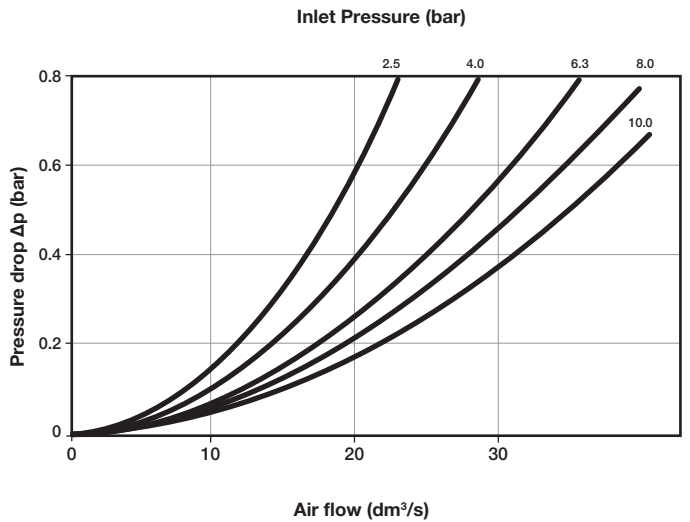Bowl 'o'- ring: Chloroprene
Elastomers: NBR

Technical data F82G—standard models

Symbol	Port Size	Drain	Filter element (µm)	Bowl	Weight (kg)	Model *1)
	G1/4	Auto	40	Guarded polycarbonate	0,22	F82G-2GN-AP3
	G3/8	Auto	40	Guarded polycarbonate	0,22	F82G-3GN-AP3
	G1/4	Auto	40	Metal with level indicator	0,41	F82G-2GN-AD3
	G3/8	Auto	40	Metal with level indicator	0,41	F82G-3GN-AD3
	G1/4	Manual	40	Guarded polycarbonate	0,20	F82G-2GN-QP3
	G3/8	Manual	40	Guarded polycarbonate	0,20	F82G-3GN-QP3
	G1/4	Manual	40	Metal with level indicator	0,40	F82G-2GN-QD3
	G3/8	Manual	40	Metal with level indicator	0,40	F82G-3GN-QD3

Option selector

Port size	Substitute
1/4"	2
3/8"	3
Thread form	**Substitute**
PTF	A
ISO G (standard)	G
Drain	**Substitute**
Manual (standard)	Q
Auto drain (standard)	A

Element	Substitute
5 µm	1
40µm (standard)	3
Bowl	**Substitute**
Transparent with guard (standard)	P
Metal with liquid indicator	D

Flow characteristics

Element: 40 µm
Port size: 1/4"

Inlet Pressure (bar)
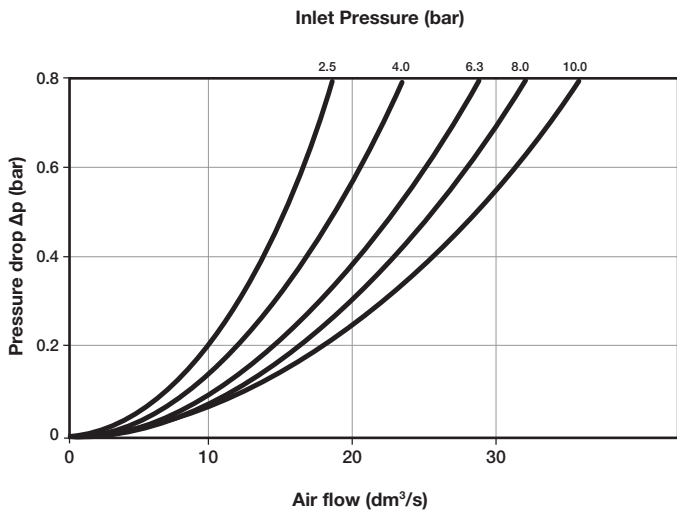
Element: 40 µm
Port size: 3/8"

Inlet Pressure (bar)
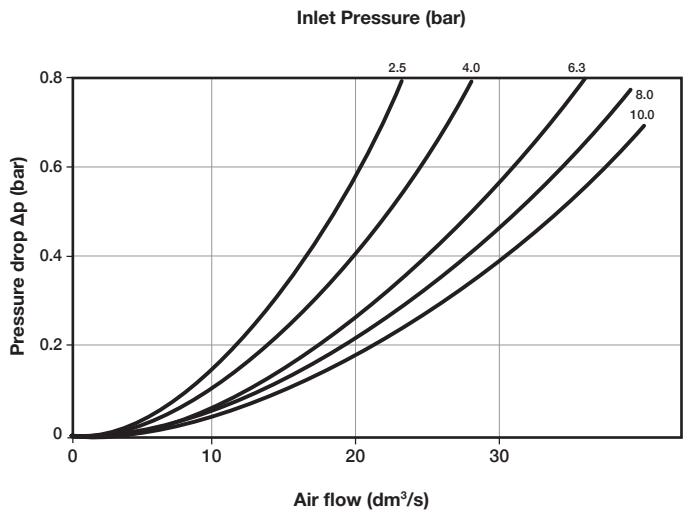
Element: 5 µm
Port size: 1/4"

Inlet Pressure (bar)
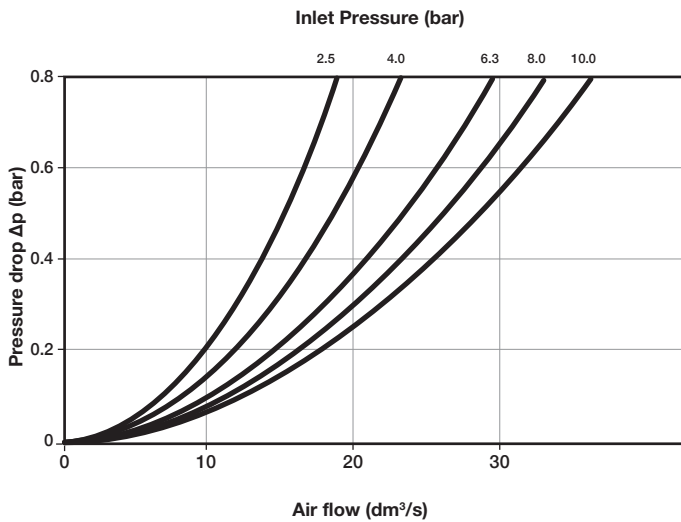
Element: 5 µm
Port size: 3/8"

Inlet Pressure (bar)

Accessories

Wall mounting bracket	**Quikclamp®**	**Quikclamp® with bracket assembled**	**Pressure sensing block 1/4 PTF**	**Pressure sensing block G1/4**
Page 5	Page 5	Page 5	Page 5	Page 5
820024-50KIT	820014-51KIT	820014-52KIT	820016-50KIT	820016-51KIT

Full flow porting block 3/8" PTF	**Full flow porting block G3/8**
Page 5	Page 5
820028-50KIT	820028-53KIT

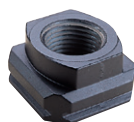|		
Pressure switch interface block (18D pressure switch)	**Pneumatic pressure switch 18D (0,5 ... 8 bar) *1)**	**Digital pressure switch 51D (-1 ... 10 bar) *2)**
Page 6	Page 6	Page 6
0523109000000000	0881300	0860810

*1) Flanged version. For other pressure ranges, please see data sheet 5.11.001
*2) For other pressure ranges, please see data sheet 5.11.385

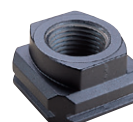|			
Port Adaptors 1/4 PTF	**Port Adaptors 3/8 PTF**	**Port Adaptors G1/4**	**Port Adaptors G3/8**
Page 6	Page 6	Page 6	Page 6
820015-02KIT	820015-03KIT	820015-08KIT	820015-09KIT
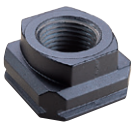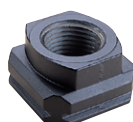
Maintenance/Service

Filter cartridge 5 micron	**Filter cartridge 40 micron**	**Auto drain kit with metal Nut - Imperial**	**Auto drain kit with metal Nut - Metric**
820038-50KIT	820038-51KIT	6000-61KIT	6000-60KIT

Spare parts

Filter Bowl (Guarded Poly bowl with auto drain 6 mm PIF)	**Filter Bowl (Guarded Poly bowl with manual drain)**	**Filter Bowl (Metal with S/ Glass & auto drain, 6 mm PIF)**	**Filter Bowl (Metal with S/ Glass & manual drain)**
820025-51KIT	820025-50KIT	820003-51KIT	820003-50KIT

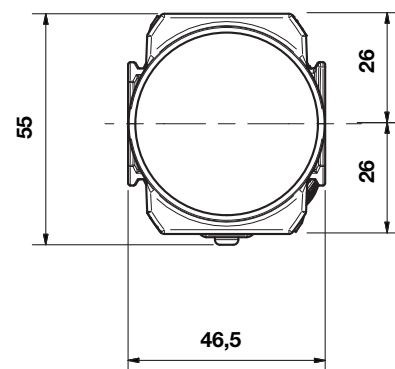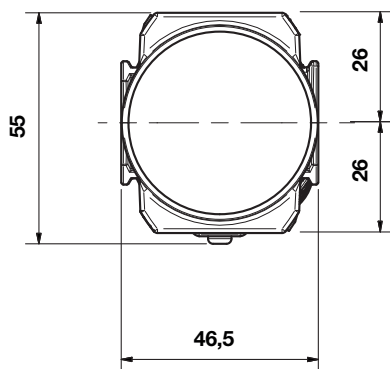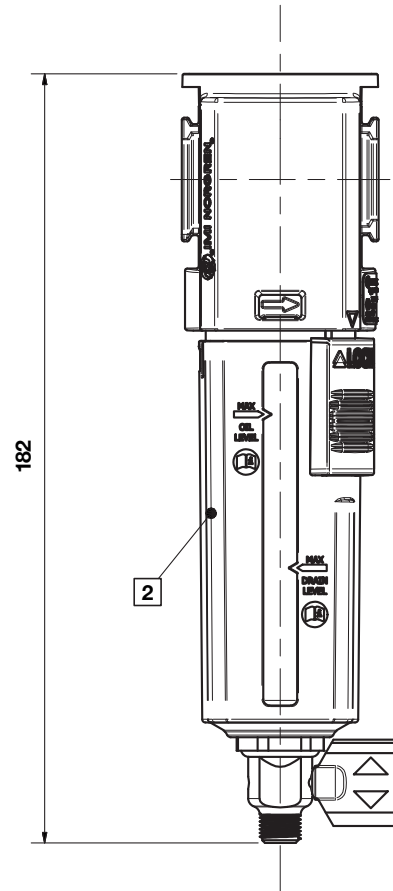|	
Filter Bowl (Guarded Poly bowl with auto drain, 1/4 PIF)	**Filter Bowl (Metal with S/ Glass & auto drain, 1/4 PIF)**
820025-53KIT	820003-56KIT

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Dimensions

Automatic Drain
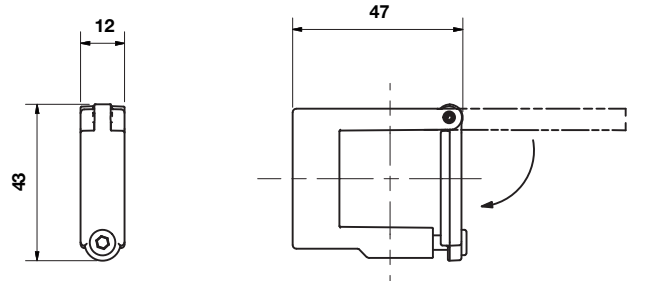
25

185

160

25

55

26
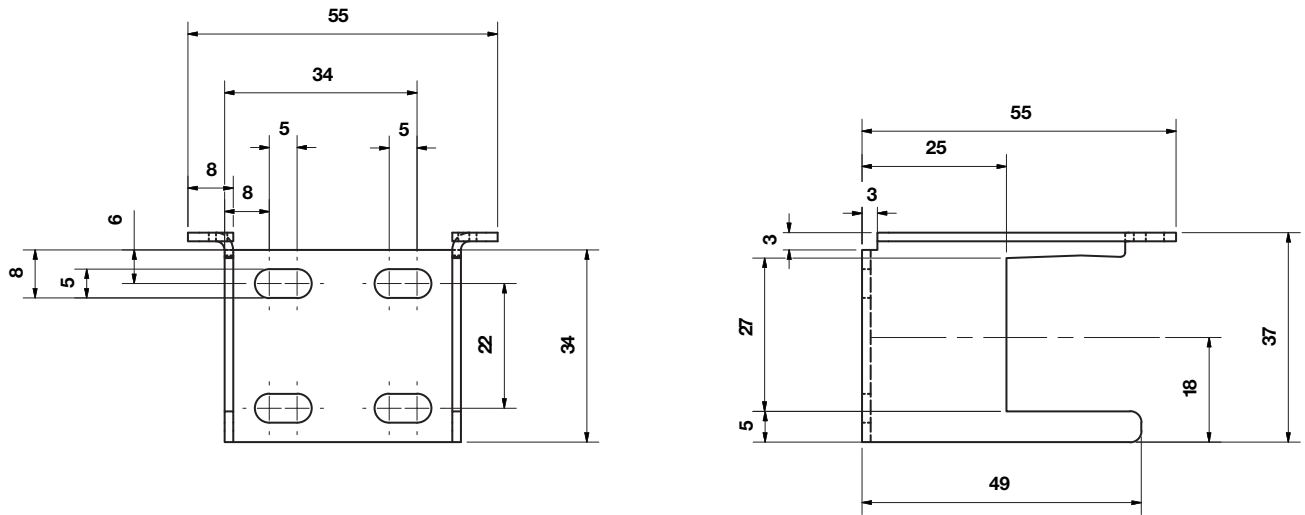
26

46,5
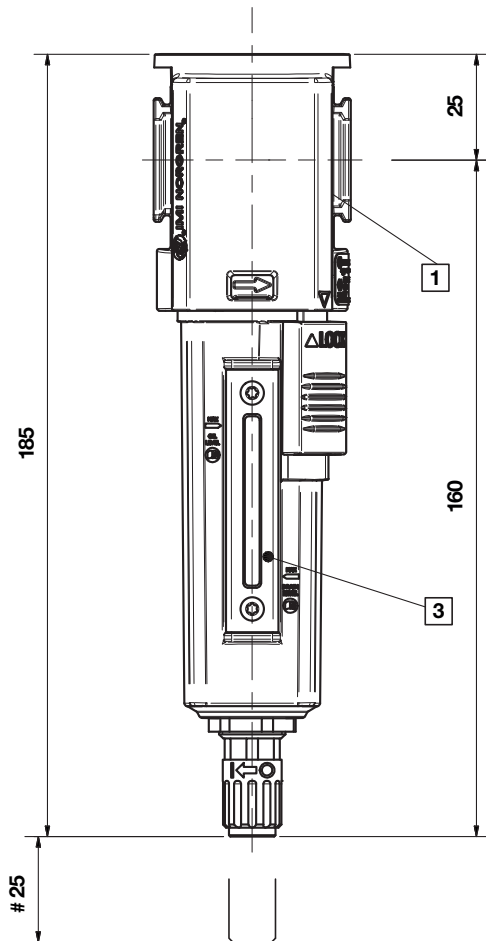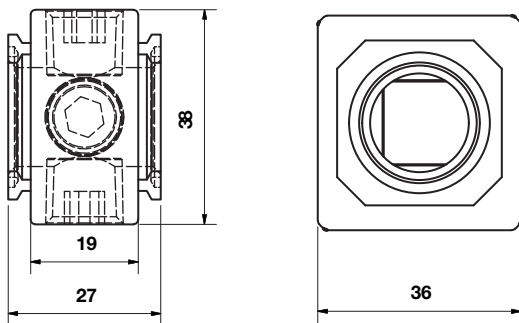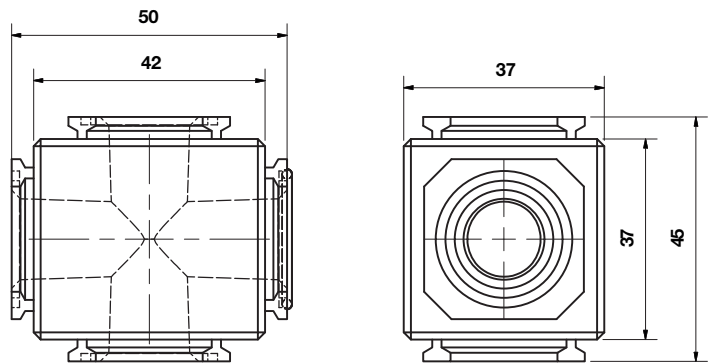
1/4 Turn Manual Drain

182

55

26

26

46,5

Minimum clearance required to remove bowl
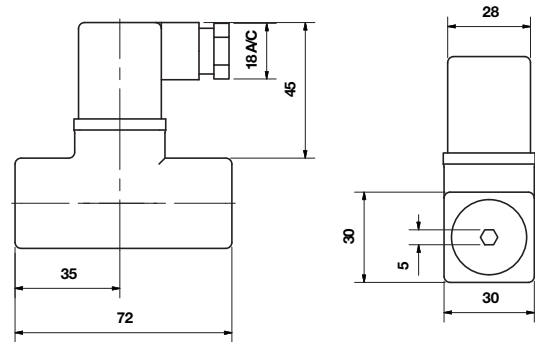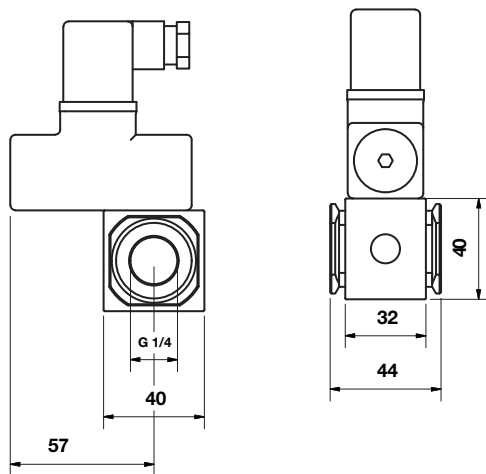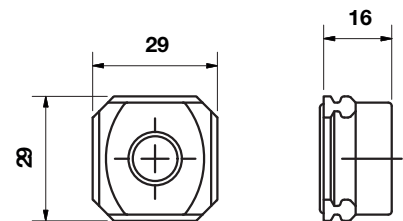
1 Main ports 1/4", 3/8" (ISO G/PTF)

2 Transparent bowl with guard

3 Metal bowl with liquid level indicator lens

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Accessories

Quikclamp® with wall bracket
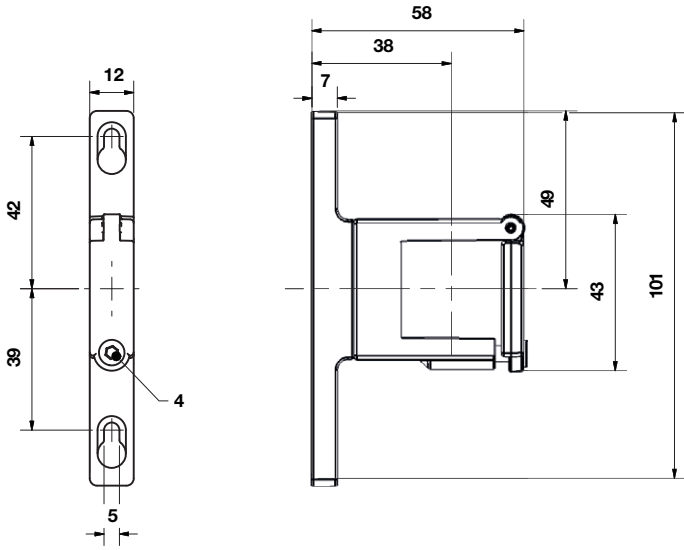
Quikclamp®

Mounting bracket

Pressure sensing block

Full flow porting block

Porting block for 18D pressure switch

40
32
44
G 1/4
40

18D Pressure switch

18 A/C
45
35
72
28
30
5
30
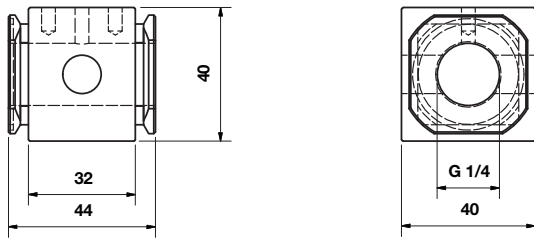
18D Porting block and 18D assembled

G 1/4
40
57
40
32
44

Pipe adaptor

29
29
16

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51D Pressure switch - digital

31

37

31

31

G 1/8

300
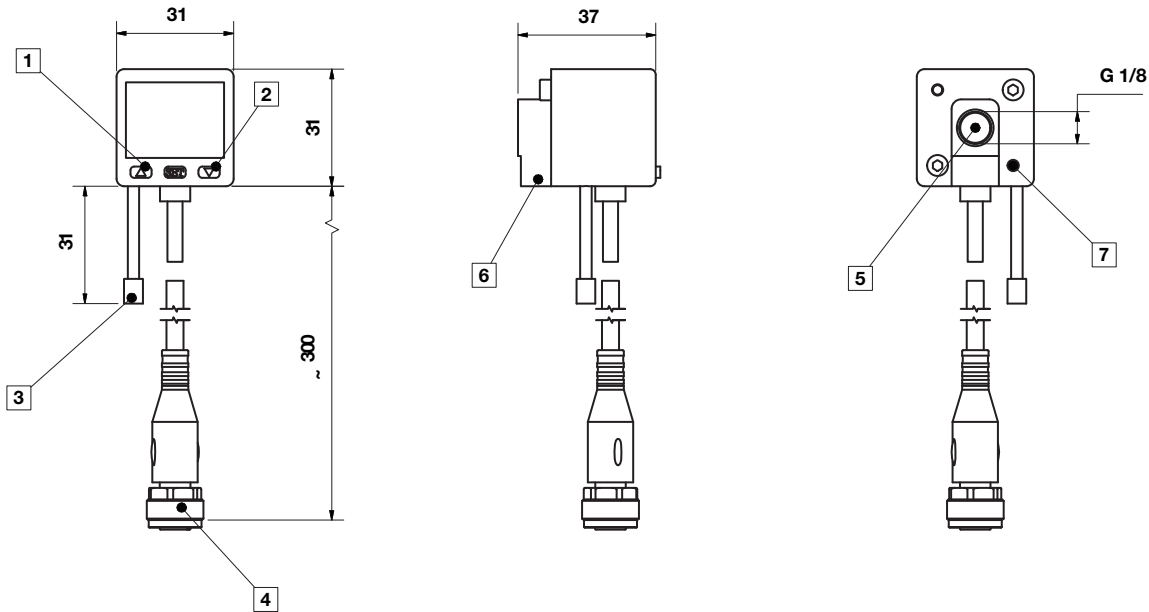
1 Switch OUT 1, green LED
2 Switch OUT 2, red LED
3 Dustproof protector
4 Connector M12 x 1
5 Inlet port
6 Alternative inlet port G1/8 plugged
7 Thread for mounting screw

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.