


# F84G - General purpose filter Excelon® Plus Modular System



- > Port size: 3/8" ... 3/4" (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 (> 98%)
- > Double safety lock bow
- > Light weight polycarbonate bowl
- > Metal bowl with prismatic liquid level indicator lens
- > High Corrosion resistance: Body and Metal bowl with electrophoretic paint finish
- > Air purity classes in accordance to ISO8573-1:2010:  
7:8:4 (40µm)  
6:8:4 (5µm)
- >  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: 20 bar (290 psi)

### Filter element:

5 µm & 40 µm

### Port size:

G3/8, G1/2, G3/4,

3/8 PTF, 1/2 PTF, 3/4 PTF

### Flow:

78 dm<sup>3</sup>/s

at port size: 1/2",

operating pressure 6,3 bar (91 psi) and a Δp: 0,5 bar (7,25 psi) drop from set.

Filter element: 40 µm

### 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: 1 dm<sup>3</sup>/s (2 scfm)

### 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 F84 are in conformity with ATEX 2014/34/EU

 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 Aluminium

with PA liquid level indicator lens

Filter element: sintered PP

Bowl 'o'- ring: Chloroprene

Elastomers: NBR

## Technical data F84G - standard models

Symbol	Port size	Drain	Filter element (µm)	Bowl	Weight (kg)	Model
	G3/8	Auto	40	Guarded polycarbonate	0,38	F84G-3GN-AP3
	G1/2	Auto	40	Guarded polycarbonate	0,38	F84G-4GN-AP3
	G3/4	Auto	40	Guarded polycarbonate	0,38	F84G-6GN-AP3
	G3/8	Auto	40	Metal with level indicator	0,52	F84G-3GN-AD3
	G1/2	Auto	40	Metal with level indicator	0,52	F84G-4GN-AD3
	G3/4	Auto	40	Metal with level indicator	0,52	F84G-6GN-AD3
	G3/8	Manual	40	Guarded polycarbonate	0,38	F84G-3GN-QP3
	G1/2	Manual	40	Guarded polycarbonate	0,38	F84G-4GN-QP3
	G3/4	Manual	40	Guarded polycarbonate	0,38	F84G-6GN-QP3
	G3/8	Manual	40	Metal with level indicator	0,52	F84G-3GN-QD3
	G1/2	Manual	40	Metal with level indicator	0,52	F84G-4GN-QD3
	G3/4	Manual	40	Metal with level indicator	0,52	F84G-6GN-QD3

**Option selector**
**F84G-\*\*\*N-\*\*\***

Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread form	Substitute
PTF	A
ISO G parallel (standard)	G
Drain	Substitute
Manual (standard)	Q
Auto drain (standard)	A

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

**Excelon Plus adheres to the following harmonised standard and technical specifications:**

2014/34/EU Equipment and protective systems intended for use in potentially explosive atmospheres.

The following harmonised standards and technical specifications have been applied ISO 4414:2010 – Pneumatic fluid power – General rules and safety requirements for systems and their components; ISO 80079-36:2016 – Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements; ISO 80079-37:2016 – Explosive atmospheres Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k".

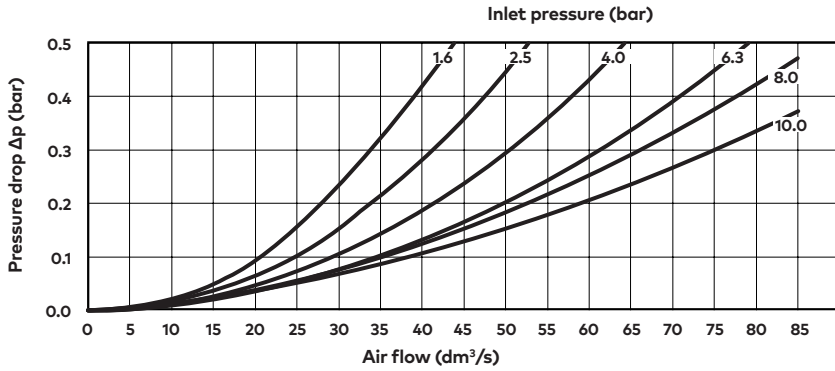

**II 2 GD**
**Ex h IIC T6 Gb**
**Ex h IIIC T85°C Db**
**ATEX Certification No.: NORGREN 18.0001X**

For a copy of the Declaration of Conformity (DoC) please use the link [http://cdn.norgren.com/pdf/IM\\_Excelon\\_Plus\\_EN\\_final.pdf](http://cdn.norgren.com/pdf/IM_Excelon_Plus_EN_final.pdf)

## Flow characteristics

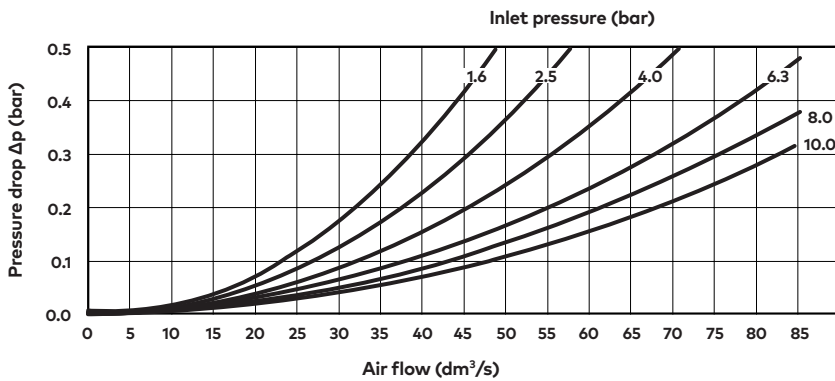
Element 40  $\mu\text{m}$

Port size: 1/2"



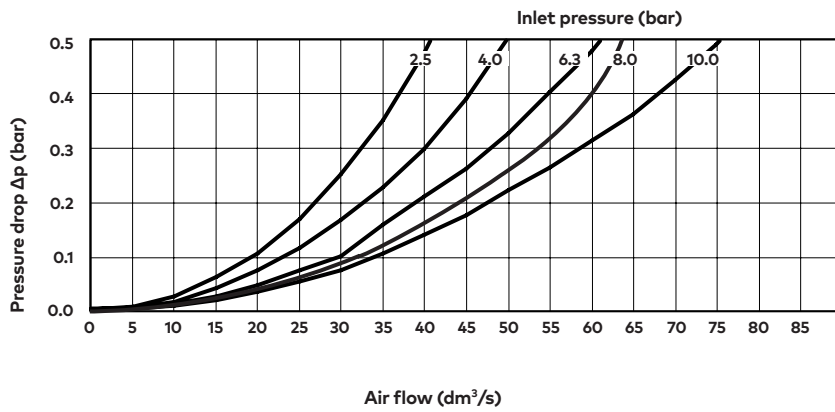
Element 5  $\mu\text{m}$

Port size: 1/2"



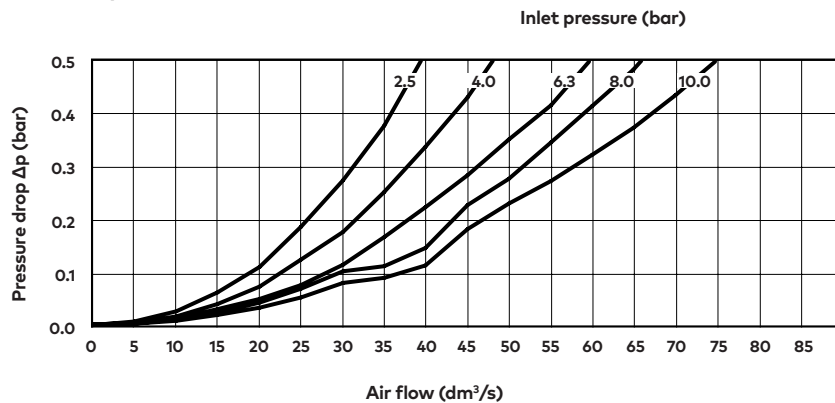
Element 40  $\mu\text{m}$

Port size: 3/8"



Element 5  $\mu\text{m}$

Port size: 3/8"



## Accessories

### Wall mounting bracket



Page 7

840024-50KIT

### Quikclamp®



Page 7

840014-51KIT

### Quikclamp® with bracket assembled



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840014-52KIT

### Hybrid Quikclamp® \*1



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840014-61

### Hybrid Quikclamp® with bracket assembled \*1

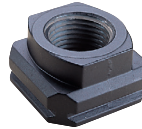


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840014-62

\*1) To connect new Excelon Plus to old Excelon 74/73 units. Having the same hole centres as 74 series mounting bracket. A Quikclamp adds 13.6 mm to the overall width of a combination unit

### Port Adaptors



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1/4 PTF	840015-01KIT
3/8 PTF	840015-02KIT
1/2 PTF	840015-03KIT
3/4 PTF	840015-04KIT
G1/4	840015-09KIT
G3/8	840015-10KIT
G1/2	840015-11KIT
G3/4	840015-12KIT

### Pressure sensing block 1/4 PTF



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840016-50KIT

### Pressure sensing block G1/4



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840016-51KIT

### Full flow porting block 3/4" PTF



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840028-50KIT

### Full flow porting block G3/4



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840028-53KIT

### Full flow porting block 3/4" PTF



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840028-68KIT

### Full flow porting block G3/4



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840028-69KIT

### Pressure switch interface block (18D pressure switch) G1/4



Page 8

033771700000000

### Pressure switch 18D (0,5 ... 8bar) \*1



Page 8

0881300

### Digital pressure switch 51D (-1 ... 10 bar) \*2



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0806810

### Electronic Pressure Sensor – stand alone version \*3



Q84G

## IO-Link cables

### Connection cable M8x1 for integrated digital pressure switch



Description	Cable length (m)	Model
M8 female to M12 male	0,6	NC-084FS-124MS-A
	1,0	NC-084FS-124MS-1
	2,0	NC-084FS-124MS-2
	5,0	NC-084FS-124MS-5
M8 female to free end	5,0	NC-084FS-00000-5

\*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

\*3) Q84G stand alone electronic pressure sensor module

see <http://s.norgren.com/digital-gauge-iodd> for data-sheet 8.900.905.

**Maintenance/Service**
**Filter cartridge  
5 micron**


840038-50KIT

**Filter cartridge  
40 micron**


840038-51KIT

**Auto drain kit with  
metal Nut - Imperial**


6000-61KIT

**Auto drain kit with  
metal Nut - Metric**


6000-60KIT

**Spare parts**
**Filter Bowl (Guarded Poly bowl  
with auto drain 6 mm PIF)**


840025-51KIT

**Filter Bowl (Guarded Poly  
bowl with manual drain)**


840025-50KIT

**Filter Bowl (Metal with S/  
Glass & auto drain, 6 mm PIF)**


840003-51KIT

**Filter Bowl (Metal with S/  
Glass & manual drain)**


840003-50KIT

**Filter Bowl (Guarded Poly  
bowl with auto drain, 1/4 PIF)**

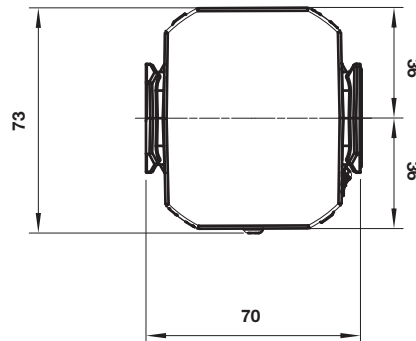
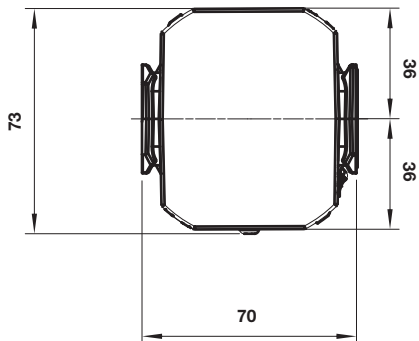
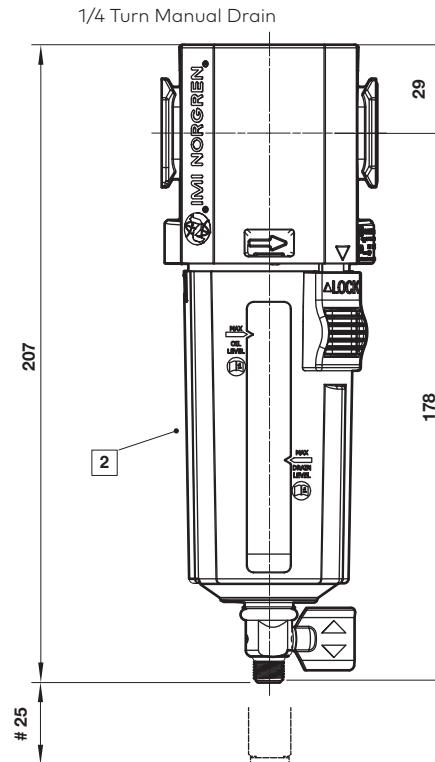
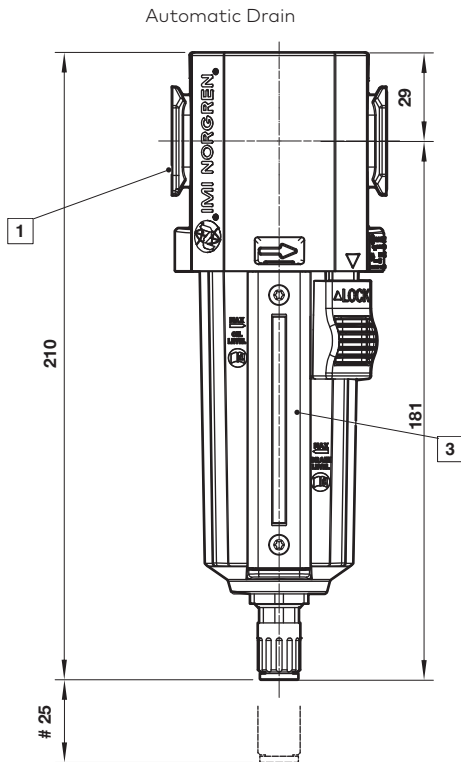

840025-53KIT

**Filter Bowl (Metal with S/  
Glass & auto drain, 1/4 PIF)**


840003-56KIT

## Dimensions

Dimensions in mm  
Projection/First angle

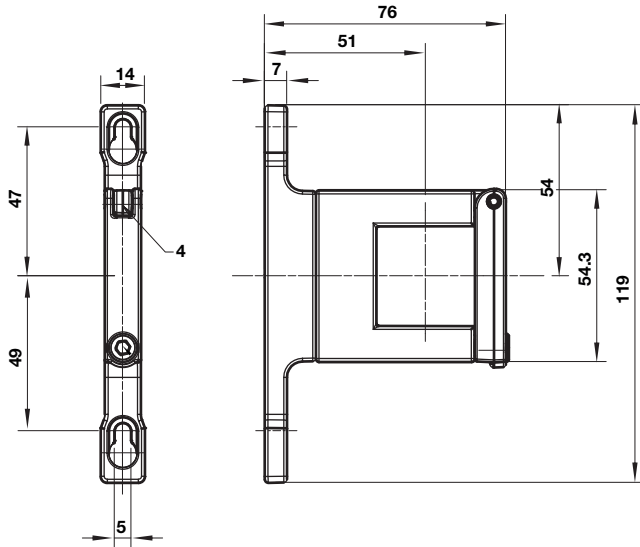
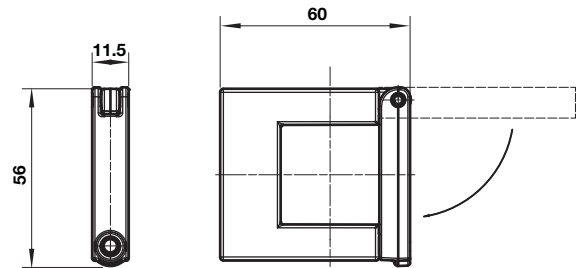
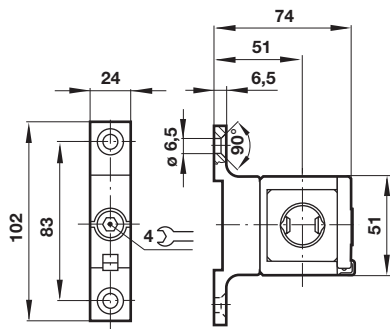
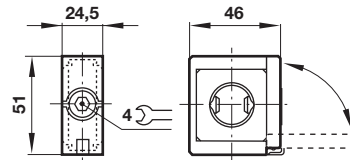
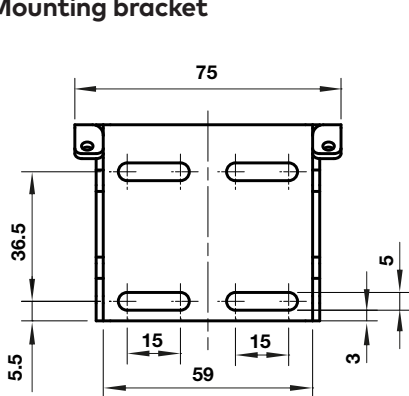
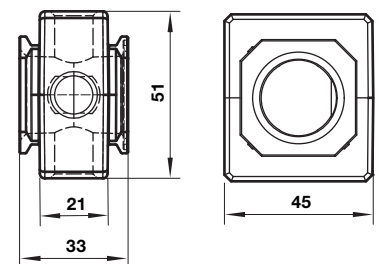


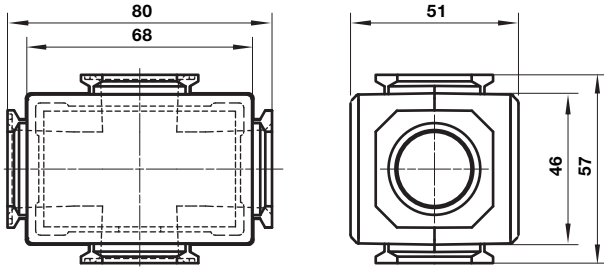
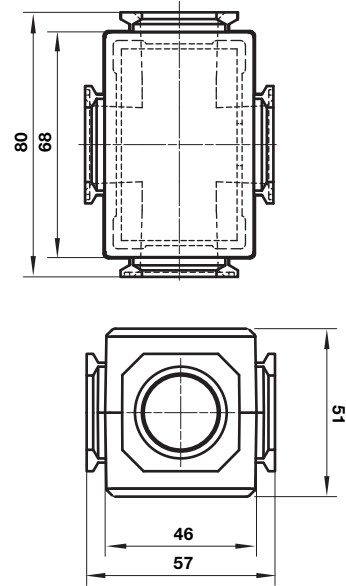
# Minimum clearance for bowl removal

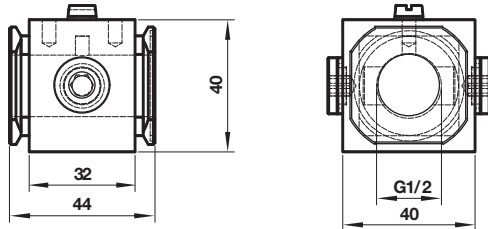
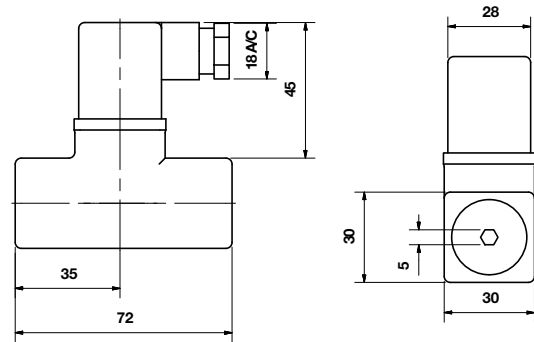
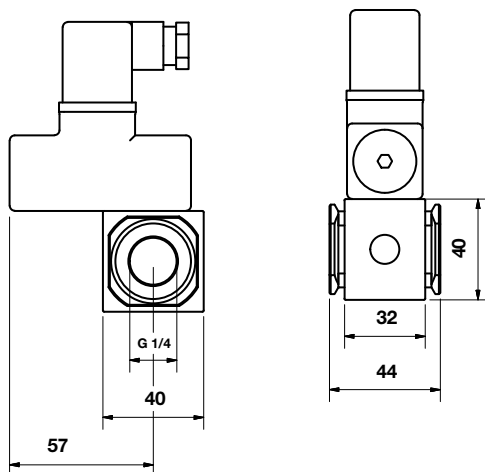
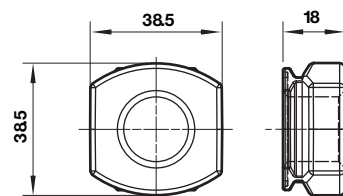
- 1 Main ports 3/8", 1/2" or 3/4"  
(ISO G/PTF)
- 2 Transparent bowl with guard
- 3 Metal bowl with liquid level indicator lens

**Accessories**

 Dimensions in mm  
 Projection/First angle

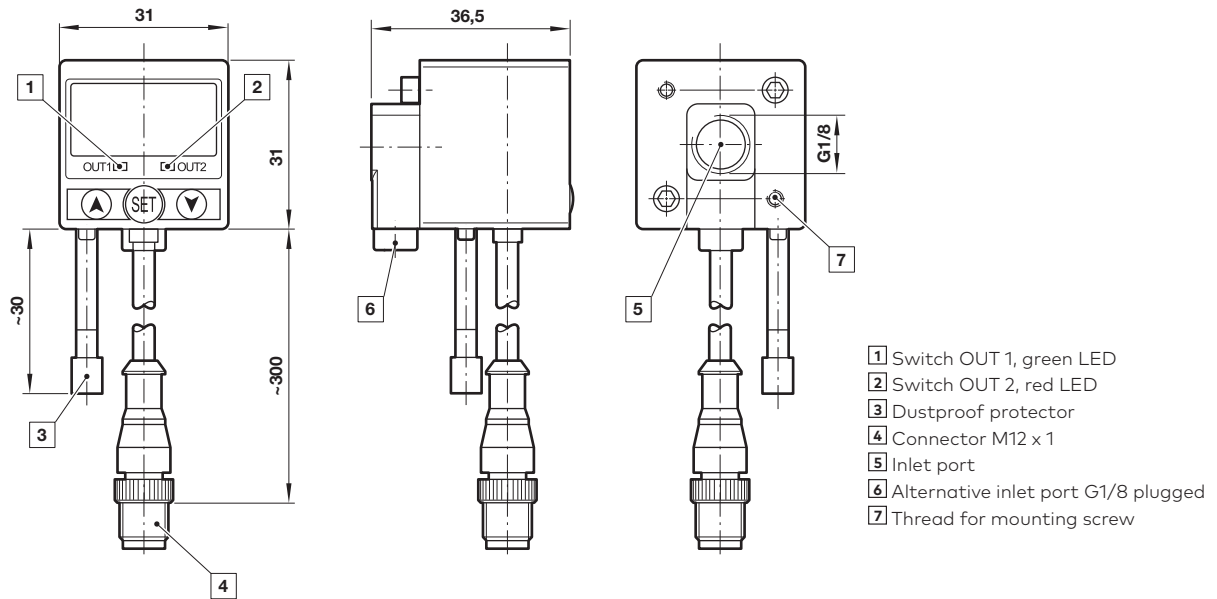
**Quikclamp® with wall bracket**

**Quikclamp®**

**Hybrid-Quikclamp® with wall bracket**

**Hybrid-Quikclamp®**

**Mounting bracket**

**Pressure sensing block**


**Full flow porting block horizontal**

**Full flow porting block vertical**

 Dimensions in mm  
 Projection/First angle

**Porting block for 18D pressure switch**

**18D Pressure switch**

**18D Porting block and 18D assembled**

**Pipe adaptor**




## 51D Pressure switch - digital



- 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.