


F84C - Oil removal 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
- High efficiency oil and particle removal
- Double safety lock bowl
- Light weight polycarbonate bowl
- Metal bowl with prismatic liquid level indicator lens
- High Corrosion resistance: Body and Metal bowl with electrophoretic paint finish
- Service indicator standard
- Air purity class in accordance with ISO8573-1:2010: 1:7:1*
*Tested in accordance with the methods laid out in ISO 12500-1 using an inlet oil aerosol concentration of 4mg/m³
-  DoC in accordance with 2014/34/EU/ATE



Technical features

Medium:

Compressed air only

Maximum supply pressure:

Polycarbonate bowl: 10 bar (145 psi)

Metal bowl: 20 bar (290 psi)

Remaining oil content:

0,01 mg/m³ at +21°C (+69°F)

Particle removal:

To 0,01 µm

Port size:

G3/8, G1/2, G3/4,
3/8 PTF, 1/2 PTF, 3/4 PTF

Service life Indicator:

Standard - included

Optional – not fitted

Flow:

Maximum flow to maintain stated oil removal performance at challenge rate of 4 mg/m³

F84C: 25 dm³/s, at port size: 1/2"

Operating pressure:

6,3 bar (91 psi)

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 dm³/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).

Note:

Install an F84G filter with a 5 µm filter element upstream of the F84C filter for maximum service life.

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: Synthetic fibre &

PE foam

Bowl 'o'- ring: Chloroprene

Elastomers: NBR

Technical data F84C - standard models

Symbol	Port size	Drain	Bowl	Weight (kg)	Model
	G3/8	Auto	Guarded polycarbonate	0,38	F84C-3GD-AP0
	G1/2	Auto	Guarded polycarbonate	0,38	F84C-4GD-AP0
	G3/4	Auto	Guarded polycarbonate	0,38	F84C-6GD-AP0
	G3/8	Auto	Metal with level indicator	0,52	F84C-3GD-AD0
	G1/2	Auto	Metal with level indicator	0,52	F84C-4GD-AD0
	G3/4	Auto	Metal with level indicator	0,52	F84C-6GD-AD0
	G3/8	Manual	Guarded polycarbonate	0,38	F84C-3GD-QP0
	G1/2	Manual	Guarded polycarbonate	0,38	F84C-4GD-QP0
	G3/4	Manual	Guarded polycarbonate	0,38	F84C-6GD-QP0
	G3/8	Manual	Metal with level indicator	0,52	F84C-3GD-QD0
	G1/2	Manual	Metal with level indicator	0,52	F84C-4GD-QD0
	G3/4	Manual	Metal with level indicator	0,52	F84C-6GD-QD0

Option selector

Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread form	Substitute
PTF	A
ISO G parallel (standard)	G
Service life Indicator:	Substitute
With (visual, standard)	D
Without	N

F84C-★ ★ ★ - ★ ★ 0

Bowl	Substitute
Metal with liquid indicator	D
Transparent with guard (standard)	P
Drain	Substitute
Manual (standard)	Q
Auto drain (standard)	A

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 IIC 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

Typical performance characteristics

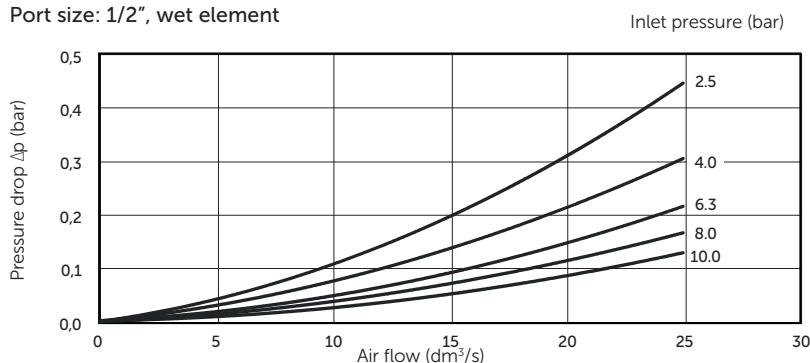
Inlet pressure (bar)	Maximum flow (dm³/s) *1)
2,50	12
4,00	17
6,30	25
8,00	30
10,00	35

*1) Maximum flow to maintain stated oil removal performance

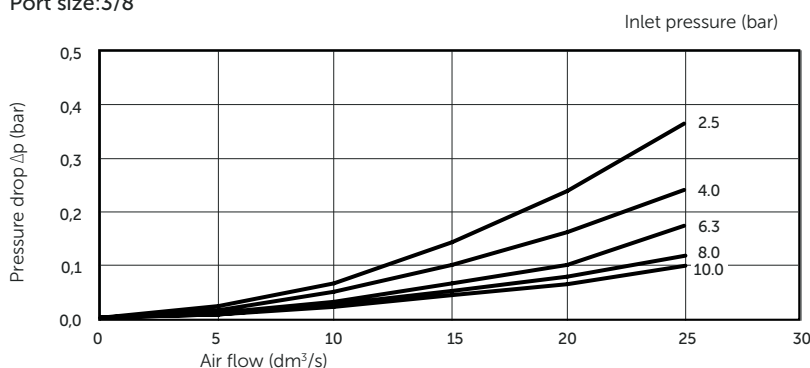
Flow characteristics

F84C

Port size: 1/2", wet element



Port size: 3/8"



Accessories

Wall mounting bracket



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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

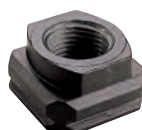


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840014-62

*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

Note : Kit contains 2 pieces
– 1 upstream and 1 downstream

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



Page 8

840028-68KIT

Full flow porting block
G3/4



Page 8

840028-69KIT

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



Page 8

0337717000000000

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



Page 8

0881300

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



Page 9

0860810

Electronic Pressure Sensor –
stand alone version *3



Q84G

*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, please see data sheet 8.900.905

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

Maintenance/Service

Coalescing
filter element



840044-50KIT

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)



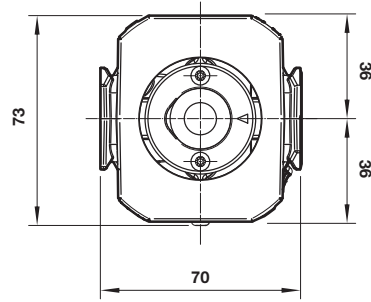
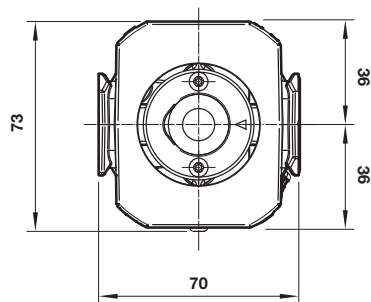
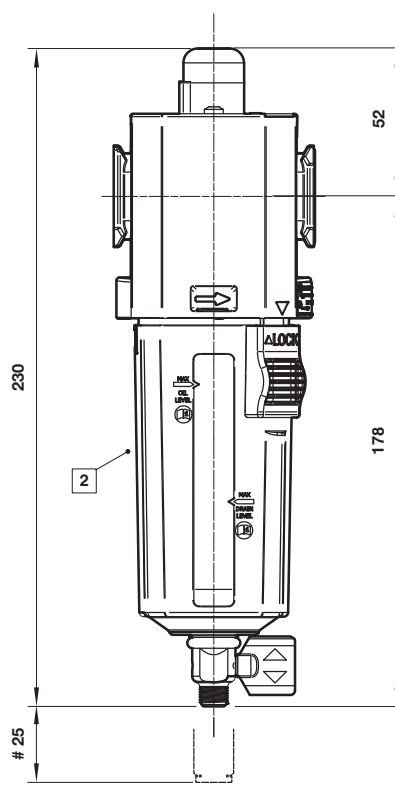
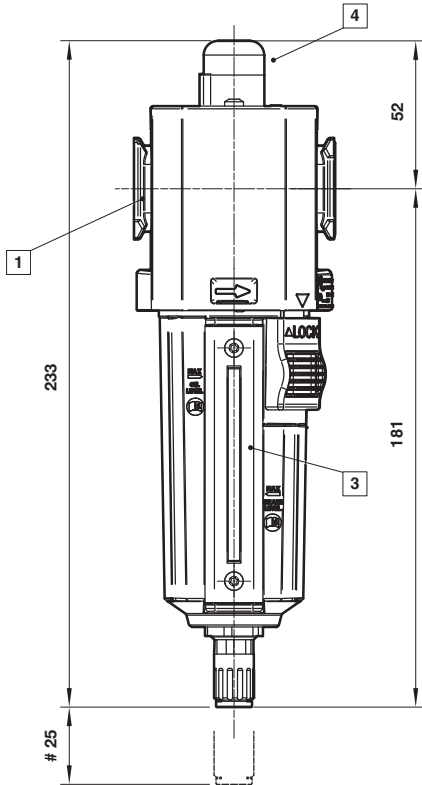
840003-56KIT

Dimensions – Standard including Service life indicator

Automatic Drain

1/4 Turn Manual Drain

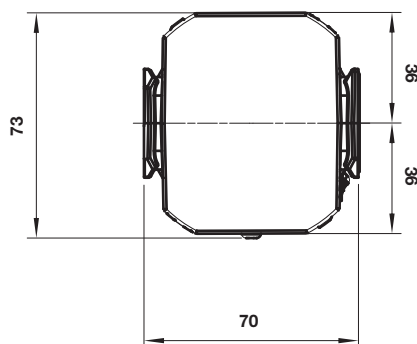
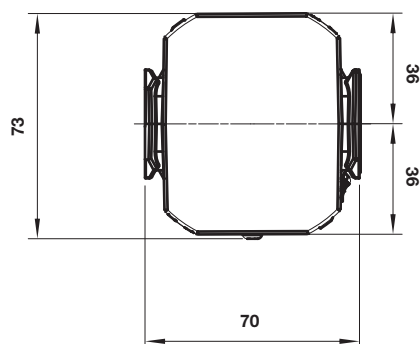
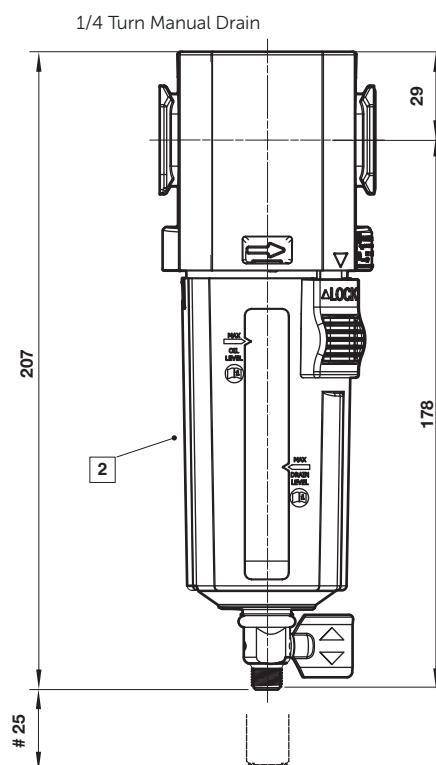
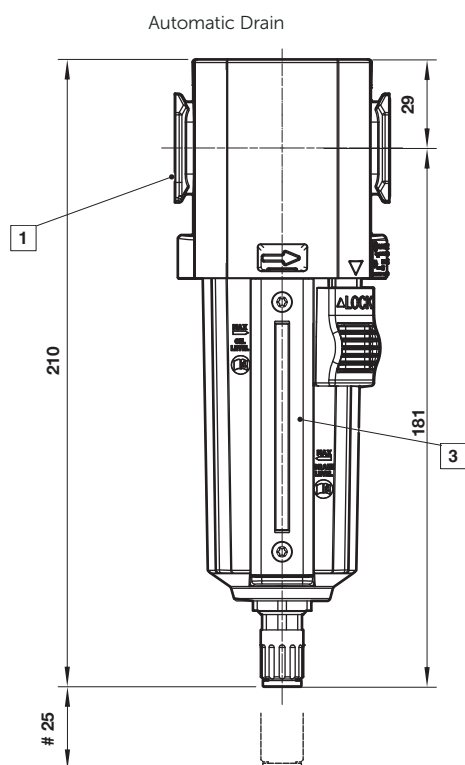
Dimensions in mm
Projection/First angle



- # 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
 - 4 Service life indicator

Dimensions - Optional - without Service life indicator fitted

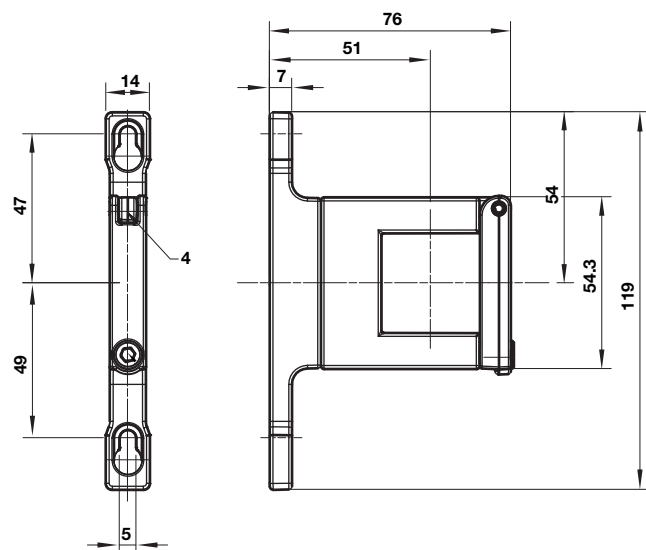
Dimensions in mm
Projection/First angle



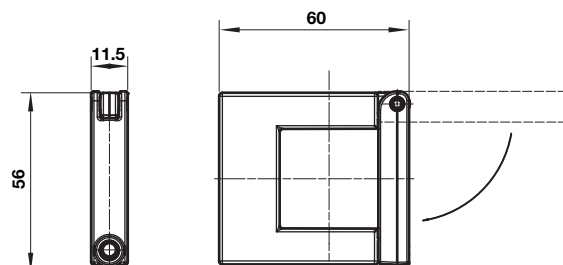
- # Minimum clearance for bowl removal
- ① Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
 - ② Transparent bowl with guard
 - ③ Metal bowl with liquid level indicator lens

Accessories

Quikclamp with wall bracket



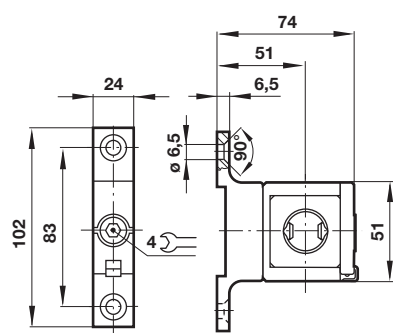
Quikclamp



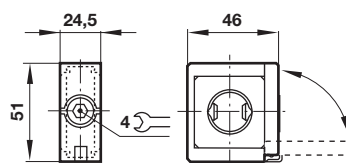
Dimensions in mm
Projection/First angle



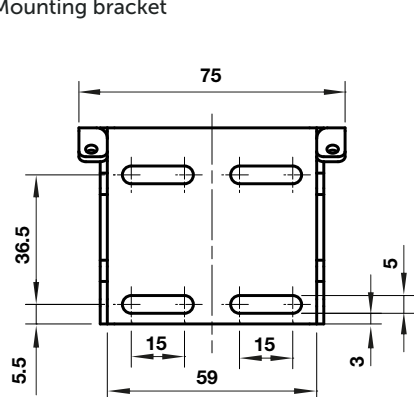
Hybrid-Quikclamp with wall bracket



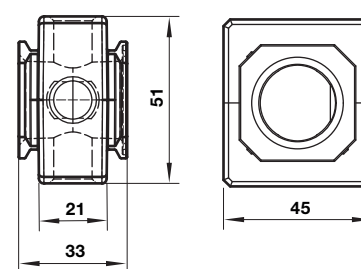
Hybrid-Quikclamp



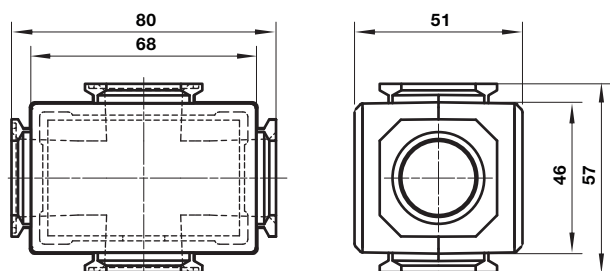
Mounting bracket



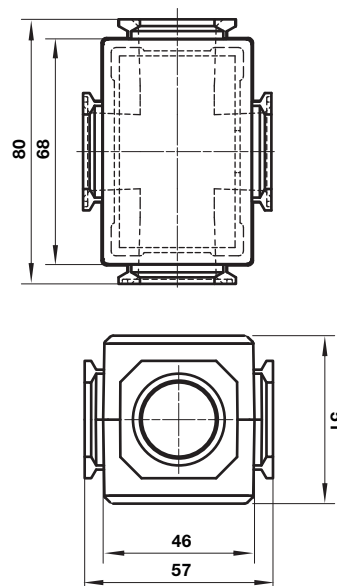
Pressure sensing block



Full flow porting block horizontal



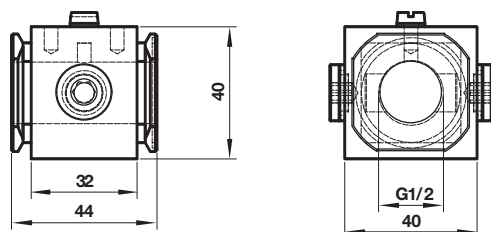
Full flow porting block vertical



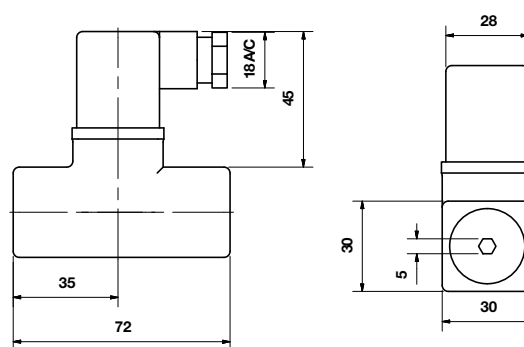
Dimensions in mm
Projection/First angle



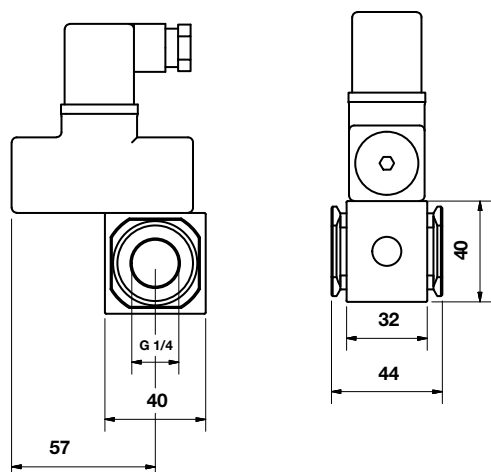
Porting block for 18D pressure switch



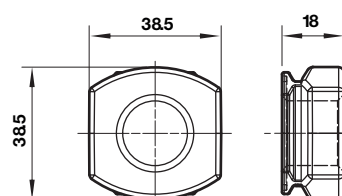
18D Pressure switch



18D Porting block and
18D assembled

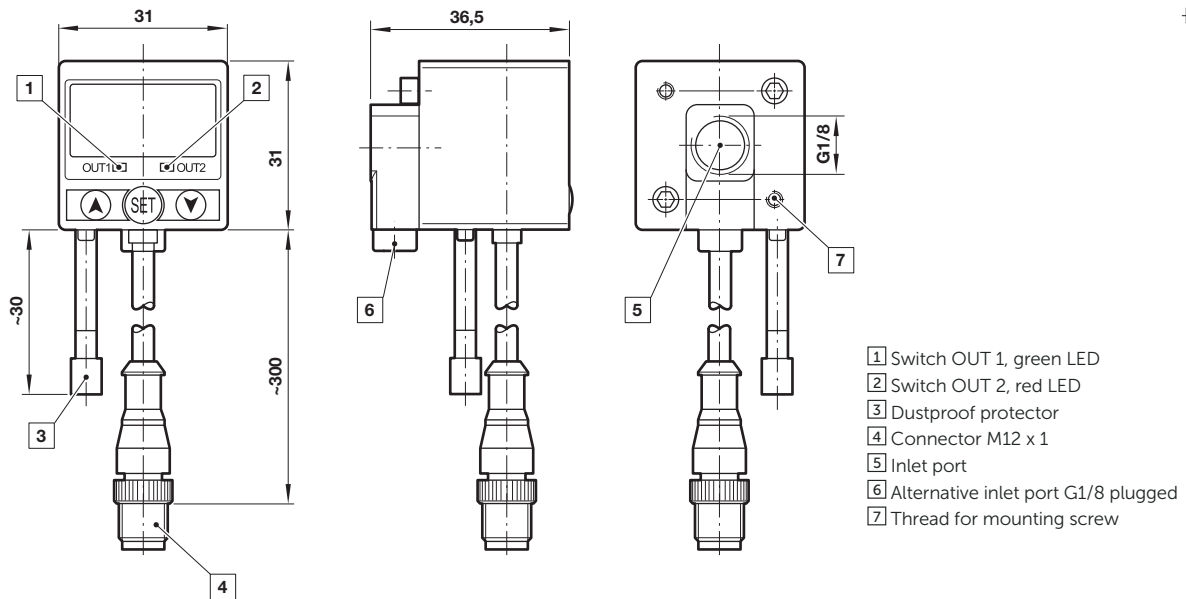


Pipe adaptor



51D Pressure switch - digital

Dimensions in mm
Projection/First angle



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.