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 bowl
- 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)
- 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: 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

Service life Indicator:
Available as an option

Flow:
78 dm^3/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^3/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
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 Polyproplyene 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-★★★-★★★

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**
Without (standard)	N
With on request	D
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 harmoised 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''.

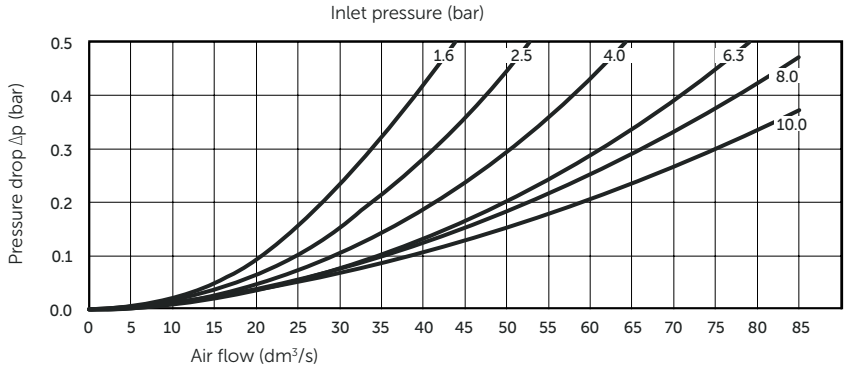
II 2 GD

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

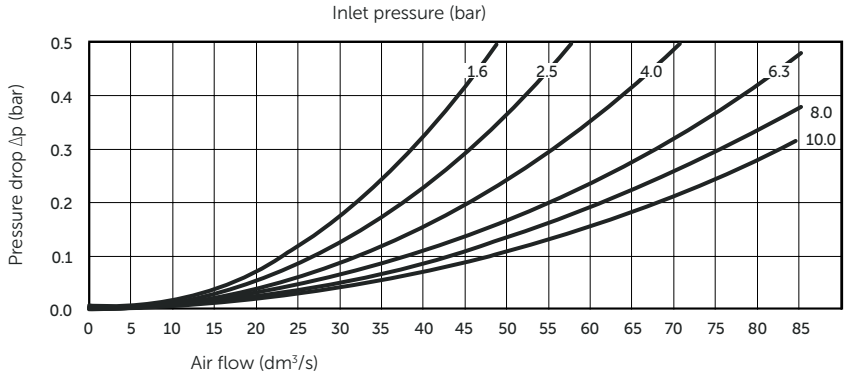
For a copy of the Declaration of Conformity (DoC) please use the link http://cdn.norgren.com/pdf/IM_Excelon_Plus_EN_final.pdf

Flow characteristics

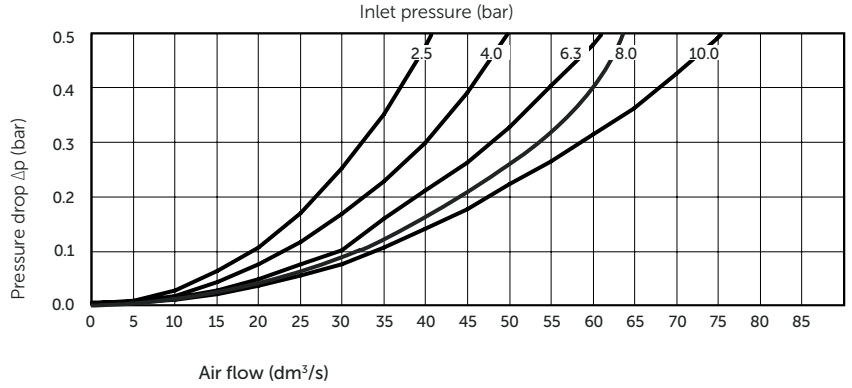
Element 40 µm
Port size: 1/2"



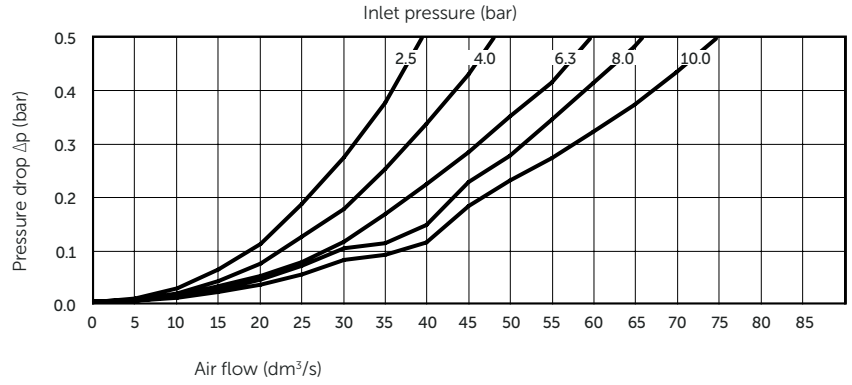
Element 5 µm
Port size: 1/2"



Element 40 µm
Port size:3/8"



Element 5 µm
Port size: 3/8"



Accessories

Wall mounting bracket

Page 8

840024-50KIT

Quikclamp

Page 8

840014-51KIT

Quikclamp
with bracket assembled

Page 8

840014-52KIT

Hybrid Quikclamp *1

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840014-61

Hybrid Quikclamp with bracket assembled *1

Page 8

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

Page 9

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

Page 8

840016-50KIT

Pressure sensing block
G1/4

Page 8

840016-51KIT

Full flow porting block
3/4" PTF

Page 9

840028-50KIT

Full flow porting block
G3/4

Page 9

840028-53KIT

Full flow porting block
3/4" PTF

Page 9

840028-68KIT

Full flow porting block
G3/4

Page 9

840028-69KIT

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

Page 9

0337170000000000

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

Page 9

0881300

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

Page 10

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

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

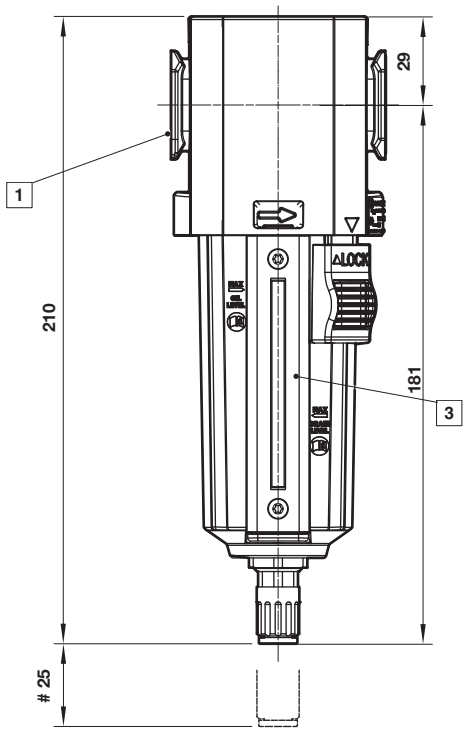
Filter Bowl (Metal with S/Glass & auto drain, 1/4 PIF)

840003-56KIT

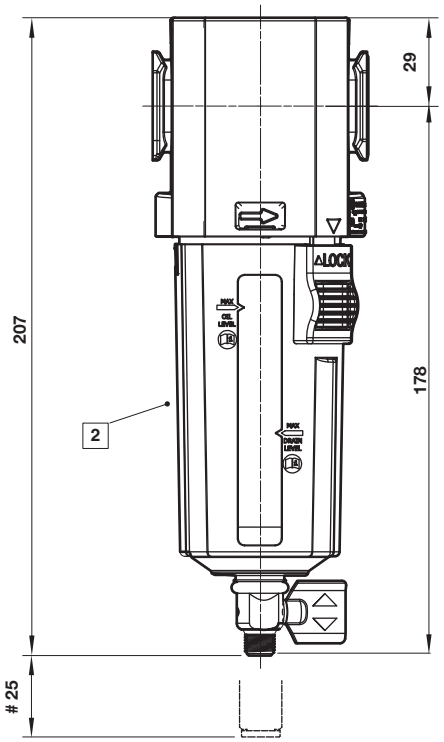
Dimensions - Standard

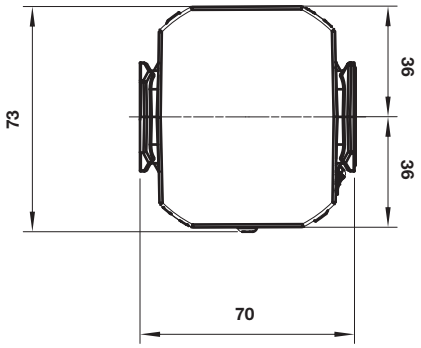
Dimensions in mm
Projection/First angle

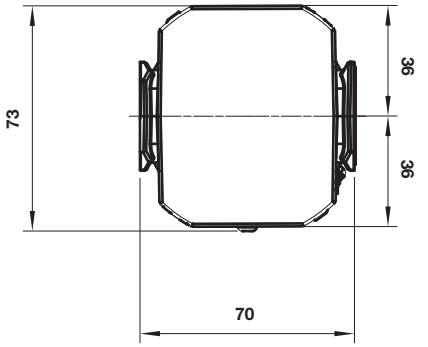
Automatic Drain



1/4 Turn Manual Drain





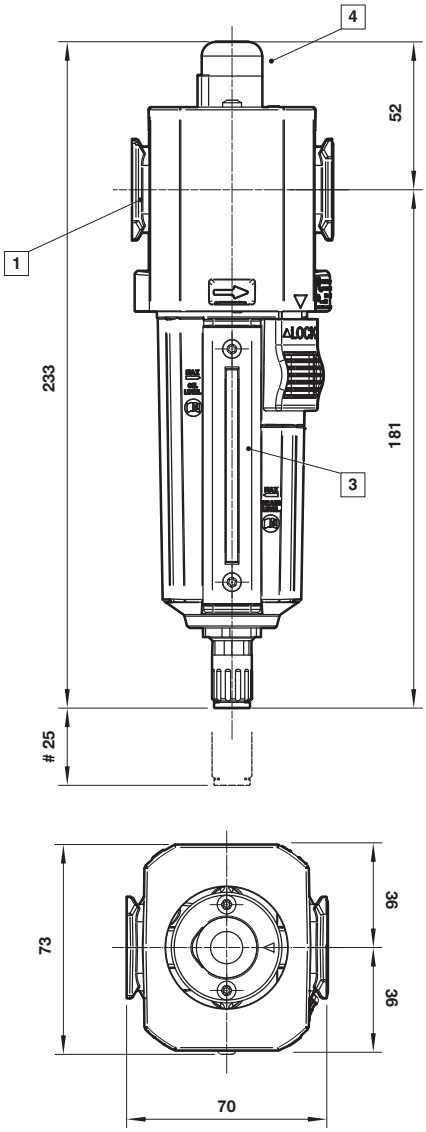


Minimum clearance for bowl removal
1 Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2 Transparent bowl with guard
3 Metal bowl with liquid level indicator lens

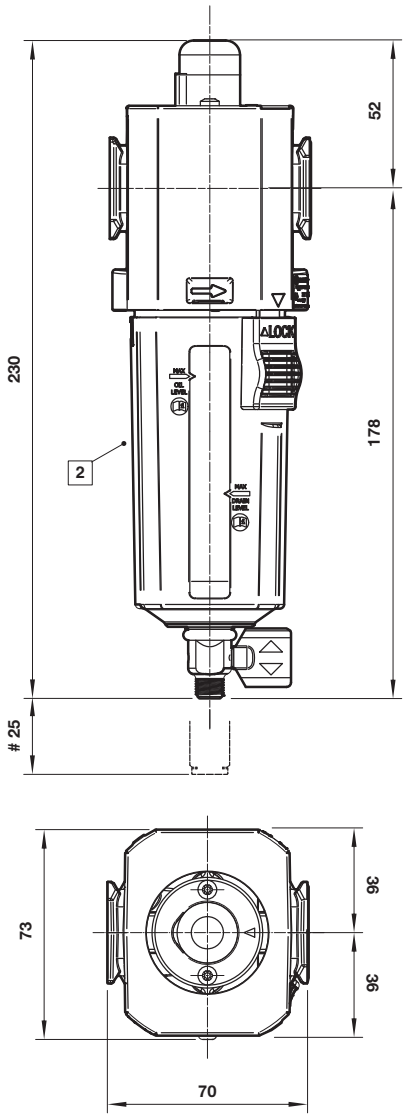
Dimensions – including optional Service life indicator

Dimensions in mm
Projection/First angle

Automatic Drain



1/4 Turn Manual Drain

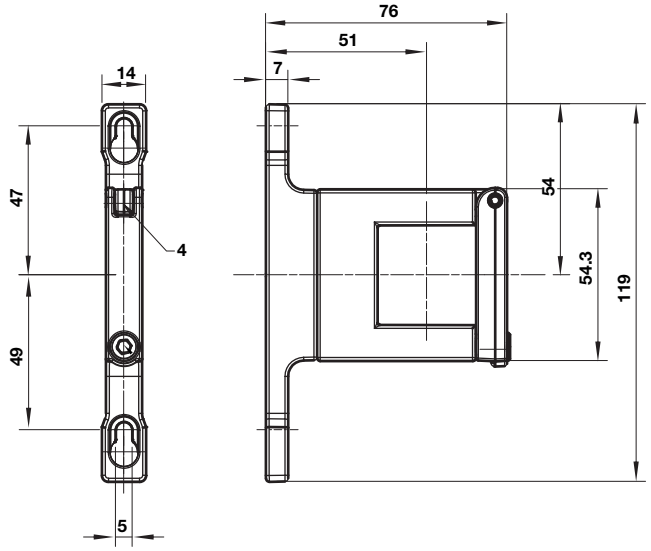


Minimum clearance for bowl removal
1 Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2 Transparent bowl with guard
3 Metal bowl with liquid level indicator lens
4 Service life indicator

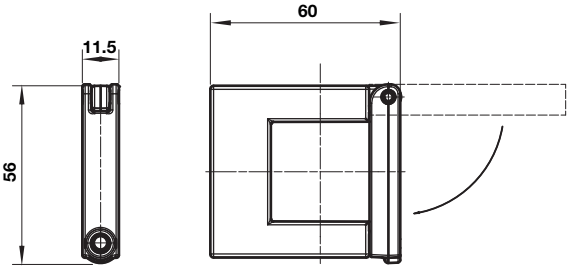
Accessories

Dimensions in mm
Projection/First angle

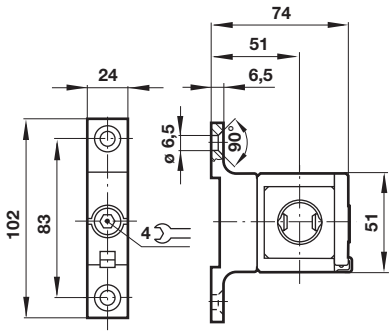
Quikclamp with wall bracket



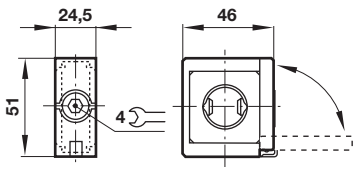
Quikclamp



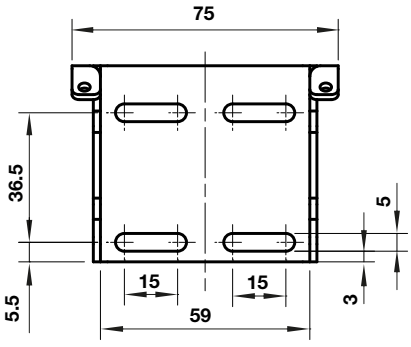
Hybrid-Quikclamp with wall bracket

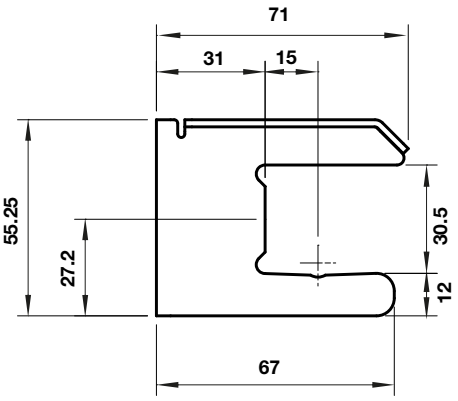


Hybrid-Quikclamp

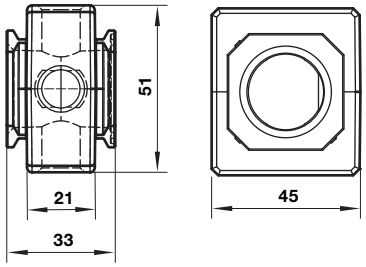


Mounting bracket

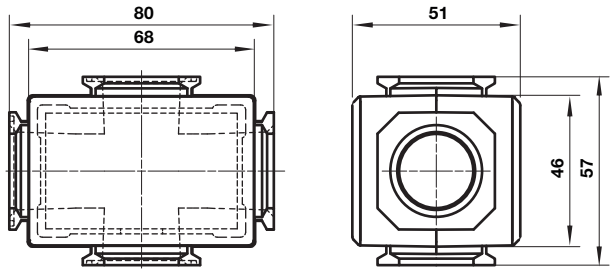




Pressure sensing block

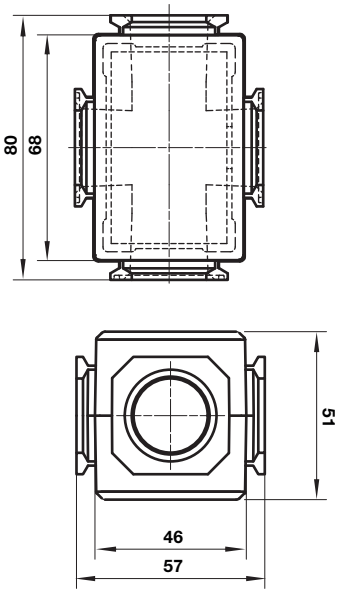


Full flow porting block horizontal

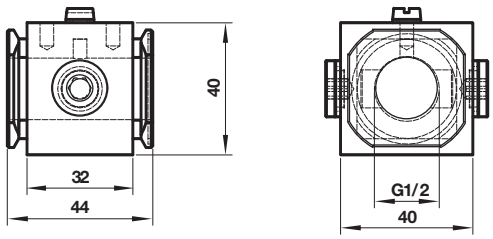


Full flow porting block vertical

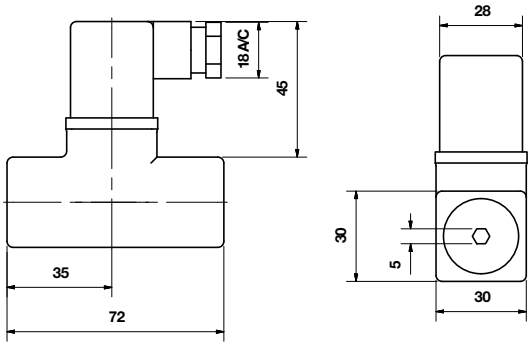
Dimensions in mm
Projection/First angle



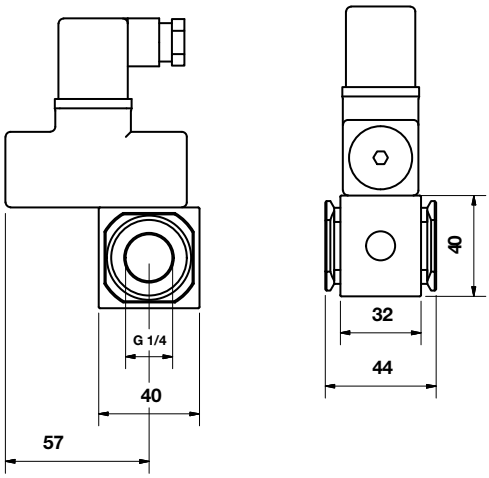
Porting block for 18D pressure switch



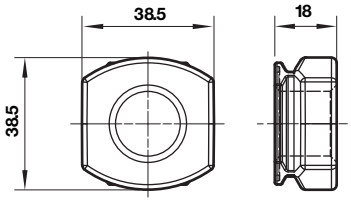
18D Pressure switch



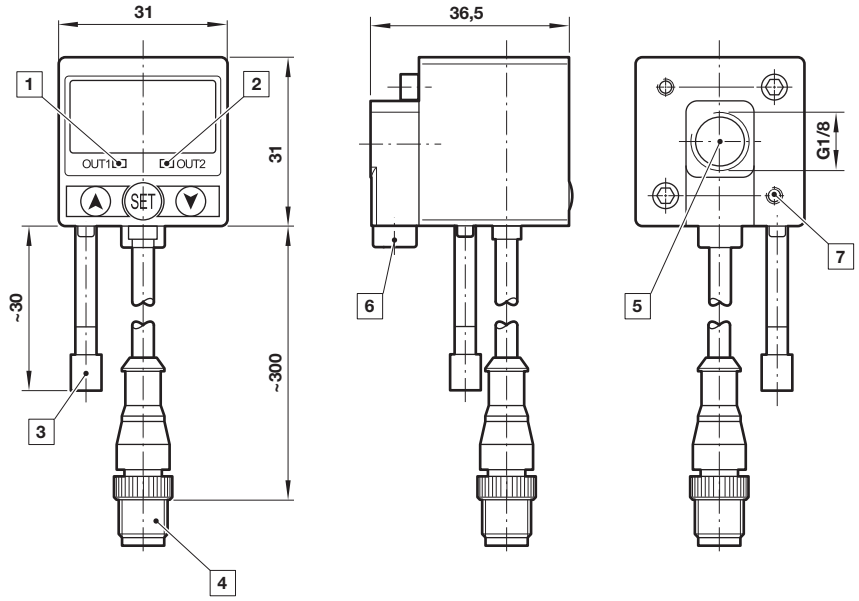
18D Porting block and 18D assembled



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.