


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

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
F84C-★★D-★★0

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

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".

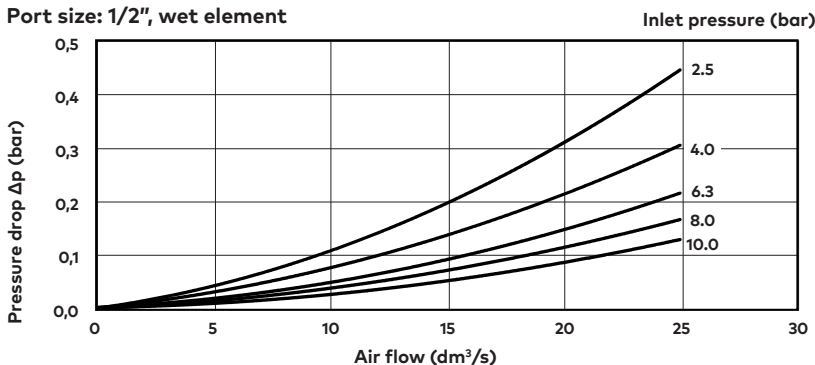
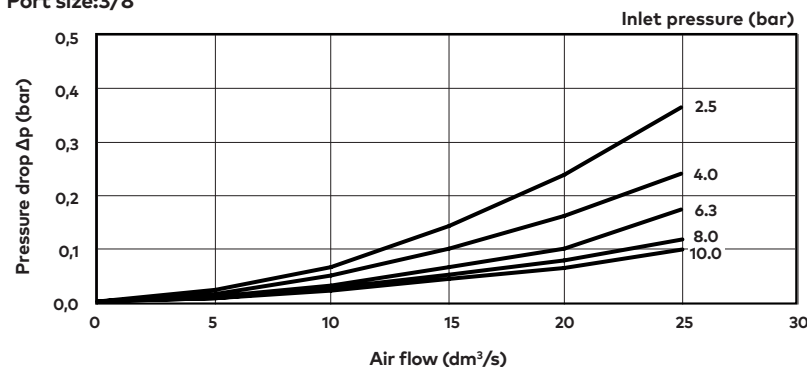

II 2 GD
Ex h IIC T6 Gb
Ex h IIIC T85°C Db
ATEX Certification No.: NORGREN 18.0001X

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

Typical performance characteristics

Inlet pressure (bar)	Maximum flow (dm ³ /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



Page 6

840024-50KIT

Quikclamp®



Page 6

840014-51KIT

Quikclamp® with bracket assembled



Page 6

840014-52KIT

Hybrid Quikclamp® *1



Page 6

840014-61

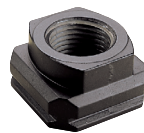
Hybrid Quikclamp® with bracket assembled *1



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840014-62

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



Page 6

840016-50KIT

Pressure sensing block G1/4



Page 6

840016-51KIT

Full flow porting block 3/4" PTF



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840028-50KIT

Full flow porting block G3/4



Page 7

840028-53KIT

Full flow porting block 3/4" PTF



Page 7

840028-68KIT

Full flow porting block G3/4



Page 7

840028-69KIT

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



Page 7

0337717000000000

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



Page 7

0881300

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



Page 8

0808010

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

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

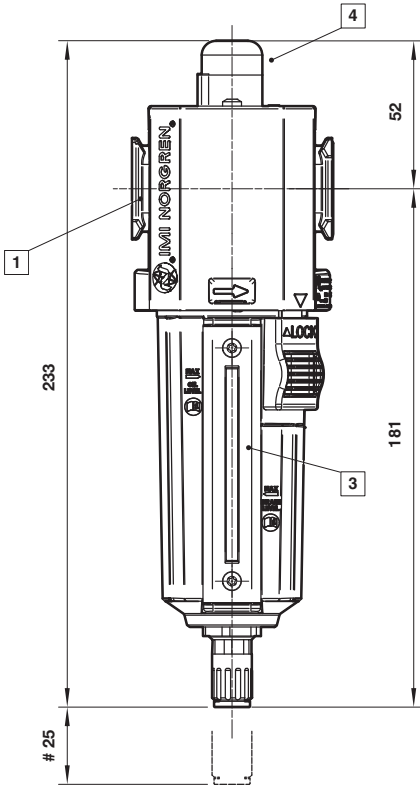
Filter Bowl (Metal with S/
Glass & auto drain, 1/4 PIF)



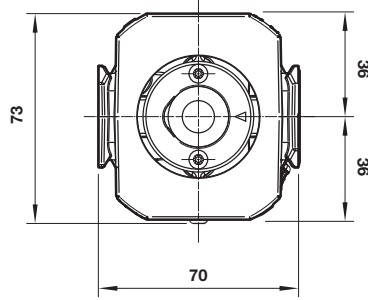
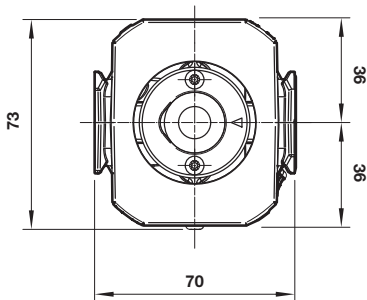
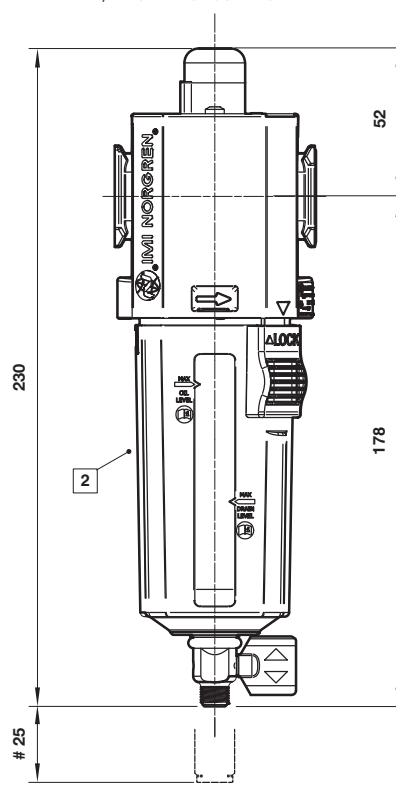
840003-56KIT

Dimensions

Automatic Drain



1/4 Turn Manual Drain



Dimensions in mm
Projection/First angle

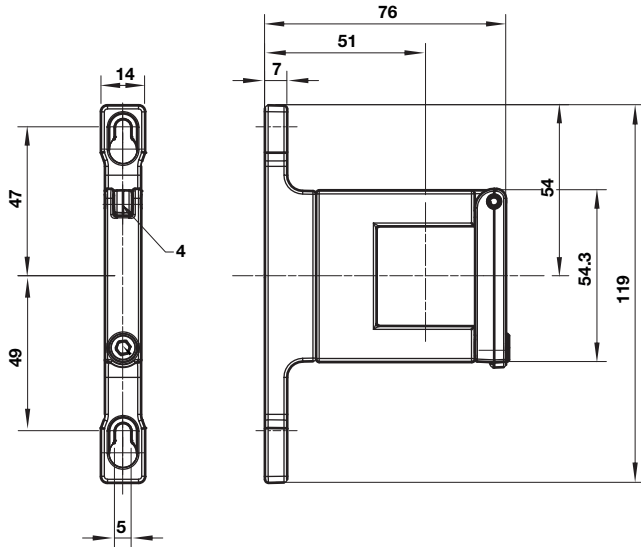
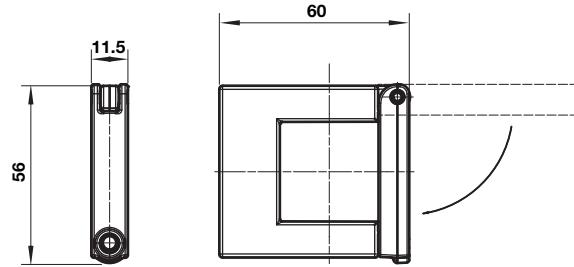
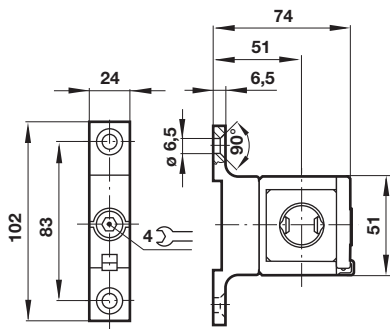
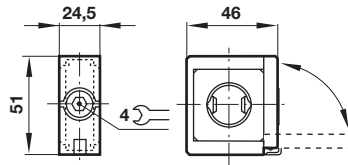
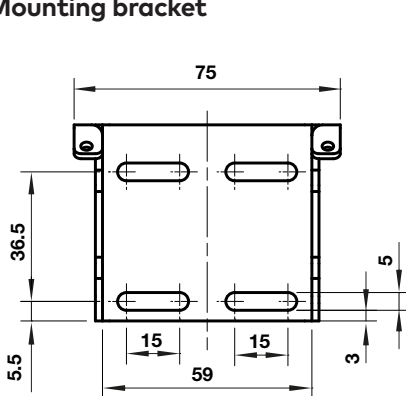
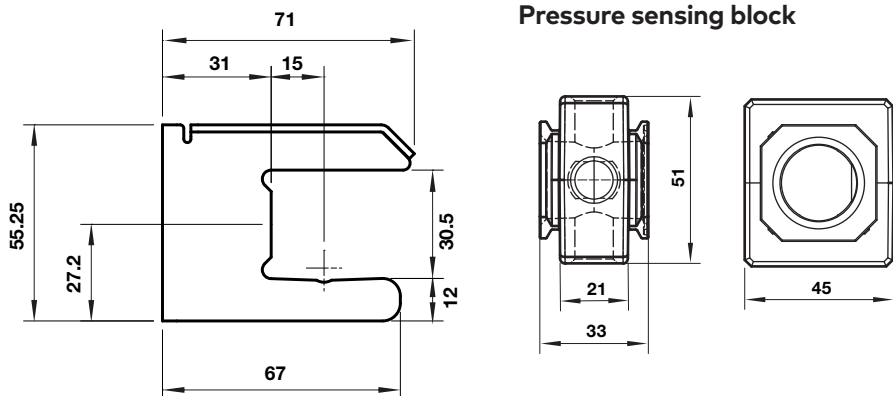


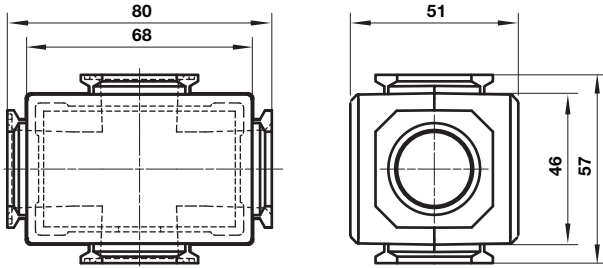
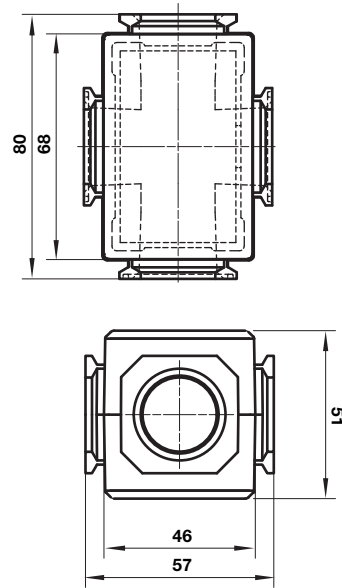
Minimum clearance for bowl removal

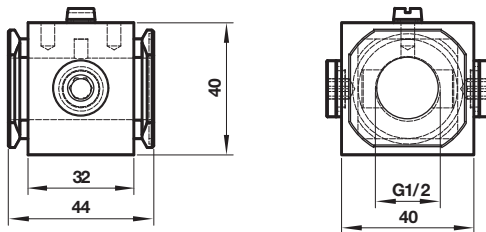
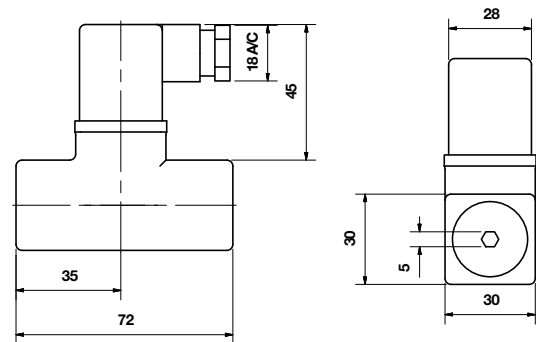
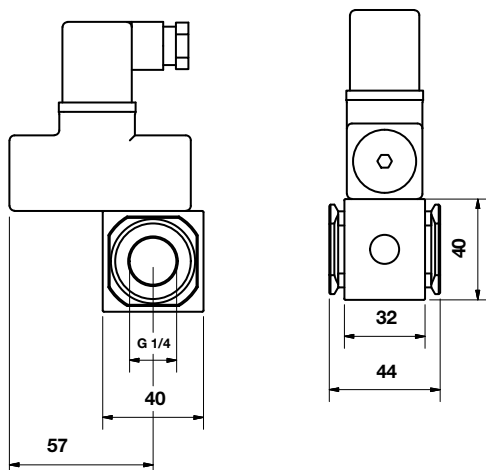
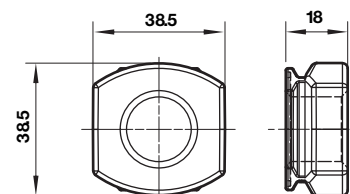
1 Main ports 3/8", 1/2" or 3/4"
(ISO G/PTF)

Accessories

 Dimensions in mm
 Projection/First angle

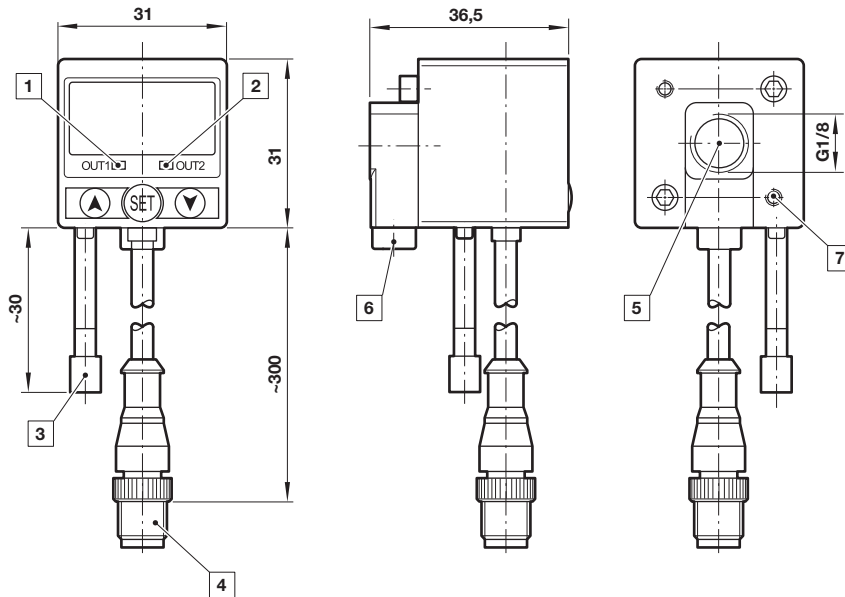
Quikclamp® with wall bracket

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

Dimensions in mm
Projection/First angle



- 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.