

# 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
- > Metal bowl with prismatic liquid level indicator lens
- > Light weight Polycarbonate bowl
- > 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/m<sup>3</sup>



### 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/m<sup>3</sup> 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/m<sup>3</sup>

F84C: 25 dm<sup>3</sup>/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 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).

#### 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

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 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**

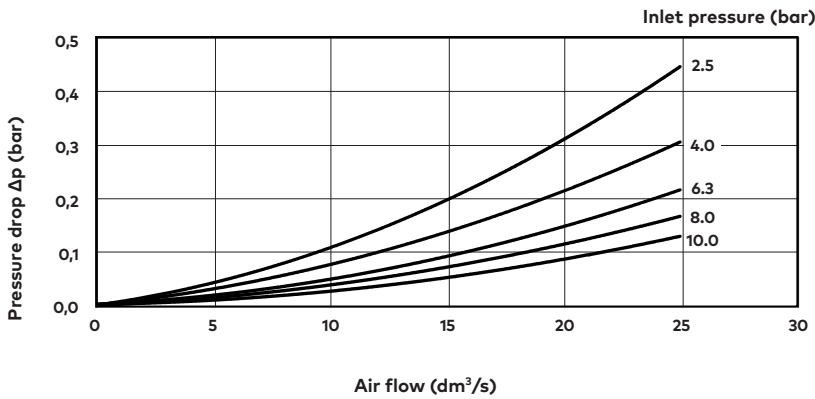
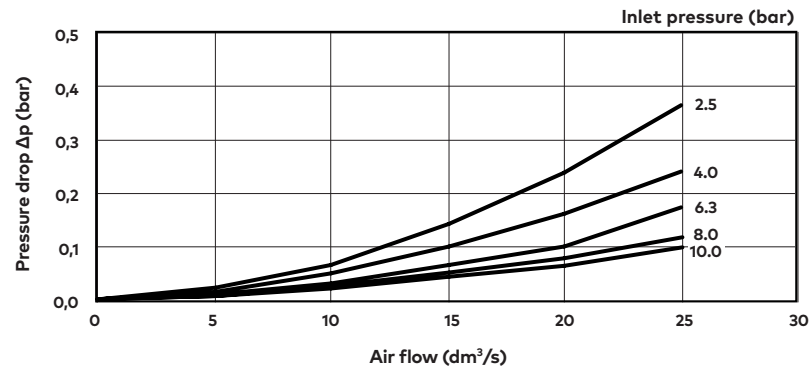
Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread form	Substitute
PTF	A
ISO G parallel (standard)	G

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

**Typical performance characteristics**

Inlet pressure (bar)	Maximum flow (dm <sup>3</sup> /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



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840014-52KIT

### Hybrid Quikclamp® \*1



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840014-61

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



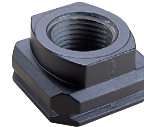
Page 6

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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3/8 PTF	840015-02KIT
1/2 PTF	840015-03KIT
3/4 PTF	840015-04KIT
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



Page 6

840028-69KIT

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



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0337717000000000

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



Page 8

0881300

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



Page 8

0860810

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



Q84G

## IO-Link cables

### Connection cable M8x1 for intergrated 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 standalone 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

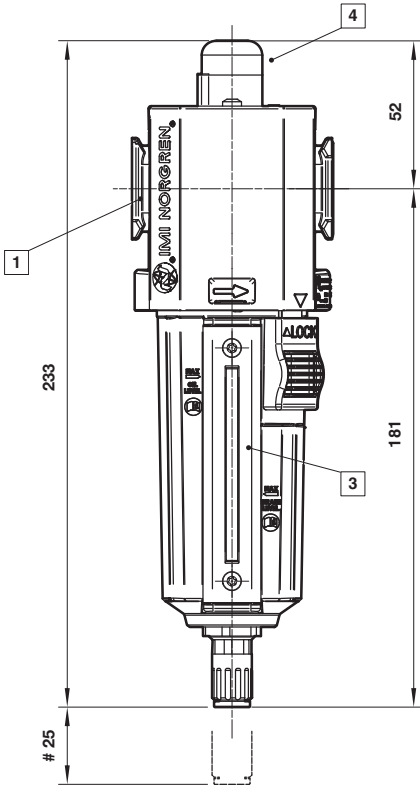
**Filter Bowl (Metal with S/ Glass & auto drain, 1/4 PIF)**



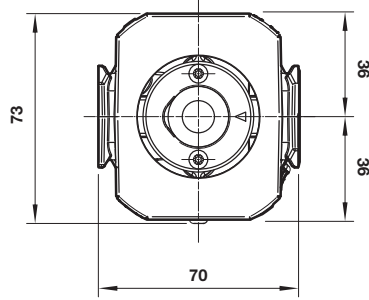
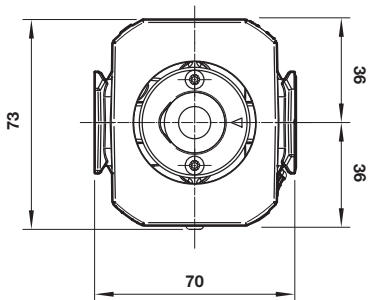
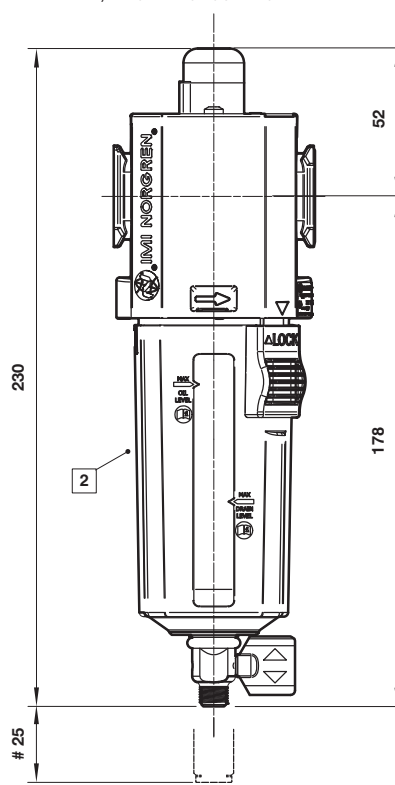
840003-56KIT

## Dimensions

Automatic Drain



1/4 Turn Manual Drain



Dimensions in mm  
Projection/First angle

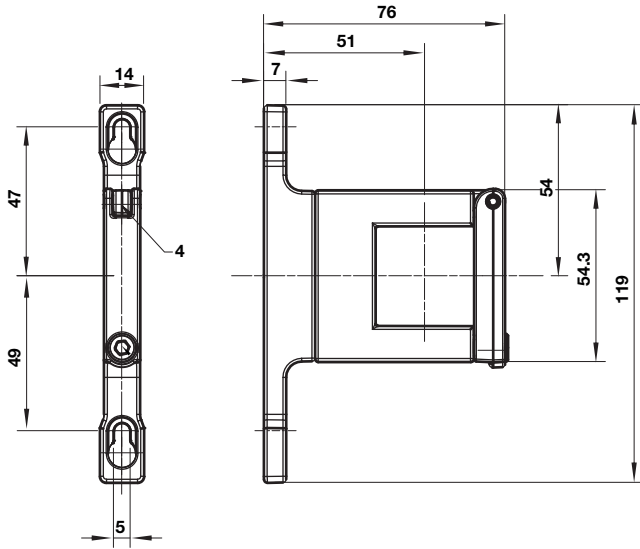
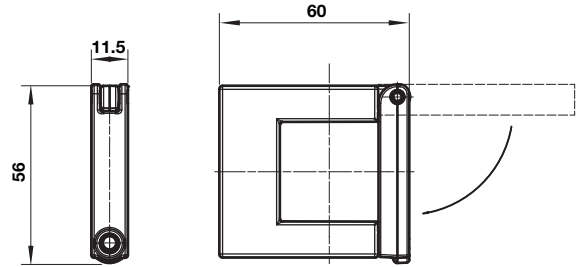
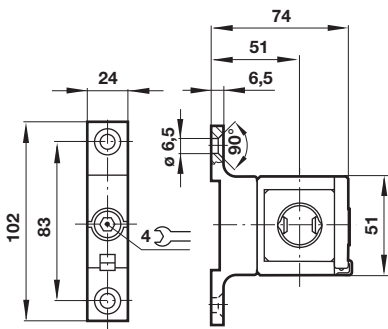
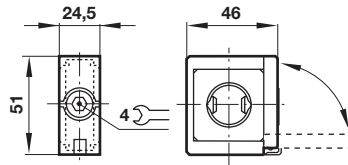
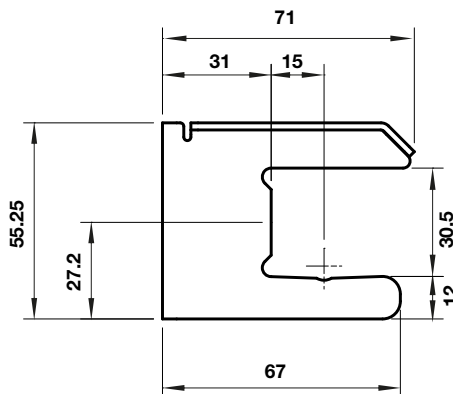
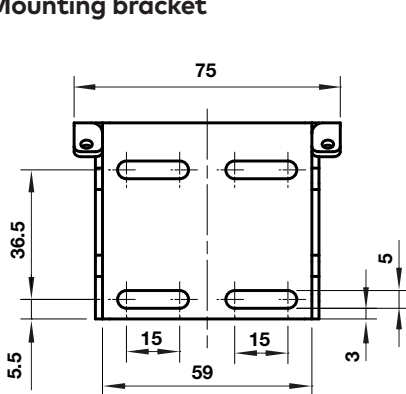
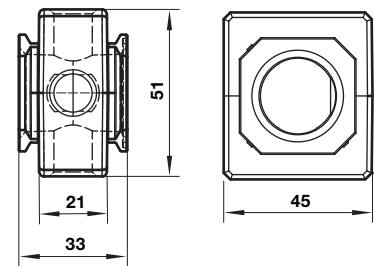


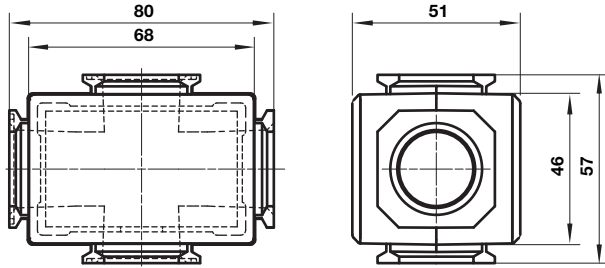
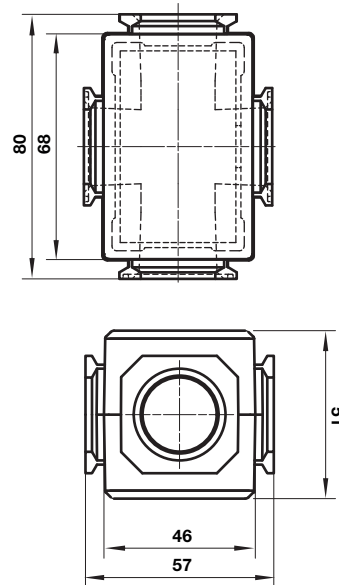
# Minimum clearance for bowl removal

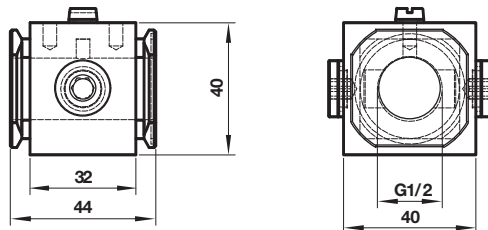
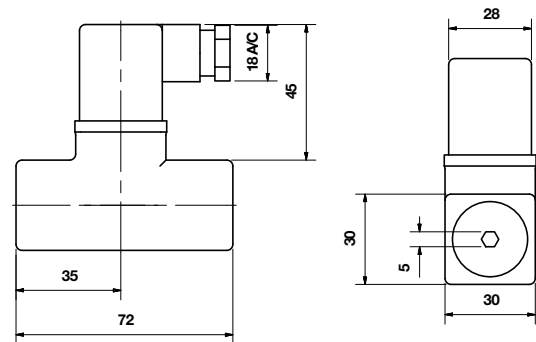
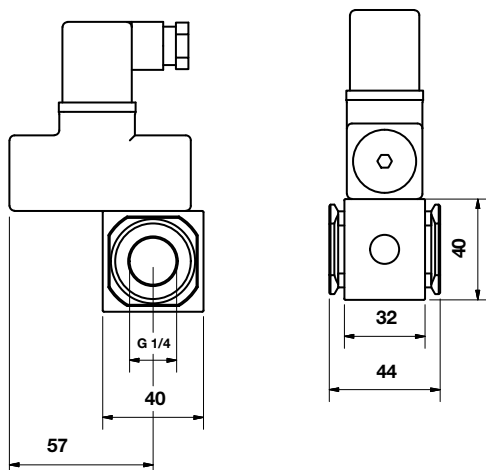
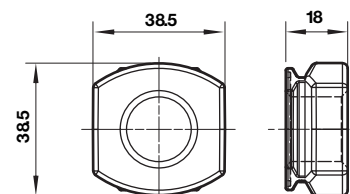
1 Main ports 3/8", 1/2" or 3/4"  
(ISO G/PTF)

**Accessories**

 Dimensions in mm  
 Projection/First angle

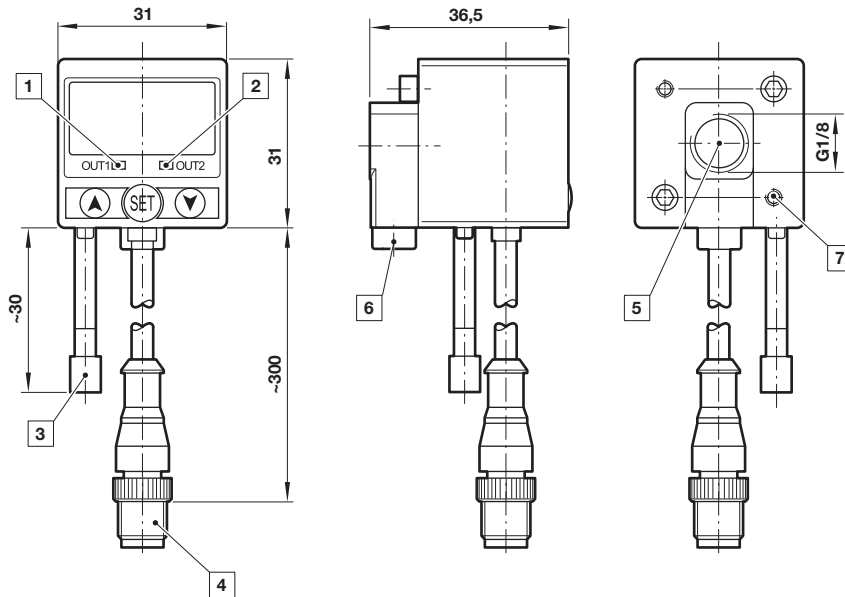
**Quikclamp® with wall bracket**

**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 OUT1, green LED
- 2 Switch OUT2, 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.