


F84V - Oil vapour removal filters

Excelon® Plus Modular System



- > **Port size: 3/8" ... 3/4"**
(ISO G/PTF)
- > **Excelon® Plus design**
allows in-line
installation or modular in-
stallation with other Excelon®
Plus products
- > **Adsorbing type**
activated carbon
element removes oil
vapours and most
hydrocarbon odours
- > **Double safety lock bowl**
- > **Light weight polycarbonate
bowl**
- > **High Corrosion resistance:**
Body and Metal bowl with
electrophoretic paint finish
- > **Air purity class in accordance
with ISO8573-1:2010: -:7:0***
*Tested in accordance with the
methods laid out in ISO 12500-2 using
an inlet oil aerosol concentration of
0.018mg/m³
- >  **DoC in accordance with
2014/34/EU/ATEX**



Technical features

Medium:

Compressed air only

Maximum operating pressure:

Polycarbonate bowl:
10 bar (145 psi)
Metal bowl: 20 bar (290 psi)

Remaining oil content:

0,003 mg/m³ max. at +21°C
(+69°F)

Port size:

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

Flow:

25 dm³/s
To maintain stated oil content
at port size: G1/2

Operating pressure:

6,3 bar (91 psi)

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

Ambient/Media temperature:

-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 F84C coalescing filter
upstream of the F84V filter for
maximum service life.

Materials:

Body: Die cast aluminium
Body covers: ABS
Transparent Bowl :
Polycarbonate with
Polypropylene Guard.
Metal Bowl: Die cast Aluminium
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

Technical data F84V - standard models

Symbol	Port size	Drain	Filter element (µm)	Bowl	Weight (kg)	Model
	G3/8	Closed bowl	Vapor removal	Guarded polycarbonate	0,38	F84V-3GN-EPA
	G1/2	Closed bowl	Vapor removal	Guarded polycarbonate	0,38	F84V-4GN-EPA
	G3/4	Closed bowl	Vapor removal	Guarded polycarbonate	0,38	F84V-6GN-EPA
	G3/8	Closed bowl	Vapor removal	Metal bowl - no sight glass	0,52	F84V-3GN-EMA
	G1/2	Closed bowl	Vapor removal	Metal bowl - no sight glass	0,52	F84V-4GN-EMA
	G3/4	Closed bowl	Vapor removal	Metal bowl - no sight glass	0,52	F84V-6GN-EMA

Option selector
F84V-★★N-E★A

Port size	Substitute
3/8"	3
1/2"	4
3/4"	6

Bowl	Substitute
Metal	M
Transparent with guard (standard)	P
Thread form	Substitute
PTF	A
ISO G parallel (standard)	G

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".

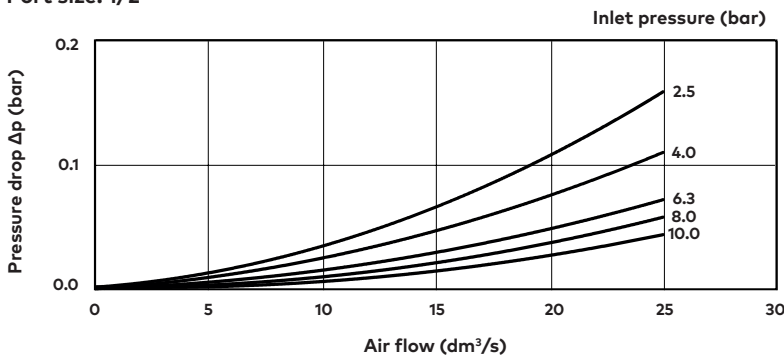
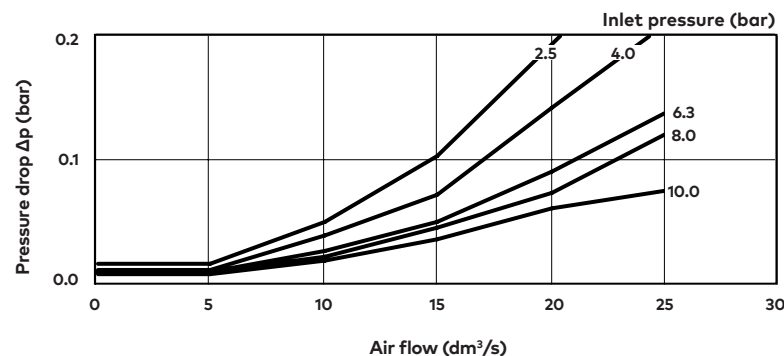

II 2 GD
Ex h IIC T6 Gb
Ex h IIIC T85°C Db
ATEX Certification No.: NORGREN 18.0001X

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	15
4,00	20
6,30	25
8,00	28
10,00	30

*1) Maximum flow to maintain stated oil removal performance

Flow characteristics
Port size: 1/2"

Port size: 3/8"


Accessories

Wall mounting bracket



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840024-50KIT

Quikclamp®



Page 5

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 5

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

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

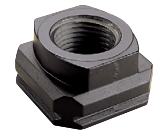
Full flow porting block G3/4



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840028-69KIT

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



Page 6

033771700000000

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



Page 6

0881300

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



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0860810

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

Vapour Removal filter element



840041-50KIT

Filter Bowl (Guarded Poly bowl)



840025-52KIT

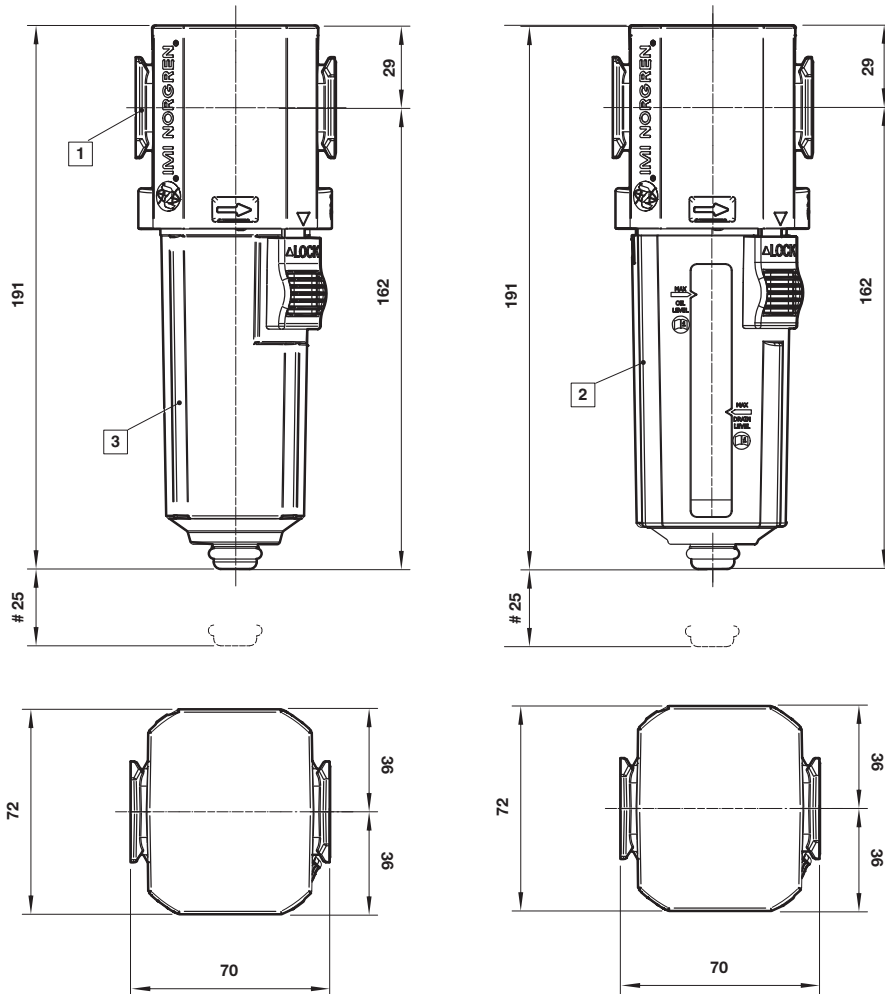
Filter Bowl (Metal)



840003-55KIT

Dimensions

Dimensions in mm
Projection/Third angle



Minimum clearance for bowl removal

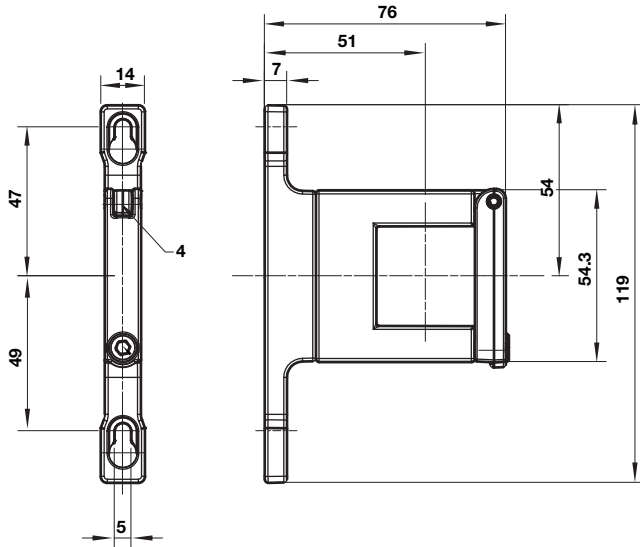
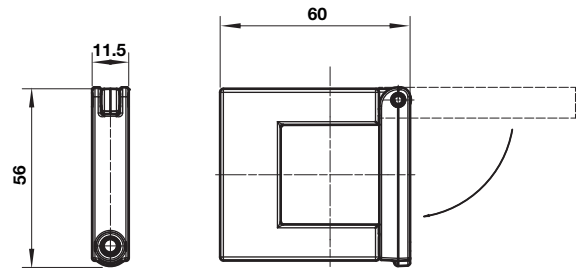
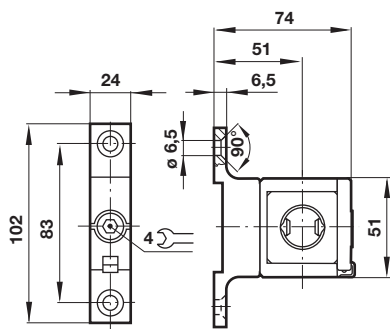
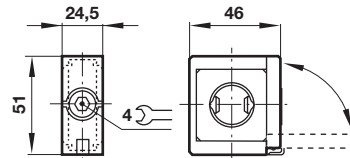
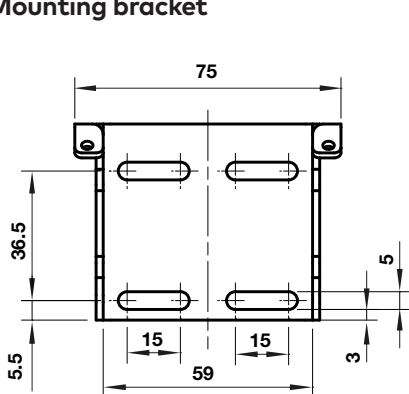
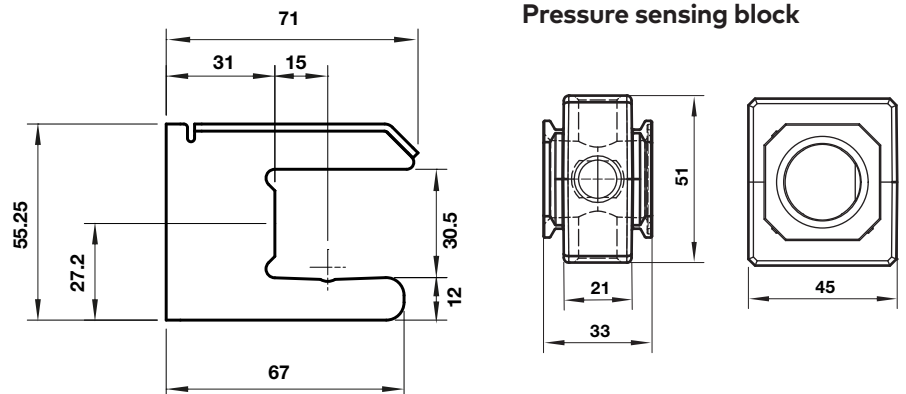
1 Main ports 3/8", 1/2" or 3/4"
(ISO G/PTF)

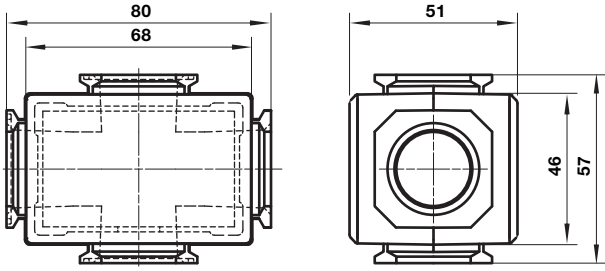
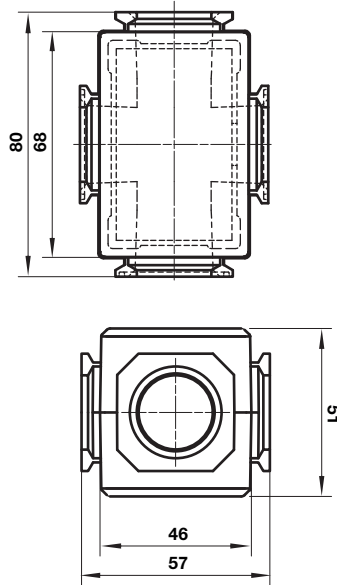
2 Transparent bowl with guard

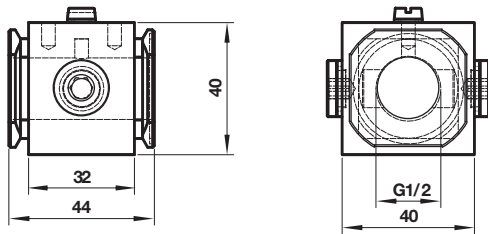
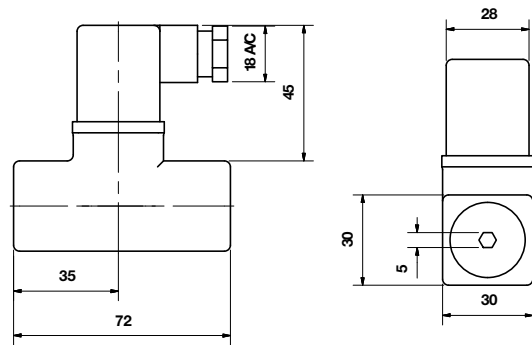
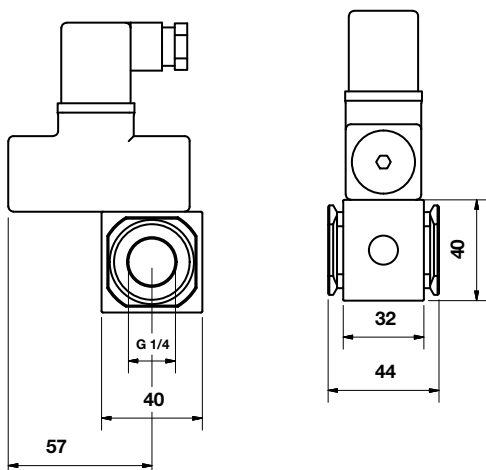
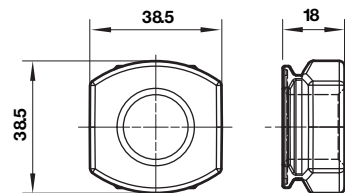
3 Metal bowl

Accessories

 Dimensions in mm
 Projection/Third angle

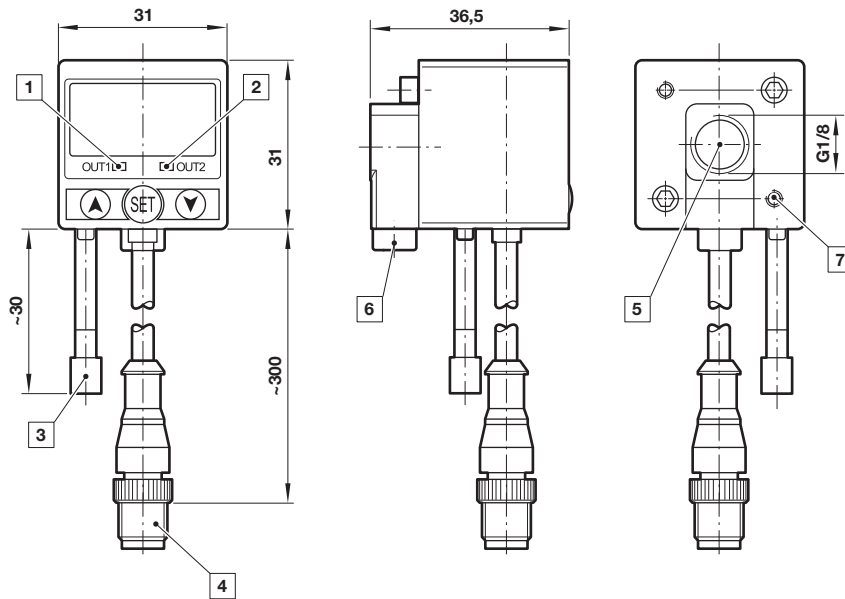
Quikclamp® with wall bracket

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/Third 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/Third 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.