


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 installation 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 IIC 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

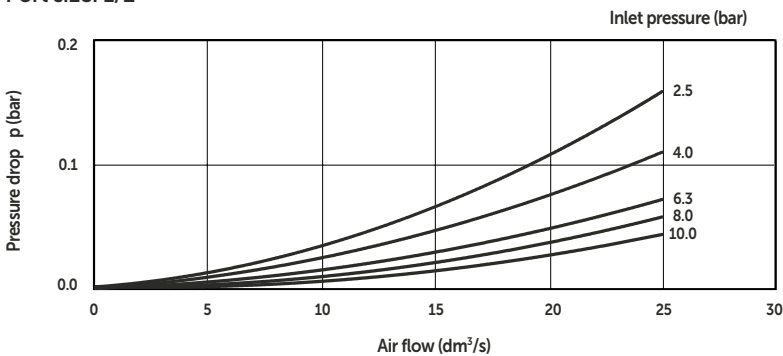
Typical performance characteristics

Inlet pressure (bar)	Maximum flow (dm ³ /s) *1)
2,50	15
4,00	20
6,30	25
8,00	28
10,00	30

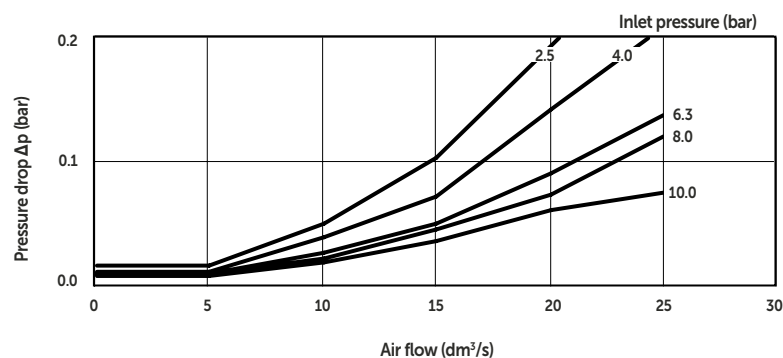
*1) Maximum flow to maintain stated oil removal performance

Flow characteristics

Port size: 1/2"







Port size: 3/8"






Accessories

<p>Wall mounting bracket</p>  <p>Page 5 840024-50KIT</p>	<p>Quikclamp</p>  <p>Page 5 840014-51KIT</p>	<p>Quikclamp with bracket assembled</p>  <p>Page 5 840014-52KIT</p>	<p>Hybrid Quikclamp *1</p>  <p>Page 5 840014-61</p>	<p>Hybrid Quikclamp with bracket assembled *1</p>  <p>Page 5 840014-62</p>																
<p>Pressure sensing block 1/4 PTF</p>  <p>Page 5 840016-50KIT</p>	<p>Pressure sensing block G1/4</p>  <p>Page 5 840016-51KIT</p>	<p>*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</p>																		
<p>Full flow porting block 3/4" PTF</p>  <p>Page 6 840028-50KIT</p>	<p>Full flow porting block G3/4</p>  <p>Page 6 840028-53KIT</p>	<p>Full flow porting block 3/4" PTF</p>  <p>Page 6 840028-68KIT</p>	<p>Full flow porting block G3/4</p>  <p>Page 6 840028-69KIT</p>	<p>Port Adaptors</p>  <p>Page 6</p> <table border="1"> <tr><td>1/4 PTF</td><td>840015-01KIT</td></tr> <tr><td>3/8 PTF</td><td>840015-02KIT</td></tr> <tr><td>1/2 PTF</td><td>840015-03KIT</td></tr> <tr><td>3/4 PTF</td><td>840015-04KIT</td></tr> <tr><td>G1/4</td><td>840015-09KIT</td></tr> <tr><td>G3/8</td><td>840015-10KIT</td></tr> <tr><td>G1/2</td><td>840015-11KIT</td></tr> <tr><td>G3/4</td><td>840015-12KIT</td></tr> </table>	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
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<p>Pressure switch interface block (18D pressure switch) G1/4</p>  <p>Page 6 0337717000000000</p>																				

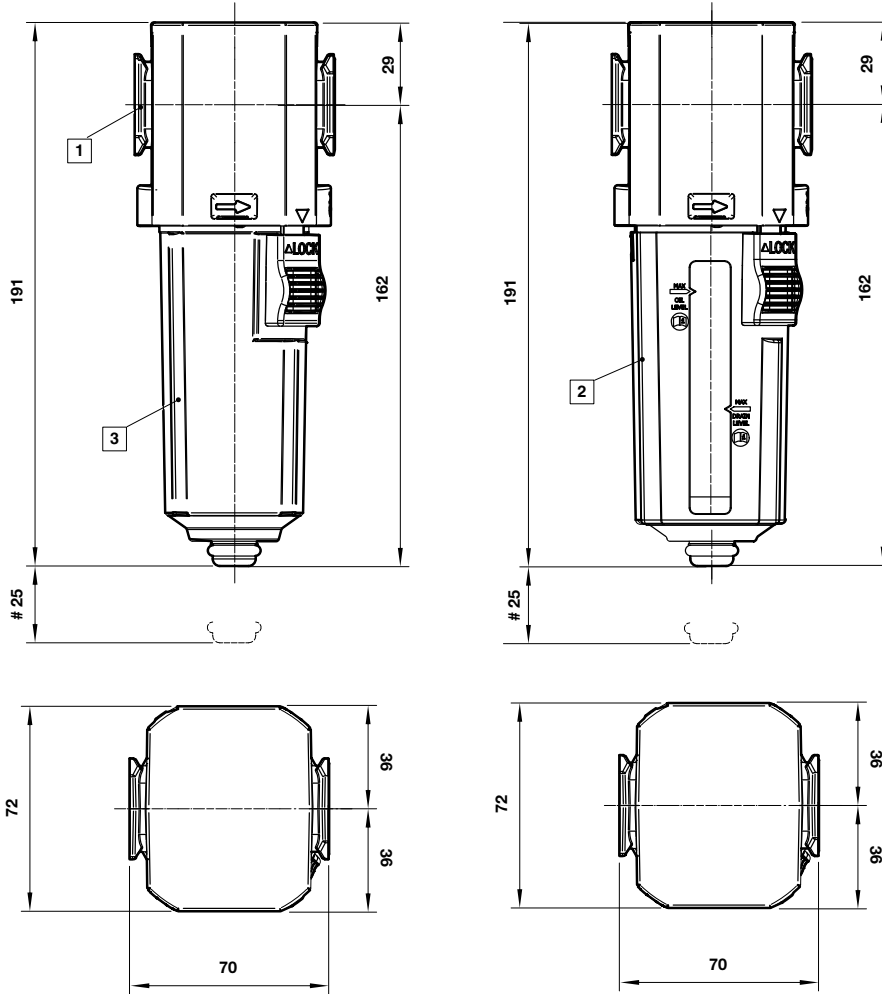
<p>Pressure switch 18D (0,5 ... 8bar) *1</p>  <p>Page 6 0881300</p>	<p>Digital pressure switch 51D (-1 ... 10 bar) *2</p>  <p>Page 7 0860810</p>	<p>Electronic Pressure Sensor – stand alone version *3</p>  <p>Q84G</p>	<p>IO-Link cables</p> <p>Connection cable M8x1 for integrated digital pressure switch</p>  <table border="1"> <thead> <tr> <th>Description</th> <th>Cable length (m)</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td rowspan="4">M8 female to M12 male</td> <td>0,6</td> <td>NC-084FS-124MS-A</td> </tr> <tr> <td>1,0</td> <td>NC-084FS-124MS-1</td> </tr> <tr> <td>2,0</td> <td>NC-084FS-124MS-2</td> </tr> <tr> <td>5,0</td> <td>NC-084FS-124MS-5</td> </tr> <tr> <td>M8 female to free end</td> <td>5,0</td> <td>NC-084FS-00000-5</td> </tr> </tbody> </table>	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
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<p>*1) Flanged version. For other pressure ranges, please see data sheet 5.11.001</p> <p>*2) For other pressure ranges, please see data sheet 5.11.385</p> <p>*3) Q84G stand alone electronic pressure sensor module see http://s.norgren.com/digital-gauge-iodd for data-sheet 8.900.905.</p>																		

Maintenance/Service

<p>Vapour Removal filter element</p>  <p>840041-50KIT</p>	<p>Filter Bowl (Guarded Poly bowl)</p>  <p>840025-52KIT</p>	<p>Filter Bowl (Metal)</p>  <p>840003-55KIT</p>
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Dimensions

Dimensions in mm
Projection/Third angle



Minimum clearance for bowl removal

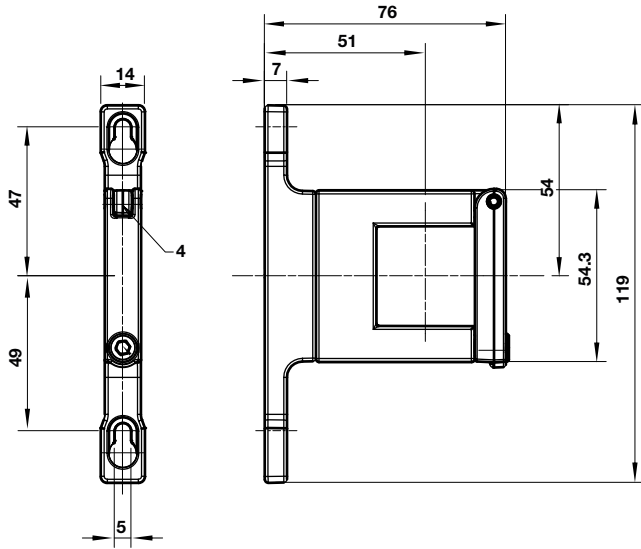
- ① Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
- ② Transparent bowl with guard
- ③ Metal bowl

Accessories

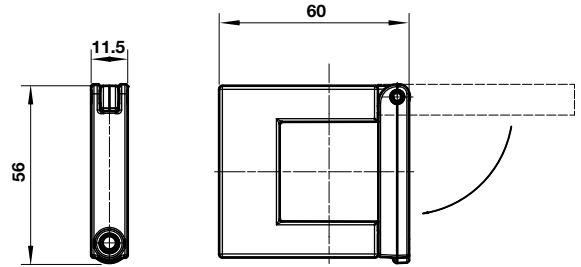
Dimensions in mm
Projection/Third angle



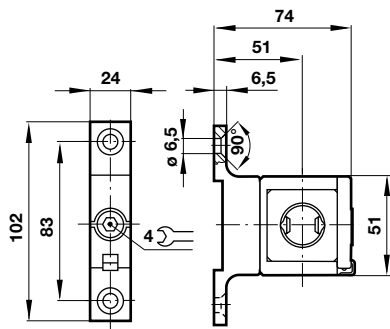
Quikclamp with wall bracket



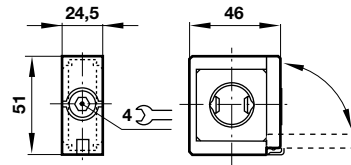
Quikclamp



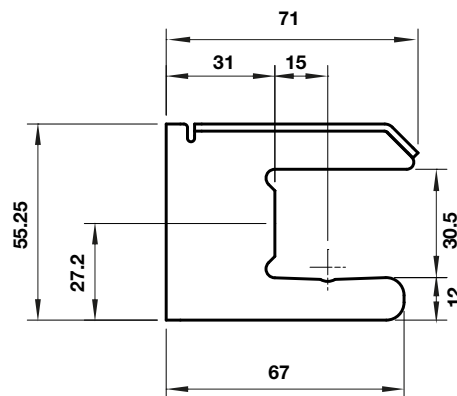
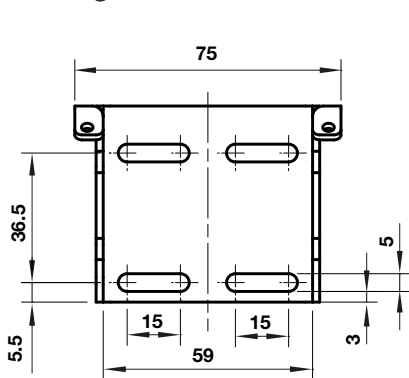
Hybrid-Quikclamp with wall bracket



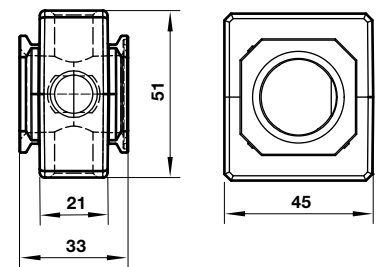
Hybrid-Quikclamp



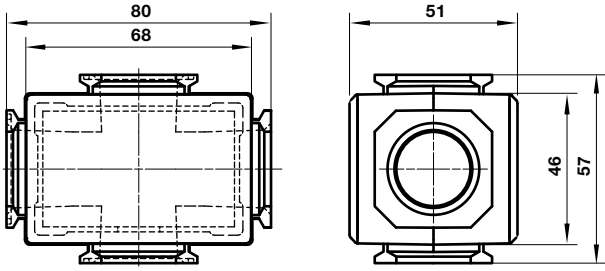
Mounting bracket



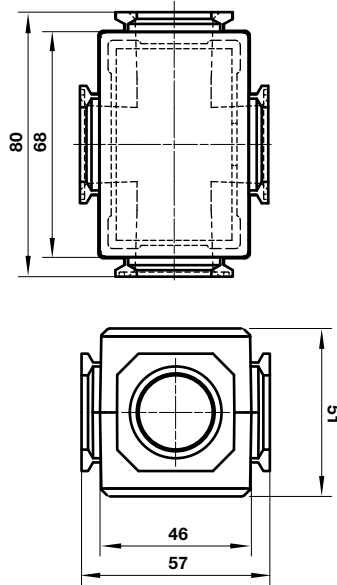
Pressure sensing block



Full flow porting block horizontal



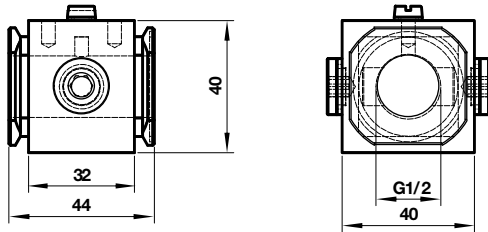
Full flow porting block vertical



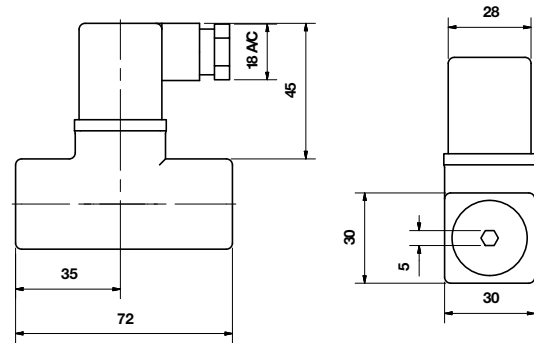
Dimensions in mm
Projection/Third angle



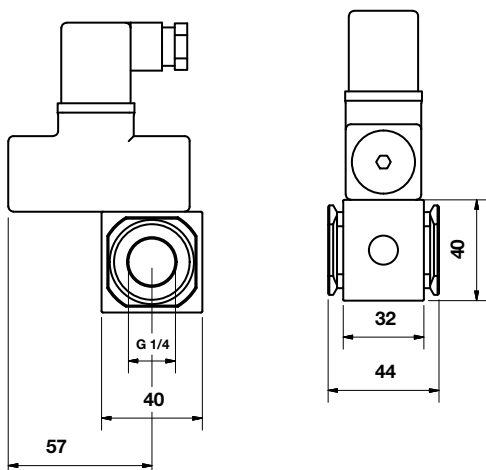
Porting block for 18D pressure switch



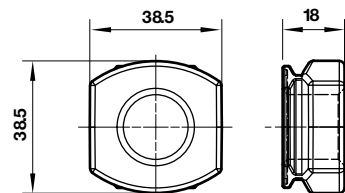
18D Pressure switch



18D Porting block and 18D assembled

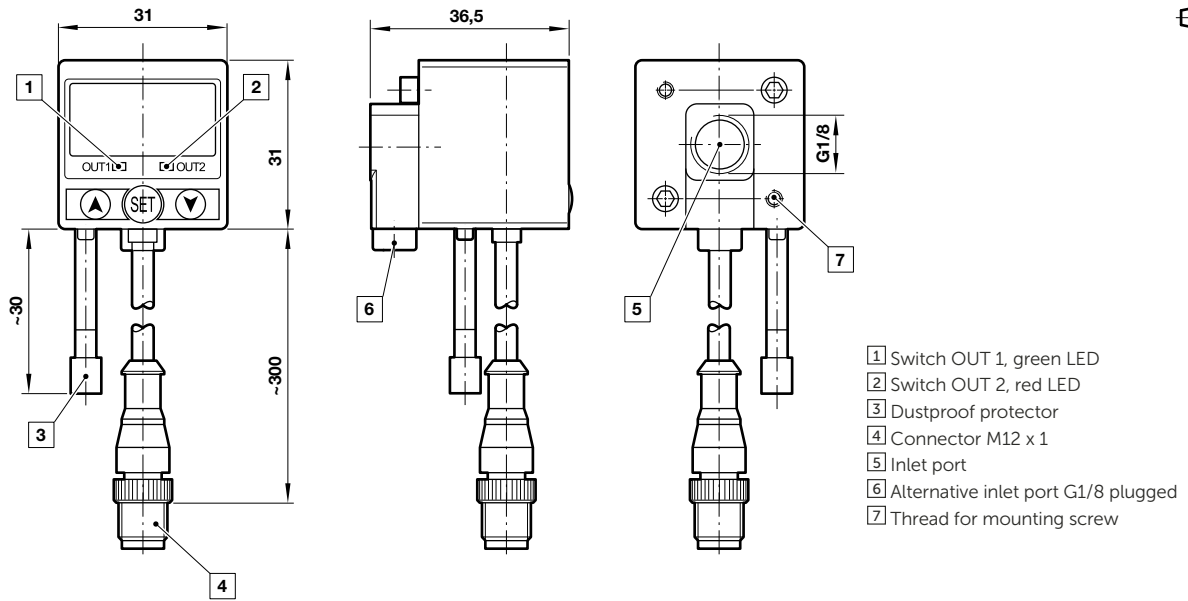


Pipe adaptor



51D Pressure switch - digital

Dimensions in mm
Projection/Third angle



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.