

# F84G - General purpose filter Excelon® Plus Modular System

- > Port size: 3/8" ... 3/4" (ISO G/ PTF)
- Excelon<sup>®</sup> Plus design allows in-line installation or modular installation with other Excelon<sup>®</sup> Plus products
- 5 or 40 micron particle and high efficiency water removal (> 98%)
- > Double safety lock bow
- Light weight polycarbonate bowl

#### 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

- 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)
- > K DoC in accordance with 2014/34/EU/ATEX



### Flow:

78 dm<sup>3</sup>/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<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).

#### Atex:

#### 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
$\rightarrow$	G3/4	Auto	40	Guarded polycarbonate	0,38	F84G-6GN-AP3
Ý	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
$\forall$	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



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#### **Option selector** F84G-\*\*N-\*\*\* Port size Substitute Element Substitute 3/8" 3 5 um 1 1/2" 40 µm (standard) 4 3 3/4" Substitute 6 Bowl Thread form Substitute Transparent with guard Ρ (standard) PTF A Metal with liquid indicator D G ISO G parallel (standard) (optional) Drain Substitute Manual (standard) Q Auto drain (standard) Α

#### 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".



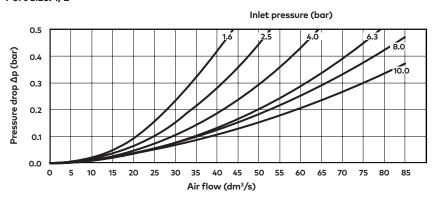
#### Ex h IIC T6 Gb Ex h IIIC T85°C Db ATEX Certification No.: NORGREN 18.0001X

For a copy of the Declaration of Conformity (DoC) please use the link <u>http://cdn.norgren.com/pdf/IM\_Excelon\_Plus\_EN\_final.pdf</u>

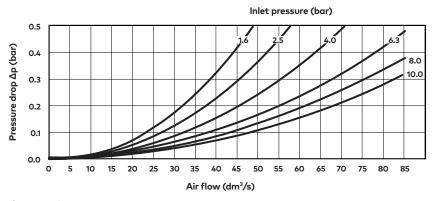


#### **Flow characteristics**

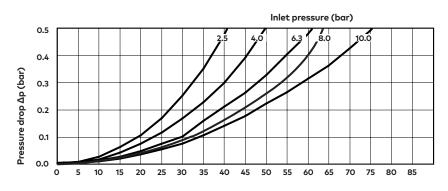
Element 40 µm Port size: 1/2"



Element 5 µm Port size: 1/2"



Element 40 µm Port size:3/8"







Inlet pressure (bar) 0.5 <u>1</u>0.0 Pressure drop Δp (bar) 0.4 0.3 0.2 0.1 0.0 0 5 10 15 25 35 45 20 30 40 50 55 60 65 70 75 80 85 Air flow (dm<sup>3</sup>/s)



#### Accessories

Wall mounting bracket Page 7



Hybrid Quikclamp® \*1





Quikclamp®



\*1) To conr 74/73 units. Having the nting bracket. A Quikclar of a combination unit

	Port Adaptors				
	Page 8				
ı	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			

840015-11KIT

840015-12KIT

Quikclamp®

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G1/2

G3/4

840014-52KIT

with bracket assembled





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Page 8

0881300

840028-50KIT

(0,5 ... 8bar) \*1

Pressure switch 18D





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Page 8

Q84G

Full flow porting block G3/4



Page 8 840028-69KIT

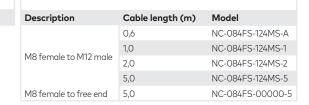
#### **IO-Link cables**



033771700000000

Connection cable M8x1 for integrated digital pressure switch





*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

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0860810

see http://s.norgren.com/digital-gauge-iodd for data-sheet 8.900.905.

	Page /
1	840014-62
e same hole centres o	s to old Excelon 74/73 unit: as 74 series mounting brac the overall width of a comb
sensing block	Pressure sensing block G1/4

Page 7 840016-51KIT



**Digital pressure switch** 

51D (-1 ... 10 bar) \*2

840028-53KIT







**Electronic Pressure Sensor** 

stand alone version \*3

840028-68KIT



#### Maintenance/Service



Filter Bowl (Guarded Poly bowl

with auto drain 6 mm PIF)



Filter Bowl (Guarded Poly

bowl with manual drain)

840038-51KIT





6000-61KIT



840003-51KIT







Filter Bowl (Metal with S/ Glass & auto drain, 1/4 PIF) 840003-56KIT

840025-50KIT

Spare parts

840025-51KIT

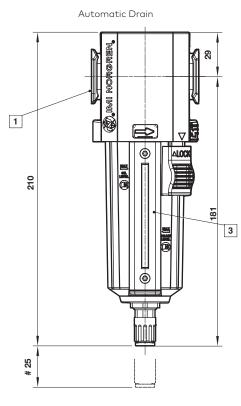


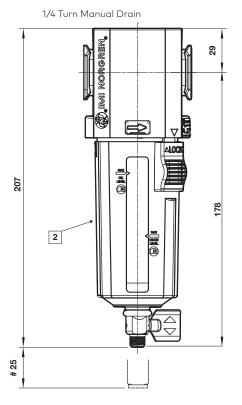
840025-53KIT

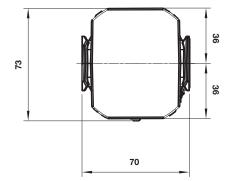


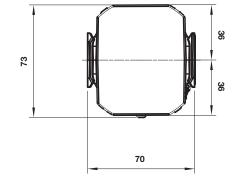


# Dimensions









# 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

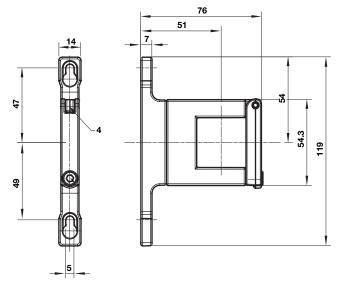


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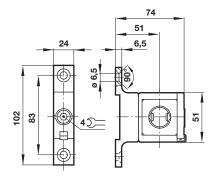


### Accessories

Quikclamp° with wall bracket



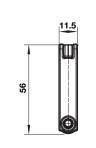
# Hybrid-Quikclamp° with wall bracket

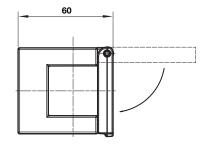


# Quikclamp®

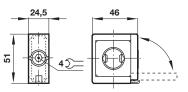
Dimensions in mm Projection/First angle

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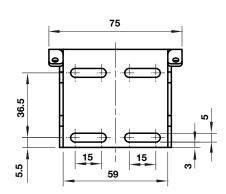


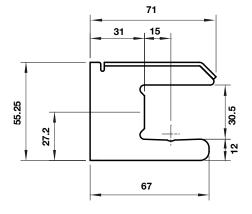


Hybrid-Quikclamp°

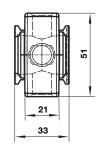


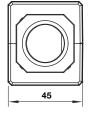
# Mounting bracket





# Pressure sensing block

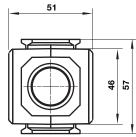






# Full flow porting block horizontal

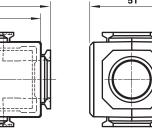
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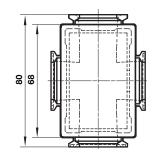


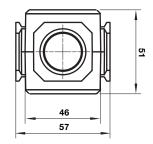
# Full flow porting block vertical

Dimensions in mm Projection/First angle

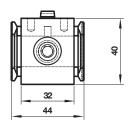


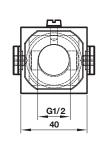




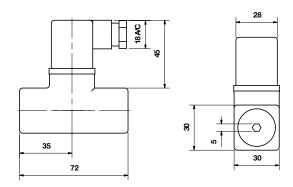


Porting block for 18D pressure switch

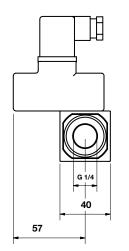


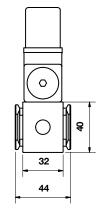


#### 18D Pressure switch

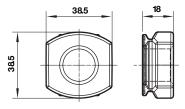


# 18D Porting block and 18D assembled



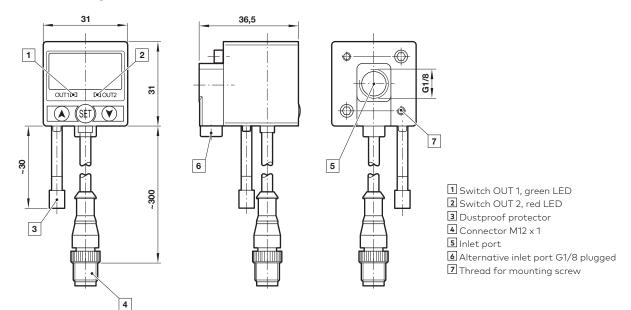


Pipe adaptor





#### 51D Pressure switch - digital



#### 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.

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2017 - 9213b) © 2020 Norgren Ltd