

# **Industrial Automation**

**IMI Norgren** 

# HF84C - Oil removal filter For Extreme Temperature applications 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
- Easy filter maintenance system. Element is removed together with the bowl for faster and cleaner servicing

- -Double safety lock bowl
- -Salt Spray compliant to ISO 9227
- -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>
- -ABS cover with High impact properties









# **Technical features**

## Medium:

Compressed air only

Maximum supply pressure: 20 bar (290 psi)

Remaining oil content:  $0.01 \,\mathrm{mg/m^3}$  at  $+21^{\circ}\mathrm{C}$  ( $+69^{\circ}\mathrm{F}$ )

Particle removal: To 0.01 µm

Port size:

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

Maximum flow to maintain stated oil removal performance at challenge rate of 4 mg/m<sup>3</sup> HF84C: 25 dm<sup>3</sup>/s, at port size:

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:

-40 ... +80°C (-40 ... +176°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Install an HF84G filter with a 5 µm filter element upstream of the HF84C filter for maximum service life.

Filters HF84 are in conformity with Atex 2014/34/EU

⟨ξ<sub>x</sub>⟩ II 2 GD Ex h IIC T6 Gb EX h IIIC T85°C Db

#### Materials:

Body: Die cast aluminium Body covers: ABS (Magnum 3904) Metal Bowl: Die cast Aluminium Filter element: Synthetic fibre & Polyethylene foam Bowl O-ring: Low temperature Nitrile Flastomers:

Low temperature Nitrile

# Technical data HF84C - standard models

Symbol	Port size	Drain	Bowl	Weight (kg)	Model
<b></b>	G3/8	Auto	Metal with level indicator	0.52	HF84C-3GN-AD0
	G1/2	Auto	Metal with level indicator	0.51	HF84C-4GN-AD0
	G3/4	Auto	Metal with level indicator	0.49	HF84C-6GN-AD0
<b>-</b>	G3/8	Manual	Metal with level indicator	0.52	HF84C-3GN-MD0
	G1/2	Manual	Metal with level indicator	0.51	HF84C-4GN-MD0
	G3/4	Manual	Metal with level indicator	0.49	HF84C-6GN-MD0



#### Option selector HF84C-★★N-★★0 Port size Substitute Substitute < Bowl Metal Μ 3/8 3 1/2" Metal with level indicator D 4 Substitute 3/4" Drain 6 Thread form Manual Μ Substitute PTF Auto drain Α Α Open ended \*1) (with male thread adaptor) ISO G G Ν \*1) Available on request

# Typical performance characteristics

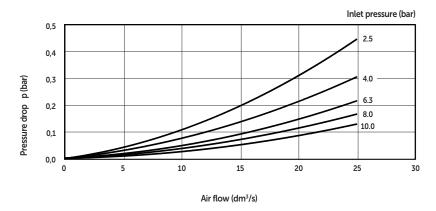
Inlet pressure (bar)	Maximum flow (dm³/s) *1)
2.50	12
4.00	17
6.30	25
8.00	30
10.00	35

<sup>\*1)</sup> Maximum flow to maintain stated oil removal performance

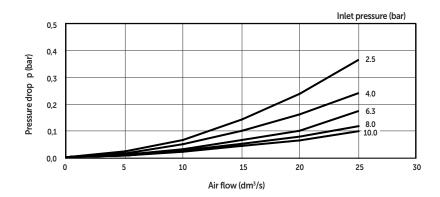
# Flow characteristics

HF84C

Port size: 1/2", wet element



# Port size:3/8"





# **Accessories**













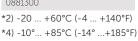
















# Maintenance/Service







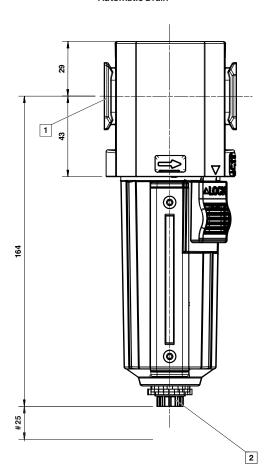
# **Dimensions**

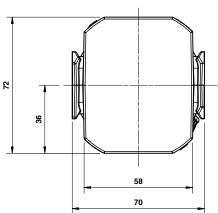
Dimensions in mm Projection/First angle

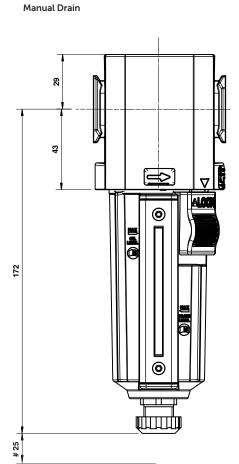




Automatic Drain







# Minimum clearance for bowl removal

1 Main ports 3/8", 1/2" or 3/4"(ISO G/PTF)
2 Port size automatic drain : G1/8

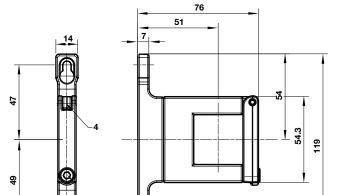


# **Accessories**

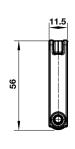
Dimensions in mm Projection/First angle

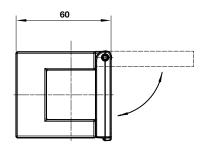




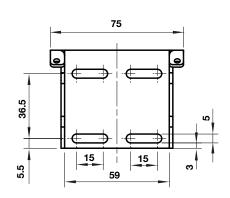


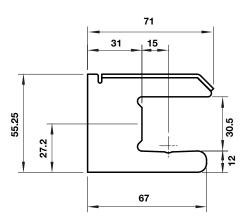




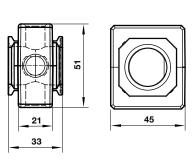


Mounting bracket





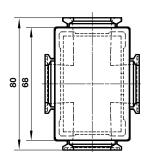
Pressure sensing block



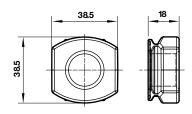
Full flow porting block horizontal

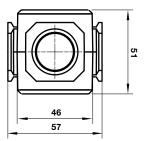
80 51

Full flow porting block vertical



# Pipe adaptor





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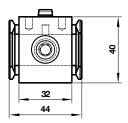


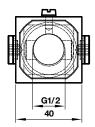
# Porting block for 18D pressure switch

Dimensions in mm Projection/First angle



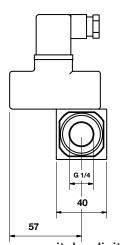


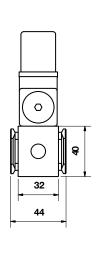


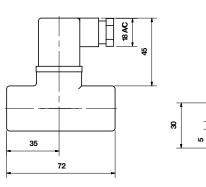


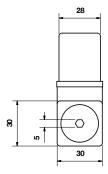
18D Porting block and 18D assembled

18D Pressure switch

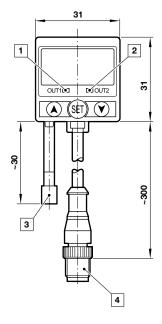


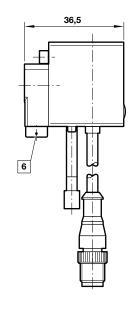


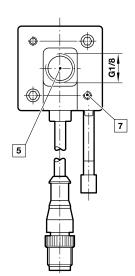




51D Pressure switch - digital







- 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.