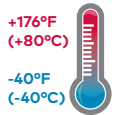


HF84C - Oil Removal Filter For Extreme Temperature Applications Excelon® Plus Modular System



- > 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/m³
- > ABS cover with high impact properties



Technical features

Medium:

Compressed air only

Maximum supply pressure:

290 psi (20 bar)

Remaining oil content:

0.01 mg/m³ at +69°F (21°C)

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 standard oil removal performance at challenge rate of 4 mg/m³
HF84C: 53 scfm (25 dm³/s), at port size: 1/2"

Operating pressure: 91 psi (6.3 bar)

Drain:

Manual or automatic

Automatic drain operating conditions (float operated):

Bowl pressure required to close drain: > 5 psi (0.35 bar)
Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)
Minimum air flow required to close drain: 2 scfm (1 dm³/s)


Ambient/Media temperature:

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

Note:

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



Atex:

Filters HF84 are in conformity with Atex 2014/34/EU
 II 2 GD
 Ex h IIC T6 Gb
 EX h IIIC T85°C Db

Materials:

Body: Die cast aluminum
 Body covers: ABS (Magnum 3904)
 Metal Bowl: Die cast aluminum
 Filter element: Synthetic fibre & Polyethylene foam
 Bowl O-ring: Low temperature nitrile
 Elastomers: Low temperature nitrile

Technical data HF84C - standard models

| Symbol | Port size | Drain | Bowl | Weight lbs. (kg) | Model |
|---|-----------|--------|----------------------------|------------------|---------------|
|  | 3/8 | Auto | Metal with level indicator | 1.15 (0.52) | HF84C-3AN-ADO |
| | 1/2 | Auto | Metal with level indicator | 1.12 (0.51) | HF84C-4AN-ADO |
| | 3/4 | Auto | Metal with level indicator | 1.08 (0.49) | HF84C-6AN-ADO |
|  | 3/8 | Manual | Metal with level indicator | 1.15 (0.52) | HF84C-3AN-MDO |
| | 1/2 | Manual | Metal with level indicator | 1.12 (0.51) | HF84C-4AN-MDO |
| | 3/4 | Manual | Metal with level indicator | 1.08 (0.49) | HF84C-6AN-MDO |

Option selector

HF84C-***N-***0

| Port size | Substitute |
|-------------|------------|
| 3/8" | 3 |
| 1/2" | 4 |
| 3/4" | 6 |
| Thread form | Substitute |
| PTF | A |
| ISO G | G |

| Bowl | Substitute |
|--|------------|
| Metal | M |
| Metal with level indicator | D |
| Drain | Substitute |
| Manual | M |
| Auto drain | A |
| Open ended *1) (with male thread adaptor) | N |

*1) Available on request

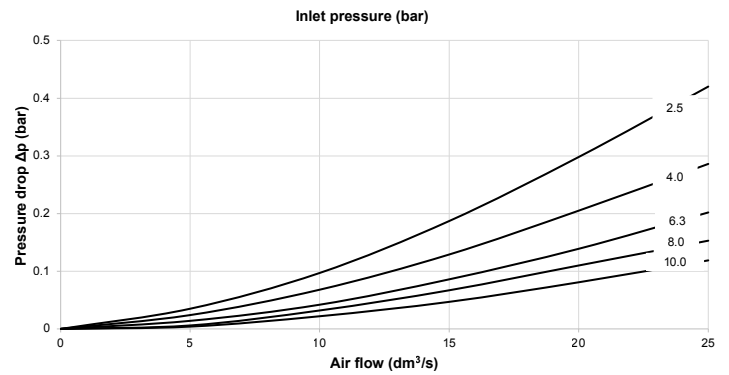
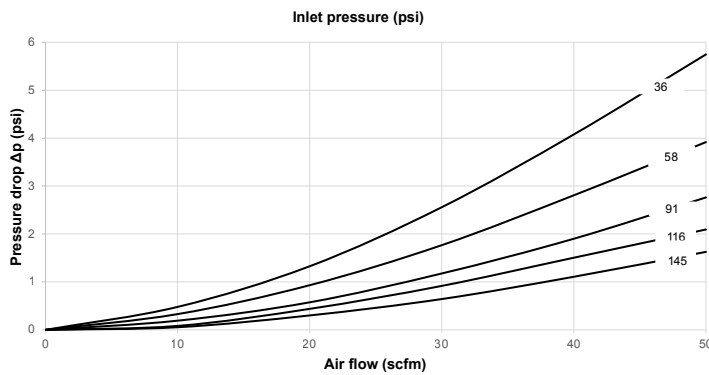
Typical performance characteristics

| Inlet pressure psi (bar) | Maximum flow scfm (dm ³ /s)*1) |
|-----------------------------|--|
| 36.26 (2.50) | 25 (12) |
| 58.01 (4.00) | 36 (17) |
| 91.37 (6.30) | 53 (25) |
| 116.03 (8.00) | 64 (30) |
| 145.04 (10.00) | 74 (35) |

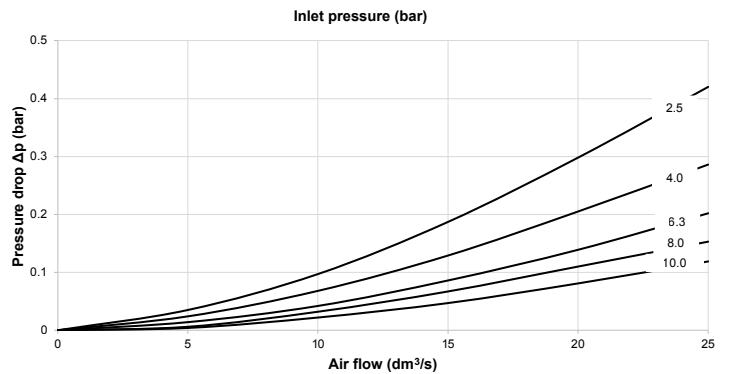
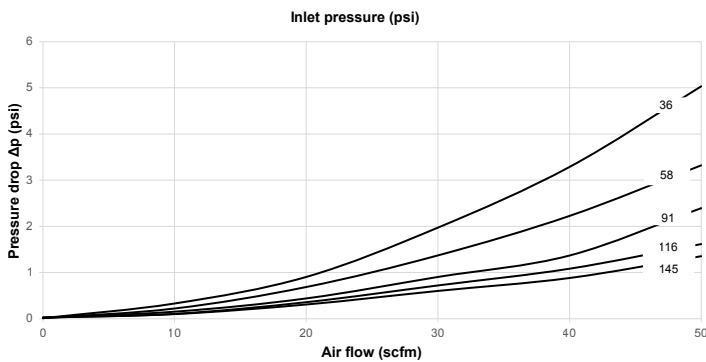
*1) Maximum flow to maintain stated oil removal performance

Flow characteristics

Port size: 1/2"



Port size: 3/8"



Accessories

Wall mounting bracket



Page 5

840024-50KIT

Quikclamp®



Page 5

H840014-51KIT

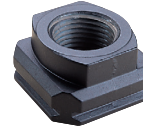
Quikclamp® with bracket assembled



Page 5

H840014-52KIT

Port Adaptors



Page 5

| | |
|---------|---------------|
| 3/8 PTF | H840015-02KIT |
| 1/2 PTF | H840015-03KIT |
| 3/4 PTF | H840015-04KIT |
| G3/8 | H840015-10KIT |
| G1/2 | H840015-11KIT |
| G3/4 | H840015-12KIT |

Pressure sensing block 1/4 PTF



Page 5

H840016-50KIT

Pressure sensing block G1/4



Page 5

H840016-51KIT

Full flow porting block, horizontal, 3/4 PTF



Page 6

H840028-50KIT

Full flow porting block, horizontal, G3/4



Page 6

H840028-53KIT

Full flow porting block, vertical, 3/4 PTF



Page 6

H840028-68KIT

Full flow porting block, vertical, G3/4



Page 6

H840028-69KIT

Pressure switch 18D 7.25 ... 116 psi (0.5 ... 8 bar) *4



Page 6

0881300000000000

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



Page 6

0337717000000000

*2) -4 ... +140°F (-20 ... +60°C)

*4) -14° ... +185°F (-10° ... +85°C)

Maintenance/Service

Coalescing filter element



H840044-50KIT

Auto drain kit with metal nut



3000-40

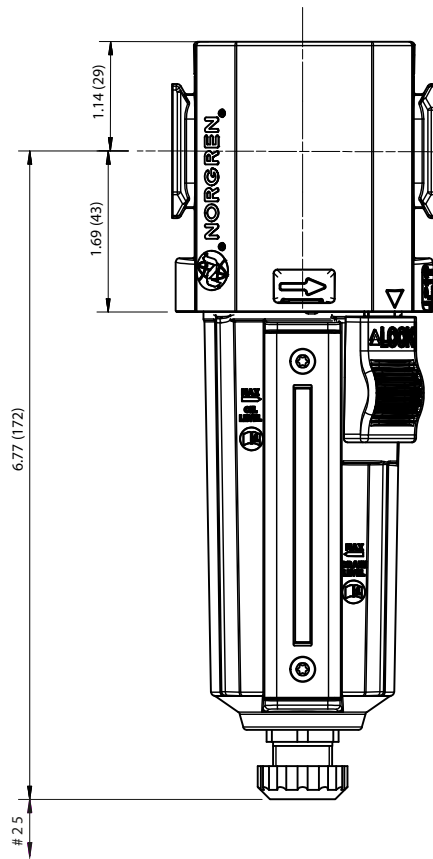
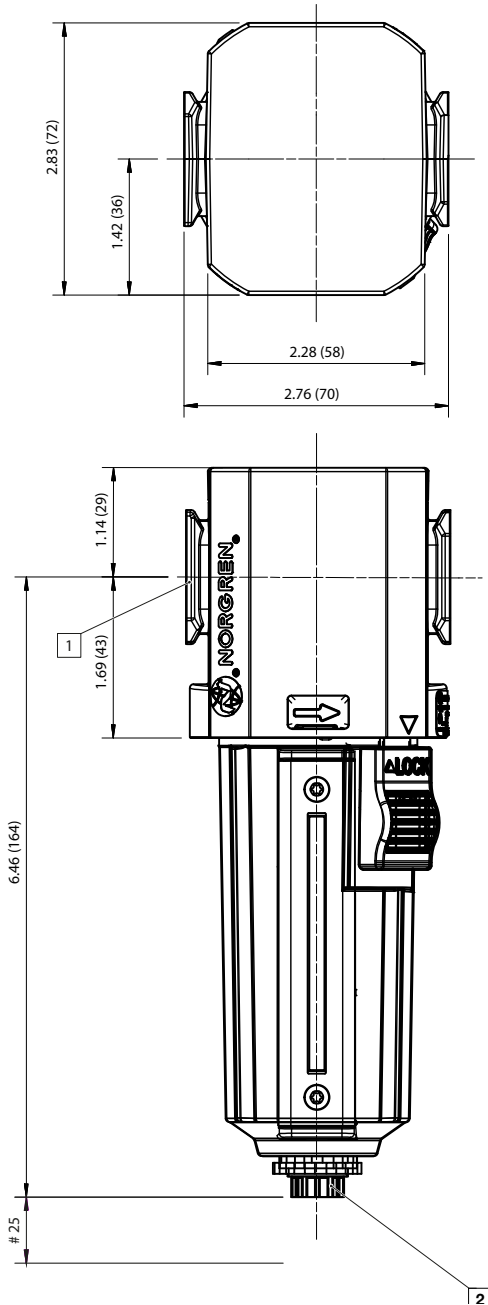
Dimensions

Dimensions in inches (mm)
Projection/Third angle



Automatic Drain

Manual Drain

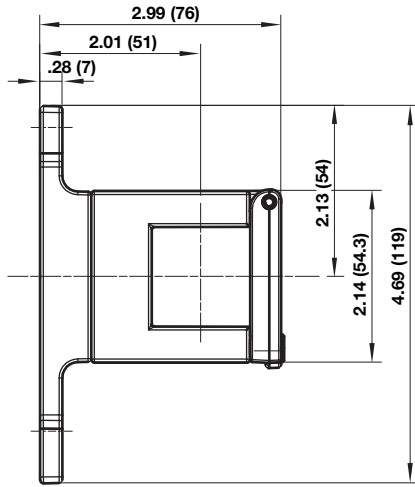
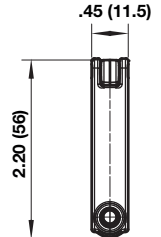
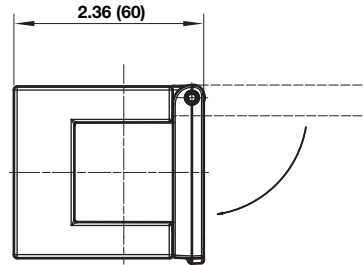
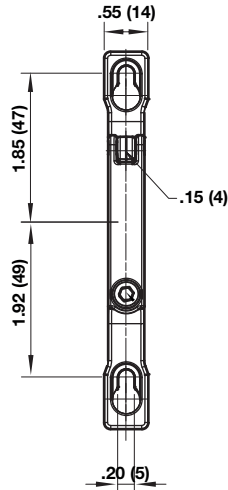
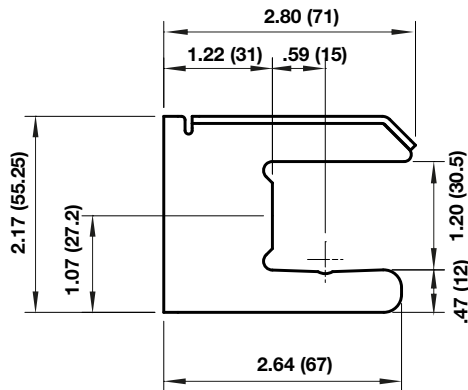
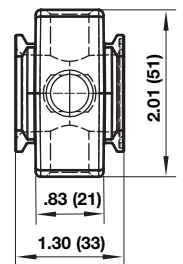
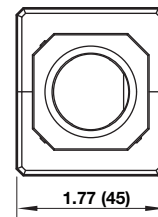
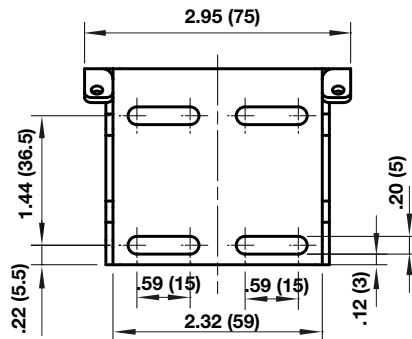
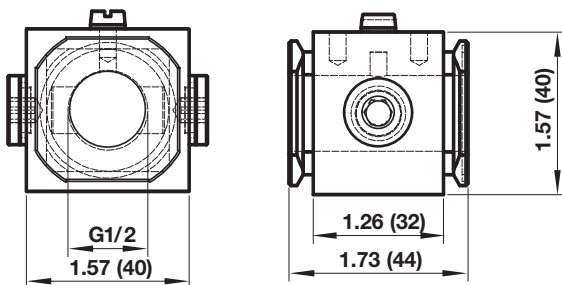
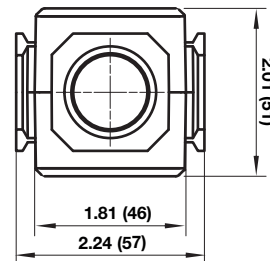
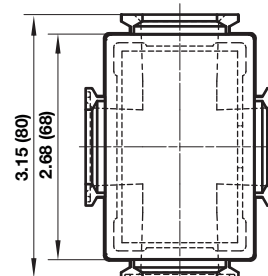
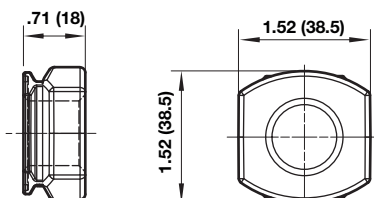


Minimum clearance for bowl removal

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

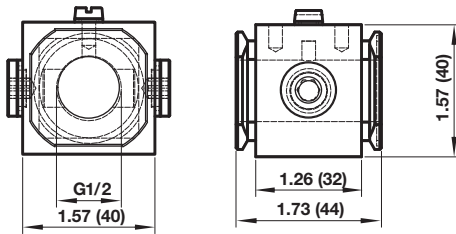
Accessories

 Dimensions in inches (mm)
 Projection/Third angle

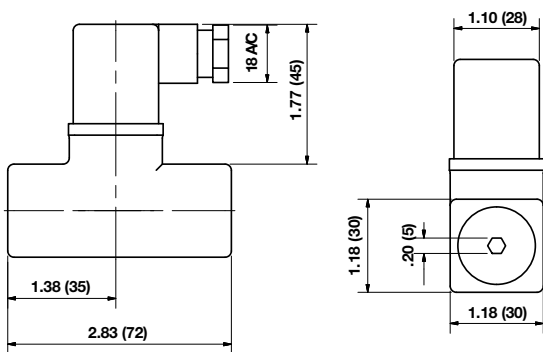
Quikclamp® with wall bracket

Quikclamp®

Mounting bracket

Pressure sensing block

Full flow porting block horizontal

Full flow porting block vertical

Pipe adaptor


Porting block for 18D pressure switch

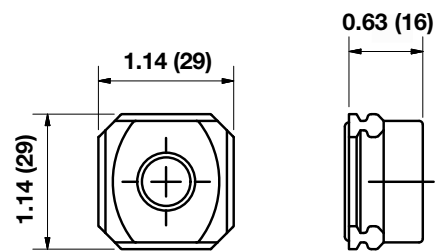
Dimensions in inches (mm)
Projection/Third angle



18D Porting block and 18D assembled



18D Pressure switch



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 IMI Precision Engineering. 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.