

## Industrial Automation

**IMI Norgren** 

### LF84C -

# Oil removal filter for Rail application 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 (500 hrs)
- Shock and vibration tested to EN61373 Category 2\*

- Fire & Smoke compliant to EN45545-2 (HL3) grouping rules\*
   \* (for single units only, please consult our technical department regarding combinations of these units)
- 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







#### **Technical features**

Medium:

Compressed air only

Maximum supply pressure: 20 bar (290 psi)

Remaining oil content: 0.01 mg/m3 at +21°C (+69°F)

Particle removal: To 0.01 µm

Dort size:

02/21

Port size: G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF

#### Flow:

Maximum flow to maintain stated oil removal performance at challenge rate of 4 mg/m3 LF84C: 25 dm3/s, at port size: 1/2"

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 dm3/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).

#### Note

Install an LF84G filter with a 5 µm filter element upstream of the LF84C filter for maximum service life

#### Atex:.

Filters LF84 are in conformity with Atex 2014/34/EU

 $\mathbf{x}$ 

II 2 GD Ex h IIC T6 Gb EX h IIIC T85°C Db

#### Materials:

Body: Die cast aluminium
Body covers: Magnum 3904 High Impact covers
Metal Bowl: Die cast Aluminium
Filter element: Synthetic fibre &
Polyethylene foam
Bowl O-ring:
Low temperature Nitrile
Elastomers:
Low temperature Nitrile

#### Technical data LF84C - standard models

Symbol	Port size	Drain	Bowl	Weight	Model
				(kg)	
<b>-</b>	G3/8	Auto	Metal	0.52	LF84C-3GN-AM0
	G1/2	Auto	Metal	0.51	LF84C-4GN-AM0
	G3/4	Auto	Metal	0.49	LF84C-6GN-AM0
<b>-</b>	G3/8	Manual	Metal	0.52	LF84C-3GN-MM0
	G1/2	Manual	Metal	0.51	LF84C-4GN-MM0
	G3/4	Manual	Metal	0.49	LF84C-6GN-MM0



#### **Option selector** LF84C- ★ ★ N- ★ M0 Port size Substitute Substitute Drain 3/8 3 Manual Μ 1/2" 4 Auto drain Α Open ended \*1) (with male thread adaptor) 3/4' Ν 6 Thread form Substitute PTF Α

ISO G

#### 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

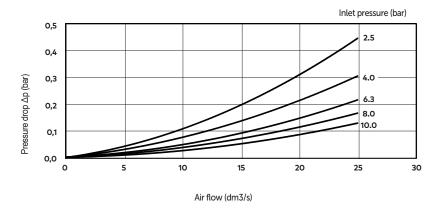
G

\*1) Maximum flow to maintain stated oil removal performance

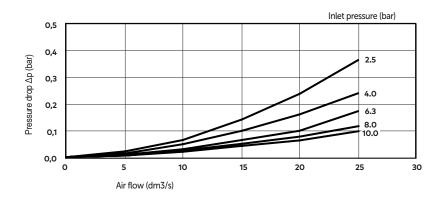
#### Flow characteristics

LF84C

Port size: 1/2", wet element



Port size:3/8"



<sup>\*1)</sup> Available on request



#### **Accessories**





















#### Maintenance/Service







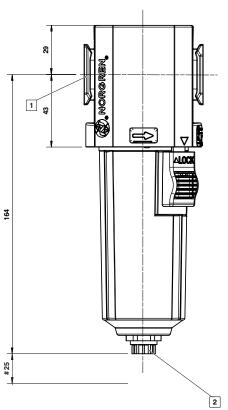
#### **Dimensions**

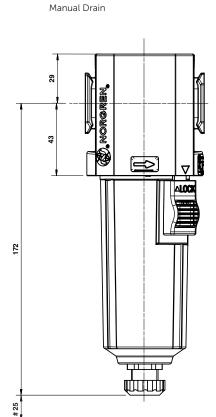
Dimensions in mm Projection/First angle

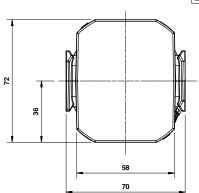




Automatic Drain





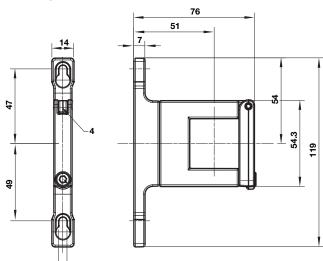


# Minimum clearance for bowl removal
1 Main ports 3/8", 1/2" or 3/4"
(ISO G/PTF)



#### **Accessories**

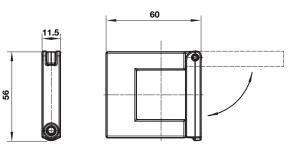
#### Quikclamp® with wall bracket



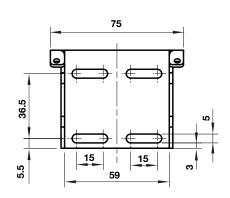
#### **Quikclamp®**

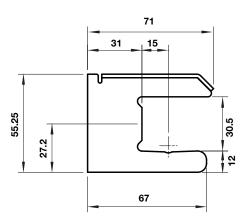


Dimensions in mm

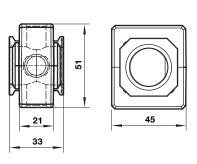


#### Mounting bracket



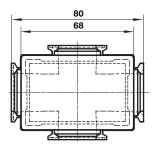


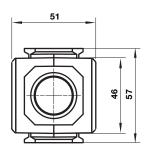
Pressure sensing block

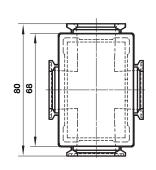


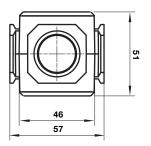
Full flow porting block horizontal

Full flow porting block vertical









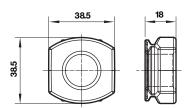


#### Pipe adaptor

Dimensions in mm Projection/First 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 IMI Precision Engineering, 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.