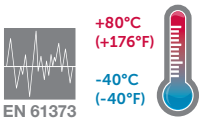
LB84G - Filter/regulator for Rail application Excelon® Plus Modular System

- Port size: 3/8" ... 3/4" (ISO G/PTF)
- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 5 or 40 micron particle and high efficiency water removal (> 98%)
- 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*
  *(includes qualification category 1, class A and B)
- 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 classes in accordance to ISO8573-1:2010: 7:8:4 (40µm) 6:8:4 (5µm)



Technical features filter/regulator

Medium:
Compressed air only

Maximum supply pressure:
20 bar (290 psi)

Outlet pressure ranges:
0.3 ...10 bar (4 ... 145 psi),
0.3 ... 4 bar (4 ... 58 psi) optional

Filter element:
5 µm & 40 µm

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

Gauge:
Gauge port as standard
(Rc 1/8 or 1/8 PTF)
Integrated gauge as option

Flow:
103 dm^3/s at port size: ½",
Inlet pressure 10 bar (145 psi),
6.3 bar (91 psi) set pressure and
a Δp: 1 bar (14.5 psi) drop from set.

Filter element: 5µm & 40µm
Diaphragm Type:
Relieving

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^3/s (2 scfm)

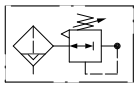
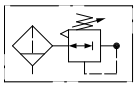
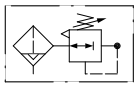
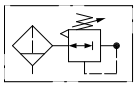
Ambient/Media temperature:
Unit with gauge port without integrated gauge :
-40 ... +80°C (-40 ... +176°F)

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

Atex:
Filter/regulators LB84 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 aluminium
Body covers: Magnum 3904 - High Impact covers
Bonnet: Die cast aluminium
Valve: Brass and Low temperature Nitrile
Metal Bowl: Die cast Aluminium
Filter element: sintered Polypropylene
Diaphragm: Low temperature Silicone, polyester reinforced
Lower spring rest and diaphragm retainer: Aluminium
Bowl O-ring: Low temperature Nitrile
Elastomers: Low temperature Nitrile

Technical data LB84G - standard models with gauge port Rc1/8 (without gauge)

Symbol	Port size	Drain	Pressure range (bar)	Filter element (µm)	Bowl	Weight (kg)	Model *1)
	G3/8	Auto	0.3 ... 10	5	Metal	0.95	LB84G-3GT-AM1-RMN
	G1/2	Auto	0.3 ... 10	5	Metal	0.94	LB84G-4GT-AM1-RMN
	G3/4	Auto	0.3 ... 10	5	Metal	0.92	LB84G-6GT-AM1-RMN
	G3/8	Manual	0.3 ... 10	5	Metal	0.94	LB84G-3GT-MM1-RMN
	G1/2	Manual	0.3 ... 10	5	Metal	0.93	LB84G-4GT-MM1-RMN
	G3/4	Manual	0.3 ... 10	5	Metal	0.91	LB84G-6GT-MM1-RMN
	G3/8	Auto	0.3 ... 10	40	Metal	0.95	LB84G-3GT-AM3-RMN
	G1/2	Auto	0.3 ... 10	40	Metal	0.94	LB84G-4GT-AM3-RMN
	G3/4	Auto	0.3 ... 10	40	Metal	0.92	LB84G-6GT-AM3-RMN
	G3/8	Manual	0.3 ... 10	40	Metal	0.94	LB84G-3GT-MM3-RMN
	G1/2	Manual	0.3 ... 10	40	Metal	0.93	LB84G-4GT-MM3-RMN
	G3/4	Manual	0.3 ... 10	40	Metal	0.91	LB84G-6GT-MM3-RMN

*1) All models shown here are supplied with gauge port applicable for flow direction left to right.
With flow direction right to left please use the online configurator www.norgren.com/air-preparation-configurator or contact Norgren

Option selector *1)

LB84G-★★T-★M★-R★★

Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread form	**Substitute**
PTF	A
ISO G	G
Drain	**Substitute**
Manual (standard)	M
Auto drain (standard)	A
Open ended (with male thread adaptor)	N*2)

Gauge	Substitute
Without integrated gauge but with gauge port 1/8"	N
With integrated gauge *4)	G
Pressure range *3)	**Substitute**
0.3 ... 4 bar	F
0.3 ... 10 bar	M
Element	**Substitute**
5 µm	1
40 µm	3

*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator www.norgren.com/air-preparation-configurator or contact Norgren

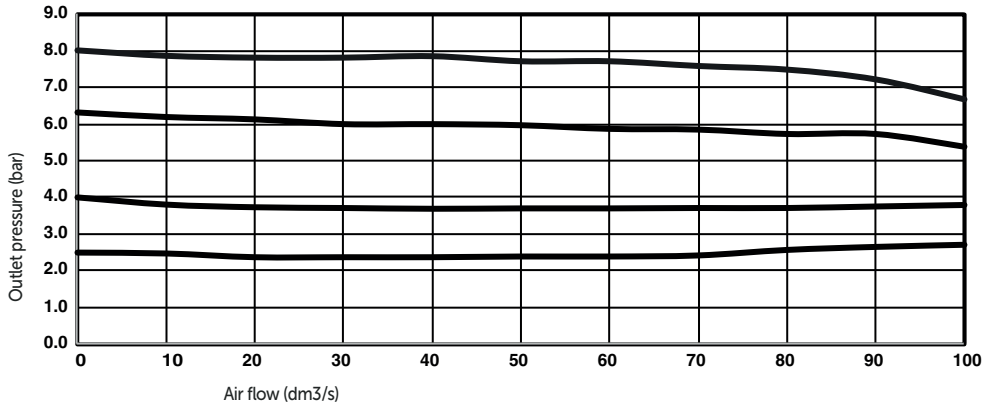
*2) Available on request

*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

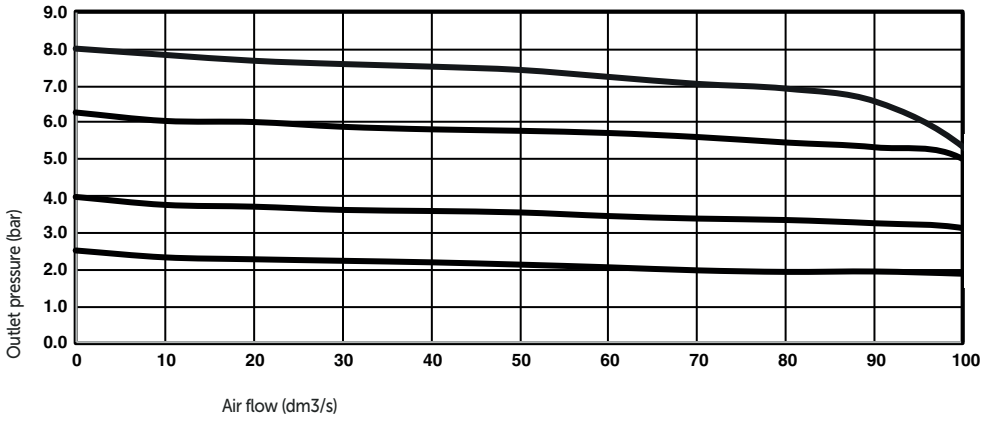
*4) Attention : With integrated gauge temperature range of the unit changes to -20°C ... +65°C

Flow characteristics

Inlet pressure: 10 bar (145 psi)
Port size: 1/2", 40 µm element



Inlet pressure: 10 bar (145 psi)
Port size: 3/8", 40 µm element



Accessories

Quikclamp®

Page 6

L840014-51KIT

Quikclamp® with bracket assembled

Page 6

L840014-52KIT

Neck mounting bracket and panel nut

Page 6

840068-51KIT

Panel mounting nut

Page 6

840048-89KIT

Mounting bracket

Page 6

840024-50KIT

Gauge adaptor kit
1/8 PTF

L840100-01KIT

Gauge adaptor kit
R 1/8

L840143-02KIT

Full flow porting block horizontal, 3/4 PTF

Page 7

L840028-50KIT

Full flow porting block horizontal, G3/4

Page 7

L840028-53KIT

Full flow porting block vertical, 3/4"PTF

Page 7

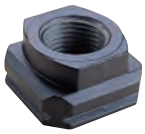
L840028-68KIT

Full flow porting block vertical, G3/4"

Page 7

L840028-69KIT

Port Adaptors



Page 7

3/8 PTF	L840015-02KIT
1/2 PTF	L840015-03KIT
3/4 PTF	L840015-04KIT
G3/8	L840015-10KIT
G1/2	L840015-11KIT
G3/4	L840015-12KIT

Pressure sensing block
1/4 PTF

Page 7

L840016-50KIT

Pressure sensing block
G1/4

Page 7

L840016-51KIT

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

Page 7

0337717000000000

Maintenance/Service

Filter cartridge
5 micron

L840038-50KIT

Filter cartridge
40 micron

L840038-51KIT

Auto drain kit with metal Nut

3000-40

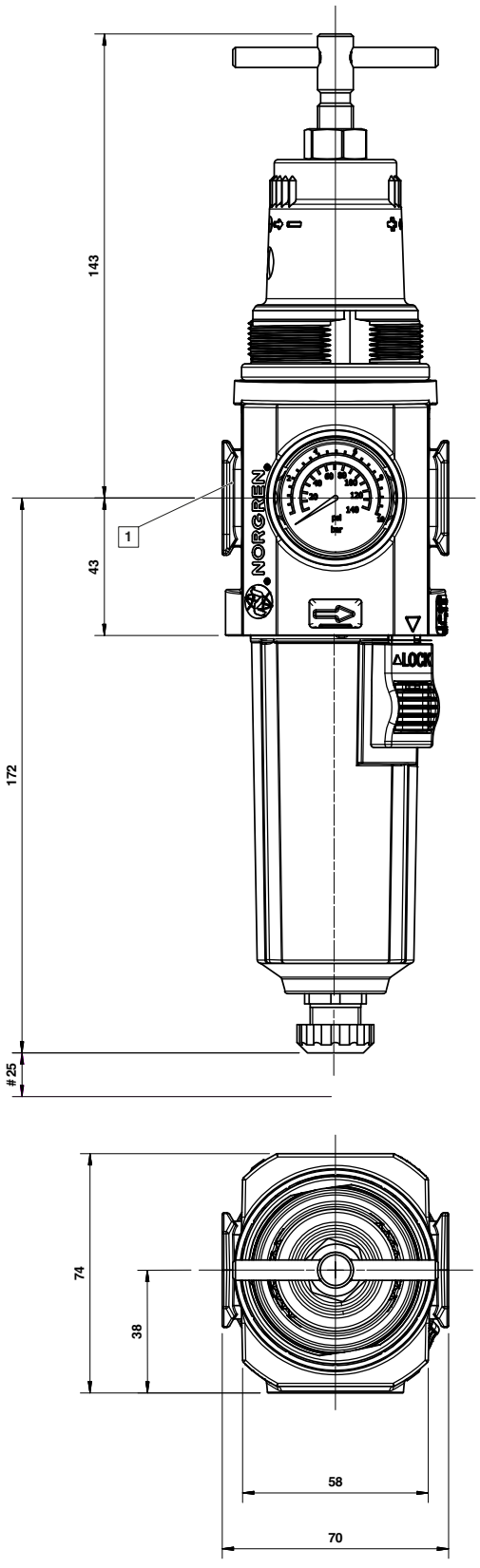
LR84 / LB84
Elastomer Kit

LFRLB84-KIT

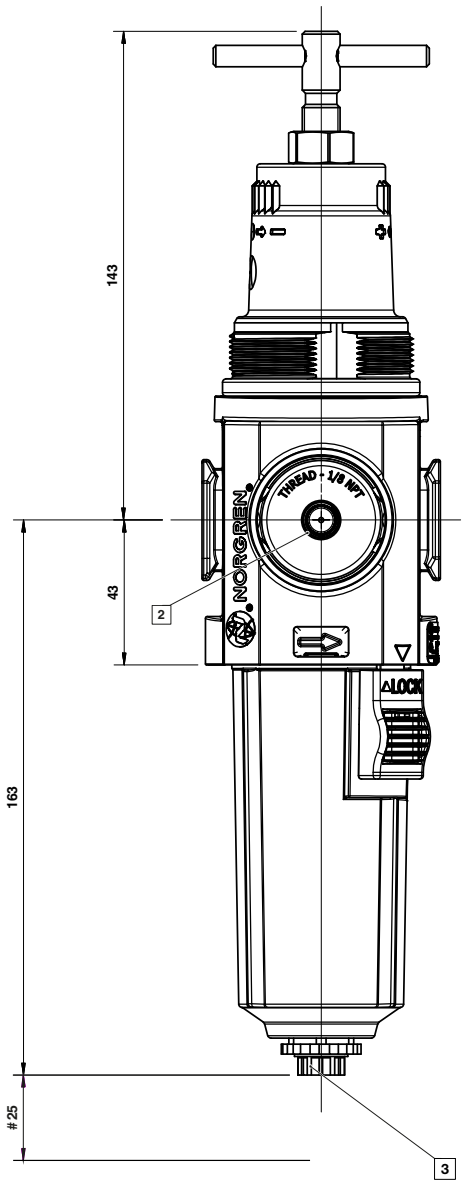
Dimensions

Dimensions in mm
Projection/First angle

Manual Drain



Auto drain

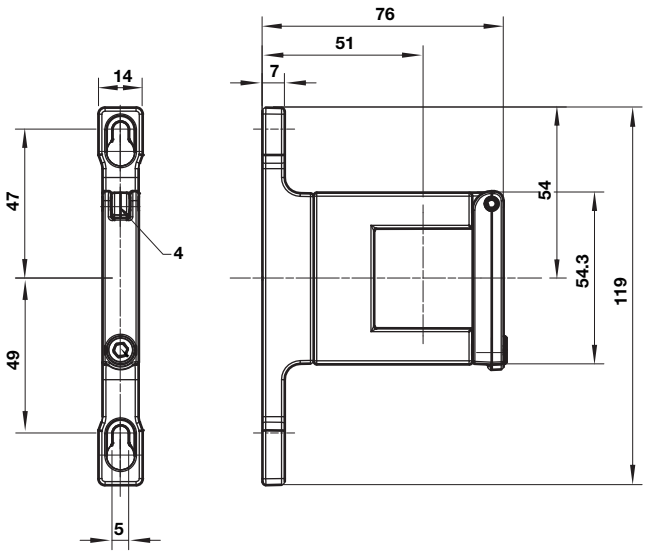


Minimum clearance for bowl removal
1 Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports
3 Port size automatic drain : G1/8

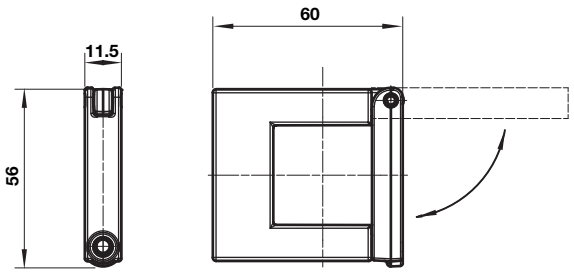
Accessories

Dimensions in mm
Projection/First angle

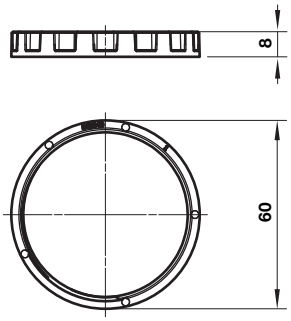
Quikclamp® with wall bracket



Quikclamp®

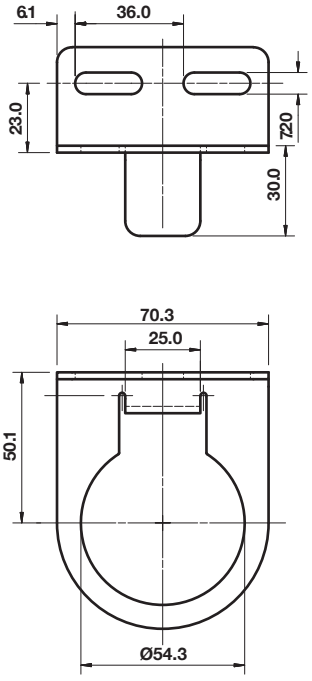


Panel mounting nut



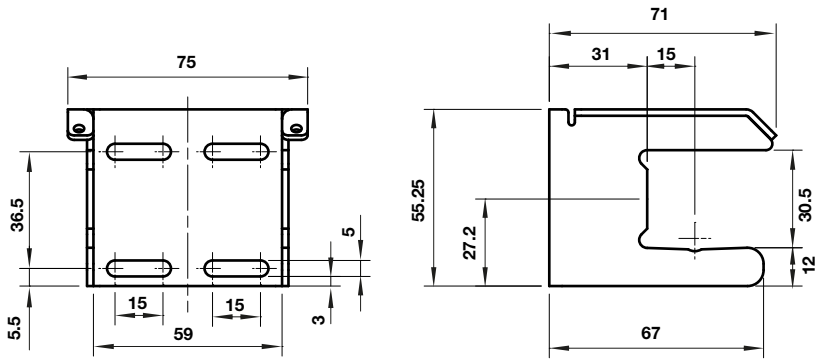
Recommended panel hole size:
ø 55 mm ... 57 mm
Panel thickness:
2 ... 6 mm

Neck mounting bracket

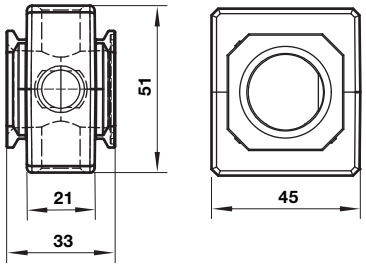


Mounting bracket

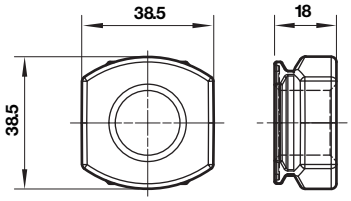
Dimensions in mm
Projection/First angle



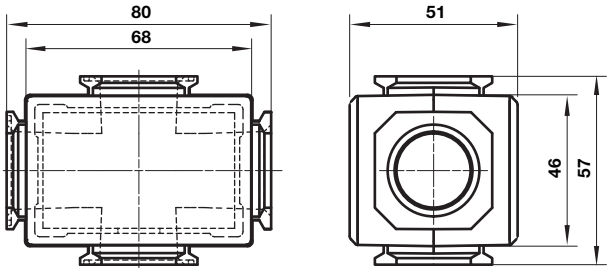
Pressure sensing block



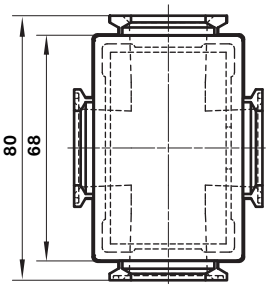
Pipe adaptor



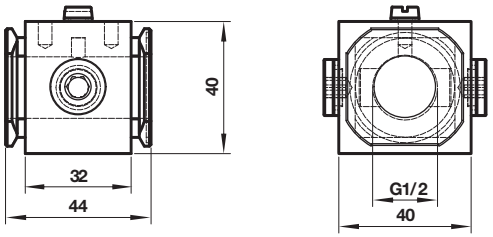
Full flow porting block horizontal

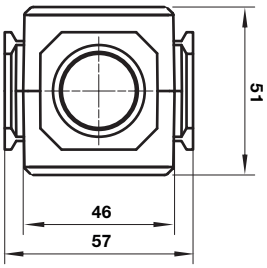


Full flow porting block vertical



Porting block for 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, 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.