

## BL84 — Filter/regulator–Lubricator Combination Units Excelon® Plus Modular System

- Port size: 3/8" to 3/4" (PTF/ISO G)
- Quickclamp connection system offers full modularity
- 40 micron particle and high efficiency water removal (>98%)
- Easy to read flush mounted integrated pressure gauge as standard, integrated electronic pressure sensor as option
- Shut off valve & filter/regulator with tamper resistant feature
- Metal bowl with prismatic liquid level indicator lens
- High corrosion resistance: body and metal bowl with electrophoretic paint finish
- All round (360°) visibility of sight dome for ease of lubricator drip rate setting



### Technical features

#### Medium:

Compressed air only

#### Maximum supply pressure:

Polycarbonate bowl:  
145 psi (10 bar)  
Metal bowl: 290 psi (20 bar)

#### Outlet pressure ranges:

4 to 145 psi (0.3 to 10 bar),

#### Filter element:

40 µm

#### Drain:

Manual or automatic

#### Port size:

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

#### Gauge:

Integrated as standard

#### Diaphragm Type:

Relieving

#### 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)

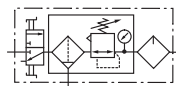
#### Ambient/Media temperature:

Polycarbonate bowl:  
+14 to +140°F (-10 to +60°C)  
Metal bowl:  
-4 to +149°F (-20 to +65°C)  
Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C)

#### Materials:

Body: Die cast aluminum  
Body covers: ABS  
Bonnet: Acetal/ Aluminum  
Valve: PP  
Bowl: Transparent PC with PP guard or die cast aluminum  
Liquid level indicator lens (metal bowl): PA  
Filter element: sintered PP  
Bowl 'o'- ring: Chloroprene  
Elastomers: NBR

### Technical data BL84–standard models with shut off valve, automatic drain, and micro fog lubricator

| Symbol  | Port size PTF | Bowl type                | Weight lbs. (kg) | Model *1) |
|---|---------------|--------------------------|------------------|-----------|
|  | 3/8           | Polycarbonate with guard | 3.6 (1.7)        | BL84-301A |
|   | 1/2           | Polycarbonate with guard | 3.6 (1.7)        | BL84-401A |
|   | 3/4           | Polycarbonate with guard | 3.6 (1.7)        | BL84-601A |
|   | 3/8           | Metal with sight glass   | 4.2 (1.9)        | BL84-351A |
|   | 1/2           | Metal with sight glass   | 4.2 (1.9)        | BL84-451A |
|   | 3/4           | Metal with sight glass   | 4.2 (1.9)        | BL84-651A |

\*1) All models shown here are supplied with integrated gauge applicable for flow direction left to right.

Other models can be configured using the option selector below or by visiting <https://imiplc.com/industrial-automation>

## Option selector \*1)

| Port size   | Substitute |
|---|------------|
| 3/8"  | 3          |
| 1/2"  | 4          |
| 3/4"  | 6          |
| Units   | Substitute |
| Filter/Regulator w. auto drain, Micro fog lubricator, Polycarbonate bowls   | 0          |
| Filter/Regulator w. auto drain, Oil fog lubricator, Polycarbonate bowls     | 1          |
| Filter/Regulator w. manual drain, Micro fog lubricator, Polycarbonate bowls | 2          |
| Filter/Regulator w. manual drain, Oil fog lubricator, Polycarbonate bowls   | 3          |
| Filter/Regulator w. auto drain, Micro fog lubricator, Metal bowls           | 5          |
| Filter/Regulator w. auto drain, Oil fog lubricator, Metal bowls             | 6          |
| Filter/Regulator w. manual drain, Micro fog lubricator, Metal bowls         | 7          |
| Filter/Regulator w. manual drain, Oil fog lubricator, Metal bowls           | 8          |

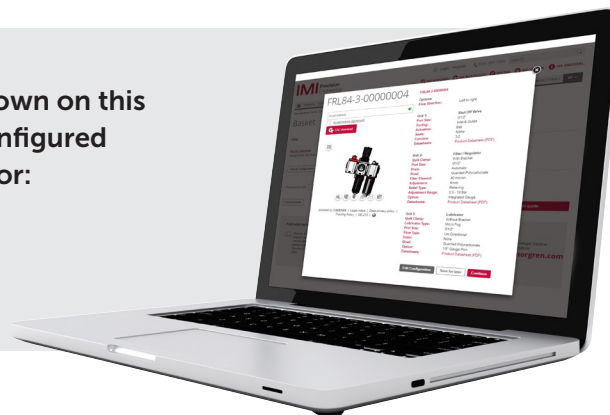
BL84-★★★★

| Thread form                       | Substitute |
|-----------------------------------|------------|
| PTF                               | A          |
| ISO G parallel                    | G          |
| Accessories                       | Substitute |
| Shut-off valve & gauge & brackets | 1          |
| Gauge & bracket                   | 5          |

\*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.imiplc.com/industrial-automation](http://www.imiplc.com/industrial-automation) or contact IMI Norgren

In addition to the standard box set units shown on this data sheet, further combinations can be configured using our online Air Preparation configurator:

[www.imiplc.com/industrial-automation](http://www.imiplc.com/industrial-automation)



## Accessories

### Quikclamp®



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840014-51KIT

### Quikclamp® with bracket assembled



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840014-52KIT

### Hybrid Quikclamp® \*1



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840014-61

### Hybrid Quikclamp® with bracket assembled \*1



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840014-62

### Mounting bracket



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840024-50KIT

\*1) To connect new Excelon Plus to Excelon 74/73 units. Having the same hole centers as 74 series mounting bracket. A Quikclamp adds 13.6 mm to the overall width of a combination unit

### Full flow porting block horizontal, 3/4 PTF



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840028-50KIT

### Full flow porting block horizontal, G3/4



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840028-53KIT

### Full flow porting block vertical, 3/4"PTF



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840028-68KIT

### Full flow porting block vertical, G3/4"



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840028-69KIT

### Pressure switch interface block (18D pressure switch) G1/2



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### Pressure sensing block 1/4 PTF



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840016-50KIT

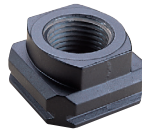
### Pressure sensing block G1/4



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840016-51KIT

### Port Adaptors



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|         |              |
|---------|--------------|
| 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 |
| G1/2    | 840015-11KIT |
| G3/4    | 840015-12KIT |

### Pneumatic pressure switch 18D (7 to 120 psi)



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### Digital pressure switch 54D (-14.5 to 145 psi) \*2



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54D-V110G-DD0-AA

### Padlock



840055-01KIT

### Lockout device



840055-02KIT

### Electronic Pressure Sensor – stand alone version \*3



Q84G

\*1) For other pressure ranges, please see 18D data sheet

\*2) For other pressure ranges, please see 54D data sheet

\*3) For Q84G standalone electronic pressure sensor module, see Q84G data sheet

## IO-Link cables

### Connection cable M8x1 for integrated digital pressure switch



| Description           | Cable length ft. (m) | Model            |
|-----------------------|----------------------|------------------|
| M8 female to M12 male | 2 (0.6)              | NC-084FS-124MS-A |
|                       | 3.3 (1.0)            | NC-084FS-124MS-1 |
|                       | 6.6 (2.0)            | NC-084FS-124MS-2 |
|                       | 16.4 (5.0)           | NC-084FS-124MS-5 |
| M8 female to free end | 9.8 (3.0)            | NC-084FS-00000-3 |

## Silencer

Porous plastic silencer \*3)  
G1/4



M/S2

Plastic silencer \*3)  
G1/4



001460000000000

Sinter bronze silencer \*3)  
1/4 PTF



MS002A

Sinter bronze silencer \*3)  
G1/4



T40C2800

\*3) Max. pressure of silencers listed in this data sheet : 145 psi.  
For pressure higher than 145 psi please contact IMI Norgren

## Maintenance/Service

Filter cartridge  
40 micron



840038-51KIT

Auto drain kit with  
metal Nut - Imperial



6000-61KIT

Auto drain kit with  
metal Nut - Metric



6000-60KIT

R84 / B84  
Elastomer Kit



FRLB84-KIT

Lubricator sight dome kit



Micro fog (red) 840055-50KIT

Oil fog (green) 840055-51KIT

## Spare parts

Filter Bowl (Guarded Poly bowl  
with auto drain 6 mm PIF)



840025-51KIT

Filter Bowl (Guarded Poly  
bowl with manual drain)



840025-50KIT

Filter Bowl (Metal with S/Glass  
& auto drain, 6 mm PIF)



840003-51KIT

Filter Bowl (Metal with S/  
Glass & manual drain)



840003-50KIT

Filter Bowl (Guarded Poly bowl  
with auto drain, 1/4 PIF)



840025-53KIT

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



840003-56KIT

Lubricator Bowl  
Guarded Poly



840025-52KIT

Lubricator Bowl  
Metal with S/Glass

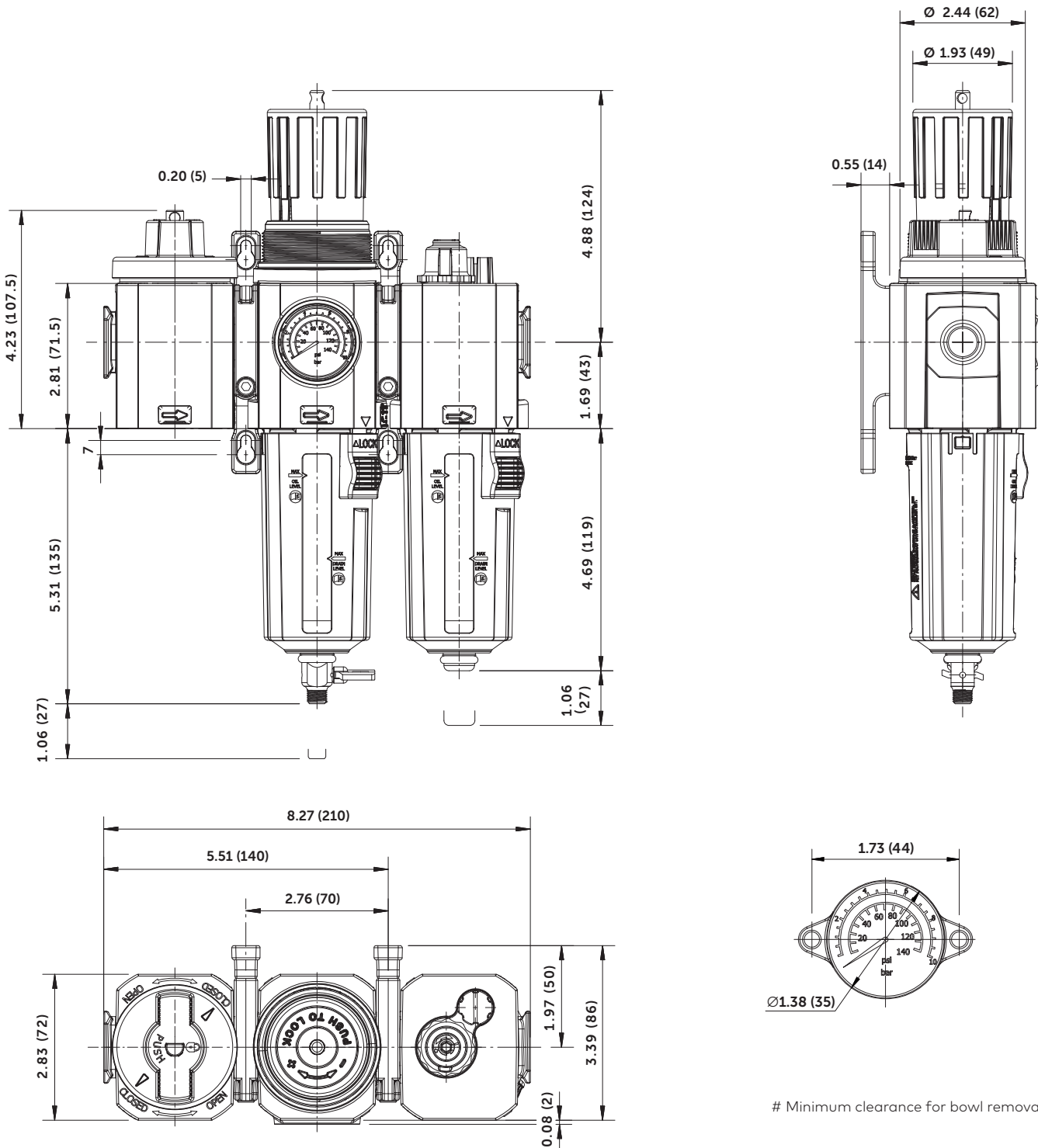


840003-52KIT



## Dimensions

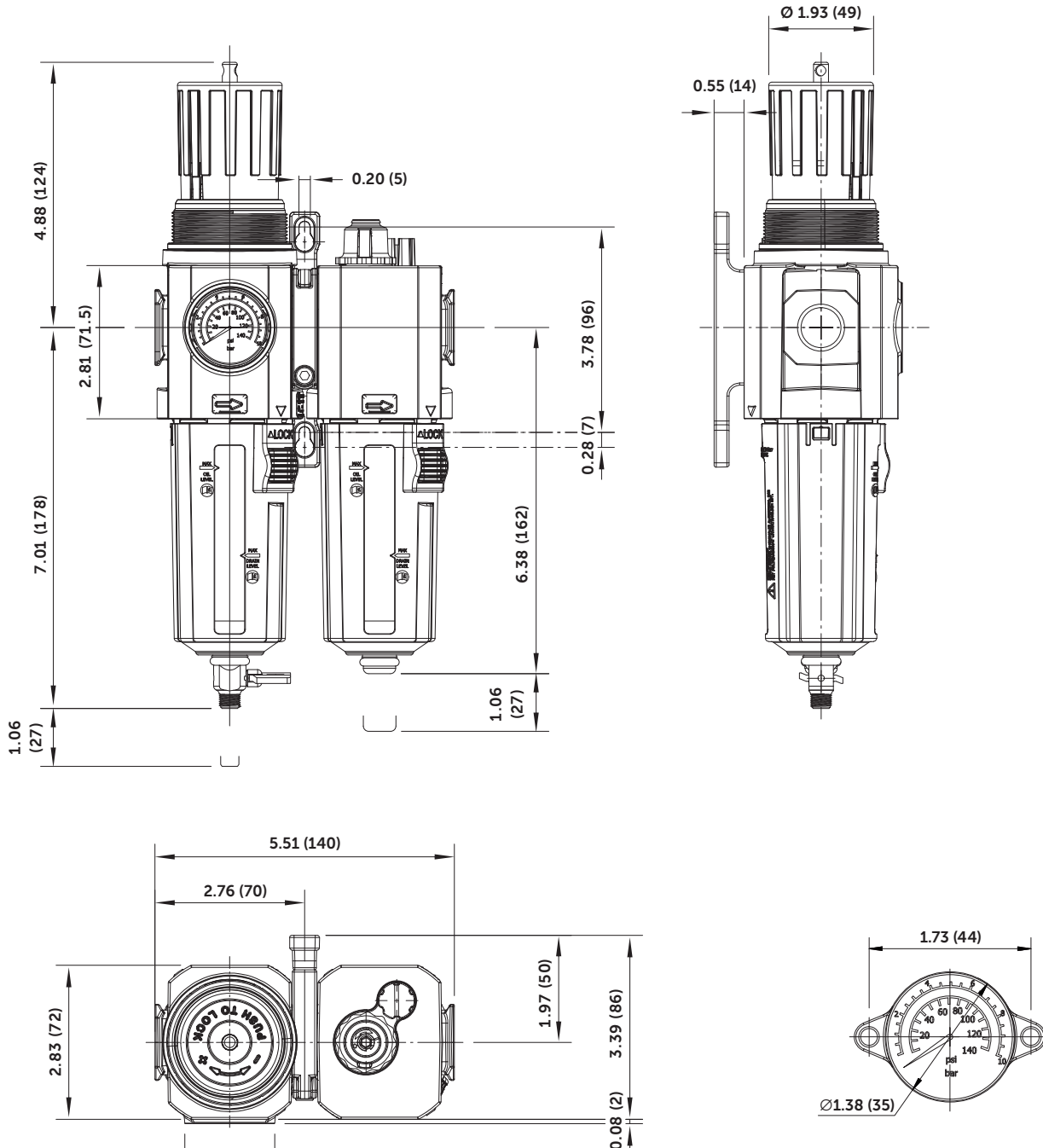
### Shut-off valve, Filter/Regulator and Lubricator





## Dimensions

### Filter/Regulator and Lubricator

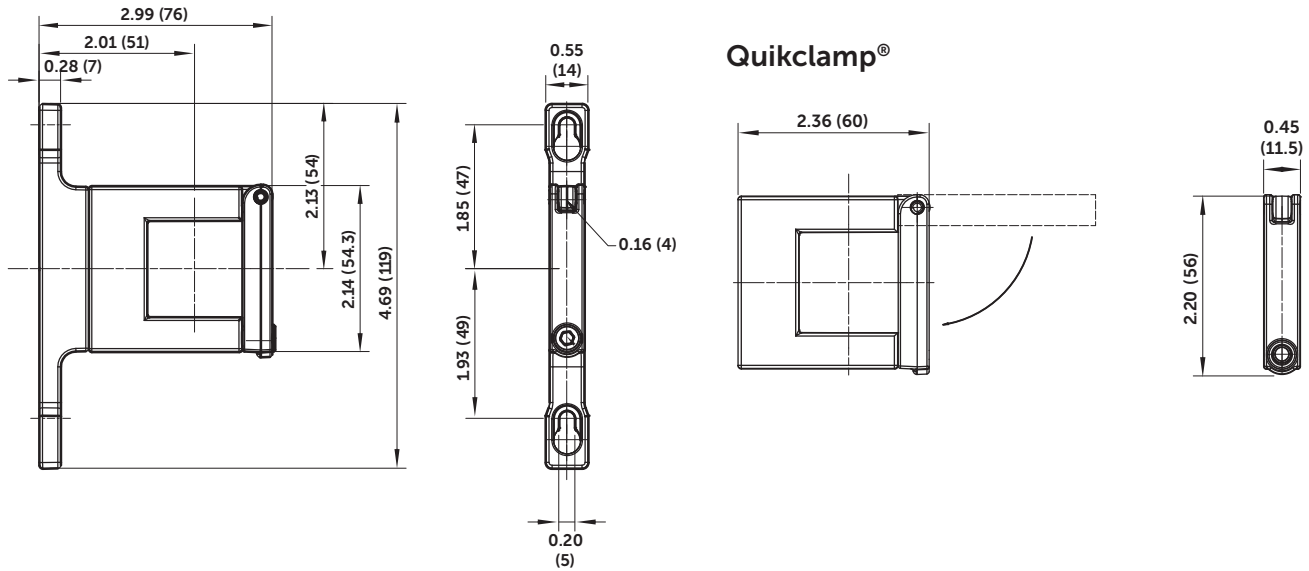


# Minimum clearance for bowl removal

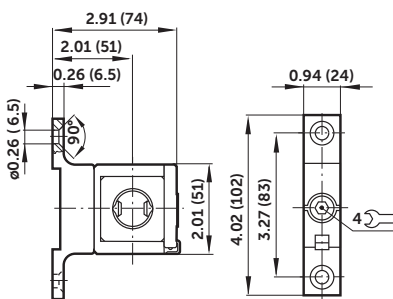


## Accessories

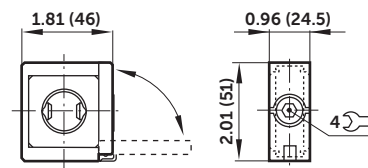
### Quikclamp® with wall bracket



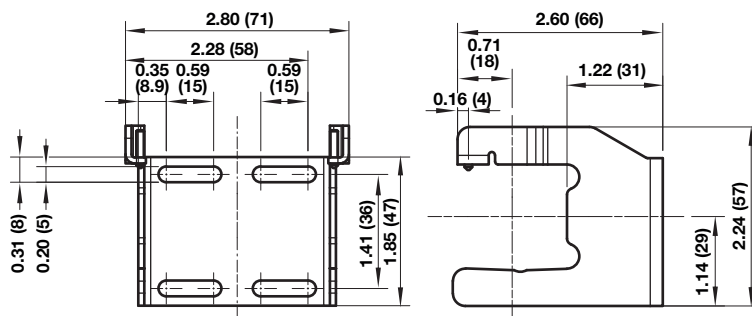
### Hybrid-Quikclamp® with wall bracket



### Hybrid-Quikclamp®

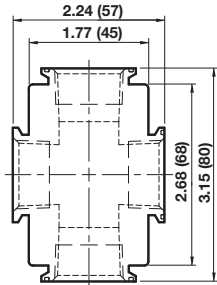


### Mounting bracket

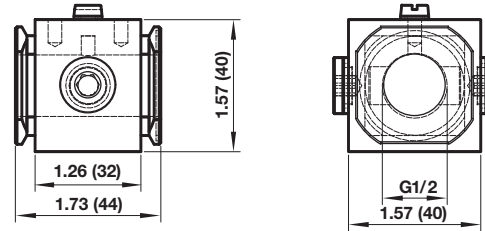




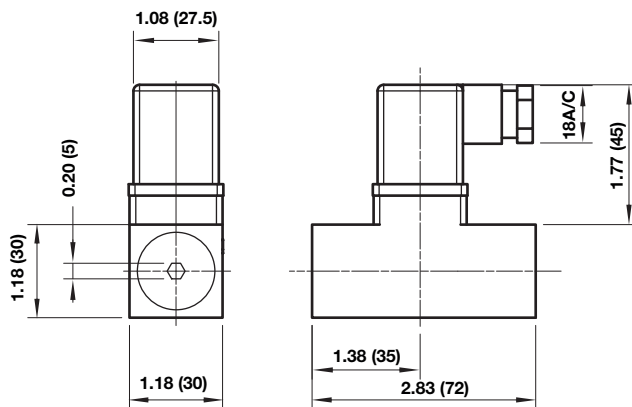
### Full flow vertical porting block



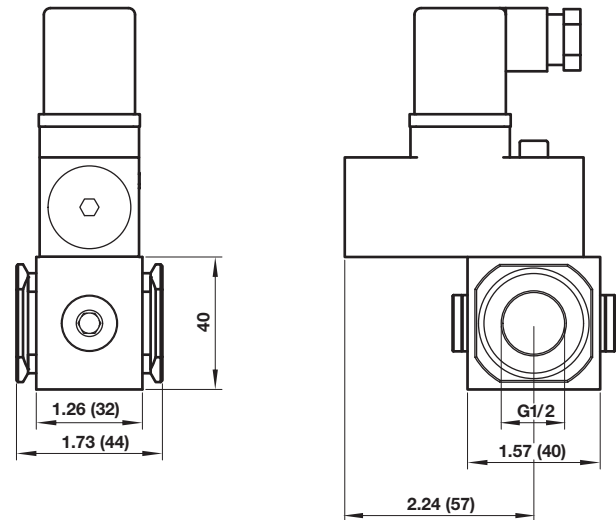
### Porting block for 18D pressure switch



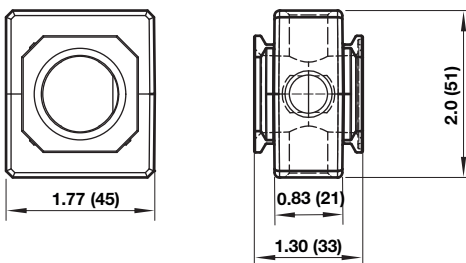
### 18D Pressure switch



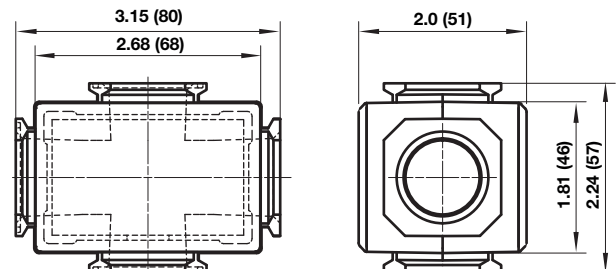
### 18D Porting block and 18D assembled



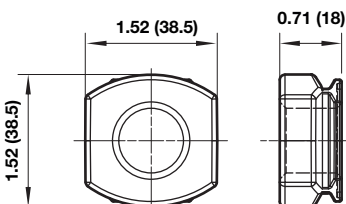
### Pressure sensing block



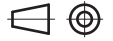
### Full flow porting block



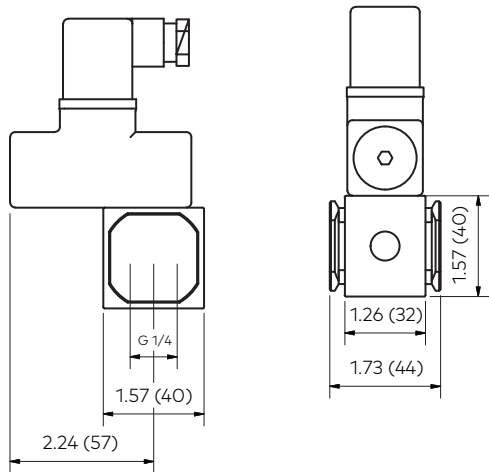
### Pipe adaptor



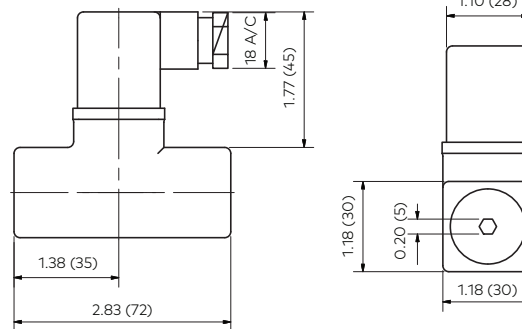




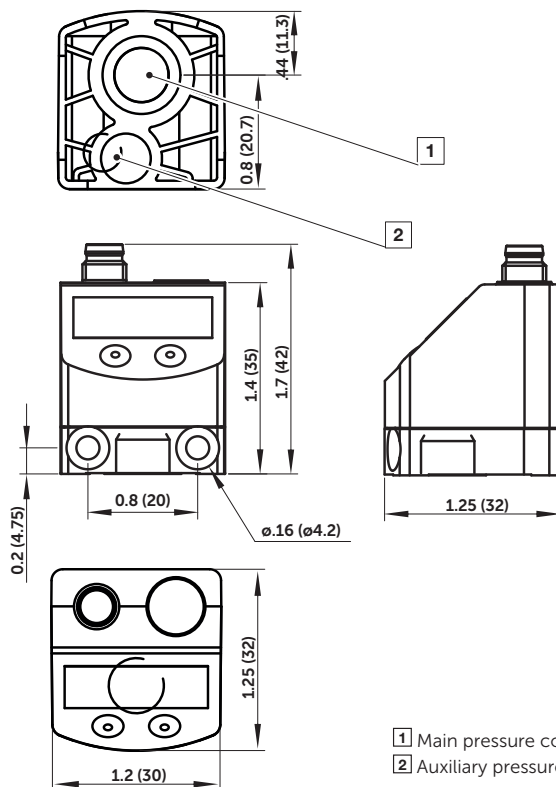
### 18D Porting block and 18D assembled



### 18D Pressure switch



### 54D Pressure switch - digital



#### Warning

Improper selection, misuse, age or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end user is responsible for verifying that all requirements for the application are met.

#### Warranty

The products described herein are warranted subject to seller's Standard Terms and Condition of Sale, available at seller's website.

**Proposition 65:** These products may contain chemicals known to the state of California to cause cancer, or birth defects, or other reproductive harm.