

F82C - Oil removal filters

Excelon® Plus Modular System



- > Port size: 1/4" & 3/8" (ISO G/PTF)
 - > Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
 - > High efficiency oil and particle removal
 - > Double safety lock bowl
 - > Metal bowl with prismatic liquid level indicator lens
 - > Light weight Polycarbonate bowl
 - > Service indicator standard
 - > Air purity class in accordance with ISO 8573-1: Remaining oil aerosol to class 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 operating pressure:
 Polycarbonate bowl:
 145 psi (10 bar)
 Metal bowl: 246 psi (17 bar)
Remaining oil content:
 0.01 mg/m³ at +69°F (+21°C)
Particle removal:
 To 0.01 µm
Port size:
 G1/4, G3/8, 1/4 PTF, 3/8 PTF

Dry element flow:

Operating pressure 91 psi (6.3 bar) and a Δp: 7.25 psi (0.5 bar) drop from set.
 1/4" = 32 scfm (15.1 dm³/s)
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)



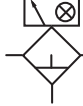

Drain:

Manual or automatic
Ambient/Media temperature:
 Polycarbonate bowl:
 +14 ... +140°F (-10 ... +60°C)
 Metal bowl:
 -4 ... +149°F (-20 ... +65°C)
 Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C)
Note: Install an F82G filter with a 5 µm filter element upstream of the F82C filter for maximum service life.

Materials:

Body: Die cast aluminum
 Body covers: ABS
 Bowl: Transparent PC with PP guard or die cast zinc
 Liquid level indicator lens (metal bowl): PA
 Filter element:
 Synthetic fiber & PE foam
 Bowl 'o'- ring: Chloroprene
 Elastomers: NBR

Technical data F82C—standard models

Symbol	Port Size (PTF)	Drain	Bowl	Weight lbs (kg)	Model
	1/4	Auto	Guarded polycarbonate	0.55 (0.25)	F82C-2AD-APO
	3/8	Auto	Guarded polycarbonate	0.55 (0.25)	F82C-3AD-APO
	1/4	Auto	Metal with level indicator	0.97 (0.44)	F82C-2AD-ADO
	3/8	Auto	Metal with level indicator	0.97 (0.44)	F82C-3AD-ADO
	1/4	Manual	Guarded polycarbonate	0.55 (0.25)	F82C-2AD-QPO
	3/8	Manual	Guarded polycarbonate	0.55 (0.25)	F82C-3AD-QPO
	1/4	Manual	Metal with level indicator	0.97 (0.44)	F82C-2AD-QDO
	3/8	Manual	Metal with level indicator	0.97 (0.44)	F82C-3AD-QDO

Option selector

F82C-***-***O

Port size	Substitute
1/4"	2
3/8"	3
Thread form	Substitute
PTF	A
ISO G	G
Differential Pressure Indicator	Substitute
With differential pressure indicator	D
Without differential pressure indicator	N

Element	Substitute
Coalescing	O
Bowl	Substitute
Transparent with guard	P
Metal with liquid indicator	D
Drain	Substitute
Manual	Q
Auto drain	A

Flow characteristics

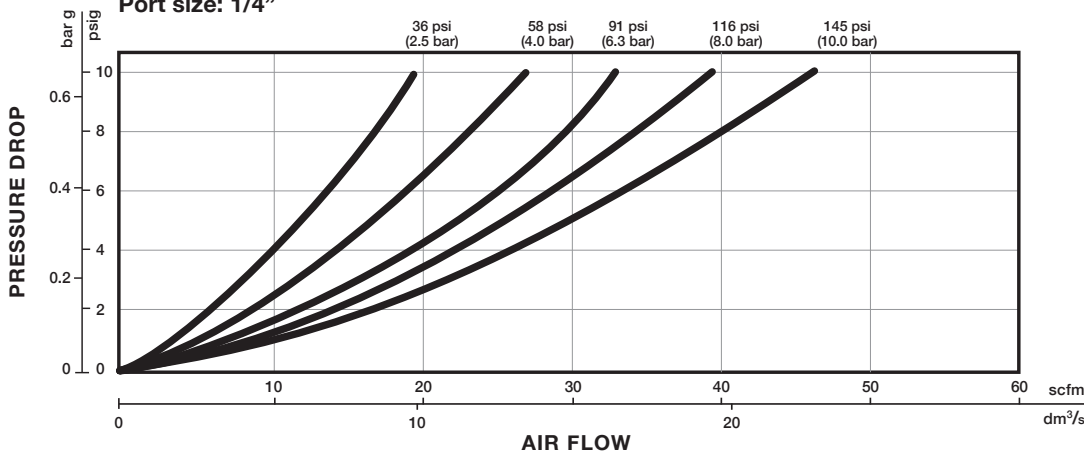
Port size: 1/4"

Oil Coalescing Filter

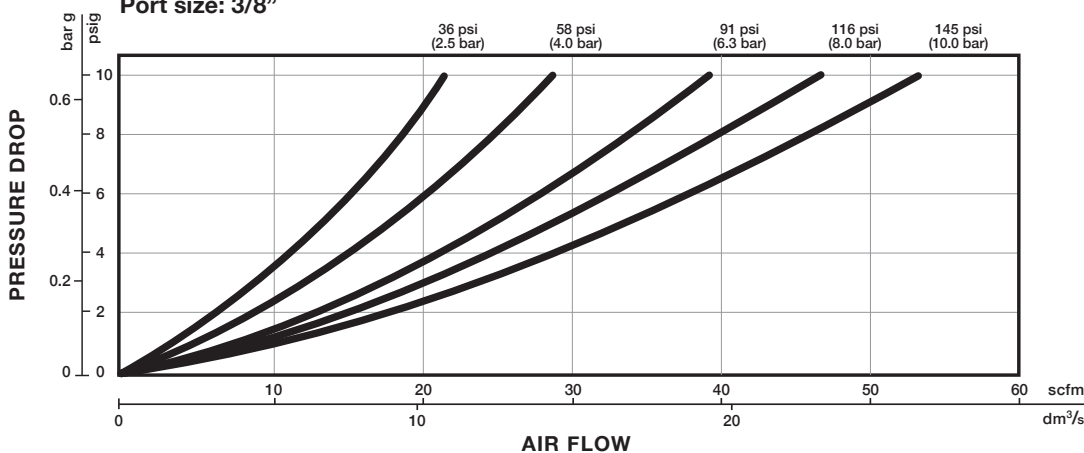
Inlet Pressure psi (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil coalescing filter scfm (L/sec)
36 (2.5)	5.5 (2.6)
58 (4)	7.8 (3.7)
91 (6.3)	11.7 (5.5)
116 (8)	14.4 (6.8)
145 (10)	17.6 (8.3)

Dry Flow

Port size: 1/4"



Port size: 3/8"



Accessories
Wall mounting bracket

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820024-50KIT

Quikclamp®

Page 7

820014-51KIT

**Quikclamp®
with bracket assembled**

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820014-52KIT

**Pressure sensing block
1/4 PTF**

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820016-50KIT

**Pressure sensing block
G1/4**

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820016-51KIT

**Full flow porting block
3/8" PTF**

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820028-50KIT

**Full flow porting block
G3/8**

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820028-53KIT

**Pressure switch interface
block (18D pressure switch)**

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**Pneumatic pressure switch
18D (0,5 ... 8 bar) *1)**

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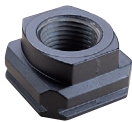
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**Digital pressure switch
51D (-14 ... 145 psi) *2)**

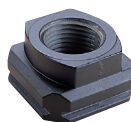
Page 9

54D-V110G-DD0-AA

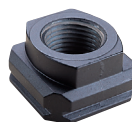
*1) For other pressure ranges, please see 18D data sheet
*2) For other pressure ranges, please see 54D data sheet

**Port Adapter
1/4 PTF**

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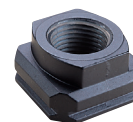
820015-02KIT

**Port Adapter
3/8 PTF**

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820015-03KIT

**Port Adapter
G1/4**

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820015-08KIT

**Port Adapter
G3/8**

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820015-09KIT

Maintenance/Service

Filter element
0.01µm



820044-50KIT

Auto drain kit with
metal Nut - Imperial



6000-61KIT

Auto drain kit with
metal Nut - Metric



6000-60KIT

Spare parts

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



820025-51KIT

Filter Bowl (Guarded Poly
bowl with manual drain)



820025-50KIT

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



820025-53KIT

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



820003-51KIT

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



820003-50KIT

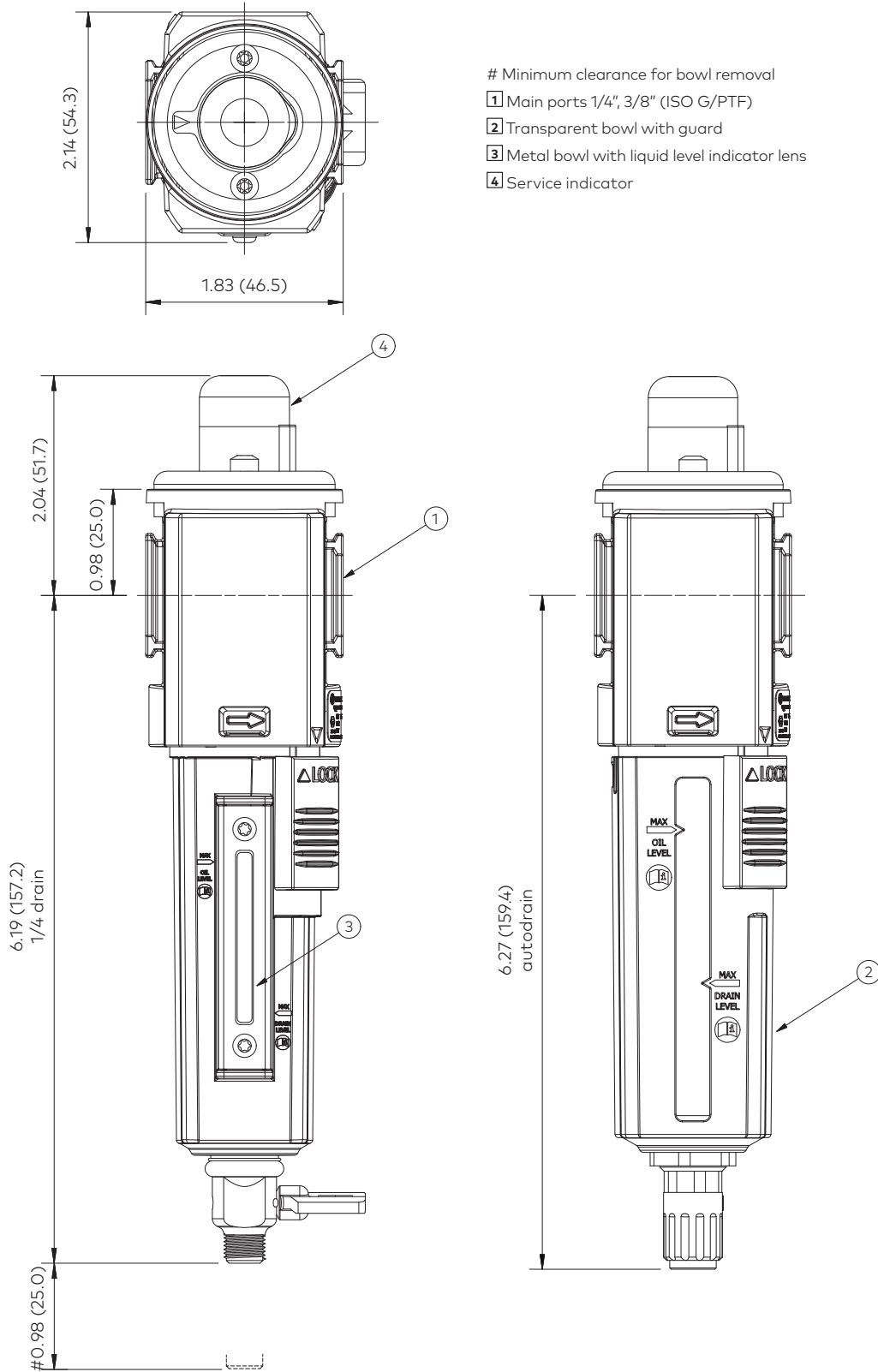
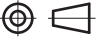
Filter Bowl (Metal with S/
Glass & auto drain, 1/4 PIF)



820003-56KIT

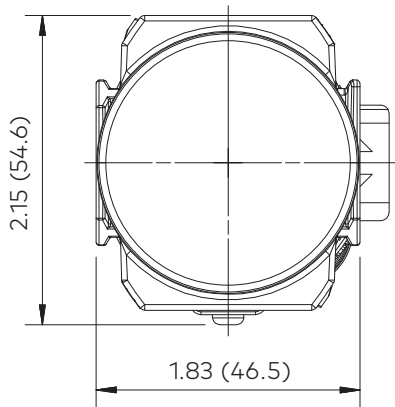
Dimensions

Dimensions in inches (mm)
Projection/Third angle



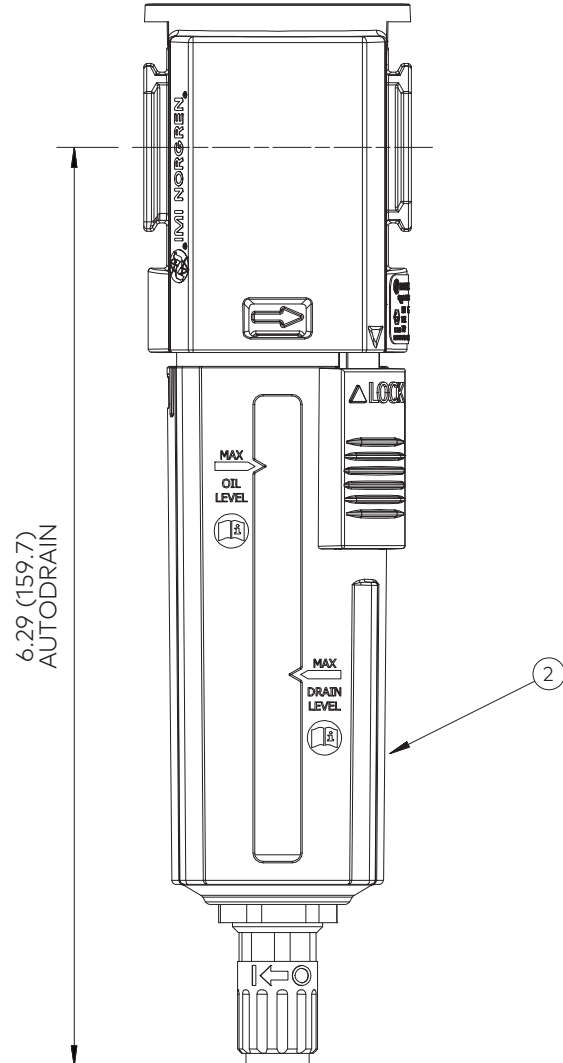
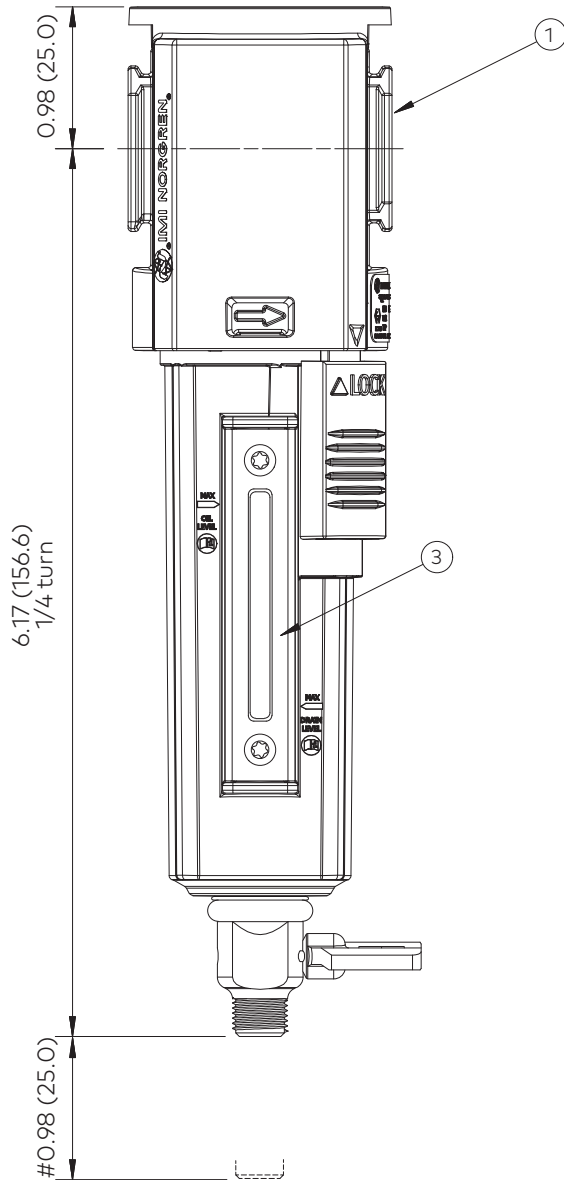
Dimensions

Dimensions in inches (mm)
Projection/Third angle

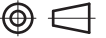
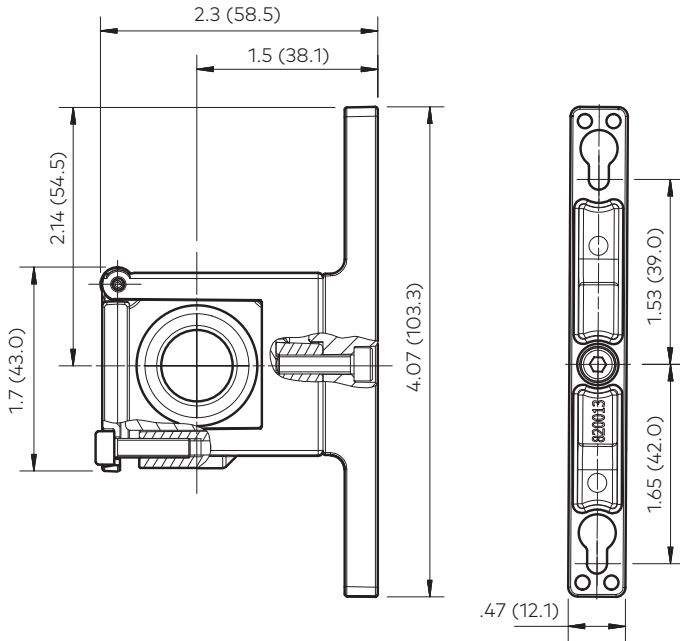
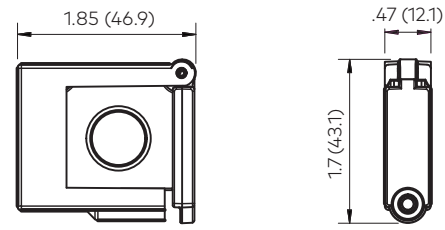
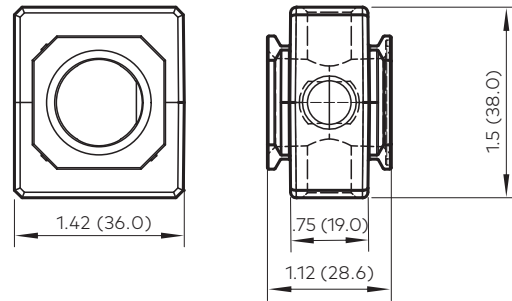
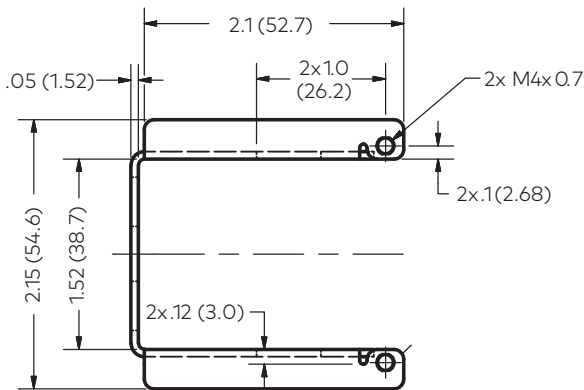
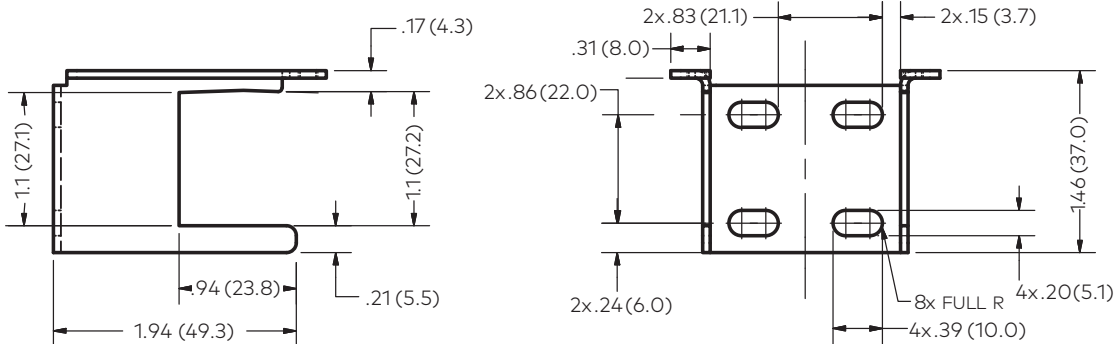
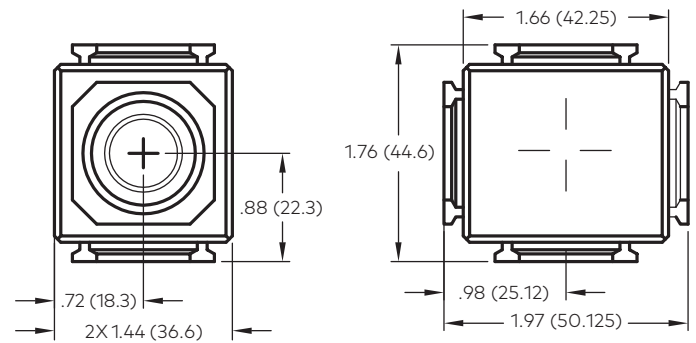


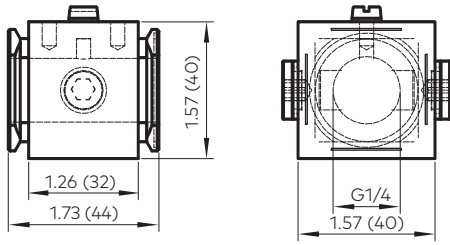
Minimum clearance for bowl removal

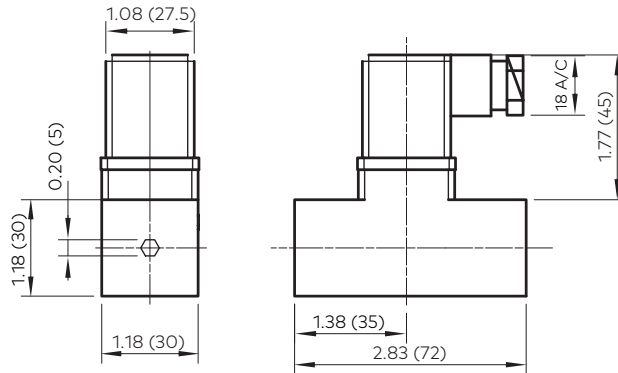
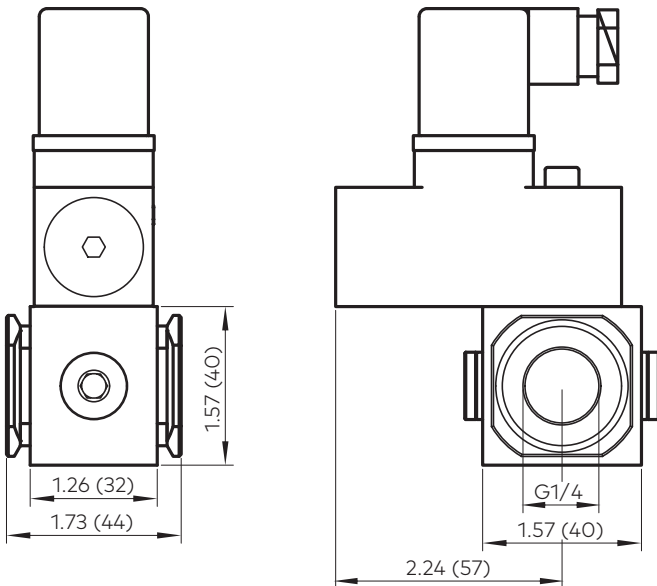
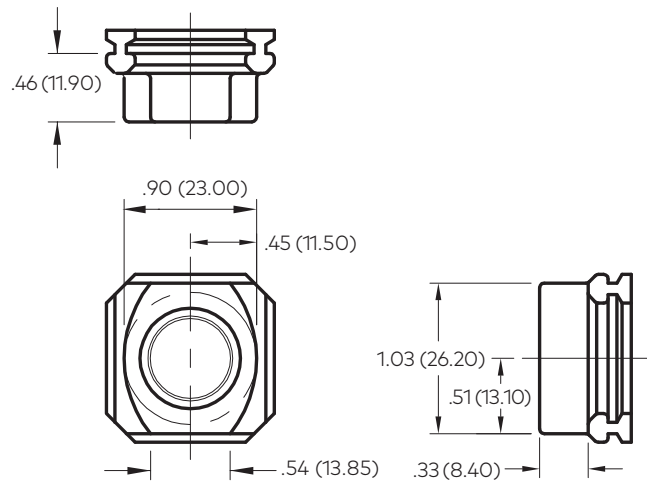
- 1 Main ports 1/4", 3/8" (ISO G/PTF)
- 2 Transparent bowl with guard
- 3 Metal bowl with liquid level indicator lens



Accessories

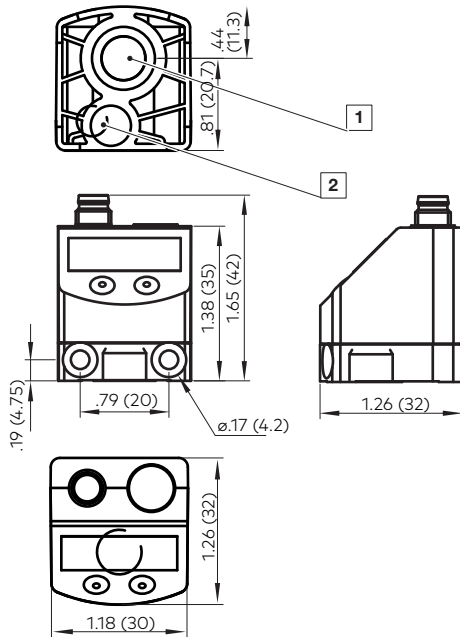
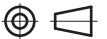
 Dimensions in inches (mm)
 Projection/Third angle

Quikclamp® with wall bracket

Quikclamp®

Pressure sensing block

Mounting bracket

Full flow porting block


Porting block for 18D pressure switch

18D Pressure switch

 Dimensions in inches (mm)
 Projection/Third angle

18D Porting block and 18D assembled

Pipe adapter


54D Pressure switch - digital

Dimensions in inches (mm)
Projection/Third angle



- 1 Main pressure connection (G1/8)
- 2 Auxiliary pressure connection for differential pressure sensing (M5)

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.