F82V - Oil vapour 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
- > Adsorbing type activated carbon element removes oil vapours
- > Double safety lock bowl
- > Light weight Polycarbonate bowl
- > Metal bowl option
- > Ex DoC in accordance with 2014/34/EU/ATEX
- > Air purity class in accordance with ISO8573-1:2010 : -:7:0*

*Tested in accordance with the methods laid out in ISO 12500-2 using an inlet oil aerosol concentration of 0.018mg/m³

Technical features

Medium:
Compressed air only
Maximum operating pressure:
Polycarbonate bowl:
10 bar (145 psi)
Metal bowl: 17 bar (246 psi)
Remaining oil content:
0,003 mg/m³ max. at +21°C (+69°F)
Port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

Dry Element Flow:
4 dm³/s - Maximum flow to maintain stated oil removal performance at operating pressure: 6,3 bar (91 psi)
Atex:
Filters F82 are in conformity with Atex 2014/34/EU
Ex II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

Ambient/Media temperature:
Polycarbonate bowl:
-10 ... +60°C (+14 ... +140°F)
Metal bowl:
-20 ... +65°C (-4 ... +149°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F). .
Note:
Install an F82C coalescing filter upstream of the F82V filter for maximum service life.

Materials:
Body: Die cast aluminium
Body covers: ABS
Transparent Bowl : Polycarbonate with Polypropylene Guard.
Metal Bowl: Die cast Zinc with PA liquid level indicator lens
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

Technical data F82V—standard models

Symbol	Port Size	Drain	Bowl	Weight (kg)	Model
	G1/4	Closed bowl	Guarded polycarbonate	0,20	F82V-2GN-EPA
	G3/8	Closed bowl	Guarded polycarbonate	0,40	F82V-3GN-EPA
	G1/4	Closed bowl	Metal bowl	0,21	F82V-2GN-EDA
	G3/8	Closed bowl	Metal bowl	0,40	F82V-3GN-EDA

Option selector

F82V–✱✱ N – E ✱ A

Port size	Substitute
1/4"	2
3/8"	3

Bowl	Substitute
Metal	D
Transparent with guard (standard)	P

Thread form	Substitute
PTF	A
ISO G (standard)	G

08/20
en 8.105.160.01

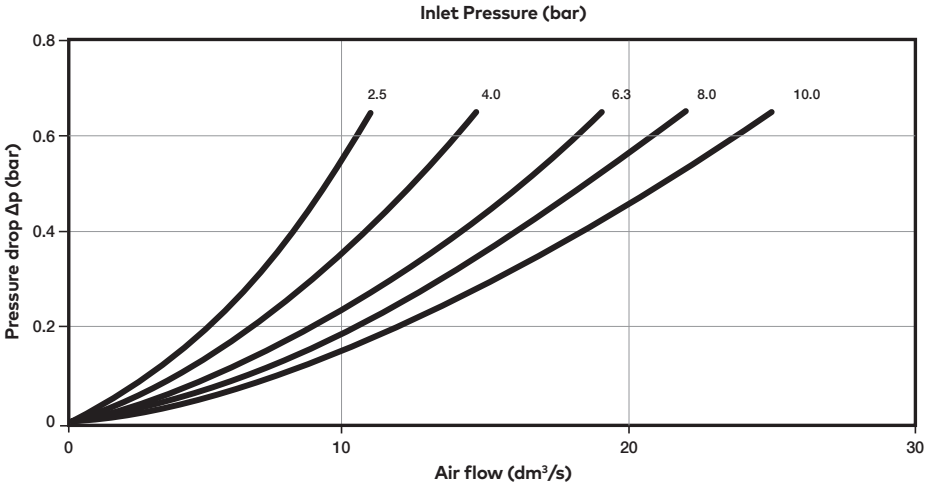
Flow characteristics

Port size: 1/4"
Vapor Removal Flow

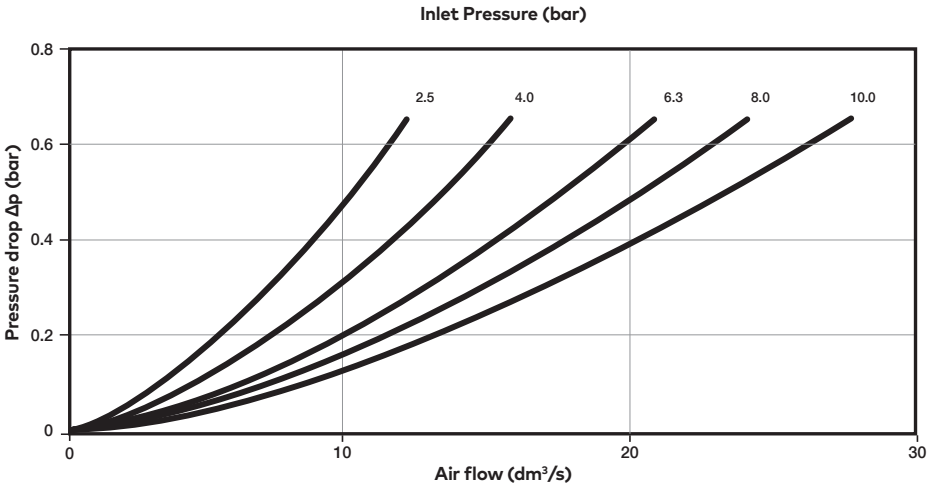
Inlet Pressure (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil vapor filter (dm3/s)
2.5	1.9
4	2.8
6.3	4
8	5
10	6.1

Dry Flow

Port size: 1/4"



Port size: 3/8"



Accessories

Wall mounting bracket

Page 4

820024-50KIT

Quikclamp®

Page 4

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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0523109000000000

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

Page 5

0881300

Digital pressure switch 51D (-1 ... 10 bar) *2)

Page 5

0860810

*1) Flanged version. For other pressure ranges, please see data sheet 5.11.001
*2) For other pressure ranges, please see data sheet 5.11.385

Port Adaptors 1/4 PTF

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820015-02KIT

Port Adaptors 3/8 PTF

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820015-03KIT

Port Adaptors G1/4

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820015-08KIT

Port Adaptors G3/8

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820015-09KIT

Maintenance/Service

Vapour Removal filter element

820041-50KIT

Filter bowl Guarded Poly

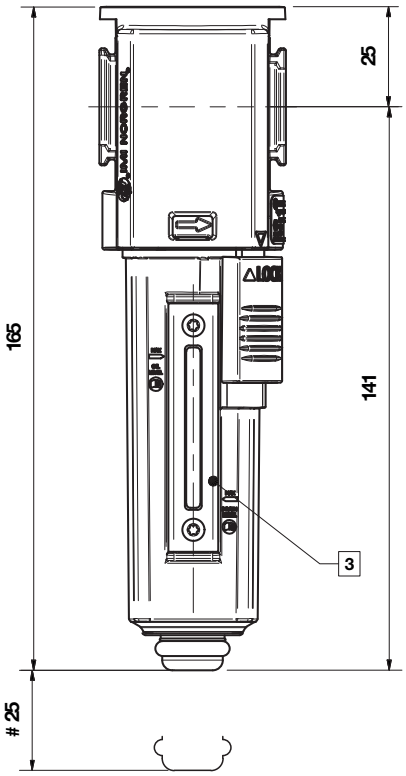
820025-52KIT

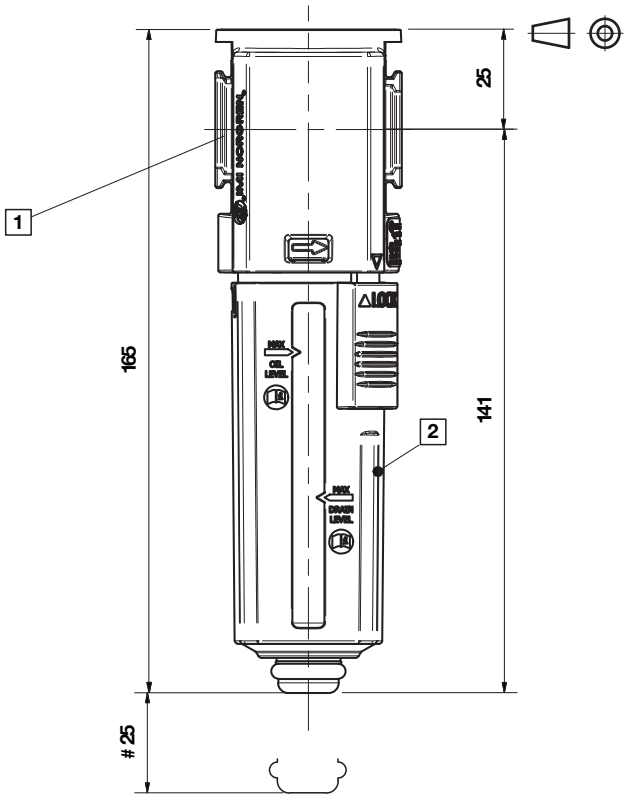
Filter bowl Metal with sight glass

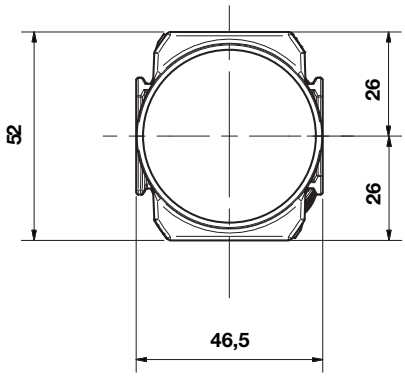
820003-52KIT

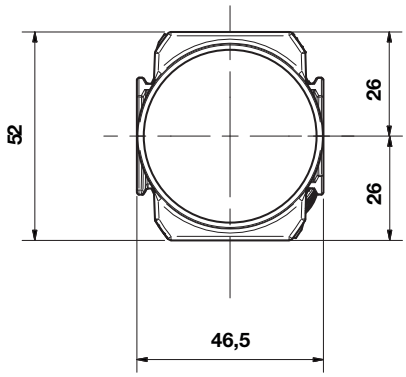
Dimensions

Dimensions in mm
Projection/First angle









Minimum clearance for bowl removal

1 Main ports 1/4", 3/8" (ISO G/PTF)

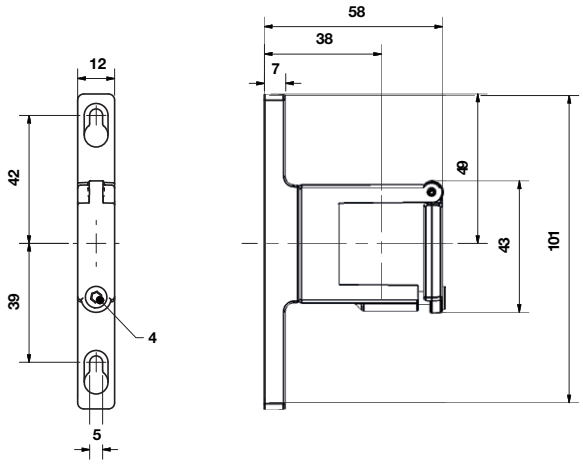
2 Transparent bowl with guard

3 Metal bowl

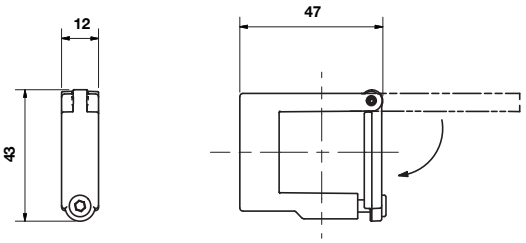
Accessories

Dimensions in mm
Projection/First angle

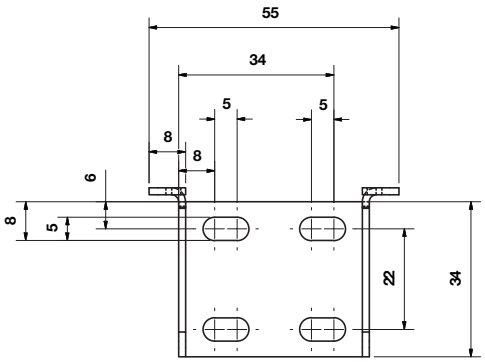
Quikclamp® with wall bracket

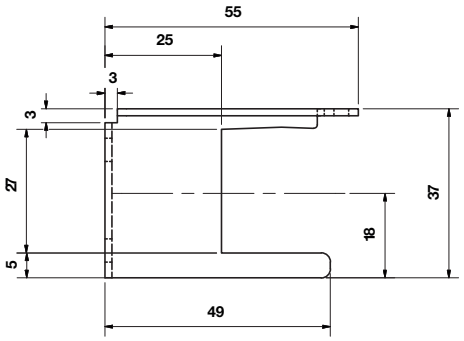


Quikclamp®

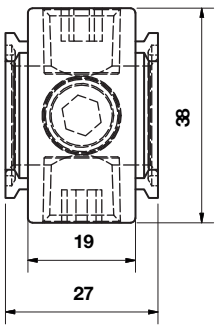


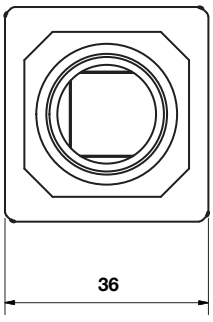
Mounting bracket



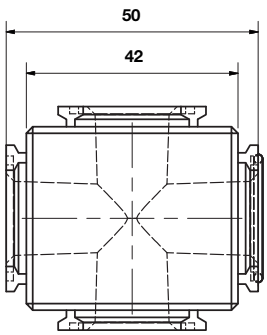


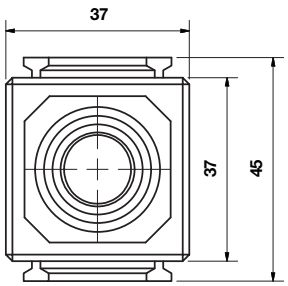
Pressure sensing block



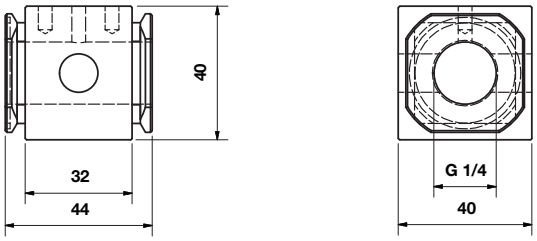


Full flow porting block



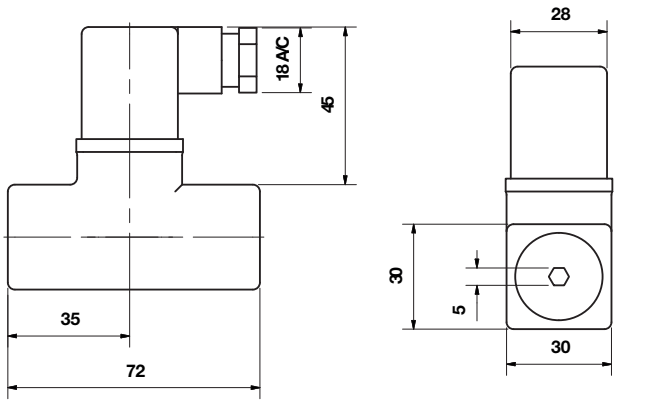


Porting block for 18D pressure switch

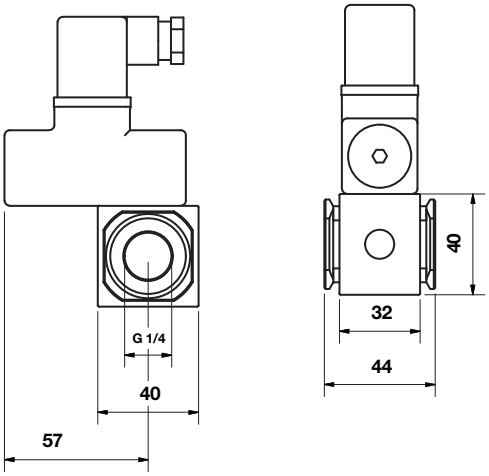


18D Pressure switch

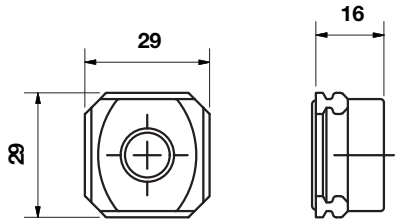
Dimensions in mm
Projection/First angle



18D Porting block and 18D assembled

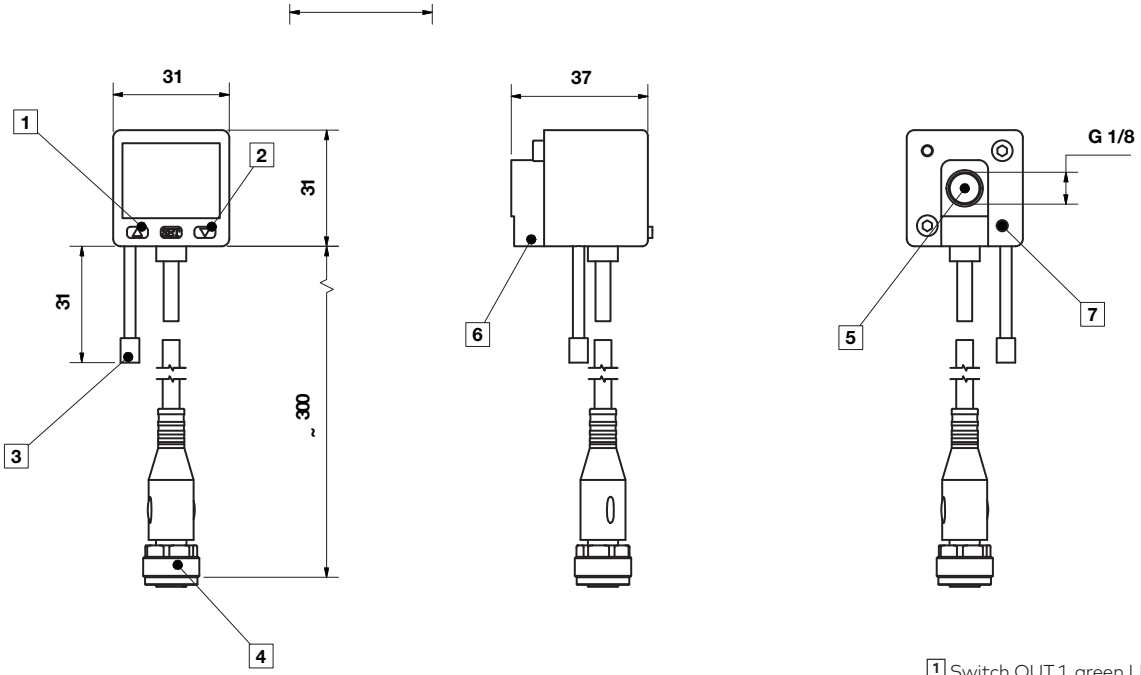


Pipe adaptor



51D Pressure switch - digital

Dimensions in mm
Projection/First angle



1 Switch OUT 1, green LED
2 Switch OUT 2, red LED
3 Dustproof protector
4 Connector M12 x 1
5 Inlet port
6 Alternative inlet port G1/8 plugged
7 Thread for mounting screw

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.