TB84 -
Filter- Regulator - Combination Units
Excelon® Plus Modular System

- Port size: 3/8" ... 3/4" (ISO G/PTF)
- Unique Quikclamp connection system offers full modularity
- 40 micron particle and high efficiency water removal (> 98%)
- Double safety lock on bowl
- Shut off valve & Filter-Regulator with tamper resistance feature.
- Light weight polycarbonate bowl
- Metal bowl with prismatic liquid level indicator lens
- High Corrosion resistance: Body and Metal bowl with Electrophoretic Paint finish
- Easy to read flush mounted integrated pressure gauge as standard, integrated electronic pressure sensor as option.
- Ex DoC in accordance with 2014/34/EU/ATE

Technical features

Medium:
Compressed air only

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

Outlet pressure ranges:
0,3 ...10 bar (4 ... 145 psi),

Filter element:
40 µm

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

Gauge:
Integrated as standard
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)

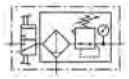
Ambient/Media temperature:
Polycarbonate bowl:
-10 ... +60°C (+14 ... +140°F)
Metal bowl:
-20 ... +65°C (-4 ... +149°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Atex:
Filter/regulators TB84 are in conformity with Atex 2014/34/EU
Ex II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db
excluding all versions with electronic pressure sensor

Materials:
Body: Die cast aluminium
Body covers: ABS
Bonnet: Acetal
Valve: PP with Geolast seals
Transparent Bowl: Polycarbonate with Polyproplyene Guard.
Metal Bowl: Die cast Aluminium with PA liquid level indicator lens
Filter element: sintered PP
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

*) Technical features IEPS (Integrated Electronic Pressure Sensor) see data sheet 8.200.300 B84G or visit https://www.norgren.com/en/products/b84g-6gk-ap3-rmg

Technical data TB84 - standard models with integrated analogue gauge

Symbol	Port size	Shut off valve	Drain	Weight (kg)	Model *1)
	3/8"	With	Manual	1,27	TB84-321G
	1/2"	With	Manual	1,27	TB84-421G
	3/4"	With	Manual	1,27	TB84-621G
	3/8"	With	Auto	1,27	TB84-301G
	1/2"	With	Auto	1,27	TB84-401G
	3/4"	With	Auto	1,27	TB84-601G

*1) All models shown here are supplied with guarded transparent bowl, brackets and integrated gauge applicable for flow direction left to right.
With flow direction right to left please use the online configurator www.norgren.com/en/support/configurators/air-preparation-configurator or contact 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.norgren.com/en/support/configurators/air-preparation-configurator

Option selector *1)

TB84-★★1★★

Port size	Substitute
3/8	3
1/2	4
3/4	6

Units	Substitute
Filter- Regulator w. auto drain, Polycarbonate bowls	0
Filter- Regulator w. manual drain,Polycarbonate bowls	2
Filter- Regulator w. auto drain, Metal bowls	5
Filter- Regulator w. manual drain, Metal bowls	7

Gauge	Substitute
IEPS (integrated electronic pressure sensor)	E
Integrated analogue gauge *2)	

Thread form	Substitute
PTF	A
ISO G parallel (standard)	G

*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/en/support/configurators/air-preparation-configurator or contact Norgren.

*2) For combinations with an integrated analogue gauge leave the 9th digit blank.

Excelon® Plus adheres to the following harmoised standard and technical specifications:

2014/34/EU Equipment and protective systems intended for use in potentially explosive atmospheres.
The following harmonised standards and technical specifications have been applied ISO 4414:2010 – Pneumatic fluid power – General rules and safety requirements for systems and their components; ISO 80079-36:2016 – Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements; ISO 80079-37:2016 – Explosive atmospheres
Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety ''c'', control of ignition sources ''b'', liquid immersion ''k''.

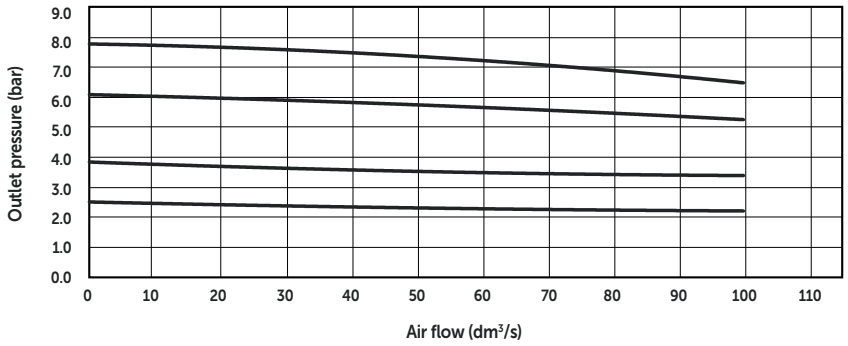
II 2 GD

Ex h IIC T6 Gb
Ex h IIIC T85°C Db
ATEX Certification No.: NORGREN 18.0001X

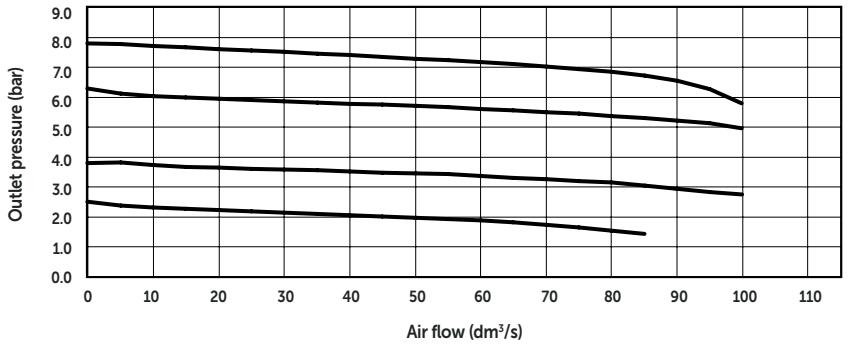
For a copy of the Declaration of Conformity (DoC) please use the link http://cdn.norgren.com/pdf/IM_Excelon_Plus_EN_final.pdf

Flow characteristics

Inlet pressure: 10 bar (145 psi)
Range: 0.3...10 bar (4...145 psi)
Port size: 1/2", 40 µm element



Inlet pressure: 10 bar (145 psi)
Range: 0.3...10 bar (4...145 psi)
Port size: 3/8", 40 µm element



Quikclamp
with bracket assembled

Page 8

840014-52KIT

Hybrid Quikclamp *1

Page 8

840014-61

Hybrid Quikclamp with bracket assembled *1

Page 8

840014-62

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

Port Adaptors

Page 9

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

Integrated gauge
4 bar gauge

840073-03KIT

Integrated gauge
10 bar gauge

840073-01KIT

Integrated gauge
20 bar gauge

840073-02KIT

Gauge adaptor kit
1/8 PTF

840143-01KIT

Gauge adaptor kit
R 1/8

840143-02KIT

Pressure sensing block
1/4 PTF

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840016-50KIT

Pressure sensing block
G1/4

Page 8

840016-51KIT

Full flow porting block
3/4" PTF

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840028-50KIT

Full flow porting block
G3/4

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840028-53KIT

Full flow porting block
3/4" PTF

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840028-68KIT

Full flow porting block
G3/4

Page 9

840028-69KIT

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

Page 9

0337717000000000

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

Page 9

0881300

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

Page 10

0860810

Electronic Pressure Sensor –
stand alone version *3

Q84G

*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.

*3) Q84G stand alone electronic pressure sensor module see http://s.norgren.com/digital-gauge-iodd for data-sheet 8.900.905.

IO-Link cables

Connection cable M8x1 for integrated digital pressure switch

Description	Cable length (m)	Model
M8 female to M12 male	0,6	NC-084FS-124MS-A
	1,0	NC-084FS-124MS-1
	2,0	NC-084FS-124MS-2
	5,0	NC-084FS-124MS-5
M8 female to free end	5,0	NC-084FS-00000-5

Padlock

Padlock

840055-01KIT

Lockout device

840055-02KIT

Silencer

Porous plastic silencer *3) G1/4

M/S2

Plastic silencer *3)
G1/4

0014600000000000

Sinter bronce silencer *3) 1/4 PTF

MS002A

Sinter bronce silencer *3) G1/4

T40C2800

*3) Max. pressure of silencers listed in this data sheet : 10bar.
For pressure higher than 10bar please contact 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

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

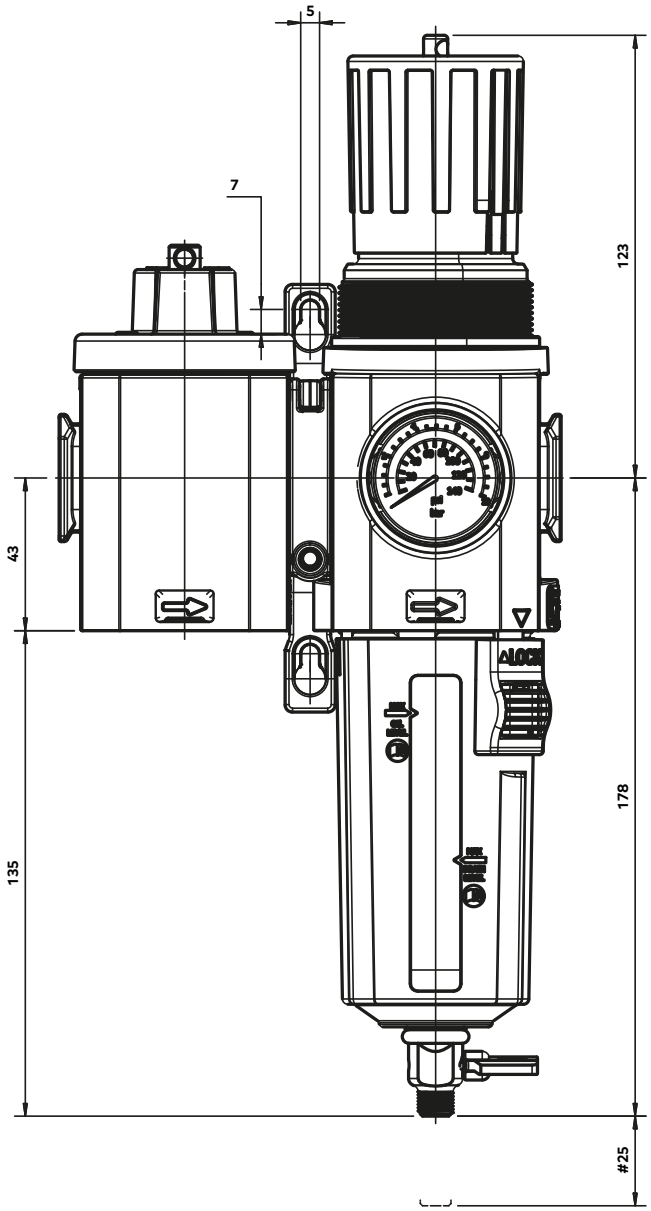
Filter Bowl (Metal with S/Glass & auto drain, 1/4 PIF)

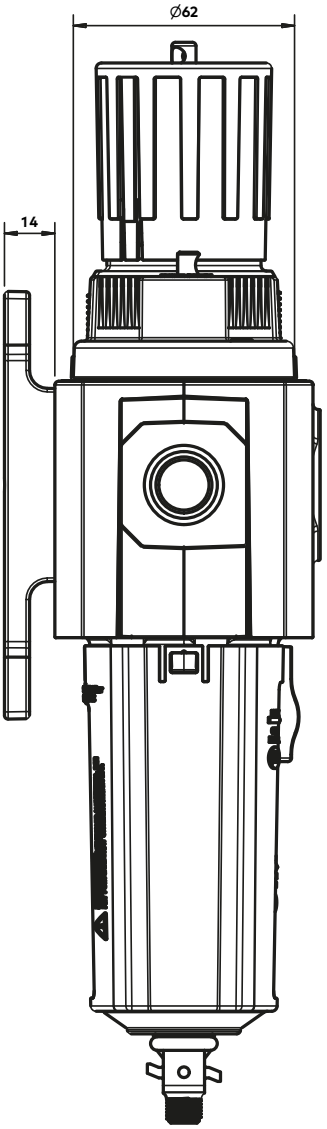
840003-56KIT

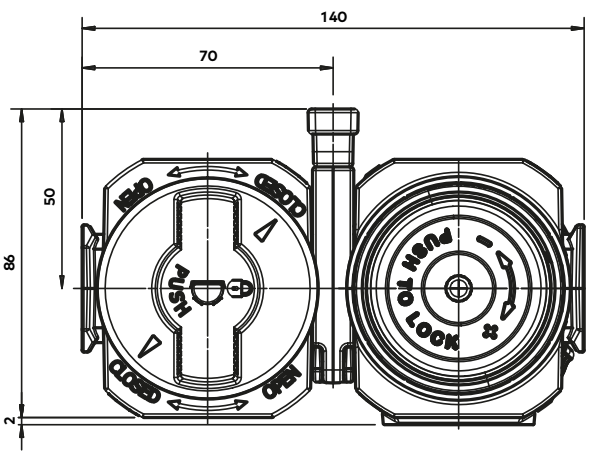
Dimensions

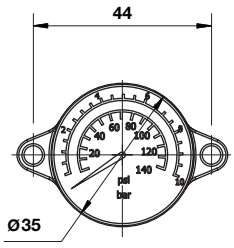
Dimensions in mm
Projection/First angle

Shut-off valve, Filter- Regulator with integrated analogue gauge







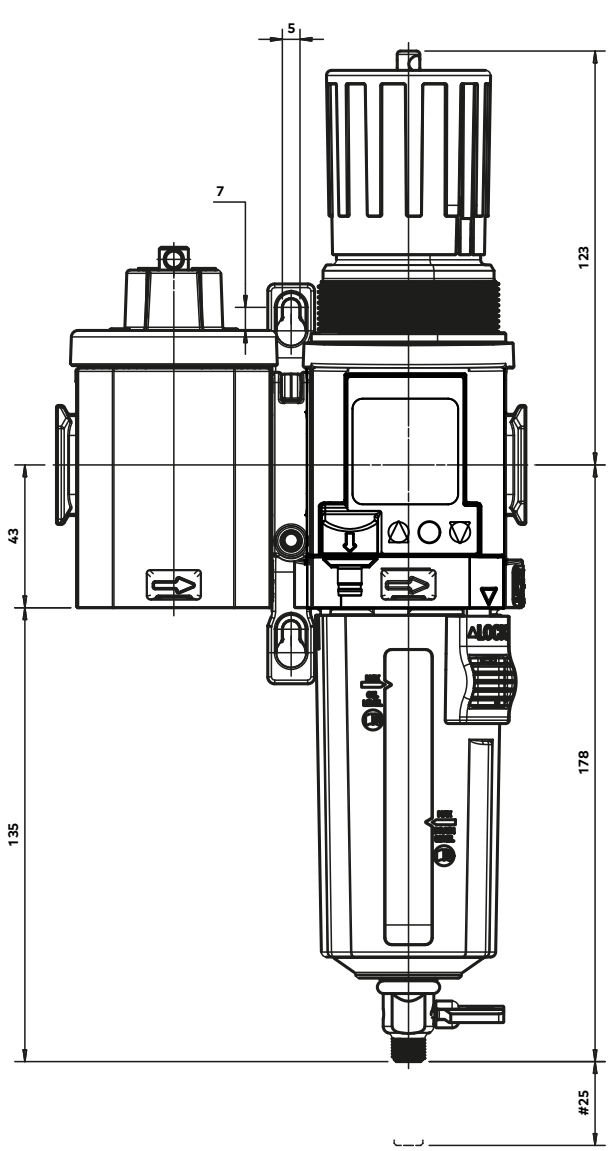


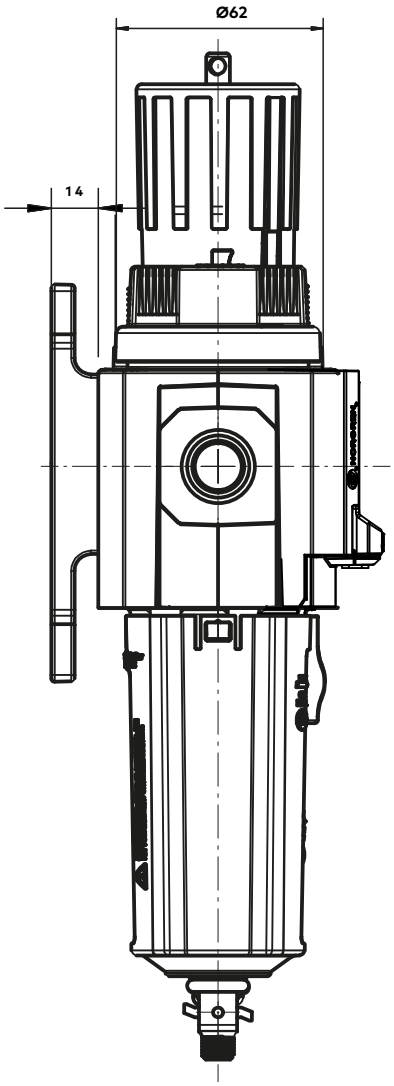
Minimum clearance for bowl removal

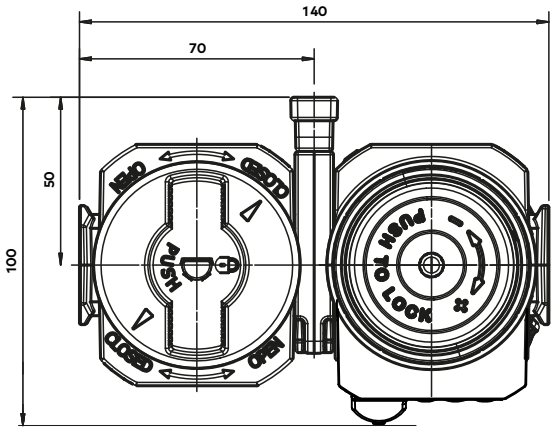
Dimensions

Dimensions in mm
Projection/First angle

Shut-off valve, Filter- Regulator with IEPS





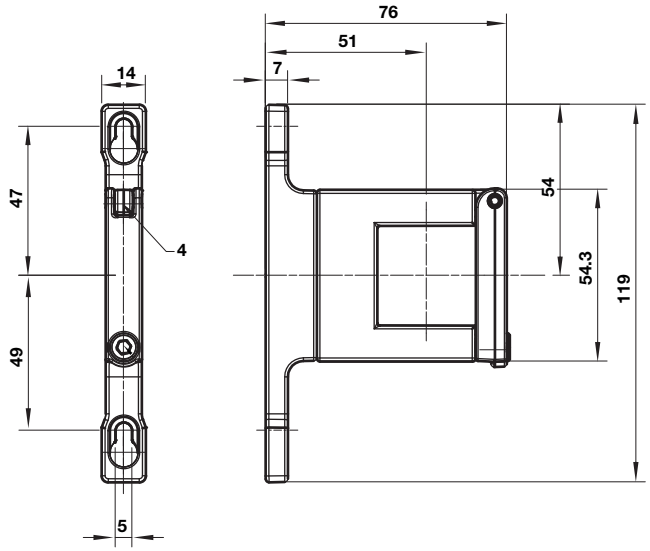


Minimum clearance for bowl removal

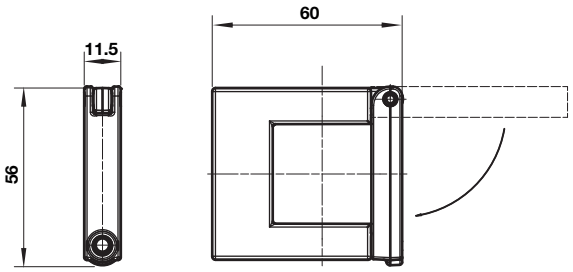
Accessories

Dimensions in mm
Projection/First angle

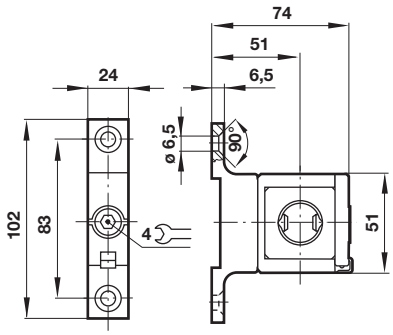
Quikclamp with wall bracket



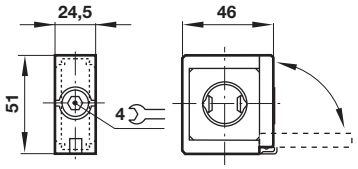
Quikclamp



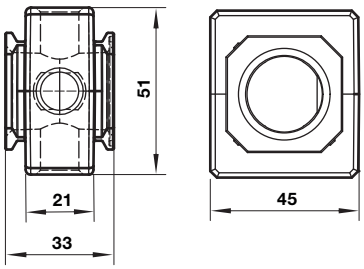
Hybrid-Quikclamp with wall bracket



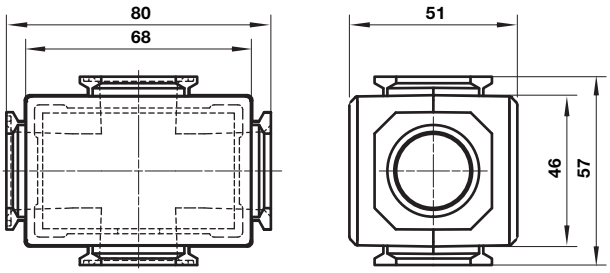
Hybrid-Quikclamp



Pressure sensing block

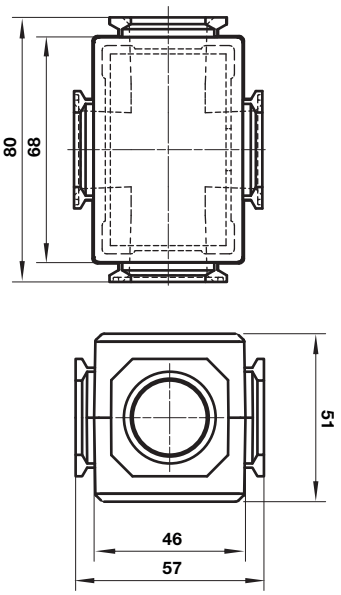


Full flow porting block horizontal

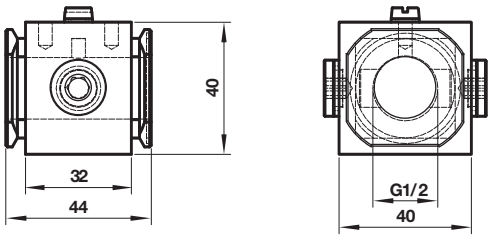


Full flow porting block vertical

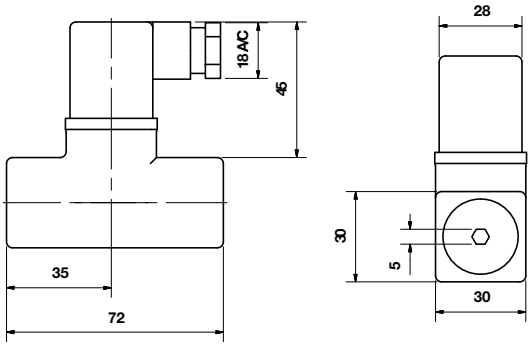
Dimensions in mm
Projection/First angle



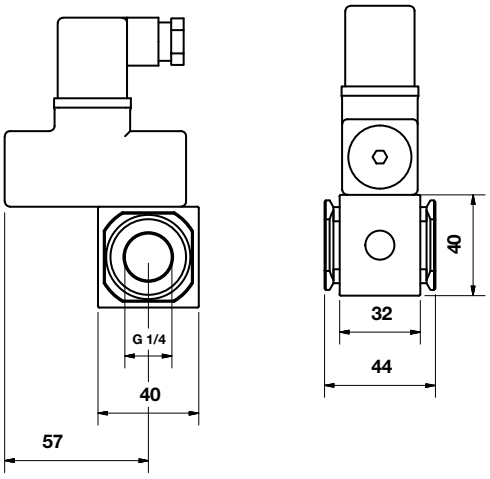
Porting block for 18D pressure switch



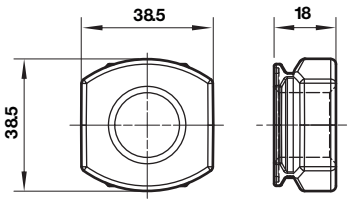
18D Pressure switch



18D Porting block and 18D assembled

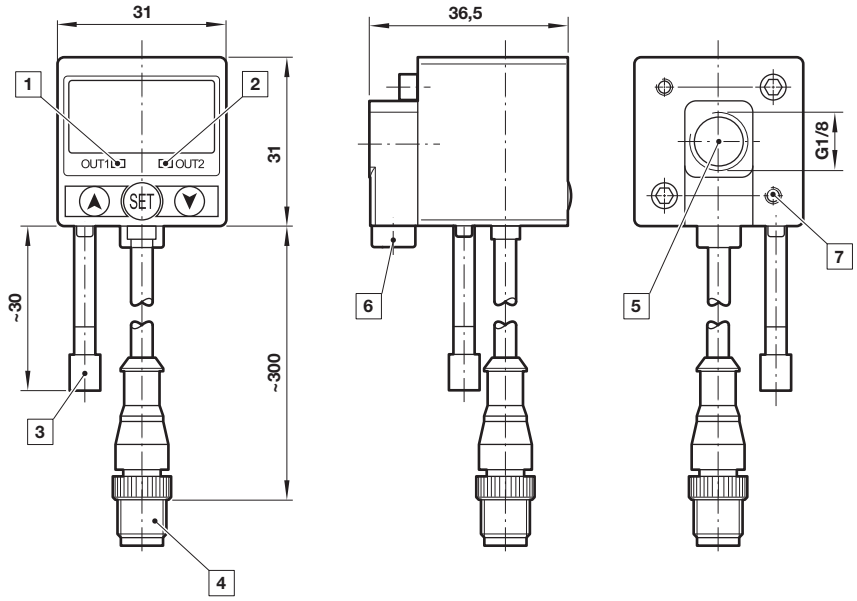


Pipe adaptor



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.