

P84F 3/2 Soft Start/Dump Valve 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
- High forward flow
capacity
- Fast Exhausting
- Variable Snap
Adjustment
- Solenoid and air pilot
options
- For use as components
in safety-related systems
according to DIN EN
ISO13849 up to a
Performance Level (PL)
c Cat. 1
Safety function: Safe
Venting.



Technical features

Medium:
Compressed air only

Maximum supply pressure:
10 bar (145 psi)

Minimum operating pressure:
3 bar (43 psi)

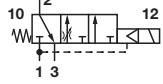
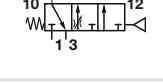
Port size:
G3/8, G1/2, G3/4,
3/8 PTF, 1/2 PTF, 3/4 PTF

Flow:
51 dm³/s at port size 1/2"
Full flow P1 to P2 at 6,3 bar (91 psi)
inlet, with 0,5 bar (7 psi) pressure
drop
P2 to P3 = 65 dm³/s.

Ambient/Media temperature:
Solenoid Operated
-20° ... +50°C (-4° ... +122°F)
Pilot Operated
-20° ... +65°C (-4° ... +149°F)
Air supply must be dry enough to avoid
ice formation at temperatures below
+2°C (+35°F).

Materials:
Body: Aluminium
End Caps: Aluminum
Body covers: ABS
Elastomers: NBR
Valve: Brass
Air Pilot: Aluminium

Technical data P84F

Symbol	Port Size	Actuation/return	Voltage	Exhaust Port	Weight (kg)	Model
	G3/8	Solenoid/spring	24 V d.c.	G1/2	1,0	P84F-3GT-PFN
	G1/2	Solenoid/spring	24 V d.c.	G1/2	1,0	P84F-4GT-PFN
	G3/4	Solenoid/spring	24 V d.c.	G1/2	1,0	P84F-6GT-PFN
	G3/8	Air/spring	N/A	G1/2	1,0	P84F-3GA-NNN
	G1/2	Air/spring	N/A	G1/2	1,0	P84F-4GA-NNN
	G3/4	Air/spring	N/A	G1/2	1,0	P84F-6GA-NNN

Electrical details for solenoid operators

Voltage tolerance: -10%/+15%

Rating: 100% continuous duty

Inlet orifice: 0,8mm

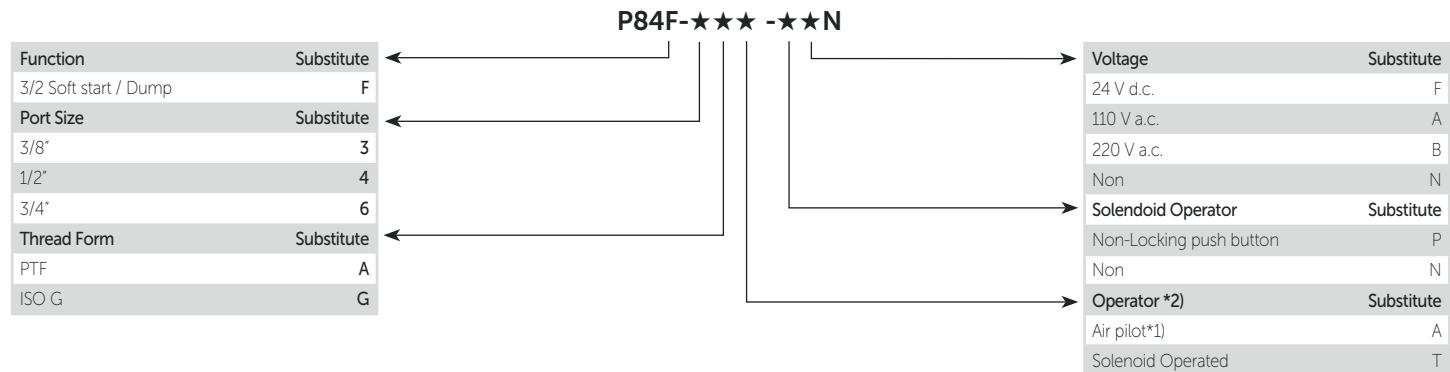
Electrical connection: 15mm DIN EN 175301-803 (DIN 43650) Form C

Manual override: Shrouded push button, spring return

Protection class: IP65

Materials: PP5 (body), NBR (seals)

Option selector



*1) To order air pilot models, select P84F-**A-NNN

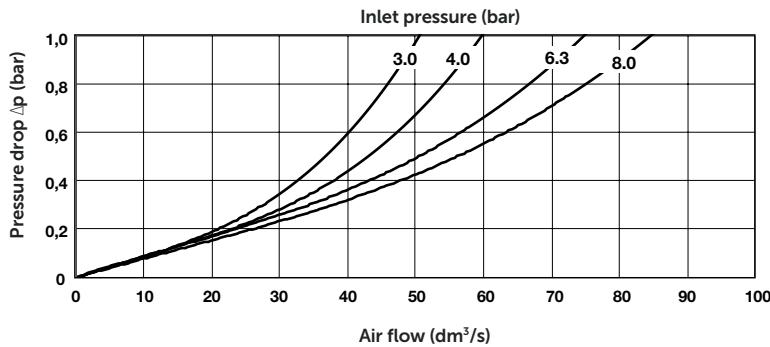
*2) ATEX statement can be found online

https://cdn.norgren.com/pdf/IM_Excelon_Plus_EN_final.pdf

Flow characteristics

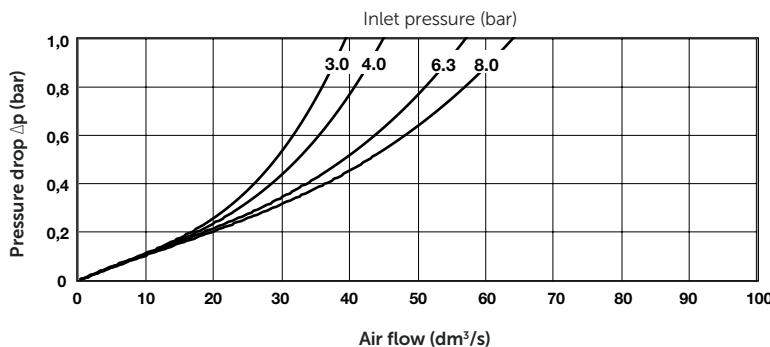
Port 1 to 2

Port size: 1/2"



Port 1 to 2

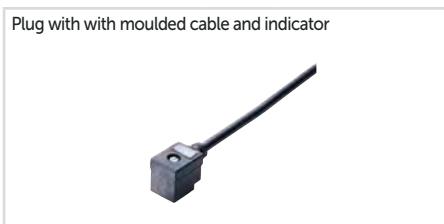
Port size: 3/8"



Accessories



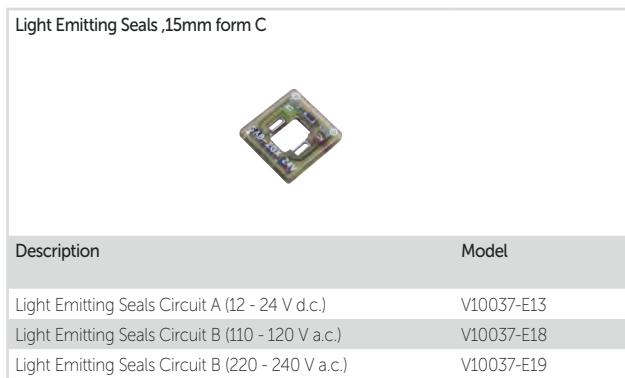
Description	Cable length (m)	Model
PUR-Cable; M12/valve type C DIN connector	0,6	NC-DINCA-123MS-A
	1	NC-DINCA-123MS-1
	2	NC-DINCA-123MS-2
	5	NC-DINCA-123MS-5



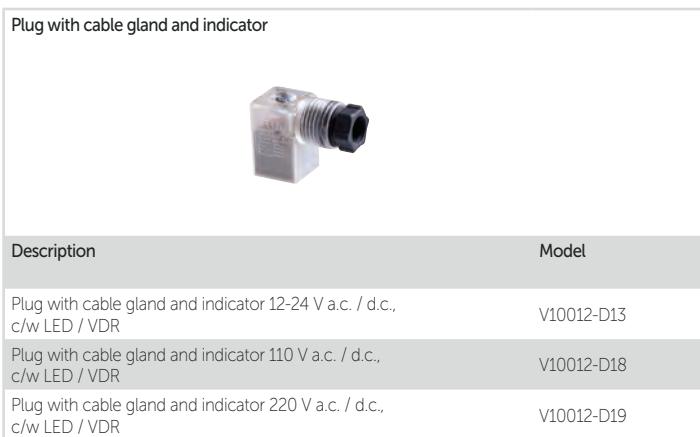
Voltage	Cable length (m)	Model
12 - 24 V a.c. / d.c.	1	V10014-D01
12 - 24 V a.c. / d.c.	3	V10014-D03
110 V a.c. / d.c.	1	V10015-D01
110 V a.c. / d.c.	3	V10015-D03
220 V a.c. / d.c.	1	V10016-D01
220 V a.c. / d.c.	3	V10016-D03



Description	Cable length (m)	Model
3 pin plug with moulded cable	1	V10013-D01
3 pin plug with moulded cable	3	V10013-D03



Description	Model
Light Emitting Seals Circuit A (12 - 24 V d.c.)	V10037-E13
Light Emitting Seals Circuit B (110 - 120 V a.c.)	V10037-E18
Light Emitting Seals Circuit B (220 - 240 V a.c.)	V10037-E19



Description	Model
Plug with cable gland and indicator 12-24 V a.c. / d.c., c/w LED / VDR	V10012-D13
Plug with cable gland and indicator 110 V a.c. / d.c., c/w LED / VDR	V10012-D18
Plug with cable gland and indicator 220 V a.c. / d.c., c/w LED / VDR	V10012-D19



V13981-E01



V13980-E01



V10027-D00

Accessories

Quikclamp



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840014-51KIT

Quikclamp with bracket assembled



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840014-52KIT

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

Hybrid Quikclamp *1



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840014-61

Hybrid Quikclamp with bracket assembled *1



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*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

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 8

840028-69KIT

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



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0337717000000000

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



Page 8

0881300

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



Page 9

0860810

Electronic Pressure Sensor – stand alone version *3



Q84G

Heavy duty muffler, 1/2" NPT male thread, brass wire element



MB004A

Heavy duty muffler, R1/2 male thread, brass wire element



MB004B

*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

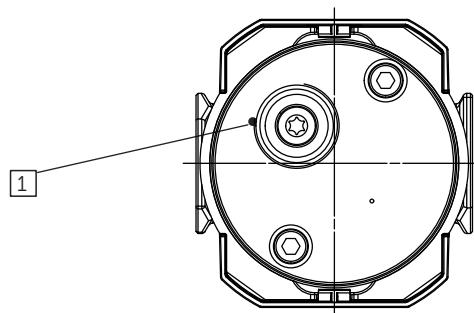
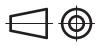
<http://s.norgren.com/digital-gauge-iodd> for data-sheet 8.900.905.

Voltage rating and spare coils

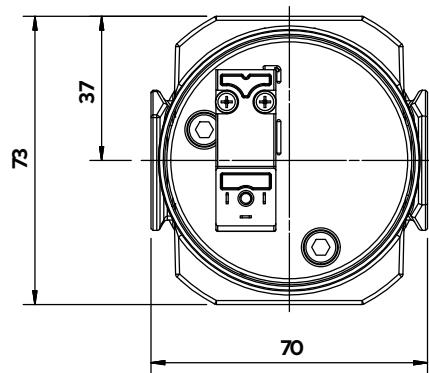
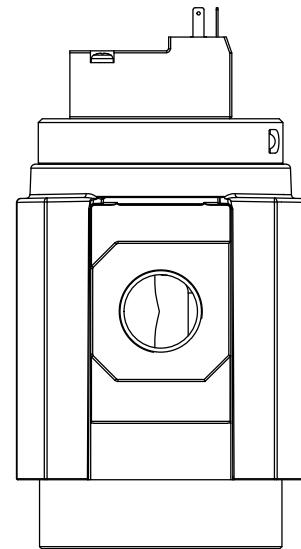
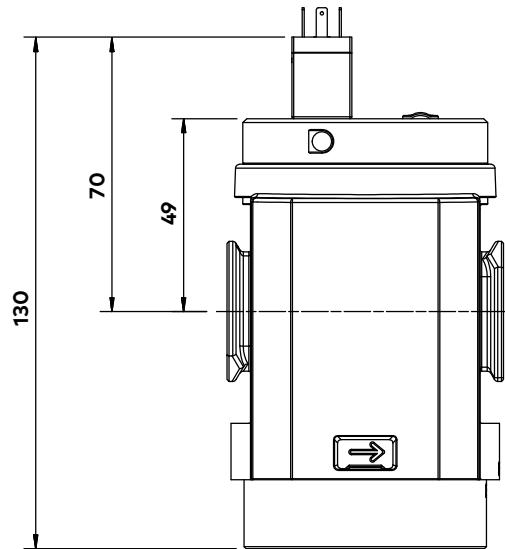
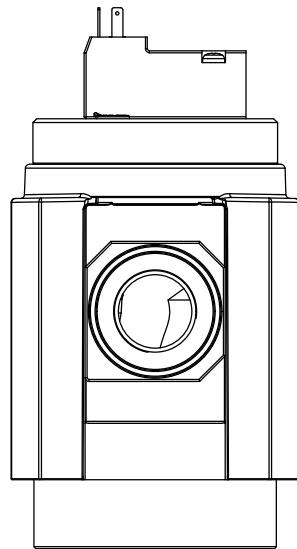
	Voltage	Power	Replacement
	24 V d.c.	1,2 W	840650-50KIT
	110 V a.c.	1,5 VA	840650-51KIT
	220 V a.c.	1,5 VA	840650-52KIT

Dimensions

Dimensions in mm
Projection/First angle



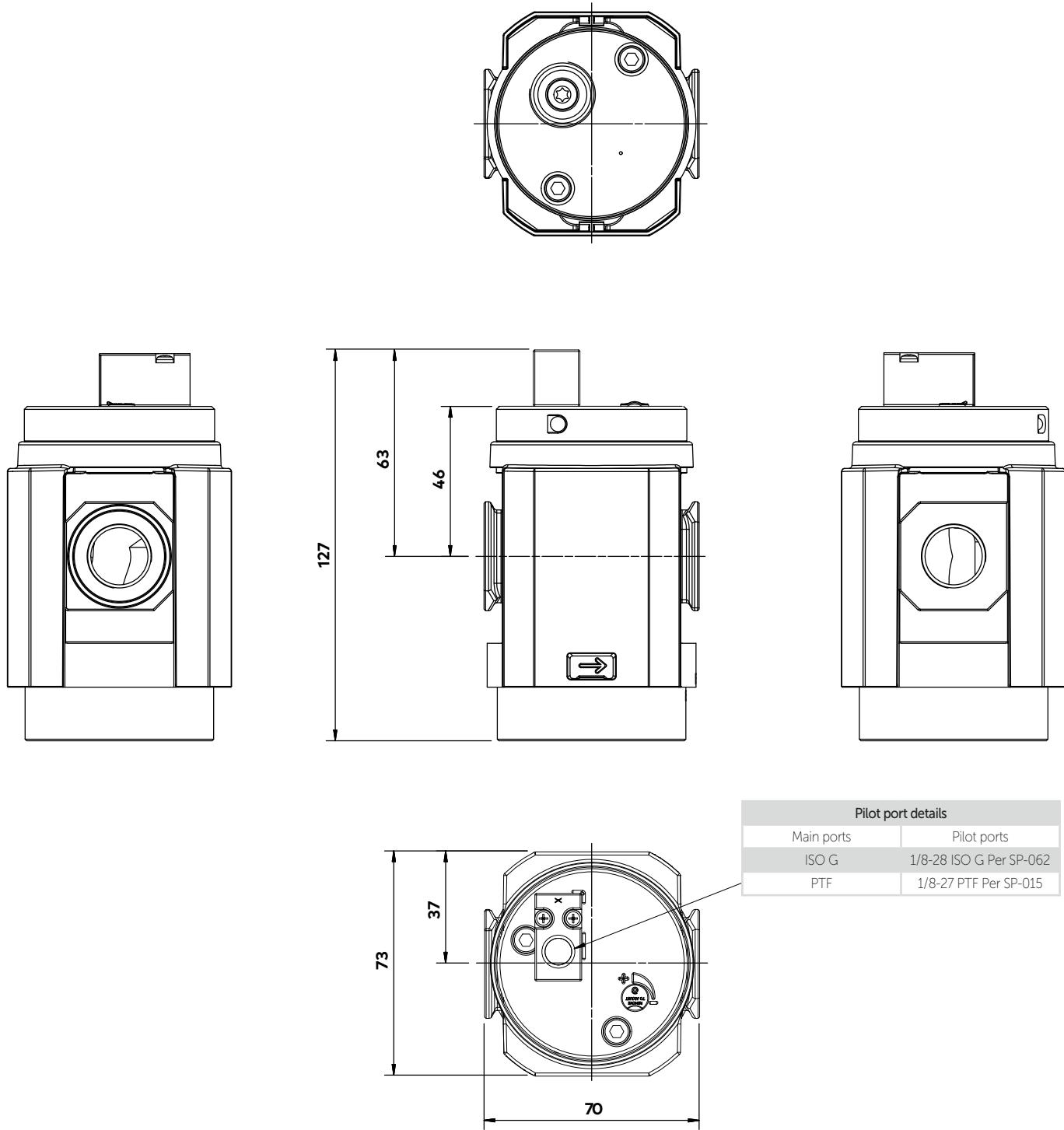
① 1/2" exhaust port (NPT or ISO G)



Dimensions

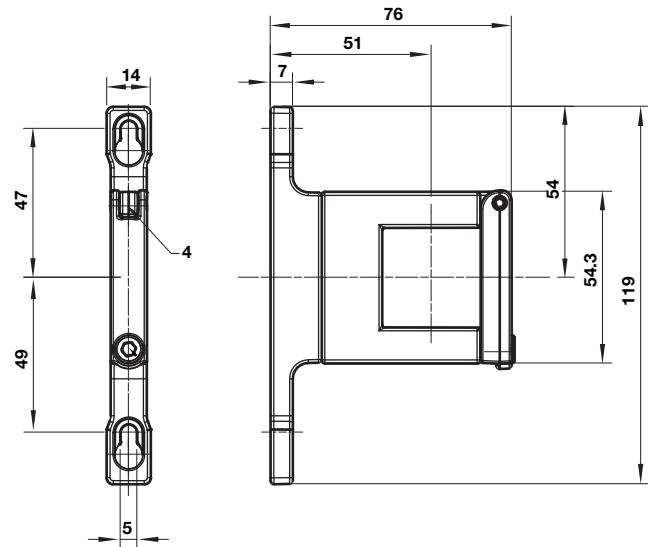
Air Pilot Operator

Dimensions in mm
Projection/First angle

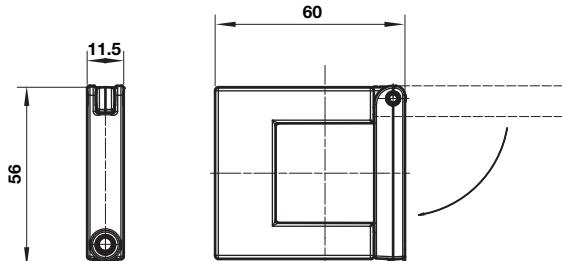


Accessories

Quikclamp with wall bracket



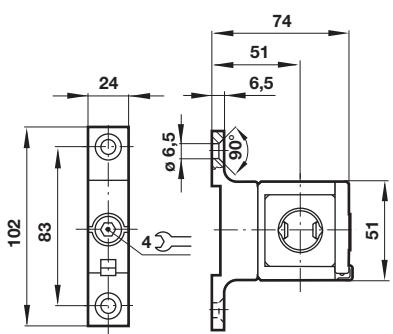
Quikclamp



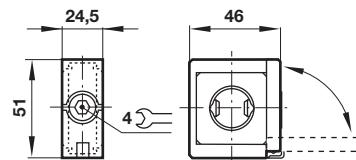
Dimensions in mm
Projection/First angle



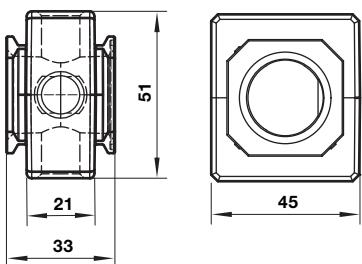
Hybrid-Quikclamp with wall bracket



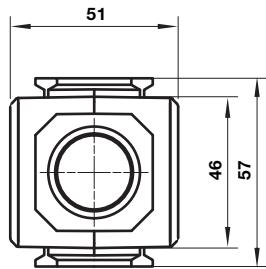
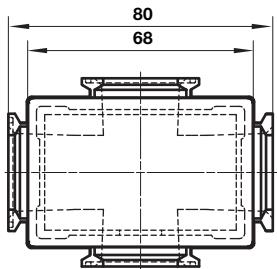
Hybrid-Quikclamp



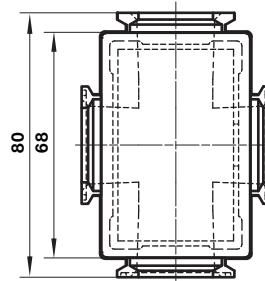
Pressure sensing block



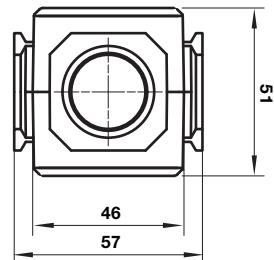
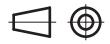
Full flow porting block horizontal



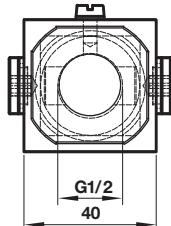
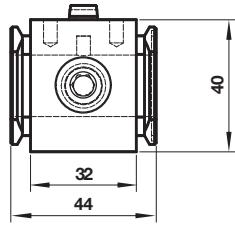
Full flow porting block vertical



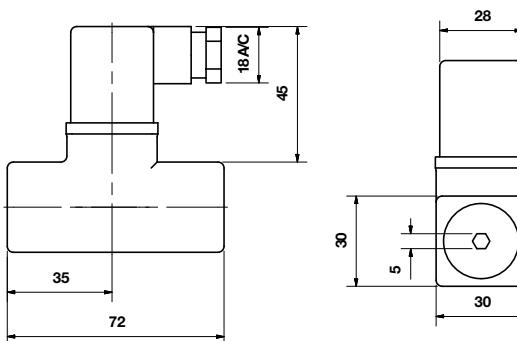
Dimensions in mm
Projection/First angle



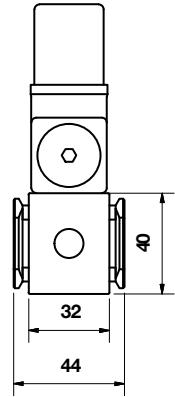
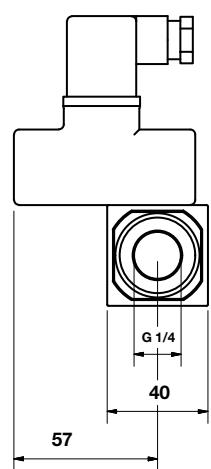
Porting block for 18D pressure switch



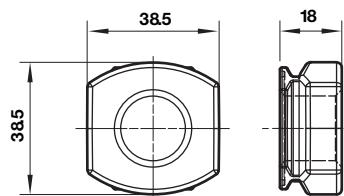
18D Pressure switch



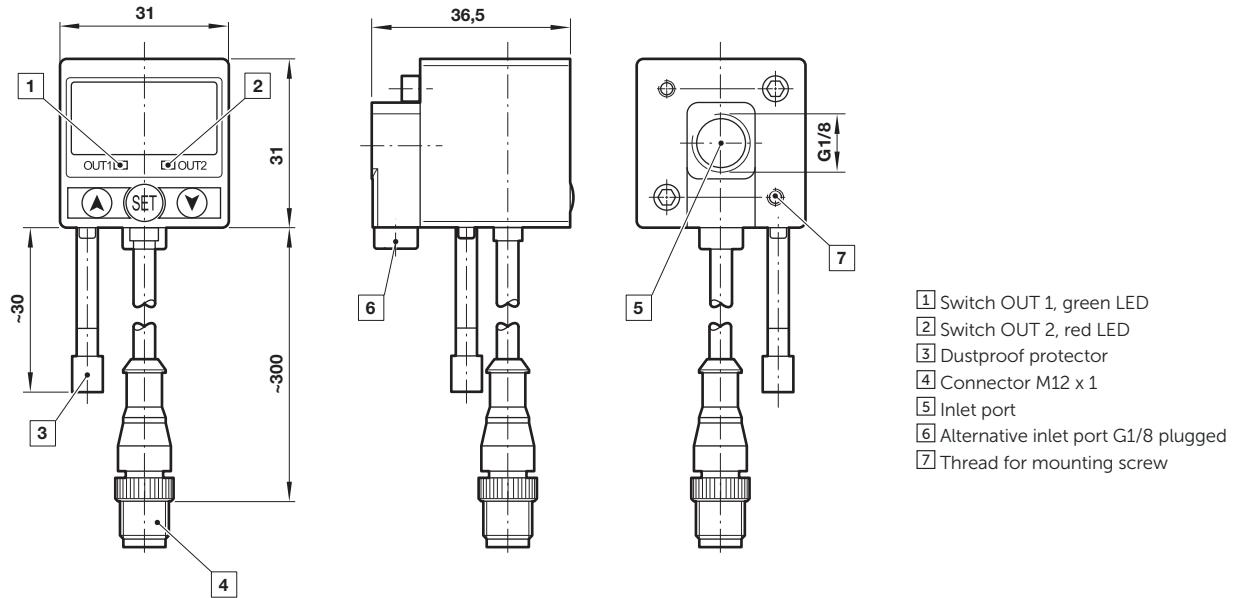
18D Porting block and
18D assembled



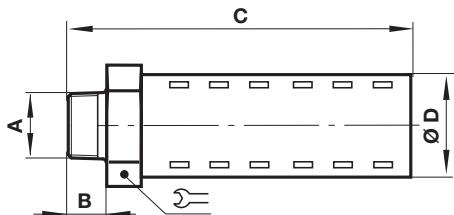
Pipe adaptor



51D Pressure switch - digital



Silencer



A	B	C	D	Model
R1/2	17	92	32	32
1/2 NPT	17	92	32	32

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.