

# P84C 3/2 Control 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
- 3 port/2 position valve,  
normally closed
- 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)

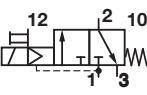
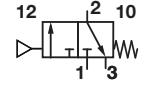
**Port size:**  
G3/8, G1/2, G3/4,  
3/8 PTF, 1/2 PTF, 3/4 PTF

**Flow:**  
58 dm<sup>3</sup>/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 = 63 dm<sup>3</sup>/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

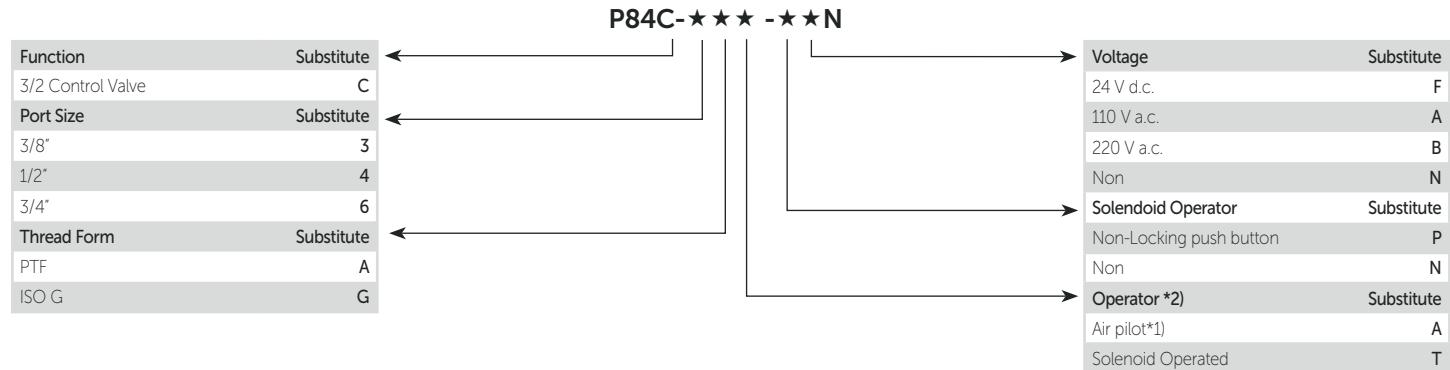
## Technical data P84C

Symbol	Port Size	Function	Voltage	Exhaust Port	Weight (kg)	Model
	G3/8	Solenoid/spring	24 V d.c.	G1/2	1,0	P84C-3GT-PFN
	G1/2	Solenoid/spring	24 V d.c.	G1/2	1,0	P84C-4GT-PFN
	G3/4	Solenoid/spring	24 V d.c.	G1/2	1,0	P84C-6GT-PFN
	G3/8	Air/spring	N/A	G1/2	1,0	P84C-3GA-NNN
	G1/2	Air/spring	N/A	G1/2	1,0	P84C-4GA-NNN
	G3/4	Air/spring	N/A	G1/2	1,0	P84C-6GA-NNN

## Electrical details for solenoid operators

<b>Voltage tolerance:</b>	-10%/+15%
<b>Rating:</b>	100% continuous duty
<b>Inlet orifice:</b>	0,8mm
<b>Electrical connection:</b>	15mm DIN EN 175301-803 (DIN 43650) Form C
<b>Manual override:</b>	Shrouded push button, spring return
<b>Protection class:</b>	IP65
<b>Materials:</b>	PP5 (body), NBR (seals)

## Option selector



\*1) To order air pilot models, select P84C-\*\*A-NNN

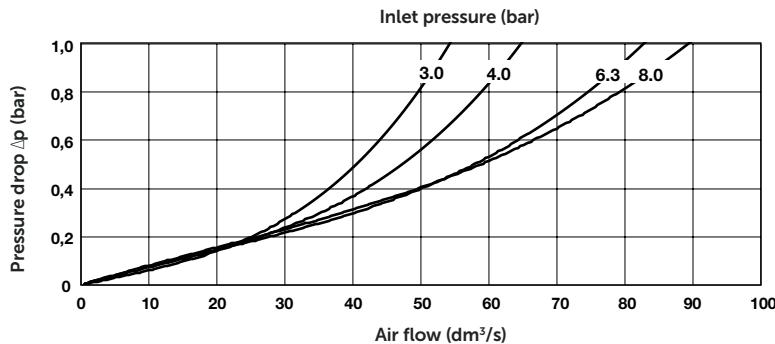
\*2) ATEX statement can be found online

[https://cdn.norgren.com/pdf/IM\\_Excelon\\_Plus\\_EN\\_final.pdf](https://cdn.norgren.com/pdf/IM_Excelon_Plus_EN_final.pdf)

## Flow characteristics

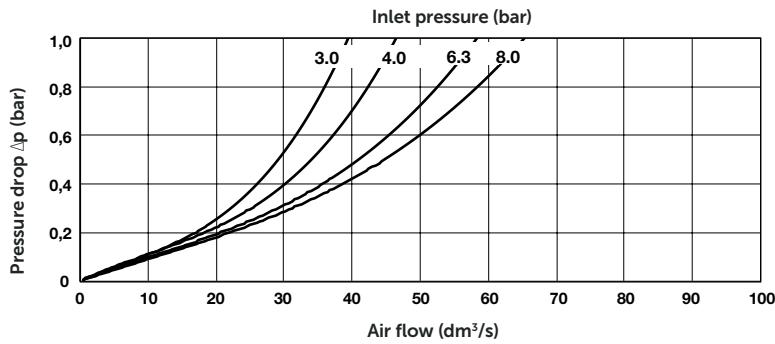
Port 1 to 2

Port size: 1/2"



Port 1 to 2

Port size: 3/8"



## Accessories

Connection cable with plug,LED and M12 Female



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

Plug with moulded cable and indicator



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

Plug with moulded cable



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

Light Emitting Seals ,15mm form C



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

Plug with cable gland and indicator



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

M12 Adaptor Rear - MSUP Valve Plug Form C 8MM



V13981-E01

M12 Adaptor Top - MSUP Valve Plug Form C 8MM



V13980-E01

Plug with cable gland



V10027-D00

## Accessories

Quikclamp	Quikclamp with bracket assembled	Pressure sensing block 1/4 PTF	Pressure sensing block G1/4	Port Adaptors
				
Page 7 840014-51KIT	Page 7 840014-52KIT	Page 7 840016-50KIT	Page 7 840016-51KIT	Page 8 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	Hybrid Quikclamp with bracket assembled *1			
				
Page 7 840014-61	Page 7 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				
Full flow porting block 3/4" PTF	Full flow porting block G3/4	Full flow porting block 3/4" PTF	Full flow porting block G3/4	Pressure switch interface block (18D pressure switch) G1/4
				
Page 8 840028-50KIT	Page 8 840028-53KIT	Page 8 840028-68KIT	Page 8 840028-69KIT	Page 8 0337717000000000

Pressure switch 18D (0,5 ... 8bar) *1	Digital pressure switch 51D (-1 ... 10 bar) *2	Electronic Pressure Sensor – stand alone version *3	Silencer	Heavy duty muffler, 1/2" NPT male thread, brass wire element
				
Page 8 0881300	Page 9 0860810	Q84G	MB004A	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

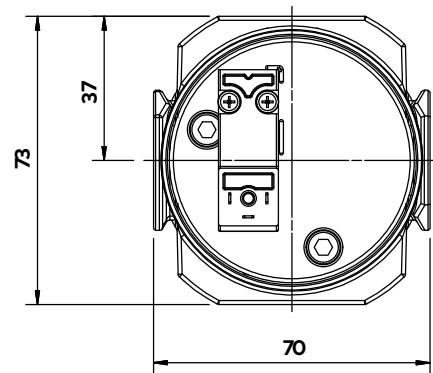
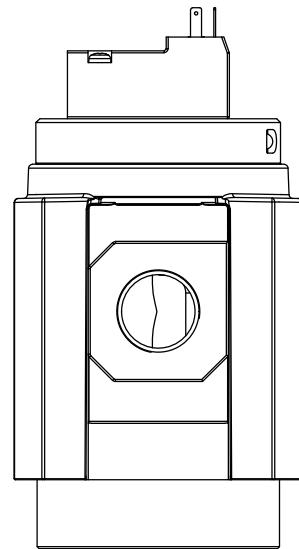
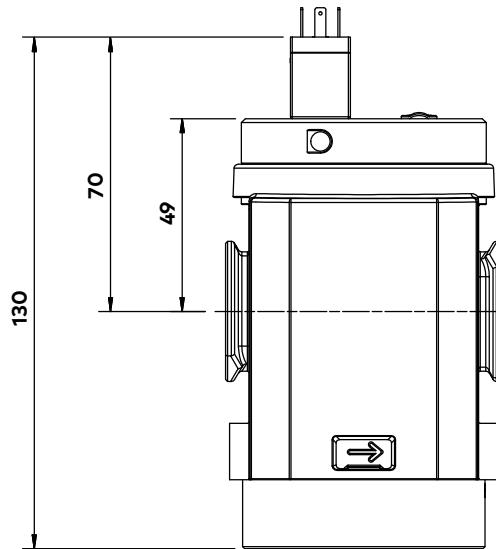
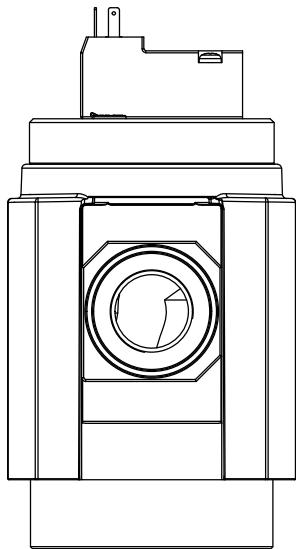
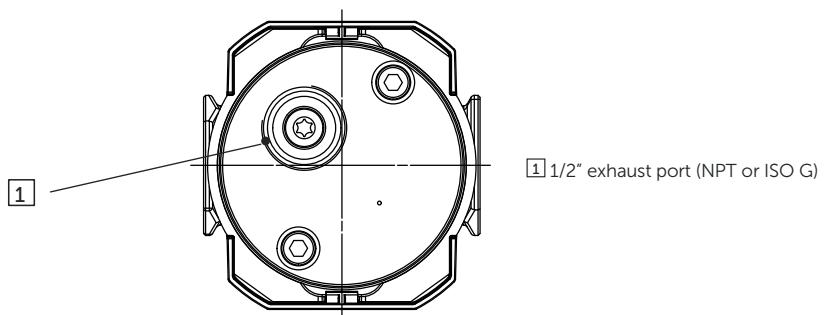
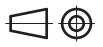
\*3) Q84G stand alone electronic pressure sensor module see <http://s.norgren.com/digital-gauge-iodd> for data-sheet 8.900.905.

## 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

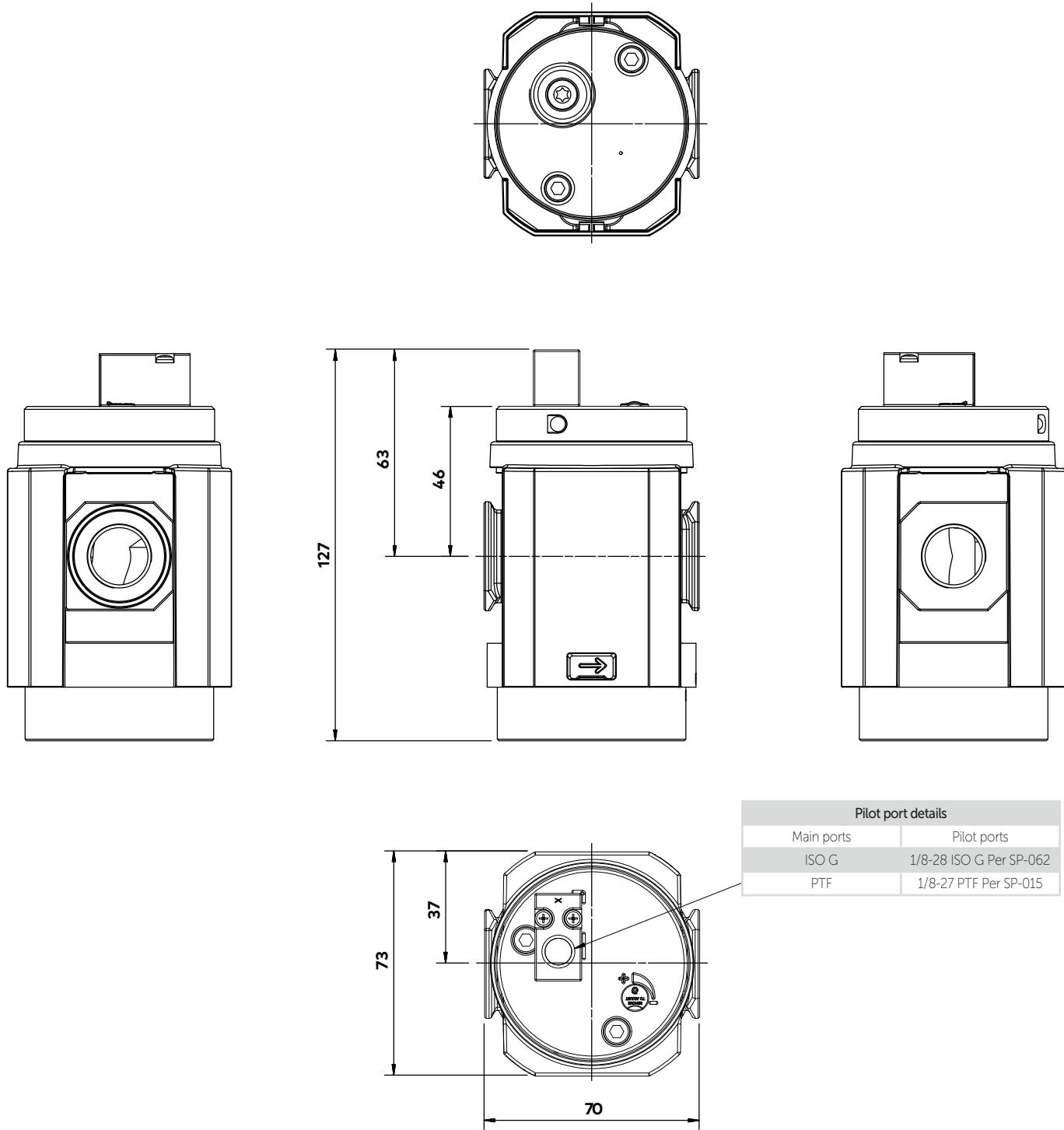
Dimensions in mm  
Projection/First angle



## Dimensions

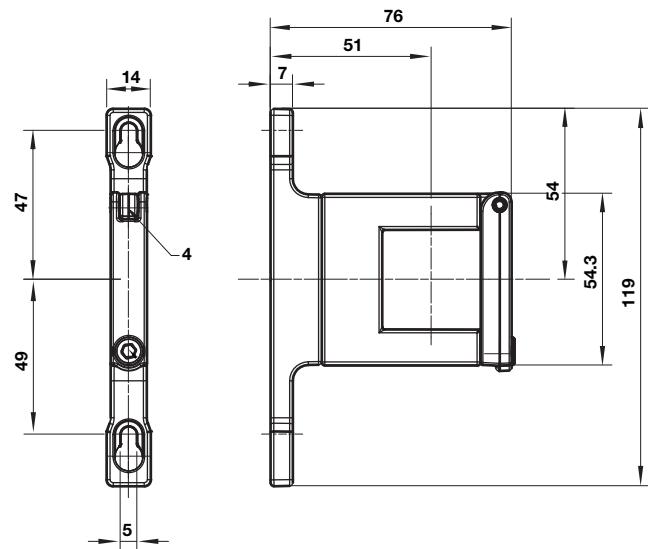
### Air Pilot Operator

Dimensions in mm  
Projection/First angle

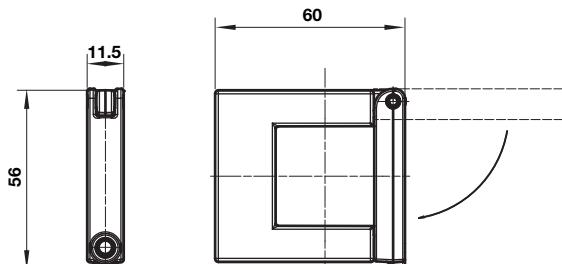


## Accessories

### Quikclamp with wall bracket



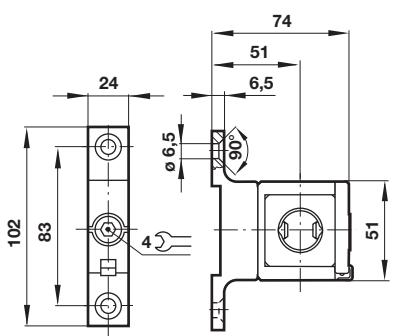
### Quikclamp



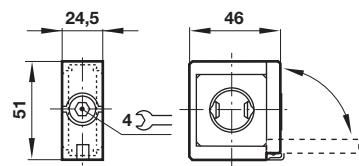
Dimensions in mm  
Projection/First angle



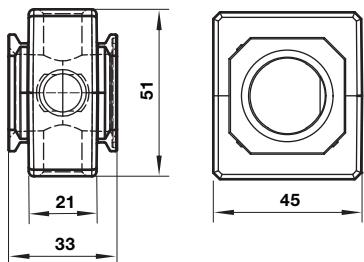
### Hybrid-Quikclamp with wall bracket



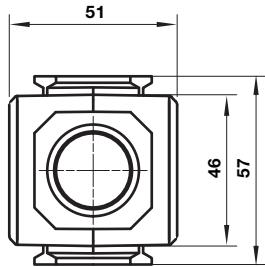
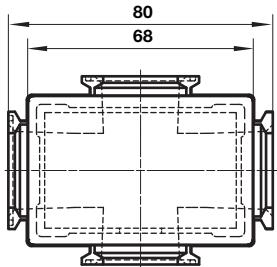
### Hybrid-Quikclamp



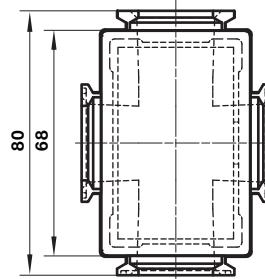
### Pressure sensing block



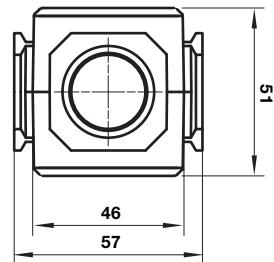
Full flow porting block horizontal



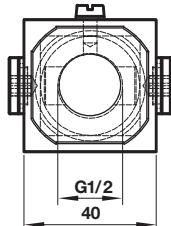
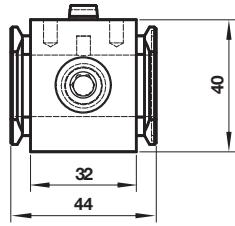
Full flow porting block vertical



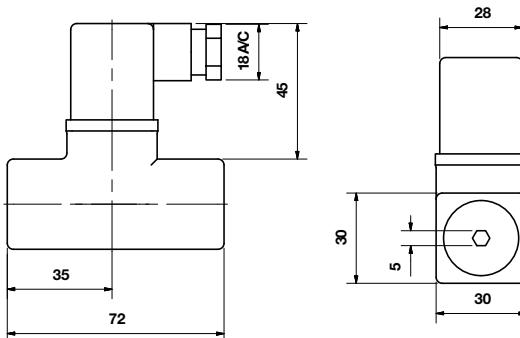
Dimensions in mm  
Projection/First angle



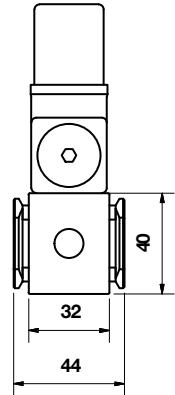
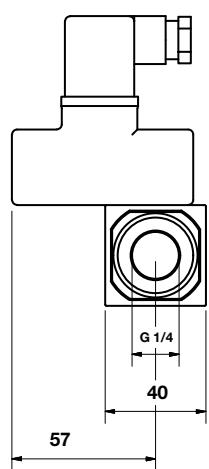
Porting block for 18D pressure switch



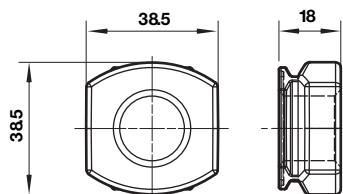
18D Pressure switch



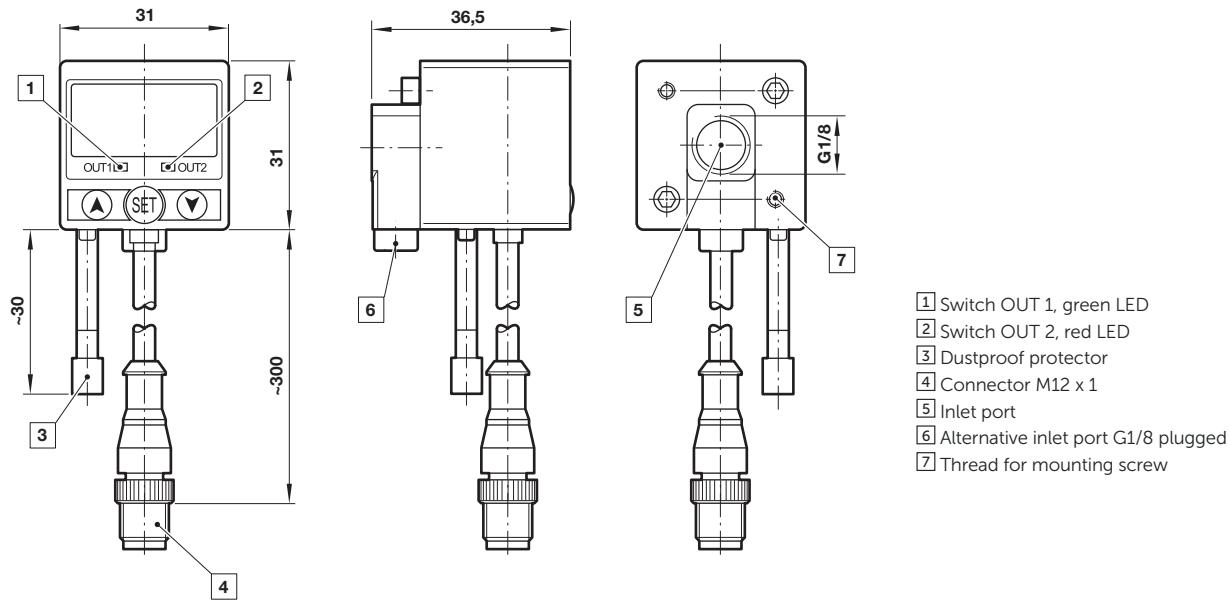
18D Porting block and  
18D assembled



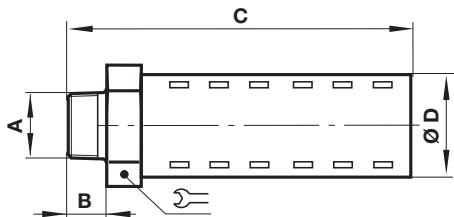
Pipe adaptor



## 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.