

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 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 = 63 dm³/s.

Ambient/Media temperature:

-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

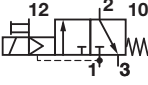
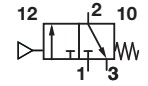
Body covers: ABS

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

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

Function		Substitute	
3/2 Control Valve		C	
Port Size		Substitute	
3/8"		3	
1/2"		4	
3/4"		6	
Thread Form		Substitute	
PTF		A	
ISO G		G	

Voltage		Substitute	
24 V d.c.		F	
110 V a.c.		A	
220 V a.c.		B	
Non		N	
Solenoid Operator		Substitute	
Non-Locking push button		P	
Non		N	
Operator *2)		Substitute	
Air pilot*1)		A	
Solenoid Operated		T	

Flow characteristics

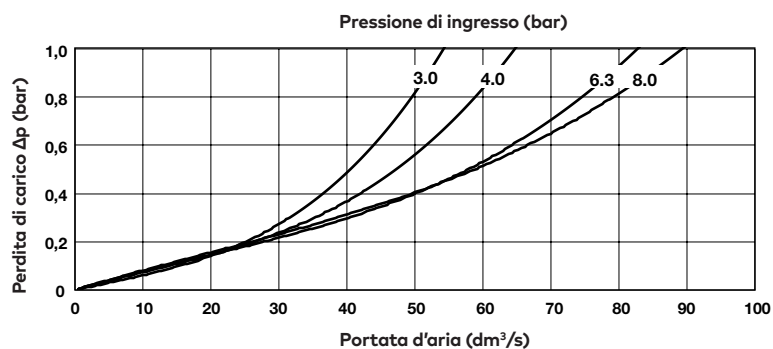
Port 1 to 2

Port size: 1/2"

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

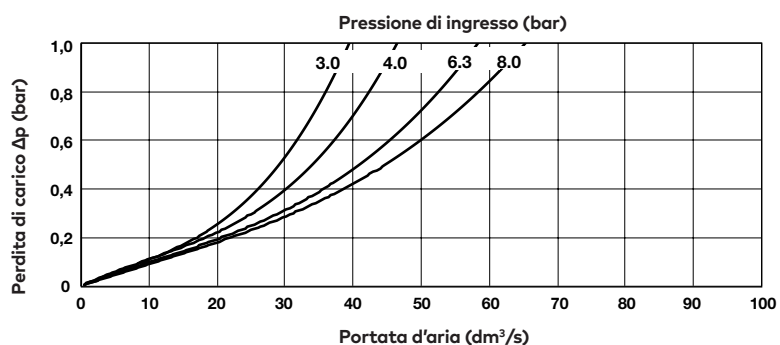
*2) ATEX statement can be found online

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



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 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®



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Quikclamp® with bracket assembled



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Pressure sensing block 1/4 PTF



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840016-50KIT

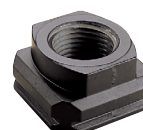
Pressure sensing block G1/4



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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

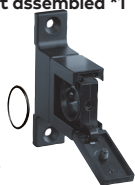
Hybrid Quikclamp® *1



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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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Full flow porting block G3/4



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Full flow porting block 3/4" PTF



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Full flow porting block G3/4



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840028-53KIT

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



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0860810

Electronic Pressure Sensor – stand alone version *3



Q84G

Silencer

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

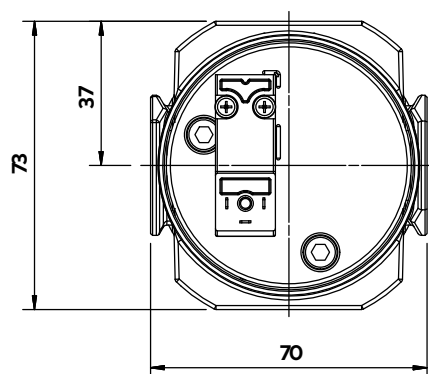
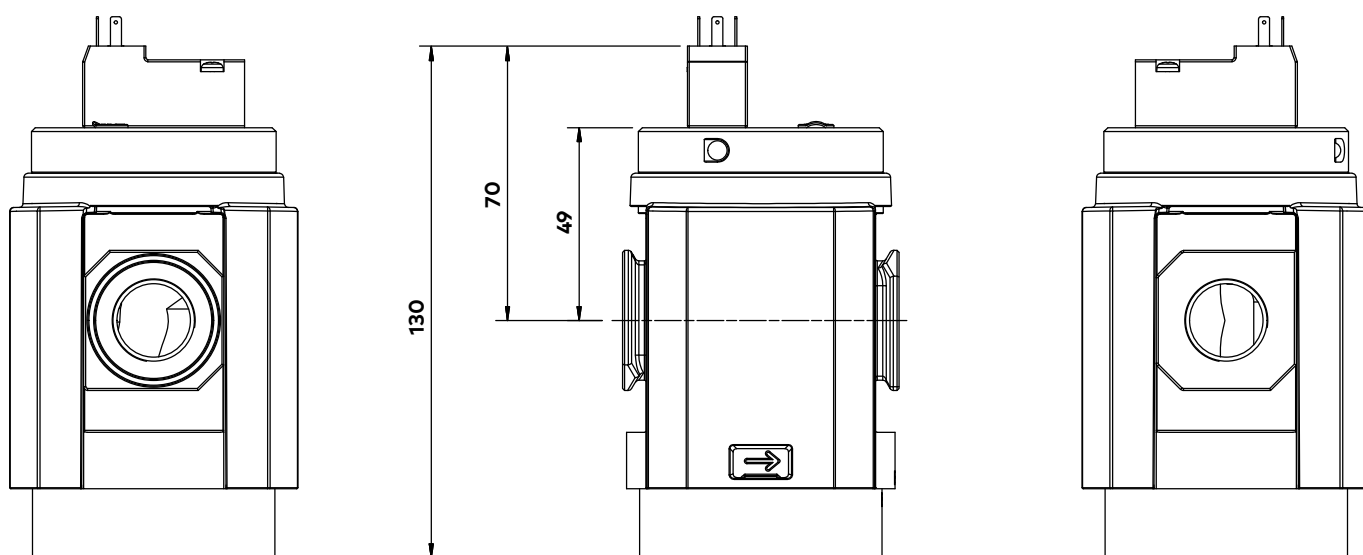
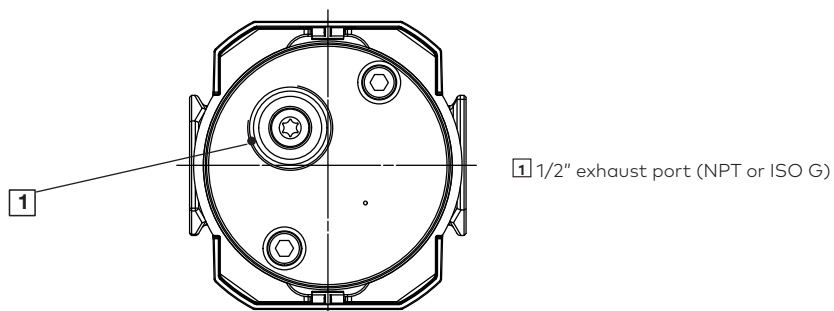
*3) Q84G stand alone electronic pressure sensor module
see <http://s.norgren.com/digital-gauge-iodd> for data-sheet 8.900.905.

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

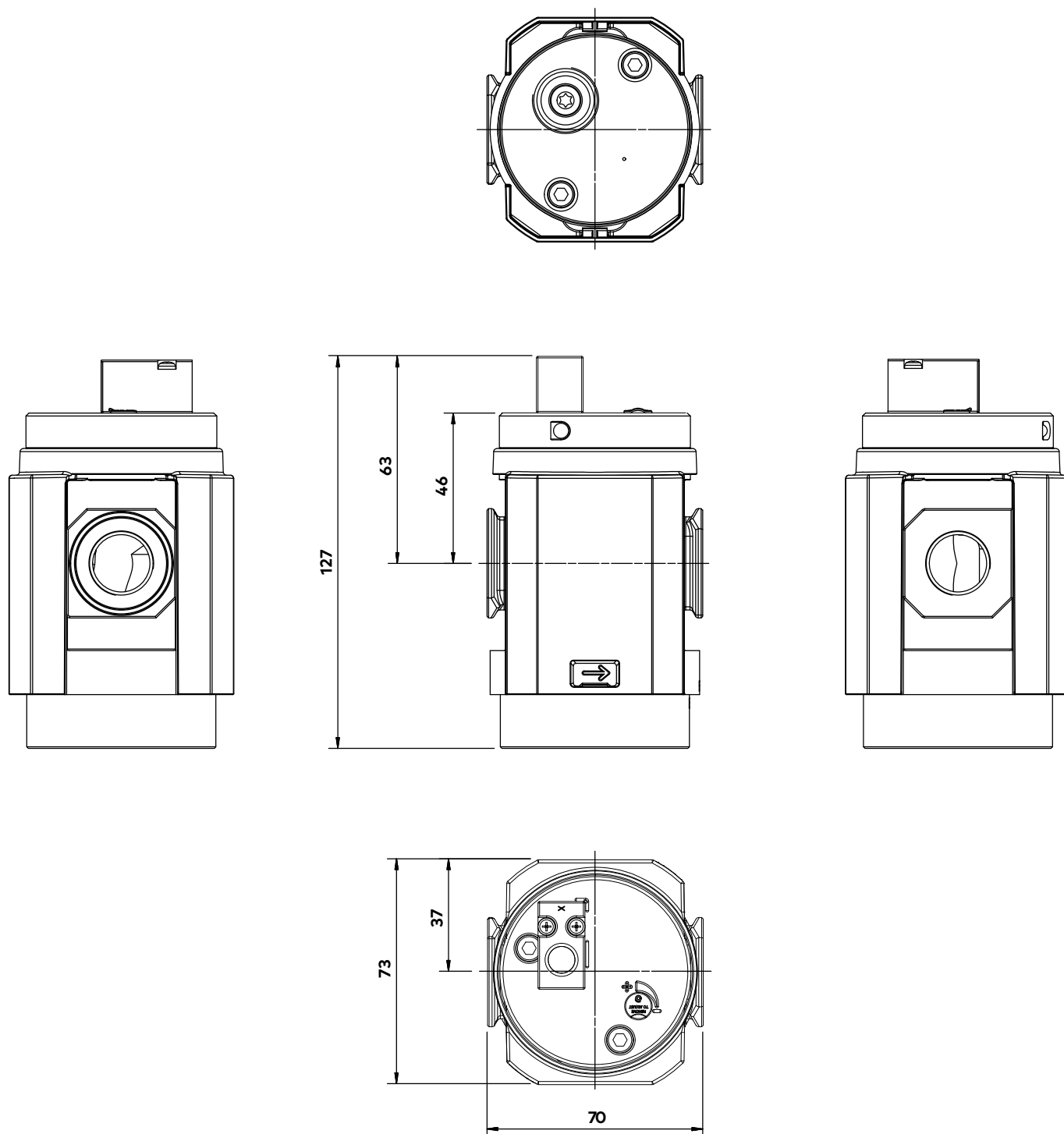
Dimensions in mm
Projection/First angle



Dimensions

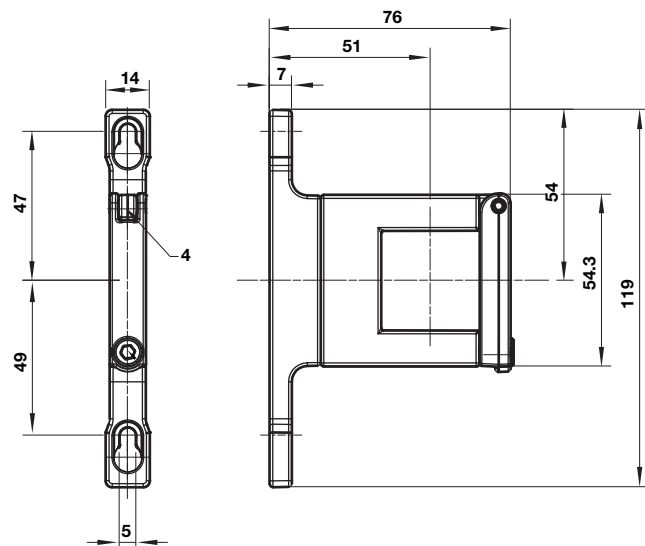
Air Pilot Operator

Dimensions in mm
Projection/First angle



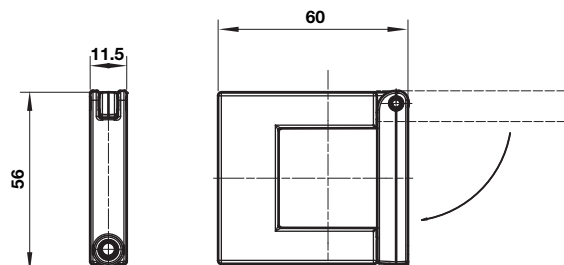
Accessories

Quikclamp® with wall bracket

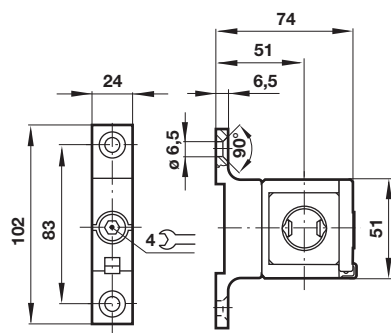


Quikclamp®

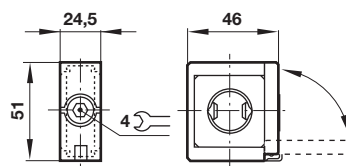
Dimensions in mm
Projection/First angle



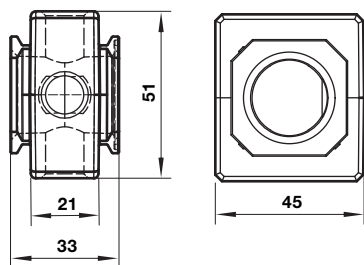
Hybrid-Quikclamp® with wall bracket



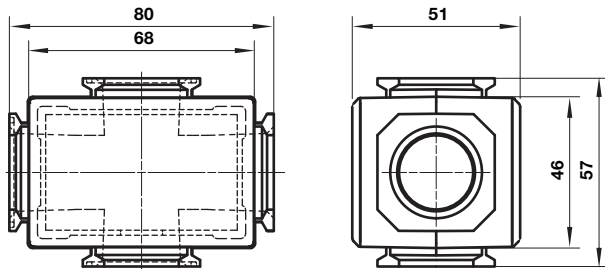
Hybrid-Quikclamp®



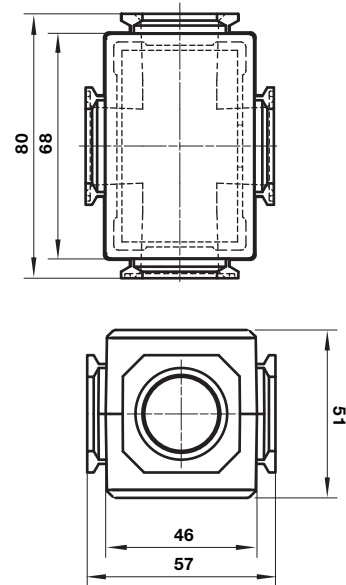
Pressure sensing block



Full flow porting block horizontal



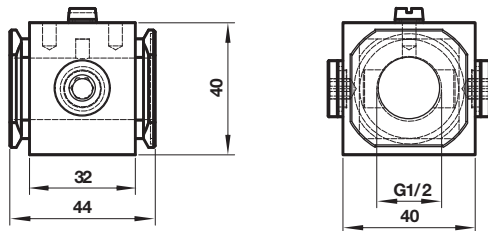
Full flow porting block vertical



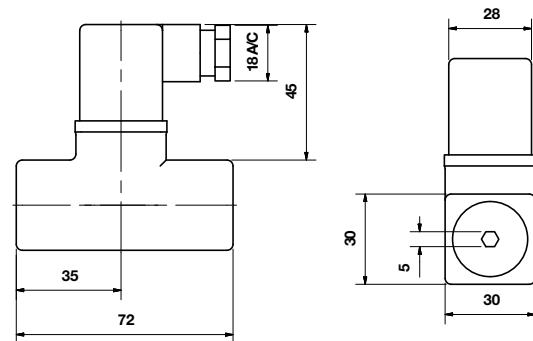
Dimensions in mm
Projection/First angle



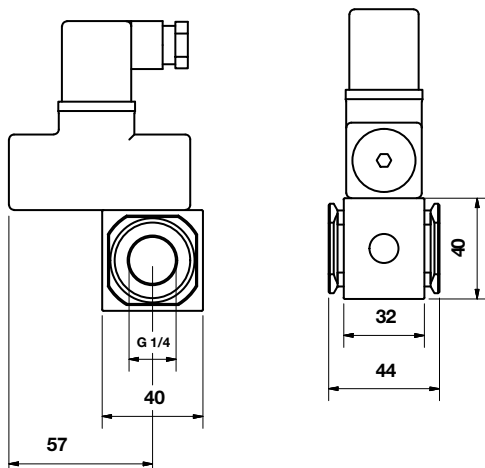
Porting block for 18D pressure switch



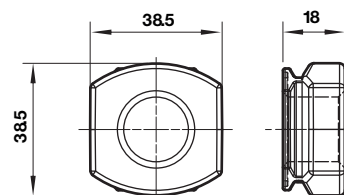
18D Pressure switch



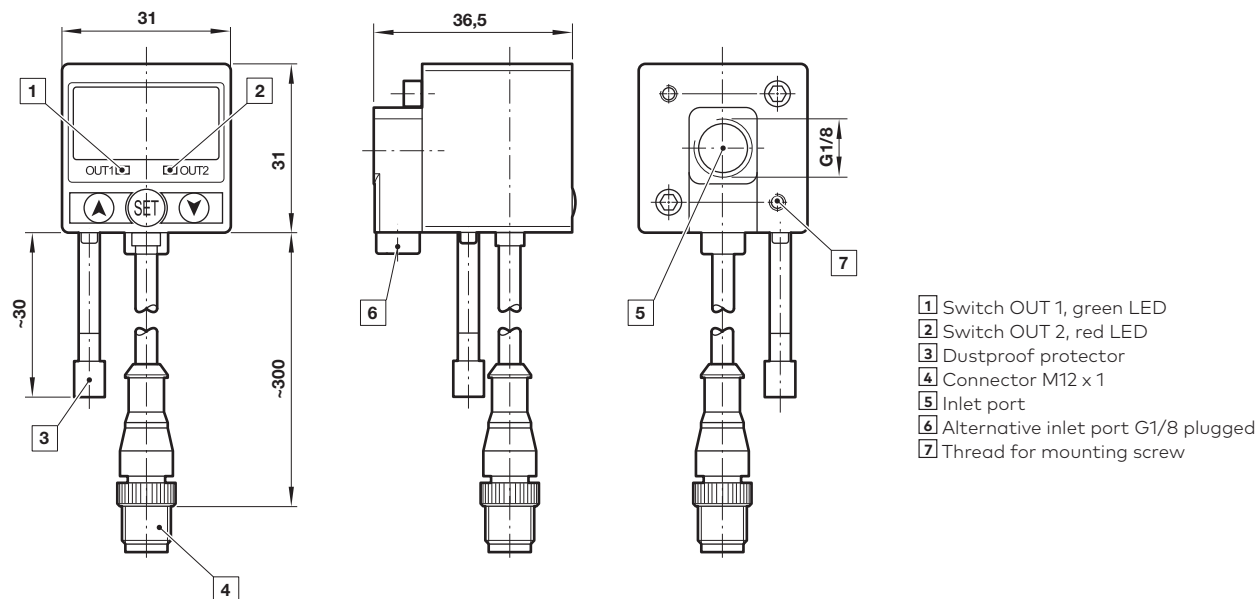
18D Porting block and 18D assembled



Pipe adaptor

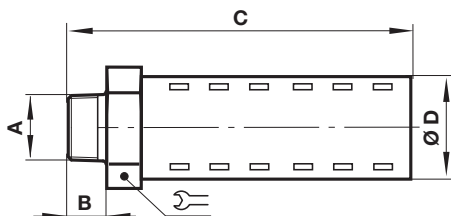


51D Pressure switch - digital



- 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

Silencer



A	B	C	D		Model
R1/2	17	92	32	32	MB004B
1/2 NPT	17	92	32	32	MB004A

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.