V84G - Pressure Relief Valve Excelon® Plus Modular System



- Port size: 3/8" ... 3/4" (ISO G / PTF)
- Allows in-line installation or modular installation with other Excelon® Plus products
- Push to lock adjusting knob with optional tamper resistant accessory
- Helps protect air operated equipment from over pressurization
- IMI Norgren pressure relief valves comply with category O(S.E.P.) and category 1 of the Pressure Equipment Directive 97/23/EC.
- Ex DoC in accordance with 2014/34/EU/ATEX

Technical features

Medium:
Compressed air only

Maximum supply pressure:
20 bar (290 psi)

Relief pressure range:
0.3 ... 4 bar (4 ... 58 psi)
0.3 ... 7 bar (4 ... 102 psi)
0.3 ... 10 bar (4 ... 145 psi)
0.7 ... 17 bar (10 ... 247 psi)

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

Gauge port:
Rc 1/8 with ISO G main ports
1/4 PTF with PTF main ports

Relief port:
Same size as the main ports

Ambient/Media temperature:
-34 ... +80°C (-30 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Atex:
Pressure relief valve V84 are in conformity with Atex 2014/34/EU
Ex II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

Materials:
Body: Aluminum
Bonnet: Aluminum
Bottom plug: Acetal
Elastomers: CR

Technical data—standard models

Symbol	Port size ISO G	Pressure range bar (psi)	Weight kg (lb)	Model
	3/8	0.3 ... 10 (4 ... 145)	0.82 (1.81)	V84G-3GK-NMN
	1/2	0.3 ... 10 (4 ... 145)	0.80(1.76)	V84G-4GK-NMN
	3/4	0.3 ... 10 (4 ... 145)	0.78 (1.72)	V84G-6GK-NMN

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.

Option selector

V84G-★★★-N★★

Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread form	**Substitute**
PTF	A
ISO G parallel (standard)	G
Adjustment	**Substitute**
Knob (standard)	K
T-bar	T*1)

*1) Units with 17 bar (247 psi) outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position.

Gauge	Substitute
With	G
Without	N
Relief pressure adjustment range *2)	**Substitute**
0.3 ... 4 bar (4 ... 58 psi)	F
0.3 ... 7 bar (4 ... 102 psi)	K
0.3 ... 10 bar (4 ... 145 psi)	M
0.7 ... 17 bar (10 ... 247 psi	S*1)

*2) Relief valve can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

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''.

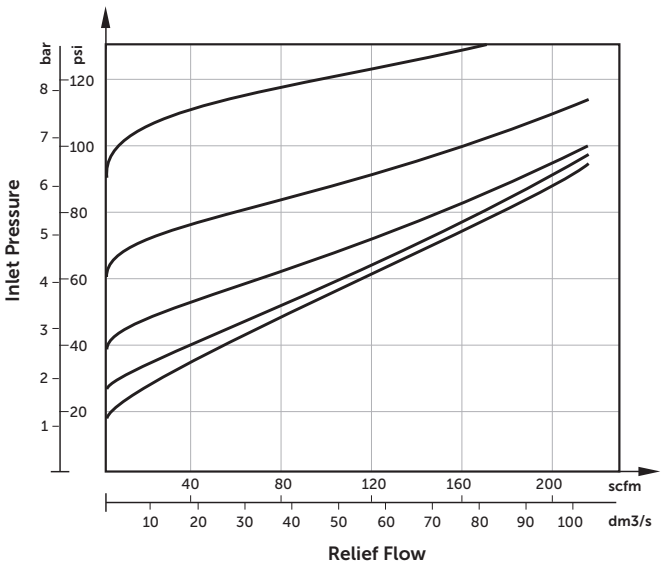
II 2 GD

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

Spring range: 0.3...10 bar (4...145 psi)
Port size: 1/2"



Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.

Accessories

Wall mounting bracket



Page 5

4324-50

Quikclamp®



Page 3

840014-51KIT

Quikclamp® with bracket assembled



Page 3

840014-52KIT

Hybrid Quikclamp® *3)



Page 5

840014-61

Hybrid Quikclamp® with bracket assembled *3)



Page 5

840014-62

Neck mounting bracket



Page 5

4368-51

Panel nut



4348-89

Tamper resistant kit



4355-51

Port Adaptors



Page 3

G3/8: 840015-10KIT

G1/2: 840015-11KIT

G3/4: 840015-12KIT

3/8 PTF: 840015-02KIT

1/2 PTF: 840015-03KIT

3/4 PTF: 840015-04KIT

Pressure sensing block



Page 3

G1/4: 840016-51KIT

1/4 PTF: 840016-50KIT

*3) To connect Excelon Plus 84 units to Excelon 74/73 units. Having the same hole centers as 74 Series mounting bracket. A Quikclamp adds 13.6 mm to the overall width of a combination unit.

Note : Kit contains 2 pieces – 1 upstream and 1 downstream

Pressure switch

Porting block for pressure switch



Page 5

0523110000000000

Pressure switch 18D (0,5 ... 8bar) *2)



0881300000000000

Padlock

Padlock



840055-01KIT

Service kits

Service kit



4384-700

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

Gauge

Center back connection, white face (for full technical specification see datasheet 8.900.900)



Pressure range bar *1	MPa	psi	Ø	Thread size	Model
0 ... 6	0 ... 0,6	0 ... 84	50 mm	R1/8	18-015-012
0 ... 10	0 ... 1	0 ... 145	50 mm	R1/8	18-015-013
0 ... 25	0 ... 2,5	0 ... 362	50 mm	R1/8	18-015-014

*1) primary scale

Center back connection, black face for North America (for full technical specification see datasheet 8.900.900)



Pressure range psig *1	bar	MPa	Ø	Thread size	Model
0 ... 60	0 ... 4	0 ... 0.4	2" (50 mm)	1/4 NPT	18-015-208
0 ... 160	0 ... 11	0 ... 1.1	2" (50 mm)	1/4 NPT	18-015-209
0 ... 300	0 ... 20	0 ... 2.1	2" (50 mm)	1/4 NPT	18-015-210

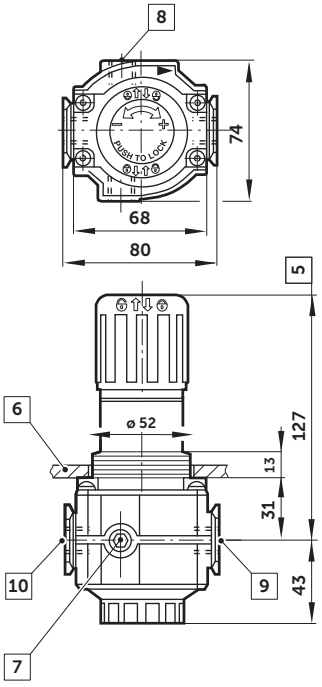
*1) primary scale

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.

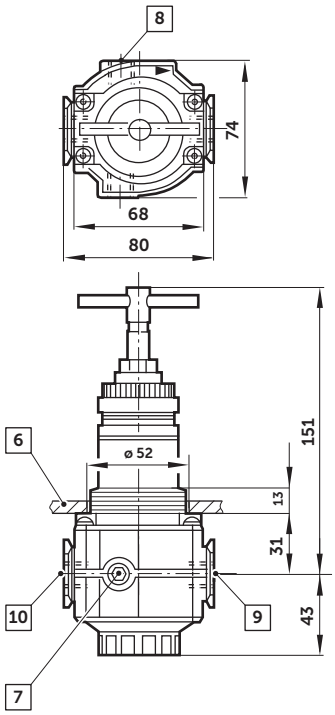
Dimensions in mm
Projection/First angle

Dimensions

Standard



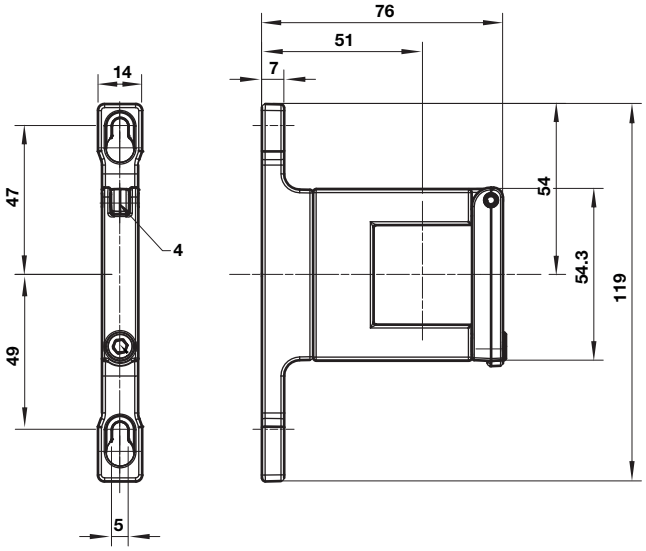
T-bar



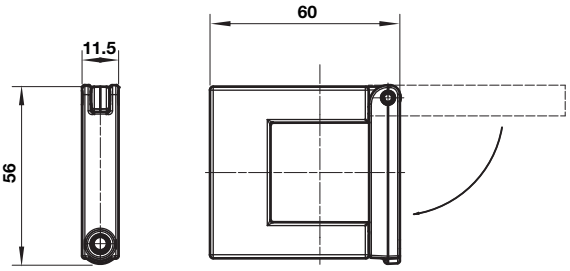
5 Reduces by 4 mm with knob in locked position
6 Panel thickness 2 ... 6 mm
7 Gauge port Rc1/8 for ISO G and 1/4 PTF for PTF main ports
8 Alternative gauge port plugged
9 Exhaust ports 3/8 ", 1/2" or 3/4"
10 Inlet ports 3/8 ", 1/2" or 3/4"

Accessories

Quikclamp® with wall bracket



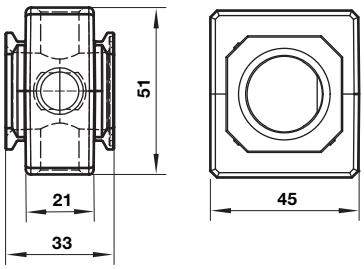
Quikclamp®



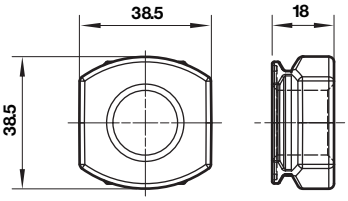
Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.

Dimensions in mm
Projection/First angle

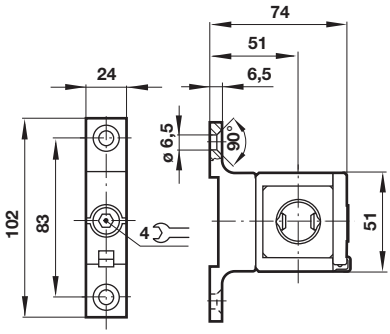
Pressure sensing block



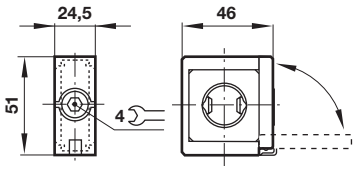
Pipe adaptor



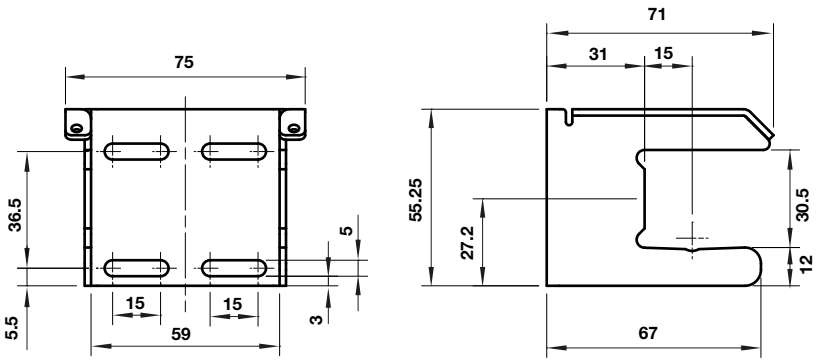
Hybrid-Quikclamp with wall bracket



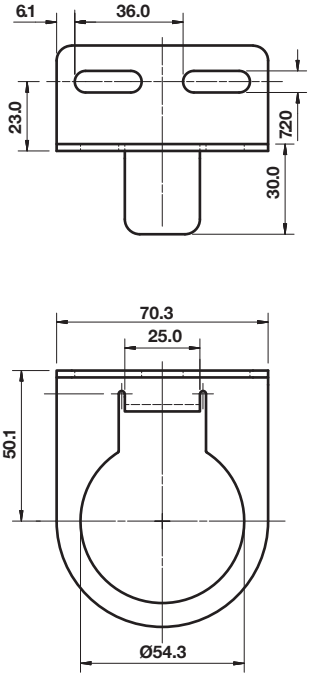
Hybrid-Quikclamp



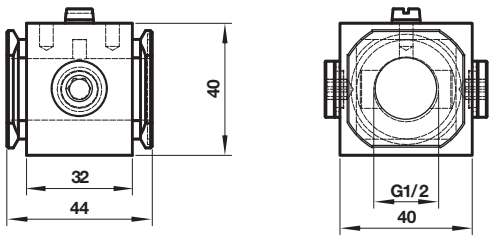
Mounting bracket



Neck mounting bracket

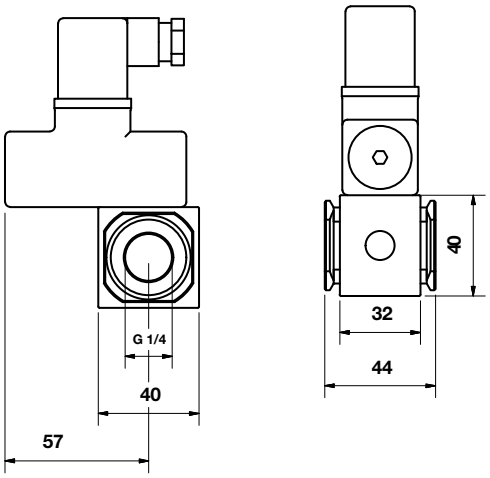


Porting block for 18D pressure switch



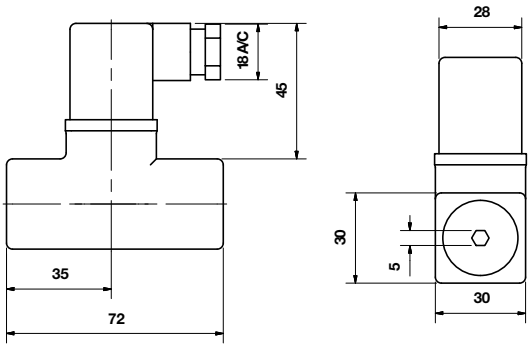
Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.

18D Porting block and 18D assembled



18D Pressure switch

Dimensions in mm
Projection/First angle



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 ap plications not within published specifications, consult IMI.

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.

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2021 - 9478c) © 2024 IMI International s.r.o.