

Алматы (7273)495-231  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922)49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Саранск (8342)22-96-24  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35  
Сыктывкар (8212)25-95-17  
Тамбов (4752)50-40-97

Тверь (4822)63-31-35  
Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Улан-Удэ (3012)59-97-51  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

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# Технические характеристики на клапаны плавного пуска Excelon Pro, Excelon, Excelon Plus, Olympian Plus компании **IMI NORGREN**

**Port size: 3/4" ... 1 1/2"**  
**(ISO G/PTF)**

**Assists machine designers in complying with the European Machineries Directive**

**Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)**

**Controlled increase of downstream pressure on start up**

**Solenoid, air pilot or manual operator**

**High forward flow capacity**

**High flow dump facility**



## Technical features

### Medium:

Compressed air only

### Operating pressure:

3 bar (43 psi) minimum

Solenoid actuated:

10 bar (145 psi) maximum

Pilot actuated:

17 bar (246 psi) maximum

### Snap pressure:

Full flow when downstream pressure reaches 50 ... 80% of inlet pressure

### Charge time:

For 25 litre (845 fluid oz) downstream volume and 6,3 bar (90 psi) inlet pressure 6,4 sec. minimum 115 sec. maximum

### Flow:

147 dm<sup>3</sup>/s (312 scfm)

(P1 » P2 = Cv 11,2)

(P2 » P3 = Cv >11)

Operating pressure: 6,3 bar (91 psi)

Δp: 0,5 bar (7 psi)

### Port sizes:

3/4", 1", 1 1/4" or 1 1/2"

### Air pilot port:

G1/4 with ISO G main ports

1/4 PTF with PTF main ports

### Exhaust port:

G1 with ISO G main ports

1" PTF with PTF main ports

### Standard compliances:

II 2G Ex h IIC T6 Gb

II 2D Ex h IIIC T85° Db

### Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C ( -4 ... +149°F)

Pilot actuated:

-20° ... +80°C ( -4 ... +176°F)

### Materials:

Body, yoke, top and bottom plate:

Aluminium

Filter discs: Sintered plastic

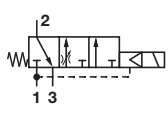
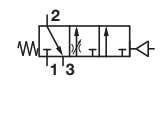
Internal components: Brass/steel

Elastomers: NBR

## Electrical details for solenoid operators

|                               |                            |
|-------------------------------|----------------------------|
| <b>Voltage tolerance</b>      | ± 10%                      |
| <b>Rating</b>                 | 100% continuous duty       |
| <b>Inlet orifice</b>          | 1,0 mm                     |
| <b>Electrical connection</b>  | Industrial Standard, 22 mm |
| <b>Solenoid coil mounting</b> | Four positions x 90°       |
| <b>Protection class</b>       | IP 65 (with sealed plug)   |

## Technical data - standard models

| Symbol                                                                              | Port size    | Size  | Actuation/return | Voltage   | Pilot port | Weight (kg) | Typ              |
|-------------------------------------------------------------------------------------|--------------|-------|------------------|-----------|------------|-------------|------------------|
|  | G3/4         | —     | Solenoid/spring  | 24 V d.c. | —          | 2,95        | P68F-6GC-PFA *1) |
|                                                                                     | G1           | —     | Solenoid/spring  | 24 V d.c. | —          | 2,93        | P68F-8GC-PFA *1) |
|                                                                                     | G1 1/4       | Basic | Solenoid/spring  | 24 V d.c. | —          | 2,90        | P68F-AGC-PFA *1) |
|                                                                                     | G1 1/2       | —     | Solenoid/spring  | 24 V d.c. | —          | 2,92        | P68F-BGC-PFA *1) |
|                                                                                     | Without yoke | —     | Solenoid/spring  | 24 V d.c. | —          | —           | P68F-BGC-PFA *1) |
|  | G3/4         | —     | Air/spring       | —         | 1/4"       | 2,77        | P68F-6GA-NNN     |
|                                                                                     | G1           | —     | Air/spring       | —         | 1/4        | 2,75        | P68F-8GA-NNN     |
|                                                                                     | G1 1/4       | Basic | Air/spring       | —         | 1/4        | 2,72        | P68F-AGA-NNN     |
|                                                                                     | G1 1/2       | —     | Air/spring       | —         | 1/4        | 2,74        | P68F-BGA-NNN     |
|                                                                                     | Without yoke | —     | Air/spring       | —         | 1/4        | —           | P68F-NNA-NNN     |

\*1) To select other solenoid type and coil voltage refer to option selector on page 2

## Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard |                      |              |      |                                                                                  |
|----------------------------------------------------------------|----------------------|--------------|------|----------------------------------------------------------------------------------|
| Voltage                                                        | Power<br>Inrush/Hold | Model        | Code |                                                                                  |
| 12 V d.c.                                                      | 2 W                  | QM/48/12J/21 | 12J  |  |
| 24 V d.c.                                                      | 2 W                  | QM/48/13J/21 | 13J  |                                                                                  |
| 110/120 V 50/60 Hz                                             | 4/2,5 VA             | QM/48/18J/21 | 18J  |                                                                                  |
| 220/240 V 50/60 Hz                                             | 6/5,0 VA             | QM/48/19J/21 | 19J  |                                                                                  |
|                                                                |                      |              |      |                                                                                  |

## Connector plugs

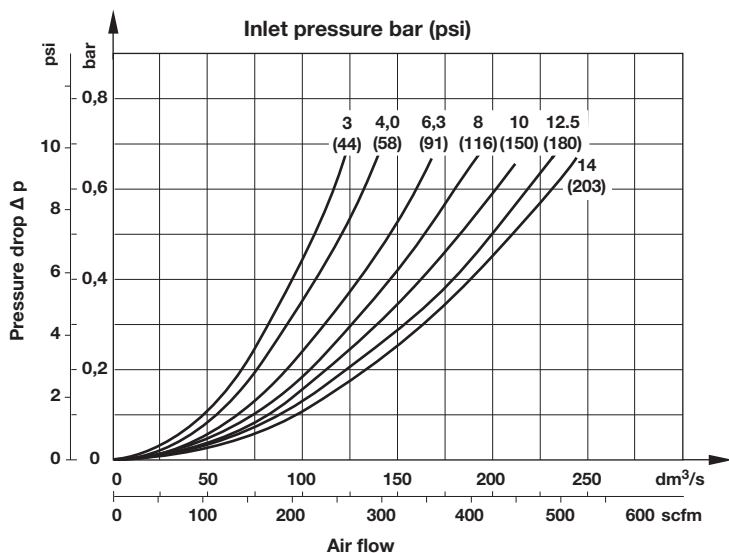


## Option selector

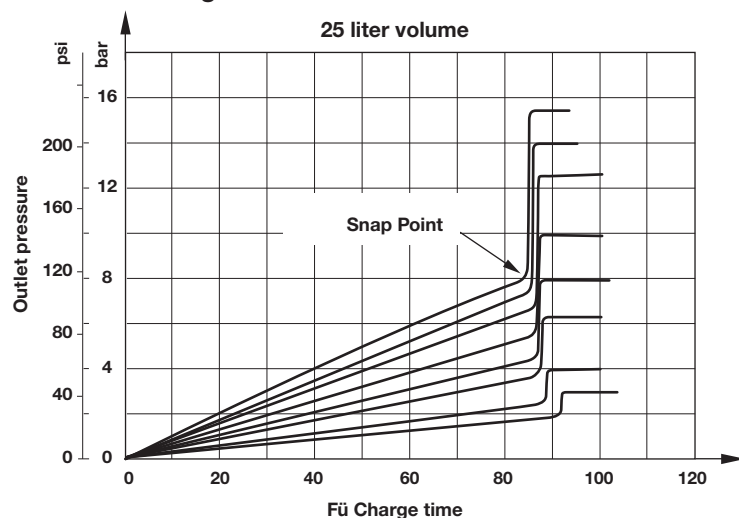
P68F-★★★★★

| Port size                          | Substitute        | Connector                         | Substitute        |
|------------------------------------|-------------------|-----------------------------------|-------------------|
| 3/4"                               | 6                 | 3 pin plug with cable gland       | A                 |
| 1"                                 | 8                 | Without                           | N                 |
| 1 1/4"                             | A                 | <b>Voltage</b>                    | <b>Watts</b>      |
| 1 1/2"                             | B                 | 24 V d.c.                         | 2 W               |
| Without yoke                       | N                 | 220/240 V, 50/60 Hz               | 4/2,5 VA          |
| <b>Threads</b>                     | <b>Substitute</b> | 110/120 V, 50/60 Hz               | 4/2,5 VA          |
| PTF                                | A                 | No coil                           | –                 |
| ISO G parallel (standard)          | G                 | No solenoid                       | –                 |
| No yoke (standard)                 | N                 | <b>Manual override</b>            | <b>Substitute</b> |
| <b>Operator</b>                    | <b>Substitute</b> | Non-locking, shrouded push button | P                 |
| Air pilot (standard)               | A                 | None                              | N                 |
| Air pilot with manual lockout      | B                 |                                   |                   |
| 22 mm solenoid (standard)          | C                 |                                   |                   |
| 22 mm solenoid with manual lockout | D                 |                                   |                   |

## Flow characteristics

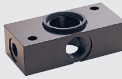


## Maximum charge time



## Accessories

|               | Single yoke                                                                        | Double yoke                                                                        | End connector kit                                                                  | Single yoke non threads                                                              | 3/2 Shut-off valve Threaded inlet only                                               |
|---------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|               |  |  |  |  |  |
| <b>Thread</b> |                                                                                    |                                                                                    |                                                                                    |                                                                                      |                                                                                      |
| G3/4          | Y68A-6GN-N1N                                                                       | Y68A-6GN-N2N                                                                       | 5524-55                                                                            | 74785-98                                                                             | T68H-6GB-B2N                                                                         |
| G1            | Y68A-8GN-N1N                                                                       | Y68A-8GN-N2N                                                                       | 5524-52                                                                            |                                                                                      | T68H-8GB-B2N                                                                         |
| G1 1/4        | Y68A-AGN-N1N                                                                       | Y68A-AGN-N2N                                                                       | 5523-52                                                                            |                                                                                      | T68H-AGB-B2N                                                                         |
| G1 1/2        | Y68A-BGN-N1N                                                                       | Y68A-BGN-N2N                                                                       | 5523-93                                                                            |                                                                                      | T68H-BGB-B2N                                                                         |
| 3/4 PTF       | Y68A-6AN-N1N                                                                       | Y68A-6AN-N2N                                                                       | 5524-53                                                                            |                                                                                      | T68H-6AB-B2N                                                                         |
| 1 PTF         | Y68A-8AN-N1N                                                                       | Y68A-8AN-N2N                                                                       | 5524-50                                                                            |                                                                                      | T68H-8AB-B2N                                                                         |
| 1 1/4 PTF     | Y68A-AAN-N1N                                                                       | Y68A-AAN-N2N                                                                       | 5523-50                                                                            |                                                                                      | T68H-AAB-B2N                                                                         |
| 1 1/2 PTF     | Y68A-BAN-N1N                                                                       | Y68A-BAN-N2N                                                                       | 5523-95                                                                            |                                                                                      | T68H-BAB-B2N                                                                         |

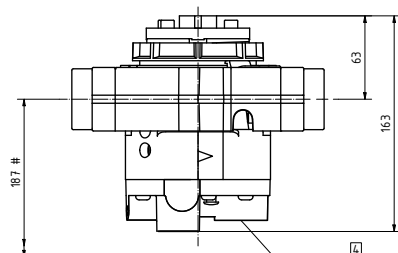
|               | 3/2 Shut-off valve Threaded outlet only                                             | Bracket mounting                                                                    | Nut                                                                                 | Silencer                                                                              | Porting block                                                                         |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|               |  |  |  |  |  |
| <b>Thread</b> |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
| G3/4          | T68H-6GC-B2N                                                                        | 18-001-979                                                                          | 5520-89                                                                             | MB008B (R1)                                                                           | 18-026-986 (G1/4 & G1/2)                                                              |
| G1            | T68H-8GC-B2N                                                                        | 18-001-979                                                                          |                                                                                     | MB008A (1 PTF)                                                                        | 18-026-983 (1/4 & 1/2 PTF)                                                            |
| G1 1/4        | T68H-AGC-B2N                                                                        | 18-001-978                                                                          |                                                                                     |                                                                                       |                                                                                       |
| G1 1/2        | T68H-BGC-B2N                                                                        | 18-001-972                                                                          |                                                                                     |                                                                                       |                                                                                       |
| 3/4 PTF       | T68H-6AC-B2N                                                                        | 18-001-979                                                                          |                                                                                     |                                                                                       |                                                                                       |
| 1 PTF         | T68H-8AC-B2N                                                                        | 18-001-979                                                                          |                                                                                     |                                                                                       |                                                                                       |
| 1 1/4 PTF     | T68H-AAC-B2N                                                                        | 18-001-978                                                                          |                                                                                     |                                                                                       |                                                                                       |
| 1 1/2 PTF     | T68H-BAC-B2N                                                                        | 18-001-972                                                                          |                                                                                     |                                                                                       |                                                                                       |

## Dimensions

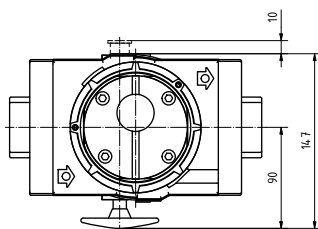
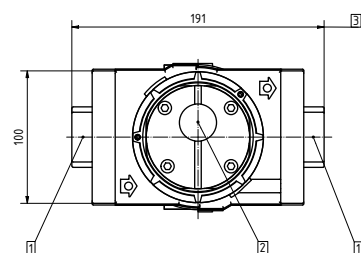
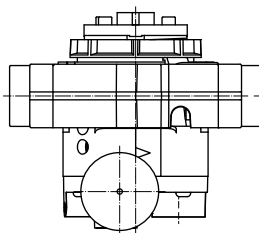
Dimensions in mm  
Projection/First angle



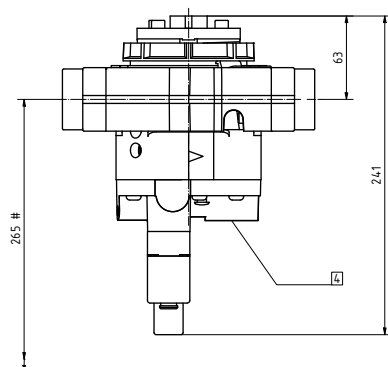
### Pilot actuated Standard



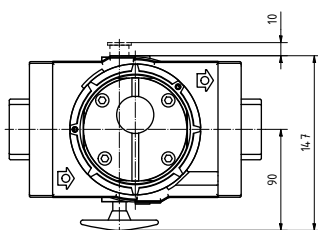
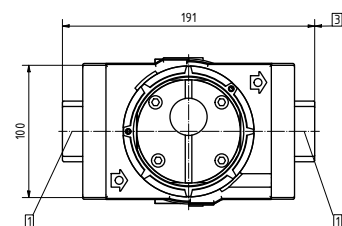
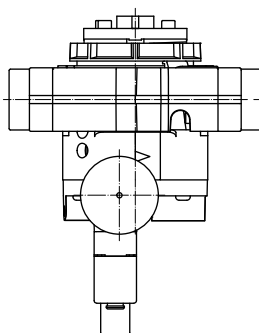
### With manual lockout



### Solenoid actuated Standard



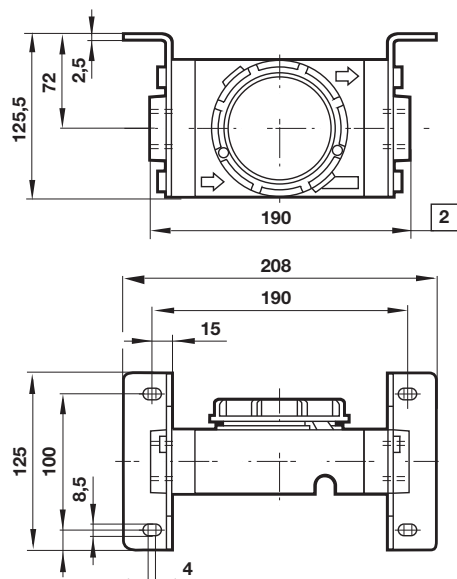
### With manual lockout



# Minimum clearance required to remove unit from yoke

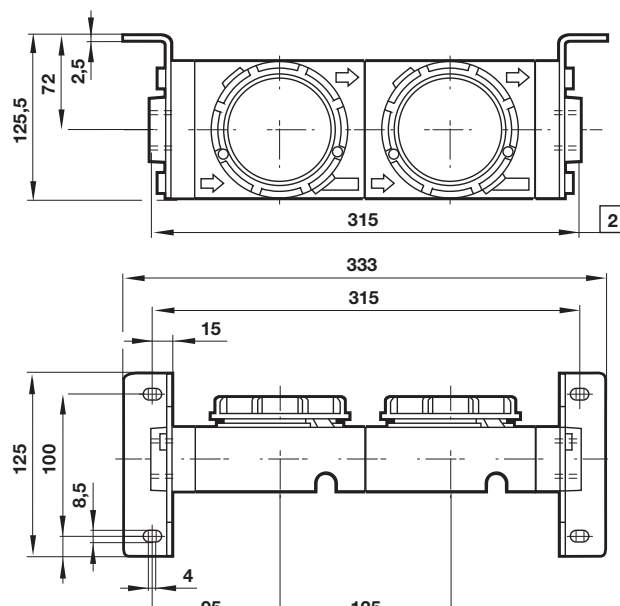
- 1 Main ports 3/4", 1", 1 1/4" or 1 1/2"
- 2 Pilot port 1/4"
- 3 Plus 10 mm for ports 1 1/4" or 1 1/2"
- 4 Exhaust port 1"

### Single yoke with bracket



1 For 1 1/4" and 1 1/2" ported yokes add 10 mm

### Double yoke with bracket

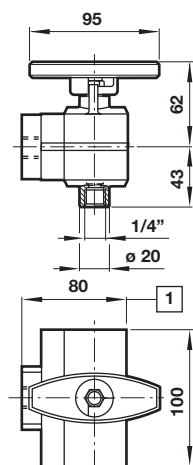


1 For 1 1/4" and 1 1/2" ported yokes add 10 mm

Dimensions in mm  
Projection/First angle

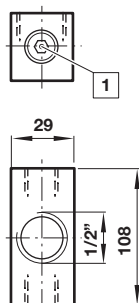


### 3/2 Shut-off valve



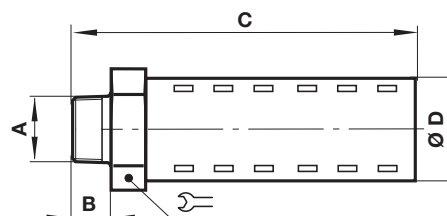
1 For 1 1/2" ported yokes add 5 mm

### Porting block



1 Two additional plugged G1/4 ports

### Silencer



| A     | B  | C   | D  |  | Typ    |
|-------|----|-----|----|---------------------------------------------------------------------------------------|--------|
| R1    | 23 | 138 | 51 | 51                                                                                    | MB008B |
| 1 PTF | 23 | 138 | 51 | 51                                                                                    | MB008A |

### 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 IMI Precision Engineering, IMI International s.r.o.

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.

## P64S - Olympian Plus plug-in system

### Soft start monitored dump valves

- > Port size: 1/4" & 3/4" (ISO G/PTF)
- > Olympian Plus plug in design or controlled increase of downstream pressure on start up
- > The positively driven micro switch ensures a monitored dump function
- > High forward flow and dump facility



#### Technical features

##### Medium:

Compressed air only

##### Operating pressure:

3 bar (43 psi) minimum

10 bar (145 psi) maximum

##### Snap pressure:

Full flow when downstream pressure reaches 35 ... 60% of inlet pressure

##### Charge time:

For 2 litre downstream volume and 6,3 bar (90 psi) inlet pressure

0,2 sec. minimum

75 sec. maximum

##### Flow:

See diagram on page 2

##### Port sizes:

1/4", 3/8", 1/2" or 3/4"

##### Exhaust port:

G1/2 with ISO G main ports

1/2" PTF with PTF main ports

##### Gauge Ports:

Rc1/8

##### Ambient/Media temperature:

0 ... +50°C (+32 ... +122°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

**Note: Soft start valves never shut off completely, and must be installed downstream of a directional control valve such as a Norgren Poppet or Lockout Valve.**

##### Materials:

Body: Zinc alloy

Intermediate body: Aluminium

Filter discs: Sintered plastic

Internal components:

Brass; steel or stainless steel

Top plate: Aluminium

Exhaust Bonnet: Zinc alloy

Yoke: Zinc alloy

Elastomers: NBR

#### Electrical details for solenoid operators

|                        |                            |
|------------------------|----------------------------|
| Voltage tolerance      | ± 10%                      |
| Rating                 | 100% continuous duty       |
| Inlet orifice          | 1,0 mm                     |
| Electrical connection  | Industrial Standard, 22 mm |
| Solenoid coil mounting | Four positions x 90°       |
| Protection class       | IP 65 (with sealed plug)   |

#### Electrical details for monitoring switch

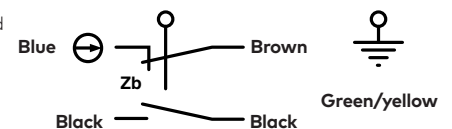
|                  |                                 |
|------------------|---------------------------------|
| Voltage          | 240 V a.c.                      |
| Current          | 1,5 A                           |
| Connection cable | Harmonised CENELEC 5 x 0,75 mm² |
| Cable length     | 2 m                             |
| Protection class | IP 66                           |

##### Switch details

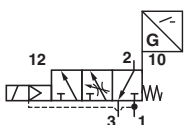
All electrical connections to be made by a competent licensed electrician

Break - before - Make contact

Normally Open/Normally Closed



#### Technical data - standard models

| Symbol                                                                              | Port size    | Size  | Actuation/return | Voltage   | Weight (kg) | Typ *1)      |
|-------------------------------------------------------------------------------------|--------------|-------|------------------|-----------|-------------|--------------|
|  | G1/4         | —     | Solenoid/spring  | 24 V d.c. | ~ 2,3       | P64S-2GC-N1N |
|                                                                                     | G3/8         | —     | Solenoid/spring  | 24 V d.c. | ~ 2,3       | P64S-3GC-N1N |
|                                                                                     | G1/2         | Basic | Solenoid/spring  | 24 V d.c. | ~ 2,3       | P64S-4GC-N1N |
|                                                                                     | G3/4         | —     | Solenoid/spring  | 24 V d.c. | ~ 2,3       | P64S-6GC-N1N |
|                                                                                     | Without yoke | —     | Solenoid/spring  | 24 V d.c. | ~ 1,8       | P64S-NNC-N1N |

\*1) Units with PTF threads on main port therefore substitute 'G' at the 7th digit changed into 'A'

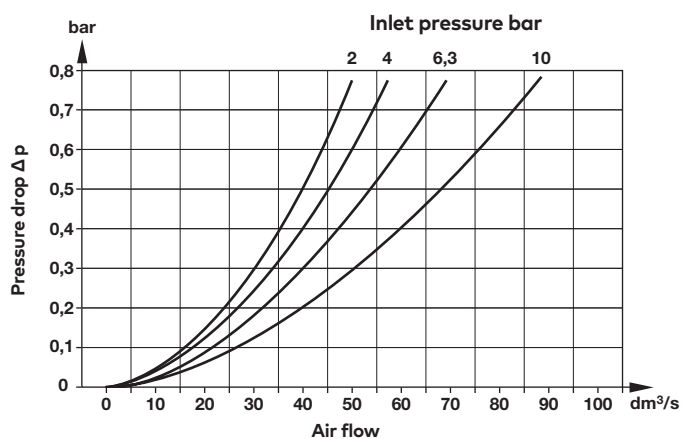
## Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                   |          |                   |              |      |
|----------------------------------------------------------------------------------|----------|-------------------|--------------|------|
|                                                                                  | Voltage  | Power Inrush/Hold | Model        | Code |
|  | 24 V d.c | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                  |          |                   |              |      |
|                                                                                  |          |                   |              |      |
|                                                                                  |          |                   |              |      |

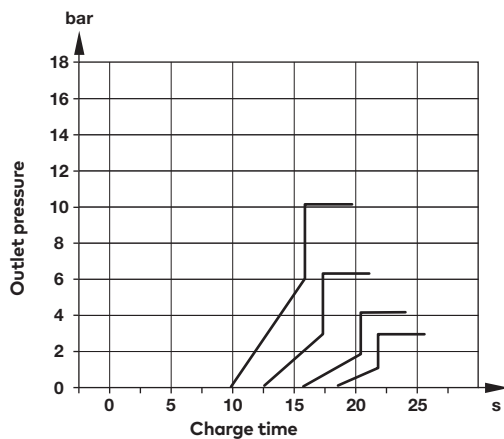
## Connector plugs



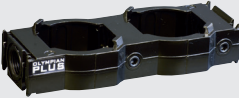
## Flow characteristics



## Maximum charge time



## Accessories

|               | Models with G-thread<br>Single yoke                                               | Double yoke                                                                       | 3/2 Shut-off valve<br>Threaded inlet only                                         | Threaded outlet only                                                               | End connector<br>kit                                                                | Rear entry<br>bracket kit                                                           |
|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|               |  |  |  |  |  |  |
| <b>Thread</b> |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| G1/4          | Y64A-2GA-N1N                                                                      | Y64A-2GA-N2N                                                                      | T64T-2GB-P1N                                                                      | T64T-2GC-P1N                                                                       | —                                                                                   | —                                                                                   |
| G3/8          | Y64A-3GA-N1N                                                                      | Y64A-3GA-N2N                                                                      | T64T-3GB-P1N                                                                      | T64T-3GC-P1N                                                                       | —                                                                                   | —                                                                                   |
| G1/2          | Y64A-4GA-N1N                                                                      | Y64A-4GA-N2N                                                                      | T64T-4GB-P1N                                                                      | T64T-4GC-P1N                                                                       | 74505-50                                                                            | —                                                                                   |
| G3/4          | Y64A-6GA-N1N*                                                                     | Y64A-6GA-N2N*                                                                     | T64T-6GB-P1N                                                                      | T64T-6GC-P1N                                                                       | 74505-53                                                                            | 18-026-981                                                                          |
| 1/4 PTF       | Y64A-2AA-N1N                                                                      | Y64A-2AA-N2N                                                                      | T64T-2AB-P1N                                                                      | T64T-2AC-P1N                                                                       | —                                                                                   | —                                                                                   |
| 3/8 PTF       | Y64A-3AA-N1N                                                                      | Y64A-3AA-N2N                                                                      | T64T-3AB-P1N                                                                      | T64T-3AC-P1N                                                                       | —                                                                                   | —                                                                                   |
| 1/2 PTF       | Y64A-4AA-N1N                                                                      | Y64A-4AA-N2N                                                                      | T64T-4AB-P1N                                                                      | T64T-4AC-P1N                                                                       | 74505-52                                                                            | —                                                                                   |
| 3/4 PTF       | Y64A-6AA-N1N*                                                                     | Y64A-6AA-N2N*                                                                     | T64T-6AB-P1N                                                                      | T64T-6AC-P1N                                                                       | 74505-55                                                                            | —                                                                                   |

\*These yokes are supplied with two end connector kits as standard.

| Bracket mounting                                                                  | Nut                                                                               | Silencer                                                                          | Yoke connector kit                                                                | Porting block                                                                       | Padlock with<br>two keys                                                            |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 74504-50                                                                          | 74502-89                                                                          | MB004B (R1/2)<br>MB004A (1/2 NPT)                                                 | 74503-51                                                                          | 74507-50                                                                            | 0613633 (brass)                                                                     |

## Gauges

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



| Pressure range<br>bar *1 | MPa       | psi       | Ø     | Thread size | Model      |
|--------------------------|-----------|-----------|-------|-------------|------------|
| 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 (full  
technical specification  
see datasheet  
8.900.900)

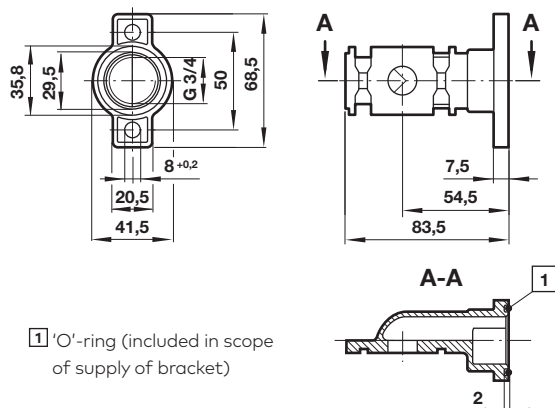


| Pressure range<br>psig *1 | bar      | MPa       | Ø          | Thread size | Model      |
|---------------------------|----------|-----------|------------|-------------|------------|
| 0 ... 160                 | 0 ... 11 | 0 ... 1.1 | 2" (50 mm) | 1/8 NPT     | 18-015-204 |
| 0 ... 400                 | 0 ... 28 | 0 ... 2.8 | 2" (50 mm) | 1/8 NPT     | 18-015-206 |

\*1) primary scale

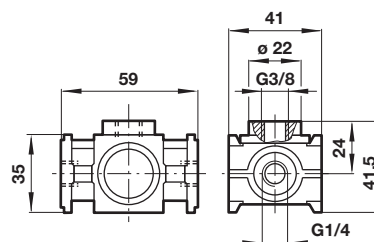


### Rear entry bracket 18-026-981

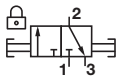


### Porting block 74507-50

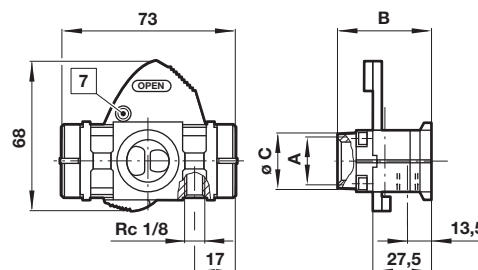
Dimensions in mm  
Projection/First angle



### 3/2 Shut-off valve

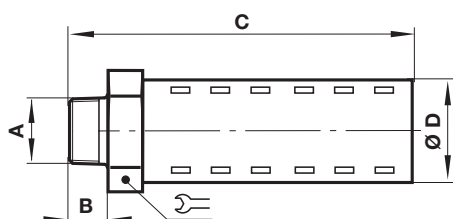
| Symbol                                                                            | A    | B  | ø C | Model        |
|-----------------------------------------------------------------------------------|------|----|-----|--------------|
|  | G1/4 | 48 | 27  | T64T-2G*-P1N |
|                                                                                   | G3/8 | 48 | 27  | T64T-3G*-P1N |
|                                                                                   | G1/2 | 48 | 27  | T64T-4G*-P1N |
|                                                                                   | G3/4 | 51 | 33  | T64T-6G*-P1N |

\* B = Threaded inlet only, C = Threaded outlet only



7 Padlock hole ø7,5 mm

### Silencer



| A       | B  | C  | D  | Model  |
|---------|----|----|----|--------|
| R1/2    | 17 | 92 | 32 | MB004B |
| 1/2 NPT | 17 | 92 | 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 IMI Precision Engineering.

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.

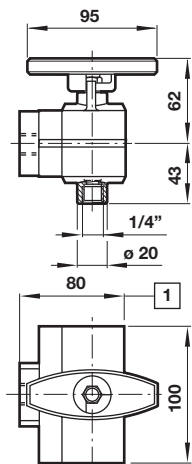


Silencer  
(T68H only)

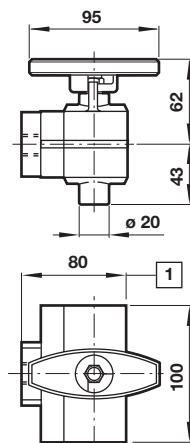


T40B2800

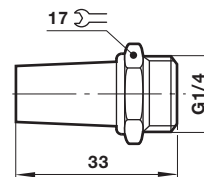
## Dimensions Threaded



## No exhaust



## Silencer



Dimensions in mm  
Projection/First angle



1 For 1 1/2" ported yokes add 5 mm

## Warning

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# P64F - Olympian Plus plug-in system

## Soft start/dump valves



- > Port size: 1/4" ... 3/4" (ISO G/PTF)
- > Assists machine designers in complying with the European Machinery Directive
- > Controlled increase of downstream pressure on start up
- > Solenoid, air pilot or manual operator
- > High forward flow and capacity dump facility



### Technical features

#### Medium:

Compressed air only

#### Operating pressure:

3 bar (43 psi) minimum

10 bar (145 psi) (Solenoid operated)

17 bar (246 psi) (Pilot operated)

#### Snap pressure:

Full flow when downstream pressure reaches 50 ... 80% of inlet pressure

#### Charge time:

For 2 litre downstream volume and 6,3 bar (90 psi) inlet pressure 0,2 sec. minimum

75 sec. maximum

#### Flow:

57 dm<sup>3</sup>/s

Operating pressure: 6,3 bar (91 psi) Δp: 0,5 bar (7 psi)

#### Port sizes:

1/4", 3/8", 1/2" or 3/4"

#### Air pilot port:

1/4 PTF with PTF main ports  
Rc1/4 with ISO G main ports

#### Exhaust port:

1/2 PTF with PTF main ports  
G1/2 with ISO G main ports

#### Gauge port:

1/8 PTF with PTF main ports

Rc1/8 with ISO G main ports

#### Standard compliances:

II 2G Ex h IIC T6 Gb  
II 2D Ex h IIIC T85° Db

#### Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C (-4° ... +122°F)

Pilot actuated:

-20° ... +80°C (-4° ... +176°F)

Version with gauge:

-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 & yoke: Zinc alloy

Intermediate body: Aluminium

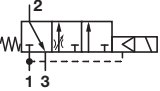
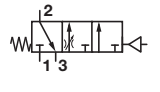
Top plate: Zinc

Elastomers: NBR

### Electrical details for solenoid operators

|                        |                            |
|------------------------|----------------------------|
| Voltage tolerance      | ± 10%                      |
| Rating                 | 100% continuous duty       |
| Inlet orifice          | 1,0 mm                     |
| Electrical connection  | Industrial Standard, 22 mm |
| Solenoid coil mounting | Four positions x 90°       |
| Protection class       | IP 65 (with sealed plug)   |

### Technical data - standard models

| Symbol                                                                              | Port size    | Size  | Actuation/return | Voltage   | Pilot port | Weight (kg) | Typ              |
|-------------------------------------------------------------------------------------|--------------|-------|------------------|-----------|------------|-------------|------------------|
|  | G1/4         | —     | Solenoid/spring  | 24 V d.c. | —          | 2,07        | P64F-2GC-PFN *1) |
|                                                                                     | G3/8         | —     | Solenoid/spring  | 24 V d.c. | —          | 2,05        | P64F-3GC-PFN *1) |
|                                                                                     | G1/2         | Basic | Solenoid/spring  | 24 V d.c. | —          | 2,02        | P64F-4GC-PFN *1) |
|                                                                                     | G3/4         | —     | Solenoid/spring  | 24 V d.c. | —          | 2,38        | P64F-6GC-PFN *1) |
|                                                                                     | Without yoke | —     | Solenoid/spring  | 24 V d.c. | —          | 1,59        | P64F-NNC-PFN *1) |
|  | G1/4         | —     | Air/spring       | —         | Rc1/4      | 1,69        | P64F-2GA-NNN     |
|                                                                                     | G3/8         | —     | Air/spring       | —         | Rc1/4      | 1,94        | P64F-3GA-NNN     |
|                                                                                     | G1/2         | Basic | Air/spring       | —         | Rc1/4      | 1,91        | P64F-4GA-NNN     |
|                                                                                     | G3/4         | —     | Air/spring       | —         | Rc1/4      | 2,27        | P64F-6GA-NNN     |
|                                                                                     | Without yoke | —     | Air/spring       | —         | Rc1/4      | 1,45        | P64F-NNA-NNN     |

\*1) To select other solenoid type and coil voltage refer to option selector on page 2

## Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                   |                    |                   |              |      |
|----------------------------------------------------------------------------------|--------------------|-------------------|--------------|------|
|                                                                                  | Voltage            | Power Inrush/Hold | Model        | Code |
|  | 12 V d.c.          | 2 W               | QM/48/12J/21 | 12J  |
|                                                                                  | 24 V d.c.          | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                  | 110/120 V 50/60 Hz | 4/2,5 VA          | QM/48/18J/21 | 18J  |
|                                                                                  | 220/240 V 50/60 Hz | 6/5,0 VA          | QM/48/19J/21 | 19J  |

## Connector plugs



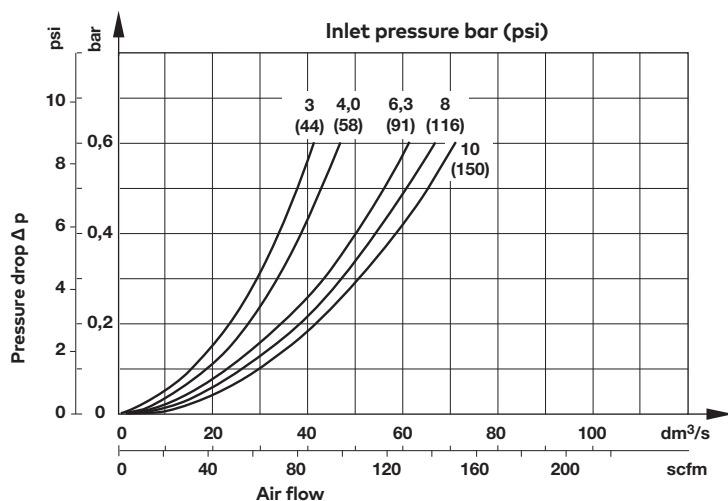
## Option selector

**P64F-★★★★★★**

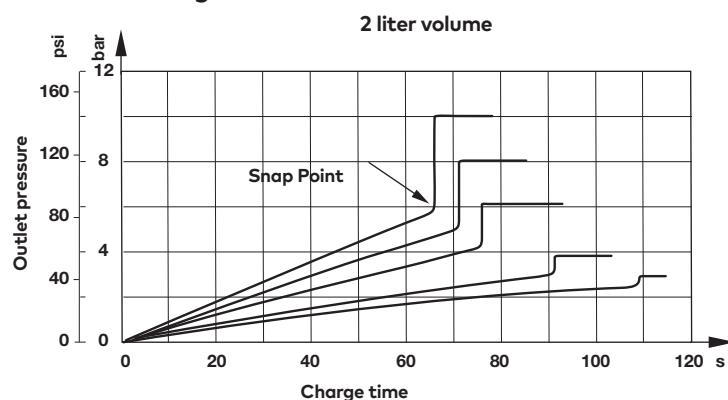
| Port size                          | Substitute |
|------------------------------------|------------|
| 1/4"                               | 2          |
| 3/8"                               | 3          |
| 1/2"                               | 4          |
| 3/4"                               | 6          |
| No yoke                            | N          |
| Threads                            | Substitute |
| PTF                                | A          |
| ISO G parallel (standard)          | G          |
| No yoke (standard)                 | N          |
| Operator                           | Substitute |
| Air pilot (standard)               | A          |
| Air pilot with manual lockout      | B          |
| 22 mm solenoid (standard)          | C          |
| 22 mm solenoid with manual lockout | D          |

| Connector                         | Substitute |            |
|-----------------------------------|------------|------------|
| With                              | A          |            |
| Without                           | N          |            |
| Voltage                           | Watts      | Substitute |
| 24 V d.c.                         | 2 W        | F          |
| 12 V d.c.                         | 2 W        | E          |
| 6 V d.c.                          | 2 W        | D          |
| 220/240 V, 50/60 Hz               | 6/5,0 VA   | B          |
| 110/120 V, 50/60 Hz               | 4/2,5 VA   | A          |
| No coil                           | –          | Z          |
| No solenoid                       | –          | N          |
| Solenoid manual operator          | Substitute |            |
| Non-locking, shrouded push button | P          |            |
| None                              | N          |            |

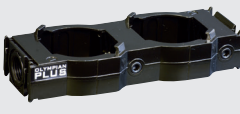
## Flow characteristics



## Maximum charge time



## Accessories

|               | Models with G-thread<br>Single yoke                                               | Double yoke                                                                       | 3/2 Shut-off valve<br>Threaded inlet only                                         | Threaded outlet only                                                               | End connector<br>kit                                                                | Rear entry<br>bracket kit                                                           |
|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|               |  |  |  |  |  |  |
| <b>Thread</b> |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| G1/4          | Y64A-2GA-N1N                                                                      | Y64A-2GA-N2N                                                                      | T64T-2GB-P1N                                                                      | T64T-2GC-P1N                                                                       | —                                                                                   | —                                                                                   |
| G3/8          | Y64A-3GA-N1N                                                                      | Y64A-3GA-N2N                                                                      | T64T-3GB-P1N                                                                      | T64T-3GC-P1N                                                                       | —                                                                                   | —                                                                                   |
| G1/2          | Y64A-4GA-N1N                                                                      | Y64A-4GA-N2N                                                                      | T64T-4GB-P1N                                                                      | T64T-4GC-P1N                                                                       | 74505-50                                                                            | —                                                                                   |
| G3/4          | Y64A-6GA-N1N*                                                                     | Y64A-6GA-N2N*                                                                     | T64T-6GB-P1N                                                                      | T64T-6GC-P1N                                                                       | 74505-53                                                                            | 18-026-981                                                                          |
| 1/4 PTF       | Y64A-2AA-N1N                                                                      | Y64A-2AA-N2N                                                                      | T64T-2AB-P1N                                                                      | T64T-2AC-P1N                                                                       | —                                                                                   | —                                                                                   |
| 3/8 PTF       | Y64A-3AA-N1N                                                                      | Y64A-3AA-N2N                                                                      | T64T-3AB-P1N                                                                      | T64T-3AC-P1N                                                                       | —                                                                                   | —                                                                                   |
| 1/2 PTF       | Y64A-4AA-N1N                                                                      | Y64A-4AA-N2N                                                                      | T64T-4AB-P1N                                                                      | T64T-4AC-P1N                                                                       | 74505-52                                                                            | —                                                                                   |
| 3/4 PTF       | Y64A-6AA-N1N*                                                                     | Y64A-6AA-N2N*                                                                     | T64T-6AB-P1N                                                                      | T64T-6AC-P1N                                                                       | 74505-55                                                                            | —                                                                                   |

\*These yokes are supplied with two end connector kits as standard.

| Bracket mounting                                                                  | Nut                                                                               | Silencer                                                                          | Yoke connector kit                                                                | Porting block                                                                       | Padlock with<br>two keys                                                            |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 74504-50                                                                          | 74502-89                                                                          | MB004B (R1/2)<br>MB004A (1/2 NPT)                                                 | 74503-51                                                                          | 74507-50                                                                            | 0613633 (brass)                                                                     |

## Gauges

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



6

| Pressure range<br>bar *1 | MPa       | psi       | Ø     | Thread size | Model      |
|--------------------------|-----------|-----------|-------|-------------|------------|
| 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  
(full technical  
specification  
see datasheet  
8.900.900)



6

| Pressure range<br>psig *1 | bar      | MPa       | Ø          | Thread size | Model      |
|---------------------------|----------|-----------|------------|-------------|------------|
| 0 ... 160                 | 0 ... 11 | 0 ... 1.1 | 2" (50 mm) | 1/8 NPT     | 18-015-204 |
| 0 ... 400                 | 0 ... 28 | 0 ... 2.8 | 2" (50 mm) | 1/8 NPT     | 18-015-206 |

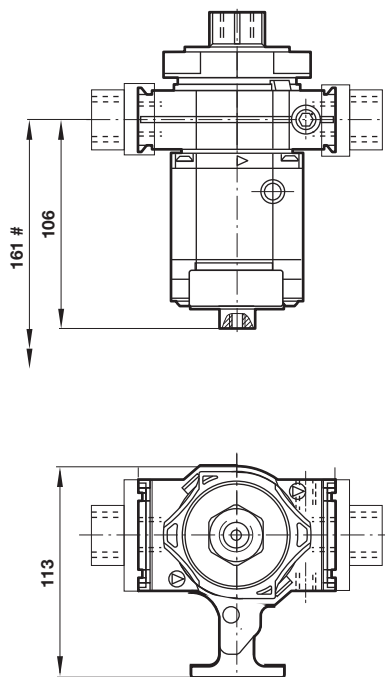
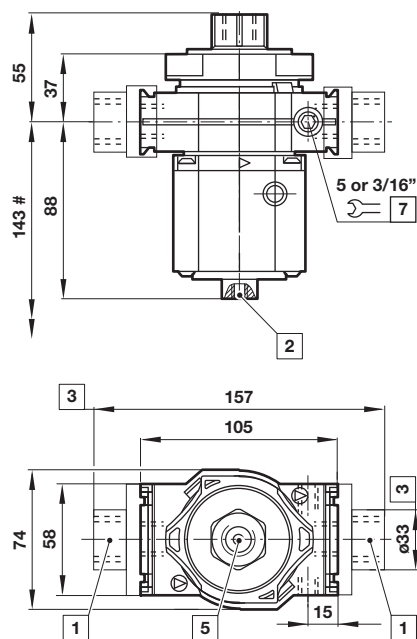
\*1) primary scale

**Dimensions**  
**Pilot actuated**  
**Standard**

Dimensions in mm  
Projection/First angle

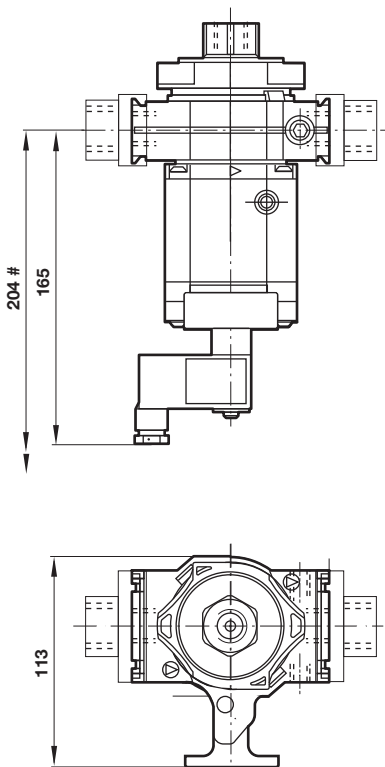
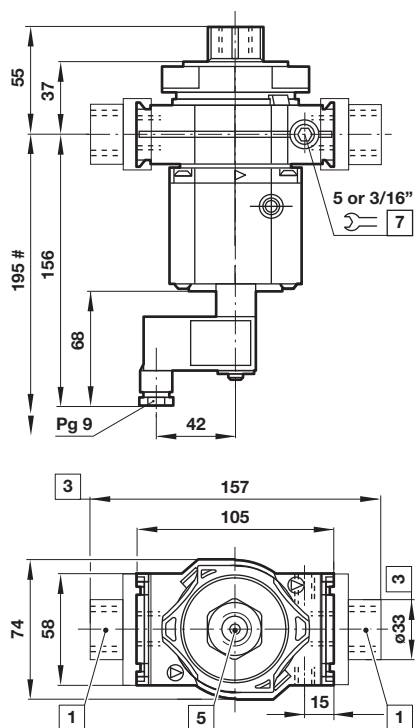


### With manual lockout



**Solenoid actuated  
Standard**

### With manual lockout

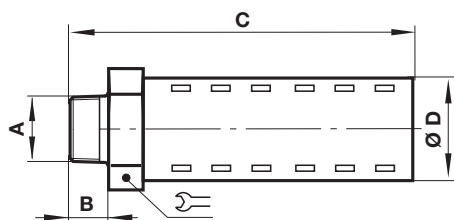


# Minimum clearance required to remove unit from yoke

- 1** Main ports 1/4", 3/8", 1/2" or 3/4"
- 2** Pilot port Rc1/4
- 3** For main ports 3/4" only
- 5** Exhaust port 1/2"
- 7** Gauge port 1/8"



## Silencer



Dimensions in mm  
Projection/First angle



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

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- > **Port size: 1/4" ... 3/4"**  
(ISO G/PTF)
- > **T64B: 2/2 shut-off valves no exhaust**
- > **T64T: 3/2 shut-off valves with 1/8" tapped exhaust**
- > **T64E: 3/2 shut-off USA OSHA lockout valves**

Valves can be locked in open or closed position

- > **Use upstream or downstream of air processing units**



### Technical features

#### Medium:

Compressed air

#### Operation pressure:

17 bar (246 psi) maximum

#### Port sizes:

1/4", 3/8", 1/2" or 3/4"

#### Exhaust port:

1/8 PTF with PTF main ports

Rc1/8 with ISO G main ports

#### Ambient/Media temperature:

-20° ... +80°C (-4° ... +176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

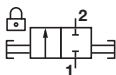
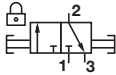
#### Materials:

Body: Zinc alloy

Slide: Acetal plastic

Elastomers: NBR

### Technical data - standard models

| Symbol                                                                              | Port size | Size  | Cv factor from IN to OUT ports | Exhaust port | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|-------|--------------------------------|--------------|-------------|--------------|
|  | G1/4      | —     | 2,6                            | —            | 0,40        | T64B-2GB-P1N |
|                                                                                     | G3/8      | —     | 5,5                            | —            | 0,40        | T64B-3GB-P1N |
|                                                                                     | G1/2      | Basic | 6,7                            | —            | 0,38        | T64B-4GB-P1N |
|                                                                                     | G3/4      | —     | 7,5                            | —            | 0,38        | T64B-6GB-P1N |
|  | G1/4      | —     | 2,6                            | 1/8"         | 0,40        | T64T-2GB-P1N |
|                                                                                     | G3/8      | —     | 5,5                            | 1/8"         | 0,40        | T64T-3GB-P1N |
|                                                                                     | G1/2      | Basic | 6,7                            | 1/8"         | 0,38        | T64T-4GB-P1N |
|                                                                                     | G3/4      | —     | 7,5                            | 1/8"         | 0,38        | T64T-6GB-P1N |
|                                                                                     | G1/4      | —     | 2,6                            | Unthreaded   | 0,40        | T64E-2GB-P1N |
|                                                                                     | G3/8      | —     | 5,5                            | Unthreaded   | 0,40        | T64E-3GB-P1N |
|                                                                                     | G1/2      | Basic | 6,7                            | Unthreaded   | 0,38        | T64E-4GB-P1N |
|                                                                                     | G3/4      | —     | 7,5                            | Unthreaded   | 0,38        | T64E-6GB-P1N |

### Options selector

### T64★-★★★- P1N

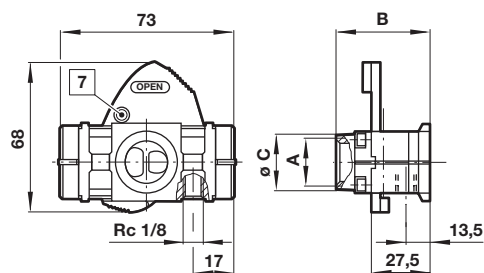
| Type                          | Substitute        | Porting                        | Substitute        |
|-------------------------------|-------------------|--------------------------------|-------------------|
| 2/2 Black actuator (standard) | <b>B</b>          | Threaded inlet only (standard) | <b>B</b>          |
| 3/2 Yellow actuator           | <b>E</b>          | Threaded outlet only           | <b>C</b>          |
| 3/2 Red actuator (standard)   | <b>T</b>          | <b>Threads</b>                 | <b>Substitute</b> |
| <b>Port size</b>              | <b>Substitute</b> | PTF                            | <b>A</b>          |
| 1/4"                          | <b>2</b>          | ISO G parallel (standard)      | <b>G</b>          |
| 3/8"                          | <b>3</b>          |                                |                   |
| 1/2"                          | <b>4</b>          |                                |                   |
| 3/4"                          | <b>6</b>          |                                |                   |

**Silencer**  
**(T64T only)**



T40B1800

## Dimensions Absperrventile

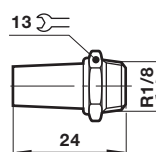


| A    | B  | ø C | Model        |
|------|----|-----|--------------|
| G1/4 | 48 | 27  | T64T-2G*-P1N |
| G3/8 | 48 | 27  | T64T-3G*-P1N |
| G1/2 | 48 | 27  | T64T-4G*-P1N |
| G3/4 | 51 | 33  | T64T-6G*-P1N |

\* B = Threaded inlet only, C = Threaded outlet only

## Schalldämpfer

Abmessungen 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 applications not within published specifications, consult IMI Precision Engineering, IMI International s.r.o.

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.

# 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.

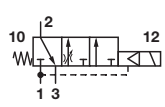
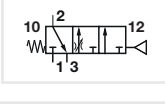
### Ambient/Media temperature:

-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

|                               |                                           |
|-------------------------------|-------------------------------------------|
| <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

**P84F-\*\*\*-\*\*\*N**

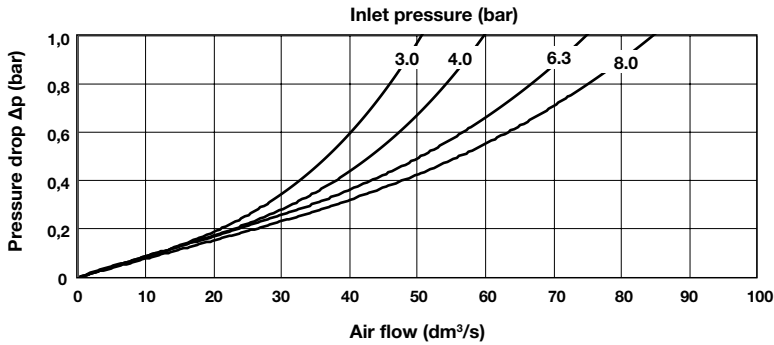
| Function              | Substitute |
|-----------------------|------------|
| 3/2 Soft start / Dump | F          |
| Port Size             | Substitute |
| 3/8"                  | 3          |
| 1/2"                  | 4          |
| 3/4"                  | 6          |
| Thread Form           | Substitute |
| 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

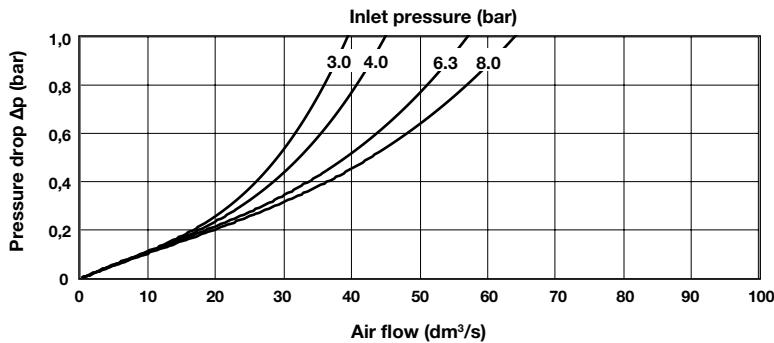
Port 1 to 2

Port size: 1/2"



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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840014-51KIT

### Quikclamp® with bracket assembled



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### Pressure sensing block 1/4 PTF



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840016-50KIT

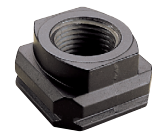
### Pressure sensing block G1/4



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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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### 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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### 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



Page 9

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

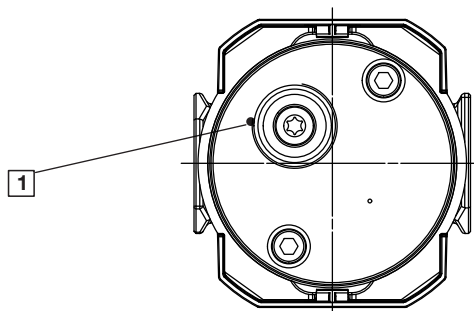
\*3) Q84G stand alone electronic pressure sensor module

## Voltage rating and spare coils

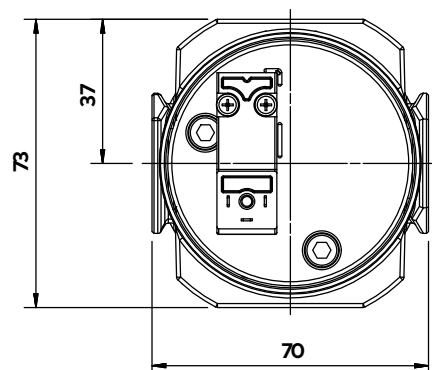
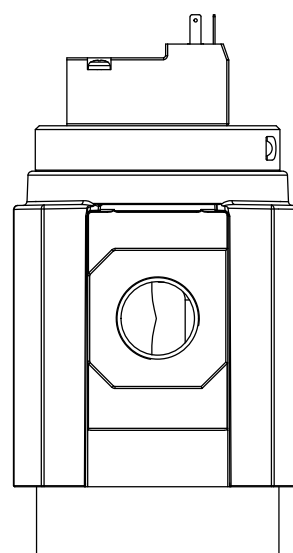
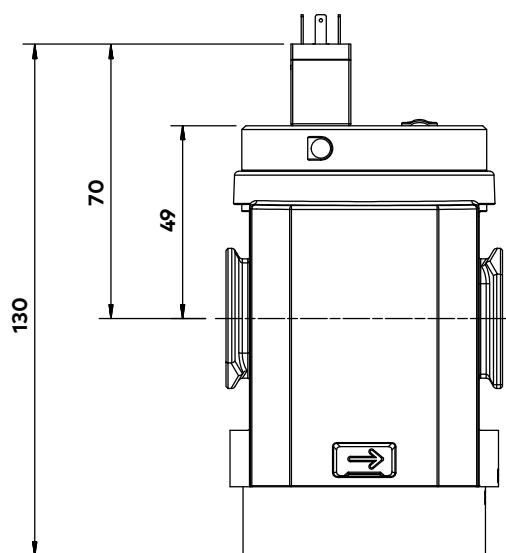
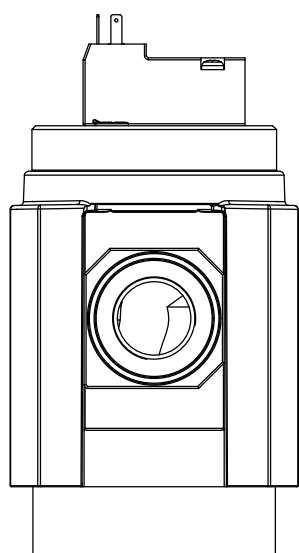
|                                                                                     | Voltage    | Power  | Replacement  |
|-------------------------------------------------------------------------------------|------------|--------|--------------|
|  | 24 V d.c.  | 1,2 W  | 840650-50KIT |
|  | 110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

## Dimensions

Dimensions in mm  
Projection/First angle



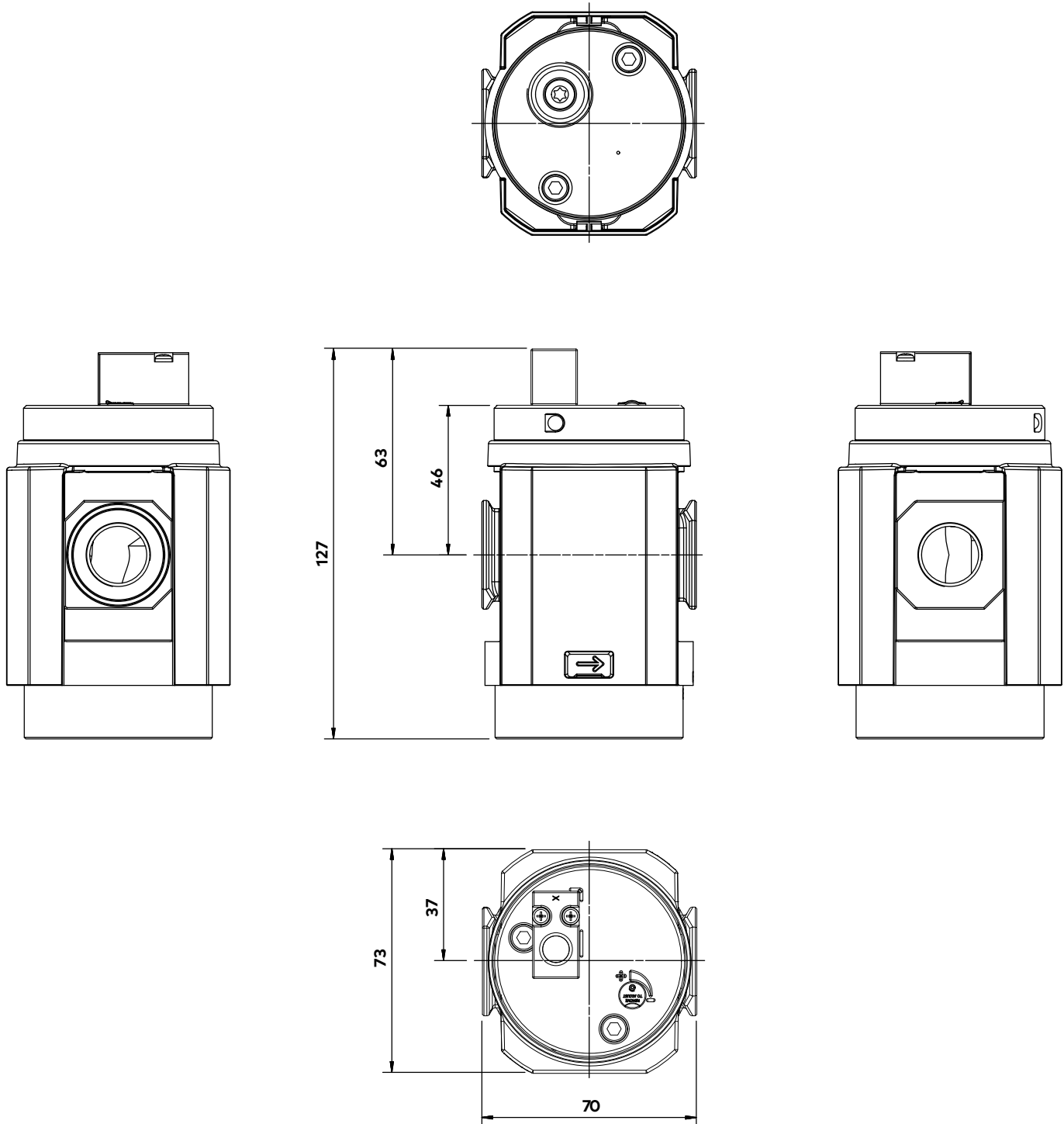
1 1/2" exhaust port (NPT or ISO G)



## Dimensions

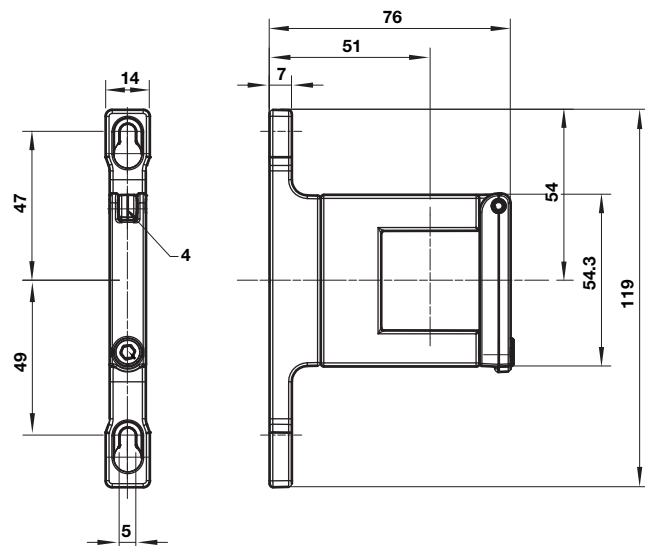
### Air Pilot Operator

Dimensions in mm  
Projection/First angle



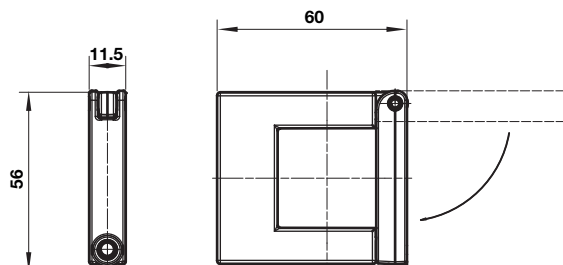
## Accessories

### Quikclamp® with wall bracket

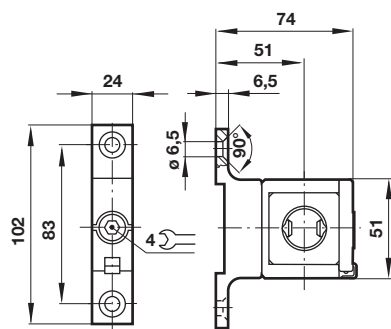


### Quikclamp®

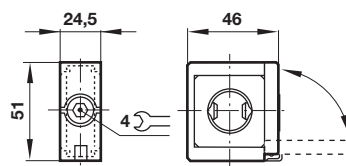
Dimensions in mm  
Projection/First angle



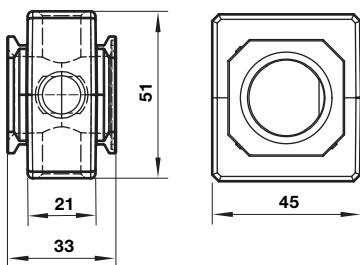
### Hybrid-Quikclamp® with wall bracket



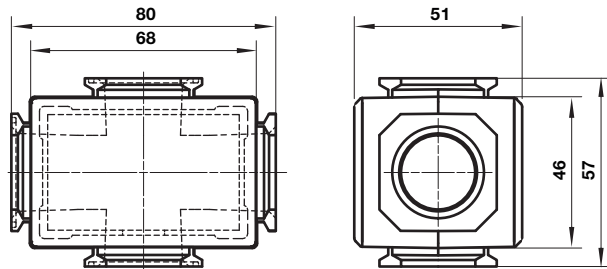
### Hybrid-Quikclamp®



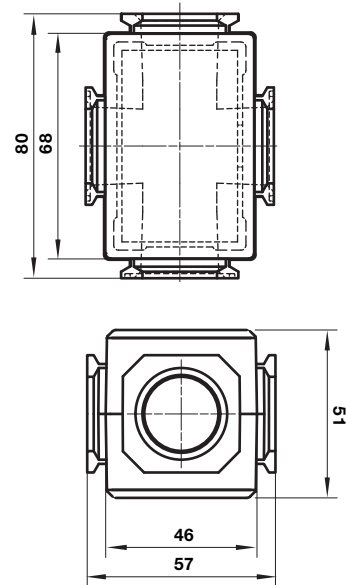
### Pressure sensing block



### Full flow porting block horizontal



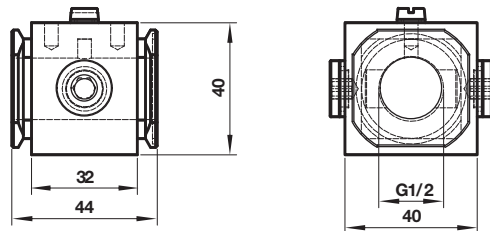
### Full flow porting block vertical



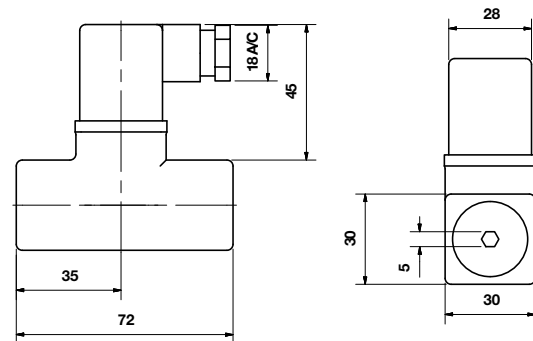
Dimensions in mm  
Projection/First angle



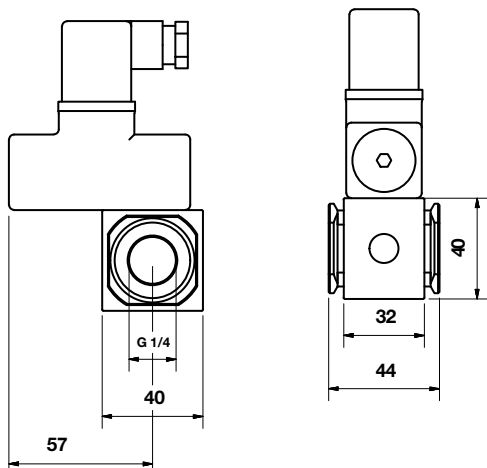
### Porting block for 18D pressure switch



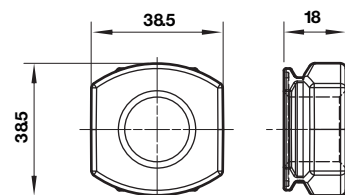
### 18D Pressure switch



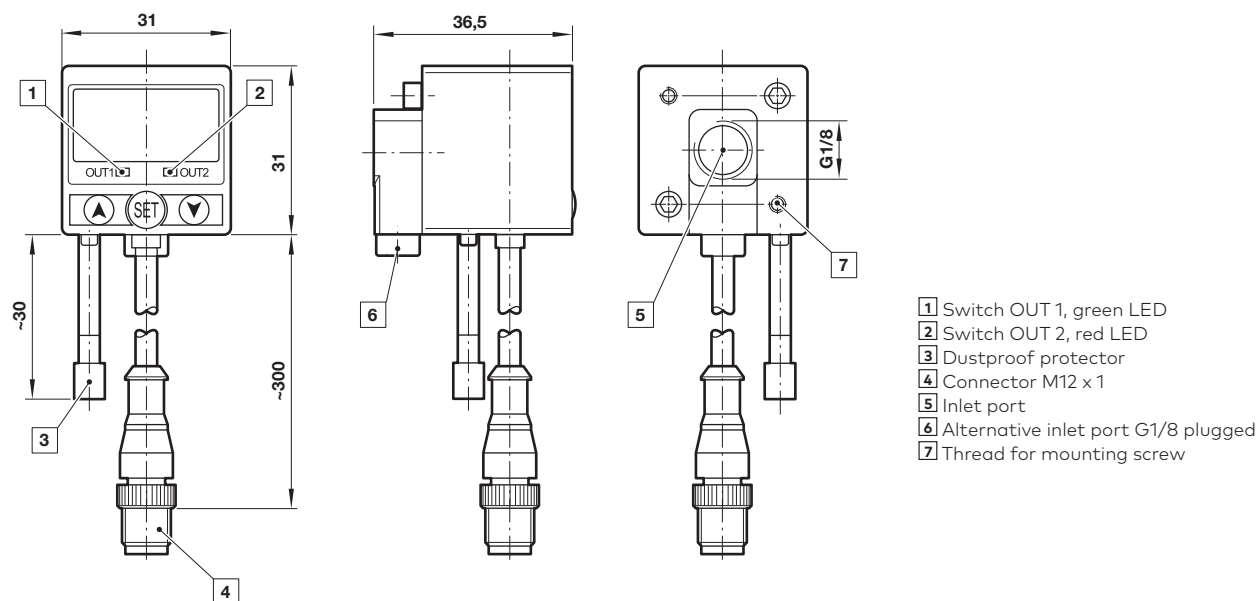
### 18D Porting block and 18D assembled



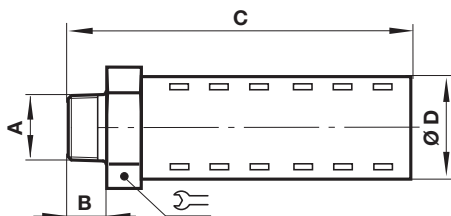
### Pipe adaptor



## 51D Pressure switch - digital



## Silencer



| A       | B  | C  | D  |  | Model  |
|---------|----|----|----|-------------------------------------------------------------------------------------|--------|
| R1/2    | 17 | 92 | 32 | 32                                                                                  | 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 Co. 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.

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

# T84T - 3/2 shut-off 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
- > 3/2 way function
- > Threaded exhaust port
- > Lockable in closed position with padlock
- > High Corrosion resistance: Metal body with electrophoretic paint finish
- >  DoC in accordance with 2014/34/EU/ATEX



### Technical features

#### Medium:

Compressed air only

#### Maximum supply pressure:

20 bar (290 psi)

#### Port size:

G3/8, G1/2, G3/4,  
3/8 PTF, 1/2 PTF, 3/4 PTF

#### Flow:

From IN to OUT ports:

1/2": 162 dm³/s at 6,3 bar and  
Δp 0,5 bar pressure drop,  
1,8 dm³/s from OUT to exhaust  
port.

#### Atex:

Shut-off valves T84 are in  
conformity with ATEX 2014/34/EU



II 2 GD

Ex h IIC T6 Gb

EX h IIIC T85°C Db

#### 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).

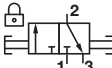
#### Materials:

Body: Die cast aluminium

Body covers: ABS

Elastomers: NBR

### Technical data T84T - standard models

| Symbol                                                                              | Port size | Function | Valve type | Exhaust port forms         | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|----------|------------|----------------------------|-------------|--------------|
|  | G3/8      | 3/2      | Ball valve | Exhaust port threaded G1/4 | 0,48        | T84T-3GA-B1N |
|                                                                                     | G1/2      | 3/2      | Ball valve | Exhaust port threaded G1/4 | 0,48        | T84T-4GA-B1N |
|                                                                                     | G3/4      | 3/2      | Ball valve | Exhaust port threaded G1/4 | 0,48        | T84T-6GA-B1N |

### Option selector

| Function | Substitute | T84T-★★A-B1N |  | Thread form               | Substitute |
|----------|------------|--------------|--|---------------------------|------------|
| 3/2      | T          |              |  | PTF                       | A          |
|          |            |              |  | ISO G parallel (standard) | G          |
|          |            |              |  | Port size                 | Substitute |
|          |            |              |  | 3/8"                      | 3          |
|          |            |              |  | 1/2"                      | 4          |
|          |            |              |  | 3/4"                      | 6          |

### Excelon Plus adheres to the following harmonised 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

## Accessories

### Wall mounting bracket



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840024-50KIT

### Quikclamp®



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840014-51KIT

### Quikclamp® with bracket assembled



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### Hybrid Quikclamp® \*1



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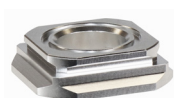
### Hybrid Quikclamp® with bracket assembled \*1



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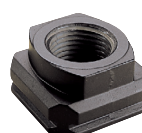
### Connector 84-82 Series \*2



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4417-01

### Port Adaptors



Page 5

|         |              |
|---------|--------------|
| 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 |

### Pressure sensing block 1/4" PTF



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### Pressure sensing block G1/4



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### Full flow porting block 3/4" PTF



Page 6

840028-50KIT

### Full flow porting block G3/4



Page 6

840028-53KIT

### Full flow porting block 3/4" PTF



Page 6

840028-68KIT

### Full flow porting block G3/4



Page 6

840028-69KIT

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



Page 6

0337717000000000

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



Page 6

0881300

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



Page 7

0860810

### Electronic Pressure Sensor – stand alone version \*3



Q84G

## 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 |

\*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) .

## Padlock

### Padlock



840055-01KIT

### Lockout device



840055-02KIT

## Silencer

### Porous plastic silencer \*3) G1/4



M/S2

### Plastic silencer \*3) G1/4



0014600000000000

### Sinter bronze silencer \*3) G1/4



T40C2800

### Sinter bronze silencer \*3) 1/4 PTF

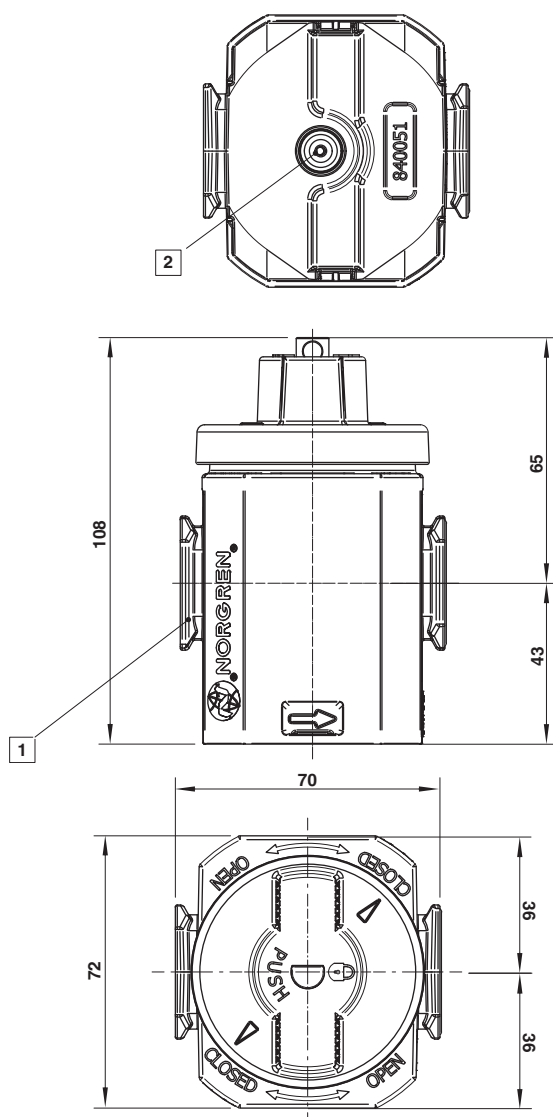


MS002A

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

## Dimensions

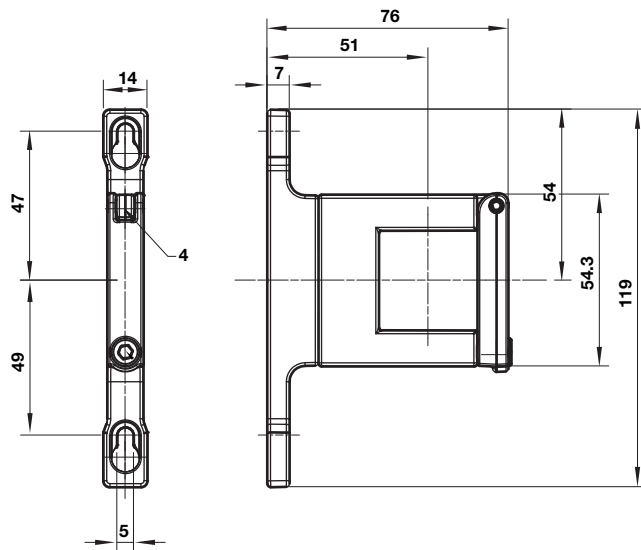
Dimensions in mm  
Projection/First angle



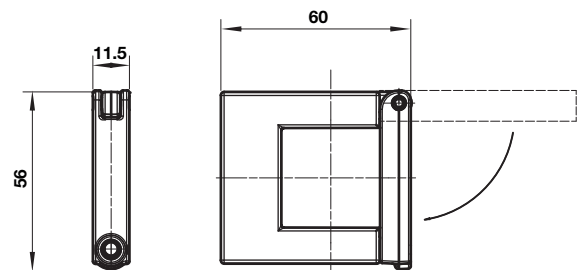
- 1 Main ports  
3/8", 1/2" OR 3/4" ISO G/PTF
- 2 Exhaust Port G1/4 or 1/4 PTF

## Accessories

### Quikclamp® with wall bracket



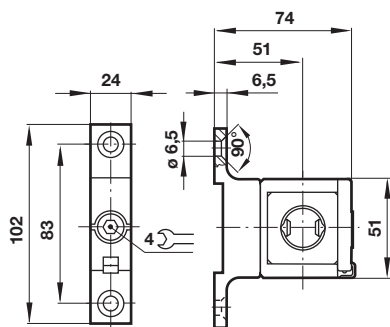
### Quikclamp®



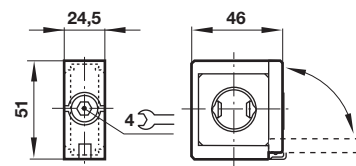
Dimensions in mm  
Projection/First angle



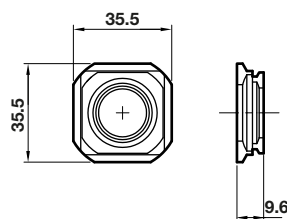
### Hybrid-Quikclamp® with wall bracket



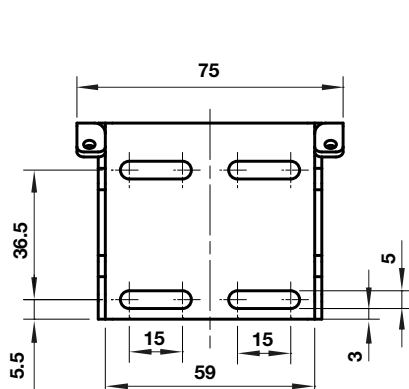
### Hybrid-Quikclamp®



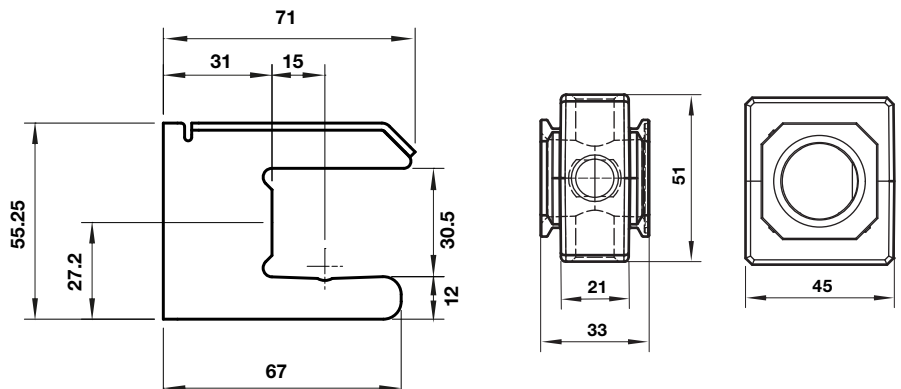
### Connector 84-82 Series



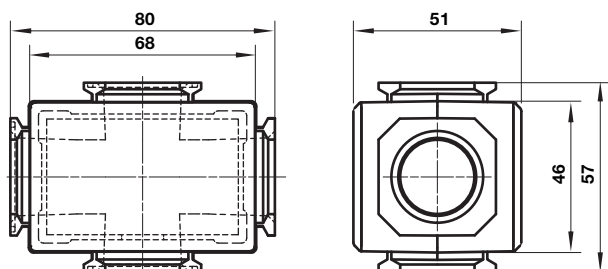
### Mounting bracket



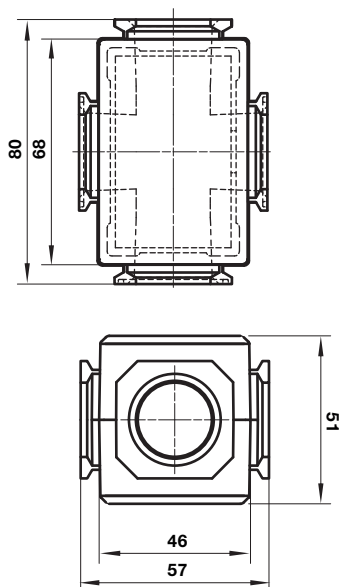
### Pressure sensing block



### Full flow porting block horizontal



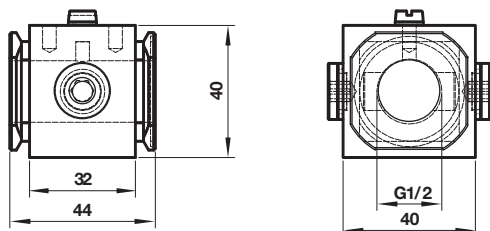
### Full flow porting block vertical



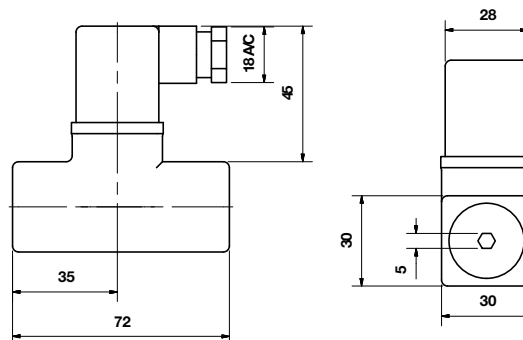
Dimensions in mm  
Projection/First angle



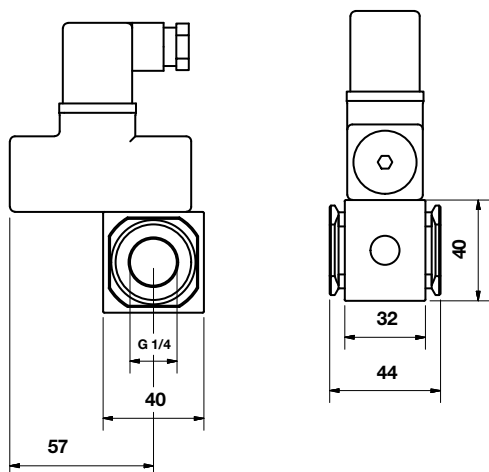
### Porting block for 18D pressure switch



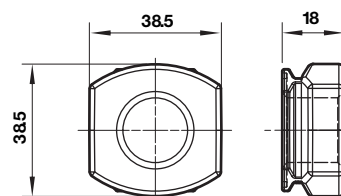
### 18D Pressure switch



### 18D Porting block and 18D assembled

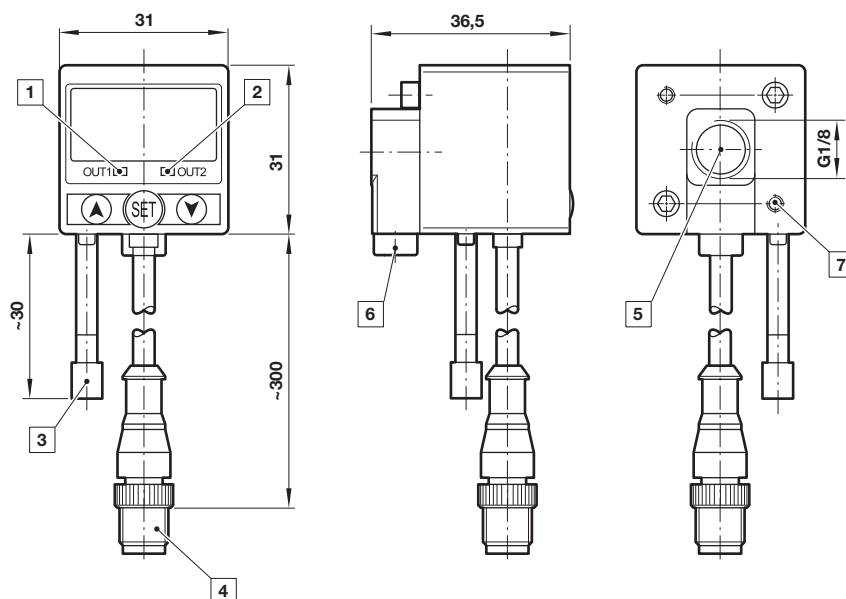


### Pipe adaptor



## 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.

- > **Port size: 1/4" ... 3/4"**  
(ISO G/PTF)
- > **Assists machine designers in complying with the European Machineries Directive**
- > **High forward flow capacity**
- > **High flow dump facility**
- > **Soft start valves allow a controlled increase of pressure onto downstream cylinders /machines offering protection to personnel equipment**
- > **The positively driven micro switch ensures a monitored dump function**



### Technical features

#### Medium:

Compressed air only

#### Operating pressure:

3 bar (43 psi) minimum

10 bar (145 psi) maximum

#### Snap pressure:

Full flow when downstream pressure reaches 35 – 60% of inlet pressure

#### Charge time:

For 2 litre downstream volume and

6,3 bar (90 psi) inlet pressure

0,2 sec. minimum

75 sec. maximum

#### Port size:

G1/4, G3/8, G1/2, G3/4,

1/4PTF, 3/8 PTF 1/2 PTF , 3/8 PTF

#### Pilot port:

Rc1/4 with ISO G main ports

1/4 PTF with PTF main ports

#### Exhaust port:

G1/2 with ISO G main ports

1/2 PTF with PTF main ports

#### Flow:

57 dm³/s

Operating pressure: 6,3 bar (91 psi)

Δp: 0,5 bar (7 psi)

P1 » P2 = Cv 4,2; P2 » P3 = Cv 5,6

#### Ambient/Media temperature:

-20 ... +50°C (+4 ... +122°F)

pilot operated

Air supply must be dry enough

to avoid ice formation at

temperatures below +2°C (+35°F).

#### Materials:

Body & intermediate body:

Aluminium

Elastomers: Synthetic materials

Filter discs: Sintered plastic

Internal components: Brass/steel

Top plate & exhaust bonnet: Zinc

### Electrical details for solenoid operators

|                               |                            |
|-------------------------------|----------------------------|
| <b>Voltage tolerance</b>      | ± 10%                      |
| <b>Rating</b>                 | 100% continuous duty       |
| <b>Inlet orifice</b>          | 1,0 mm                     |
| <b>Electrical connection</b>  | Industrial Standard, 22 mm |
| <b>Solenoid coil mounting</b> | Four positions x 90°       |
| <b>Protection class</b>       | IP 65 (with sealed plug)   |

### Electrical details for monitoring switch

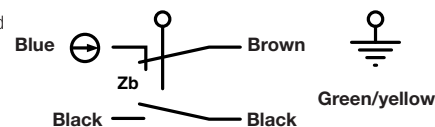
|                         |                                 |
|-------------------------|---------------------------------|
| <b>Voltage</b>          | 240 V a.c.                      |
| <b>Current</b>          | 1,5 A                           |
| <b>Connection cable</b> | Harmonised CENELEC 5 x 0,75 mm² |
| <b>Cable length</b>     | 2 m                             |
| <b>Protection class</b> | IP 66                           |

#### Switch details

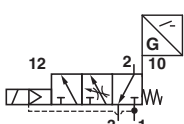
All electrical connections to be made by a competent licensed electrician

Break - before - Make contact

1 Normally Open / 1 Normally Closed



### Technical data - standard models

| Symbol                                                                              | Port size | Size  | Actuation/return | Voltage   | Weight (kg) | Typ          |
|-------------------------------------------------------------------------------------|-----------|-------|------------------|-----------|-------------|--------------|
|  | G1/4      | —     | Solenoid/spring  | 24 V d.c. | 1,05        | P74S-2GC-N1N |
|                                                                                     | G3/8      | —     | Solenoid/spring  | 24 V d.c. | 1,08        | P74S-3GC-N1N |
|                                                                                     | G1/2      | Basic | Solenoid/spring  | 24 V d.c. | 1,05        | P74S-4GC-N1N |
|                                                                                     | G3/4      | —     | Solenoid/spring  | 24 V d.c. | 1,41        | P74S-6GC-N1N |

### Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                      |           |                   |              |      |
|-------------------------------------------------------------------------------------|-----------|-------------------|--------------|------|
|                                                                                     | Voltage   | Power Inrush/Hold | Model        | Code |
|  | 24 V d.c. | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                     |           |                   |              |      |
|                                                                                     |           |                   |              |      |
|                                                                                     |           |                   |              |      |

### Connector plugs

| Industrial standard 22 mm 2-pole + PE                                               |
|-------------------------------------------------------------------------------------|
|  |
| 0657868                                                                             |

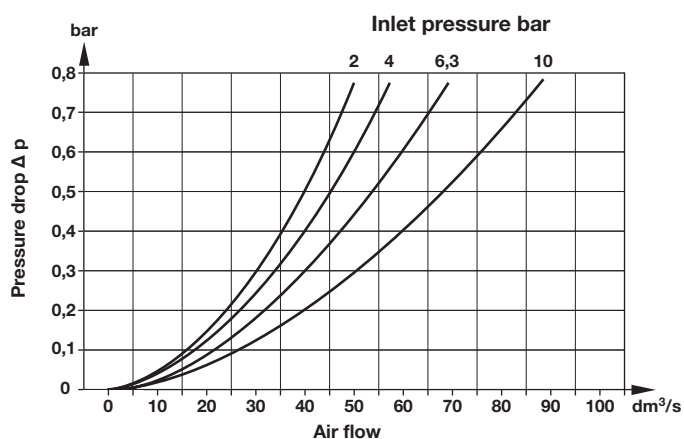
## Option selector

**P74S-★★C-N1N**

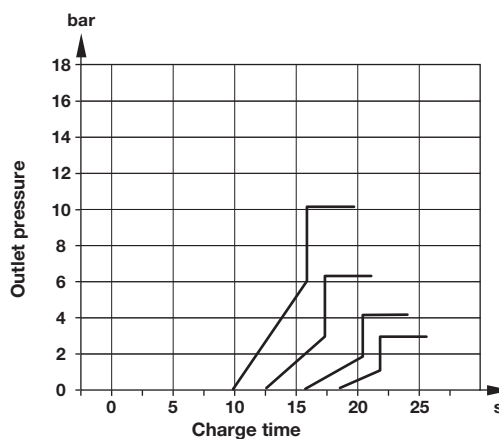
| Port size | Substitute |
|-----------|------------|
| 1/4"      | 2          |
| 3/8"      | 3          |
| 1/2"      | 4          |
| 3/4"      | 6          |

| Thread size               | Substitute |
|---------------------------|------------|
| PTF                       | A          |
| ISO G parallel (standard) | G          |

## Flow characteristics



## Maximum charge time



## Accessories

| Wall mounting bracket                                                             | Quikclamp®                                                                        | Quikclamp with wall bracket®                                                      | Quikmount pipe adaptor *1)                                                        | Porting block with three alternative 1/4" ports                                   | 2/2 Shut-off valves (for full technical specification see datasheet 8.200.600)      | 3/2 Shut-off valves (for full technical specification see datasheet 8.200.600)      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                              | Page 4                                                                              |
| 4324-50                                                                           | 4314-51                                                                           | 4314-52                                                                           | G3/8: 4315-10                                                                     | G1/4: 4316-52                                                                     | G 3/8: T74B-3GA-P1N                                                                 | G 3/8: T74T-3GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | G1/2: 4315-11                                                                     | 1/4 PTF: 4316-50                                                                  | G 1/2: T74B-4GA-P1N                                                                 | G 1/2: T74T-4GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | G3/4: 4315-12                                                                     |                                                                                   | G 3/4: T74B-6GA-P1N                                                                 | G 3/4: T74T-6GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | 3/8 PTF: 4315-02                                                                  |                                                                                   | 3/8 PTF: T74B-3AA-P1N                                                               | 3/8 PTF: T74T-3AA-P1N                                                               |
|                                                                                   |                                                                                   |                                                                                   | 1/2 PTF: 4315-03                                                                  |                                                                                   |                                                                                     | 1/2 PTF: T74T-4AA-P1N                                                               |
|                                                                                   |                                                                                   |                                                                                   | 3/4 PTF: 4315-04                                                                  |                                                                                   | 3/4 PTF: T74B-6AA-P1N                                                               | 3/4 PTF: T74T-6AA-P1N                                                               |

\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

## Pressure switch

| Porting block for pressure switch                                                 | Pressure switch (0,5 ... 8 bar)                                                   | Padlock (brass) with two keys *1)                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |
| Page 4                                                                            |                                                                                   |                                                                                   |
| 0523110000000000                                                                  | 0881300000000000                                                                  | 0613633000000000                                                                  |

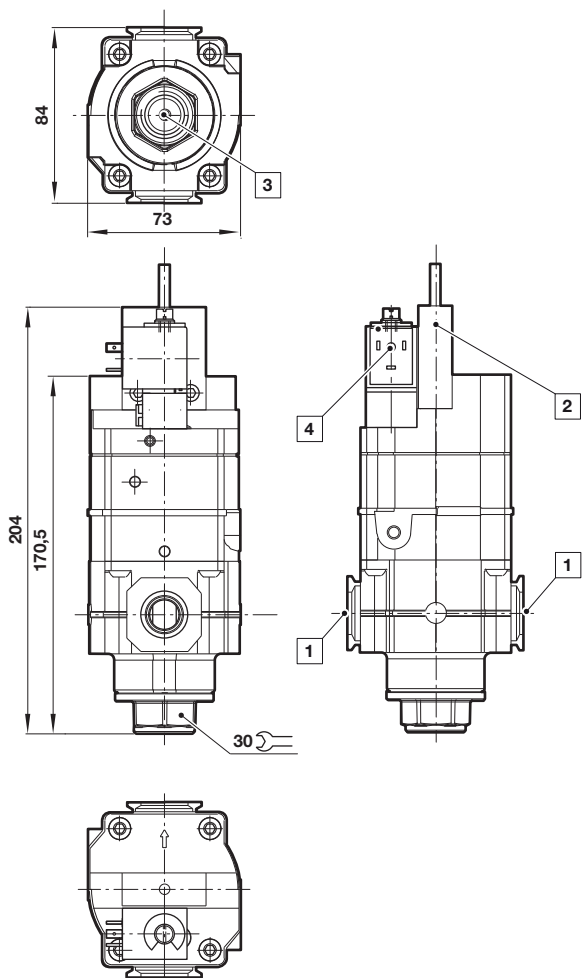
\*1) for shut-off valves

## Silencer

| Silencer                                                                          |
|-----------------------------------------------------------------------------------|
|  |
| Page 4                                                                            |
| R1/2: MB004B                                                                      |
| 1/2 NPT: MB004A                                                                   |

## Drawing

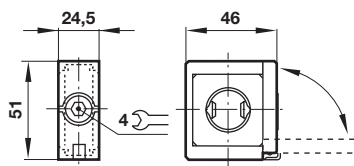
Dimensions in mm  
Projection/First angle



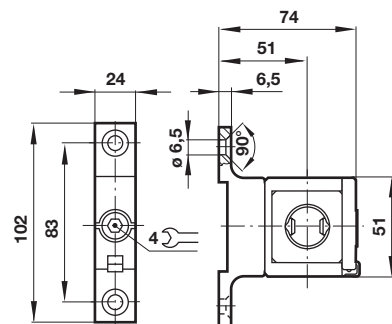
- 1 Main sorts 1/4", 3/8", 1/2" or 3/4"
- 2 Monitored switch
- 3 Exhaust port
- 4 Solenoid

## Accessories

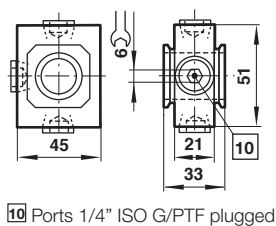
### Quikclamp®



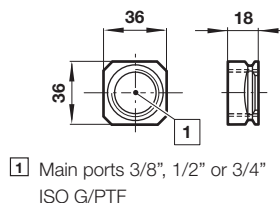
### Quikclamp® with wall bracket



### Porting block



### Pipe adapter



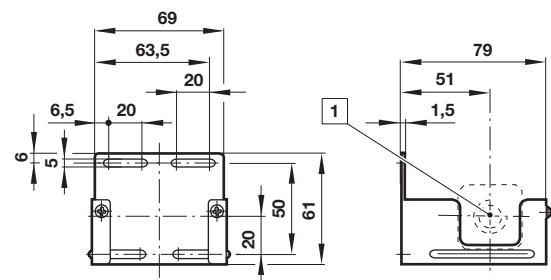
1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

10 Ports 1/4" ISO G/PTF plugged

Dimensions in mm  
Projection/First angle

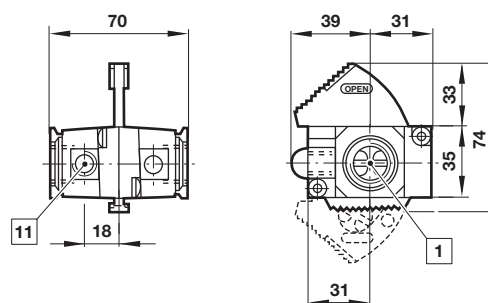


### Wall mounting bracket



1 Main ports

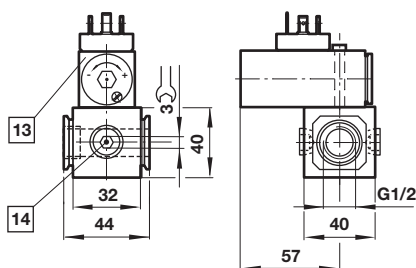
### Shut-off valves



1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

11 Exhaust port Rc1/8

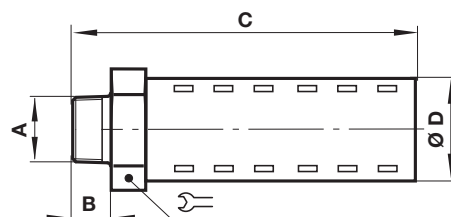
### Porting block for pressure switch



13 Pressure switch is not in scope of delivery

14 Alternative G1/4 ports plugged

### 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 IMI Precision Engineering, IMI International s.r.o. 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.



- > Port size: Unthreaded Ports, 1/2" basic size
- > Customised poppets for long service life
- > Excelon design allows in-line installation or modular installation with other Excelon products
- > High flow spring return
- > Solenoid or air pilot actuated



## Technical features

### Medium:

Compressed air only

### Operating pressure:

3 ... 10 bar (44 ... 145 psi) solenoid actuated

3 ... 17 bar (44 ... 250 psi) pilot actuated

### Port size:

Unthreaded

### Pilot port:

G1/4 with ISO G main ports

1/4 PTF with PTF main ports

### Exhaust port:

G1/2 with ISO G main ports

1/2 PTF with PTF main ports

### Flow factor:

2/2 Cv = 4,0

3/2 IN » OUT Cv = 3,2

3/2 OUT » EXHAUST Cv = 5,3

### Flow direction:

2/2 NC: A » B

2/2 NO: A » B

3/2: B » A

### Ambient/Media temperature:

Solenoid operated:

Depending on solenoid rating

-20° ... +50°C (+4° ... +122°F)

Pilot operated

-20° ... +80°C (+4° ... +176°F)

Version with gauge:

-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: Zinc

Elastomers: Synthetic materials

Internal components: Aluminium

## Electrical details for solenoid operators

|                        |                            |
|------------------------|----------------------------|
| Voltage tolerance      | ± 10%                      |
| Rating                 | 100% continuous duty       |
| Inlet orifice          | 1,0 mm                     |
| Electrical connection  | Industrial Standard, 22 mm |
| Solenoid coil mounting | Four positions x 90°       |
| Protection class       | IP 65 (with sealed plug)   |

## Technical data - standard models

| Symbol | Port size *1) | Size  | Actuation/return | Operating pressure (bar) | Pilot pressure (bar) | Voltage   | Gewicht (kg) | Drawing No. | Model            |
|--------|---------------|-------|------------------|--------------------------|----------------------|-----------|--------------|-------------|------------------|
|        | 1/2"          | Basic | Air pilot/Spring | 3 ... 17                 | 3 ... 17             | —         | 0,54         | 1           | P74A-NGA-NNN     |
|        | 1/2"          | Basic | Air pilot/Spring | 3 ... 17                 | 3 ... 17             | —         | 0,54         | 1           | P74B-NGA-NNN     |
|        | 1/2"          | Basic | Air pilot/Spring | 3 ... 17                 | 3 ... 17             | —         | 0,54         | 2           | P74C-NGA-NNN     |
|        | 1/2"          | Basic | Solenoid/Spring  | 3 ... 10                 | —                    | 24 V d.c. | 0,74         | 3           | P74A-NNC-PFA *2) |
|        | 1/2"          | Basic | Solenoid/Spring  | 3 ... 10                 | —                    | 24 V d.c. | 0,74         | 4           | P74C-NGC-PFA *2) |

\*1) Unthreaded

\*2) To select other solenoid type and coil voltage refer to option selector on page 2

## Option selector

| Function                  | Substitute | P74★-N★-★-★-★ |  | Connector                | Substitute |
|---------------------------|------------|---------------|--|--------------------------|------------|
| 2/2 NC                    | A          |               |  | With                     | A          |
| 2/2 NO                    | B          |               |  | Without                  | N          |
| 3/2 NC                    | C          |               |  |                          |            |
| Exhaust port only         | Substitute |               |  | Coil voltage             | Substitute |
| PTF                       | A          |               |  | 24 V d.c.                | F          |
| ISO G parallel (standard) | G          |               |  | 12 V d.c.                | E          |
| Operator                  | Substitute |               |  | 220/240 V a.c.           | B          |
| Air pilot *1)             | A          |               |  | 110/120 V a.c.           | A          |
| 22 mm miniature solenoid  | C          |               |  | No coil                  | Z          |
|                           |            |               |  | No solenoid              | N          |
|                           |            |               |  | Manual override          | Substitute |
|                           |            |               |  | Push only, spring return | P          |
|                           |            |               |  | Without                  | N          |

\*1) To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P74A-NGA-NNN.

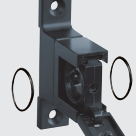
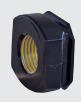
## Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                   |                    |                   |              |      |
|----------------------------------------------------------------------------------|--------------------|-------------------|--------------|------|
|                                                                                  | Voltage            | Power Inrush/Hold | Model        | Code |
|  | 12 V d.c.          | 2 W               | QM/48/12J/21 | 12J  |
|                                                                                  | 24 V d.c.          | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                  | 110/120 V 50/60 Hz | 2,5 VA            | QM/48/18J/21 | 18J  |
|                                                                                  | 220/240 V 50/60 Hz | 5,0 VA            | QM/48/19J/21 | 19J  |

## Connector plugs



## Accessories

| Wall mounting bracket                                                              | Quikclamp®                                                                          | Quikclamp with wall bracket®                                                        | Quikmount pipe adaptor *1)                                                          | Porting block with three alternative 1/4" ports                                     | 2/2 Shut-off valves (for full technical specification see datasheet 8.200.600)        | 3/2 Shut-off valves (for full technical specification see datasheet 8.200.600)        |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Page 4                                                                             | Page 3                                                                              | Page 3                                                                              | Page 3                                                                              | Page 3                                                                              | Page 4                                                                                | Page 4                                                                                |
| 4324-50                                                                            | 4314-51                                                                             | 4314-52                                                                             | G3/8: 4315-10                                                                       | G1/4: 4316-52                                                                       | G 3/8: T74B-3GA-P1N                                                                   | G 3/8: T74T-3GA-P1N                                                                   |
|                                                                                    |                                                                                     |                                                                                     | G1/2: 4315-11                                                                       | 1/4 PTF: 4316-50                                                                    | G 1/2: T74B-4GA-P1N                                                                   | G 1/2: T74T-4GA-P1N                                                                   |
|                                                                                    |                                                                                     |                                                                                     | G3/4: 4315-12                                                                       |                                                                                     | G 3/4: T74B-6GA-P1N                                                                   | G 3/4: T74T-6GA-P1N                                                                   |
|                                                                                    |                                                                                     |                                                                                     | 3/8 PTF: 4315-02                                                                    |                                                                                     |                                                                                       |                                                                                       |
|                                                                                    |                                                                                     |                                                                                     | 1/2 PTF: 4315-03                                                                    |                                                                                     |                                                                                       | 1/2 PTF: T74T-4AA-P1N                                                                 |
|                                                                                    |                                                                                     |                                                                                     | 3/4 PTF: 4315-04                                                                    |                                                                                     | 3/4 PTF: T74B-6AA-P1N                                                                 | 3/4 PTF: T74T-6AA-P1N                                                                 |

\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

## Pressure switch

| Porting block for pressure switch *1)                                               | Pressure switch (0,5 ... 8 bar)                                                     | Connector DIN EN 175301-803 Form A                                                  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| Page 4                                                                              |                                                                                     |                                                                                     |
| 0523110000000000                                                                    | 0881300000000000                                                                    | 0570110000000000                                                                    |

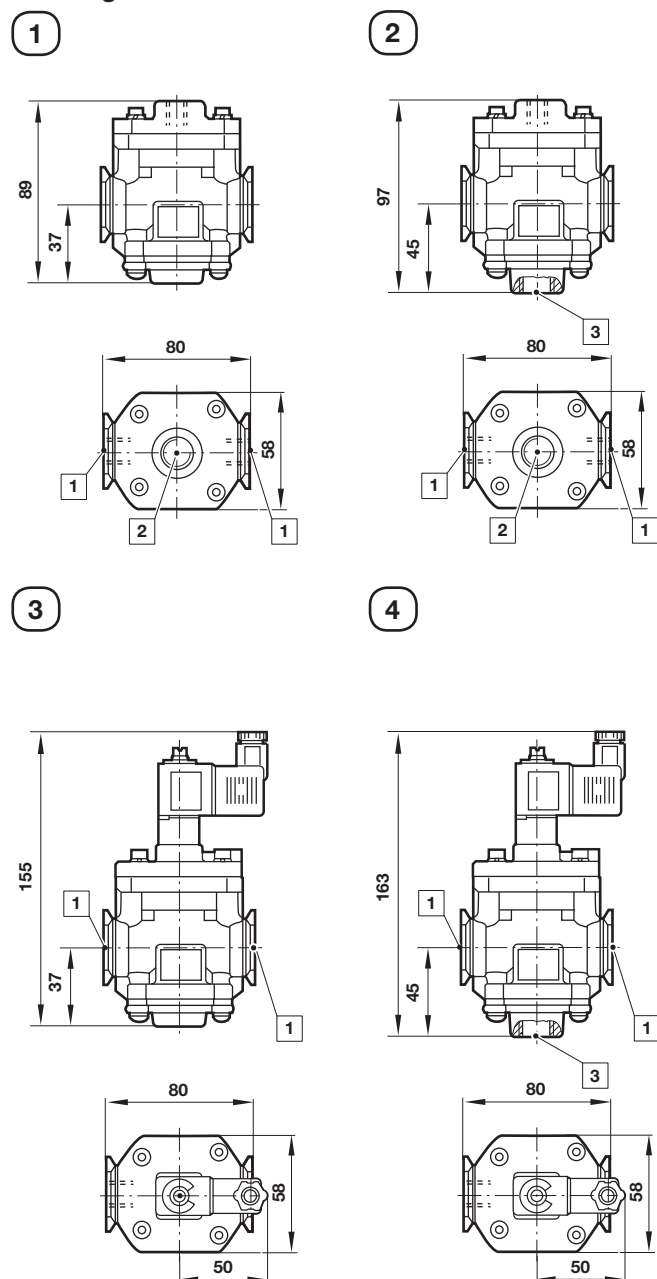
\*1) Pressure switch is not in scope of delivery

| Silencer                                                                            |
|-------------------------------------------------------------------------------------|
|  |
| Page 4                                                                              |
| R1/2: MB004B                                                                        |
| 1/2 NPT: MB004A                                                                     |

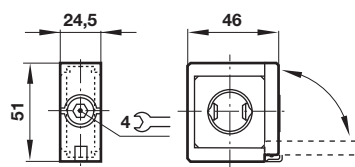
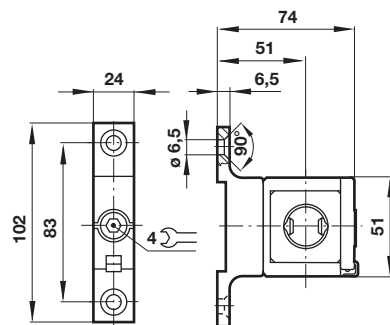
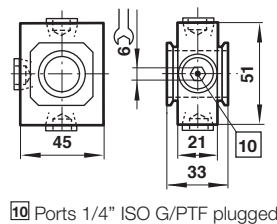
## Service kits

| Service kit     |
|-----------------|
|                 |
| 53474-37        |
| 53474-40 (P74C) |

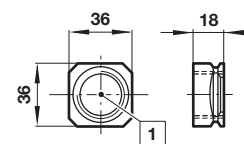
**Drawings**

 Dimensions in mm  
 Projection/First angle


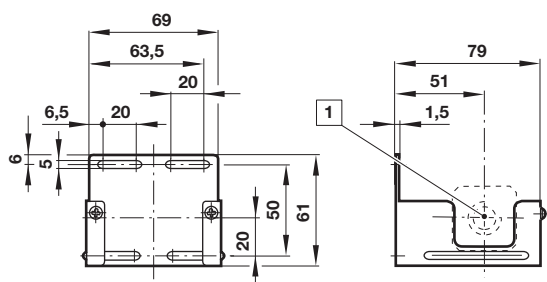
- 1 Unthreaded main port 1/2"
- 2 Pilot port 1/4"
- 3 Exhaust port 1/2"

**Accessories**
**Quikclamp®**

**Quikclamp® with wall bracket**

**Porting block**


10 Ports 1/4" ISO G/PTF plugged

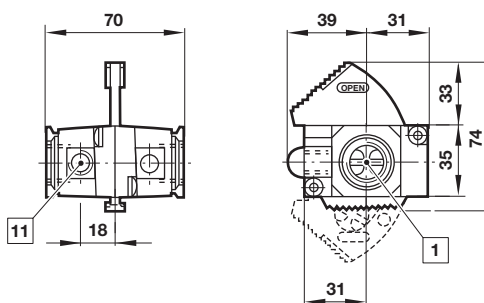
**Pipe adapter**

 1 Main ports 3/8", 1/2" or 3/4"  
 ISO G/PTF

### Wall mounting bracket



1 Main ports

### Shut-off valves



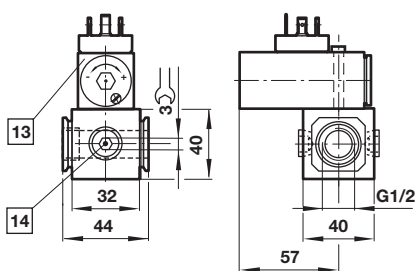
1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

11 Exhaust port Rc1/8 at 3/2 valve only

Dimensions in mm  
 Projection/First angle



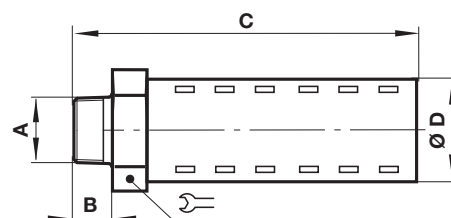
### Porting block for pressure switch



13 Pressure switch is not in scope of delivery

14 Alternative G1/4 ports plugged

### 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 IMI Precision Engineering, Norgren Inc.

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.

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# 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

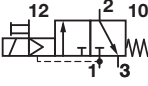
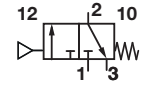
Body covers: ABS

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

|                               |                                           |
|-------------------------------|-------------------------------------------|
| <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

**P84C-\*\*\*-\*\*\*N**

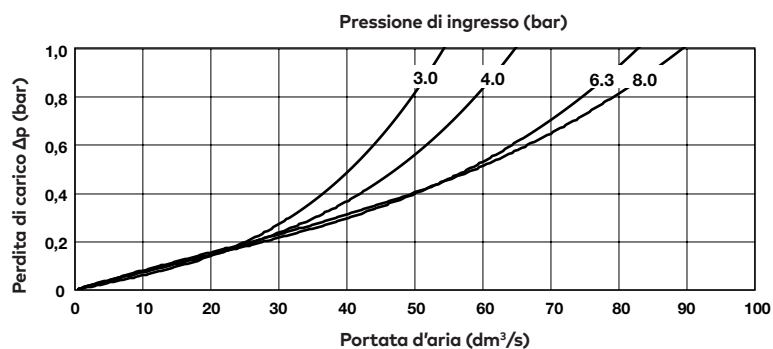
| Function          | Substitute |
|-------------------|------------|
| 3/2 Control Valve | C          |
| Port Size         | Substitute |
| 3/8"              | 3          |
| 1/2"              | 4          |
| 3/4"              | 6          |
| Thread Form       | Substitute |
| PTF               | 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

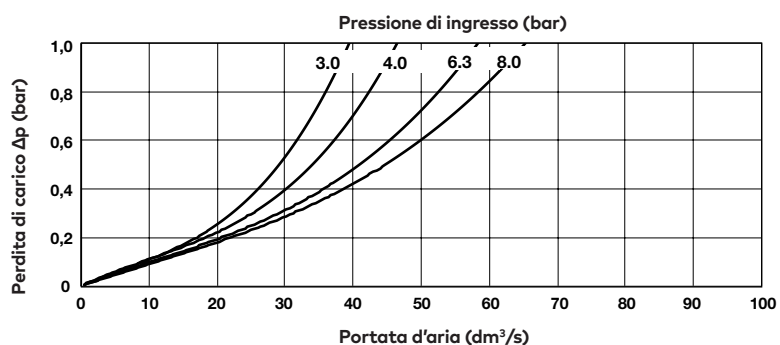
Port 1 to 2

Port size: 1/2"



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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840014-51KIT

### Quikclamp® with bracket assembled



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840014-52KIT

### Pressure sensing block 1/4 PTF



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840016-50KIT

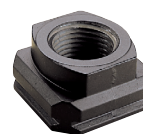
### Pressure sensing block G1/4



Page 7

840016-51KIT

### Port Adaptors



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



Page 7

840014-61

### Hybrid Quikclamp® with bracket assembled \*1



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



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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



Page 8

840028-50KIT

### Full flow porting block G3/4



Page 8

840028-53KIT

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



Page 8

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

## 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

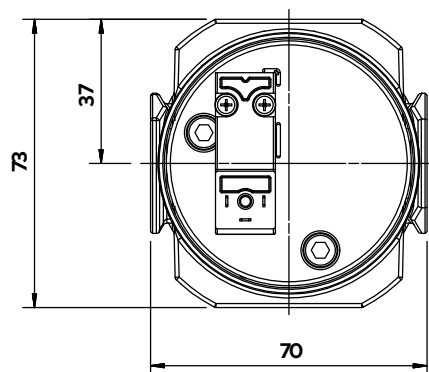
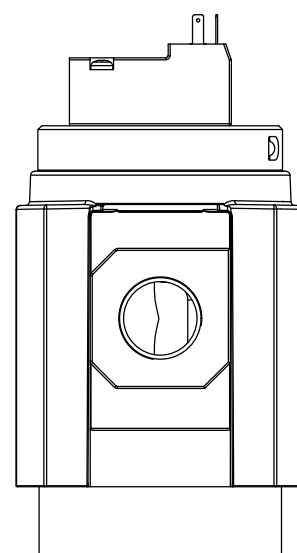
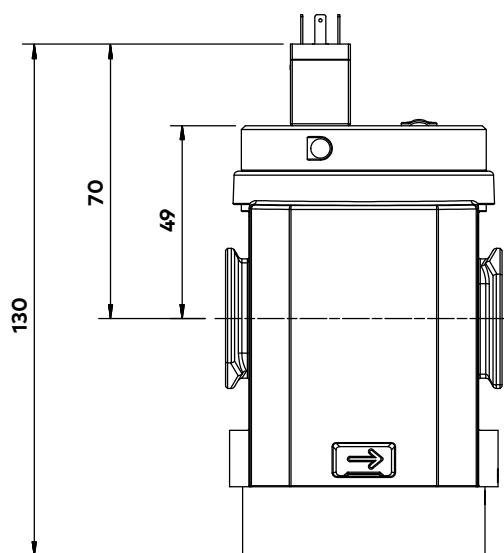
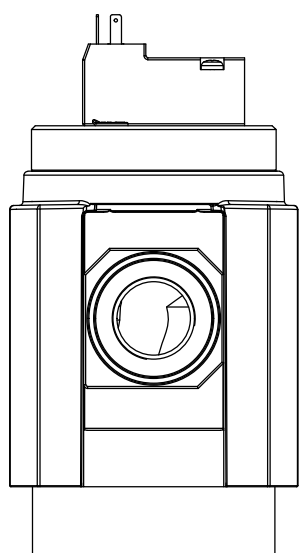
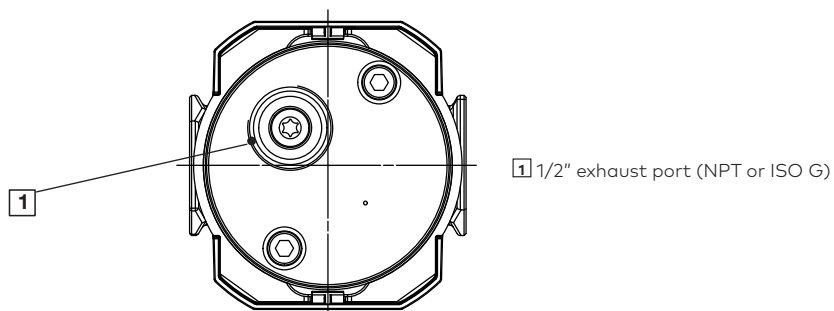
\*2) For other pressure ranges, please see data sheet 5.11.385

\*3) 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

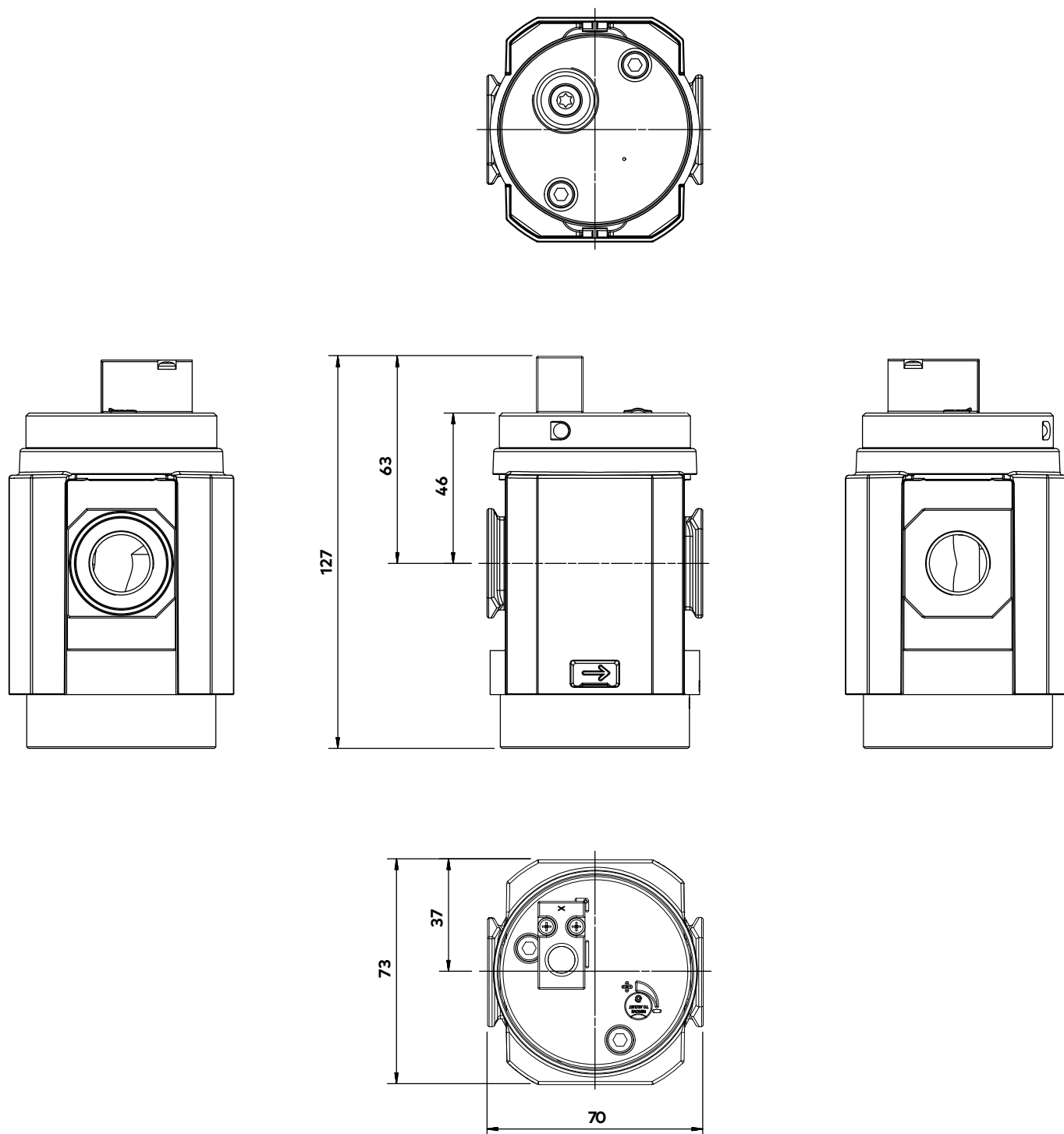
Dimensions in mm  
Projection/First angle



## Dimensions

### Air Pilot Operator

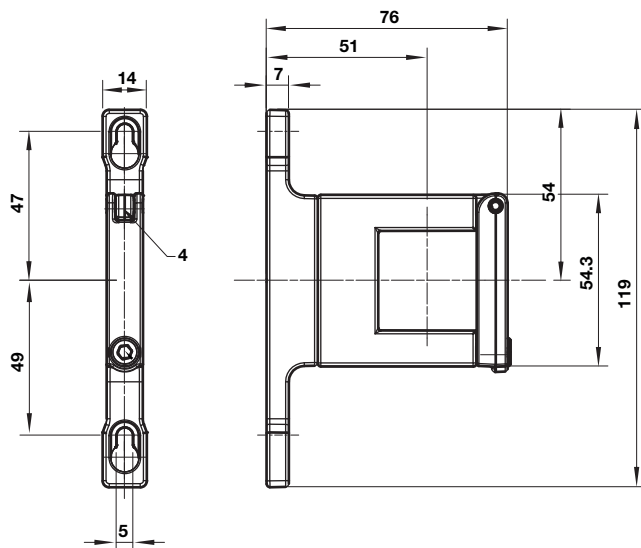
Dimensions in mm  
Projection/First angle



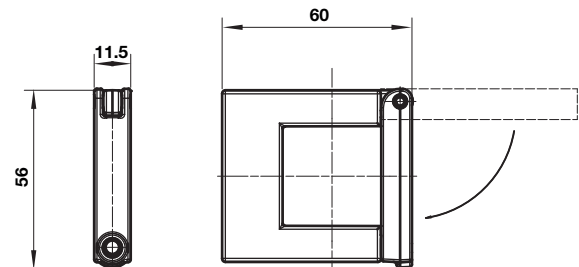
## Accessories

### Quikclamp® with wall bracket

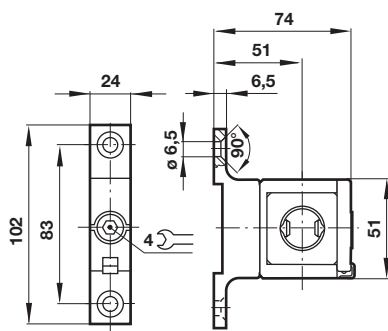
Dimensions in mm  
Projection/First angle



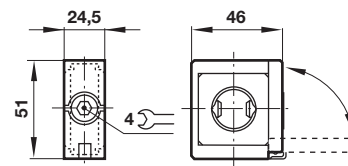
### Quikclamp®



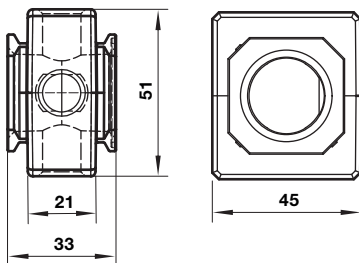
### Hybrid-Quikclamp® with wall bracket



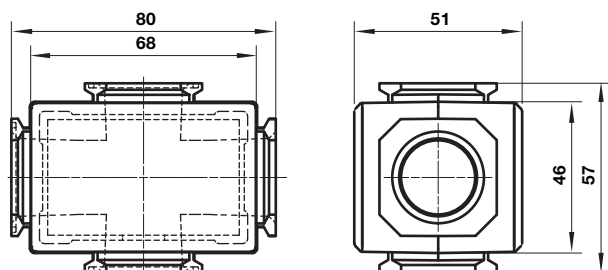
### Hybrid-Quikclamp®



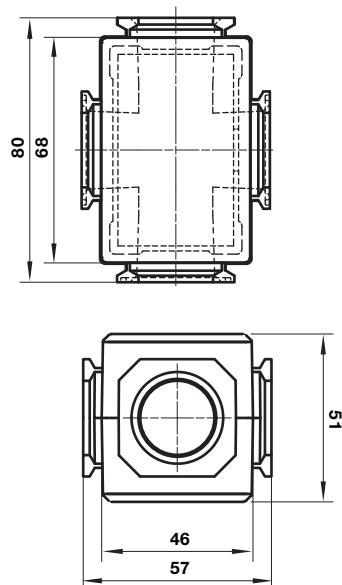
### Pressure sensing block



### Full flow porting block horizontal



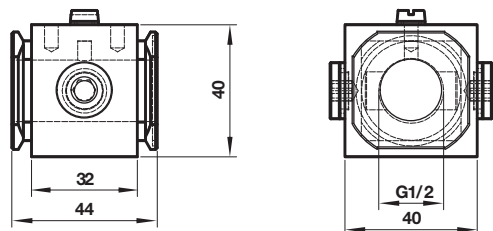
### Full flow porting block vertical



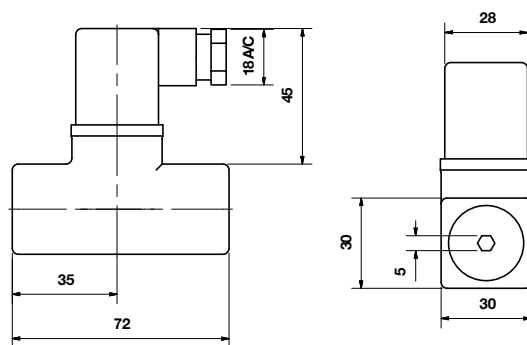
Dimensions in mm  
Projection/First angle



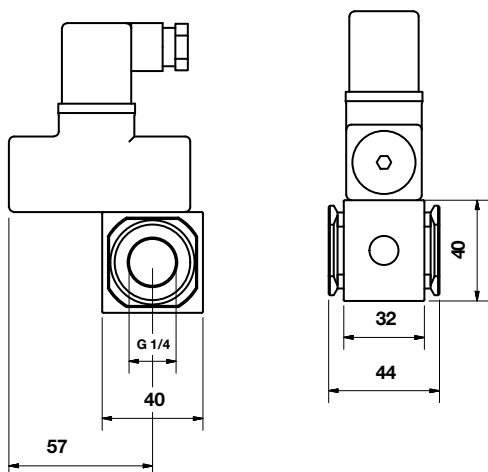
### Porting block for 18D pressure switch



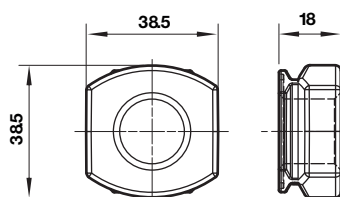
### 18D Pressure switch



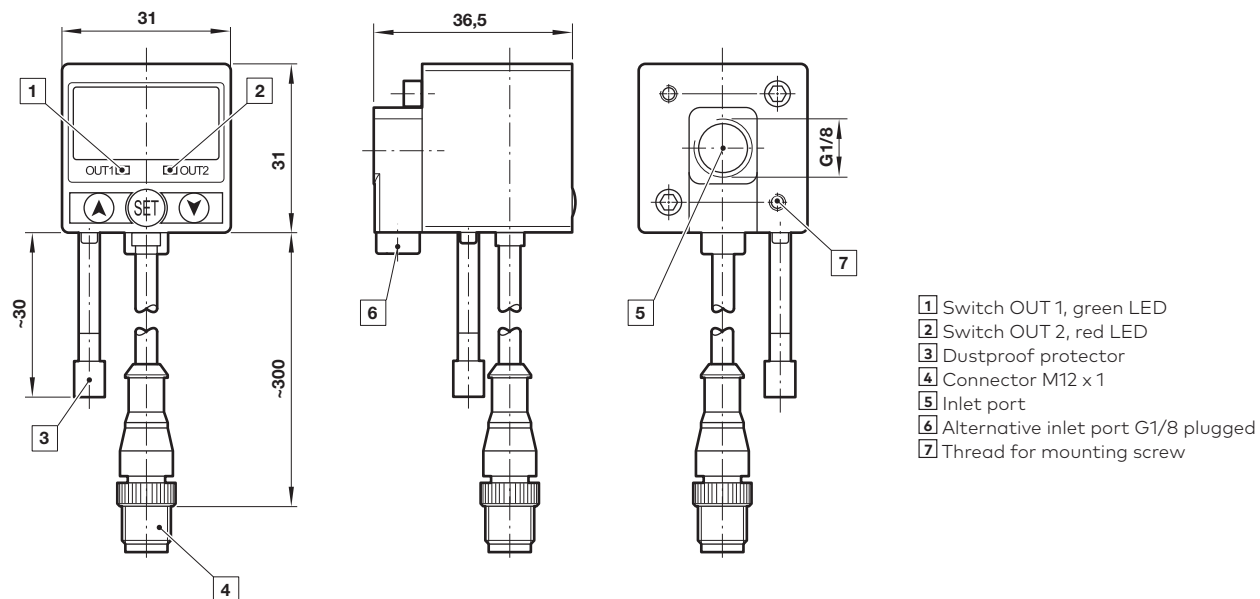
### 18D Porting block and 18D assembled



### Pipe adaptor

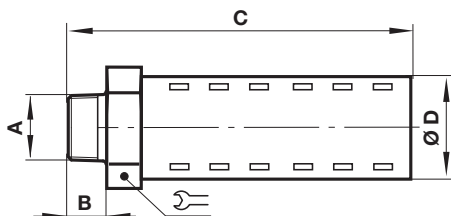


## 51D Pressure switch - digital



- 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.

- > **Port size: 3/8" ... 3/4"**  
(ISO G/PTF)
- > **Assists machine designers in complying with the European Machineries Directive**
- > **Excelon design allows in-line installation or modular installation with other Excelon products**
- > **Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)**
- > **Controlled increase of downstream pressure onstart up**
- > **High forward flow capacity**
- > **High flow dump facility**



### Technical features

#### Medium:

Compressed air only

#### Operating pressure:

Solenoid actuated:

3 ... 10 bar (44 ... 145 psi)

Pilot actuated:

3 ... 17 bar (44 ... 250 psi)

#### Snap pressure:

Full flow when downstream pressure reaches 50 – 80% of inlet pressure

#### Charge time:

For 2 litre downstream volume and 6,3 bar (90 psi) inlet pressure  
0,2 sec. minimum  
110 sec. maximum

#### Port size:

G3/8, G1/2, G3/4,  
3/8 PTF 1/2 PTF, 3/8 PTF

#### Pilot port:

Rc1/4 with ISO G main ports  
1/4 PTF with PTF main ports

#### Exhaust port:

G1/2 with ISO G main ports  
1/2 PTF with PTF main ports

#### Flow:

57 dm³/s

Operating pressure: 6,3 bar (91 psi)

Δp: 0,5 bar (7 psi)

P1 » P2 = Cv 4,4; P2 » P3 = Cv 5,6

#### Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C (-4° ... +122°F)

Pilot actuated:

-20° ... +80°C (+4° ... +176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Materials:

Body & intermediate body:

Aluminium

Elastomers: Synthetic materials

Filter discs: Sintered plastic

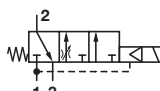
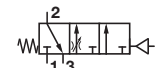
Internal components: Brass/steel

Top plate & exhaust bonnet: Zinc

### Electrical details for solenoid operators

|                               |                            |
|-------------------------------|----------------------------|
| <b>Voltage tolerance</b>      | ± 10%                      |
| <b>Rating</b>                 | 100% continuous duty       |
| <b>Inlet orifice</b>          | 1,0 mm                     |
| <b>Electrical connection</b>  | Industrial Standard, 22 mm |
| <b>Solenoid coil mounting</b> | Four positions x 90°       |
| <b>Protection class</b>       | IP 65 (with sealed plug)   |

### Technical data - standard models

| Symbol                                                                              | Port size | Size  | Actuation/return | Voltage   | Pilot port | Weight (kg) | Typ              |
|-------------------------------------------------------------------------------------|-----------|-------|------------------|-----------|------------|-------------|------------------|
|  | G3/8      | —     | Solenoid/spring  | 24 V d.c. | -          | 1,08        | P74F-3GC-PFA *1) |
|                                                                                     | G1/2      | Basic | Solenoid/spring  | 24 V d.c. | -          | 1,05        | P74F-4GC-PFA *1) |
|                                                                                     | G3/4      | —     | Solenoid/spring  | 24 V d.c. | -          | 1,41        | P74F-6GC-PFA *1) |
|  | G3/8      | —     | Air/spring       | —         | M5         | 1,05        | P74F-3GA-NNN     |
|                                                                                     | G1/2      | Basic | Air/spring       | —         | M5         | 1,02        | P74F-4GA-NNN     |
|                                                                                     | G3/4      | —     | Air/spring       | —         | M5         | 1,35        | P74F-6GA-NNN     |

\*1) To select other solenoid type and coil voltage refer to option selector on page 2

### Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                      |                    |                   |              |      |
|-------------------------------------------------------------------------------------|--------------------|-------------------|--------------|------|
|                                                                                     | Voltage            | Power Inrush/Hold | Model        | Code |
|  | 12 V d.c.          | 2 W               | QM/48/12J/21 | 12J  |
|                                                                                     | 24 V d.c.          | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                     | 110/120 V 50/60 Hz | 4/2,5 VA          | QM/48/18J/21 | 18J  |
|                                                                                     | 220/240 V 50/60 Hz | 6/5,0 VA          | QM/48/19J/21 | 19J  |

### Connector plugs



Option selector

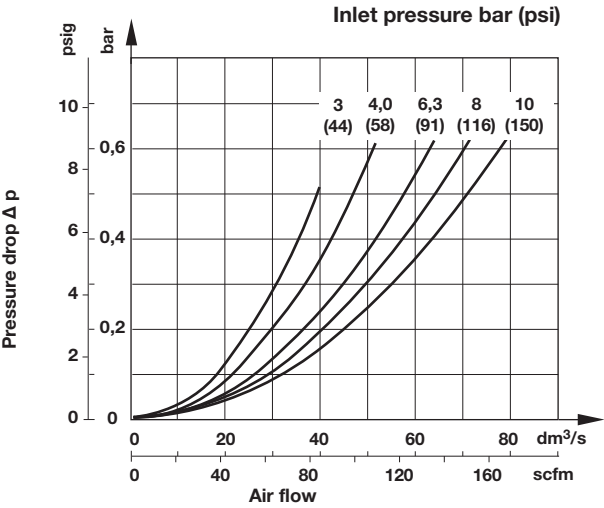
| Port size                                          | Substitute |
|----------------------------------------------------|------------|
| 3/8"                                               | 3          |
| 1/2"                                               | 4          |
| 3/4"                                               | 6          |
| Thread size                                        | Substitute |
| PTF                                                | A          |
| ISO G parallel (standard)                          | G          |
| Operator                                           | Substitute |
| Air pilot*1)                                       | A          |
| Air pilot with manual lockout slide* 1)            | B          |
| 22 mm miniature solenoid                           | C          |
| 22 mm miniature solenoid with manual lockout slide | D          |
| CNOMO solenoid                                     | L          |
| CNOMO solenoid with manual lockout slide           | M          |

\*1)To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P74F-2GA-NNN.

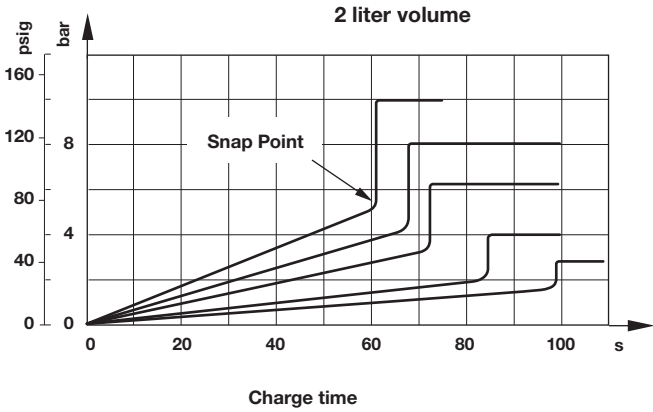
P74F-...-...

| Connector            | Substitute |
|----------------------|------------|
| With                 | A          |
| Without              | N          |
| Coil voltage         | Substitute |
| 24 V d.c.            | F          |
| 12 V d.c.            | E          |
| 220/240 V a.c.       | B          |
| 110/120 V a.c.       | A          |
| No coil              | Z          |
| No solenoid          | N          |
| Manual override      | Substitute |
| Shrouded push button | P          |
| No solenoid          | N          |

Flow characteristics



Charge time



## Accessories

| Wall mounting bracket                                                             | Quikclamp®                                                                        | Quikclamp with wall bracket®                                                      | Quikmount pipe adaptor *1)                                                        | Porting block with three alternative 1/4" ports                                   | 2/2 Shut-off valves (for full technical specification see datasheet 8.200.600)      | 3/2 Shut-off valves (for full technical specification see datasheet 8.200.600)      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                            | Page 4                                                                              | Page 4                                                                              |
| 4324-50                                                                           | 4314-51                                                                           | 4314-52                                                                           | G3/8: 4315-10                                                                     | G1/4: 4316-52                                                                     | G 3/8: T74B-3GA-P1N                                                                 | G 3/8: T74T-3GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | G1/2: 4315-11                                                                     | 1/4 PTF: 4316-50                                                                  | G 1/2: T74B-4GA-P1N                                                                 | G 1/2: T74T-4GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | G3/4: 4315-12                                                                     |                                                                                   | G 3/4: T74B-6GA-P1N                                                                 | G 3/4: T74T-6GA-P1N                                                                 |
|                                                                                   |                                                                                   |                                                                                   | 3/8 PTF: 4315-02                                                                  |                                                                                   |                                                                                     |                                                                                     |
|                                                                                   |                                                                                   |                                                                                   | 1/2 PTF: 4315-03                                                                  |                                                                                   |                                                                                     | 1/2 PTF: T74T-4AA-P1N                                                               |
|                                                                                   |                                                                                   |                                                                                   | 3/4 PTF: 4315-04                                                                  |                                                                                   | 3/4 PTF: T74B-6AA-P1N                                                               | 3/4 PTF: T74T-6AA-P1N                                                               |

\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

## Pressure switch

| Porting block for pressure switch                                                 | Pressure switch (0,5 ... 8 bar)                                                   | Padlock (brass) with two keys *1)                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |
| Page 4                                                                            |                                                                                   |                                                                                   |
| 0523110000000000                                                                  | 0881300000000000                                                                  | 0613633000000000                                                                  |

\*1) for shut-off valves

## Padlock

## Silencer

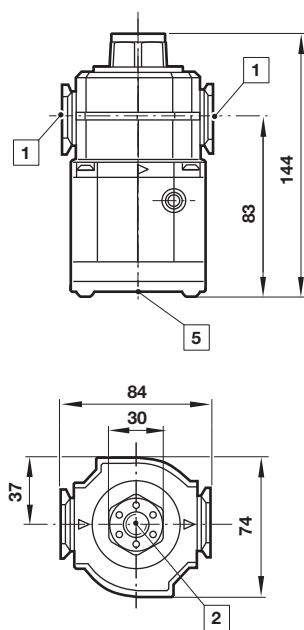
| Silencer                                                                          |
|-----------------------------------------------------------------------------------|
|  |
| Page 4                                                                            |
| R1/2: MB004B                                                                      |
| 1/2 NPT: MB004A                                                                   |

## Drawings

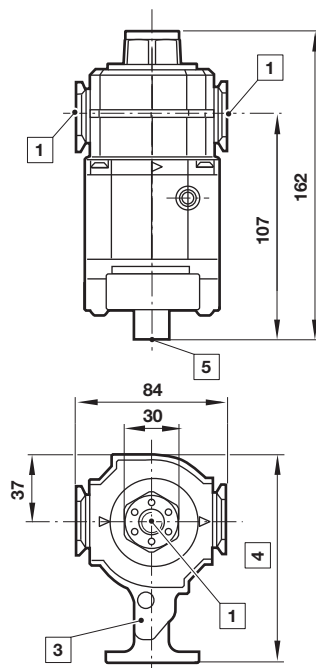
Dimensions in mm  
Projection/First angle



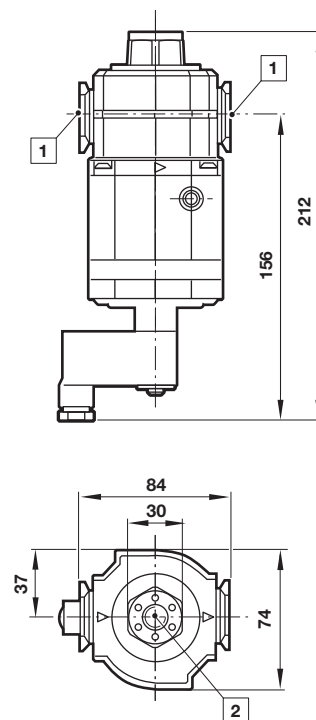
### Air pilot actuated



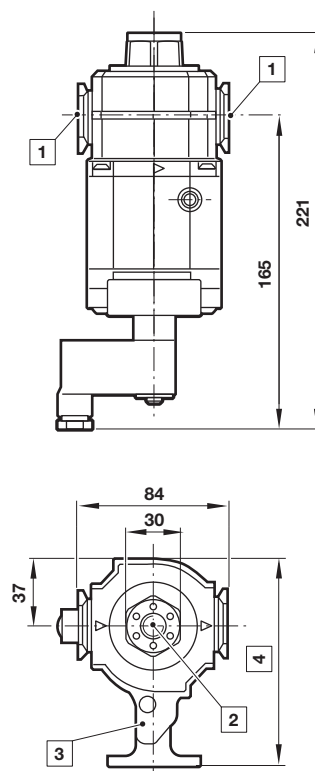
### Air actuated plus manual lockout slide



### Solenoid actuated



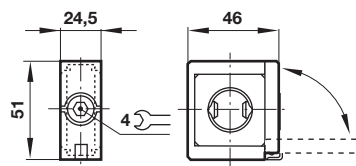
### Solenoid actuated plus manual lockout slide



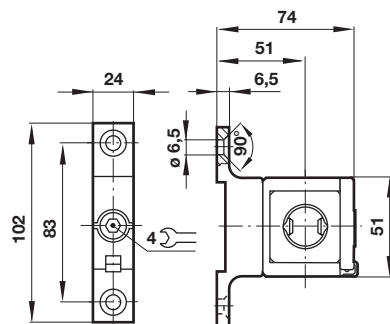
- 1 Main ports 3/8", 1/2" or 3/4"
- 2 Pilot port
- 3 Manual lockout slide
- 4 Minimum 96 mm; maximum 111 mm
- 5 Exhaust port

## Accessories

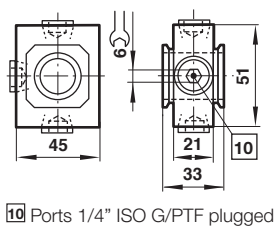
### Quikclamp®



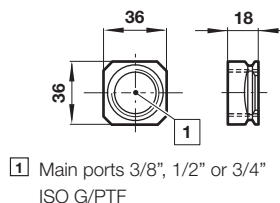
### Quikclamp® with wall bracket



### Porting block



### Pipe adapter



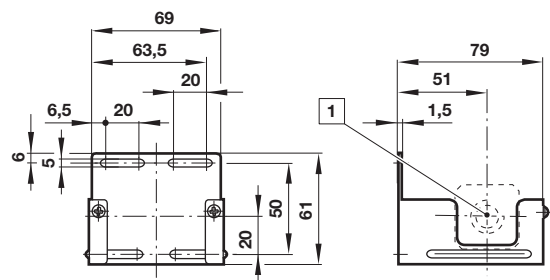
1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

10 Ports 1/4" ISO G/PTF plugged

Dimensions in mm  
Projection/First angle

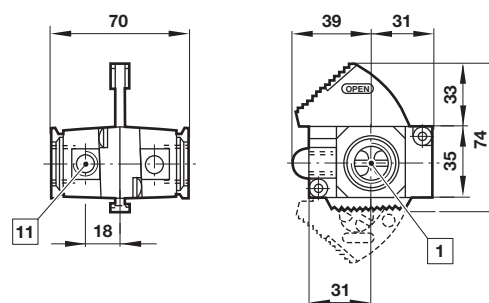


### Wall mounting bracket



1 Main ports

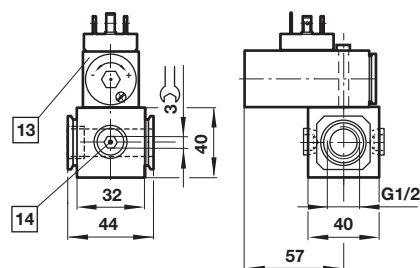
### Shut-off valves



1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

11 Exhaust port Rc1/8

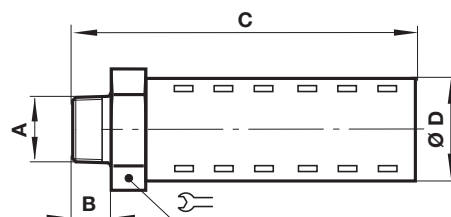
### Porting block for pressure switch



13 Pressure switch is not in scope of delivery

14 Alternative G1/4 ports plugged

### 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 IMI Precision Engineering, Norgren GmbH.

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.

- > Port size: 1/4" or 3/8" (ISO G/NPT)
- > Solenoid or air pilot operated
- > Excelon design allows in-line installation or modular installation with other Excelon products
- > Customised poppets for long service life
- > 3/2 valves, normally closed
- > High flow



## Technical features

### Medium:

Compressed air only

### Maximum pressure solenoid operated:

Dependant on solenoid rating  
 [must not exceed 10 bar (150 psi)]  
 Maximum pressure pilot operated:  
 10 bar (150 psi)  
 Minimum operating pressure:  
 3 bar (44 psi)

### Air Pilot Port:

M5 with ISO G main ports  
 10-32 UNF with PTF main ports

### Exhaust Port:

Rc1/4 with ISO G main ports  
 1/4 PTF with PTF main ports

### Average flow factor (Cv):

IN to OUT ports: 1,31  
 OUT to EXHAUST ports: 1,27

### Ambient/Media temperature:

Solenoid operated:  
 -20 ... +65°C (+4 ... +149°F)  
 Maximum temperature for solenoid operated valves is depending on the solenoid rating, but must not exceed +65°C (+149°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).

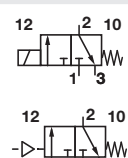
### Materials:

Body: Zinc alloy  
 Elastomers: Synthetic materials  
 Filter discs: Sintered plastic  
 Internal components: Brass/steel

## Electrical details for solenoid operators

|                        |                            |
|------------------------|----------------------------|
| Voltage tolerance      | ± 10%                      |
| Rating                 | 100% continuous duty       |
| Inlet orifice          | 1,0 mm                     |
| Electrical connection  | Industrial Standard, 22 mm |
| Solenoid coil mounting | Four positions x 90°       |
| Protection class       | IP 65 (with sealed plug)   |

## Technical data - standard models

| Symbol                                                                              | Port size | Size  | Actuation/return | Voltage   | Weight (kg) | Model            |
|-------------------------------------------------------------------------------------|-----------|-------|------------------|-----------|-------------|------------------|
|  | G 1/4     | Basic | Solenoid/spring  | 24 V d.c. | 0,96        | P72C-2GC-PFN *1) |
|                                                                                     | G 3/8     |       | Solenoid/spring  | 24 V d.c. | 0,93        | P72C-3GC-PFN *1) |
|                                                                                     | G 1/4     | Basic | Air/spring       | —         | 0,84        | P72C-2GA-NNN     |
|                                                                                     | G 3/8     |       | Air/spring       | —         | 0,82        | P72C-3GA-NNN     |

\*1) To select other solenoid type and coil voltage refer to option selector on page 2

## Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                      |                    |                   |              |      |
|-------------------------------------------------------------------------------------|--------------------|-------------------|--------------|------|
|                                                                                     | Voltage            | Power Inrush/Hold | Model        | Code |
|  | 12 V d.c.          | 2 W               | QM/48/12J/21 | 12J  |
|                                                                                     | 24 V d.c.          | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                     | 110/120 V 50/60 Hz | 4/2,5 VA          | QM/48/18J/21 | 18J  |
|                                                                                     | 220/240 V 50/60 Hz | 6/5,0 VA          | QM/48/19J/21 | 19J  |

## Connector plugs



## Option selector

**P72C-★★★★★★**

| Port size                | Substitute |
|--------------------------|------------|
| 1/4"                     | <b>2</b>   |
| 3/8"                     | <b>3</b>   |
| Thread size              | Substitute |
| ISO G (standard)         | <b>G</b>   |
| PTF                      | <b>A</b>   |
| Operator                 | Substitute |
| Air pilot *1)            | <b>A</b>   |
| 22 mm miniature solenoid | <b>C</b>   |
| CNOMO                    | <b>L</b>   |

\*1) To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P72C-2GA-NNN.

| Connector plugs   | Substitute |
|-------------------|------------|
| With              | <b>A</b>   |
| Without           | <b>N</b>   |
| Coil voltage      | Substitute |
| 24 V d.c.         | <b>F</b>   |
| 12 V d.c.         | <b>E</b>   |
| 220/240 V a.c.    | <b>B</b>   |
| 110/120 V a.c.    | <b>A</b>   |
| No coil           | <b>Z</b>   |
| No solenoid       | <b>N</b>   |
| Solenoid operator | Substitute |
| With              | <b>P</b>   |
| No solenoid       | <b>N</b>   |

## Accessories

| Wall mounting bracket                                                             | Quikclamp®                                                                        | Quikclamp with wall bracket®                                                      | Quikmount pipe adaptor *1)                                                        | Porting block with three alternative 1/4" ports                                   | 2/2 Shut-off valves (for full technical specification see datasheet 8.160.600)      | 3/2 Shut-off valves (for full technical specification see datasheet 8.160.600)      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| <b>Page 3</b>                                                                     | <b>Page 3</b>                                                                     | <b>Page 3</b>                                                                     | <b>Page 3</b>                                                                     | <b>Page 3</b>                                                                     | <b>Page 3</b>                                                                       | <b>Page 3</b>                                                                       |
| 4224-50                                                                           | 4214-51                                                                           | 4214-52                                                                           | G1/4: 4215-08                                                                     | G1/4: 4216-52                                                                     | G1/4: T72B-2GA-P1N                                                                  | G1/4: T72T-2GA-P1N                                                                  |
|                                                                                   |                                                                                   |                                                                                   | G3/8: 4215-09                                                                     | 1/4 PTF: 4216-50                                                                  | G3/8: T72B-3GA-P1N                                                                  | G3/8: T72T-3GA-P1N                                                                  |
|                                                                                   |                                                                                   |                                                                                   | 1/4 PTF: 4215-02                                                                  |                                                                                   | 1/4 PTF: T72B-2AA-P1N                                                               | 1/4 PTF: T72T-2AA-P1N                                                               |
|                                                                                   |                                                                                   |                                                                                   | 3/8 PTF: 4215-03                                                                  |                                                                                   | 3/8 PTF: T72B-3AA-P1N                                                               | 3/8 PTF: T72T-3AA-P1N                                                               |

\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

## Pressure switch

| Porting block for pressure switch                                                   | Pressure switch (0,5 ... 8 bar)                                                     | Padlock (brass) with two keys *1)                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| 0523109000000000                                                                    | 0881300000000000                                                                    | 0613633000000000                                                                    |

\*1) for shut-off valves

## Padlock

### Silencer

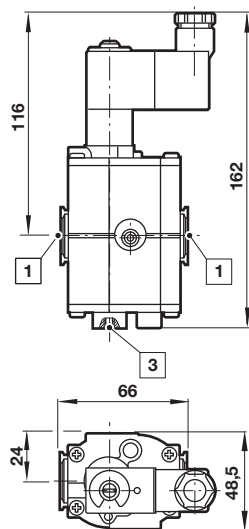


**Page 3**

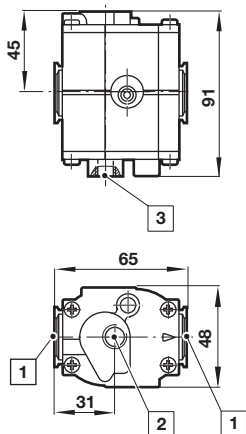
R1/4: MB002B  
 1/4 PTF: MB002A

## Drawings

### Solenoid actuated



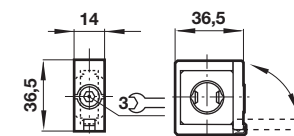
### Air pilot actuated



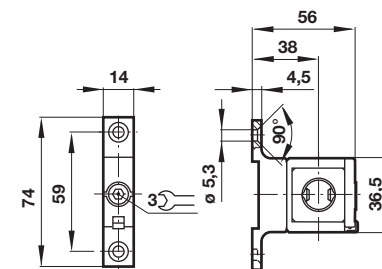
### Accessories

#### Quikclamp®

Dimensions in mm  
Projection/First angle

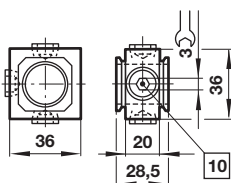


#### Quikclamp® with wall bracket



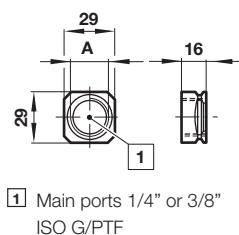
- 1 Main ports 1/4" or 3/8"
- 2 Pilot port
- 3 Exhaust port

### Porting block



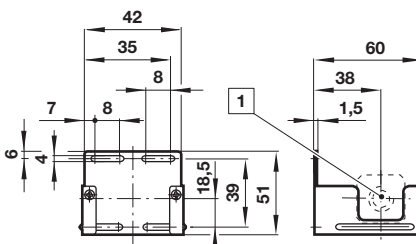
10 Ports (G1/4 or 1/4 NPT) plugged

### Pipe adapter



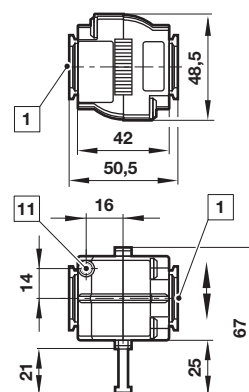
- 1 Main ports 1/4" or 3/8" ISO G/PTF

### Wall mounting bracket



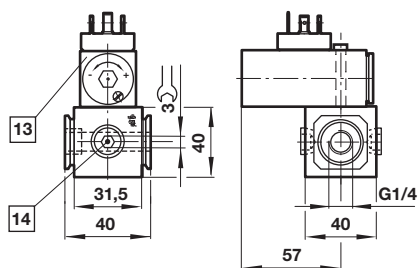
- 1 Main ports

### Shut-off valves



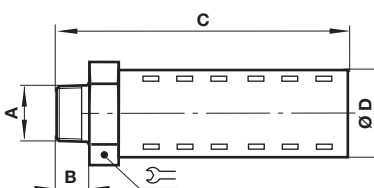
- 1 Main ports 1/4" or 3/8" ISO G/PTF
- 11 Exhaust port M5 at 3/2 valve only

### Porting block for pressure switch



- 13 Pressure switch is not in scope of delivery
- 14 Alternative G1/4 ports plugged

### Silencer



| A       | B  | C  | D  | Symbol | Model  |
|---------|----|----|----|--------|--------|
| R1/4    | 17 | 92 | 32 | 32     | MB002B |
| 1/4 NPT | 17 | 92 | 32 | 32     | MB002A |

## Warning

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#### »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 IMI Precision Engineering, Norgren Inc. 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.

- > **Port size: 1/4" ... 1/2"**  
(ISO G/PTF)
- > **Excelon design allows in-line installation or modular installation with other Excelon products**
- > **T73B 2/2 valves no exhaust**
- > **T73T 3/2 valves with M5 tapped exhaust**
- > **T73E 3/2 position lockout valves help conform to OSHA Lockout regulations in USA market. Exhaust outlet is not tapped.**



### Technical features

#### Medium:

Compressed air only

#### Maximum operating pressure:

17 bar (250 psi)

#### Port size:

G1/4, G3/8, G1/2,  
1/4 PTF, 3/8 PTF 1/2 PTF

#### Exhaust port:

M5 for T73T models

#### CV factor:

From IN to OUT ports:  
1/4": 4,0; 3/8": 8,0; 1/2": 7,8;  
0,2 from OUT to Exhaust ports on  
3/2 valves

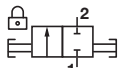
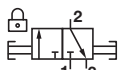
#### Ambient/Media temperature:

-34° ... +65°C (-30° ... +149°F)  
Air supply must be dry enough  
to avoid ice formation at  
temperatures below +2°C (+35°F).

#### Materials:

Body: Zinc  
Slide: Acetal plastic  
Elastomers: NBR

### Technical data - standard models

| Symbol                                                                              | Port size | Function | Size  | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|----------|-------|-------------|--------------|
|  | G1/4      | 2/2      | —     | 0,30        | T73B-2GA-P1N |
|                                                                                     | G3/8      | 2/2      | Basic | 0,30        | T73B-3GA-P1N |
|                                                                                     | G1/2      | 2/2      | —     | 0,30        | T73B-4GA-P1N |
|  | G1/4      | 3/2      | —     | 0,30        | T73T-2GA-P1N |
|                                                                                     | G3/8      | 3/2      | Basic | 0,30        | T73T-3GA-P1N |
|                                                                                     | G1/2      | 3/2      | —     | 0,30        | T73T-4GA-P1N |

### Option selector

| Function                                                                   | Substitute |
|----------------------------------------------------------------------------|------------|
| 2/2 (Black slide locks in closed position only) No exhaust outlet          | <b>B</b>   |
| 3/2 (Yellow slide locks in closed position only) Unthreaded exhaust outlet | <b>E</b>   |
| 3/2 (Red slide locks in closed position only) Threaded exhaust port        | <b>T</b>   |

### T73★-★★A-P1N

| Thread form               | Substitute |
|---------------------------|------------|
| NPT                       | <b>A</b>   |
| ISO G parallel (standard) | <b>G</b>   |
| Thread size               | Substitute |
| 1/4"                      | <b>2</b>   |
| 3/8"                      | <b>3</b>   |
| 1/2"                      | <b>4</b>   |

## Accessories

| Quikclamp®                                                                       | Quikclamp with wall bracket®                                                      | Quikmount pipe adaptor *1)                                                                                  | Porting block with three alternative 1/4" ports                                   | Silencer                                                                          |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |                            |  |  |
| 4314-51                                                                          | 4314-52                                                                           | G1/4: 4315-09<br>G3/8: 4315-10<br>G1/2: 4315-11<br>1/4 PTF: 4315-01<br>3/8 PTF: 4315-02<br>1/2 PTF: 4315-03 | G1/4: 4316-52<br>1/4 PTF: 4316-50                                                 | M5: T40M0500                                                                      |

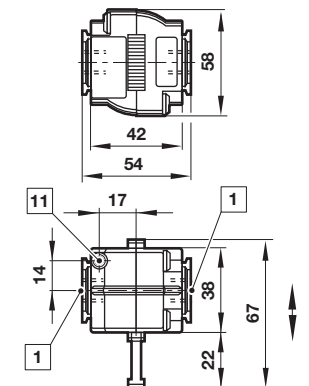
\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

## Pressure switch

| Porting block for pressure switch                                                 | Pressure switch (0,5 ... 8 bar)                                                   | Padlock (brass) with two keys *1)                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |
| 0523110000000000                                                                  | 0881300000000000                                                                  | 0613633000000000                                                                  |

\*1) for shut-off valves

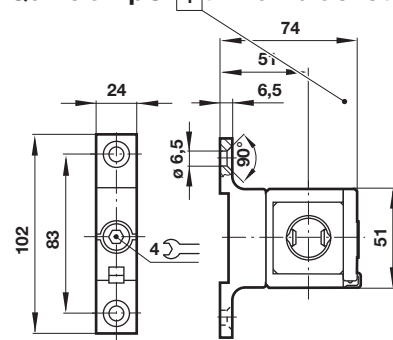
## Drawing



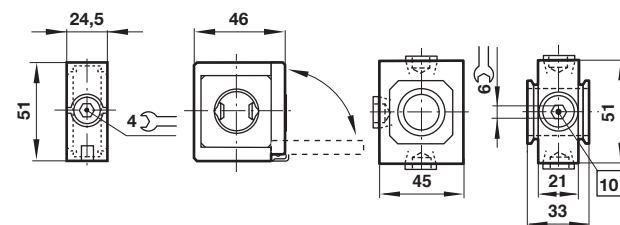
- 1 Main ports 1/4", 3/8" or 1/2" ISO G/PTF  
 11 Exhaust port M5 at 3/2 valve only

## Accessories

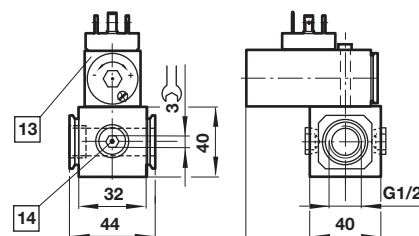
### Quikclamp® with wall bracket



### Quikclamp®

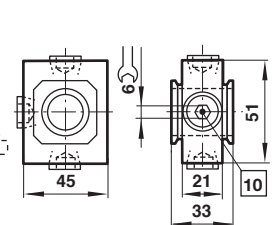


### Porting block for pressure switch



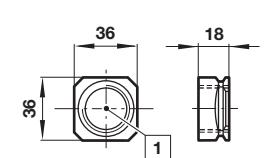
- 13 Pressure switch is not in scope of delivery  
 14 Alternative G1/4 ports plugged

### Porting block



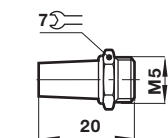
- 10 Ports 1/4" ISO G/PTF plugged

### Pipe adapter



- 1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

### Silencer



## Warning

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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.

- > **Port size: 1/4" or 3/8" (ISO G/NPT)**
- > **Assists machine designers in complying with the European Machineries Directive**
- > **Excelon design allows in-line installation or modular installation with other Excelon products**
- > **Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)**
- > **Controlled increase of downstream pressure onstart up**
- > **High forward flow capacity**
- > **High flow dump facility**



### Technical features

#### Medium:

Compressed air only

#### Operating pressure:

17 bar (250 psi) pilot actuated

10 bar (145 psi) solenoid actuated

#### Minimum operating pressure:

3 bar (44 psi)

#### Snap pressure:

Full flow when downstream pressure reaches 50 – 80% of inlet pressure

#### Port size:

G1/4, G3/8, 1/4" or 3/8" PTF

#### Air pilot port:

M5 with ISO G main ports

10-32 UNF with PTF main ports

#### Exhaust port:

G1/4 with ISO G main ports

#### Charge time:

For 2 litre downstream volume and

6,3 bar (90 psi) inlet pressure

0,8 sec. minimum

99 sec. maximum

#### Flow:

21 dm³/s at port size: G1/4

Operating pressure: 6,3 bar (91 psi)

Δp: 0,5 bar (7 psi)

P1 to P2 = Cv 1,59

P2 to P3 = Cv 1,72

#### Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C (-4° ... +122°F)

Pilot actuated:

-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: Zinc alloy

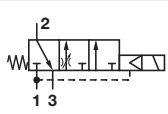
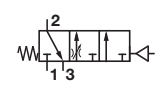
Elastomers: Synthetic materials

Internal components: Brass/steel

### Electrical details for solenoid operators

|                               |                            |
|-------------------------------|----------------------------|
| <b>Voltage tolerance</b>      | ± 10%                      |
| <b>Rating</b>                 | 100% continuous duty       |
| <b>Inlet orifice</b>          | 1,0 mm                     |
| <b>Electrical connection</b>  | Industrial Standard, 22 mm |
| <b>Solenoid coil mounting</b> | Four positions x 90°       |
| <b>Protection class</b>       | IP 65 (with sealed plug)   |

### Technical data - standard models

| Symbol                                                                              | Port size | Size  | Actuation/return | Voltage   | Pilot port | Weight (kg) | Typ              |
|-------------------------------------------------------------------------------------|-----------|-------|------------------|-----------|------------|-------------|------------------|
|  | G1/4      | Basic | Solenoid/spring  | 24 V d.c. | -          | 0,91        | P72F-2GC-PFN *1) |
|                                                                                     | G3/8      |       | Solenoid/spring  | 24 V d.c. | -          | 0,90        | P72F-3GC-PFN*1)  |
|  | G1/4      | Basic | Air/spring       | —         | M5         | 0,88        | P72F-2GA-NNN     |
|                                                                                     | G3/8      |       | Air/spring       | —         | M5         | 0,87        | P72F-2GA-NNN     |

\*1) To select other solenoid type and coil voltage refer to option selector on page 2

### Voltage codes and spare coils

| 22 mm coil for connector interface acc. to industrial standard                      |                    |                   |              |      |
|-------------------------------------------------------------------------------------|--------------------|-------------------|--------------|------|
|                                                                                     | Voltage            | Power Inrush/Hold | Model        | Code |
|  | 12 V d.c.          | 2 W               | QM/48/12J/21 | 12J  |
|                                                                                     | 24 V d.c.          | 2 W               | QM/48/13J/21 | 13J  |
|                                                                                     | 110/120 V 50/60 Hz | 4/2,5 VA          | QM/48/18J/21 | 18J  |
|                                                                                     | 220/240 V 50/60 Hz | 6/5,0 VA          | QM/48/19J/21 | 19J  |

### Connector plugs



## Option selector

| Port size                | Substitute |
|--------------------------|------------|
| 1/4"                     | 2          |
| 3/8"                     | 3          |
| Thread size              | Substitute |
| ISO G (standard)         | G          |
| PTF                      | A          |
| Operator                 | Substitute |
| Air pilot *1)            | A          |
| 22 mm miniature solenoid | C          |
| CNOMO                    | L          |

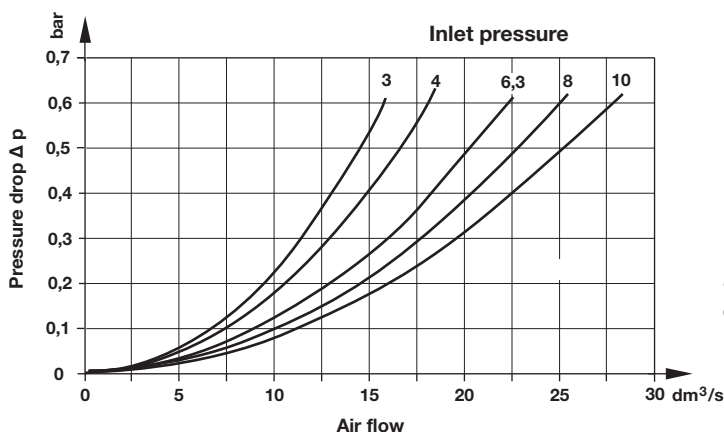
\*1) To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P72F-2GA-NNN.

P72F-★★★★★★

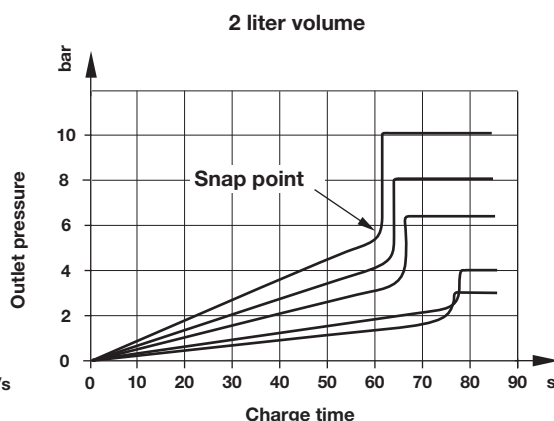
| Connector plugs   | Substitute |
|-------------------|------------|
| With              | A          |
| Without           | N          |
| Coil voltage      | Substitute |
| 24 V d.c.         | F          |
| 12 V d.c.         | E          |
| 220/240 V a.c.    | B          |
| 110/120 V a.c.    | A          |
| No coil           | Z          |
| No solenoid       | N          |
| Solenoid operator | Substitute |
| With              | P          |
| No solenoid       | N          |

## Flow characteristics

Port size: G1/4



## Charge time



## Accessories

| Wall mounting bracket                                                               | Quickclamp®                                                                         | Quickclamp with wall bracket®                                                       | Quickmount pipe adaptor *1)                                                         | Porting block with three alternative G1/4 ports                                     | 2/2 Shut-off valves (for full technical specification see datasheet 8.160.600)        | 3/2 Shut-off valves (for full technical specification see datasheet 8.160.600)        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Page 3                                                                              | Page 3                                                                              | Page 3                                                                              | Page 3                                                                              | Page 3                                                                              | Page 3                                                                                | Page 3                                                                                |
| 4224-50                                                                             | 4214-51                                                                             | 4214-52                                                                             | G1/4: 4215-08                                                                       | G1/4: 4216-52                                                                       | G1/4: T72B-2GA-P1N                                                                    | G1/4: T72T-2GA-P1N                                                                    |
|                                                                                     |                                                                                     |                                                                                     | G3/8: 4215-09                                                                       | 1/4 PTF: 4216-50                                                                    | G3/8: T72B-3GA-P1N                                                                    | G3/8: T72T-3GA-P1N                                                                    |
|                                                                                     |                                                                                     |                                                                                     | 1/4 PTF: 4215-02                                                                    |                                                                                     | 1/4 PTF: T72B-2AA-P1N                                                                 | 1/4 PTF: T72T-2AA-P1N                                                                 |
|                                                                                     |                                                                                     |                                                                                     | 3/8 PTF: 4215-03                                                                    |                                                                                     | 3/8 PTF: T72B-3AA-P1N                                                                 | 3/8 PTF: T72T-3AA-P1N                                                                 |

## Pressure switch

| Porting block for pressure switch                                                   | Pressure switch (0,5 ... 8 bar)                                                     | Padlock (brass) with two keys *1)                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| 0523109000000000                                                                    | 0881300000000000                                                                    | 0613633000000000                                                                    |

\*1) for shut-off valves

## Padlock

## Silencer



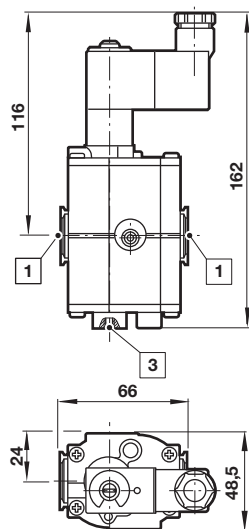
Page 3

R1/4: MB002B

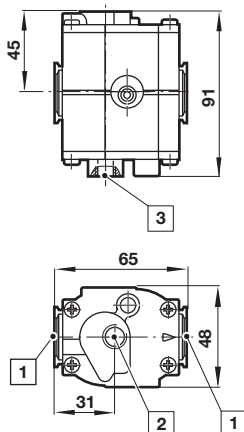
1/4 PTF: MB002A

## Drawings

### Solenoid actuated



### Air pilot actuated

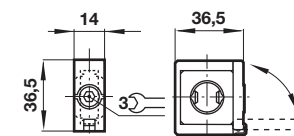


- 1 Main ports 1/4" or 3/8"
- 2 Pilot port
- 3 Exhaust port

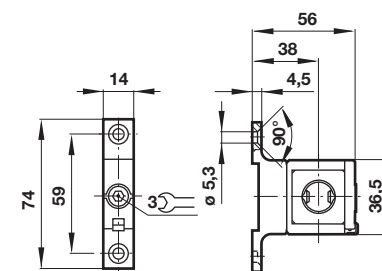
### Accessories

#### Quikclamp®

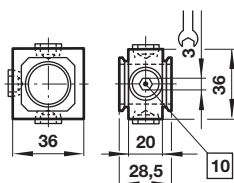
Dimensions in mm  
Projection/First angle



#### Quikclamp® with wall bracket

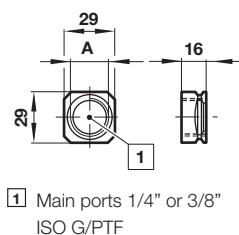


### Porting block



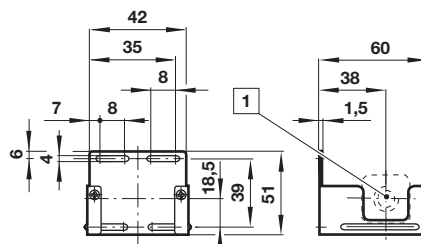
- 10 Ports (G1/4 or 1/4 NPT) plugged

### Pipe adapter



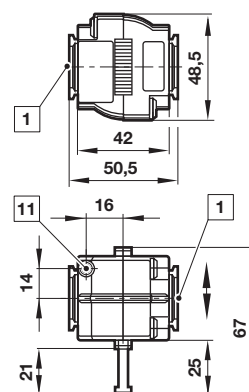
- 1 Main ports 1/4" or 3/8" ISO G/PTF

### Wall mounting bracket



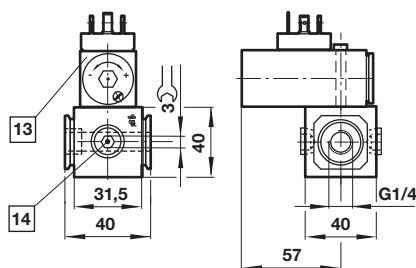
- 1 Main ports

### Shut-off valves



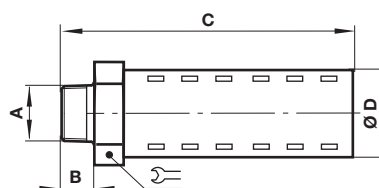
- 1 Main ports 1/4" or 3/8" ISO G/PTF
- 11 Exhaust port M5 at 3/2 valve only

### Porting block for pressure switch



- 13 Pressure switch is not in scope of delivery
- 14 Alternative G1/4 ports plugged

### Silencer



| A       | B  | C  | D  | Symbol | Model  |
|---------|----|----|----|--------|--------|
| R1/4    | 17 | 92 | 32 | 32     | MB002B |
| 1/4 NPT | 17 | 92 | 32 | 32     | MB002A |

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- > Port size: 1/4" or 3/8" (ISO G/PTF)
- > Excelon design allows in-line installation or modular installation with other Excelon products
- > T72B 2/2 shut-off valves no exhaust
- > T72T 3/2 shut-off valves with M5 tapped exhaust
- > T72E 3/2 USA OSHA lockout valves
- > Valves can be locked in closed position only
- > Threaded ports on inlet and outlet



### Technical features

#### Medium:

Compressed air only

#### Maximum operating pressure:

17 bar (250 psi)

#### Port size:

G1/4, G3/8, 1/4 PTF, 3/8 PTF

#### Exhaust port:

M5 (T72T only)

#### CV factor:

4,0 from IN to OUT ports:

0,2 from OUT to Exhaust ports on 3/2 valves

#### Ambient/Media temperature:

-34° ... +65°C (-30° ... +149°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

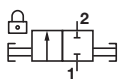
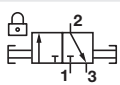
#### Materials:

Body: zinc

Slide: Acetal

Elastomers: NBR

### Technical data - standard models

| Symbol                                                                              | Port size | Function | Size  | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|----------|-------|-------------|--------------|
|   | G1/4      | 2/2      | Basic | 0,36        | T72B-2GA-P1N |
|                                                                                     | G3/8      | 2/2      | —     | 0,36        | T72B-3GA-P1N |
|  | G1/4      | 3/2      | Basic | 0,39        | T72T-2GA-P1N |
|                                                                                     | G3/8      | 3/2      | —     | 0,39        | T72T-3GA-P1N |

### Option selector

| Version                     | Substitute |
|-----------------------------|------------|
| 2/2; black actuator         | <b>B</b>   |
| 3/2; yellow actuator (OSHA) | <b>E</b>   |
| 3/2; red actuator           | <b>T</b>   |
| Port size                   | Substitute |
| 1/4"                        | <b>2</b>   |
| 3/8"                        | <b>3</b>   |

**T72★-★★A-P1N**

| Thread form    | Substitute |
|----------------|------------|
| PTF            | <b>A</b>   |
| ISO G parallel | <b>G</b>   |

## Accessories

| Quikclamp® | Quikclamp with wall bracket® | Quikmount pipe adaptor *1)                                             | Porting block with three alternative 1/4" ports | Silencer     |
|------------|------------------------------|------------------------------------------------------------------------|-------------------------------------------------|--------------|
|            |                              |                                                                        |                                                 |              |
| 4214-51    | 4214-52                      | G1/4: 4215-08<br>G3/8: 4215-09<br>1/4 PTF: 4215-02<br>3/8 PTF: 4215-03 | G1/4: 4216-52<br>1/4 PTF: 4216-50               | M5: T40M0500 |

\*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

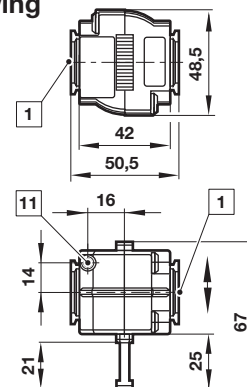
## Pressure switch

| Porting block for pressure switch | Pressure switch (0,5 ... 8 bar) | Padlock (brass) with two keys *1) |
|-----------------------------------|---------------------------------|-----------------------------------|
|                                   |                                 |                                   |
| 0523109000000000                  | 0881300000000000                | 0613633000000000                  |

\*1) for shut-off valves

## Padlock

## Drawing



Dimensions in mm  
 Projection/First angle

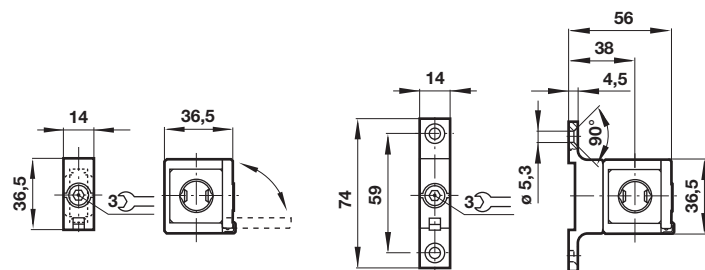


- 1 Main ports 1/4" or 3/8" ISO G/PTF
- 11 Exhaust port M5 at T72T only

## Accessories

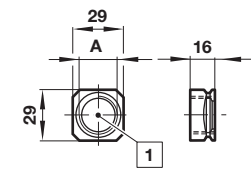
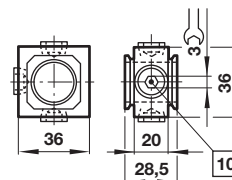
### Quikclamp®

### Quikclamp® with wall bracket



### Porting block

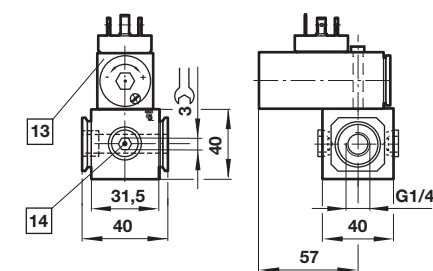
### Pipe adapter



- 1 Main ports 1/4" or 3/8" ISO G/PTF

10 Ports (G1/4 or 1/4 NPT ) plugged

## Porting block for pressure switch



- 13 Pressure switch is not in scope of delivery
- 14 Alternative G1/4 ports plugged

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

# T82T - 3/2 shut-off valve Excelon® Plus Modular System

- > Port size: 1/4" ... 3/8" (ISO G/PTF)
- > Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- > 3/2 way function
- > Threaded exhaust port
- > Lockable in closed position with padlock



## Technical features

### Medium:

Compressed air only

### Maximum supply pressure:

17 bar (246 psi)

### Port size:

G1/4, G3/8, 1/4 PTF, 3/8 PTF

### Flow:

45 dm<sup>3</sup>/s at port size 1/4",  
41 dm<sup>3</sup>/s at port size 3/8",  
inlet pressure 10 bar (145 psi) ,  
6.3bar (91psi) set pressure and a  
Δp: 0.5 bar (7.25 psi) droop from  
set.

Exhaust flow: 1.54 dm<sup>3</sup>/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).

### Atex:

Shut-off valves T82 are in  
conformity with Atex 2014/34/EU



II 2 GD

Ex h IIC T6 Gb

EX h IIIC T85°C Db

### Materials:

Body: Die cast aluminium

Body covers: ABS

Elastomers: NBR

Valve: Brass

## Technical data T82T—standard models

| Symbol                                                                              | Port Size | Function | Exhaust port | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|----------|--------------|-------------|--------------|
|  | G1/4      | 3/2      | G1/4         | 0,20        | T82T-2GA-B1N |
|                                                                                     | G3/8      | 3/2      | G1/4         | 0,20        | T82T-3GA-B1N |

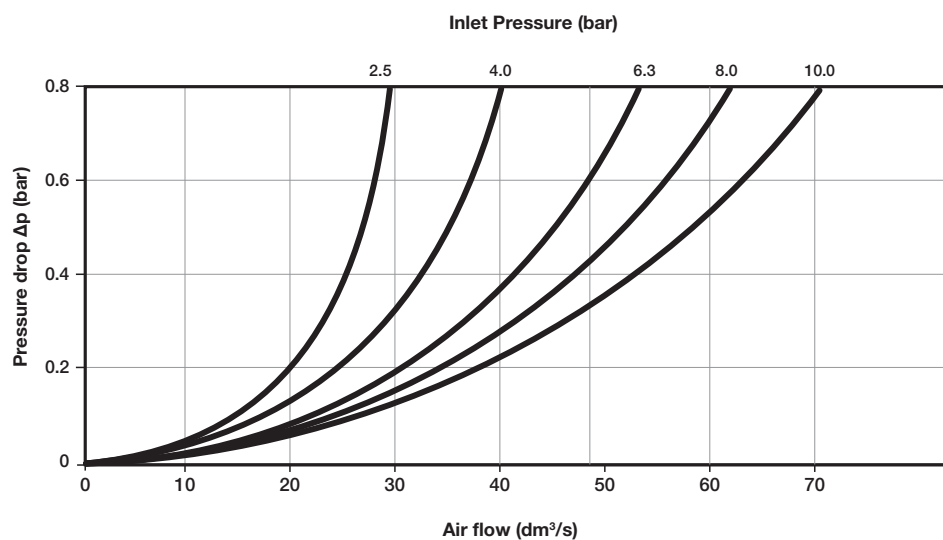
## Option selector

T82T-★ ★ A-B1N

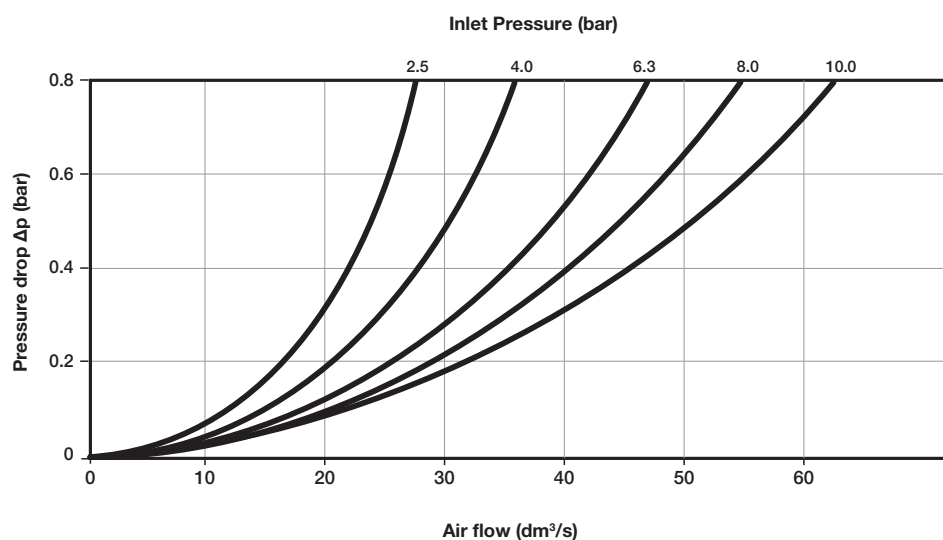
| Function | Substitute | Thread form      | Substitute |
|----------|------------|------------------|------------|
| 3/2      | T          | PTF              | A          |
|          |            | ISO G (standard) | G          |
|          |            | Port size        | Substitute |
|          |            | 1/4"             | 2          |
|          |            | 3/8"             | 3          |

## Flow characteristics

Port size: 1/4"



Port size: 3/8"



## Accessories

### Wall mounting bracket



Page 4

820024-50KIT

### Quikclamp®



Page 4

820014-51KIT

### Quikclamp® with bracket assembled



Page 4

820014-52KIT

### Pressure sensing block 1/4 PTF



Page 5

820016-50KIT

### Pressure sensing block G1/4



Page 5

820016-51KIT

### Full flow porting block 3/8" PTF



Page 5

820028-50KIT

### Full flow porting block G3/8



Page 5

820028-53KIT

### Pressure switch interface block (18D pressure switch)



Page 5

0523109000000000

### Pneumatic pressure switch 18D (0,5 ... 8 bar) \*1)



Page 5

0881300

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



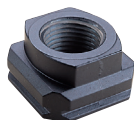
Page 5

0860810

\*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

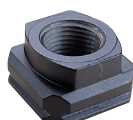
### Port Adaptors 1/4 PTF



Page 5

820015-02KIT

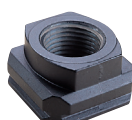
### Port Adaptors 3/8 PTF



Page 5

820015-03KIT

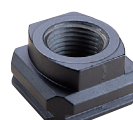
### Port Adaptors G1/4



Page 5

820015-08KIT

### Port Adaptors G3/8



Page 5

820015-09KIT

## Padlock

### Padlock



840055-01KIT

### Lockout device



840055-02KIT

## Silencer

### Porous plastic silencer \*3) G1/4



M/S2

### Porous plastic silencer \*3) G1/4



0014600000000000

### Sinter bronze silencer \*3) G1/4



T40C2800

### Porous plastic silencer \*3) 1/4 PTF

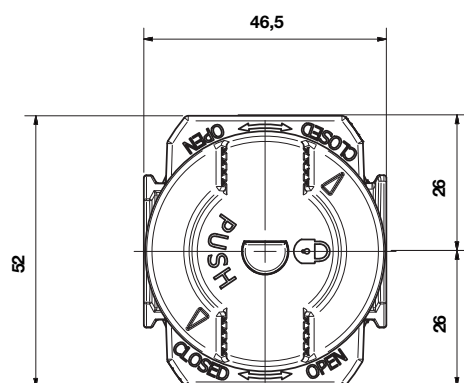
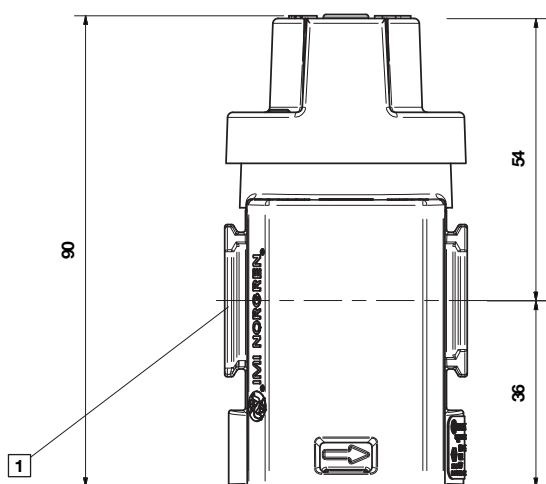
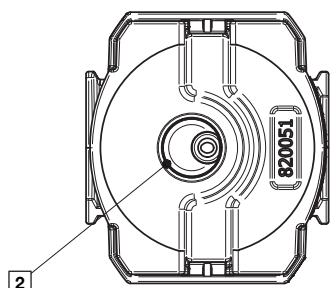


MS002A

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

## Dimensions

Dimensions in mm  
Projection/First angle

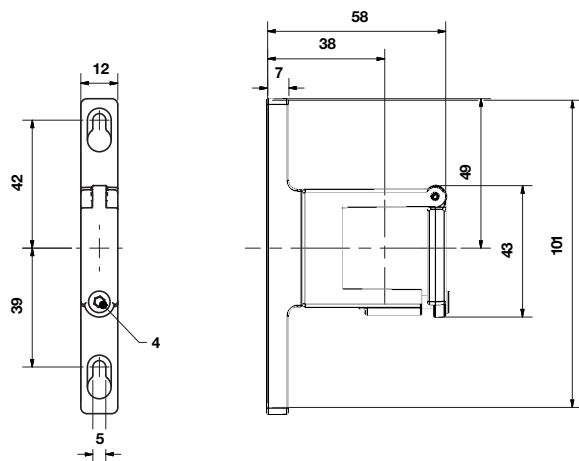


- 1 Main ports 1/4" or 3/8" ISO G/PTF
- 2 Exhaust Port Rc1/4 or 1/4 PTF

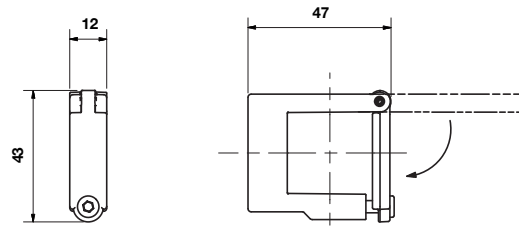
## Accessories

### Quikclamp® with wall bracket

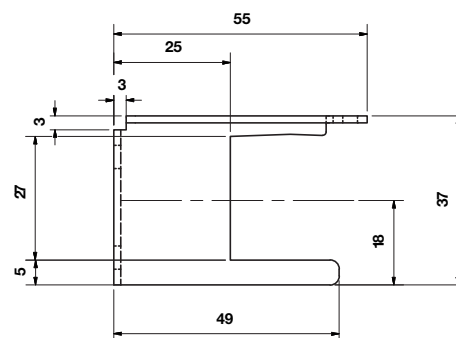
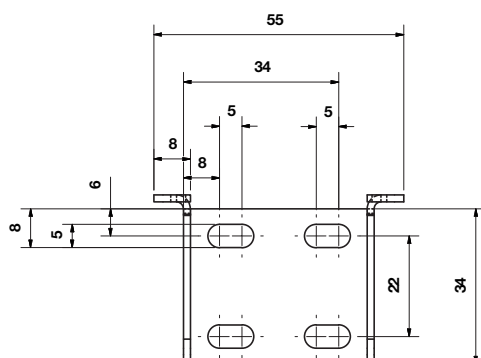
Dimensions in mm  
Projection/First angle



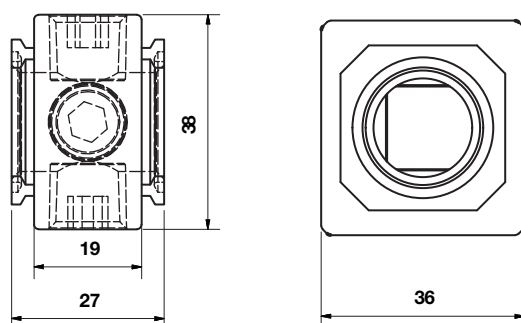
### Quikclamp®



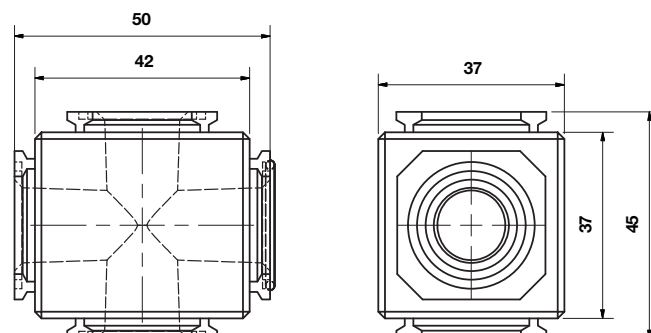
### Wall Mounting bracket



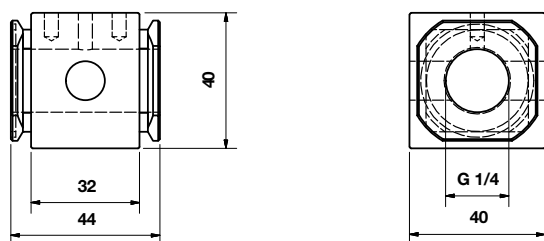
### Pressure sensing block



### Full flow portiang block

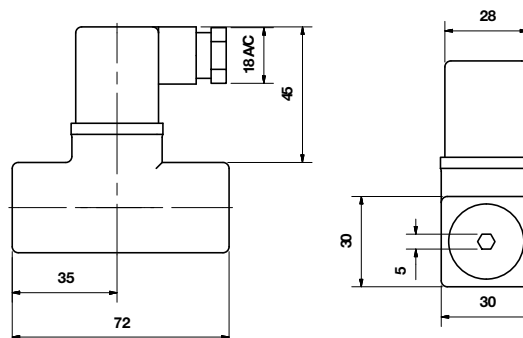


## Porting block

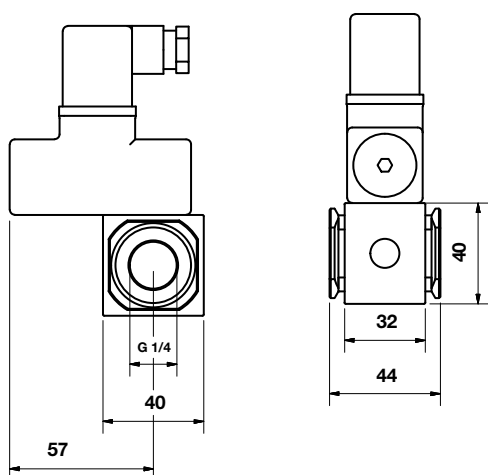


## 18D Pressure switch

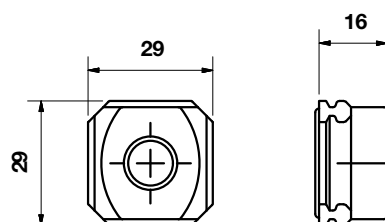
Dimensions in mm  
Projection/First angle



## 18D Porting block and 18D assembled

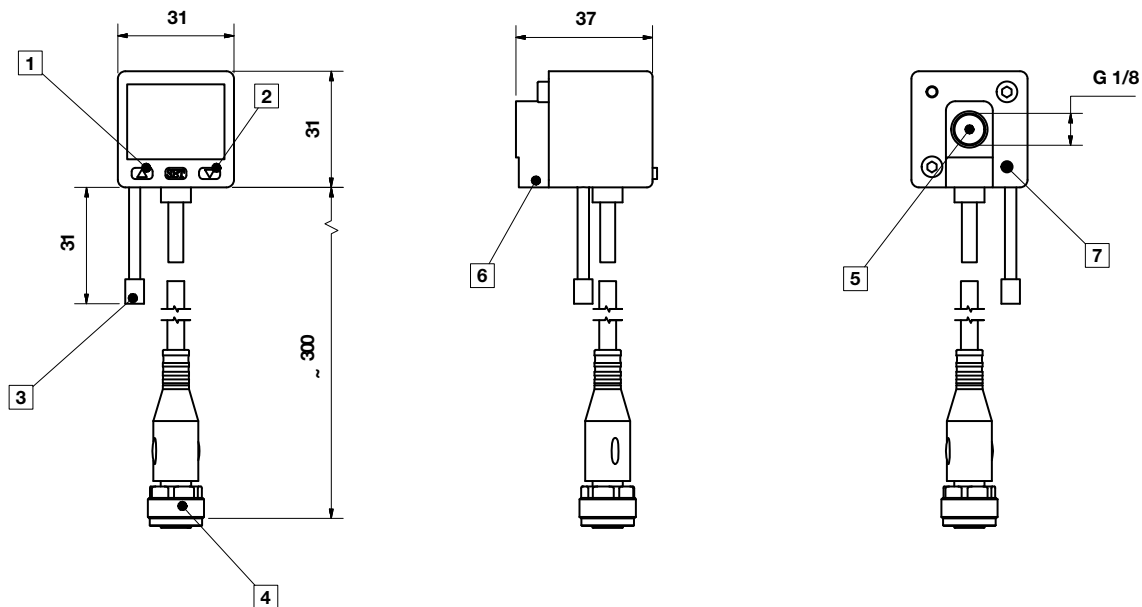


## Pipe adaptor



## 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.

# P82F 3/2 Soft Start/Dump Valve Excelon® Plus Modular System



- > Port size:  
1/4" ... 3/8" (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:

G1/4, G3/8,  
1/4 PTF, 3/8 PTF

### Flow:

21 dm³/s at port size 1/4"  
Full flow P1 to P2 at 6,3 bar  
(91 psi) inlet, with 0,5 bar  
(7 psi) pressure drop  
P2 to P3 at 18 dm³/s

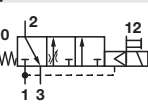
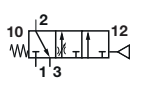
### Ambient/Media temperature:

-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 P82F

| Symbol                                                                              | Port Size | Actuating/return | Voltage   | Exhaust Port | Weight (kg) | Model        |
|-------------------------------------------------------------------------------------|-----------|------------------|-----------|--------------|-------------|--------------|
|  | G1/4      | Solenoid/spring  | 24 V d.c. | G1/4         | 0,45        | P82F-2GT-PFN |
|                                                                                     | G3/8      | Solenoid/spring  | 24 V d.c. | G1/4         | 0,45        | P82F-3GT-PFN |
|  | G1/4      | Air/spring       | N/A       | G1/4         | 0,45        | P82F-2GA-NNN |
|                                                                                     | G3/8      | Air/spring       | N/A       | G1/4         | 0,45        | P82F-3GA-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

P82F-\*\*\*-\*\*\*N

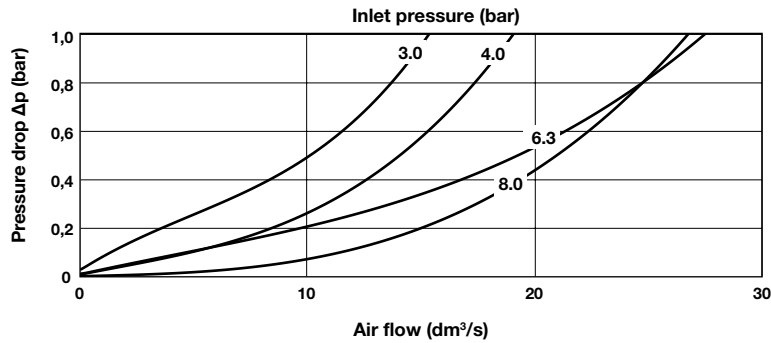
| Function       | Substitute |
|----------------|------------|
| 3/2 Soft Start | F          |
| Port Size      | Substitute |
| 1/4"           | 2          |
| 3/8"           | 3          |
| Thread Form    | Substitute |
| PTF            | A          |
| ISO G          | G          |

| 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

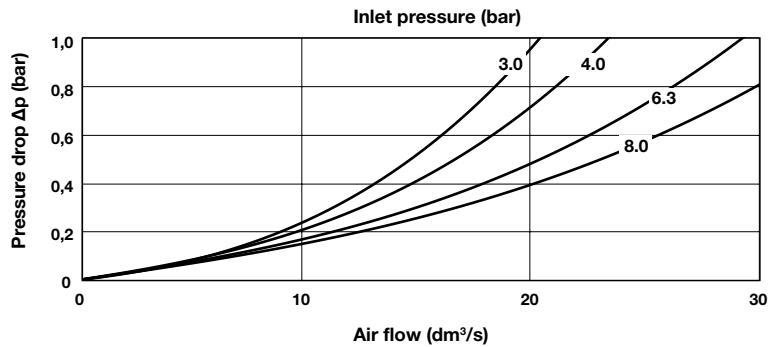
Port 1 to 2

Port size: 1/4"



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 Top - MSUP Valve Plug Form C 8MM



V13981-E01

### M12 Adaptor Rear - MSUP Valve Plug Form C 8MM



V13980-E01

### Plug with cable gland



V10027-D00

## Accessories

### Quikclamp®



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820014-51KIT

### Quikclamp® with bracket assembled



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820014-52KIT

### Pressure sensing block 1/4 PTF



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820016-50KIT

### Pressure sensing block G1/4



Page 5

820016-51KIT

### Full flow porting block 3/8" PTF



Page 5

820028-50KIT

### Full flow porting block G3/8



Page 5

820028-53KIT

### Pressure switch interface block (18D pressure switch)



Page 6

0523109000000000

### Pneumatic pressure switch 18D (0,5 ... 8 bar) \*1)



Page 6

0881300

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



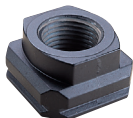
Page 7

0860810

\*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

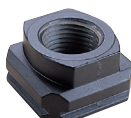
### Port Adaptors 1/4 PTF



Page 6

820015-02KIT

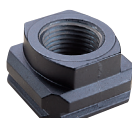
### Port Adaptors 3/8 PTF



Page 6

820015-03KIT

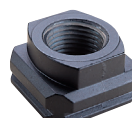
### Port Adaptors G1/4



Page 6

820015-08KIT

### Port Adaptors G3/8



Page 6

820015-09KIT

## Silencer

### Heavy duty muffler, 1/4" NPT male thread, brass wire element



MB002A

### Heavy duty muffler, R1/4 male thread, brass wire element



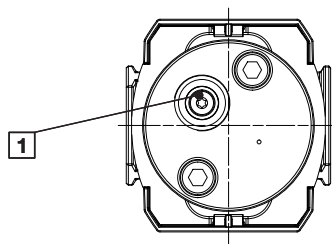
MB002B

## Voltage rating and spare coils

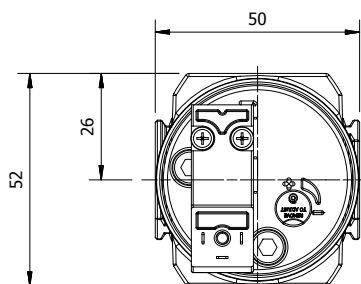
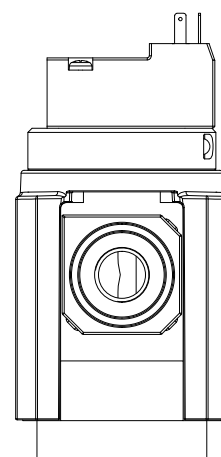
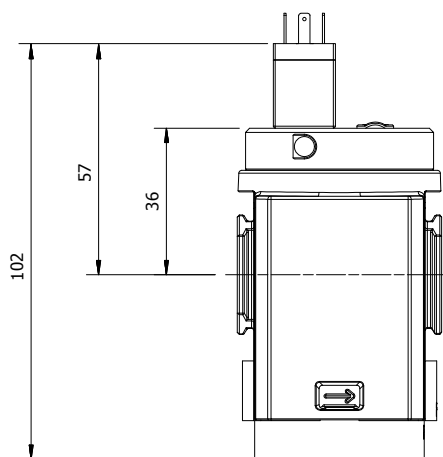
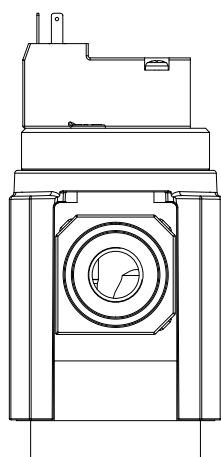
|                                                                                     | Voltage    | Power  | Replacement  |
|-------------------------------------------------------------------------------------|------------|--------|--------------|
|  | 24 V d.c.  | 1,2 W  | 840650-50KIT |
|  | 110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

## Dimensions

Dimensions in mm  
Projection/First angle



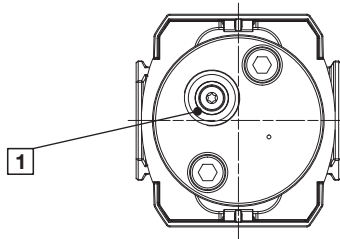
1 1/4" exhaust port (NPT or ISO G)



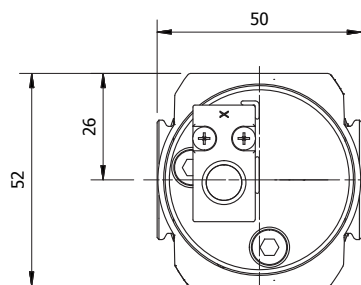
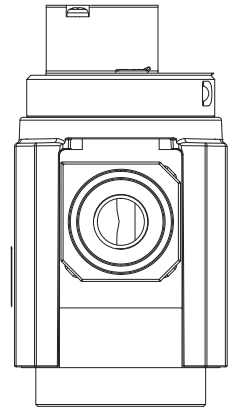
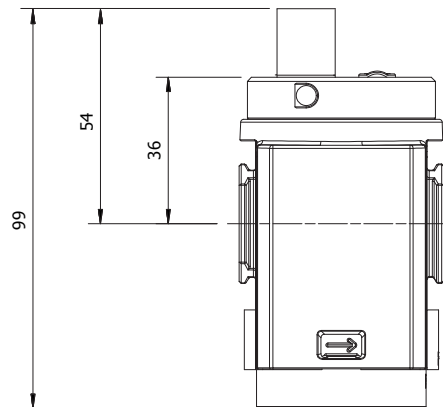
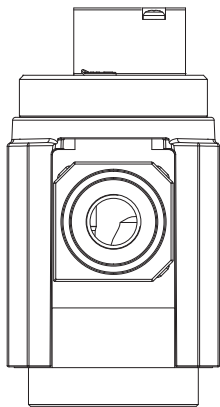
## Dimensions

### Air Pilot Operator

Dimensions in mm  
Projection/First angle

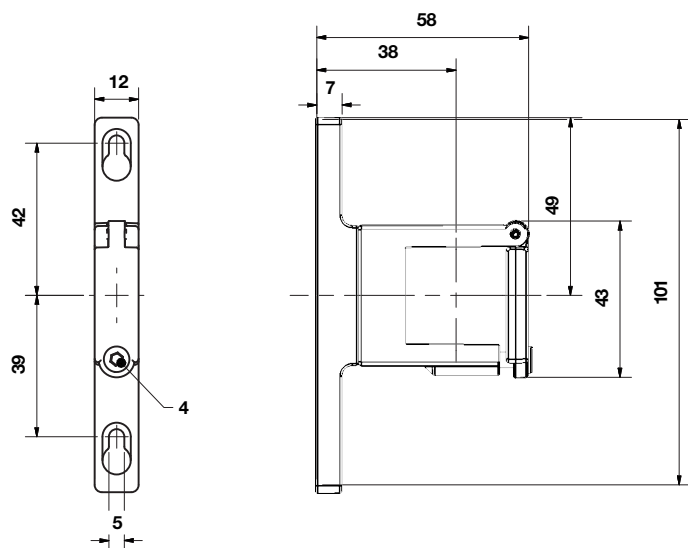


1 1/4" exhaust port (NPT or ISO G)



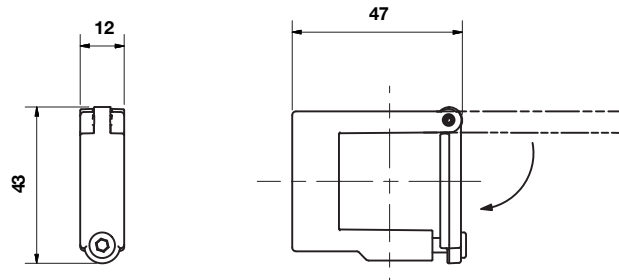
## Accessories

### Quikclamp® with wall bracket

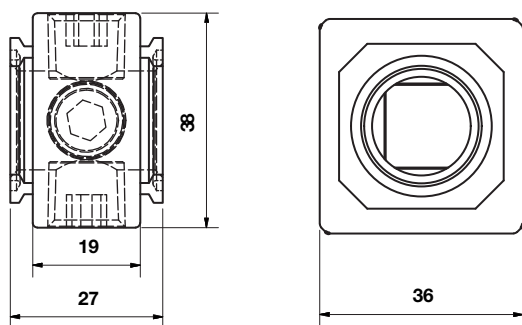


### Quikclamp®

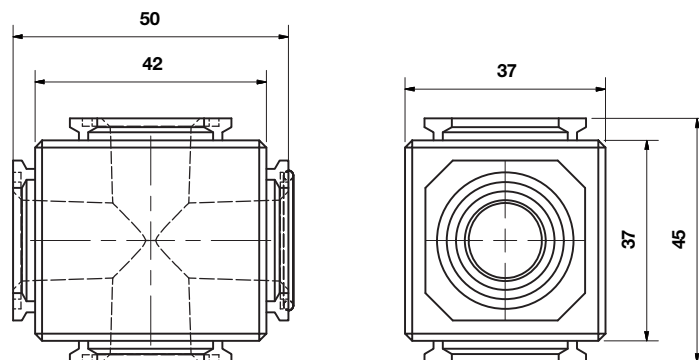
Dimensions in mm  
Projection/First angle



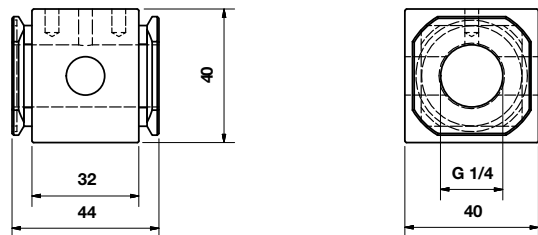
### Pressure sensing block



### Full flow porting block

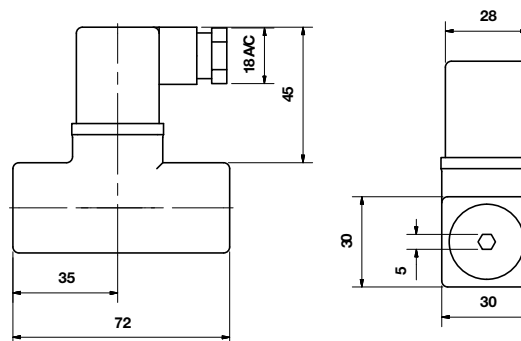


## Porting block for 18D pressure switch

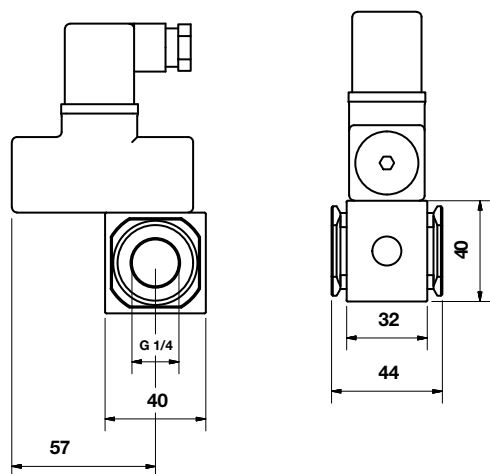


## 18D Pressure switch

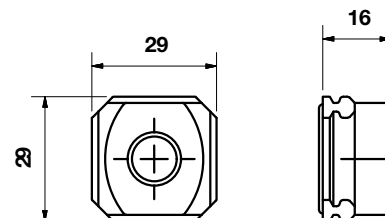
Dimensions in mm  
Projection/First angle



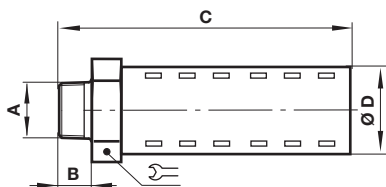
## 18D Porting block and 18D assembled



## Pipe adaptor



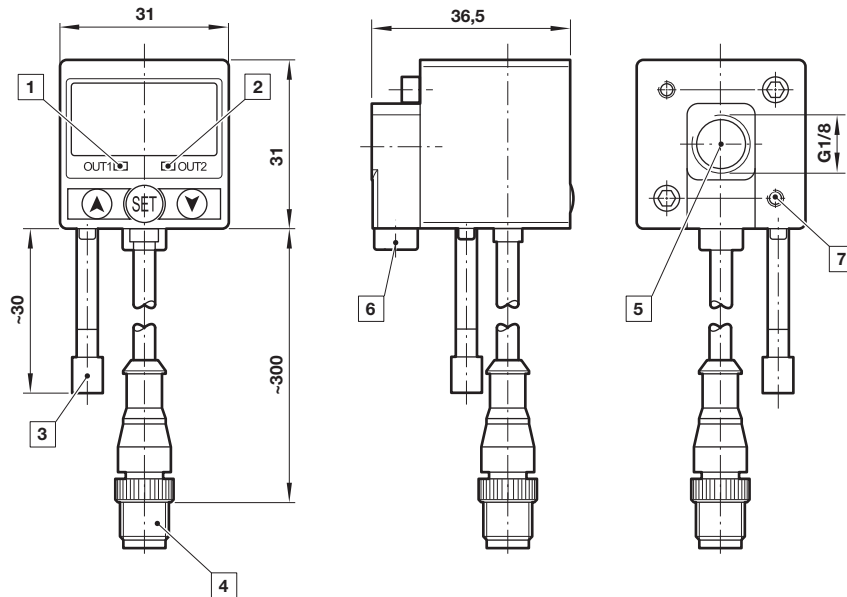
## Silencer



| A       | B  | C  | D  |    | Model  |
|---------|----|----|----|----|--------|
| R1/4    | 17 | 92 | 32 | 32 | MB002B |
| 1/4 NPT | 17 | 92 | 32 | 32 | MB002A |

## 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

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

# P82C 3/2 Wegeventil Excelon® Plus Modular System



- > Anschluss:  
1/4" ... 3/8" (ISO G/PTF)
- > Excelon® Plus erlaubt direkten Leitungseinbau oder modulare Installation mit anderen Excelon® Plus Produkten
- > Hohe Durchflussleistung
- > Schnelle Entlüftung
- > 3/2 Wegeventil, normal geschlossen
- > Optional elektropneumatisch oder pneumatisch betätigt
- > Zur Verwendung als Komponente in sicherheitsbezogenen Systemen für Sicherheitsfunktion „Sicheres Entlüften“ bis zu einem Performance Level (PL) c Kat. 1 entsprechend DIN EN ISO13849



## Technische Merkmale

### Betriebsmedium:

Druckluft

### Max. Betriebsdruck:

10 bar (145 psi)

### Min. Betriebsdruck:

3 bar (43 psi)

### Anschluss:

G1/4, G3/8,  
1/4 PTF, 3/8 PTF

### Durchfluss:

20 dm³/s bei Anschluss 1/4"  
Durchfluss von Anschluss  
1 nach 2, bei 6,3bar  
(91psi) Eingangsdruck  
und einer Druckdifferenz  
von Δp 0,5 bar (7 psi)  
Durchfluss von Anschluss  
2 nach 3: 20 dm³/s

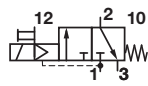
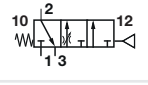
### Umgebungs-/ Mediumstemperatur:

-20 ... +65°C (-4 ... +149°F)  
Um das Einfrieren zu vermeiden,  
muss die Druckluft unter +2°C  
(+35°F) frei von Feuchtigkeit sein

### Material:

Gehäuse: Aluminium  
Endkappen: Aluminium  
Gehäusekappe: ABS  
Dichtungen: NBR  
Ventil: Kupfer  
Druckluftansteuerung:  
Aluminium

## Technische Daten P82C

| Symbol                                                                              | Anschluss | Betätigung/Rückstellung  | Spannung | Entlüftungsanschluss | Gewicht (kg) | Typ          |
|-------------------------------------------------------------------------------------|-----------|--------------------------|----------|----------------------|--------------|--------------|
|  | G1/4      | Elektropneumatisch/Feder | 24 V DC  | G1/4                 | 0,43         | P82C-2GT-PFN |
|                                                                                     | G3/8      | Elektropneumatisch/Feder | 24 V DC  | G1/4                 | 0,43         | P82C-3GT-PFN |
|  | G1/4      | Druckluft/Feder          | -        | G1/4                 | 0,43         | P82C-2GA-NNN |
|                                                                                     | G3/8      | Druckluft/Feder          | -        | G1/4                 | 0,43         | P82C-3GA-NNN |

## Kenngößen für Elektromagnete

|                         |                                           |
|-------------------------|-------------------------------------------|
| Spannungstoleranz       | -10%/+15%                                 |
| Rating:                 | 100% Dauerbetrieb                         |
| Nennweite:              | 0,8mm                                     |
| Elektrischer Anschluss: | 15mm DIN EN 175301-803 (DIN 43650) Form C |
| Handhilfsbetätigung:    | Nicht rastend                             |
| Schutzart:              | IP65                                      |
| Material:               | PP5 (Gehäuse), NBR (Dichtungen)           |

## Typenschlüssel

**P82C-\*\*\*-\*\*\*N**

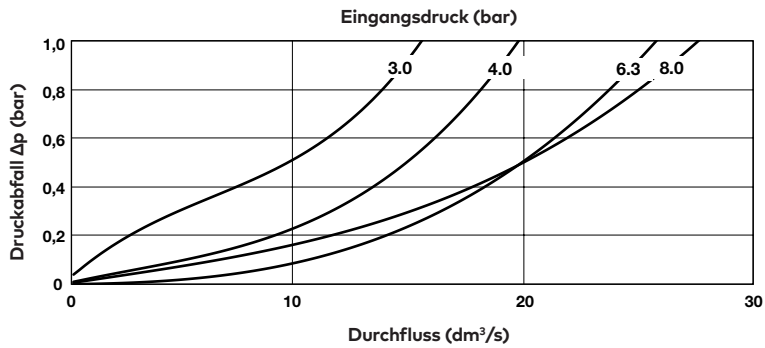
| Funktion       | Kennung |
|----------------|---------|
| 3/2 Wegeventil | C       |
| Anschluss      | Kennung |
| 1/4"           | 2       |
| 3/8"           | 3       |
| Gewinde        | Kennung |
| PTF            | A       |
| ISO G          | G       |

| Spannung                   | Kennung |
|----------------------------|---------|
| 24 V DC                    | F       |
| 110 V AC                   | A       |
| 220 V AC                   | B       |
| Kein Magnet                | N       |
| Handhilfsbetätigung        | Kennung |
| Drücken, nicht arretierbar | P       |
| Ohne                       | N       |
| Betätigung *1)             | Kennung |
| Pneumatisch*2)             | A       |
| Elektropneumatisch         | T       |

## Durchflusscharakteristik

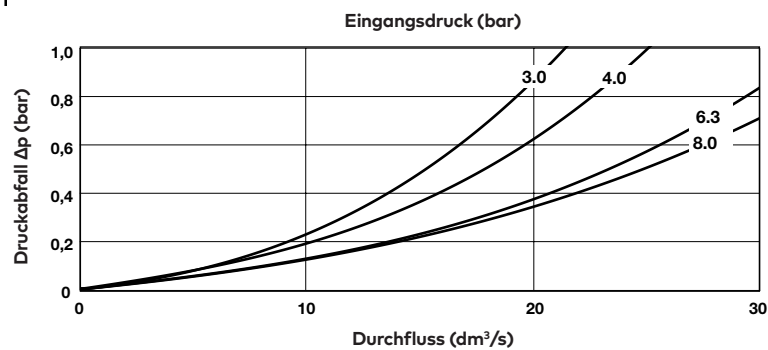
Anschluss 1 nach 2

Anschluss: 1/4"



Anschluss 1 nach 2

Anschluss: 3/8"



## Zubehör

### Verbindungskabel mit Stecker Bauform C, LED und Steckverbindung M12



| Beschreibung                                               | Kabel-<br>länge<br>(m) | Typ              |
|------------------------------------------------------------|------------------------|------------------|
| Steckverbinder M12<br>gerade - PUR Kabel                   | 0,6                    | NC-DINCA-123MS-A |
| - Steckverbinder mit<br>LED, Bauform C DIN,<br>abgewinkelt | 1                      | NC-DINCA-123MS-1 |
|                                                            | 2                      | NC-DINCA-123MS-2 |
|                                                            | 5                      | NC-DINCA-123MS-5 |

### Ventilstecker Bauform C mit LED und eingegossenem Verbindungskabel



| Spannung           | Kabel-<br>länge<br>(m) | Typ        |
|--------------------|------------------------|------------|
| 12 - 24 V AC / D.C | 1                      | V10014-D01 |
| 12 - 24 V AC / D.C | 3                      | V10014-D03 |
| 110 V AC / D.C.    | 1                      | V10015-D01 |
| 110 V AC / D.C.    | 3                      | V10015-D03 |
| 220 V AC / D.C     | 1                      | V10016-D01 |
| 220 V AC / D.C     | 3                      | V10016-D03 |

### Ventilstecker Bauform C mit eingegossenem Verbindungskabel



| Beschreibung                              | Kabel-<br>länge<br>(m) | Typ        |
|-------------------------------------------|------------------------|------------|
| 3-poliger Stecker mit<br>Verbindungskabel | 1                      | V10013-D01 |
| 3-poliger Stecker mit<br>Verbindungskabel | 3                      | V10013-D03 |

### Leuchtdichtung, 15mm Form C



| Beschreibung                    | Typ        |
|---------------------------------|------------|
| Leuchtdichtung (12 - 24 V DC)   | V10037-E13 |
| Leuchtdichtung (110 - 120 V AC) | V10037-E18 |
| Leuchtdichtung (220 - 240 V AC) | V10037-E19 |

### Stecker Bauform C mit LED/VDR



| Beschreibung                          | Typ        |
|---------------------------------------|------------|
| Stecker 24 V DC komplett mit LED/VDR  | V10012-D13 |
| Stecker 110 V AC komplett mit LED/VDR | V10012-D18 |
| Stecker 220 V AC komplett mit LED/VDR | V10012-D19 |

### M12 Adapter mit LED - Stecker Form C auf M12



V13981-E01

### M12 Adapter mit LED - Stecker Form C auf M12



V13980-E01

### Stecker Bauform C



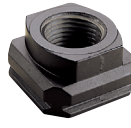
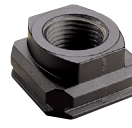
V10027-D00

## Zubehör

|                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                                                           |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Quikclamp®</b><br><br><b>Seite 5</b><br>820014-51KIT                                               | <b>Quikclamp® mit Befestigungswinkel</b><br><br><b>Seite 5</b><br>820014-52KIT | <b>Anschlussblock 1/4 PTF</b><br><br><b>Seite 5</b><br>820016-50KIT                      | <b>Anschlussblock G1/4</b><br><br><b>Seite 5</b><br>820016-51KIT |
| <b>Verteilerblock 3/8" PTF</b><br><br><b>Seite 5</b><br>820028-50KIT                                  | <b>Verteilerblock G3/8</b><br><br><b>Seite 5</b><br>820028-53KIT               |                                                                                                                                                                           |                                                                                                                                                    |
| <b>Anschlussflansch mit DS-Interface 18D Druckschalter</b><br><br><b>Seite 6</b><br>0523109000000000 | <b>Druckschalter 18D (0,5 ... 8 bar) *1)</b><br><br><b>Seite 6</b><br>0881300 | <b>Digitaler Druckschalter 51D (-1 ... 10 bar) *2)</b><br><br><b>Seite 7</b><br>0860810 |                                                                                                                                                    |

\*1) Mit Flanschanschluss Für weitere Schaltdruckbereiche siehe Datenblatt 5.11.001

\*2) Für weitere Schaltdruckbereiche siehe Datenblatt 5.11.385

|                                                                                                                                                        |                                                                                                                                                        |                                                                                                                                                     |                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gewindeflansch 1/4 PTF</b><br><br><b>Seite 6</b><br>820015-02KIT | <b>Gewindeflansch 3/8 PTF</b><br><br><b>Seite 6</b><br>820015-03KIT | <b>Gewindeflansch G1/4</b><br><br><b>Seite 6</b><br>820015-08KIT | <b>Gewindeflansch G3/8</b><br><br><b>Seite 6</b><br>820015-09KIT |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|

## Schalldämpfer

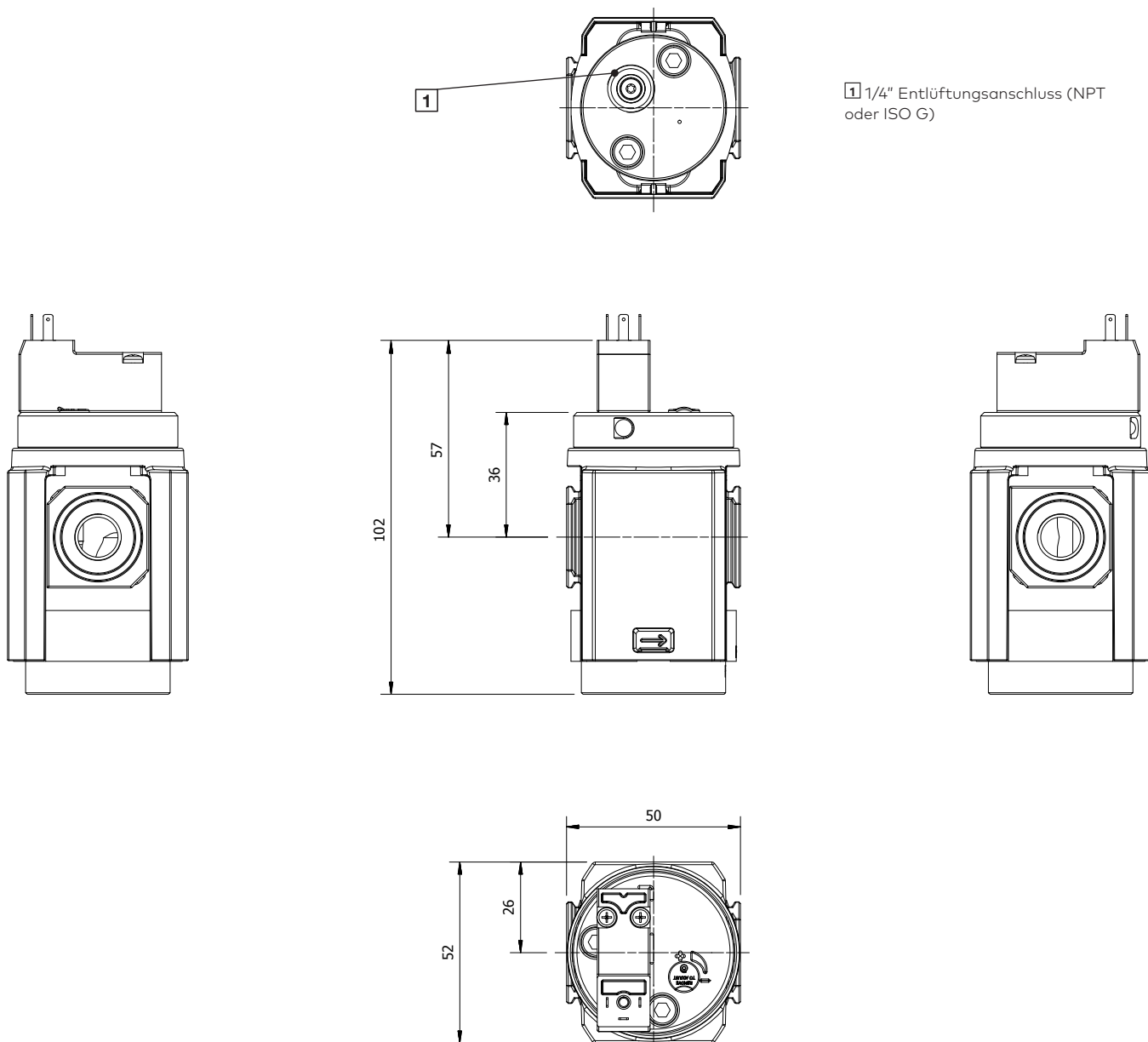
|                                                                                                                                             |                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hochleistungsschalldämpfer 1/4" NPT</b><br><br>MB002A | <b>Hochleistungsschalldämpfer R1/4</b><br><br>MB002B |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|

## Nennspannung und Ersatzspulen

|                                                                                     | Spannung | Leistung | Ersatzteil   |
|-------------------------------------------------------------------------------------|----------|----------|--------------|
|  | 24 V DC  | 1,2 W    | 840650-50KIT |
|  | 110 V AC | 1,5 VA   | 840650-51KIT |
|  | 220 V AC | 1,5 VA   | 840650-52KIT |

## Abmessungen

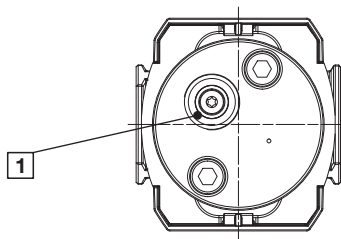
Abmessungen in mm  
Projection/First angle



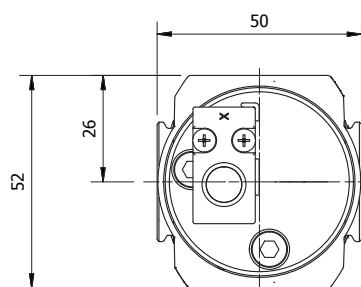
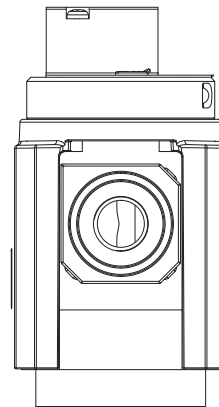
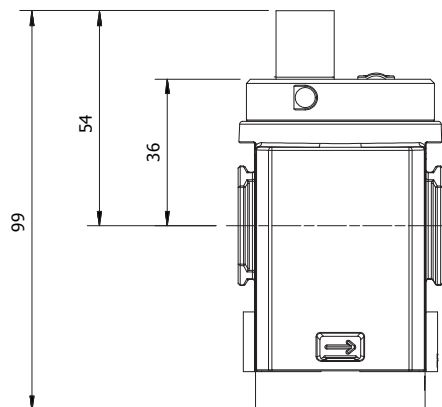
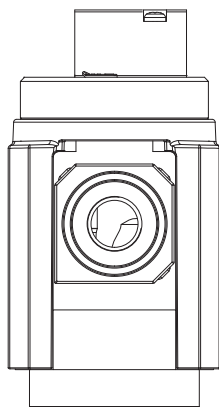
## Abmessungen

### Pneumatische Betätigung

Abmessungen in mm  
Projection/First angle

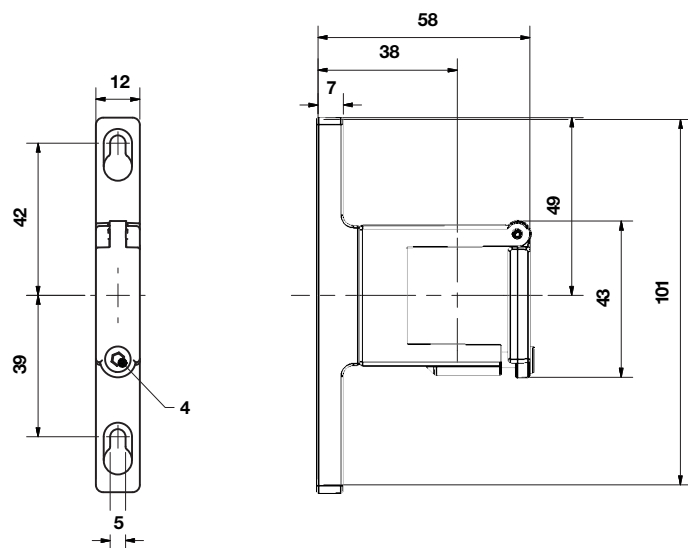


1 1/4" Entlüftungsanschluss (NPT oder ISO G)

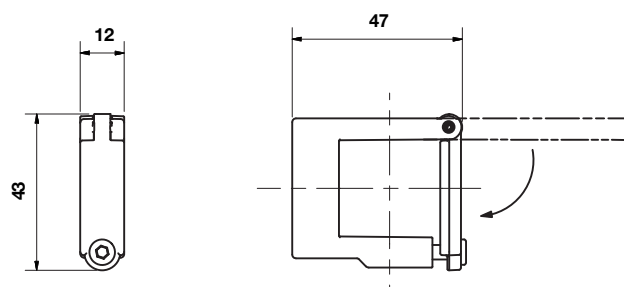


## Zubehör

### Quikclamp® mit Befestigungswinkel



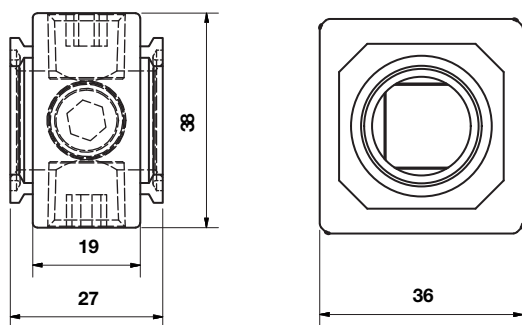
### Quikclamp®



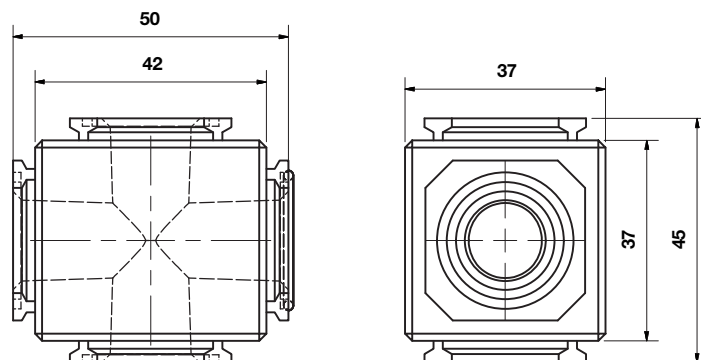
Abmessungen in mm  
Projection/First angle



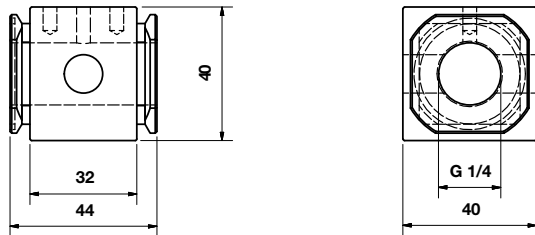
### Anschlussblock



### Verteilerblock

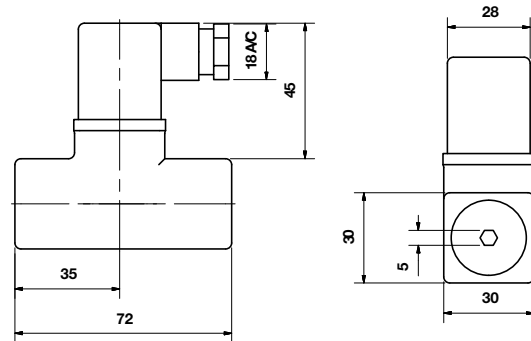


## Anschlussblock für 18D Druckschalter



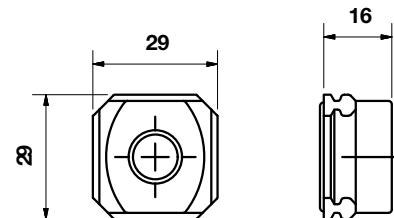
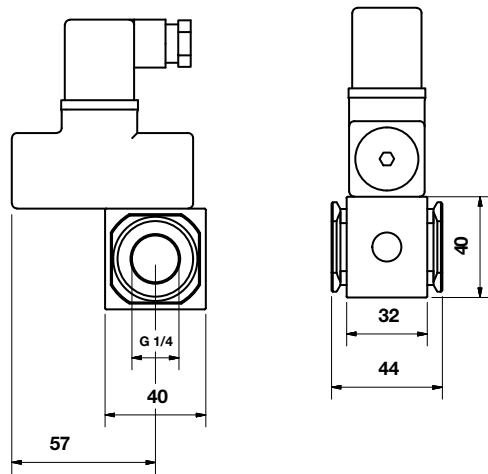
## 18D Druckschalter

Abmessungen in mm  
Projection/First angle

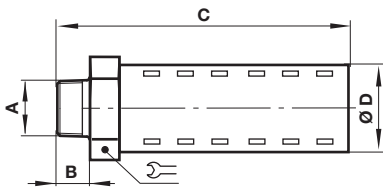


## Anschlussflansch mit DS-Interface 18D und montiertem 18D Druckschalter

## Gewindeflansch



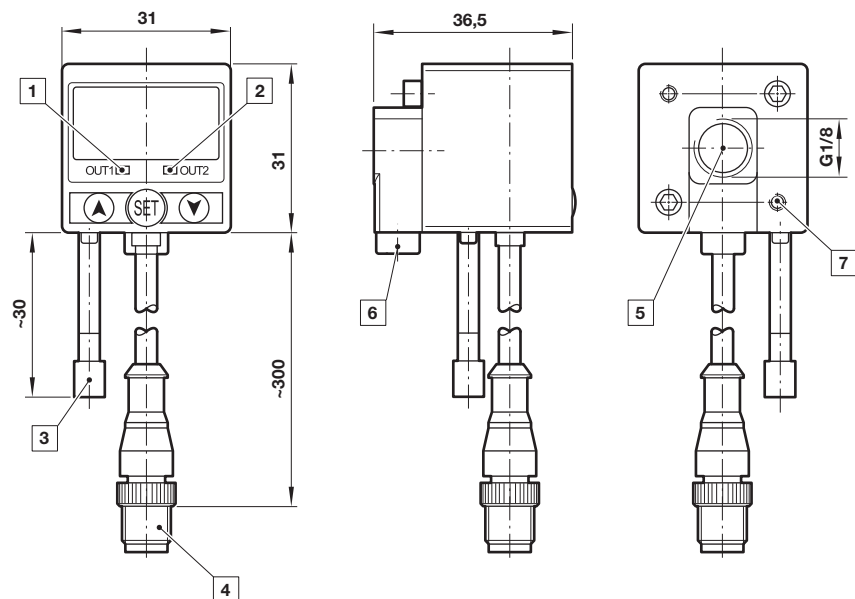
## Schalldämpfer



| A       | B  | C  | D  |  | Typ    |
|---------|----|----|----|-------------------------------------------------------------------------------------|--------|
| R1/4    | 17 | 92 | 32 | 32                                                                                  | MB002B |
| 1/4 NPT | 17 | 92 | 32 | 32                                                                                  | MB002A |

## 51D Digitaler Druckschalter

Abmessungen in mm  
Projection/First angle



- 1 Schalter AUS 1, grüne LED
- 2 Schalter AUS 2, rote LED
- 3 Staubsicherer Schutz
- 4 Stecker M12 x 1
- 5 Einlassöffnung
- 6 Alternative Einlassöffnung G1/8 eingesteckt
- 7 Gewinde für Befestigungsschraube

### Sicherheitshinweise

Diese Produkte sind ausschließlich in Druckluftsystemen zu verwenden. Sie sind dort einzusetzen, wo die unter **»Technische Merkmale/-Daten«** aufgeführten Werte nicht überschritten werden.

Berücksichtigen Sie bitte die entsprechende Katalogseite. Vor dem Einsatz der Produkte bei nicht industriellen Anwendungen, in lebenserhaltenden oder anderen Systemen, die nicht in den veröffentlichten Anleitungsunterlagen enthalten sind, wenden Sie sich bitte direkt an Norgren Ltd.

Durch Missbrauch, Verschleiß oder Störungen können in Fluidsystemen verwendete Komponenten auf verschiedene Arten versagen. Systemauslegern wird dringend empfohlen, die Störungsarten aller in Hydrauliksystemen verwendeten Komponententeile zu berücksichtigen und ausreichende Sicherheitsvorkehrungen zu treffen, um Verletzungen von Personen sowie Beschädigungen der Geräte im Falle einer solchen Störung zu verhindern. Systemausleger sind verpflichtet, Sicherheitshinweise für den Endbenutzer im Betriebshandbuch zu vermerken, wenn der Störungsschutz nicht ausreichend gewährleistet ist.

- > **Port size: Ø 6 ... 12 mm**  
G1/8 ... G3/8
- > **Configuration flexibility**
- > **Low weight**
- > **No tools required for assembly**



### Technical features

#### Medium:

Compressed air

#### Maximum operating pressure:

12 bar (174 psi) max.

#### Ambient/Media temperature:

-20 ... +60°C (-4 ... +140°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

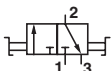
#### Materials:

Body and valve stem: PBT

Internal parts: Acetal

Elastomers: NBR and TPE

### Technical data - standard models

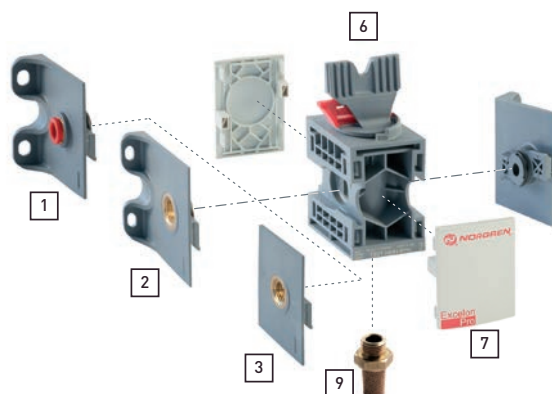
| Symbol                                                                             | Port size | Connector             | Flow (Cv factor) | Weight (kg) | Model        |
|------------------------------------------------------------------------------------|-----------|-----------------------|------------------|-------------|--------------|
|  | G 1/4     | With mounting bracket | 2,57             | 0,16        | T92T-2GN-B1N |

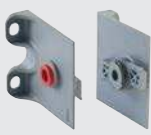
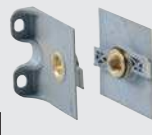
### Option selector

**T92T-★★N-B1N**

| Connector with mounting bracket | Substitute | Connector without mounting bracket | Substitute        |
|---------------------------------|------------|------------------------------------|-------------------|
| 6 mm Push-in fitting            | <b>6D</b>  | G1/4                               | <b>2V</b>         |
| 8 mm Push-in fitting            | <b>8D</b>  | Connector                          | <b>Substitute</b> |
| 10 mm Push-in fitting           | <b>AD</b>  | Without                            | <b>NN</b>         |
| 12 mm Push-in fitting           | <b>BD</b>  |                                    |                   |
| G 1/8                           | <b>1G</b>  |                                    |                   |
| G 1/4                           | <b>2G</b>  |                                    |                   |
| G 3/8                           | <b>3G</b>  |                                    |                   |

## Component parts and accessories

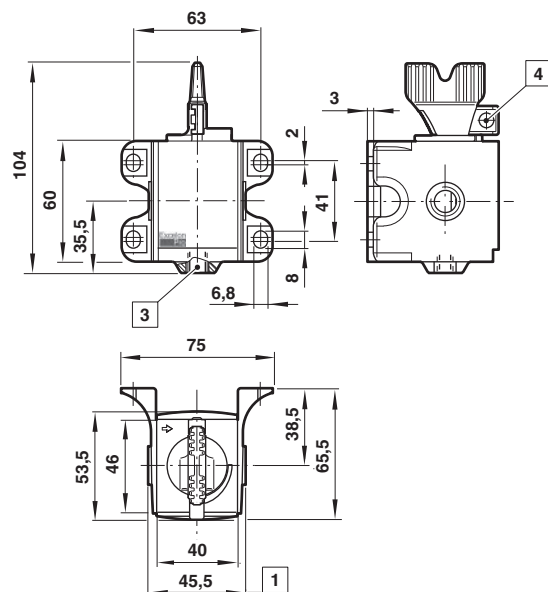


|                                                                                     | Push-in fitting connector<br>with mounting bracket                                  | Threaded connector<br>with mounting bracket                                         | Threaded connector<br>without mounting bracket                                    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                                                     |    |    |  |
| <b>Port size</b>                                                                    | <b>1</b>                                                                            | <b>2</b>                                                                            | <b>3</b>                                                                          |
| G1/8                                                                                | -                                                                                   | 9212KIT-1G                                                                          | -                                                                                 |
| G1/4                                                                                | -                                                                                   | 9212KIT-2G                                                                          | 9211KIT-2V                                                                        |
| G3/8                                                                                | -                                                                                   | 9212KIT-3G                                                                          | -                                                                                 |
| ø 6 mm                                                                              | 9213KIT-6D                                                                          | -                                                                                   | -                                                                                 |
| ø 8 mm                                                                              | 9213KIT-8D                                                                          | -                                                                                   | -                                                                                 |
| ø 10 mm                                                                             | 9213KIT-AD                                                                          | -                                                                                   | -                                                                                 |
| ø 12 mm                                                                             | 9213KIT-BD                                                                          | -                                                                                   | -                                                                                 |
| <b>Quick connector</b>                                                              | <b>Locking plate</b>                                                                | <b>Silencer</b>                                                                     |                                                                                   |
|  |  |  |                                                                                   |
| <b>4</b>                                                                            | <b>7</b>                                                                            | <b>9</b>                                                                            |                                                                                   |
| 9210-50                                                                             | 9236-88                                                                             | T40M0500                                                                            |                                                                                   |

 **Warning**  
 Locking plates **MUST** be in place  
 before pressurizing any Excelon Pro unit.

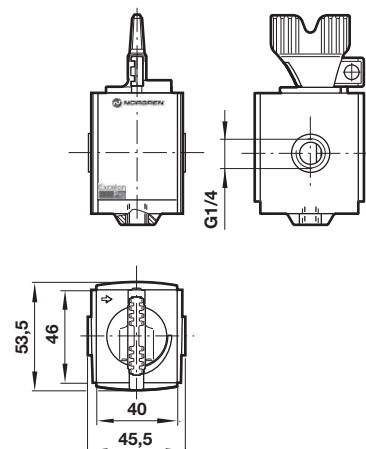
## Drawings

### Shut-off valve with wall mounting bracket



### Shut-off valve without mounting bracket

Dimensions in mm  
Projection/First angle



# Minimum clearance required to remove bowl

#### 1 Connector Dimensions

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

| PIF Connector      | Port-to-port |
|--------------------|--------------|
| 6 mm, 8 mm         | 60           |
| 10 mm, 12 mm       | 62           |
| Threaded connector |              |
| G1/8, G1/4         | 45,5         |
| G3/8               | 76           |

## 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 IMI Precision Engineering, Norgren Inc. 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.

T68C-6GB-B2N

# Olympian 68 3/2 G3/4 Shut-off Valve

[Overview](#)   [Technical Details](#)



3 port/2 position  
Easy to operate  
Lockable in the 'closed' position

|            |                |
|------------|----------------|
| Medium:    | Compressed Air |
| Port Size: | G3/4           |
| Actuation: | Manual         |

Downloads

[CAD](#)   [Installation Guide \(PDF\)](#)

## CAD

We offer CAD for the vast majority of our product range providing you with access to download 2D and 3D CAD models, quickly and easily in a wide range of file formats and versions.

CAD & CONFIGURATION

## Technical Details

|                        |                |
|------------------------|----------------|
| Medium                 | Compressed Air |
| Operating Temperature  | -20 ... 80 °C  |
| Port Size              | G3/4           |
| Actuation              | Manual         |
| Maximum Inlet Pressure | 17 bar         |
| Materials - Elastomers | Nitrile rubber |
| Range                  | T68C           |
| Series                 | Olympian Plus  |
| Brand                  | Norgren        |

T68C-AGB-B2N

# Olympian 68 3/2 G1-1/4 Shut-off Valve

[Overview](#)   [Technical Details](#)



3 port/2 position  
Easy to operate  
Lockable in the 'closed' position

|            |                |
|------------|----------------|
| Medium:    | Compressed Air |
| Port Size: | G1-1/4         |
| Actuation: | Manual         |

Downloads

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## CAD

We offer CAD for the vast majority of our product range providing you with access to download 2D and 3D CAD models, quickly and easily in a wide range of file formats and versions.

CAD & CONFIGURATION

## Technical Details

|                        |                |
|------------------------|----------------|
| Medium                 | Compressed Air |
| Operating Temperature  | -20 ... 80 °C  |
| Port Size              | G1-1/4         |
| Actuation              | Manual         |
| Maximum Inlet Pressure | 17 bar         |
| Materials - Elastomers | Nitrile rubber |
| Range                  | T68C           |
| Series                 | Olympian Plus  |
| Brand                  | Norgren        |

T68C-BGB-B2N

# Olympian 68 3/2 G1-1/2 Shut-off Valve

[Overview](#)   [Technical Details](#)



3 port/2 position  
Easy to operate  
Lockable in the 'closed' position

|            |                |
|------------|----------------|
| Medium:    | Compressed Air |
| Port Size: | G1-1/2         |
| Actuation: | Manual         |

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## CAD

We offer CAD for the vast majority of our product range providing you with access to download 2D and 3D CAD models, quickly and easily in a wide range of file formats and versions.

CAD & CONFIGURATION

## Technical Details

|                        |                |
|------------------------|----------------|
| Medium                 | Compressed Air |
| Operating Temperature  | -20 ... 80 °C  |
| Port Size              | G1-1/2         |
| Actuation              | Manual         |
| Maximum Inlet Pressure | 17 bar         |
| Materials - Elastomers | Nitrile rubber |
| Range                  | T68C           |
| Series                 | Olympian Plus  |
| Brand                  | Norgren        |

T68C-8GB-B2N

# Olympian 68 3/2 G1 Shut-off Valve

[Overview](#)   [Technical Details](#)



3 port/2 position  
Easy to operate  
Lockable in the 'closed' position

|            |                |
|------------|----------------|
| Medium:    | Compressed Air |
| Port Size: | G1             |
| Actuation: | Manual         |

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CAD & CONFIGURATION

## Technical Details

|                            |                |
|----------------------------|----------------|
| Medium                     | Compressed Air |
| Operating Temperature      | -20 ... 80 °C  |
| Port Size                  | G1             |
| Actuation                  | Manual         |
| Maximum Inlet Pressure     | 17 bar         |
| Materials - Elastomers     | Nitrile rubber |
| Certification - WEEE       | NonWEEE        |
| Classification - eClass 11 | 51030200       |
| Range                      | T68C           |
| Series                     | Olympian Plus  |
| Brand                      | Norgren        |

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