



# Moduflex FRLs

## **Moduflex40 P3H Series**

1/8" and 1/4" ported

## **Moduflex60 P3K Series**

3/8" and 1/2" ported

## **Moduflex80 P3M Series**

1/2", 3/4" and 1" ported

Catalogue no. PDE2501TCUK-ca

Edition: June 2006



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 **WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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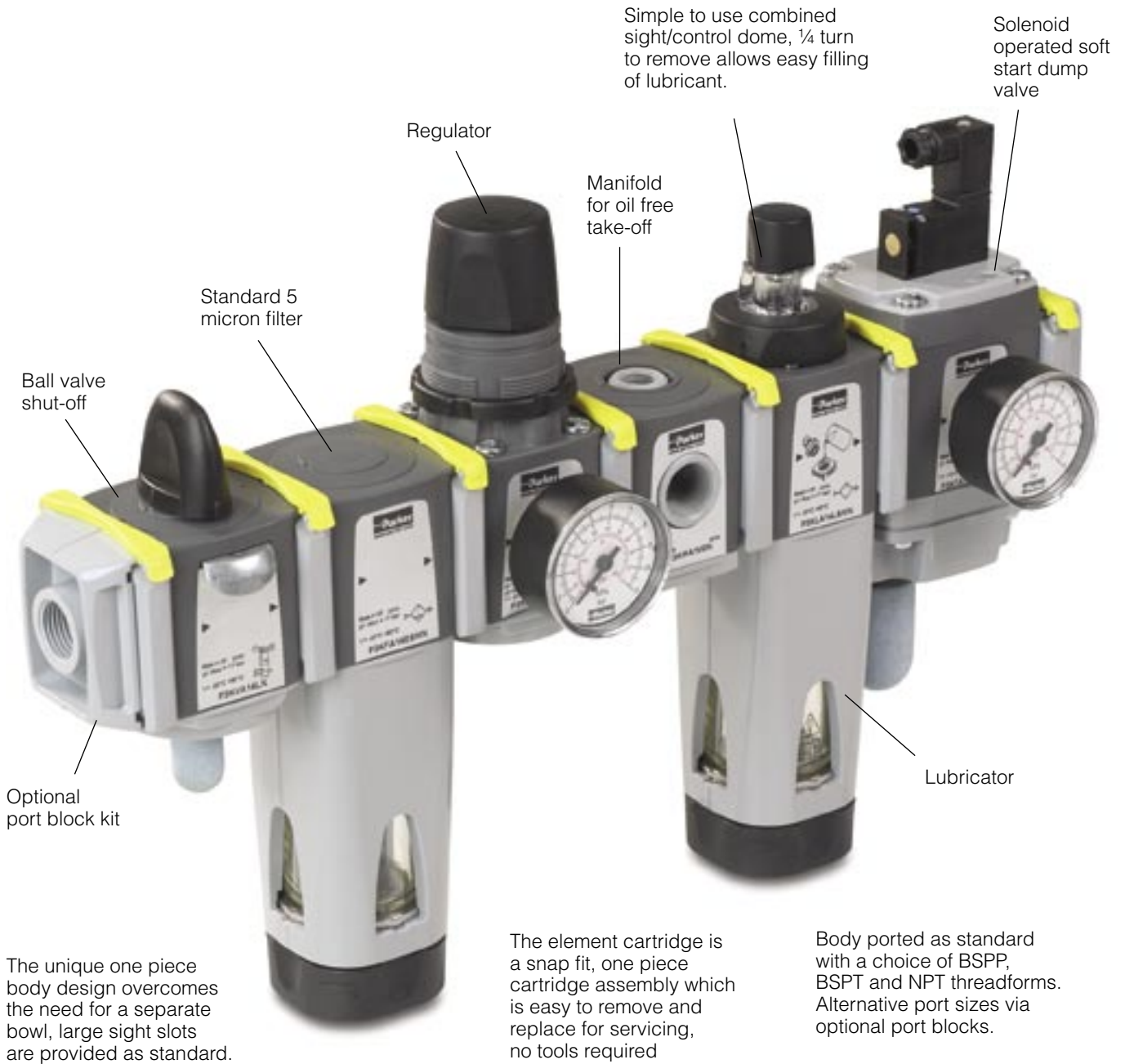
# Moduflex modular air preparation system

The Moduflex modular air preparation system is constructed out of aluminium for the added advantages of both lightweight and strength.

The unique 'Cliplok' fastener enables combinations of units to be built in a fraction of the time taken by more traditional systems.

Combinations may be assembled quickly and easily, the individual units combine face to face with no intermediate block and ..... No increase in overall dimension.

## Typical Combination Assembly



Manual, semi-automatic and fully automatic drain options are available, recessed into the base plate for extra safety & protection from damage.

# Moduflex modular air preparation system

## Cliplok Mounting System

The unique 'Cliplok' allows units to be connected together, without the use of pipe connectors, saving space whilst providing constant mounting centres. The 'Cliploks' slide into the units from the front and rear and are locked in place by the overstrap.

For wall mounting 'Cliploks' with integral wall brackets are available. They are assembled and locked in exactly the same way.

Wall mounted 'Cliploks' can be left attached to the wall and the unit will slide off, once the overstrap has been lifted.



'Cliploks' locate and fix units in combination, allowing easy removal for servicing with no width penalty.



# Moduflex modular air preparation system

## Moduflex Series Filter Elements

Moduflex Series standard Filter units feature 5 micron elements as standard with a 40 micron option.

Options include Coalescing units for the removal of oil and water aerosols and Adsorber units with activated carbon elements for the removal of hydrocarbon vapours.

The unique one piece body design overcomes the need for a separate bowl. Featuring an easy to use 1/8 turn base plate for filter element removal with positive latch to ensure correct and safe refitting.

The element cartridge is a snap fit, one piece cartridge assembly which is easy to remove and replace for servicing, no tools required.

Manual, semi-auto and automatic drain options are available.



**ATEX approval: CE Ex II 3 GD  
ISO 4414 EN 983**

One hand operation for easy servicing, no small easily lost part to worry about.



Body ported as standard with a choice of BSPP, BSPT and NPT threadforms

Large sights provided as standard

Standard filter units feature 5 micron element.

Condensate bowl

## Validated for transport applications



**RAILWAY INDUSTRY  
ASSOCIATION**

**BS EN / IEC 61373:1999, Category 1, Class B.**

As you would expect from a member of the Rail Industry Association, the Moduflex60 FRL meets the test specification standards enabling the Moduflex60 FRL to be used as a validated product in a variety of rail applications.



# Moduflex modular air preparation system

Easy to use large diameter oil filling orifice



Simple to use combined sight/control dome, 1/4 turn to remove allows easy filling of lubricant even under pressure.

## Optional Tamperproof Kit



## Optional Manifold Mounted Regulators

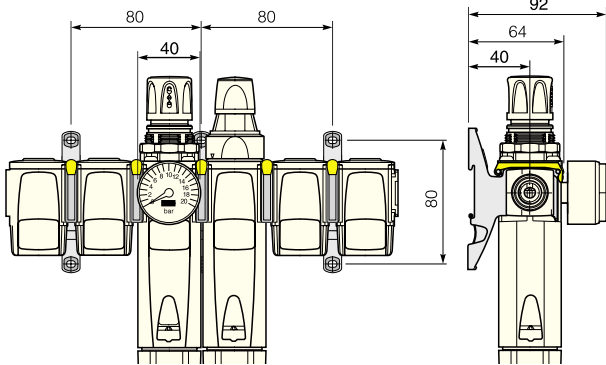


An optional version of the regulator may be Manifold Mounted for common inlet installations, providing any number of subsidiary p2 pressures.

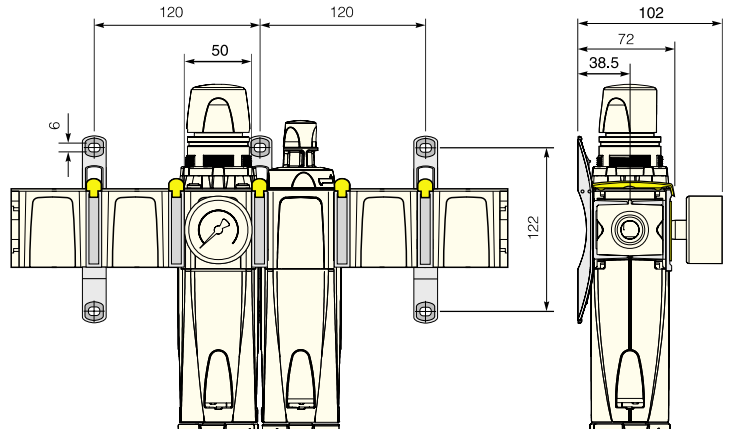
# Moduflex modular air preparation system

## Recommended Wall Mounting Configurations

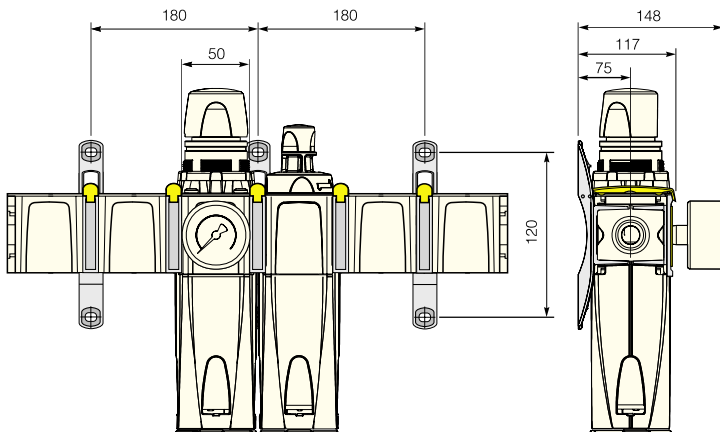
### Moduflex 40 P3H Series



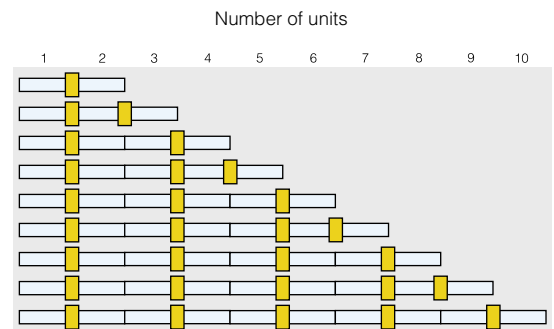
### Moduflex 60 P3K Series



### Moduflex 80 P3M Series



### Position of Wall Mounting Bracket for Combinations



## Single Mounting Bracket



Facilitates the permanent mounting of a single unit without the use of the 'Cliplok' system. The single piece steel bracket may be fixed to the wall or machine and a single Moduflex unit simply and securely pushed into place.

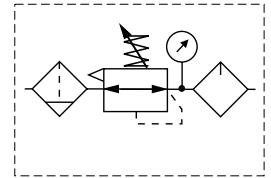
**This is a permanent mounting option, care must be exercised before the unit is assembled.**

**Suitable for individual Filter and Lubricator mounting.**

For all other mounting arrangements the 'Cliplok' system should be used.

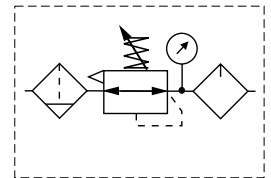
| Series | Description                  | Weight<br>g | Order Code       |
|--------|------------------------------|-------------|------------------|
| P3H    | Single unit mounting bracket | 29          | <b>P3HKA00MW</b> |
| P3K    | Single unit mounting bracket | 44          | <b>P3KKA00MW</b> |

**Popular Combinations**



**Filter + Regulator + Lubricator Combinations**  
**5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

| Port size                     | Manual Drain           | Weight (g) | Semi-Auto Drain        | Weight (g) |
|-------------------------------|------------------------|------------|------------------------|------------|
| G <sup>1</sup> / <sub>4</sub> | <b>P3HCB12SEMNGLMB</b> | 815        | <b>P3HCB12SESNGLMB</b> | 820        |



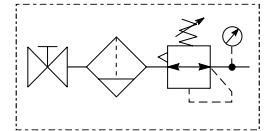
**Filter/Regulator + Lubricator Combinations**  
**5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

| Port size                     | Manual Drain           | Weight (g) | Semi-Auto Drain        | Weight (g) |
|-------------------------------|------------------------|------------|------------------------|------------|
| G <sup>1</sup> / <sub>4</sub> | <b>P3HCA12SEMNGLMB</b> | 628        | <b>P3HCA12SESNGLMB</b> | 632        |

**Options:**

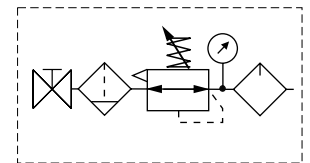
|                          |          |                               |           |                 |           |                       |          |          |            |
|--------------------------|----------|-------------------------------|-----------|-----------------|-----------|-----------------------|----------|----------|------------|
| <b>P3H</b>               | <b>C</b> |                               |           |                 | <b>SE</b> |                       | <b>N</b> | <b>G</b> | <b>LMB</b> |
| Filter/Regulator + Lub   | <b>A</b> | G <sup>1</sup> / <sub>8</sub> | <b>11</b> | Manual Drain    | <b>M</b>  | 0 - 2 bar with gauge  | <b>Z</b> |          |            |
| Filter + Regulator + Lub | <b>B</b> | G <sup>1</sup> / <sub>4</sub> | <b>12</b> | Semi Auto Drain | <b>S</b>  | 0 - 4 bar with gauge  | <b>M</b> |          |            |
|                          |          |                               |           |                 |           | 0 - 8 bar with gauge  | <b>G</b> |          |            |
|                          |          |                               |           |                 |           | 0 - 16 bar with gauge | <b>J</b> |          |            |

## Popular Combinations



### Ball Valve + Filter/Regulator Combinations 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

| Port size                     | Manual Drain         | Weight (g) | Semi-Auto Drain      | Weight (g) |
|-------------------------------|----------------------|------------|----------------------|------------|
| G <sup>1</sup> / <sub>4</sub> | <b>P3HAN12SEMNGB</b> | 533        | <b>P3HAN12SESNGB</b> | 538        |



### Ball Valve + Filter/Regulator + Lubricator Combinations 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

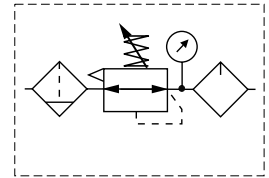
| Port size                     | Manual Drain          | Weight (g) | Semi-Auto Drain       | Weight (g) |
|-------------------------------|-----------------------|------------|-----------------------|------------|
| G <sup>1</sup> / <sub>4</sub> | <b>P3HAA12SEMGLMB</b> | 730        | <b>P3HAA12SESGLMB</b> | 735        |

## Options:

|                                      |          |                               |           |           |  |                       |          |                                      |  |          |
|--------------------------------------|----------|-------------------------------|-----------|-----------|--|-----------------------|----------|--------------------------------------|--|----------|
| <b>P3H</b>                           | <b>A</b> |                               |           | <b>SE</b> |  | <b>N</b>              | <b>G</b> |                                      |  | <b>B</b> |
| Ball valve + Filter/Reg              | <b>N</b> | G <sup>1</sup> / <sub>8</sub> | <b>11</b> |           |  | 0 - 2 bar with gauge  | <b>Z</b> | Add only for options with Lubricator |  |          |
| Ball valve + Filter/Reg + Lubricator | <b>A</b> | G <sup>1</sup> / <sub>4</sub> | <b>12</b> |           |  | 0 - 4 bar with gauge  | <b>M</b> |                                      |  |          |
|                                      |          | Manual Drain                  | <b>M</b>  |           |  | 0 - 8 bar with gauge  | <b>G</b> |                                      |  |          |
|                                      |          | Semi Auto Drain               | <b>S</b>  |           |  | 0 - 16 bar with gauge | <b>J</b> |                                      |  |          |

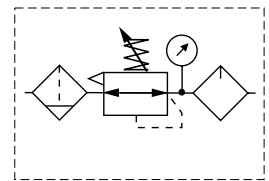


## Popular Combinations



### Filter + Regulator + Lubricator Combinations 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

| Port size        | Manual Drain          | Weight (g) | Semi-Auto Drain        | Weight (g) | Auto Drain             | Weight (g) |
|------------------|-----------------------|------------|------------------------|------------|------------------------|------------|
| G <sup>1/2</sup> | <b>P3KCB14SEMGLMB</b> | 2010       | <b>P3KCB14SESEGLMB</b> | 2015       | <b>P3KCB14SEANGLMB</b> | 2030       |



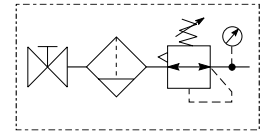
### Filter/Regulator + Lubricator Combinations 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

| Port size        | Manual Drain          | Weight (g) | Semi-Auto Drain        | Weight (g) | Auto Drain             | Weight (g) |
|------------------|-----------------------|------------|------------------------|------------|------------------------|------------|
| G <sup>1/2</sup> | <b>P3KCA14SEMGLMB</b> | 1610       | <b>P3KCA14SESEGLMB</b> | 1615       | <b>P3KCA14SEANGLMB</b> | 1630       |

## Options:

|                          |          |                  |           |                 |           |                       |          |          |            |
|--------------------------|----------|------------------|-----------|-----------------|-----------|-----------------------|----------|----------|------------|
| <b>P3</b>                | <b>K</b> | <b>C</b>         |           |                 | <b>SE</b> |                       | <b>N</b> | <b>G</b> | <b>LMB</b> |
| Filter/Regulator + Lub   | <b>A</b> | G <sup>3/8</sup> | <b>13</b> | Manual Drain    | <b>M</b>  | 0 - 2 bar with gauge  | <b>Z</b> |          |            |
| Filter + Regulator + Lub | <b>B</b> | G <sup>1/2</sup> | <b>14</b> | Semi Auto Drain | <b>S</b>  | 0 - 4 bar with gauge  | <b>M</b> |          |            |
|                          |          |                  |           | Auto Drain      | <b>A</b>  | 0 - 8 bar with gauge  | <b>G</b> |          |            |
|                          |          |                  |           |                 |           | 0 - 16 bar with gauge | <b>J</b> |          |            |

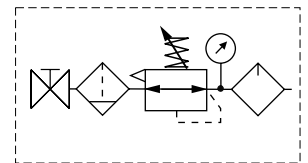
## Popular Combinations



### Ball Valve + Filter/Regulator Combinations

#### 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

| Port size        | Manual Drain         | Weight (g) | Semi-Auto Drain      | Weight (g) | Auto Drain           | Weight (g) |
|------------------|----------------------|------------|----------------------|------------|----------------------|------------|
| G <sup>1/2</sup> | <b>P3KAN14SEMNGB</b> | 1425       | <b>P3KAN14SESNGB</b> | 1430       | <b>P3KAN14SEANGB</b> | 1445       |



### Ball Valve + Filter/Regulator + Lubricator Combinations

#### 5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets

| Port size        | Manual Drain          | Weight (g) | Semi-Auto Drain       | Weight (g) | Auto Drain            | Weight (g) |
|------------------|-----------------------|------------|-----------------------|------------|-----------------------|------------|
| G <sup>1/2</sup> | <b>P3KAA14SEMNLMB</b> | 2210       | <b>P3KAA14SESNLMB</b> | 2215       | <b>P3KAA14SEANLMB</b> | 2230       |

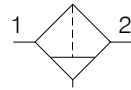
## Options:

|                                      |          |                  |           |           |  |                       |          |                                      |  |           |
|--------------------------------------|----------|------------------|-----------|-----------|--|-----------------------|----------|--------------------------------------|--|-----------|
| <b>P3K</b>                           | <b>A</b> |                  |           | <b>SE</b> |  | <b>N</b>              | <b>G</b> |                                      |  | <b>B</b>  |
| Ball valve + Filter/Reg              | <b>N</b> | G <sup>3/8</sup> | <b>13</b> |           |  | 0 - 2 bar with gauge  | <b>Z</b> | Add only for options with Lubricator |  | <b>LM</b> |
| Ball valve + Filter/Reg + Lubricator | <b>A</b> | G <sup>1/2</sup> | <b>14</b> |           |  | 0 - 4 bar with gauge  | <b>M</b> |                                      |  |           |
|                                      |          | Manual Drain     |           | <b>M</b>  |  | 0 - 8 bar with gauge  | <b>G</b> |                                      |  |           |
|                                      |          | Semi Auto Drain  |           | <b>S</b>  |  | 0 - 16 bar with gauge | <b>J</b> |                                      |  |           |
|                                      |          | Auto Drain       |           | <b>A</b>  |  |                       |          |                                      |  |           |

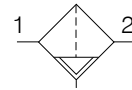
## Standard Filter



## Symbols



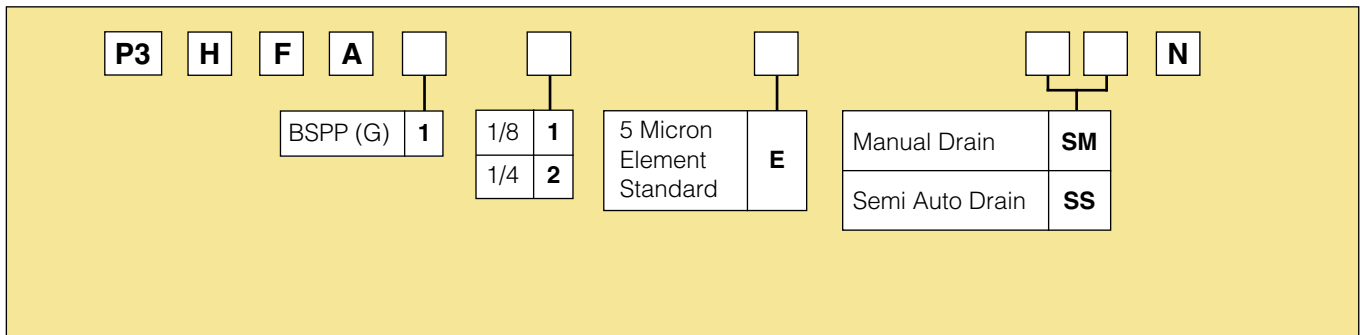
Manual drain



Semi auto drain

- Integral 1/8 or 1/4 ports (BSPP, BSPT & NPT)
- High efficiency 5 micron element as standard
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

## Options:



| Port size | Description     | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|-----------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| G1/8      | Manual drain    | <b>P3HFA11ESMN</b> | 11                        | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 274      |
| G1/8      | Semi auto drain | <b>P3HFA11ESSN</b> | 11                        | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 274      |
| G1/4      | Manual drain    | <b>P3HFA12ESMN</b> | 17                        | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 274      |
| G1/4      | Semi auto drain | <b>P3HFA12ESSN</b> | 17                        | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 274      |

\* flow with 6,3 bar inlet pressure and 0,5 pressure drop.

# Moduflex modular air preparation system P3H Series

## Technical Information

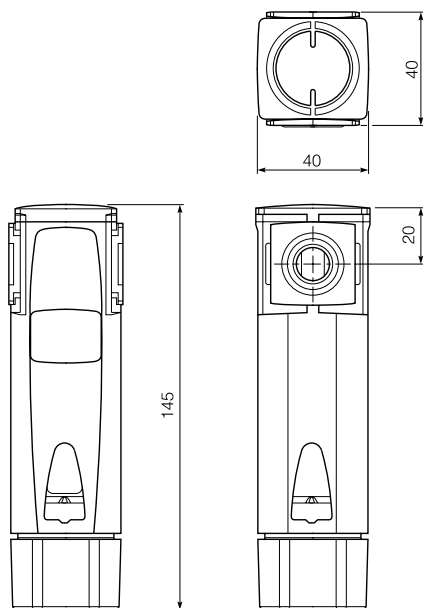
|  |   |
|--|---|
| Fluid:   | Compressed air  |
| Maximum inlet pressure*:   | 17 bar Manual or Semi auto  |
| Temperature range*:  | -20°C to +80°C  |
| Particle removal:  | 5 micron  |
| Air quality:   | Within ISO 8573-1,<br>Class 3 and 5 (particulates)                    |
| Typical flow with 5µm element<br>6,3 bar inlet pressure<br>and 0.5 bar pressure<br>drop: | 17 dm <sup>3</sup> /s   |
| Manual drain:  | twist grip open and barbed<br>connection                              |
| Semi-auto drain:<br>bowl pressure to<br>close drain                                      | 0,2 bar @ min flow of 0,4 dm <sup>3</sup> /s<br>and barbed connection |
| Bowl sump capacity:  | 10 cm <sup>3</sup>  |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyester              |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Nylon                  |
| Drain:           | Acetal                 |

## Dimensions (mm)

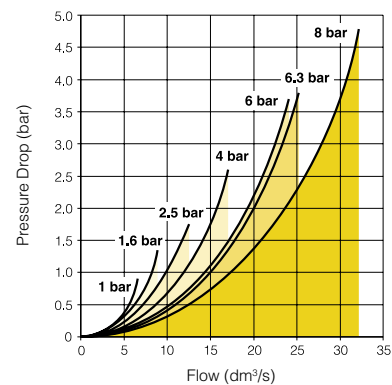


## Service kits

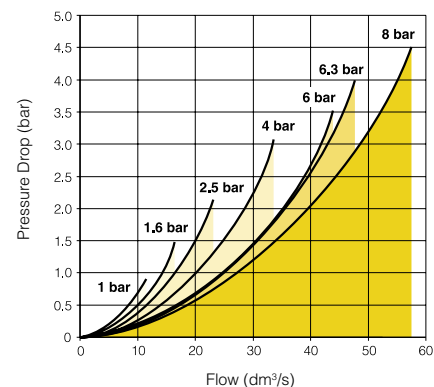
| Description                       | Order code |
|-----------------------------------|------------|
| 5 micron element kit              | P3HKA00ESE |
| Sight glass & manual drain kit    | P3HKA00BSM |
| Sight glass & semi-auto drain kit | P3HKA00BSS |

## Flow characteristics

### (1/8) 5 Micron Filter



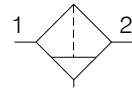
### (1/4) 5 Micron Filter



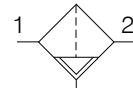
## Standard Filter



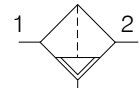
## Symbols



Manual drain



Semi auto drain



Auto drain

- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- High efficiency 5 micron element as standard (optional 40 micron)
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

## Options:

|           |          |          |          |                            |          |                 |           |  |          |
|-----------|----------|----------|----------|----------------------------|----------|-----------------|-----------|--|----------|
| <b>P3</b> | <b>K</b> | <b>F</b> | <b>A</b> |                            |          |                 |           |  | <b>N</b> |
| BSPP (G)  | <b>1</b> | 3/8      | <b>3</b> | 5 Micron Element Standard  | <b>E</b> | Manual Drain    | <b>SM</b> |  |          |
| BSPT      | <b>2</b> | 1/2      | <b>4</b> | 40 Micron Element Optional | <b>G</b> | Semi Auto Drain | <b>SS</b> |  |          |
| NPT       | <b>9</b> |          |          |                            |          | Auto Drain      | <b>SA</b> |  |          |

| Port size | Description     | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|-----------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 3/8       | Manual drain    | <b>P3KFA13ESMN</b> | 45                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 660      |
| 3/8       | Semi auto drain | <b>P3KFA13ESSN</b> | 45                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 650      |
| 3/8       | Auto drain      | <b>P3KFA13ESAN</b> | 45                        | 14      | -20         | 80          | 48                        | 194       | 60       | 60       | 680      |
| 1/2       | Manual drain    | <b>P3KFA14ESMN</b> | 50                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 650      |
| 1/2       | Semi auto drain | <b>P3KFA14ESSN</b> | 50                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 650      |
| 1/2       | Auto drain      | <b>P3KFA14ESAN</b> | 50                        | 14      | -20         | 80          | 48                        | 194       | 60       | 60       | 670      |

\* flow with 6,3 bar inlet pressure and 0,5 pressure drop.



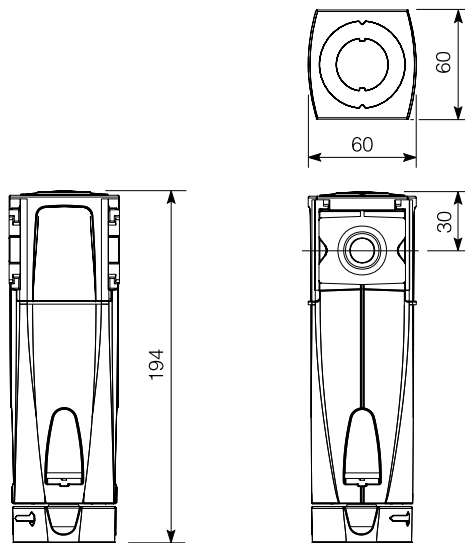
# Moduflex modular air preparation system P3K Series

## Technical Information

|  |   |                     |
|--|---|---------------------|
| Fluid:   | Compressed air  |                     |
| Maximum inlet pressure*:   | 17 bar  | Manual or Semi auto |
|  | 14 bar*   | Auto drain          |
| Temperature range*:  | -20°C to +80°C  |                     |
| Particle removal:  | 5 micron and 40 micron  |                     |
| Air quality:   | Within ISO 8573-1,<br>Class 3 and 5 (particulates)                    |                     |
| Typical flow with 5µm element<br>6,3 bar inlet pressure<br>and 0.5 bar pressure<br>drop: | 50 dm <sup>3</sup> /s   |                     |
| Manual drain:  | twist grip open and barbed<br>connection                              |                     |
| Semi-auto drain:<br>bowl pressure to<br>close drain                                      | 0,2 bar @ min flow of 0,4 dm <sup>3</sup> /s<br>and barbed connection |                     |
| Auto drain:  |   |                     |
| bowl pressure to close drain   | 1 bar   |                     |
| Operating range  | 1 to 14 bar   |                     |
| manual override facility (depress pin)   | barbed connection.  |                     |
| Bowl sump capacity:  | 48 cm <sup>3</sup>  |                     |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

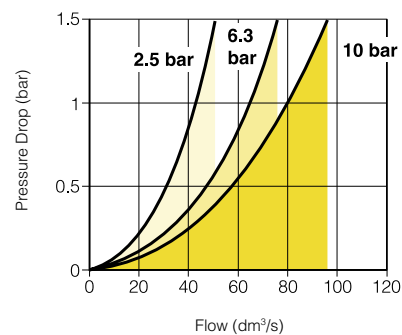
| Description                       | Order code        |
|-----------------------------------|-------------------|
| 5 micron element kit              | <b>P3KKA00ESE</b> |
| 40 micron element kit             | <b>P3KKA00ESG</b> |
| Sight glass & manual drain kit    | <b>P3KKA00BSM</b> |
| Sight glass & semi-auto drain kit | <b>P3KKA00BSS</b> |
| Sight glass & auto drain kit      | <b>P3KKA00BSA</b> |

## Material Specification

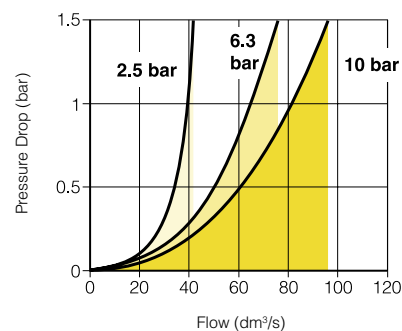
|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyester              |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Acetal                 |
| Drain:           | Acetal                 |

## Flow characteristics

### (3/8) 5 Micron Filter



### (1/2) 5 Micron Filter





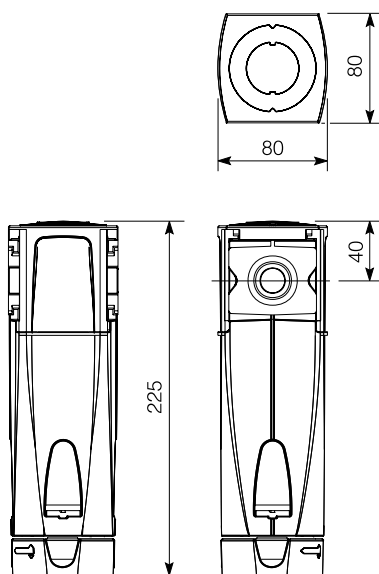
# Moduflex modular air preparation system P3M Series

## Technical Information

|  |   |                     |
|--|---|---------------------|
| Fluid:   | Compressed air  |                     |
| Maximum inlet pressure*:   | 17 bar  | Manual or Semi auto |
| 14 bar*  | Auto drain  |                     |
| Temperature range*:  | -20°C to +80°C  |                     |
| Particle removal:  | 5 micron and 40 micron  |                     |
| Air quality:   | Within ISO 8573-1,<br>Class 3 and 5 (particulates)                    |                     |
| Typical flow with 5µm element<br>6,3 bar inlet pressure<br>and 0.5 bar pressure<br>drop: | 105 dm <sup>3</sup> /s  |                     |
| Manual drain:  | twist grip open and barbed<br>connection                              |                     |
| Semi-auto drain:<br>bowl pressure to close drain   | 0,2 bar @ min flow of 0,4 dm <sup>3</sup> /s<br>and barbed connection |                     |
| Auto drain:  |   |                     |
| bowl pressure to close drain   | 1 bar   |                     |
| Operating range  | 1 to 14 bar   |                     |
| manual override facility (depress pin)   | barbed connection.  |                     |
| Bowl sump capacity:  | 100 cm <sup>3</sup>   |                     |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

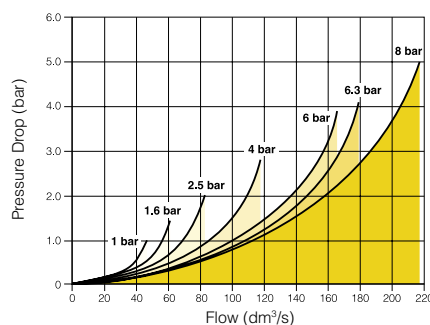
| Description                       | Order code        |
|-----------------------------------|-------------------|
| 5 micron element kit              | <b>P3MKA00ESE</b> |
| 40 micron element kit             | <b>P3MKA00ESG</b> |
| Sight glass & manual drain kit    | <b>P3MKA00BSM</b> |
| Sight glass & semi-auto drain kit | <b>P3MKA00BSS</b> |
| Sight glass & auto drain kit      | <b>P3MKA00BSA</b> |

## Material Specification

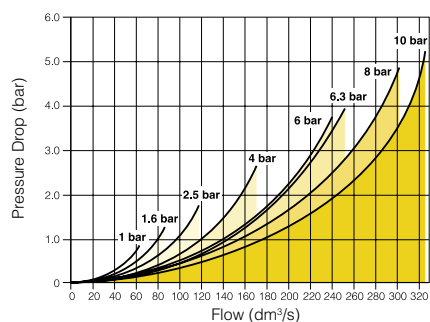
|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyester              |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Nylon                  |
| Drain:           | Acetal                 |

## Flow characteristics

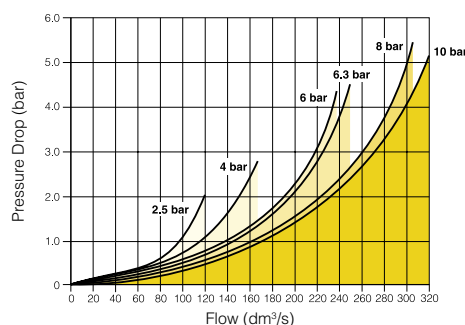
### (1/2) 5 Micron Filter



### (3/4) 5 Micron Filter



### (1") 5 Micron Filter



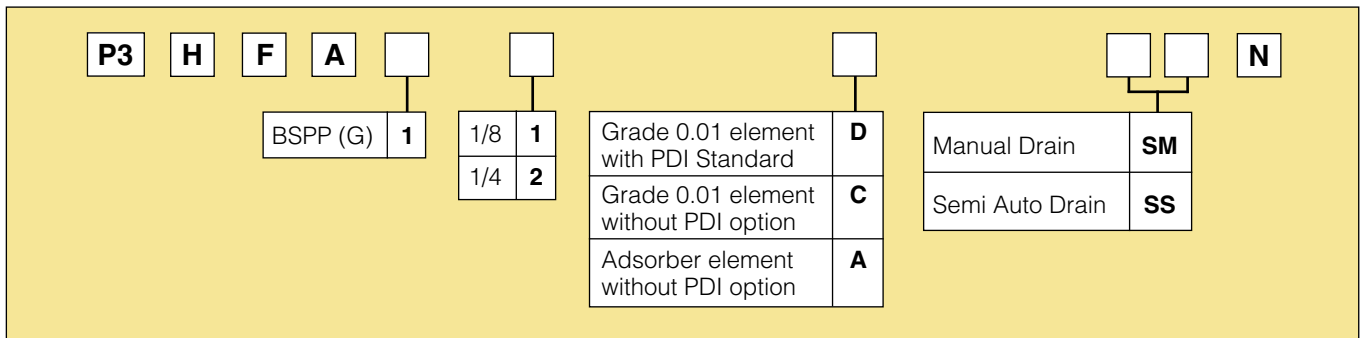
## Coalescing Filters and Adsorbers



- Integral 1/8 or 1/4 ports (BSPP, BSPT & NPT)
- 0.01µm element as standard (coalescer)
- Differential Pressure Indicator (DPI) as standard on Coalescing Filters
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

**Note:** To optimise the life of coalescing element, it is advisable to install a P3HFA pre-filter with a 5 micron element upstream of the coalescing filter.

### Options:



| Port size | Description                        | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|------------------------------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| G1/8      | Coalescing Filter, Manual drain    | <b>P3HFA11DSMN</b> | 3.5                       | 17      | -20         | +80         | 10                        | 157       | 40       | 40       | 274      |
| G1/8      | Coalescing Filter, Semi auto drain | <b>P3HFA11DSSN</b> | 3.5                       | 17      | -20         | +80         | 10                        | 157       | 40       | 40       | 274      |
| G1/4      | Coalescing Filter, Manual drain    | <b>P3HFA12DSMN</b> | 4                         | 17      | -20         | +80         | 10                        | 157       | 40       | 40       | 274      |
| G1/4      | Coalescing Filter, Semi auto drain | <b>P3HFA12DSSN</b> | 4                         | 17      | -20         | +80         | 10                        | 157       | 40       | 40       | 274      |
| G1/8      | Adsorber Filter, Manual drain      | <b>P3HFA11ASMN</b> | 6                         | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 269      |
| G1/4      | Adsorber Filter, Manual drain      | <b>P3HFA12ASMN</b> | 8                         | 17      | -20         | +80         | 10                        | 145       | 40       | 40       | 269      |

\* flow with 6,3 bar inlet pressure and 0,2 pressure drop.

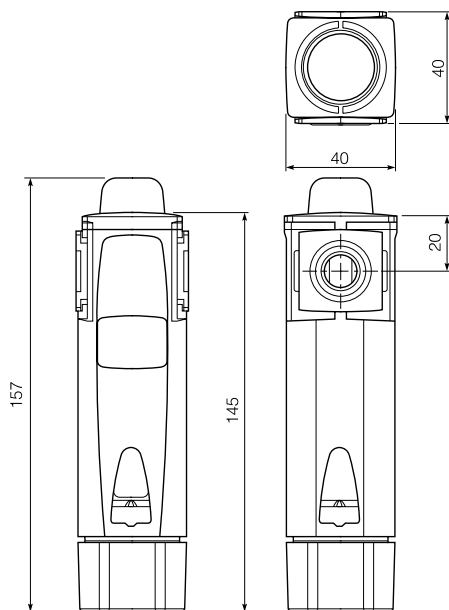
# Moduflex modular air preparation system P3H Series

## Technical Information

|  |  |                      |
|--|--|----------------------|
| Fluid:   | Compressed air   |                      |
| Maximum inlet pressure*:   | 17 bar Manual or Semi auto   |                      |
| Temperature range*:  | Coalescing filter : -20°C to +66°C<br>Adsorber filter : -20°C to +50°C |                      |
| Media specifications:  |  |                      |
| Coalescing efficiency  | (0.3 to 0.6 micron particles): 99.97%                                  |                      |
| Max. oil carryover (PPM w/w):  | 0.008  |                      |
| Typical flow with 0.01 micron element at 6,3 bar inlet pressure and 0.2 bar pressure drop: | Coalescer  | 4 dm <sup>3</sup> /s |
|  | Adsorber   | 8 dm <sup>3</sup> /s |
| Manual drain:  | twist grip open and barbed connection                                  |                      |
| Semi-auto drain:   | 0,2 bar barbed connection  |                      |
| bowl pressure to close drain   |  |                      |
| Bowl sump capacity:  | 10 cm <sup>3</sup>   |                      |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

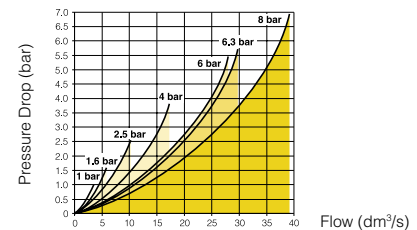
| Description                         | Order code        |
|-------------------------------------|-------------------|
| 0.01 micron coalescing element kit  | <b>P3HKA00ESC</b> |
| Adsorber element kit                | <b>P3HKA00ESA</b> |
| Sight glass & manual drain kit      | <b>P3HKA00BSM</b> |
| Sight glass & semi-auto drain kit   | <b>P3HKA00BSS</b> |
| Differential pressure indicator kit | <b>P3HKA00RQ</b>  |

## Material Specification

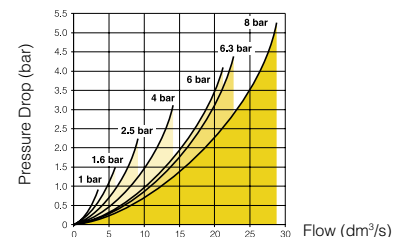
|  |                                  |
|--|----------------------------------|
| Body:                                      | Aluminium                        |
| Sight glass:                               | Technopolymer                    |
| Filter cover:                              | Polyester                        |
| Coalescing element:                        | Borosilicate & felt glass fibres |
| Adsorber element:                          | Activated charcoal               |
| Elastomers:                                | Nitrile NBR                      |
| Bayonet support:                           | Nylon                            |
| Drain:                                     | Acetal                           |
| Differential pressure indicator materials: |                                  |
| Body:                                      | Technopolymer                    |
| Internal parts:                            | Acetal                           |
| Spring:                                    | Stainless steel                  |
| Elastomers:                                | Nitrile NBR                      |
| Support plate                              | Aluminium                        |
| Screws                                     | Steel / zinc plated              |

## Flow characteristics

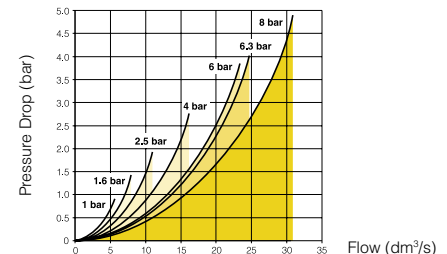
### (1/8) 0.01µm Coalescing Filter



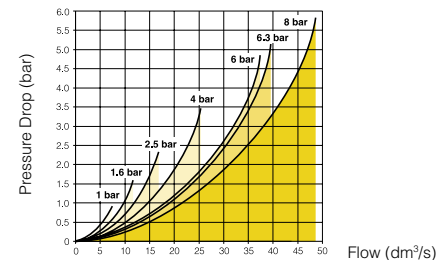
### (1/4) 0.01µm Coalescing Filter



### 1/8) 0.01µm Adsorber Filter



### (1/4) 0.01µm Adsorber Filter





## Coalescing Filters and Adsorbers



- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- 0.01µm element as standard (coalescer)
- Differential Pressure Indicator (DPI) as standard on Coalescing Filters
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

**Note:** To optimise the life of coalescing element, it is advisable to install a P3KFA pre-filter with a 5 micron element upstream of the coalescing filter.

### Options:

|           |          |          |          |                                       |          |                 |           |  |          |
|-----------|----------|----------|----------|---------------------------------------|----------|-----------------|-----------|--|----------|
| <b>P3</b> | <b>K</b> | <b>F</b> | <b>A</b> |                                       |          |                 |           |  | <b>N</b> |
| BSPP (G)  | <b>1</b> | 3/8      | <b>3</b> | Grade 0.01 element with PDI Standard  | <b>D</b> | Manual Drain    | <b>SM</b> |  |          |
| BSPT      | <b>2</b> | 1/2      | <b>4</b> | Grade 0.01 element without PDI option | <b>C</b> | Semi Auto Drain | <b>SS</b> |  |          |
| NPT       | <b>9</b> |          |          | Adsorber element without PDI option   | <b>A</b> | Auto Drain      | <b>SA</b> |  |          |

| Port size | Description                        | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|------------------------------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 3/8       | Coalescing Filter, Manual drain    | <b>P3KFA13DSMN</b> | 27                        | 17      | -20         | 80          | 48                        | 202       | 60       | 60       | 660      |
| 3/8       | Coalescing Filter, Semi auto drain | <b>P3KFA13DSSN</b> | 27                        | 17      | -20         | 80          | 48                        | 202       | 60       | 60       | 660      |
| 3/8       | Coalescing Filter, Auto drain      | <b>P3KFA13DSAN</b> | 27                        | 14      | -20         | 80          | 48                        | 202       | 60       | 60       | 680      |
| 1/2       | Coalescing Filter, Manual drain    | <b>P3KFA14DSMN</b> | 35                        | 17      | -20         | 80          | 48                        | 202       | 60       | 60       | 650      |
| 1/2       | Coalescing Filter, Semi auto drain | <b>P3KFA14DSSN</b> | 35                        | 17      | -20         | 80          | 48                        | 202       | 60       | 60       | 650      |
| 1/2       | Coalescing Filter, Auto drain      | <b>P3KFA14DSAN</b> | 35                        | 14      | -20         | 80          | 48                        | 202       | 60       | 60       | 670      |
| 3/8       | Adsorber Filter, Manual drain      | <b>P3KFA13ASMN</b> | 32                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 670      |
| 1/2       | Adsorber Filter, Manual drain      | <b>P3KFA14ASMN</b> | 41                        | 17      | -20         | 80          | 48                        | 194       | 60       | 60       | 660      |

\* flow with 6,3 bar inlet pressure and 0,2 pressure drop.

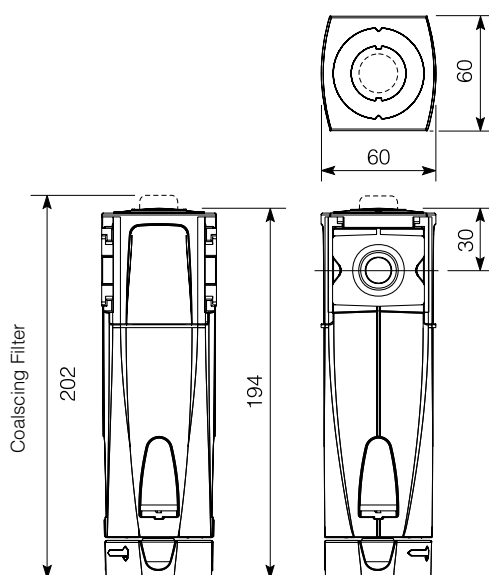
# Moduflex modular air preparation system P3K Series

## Technical Information

|  |  |                       |
|--|--|-----------------------|
| Fluid:   | Compressed air   |                       |
| Maximum inlet pressure*:   | 17 bar   | Manual or Semi auto   |
| for automatic float drain option   | 14 bar*  | Auto drain            |
| Temperature range*:  | -20°C to +80°C   |                       |
| Media specifications:  |  |                       |
| Coalescing efficiency  | (0.3 to 0.6 micron particles): 99.97%                  |                       |
| Max. oil carryover (PPM w/w):  | 0.008  |                       |
| Typical flow with 0.01 micron element at 6,3 bar inlet pressure and 0.2 bar pressure drop: | Coalescer  | 35 dm <sup>3</sup> /s |
|  | Adsorber   | 32 dm <sup>3</sup> /s |
| Manual drain:  | twist grip open and barbed connection                  |                       |
| Semi-auto drain:   | 0,2 bar barbed connection bowl pressure to close drain |                       |
| Auto drain:  |  |                       |
| bowl pressure to close drain   | 1 bar  |                       |
| Operating range  | 1 to 14 bar  |                       |
| manual override facility (depress pin)   | barbed connection.                                     |                       |
| Bowl sump capacity:  | 48 cm <sup>3</sup>                                     |                       |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

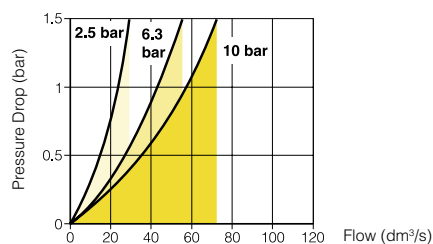
| Description                         | Order code        |
|-------------------------------------|-------------------|
| 0.01 micron coalescing element kit  | <b>P3KKA00ESC</b> |
| Adsorber element kit                | <b>P3KKA00ESA</b> |
| Sight glass & manual drain kit      | <b>P3KKA00BSM</b> |
| Sight glass & semi-auto drain kit   | <b>P3KKA00BSS</b> |
| Sight glass & auto drain kit        | <b>P3KKA00BSA</b> |
| Differential pressure indicator kit | <b>P3KKA00RQ</b>  |

## Material Specification

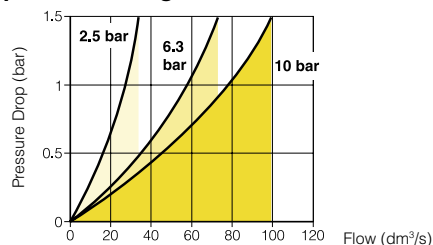
|  |                                  |
|--|----------------------------------|
| Body:                                      | Aluminium                        |
| Sight glass:                               | Technopolymer                    |
| Filter cover:                              | Polyester                        |
| Coalescing element:                        | Borosilicate & felt glass fibres |
| Adsorber element:                          | Activated charcoal               |
| Elastomers:                                | Nitrile NBR                      |
| Bayonet support:                           | Acetal                           |
| Drain:                                     | Acetal                           |
| Differential pressure indicator materials: |                                  |
| Body:                                      | Technopolymer                    |
| Internal parts:                            | Acetal                           |
| Spring:                                    | Stainless steel                  |
| Elastomers:                                | Nitrile NBR                      |
| Support plate                              | Aluminium                        |
| Screws                                     | Steel / zinc plated              |

## Flow characteristics

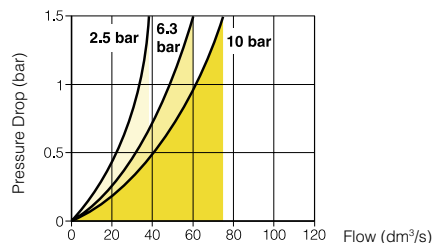
### (3/8) 0.01µm Coalescing Filter



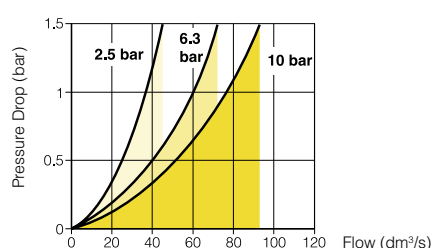
### (1/2) 0.01µm Coalescing Filter



### (3/8) 0.01µm Adsorber Filter



### (1/2) 0.01µm Adsorber Filter



## Coalescing Filters and Adsorbers



- Integral 1/2, 3/4 or 1" ports (BSPP, BSPT & NPT)
- 0.01µm element as standard (coalescer)
- Differential Pressure Indicator (DPI) as standard on Coalescing Filters
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

**Note:** To optimise the life of coalescing element, it is advisable to install a P3MFA pre-filter with a 5 micron element upstream of the coalescing filter.

### Options:

|           |          |          |          |                                       |          |                 |           |  |          |
|-----------|----------|----------|----------|---------------------------------------|----------|-----------------|-----------|--|----------|
| <b>P3</b> | <b>M</b> | <b>F</b> | <b>A</b> |                                       |          |                 |           |  | <b>N</b> |
| BSPP (G)  | <b>1</b> | 1/2      | <b>4</b> | Grade 0.01 element with PDI Standard  | <b>D</b> | Manual Drain    | <b>SM</b> |  |          |
| BSPT      | <b>2</b> | 3/4      | <b>6</b> | Grade 0.01 element without PDI option | <b>C</b> | Semi Auto Drain | <b>SS</b> |  |          |
| NPT       | <b>9</b> | 1"       | <b>8</b> | Adsorber element without PDI option   | <b>A</b> | Auto Drain      | <b>SA</b> |  |          |

| Port size | Description                        | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|------------------------------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 1/2       | Coalescing Filter, Manual drain    | <b>P3MFA14DSMN</b> | 44                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1440     |
| 1/2       | Coalescing Filter, Semi auto drain | <b>P3MFA14DSSN</b> | 44                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1430     |
| 1/2       | Coalescing Filter, Auto drain      | <b>P3MFA14DSAN</b> | 44                        | 14      | -20         | 80          | 100                       | 265       | 80       | 80       | 1460     |
| 3/4       | Coalescing Filter, Manual drain    | <b>P3MFA16DSMN</b> | 57                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1420     |
| 3/4       | Coalescing Filter, Semi auto drain | <b>P3MFA16DSSN</b> | 57                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1410     |
| 3/4       | Coalescing Filter, Auto drain      | <b>P3MFA16DSAN</b> | 57                        | 14      | -20         | 80          | 100                       | 265       | 80       | 80       | 1440     |
| 1"        | Coalescing Filter, Manual drain    | <b>P3MFA18DSMN</b> | 58                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1400     |
| 1"        | Coalescing Filter, Semi auto drain | <b>P3MFA18DSSN</b> | 58                        | 17      | -20         | 80          | 100                       | 265       | 80       | 80       | 1400     |
| 1"        | Coalescing Filter, Auto drain      | <b>P3MFA18DSAN</b> | 58                        | 14      | -20         | 80          | 100                       | 265       | 80       | 80       | 1420     |
| 1/2       | Adsorber Filter, Manual drain      | <b>P3MFA14ASMN</b> | 37                        | 17      | -20         | 50          | 100                       | 255       | 80       | 80       | 1374     |
| 3/4       | Adsorber Filter, Manual drain      | <b>P3MFA16ASMN</b> | 41                        | 17      | -20         | 50          | 100                       | 255       | 80       | 80       | 1350     |
| 1"        | Adsorber Filter, Manual drain      | <b>P3MFA18ASMN</b> | 42                        | 17      | -20         | 50          | 100                       | 255       | 80       | 80       | 1312     |

\* flow with 6,3 bar inlet pressure and 0,2 pressure drop.

## Technical Information

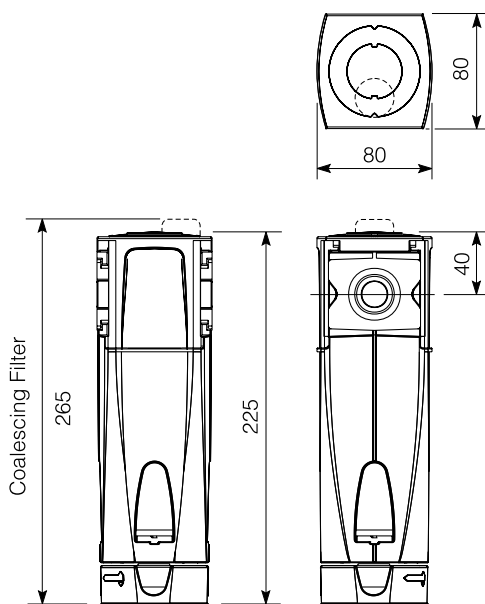
|  |                                       |                       |
|--|---------------------------------------|-----------------------|
| Fluid:   | Compressed air                        |                       |
| Maximum inlet pressure*:   | 17 bar                                | Manual or Semi auto   |
| for automatic float drain option   | 14 bar*                               | Auto drain            |
| Temperature range*:  |                                       |                       |
| Coalescing filter :  | -20°C to +80°C                        |                       |
| Adsorber filter :  | -20°C to +50°C                        |                       |
| Media specifications:  |                                       |                       |
| Coalescing efficiency  | (0.3 to 0.6 micron particles): 99.97% |                       |
| Max. oil carryover (PPM w/w):  | 0.008                                 |                       |
| Typical flow with 0.01 micron element at 6,3 bar inlet pressure and 0.2 bar pressure drop: | Coalescer                             | 44 dm <sup>3</sup> /s |
|  | Adsorber                              | 41 dm <sup>3</sup> /s |
| Manual drain:  | twist grip open and barbed connection |                       |
| Semi-auto drain:   |                                       |                       |
| bowl pressure to close drain   | 0,2 bar barbed connection             |                       |
| Auto drain:  |                                       |                       |
| bowl pressure to close drain   | 1 bar                                 |                       |
| Operating range  | 1 to 14 bar                           |                       |
| manual override facility (depress pin) barbed connection.                                  |                                       |                       |
| Bowl sump capacity:  | 100 cm <sup>3</sup>                   |                       |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

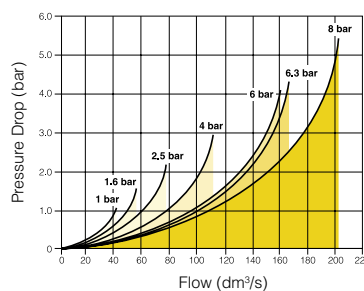
|  |                                  |
|--|----------------------------------|
| Body:                                      | Aluminium                        |
| Sight glass:                               | Technopolymer                    |
| Filter cover:                              | Polyester                        |
| Coalescing element:                        | Borosilicate & felt glass fibres |
| Adsorber element:                          | Activated charcoal               |
| Elastomers:                                | Nitrile NBR                      |
| Bayonet support:                           | Nylon                            |
| Drain:                                     | Acetal                           |
| Differential pressure indicator materials: |                                  |
| Body:                                      | Technopolymer                    |
| Internal parts:                            | Acetal                           |
| Spring:                                    | Stainless steel                  |
| Elastomers:                                | Nitrile NBR                      |
| Support plate                              | Aluminium                        |
| Screws                                     | Steel / zinc plated              |

## Dimensions (mm)

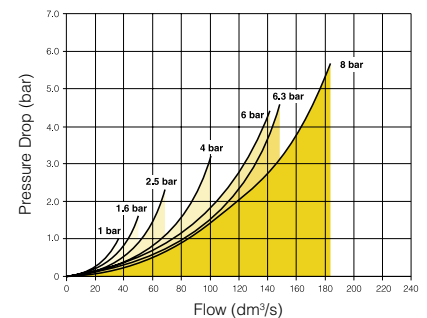


## Flow characteristics

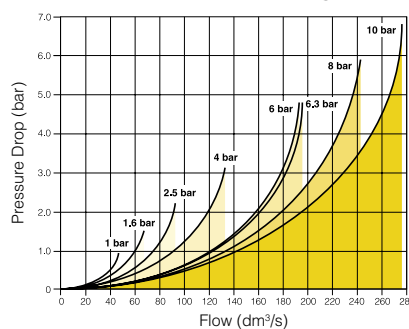
(1/2) 0.01µm Coalescing Filter



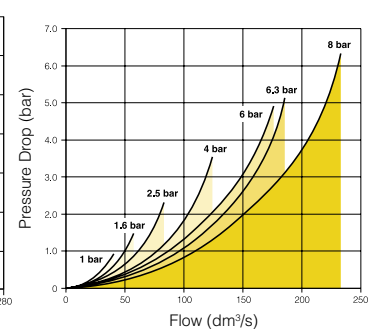
(1/2) 0.01µm Adsorber Filter



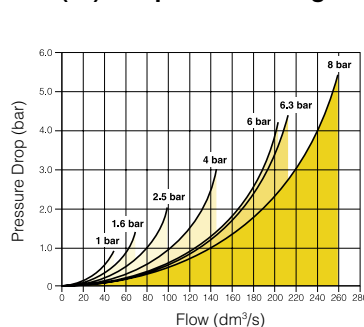
(3/4) 0.01µm Coalescing Filter



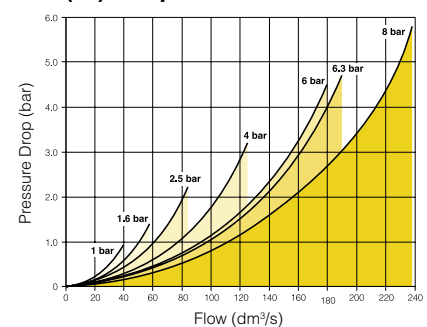
(3/4) 0.01µm Adsorber Filter



(1'') 0.01µm Coalescing Filter



(1'') 0.01µm Adsorber Filter



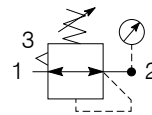
## Service kits

| Description                         | Order code        |
|-------------------------------------|-------------------|
| 0.01 micron coalescing element kit  | <b>P3MKA00ESC</b> |
| Adsorber element kit                | <b>P3MKA00ESA</b> |
| Sight glass & manual drain kit      | <b>P3MKA00BSM</b> |
| Sight glass & semi-auto drain kit   | <b>P3MKA00BSS</b> |
| Sight glass & auto drain kit        | <b>P3MKA00BSA</b> |
| Differential pressure indicator kit | <b>P3MKA00RQ</b>  |

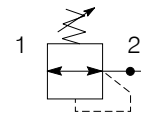
## Regulator



## Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 1/8 or 1/4 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm
- Balanced valve design
- Padlockable tamperproof kit
- Pressure limiter kit
- Relieving & Non-relieving types

## Options:

|           |          |          |          |          |   |     |          |               |          |                     |          |
|-----------|----------|----------|----------|----------|---|-----|----------|---------------|----------|---------------------|----------|
| <b>P3</b> | <b>H</b> | <b>R</b> | <b>A</b> |          |   |     | <b>N</b> |               | <b>P</b> |                     |          |
|           |          |          |          | BSPP (G) | 1 | 1/8 | 1        | Relieving     | <b>B</b> | 0 - 2 bar No Gauge  | <b>Y</b> |
|           |          |          |          |          |   | 1/4 | 2        | Non-relieving | <b>N</b> | 0 - 4 bar No Gauge  | <b>L</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 8 bar No Gauge  | <b>N</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 16 bar No Gauge | <b>H</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 2 bar Gauge     | <b>Z</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 4 bar Gauge     | <b>M</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 8 bar Gauge     | <b>G</b> |
|           |          |          |          |          |   |     |          |               |          | 0 - 16 bar Gauge    | <b>J</b> |

| Port size | Description                      | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Height mm | Width mm | Depth mm | Weight g |
|-----------|----------------------------------|--------------------|---------------------------|---------|-------------|-------------|-----------|----------|----------|----------|
| G1/8      | 8 bar relieving                  | <b>P3HRA11BNNP</b> | 13                        | 17      | -20         | +80         | 112       | 40       | 40       | 196      |
| G1/8      | 8 bar relieving + pressure gauge | <b>P3HRA11BNGP</b> | 13                        | 17      | -20         | +80         | 112       | 40       | 78       | 200      |
| G1/4      | 8 bar relieving                  | <b>P3HRA12BNNP</b> | 26                        | 17      | -20         | +80         | 112       | 40       | 40       | 196      |
| G1/4      | 8 bar relieving + pressure gauge | <b>P3HRA12BNGP</b> | 26                        | 17      | -20         | +80         | 112       | 40       | 78       | 200      |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

**For Gauges: See page 54**



# Moduflex modular air preparation system P3H Series

## Technical Information

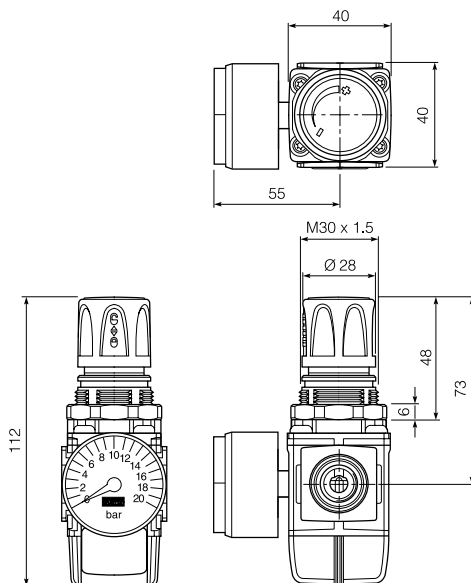
|  |                       |
|--|-----------------------|
| Fluid:   | Compressed air        |
| Maximum inlet pressure*:   | 17 bar                |
| Temperature range*:  | -20°C to +80°C        |
| Typical flow with 10 bar inlet pressure, 6.3 bar set pressure and 1 bar pressure drop: | 26 dm <sup>3</sup> /s |
| Gauge ports:   | 1/8"                  |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Bonnet:          | Glass filled polyamide |
| Regulator cover: | Polyester              |
| Control Knob:    | Polyamide              |
| Valve:           | Composite              |
| Elastomers:      | Nitrile NBR            |
| Screws:          | Steel / zinc plated    |

## Dimensions (mm)

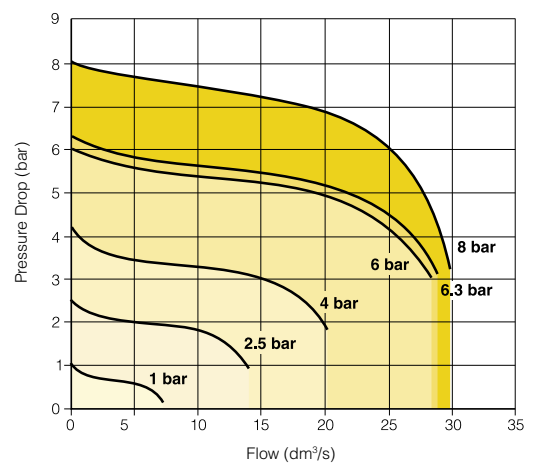


## Service kits

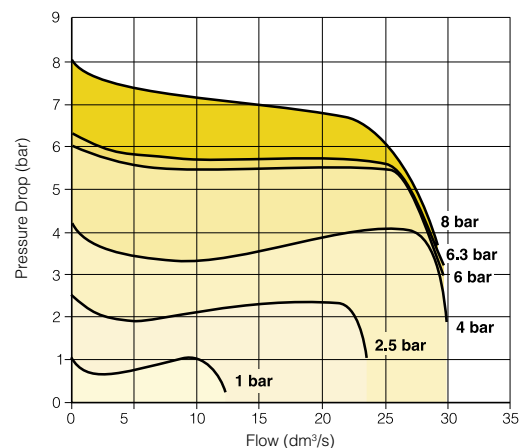
| Description                        | Order code       |
|------------------------------------|------------------|
| Angle bracket + metal lock ring    | <b>P3HKA00MS</b> |
| Angle bracket + plastic lock ring  | <b>P3HKA00MR</b> |
| Panel Mounting nut (aluminium)     | <b>P3HKA00MM</b> |
| Plastic lock ring                  | <b>P3HKA00MP</b> |
| Diaphragm kit (relieving type)     | <b>P3HKA00RR</b> |
| Diaphragm kit (non-relieving type) | <b>P3HKA00RN</b> |
| Lockable tamperproof kit           | <b>P3HKA00AL</b> |
| Tamperproof knob kit               | <b>P3HKA00AT</b> |

## Flow characteristics

### Regulation characteristics: (1/8)



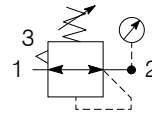
### Regulation characteristics: (1/4)



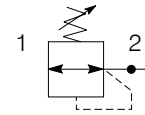
## Regulator



## Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm
- Balanced valve design
- Padlockable tamperproof kit
- Pressure limiter kit
- Relieving & Non-relieving types

## Options:

|           |          |          |          |               |          |            |          |          |          |
|-----------|----------|----------|----------|---------------|----------|------------|----------|----------|----------|
| <b>P3</b> | <b>K</b> | <b>R</b> | <b>A</b> |               |          |            | <b>N</b> |          | <b>P</b> |
| BSPP (G)  | <b>1</b> | 3/8      | <b>3</b> | Relieving     | <b>B</b> | 0 - 2 bar  | No Gauge | <b>Y</b> |          |
| BSPT      | <b>2</b> | 1/2      | <b>4</b> | Non-relieving | <b>N</b> | 0 - 4 bar  | No Gauge | <b>L</b> |          |
| NPT       | <b>9</b> |          |          |               |          | 0 - 8 bar  | No Gauge | <b>N</b> |          |
|           |          |          |          |               |          | 0 - 16 bar | No Gauge | <b>H</b> |          |
|           |          |          |          |               |          | 0 - 2 bar  | Gauge    | <b>Z</b> |          |
|           |          |          |          |               |          | 0 - 4 bar  | Gauge    | <b>M</b> |          |
|           |          |          |          |               |          | 0 - 8 bar  | Gauge    | <b>G</b> |          |
|           |          |          |          |               |          | 0 - 16 bar | Gauge    | <b>J</b> |          |

| Port size | Description                      | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Height mm | Width mm | Depth mm | Weight g |
|-----------|----------------------------------|--------------------|---------------------------|---------|-------------|-------------|-----------|----------|----------|----------|
| 3/8       | 8 bar relieving                  | <b>P3KRA13BNNP</b> | 63                        | 17      | -20         | 80          | 144       | 60       | 60       | 465      |
| 3/8       | 8 bar relieving + pressure gauge | <b>P3KRA13BNGP</b> | 63                        | 17      | -20         | 80          | 144       | 60       | 97       | 540      |
| 1/2       | 8 bar relieving                  | <b>P3KRA14BNNP</b> | 73                        | 17      | -20         | 80          | 144       | 60       | 60       | 455      |
| 1/2       | 8 bar relieving + pressure gauge | <b>P3KRA14BNGP</b> | 73                        | 17      | -20         | 80          | 144       | 60       | 97       | 455      |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

**For Gauges: See page 54**

# Moduflex modular air preparation system P3K Series

## Technical Information

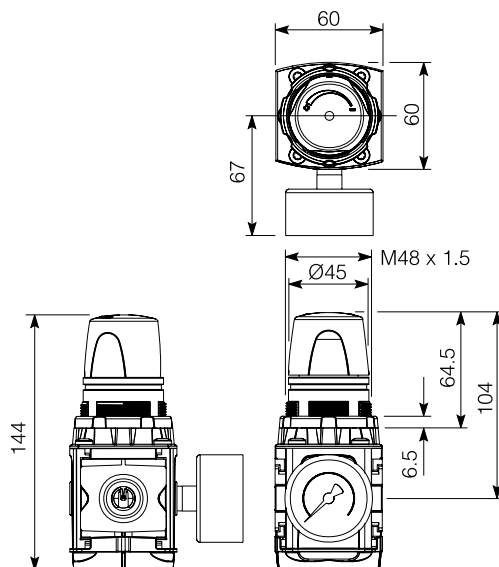
|  |                       |
|--|-----------------------|
| Fluid:   | Compressed air        |
| Maximum inlet pressure*:   | 17 bar                |
| Temperature range*:  | -20°C to +80°C        |
| Typical flow with 10 bar inlet pressure, 6.3 bar set pressure and 1 bar pressure drop: | 73 dm <sup>3</sup> /s |
| Gauge ports:   | 1/4"                  |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Bonnet:          | Glass filled polyamide |
| Regulator cover: | Polyester              |
| Control Knob:    | Polyamide              |
| Valve:           | Composite              |
| Elastomers:      | Nitrile NBR            |
| Screws:          | Steel / zinc plated    |

## Dimensions (mm)



## Service kits

| Description                        | Order code |
|------------------------------------|------------|
| Angle bracket + metal lock ring    | P3KKA00MS  |
| Angle bracket + plastic lock ring  | P3KKA00MR  |
| Panel Mounting nut (aluminium)     | P3KKA00MM  |
| Plastic lock ring                  | P3KKA00MP  |
| Lockable tamper-proof kit          | P3KKA00AL  |
| Tamper-proof knob kit              | P3KKA00AT  |
| Maximum pressure limiter kit       | P3KKA00AM  |
| Diaphragm kit (relieving type)     | P3KKA00RR  |
| Diaphragm kit (non-relieving type) | P3KKA00RN  |

## Lockable Tamperproof Kit

This facilitates the tamperproofing of the Reglator and Filter-Regulator units. The hinged black part clamps over the control knob and is locked in place by sliding over the yellow cover. Four pad lock location holes are provided for added security if required.



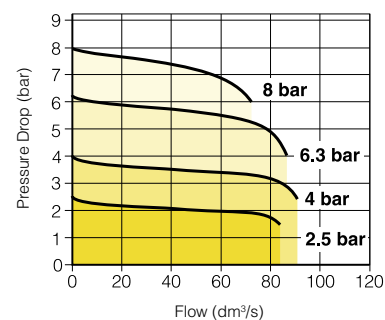
## Order code

**P3KKA00AL**

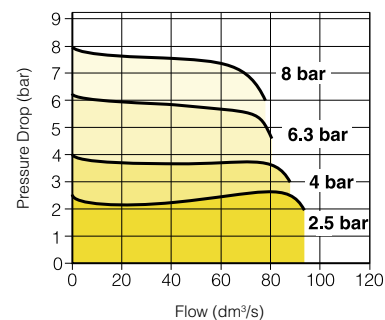
**Note:** Pad lock not included

## Flow characteristics

### Regulation characteristics: (3/8)



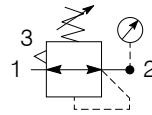
### Regulation characteristics: (1/2)



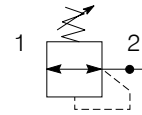
## Regulator



## Symbols



Self relieving regulator with gauge



Non relieving regulator with gauge

- Integral 1/2, 3/4 or 1" ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm
- Balanced valve design
- Padlockable tamperproof kit
- Pressure limiter kit
- Relieving & Non-relieving types

## Options:

|           |          |          |          |          |          |     |          |               |          |                     |          |
|-----------|----------|----------|----------|----------|----------|-----|----------|---------------|----------|---------------------|----------|
| <b>P3</b> | <b>M</b> | <b>R</b> | <b>A</b> |          |          |     | <b>N</b> |               | <b>N</b> |                     |          |
|           |          |          |          | BSPP (G) | <b>1</b> | 1/2 | <b>4</b> | Relieving     | <b>B</b> | 0 - 2 bar No Gauge  | <b>Y</b> |
|           |          |          |          | BSPT     | <b>2</b> | 3/4 | <b>6</b> | Non-relieving | <b>N</b> | 0 - 4 bar No Gauge  | <b>L</b> |
|           |          |          |          | NPT      | <b>9</b> | 1"  | <b>8</b> |               |          | 0 - 8 bar No Gauge  | <b>N</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 16 bar No Gauge | <b>H</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 2 bar Gauge     | <b>Z</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 4 bar Gauge     | <b>M</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 8 bar Gauge     | <b>G</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 16 bar Gauge    | <b>J</b> |

| Port size | Description                      | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Height mm | Width mm | Depth mm | Weight g |
|-----------|----------------------------------|--------------------|---------------------------|---------|-------------|-------------|-----------|----------|----------|----------|
| 1/2       | 8 bar relieving                  | <b>P3MRA14BNNN</b> | 100                       | 17      | -20         | 80          | 185       | 80       | 80       | 1085     |
| 1/2       | 8 bar relieving + pressure gauge | <b>P3MRA14BNGN</b> | 100                       | 17      | -20         | 80          | 185       | 80       | 115      | 1135     |
| 3/4       | 8 bar relieving                  | <b>P3MRA16BNNN</b> | 129                       | 17      | -20         | 80          | 185       | 80       | 80       | 1080     |
| 3/4       | 8 bar relieving + pressure gauge | <b>P3MRA16BNGN</b> | 129                       | 17      | -20         | 80          | 185       | 80       | 115      | 1130     |
| 1"        | 8 bar relieving                  | <b>P3MRA18BNNN</b> | 130                       | 17      | -20         | 80          | 185       | 80       | 80       | 1075     |
| 1"        | 8 bar relieving + pressure gauge | <b>P3MRA18BNGN</b> | 130                       | 17      | -20         | 80          | 185       | 80       | 115      | 1125     |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

**For Gauges: See page 54**

# Moduflex modular air preparation system P3M Series

## Technical Information

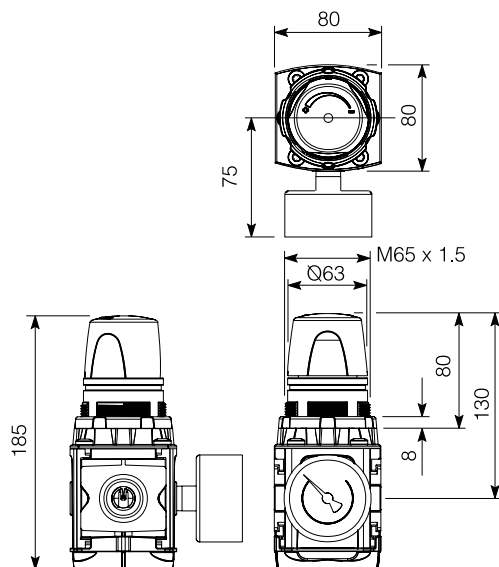
|  |                        |
|--|------------------------|
| Fluid:   | Compressed air         |
| Maximum inlet pressure*:   | 17 bar                 |
| Temperature range*:  | -20°C to +80°C         |
| Typical flow with 10 bar inlet pressure, 6.3 bar set pressure and 1 bar pressure drop: | 129 dm <sup>3</sup> /s |
| Gauge ports:   | 1/4"                   |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Bonnet:          | Glass filled polyamide |
| Regulator cover: | Polyester              |
| Control Knob:    | Polyamide              |
| Valve:           | Composite              |
| Elastomers:      | Nitrile NBR            |
| Screws:          | Steel / zinc plated    |

## Dimensions (mm)



## Service kits

| Description                        | Order code       |
|------------------------------------|------------------|
| Angle bracket + metal lock ring    | <b>P3MKA00MS</b> |
| Panel Mounting nut (aluminium)     | <b>P3MKA00MM</b> |
| Lockable tamper-proof kit          | <b>P3MKA00AL</b> |
| Tamper-proof knob kit              | <b>P3MKA00AT</b> |
| Diaphragm kit (relieving type)     | <b>P3MKA00RR</b> |
| Diaphragm kit (non-relieving type) | <b>P3MKA00RN</b> |

## Lockable Tamperproof Kit

This facilitates the tamperproofing of the Reglator and Filter-Regulator units. The hinged black part clamps over the control knob and is locked in place by sliding over the yellow cover. Four pad lock location holes are provided for added security if required.



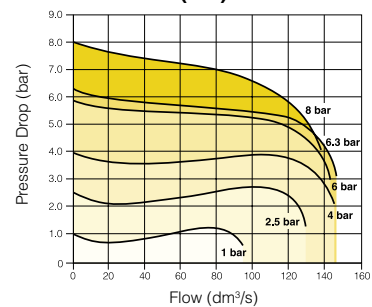
## Order code

**P3MKA00AL**

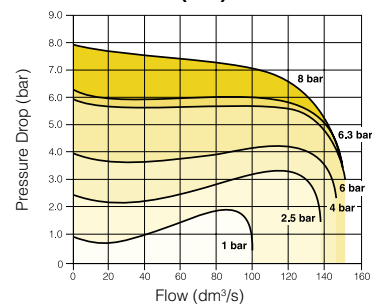
**Note:** Pad lock not included

## Flow characteristics

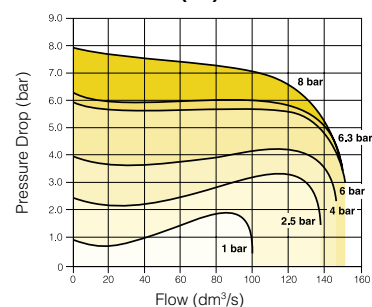
### Regulation characteristics: (1/2)



### Regulation characteristics: (3/4)



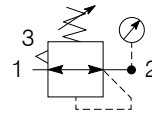
### Regulation characteristics: (1'')



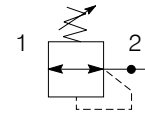
## Manifold Regulators



## Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm
- Balanced valve design
- Padlockable tamperproof kit
- Pressure limiter kit
- Relieving & Non-relieving types
- 1/2" aspirated full flow outlet port.

## Options:

|           |          |          |          |          |          |     |          |               |          |                     |          |
|-----------|----------|----------|----------|----------|----------|-----|----------|---------------|----------|---------------------|----------|
| <b>P3</b> | <b>K</b> | <b>H</b> | <b>A</b> |          |          |     | <b>N</b> |               | <b>P</b> |                     |          |
|           |          |          |          | BSPP (G) | <b>1</b> | 3/8 | <b>3</b> | Relieving     | <b>B</b> | 0 - 2 bar No Gauge  | <b>Y</b> |
|           |          |          |          | BSPT     | <b>2</b> | 1/2 | <b>4</b> | Non-relieving | <b>N</b> | 0 - 4 bar No Gauge  | <b>L</b> |
|           |          |          |          | NPT      | <b>9</b> |     |          |               |          | 0 - 8 bar No Gauge  | <b>N</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 16 bar No Gauge | <b>H</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 2 bar Gauge     | <b>Z</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 4 bar Gauge     | <b>M</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 8 bar Gauge     | <b>G</b> |
|           |          |          |          |          |          |     |          |               |          | 0 - 16 bar Gauge    | <b>J</b> |

| Port size | Description                      | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Height mm | Width mm | Depth mm | Weight g |
|-----------|----------------------------------|--------------------|---------------------------|---------|-------------|-------------|-----------|----------|----------|----------|
| 3/8       | 8 bar relieving                  | <b>P3KHA13BNNP</b> | 63                        | 17      | -20         | 80          | 144       | 60       | 60       | 490      |
| 3/8       | 8 bar relieving + pressure gauge | <b>P3KHA13BNGP</b> | 63                        | 17      | -20         | 80          | 144       | 60       | 97       | 565      |
| 1/2       | 8 bar relieving                  | <b>P3KHA14BNNP</b> | 73                        | 17      | -20         | 80          | 144       | 60       | 60       | 480      |
| 1/2       | 8 bar relieving + pressure gauge | <b>P3KHA14BNGP</b> | 73                        | 17      | -20         | 80          | 144       | 60       | 97       | 555      |

**For Gauges: See page 54**

# Moduflex modular air preparation system P3K Series

## Technical Information

|  |                       |
|--|-----------------------|
| Fluid:   | Compressed air        |
| Maximum inlet pressure*:   | 17 bar                |
| Temperature range*:  | -20°C to +80°C        |
| Typical flow with 10 bar inlet pressure, 6.3 bar set pressure and 1 bar pressure drop: | 73 dm <sup>3</sup> /s |
| Gauge (pressure) port:   | 1/4"                  |
| Outlet port:   | 1/2"                  |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

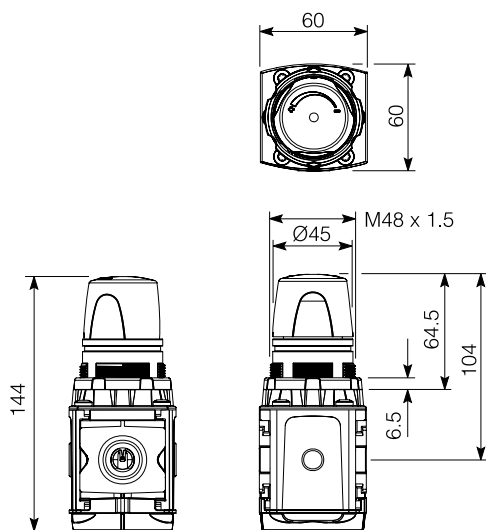
## Pressure Limiter Kit

This kit enables the user to make a field setting of the maximum outlet to avoid accidental overpressure by limiting the spring travel.

### Order code

**P3KKA00AM**

## Dimensions (mm)



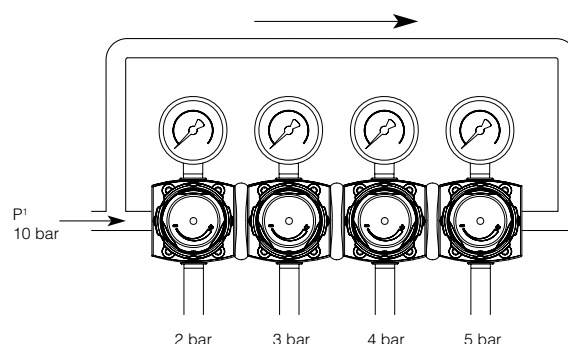
## Service kits

| Description                        | Order code       |
|------------------------------------|------------------|
| Angle bracket + metal lock ring    | <b>P3KKA00MS</b> |
| Angle bracket + plastic lock ring  | <b>P3KKA00MR</b> |
| Panel Mounting nut (aluminium)     | <b>P3KKA00MM</b> |
| Plastic lock ring                  | <b>P3KKA00MP</b> |
| Lockable tamper-proof kit          | <b>P3KKA00AL</b> |
| Tamper-proof knob kit              | <b>P3KKA00AT</b> |
| Maximum pressure limiter kit       | <b>P3KKA00AM</b> |
| Diaphragm kit (relieving type)     | <b>P3KKA00RR</b> |
| Diaphragm kit (non-relieving type) | <b>P3KKA00RN</b> |

## Material Specification

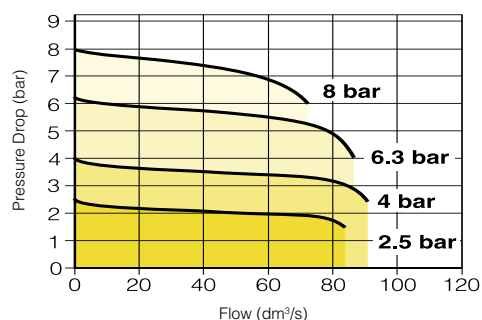
|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Bonnet:          | Glass filled polyamide |
| Regulator cover: | Polyester              |
| Control Knob:    | Polyamide              |
| Valve:           | Composite              |
| Elastomers:      | Nitrile NBR            |
| Screws:          | Steel / zinc plated    |

## Manifold Pressure Regulators

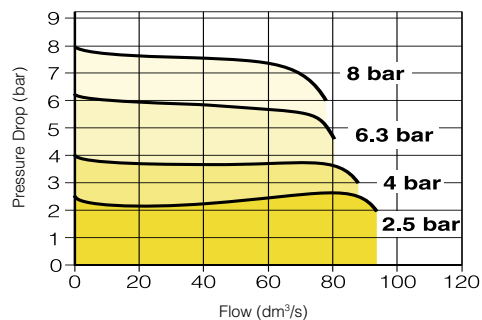


## Flow characteristics

### Regulation characteristics: (3/8)



### Regulation characteristics: (1/2)

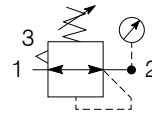




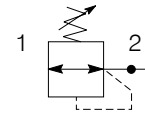
## Key Lockable Regulator



## Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm
- Balanced valve design
- Relieving & Non-relieving types

## Options:

|           |          |          |          |               |          |            |          |          |          |
|-----------|----------|----------|----------|---------------|----------|------------|----------|----------|----------|
| <b>P3</b> | <b>K</b> | <b>R</b> | <b>A</b> |               |          |            | <b>K</b> |          | <b>M</b> |
| BSPP (G)  | <b>1</b> | 3/8      | <b>3</b> | Relieving     | <b>B</b> | 0 - 2 bar  | No Gauge | <b>Y</b> |          |
| BSPT      | <b>2</b> | 1/2      | <b>4</b> | Non-relieving | <b>N</b> | 0 - 4 bar  | No Gauge | <b>L</b> |          |
| NPT       | <b>9</b> |          |          |               |          | 0 - 8 bar  | No Gauge | <b>N</b> |          |
|           |          |          |          |               |          | 0 - 16 bar | No Gauge | <b>H</b> |          |
|           |          |          |          |               |          | 0 - 2 bar  | Gauge    | <b>Z</b> |          |
|           |          |          |          |               |          | 0 - 4 bar  | Gauge    | <b>M</b> |          |
|           |          |          |          |               |          | 0 - 8 bar  | Gauge    | <b>G</b> |          |
|           |          |          |          |               |          | 0 - 16 bar | Gauge    | <b>J</b> |          |

| Port size | Description                      | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Height mm | Width mm | Depth mm | Weight g |
|-----------|----------------------------------|--------------------|---------------------------|---------|-------------|-------------|-----------|----------|----------|----------|
| 3/8       | 8 bar relieving                  | <b>P3KRA13BKNM</b> | 63                        | 17      | -20         | 80          | 186       | 60       | 60       | 810      |
| 3/8       | 8 bar relieving + pressure gauge | <b>P3KRA13BKGM</b> | 63                        | 17      | -20         | 80          | 186       | 60       | 97       | 860      |
| 1/2       | 8 bar relieving                  | <b>P3KRA14BKNM</b> | 73                        | 17      | -20         | 80          | 186       | 60       | 60       | 800      |
| 1/2       | 8 bar relieving + pressure gauge | <b>P3KRA14BKGM</b> | 73                        | 17      | -20         | 80          | 186       | 60       | 97       | 850      |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

**For Gauges: See page 54**

# Moduflex modular air preparation system P3K Series

## Technical Information

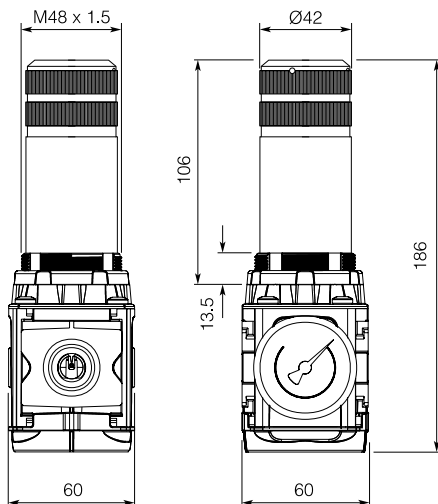
|  |                       |
|--|-----------------------|
| Fluid:   | Compressed air        |
| Maximum inlet pressure*:   | 17 bar                |
| Temperature range*:  | -20°C to +80°C        |
| Typical flow with 10 bar inlet pressure, 6.3 bar set pressure and 1 bar pressure drop: | 73 dm <sup>3</sup> /s |
| Gauge ports:   | 1/4"                  |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                     |
|------------------|---------------------|
| Body:            | Aluminium           |
| Bonnet:          | Aluminium           |
| Regulator cover: | Polyester           |
| Control Knob:    | Aluminium           |
| Valve:           | Composite           |
| Elastomers:      | Nitrile NBR         |
| Screws:          | Steel / zinc plated |

## Dimensions (mm)

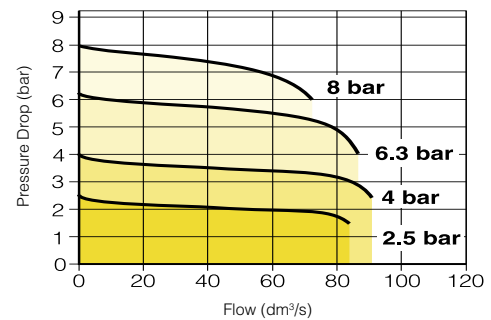


## Service kits

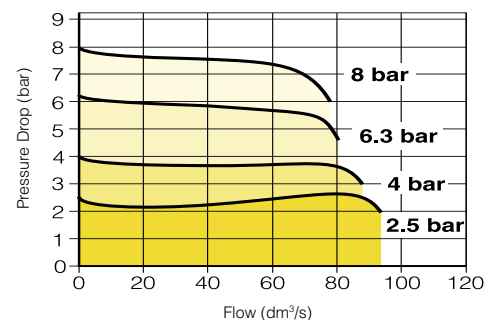
| Description                               | Order code       |
|---|------------------|
| Angle bracket + metal panel mounting ring | <b>P3KKA00MS</b> |
| Panel Mounting nut (aluminium)            | <b>P3KKA00MM</b> |
| Diaphragm kit (relieving type)            | <b>P3KKA00RR</b> |
| Diaphragm kit (non-relieving type)        | <b>P3KKA00RN</b> |

## Flow characteristics

### Regulation characteristics: (3/8)



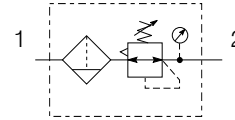
### Regulation characteristics: (1/2)



## Filter/Regulator

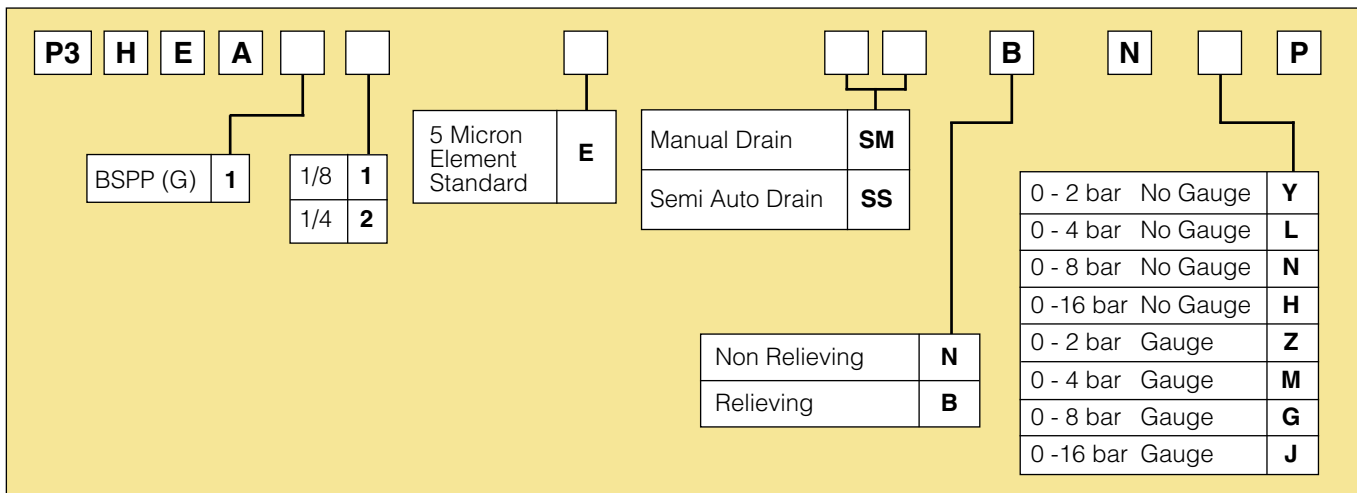


## Symbols



- Integral 1/8 or 1/4 ports (BSPP, BSPT & NPT)
- High efficiency 5 micron element as standard
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing filter element
- Secondary pressure ranges 2, 4, 8 and 16 bar
- Rolling diaphragm

## Options:



| Port size | Description                              | Order Code            | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|--|-----------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| G1/8      | 8 bar, relieving, manual drain           | <b>P3HEA11ESMBNNP</b> | 11                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 307      |
| G1/8      | 8 bar, relieving, semi-auto drain        | <b>P3HEA11ESSBNNP</b> | 11                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 307      |
| G1/8      | 8 bar, relieving, gauge, manual drain    | <b>P3HEA11ESMBNGP</b> | 11                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 307      |
| G1/8      | 8 bar, relieving, gauge, semi-auto drain | <b>P3HEA11ESSBNGP</b> | 11                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 307      |
| G1/4      | 8 bar, relieving, manual drain           | <b>P3HEA12ESMBNNP</b> | 25                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 312      |
| G1/4      | 8 bar, relieving, semi-auto drain        | <b>P3HEA12ESSBNNP</b> | 25                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 312      |
| G1/4      | 8 bar, relieving, gauge, manual drain    | <b>P3HEA12ESMBNGP</b> | 25                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 312      |
| G1/4      | 8 bar, relieving, gauge, semi-auto drain | <b>P3HEA12ESSBNGP</b> | 25                        | 17      | -20         | +80         | 10                        | 196       | 40       | 40       | 312      |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

# Moduflex modular air preparation system P3H Series

## Technical Information

|   |  |
|---|--|
| Fluid:  | Compressed air   |
| Maximum inlet pressure*:  | 17 bar Manual or Semi auto                                 |
| Temperature range*:   | -20°C to +80°C   |
| Particle removal:   | 5 micron and 40 micron                                     |
| Air quality:  | Within ISO 8573-1,<br>Class 3 and 5 (particulates)         |
| Typical flow with 10 bar inlet pressure 6,3 bar set pressure and 1 bar pressure drop 21dm <sup>3</sup> /s |  |
| Manual drain:   | twist grip open and barbed connection                      |
| Semi-auto drain:  | 0,2 bar and barbed connection bowl pressure to close drain |
| Bowl sump capacity:   | 10 cm <sup>3</sup>   |

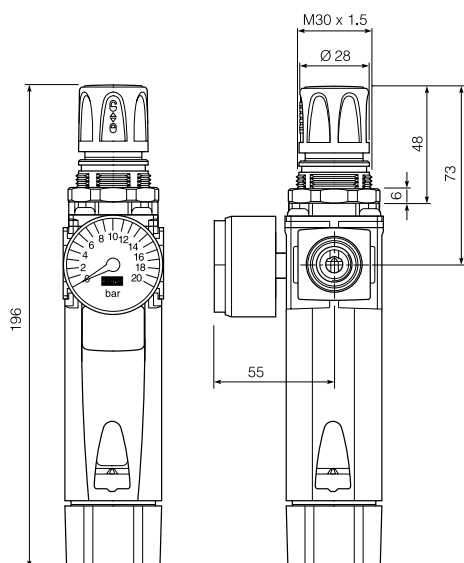
\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyesther             |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Nylon                  |
| Drain:           | Acetal                 |
| Bonnet:          | Glass filled polyamide |
| Control knob:    | Polyamide              |
| Valve:           | Composite              |
| Screws:          | Steel/ zinc plated     |

For Gauges: See page 54

## Dimensions (mm)

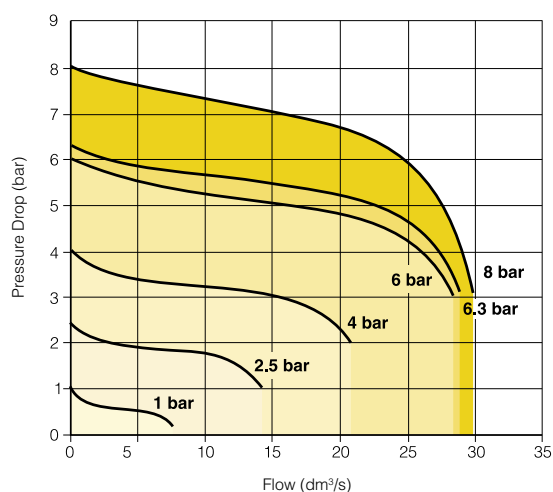


## Service kits

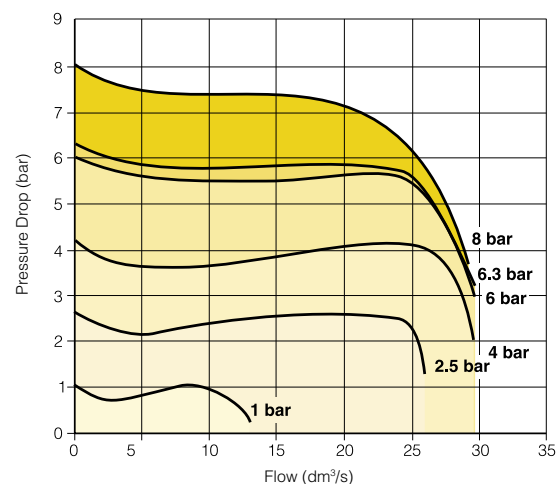
| Description                        | Order code |
|------------------------------------|------------|
| 5 micron element kit               | P3HKA00ESE |
| Sight glass & manual drain kit     | P3HKA00BSM |
| Sight glass & semi-auto drain kit  | P3HKA00BSS |
| Diaphragm kit (relieving type)     | P3HKA00RR  |
| Diaphragm kit (non-relieving type) | P3HKA00RN  |
| Angle bracket + metal lock ring    | P3HKA00MS  |
| Angle bracket + plastic lock ring  | P3HKA00MR  |
| Panel mount nut (aluminium)        | P3HKA00MM  |
| Lockable tamperproof kit           | P3HKA00AL  |
| Tamperproof knob kit               | P3HKA00AT  |

## Flow characteristics

### Regulation characteristics: (1/8) 5 micron



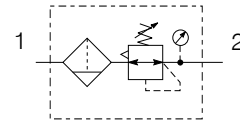
### Regulation characteristics: (1/4) 5 micron



## Filter/Regulator

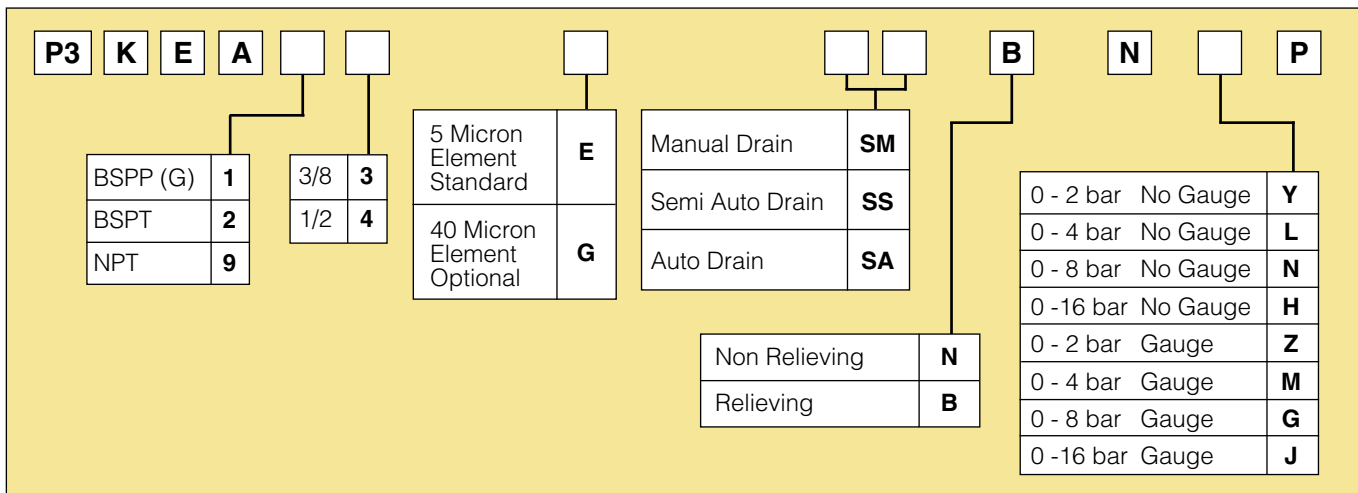


## Symbols



- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- High efficiency 5 micron element as standard (optional 40 micron)
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing filter element
- Secondary pressure ranges 2, 4, 8 and 16 bar
- Rolling diaphragm

## Options:



| Port size | Description                              | Order Code            | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|--|-----------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 3/8       | 8 bar, relieving, manual drain           | <b>P3KEA13ESMBNNP</b> | 48                        | 17      | -20         | 80          | 48                        | 267       | 60       | 60       | 845      |
| 3/8       | 8 bar, relieving, semi-auto drain        | <b>P3KEA13ESSBNNP</b> | 48                        | 17      | -20         | 80          | 48                        | 267       | 60       | 60       | 840      |
| 3/8       | 8 bar, relieving, auto drain             | <b>P3KEA13ESABNNP</b> | 48                        | 14      | -20         | 80          | 48                        | 267       | 60       | 60       | 865      |
| 3/8       | 8 bar, relieving, gauge, manual drain    | <b>P3KEA13ESMBNGP</b> | 48                        | 17      | -20         | 80          | 48                        | 267       | 60       | 97       | 920      |
| 3/8       | 8 bar, relieving, gauge, semi-auto drain | <b>P3KEA13ESSBNGP</b> | 48                        | 17      | -20         | 80          | 48                        | 267       | 60       | 97       | 925      |
| 3/8       | 8 bar, relieving, gauge, auto drain      | <b>P3KEA13ESABNGP</b> | 48                        | 14      | -20         | 80          | 48                        | 267       | 60       | 97       | 940      |
| 1/2       | 8 bar, relieving, manual drain           | <b>P3KEA14ESMBNNP</b> | 61                        | 17      | -20         | 80          | 48                        | 267       | 60       | 60       | 855      |
| 1/2       | 8 bar, relieving, semi-auto drain        | <b>P3KEA14ESSBNNP</b> | 61                        | 17      | -20         | 80          | 48                        | 267       | 60       | 60       | 860      |
| 1/2       | 8 bar, relieving, auto drain             | <b>P3KEA14ESABNNP</b> | 61                        | 14      | -20         | 80          | 48                        | 267       | 60       | 60       | 875      |
| 1/2       | 8 bar, relieving, gauge, manual drain    | <b>P3KEA14ESMBNGP</b> | 61                        | 17      | -20         | 80          | 48                        | 267       | 60       | 97       | 930      |
| 1/2       | 8 bar, relieving, gauge, semi-auto drain | <b>P3KEA14ESSBNGP</b> | 61                        | 17      | -20         | 80          | 48                        | 267       | 60       | 97       | 935      |
| 1/2       | 8 bar, relieving, gauge, auto drain      | <b>P3KEA14ESABNGP</b> | 61                        | 14      | -20         | 80          | 48                        | 267       | 60       | 97       | 950      |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.

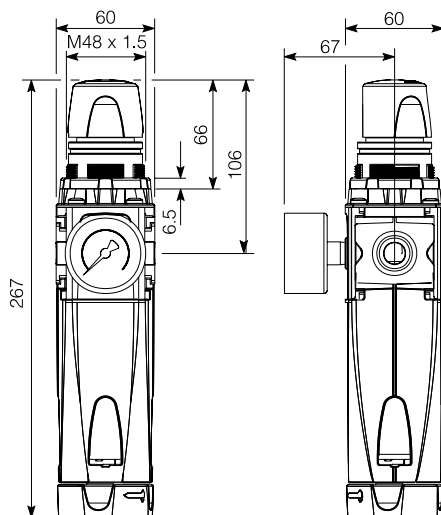
# Moduflex modular air preparation system P3K Series

## Technical Information

|  |  |
|--|--|
| Fluid:   | Compressed air                                     |
| Maximum inlet pressure*:   | 17 bar Manual or Semi auto                         |
| for automatic float drain option   | 14 bar* Auto drain                                 |
| Temperature range*:  | -20°C to +80°C                                     |
| Particle removal:  | 5 micron and 40 micron                             |
| Air quality:   | Within ISO 8573-1,<br>Class 3 and 5 (particulates) |
| Typical flow with 10 bar inlet pressure 6,3 bar set pressure and 1 bar pressure drop | 61 dm <sup>3</sup> /s                              |
| Manual drain:  | twist grip open and barbed connection              |
| Semi-auto drain:   | 0,2 bar and barbed connection                      |
| bowl pressure to close drain   |  |
| Auto drain:  |  |
| bowl pressure to close drain   | 1 bar  |
| Operating range  | 1 to 14 bar  |
| manual override facility (depress pin)   | barbed connection.                                 |
| Bowl sump capacity:  | 48 cm <sup>3</sup>                                 |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

| Description                        | Order code        |
|------------------------------------|-------------------|
| 5 micron element kit               | <b>P3KKA00ESE</b> |
| 40 micron element kit              | <b>P3KKA00ESG</b> |
| Sight glass & manual drain kit     | <b>P3KKA00BSM</b> |
| Sight glass & semi-auto drain kit  | <b>P3KKA00BSS</b> |
| Sight glass & auto drain kit       | <b>P3KKA00BSA</b> |
| Lockable tamper-proof kit          | <b>P3KKA00AL</b>  |
| Tamper-proof knob kit              | <b>P3KKA00AT</b>  |
| Maximum pressure limiter kit       | <b>P3KKA00AM</b>  |
| Diaphragm kit (relieving type)     | <b>P3KKA00RR</b>  |
| Diaphragm kit (non-relieving type) | <b>P3KKA00RN</b>  |

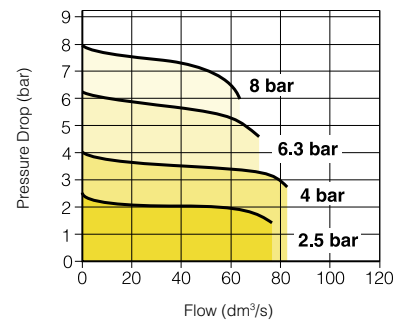
## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyesther             |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Acetal                 |
| Drain:           | Acetal                 |
| Bonnet:          | Glass filled polyamide |
| Control knob:    | Polyamide              |
| Valve:           | Composite              |
| Screws:          | Steel/ zinc plated     |

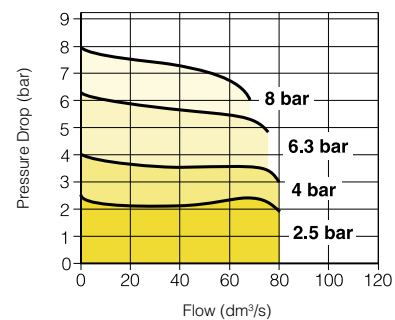
**For Gauges: See page 54**

## Flow characteristics

### (3/8) 5 Micron Filter/Regulator



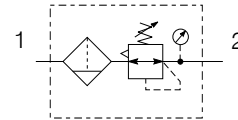
### (1/2) 5 Micron Filter/Regulator



## Filter/Regulator



## Symbols



- Integral 1/2, 3/4 or 1" ports (BSPP, BSPT & NPT)
- High efficiency 5 micron element as standard (optional 40 micron)
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing filter element
- Secondary pressure ranges 2, 4, 8 and 16 bar
- Rolling diaphragm

## Options:

|           |          |          |          |                            |          |                 |           |  |  |  |          |
|-----------|----------|----------|----------|----------------------------|----------|-----------------|-----------|--|--|--|----------|
| <b>P3</b> | <b>M</b> | <b>E</b> | <b>A</b> |                            |          |                 |           | <b>B</b>   | <b>N</b>                                     |  | <b>N</b> |
| BSPP (G)  | <b>1</b> | 1/2      | <b>4</b> | 5 Micron Element Standard  | <b>E</b> | Manual Drain    | <b>SM</b> | 0 - 2 bar No Gauge <b>Y</b><br>0 - 4 bar No Gauge <b>L</b><br>0 - 8 bar No Gauge <b>N</b><br>0 - 16 bar No Gauge <b>H</b><br>0 - 2 bar Gauge <b>Z</b><br>0 - 4 bar Gauge <b>M</b><br>0 - 8 bar Gauge <b>G</b><br>0 - 16 bar Gauge <b>J</b> | Non Relieving <b>N</b><br>Relieving <b>B</b> |  |          |
| BSPT      | <b>2</b> | 3/4      | <b>6</b> | 40 Micron Element Optional | <b>G</b> | Semi Auto Drain | <b>SS</b> |  |  |  |          |
| NPT       | <b>9</b> | 1"       | <b>8</b> |                            |          | Auto Drain      | <b>SA</b> |  |  |  |          |

| Port size | Description                              | Order Code            | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|--|-----------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 1/2       | 8 bar, relieving, manual drain           | <b>P3MEA14ESMBNNN</b> | 113                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1868     |
| 1/2       | 8 bar, relieving, semi-auto drain        | <b>P3MEA14ESSBNNN</b> | 113                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1858     |
| 1/2       | 8 bar, relieving, auto drain             | <b>P3MEA14ESABNNN</b> | 113                       | 14      | -20         | 80          | 100                       | 340       | 80       | 80       | 1888     |
| 1/2       | 8 bar, relieving, gauge, manual drain    | <b>P3MEA14ESMBNGN</b> | 113                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1918     |
| 1/2       | 8 bar, relieving, gauge, semi-auto drain | <b>P3MEA14ESSBNGN</b> | 113                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1908     |
| 1/2       | 8 bar, relieving, gauge, auto drain      | <b>P3MEA14ESABNGN</b> | 113                       | 14      | -20         | 80          | 100                       | 340       | 80       | 115      | 1938     |
| 3/4       | 8 bar, relieving, manual drain           | <b>P3MEA16ESMBNNN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1865     |
| 3/4       | 8 bar, relieving, semi-auto drain        | <b>P3MEA16ESSBNNN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1855     |
| 3/4       | 8 bar, relieving, auto drain             | <b>P3MEA16ESABNNN</b> | 120                       | 14      | -20         | 80          | 100                       | 340       | 80       | 80       | 1885     |
| 3/4       | 8 bar, relieving, gauge, manual drain    | <b>P3MEA16ESMBNGN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1915     |
| 3/4       | 8 bar, relieving, gauge, semi-auto drain | <b>P3MEA16ESSBNGN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1905     |
| 3/4       | 8 bar, relieving, gauge, auto drain      | <b>P3MEA16ESABNGN</b> | 120                       | 14      | -20         | 80          | 100                       | 340       | 80       | 115      | 1935     |
| 1"        | 8 bar, relieving, manual drain           | <b>P3MEA18ESMBNNN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1860     |
| 1"        | 8 bar, relieving, semi-auto drain        | <b>P3MEA18ESSBNNN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 80       | 1850     |
| 1"        | 8 bar, relieving, auto drain             | <b>P3MEA18ESABNNN</b> | 120                       | 14      | -20         | 80          | 100                       | 340       | 80       | 80       | 1880     |
| 1"        | 8 bar, relieving, gauge, manual drain    | <b>P3MEA18ESMBNGN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1910     |
| 1"        | 8 bar, relieving, gauge, semi-auto drain | <b>P3MEA18ESSBNGN</b> | 120                       | 17      | -20         | 80          | 100                       | 340       | 80       | 115      | 1900     |
| 1"        | 8 bar, relieving, gauge, auto drain      | <b>P3MEA18ESABNGN</b> | 120                       | 14      | -20         | 80          | 100                       | 340       | 80       | 115      | 1930     |

\*flow with 10 bar inlet pressure, 6,3 bar set pressure and 1 bar pressure drop.



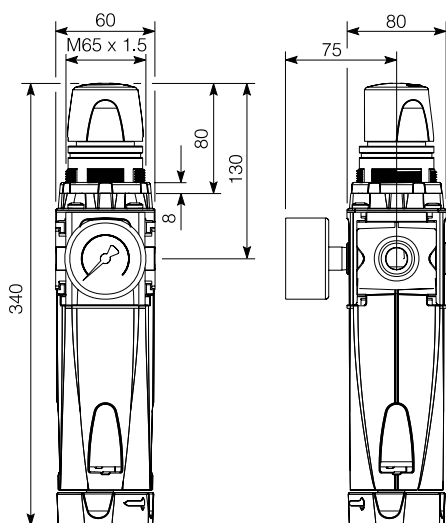
# Moduflex modular air preparation system P3M Series

## Technical Information

|  |  |
|--|--|
| Fluid:   | Compressed air                                     |
| Maximum inlet pressure*:   | 17 bar Manual or Semi auto                         |
| for automatic float drain option   | 14 bar* Auto drain                                 |
| Temperature range*:  | -20°C to +80°C                                     |
| Particle removal:  | 5 micron and 40 micron                             |
| Air quality:   | Within ISO 8573-1,<br>Class 3 and 5 (particulates) |
| Typical flow with 10 bar inlet pressure 6,3 bar set pressure and 1 bar pressure drop 120dm <sup>3</sup> /s |  |
| Manual drain:  | twist grip open and barbed connection              |
| Semi-auto drain:   | 0,2 bar and barbed connection                      |
| Auto drain:  |  |
| bowl pressure to close drain   | 1 bar  |
| Operating range  | 1 to 14 bar  |
| manual override facility (depress pin)   | barbed connection.                                 |
| Bowl sump capacity:  | 100 cm <sup>3</sup>                                |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

## Dimensions (mm)



## Service kits

| Description                        | Order code |
|------------------------------------|------------|
| 5 micron element kit               | P3MKA00ESE |
| 40 micron element kit              | P3MKA00ESG |
| Sight glass & manual drain kit     | P3MKA00BSM |
| Sight glass & semi-auto drain kit  | P3MKA00BSS |
| Sight glass & auto drain kit       | P3MKA00BSA |
| Lockable tamper-proof kit          | P3MKA00AL  |
| Tamper-proof knob kit              | P3MKA00AT  |
| Maximum pressure limiter kit       | P3MKA00AM  |
| Diaphragm kit (relieving type)     | P3MKA00RR  |
| Diaphragm kit (non-relieving type) | P3MKA00RN  |
| Angle bracket + metal lock ring    | P3MKA00MS  |
| Panel mount nut (aluminium)        | P3MKA00MM  |

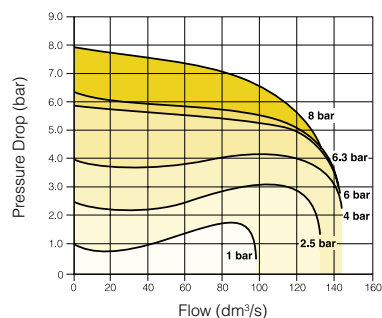
## Material Specification

|                  |                        |
|------------------|------------------------|
| Body:            | Aluminium              |
| Sight glass:     | Technopolymer          |
| Body cover:      | Polyesther             |
| Element:         | Sintered polypropylene |
| Elastomers:      | Nitrile NBR            |
| Bayonet support: | Nylon                  |
| Drain:           | Acetal                 |
| Bonnet:          | Glass filled polyamide |
| Control knob:    | Polyamide              |
| Valve:           | Composite              |
| Screws:          | Steel/ zinc plated     |

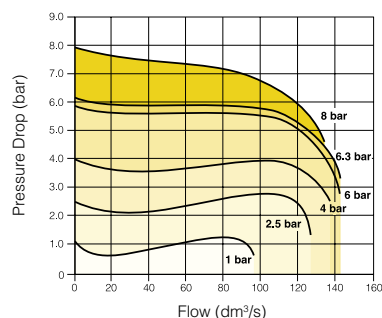
For Gauges: See page 54

## Flow characteristics

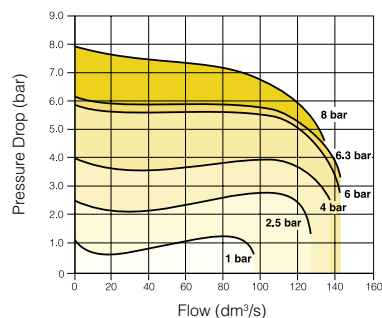
### (1/2) 5 Micron Filter/Regulator



### (3/4) 5 Micron Filter/Regulator



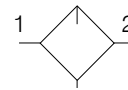
### (1") 5 Micron Filter/Regulator



## Moduflex Lubricator



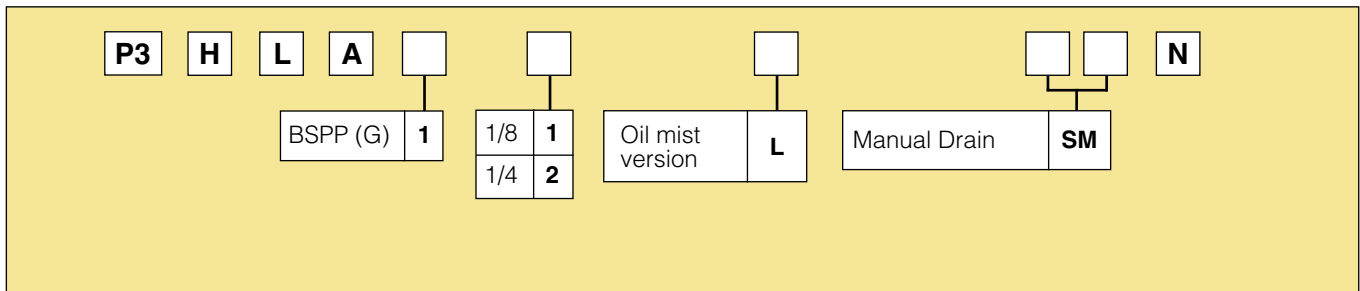
## Symbols



Lubricator with drain

- Integral 1/8 or 1/4 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Constant density lubrication
- Finger tip ratchet control for precise oil drip rate adjustment
- Fill from top
- '2 stage' bayonet to reveal large filling orifice
- No small easily lost parts
- Large oil reservoir

## Options:



| Port size | Description | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|-------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| G1/8      | Oil mist    | <b>P3HLA11LSMN</b> | 13                        | 10      | -20         | +80         | 32                        | 195       | 40       | 40       | 285      |
| G1/4      | Oil mist    | <b>P3HLA12LSMN</b> | 26                        | 10      | -20         | +80         | 32                        | 195       | 40       | 40       | 280      |

\* flow with 6,3 bar inlet pressure and 0,5 pressure drop.

# Moduflex modular air preparation system P3H Series

## Technical Information

|                          |                                       |
|--------------------------|---------------------------------------|
| Fluid:                   | Compressed air                        |
| Maximum inlet pressure*: | 10 bar                                |
| Temperature range*:      | -20°C to +80°C                        |
| Manual drain:            | twist grip open and barbed connection |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2° C  
 Low flow start point (lubrication pick-up): at 6.3bar inlet pressure 0.76 dm³/s  
 Typical flow with 6.3bar inlet pressure and 0.7 bar pressure drop: 26 dm³/s

## Recommended Lubricants

High speed tools and systems      Air Cylinders and Valves

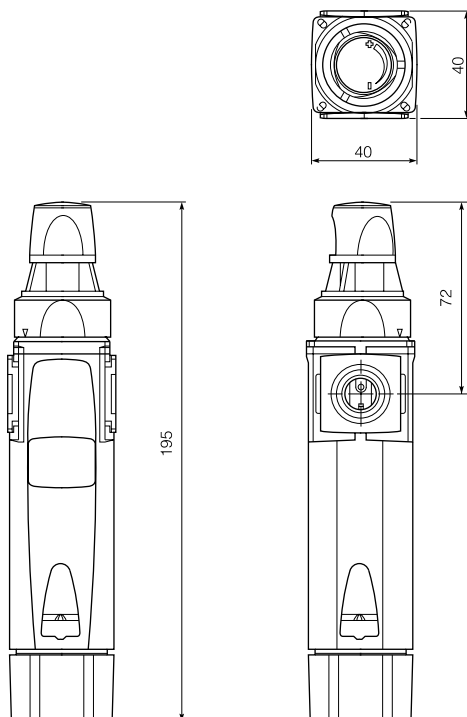
**VG15 - 22**

**VG32**

For food industry applications : approved oil USDA-H1.  
 Do not use oils with additives compounds oils containing solvents, graphite, detergents or synthetic oils.

**Note : Fill lubricant from top only**

## Dimensions (mm)



## Service kits

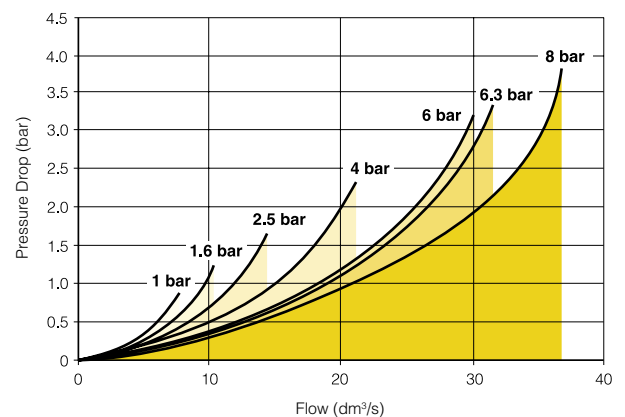
| Description                    | Order code        |
|--------------------------------|-------------------|
| Sight glass & manual drain kit | <b>P3HKA00BSM</b> |
| Drip control assembly kit      | <b>P3HKA00PG</b>  |

## Material Specification

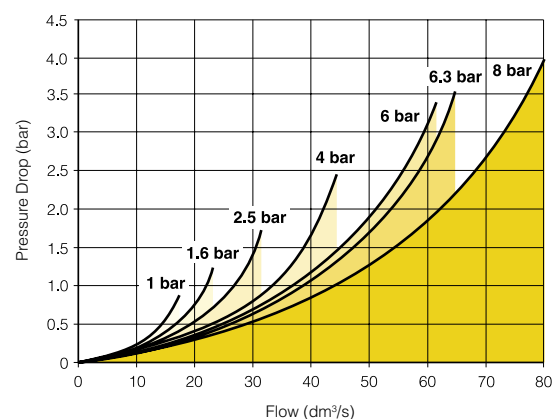
|                   |               |
|-------------------|---------------|
| Body:             | Aluminium     |
| Bowl sight glass: | Technopolymer |
| Sight dome:       | Technopolymer |
| Lubricator cover: | Polyester     |
| Bayonet support:  | Nylon         |
| Drain:            | Acetal        |
| Elastomers:       | Nitrile NBR   |

## Flow characteristics

### (1/8) Lubricator

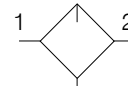


### (1/4) Lubricator



## Moduflex Lubricator

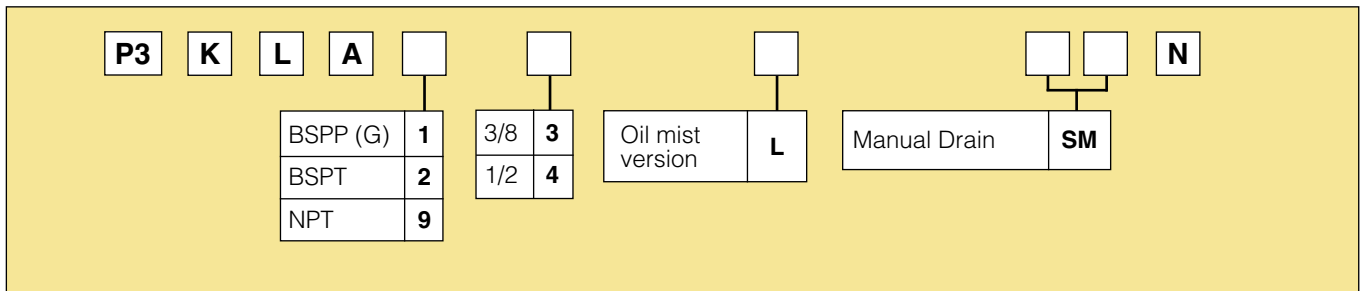
## Symbols



Lubricator with drain

- Integral 3/8 or 1/2 ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Constant density lubrication
- Finger tip ratchet control for precise oil drip rate adjustment
- Fill from top under system pressure
- '2 stage' bayonet to reveal large filling orifice
- No small easily lost parts
- Large oil reservoir

## Options:



| Port size | Description                   | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|-------------------------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 3/8       | Oil mist, fill under pressure | <b>P3KLA13LSMN</b> | 44                        | 17      | -20         | 80          | 130                       | 241       | 60       | 60       | 745      |
| 1/2       | Oil mist, fill under pressure | <b>P3KLA14LSMN</b> | 70                        | 17      | -20         | 80          | 130                       | 241       | 60       | 60       | 735      |

\* flow with 6,3 bar inlet pressure and 0,5 pressure drop.

# Moduflex modular air preparation system P3K Series

## Technical Information

|                          |                                       |
|--------------------------|---------------------------------------|
| Fluid:                   | Compressed air                        |
| Maximum inlet pressure*: | 17 bar                                |
| Temperature range*:      | -20°C to +80°C                        |
| Manual drain:            | twist grip open and barbed connection |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2° C  
 Low flow start point (lubrication pick-up): at 6.3bar inlet pressure 0.76 dm³/s  
 Typical flow with 6.3bar inlet pressure and 0.7 bar pressure drop: 76 dm³/s

## Recommended Lubricants

High speed tools and systems      Air Cylinders and Valves

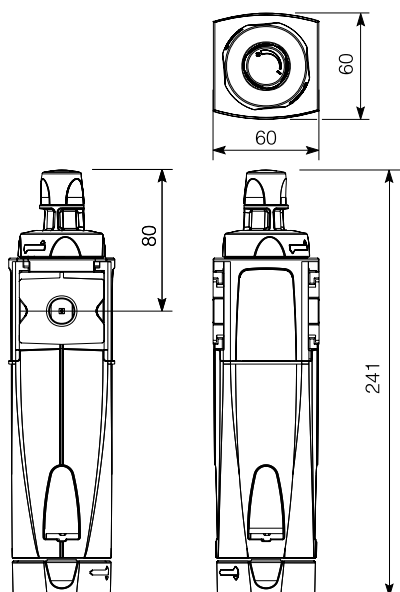
**VG15 - 22**

**VG32**

For food industry applications : approved oil USDA-H1.  
 Do not use oils with additives compounds oils containing solvents, graphite, detergents or synthetic oils.

**Note : Fill lubricant from top only**

## Dimensions (mm)



## Service kits

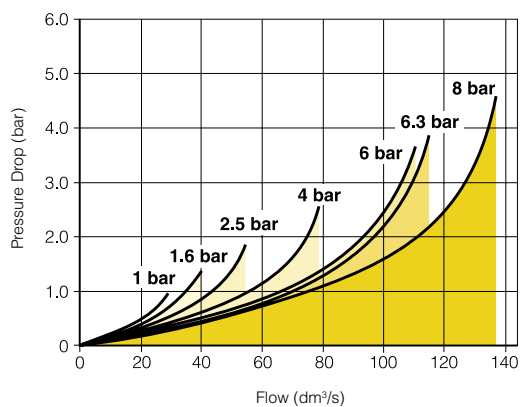
| Description                    | Order code        |
|--------------------------------|-------------------|
| Sight glass & manual drain kit | <b>P3KKA00BSM</b> |
| Drip control assembly kit      | <b>P3KKA00PG</b>  |

## Material Specification

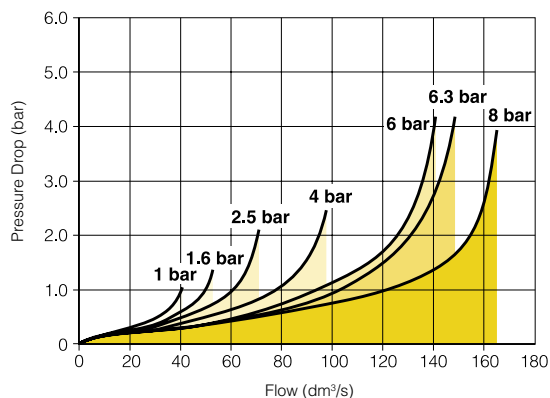
|                   |               |
|-------------------|---------------|
| Body:             | Aluminium     |
| Bowl sight glass: | Technopolymer |
| Sight dome:       | Technopolymer |
| Lubricator cover: | Polyester     |
| Bayonet support:  | Acetal        |
| Drain:            | Acetal        |
| Elastomers:       | Nitrile NBR   |

## Flow characteristics

### (3/8) Lubricator



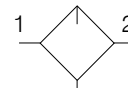
### (1/2) Lubricator



## Moduflex Lubricator



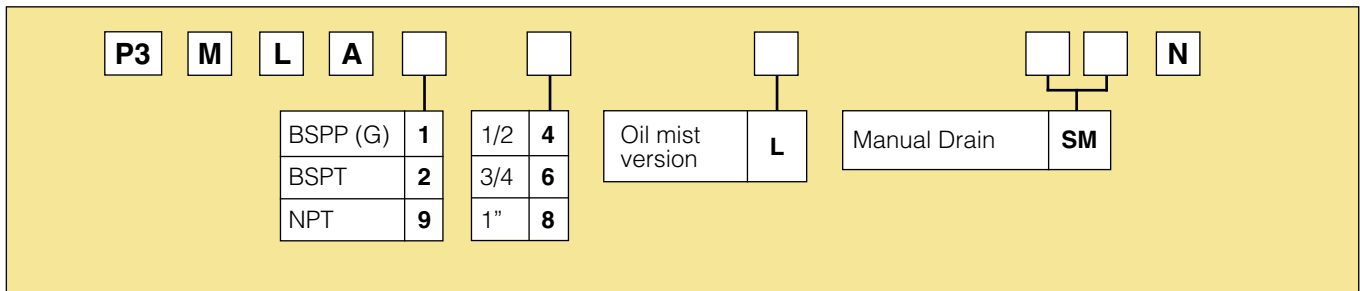
## Symbols



Lubricator with drain

- Integral 1/2, 3/4 or 1" ports (BSPP, BSPT & NPT)
- Robust but lightweight aluminium construction
- Constant density lubrication
- Finger tip ratchet control for precise oil drip rate adjustment
- Fill from top under system pressure
- '2 stage' bayonet to reveal large filling orifice
- No small easily lost parts
- Large oil reservoir

## Options:



| Port size | Description                   | Order Code         | Flow dm <sup>3</sup> /s * | Max bar | Min temp °C | Max temp °C | Bowl size cm <sup>3</sup> | Height mm | Width mm | Depth mm | Weight g |
|-----------|-------------------------------|--------------------|---------------------------|---------|-------------|-------------|---------------------------|-----------|----------|----------|----------|
| 1/2       | Oil mist, fill under pressure | <b>P3MLA14LSMN</b> | 87                        | 17      | -20         | 80          | 320                       | 303       | 80       | 80       | 1460     |
| 3/4       | Oil mist, fill under pressure | <b>P3MLA16LSMN</b> | 103                       | 17      | -20         | 80          | 320                       | 303       | 80       | 80       | 1443     |
| 1"        | Oil mist, fill under pressure | <b>P3MLA18LSMN</b> | 108                       | 17      | -20         | 80          | 320                       | 303       | 80       | 80       | 1407     |

\* flow with 6,3 bar inlet pressure and 0,5 pressure drop.

# Moduflex modular air preparation system P3M Series

## Technical Information

|                          |                                       |
|--------------------------|---------------------------------------|
| Fluid:                   | Compressed air                        |
| Maximum inlet pressure*: | 17 bar                                |
| Temperature range*:      | -20°C to +80°C                        |
| Manual drain:            | twist grip open and barbed connection |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2° C  
 Low flow start point (lubrication pick-up): at 6.3bar inlet pressure 0.76 dm³/s  
 Typical flow with 6.3bar inlet pressure and 0.7 bar pressure drop: 108 dm³/s

## Recommended Lubricants

High speed tools and systems      Air Cylinders and Valves and systems

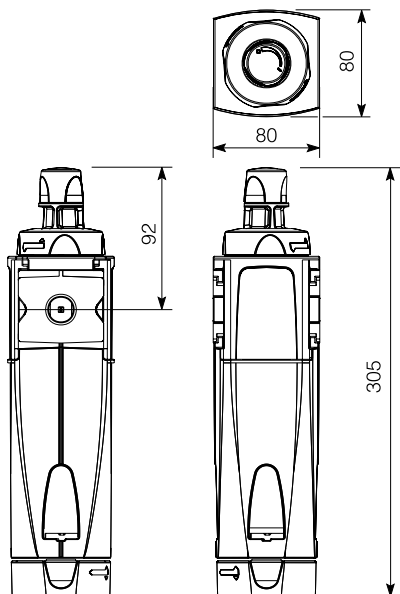
**VG15 - 22**

**VG32**

For food industry applications : approved oil USDA-H1.  
 Do not use oils with additives compounds oils containing solvents, graphite, detergents or synthetic oils.

**Note : Fill lubricant from top only**

## Dimensions (mm)



## Service kits

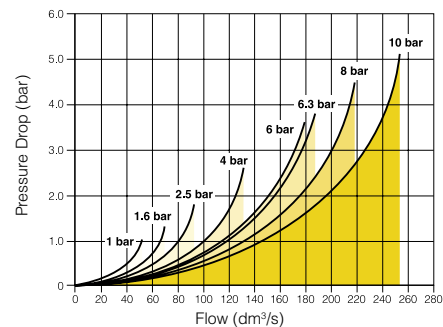
| Description                    | Order code        |
|--------------------------------|-------------------|
| Sight glass & manual drain kit | <b>P3MKA00BSM</b> |
| Drip control assembly kit      | <b>P3MKA00PG</b>  |

## Material Specification

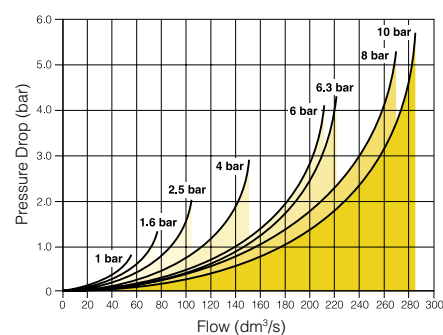
|                   |               |
|-------------------|---------------|
| Body:             | Aluminium     |
| Bowl sight glass: | Technopolymer |
| Sight dome:       | Technopolymer |
| Lubricator cover: | Polyester     |
| Bayonet support:  | Nylon         |
| Drain:            | Acetal        |
| Elastomers:       | Nitrile NBR   |

## Flow characteristics

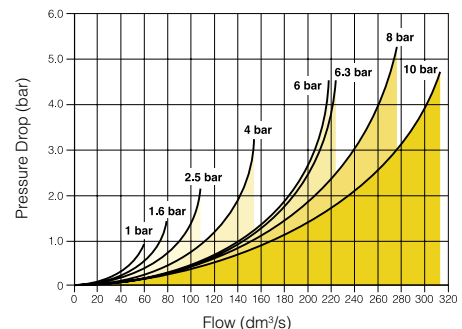
### (1/2) Lubricator



### (3/4) Lubricator



### (1") Lubricator







# Moduflex modular air preparation system P3K Series

## Technical Information

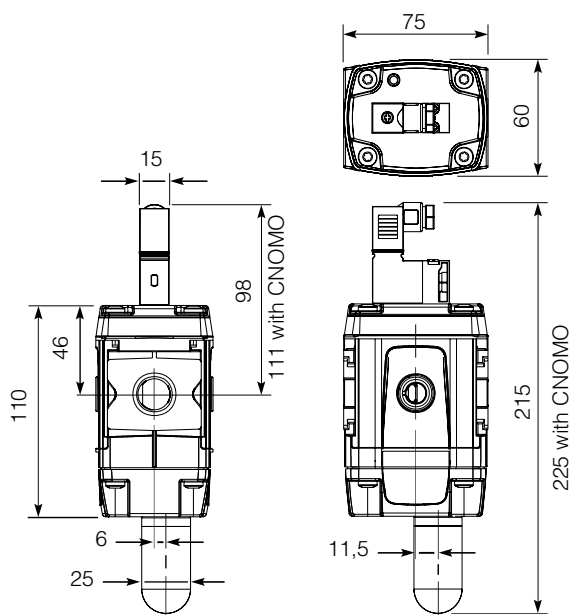
|  |  |
|--|--|
| Fluid:   | Compressed air                               |
| Maximum pressure Solenoid operated:                                | 10 bar                                       |
| Maximum pressure Air Pilot operated:                               | 17 bar                                       |
| Minimum operating pressure:  | 3 bar  |
| Temperature range* Solenoid operated:                              | -10° to + 50° C                              |
| Temperature range* Air Pilot operated:                             | -20° to + 80° C                              |
| Air Pilot port:  | 1/8"   |
| Exhaust port:  | 1/2"   |
| Gauge port:  | 1/4"   |
| Typical flow with 6.3bar inlet pressure and 0.7 bar pressure drop: | 48 dm³/s                                     |
| Cv:  | (P1 to P2 = Cv 3.34)<br>(P2 to P3 = Cv 3.16) |

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C  
Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

## Material Specification

|                      |                        |
|----------------------|------------------------|
| Body:                | Marine grade aluminium |
| Body cover:          | Polyester              |
| Internal components: |                        |
| Elastomers:          | Nitrile NBR            |

## Dimensions (mm)



## Solenoids for Dump Valves (15mm solenoid)

| Voltage               | Order code |
|-----------------------|------------|
| 12VDC                 | P2E-KV32B1 |
| 24VDC                 | P2E-KV32C1 |
| 12V 50Hz/60Hz         | P2E-KV34B1 |
| 24V 50Hz              | P2E-KV31C1 |
| 115V 50Hz/120VAC 60Hz | P2E-KV31F1 |
| 230V 50Hz/240VAC 60Hz | P2E-KV31J1 |

## Cable plugs 15 mm (8 mm pin spacing) IP 65

| Description  | Order code |
|--|------------|
| Large headed screw for inaccessible or recess position |            |
| Standard to be wired universal                         | P8C-C      |
| To be wired LED+protection 24 VDC                      | P8C-C26C   |
| With standard screw                                    |            |
| Standard to be wired universal                         | P8C-D      |
| To be wired LED+protection 24 VDC                      | P8C-D26C   |
| With cable and standard screw                          |            |
| Standard with 2 m cable                                | P8L-C2     |
| Standard with 5 m cable                                | P8L-C5     |
| LED+protection 24 VAC/DC, 2 m                          | P8L-C226C  |
| LED+protection 24 VAC/DC, 5 m                          | P8L-C526C  |

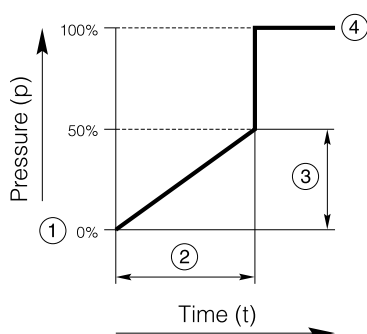
## Solenoids (with manual override non-locking)

4,5 W solenoids with CNOMO 06.05.10 interface for cable plug DIN 43650 form A

| Voltage           | Order code |
|-------------------|------------|
| 24V DC (48V 50Hz) | EV30M1100  |
| 24V AC            | EV30C1100  |
| 110V AC           | EV30J1100  |
| 230V AC           | EV30A1100  |

## DIN 43650 form A

| Voltage                              | Order code    |
|--------------------------------------|---------------|
| Standard                             | 3EV290V10     |
| With LED and protection 24 V DC / AC | 3EV290V20-24  |
| With LED and protection 110 V AC     | 3EV290V20-110 |
| With LED and protection 230 V AC     | 3EV290V20-230 |



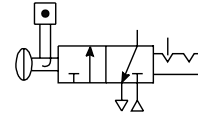
- ① Start signal
- ② Switching time delay
- ③ Gradual pressure build up
- ④ Operating pressure  $p^2 (=p^1)$

## Manually Operated Dump Valves



Moduflex Series Dump Valves enable the depressurisation of downstream air in the event of an emergency or system failure. They are provided with high visibility large striker knobs and vent through the exhaust port.

## Symbols



- Shuts off upstream and dumps downstream pressure.
- Choice of red or black knobs.
- Padlockable version.
- Moduflex Series Soft Start/Dump Valves may be used as stand alone units or assembled in Moduflex combination units.

The padlock slide may be assembled on either side. It is recommended that this is assembled after mounting.

**Note:** This is a permanent assembly and may not be removed later

## Options:

|           |          |          |          |                               |           |            |           |
|-----------|----------|----------|----------|-------------------------------|-----------|------------|-----------|
| <b>P3</b> | <b>K</b> | <b>D</b> | <b>A</b> | <b>1</b>                      | <b>4</b>  |            | <b>LN</b> |
|           |          |          |          | G <sup>1</sup> / <sub>2</sub> | <b>14</b> |            |           |
|           |          |          |          |                               |           | Black knob | <b>B</b>  |
|           |          |          |          |                               |           | Red knob   | <b>R</b>  |

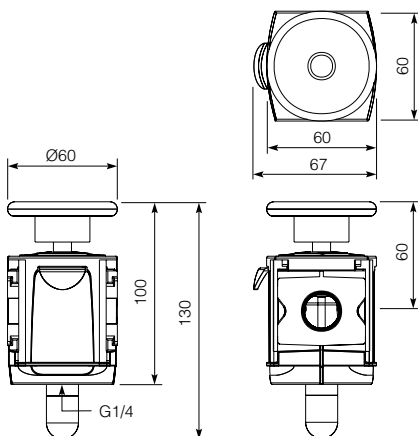
## Technical Information

|                         |                |                       |
|-------------------------|----------------|-----------------------|
| Flow Capacity           | 1/2            | 47 dm <sup>3</sup> /s |
| Operating Temperature   | -20°C to +80°C |                       |
| Maximum Supply Pressure | 17 bar         |                       |

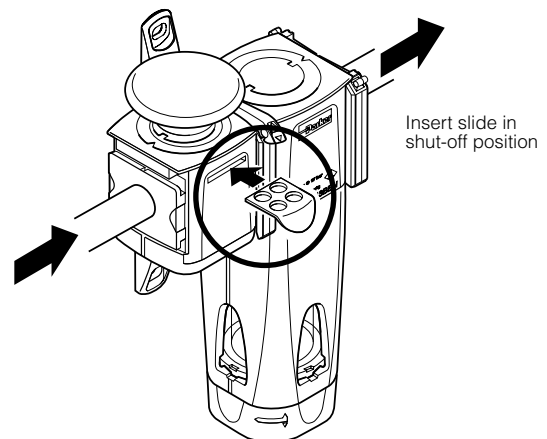
## Weight (g)

|   |            |
|---|------------|
|   | <b>1/2</b> |
| Bistable 3/2 valve with lockable facility | 400        |

## Dimensions (mm)



For exhaust mufflers see page 54



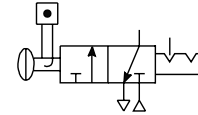
**Note:** We recommend that the locking slide is assembled last. It is a permanent assembly and cannot be removed later.

## Modular Ball Valve



Moduflex Series Ball Valves provide shut off line pressure with a non-sticking 90° turn handle to prevent unauthorised adjustment. When the inlet pressure is turned off the downstream vents through the exhaust port.

## Symbols



- Positive bubble tight shut-off.
- 90° turn handle to prevent unauthorised adjustment.
- Padlockable.
- When the inlet pressure is turned off the downstream vents through the exhaust port.

The padlock slide may be assembled on either side. It is recommended that this is assembled after mounting.

**Note:** This is a permanent assembly and may not be removed later

## Options:

|           |          |           |                  |           |  |           |
|-----------|----------|-----------|------------------|-----------|--|-----------|
| <b>P3</b> |          | <b>V</b>  | <b>A</b>         |           |  | <b>LN</b> |
| 40 Series | <b>H</b> |           |                  |           |  |           |
| 60 Series | <b>K</b> |           |                  |           |  |           |
|           |          | <b>40</b> | G <sup>1/8</sup> | <b>11</b> |  |           |
|           |          |           | G <sup>1/4</sup> | <b>12</b> |  |           |
|           |          | <b>60</b> | G <sup>3/8</sup> | <b>13</b> |  |           |
|           |          |           | G <sup>1/2</sup> | <b>14</b> |  |           |

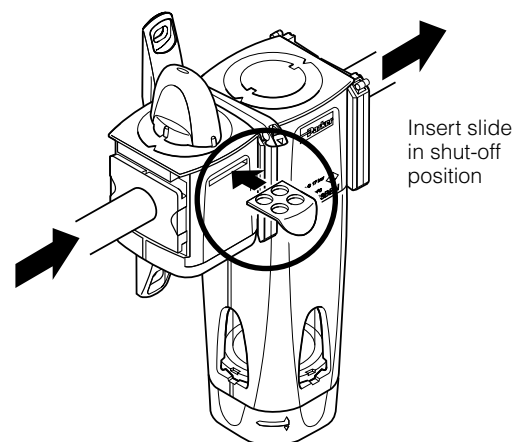
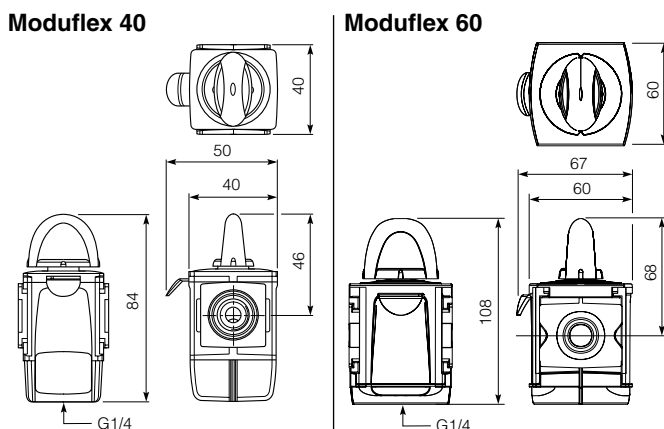
## Technical Information

|                          |                |                        |
|--------------------------|----------------|------------------------|
| Flow Capacity:           | 1/8            | 20 dm <sup>3</sup> /s  |
|                          | 1/4            | 20 dm <sup>3</sup> /s  |
|                          | 3/8            | 90 dm <sup>3</sup> /s  |
|                          | 1/2            | 122 dm <sup>3</sup> /s |
| Operating Temperature:   | -20°C to +80°C |                        |
| Maximum Supply Pressure: | 17 bar         |                        |

## Weight (g)

|                                  |            |            |            |            |
|----------------------------------|------------|------------|------------|------------|
|                                  | <b>1/8</b> | <b>1/4</b> | <b>3/8</b> | <b>1/2</b> |
| 3/2 valve with lockable facility | 195        | 190        | 470        | 450        |

## Dimensions (mm)



**Note:** We recommend that the locking slide is assembled last. It is a permanent assembly and cannot be removed later.

For exhaust mufflers see page 54

## Modular Manifold

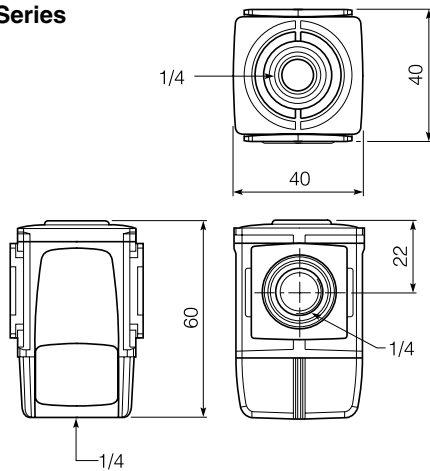


Moduflex Series Manifolds, provide 4 extra outlet ports, they may be assembled at any position in a combination e.g. before the lubricator to provide oil free take off or at the end of a combination to provide extra outlet ports.

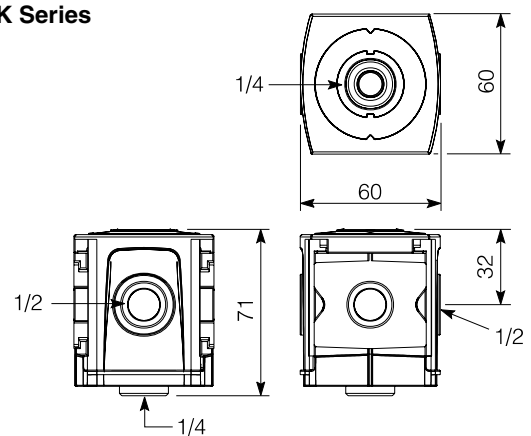
| Series     | Description | Order code       | Weight (g) |
|------------|-------------|------------------|------------|
| <b>P3H</b> | G1/4        | <b>P3HMA1V0N</b> | 148        |
| <b>P3K</b> | G1/2        | <b>P3KMA1V0N</b> | 226        |

## Dimensions (mm)

### P3H Series



### P3K Series

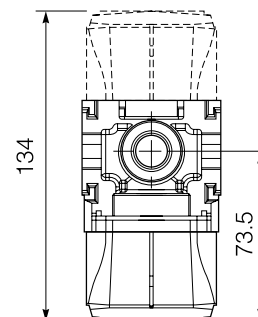


## Diverter Manifold Block - P3K Series



The Diverter Block allows a unit to be oriented in 90° increments to suit the application it may be assembled at any point in a combination.

| Description                         | Order code       | Weight (g) |
|-------------------------------------|------------------|------------|
| Top mounted diverter block          | <b>P3KMA14AN</b> | 444        |
| Bottom mounted diverter block       | <b>P3KMA14BN</b> | 444        |
| Top & bottom mounted diverter block | <b>P3KMA14CN</b> | 662        |



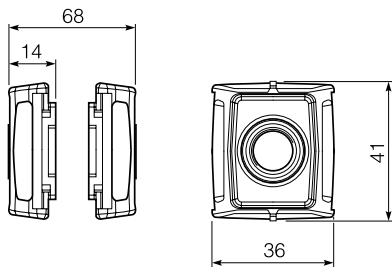
## Optional Port Block Kits



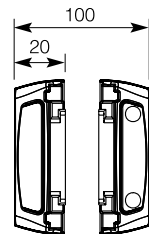
- To change port sizes Port Block Kits are available, they are attached to any unit utilising the 'Cliplok' system.
- Allows assemblies to be removed from a hard piped system.

| Series     | Connection                    | Order Code       | Weight (g) |
|------------|-------------------------------|------------------|------------|
| <b>P3H</b> | G <sup>1</sup> / <sub>8</sub> | <b>P3HKAD1CP</b> | 26         |
| <b>P3H</b> | G <sup>1</sup> / <sub>4</sub> | <b>P3HKAD2CP</b> | 26         |
| <b>P3K</b> | G <sup>3</sup> / <sub>8</sub> | <b>P3KKAD3CP</b> | 190        |
| <b>P3K</b> | G <sup>1</sup> / <sub>2</sub> | <b>P3KKAD4CP</b> | 180        |
| <b>P3M</b> | G <sup>1</sup> / <sub>2</sub> | <b>P3MKAD4CP</b> | 518        |
| <b>P3M</b> | G <sup>3</sup> / <sub>4</sub> | <b>P3MKAD6CP</b> | 483        |
| <b>P3M</b> | G1"                           | <b>P3MKAD8CP</b> | 438        |

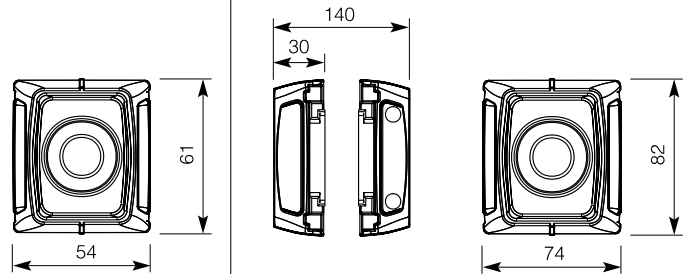
### P3H Series



### P3K Series



### P3M Series

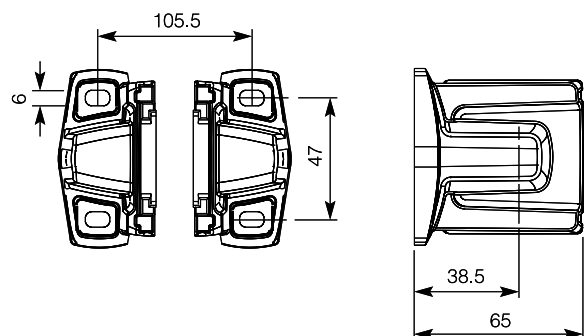


## Rear Entry Connector Kits - P3K Series



The Rear Entry Connector is available in 1/2" port size and enables single units or combinations to be mounted on a bulkhead with the air connections made from the rear.

| Description                   | Connection                    | Order Code       | Weight (g) |
|-------------------------------|-------------------------------|------------------|------------|
| Rear entry port connector kit | G <sup>1</sup> / <sub>2</sub> | <b>P3KKAR4CR</b> | 250        |





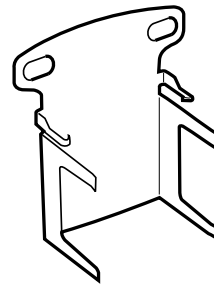


# Moduflex modular air preparation system

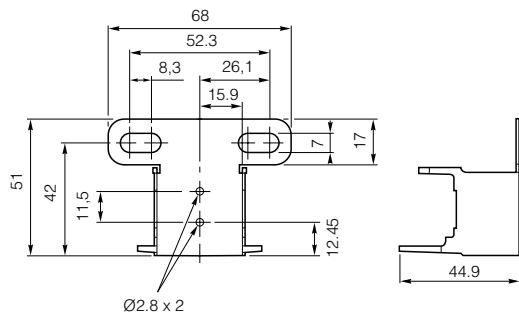
## Accessories

### Single Unit Mounting Bracket

Suitable for individual Filters and Lubricator mounting

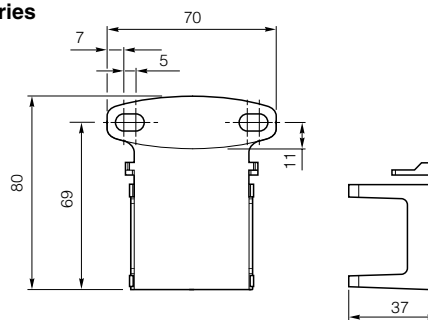


#### P3H Series



| Series     | Description                  | Weight (g) | Order code       |
|------------|------------------------------|------------|------------------|
| <b>P3H</b> | Single unit mounting bracket | 25         | <b>P3HKA00MW</b> |

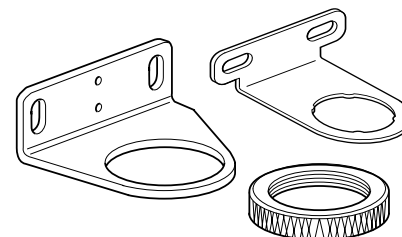
#### P3K Series



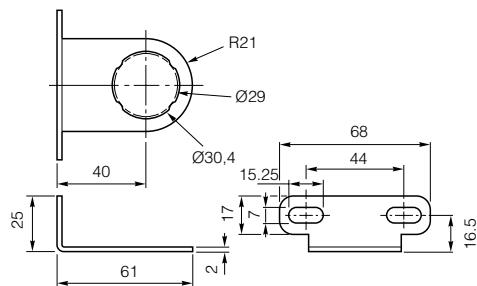
| Series     | Description                  | Weight (g) | Order code       |
|------------|------------------------------|------------|------------------|
| <b>P3K</b> | Single unit mounting bracket | 44         | <b>P3KKA00MW</b> |

### Regulator & Filter Regulator Angle Bracket

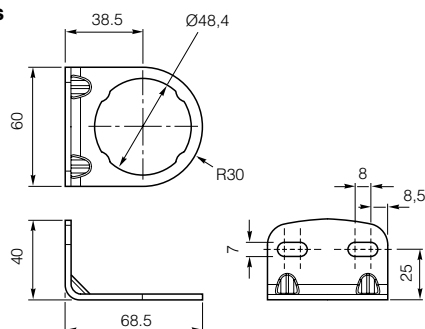
Suitable for individual Regulator and Filter-Regulator mounting



#### P3H Series

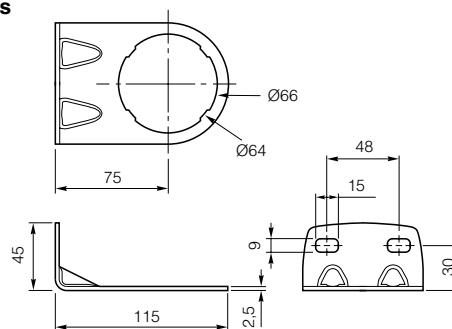


#### P3K Series



| Series     | Description                 | Weight (g) | Order code       |
|------------|-----------------------------|------------|------------------|
| <b>P3H</b> | Angle bracket + plastic nut | 44.5       | <b>P3HKA00MR</b> |
| <b>P3H</b> | Angle bracket + metal nut   | 47         | <b>P3HKA00MS</b> |
| <b>P3K</b> | Angle bracket + plastic nut | 74.5       | <b>P3KKA00MR</b> |
| <b>P3K</b> | Angle bracket + metal nut   | 79         | <b>P3KKA00MS</b> |

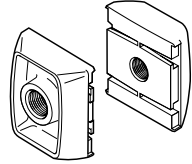
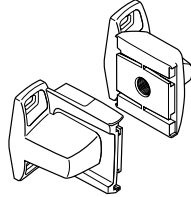

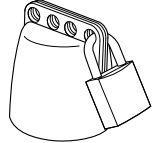


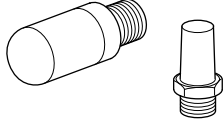
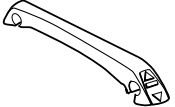

#### P3M Series



| Series     | Description               | Weight (g) | Order code       |
|------------|---------------------------|------------|------------------|
| <b>P3M</b> | Angle bracket + metal nut | 171        | <b>P3MKA00MS</b> |

# Moduflex modular air preparation system

## Accessories

| Series     | Description                                    | Connection   | Weight (g) | Order code       |   |
|------------|--|--------------|------------|------------------|---|
| <b>P3H</b> | Port Connector Kit                             | 1/8          | 26         | <b>P3HKAD1CP</b> |    |
| <b>P3H</b> |  | 1/4          | 26         | <b>P3HKAD2CP</b> |   |
| <b>P3K</b> |  | 3/8          | 190        | <b>P3KKAD3CP</b> |   |
| <b>P3K</b> |  | 1/2          | 180        | <b>P3KKAD4CP</b> |   |
| <b>P3M</b> |  | 1/2          | 518        | <b>P3MKAD4CP</b> |   |
| <b>P3M</b> |  | 3/4          | 483        | <b>P3MKAD6CP</b> |   |
| <b>P3M</b> |  | 1"           | 438        | <b>P3MKAD8CP</b> |   |
| <b>P3K</b> | Rear entry port connector kit                  | 1/2          | 250        | <b>P3KKAR4CR</b> |    |
| <b>P3H</b> | Panel mounting nut (Aluminium)                 |              | 5          | <b>P3HKA00MM</b> |    |
| <b>P3K</b> |  |              | 8.5        | <b>P3KKA00MM</b> |   |
| <b>P3M</b> |  |              | 24         | <b>P3MKA00MM</b> |   |
| <b>P3H</b> | Regulator & Filter/Regulator - Tamperproof kit |              | 29         | <b>P3HKA00AL</b> |  |
| <b>P3K</b> |  |              | 75         | <b>P3KKA00AL</b> |   |
| <b>P3M</b> |  |              | 105        | <b>P3MKA00AL</b> |   |
| <b>P3H</b> | Pressure gauge                                 | 0 to 2 bar   | 1/8        | 35               |  |
|            |  | 0 to 4 bar   | 1/8        | 35               |   |
|            |  | 0 to 10 bar  | 1/8        | 35               |   |
|            |  | 0 to 20 bar  | 1/8        | 35               |   |
| <b>P3K</b> | Pressure gauge                                 | 0 to 4 bar   | 1/4        | 50               |  |
| <b>P3M</b> |  | 0 to 11 bar  | 1/4        | 50               |   |
|            |  | 0 to 20 bar  | 1/4        | 50               |   |
| <b>P3H</b> | Exhaust Muffler                                |              |            |                  |  |
| <b>P3K</b> | Plastic Series                                 | 1/4          |            | <b>P6M-PAB2</b>  |   |
|            | Sintered Bronze Series                         | 1/4          |            | <b>P6M-BAA2</b>  |   |
| <b>P3H</b> | Overstrap (Spares kit)                         |              | 10         | <b>P3HKA00CF</b> |  |
| <b>P3K</b> |  | (pack of 10) | 20         | <b>P3KKB00CF</b> |   |
| <b>P3M</b> |  |              | 50         | <b>P3MKA00CF</b> |   |
| <b>P3H</b> | Connector O ring (Spares kit)                  |              | 2          | <b>P3HKA02CY</b> |  |
| <b>P3K</b> |  | (pack of 5)  | 2          | <b>P3KKA04CY</b> |   |
| <b>P3M</b> |  |              | 5          | <b>P3MKA08CY</b> |   |

# Moduflex modular air preparation system

## Pressure Switch

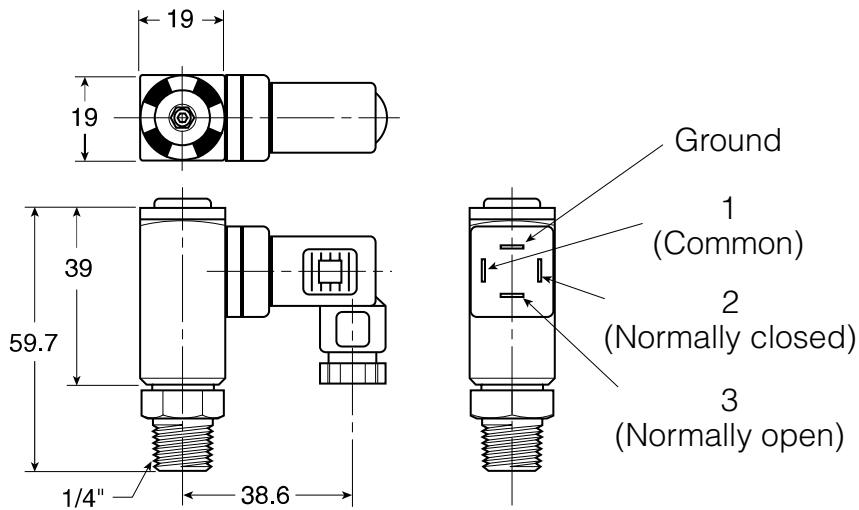


- Inline Mounting
- Dial indicator for easy pressure setting
- 5 amp rated snap action micro switch
- Heavy duty aluminium component
- Compact size
- DIN 43650HCM connector included
- IP65 Rated
- Field adjustable 2 - 10 bar
- +/- 2% repeatability
- Single pole / Double throw switch

The Pressure Switch monitors the air pressure in your pneumatic system. When the pressure in your system either drops below or exceeds the set point, an electrical output is generated.

Using a 3mm hex wrench, turn the adjusting screw on top of the unit clockwise to increase the pressure set point and counterclockwise to decrease the pressure setting. One complete revolution of the adjusting screw covers the complete adjustment range (2 - 10 bar).

| Description | Order code    | Weight (g) |
|-------------|---------------|------------|
| G1/4        | <b>P01913</b> | 90         |



## Technical Information

|                         |  |
|-------------------------|--|
| Electrical:             | 5 amp, 12/24VDC, 125/250VAC                      |
| Maximum inlet pressure: | 20 bar   |
| Mechanical life:        | 10 <sup>6</sup> at standard operating conditions |
| Electrical connection:  | DIN 43650HCM                                     |
| Electrical protection:  | IP65   |
| Repeatability:          | ±2% at 20°C ambient                              |
| Temperature range:      | -40°C to 80°C                                    |
| Weight:                 | 0,06 Kg  |

## Material Specification

|            |                    |
|------------|--------------------|
| Diaphragm: | Nitrile            |
| Housing:   | Anodised aluminium |

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