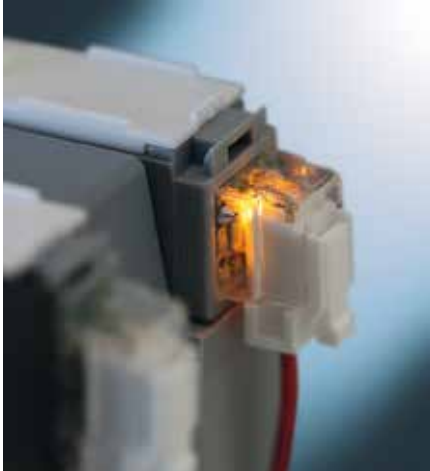




# Moduflex Valve System®

## Flexibility for pneumatic users

*Whether configured from basic components or ordered as a pre-assembled and tested valve island, **Moduflex flexibility** is unmatched in the market place.*



### Innovative

The 6 patents awarded to the Moduflex Valve System reflect that innovation is core to the Parker design process. Maintaining a clear understanding of our customer's expectations has defined the individuality of the Moduflex, and clearly differentiated it as a leading automation solution.

### Adaptive

No other system can be adapted so simply once specified. Unique, captive fitting release system, quick release electrical connectors and single mechanical screw connection between manifolds offer the ultimate capability for late system design changes.

### Multi-Functional

From stand-alone valves to fieldbus ready valve islands, from cylinder flow controls to vacuum generators with integrated blow-off, the Moduflex Valve System meets the requirements of the whole automation spectrum.

## Moduflex Valve System

The Moduflex Valve System redefines flexibility for pneumatic users. Whether configured from basic components or ordered as a pre-assembled and tested valve island, Moduflex flexibility is unmatched in the market place.



### V Series



### T Series



Lockable Connector IP67



Clip Connector IP40

New for  
2015

### S Series



Lockable Connector IP67



Clip Connector IP40

New for  
2015

### P Series



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From stand-alone valves to fieldbus ready valve islands, from cylinder flow controls to vacuum generators with integrated blow-off, the Moduflex Valve System meets the requirements of the whole automation spectrum.

### Light-weight

An As-i compatible valve manifold with 8 electrical inputs and 8 pneumatic outputs weighs a mere 800grams, making the Moduflex Valve System the perfect choice for end of arm tooling application.

## Moduflex Valve technology

Two technology platforms enable the compact design and high performance of the Moduflex Valve System.

The compact dual 4/2 and 3/2 valves utilize well proven Parker seal technology. The standard 4/2 valves adopt the long life super durable ceramic switching technology.

### Dual 4/2 valve

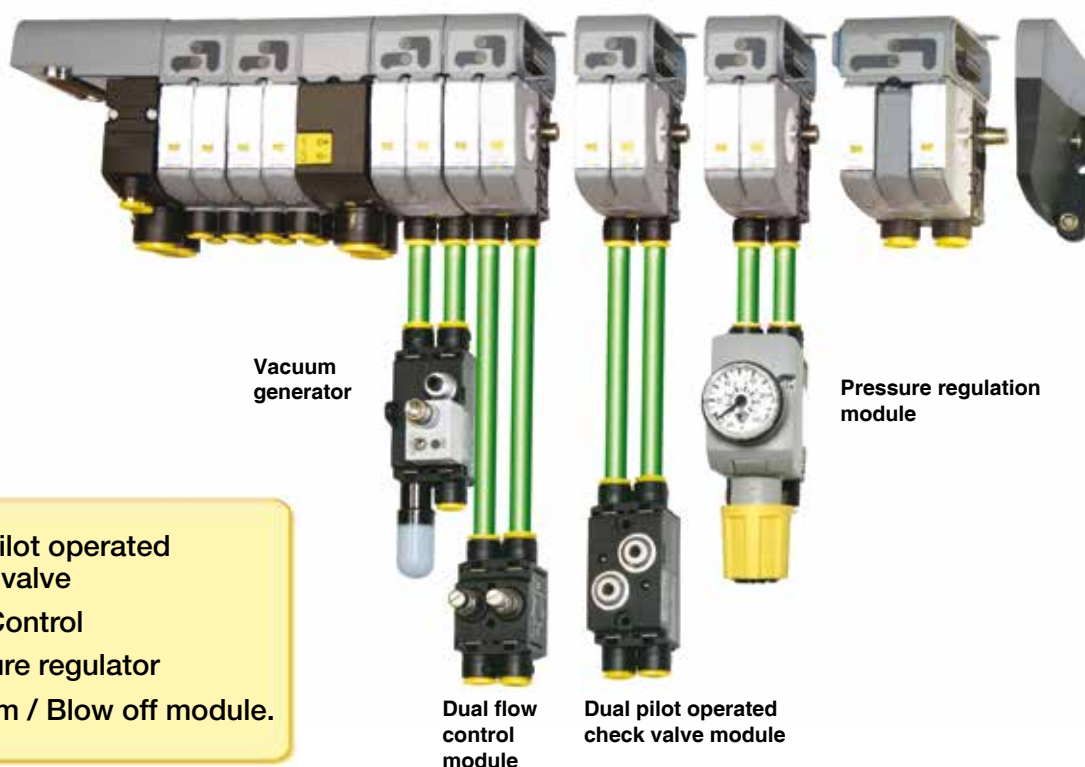


### 4/2 Valve



## Moduflex Complete Control

With the introduction of the dual 4/2 size 1 valves, Moduflex now offers unrivaled ability of matching valves to exact flow requirements, ensuring cost and space are minimized. In addition, Moduflex Valve System offers all the necessary control peripherals to provide a complete automation solution. Moduflex is the complete control package.



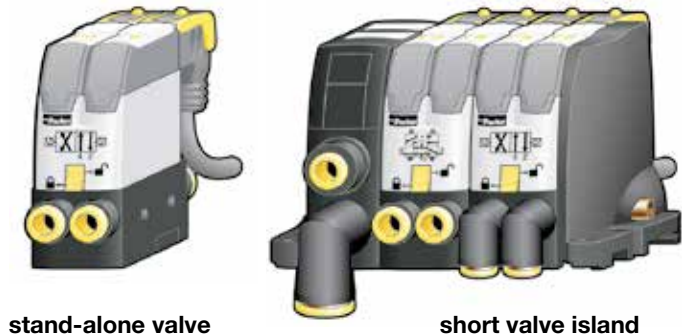
- Dual pilot operated check valve
- Flow Control
- Pressure regulator
- Vacuum / Blow off module.

With high performance technology, Moduflex opens a new era in the field of electro-pneumatic automation. Valves are easily assembled into compact islands that conform to any application requirement.

## Adaptive pneumatic

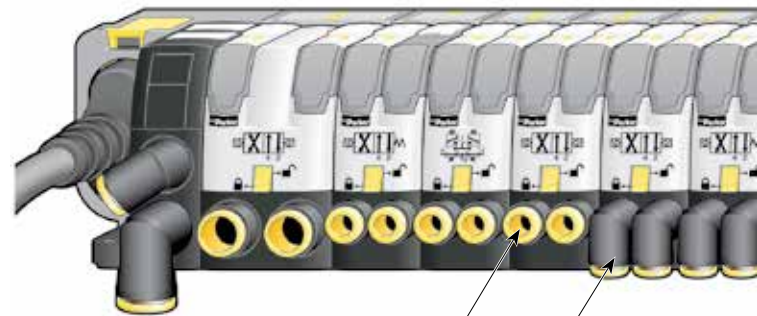
With the Moduflex Valve design, pneumatic automation is now totally flexible.

- Valves may be stand-alone or assembled into short or long islands, depending on application.
- IP 65-67 water and dust protection allows valve to be installed near the cylinders for shorter response time and lower air consumption.
- The IP40 water and dust protection allows an optimized electrical connection for applications into cabinet or soft and none aggressive environments.
- Valve island electrical connections may be integrated.
- Push-in pneumatic connectors may be straight or elbow, for 4, 6, 8 or 10 mm OD tubes.
- A given island may incorporate different valve sizes in order to fulfill each cylinder flow requirement. A single island will accommodate all cylinders, up to 100 mm bore size.
- Island modifications are easy : add or remove a valve, change a valve function, change tubing size, change piloting in minutes.
- Manual overrides are also adaptive : locking for set up, non-locking for production, ...



stand-alone valve

short valve island

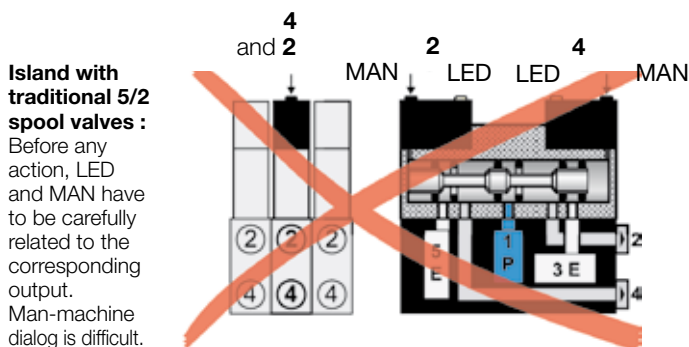
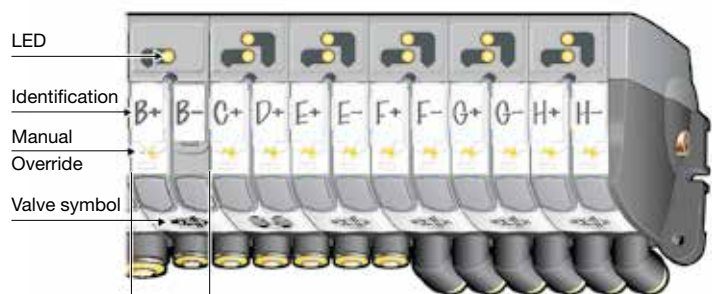


or long valve island

straight or elbow  
pneumatics connectors

## Easy man-machine dialog

- Moduflex incorporates LED indicators, manual overrides (MAN), in conjunction with valve symbols and identification.
- As compared to traditional 5/2 valve islands, Moduflex offers a more user friendly dialog : each marking, LED and MAN are all lined up with the corresponding cylinder output.



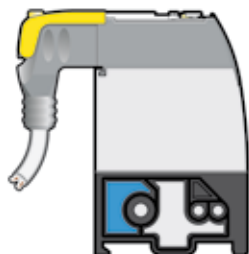
**Island with traditional 5/2 spool valves :**  
Before any action, LED and MAN have to be carefully related to the corresponding output. Man-machine dialog is difficult.

**Island with Moduflex 4/2 slides valves:**  
Each marking, LED and MAN line up with the corresponding output.

Man-machine dialog is easy.

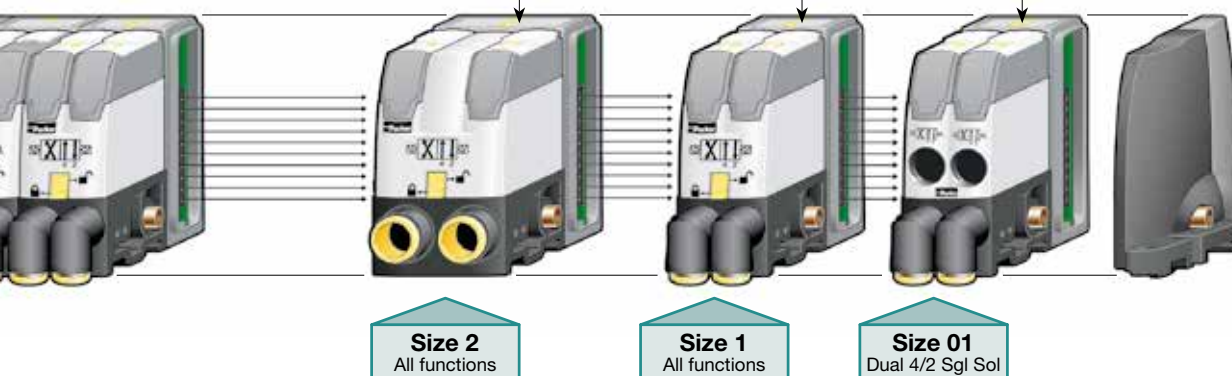
## Adaptive design

individual electrical connector  
Lockable M8 Connector - IP67 or Clip Connector - IP40



or Valve Bank with integrated IP65 electrical connections

3 valves sizes in the same valve bank



## Flows and tube connections



Optimal nominal section for a full flow with appropriate fitting

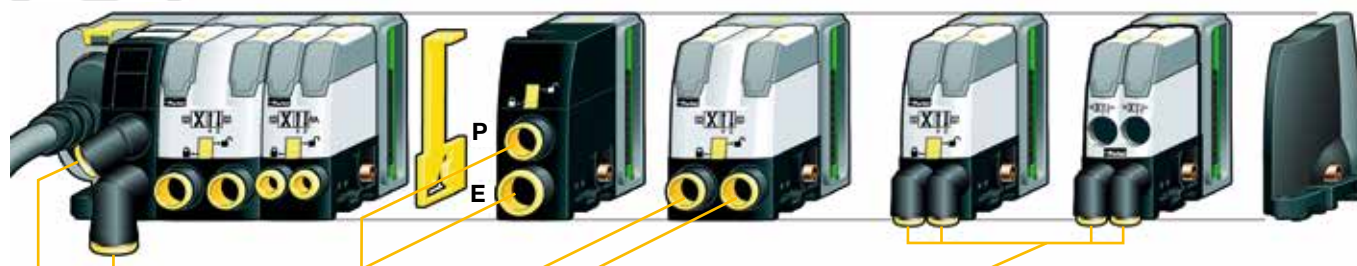
3 valve sizes lead to a global choice of tube sizes, thus covering all usual applications

Tube size to cylinder  
Cylinder bore size

| Size 2                                                 |                    |
|--------------------------------------------------------|--------------------|
| Nominal section 40 mm <sup>2</sup>                     |                    |
| Qn 800 Nl/mn*<br>Qmax 1340 Nl/mn*                      |                    |
| *) For 3/2 functions<br>Qn 450 Nl/mn<br>Qmax 800 Nl/mn |                    |
| Ø Ext.<br>10 mm                                        | Ø Ext.<br>8 mm     |
| Ø 63 to<br>Ø 100 mm                                    | Ø 40 to<br>Ø 63 mm |

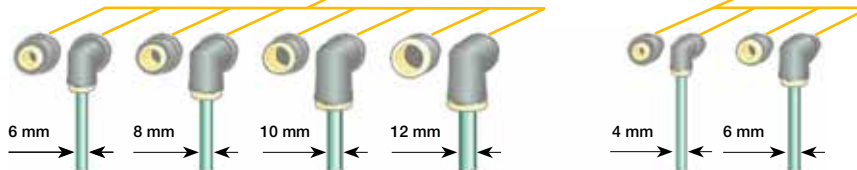
| Size 1                                                 |                   |
|--------------------------------------------------------|-------------------|
| Nominal section 12 mm <sup>2</sup>                     |                   |
| Qn 310 Nl/mn*<br>Qmax 510 Nl/mn*                       |                   |
| *) For 3/2 functions<br>Qn 235 Nl/mn<br>Qmax 415 Nl/mn |                   |
| Ø Ext.<br>6 mm                                         | Ø Ext.<br>4 mm    |
| Ø 25 to<br>Ø 40 mm                                     | Ø 6 to<br>Ø 25 mm |

| Size 01                           |  |
|-----------------------------------|--|
| Nominal section 4 mm <sup>2</sup> |  |
| Qn 165 Nl/mn*<br>Qmax 275 Nl/mn*  |  |
| Ø Ext.<br>4 mm                    |  |
| Ø 6 to<br>Ø 25 mm                 |  |



### Adaptive pneumatic connection

Valve outputs are equipped with clip-on push-in tube connectors with a choice of straight or elbow in different sizes



Typical cylinder speeds are shown on next pages. Module size, tube diameter and length, cylinder size, load and exhaust collection are taken into account.

## Operating information

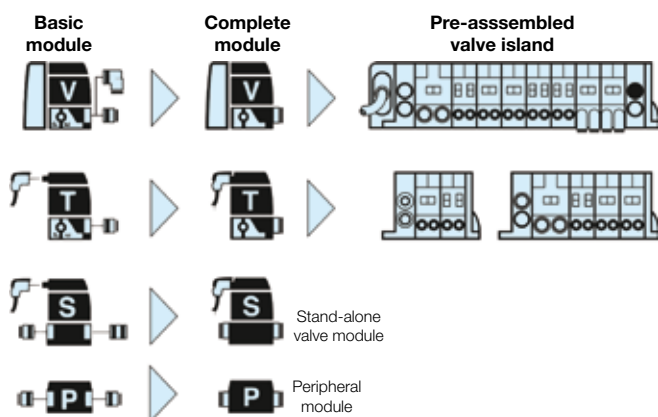
|                                  |                 |
|----------------------------------|-----------------|
| Working pressure                 | -0,9 to 8 bar   |
| Pilot pressure                   | 3 to 8 bar *    |
| Working temperature              | -15 °C to 60 °C |
| Protection individual connectors | IP 67 NEMA4     |
| Protection integrated connectors | IP 65           |
| Voltage                          | 24 V DC         |

\* Single and double 3/2 3,5 to 8 bar

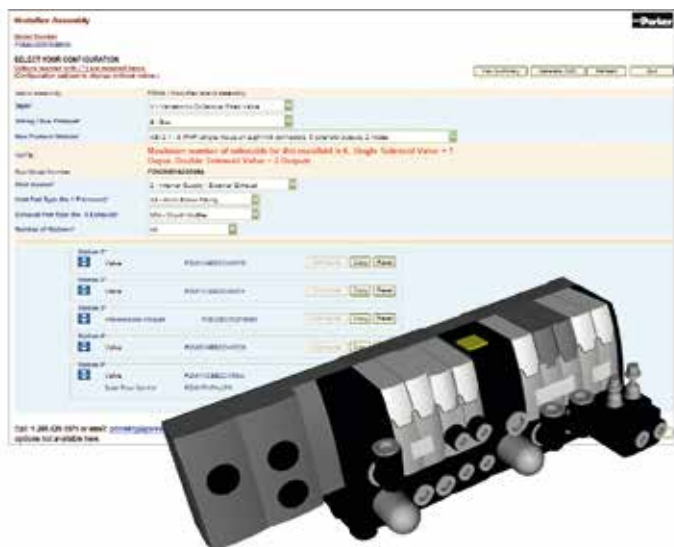
|        |       | Dual 4/2  | Dual 3/2  | 3/2       | 4/2        |
|--------|-------|-----------|-----------|-----------|------------|
| Size 1 | Qmax. | 275 l/min | 415 l/min | 415 l/min | 510 l/min  |
|        | Qn    | 165 l/min | 235 l/min | 235 l/min | 310 l/min  |
| Size 2 | Qmax. | -         | 805 l/min | 805 l/min | 1340 l/min |
|        | Qn    | -         | 450 l/min | 440 l/min | 800 l/min  |

## Total ordering flexibility

Additionally to the complete product adaptability, the Moduflex Valve range offers for V, T, S and P series an ordering flexibility with 3 different designs; from all components separately ordered (basic module) to pre-assembled and tested valve island.



The Moduflex Valve Island in-line e-Configurator software is the easy way to, step by step, configure and order the required valve island for the application.



## Ordering options

### 1 - Basic modules ordering

Using this option, all basic components are separately ordered :

- Head and Tail set
- Valve modules
- Intermediate module kit
- Peripheral modules
- Pneumatic connectors, mufflers and plugs
- Electrical connection or fieldbus module

The complete bill of material needed for the valve island assembly can be easily details using page 1 of the Moduflex Valve Configurator software report.

### 2 - Complete modules ordering

Using this option, modules are defined, ordered and supplied, pneumatic connectors and electrical connection equipped. One part number defines :

- Function module
- Pneumatic connectors, muffler and plugs
- Electrical connection and cable

For an entire valve island configuration, the list of complete modules can be easily details using page 3 of the Moduflex Valve Configurator software report.

### 3 - Pre-assembled valve islands ordering

Using this option, the complete valves island configuration has to be defined, and may be ordered, delivered fully assembly and tested under one part number.

The Moduflex Valve in-line e-Configurator software is an easy way for a clear definition of the requested valve island configuration.

## V series

Integrated connection field bus  
or multi-connector valve island



## T series

Individual connector valve islands  
Solenoid clip or lockable connector  
or remote air pilot



## S series

Stand alone valves  
Solenoid clip or lockable connector  
or remote air pilot



## P series

Peripheral modules  
Flow control, check valves,  
pressure regulator, vacuum



## Moduflex Valve in-line e-Configurator



## Integrated connections valve islands : V series

In a V series Moduflex valve island, electrical controls are all received by the head module and transmitted to the concerned valve modules through the modular integrated circuit.

The head module may either be a cable multi-connector or a Fieldbus communication module : the next pages show multi-connector cable and a complete choice of bus protocols.



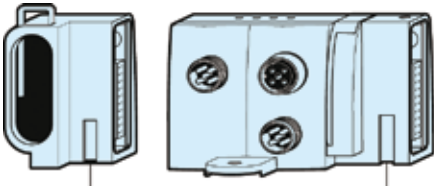
## Valve island configuration

The following page shows all valve sizes and functions that may enter into a V series valve island and, for each valve size, a choice of clip-on pneumatic connectors : tubing size, straight, elbow...

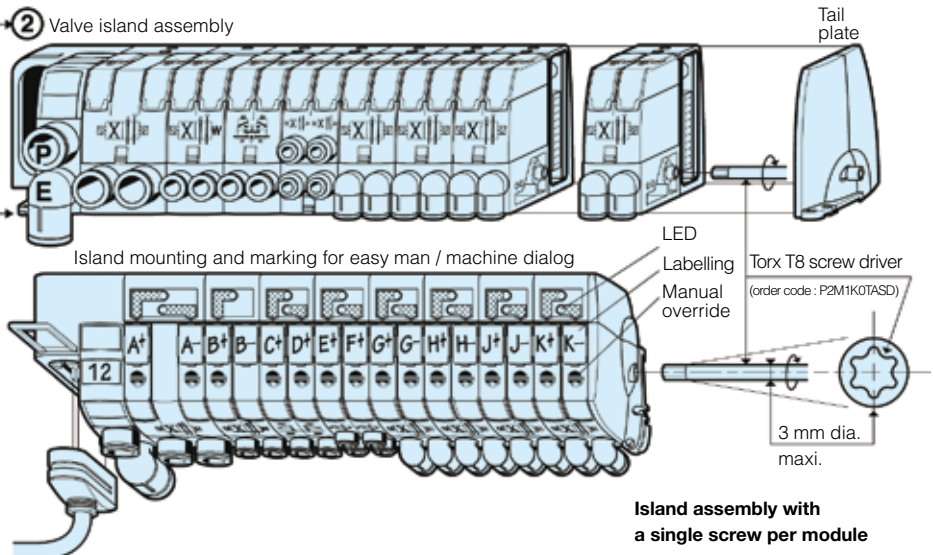
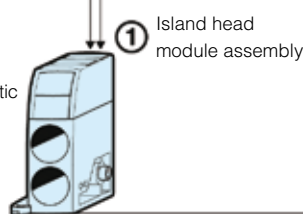
To receive its pressure supply and collect its exhaust, the island also requires a pneumatic

head and tail module set and sometimes an intermediate module set with 4 configuration plates for different functions. To receive its electrical controls, the island is completed by an electrical head module, either a multi-connector or by a bus module to be chosen from the next pages.

Valve island electrical head module :  
multi-connector or field bus connection



Pneumatic head module



## Valve island assembly

The above illustration presents :

- **Step ①** : the electrical head module is engaged into the pneumatic head module ;
- **Step ②** valve modules are one by one screwed onto each other starting from the head module. For this task, the single integrated screw is tightened with a torx T8 standard screwdriver.

The pneumatic connectors may be clipped or unclipped at any stage.

With a LED, a manual override and a labelling for each valve pilot (see illustration), the island front face eases the "man / machine" dialog.

The resulting valve island length is expressed by the drawing below, while further size details and mountings are presented on dimensions pages.

## Modules and island ordering

Choice between 3 approaches :

### 1 - Basic modules ordering :

The following page shows these modules supplied without connector, together with the choice of clip-on connectors separately supplied (10 units packs). This approach gives the maximum flexibility.

### 2 - Complete modules ordering :

Page 265 shows the ordering chart for modules supplied with their connectors.

### 3 - Assembled island ordering :

Page 268 shows the valve island configurator CD-Rom to specify a valve island that may be delivered assembled.

Field bus head module :  
■ width : 94 mm

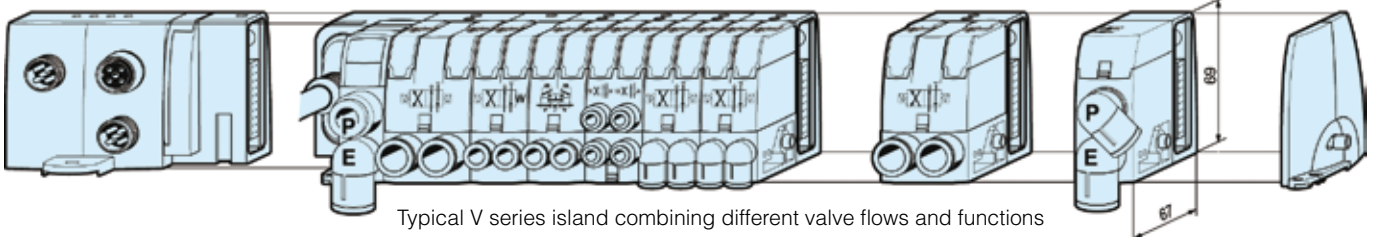
Multi-connector head module :  
■ guillotine, width : 47 mm  
■ sub-D 25, width : 56 mm

Valve modules  
size 1 :  
■ width : 25 mm

Valve module  
size 2 :  
■ width : 37.5 mm

Intermediate module :  
■ width : 25 mm

Tail plate :  
■ width : 16 mm



Typical V series island combining different valve flows and functions

## Basic modules (without connector)

| Valve Modules                                                                                   |                                                                                   | Size 1                                                          |            | Size 2             |                        |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|------------|--------------------|------------------------|
|                                                                                                 | Symbol                                                                            | Description                                                     | Weight (g) | Order code         | Weight (g) Order code  |
|  <p>Size 1</p> |  | 4/2 Solenoid spring                                             | 94         | <b>P2M1V4ES2CV</b> | 100 <b>P2M2V4ES2CV</b> |
|                                                                                                 |  | 4/2 Double solenoid                                             | 103        | <b>P2M1V4EE2CV</b> | 110 <b>P2M2V4EE2CV</b> |
|                                                                                                 |  | 2 x 3/2 NC + NC with exhaust check valves                       | 106        | <b>P2M1VDEE2CV</b> | 115 <b>P2M2VDEE2CV</b> |
|                                                                                                 |  | 2 x 3/2 NO + NO with exhaust check valves                       | 106        | <b>P2M1VCEE2CV</b> | 115 <b>P2M2VCEE2CV</b> |
|  <p>Size 2</p> |  | 2 x 3/2 NC + NO with exhaust check valves                       | 106        | <b>P2M1VEEE2CV</b> | 115 <b>P2M2VEEE2CV</b> |
|                                                                                                 |  | 2 x 4/2 Solenoid spring with exhaust check valves               | 114        | <b>P2M1VJEE2CV</b> |                        |
|                                                                                                 |  | 3/2 NC with exhaust check valves                                | 102        | <b>P2M1V3ES2CV</b> | 110 <b>P2M2V3ES2CV</b> |
|                                                                                                 |  | 4/3 Centre exhaust 2 x 3/2 NC + NC without exhaust check valves | 106        | <b>P2M1VGEE2CV</b> | 115 <b>P2M2VGEE2CV</b> |

## Island head and intermediate module sets

| Valve Modules                                                                                        |                                                                              | Size 2     |                  |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|------------------|
|                                                                                                      | Description                                                                  | Weight (g) | Order code       |
|  <p>P2M2HXT01</p> | Valve island pneumatic head and tail module set                              | 64         | <b>P2M2HXT01</b> |
|                                                                                                      | Valve island intermediate supply module with a set of 4 configuration plates | 68         | <b>P2M2BXV0A</b> |

## Clip-On pneumatic connectors \*

| Valve Modules                                                                       |                    | Size 1  |            | Size 2         |                       |
|-------------------------------------------------------------------------------------|--------------------|---------|------------|----------------|-----------------------|
|                                                                                     | Description        | Tube OD | Weight (g) | Order code     | Weight (g) Order code |
|  | Straight connector | G1/8"   | 2          | <b>FMDG1-1</b> |                       |
|                                                                                     |                    | 4 mm    | 2          | <b>FMD04-1</b> |                       |
|                                                                                     |                    | 6 mm    | 3          | <b>FMD06-1</b> | 3 <b>FMD06-2</b>      |
|                                                                                     |                    | 8 mm    |            |                | 4 <b>FMD08-2</b>      |
|                                                                                     |                    | 10 mm   |            |                | 5 <b>FMD10-2</b>      |
|                                                                                     |                    | 12 mm   |            |                | 6 <b>FMD12-2</b>      |
|  | Elbow connector    | G1/8"   | 3          | <b>CMDG1-1</b> |                       |
|                                                                                     |                    | 4 mm    | 3          | <b>CMD04-1</b> |                       |
|                                                                                     |                    | 6 mm    | 5          | <b>CMD06-1</b> | 5 <b>CMD06-2</b>      |
|                                                                                     |                    | 8 mm    |            |                | 6 <b>CMD08-2</b>      |
|                                                                                     |                    | 10 mm   |            |                | 7 <b>CMD10-2</b>      |
|                                                                                     |                    | 12 mm   |            |                | 8 <b>CMD12-2</b>      |
|  | Silencer           |         |            |                | 5 <b>MMDVA2</b>       |
|                                                                                     | Plug               |         | 3          | <b>PMDXX1</b>  | 5 <b>PMDXX2</b>       |

\* Fittings and plugs pack quantity : 10

## Electrical multi-connection and field bus head modules

Multiconnector or field bus head module to be chosen from next pages.

## V series valve island : Electrical multi-connector head module

|                                                                                  | Description                   | Protection | Cable length | Weight (g) | Order code        |
|----------------------------------------------------------------------------------|-------------------------------|------------|--------------|------------|-------------------|
|  | <b>Guillotine type</b>        |            |              | 38         | <b>P2M2HEV0A</b>  |
|                                                                                  | Multi-connection head module  |            |              |            |                   |
|                                                                                  | Guillotine connector          | IP65       | 2 m          | 335        | <b>P8LMH20M2A</b> |
|                                                                                  | with flying leads             |            | 5 m          | 802        | <b>P8LMH20M5A</b> |
|  | <b>Standard Sub-D 25 type</b> |            |              | 60         | <b>P2M2HEV0D</b>  |
|                                                                                  | Multi-connection head module  |            |              |            |                   |
|                                                                                  | Sub-D 25 connector            | IP40       | 3 m          | 435        | <b>P8LMH25M3A</b> |
|                                                                                  | with flying leads             |            | 9 m          | 1425       | <b>P8LMH25M9A</b> |
|                                                                                  | multi-cable                   | IP65       | 9 m          | 1425       | <b>P8LMH25B9A</b> |

## V series valve island : Electrical field bus head modules for AS-i protocol



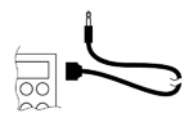
## Standard AS-i protocol (up to 31 nodes) electrical head modules

|                                                                                    |                                                                                                                                                     |                   |           |                       |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|-----------------------|
|   | Electrical module for <b>8 outputs</b> max.                                                                                                         | Input connections | Weight(g) | Order code            |
|                                                                                    | <ul style="list-style-type: none"> <li>V series islands may have up to 8 solenoid pilots</li> <li>2 nodes per module, 4 I / 4 O per node</li> </ul> | no input          | 150       | <b>P2M2HBVA10800</b>  |
|                                                                                    |                                                                                                                                                     | 8 M8 inputs       | 200       | <b>P2M2HBVA10808A</b> |
|                                                                                    |                                                                                                                                                     | 8 inputs on 4 M12 | 200       | <b>P2M2HBVA10808B</b> |
|  | Electrical module for <b>4 outputs</b> max.                                                                                                         | No inputs         | 150       | <b>P2M2HBVA10400</b>  |
|                                                                                    | <ul style="list-style-type: none"> <li>V series islands may have up to 4 solenoid pilots</li> <li>1 node per module, 4 I / 4 O</li> </ul>           | 4 inputs on 4 M12 | 200       | <b>P2M2HBVA10404B</b> |

## AS-i version 2-1 protocol (up to 62 nodes) electrical head modules

|                                                                                    |                                                                                                                                                     |                   |     |                       |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----|-----------------------|
|  | Electrical module for <b>6 outputs</b> max.                                                                                                         | none              | 150 | <b>P2M2HBVA20600</b>  |
|                                                                                    | <ul style="list-style-type: none"> <li>V series islands may have up to 6 solenoid pilots</li> <li>2 nodes per module, 4 I / 3 O per node</li> </ul> | 8 M8 Inputs       | 200 | <b>P2M2HBVA20608A</b> |
|                                                                                    |                                                                                                                                                     | 8 inputs on 4 M12 | 200 | <b>P2M2HBVA20608B</b> |

## AS-i head module accessories

|                                                                                    | Description                   | Connector type            | Weight (g) | Order code        |
|------------------------------------------------------------------------------------|-------------------------------|---------------------------|------------|-------------------|
|  | Cable quick connect connector | M8 Male                   | 25         | <b>P8CS0803J</b>  |
|                                                                                    |                               | M12 Male - A coding       | 25         | <b>P8CS1204J</b>  |
|                                                                                    | « Y » shape                   | M12 Male - 2 x M12 Female | 25         | <b>P8CSY1212A</b> |
|  | Addressing cable 1 meter      | M12 Male - Jack           | 100        | <b>P8LS12JACK</b> |

## V series valve island : Electrical field bus head modules for device bus

Electrical modules for 16 outputs  
(The V series modules may have up to 16 solenoid pilot valves)

|                                                                                   | Description                       | Bus Protocol | Bus In / Bus Out                                                                                          | Power supply   | Weight (g) | Order code           |
|-----------------------------------------------------------------------------------|-----------------------------------|--------------|-----------------------------------------------------------------------------------------------------------|----------------|------------|----------------------|
|                                                                                   | Moduflex Bus Communication module | Profibus DP  | M12 - B coding                                                                                            | M12 - A coding | 250        | <b>P2M2HBVP21600</b> |
|  |                                   |              | For GSD file, go to <a href="http://www.parker.com/pneu/moduflex">http://www.parker.com/pneu/moduflex</a> |                |            |                      |
|                                                                                   |                                   | DeviceNet    | M12 - A coding                                                                                            | M12 - A coding | 250        | <b>P2M2HBVD21600</b> |
|                                                                                   |                                   |              |                                                                                                           | M12 - B coding | 250        | <b>P2M2HBVD11600</b> |
|                                                                                   |                                   |              | For EDS file, go to <a href="http://www.parker.com/pneu/moduflex">http://www.parker.com/pneu/moduflex</a> |                |            |                      |
|                                                                                   |                                   | CANopen      | M12 - A coding                                                                                            | M12 - A coding | 250        | <b>P2M2HBVC21600</b> |
|                                                                                   |                                   |              |                                                                                                           | M12 - B coding | 250        | <b>P2M2HBVC11600</b> |
|                                                                                   |                                   |              | For EDS file, go to <a href="http://www.parker.com/pneu/moduflex">http://www.parker.com/pneu/moduflex</a> |                |            |                      |
|                                                                                   |                                   | InterBus-S   | M23 - 9 Pins                                                                                              | M12 - A coding | 300        | <b>P2M2HBVS11600</b> |

## Device Bus connection accessories

|                                                                                                                            | Description                            | Bus Protocol         | Connector type | Weight (g) | Order code        |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------|----------------|------------|-------------------|
|                                                                                                                            | Power supply female straight connector | All                  | M12 - A coding | 25         | <b>P8CS1205AA</b> |
|  <p>P2M2HBVP21600</p> <p>P8CS1205AA</p> |                                        | DeviceNet<br>CANopen | M12 - B coding | 25         | <b>P8CS1205AB</b> |
|                                                                                                                            | Bus IN female connector                | DeviceNet<br>CANopen | M12 - A coding | 25         | <b>P8CS1205AA</b> |
|                                                                                                                            |                                        | Profibus DP          | M12 - B coding | 25         | <b>P8CS1205AB</b> |
|                                                                                                                            | Bus OUT male connector                 | DeviceNet<br>CANopen | M12 - A coding | 25         | <b>P8CS1205BA</b> |
|                                                                                                                            |                                        | Profibus DP          | M12 - B coding | 25         | <b>P8CS1205BB</b> |
|                                                                                                                            | Line termination                       | DeviceNet<br>CANopen | M12 - A coding | 25         | <b>P8BPA00MA</b>  |
|                                                                                                                            |                                        | Profibus DP          | M12 - B coding | 25         | <b>P8BPA00MB</b>  |



M12 - A coding connector



M12 - B coding connector

## Individual connection valve islands : T series

In a T series valve island, electrical controls are individually connected to each valve module, onto its solenoid pilot.

As an alternative, air pilot valve modules are also available, to be controlled by individual pneumatic signals.



## Valve island assembly

As shown by the above illustration, the valve modules are one by one screwed onto each other, starting from the head module. For this task, the single integrated screw is tightened with a torx T8 standard screwdriver.

The pneumatic connectors may be clipped or unclipped at any stage.

With a LED, a manual override and a labelling for each valve pilot (see above illustration), the island front face eases the "man / machine" dialog.

The resulting valve island length is expressed by the drawing below, while further size details and mountings are presented on dimensions pages.

## Valve pilot connections

### 1 - Solenoid valve modules



In its IP40 version, each solenoid shows Clip connection integrating LED and voltage surge protection. The clip connector with flying leads may be ordered separately with independent or interconnected common.

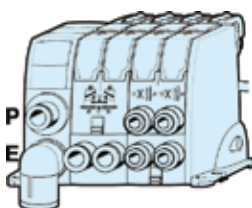
In its IP67 version, each solenoid shows a M8 connection. Lockable connectors, IP67 protected, with LED voltage surge protection and flying lead cable may be ordered for the required length.

### 2 - Air pilot valve modules



No connector has to be ordered : each pneumatic pilot port includes its integrated swivable elbow 4 mm OD tube push-in connector.

Typical T series short island for single or double acting small cylinders.

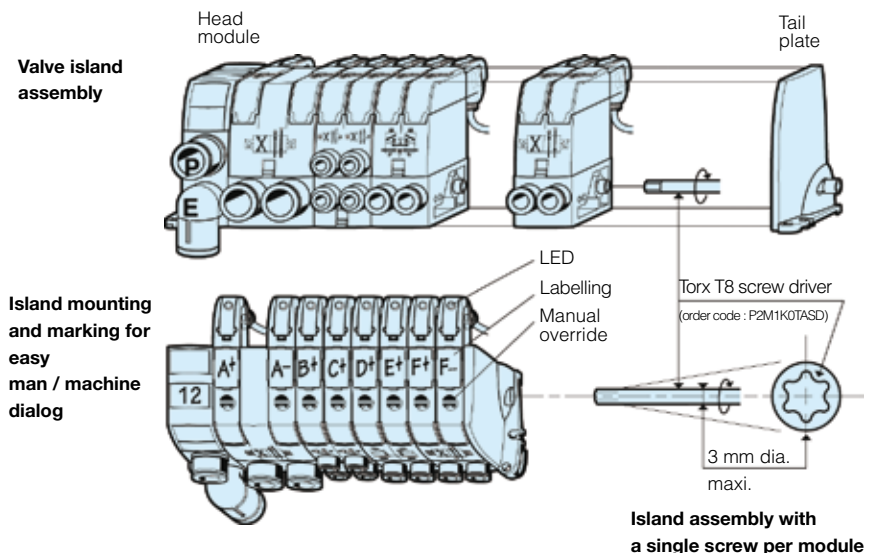


## Valve island configuration

The following page presents all valve sizes and functions that may enter into a T series valve island and, for each valve size, a choice of clip-on pneumatic connectors : tubing size, straight, elbow... To receive its pressure supply and collect its exhaust, the island also requires a

pneumatic head and tail module set and sometimes an intermediate module set including 4 configuration plates for different functions.

Valve modules may either be solenoid versions or air pilot versions. Mixing both versions into the same valve island is possible.



## Modules and island ordering

Choice between 3 approaches :

### 1 - Basic modules ordering :

The following page shows these modules supplied without connector, together with the choice of clip-on connectors separately supplied (10 units packs). This approach gives the maximum flexibility.

### 2 - Complete modules ordering :

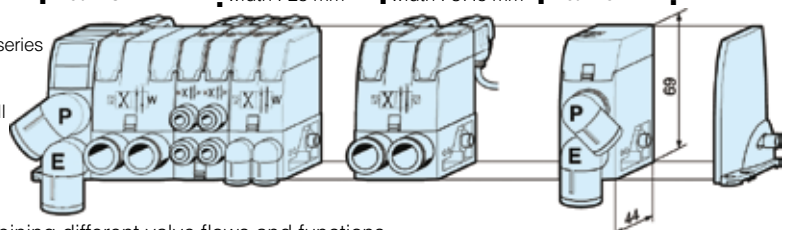
Page 265 shows the ordering chart for modules supplied with their connectors.

### 3 - Assembled island ordering :

Page 268 shows the valve island configurator CD-Rom to specify a valve island that may be delivered assembled.

| Pneumatic head module : | Valve module size 1 : | Valve module size 2 : | Intermediate module : | Tail plate :  |
|-------------------------|-----------------------|-----------------------|-----------------------|---------------|
| width : 32 mm           | width : 25 mm         | width : 37.5 mm       | width : 25 mm         | width : 16 mm |

Typical T series high flow island for both small and large cylinders.



Typical T series islands combining different valve flows and functions

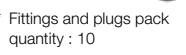
## Basic modules (without connector)

| Valve Modules                                                                                                         |                                                                                    |                                                                       |           |                 | Size 1 |                    | Size 2 |                    |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------|-----------------|--------|--------------------|--------|--------------------|
|                                                                                                                       | Symbol                                                                             | Description                                                           | Actuator  | Pilot connector | W (g)  | Order code         | W (g)  | Order code         |
| <br><b>Size 1</b><br><b>Dual 4/2</b> |   | 4/2 Spring return                                                     | Solenoid  | M8 Lockable     | 68     | <b>P2M1T4ES2C</b>  | 74     | <b>P2M2T4ES2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 68     | <b>P2M1T4ES2CW</b> | 74     | <b>P2M2T4ES2CW</b> |
|                                                                                                                       |   | 4/2 Double pilot                                                      | Solenoid  | M8 Lockable     | 63     | <b>P2M1T4PS</b>    | 69     | <b>P2M2T4PS</b>    |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 63     | <b>P2M1T4PS</b>    | 69     | <b>P2M2T4PS</b>    |
|                                                                                                                       |   | 2 x 3/2 NC + NC<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 77     | <b>P2M1T4EE2C</b>  | 83     | <b>P2M2T4EE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 77     | <b>P2M1T4EE2CW</b> | 83     | <b>P2M2T4EE2CW</b> |
| <br><b>Size 1</b>                    |   | 2 x 3/2 NO + NO<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 67     | <b>P2M1T4PP</b>    | 73     | <b>P2M2T4PP</b>    |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 67     | <b>P2M1T4PP</b>    | 73     | <b>P2M2T4PP</b>    |
|                                                                                                                       |   | 2 x 3/2 NC + NO<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 80     | <b>P2M1TDEE2C</b>  | 94     | <b>P2M2TDEE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 80     | <b>P2M1TDEE2CW</b> | 94     | <b>P2M2TDEE2CW</b> |
|                                                                                                                       |   | 2 x 3/2 NO + NO<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 80     | <b>P2M1TCEE2C</b>  | 94     | <b>P2M2TCEE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 80     | <b>P2M1TCEE2CW</b> | 94     | <b>P2M2TCEE2CW</b> |
| <br><b>Size 2</b>                    |   | 2 x 4/2 Spring return<br>with exhaust check valves                    | Solenoid  | M8 Lockable     | 70     | <b>P2M1TDEE2C</b>  | 84     | <b>P2M2TDEE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 70     | <b>P2M1TDEE2CW</b> | 84     | <b>P2M2TDEE2CW</b> |
|                                                                                                                       |   | 3/2 NC<br>with exhaust check valves                                   | Solenoid  | M8 Lockable     | 80     | <b>P2M1TCEE2C</b>  | 94     | <b>P2M2TCEE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 80     | <b>P2M1TCEE2CW</b> | 94     | <b>P2M2TCEE2CW</b> |
|                                                                                                                       |  | 4/3 Centre exhaust<br>2 x 3/2 NC + NC<br>without exhaust check valves | Solenoid  | M8 Lockable     | 88     | <b>P2M1TJEE2C</b>  | 94     | <b>P2M2TJEE2C</b>  |
|                                                                                                                       |                                                                                    |                                                                       | Air pilot | Clip            | 88     | <b>P2M1TJEE2CW</b> | 94     | <b>P2M2TJEE2CW</b> |

## Island head and intermediate module sets

| Valve Modules                                                                                           |                                                                              | Size 2 |                  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------|------------------|
|                                                                                                         | Description                                                                  | W (g)  | Order code       |
| <br><b>P2M2HXT01</b> | Valve island pneumatic head and tail module set                              | 64     | <b>P2M2HXT01</b> |
|                                                                                                         | Valve island intermediate supply module with a set of 4 configuration plates | 64     | <b>P2M2BXT0A</b> |

## Clip-On pneumatic connectors \*

| Valve Modules                                                                       |                    |         |       |                | Size 1 |                | Size 2 |                |
|-------------------------------------------------------------------------------------|--------------------|---------|-------|----------------|--------|----------------|--------|----------------|
|                                                                                     | Description        | Tube OD | W (g) | Order code     | W (g)  | Order code     | W (g)  | Order code     |
|  | Straight connector | G1/8"   | 2     | <b>FMDG1-1</b> |        |                |        |                |
|                                                                                     |                    | 4 mm    | 2     | <b>FMD04-1</b> |        |                |        |                |
|                                                                                     |                    | 6 mm    | 3     | <b>FMD06-1</b> | 3      | <b>FMD06-2</b> |        |                |
|                                                                                     |                    | 8 mm    |       |                |        |                | 4      | <b>FMD08-2</b> |
|                                                                                     |                    | 10 mm   |       |                |        |                | 5      | <b>FMD10-2</b> |
|                                                                                     |                    | 12 mm   |       |                |        |                | 6      | <b>FMD12-2</b> |
|  | Elbow connector    | G1/8"   | 3     | <b>CMDG1-1</b> |        |                |        |                |
|                                                                                     |                    | 4 mm    | 3     | <b>CMD04-1</b> |        |                |        |                |
|                                                                                     |                    | 6 mm    | 5     | <b>CMD06-1</b> | 5      | <b>CMD06-2</b> |        |                |
|                                                                                     |                    | 8 mm    |       |                |        |                | 6      | <b>CMD08-2</b> |
|                                                                                     |                    | 10 mm   |       |                |        |                | 7      | <b>CMD10-2</b> |
|                                                                                     |                    | 12 mm   |       |                |        |                | 8      | <b>CMD12-2</b> |
|  | Silencer           |         |       |                |        |                | 5      | <b>MMDVA2</b>  |
|                                                                                     | Plug               |         | 3     | <b>PMDXX1</b>  |        |                | 5      | <b>PMDXX2</b>  |

\* Fittings and plugs pack quantity : 10

## Electrical connectors

| M8 connector                                                                        |                                                                  | Description                                                           | Connector type        | Cable length | W (g) | Order code         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------|--------------|-------|--------------------|
|  | Clip connector                                                   | Individual Clip-on connector – IP67                                   | M8 / 2 x Flying leads | 2 meters     | 62    | <b>P8LS08L226C</b> |
|                                                                                     |                                                                  | Including LED and surge protection                                    |                       | 5 meters     | 155   | <b>P8LS08L526C</b> |
|                                                                                     |                                                                  | 2 Flying leads                                                        |                       | 9 meters     | 180   | <b>P8LS08L926C</b> |
|                                                                                     |                                                                  | Clip-on connector – IP40                                              | 1 x Clip connector    | 1 meter      | 8     | <b>P8LW021C</b>    |
|                                                                                     |                                                                  | Individual : Including 2 flying leads                                 | 2 x Clip connectors   | 1 meter      | 12    | <b>P8LW021C02</b>  |
|                                                                                     |                                                                  | Multiple : Including 1 common (0 Vdc) and 1 flying lead per connector | 4 x Clip connectors   | 1 meter      | 20    | <b>P8LW021C04</b>  |
|  | Straight cable quick connect to thread connector, IP67 protected |                                                                       | M8                    |              | 12    | <b>P8CS0803J</b>   |
|                                                                                     |                                                                  |                                                                       | M12                   |              | 15    | <b>P8CS1204J</b>   |

## Stand-Alone Valve Modules : S series

Very useful to control isolated cylinders, these stand-alone valves module are compact and easy to mount on the machines with neat electrical and pneumatic connections.

As an alternative to electrical controls, valves with air pilots are also available, to be controlled by individual pneumatic signals.



## Valve functions

The following page shows all valve sizes and functions and, for each valve size, a choice of clip-on pneumatic connectors : tubing size, straight, elbow, ...

## Valve main connections

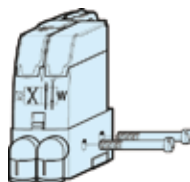
- Outlets to cylinders (ports 2 and 4) on one side.
- Supply P (port 1) and exhaust E (port 3) on the other side. At port 3, exhaust may be collected or receive a clip-on muffler.



## Valve mounting

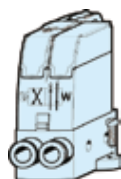
All valves may be mounted either with side screws or with their integrated retractable brackets.

### Side screw mounting



The brackets are then retracted.

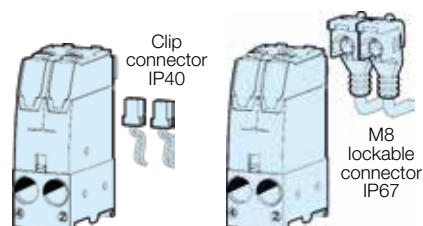
### Optional foot mounting



The brackets are then extended.

## Valve pilot connections

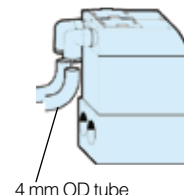
### 1- Solenoid valve modules



In its IP40 version, each solenoid shows Clip connection integrating LED and voltage surge protection. The clip connector with flying leads may be ordered separately with independent or interconnected common. In its IP67 version, each solenoid shows a M8 connection. Lockable connectors, IP67 protected, with LED voltage surge protection and flying lead cable may be ordered for the required length.

### 2- Air pilot valve modules

No connector has to be ordered : each pneumatic pilot port includes its integrated swivable elbow 4 mm OD tube push-in connector.



## Modules and island ordering

Choice between 2 approaches :

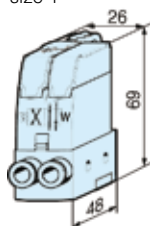
### 1 - Basic modules ordering :

The following page shows these modules supplied without connector, together with the choice of clip-on connectors separately supplied (10 units packs). This approach gives the maximum flexibility.

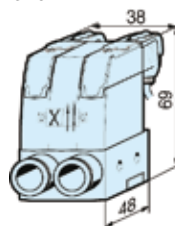
### 2 - Complete modules ordering :

Ordering chart for modules supplied with their pneumatic and electrical connectors and muffler.

Valve module size 1



Valve module size 2



## Valve Modules

|                                                                                   | Symbol                                                                            | Description                                                           | Actuator  | Pilot connector | W (g) | Size 1             | W (g) | Size 2             |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------|-----------------|-------|--------------------|-------|--------------------|
|                                                                                   |                                                                                   |                                                                       |           |                 |       | Order code         |       | Order code         |
|  |  | 4/2 Spring return                                                     | Solenoid  | M8 Lockable     | 72    | <b>P2M1S4ES2C</b>  | 78    | <b>P2M2S4ES2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 72    | <b>P2M1S4ES2CW</b> | 78    | <b>P2M2S4ES2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 67    | <b>P2M1S4PS</b>    | 73    | <b>P2M2S4PS</b>    |
|                                                                                   |  | 4/2 Double pilot                                                      | Solenoid  | M8 Lockable     | 87    | <b>P2M1S4EE2C</b>  | 93    | <b>P2M2S4EE2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 87    | <b>P2M1S4EE2CW</b> | 93    | <b>P2M2S4EE2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 77    | <b>P2M1S4PP</b>    | 73    | <b>P2M2S4PP</b>    |
|  |  | 2 x 3/2 NC + NC<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 85    | <b>P2M1SDEE2C</b>  | 91    | <b>P2M2SDEE2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 85    | <b>P2M1SDEE2CW</b> | 91    | <b>P2M2SDEE2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 75    | <b>P2M1SDPP</b>    | 81    | <b>P2M2SDPP</b>    |
|                                                                                   |  | 2 x 3/2 NO + NO<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 85    | <b>P2M1SCEE2C</b>  | 91    | <b>P2M2SCEE2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 85    | <b>P2M1SCEE2CW</b> | 91    | <b>P2M2SCEE2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 75    | <b>P2M1SCPP</b>    | 81    | <b>P2M2SCPP</b>    |
|  |  | 2 x 3/2 NC + NO<br>with exhaust check valves                          | Solenoid  | M8 Lockable     | 85    | <b>P2M1SEEE2C</b>  | 91    | <b>P2M2SEEE2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 85    | <b>P2M1SEEE2CW</b> | 91    | <b>P2M2SEEE2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 75    | <b>P2M1SEPP</b>    | 81    | <b>P2M2SEPP</b>    |
|                                                                                   |  | 3/2 NC<br>with exhaust check valves                                   | Solenoid  | M8 Lockable     | 80    | <b>P2M1S3ES2C</b>  | 86    | <b>P2M2S3ES2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 80    | <b>P2M1S3ES2CW</b> | 86    | <b>P2M2S3ES2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 70    | <b>P2M1S3PS</b>    | 76    | <b>P2M2S3PS</b>    |
|                                                                                   |  | 4/3 Centre exhaust<br>2 x 3/2 NC + NC<br>without exhaust check valves | Solenoid  | M8 Lockable     | 85    | <b>P2M1SGEE2C</b>  | 91    | <b>P2M2SGEE2C</b>  |
|                                                                                   |                                                                                   |                                                                       |           | Clip            | 85    | <b>P2M1SGEE2CW</b> | 91    | <b>P2M2SGEE2CW</b> |
|                                                                                   |                                                                                   |                                                                       | Air pilot |                 | 75    | <b>P2M1SGPP</b>    | 81    | <b>P2M2SGPP</b>    |

## Clip-On pneumatic connectors \*

## Valve Modules

|                                                                                     | Description        | Tube OD | W (g) | Size 1         | W (g) | Size 2         |
|-------------------------------------------------------------------------------------|--------------------|---------|-------|----------------|-------|----------------|
|                                                                                     |                    |         |       | Order code     |       | Order code     |
|  | Straight connector | G1/8"   | 2     | <b>FMDG1-1</b> |       |                |
|                                                                                     |                    | 4 mm    | 2     | <b>FMD04-1</b> |       |                |
|                                                                                     |                    | 6 mm    | 3     | <b>FMD06-1</b> | 3     | <b>FMD06-2</b> |
|                                                                                     |                    | 8 mm    |       |                | 4     | <b>FMD08-2</b> |
|                                                                                     |                    | 10 mm   |       |                | 5     | <b>FMD10-2</b> |
|                                                                                     |                    | 12 mm   |       |                | 6     | <b>FMD12-2</b> |
|  | Elbow connector    | G1/8"   | 3     | <b>CMDG1-1</b> |       |                |
|                                                                                     |                    | 4 mm    | 3     | <b>CMD04-1</b> |       |                |
|                                                                                     |                    | 6 mm    | 5     | <b>CMD06-1</b> | 5     | <b>CMD06-2</b> |
|                                                                                     |                    | 8 mm    |       |                | 6     | <b>CMD08-2</b> |
|                                                                                     |                    | 10 mm   |       |                | 7     | <b>CMD10-2</b> |
|                                                                                     |                    | 12 mm   |       |                | 8     | <b>CMD12-2</b> |
|  | Silencer           |         | 3     | <b>MMDVA1</b>  | 5     | <b>MMDVA2</b>  |
|  | Plug               |         | 3     | <b>PMDXX1</b>  | 5     | <b>PMDXX2</b>  |

\* Fittings and plugs pack quantity : 10

## Electrical connectors

|                                                                                     | Description                                                                                 | Connector type        | Cable length | W (g) | Order code         |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|--------------|-------|--------------------|
|                                                                                     |                                                                                             |                       |              |       |                    |
|  | Individual Clip-on connector – IP67<br>Including LED and surge protection<br>2 Flying leads | M8 / 2 x Flying leads | 2 meters     | 62    | <b>P8LS08L226C</b> |
|                                                                                     |                                                                                             |                       | 5 meters     | 155   | <b>P8LS08L526C</b> |
|                                                                                     |                                                                                             |                       | 9 meters     | 180   | <b>P8LS08L926C</b> |
|                                                                                     | Clip-on connector – IP40                                                                    | 1 x Clip connector    | 1 meter      | 8     | <b>P8LW021C</b>    |
|                                                                                     | Individual : Including 2 flying leads                                                       | 2 x Clip connectors   | 1 meter      | 12    | <b>P8LW021C02</b>  |
|                                                                                     | Multiple : Including 1 common (0 Vdc)<br>and 1 flying lead per connector                    | 4 x Clip connectors   | 1 meter      | 20    | <b>P8LW021C04</b>  |
|                                                                                     |                                                                                             | 8 x Clip connectors   | 1 meter      | 36    | <b>P8LW021C08</b>  |
|  | Straight cable quick connect to thread<br>connector, IP67 protected                         | M8                    |              | 12    | <b>P8CS0803J</b>   |
|                                                                                     |                                                                                             | M12                   |              | 15    | <b>P8CS1204J</b>   |

## Peripheral Valve Modules : P series

Four additional peripheral modules complete the valve system in order to facilitate the installation of specific cylinder controls :

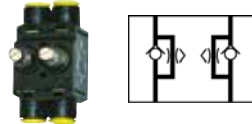
- Dual flow control, for cylinder speed adjusting;
- Dual pilot operated check valve, for cylinder positioning;
- Pressure regulator, for cylinder thrust adjusting;
- Vacuum generator, for vacuum pad controls.



## Module function selection

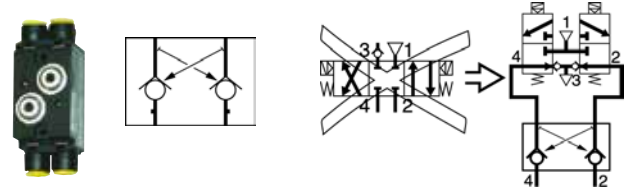
### Dual flow control

By controlling the exhaust flows of a double acting cylinder, this module can adjust both speeds : forward and backward.



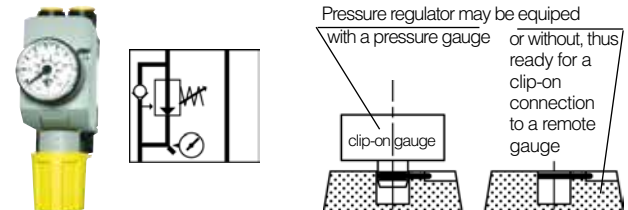
### Dual pilot operated check valve

Combined with a double 3/2 NC + NC valve, this module will block flows and stop cylinder movement as soon as the valve outputs are both exhausted. Better than a 3 position closed centre valve, it provides accurate positioning when mounted close to the cylinder.



### Pressure regulator

The thrust developed by a cylinder often requires adjustment by controlling the pressure to the front or back of the piston. This pressure regulator module enables manual adjustment of pressure on one side of the piston, with visual indication provided by the pressure gauge.

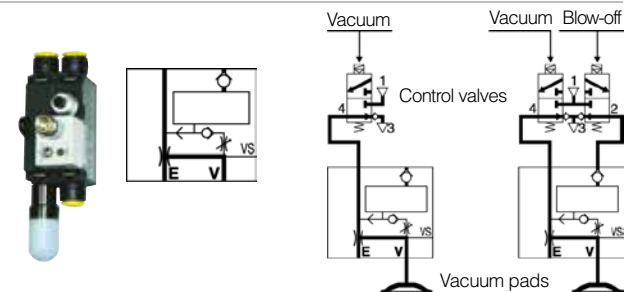


### Vacuum generator

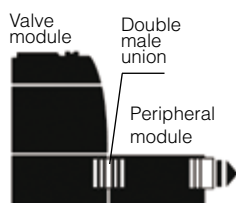
This multi-purpose module controls vacuum pads with a choice between two basics schematics :

- Controlled with only one 3/2 NC valve, the vacuum generator provides vacuum to the pads during valve actuation and then blow-off supplied from an integrated chamber.
- Controlled with a double 3/2 NC + NC, the vacuum generator provides vacuum during the first valve actuation, and then strong blow-off from the second valve.

Integrated blow-off flow controller. Optional plug-in vacuum sensor.



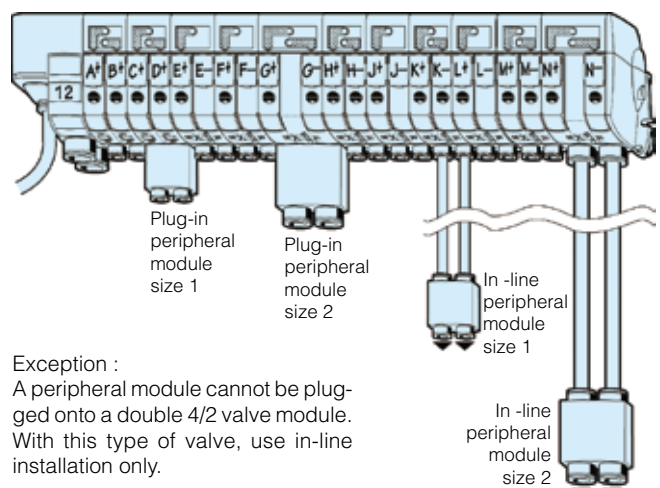
## Module installation selection



Stand alone valve complete with a plug-in peripheral module

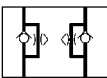
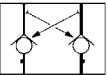
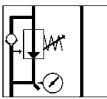
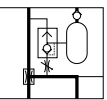


- Peripheral modules may either be mounted :
- Plugged into the valve module through double male unions;
  - Or in line, close to the cylinder to control it better.



Exception :  
A peripheral module cannot be plugged onto a double 4/2 valve module. With this type of valve, use in-line installation only.

## Basic peripheral modules (without connector)

| Peripheral Modules                                                                |                                                                                   |                       | Size 1         |                 | Size 2     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|----------------|-----------------|------------|-----------------|
|                                                                                   | Symbol                                                                            | Description           | Weight (g)     | Order code      | Weight (g) | Order code      |
|  |  | Dual flow control     | 50             | <b>P2M1PXFA</b> | 50         | <b>P2M2PXFA</b> |
|  |  | Dual P.O. check valve | 50             | <b>P2M1PXCA</b> | 50         | <b>P2M2PXCA</b> |
|  |  | Pressure regulator    | Pressure range | Gauge           |            |                 |
|                                                                                   |                                                                                   |                       | 0 - 2 bar      | 0 - 4 bar       | 135        | <b>P2M1PXSR</b> |
|                                                                                   |                                                                                   |                       |                | Without         | 105        | <b>P2M1PXST</b> |
|                                                                                   |                                                                                   |                       | 0 - 4 bar      | 0 - 7 bar       | 135        | <b>P2M1PXSM</b> |
|                                                                                   |                                                                                   |                       |                | Without         | 105        | <b>P2M1PXSL</b> |
|                                                                                   |                                                                                   |                       | 0 - 8 bar      | 0 - 11 bar      | 135        | <b>P2M1PXSG</b> |
|                                                                                   |                                                                                   |                       |                | Without         | 105        | <b>P2M1PXSN</b> |
|  |  | 90% Vacuum generator  | 30             | <b>P2M1PXVA</b> |            |                 |

## Clip-On pneumatic connectors \*

| Valve Modules                                                                       |                    |         | Size 1     |                | Size 2     |                |
|-------------------------------------------------------------------------------------|--------------------|---------|------------|----------------|------------|----------------|
|                                                                                     | Description        | Tube OD | Weight (g) | Order code     | Weight (g) | Order code     |
|  | Straight connector | G1/8"   | 2          | <b>FMDG1-1</b> |            |                |
|                                                                                     |                    | 4 mm    | 2          | <b>FMD04-1</b> |            |                |
|                                                                                     |                    | 6 mm    | 3          | <b>FMD06-1</b> | 3          | <b>FMD06-2</b> |
|                                                                                     |                    | 8 mm    |            |                | 4          | <b>FMD08-2</b> |
|                                                                                     |                    | 10 mm   |            |                | 5          | <b>FMD10-2</b> |
|                                                                                     |                    | 12 mm   |            |                | 6          | <b>FMD12-2</b> |
|  | Elbow connector    | G1/8"   | 3          | <b>CMDG1-1</b> |            |                |
|                                                                                     |                    | 4 mm    | 3          | <b>CMD04-1</b> |            |                |
|                                                                                     |                    | 6 mm    | 5          | <b>CMD06-1</b> | 5          | <b>CMD06-2</b> |
|                                                                                     |                    | 8 mm    |            |                | 6          | <b>CMD08-2</b> |
|                                                                                     |                    | 10 mm   |            |                | 7          | <b>CMD10-2</b> |
|                                                                                     |                    | 12 mm   |            |                | 8          | <b>CMD12-2</b> |
|  | Double male union  |         | 5          | <b>HMDXX1</b>  | 8          | <b>HMDXX2</b>  |
|                                                                                     | Silencer           |         | 3          | <b>MMDVA1</b>  |            |                |
|                                                                                     | Plug               |         | 3          | <b>PMDXX1</b>  | 5          | <b>PMDXX2</b>  |

\* Fittings and plugs pack quantity : 10

## Clip-on accessories

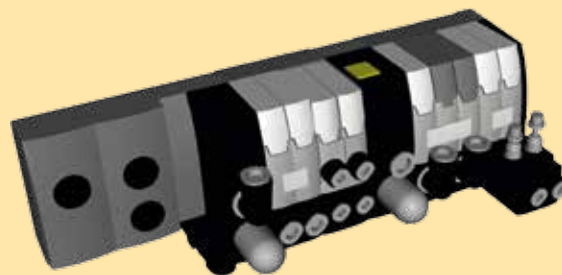
|                                                                                     | Description                                                                    | Connection      | Pressure range | Weight (g) | Order code          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------|----------------|------------|---------------------|
|  | Clip-on pressure gauge<br>for pressure regulator modules,<br>size 1 or size 2  | Clip-on         | 0 to 4 bar     | 30         | <b>P2M1K0GT</b>     |
|                                                                                     |                                                                                |                 | 0 to 7 bar     | 30         | <b>P2M1K0GL</b>     |
|                                                                                     |                                                                                |                 | 0 to 11 bar    | 30         | <b>P2M1K0GN</b>     |
|  | Analog (1 - 5 Vdc) Vacuum Sensor                                               | Diam. 4 mm tube | 0 to -1 bar    | 25         | <b>MPS-V8T4-AG</b>  |
|                                                                                     | Flying lead 2 meter cable                                                      | Diam. 6 mm tube | 0 to -1 bar    | 25         | <b>MPS-V8T-AG</b>   |
|                                                                                     | Dig. PNP / Ana (4 - 20 mA) Vacuum Sensor<br>15 cm cable - M8 4 pin's connector | G 1/8" male     | 0 to -1 bar    | 45         | <b>MPS-V34G-PCI</b> |

## Moduflex Valve Island e-Configurator

The comprehensive **Moduflex Valve CAD e-Configurator** enable online Moduflex Valve Island configuration giving Bill of Material and 3D or 2D CAD download

Go to <http://www.parker.com/pde/cad> to start

Stacking Air Valve  
Moduflex P2M Series



## Valve island configuration practice :

**Moduflex Assembly**

Model Number  
P2MAVB2C8MM05

**SELECT YOUR CONFIGURATION**  
*Options marked with (\*) are required items.  
(Configuration subject to change without notice.)*

Island Assembly: P2MA - Moduflex Island Assembly

Style\*: V - Valvebonic Collective Wired Valve

Wiring / Bus Protocol\*: B - Bus

Bus Protocol Module\*: ASI 2 1 - 8 (PNP) single inputs on eight M8 connectors, 8 solenoid outputs, 2 nodes

NOTE: Maximum number of solenoids for this manifold is 6. Single Solenoid Valve = 1 Output. Double Solenoid Valve = 2 Outputs

Bus Model Number: P2M2HVA20608A

Pilot Source\*: 2 - Internal Supply / External Exhaust

Inlet Port Type (No. 1 Pressure)\*: CS - 3mm Elbow Fitting

Exhaust Port Type (No. 3 Exhaust)\*: MM - Clip-In Muffler

Number of Stations\*: 05

View Summary Generate CAD Refresh Quit

**Step 1 : Head and tail definition**

Station 1\*: Valve P2M1V4EE2CV00R6 Configure Copy Reset

Station 2\*: Valve P2M1V4EE2CV00F4 Configure Copy Reset

Station 3\*: Intermediate Module P2M2B3CV02F8MM Configure Copy Reset

Station 4\*: Valve P2M2V4ES2CV00C8 Configure Copy Reset

Station 5\*: Valve P2M1VDEE2CV00JJ Dual Flow Control P2M1FXFAJF4 Configure Copy Reset

View Summary Generate CAD Refresh Quit

Call: 1.269.629.5575 or email: [pdnmtg@parker.com](mailto:pdnmtg@parker.com) for special options not available here.

## Get the bill of material

By clicking on View Summary button :

1. View the bill of material :
  - Head and Tail Set
  - Valves detail
2. Click to Print



## Download 2D or 3D CAD

By clicking on Generate CAD button :

1. Select to view, download or e-mail your CAD file
2. Select your best file format
3. Submit Request



## 1 - Multi-connector or sub-D 25 valve island

Multi-connector  
or sub-D 25  
electrical head module  
width : 15 mm

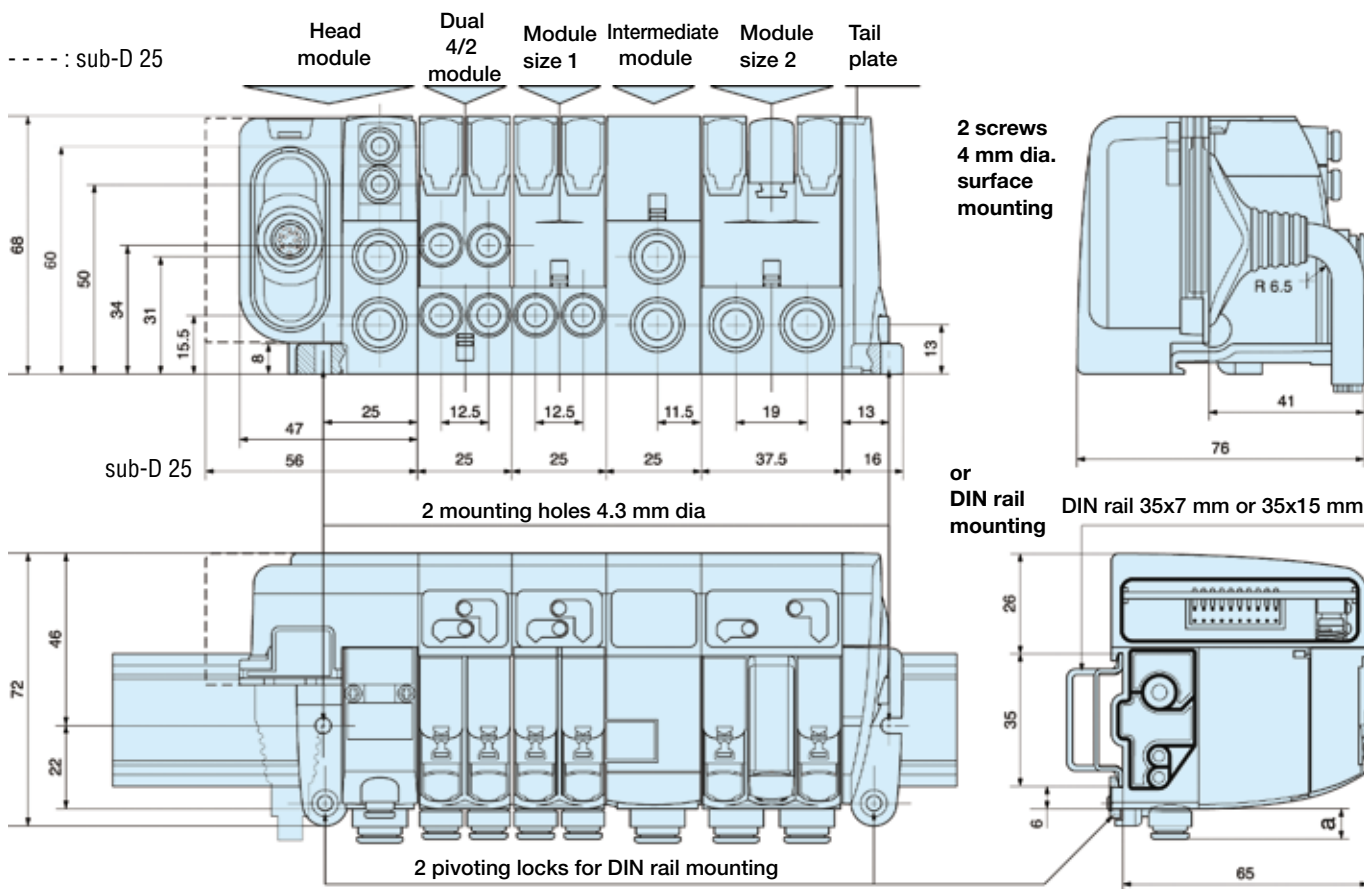
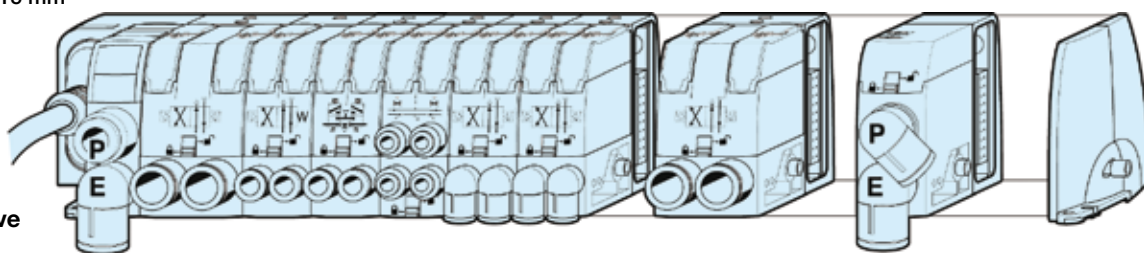
Head and tail  
pneumatic module set  
width : 48 mm

Modules  
size 1  
width : 25 mm

Modules  
size 2  
width : 37.5 mm

Intermediate  
module  
width : 25 mm

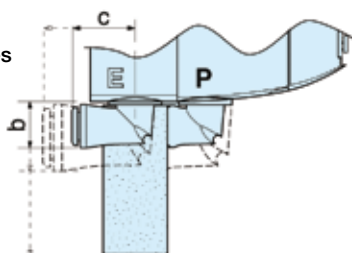
Island total width  
depending on valve  
composition



Special case : 4/3 closed centre function within island version :  
Add the dimensions of the dual P.O. check valve module plugged  
into the island.

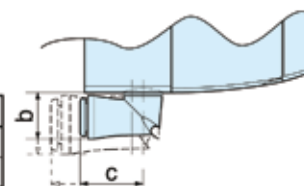
Island head and intermediate modules

|               | a  | b  | c  |
|---------------|----|----|----|
| 6 mm tube OD  | 8  | 13 | 16 |
| 8 mm tube OD  | 9  | 16 | 19 |
| 10 mm tube OD | 13 | 18 | 22 |
| 12 mm tube OD | 13 | 19 | 25 |
| muffler       |    | 40 |    |



Island valves modules

|                | OD tube | a  | b  | c  |
|----------------|---------|----|----|----|
| Size 1 modules | 4 mm    | 8  | 10 | 12 |
|                | 6 mm    | 8  | 13 | 16 |
| Size 2 modules | 8 mm    | 9  | 16 | 19 |
|                | 10 mm   | 13 | 18 | 22 |



## 2 - Field bus connected islands

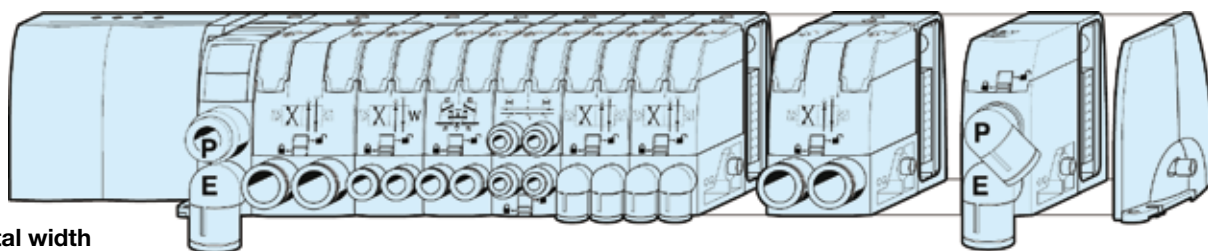
Electrical field  
bus head module  
width : 62 mm

Head and tail  
pneumatic module set  
width : 48 mm

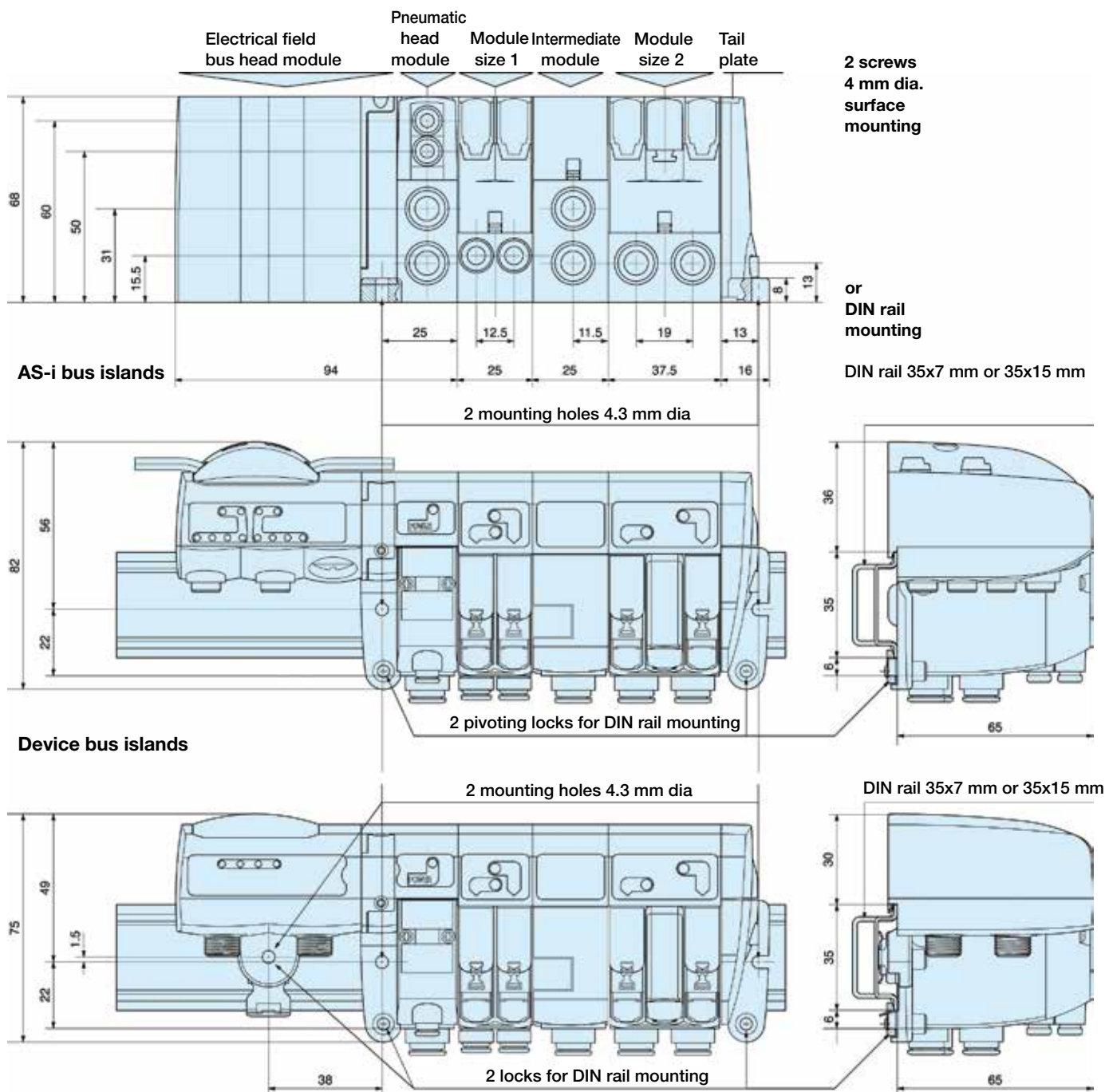
Modules  
size 1  
width : 25 mm

Modules  
size 2  
width : 37.5 mm

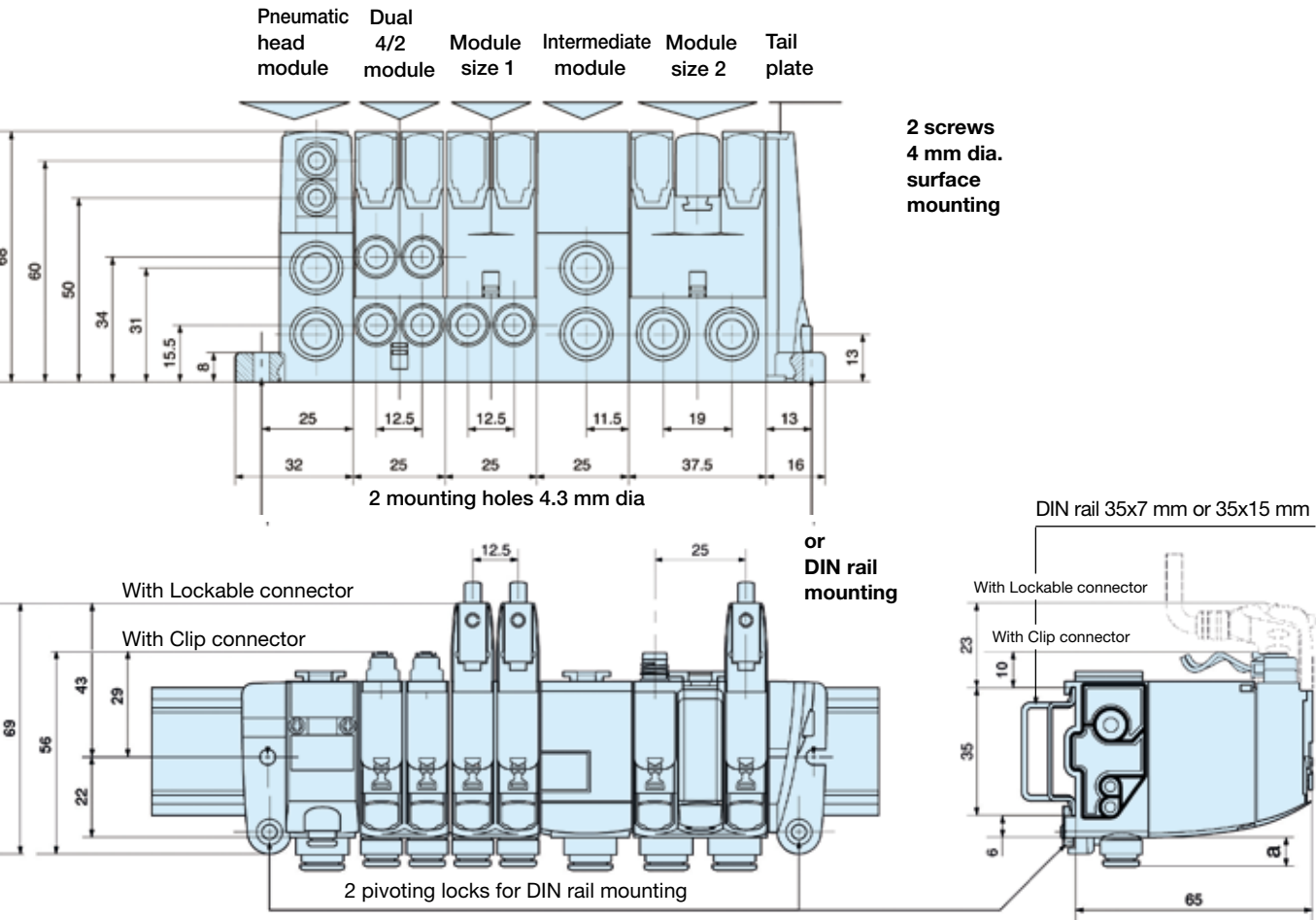
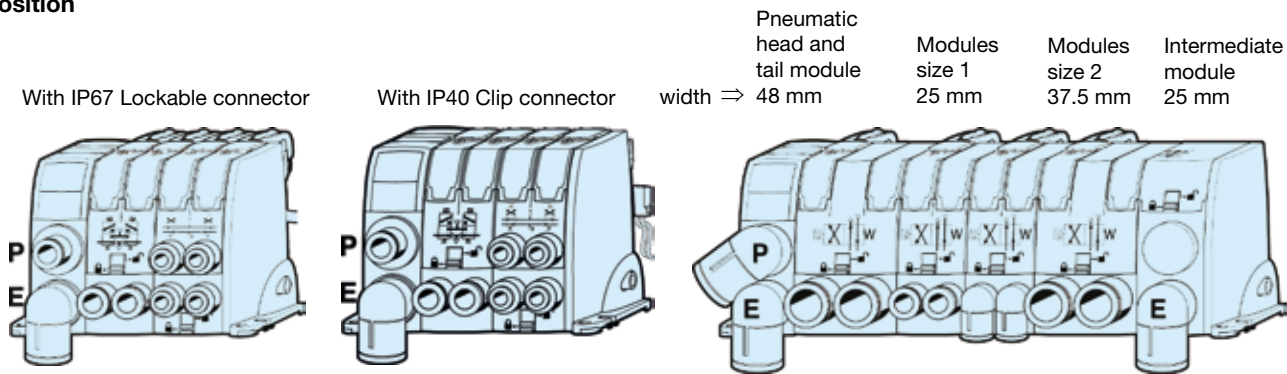
Intermediate  
module  
width : 25 mm



Island total width  
depending on valve  
composition



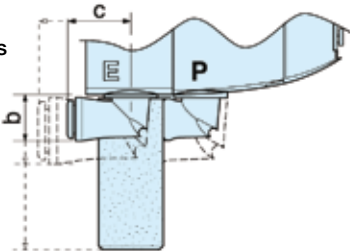
Island total width  
depending on valve  
composition



Special case : 4/3 closed centre function within island version :  
Add the dimensions of the dual P.O. check valve module plugged  
into the island.

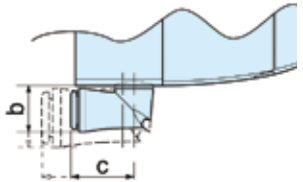
Island head and intermediate modules

|               | a  | b  | c  |
|---------------|----|----|----|
| 6 mm tube OD  | 8  | 13 | 16 |
| 8 mm tube OD  | 9  | 16 | 19 |
| 10 mm tube OD | 13 | 18 | 22 |
| 12 mm tube OD | 13 | 19 | 25 |
| muffler       |    | 40 |    |



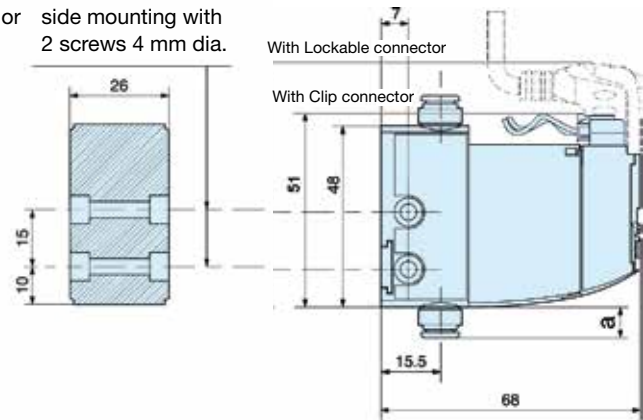
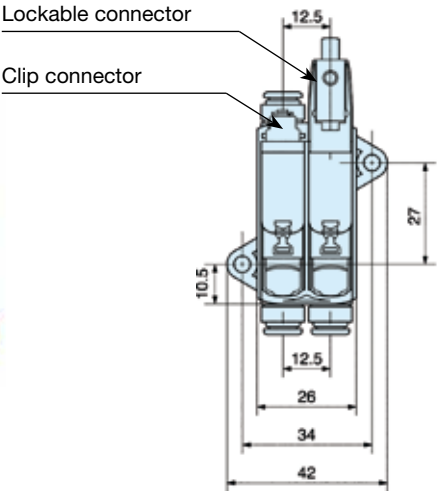
Island valves modules

|                | OD tube | a  | b  | c  |
|----------------|---------|----|----|----|
| Size 1 modules | 4 mm    | 8  | 10 | 12 |
|                | 6 mm    | 8  | 13 | 16 |
| Size 2 modules | 8 mm    | 9  | 16 | 19 |
|                | 10 mm   | 13 | 18 | 22 |

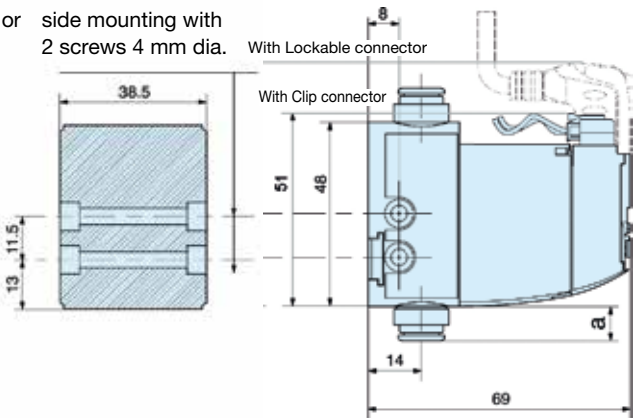
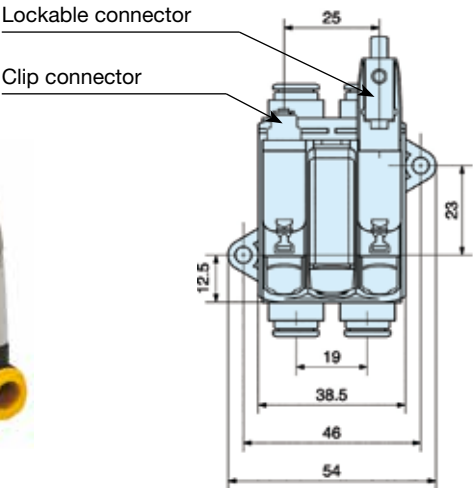


Stand-alone  
valve  
size 1

surface mounting with screws  
4 mm dia. into retractable brackets 3 mm thick



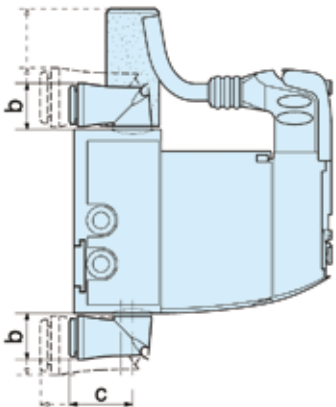
Stand-alone  
valve  
size 2



Dimensions and mountings  
of the stand-alone valves  
4/2, double and single 3/2,  
4/3 vented centre and  
4/3 pressure centre.

Special case : 4/3 closed centre.  
Add the dual P.O. check  
valve module that has been  
plugged in the basic valve.

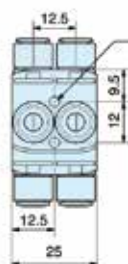
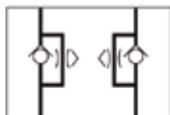
|                   |               | a  | b  | c  |
|-------------------|---------------|----|----|----|
| Size 1<br>modules | 4 mm tube OD  | 8  | 10 | 12 |
|                   | 6 mm tube OD  | 8  | 13 | 16 |
|                   | muffler       |    | 31 |    |
| Size 2<br>modules | 8 mm tube OD  | 9  | 16 | 19 |
|                   | 10 mm tube OD | 13 | 18 | 22 |
|                   | muffler       |    | 40 |    |



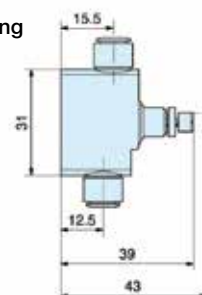
**Reminder :** peripheral modules may either be plugged in a valve or mounted in line separate from the valve



### Dual flow control module size 1

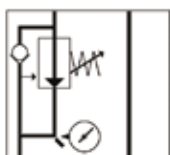


possible mounting  
with 2 screws  
3 mm dia.

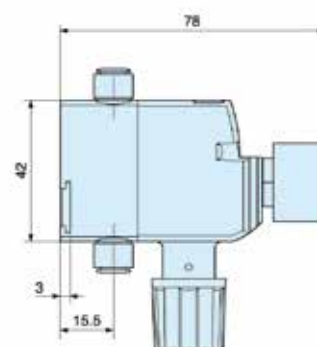
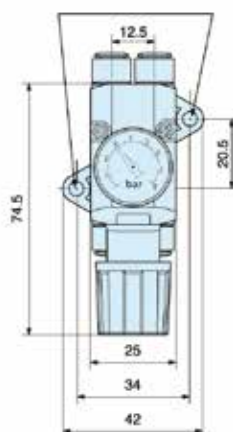


### Pressure regulation module size 1

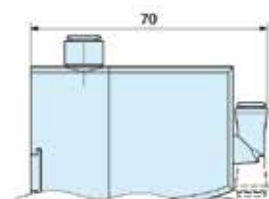
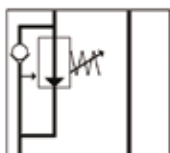
- with gauge



mounting with 2 screws 4 mm dia.  
on retractable brackets

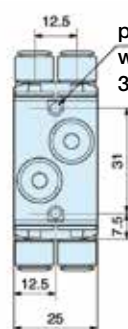
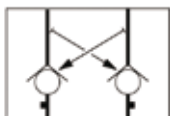


- without gauge



swivel elbow push-in  
connector 4 mm OD tube

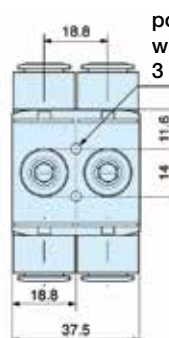
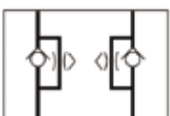
### Dual P.O. check valve module size 1



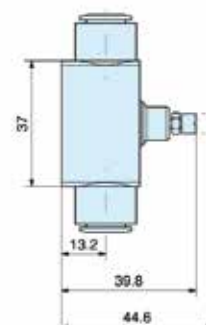
possible mounting  
with 2 screws  
3 mm dia.



### Dual flow control module size 2

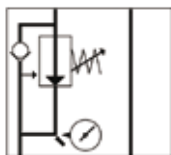
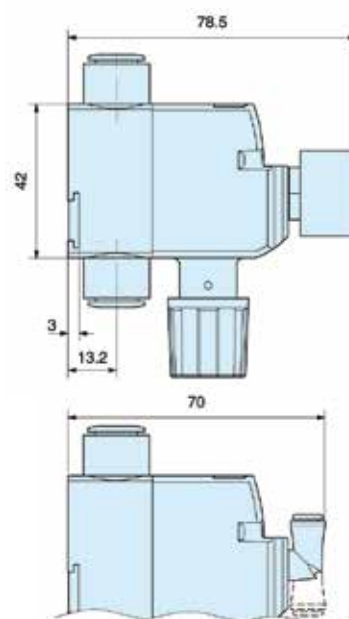
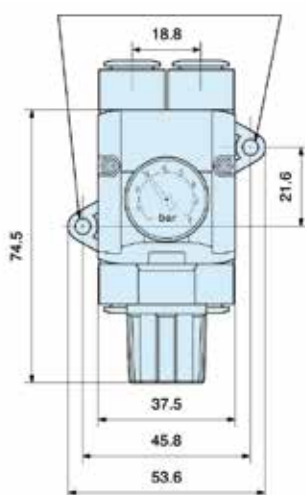


possible mounting  
with 2 screws  
3 mm dia.



## Pressure regulation module size 2

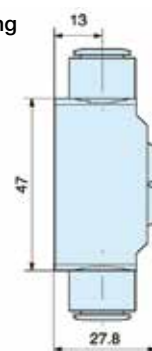
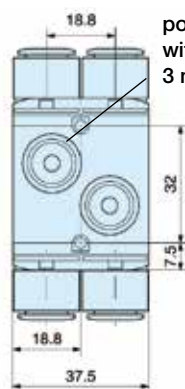
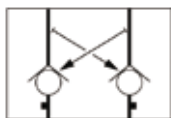
- with gauge

mounting with 2 screws 4 mm dia.  
on retractable brackets

- without gauge

swivel elbow push-in  
connector 4 mm OD tube

## Dual P.O. check valve module size 2



## Vacuum generator module

In-line

With Moduflex valve

