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\text { The electrical connection is achieved by a male SUB-D } 37 \text { pin connector which is able to manage up to } 32 \text { solenoid pilots }
$$ As an option, a male SUB-D 25 pin connector is also available. This connectror can manage up to 22 solenoid pilots.

Bistable $5 / 2$ valve, $5 / 3$ valves and $2 \times 3 / 2$ always require 2 electrical signals, since they are equipped with 2 electrical pilots. The first signal is connected with side 14 pilot, while the second is connected with side 12 . Monostable $5 / 2$ valves require a single electrical signal since they are equipped just with side 14 electrical pilot.

The management and distribution of the electrical signals between each valve is obtained by a PCB which receives the signals from the previous module, uses one, two or none according with the type, and carries the remaining ones forward to the next module. As a result, modular sub-bases are available in 2 versions
-Monostable version uses a PCB which uses one sigle signal and carries forward the remaining ones. It is suitable ONLY for monostable valves.
-Bistable version uses a PCB which uses 2 signals and carries forward the remaining ones.
This second solution allows the modification of the manifold (replacement of monostable valves with bistable for example) without having to reset the PLC output layout. On the other hand this solution limits the maximum number of valves: -37P input connector $=16$ bistable MAX
-25P input connector $=11$ bistable MAX
Intermediate supply \& exhaust module is equipped with a dedicated PCB which carries forward all electrical signals using none and allows to place the module anywhere in the battery layout.

All signals not used for the battery configuration can be available for other applications by using a exit manifold equipped with a female SUB-D 25 pin connector.
he number ov available signals depends on the input connection:

- 37 pin input connector Nout $=32-\mathrm{N}$ of allocated signals
.25 pin input connector $\mathrm{Nout}=25-\mathrm{N}$ of allocated signals

See following configuration examples and relevant pin correspondence for input and output SUB-D connector.


PIN layout for a battery assembled on a mixed configuration of monostable/bistable bases



| pos. | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

PIN layout for a battery assembled just on bistable bases

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PIN layout for batteries of monostable EV assembled on monostable bases (37P and 25P input)


PIN $1=$ PILOT 14 EV POS. 1
PIN $2=$ PLIOT 12 EV POS 1 PIN $2=$ PILOT 12 EV POS. 1
PIN $3=$ PILOT 14 EV POS 2 PIN 4 = NOT CONNECTED PIN 5 = PILOT 14EV POS. 3
PIN 6 =NOT CONNECTED $\begin{aligned} \text { PIN } 6 & =\text { NOT CONNECTED } \\ \text { PIN } 7 & =\text { PILOT 14EV POS. } 4\end{aligned}$ PIN 8 = PLOT 12 EV POS. 4 PIN $9=$ PILOT 14 EV POS.
PIN $10=$ NOT CONNECTED PIN $10=$ NOTLT $11=$ PILOT 14 EV POS. 7 PIN $12=$ NOT CONECTED PIN $13=$ PILOT 14 EV POS. 8
PIN $14=$ NOT CONNECTED PIN $15=$ PILOT 14 EV POS. 9 PN $16=$ NOT CONNECTED
PN $17=$ PILOT 14 EV POS 10 PIN $17=$ PILOT 14 EV POS. 10
PIN $18=$ NOT CONNECTED PIN $18=$ NOT CONNECTED
PIN $19=$ PILOT 14 EV POS. 11
PIN $20=$ PLLOT T 12 EV POS. 11 PIN $21=$ PLLOT T 14 EV POS. 12 PIN $22=$ PILOT 12 EV POS. 12


