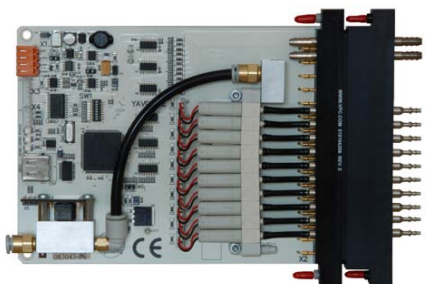


# YAV90PNE

## 10 channel Pneumatic sub-system



### Features

- > 10 valves of 3 ways to directly control 10 simple effect actuators or 5 double effect ones. 12 inputs for actuators position sensors.
- > Pressure linear sensor included
- > 2 connectos as direct pressure air inlet to fixture
- > 4 digital outputs (24Vdc) for external coils control
- > 1 analog output to control proportional valve
- > 2 logic inputs to inhibit output
  - > CAN bus controlled
  - > Reliable VPC 90 Pneumatic connector

### Applications

- > Simple effect or double effect Pneumatic actuators (linear or rotary) control
- > Marking devices
- > Grippers
- > Precise Strength application (adding electronic controlled pressure valve)

### Overview

This module is a complete pneumatic plug&play sub-system, controlled by USB or CAN bus.

Thanks to 10 3-way microvalves, 10 simple effect actuators or 5 double effect ones can be controlled. There are inputs to monitor the position of the actuators (PNP).

Coils are powered in a way that once activated, the power consumption is reduced to avoid its self-heating.

Control through the PC is more easy thanks to the included pressure sensor. Some programmable static relays are available to set the operational limits.

Two logic inputs placed opposite to the VPC connector are to cut the air inlet when the system detects fixture extraction.

The board has also outputs to control 4 auxiliary coils (two in the connector side, two in the opposite one) and an analog output to control a proportional valve.

The board can be controlled through CAN bus or USB and is delivered with all the necessary software to use it in a Test stand based platform.

### Specifications

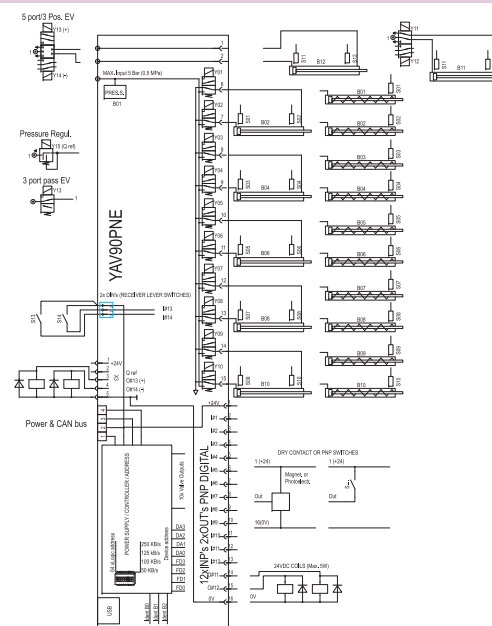
#### > Pneumatic

Operation max. pressure	500 kPa
Test pressure	1000 kPa
Number of microvalves	10
Flow	0.043 dm <sup>3</sup> /bar
Pressure inlet connection	Dex/in= 8/6 mm
Bypass connections with tube	Dex/in= 8/6 mm
Valves output inlet connection tube	Din= 4 o 6 mm
Isolation resistance between contacts	> 10E11 V

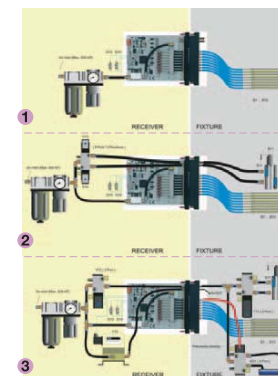
#### > Electric

Logic inputs	14
Threshold input voltage	6 VDC
Inputs internal resistance	> 5 k
Logic outputs	4
Outputs voltage	24V
Outputs max. current	500 mA

Analog outputs	1
Analog outputs voltage	0 ... 5 VDC
> Power supply	
Operative voltage range	20..29VDC
Max. 24V current requirement	115mA
> Physical	
I/O connector	VPC, 16 Position, 510104206
Dimensions mm (HxL)	142x187
> Environment	
Operating temperature	0 to 45 °C
Storage temperature	-20 to 70 °C
Relative humidity	10 to 90% relative humidity, noncondensing



#### > YAV90PNE Pin Assignment



- > 1. Basic application
- > 2. Typical application
- > 3. Proportional valve application scheme
- > YAV90PNE Software Virtual Panel