

# THE WORLD OF MULTIMACH

The family of Multimach valves comprises three series of products, each with specific characteristics to suit different customer needs:

- mm** - Multimach
- HDM** - Heavy Duty Multimach
- cm** - Clever Multimach

What they all have in common is a series of features that make them special and highly appreciated: unbeatable modularity, allowing the formation of islands of one or more valves, integration of all the components under a single code, and complete freedom in building islands. The pages below explain everything about these valves.

**mm**

Multimach



**HDM**

Heavy Duty Multimach



**cm**

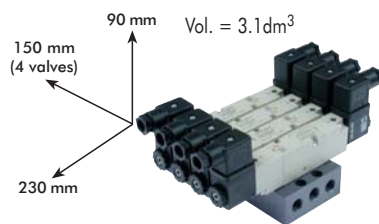
Clever Multimach



## ENCUMBRANCES MINIMUS

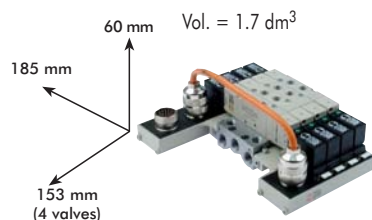
### Series 70 1/8"

Flow 4x550 = 2200 NI/1'  
Specific flow = 710 NI/1' /dm<sup>3</sup>



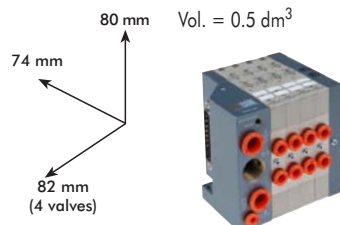
### MACH 16

Flow 4x750 = 3000 NI/1'  
Specific flow = 1760 NI/1' /dm<sup>3</sup>



### Multimach

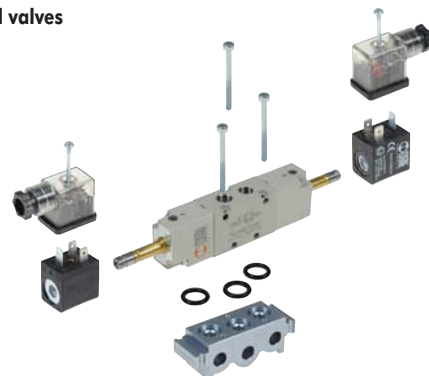
Flow 4x800 = 3200 NI/1'  
Specific flow = 6400 NI/1' /dm<sup>3</sup>



## INTEGRATION

A single item and a single code cover the valve, base, coils and fittings.

### Traditional valves

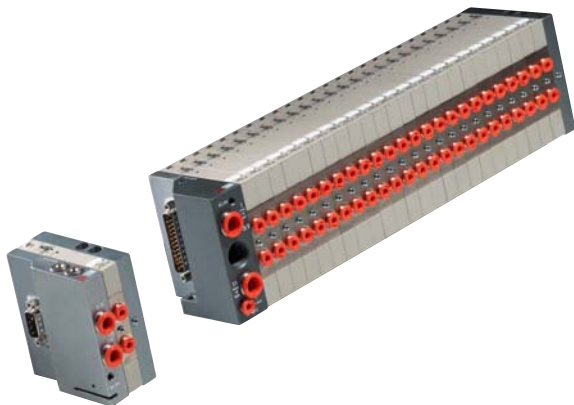


### Valves with high integration multimach



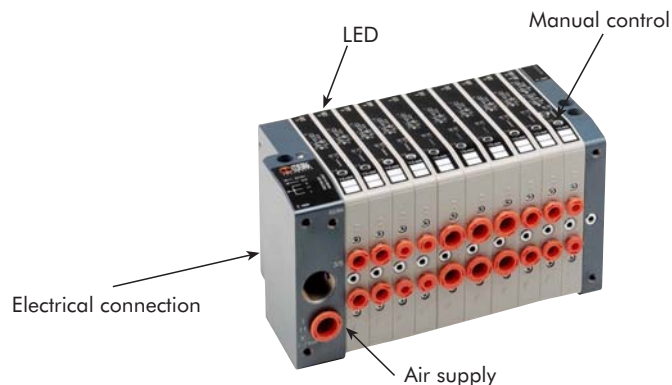
### FULL MODULARITY

- 1 to 16 valves (HDM)
- 1 to 24 valves (mm)
- 1 to 32 valves (CM)



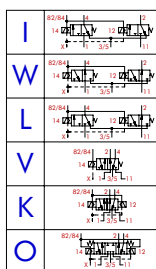
### EVERYTHING IN THE RIGHT PLACE

- Power input, delivery ports and air relief on one side.
- User interface on one side.
- Electrical connection on one side.



### ALL PNEUMATIC SYSTEM DIAGRAMS

Valves 3/2 NC, 3/2 NO, 5/2 monostable and bistable, 5/3 CC; 5/3 OC; 5/3 PC



Also operates as 5/3 OC

Also operates as 5/3 PC

### 3 PORT SIZES FOR COMPRESSED AIR

Ø 4 pipe  
200 NI / I'



Ø 6 pipe  
500 NI / I'



Ø 8 pipe  
800 NI / I'

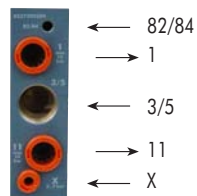


### HIGH FLEXIBILITY OF PRESSURES

#### 3 types of air supply:

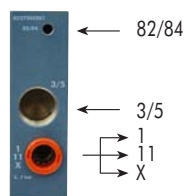
End-plate 1-11 with:

- 2 input ports
- 1 exhaust port
- 1 pilot input
- 1 exhaust pilot



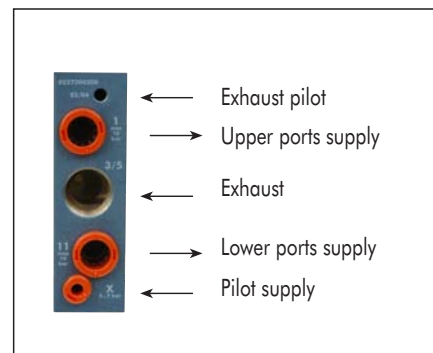
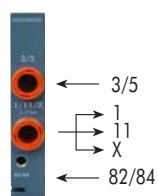
End-plate 1 with:

- 1 input ports
- 1 exhaust port
- 1 exhaust pilot



End-plate 1 reduced, only 14.5 mm wide with:

- 1 input port
- 1 exhaust
- 1 exhaust pilot



#### 3 types of intermediates elements:

Intermediate through



Intermediate blind



Intermediate exhaust switch



### HIGHLY COMPATIBLE MATERIALS

**Body:** Aluminium + Niplate® 600 nickel-plating

**Shell:** Hostaform®

**Spool gaskets:** FKM/FPM

Very high resistance to corrosion and wear.

Acetal resin, resistant, non-toxic, elastic.

Compatibility with oils and chemicals. It doesn't fear high temperatures



### DIFFERENCES

	 Multimach	 Heavy Duty Multimach	 Clever Multimach
Max number of pilots	24	16	32
Max number of valves (same as n° of pilots)	24	16	32
Protection class	IP51	IP65	IP65
Possibility of controlling other islands in cascade	By splitting cables in the connectors	NO	YES, with specific connector M8
Control logic	PNP	PNP/NPN free	PNP/NPN configurable
Electrical connection in the island	Parallel wires	Gold contacts parallel	Colden contacts, serial transmission
Coil numbering	Free, connecting pilot wires to the connectors	Fixed, from left to right	Fixed, from left to right
LED active control	YES	YES	YES
Diagnosis	NO	NO	YES
M8 INPUT modules	NO	NO	YES

# FEATURES OF OF HDMs AND CMs

## PROTECTION CLASS IP 65

Dust protected



Water protected



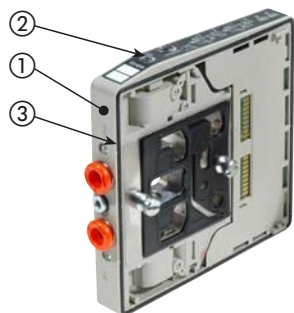
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## HOW IP65 INDEX OF PROTECTION IS OBTAINED

The entire system is designed to prevent dust and water getting into the island.

- ① Monobloc shell around the valve
- ② NBR seals on the manual controls and grub screws
- ③ NBR perimetral seal

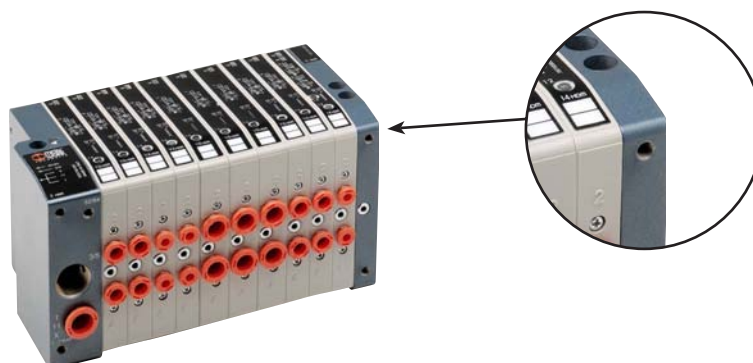
- Standard Sub-D connectors protected by a technopolymer shell with NBR seal



## ROUNDED SHAPE

The outside of the island is smooth, with no slots or gaps, with a rounded profile for easy cleaning and washing.

N.B.: for washing use only mild cleaners or products compatible with NBR, FKM/FPM and Hostaform®



**SHOCK RESISTANCE**

The metal terminals and integral plastic shell protect the internal parts.



**SHOCK RESISTANCE**

Tests performed with vibration in all directions, 16G acceleration and 0-55 Hz frequency.



**ASSEMBLY POSSIBILITIES**

The islands can be assembled in various ways and on various sides with lag screws or through screws.



**EASY ASSEMBLY**

Time required to add or replace a valve: **50 seconds**.

