**EB80 BOXI – THE FAMILY THAT'S GROWING**

*(Figure 1) EB 80 BOXI – the new 6, 8 and 12-position valve islands*

Metal Work S.p.A. introduced the modular EB80 solenoid valve system into its range some years ago. This has enabled the creation of valve islands with a very high number of solenoid valves (up to 128), with multipolar control or control via the main buses available on the market, with analogue or digital input/output signal modules and advanced diagnostics. Over time the system has evolved to feature new Industry 4.0 functionality, multi-function modules, shut-off valves and high-capacity valves.

Proportional pressure regulators were also introduced in the EB80 islands, with both analogue and field bus control. This development offered the possibility of having electronic pressure controllers that could be managed via all main field buses on the market. Consequently, the EB80 represents a complete electro-pneumatic system that can meet the most exacting requirements.

However, Metal Work has also developed EB80 BOXI for customers looking for a simple, lightweight solution, currently available as a compact module which can accommodate up to 4 valves.

*(Figure 2) EB 80 BOXI – 4-position version.*

BOXI is smaller and lighter (by approximately 40% with the same functionality), making it preferable for use in compact dimensions or for assembly on moving parts, such as pick-and-place machinery. BOXI may be simple but it still has all the innovative features that made the EB80 system a success, including: required power reduced to just 0.3 W per valve, enabling considerable energy savings and minimal heat generation; supply voltage ranging from 10.8 to 31.2 V for a variety of industrial applications where a limited range cannot be guaranteed (24 VDC ±10%), normally required with the standard solenoid valves on the market; IP65 protection for demanding environments with dust and humidity; diagnostics with a multipolar supply system; valves with all types of pneumatic functionality and capacity up to 1250 Nl/min; circuit diverted valve to enable rapid system discharge downstream. EB80 BOXI is available with an electrical connection with a 9 PIN connector or control via IO-Link. BOXI has been designed to be fitted directly to DIN rails thanks to the shape of its base, or to the wall using the three metal brackets provided.

Based on its market success and customer demand, Metal Work is expanding the range to include the new 6, 8 and 12-position EB80 BOXI valve islands for mono-stable or bi-stable valves.

The new valve islands have 26-pole D-Sub multipolar connections, and are available in 6 versions depending on application requirements. Versions with 6 positions and 6 electric controls, 8 positions and 8 controls or 12 positions and 12 controls (cost-effective solutions) are suitable for applications with just one solenoid valve (e.g. monostable 5/2 valves). Versions with 6 positions and 12 electric controls, 8 positions and 16 controls, and 12 positions and 24 controls are available for applications with a dual solenoid valve (e.g. bi-stable valves).

The new BOXI range has all of the technical characteristics featured in the 4-valve versions. Valve islands can be ordered with or without valves. Finally, when ordering 6, 8 or 12-position valve islands, additional pneumatic supply and discharge modules can be requested which, when connected downstream of the solenoid valves, maintain correct air flow even in applications requiring higher consumption.