





# NEW CAMOZZI SOLUTIONS





Discover our latest components designed to meet the requirements of an ever more demanding market looking for innovation, reliability and higher flexibility.















### **SECTORS AND APPLICATIONS**



Camozzi Automation offers a complete range of components, systems and technologies for industrial automation, including tailored solutions for any application.

Packaging, Food & Beverage, Plastics & Rubber, Automotive, Electronic Systems, Textile Machinery, Assembly & Robotics, Printing & Paper, Woodworking Machinery



#### **☒** Life Science

Camozzi Automation supports the Life Science sector with a wide range of components and customised solutions for the control of fluids - both liquids and gases - with high efficiency and high reliability performance.

Medical, Analytical



Camozzi Automation offers the Transportation sector a wide range of solutions, ready for use in harshest conditions, assuring reliable and efficient operation - Every Day.

Truck & Trailer, Bus & Coach, Rail, Off Road, Passenger Car & Light Commercial Vehicles



### **SERIES D: MODULAR AND FLEXIBLE**

Series D is a new valve system that ensures **maximum flexibility and productivity** across many primary industrial automation processes. Single pneumatic and electric subbases plus a **simple valve-connection system** make the Series D valve island the ideal solution for all applications that require quick and **easy installation** of pneumatic functionality. Series D is available in both multipole and in serial communication versions. The Fieldbus module allows control of the valve island using the main fieldbus protocols, making it easy to integrate **pneumatic and electrical functionality** in the most advanced automation systems.



Sub-D 25 pins with up to 11 valve positions

Sub-D 44 pins with up to 19 valve positions

#### FIELDBUS VERSION

128 Digital I/O and 16 Analog I/O with up to 128 coils on 64 valve posizions

#### **IO-LINK VERSION**

64 coils on 32 valve positions

#### **BENEFITS**



Flexibility in connecting different I/O modules



**Integrated diagnostics** and predictivity



Available protocols: PROFIBUS-DP, CANopen, EtherNet/IP, PROFINET, EtherCAT, IO-Link



**UL Recognized Components** for Canada and the United States

The Series D valve island is also equipped with **CoilVision® technology** which can monitor and predict the wear and efficiency status of selected parts of the solenoid valves. The gathered data, alarm history and health status are indicated through different combinations of flashing LEDs on the module and can be sent to a PLC or to a wireless IIoT gateway and then on to the Cloud.

# 4 SIZES FOR UNLIMITED APPLICATIONS

#### Series D - Size 1



The ideal solution for all industrial applications that require quick and easy installation of pneumatic functionality in restricted spaces.

#### MAIN TECHNICAL FEATURES

Size	10.5 mm
Flow	250 Nl/min



Compact design



Individual, modular sub-bases in technopolymer



Highly expandable electric and pneumatic functionality



VIEW CATALOGUE

#### Series D - Size 2



Designed for applications that demand compact dimensions and high flow rates.

#### **MAIN TECHNICAL FEATURES**

Size	16 mm
Flow	950 Nl/min



Compact design



Individual, modular sub-bases in technopolymer



Highly expandable electric and pneumatic functionality



VIEW CATALOGUE

Series D - Size 4



Particularly suitable for all applications that require high flow rates and require solutions with a robust and compact design.

#### **MAIN TECHNICAL FEATURES**

Size	25 mm
Flow	2000 Nl/min



High flow rates



Robust design



High reliability



CATALOGUE

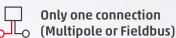
#### Series D - Size 5



A single island with a mix of sizes (10.5 and 16) that offers one Multipole or Fieldbus connection, with common positional fixings and single modularity.

#### **MAIN TECHNICAL FEATURES**

Size	10.5 + 16 mm
Flow	250 - 950 Nl/mir





Combination of flow types in one valve island



**Compact dimensions** 



IEW ATALOGUE

# SERIES D - VA and VB Versions: VERSATILE, COMPACT, FLEXIBLE

Series D range is enhanced with the addition of two new valve and solenoid valve variants that are easy to install and deliver **high performance within a compact footprint**.

The VA and VB versions are available in three sizes with different flow rates. They can both be **used individually or mounted to a manifold**. Thanks to their versatility, compact design and aluminium body, the Series D valves and solenoid valves are are suitable for a wide range of industrial applications, from traditional uses right through to more innovative or demanding sectors. The valves' functionality and high flexibility make them an extremely **versatile and precise solution** to meet every need.

#### **BENEFITS**



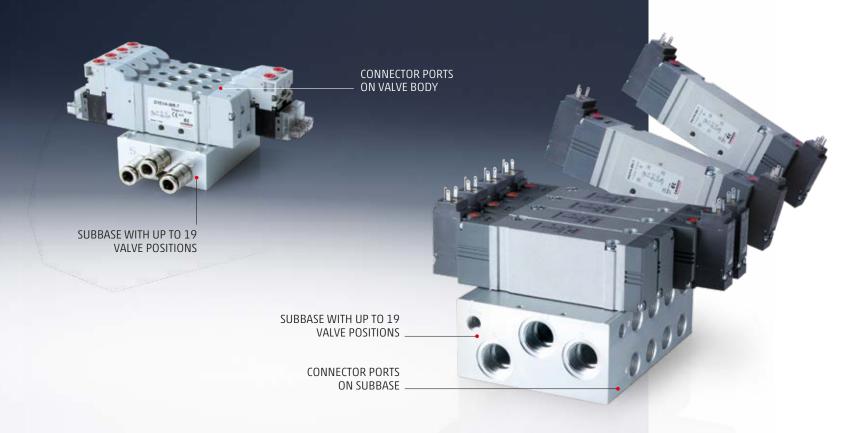
Robust design



Compact design for restricted spaces



**Maximum versatility** 



### **VA and VB Versions**

#### Series D - VA Version







#### **MAIN TECHNICAL FEATURES**

Pneumatic connection (VA version)

Connector ports on valve body

Allows manifold mounting



#### Series D - VA and VB Versions











#### **MAIN TECHNICAL FEATURES**

Electrical connection (VA and VB versions)

Micro connector	size 10.5, 16 mm
M8 connector	size 10.5, 16 mm flow
EN 175301C connector	size 16, 25 mm flow



# SERIES CX4: HIGHLY FLEXIBLE CONNECTIVITY

The serial node CX4 is compatible with the most commonly used protocols: **Profibus-Dp**, **PROFINET**, **CANopen**, **EtherCAT**, **EtherNet/IP**. As well as different analog and digital I/O modules, advanced modules can be connected via the serial module to acquire data from thermocouples, RTD temperature sensors or sensors in a bridge configuration.

The **mechanical and electrical connection system** as well as the internal bus make the serial node extremely flexible. Users are free to add, move, remove and substitute different modules as well as replace its communication protocol. All this in restricted spaces.



#### **BENEFITS**



Compact size for restricted spaces



Reduced installation and maintenance times



Flexibility in connecting modules

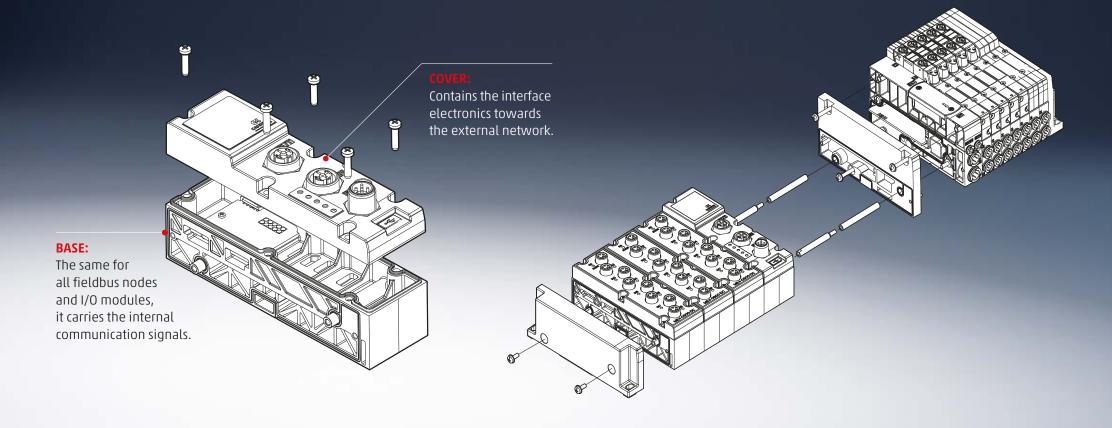


Modular design for maximum versatility

Number of digital outputs/inputs	128
Number of analogical outputs/inputs	16

# EXTREME FLEXIBILITY IN RESTRICTED SPACES

Electrical terminals can be easily connected to an island by means of tie-rods so as to maintain the overall dimensions of the contained system.







### **SERIES PRE: DIGITAL** PRESSURE MANAGEMENT

The Series PRE proportional pressure regulator is equipped with **CoilVision® technology** which constantly **monitors the operation of the solenoids** in the regulator to assess their health status. All data generated by the regulator can be transmitted wirelessly, for logging, aggregation and analysis and can be viewed through the **UVIX software**, downloadable from the Camozzi Catalogue website. The Series PRE is available in two sizes and in different configurations, including **IO-Link connectivity**. As well as the standard options with and without display, there is a version with an integral exhaust valve, which enables the system to exhaust even without a power supply. A manifold version enables the control of several outlets with only one inlet, while a version with an additional external sensor connection enables **pressure control at any point in the system**.



#### **BENEFITS**



**Integrated diagnostics** and predictivity



**Compatible with OXYGEN** 



Configuration flexibility



**UL Recognized Components** c **Fl**us for Canada and the United States



Easy integration with Series MD FRL Units

Flow (Qn)	PRE104 - 1100 Nl/min PRE238 - 4600 Nl/min
Pneumatic ports	G1/4 - G3/8 -1/4 NPTF



# SERIES PME: COMPACT, LIGHT AND WITHOUT COMPROMISE

The Series PME proportional pressure regulator is the ideal solution for industrial applications that require **accurate pressure control within a system**. This new pressure regulator offers a high pneumatic performance, despite having its weight and dimensions reduced to a minimum to allow **greater flexibility in its use**. Series PME is available in two sizes and versions. One version has an integrated exhaust valve that allows the system to discharge even in the absence of power. The second is a manifold version, **ideal for controlling several outlets with only a single inlet**. Each has been designed to meet a wide range of applications and to guarantee reliable and precise control across the entire system.



#### **BENEFITS**



**Manifold version** 



Integrated exhaust valve version



Easy integration with Series MD FRL Units



Compact and essential



Configuration App that uses NFC technology

#### **MAIN TECHNICAL FEATURES**

Pneumatic ports | PME104 - 1100 Nl/min PME238 - 4600 Nl/m | Pneumatic ports | G1/4 - G3/8 -1/4 NPTF



# END LOCK CYLINDER SERIES 63: ROBUST, SAFE AND EFFICIENT

END LOCK pneumatic cylinders are fitted with **automatic mechanical end stroke locks** which guarantee safe and secure holding of the cylinder rod in both the fully retracted and fully extended positions. The locks activate and release automatically, without the need for external signals or commands and the Series 63 END LOCK cylinder complies with **comply with ISO 15552**. The automatic mechanical lock therefore makes the Series 63 END LOCK cylinders highly suitable for use in sectors and for applications where it is **essential to lock the cylinder's position**, both to avoid sliding during long stops and in situations with an absence of air, for example in transportation, printing & paper and the woodworking industry. In addition, their capability to withstand external forces, that are much higher than the force exerted by the piston, makes the END LOCK cylinder the ideal solution for applications such as lifters, positioners and presses where a **greater degree of safety** is required compared to the more traditional rod locks combined with blocking valves.



#### **BENEFITS**



Reliable and safe even under harsh environments



Increased machine performance



Reduced maintenance and set-up times



Reduced installation times



Functional machine upgrade

Versions	Double-acting Magnetic Cushioned
Sizes	ø 32, 40, 50, 63, 80, 100, 125 mm



### **CYLINDER VARIANTS**

The Series 63 END LOCK cylinder is available in different variants that enable its use even **for applications in harsh environments or adverse working conditions**. These configurations are mostly used in applications that require robustness and reliability, such as the **transportation sector**, especially where trucks or special vehicles are characterized by strong vibration, frequent changes in temperature or humid and dusty working environments.

Its automatic mechanical lock makes the END LOCK cylinder highly suitable for industrial sectors like **printing & paper** or **woodworking**, where **maximum safety** is necessary because of the movement of material through lifting, stopping or pushing processes.

The integrated lock allows the cylinder to be used even in **dusty working environments or in confined spaces**.

#### TRANSPORTATION - MOBILE AUTOMATION

Doorstep systems, trailer tailgates, actuated aerodynamic flaps, passenger ramps, retractable handrail systems.

#### **INDUSTRIAL AUTOMATION**

Vertical axes, lifters, presses and tilting units.



# SERIES KL-KLE: HIGH FLOW RATES IN A COMPACT DESIGN

The latest Series KL and KLE miniaturised 10 mm solenoid valves have been designed for industrial applications and medical devices that require high flow rates and pressures within compact dimensions. Its compact design, reduced weight and low energy consumption makes the KL version the ideal solution for applications within confined spaces and limited power supply, such as portable oxygen concentrators or emergency lung ventilators. For applications that demand more robust levels of performance, the KLE version has been designed to control higher pressures and flow rates compared to traditional solenoid valves. The body size and overall dimensions of both versions have been designed to allow easy integration with manifold systems or subbases and to be quickly installed on devices and machines. Series KL and KLE are available in different models to satisfy any application across all the main sectors of industrial automation and life science.



#### **BENEFITS**



#### **Reduced installation times**



Easy and flexible to install in the system



**Energy efficient** 



High reliability



Components compliant with medical devices



Compact design and reduced weight for portable devices

Size	10 mm
Orifice diameter	0.6 1.6 mm



# SERIES MX SAFEMAX WITH SOFT START VALVE: SAFETY AT YOUR FINGERTIPS

The new Series MX SAFEMAX soft start valve enables **gradual pressurisation of the system**, **while maintaining all safety functions**. The compact dimensions and the internal construction of the components allows **easy integration of the soft start valve with Series MX2** air treatment units without the need for additional connection interfaces.

The soft start valve is positioned upstream of the safety valves, so does not interfere with the exhaust air flow and allows the safety valves to **quickly discharge the system in the event of an emergency**.



#### **BENEFITS**



Compliant with Machinery Directive 2006/42/EC



Easy integration with Series MX2 FRL Units



Solutions to achieve up to Performance Level E



Integrated soft start valve



No connection interfaces needed

Performance level (PL)	
Single version	category 2, PLd
Double version	category 4, PLe



# **SERIES ASX: FLUID CONTROL** FOR HIGH-END APPLICATIONS

The angle seat valve is a pneumatically-operated valve, **designed to control steam**, **liquids**, gas and fluids that contain suspended solid particulate matter. The angled mount and design of the valve enable a high and constant flow, whilst ensuring a low pressure drop. **Made entirely of stainless steel**, this valve is the ideal solution for many industrial applications, from steam production and water treatment plants to the food and chemical industries, where besides high flow rates, the **control of viscous fluids** is also required. The Series ASX is available in a range of different versions based on the nominal diameter, covering both control and process connections. There are also one-way flow direction models available for use in applications where it may be necessary to prevent or **reduce water-hammer effects** when closing the valve.



VERSION WITH WELDED ENDS DIN 11850-2 AND DIN 11850-3

THREADED VERSION BSP DIN ISO 228-1, BSPT DIN 2999-1 **NPT ASMF B1.20.1** 

TRI-CLAMP VERSION ISO 2852

FLANGED VERSION DIN 2543

#### **BENEFITS**



High flow rate



Low fluid resistance



Versions available that prevent the water-hammer effect



**Compliant with Directive** PED 2014/68/EU



**Compliant with** the ATEX Directive

#### MAIN TECHNICAL FEATURES

**Functions** 

2/2 NC

2/2 NO 2/2 Double Acting

Flow coefficient  $Kv (m^3/h)$  2.2 ... 132



# SERIES ASP: FLUID CONTROL FOR COST-EFFECTIVE APPLICATIONS

Series ASP directly operated angle seat valves are the ideal solution for industrial applications that require **robust and resistant solutions**. They are compatible with mains gas supplies, inert liquids and fluids containing suspended solid particulate matter.

The Series ASP is available in different models and with **threaded connections** ranging from 3/8" to 2-1/2". It also comes in **2 versions**, one with the flow direction above the poppet for gas and steam applications and the other with the flow direction under the poppet, for liquids.



#### **BENEFITS**



Differential pressures up to 20 bar



High flow rate



Low fluid resistance



Versions available that prevent the water-hammer effect



Compliant with Directive PED 2014/68/EU

#### **MAIN TECHNICAL FEATURES**

Functions

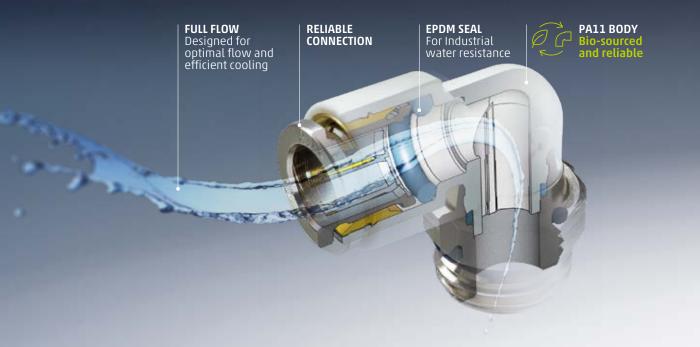
2/2 NC
2/2 NO
2/2 Double Acting

Flow coefficient Kv (m³/h) 2.6 ... 65



# **SERIES 7000 FLUIDICS: THE NEW** PUSH-IN FITTING FOR COOLING SYSTEMS

Series 7000 Fluidics push-in fittings enable smooth passage of fluids in **cooling systems**. The Series 7000 Fluidics fitting range has been designed with a **special technopolymer**, based on renewable raw materials, that allows the component to resist water absorption, temperature variations and cooling liquid additives. The material maintains constant dimensional stability in contact with different fluids and does not breakdown with age. Advanced gripping characteristics make the Series 7000 Fluidics an excellent alternative to traditional fittings, guaranteeing a **uniform tightening on the whole surface of the tube**. This enhances high reliability and resistance to repeated connections and disconnections of the tube. Reliable connection, compact dimensions and easy installation in confined spaces are only some of the features that make these new fittings an innovative solution for a wide range of cooling systems.



#### **BENEFITS**



Easy to connect and disconnect



Resistant to water pressure and erosion



Resistant to corrosion



Dimensional stability with water contact



Long life cycle

#### **MAIN TECHNICAL FEATURES**

Tube external diameters | 6, 8, 10, 12, 16 mm



### **COMPUTER AND ELECTRONICS COOLING**

#### Applications:

- Data centre racks
- Water cooling for servers and processors
- Aluminium cold plates
- Energy Storage: power packs, battery racks, fuel cells



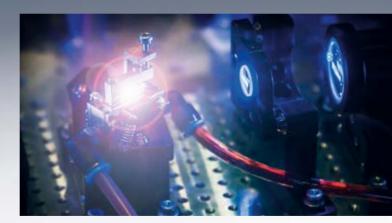


# INDUSTRIAL EQUIPMENT COOLING

#### Applications:

- Energy: Fuel cells, batteries, energy storage
- Lasers and Welding: Laser heads and generators, welding pliers, chillers
- Plastic Injection: Moulds, chillers





#### Contacts

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