



Automation

NEW CAMOZZI SOLUTIONS



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.



Series QR

▶ Page 23



Series 29

▶ Page 20



Series ASX

▶ Page 17



Series PRE

▶ Page 10



Series D - Size 1

▶ Page 02



Series D - Size 4

▶ Page 05

Series CGAN

▶ Page 32



Series CGSP

▶ Page 29



Series CGSY

▶ Page 26



Series MX Safemax

▶ Page 14





SERIES D - SIZE 1: COMPACT, MODULAR AND FLEXIBLE

Series D is the new valve unit able to ensure optimum productivity and flexibility for use in many **industrial automation systems**. The modular single sub-bases, with an easy valve connection system and reduced dimensions, make the Series D valve island the ideal solution for all industrial applications that require **quick and easy installation of pneumatic functions in restricted spaces**. Series D valve island can be connected to the main fieldbus protocols through the serial module.

This combination makes it easy to integrate pneumatic and electrical functions in the most advanced automation systems, as it allows an increase in the number of controllable valves and interconnection of analog and digital I/O modules in a single network node. The Series D valve island is also equipped with **CoilVision® technology** which can monitor and predict the wear and efficiency status of some parts of the solenoid valves.

FIELDBUS

- HIGH NUMBER OF MODULES
- CAN BE CONNECTED WITH THE MAIN FIELDBUS PROTOCOLS
- FLEXIBILITY IN CONNECTING DIFFERENT I/O MODULES



MULTIPOLE

- DIAGNOSTICS AND VALVE COMMUTATION LED
- MANUAL OVERRIDES
- MODULARITY 1 SUB-BASES WITH INTERCHANGEABLE CARTRIDGES



TECHNICAL CHARACTERISTICS

- Size 10.5 mm
- Flow 250 NL/min

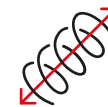
BENEFITS



Compact design



Individual, modular sub-bases in technopolymer



Flexibility in connecting different I/O modules



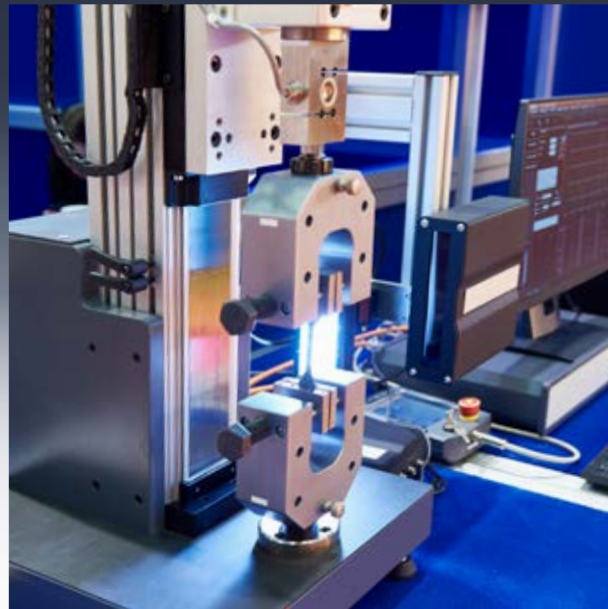
Integrated diagnostics and predictivity



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

INDUSTRIAL SECTORS AND APPLICATIONS

- MACHINE TOOLS
- HANDLING
- WOODWORKING MACHINERY
- FOOD & BEVERAGE
- TESTING
- TEXTILE MACHINERY



PNEUMATIC SECTION	
Valve construction	spool with seals
Valve functions	5/2 monostable and bistable - 5/3 CC - CP - CO - 2 x 3/2 NC 2 x 3/2 NO - 1 x 3/2 NC +1 x 3/2 NO
Materials	spool: AL - spool seals: HNBR - other seals: NBR - body: AL - end caps and subbase: polymer
Connections	port 2 and 4: tube Ø 4, tube Ø 6 - supply 1: tube Ø 8 - supply 12/14: tube Ø 4 - exhaust 3 and 5: tube Ø 8 - exhaust 82/84: tube Ø 4
Temperature	0 ÷ 50 °C
Air characteristics	compressed, filtered and non-lubricated air in class 7.4.4 according to ISO 8573-1:2010. If lubrication should be necessary, only use oils with a maximum viscosity of 32 Cst and the version with external servo pilot. The air quality for the servo pilot should be of class 7.4.4 according to ISO 8573-1:2010 (do not lubricate).
Valve size	10.5 mm
Operation pressure	-0.9 ÷ 10 bar
Pilot pressure	2.5 ÷ 7 bar - 4.5 ÷ 7 bar (with working pressure exceeding 6 bar for the version 2x3/2)
Flow rate	250 NL/min
Mounting position	any position
Protection Class	IP65

ELECTRICAL SECTION - MULTIPOLE VERSION	
Type of Sub-D connector	25 or 44 pins
Max. absorption	0.8 A (with Sub-D connector 25 pins) - 1 A (with Sub-D connector 44 pins)
Supply voltage	24 V DC +/-10%
Max. number of coils to operate	22 on 11 valve positions (with Sub-D connector 25 pins) - 38 on 19 valve positions (with Sub-D connector 44 pins)
Signalling LED	green LED - presence of power - red LED - anomaly - Valve: yellow LED - presence of power blinking yellow LED - operating fault

ELECTRICAL SECTION - FIELDBUS VERSION	
Available protocols	PROFIBUS-DP, CANopen, EtherNet/IP, PROFINET, EtherCAT, IO-Link
Max. absorption	2.5 A
Supply voltage	24 V DC +/-10% logic supply - 24 V DC +/-10% power supply
Max. number of coils to operate	128 on 64 valve positions
Max. number of digital input*	128
Max. number of analog input*	16
Max. number of digital output*	128
Max. number of analog output*	16

*not for IO-Link Version

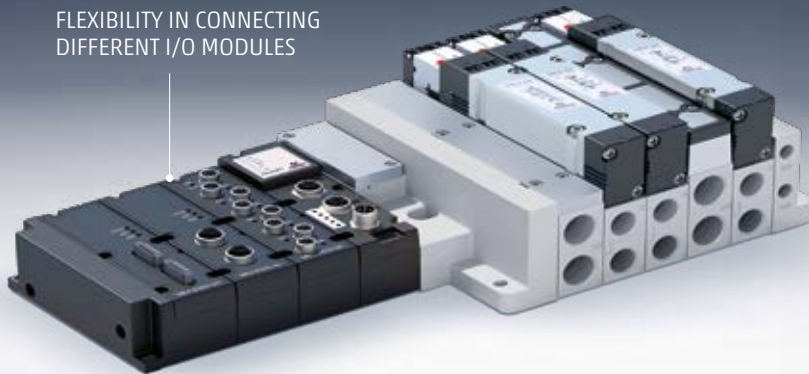


SERIES D - SIZE 4: ROBUST, RELIABLE AND FOR HIGH FLOW RATES

Series D - Size 4 valve island is particularly suitable for all those applications that require **high flow rates** and solutions **with a robust and compact design**. The Size 4 is entirely made of **aluminium** to guarantee high performance, especially in industrial environments with particularly harsh conditions. As well as having the same structure and technical principles of the Series D family, the valve island is also equipped with **CoilVision® technology**, to monitor the health status of each solenoid valve.

FIELDBUS

- HIGH NUMBER OF MODULES
- CAN BE CONNECTED WITH THE MAIN FIELDBUS PROTOCOLS
- FLEXIBILITY IN CONNECTING DIFFERENT I/O MODULES



MULTIPOLE

- DIAGNOSTICS AND VALVE COMMUTATION LED
- MANUAL OVERRIDES
- METAL MODULARITY 1 SUB-BASES
- THREADED PORTS



TECHNICAL CHARACTERISTICS

- Size 25 mm
- Flow 2000 NL/min

BENEFITS



High flow rates



Robust design



Reliability



Integrated diagnostics and predictivity



Flexibility in connecting different I/O modules

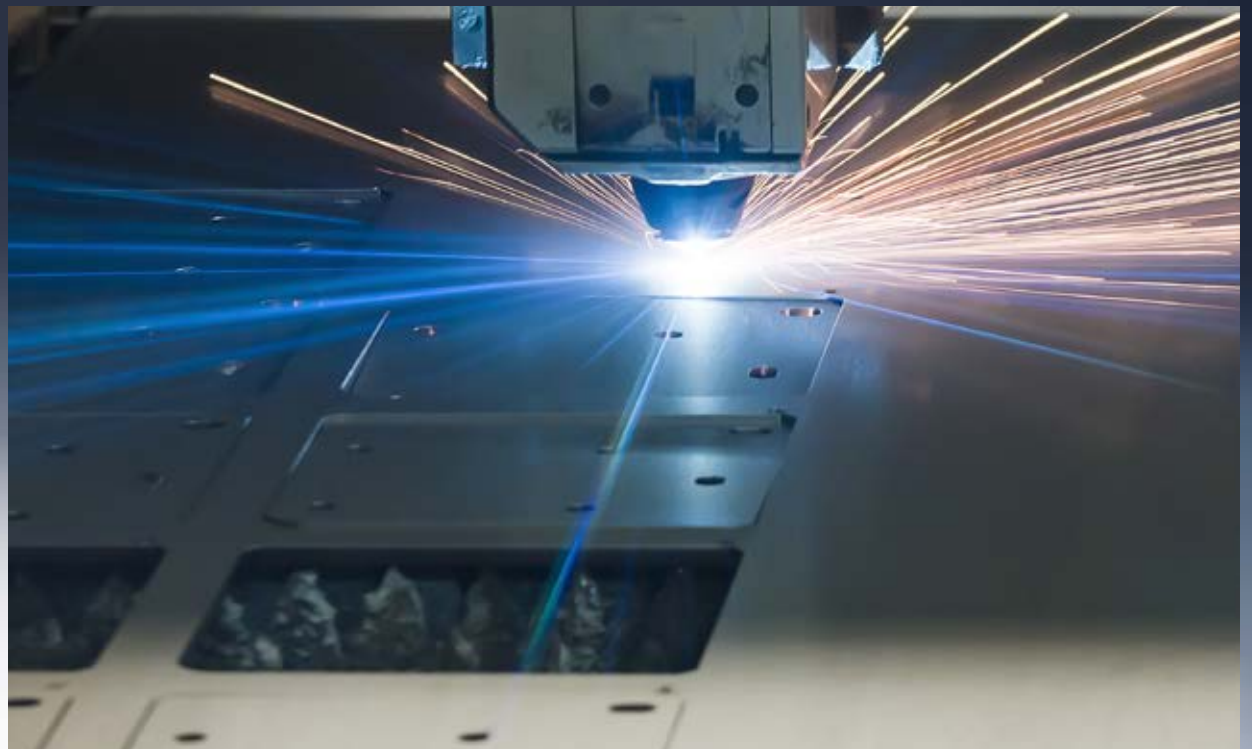
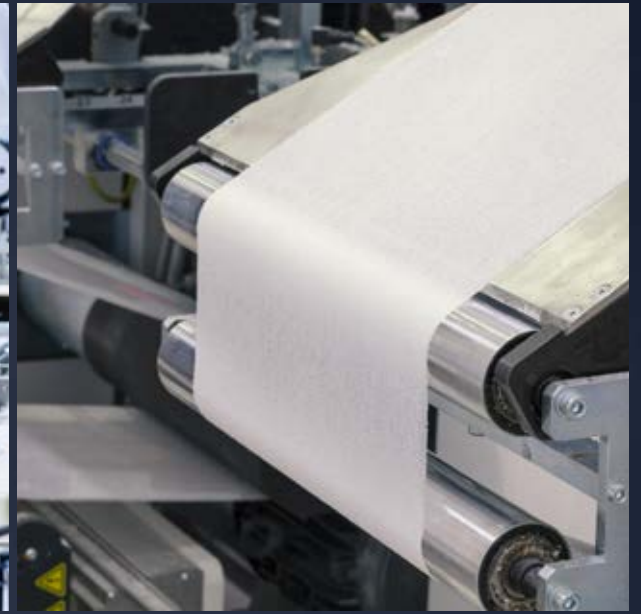


Available protocols:
PROFIBUS-DP, CANopen, EtherNet/IP, PROFINET, EtherCAT, IO-Link

COILVISION®
TECHNOLOGY

INDUSTRIAL SECTORS AND APPLICATIONS

- PAPER
- ASSEMBLY MACHINERY
- WOODWORKING MACHINERY
- PRINTING
- LASER CUTTING MACHINERY
- PLASTICS



PNEUMATIC SECTION	
Valve construction	spool with seals
Valve functions	5/2 monostable and bistable - 5/3 CC - CP - CO - 2 x 3/2 NC 2 x 3/2 NO - 1 x 3/2 NC +1 x 3/2 NO
Materials	spool: AL - spool seals: HNBR - other seals: NBR - body: AL - end caps: polymer - individual subbase: AL
Connections	inlet 2 and 4: threaded G 3/8 - supply 1: G 1/2 - supply 12/14: G 1/8 - exhaust 3 and 5: G 1/2 or integrated silencer - exhaust 82/84: G 1/8
Temperature	0 ÷ 50 °C
Air characteristics	compressed, filtered and non-lubricated air in class 7.4.4 according to ISO 8573-1:2010. If lubrication should be necessary, only use oils with a maximum viscosity of 32 Cst and the version with external servo pilot. The air quality for the servo pilot should be of class 7.4.4 according to ISO 8573-1:2010 (do not lubricate).
Valve size	25 mm
Operation pressure	-0.9 ÷ 10 bar
Pilot pressure	2.5 ÷ 7 bar - 4.5 ÷ 7 bar (with working pressure exceeding 6 bar for the version 2x3/2)
Flow rate	2000 NI/min
Mounting position	any position
Protection Class	IP65

ELECTRICAL SECTION - MULTIPOLE VERSION	
Type of Sub-D connector	25 or 44 pins
Max. absorption	0.8 A (with Sub-D connector 25 pins) - 1 A (with Sub-D connector 44 pins)
Supply voltage	24 V DC +/-10%
Max. number of coils to operate	22 on 11 valve positions (with Sub-D connector 25 pins) - 38 on 19 valve positions (with Sub-D connector 44 pins)
Signalling LED	green LED - presence of power - red LED - anomaly - Valve: yellow LED - presence of power blinking yellow LED - operating fault

ELECTRICAL SECTION - FIELDBUS VERSION	
Available protocols	PROFIBUS-DP, CANopen, EtherNet/IP, PROFINET, EtherCAT, IO-Link
Max. absorption	2.5 A
Supply voltage	24 V DC +/-10% logic supply - 24 V DC +/-10% power supply
Max. number of coils to operate	128 on 64 valve positions
Max. number of digital input*	128
Max. number of analog input*	16
Max. number of digital output*	128
Max. number of analog output*	16

*not for IO-Link Version

OUR VALVES HAVE PLENTY TO TELL YOU...



UVIX

The data collected through an IIoT Gateway are routed to the supervisory system called Camozzi UVIX. Camozzi UVIX is a software supervisor that can be installed on a PC or on a server inserted in a corporate network and accessible from other PCs.



DIAGNOSTIC CHARACTERISTICS



ON/OFF status of each valve



Health status



Short circuit
or solenoid fault



Cycle counter



Temperature monitoring of the
Master module and the solenoids



Interrupted solenoid



Over and under voltage



Power consumption

Powered by



DIGITAL

Industrial Cyber-Physical
Systems

KEEP EVERYTHING UNDER CONTROL. IN ADVANCE.

CoilVision® technology has been developed to constantly monitor the operating parameters of the solenoid that drives the spool.
Each operation of the solenoid, in different cyclic configurations and environmental conditions, is analysed to acquire information that is processed by software algorithms to diagnose and predict the health status of the component.

COILVISION®
TECHNOLOGY

POWER CONSUMPTION

STATE OF WEAR

NUMBER OF CYCLES COMPLETED

OPERATING TEMPERATURES

...and other critical parameters in real time,
preventing any malfunctions.

The screenshot displays the CAMOZZI UVIX software interface. On the left, a navigation menu shows a tree structure: MARC > DEMO > SERIES_D_LIVE (MD). Under SERIES_D_LIVE, there are eight items labeled '1 - Valve' through '8 - Valve', each with a green circular indicator. The main panel shows 'Devices group: DEMO', 'Device name: SERIES_D_LIVE', and 'Slave: 1 - Valve'. Below this, a 'Status information' section includes a 3D model of a valve and a 'Configuration' button. To the right of the model, a table lists: Slave ID: 1, Family name: Valve, Subtype: 10 mm, Firmware: 2.03. Further right, another table shows: Last transmission: 2020-02-19 09:05:15, Status: (green dot), and Operational status: Work. Below the status information is a 'Details' section with tabs for 'Variables' and 'Alarms'. The 'Variables' tab is active, showing a table with columns 'Name', 'Value', and 'Received'. The table contains data for Temperature subbase (36 °C), Cycles coil 14 (182558), Health status coil 14 (100 %), Status coil 14 (Off), Errors coil 14 (0), Cycles coil 12 (0), and Health status coil 12 (100 %). On the right side of the 'Details' section, there are two semi-circular gauges: 'Health status coil 14 [%]' and 'Health status coil 12 [%]', both showing 100% health.

Name	Value	Received
Temperature subbase	36 °C	2020-02-19 09:05:13
Cycles coil 14	182558	2020-02-19 09:05:13
Health status coil 14	100 %	2020-02-19 09:05:13
Status coil 14	Off	2020-02-19 09:05:13
Errors coil 14	0	2020-02-19 09:05:15
Cycles coil 12	0	2020-02-19 09:05:13
Health status coil 12	100 %	2020-02-19 09:05:13



SERIES PRE: DIGITAL PRESSURE MANAGEMENT

The Series PRE proportional pressure regulator is equipped with a new **technology, CoilVision®** 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**.

VERSION WITH AND WITHOUT DISPLAY

NFC

WIRELESS

USB

AVAILABLE VERSIONS

- IO-Link version

- Manifold version
- Version with integrated exhaust valve



BENEFITS



Integrated diagnostics and predictivity



Compatible with OXYGEN



Control parameters can be customised



Configuration flexibility



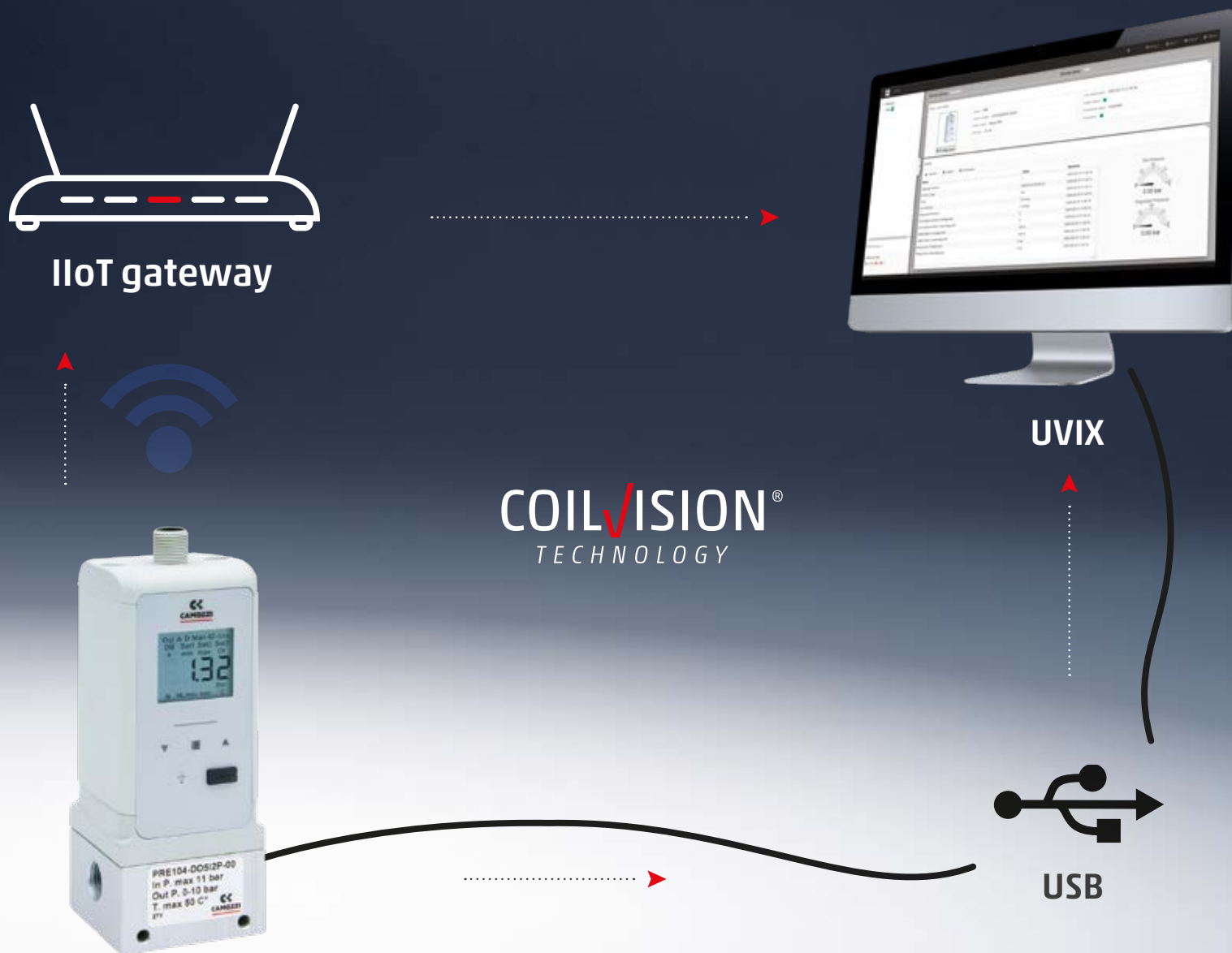
UL - CSA certificate



Modular with Series MD

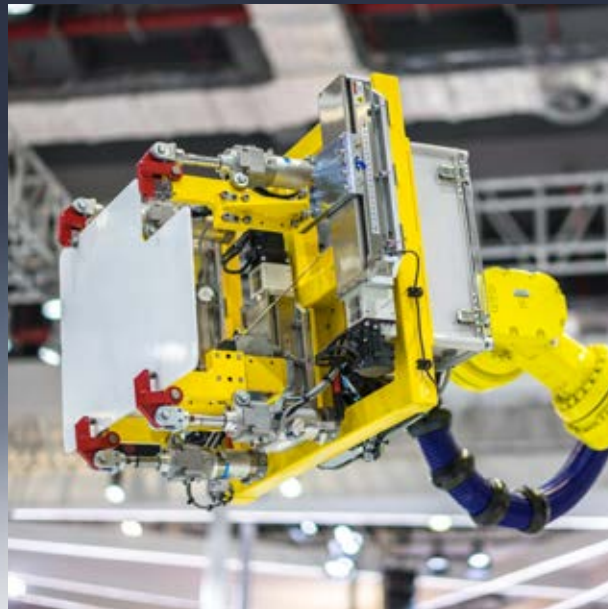
COILVISION®
TECHNOLOGY

COILVISION® DIAGNOSTICS



INDUSTRIAL SECTORS AND APPLICATIONS

- FOOD PROCESSING
AND PACKAGING
- LIFE SCIENCE
- MACHINE TOOLS &
MANUFACTURING SYSTEMS
- WOODWORKING
- PAPER AND PRINTING



Standard of reference	CE; RoHS; UL-CSA		
Controlled quantity	pressure		
Number of ways	3 ways		
Flow (Qn)	PRE104 - 1100 l/min PRE238 - 4600 l/min		
Media	Filtered and non-lubricated compressed air of class 7.4.4 according to ISO 8573.1 Inert gases and oxygen		
Min & max regulated pressure (bar)	0 - 1 bar (0-14,5 PSI)(B) 0,03 - 4 bar (0,43-58 PSI) (E)	0,05 - 10,3 bar (0,72-150 PSI)(D) 0,05 - 7 bar (0,72-101,5 PSI) (G)	0,05 - 6 bar (0,72-87 PSI) (F)
Maximum inlet pressure	2 bar (B) 5 bar (E) 11 bar (D); (G) and (F)		
External sensor (optional)	input signal 0-10 V DC or 4-20 mA		
Resolution (% FS)	0,3 (size 1) 0,6 (size 2)		
Fluid temperature (min and max °C)	0 - 50 °C		
Environmental temperature (min and max °C)	0 - 50 °C		
Pneumatic ports	G1/4 - G3/8 -1/4NPTF		
Materials	body: aluminium - cover: technopolymer - seals: NBR or FKM		
Supply voltage (V)	24 V DC		
Command signal	0-10V (2); 4-20 mA (4); 5 bit Digital (D); IO-Link (I)		
Hysteresis (% FS)	0,5% (size 1) 0.7% (size 2)		
Power consumption	Max 0,5A (Envisage a power supply of at least 1A)		
Type of electrical connection	M12 5 Pin Male (IO-Link) M12 8 Pin Male (Analog and PreSet) M12 12 Pin Male (version with external sensor)		
IP protection class	IP65		
Repeatability (% FS)	0,4		
Linearity (% FS)	0,4		
Modularity	with Series MD		
PRE in IO-Link version	V1.1 according to standard IEC 61131-9 / 61131-2		
Feedback signal	0-5 V DC and 4-20 mA (always present in the version with analog command signal (2) (4))		



SERIES MX SAFEMAX: SAFETY AT YOUR FINGERTIPS

The Machinery Directive (MD) 2006/42/EC establishes the **safety requirements** that a machine must satisfy while in use, in order to **protect the health of people**. Series MX SAFEMAX valves comply with **ISO 13849-1**, which refers to the safe design of control systems that perform safety functions. These valves are equipped with an **integrated sensor** that detects the position of the spool and checks whether the system is **rapidly discharged in case of emergency**. The single channel valve is a component classified in category 2 and allows to achieve **Performance Level D**. The double channel valve is a component classified in category 4 and allows to achieve **Performance Level E**.

BENEFITS



Compliant with Machinery Directive 2006/42/EC



Easy integration with Series MX2 FRL Units



Solutions to achieve up to Performance Level E



INTEGRATED ANTI-TAMPER SENSOR

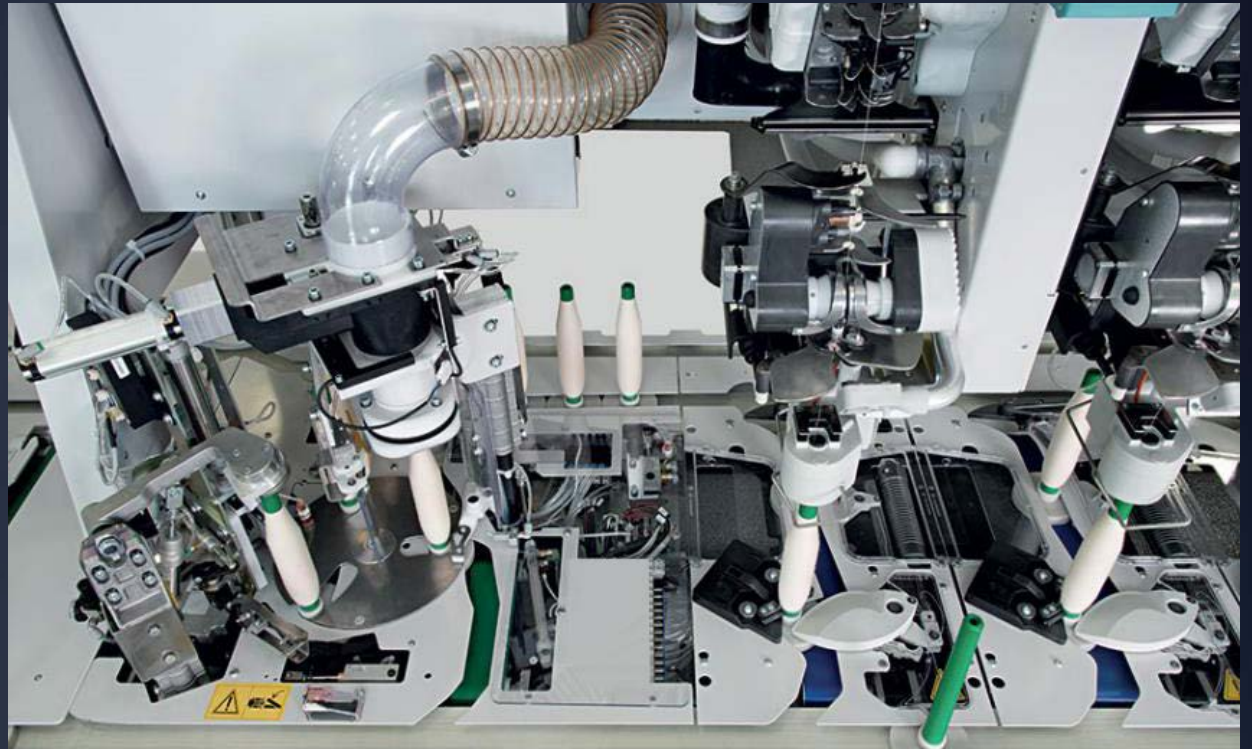
CONNECTION WITH MX UNITS

HIGH EXHAUST FLOW

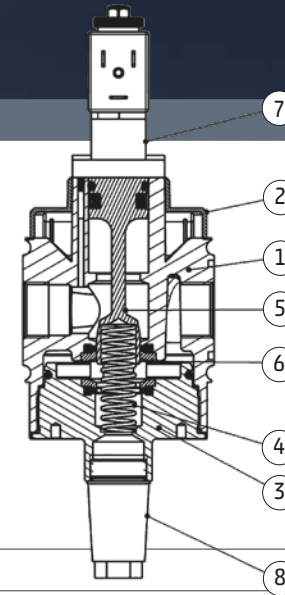


INDUSTRIAL SECTORS AND APPLICATIONS

- TEXTILE
- CHEMICAL
- PULP & PAPER
- FOOD & BEVERAGE
- ENERGY
- PHARMACEUTICAL & COSMETIC
- AIR & GAS TREATMENT
- WATER TREATMENT
- STEAM & HOT WATER TREATMENT



CONSTRUCTION	modular, compact, spool-type	
Materials	1 = Body 2 = Covering 3 = Cover 4 = Lower spring 5 = Spool 6 = Cage element 7 = Solenoid 8 = Silencer Seals Sensor	Aluminium POM Polyacetal Aluminium Steel Stainless steel Brass Steel, brass, PBT, POM Bronze, Steel NBR, FKM PA body, epoxy resin and PU cable
Ports	G1/2	
Mounting	in-line, wall-mounting (by means of clamps)	
Operating temperature	-5°C ÷ 60°C	
Operating pressure	with internal servo-pilot: 3,5 bar ÷ 10 bar - with external servo-pilot: 0,5 bar ÷ 10 bar - (pilot 3,5 bar ÷ 10 bar, greater or equal to operating P)	
Nominal flow	single version: 1→2 = 5600 NL/min (ΔP 1) 2→3 = 5000 NL/min (free flow) - double version: 1→2 = 4100 NL/min (ΔP 1) 2→3 = 5000 NL/min (free flow)	
Fluid	Filtered air in class 7.4.4 according to ISO 8573-1 (In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication)	
COIL SPECIFICATIONS		
Connection	DIN EN 175 301-803-B	
Voltage	24V DC (±10%) 3,1W (ED 100%)	
SENSOR SPECIFICATIONS		
Connection	with wires, M8	
Voltage	10-28V DC	
Operation	Magneto-resistive	
Type of contact	N.O. PNP	
Maximum current	EX version: 200 mA 0,65 W - UL version: 100 mA 3 W - CE version: 200 mA 5,5W	
COMPLIANCE WITH EN ISO 13849-1 STANDARD		
Performance level reachable (PL)	single version: category 2, PLd - double version: category 4, PLe	
B10d	2.000.000 cycles	





SERIES ASX: FLUID CONTROL WITHOUT COMPROMISE

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 through 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, the medium to control and the connections required by the application. There are also specific models available to be installed in applications with flow direction under the poppet, in order to prevent or reduce the water-hammer effect when closing the valve.



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

THREADED VERSION
BSP DIN ISO 228-1
BSPT DIN 2999-1
NPT ASME B1.20.1

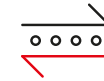
TRI-CLAMP
VERSION
ISO 2852

FLANGED
VERSION
DIN 2543

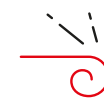
BENEFITS



High flow rate



Low fluid resistance



Versions available
that prevent
water-hammer effects



Compliant with Directive
PED 97/23/EC



Compliant with
the ATEX Directive

INDUSTRIAL SECTORS AND APPLICATIONS

- PULP & PAPER
- TEXTILE
- CHEMICAL
- ENERGY
- WATER TREATMENT
- FOOD & BEVERAGE
- STEAM & HOT WATER TREATMENT
- AIR & GAS TREATMENT
- PHARMACEUTICAL & COSMETIC

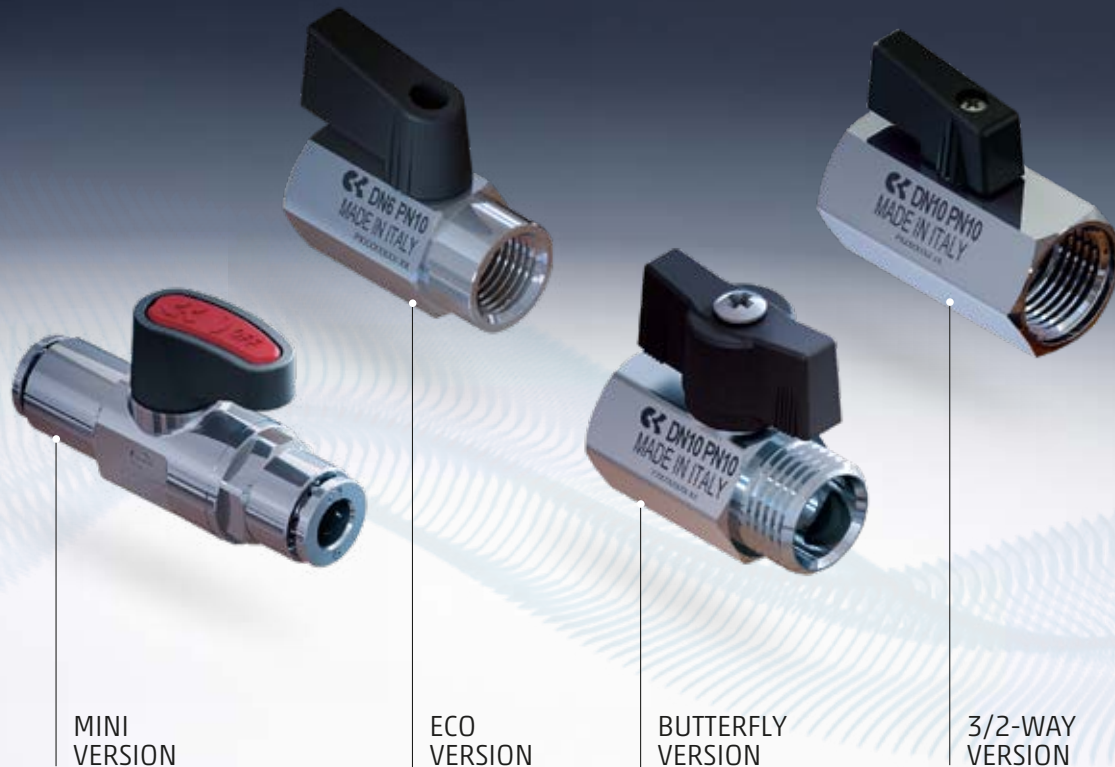


TECHNICAL FEATURES	
Function	2/2 NC - 2/2 NO - 2/2 Double acting
Operation	pneumatic, poppet type
Pneumatic connections	1/4 ... 4" with BSP/BSPT/NPT threads, flanged, welding ends, tri-clamp
Nominal diameter	DN8 ... DN100
Flow coefficient Kv (m³/h)	2.2 ... 132
Operating pressure	0 ÷ 2 ... 16 bar
Operating temperature	-10 ÷ 180 °C (standard seals) / 25 ÷ 220°C (high temperature seals)
Media	water, air, steam, inert or corrosive liquids and gases (compatible with the materials in contact)
Viscosity	600 cSt. max
Installation	in any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	316 stainless steel (DN8 ÷ DN80) / 304 stainless steel (DN100)
Seals	PTFE
Internal parts	316 stainless steel
SPECIFICATIONS PNEUMATIC ACTUATOR	
Actuator dimensions	Ø40 - Ø50 - Ø63 - Ø90 - Ø125 mm
Actuator material	304 stainless steel / aluminium (only for Ø 125 mm)
Piston material	aluminium
Piston seal material	FKM
Piloting fluid	air or inert gases
Piloting pressure	10 bar max.
Actuator position	360° rotatable



SERIES 29: FLUID CONTROL IN REDUCED SPACES

The mini ball valves are used to **open or close air or fluids in industrial applications** characterised by **extremely reduced spaces**. The **miniaturised dimensions** and **light weight** of Series 29 enable a **quick installation** at any point of the system, also thanks to the push-in connection or thread. The design and materials used make this series particularly suitable for **compressed air systems as well as hydraulic circuits and systems**.



BENEFITS



Reduction
in installation time



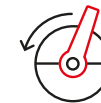
Compact dimensions



Lightweight



Maximum flow capability



Easy-to-operate lever



Usage with polymer tubing

INDUSTRIAL SECTORS AND APPLICATIONS

- INDUSTRIAL AUTOMATION
- HYDRAULIC SYSTEMS
- HYDRAULIC CIRCUITS
- AIR COMPRESSORS
- COMPRESSED AIR PLANTS
- UNDER FLOOR HEATING



Function	2/2-way 3/2-way with exhaust
Operation	90° lever rotation
Ports	G1/8 G1/4 G3/8 G1/2 R1/8 R1/4
Tube diameter	Ø 4, 6, 8 mm
Orifice diameter	6 mm (MINI version) 8 mm bis 10 mm (ECO, butterfly and 3/2-way with exhaust)
Operating pressure	0 ÷ 10 bar
Operating temperature	-10°C ÷ 90°C
Materials	valve body, rod, collet: brass; ball: nickel plated brass; ball seals: PTFE; rod sealing ring: FKM; lever: glass charged PA66
Surface finishing	chrome plated, sandblasted and chrome plated (only butterfly version)
Media	compressed air, inert gases, water, oil - other on demand



SERIES QR: ROTARY ACTUATOR WITH RACK AND PINION SYSTEM

The Series QR rotary actuators are cylinders with a double piston, able to provide **high torques** while ensuring **high stability and a precise rotary movement**. The rotation angle can be easily set as desired between 0° and 190° by means of adjustment bolts or hydraulic absorbers positioned on one side of the rotary table. The use of shock absorbers allows the dampening of two to five times more kinetic energy than with regulation bolts. The rotary table is compact and allows direct mounting of the load. Their compact design, lightness and ease to **combine with EOAT** make these actuators particularly suitable for use in the **assembly and packaging sectors** and any application that requires **transfer, tilting or rotation of objects**.

COMPACT, DOUBLE-ACTING, MAGNETIC

SIZES: 7, 10, 20, 30, 50 mm



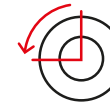
BENEFITS



Compact design



High rotation stability



Adjustable rotation angle



Easy to install



Mechanical or hydraulic shock absorbers



Can be integrated into manipulation systems

CAMOZZI | SERIES QR

INDUSTRIAL SECTORS AND APPLICATIONS

- ASSEMBLY
-
- PACKAGING



Type of construction	"Rack & Pinion" system
Operation	double-acting
Materials	profile, end blocks and rotor = aluminium rack = steel pinion = steel rack's guide ring = PTFE seals = NBR
Type of mounting	by means of screws in the central body
Sizes	07, 10, 20, 30, 50
Operating temperature	0°C ÷ 70°C
Standard rotation angles	0 - 190°
Minimum rotation angle (with shock absorber)	10 = 66°, 20 = 52°, 30 = 46°, 50 = 70°
Repeatability	<0.2°
Bearings	ball bearings
Operating pressure	1 - 10 bar, 1 - 7 bar (for 7 mm), 1-6 bar (for versions with shock absorber)
Medium	filtered air in class 7.8.4 according to ISO 8573-1 standard. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.

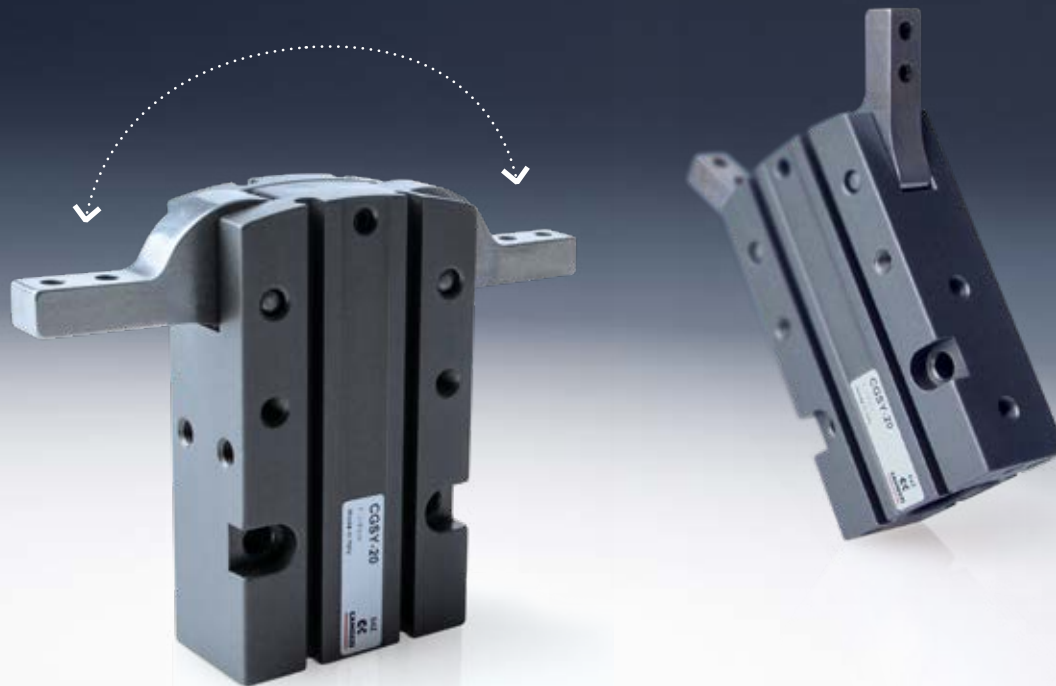
Coding example

QR	20	A
QR	SERIES	PNEUMATIC SYMBOL CD18
20	SIZE 07 10 20 30 50	
A	TYPE OF CUSHIONING A = mechanical stop S = shock absorber	



SERIES CGSY: RADIAL GRIPPERS OPENING ANGLE 180°

Camozzi Series CGSY Gripper is designed to guarantee **consistent performance every time**, even across a wide range of applications that demand the highest levels of productivity. The **180° opening angle** enables operation within restricted workspace, while at the same time **optimizing product handling**. This makes it particularly suited to applications such as blowing PET bottles as well as filling applications for the food and chemicals industries. Its design and the materials used assure **accurate operation** even **in harsh environments** contaminated with dust or vapour and in applications where frequent washdown is usual.



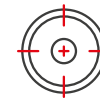
BENEFITS



High speed opening and closing



High gripping force



Precision and position repeatability



Reliability



Protection against impurities at the inlet

INDUSTRIAL SECTORS AND APPLICATIONS

- BOTTLING
- FOOD & BEVERAGE
- PLASTICS & RUBBER
- ASSEMBLY



Type of construction	Radial gripper
Type of operation	Double-acting
Sizes	10, 16, 20, 25
Force transmission	Cam system
Closing torque at 6 bar	50 - 790 Ncm
Opening/closing angle	2x90°
Air connections	M5
Operating pressure	2 ÷ 8 bar
Operating temperature	5°C ÷ 60°C (standard)
Store temperature	-10°C ÷ 80°C
Maximum use frequency	3 Hz
Repeatability	0.05°
Medium	Filtered air in class 7.4.4 according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication.
Compatibility	RoHS Directive
Certifications	ATEX (II 2GD c IIC 120°C(T4)-20°C≤Ta≤80)
Materials	PTFE, Silicone and Copper free
Compatible magnetic proximity switches	Series CSD

NB: Pressurize the pneumatic system gradually in order to avoid uncontrolled movements.

Coding example

CGSY	-	16	EX
CGSY	SERIES	PNEUMATIC SYMBOL PNZ1	
16	SIZE 10 16 20 25		
EX	Add EX to order the certified ATEX version		



SERIES CGSP: COMPACT, SELF-CENTERING PARALLEL GRIPPERS

Series CGSP grippers are double acting, self-centering parallel grippers with a T-shaped sliding guide. Thanks to the materials and surface coating used, this Series **guarantees high performance over time**. These highly reliable grippers are protected against the entrance of impurities even in dusty environments. Their compact design, **high positioning repeatability** and opening and closing speed make the Series CGSP suitable for **handling small items in pick & place**, insertion and machine tending applications that are typically found in the electronic components assembly sector, cosmetics & medical industry as well as in food packaging.

BENEFITS



Compact and light design



High reliability



Free from copper, silicone and PTFE



Compatible with magnetic and inductive sensors

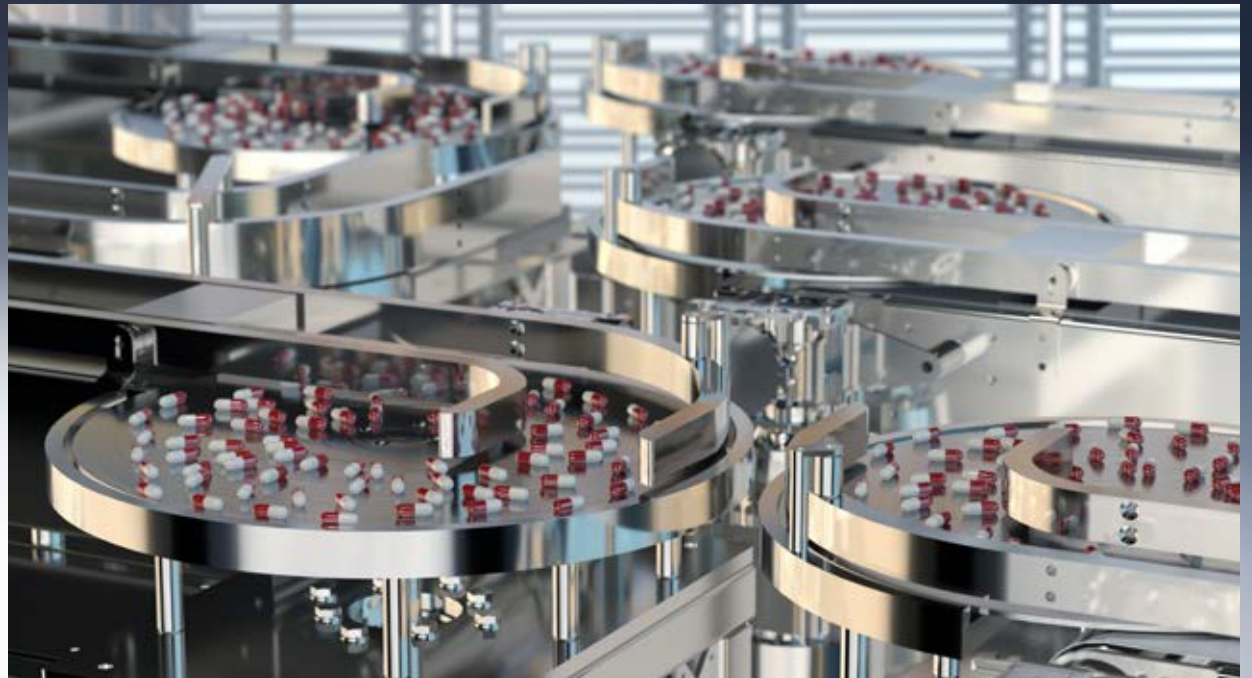


Protected against the entrance of impurities (IP40)



INDUSTRIAL SECTORS AND APPLICATIONS

- ASSEMBLY
- COSMETIC & PHARMA
- PLASTICS & RUBBER



Type of construction	Self-centering parallel gripper with T-guide
Operation	Single acting (NO, NC), double acting
Bores	20, 25, 32, 40
Force transmission	Lever
Air connections	M5 (Ø20, 25, 32), G1/8 (Ø40)
Working temperature	5°C ÷ 60°C
Storage temperature	-10°C ÷ 80°C
Maximum use frequency	3 Hz (Ø 20, 25, 32), 2 Hz (Ø 40)
Repeatability	0.02 mm
Interchangeability	0.1 mm
Medium	Filtered air in class 7.4.4 according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication
Lubrication	After 10 million cycles, grease the sliding zones using Molykote DX grease
Protection class	IP 40
Compatibility	ROHS Directive
Certifications	ATEX (II 2GD c IIC 120°C(T4)-20°C≤Ta≤80)
Materials	Free from Copper, Silicone and PTFE
Compatible magnetic proximity switches	Series CSD

N.B. Pressurize the pneumatic system gradually in order to avoid uncontrolled movements.

Coding example

CGSP	-	20	-	NC	-	EX
-------------	---	-----------	---	-----------	---	-----------

CGSP	SERIES	
20	SIZES 20, 25, 32, 40	
NC	FUNCTIONING = double acting NO = single acting, normally open NC = single acting, normally closed	PNEUMATIC SYMBOLS PNZ1 PNZ3 PNZ2
EX	VERSION = Standard EX = ATEX certification	



SERIES CGAN: ANGULAR GRIPPERS OPENING ANGLE 30°

Thanks to an opening angle of between -10° and 30° , the Series CGAN angular grippers guarantee a **fast and efficient grip even in reduced workspaces**. Its compact design and the materials used, make this gripper particularly suitable for all those applications requiring **high precision and position repeatability** such as Transferring, Pick & Place or Pick & Hold. Fixing points on three different sides of the gripper body and its easy mounting by means of an optional adaptor, guarantee **highly flexible installation**, even in industrial sectors that demand high levels of production efficiency such as the assembly, packaging and Food & Beverage sectors.



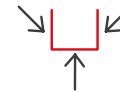
BENEFITS



Compact and light design



Flexible mounting



Fixing on 3 sides



High speed opening and closing



Position detection thanks to the use of Series CSD magnetic proximity switches

INDUSTRIAL SECTORS AND APPLICATIONS

- PACKAGING

- FOOD & BEVERAGE

- ASSEMBLY



Type of construction	Self centering angular gripper
Operation	Double-acting
Sizes	10, 16, 20, 25, 32
Force transmission	Lever system
Opening torque at 6 bar	14 - 280 (Ncm)
Closing torque at 6 bar	10 - 230 (Ncm)
Opening/closing angle	2x15°
Air connections	M3 - M5
Operating pressure	2 ÷ 8 bar
Operating temperature	5°C ÷ 60°C
Store temperature	-10°C ÷ 80°C
Maximum use frequency	3 Hz
Repeatability	0.05°
Medium	Filtered air in class 7.4.4 according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication.
Certifications	ATEX (II 2GD c IIC 120°C(T4)-20°C≤Ta≤80)
Compatibility	RoHS Directive
Materials	PTFE, Silicone and Copper free
Compatible magnetic proximity switches	Series CSD

Coding example

CGAN	-	20	-	EX
-------------	---	-----------	---	-----------

CGAN	SERIES	PNEUMATIC SYMBOL PNZ1
20	SIZES 10 16 20 25 32	
EX	VERSION = Standard EX = Atex certified	

Contacts

Camozzi Automation S.p.A.

Società Unipersonale
Via Eritrea, 20/I
25126 Brescia
Italy
Tel. +39 030 37921
info@camozzi.com

Customer Service

Tel. +39 030 3792790
service@camozzi.com

Export Department

Tel. +39 030 3792262
sales@camozzi.com



Automation