CEME

FLUID CONTROL SOLUTIONS

Coffee | Beverage | Refrigeration Air-conditioning | Steam | Medical | Welding | Water Management | Other-Industrial | Heating

Sanitary Water management

Latching solenoid pilot and solenoid valves

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CEME
FLUID CONTROL SOLUTIONS

CEME, SOLENOID PUMPS AND VALVES

Electro-pumps, solenoid valves, pressure switches, flow meters for a perfect fluid control

Established in 1974, CEME is now a landmark of reference for industrial pumps and valves production in Italy and throughout the world. Over the years, the company has diversified its product range and their applications enriching its array of electro-pumps, solenoid valves, pressue switches, flow meters and other components to properly control the passage of any type of fluid: water, gas, steam, air.
CEME is renowned for its technical engineering know-how, quality, flexibility and for the distinctive ability to develop innovative solutions for customers on the Italian and international markets. Technology needs control.

- **LATCHING SOLENOID PILOT**
  - Servo controlled for DN 11 mm
  - Direct acting
- **LATCHING SOLENOID VALVE DN 5**
  - Thread connection M20 x 1
  - Thread connection M22 x 2
- **WATER SOLENOID VALVE**

CEME introduces its wide range of components dedicated to sanitary market.

These products have been designed by **CEME** with the aim of bringing innovative solutions and high quality components.

CEME has put in place its decades of experience in developing products in compliance with the most relevant norms related to the main sanitary applications, such as electronic faucets and flushing system.

NEW

CEME
FLUID CONTROL SOLUTIONS

LATCHING SOLENOID VALVE

DN 5 mm L series

M20X1

M22X2

HIGHLIGHTS

- 2/2 way servo controlled
- 0,5 – 8 bar (0,5 – 10 bar upon request)
- Tap water
- Compact design
- Body valve in PPSU

PRODUCT DESCRIPTION

The new CEME Solenoid Valve for sanitary market is a 2/2 way servo controlled valve with Ø 5 mm.
The main application is electronically controlled sanitary fittings, both battery driven (latching 6V) and power supply (12V DC).
Thanks to the flow rate optimization, the Ø 5 mm can meet all the sanitary taps' requirements.
While designing the valve, our efforts and attention were focused on the water hammer: the test results rate this valve at the top level. The hydraulic and mechanical concept has been developed considering longterm performances, durability and battery life as priority targets.
All the materials are compliant with the main regulations in drinking-water applications.

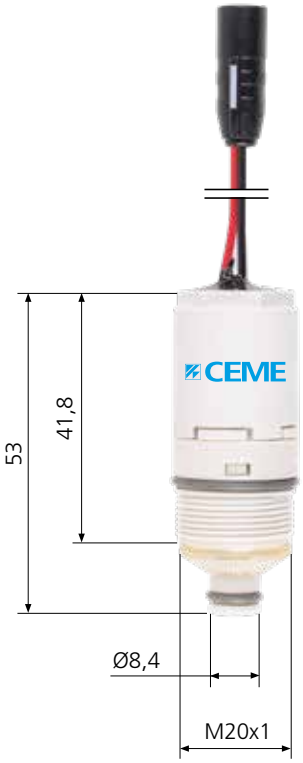
1

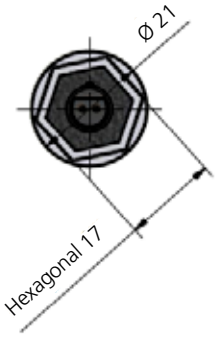
Water Management

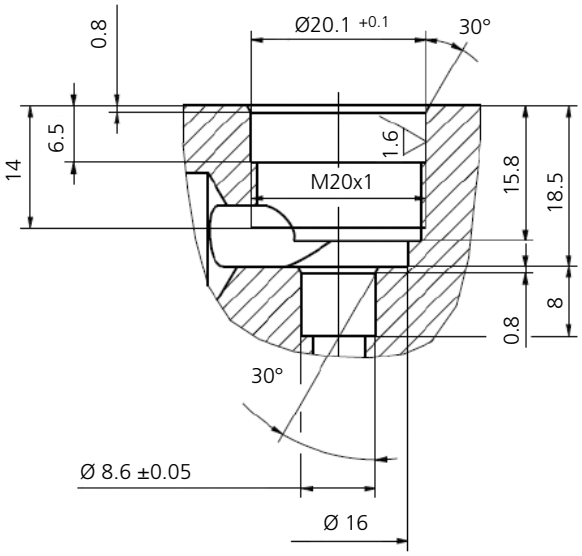
GENERAL FEATURES
Long life material
Interchangeable plastic filter
Very compact design
Low power consumption
Servo controlled
100% tested with water and air
IP grade: IP65
Overall dimensions according with the drawing of the model
Suitable for chemical disinfection (Chlora-mine) as well as thermal disinfection

MATERIALS	
Hydraulic body	PPSU - R5100
LSR Seals	All the seals are in Liquid Silicon Rubber
Other	Stainless steel (spring and plunger)
Material approvals	FDA, DM174, ACS, NSF, WRAS, DVGW

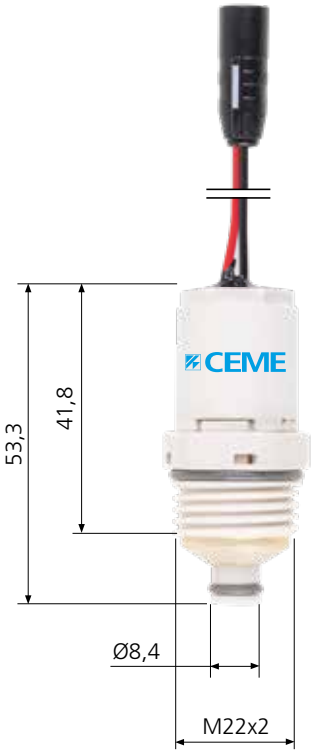
Cod. L400 *M20X1*

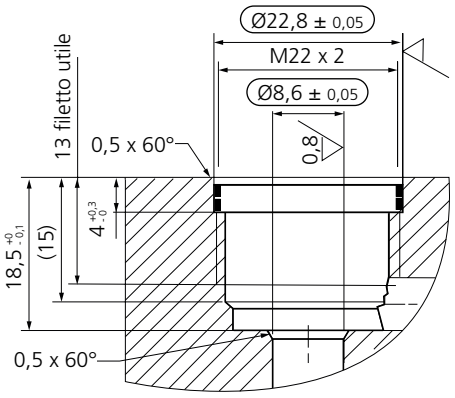






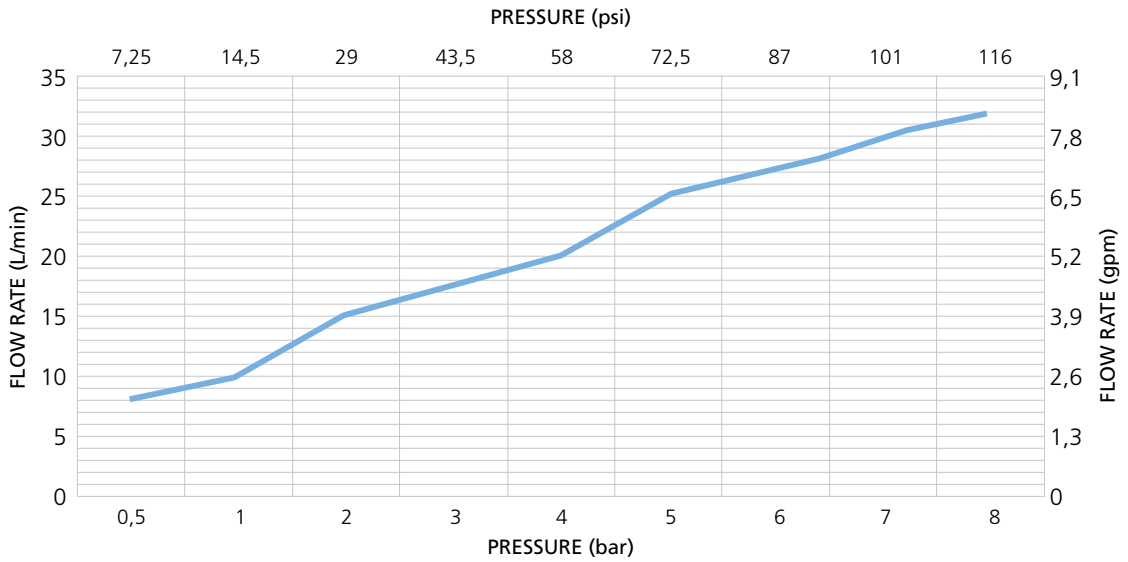
Cod. L500 *M22X2*





LATCHING SOLENOID VALVE
DN 5 mm L series

HYDRAULIC CHARACTERISTICS

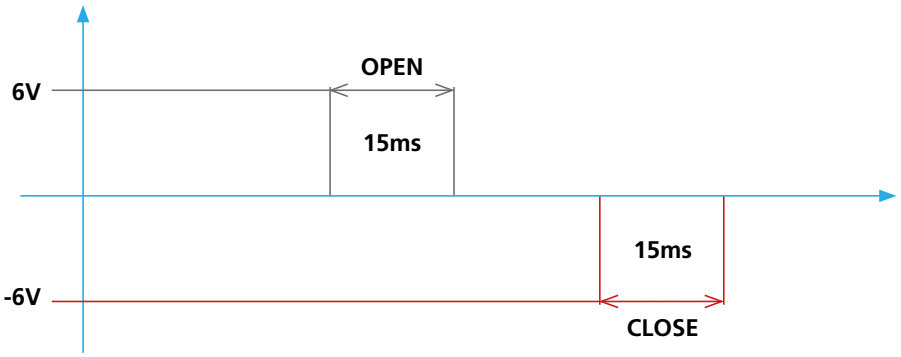


WORKING CHARACTERISTICS

Working pressure	0,5 ÷ 8,0 bar (7,25 ÷ 116 PSI)
Pressure burst	According to EN60730
Water Hammer	According to EN60730
Flow direction	Uniderectional
Valve position	Any position
Working fluid	Tap water
Power Supply / Absorption / Pulse	6V 1W 170mA Latching solenoid (impulse 15ms minimum)
Insulation class	H according with EN60730
Fluid Temp	5° ÷ 95°C (41° ÷ 203° F)
Ambient Temp	5° ÷ 95°C (41° ÷ 203° F)

ELECTRICAL SPECIFICATIONS MONO	
Electrical connections	Cable (KCC connector upon request)
Coil power	1,5W (12V DC)
Operating voltage	(12V DC) at 20°
Nominal Current	125 mA (12V DC)
ED	100%

ELECTRICAL SPECIFICATIONS	
Electrical Connection	Cable (KCC connector upon request)
Coil power	1W (6V)
Operating Voltage	6V (5Vmin) at 20° C
Max Voltage supply	8V
Nominal Current	170 mA (at 6V 25°C)
Pulse time	**Close** min 15ms / **Open** min 15ms



NEW

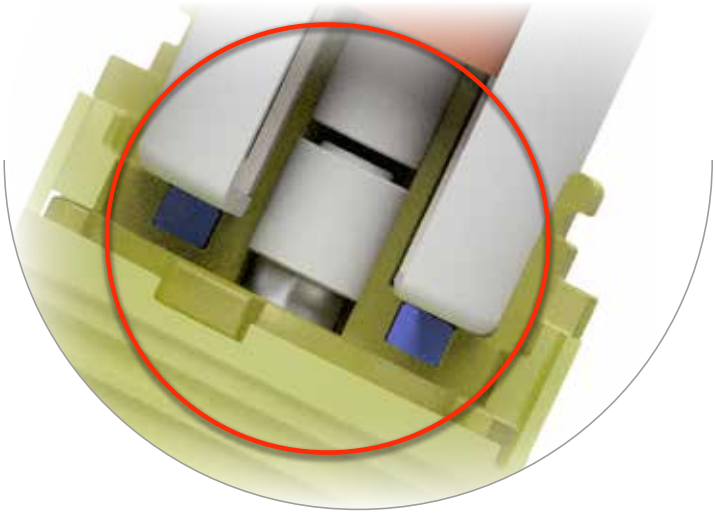
CEME
FLUID CONTROL SOLUTIONS

LATCHING SOLENOID VALVE
DN 5 mm L series

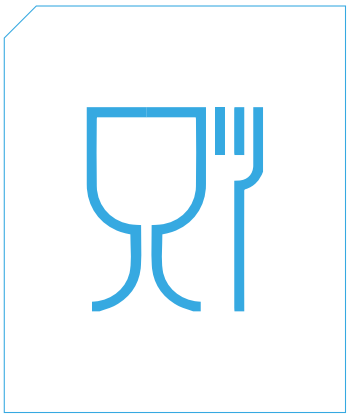
HIGHLIGHTS

The floating core system represents a unique and innovative solution in this range of valves.
Ceme R&D has concentrated his efforts to design the "springless floating system".

This solution offers several advantages:
- Reduction of power consumption
- Faster response
- No core sticking (a very common issue with standard sanitary valves)
- Removal of a critical component. Commonly when the core spring is damaged, the valve can remain open, wasting water from the faucet.



The diaphragm of this valve is a concentrate of innovation, an ambitious project that today brings many improvements if compared to standard products:
- Labyrinth Calibrated System:
  The water flows through a sophisticate system of micro channels, designed to minimize the water hammer and to allow a quick and
  progressive closing.
- Self-cleaning:
  The diaphragm has holes for the water load.
  This system prevents any type of blockage due to dirt. The regular up-and-down movement of the membrane causes also a stretch deformation of the holes, keeping the passage constantly clean. This simple and smart system does not need any needle to clean the holes, unlike many other standard valves in this market.



HIGHLIGHTS

Ceme has selected one single material for all the valve seals, LSR (Liquid Silicon Rubber), instead of other common elastomers, such as EPDM.

LSR can grant far better performances:
- Fully food grade approved. LSR is also in compliance with the incoming restrictions concerning rubbers, which will involve and forbid many of the common rubbers
- Fully compatible with chloramine even in high concentration
- Fully compatible with the most common chemical agents used for disinfection
- No ageing/degradation effects - LSR assures a very long life

The body of the valve and all the internal mechanical parts are made of PPSU, one of the top high resistance plastic materials (generally common valves are made of PA66 or POM).

Also in this case, Ceme has selected this high quality material to grant the best performances:
- The high mechanical resistance rates this valve at the top level for burst pressure
- Thermal disinfection: PPSU allows the fluid compatibility at 95°C (203°F) in compliance with the most severe disinfection cycle, while the plastic materials of the common valves mentioned above, allow a max fluid temperature of 65°C (150°F), or a higher temperature just for a limited time.
- Best compatibility with food grade approvals
- Best compatibility with chemical agents
- Longer life time resistance

NEW

CEME
FLUID CONTROL SOLUTIONS

LATCHING SOLENOID PILOT

HIGHLIGHTS

- Pilot
- Tap Water
- Low water hammer

PRODUCT DESCRIPTION

The new CEME latching Solenoid pilot is a 2/2 way direct action pilot for flush system.
The main application is electronically controlled, battery driven sanitary.

The hydraulic and mechanical concept has been developed considering longterm performances, durability and battery life as priority targets. All the materials are compliant with the main regulations in drinking-water applications.

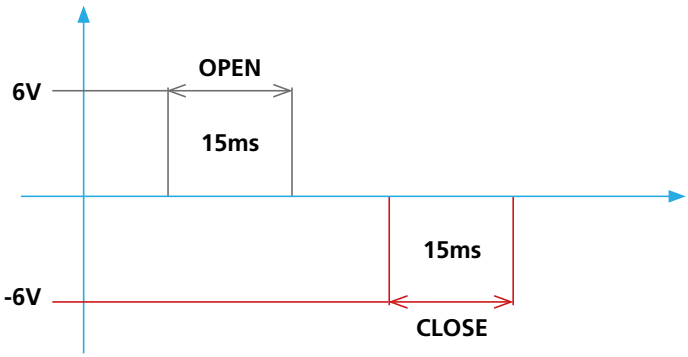
Water Management

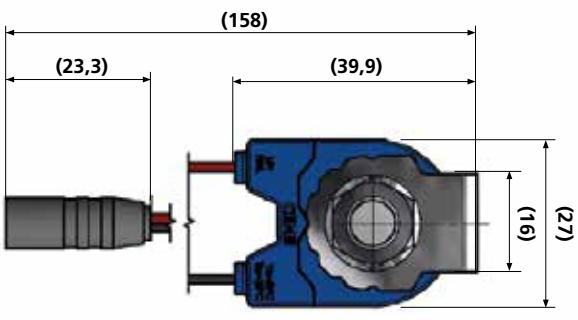
GENERAL FEATURES
Long life material
Low power consumption
Direct action
100% tested with water and air
Overall dimensions according with the drawing of the model
Suitable for chemical disinfection (Chlora-mine) as well as thermal disinfection

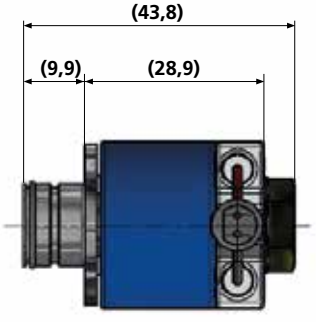
MATERIALS	
Hydraulic Tube	Stainless steel
EPDM or LSR Seals	All the seals are in EPDM or LSR
Other	Stainless steel (spring and plunger)
Material approvals	FDA, DM174, ACS, NSF, WRAS

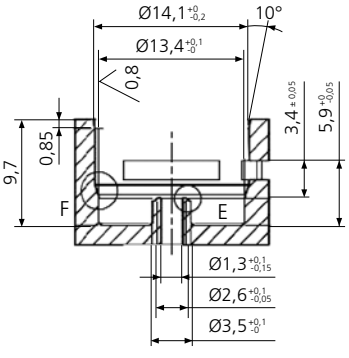
WORKING CHARACTERISTICS	
Working pressure	0 ÷ 8 bar (0 ÷ 145 PSI)
Pressure burst	According to EN60730
Water Hammer	According to EN60730
Flow direction	Uniderectional
Valve position	Any position
Fluid	Tap water
Power Supply / Absorption / Pulse	6V 2.25W 375mA (impulse 15ms minimum)
Heating class	H according with EN 60730
Fluid Temp	0° ÷ 85° C (32° ÷ 185° F)
Ambient Temp	0° ÷ 85° C (32° ÷ 185° F)

ELECTRICAL SPECIFICATIONS LATCHING	
Electrical Connection	cable with connector faston
Nominal power	3.2W (6V)
Operating Voltage	6V (5Vmin) at 20° C
Max Voltage supply	9V
Nominal Current	545 mA (at 6V 25°C)
Pulse time	**Close** min 15ms / **Open** min 15ms









NEW

CEME
FLUID CONTROL SOLUTIONS

LATCHING SOLENOID PILOT
for DN 11 mm W00 SERIES

HIGHLIGHTS
- 2/2 way servo controlled
- Tap Water
- Internal filter (only latching)
- Low water hammer

PRODUCT DESCRIPTION

The new CEME latching Solenoid pilot is a 2/2 way servo controlled valve for Ø 11 mm. The main application is electronically controlled, battery driven sanitary.
The hydraulic and mechanical concept has been developed considering longterm performances, durability and battery life as priority targets.
All the materials are compliant with the main regulations in drinking-water applications.

Water Management

GENERAL FEATURES
Long life material
Internal filter
Low water hammer
Low power consumption
Servo controlled
100% tested with water and air
Overall dimensions according with the drawing of the model
Suitable for chemical disinfection (Chlora-mine) as well as thermal disinfection

MATERIALS	
Hydraulic Tube	PA66 FV30%
EPDM or LSR Seals	All the seals are in EPDM or LSR
Other	Stainless steel (spring and plunger)
Material approvals	FDA, DM174, ACS, NSF, WRAS
Connectors	KCC SK2/2 male - faston

WORKING CHARACTERISTICS	
Working pressure	0,1 ÷ 10,0 bar (1,45 ÷ 145 PSI)
Pressure burst	According to EN60730
Water Hammer	According to EN60730
Flow direction	Uniderectional
Valve position	Any position
Working fluid	Tap water
Power Supply / Absorption / Pulse	6V 2.25W 375mA (impulse 15ms minimum)
Insulation class	H according with EN 60730
Fluid Temp	2° ÷ 85°C (35,6° ÷ 185° F)
Ambient Temp	2° ÷ 85°C (35,6° ÷ 185° F)

ELECTRIC CONNECTIONS / *CONNESSIONI ELETTRICHE:*

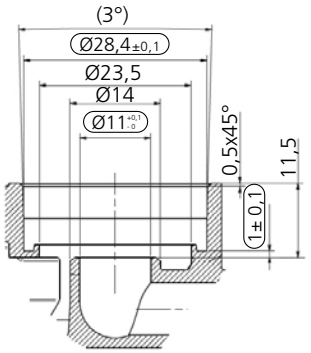
IP65 connector (latching)

Fast-on connections

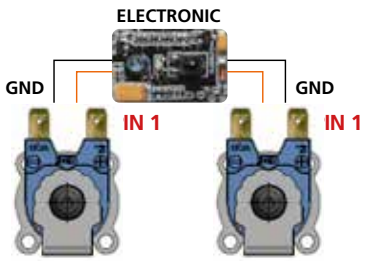
ELECTRICAL SPECIFICATIONS							
Electrical Connection	Faston 6,3x0,8 / Faston terminal UNI ISO 6952						
Coil power	4,2VA 8,2W	5,5W	6,5VA	8,2VA	7VA	6,5W	7,5VA
Operating Voltage	12Vac/dc	12Vdc	220/240V	230V	24Vac	24Vdc	110/120V
ED	100%						

ELECTRICAL SPECIFICATIONS LATCHING	
Electrical Connection	Faston (cable with connector upon request)
Coil power	2,25W (6V)
Operating Voltage	6V (5Vmin) at 20° C
Max Voltage supply	12V
Nominal Current	375 mA (at 6V 25°C)
Pulse time	**Close** min 15ms / **Open** min 15ms

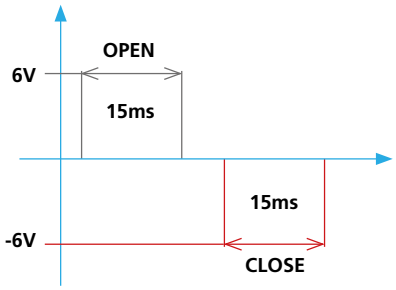
PILOT SEAT



Male connector W15 coil /
Faston Polarity of connector:
strand color RED Pin 1 strand color BLACK



Positive TO **PIN 1** (+) pulse to open
GND TO **PIN 1** (-) pulse to close



Internal filter (latching)

NEW

CEME
FLUID CONTROL SOLUTIONS

WATER VALVE

WATER SERIES SOLENOID VALVE

HIGHLIGHTS
- 2/2 way servo controlled
- 0,1 – 10 bar
- Compact design
- Hydraulic body valve in PA66 GF30%
- Latching version also available with cable connector

PRODUCT DESCRIPTION

The new CEME Solenoid Valve for water management market is a 2/2 way servo controlled valve with Ø11mm.
The main application is sanitary market, different power suplly avaiable.Thanks to the flow rate optimization, the Ø11mm can meet all the sanitary market requirements.

While designing the valve, our efforts and attention were focused onthe water hammer: the test results rate this valve at the top level. The hydraulic and mechanical concept has been developed considering long terms of performances and durability.

GENERAL FEATURES
Long life material
External filter replaceable
Very compact design
Low power consumption
Servo controlled
100% tested with water and air
IP grade: IPX0
Suitable for chemical disinfection (Chlora-mine) as well as thermal disinfection

MATERIALS	
Body material	PA 66 GF 30%
EPDM or LSR	All the seals are in EPDM or LSR
Spring	Stainless steel
Material approvals	KTW, ACS, NSF, WRAS

WORKING CHARACTERISTICS	
Working pressure	0.1 ÷ 10 bar
Pressure burst	According to EN60730
Water Hammer	According to EN60730
Flow direction	Uniderectional
Valve position	Any position
Working fluid	Tap water
Insulation class	H according with EN 60730
Fluid Temp	5° ÷ 65°C (41° ÷ 150° F)
Ambient Temp	5° ÷ 65°C (41° ÷ 150° F)

ELECTRICAL SPECIFICATIONS

Electrical Connection	Faston 6,3x0,8 / Faston terminal UNI ISO 6952							
Coil power	4,2VA / 8,2W	5,5W	6,5VA	8,2VA	7VA	6.5W	7.5VA	2.25W
Operating Voltage	12Vac/dc	12Vdc	220/240V	230V	24Vac	24Vdc	110/120V	6V
ED	100%							Latching

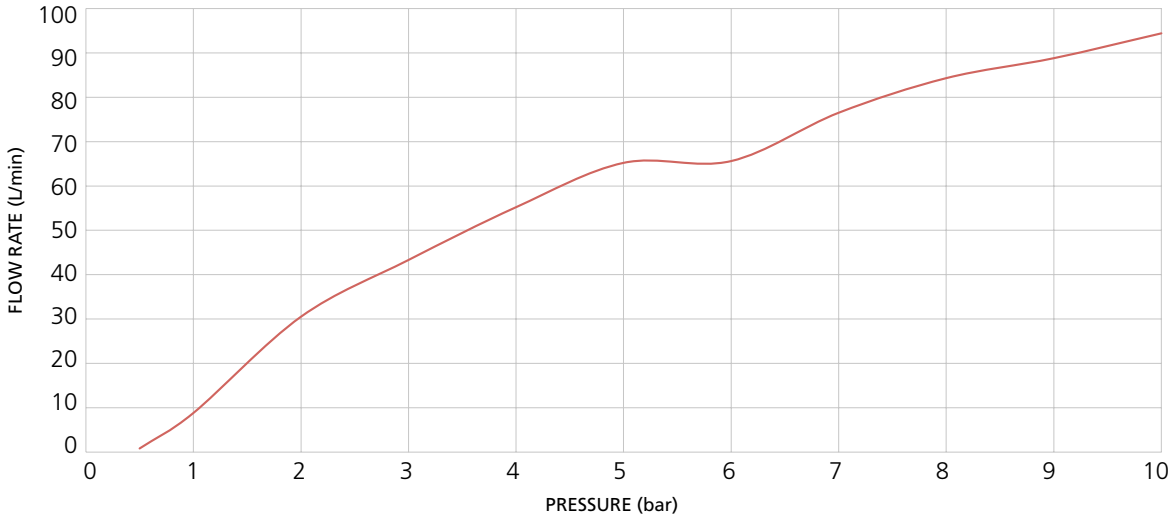
ELECTRICAL SPECIFICATIONS LATCHING

Electrical Connection	Faston (cable with connector upon request)
Coil power	2,25W (6V)
Operating Voltage	6V (5Vmin) at 20° C
Max Voltage supply	12V
Nominal Current	375 mA (at 6V 25°C)
Pulse time	**Close** min 15ms / **Open** min 15ms

SPECIFICATIONS

CONNECTION	ORIFICE Ø (mm)	KV m^3/h	Pressure (bar)		Filter
			Min	Max	mesh
G 3/4'' - PF Ø6mm	11	0,065	0,1	10	150
G 3/4'' - PF Ø8mm	11	0,090	0,1	10	150
G 3/4'' - PF Ø10mm	11	0,090	0,1	10	150
G 3/4'' - PF Ø1/4''	11	0,090	0,1	10	150
G 1/2'' - G 1/2''	11	0,090	0,1	10	150
G 3/4'' - G 1/2''	11	0,090	0,1	10	150
G 3/4'' - G 3/4''	11	0,090	0,1	10	150
G 3/4'' - G 3/8''	11	0,090	0,1	10	150
G 3/8'' - G 3/8''	11	0,090	0,1	10	150
G 3/4'' - G 1/2'' 90°	11	0,090	0,1	10	150
G 1/2'' - G 1/2'' 90°	11	0,090	0,1	10	150

HYDRAULIC CHARACTERISTICS



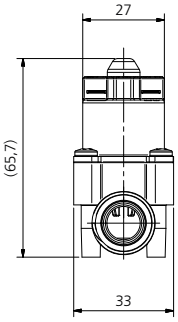
NEW

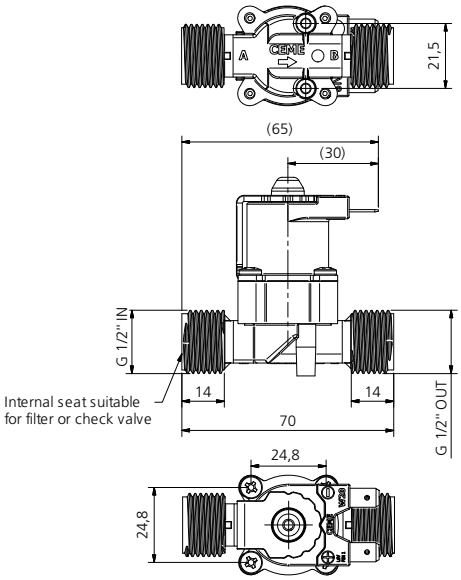
CEME
FLUID CONTROL SOLUTIONS

WATER VALVE

WATER SERIES SOLENOID VALVE

SERIES WBB - 1/2”M - 1/2”M





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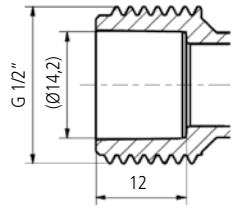

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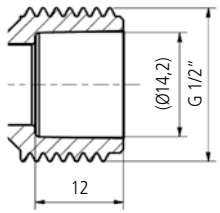
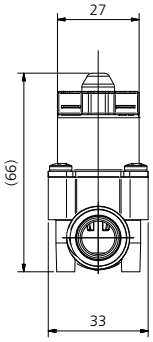
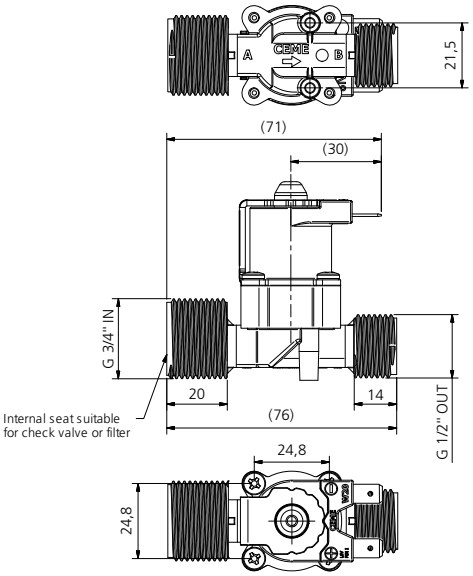


SERIES WAB - 3/4”M - 1/2”M





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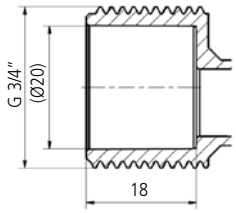

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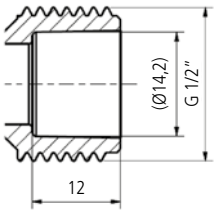
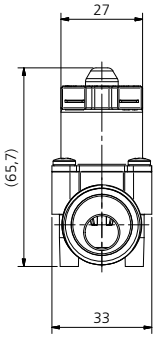
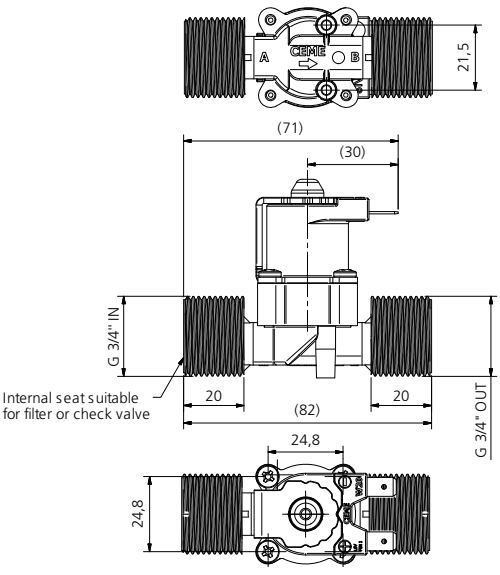


SERIES WAA - 3/4”M - 3/4”M





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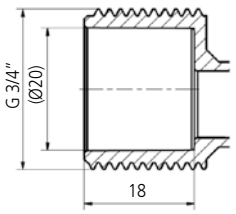
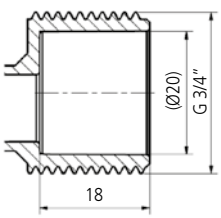
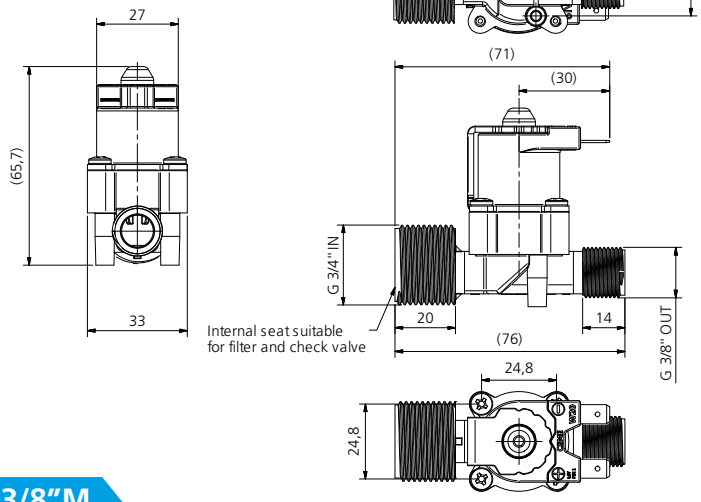


OUT



SERIES WAC - 3/4"M - 3/8"M



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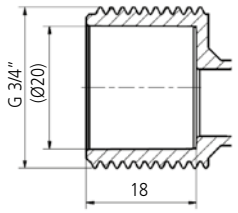

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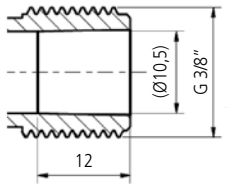
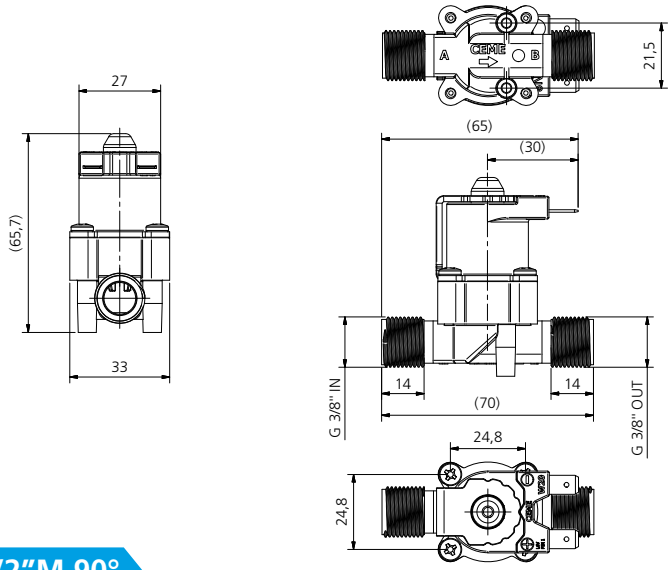


SERIES WCC - 3/8"M - 3/8"M



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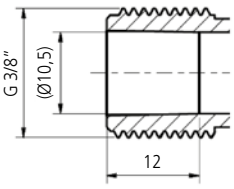

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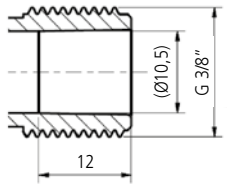
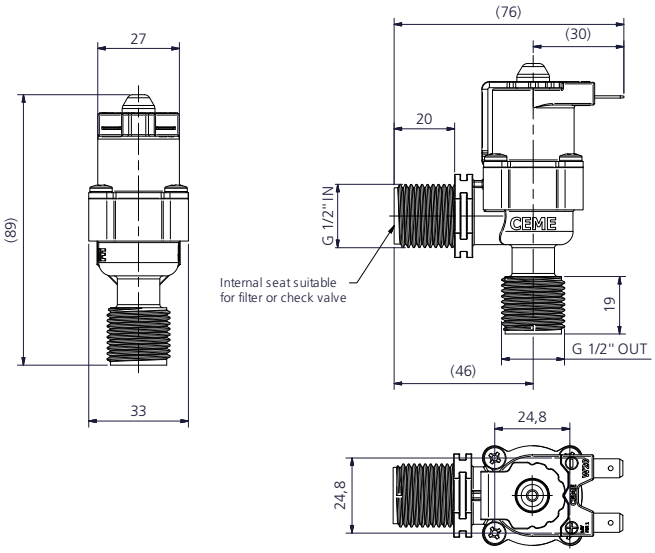


SERIES WFF - 1/2"M - 1/2"M 90°



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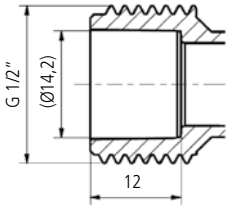

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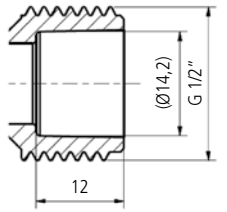
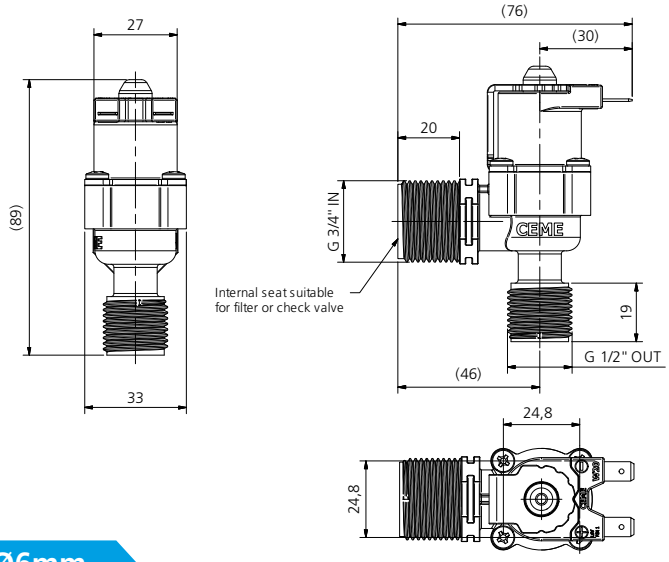


NEW

CEME
FLUID CONTROL SOLUTIONS

WATER VALVE
WATER SERIES SOLENOID VALVE

SERIES WGF - 3/4”M - 1/2”M 90°



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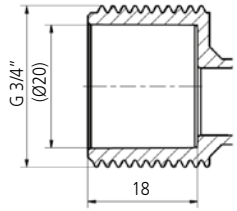
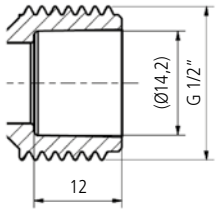
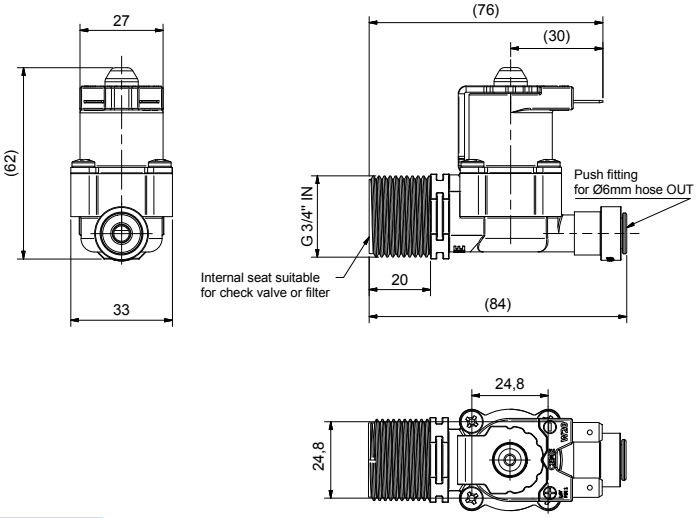


OUT



SERIES W22 - 3/4”M / PFØ6mm



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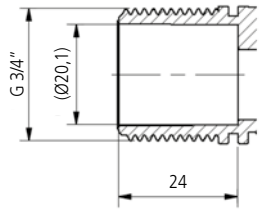

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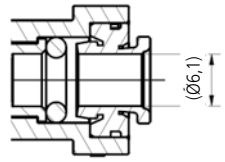
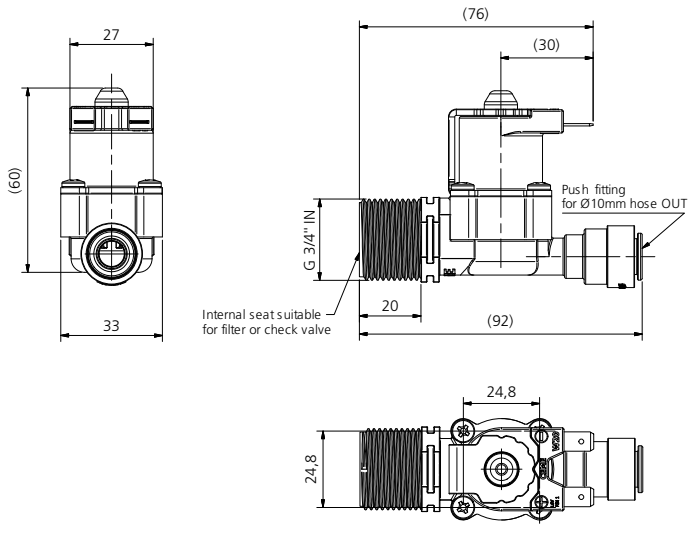


SERIES W23 - 3/4”M / PFØ10mm



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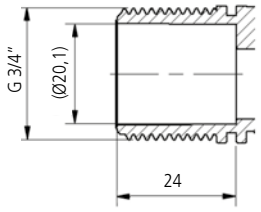

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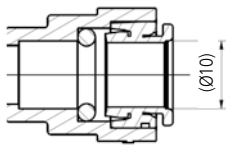
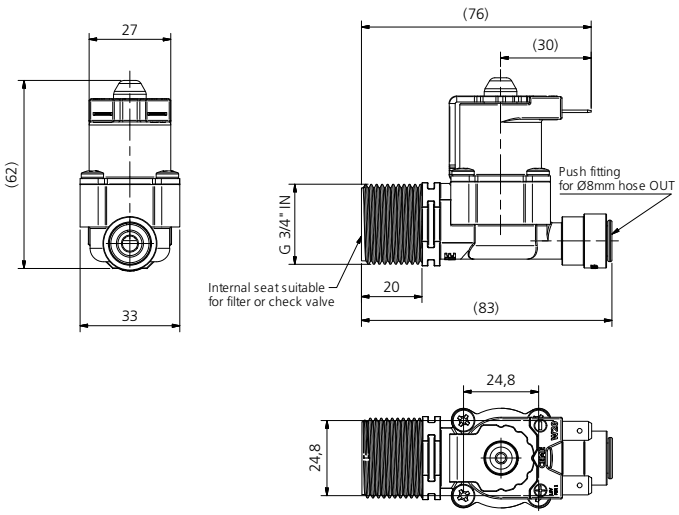


SERIES W24 - 3/4"M / PFØ8mm



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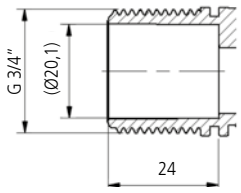

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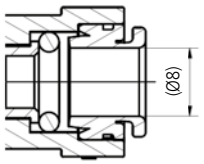
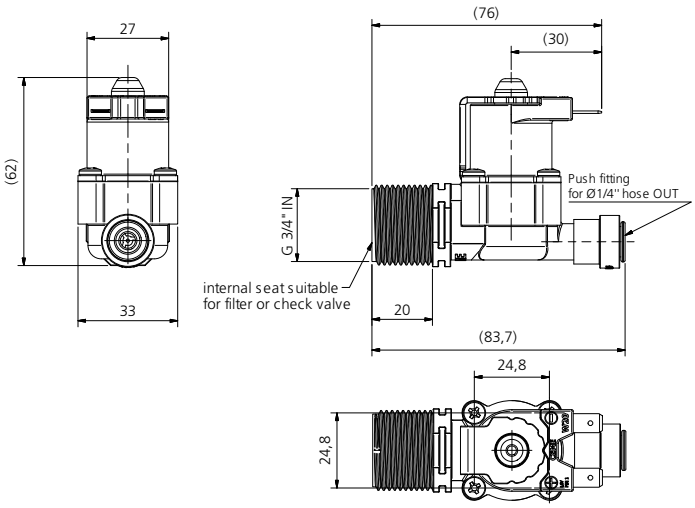


SERIES W27 - 3/4"M / PFØ1/4"



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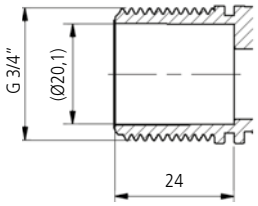
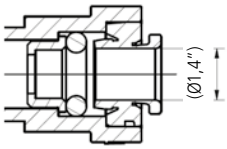
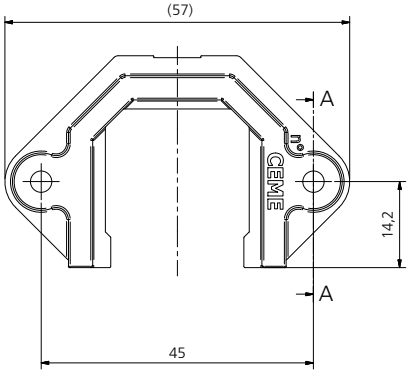


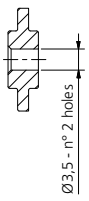
OUT

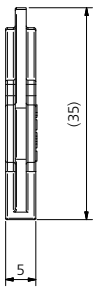


MOUNTING BRACKET (accessory / optional)



A-A (2:1)





The mounting bracket can be supplied upon request together with the water valve and it is suitable for the following series:
WFF - WGF - W22 - W23 - W24 - W27

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