



**HIGHLIGHTS**

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

**PRODUCT DESCRIPTION**

The new CEME Solenoid Valve for sanitary market is a 2/2 way servo controlled valve with DN 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 DN 5.0 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.

**DESCRIZIONE PRODOTTO**

*la nuova valvola CEME per il mercato sanitario è una 2/2 vie, servo comandata, con orifizio DN 5 mm. L'applicazione principale è rubinetteria gestita elettronicamente, sia con alimentazione a batteria (latching 6V) che con alimentazione da rete (12V DC). Grazie all'ottimizzazione della portata, la DN 5 è in grado di soddisfare tutte le necessità applicative della rubinetteria. Durante la progettazione, i nostri sforzi si sono concentrati sul colpo di ariete: i risultati dei test posizionano questa valvola ai più alti livelli di mercato. L'idraulica e la meccanica della valvola sono stati sviluppati considerando come esigenze primarie la garanzia di alte prestazioni, la resistenza nel tempo della valvola e infine un basso consumo delle batterie di alimentazione. Tutti i materiali sono in accordo con le principali normative in materia di acqua potabile.*



Water Management

**GENERAL FEATURES / CARATTERISTICHE GENERALI**

Long life material / *Materiale di lunga durata*

External filter AISI 316 / *Filtro esterno AISI 316*

Very compact design / *Design molto compatto*

Low power consumption / *Basso consumo energetico*

Servo controlled / *Servo assistito*

100% tested with water and air / *Testato 100 % con acqua e aria*

IP grade: IP65 / *Grado IP : IP65*

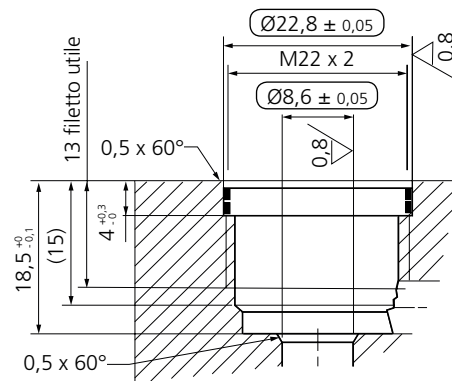
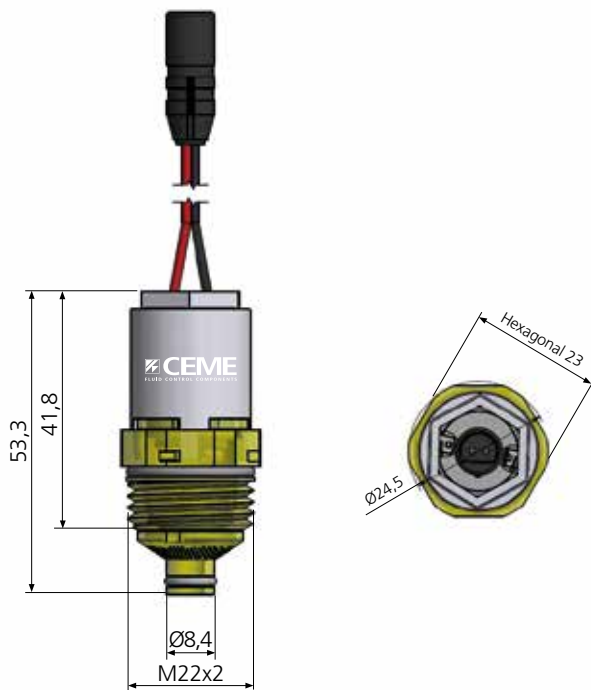
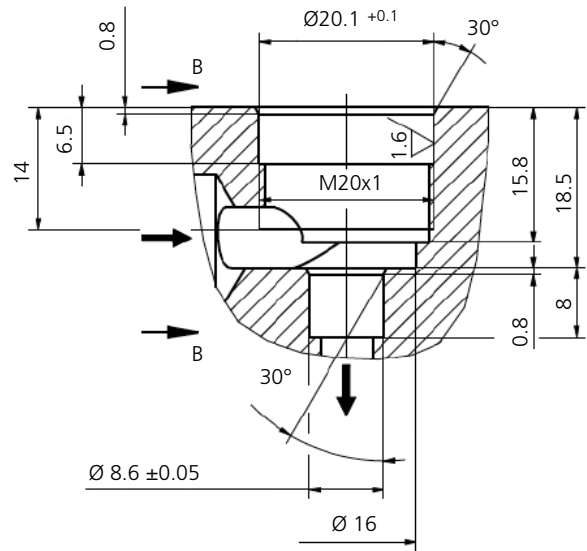
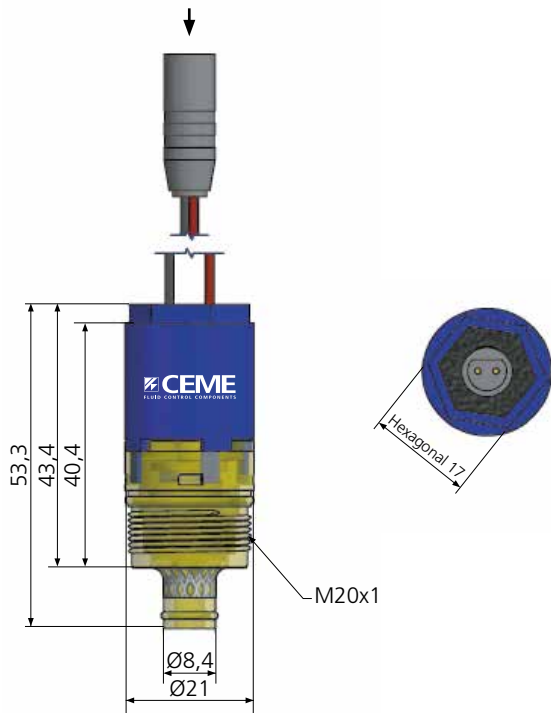
Overall dimensions according with the drawing of the model / *Dimensioni di ingombro in funzione con il disegno del modello*

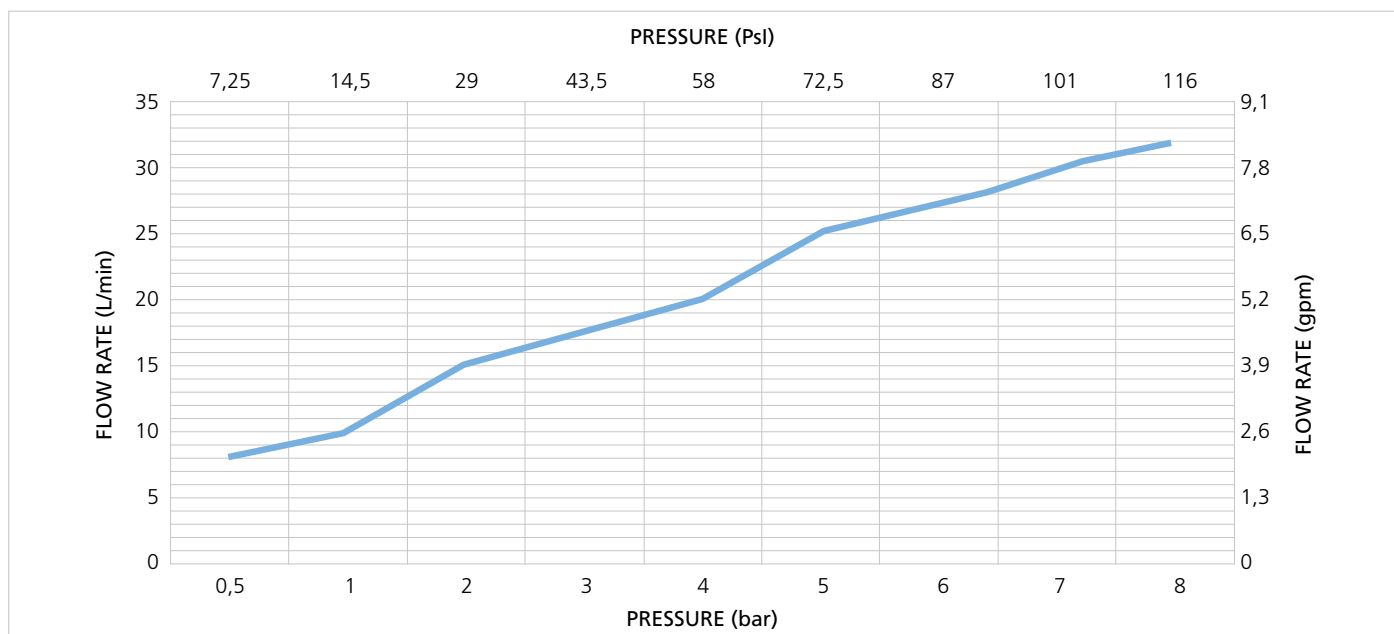
Suitable for chemical disinfection (Chloramine) as well as thermal disinfection  
*Adatto per la disinfezione chimica (Chloramine), e per la disinfezione termica*

**MATERIALS / MATERIALI**

Hydraulic body and ext. filter <i>Corpo idraulico e filtro</i>	PPSU
LSR Seals <i>Guarnizione LSR</i>	All the seals are in liquid silicon rubber <i>Tutte le guarnizioni sono in gomma siliconica liquida</i>
Spring / <i>Molle</i>	Stainless steel <i>In acciaio inox</i>
Material approvals <i>Approvazioni materiale</i>	FDA, DM174, ACS, NSF, WRAS, DVGW

**SANITARY**  
**SOLENOID VALVE FOR SANITARY APPLICATIONS N.C**  
*Elettrovalvola per sanitari N.C.*



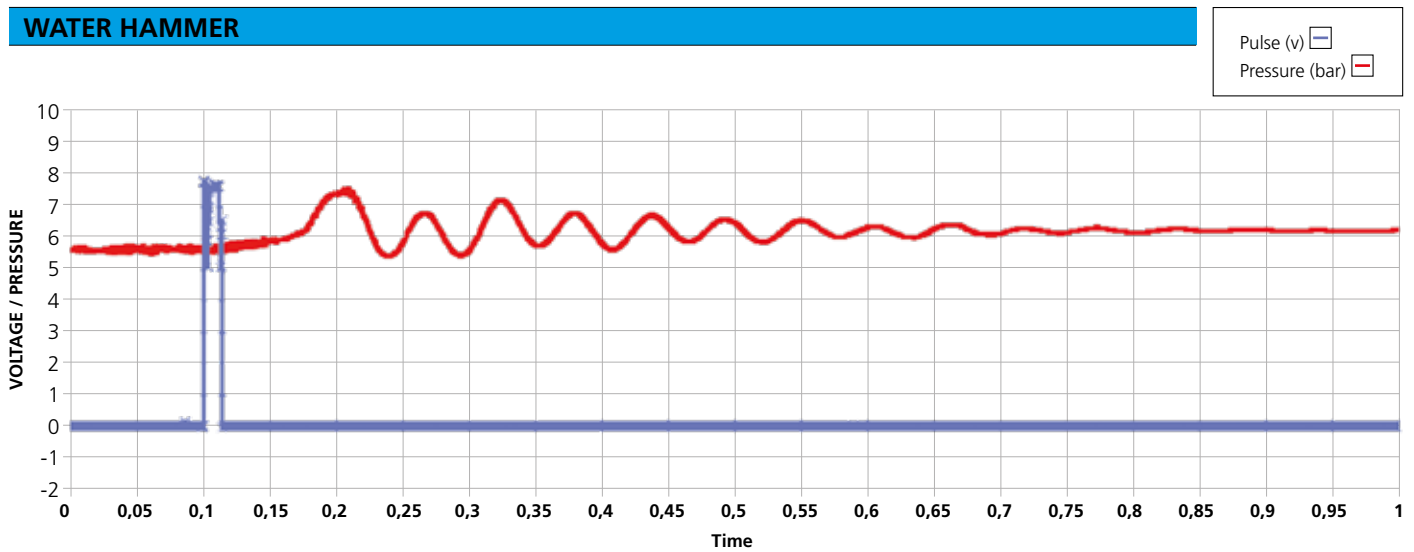
**HYDRAULIC CHARACTERISTIC / CARATTERISTICHE IDRAULICHE**

**WORKING CHARACTERISTICS / CARATTERISTICHE DI LAVORO**

Working pressure / <i>Pressione lavorativa</i>	0.5 ÷ 8.0 bar (7.25 ÷ 116 PSI)
Pressure burst / <i>Pressione di scoppio</i>	According to EN60730 / <i>Secondo EN60730</i>
Water Hammer / <i>Pressione acqua</i>	According to EN60730 / <i>Secondo EN60730</i>
Flow direction / <i>Direzione del flusso</i>	Unidirectional / <i>Unidirezionale</i>
Valve position / <i>Posizione della valvola</i>	Any position / <i>Qualsiasi posizione</i>
Fluid / <i>Fluido</i>	Tap water / <i>Acqua di rubinetto</i>
Power Supply / Absorption / Pulse <i>Alimentazione / Assorbimento / Impulso</i>	6V 1W 170mA Latching solenoid (impulse 15ms minimum) <i>Elettrovalvola bistabile 6V 1W 170mA (impulso 15ms minimo)</i>
Heating class / <i>Classe di riscaldamento</i>	H according with EN 60 335-1 / <i>H secondo la norma EN 60 335-1</i>
Fluid Temp / <i>Temperatura fluido</i>	5° ÷ 95°C ( 41° ÷ 203° F)
Ambient Temp / <i>Temperatura ambiente</i>	5° ÷ 95°C ( 41° ÷ 203° F)

**ELECTRICAL SPECIFICATIONS MONO / SPECIFICHE ELETTRICHE MONO**

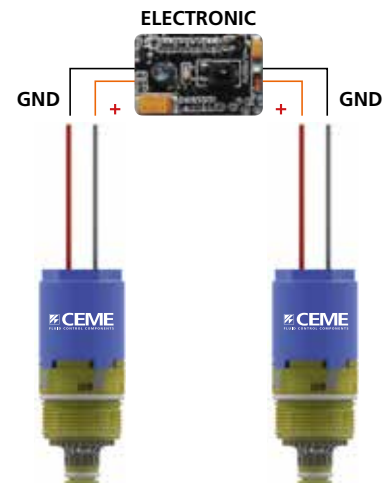
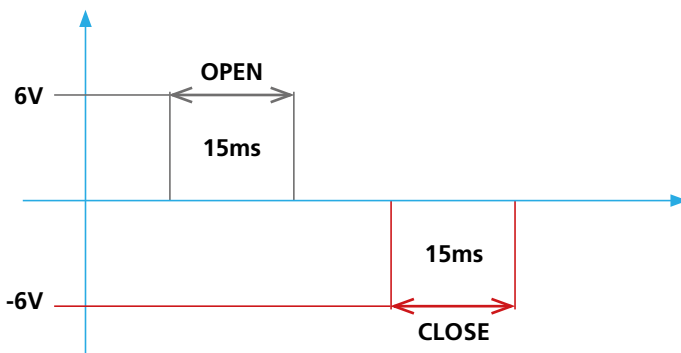
Electrical connections / <i>Connessione elettrica</i>	Cable (KCC connector upon request) / <i>Cavo (connettore KCC su richiesta)</i>
Nominal power / <i>Potenza nominale</i>	1.5W (12V DC)
Operating voltage / <i>Tensione di esercizio</i>	(12V DC) at 20°
Nominal Current / <i>Corrente nominale</i>	125 mA (12V DC)
ED	100%

**WATER HAMMER**



**ELECTRICAL SPECIFICATIONS LATCHING / SPECIFICHE ELETTRICHE**

Electrical Connection / <i>Connessione elettrica</i>	Cable (KCC connector upon request) / <i>Cavo (connettore KCC su richiesta)</i>
Nominal power / <i>Potenza nominale</i>	1W (6V)
Operating Voltage / <i>Tensione di funzionamento</i>	6V (5Vmin) at 20° C
Max Voltage supply / <i>Fornitura Max Voltage</i>	8V
Nominal Current / <i>Corrente nominale</i>	170 mA (at 6V 25°C)
Pulse time / <i>Tempo di impulso</i>	<b>Close</b> min 15ms / <b>Open</b> min 15ms



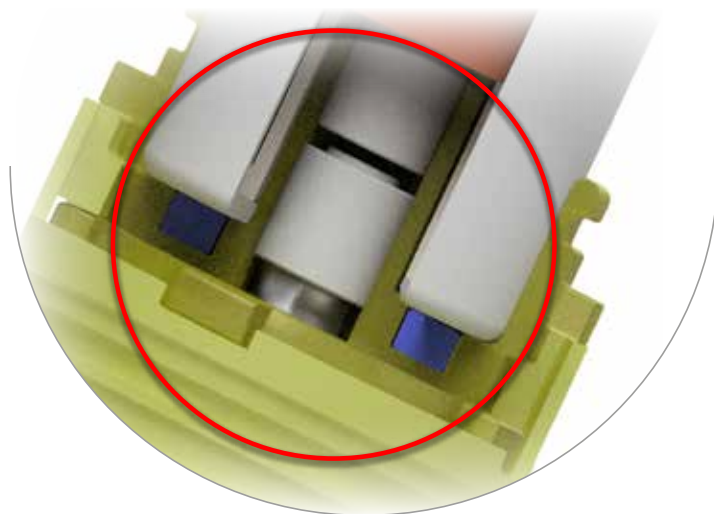
## HIGHLIGHTS

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".

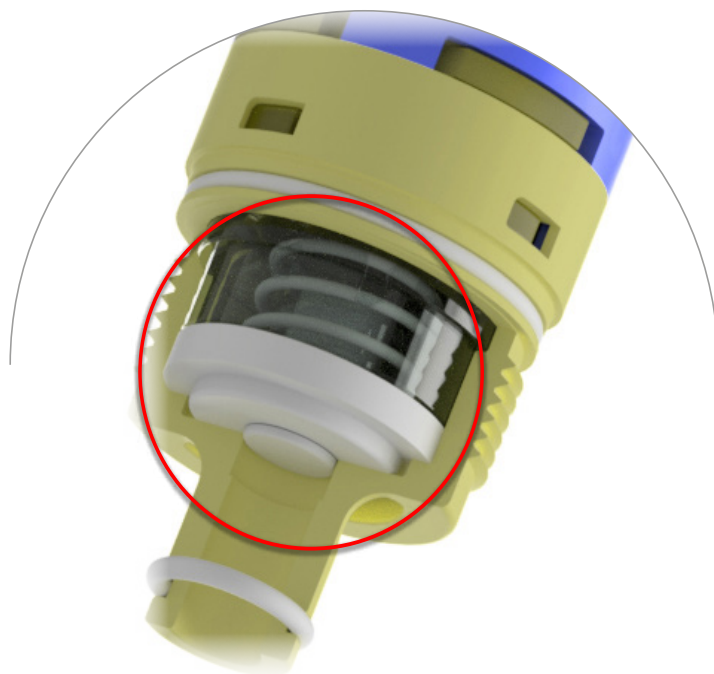
This solution offers several advantages:

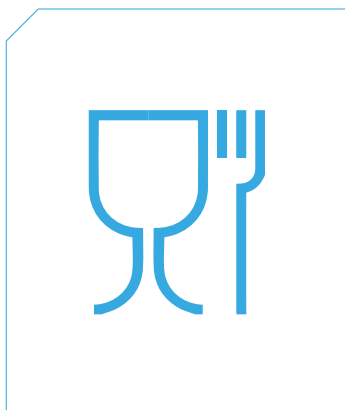
- Reduction of power consumption
- Faster response
- No core sticking (a very common issue with standard sanitary valves)
- Removal of a critical component. Commonly when the core spring is damaged, the valve can remain open, wasting water from the faucet.



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 sophisticated 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.



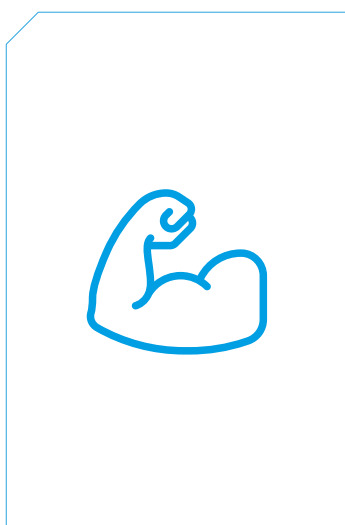


## HIGHLIGHTS

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 resistanc