

# ElettroSfera

Omni brass / stainless steel ball valves suitable for automation  
 Motorized with 12/24 Vd high speed ON / OFF Electric Actuator  
 in Modulating version with Encoder - Basic / High Performance version



**Operation Time <2.5 seconds**

**2-way and 3-way L-shaped brass valves**

Available sizes from: 3/8" to 1" .1/2 - F / F gas threads  
 Material: Brass body / high thickness hard chrome plated sphere  
 Ball / Stem / Anti-friction Rings in PTFE - Temperature Use 2-way valves: from -20 ° to + 150 ° C Seals  
 Ball / Stem / Anti-friction rings in PTFE - Temperature Use 3-way valves: from -20 ° to + 120 ° C  
 Intercepted fluid: vacuum, air, water, oils, solvents, petroleum products, etc.

## 2 Way Brass

ON/OFF - Standard		ON/OFF-High Performance		Modulating - Standard		Modulating -High Performance	
3/8"	ESBX-101H003	3/8"	ESHX-101H003	3/8"	ESBM-101H003	3/8"	ESHM-101H003
1/2"	ESBX-101H004	1/2"	ESHX-101H004	1/2"	ESBM-101H004	1/2"	ESHM-101H004
3/4"	ESBX-101H005	3/4"	ESHX-101H005	3/4"	ESBM-101H005	3/4"	ESHM-101H005
1"	ESBX-101H006	1"	ESHX-101H006	1"	ESBM-101H006	1"	ESHM-101H006
1".1/4	ESBX-101H007	1".1/4	ESHX-101H007	1".1/4	ESBM-101H007	1".1/4	ESHM-101H007
1".1/2	ESBX-101H008	1".1/2	ESHX-101H008	1".1/2	ESBM-101H008	1".1/2	ESHM-101H008



## 3 way in L Brass

ON/OFF - Standard		ON/OFF-High Performance		Modulating - Standard		Modulating -High Performance	
3/8"	ESBX-153H003	3/8"	ESHX-153H003	3/8"	ESBM-153H003	3/8"	ESHM-153H003
1/2"	ESBX-153H004	1/2"	ESHX-153H004	1/2"	ESBM-153H004	1/2"	ESHM-153H004
3/4"	ESBX-153H005	3/4"	ESHX-153H005	3/4"	ESBM-153H005	3/4"	ESHM-153H005
1"	ESBX-153H006	1"	ESHX-153H006	1"	ESBM-153H006	1"	ESHM-153H006
1".1/4	ESBX-153H007	1".1/4	ESHX-153H007	1".1/4	ESBM-153H007	1".1/4	ESHM-153H007
1".1/2	ESBX-153H008	1".1/2	ESHX-153H008	1".1/2	ESBM-153H008	1".1/2	ESHM-153H008



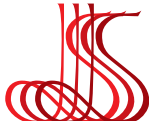
## 2-way stainless steel valves

Available sizes from: 3/8" to 1" - F / F gas threads  
 Material: Body and ball AISI316  
 Ball / Rod / Anti-Friction Rings in PTFE  
 Usage temperature: from -20 ° to + 180 ° C  
 Intercepted fluid: vacuum, air, water, oils, solvents, petroleum products, aggressive fluids, etc ..

ON/OFF - Standard		ON/OFF-High Performance		Modulante - Standard		Modulating -High Performance	
1/4"	ESBX-424H402	1/4"	ESHX-424H402	1/4"	ESBM-424H402	1/4"	ESHM-424H402
3/8"	ESBX-424H403	3/8"	ESHX-424H403	3/8"	ESBM-424H403	3/8"	ESHM-424H403
1/2"	ESBX-424H404	1/2"	ESHX-424H404	1/2"	ESBM-424H404	1/2"	ESHM-424H404
3/4"	ESBX-424H405	3/4"	ESHX-424H405	3/4"	ESBM-424H405	3/4"	ESHM-424H405
1"	ESBX-424H406	1"	ESHX-424H406	1"	ESBM-424H406	1"	ESHM-424H406



ESBX - Standard model ON / OFF actuator with sintered gears n. cycles 40-50.000 tested ESBM-  
 "modulating with Hall effect encoder without limit switch" "" ""  
 ESHX- ON / OFF actuator model High Performance with Brass / Stainless steel n. 100,000 cycles  
 tested ESHM- "modulating with Hall effect encoder without limit switch" "" "" ""



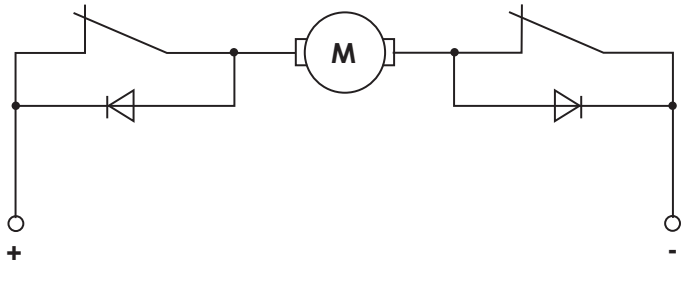
## Technical data Electric Actuator

### ACTUATOR TECHNICAL DATA:

Working angle: 90 ° ON-OFF (without mechanical stops)  
Proportional control: via Hall effect encoder 1 or 2 probes (on request) Working torque: 30 Nm max.  
Maneuver time (0 ° -90 °): <2.5 seconds  
Service: 50%  
Compliance with standards: Low voltage directive 2006/96 / EC  
Degree of protection: IP54  
Working temperature: -20 ° + 80 ° C  
Protections: thermal internal to the motor  
Limit switches: 2 internal electromechanical type already registered or Encoder assembly without limit switch  
Power supply voltage: 12-24 Vdc  
Maximum absorbed current: 1 A (12V) - 2 A (24 V)  
Wiring: 6 wires (connector only on request)  
Attack for manual emergency operation by key  
Connection to the valve: F03 - 09 mm

### ELECTRICAL DIAGRAM:

2 FINECORSA CON DIODI / 2 SWITCHES WITH DIODES



### MOTOR POWER:

Gray: + motor  
White: - engine

### SIGNALS

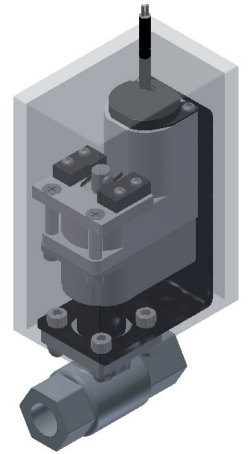
(for any need for interface to PLC or similar)

Brown: valve closing micro contact

Green: micro contact " "

Pink: valve opening micro contact

Yellow: micro contact " "



### ENCODER OPTION FOR PROPORTIONAL FLOW CONTROL

In case of request / supply of the valve equipped with encoder, the colors / type of wiring will be provided according to specific needs (for example, encoder 1 or 2 probes, etc)

### DISTRIBUTORS:

