# 715 XS VALVE WITH SA03 ELECTRIC ACTUATOR

## **CHARACTERISTICS**

The stainless steel 715XS+SA03 2-way ball valve is dedicated to the automatic shut-off of uncharged industrial fluids. This full bore ball valve has an antistatic device and is certified according to the EC standards. The ISO 5211 pad enables the direct mounting of the SA03 electric actuator. It is perfectly adapted for an indoor or outdoor industrial use.

ISO 9001 3.1 Cert.

IP 67

**(E** 

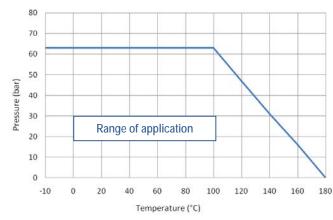
## **AVAILABLE ITEMS**

1.4408 stainless steel (A351 CF8M) body Size  $\frac{1}{2}$  " to 1" BSP threaded connections

Voltages: 24 V DC, 24 V AC, and 230 V AC

## **LIMITS OF USE**

Max. allowable pressure (PS)	63 bar (20 °C)
Min./max. allowable temperature (TS)	-10 °C / +180 °C
Room temperature	-20 °C / +70 °C
Service	S2 – 70%





### **DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE**

	Standard	Notified bodies		Standard
97/23/EC Pressure	½ " to 1" : excluded		Valve testing	EN 12266
Equipment Directive	1" ¼ to 3" : category III	TÜV #0035	Material certificate	EN 10204
Size	EN 12516-1		Actuator attachment	ISO 5211
Alloy grade	EN 1503-1			

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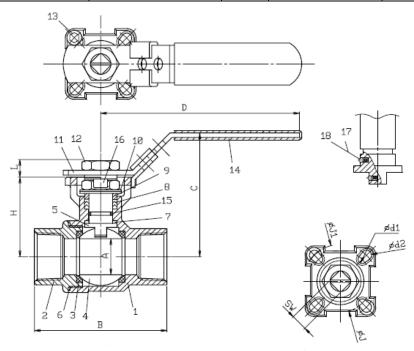


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# 715 XS VALVE WITH SA03 ELECTRIC ACTUATOR

## **CONSTRUCTION**

#	Item	Material	#	Item	Material
1	Body	Stainless steel A351 CF8M /1.4408	11		Stainless steel 304
2	End cap	Stainless steel A351 CF8M /1.4408	1 12   1		Stainless steel 304
4	Seats	PTFE+15% Graphite 13		End stop	Stainless steel 304
5	Stem	Stainless steel 316	14	Sleeve	PVC
6	Body gasket	PTFE	15	O-ring	FKM
7	Washer	PTFE	16	Sliding block	Stainless steel 304
8	Gland packing	PTFE	17	Antistatic device	Stainless steel 316
9	Washer	Stainless steel 304	18	Spring	Stainless steel 316
10	Belleville spring washer	Stainless steel 301			



## **DIMENSIONS (mm)**

DN	Α	В	С	D	Н	L	J	J1	d1	d2	SW
1/2"	15	55	70.9	110	42.3	8	42	50	6	7	9
3/4 "	20	76	73.4	110	44.9	8	42	50	6	7	9
1"	24.5	83	84.1	135	54	10	42	50	6	7	11
1" ¼	32	91	89.3	165	59.2	10	50	70	7	9	11
1" ½	38	103	109.5	165	71.3	10	50	70	7	9	11
2"	50	120	118.9	165	82.9	14.8	50	70	7	9	14
2"½	65	155	155	300	107	17.1	70	102	9	11	17
3"	80	182	165	335	117	17.1	70	102	9	11	17

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## **ELECTRIC ACTUATION WITH SA03**

Suggested standard SA03 actuation under the following conditions:

- Electric actuator with an IP 67 epoxy coated aluminium enclosure and steel gears
- A minimum 1.3 safety factor compared with the valve nominal torque rating,
- A maximum pressure differential up/downstream of 10 bar (= $\Delta$ P)

Direct mounting of the electric actuator

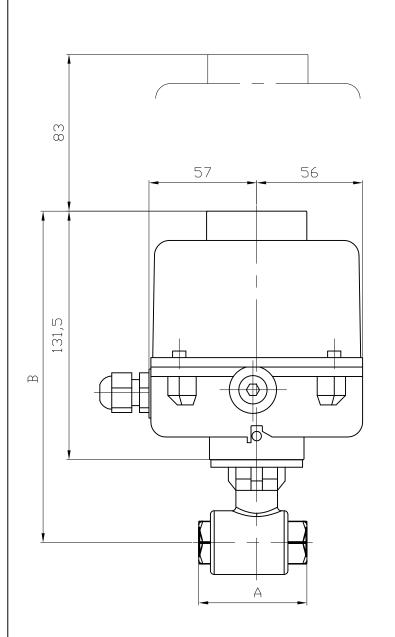
DN	Actuator	Power	Intensity 230 V AC	Intensity 24 V AC/DC	Operating Time*	Standard equipment of the actuator	
1/2 "	SA03	3 W	0.8 A	0.8 A	8 s	2 adjustable limit switches	
3/4 ''	SA03	3 W	0.8 A	0.8 A	8 s	2 dry auxiliary switches	
1"	SA03	3 W	0.8 A	0.8 A	8 s	2 W anti-condensation heater	
1" ¼						Actuator thermal cut-out	
1" ½	Refer to 502 + SA 05					Declutching by lever	
2"						Manual override by key	
2" ½						Backlit position indicator	
3"	Refer to 502 + NA					Electrical connection: 1 gland pack. M20x1.5	

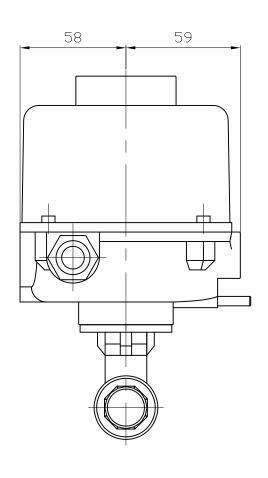
<sup>\*</sup>Unloaded operating time given for information purpose only. May vary depending on the medium

For any other working conditions, please contact us.

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DN	1/2"	3/4"	1"
Α	57	71	83
В	173.8	176.3	185.5
KG	2.27	2.44	2.87

Informations données à titre indicatif et sous réserve de modifications éventuelles data subject to alteration

Ech: /	Date :07/02/2012	Dessiné par : E.D.	Tolérances générales: +/- 0.2	Modifications	Date	REV.
RDBII	ROBINET A TOURNANT SPHERIQUE 715XS/BALL  VALVE 715XS +			Matiére :		
SERV	VA MOTEUR SA	Poids (Kg) :				
SECTORIEL 45, Rue du Ruisseau		Traitement : SANS				
		SAINT QUENTIN FALLAVIER	Plan n° Ens	112	7	

## **GENERAL CHARACTERISTICS**

The SA03 electric actuator is dedicated to the actuation of ¼ turn valve. The maximum torque value is 30 Nm. With a compact design, a cast aluminium enclosure with an epoxy protection, it is especially adapted to the actuation of small diameter valves. It is equipped with a backlit position indicator. Protection IP67: can be used indoor or outdoor. The SA03 complies with the EN 15714-2 standard.

## **AVAILABLE ITEMS**

Voltage: 230 V AC, 24 V AC, 24 V DC



## **LIMITS OF USE**

Protection rating	IP 67		
Temperature range	-20 °C / +70 °C		
Service	S2 - 15 minutes / S4 - 70%		

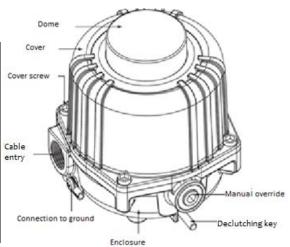
## **MECHANICAL CHARACTERISTICS**

Gears	Treated steel pinions			
Torque	30 Nm			
Rotation angle	90° +/- 5°			
On avating time	24 V DC	24 V AC	230 V AC	
Operating time	7 s	9 s	12 s	
ISO 5211 pad	F03/F05 star 11			
Declutching	Declutching key			
Manual override	6mm Allen key			
Weight		1.5 kg		



### **ELECTRICAL CHARACTERISTICS**

Power	3 W			
Interests.	24 V DC	24 V AC	230 V AC	
Intensity	0.8 A	1 A	0.1 A	
Motor Protection	Thermal cut-out			
Limit switches	2 adjustable switches			
Auxiliary switches	2 dry adjustable switches 250 V AC 5 A			
Anti-condensation	Heater 2x1.5 W			
Electrical connection	2 x M20 x 1.5 (supplied with 1 cap and 1 gland pack)			

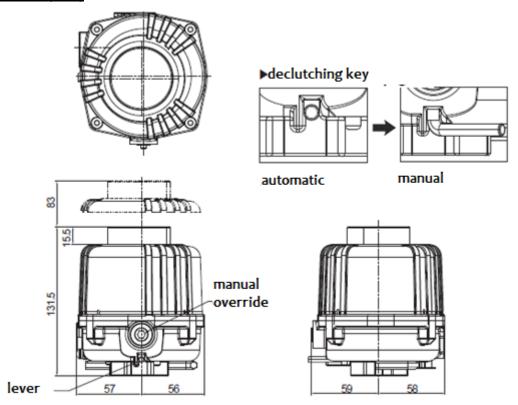


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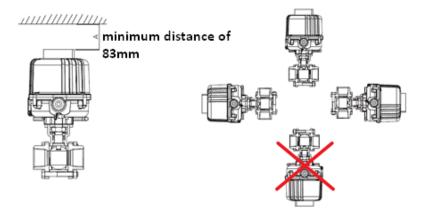
## **DIMENSIONS (mm)**



## **CONSTRUCTION**

#	Item	Material
1	Enclosure	Epoxy coated aluminium alloy
2	Cover	Epoxy coated aluminium alloy
3	3 Cover screws Stainless steel	
4	Dome	Polycarbonate

## **ASSEMBLY POSITIONS**



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#### **WARRANTY**

Before contacting us, please make sure to identify the type of actuator.

The SECTORIEL actuators are guaranteed 12 months after the delivery date. The defective pieces, after our expertise, will be replaced at our own expense. We will not accept any claim of damage caused by a wrong use or modification of the actuator.

### **CHECK UPON DELIVERY**

When delivered, please check:

- The quality of the package
- The conformity of the actuator to the ordered one
- The possible damages

It is recommended to install the electric actuator right after the delivery and not to leave it without using it. If the device is stored, it has to be in a dry and sheltered place.

### **PRECAUTIONS FOR USE**

Before installation, please check that the device is depressurized and at room temperature.

Do not install in an explosive area.

For an indoor and an outdoor installation, the actuator protection class is IP 67. Do not immerse the actuator nor install it in a marine environment.

Do not connect the actuator to the electricity supply during the installation or during the maintenance of the valve on the pipe or of the actuator on the valve.

Check the input voltage of the actuator before connecting.

Do not connect the actuator in parallel or in series with others. If necessary, use relays.

Do not install the actuator on valves with a higher rating than the nominal torque of the actuator.

#### **INSTALLATION AND USE**

Mount the actuator on the valve (already done for actuated valve provided by ourselves).

Connect as indicated on the below electrical wiring scheme.

Adjust the limit switches (already done for actuated valve provided by ourselves).

Check the valve movement using the dome located on top of the cover.

#### **Emergency manual override:**

Please, before using the emergency manual override, disconnect the power supply and declutch the motor with the declutching key. Then, rotate the hexagonal drive thanks to the corresponding Allen key. Reposition the declutching key after use.

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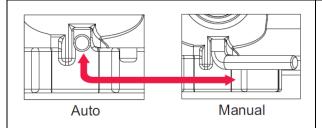
www.sectoriel.fr / email: sectoriel@sectoriel.fr

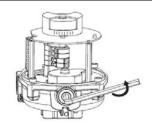
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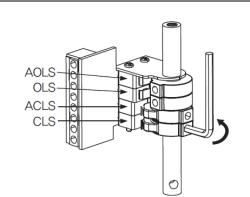
### **LIMIT SWITCHES ADJUSTMENT**

1. Switch the electric actuator to manual mode (using the declutching key)

2. Use the Allen key to open and close the valve and to adjust the limit switches as indicated below







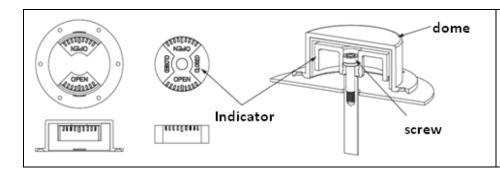
The cams are attached on the drive shaft

Clockwise rotation = closing of the valve. The microswitch stops the electric actuator.

Anti-clockwise rotation = opening of the valve. The micro-switch stops the electric actuator.

CLS	Closing contact
OLS	Opening contact
ACSL	Auxiliary closing contact
OCSL	Auxiliary opening contact

## **POSITION INDICATOR ADJUSTMENT**



The valve position is shown by the indicator. If it is not aligned correctly, remove the cover and adjust it by unscrewing the fixing screw.

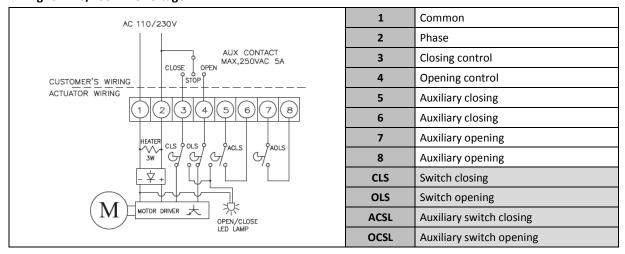
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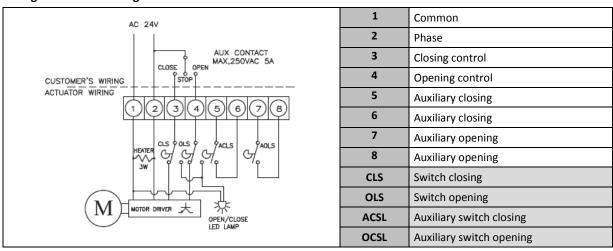
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### **ELECTRICAL WIRING**

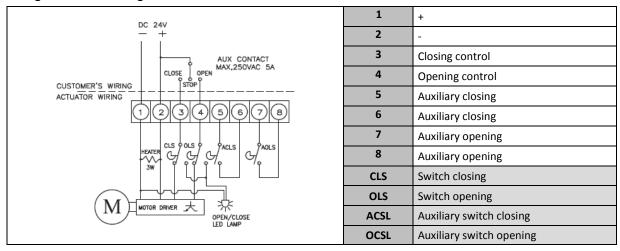
#### Wiring for 110/230 V AC voltage



#### Wiring for 24 V AC voltage



#### Wiring for 24 V DC voltage



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