

S9000 - 230C

FIRŠT ZONE UNITS

3-way brass ball valves with electric actuator S9000 and Clip system.



Valves are available in DN 20 – DN 32, with internal or external thread, union fittings and compression fittings.

- The FIRŠT motorized 3-way ball valves are used as diverting elements for use in heating devices (heat pumps), in HVAC systems, solar heating systems, for sanitary and tap water installations.
- Four types of connections are available: internal threads (234C), union fitting (237C), external threads (238C), compression fittings (244C).

OPERATION

The FIRŠT valves 230C are compact 3-way brass ball valves for use in diverting/ changeover applications with 2P S9000 actuator and mixing application with S9000 3P actuator.

Actuators are controlled with 2-point signal (SPST) built-in relay module. Zone units can be manually operated with handle and button on the cover.

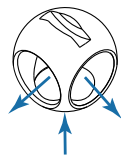
Valves are suitable for long-lasting operation because of special sealing construction. Small rotation torque reduces possibility of valve blocking. FIRŠT S9000 electric actuators allow high regulating accuracy and easy installation with one-click CLIP system.

MAINTENANCE

Valve and actuator require no maintenance. The installation of suitable strainer is recommended.

CERTIFICATES

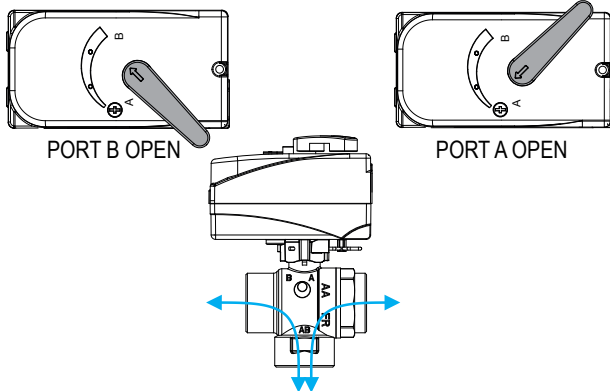
Firšt valves 230C are suitable for use in drinking water installations. All 230C valves are ACS certified.



Ball type: LL with permanent flow during ball rotation

INSTALLATION POSITION

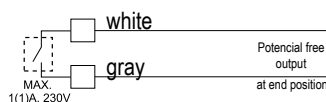
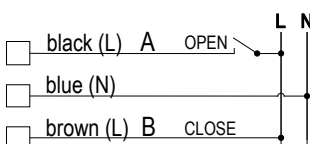
Actuator can be installed in only one position.



ELECTRICAL CONNECTION

2- point control SPST

Optional: potencial free output S1



TECHNICAL DATA: VALVES

Nominal pressure:	PN 32 for general applications
Medium:	drinking water, water, glycol < 50%, non aggressive liquids water quality as per VDI 2035
Media temperature:	min. +2°C max. +110°C
Media temperature with optional SCA solar/cooling adaptor:	min. -15°C max. +125°C (briefly +150°C, with water/glycol solution)
Leakage (Δp =1 bar):	rate B according to EN 12266-1:2003
Max. diff. pressure:	6 bar (recommended max. diff. pressure for low noise operation: 2 bar)
Connections:	Rp internal thread (EN 10226-1) R external thread (EN 10226-1) G external thread (ISO 228-1) compression fittings (EN 1254-2)

Material

Valve body:	Brass, CW617N
Ball:	Brass, CW617N
Seals:	PTFE, EPDM Perox, FPM
Certification:	ACS

TECHNICAL DATA: ACTUATOR

Control:	2-point SPST
Supply voltage:	230 VAC 50Hz
Rotation time:	20s/90°
Power consumption:	9 VA (operation), 7 VA (stand by relay on), 0 VA (stand by relay off)
Max. Torque:	5 Nm
Protection class:	II
Enclosure rating:	IP44
Connection:	cabl 1 m, 3 x 0,75 mm ²
Direction of rotation:	defined CW/CCW (90°)
Manual control:	with handle and button on the cover
Position indicator:	handle with reversible scale
Ambient temperature:	0°C..+55°C

CLIP SYSTEM

Compact design of the valve allows easy assembling and disassembling. Clip system allows easy installation of the actuator on the valve body with single click without any tools.



CE In accordance with PED, LVD, RoHS2, EMC

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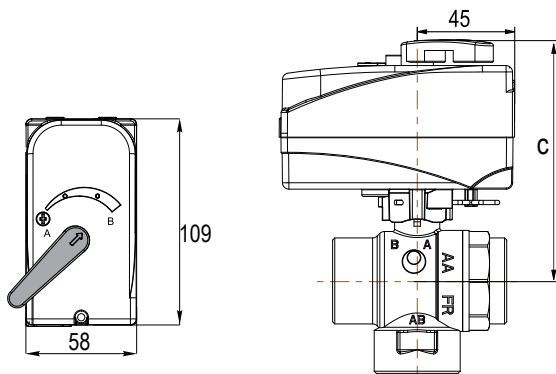
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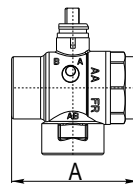
FIRST ZONE UNITS

3-way brass ball valves with electric actuator S9000 and Clip system.



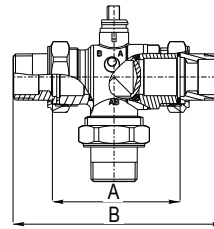
FBV 234C

internal threads



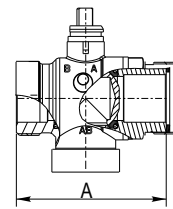
FBV 237C

union fitting



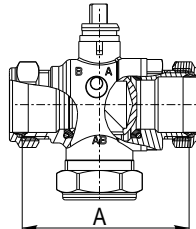
FBV 238C

external threads



FBV 244C

compression fittings



S9000 234C, internal threads

Code	Type	DN	Kvs	Voltage	Rotation time	Control	Connection	A	B	C	Weight [kg]	Price (€)
14215	S9FV0-K 234C DN20 Rp3/4"	20	9,6	230V~50 Hz	20s/90°	2P	Rp 3/4"	68		104	0,64	
14216	S9FV0-K 234C DN25 Rp1"	25	11,3	230V~50 Hz	20s/90°	2P	Rp 1"	81		107	0,75	
14217	S9FV0-K 234C DN32 Rp1 1/4"	32	25	230V~50 Hz	20s/90°	2P	Rp 1 1/4"	92		114	0,95	

S9000 237C, union fitting

Code	Type	DN	Kvs	Voltage	Rotation time	Control	Connection	A	B	C	Weight [kg]	Price (€)
14209	S9FV0-K 237C DN20 R3/4"	20	9,6	230V~50 Hz	20s/90°	2P	R 3/4"	72	136	104	0,70	
14210	S9FV0-K 237C DN25 R1"	25	11,3	230V~50 Hz	20s/90°	2P	R 1"	85	152	107	0,84	
14211	S9FV0-K 237C DN32 R5/4"	32	25	230V~50 Hz	20s/90°	2P	Rp 1 1/4"	90	165	134	1,09	

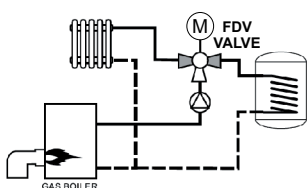
S9000 238C, external threads

Code	Type	DN	Kvs	Voltage	Rotation time	Control	Connection	A	B	C	Weight [kg]	Price (€)
14298	S9FV0-K 238C DN20 G 1"	20	9,6	230V~50 Hz	20s/90°	2P	G 1"	72		104	0,77	
14299	S9FV0-K 238C DN25 G 5/4"	25	11,3	230V~50 Hz	20s/90°	2P	G 1 1/4"	85		107	0,95	
14300	S9FV0-K 238C DN32 G 6/4"	32	25	230V~50 Hz	20s/90°	2P	G 1 1/2"	90		134	1,26	

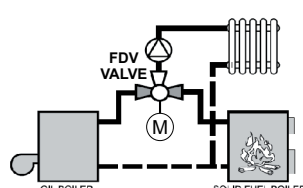
S9000 244C, compression fittings

Code	Type	DN	Kvs	Voltage	Rotation time	Control	Connection	A	B	C	Weight [kg]	Price (€)
14303	S9FV0-K 244C DN20 22mm	20	9,6	230V~50 Hz	20s/90°	2P	CPF 22mm	72		107	0,67	
14304	S9FV0-K 244C DN25 28mm	25	11,3	230V~50 Hz	20s/90°	2P	CPF 28mm	85		134	0,81	

APPLICATION EXAMPLE



Diverting application



Changeover application

Features and options

- **Auxiliary switch:** one potential free auxiliary switch in the end position of the actuator is available as an option.
- **Molex connector:** optional Molex connector (IP40) and optional specially sealed Molex cable (IP44).
- **Supply voltage:** 230 VAC 50 Hz 24 VAC 50 Hz.
- **Manual control handle:** with or without manual control handle.
- **Solar/cooling adapter:** Heat barrier for protection of the actuator in solar or cooling systems.
- **Different rotation times:** 20s/90°, 40s/90°, 80s/90°, 110s/90°
- **Control:** 3 point / 0-10 V