

S11 MOD X AC/DC

FIRST MODULATING ACTUATOR

for 3-way and 4-way valves



MODULATING CONTROL		0 - 10 V DC 4 - 20 mA
24V AC/DC		

EURONORM AXLE SYSTEM

ISO 5211



FIRST actuators, series S11 MOD X, are modulating actuators designed for operating 3-way and 4-way mixing valves (DN 15 - DN 50).

- The FIRST S11 MOD X AC/DC actuators have defined direction of rotation (90° rotating angle).
- Actuators are available with cable and molex connection with manual control handle and are recommended for mixing applications.

OPERATION

S11 - MOD X AC/DC is an electric actuator designed for operating 3-way and 4-way rotary mixing valves. Actuators are controlled by modulating signal 0-10 VDC (4-20 mA). Actuators have output signal. FIRST S11 - MOD X AC/DC actuators allow high regulating accuracy and easy installation with different mounting systems.

Actuators are available in 24 V AC/DC and are supplied with a 1,5 m attached connection cable or Molex connector. Actuator can be manually operated with handle and button on the cover.

Actuators S11 - MOD X AC/DC are recommended for mixing or diverting applications with FMV 130E, FMV 140E nad FMV H-151E valves. Actuators can also be used with 2-way, 3-way and 6-way ISO 5211 F04 valves.

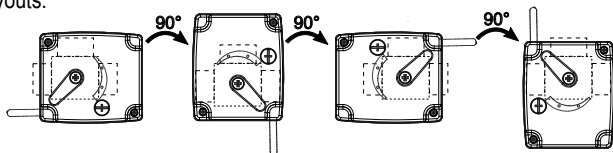
It is also equipped with mounting kits for assembling on mixing valves of other manufacturers.

MAINTENANCE

Actuator requires no maintenance. The installation of suitable strainer is recommended.

INSTALLATION POSITION

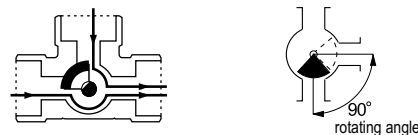
Actuator can be rotated on the mixing valve body to fit different installation layouts.



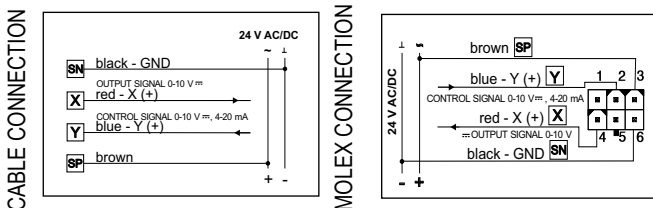
TECHNICAL DATA: ACTUATOR

Modulating signal:	0...10 VDC, 4...20 mA
Output signal:	0...10 VDC, max <0,5 mA / 10V
Supply voltage:	24 VAC, 50/60 Hz +/-20% 24 VDC +/-10%
Rotation time:	75s/90°
Power consumption:	2 W (operation), 0,4 W (stand by), 5 VA for transformer sizing (class 2 power sources)
Max. Torque:	5 Nm / 10 Nm
Protection class:	II
Enclosure rating:	IP44 (cable connection) IP44 (specially sealed Molex cable)
Connection:	cable 1,5 m, 4x0,5 mm ² / Molex connection
Direction of rotation:	defined CW/CCW (90°)
Manual control:	with manual control handle
Position indicator:	handle with position indicator
Media temperature:	+2°C...+110°C
Ambient temperature:	0°C...+55°C
Storage temperature:	10°C...+70°C
Humidity:	0%..80% R.H. (non condensed)

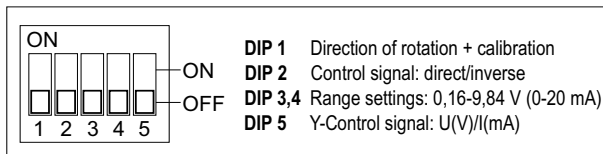
MIXING APPLICATION



ELECTRICAL CONNECTION



DIP SWITCHES; For setting different functions of the actuator.



SUITABLE VALVES

FMV 130E



FMV 140E



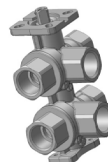
FMV H-151E



**2-way / 3-way
ISO 5211 F04**



6-way ISO 5211 F04



In accordance with PED, LVD, RoHS2, EMC



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www.first.si
Let First be your first choice.

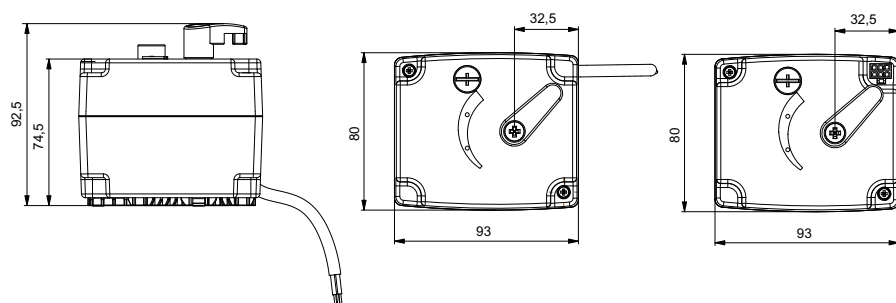


S11 MOD X AC/DC

FIRŠT MODULATING ACTUATOR

for 3-way and 4-way valves

S11 - MOD X AC/DC

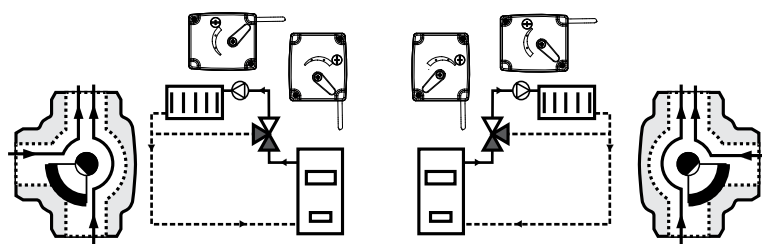


S11 - MOD X AC/DC

Code	Type	Voltage [V]	Rotation time [s]	Control signal	Connection	Max. torque [Nm]	Weight [kg]	Price (€)
12904	S11 MOD X 20758A-K AC/DC	24 V AC/DC	75s/90°	Modulating 0-10 VDC	Cable	5 Nm	0,41 kg	
12905	S11 MOD X 20758A-M AC/DC	24 V AC/DC	75s/90°	Modulating 0-10 VDC	Molex	5 Nm	0,32 kg	
12947	S11 MOD X 20758B-K AC/DC	24 V AC/DC	75s/90°	Modulating 0-10 VDC	Cable	10 Nm	0,44 kg	
12948	S11 MOD X 20758B-M AC/DC	24 V AC/DC	75s/90°	Modulating 0-10 VDC	Molex	10 Nm	0,36 kg	

Installation examples

S11 - MOD X AC/DC actuator with FMV 130E valves.

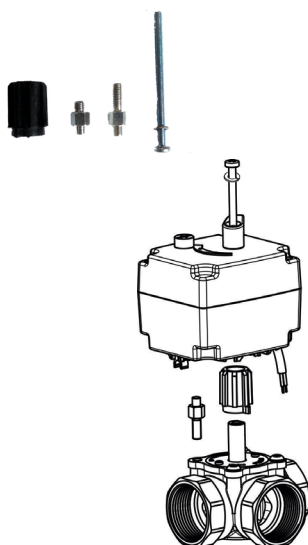


Features and options

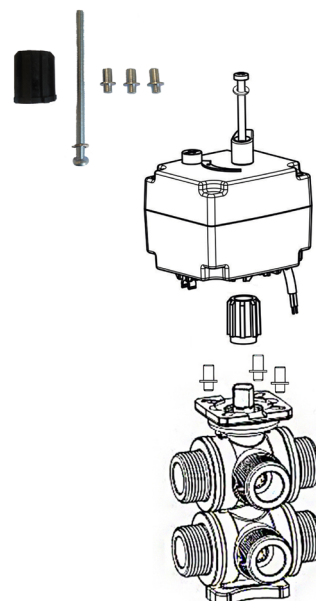
- **Power supply:** 24V AC/DC
- **Control signal:** 0,16-9,84 V (0-20 mA); 2-9,84 V (4-20 mA); 0,16-4,88 V; 5,12-9,84 V
- **Output signal:** 0-10 VDC, max <0,5 mA/10 V
- **Connection:** cable 1,5 m (4x0,5 mm²) / Molex connector
- **Mounting kits** for assembling on mixing valves of other manufacturers

Adapter kits

Enclosed mounting kit, code 58104:
For FMV 130E and 140E



Optional mounting ISO 5211 F04 kit,
code 58106: For FBV 660 and ISO
5211 F04



Optional mounting kit, code 58024: FIRŠT
(ROTOMIX, ROTOMIX G), ESBE (VRG,
VRB), LK ACASO (TERMOMIX), BARBERI,
FEROTERM, PAW, EURONORM, ESBE,
IMP, DANFOSS, BESSER, SELTRON, LO-
VATO, TUXHORN, STRAWA, CIMBERIO

