

## VFSR Electric Spring Return Actuator

### General VFSR Actuator Characteristics

The VFSR electric actuator is designed for ¼ turn valves with an emergency shutoff device in case of power shortage. In standard operation, the actuator is operated by an electric motor. In the event of a power failure the spring return mechanism will return the valve to the failsafe position (Open or Closed). The maximum torque value is 300Nm. With a compact design due to an IP 67 cast epoxy coated aluminium enclosure, the VFSR electric actuator is especially adapted to the actuation of indoor or outdoor ball valves and butterfly valves. It is equipped with a visual position indicator and a manual override as standard.

### Voltage Options

- 230 V AC (50-60 Hz) - Standard
- 110 V AC (50-60 Hz) - Option
- 380/3/ V AC (50-60 Hz) - Option
- 24 V DC - Option

IP 67

ISO  
9001

CE



### Limits of Use

<b>Protection Rating</b>	IP 67
<b>Temperature Range</b>	-20°C +55°C
<b>Service</b>	S2-15 Minutes
<b>Installation</b>	Vertical Only Actuator mounted on top of valve

### Mechanical Information

Gears	Treated Steel Pinions		
Emergency Control	Handwheel		
Spring Rod Lubrication	Shell Alvania EP2		
Rotation Angle	90° + / - 5°		
Torque Limiter	2 External Adjustable Mechanical Stops		
Declutching	Electro-Magnetic		
	VFSR 05	VFSR 10	VFSR 30
Torque	50 Nm	100 Nm	300 Nm
Number of Emergency Handwheel Rotations	25 Rotations	25 Rotations	113 Rotations
Valve Connection ISO 5211	F07 Star 14	F07 / F10 Star 17	F10 / F12 Star 17
Weight	26 kg	35 kg	62 kg

## Electrical Information

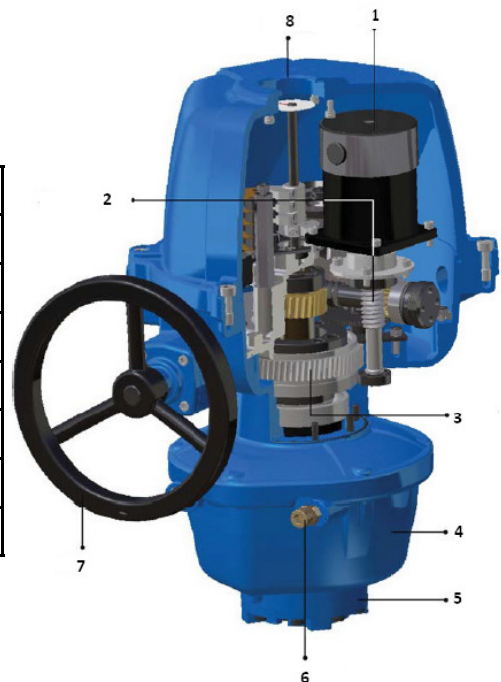
<b>Limit Switches</b>	2 Adjustable Switches	<b>Electrical Connection</b>	2 Glandpacks. M20x1.5
<b>Auxiliary Switches</b>	2 Dry Adjustable Switches	<b>Anti-Condensation</b>	20 W Heater

Item	Spring Return (90°)	Electric Actuator Operating Time						
		110 V AC		230 V AC		380/3/ V AC		24 V DC
		Opening/Closing (s)						
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
VFSR 05	1 s	16/14	14/12	16/14	12/13	17/15	15/13	13/10
VFSR 10	1 s	18/16	16/14	20/19	17/15	21/19	19/16	20/12
VFSR 30	1 s	90/81	72/68	89/62	75/68	87/82	74/68	86/56

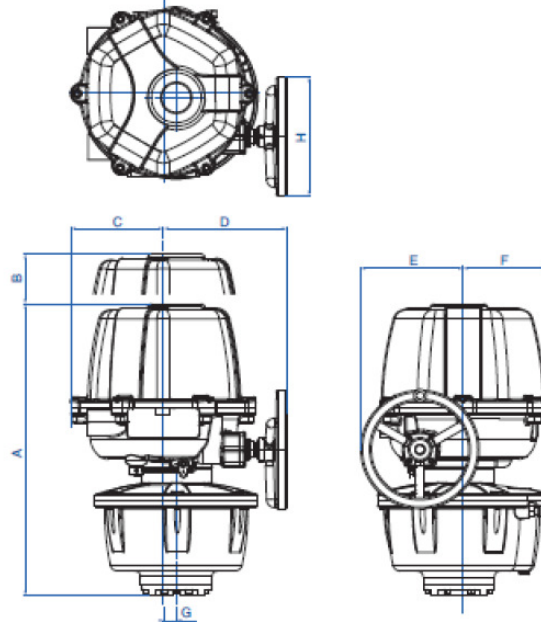
Item	110 V AC		230 V AC		380/3/ V AC		24 V DC
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
VFSR 05	1.7 A	1.70 A	1.15 A	1.03 A	0.24 A	0.25 A	6.3 A
VFSR 10	2.4 A	3.00 A	1.18 A	1.30 A	0.40 A	0.40.4 A	8.6 A
VFSR 30	2.3 A	3.15 A	1.16 A	1.30 A	0.36 A	0.29 A	7.6 A

## Actuator Materials

1	Electric Motor	Polyester Coated Aluminium
2	Worm Gear	Treated Steel
3	Spur Gear	Treated Steel
4	Spring Rod	Polyester Coated Aluminium
5	Mounting Flange	Polyester Coated Aluminium
6	Adjustable Stops	Stainless Steel
7	Emergency Handwheel	Steel
8	Position Indicator	Safety Glass



## Dimensions (mm)



Item	A	B	C	D	E	F	G	H
VFSR 05	477	155	150	206	164	134	20	200
VFSR 10	535	212.5	156	208	173	141	22	200
VFSR 30	653	212.5	156	208	173	141	22	200

## Wiring Scheme 230VAC

1	Unused
2	Unused
3	Common
4	Suggestion for "close" lamp
5	Suggestion for "open" lamp
6	Opening Control
7	Closing Control
8	Declutching Supply
9	Auxiliary Switch Closing
10	Auxiliary Switch Closing
11	Auxiliary Switch Opening
12	Auxiliary Switch Opening

