

SR, SL, ST

Solenoid actuator

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Description Solenoid actuators SR/SL/ST are designed to operate VF and VFH butterfly valves, used in two-stage control of gas flow and air flow in combustion processes.

Features Available with fast opening and fast closing (<1s), with slow opening (3-4s) and fast closing or with slow opening and slow closing (3-4s)

Equipped with two regulating screws for minimum and maximum flowrate adjustment.

Provided with valve disc position indicator.

Suitable for intermittent operation and large number of operating cycles.

Its sturdy and functional design allows a fast and easy installation, and it is practically free of maintenance.

All components are designed to withstand any mechanical, chemical, thermal condition occurring during typical service. Effective impregnation and surface treatments have been used to improve mechanical sturdiness, sealing and resistance to corrosion of the components.



WARNING

This control must be installed in compliance with the rules in force.

Functioning and application

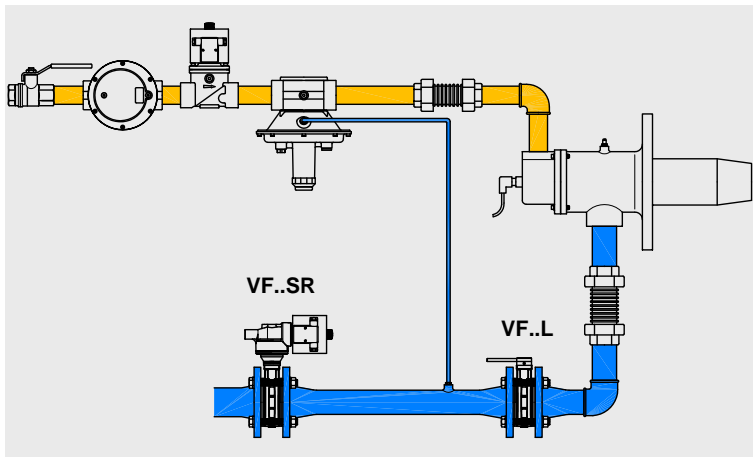


Fig. 1

- When the combustion process is intermittent, a VF butterfly valve with solenoid actuator can be used, to adjust air volumes for low and high fire.

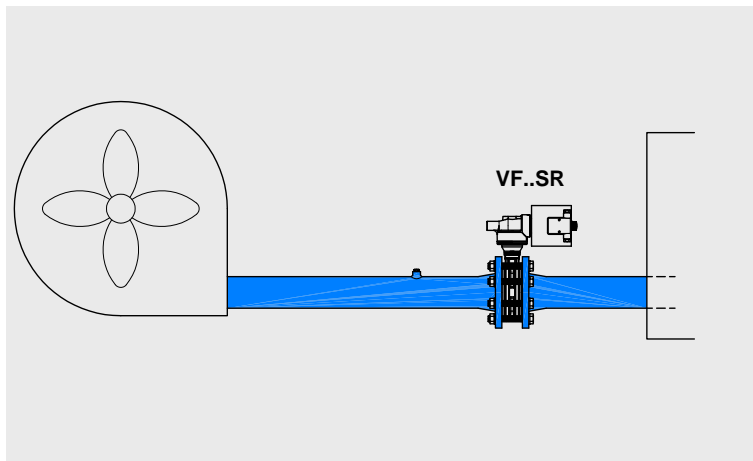


Fig. 2

- In the annealing furnaces an auxiliary cooling is often required. Air volumes is controlled by a VF butterfly valve with solenoid actuator.

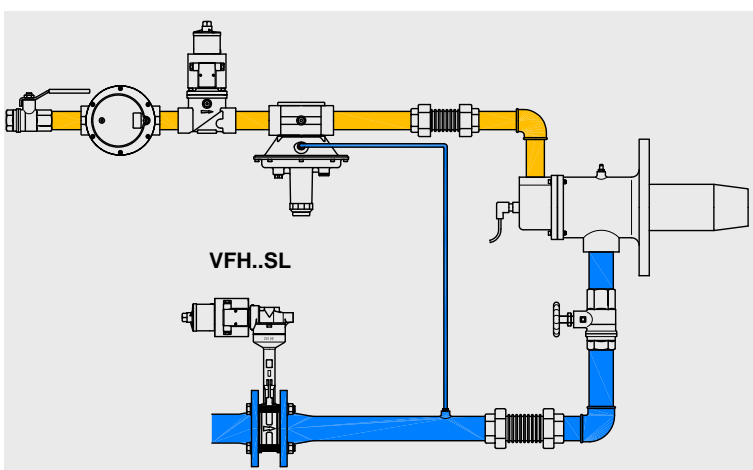


Fig. 3

- In case of combustion process with pre-heated air, VFH butterfly valve can be used. Solenoid actuator is preferentially suitable for min/max regulation with heavy duty cycles.



WARNING

Location and mode of installation must be in compliance with local rules in force.

Technical specifications

Tab. 1

Actuator type	SR fast opening and fast closing SL slow opening and fast closing ST slow opening and slow closing
Overall dimensions	See table 2
Rotation angle	0 / 90° minimum and maximum adjustable
Ambient temperature	-15°C / +60°C
Voltage rating	230VAC 50/60Hz 110VAC 50/60Hz
Voltage tolerance	-15% / +10%
Power consumption	45 W (starting 180 W)
Enclosure	IP54 (EN 60529) (optional IP65)
Cable gland	2x ISO 20 (EN 50262) standard socket optional
Coil winding insulation	Class H (200°C)
Coil thermal resistance	Class F (155°C)
Operating time (0 - 90°)	SR: 1s opening/closing SL: ~4s opening / 1s closing ST: ~4s opening/closing

VF		DN40	DN50	DN65	DN80	DN100	DN125	DN150
	S..4	●	●	●				
	S..8				●	●	●	●

VFH		DN40	DN50	DN65	DN80	DN100
	S..4	●	●			
	S..8			●	●	●

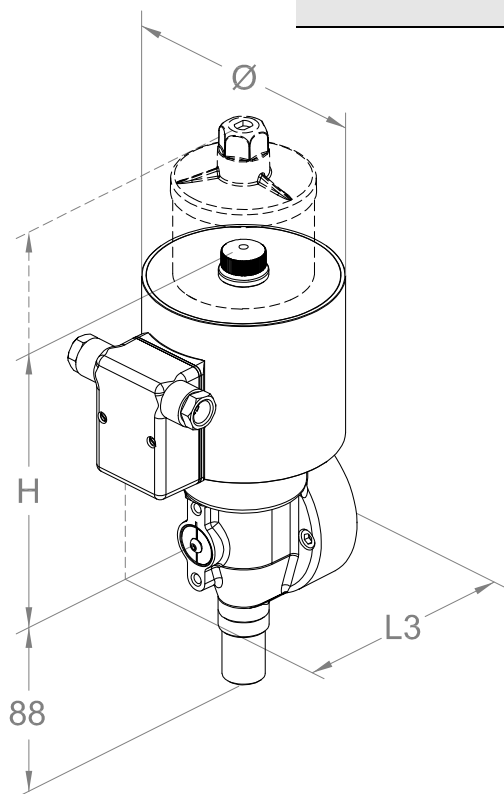


Fig.4

Tab. 2

Model	Overall dimensions [mm]			Weight [Kg]
	L3	H	∅	
SR4	126	160	100	5,0
SL4	126	230	100	5,5
ST4	126	240	100	5,6
SR8	134	182	114	7,2
SL8	134	252	114	7,7
ST8	134	262	114	7,8

Actuator identification

Tab.3

S..4	S..8	Model
		Actuator type
●	●	R= fast opening and fast closing
○	○	L= slow opening and fast closing
○	○	T= slow opening and slow closing
		Actuator size
●	⊗	4
⊗	●	8
		Voltage
●	●	A= 230VAC 50/60Hz
○	○	B= 110VAC 50/60Hz

For more information about butterfly valves see their technical sheets.

● Standard ○ Optional ⊗ Not available



Manufacturer reserves the right to update or make technical changes without prior notice.

Standards and approvals

The actuators meet current European approval requirements regarding electrical safety:

- Electromagnetic Compatibility (2004/108/EC)
- Low Voltage Directive (2006/95/EC)

Quality Management System is certified according to UNI EN ISO 9001 and the monitoring is carried out by the notified body:

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