elektrogas®

SR, SL, ST

**Solenoid actuator
for butterfly valves VF, VFT, VFH**

SR, SL, ST

Solenoid actuator

Contents

Description

Solenoid actuators SR/SL are designed to operate VF, VFT 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


VF..SR

VF..L
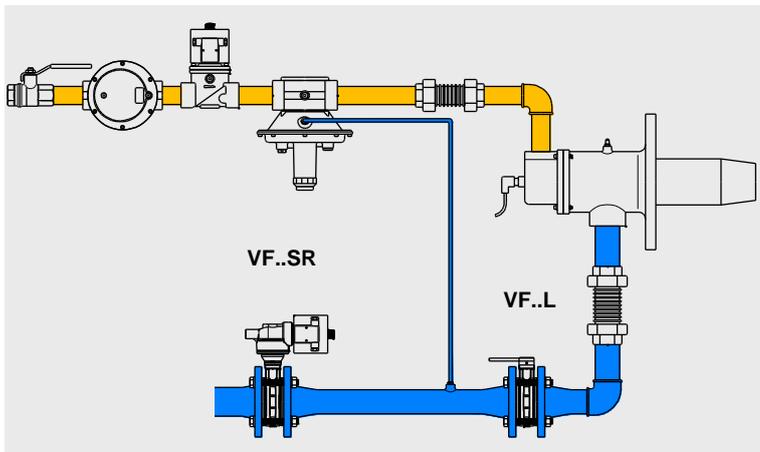
Fig. 1

- 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.


VF..SR
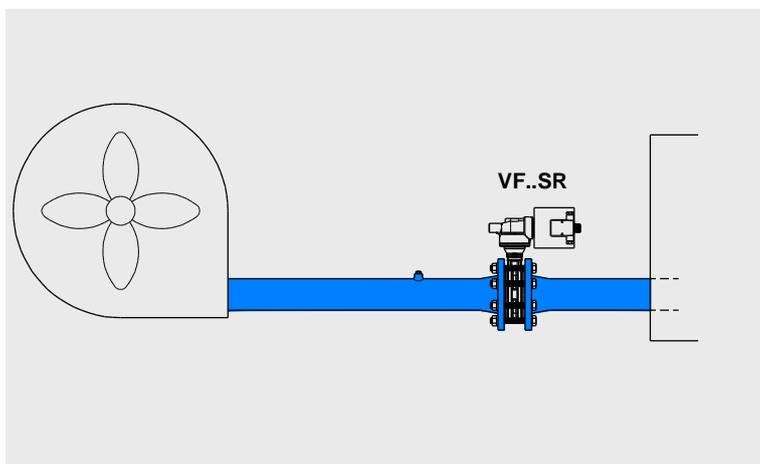
Fig. 2

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


VFH..SL
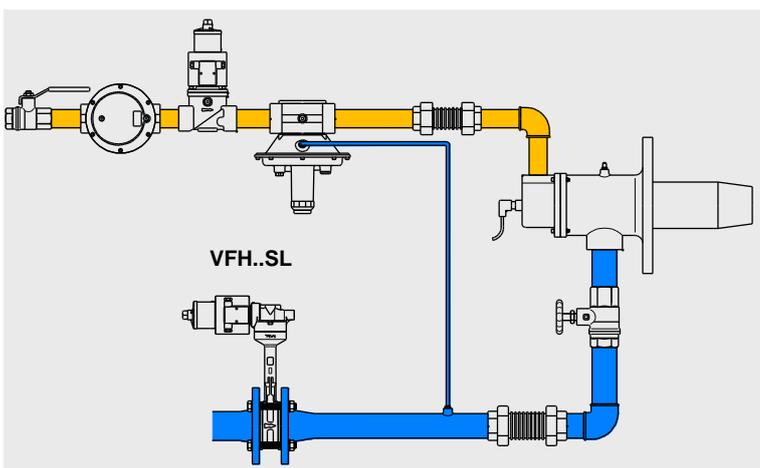
Fig. 3

- 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 specification

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 120VAC 50/60Hz
Voltage tolerance	-15% / +10%
Power consumption	45 W (starting180 W)
Enclosure	IP54 (EN 60529) (optional IP65)
Cable gland	M20x1,5 for terminal box PG 9 for ISO plug
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 VFT	Rp3/4	Rp1	Rp1¼	DN40 Rp1½	DN50 Rp2	DN65	DN80	DN100	DN125	DN150	DN200
S..4	●	●	●	●	●	●					
S..8							●	●	●	●	

VFH	Rp3/4	Rp1	Rp1¼	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
S..4				●	●	●					
S..8							●	●	⊗	⊗	⊗

⊗ Not recommended, use MZ servomotor

Fig.4
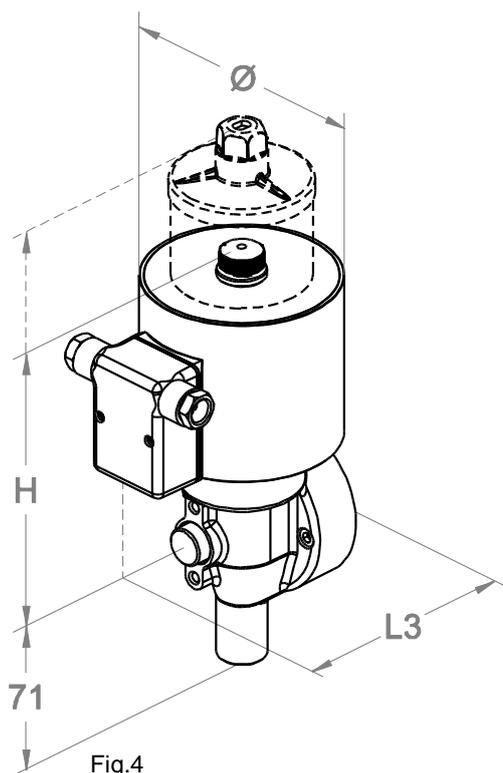
Tab. 2

Model	Overall dimensions [mm]			Weight [Kg]
	L3	H	Ø	
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	**R**	**4**	**A**	

Model
S

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
N = 120VAC 50/60Hz

Special versions (some may be present concurrently)
I   Electrical connection with ISO 4400 plug
M   Special connection for open position indicator
T   Transparent cover to see led on electronic board
T1   Transparent cover and ISO 4400 plug
O   IP65 protection with 1.5 m cable
O1 IP65 protection with ISO 4400 plug
X   Ex execution for zone 2 and 22

ℹ️ 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 (2014/30/EU)
- Low Voltage Directive (2014/35/EU)
- RoHS II (2011/65/EU)

Quality Management System is certified according to UNI EN ISO 9001.

The information in this document contains general descriptions of technical options available and based on current specifications.

The company reserves the right to make changes in specifications and models as design improvements are introduced, without prior notice.

Visit Elektrogas website for updates and further details.

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