

SM SERIES FAST RUNNING DAMPER ACTUATOR

Modulating Control
10 Nm

SM...10 (S1) SERIES

Swisotec is proud to offer the 10 and 20 Nm damper actuator of the SM... 10/20 (S/S1) Series of designed specifically applications into the HVAC and Light Industrial market. Swisotec high quality actuators have been designed for use with fast running air damper and ball valve application.



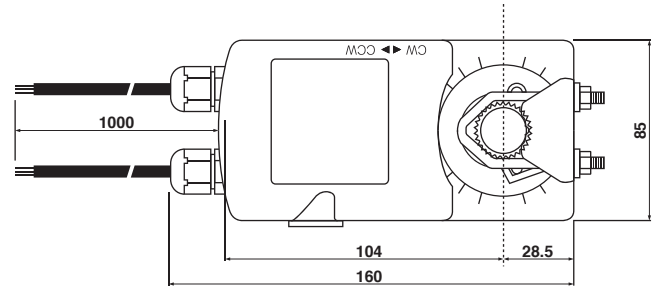
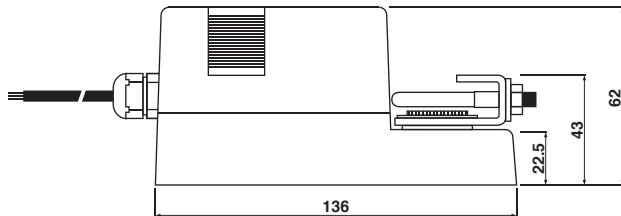
PRODUCT FEATURE

- Torque 10 Nm
- Damper size 2.0 m²
- Power supply AC/DC 24V and AC 230V
- Shaft dimensions - Ø 10...20 mm / □ 5...14 mm
- Minimum Shaft Length 45 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Actuator with 1 m cable connection
- Optional 1 Adjustable SPDT auxiliary switches
- Manual over-ride push button when required

MODEL SELECTION TABLE

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
SM 1.1-10	10 Nm	AC/DC 24 V ± 10%	15 Sec	-
SM 1.1-10S1	10 Nm	AC/DC 24 V ± 10%	15 Sec	1 x SPDT (Adjustable)
SM 2.2-10	10 Nm	AC 230 V ± 10%	15 Sec	-
SM 2.2-10S1	10 Nm	AC 230 V ± 10%	15 Sec	1 x SPDT (Adjustable)

DIMENSION (mm)



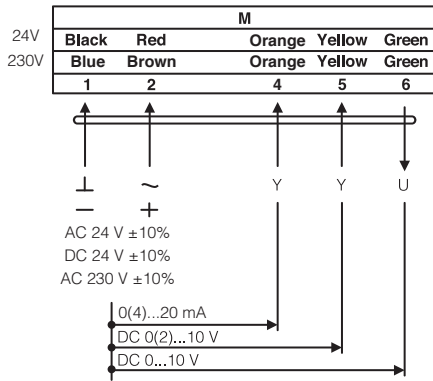
TECHNICAL SPECIFICATION

MODEL NUMBER	SM 1.1-10 (S1)	SM 2.2-10 (S1)
TORQUE	10 Nm	10 Nm
DAMPER SIZE	2.0 m ²	2.0 m ²
SHAFT DIMENSION	Ø 10...20 mm / □ 5...14 mm	Ø 10...20 mm / □ 5...14 mm
POWER SUPPLY	AC/DC 24 V ± 10%	AC 230 V ± 10%
FREQUENCY	50...60 Hz	50...60 Hz
CONTROL SIGNAL	2 & 3 point control	2 & 3 point control
POWER CONSUMPTION		
● OPERATING	6.0 W	6.0 W
● END POSITION	2.0 W	2.0 W
FOR WIRE SIZING	6.5 VA	6.5 VA
ELECTRICAL CONNECTION	1 m Cable	1 m Cable
AUXILIARY SWITCH RATING	3 (1.5) A, AC 250 V	3 (1.5) A, AC 250 V
PROTECTION CLASS	Class III ⚡	Class II ⚡
ANGLE OF ROTATION	90° (95° mechanical)	90° (95° mechanical)
WEIGHT	< 1.0 Kg	< 1.0 Kg
LIFE CYCLE	60,000 Rotation	60,000 Rotation
SOUND LEVEL	45 dB	45 dB
IP PROTECTION	IP54	IP54
OPERATING TEMPERATURE	-20°...50° as per IEC 721-3-3	-20°...50° as per IEC 721-3-3
NON-OPERATING TEMPERATURE	-30°...+60° C / IEC 721-3-2	-30°...+60° C / IEC 721-3-2
AMBIENT HUMIDITY	5%...95% rH non condensing / EN	5%...95% rH non condensing / EN
MAINTENANCE	Maintenance Free	Maintenance Free
MODE OF OPERATION	Type I / EN 60730-1	Type I / EN 60730-1
EMC	CE & ISO 9000 EN / EEC	CE & ISO 9000 EN / EEC

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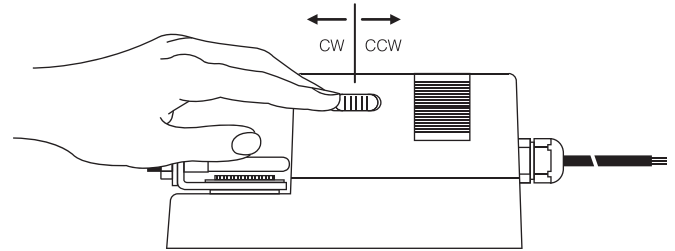
WIRING DIAGRAM SM...10 (S1) POWER SUPPLY AC/DC 24V - AC 230V



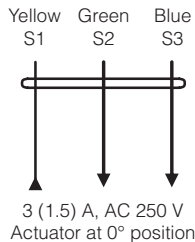
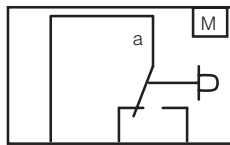
DIRECTION OF ROTATION SM...10 (S1)

Default factory setting: CW.

Direction of rotation can be change by toggling between CW/CCW switch on the actuator's housing.



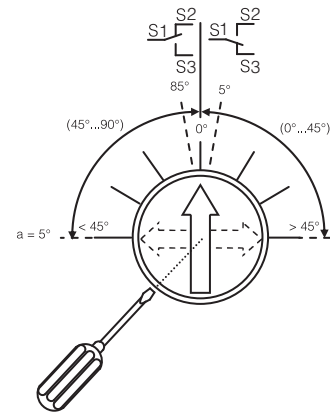
WIRING DIAGRAM SM...10 (S1) AUXILIARY SWITCH



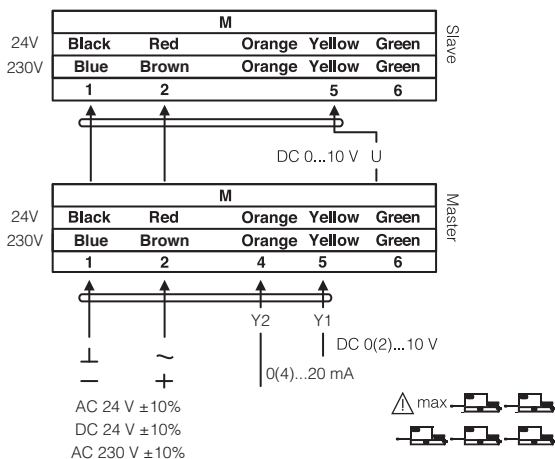
AUXILIARY SWITCH SM...10 (S1)

Switch **a** factory-set at 5°.

The auxiliary switch can be optimally adjusted between 0°...90°.



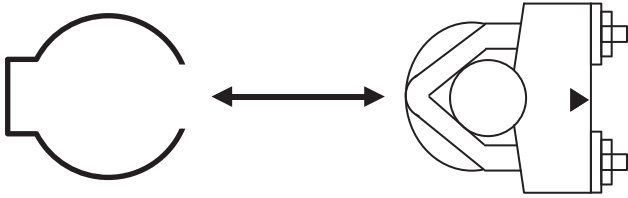
WIRING DIAGRAM SM...10 (S1) PARALLEL CONNECTION



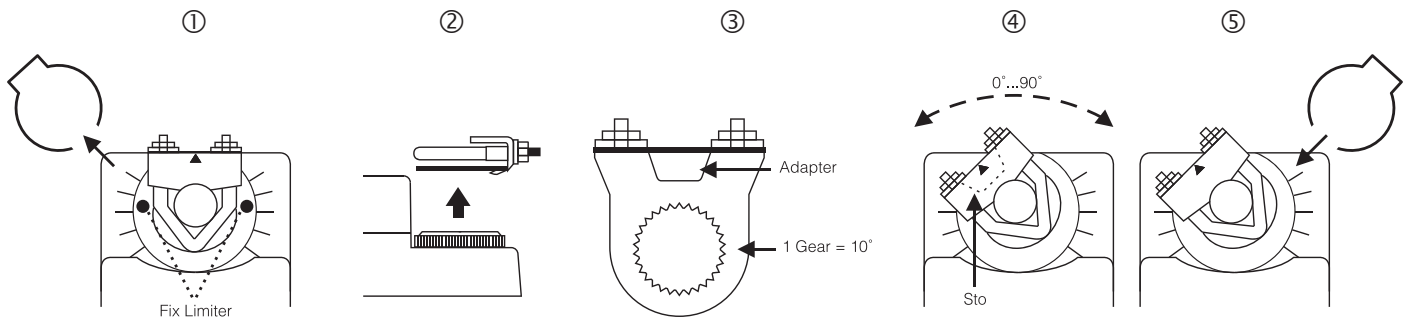
REMARK

Parallel connection of SM...10 (S1) actuators are limited to 5. Power consumption must be observe.

RELEASING THE ADAPTER SM...10 (S1)






LIMITING ANGLE OF ROTATION SM...10 (S1)



IMPORTANT REMARK

For special requirement, consult your local Swisotec's representative.

  This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.

 AC / DC 24 V: Connect via safety isolating transformer.
AC 230 V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3mm contact gap.)

The performance specifications are nominal and conform to acceptable industry standards. Swisotec shall not be liable for damages resulting from misapplication or misuse of its products.