



SQM4 – the actuator for air and gas dampers

Highlights

- Global approvals, marine approval
- Standardized, durable, and compact design
- Straightforward to install, maintenance-free during operation, and no servicing required
- Potentiometer can be installed at the factory or retrofitted in the field
- Safety-related function in combination with Siemens burner controls

The electromotoric synchron actuators **SQM40/SQM41** are suited for driving flow control valves, butterfly valves, dampers or for use on other applications that require rotary motion.

The actuators are used primarily for load-dependent control of the flow of gas, oil volume, and combustion air volume in connection with 3-position or modulating controllers (e.g., 4...20 mA), and/or directly by burner controls. In this case, fuel-air ratio control operates according to the mechanical or pneumatic principle.

Features

- Electromotoric actuator from 2.5 up to 18 Nm torque
- Clockwise and counterclockwise variants
- Running times from 5 up to 65 seconds
- Various shaft versions available
- Drive shaft can be disengaged
- Electronic version for general control inputs 2-/3-position, 4-20mA, (0)2-10V
- Internal position indication

Applications

Areas of application are multistage or modulating oil and gas burners of medium to larger capacity.

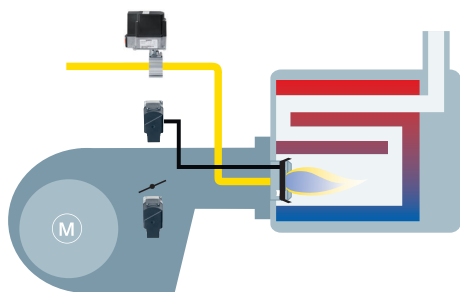
Standards: Gas burners to EN 676, oil burners to EN 256, industrial burners to EN 746-2



Example: SQM40 with gas damper VKP40

Technical data (extract)

Operating voltage - SQM4x.xxxA1x - SQM4x.xxxA2x - SQM4x.xxxR1x	depending on type AC 120 V AC 230 V AC 120 V
Operating frequency	50 ... 60 Hz
Drive motor	Synchronous motor
Power consumption	10 VA
Operating angle	between 0° and max. 135°, depending on type
Mounting position	Optional
Safety class	IP66 Nema 4 (for types with UL/CSA approvals)
Torque	2.5 Nm, 5 Nm, 10 Nm, 18 Nm, depending on type
Running time	5 s, 15 s, 30 s and 65 s, depending on type



Example: Burner graphic with SQM40

Type of shafts

Shaft	Picture	Number
∅ 10 mm, Woodruff key		1
□ 9.5 mm, Square shaft		4
∅ 10 mm, D-shaft compatible with SQM45		5
∅ 14 mm, Parallel key compatible with SQM48		7

Standards and certificates (extract)



Conformity to EC directives:

- Electromagnetic compatibility EMC (immunity) 2004/108/EC
- Gas-fired appliances directive 90/396/EC
- Low-voltage directive 2006/95/EC
- Directive for pressure devices 97/23/EC



ISO 9001: 2008
ISO 14001: 2004



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Overview of circuit variants

Circuit variants	Controller signals					Relay	Free switching contacts	Burner controls	Applications
	2-10 V	4-20 mA	0-135 Ω	3-position	2-position				
SQM4x..x1x	•	•	•	•				LAL/LFL, LGK/LOK, LME73	modulating
SQM4x..x2x SQM4x..x5x		•		•			1	LAL/LFL, LGK/LOK, LME73	modulating
SQM4x..x3x				•	•	3	1	LME22, LME23, LME39	modulating 2-position
SQM4x..x4x	•	•	•					LAL/LFL, LGK/LOK, LME73	modulating
SQM4x..x6x				•			1 (+2 NO contacts)	LAL/LFL, LGK/LOK, LME73	modulating
SQM4x..x7x				•	•	1	1 (+1 NO contacts)	LAL/LFL, LGK/LOK, LME73	modulating 2-position
SQM4x..x8x				•			3	LAL/LFL, LGK/LOK, LME73	modulating