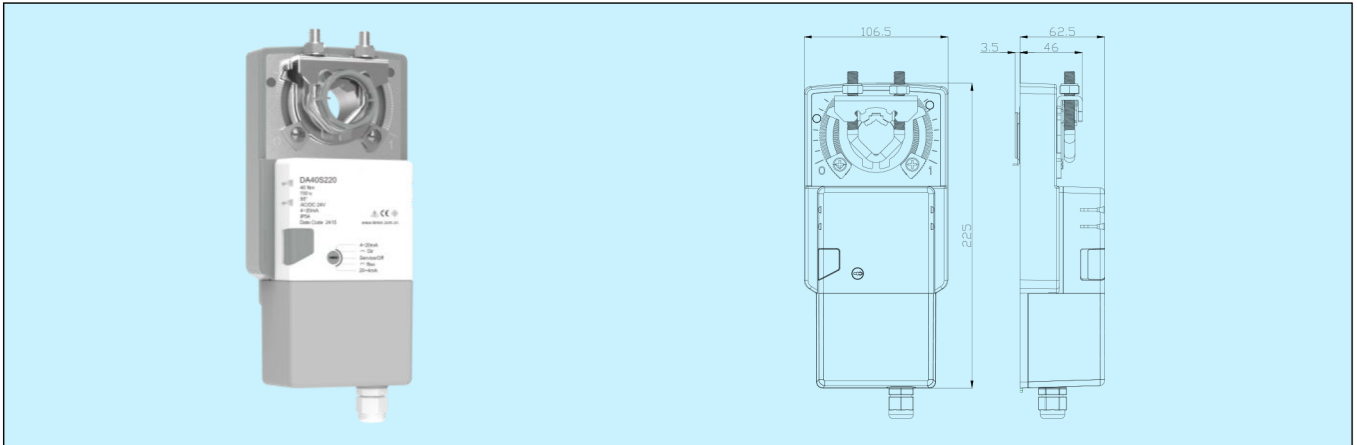


DA40S Fail-safe Damper Actuator, 40Nm Series



Applications & Features

- Special designed for the control of dampers of various HVAC system and equipment
- Easily assemble: connect the damper and actuator, the adapter can self-centered the connection shaft. Can be applied to dampers with different size shaft
- Mechanical limit: can be adjusted within the full stroke
- Mechanical position indication: can adjust the indicator freely
- Manual operation: can be manual operated with the button, convenient to manually adjust the actuator when the power is off, or the control signal input is absent
- Multi-function selection knob: select control signal, rotate direction and stop/shutdown status, very convenient to set multiple operating modes
- In case of external power failure, the actuator can still run to the selected fail-safe position with internal capacitors
- Standard or medium speed optional
- Highly reliable with full stroke overload protection function, can self-stop at the end without limit switch
- Removable terminal cover, easy for installation and wiring
- Industrial design, stable and reliable operation, long life
- External position switch: the position setpoint can be adjusted freely and installed on site. The wiring direction can be conveniently set to left or right

Specifications

Torque: 40 Nm

Damper size: $\leq 8 \text{ m}^2$ (see details in the manual)

Direction of rotation: Set by knob

Position indicator: Mechanical

Manual override: Set by push button

Angle of rotation: Max. 95°

Running time: Standard 150s, medium speed 75s optional

Connected shaft: Circular $\Phi 12 \sim 26.7 \text{ mm}$, square $12 \sim 18 \text{ mm}$, min. length 50mm

Driver: Brushless DC motor (BLDC)

Power: 19.2~28.8V AC/DC

Power consumption: Act 8.5W, Hold 1.5W, Charge 4W

Power protection: Class III-low voltage safe

Control Signal: on/off, 3 pos; 0~10V (input impedance 250K Ω); 4~20 mA (input impedance 200 Ω); RS485/Modbus

Internal feedback: 0(2)~10VDC (max. output 1mA); 4~20mA (max. load 500 Ω); RS485/Modbus-RTU

Internal switch: 2xSPDT, 0.5A/30VDC

External position switch: 1 or 2, SPDT, 0.5A/250VAC, must be ordered separately, see External Position Switch

Fail-safe position: Zero or Full scale, set by DIP switch

Fail-safe delay time: 2s

Fail-safe running time: <45s

Capacitor charge time: <15min

Capacitor service life: >10 years

Electrical connection: Screw terminal

Service life: 100,000 cycles (full stroke, standard speed)

Mode of operation: Type1 to EN60730-1

Work temp.: $-30 \sim 50^\circ \text{C}$, 95%RH, no cond. (EN60730-1)

Storage temp.: $-40 \sim 80^\circ \text{C}$

Noise level: $\leq 45 \text{ dB}$

Protection: IP54

Protection: IP54

Weight: 1.9kg

Approval: CE

Models

Model	DA40S		Fail-safe Damper Actuator, 40Nm
Control signal		0	on/off, 3-pos
		1	0(2)~10VDC
		2	4~20mA
		8	RS485/Modbus RTU
Internal feedback		0	N/A
		1	0(2)~10VDC
		2	4~20mA
		8	RS485/Modbus RTU
Internal switch		0	N/A
		1	2xSPDT, 0.5A/30VDC

1. When control signal is 0, feedback should be 0. If control signal is 1, feedback may be 0 or 1. If control signal is 2, feedback may be 0 or 2. If control signal is 8, feedback may be 0 or 8.
2. If select medium speed 90s, add suffix M to the model.

External Position Switch: (must be ordered separately):

The external position switch can feedback the position status of the actuator. Suitable for field installation, it can replace the function of the internal switch and can adjust the position set point freely.

Model: SW1A(1xSPDT, 0.5A/250VAC); SW2A(2xSPDT, 0.5A/250VAC)

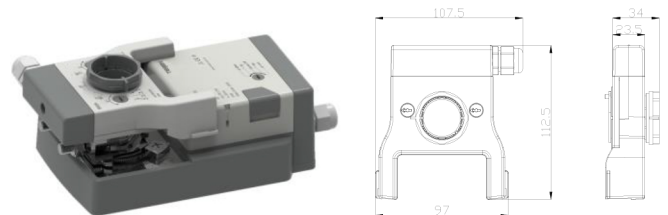
Work temp.: $-30 \sim 50^\circ \text{C}$, 0~95%RH, no cond. (EN60730-1)

Storage temp.: $-40 \sim 80^\circ \text{C}$

Power Protection: Class II-totally insulated

Enclosure Protection: IP54

Weight: 0.13kg



Note: The product's standard torque is 40 Nm, usually is applicable for dampers with size less than 8 m^2 . However, due to the differences of materials, structures, installations, and the applied ventilation system's pressure or flow condition, the needed torque may be different.