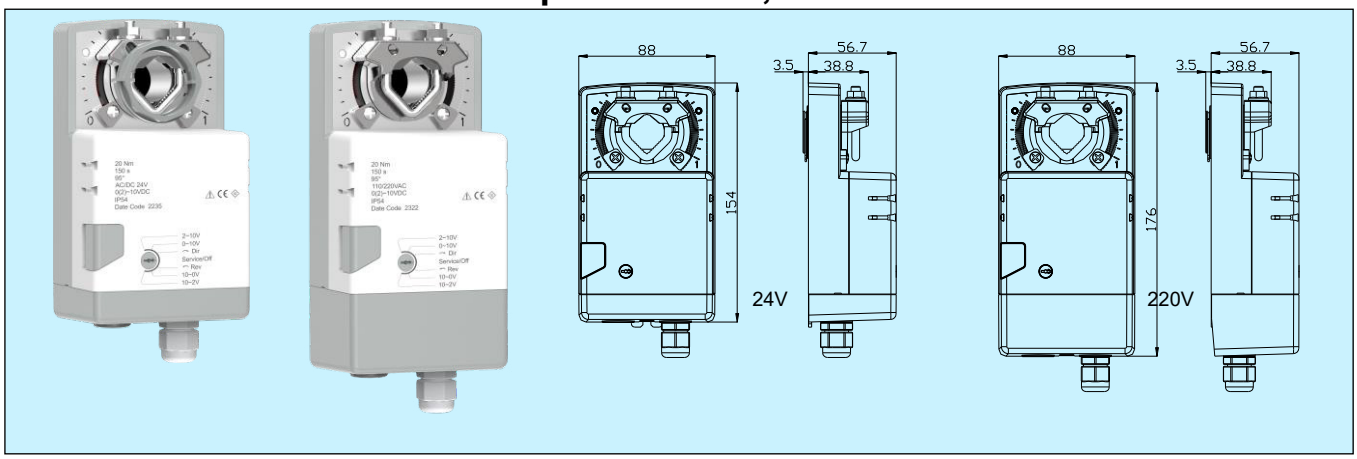
DA20 Damper Actuator, 20Nm Series



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 for user to manually adjust the actuator when the power is off or the control signal input is absence
- Multi-function selection knob: select control signal, rotate direction and stop/shutdown status, very convenient to set multiple operating modes
- Highly reliable: full stroke overload protection function, no limit switch, self-stop at the end point
- Removable terminal cover design, convenient and easy for installation and wiring
- High service life: using 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: 20 Nm
Damper size: ≤4 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: 150s
Connection shaft: Circular Φ10~20mm, square 8~14mm, min. length 43mm

Power:

Power Range	19.2~28.8V AC/DC	85~265V, 50/60Hz
Consumption	Act 3W, Hold 0.8W	Act 3.5W, Hold 1.2W
Protection	class III-low voltage safe	class II-totally insulated

Control Signal: on/off, 3 pos; 0~10V(input impedance 250kΩ); 4~20 mA (input impedance 200Ω); RS485/Modbus
Internal feedback: 0(2)~10VDC (max. output 1mA); 4~20mA (max. load 500Ω); RS485/Modbus-RTU
Internal switch: 2×SPDT, 0.5A/30VDC
External position switch: 1 or 2, SPDT, 0.5A/250VAC, must be ordered separately, see External Position Switch
Electrical connection: screw terminal
Mode of operation: Type1 to EN60730-1
Work temp.: -30~50°C, 95%RH, no cond. (EN60730-1)
Storage temp.: -40~80°C
Noise level: ≤40dB
Protection: IP54
Weight: 1kg (24V models)
Approval: CE

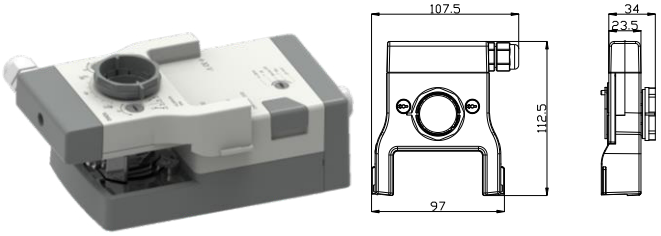
Models

Model	DA20					20Nm Damper Actuator
Power		0 1				24VAC/DC 85~265VAC
Control signal			0 1 2 8			on/off, 3-pos 0(2)~10VDC 4~20mA RS485/Modbus RTU
Internal feedback				0 1 2 8		N/A 0(2)~10VDC 4~20mA RS485/Modbus RTU
Internal switch					0 1	N/A 2xSPDT, 0.5A/30VDC

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.

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.: -30~50°C, 0~95%RH, no cond. (EN60730-1)
Storage temp.: -40~80°C
Power Protection: class II-totally insulated
Enclosure Protection: IP54
Weight: 0.13kg



Note 1: The content of this page is a complete catalog of DA20 products. But the subsequent content is the instruction manual of its 24VDC/AC products. 220VAC products have an independent manual.

Note 2: The product's standard torque is 20 Nm, usually is applicable for dampers with size less than 4 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.