Modulating rotary actuator for butterfly valves with ISO 5211-F07 mounting flange

- Torque motor 40 Nm
- Nominal voltage AC/DC 24 V
- Control modulating 2...10 V
- Position feedback 2...10 V



Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 19.228.8 V
	Power consumption in operation	4.5 W
	Power consumption in rest position	1.5 W
	Power consumption for wire sizing	6.5 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	40 Nm
	Operating range Y	210 V
	Input Impedance	100 kΩ
	Position feedback U	210 V
	Position feedback U note	Max. 1 mA
	Position accuracy	±5%
	Manual override	with push-button, can be locked
	Running time motor	150 s / 90°
	Sound power level, motor	45 dB(A)
	Position indication	Mechanically (integrated)
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	UL Approval	cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1
		The UL marking on the actuator depends on
		the production site, the device is UL-compliant in any case
	Mode of operation	Type 1
	Rated impulse voltage supply / control	0.8 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-3050°C [-22122°F]
	Storage temperature	-4080°C [-40176°F]
	Servicing	maintenance-free
Mechanical data	Connection flange	F07
Weight	Weight	2.2 kg
Weight	rreignt	2.2 NY



Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning
 systems and must not be used outside the specified field of application, especially in aircraft or
 in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The switch for changing the direction of rotation may only be operated by authorised specialists. The direction of rotation must not in particular be reversed in a frost protection circuit.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Mode of operation The actuator is connected with a standard control signal of 0...10 V and drives to the position

defined by the control signal. Measuring voltage U serves for the electrical display of the valve

position 0.5...100% and as control signal for other actuators.

Simple direct mounting Simple direct mounting on the butterfly valve. The mounting orientation in relation to the

butterfly valve can be selected in 90° (angle) increments.

Manual override Manual override with push-button possible (the gear train is disengaged for as long as the

button is pressed or remains locked).

Adjustable angle of rotation Adjustable angle of rotation with mechanical end stops.

High functional reliability The actuator is overload protected, requires no limit switches and automatically stops when the

end stop is reached.

Accessories

Description	Туре	
Auxiliary switch 1 x SPDT add-on	S1A	
Auxiliary switch 2 x SPDT add-on	S2A	
Feedback potentiometer 140 Ω add-on	P140A	
Feedback potentiometer 200 Ω add-on	P200A	
Feedback potentiometer 500 Ω add-on	P500A	
Feedback potentiometer 1 kΩ add-on	P1000A	
Feedback potentiometer 2.8 kΩ add-on	P2800A	
Feedback potentiometer 5 kΩ add-on	P5000A	
Feedback potentiometer 10 kΩ add-on	P10000A	

Electrical installation



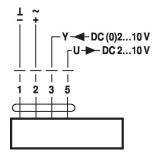
Supply from isolating transformer.

Parallel connection of other actuators possible. Observe the performance data. Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.



Wiring diagrams

AC/DC 24 V, modulating



Cable colours:

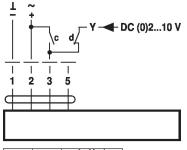
1 = black

2 = red

3 = white

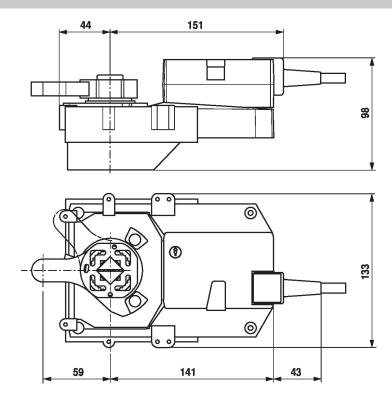
5 = orange





С	d	MM
1	/-	A – AB = 100%
/-	/-	A – AB = 0%
<u></u>	Ł	DC (0)210 V

Dimensions



Further documentation

- The complete product range for water applications
- Data sheets for butterfly valves
- Installation instructions for actuators and/or butterfly valves
- General notes for project planning