

Electric Rotary Actuator – On/Off or programmable control actuator



Type 3005 can be combined with...



Type 2651

2-piece st. st.
ball valve



Type 2654

3-piece st. st.
ball valve



Type 2657

Plastic
ball valve



Type 2671

Metal
butterfly valve



Type 2674

Plastic
butterfly valve

- Direct mounting on quarter-turn valves
- Manual override standard
- Corrosion resistant
- Adjustable limit switches
- Multi-voltage version
- Protection class IP68

The rotary actuator type 3005 is a compact and powerful actuator system which provides a long service life.

Materials and components have been chosen for maintenance-free operation and ensure low thermal loading on the actuator. The modular design offers many options such as extra limit switches or potentiometers to be added to the basic unit.

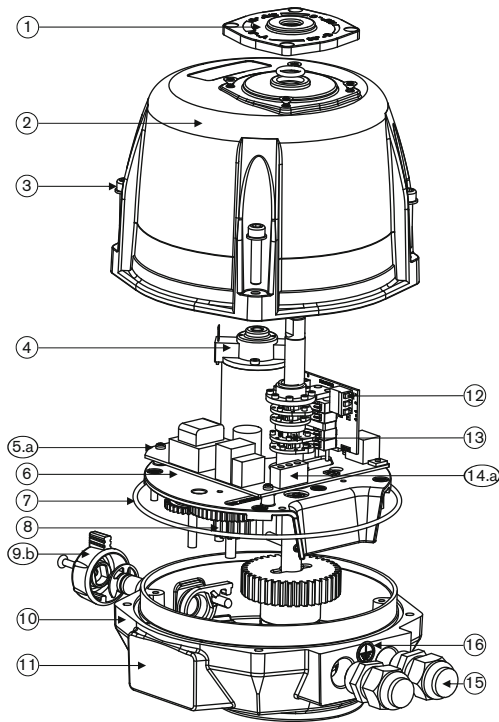
Technical data

Torque	25 and 300 Nm (see ordering chart) (600 and 1000 Nm on request)
Angle of rotation	90° (+/- 5°)
90° rotation time	7 up to 60 s (see ordering chart)
Duty rating	At max. torque: 50% of the time Control actuator: 50% of max. torque
Power supply	15-30 V AC 50/60 Hz / 12-48 V DC 100-240 V AC 50/60 Hz / 100-350 V DC Tolerance +/- 10%
Power consumption	45 W
Motor protection	Electronic torque limitation
Electrical connection	2 cable glands ISO 20 (Cable plug acc. EN 175301-803 on request)
Mounting	acc. ISO 5211 F05/F07 F07/F10v
Drive	Motor 25 Nm Female star 17 mm; conversion sleeve star 17/11 mm enclosed Motor 45, 75 Nm Female star 17 mm; conversion sleeve star 17/14 mm enclosed Motor 100, 150, 300 Nm Female star 22 mm; conversion sleeve star 22/17 mm enclosed
Installation	Do not mount the actuator upside down!

Technical data	
Limit switches	4 adjustable (2 for motor and 2 additional for feedback) max. 250 V AC/5 A
Analogue signals control version (programmable)	
Input	– 0-10 V – 4-20 mA
Output	– 0-20 mA – 0-10 V – 4-20 mA – 0-20 mA
Manual override	By hand wheel (from 100 Nm)
Mechanical limit stops	Standard
Optical position indicator	Standard
Material	
Cover, Housing	Nylon / Epoxy coated aluminium
Axis, screw	Stainless steel
Gear	Zinc-plated Steel
Type of class	IP68
Ambient temperature	-20 °C up to + 70 °C -20 °C up to + 40 °C (emergency reset)
Weight	5.6 kg
Heating resistor	10 W
Options	Three position actuator (180°) Rotation 180° or 270° Feedback On/Off actuators: – Potentiometer 0.1K, 1K, 5K or 10K – Analogue signal 4-20 mA Fail safe option 2 extra limit switches

Exploded view

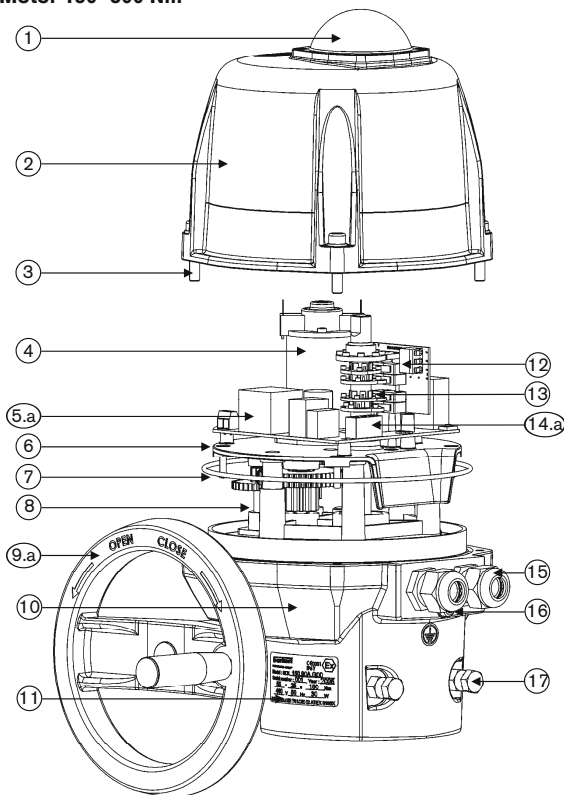
Motor 25–100 Nm



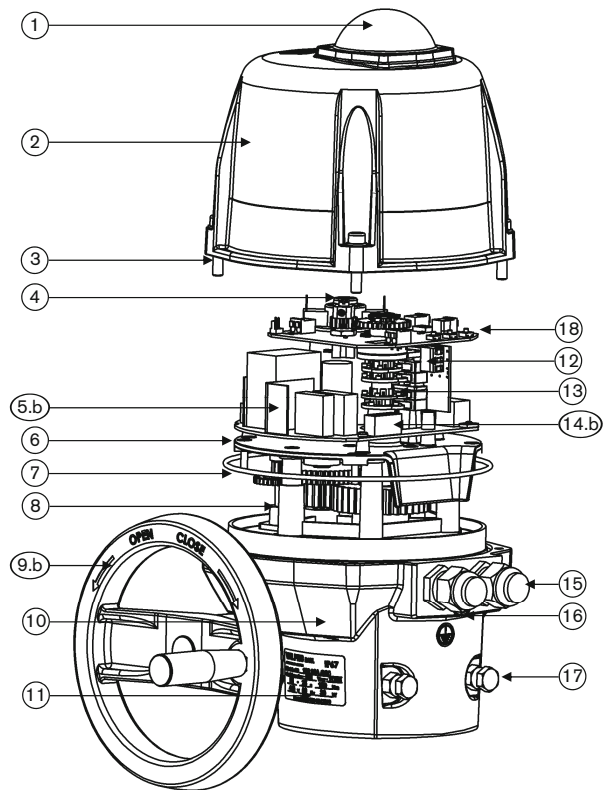
No.	Designation
1	Optical position indicator
2	Cover
3	Stainless steel screws
4	Motor
5.a*	Pilot and power supply card
5.b*	power supply card
6	Gear box
7	O-ring
8	Gear
9.a	Hand wheel
9.b	Clutch knob
10	Housing
11	Identification label
12	Auxiliary limit switch terminal
13	Cams
14.a*	Pilot and power supply card
14.b*	Power supply terminal
15	Cable gland ISO M20
16	Earth screw
17	Mechanical limit stops
18	Positioning card (only for actuator with position control)

* Only for multi-voltage version

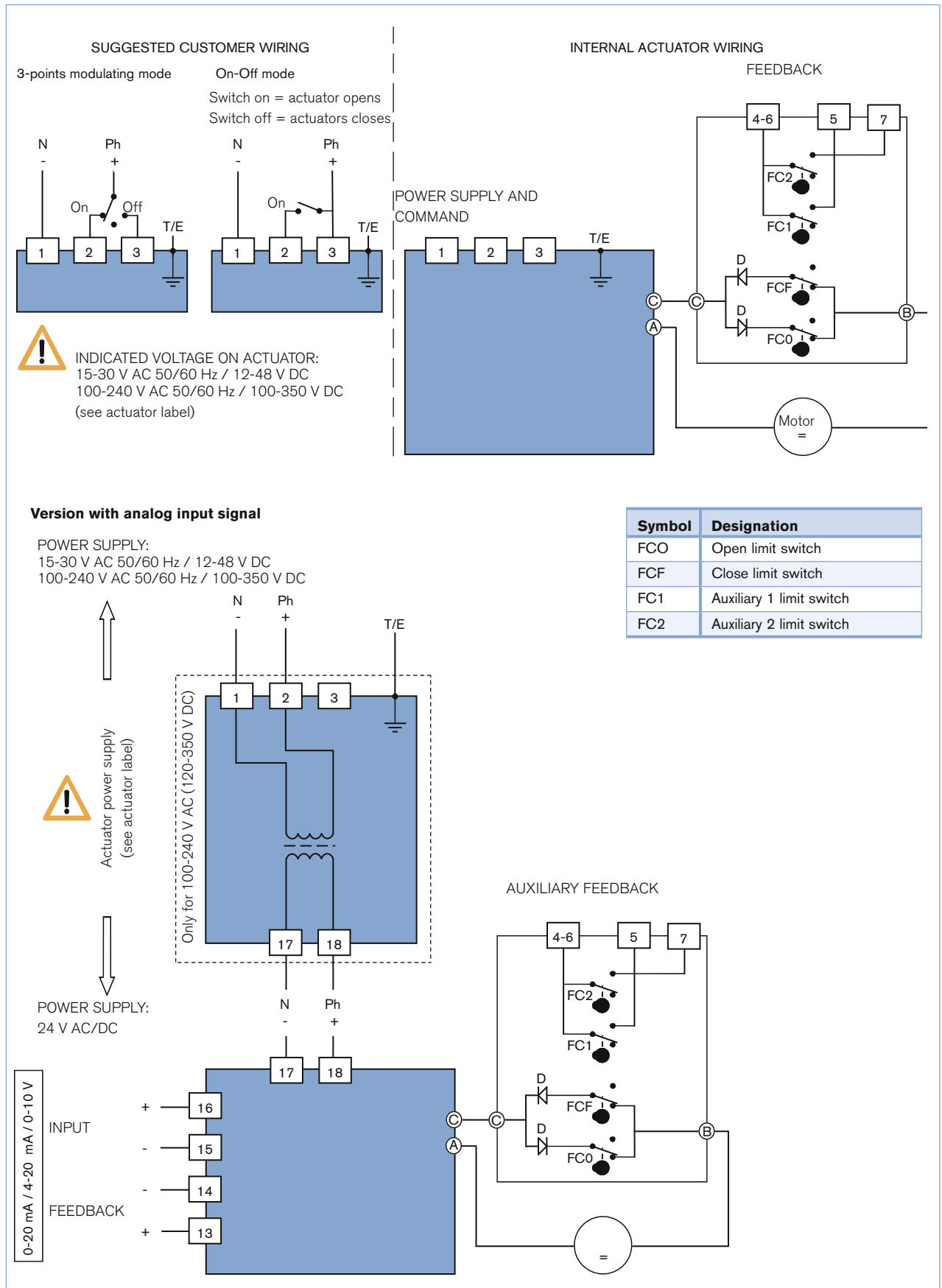
Motor 150–300 Nm



Motor 150–300 Nm with positioning card



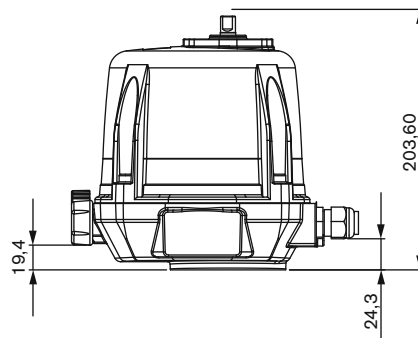
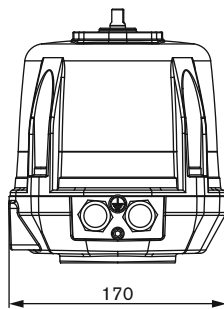
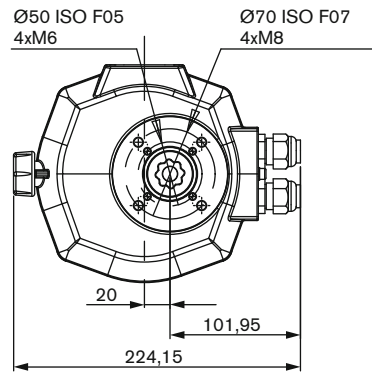
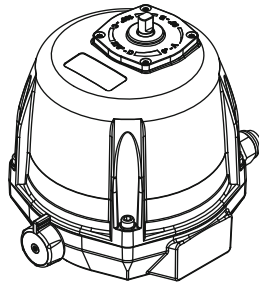
Electrical connections



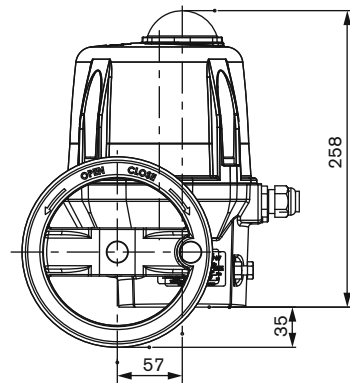
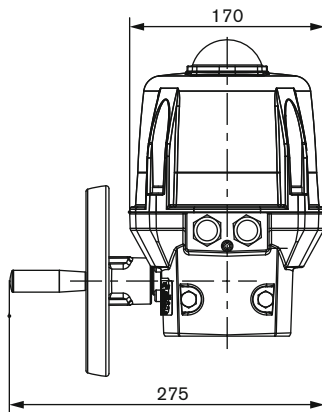
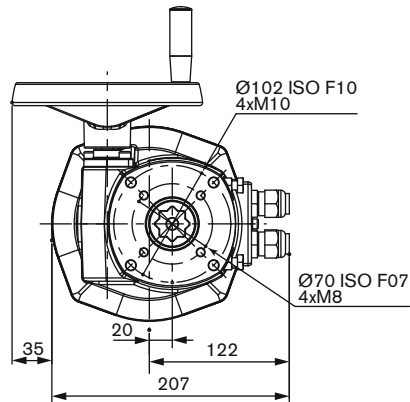
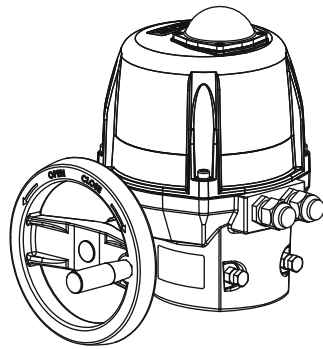
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Dimensions [mm]

Motor 25–100 Nm



Motor 150–300 Nm



Ordering chart (other versions on request)

Standard version without analogue signal input

Remark : For the actuator choice, we recommend a safety torque equal to 1.5 times of the valve maximal torque (2 times for the control version).

Drive stars [mm]	Conversion sleeve star [mm]	Connection flange	Torque [Nm]	90° travel [s]	Power consumption [W]	Voltage / Frequency [V / Hz]	Item no.
17	17/11	F05/F07	25	7	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	207 170
						15-30 V AC, 50/60 Hz / 12-48 V DC	180 864
	17/14		45	15	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	189 194
						15-30 V AC, 50/60 Hz / 12-48 V DC	189 199
			75	20	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	203 454
						15-30 V AC, 50/60 Hz / 12-48 V DC	216 012
22	22/17	F07/F10	100	15	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	205 547
						15-30 V AC, 50/60 Hz / 12-48 V DC	224 608
			150	30	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181 303
						15-30 V AC, 50/60 Hz / 12-48 V DC**	181 304
			300	60	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181 305
						15-30 V AC, 50/60 Hz / 12-48 V DC**	181 306

*Other regulating times and delay angles on request

**The operating voltage mustn't to fall below 11.5 V

Control version with 4-20 mA, 0-20 mA or 0-10 V, analogue signal input or output

Remark : For the actuator choice, we recommend a safety torque equal to 1.5 times of the valve maximal torque (2 times for the control version).

Drive stars [mm]	Conversion sleeve star [mm]	Connection flange	Torque [Nm]	90° travel [s]	Power consumption [W]	Voltage / Frequency [V / Hz]	Item no.
22	22/17	F07-F10	150	30	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181 293
						15-30 V AC, 50/60 Hz / 12-48 V DC**	228 177
			300	60	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181 307
						15-30 V AC, 50/60 Hz / 12-48 V DC**	179 726

*Other regulating times and delay angles on request

**The operating voltage mustn't to fall below 11.5 V

i Further versions on request

⚡ Voltage
other voltages

> Additional
Torque 600, 1000 Nm

Ordering chart accessories

Description	Item no.
Key to adjust limit switches	679 946
Conversion sleeve star/square 14/9 mm	665 288
Conversion sleeve star/square 14/11 mm	665 289
Conversion sleeve star/star 22/14 mm	666 684
Conversion sleeve star/square 22/17 mm	684 858
Conversion sleeve square/square 17/14 mm	665 290
Adapter external square 14/10 mm (for actuators with torque from 25 to 75 Nm)	668 234
Adapter external square 14/10 mm (for actuators with torque from 100 Nm)	677 877

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