

## 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.

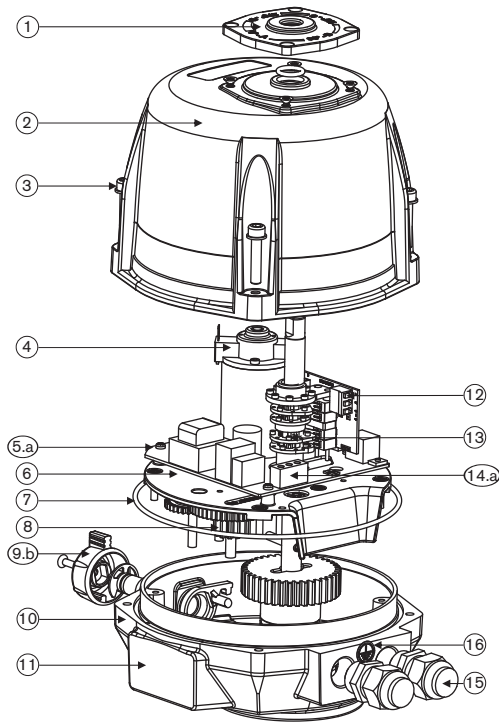
Materials and components have been chosen for maintenance-free operation and ensure low thermal loading on the actuator. The modular design offers many options such as extra limit switches or potentiometers to be added to the basic unit.

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

Technical data	
<b>Limit switches</b>	4 adjustable (2 for motor and 2 additional for feedback) max. 250 V AC/5 A
<b>Analogue signals</b> control version (programmable)	
Input	– 0-10 V – 4-20 mA
Output	– 0-20 mA – 0-10 V – 4-20 mA – 0-20 mA
<b>Manual override</b>	By hand wheel (from 100 Nm)
<b>Mechanical limit stops</b>	Standard
<b>Optical position indicator</b>	Standard
<b>Material</b>	
Cover, Housing	Nylon / Epoxy coated aluminium
Axis, screw	Stainless steel
Gear	Zinc-plated Steel
<b>Type of class</b>	IP68
<b>Ambient temperature</b>	-20 °C up to + 70 °C -20 °C up to + 40 °C (emergency reset)
<b>Weight</b>	5.6 kg
<b>Heating resistor</b>	10 W
<b>Options</b>	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

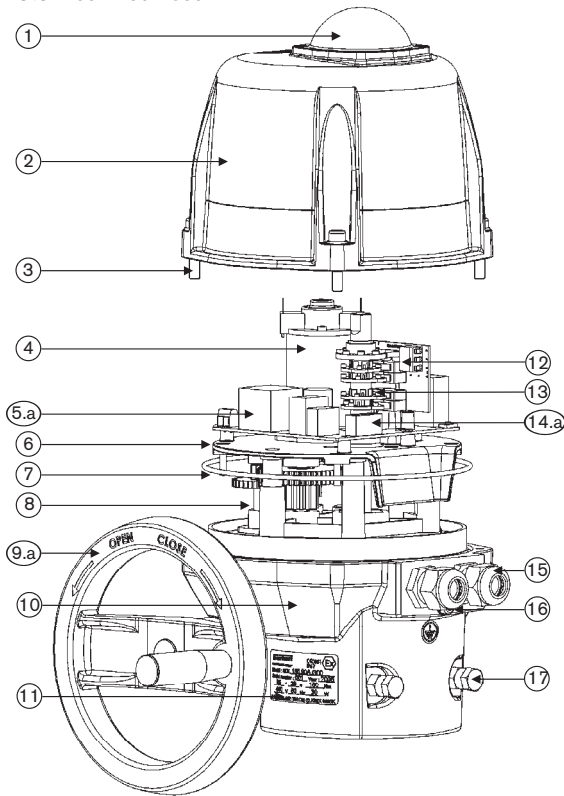
Motor 25 - 45 - 75 Nm



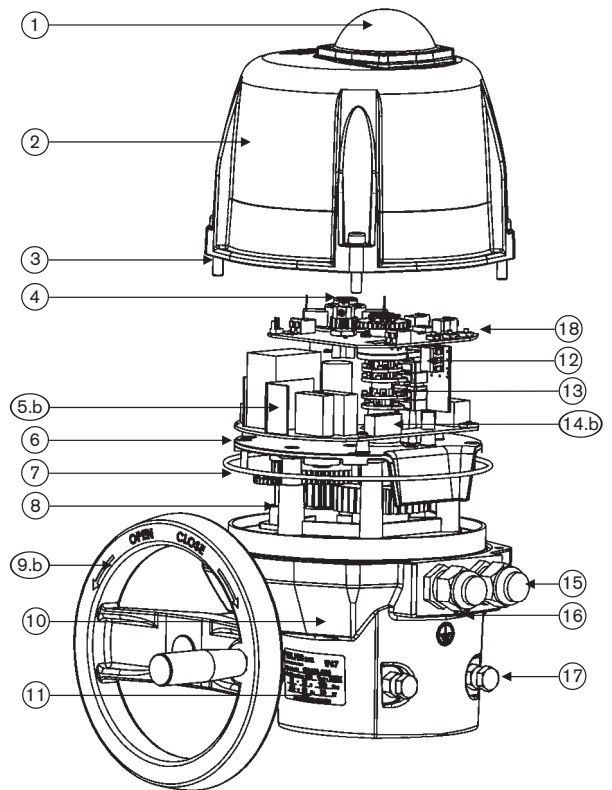
No.	Designation
1	Optical position indicator
2	Cover
3	Stainless steel screws
4	Motor
5.a*	Pilot and power supply card
5.b*	power supply card
6	Gear box
7	O-ring
8	Gear
9.a	Hand wheel
9.b	Clutch knob
10	Housing
11	Identification label
12	Auxiliary limit switch terminal
13	Cams
14.a*	Pilot and power supply 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

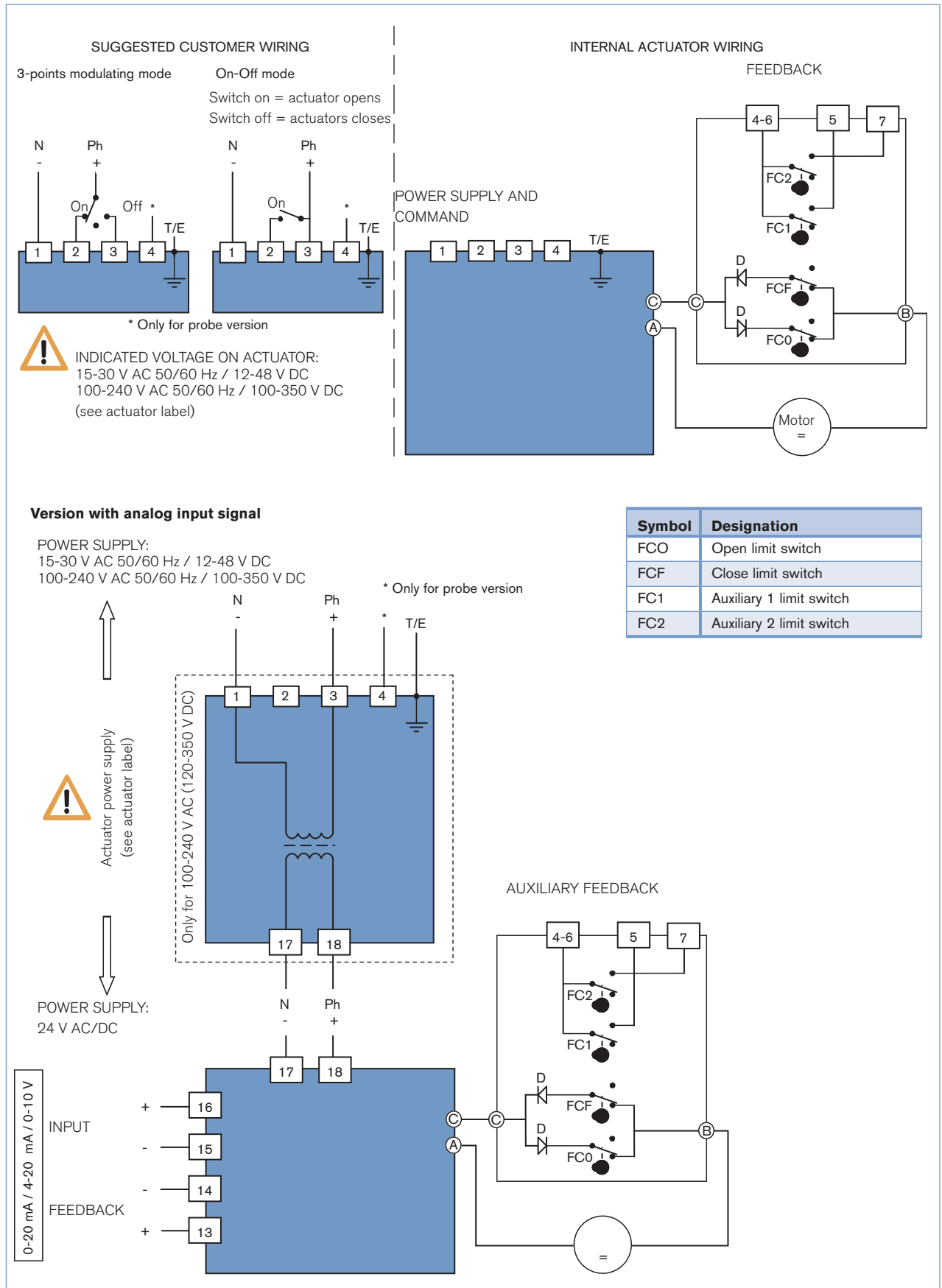
Motor 100 - 150 - 300 Nm



Motor 100 - 150 - 300 Nm with positioning card



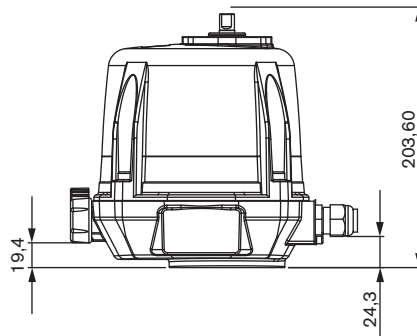
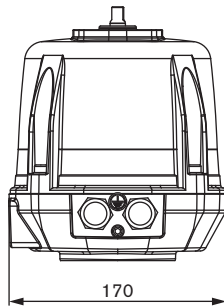
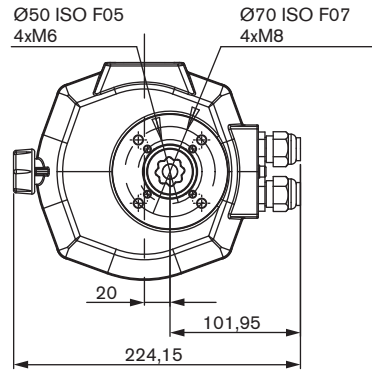
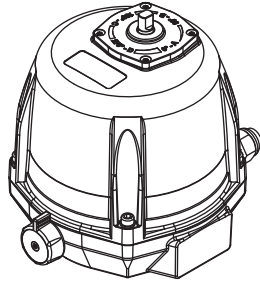
Electrical connections



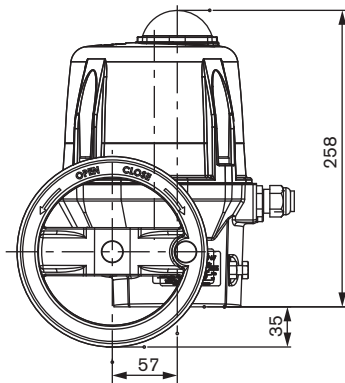
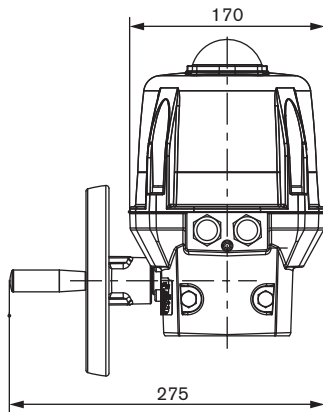
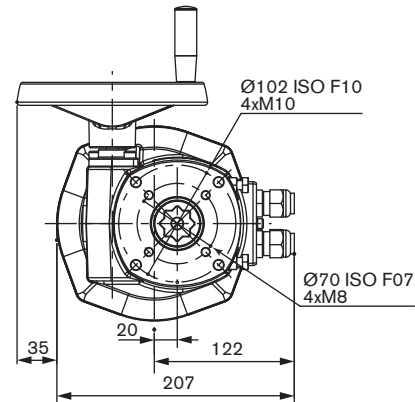
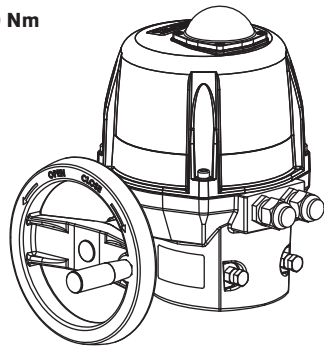
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Dimensions [mm]

Motor 25 - 45 - 75 Nm



Motor 100 - 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

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