

## 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



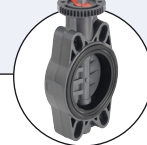
**Type 2657**

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.

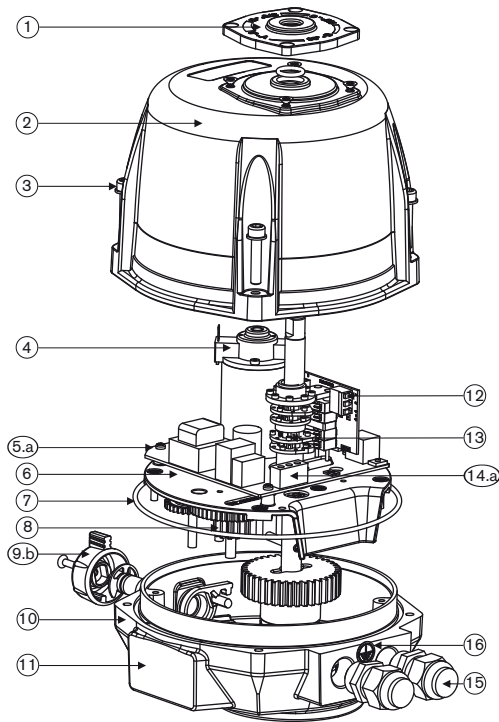
Materials and components have been chosen for maintenance-free operation and ensure low thermal loading on the actuator. The modular design offers many options such as extra limit switches or potentiometers to be added to the basic unit.

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 sec.(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 control version (programmable)</b>	
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

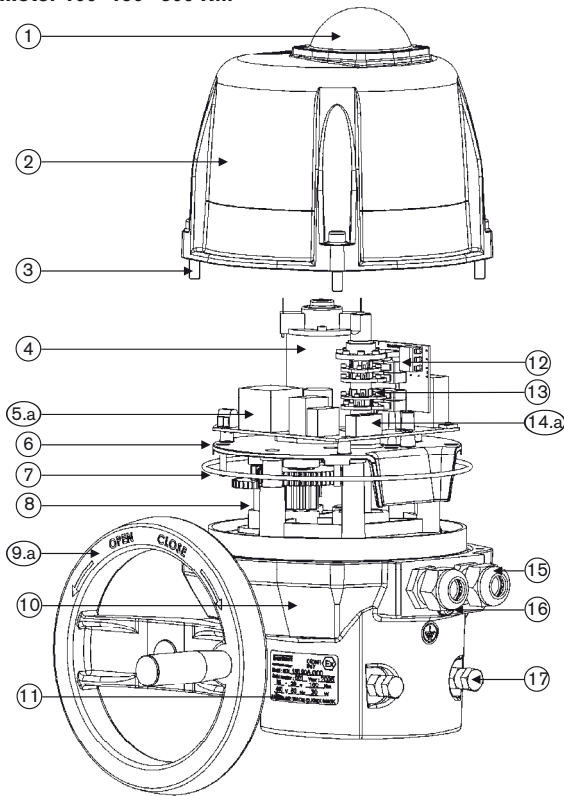
Motor 25-45 - 75 Nm



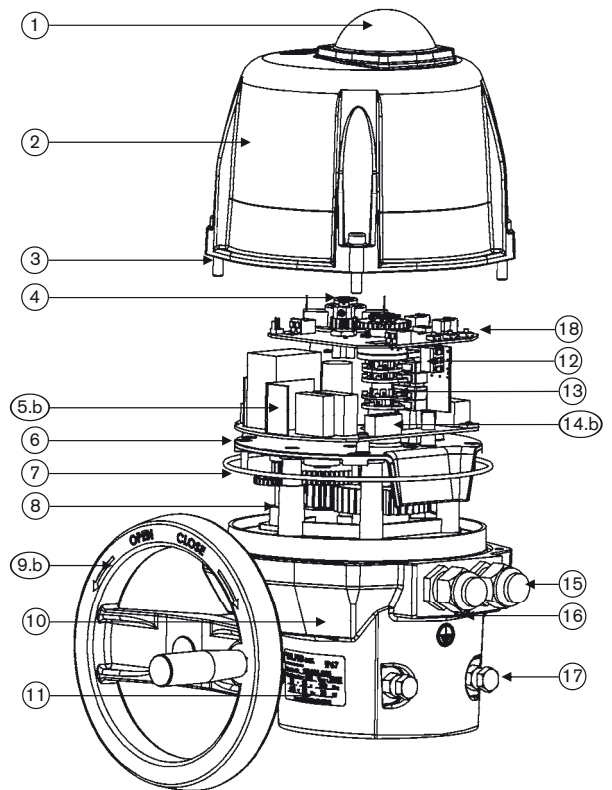
No.	Designation
1	Optical position indicator
2	Cover
3	Stainless steel screws
4	Motor
5.a*	Pilot and power supply card
5.b*	power supply card
6	Gear box
7	O-ring
8	Gear
9.a	Hand wheel
9.b	Clutch knob
10	Housing
11	Identification label
12	Auxiliary limit switch terminal
13	Cams
14.a*	Pilot and power supply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

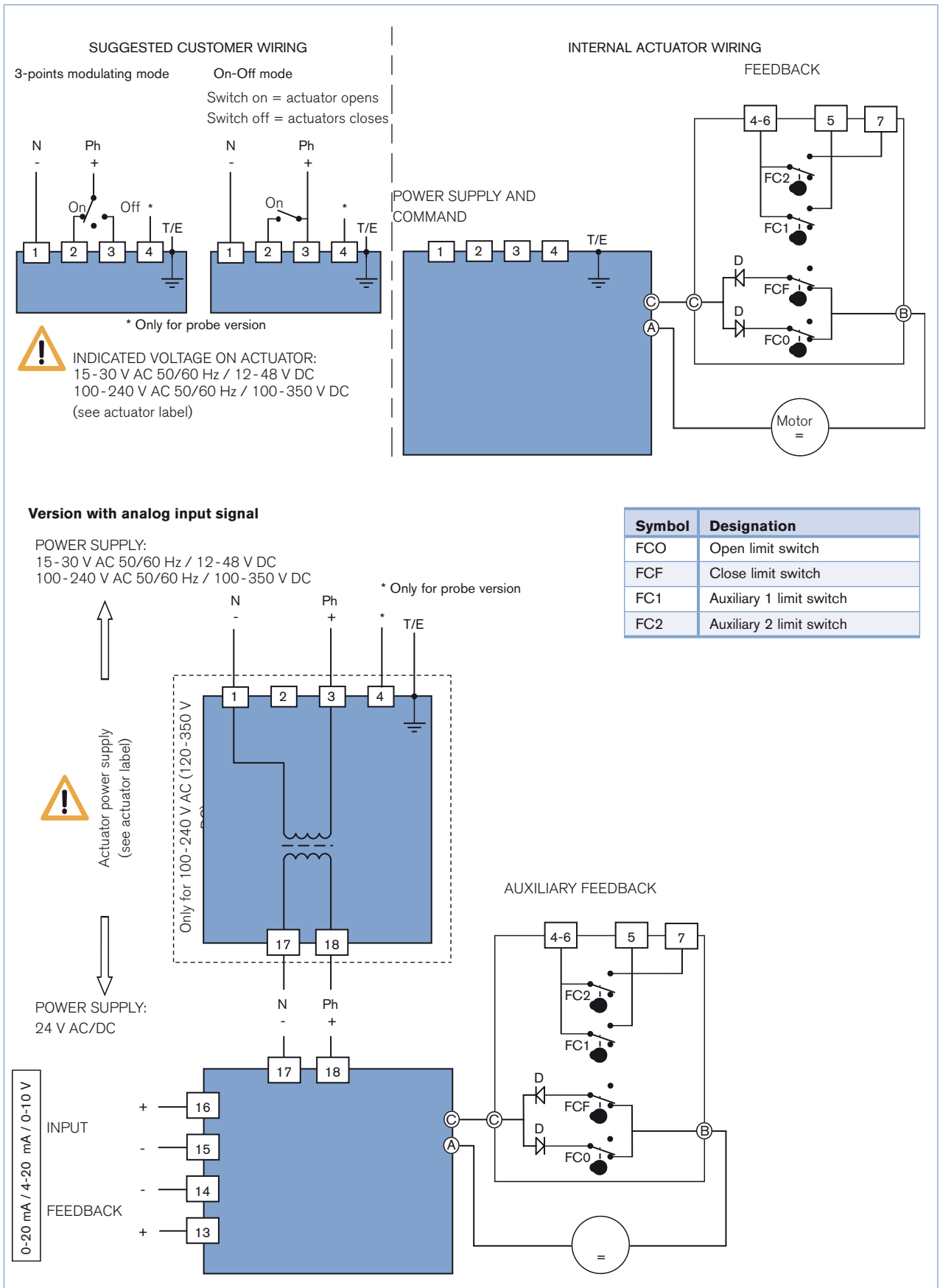
Motor 100-150 - 300 Nm



Motor 100-150 - 300 Nm with positioning card



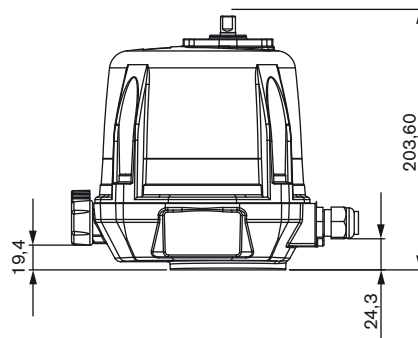
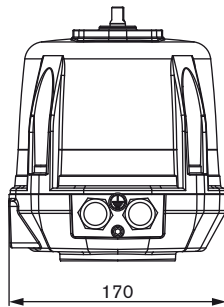
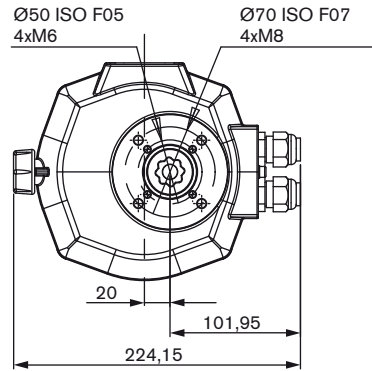
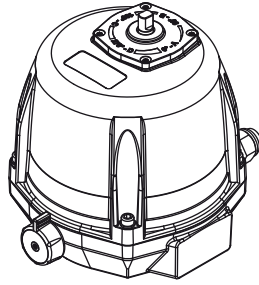
Electrical connections



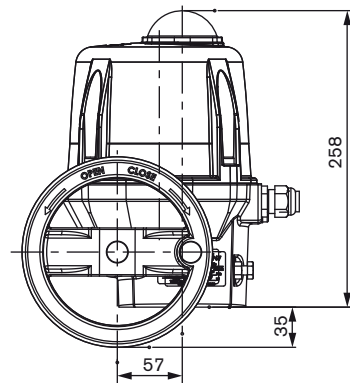
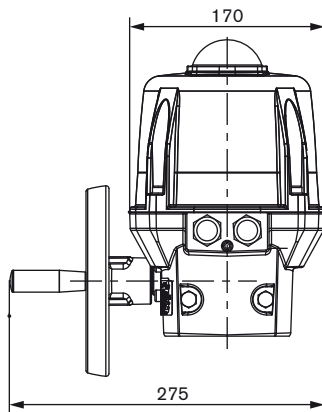
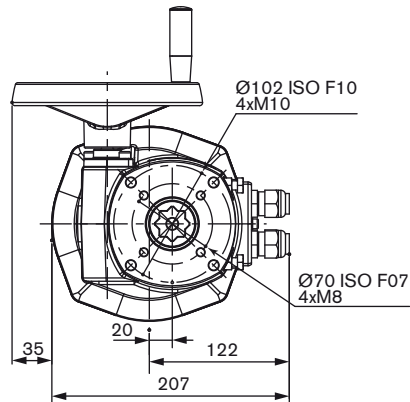
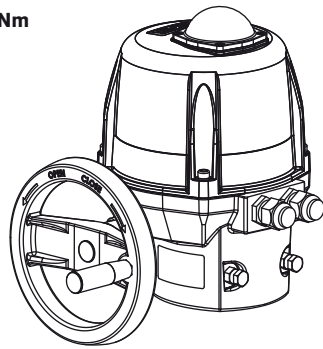
DTS 1000097019 EN Version: O Status: RL (released | freigegeben | valide) printed: 31.01.2018

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]	Article no.
17	17/11	F05/F07	25	7	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	207170 
						15-30 V AC, 50/60 Hz / 12-48 V DC	180864 
	17/14		45	15	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	189194 
						15-30 V AC, 50/60 Hz / 12-48 V DC	189199 
			75	20	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	203454 
						15-30 V AC, 50/60 Hz / 12-48 V DC	216012 
22	22/17	F07/F10	100	15	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	205547 
						15-30 V AC, 50/60 Hz / 12-48 V DC	224608 
			150	30	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181303 
						15-30 V AC, 50/60 Hz / 12-48 V DC**	181304 
			300	60	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181305 
						15-30 V AC, 50/60 Hz / 12-48 V DC**	181306 

\*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]	Article no.
22	22/17	F07-F10	150	30	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181293 
						15-30 V AC, 50/60 Hz / 12-48 V DC**	228177 
			300	60	45	100-240 V AC, / 50/60 Hz / 100-350 V DC	181307 
						15-30 V AC, 50/60 Hz / 12-48 V DC**	179726 

\*Other regulating times and delay angles on request

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

### Further versions on request



**Voltage**  
other voltages



**Additional**  
Torque 600, 1000 Nm

## Ordering chart accessories

Description	Article no.
Key to adjust limit switches	679946 
Conversion sleeve star/square 14/9 mm	665288 
Conversion sleeve star/square 14/11 mm	665289 
Conversion sleeve star/star 22/14 mm	666684 
Conversion sleeve star/square 22/17 mm	684858 
Conversion sleeve square/square 17/14 mm	665290 

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