









## Electrical Rotary Actuator - On/Off and control

- Direct mounting on ball & butterfly valves
- Manual override standard
- Adjustable limit switches
- Robust housing



Product variants described in the data sheet may differ from the product presentation and description.

### Can be combined with

	<b>Type 2651</b> 2/2 or 3/2 way Ball Valve, 2-Piece	▶
	<b>Type 2654</b> 2/2-way ball valve 3-piece	▶
	<b>Type 2657</b> Ball Valve, manually-operated	▶
	<b>Type 2671</b> Butterfly valve	▶
	<b>Type 2674</b> Plastic butterfly valve	▶
	<b>Type TKU001</b> 2/2 way compact flange ball valve	▶

### Type description

The electromotive rotary actuator type 3005 PS is a compact and powerful actuator system that ensures a long service life.

The particularly robust housing also protects the actuator from various external influences and impacts. This makes it perfect for use within heavy industrial applications. The modular design also offers the option of equipping the actuators with further features such as heating resistors or potentiometers.

The materials have been selected for maintenance-free operation, even in aggressive environments, and ensure a low thermal load.

## Table of contents

<b>1. General technical data</b>	<b>3</b>
1.1. General data .....	3
1.2. Electrical data .....	4
<b>2. Materials</b>	<b>4</b>
2.1. Chemical Resistance Chart – Bürkert resistApp.....	4
<b>3. Dimensions</b>	<b>5</b>
<b>4. Device/Process connections</b>	<b>6</b>
4.1. Electrical connections.....	6
<b>5. Product design and assembly</b>	<b>7</b>
5.1. Product assembly .....	7
<b>6. Ordering information</b>	<b>7</b>
6.1. Bürkert eShop – Easy ordering and quick delivery.....	7
6.2. Bürkert product filter.....	7
6.3. Ordering chart.....	8
On/Off actuator .....	8
6.4. Ordering chart accessories.....	8
Actuator accessories .....	8
Conversion sleeves.....	8

## 1. General technical data

### 1.1. General data

Product properties	
Dimensions	Detailed information can be found in chapter "3. Dimensions" on page 5.
Material	
Cover	Polycarbonate (Lexan 943A)
Body	Aluminium silicon alloy (AlSi12)
Weight	6 kg
Drive	Double square 22 mm
Optical position indicator	Standard
Performance data	
Torque	100 Nm, 130 Nm, 150 Nm
Rotation angle	90° (adjustable)
Rotation time (90 %)	19...32 sec Detailed information can be found in chapter "6. Ordering information" on page 7.
Options	Heating resistors Potentiometer (100/200/500/1000/2000 Ohm)
Electrical data	
Operating voltage	
Synchronous motor	24 V AC / 115 V AC 1~ / 230 V AC 1~ / 400 V 3~
DC motor	24V DC
Limit switches	4 adjustable (2 for the motor and 2 for the position feedback), max. 250 V AC 1 A inductive load 3 A ohmic load
Power consumption	27 W...45 W Detailed information can be found in chapter "6. Ordering information" on page 7.
Over-voltage category	II
Motor protection	Thermoswitch (for drives with alternating current - AC) (for drives with direct current - DC)
Duty cycle	Acc to IEC60034 - 1.8 S2 short-term operation (on/off) 20 min S3/S4 control operation 1200 cycles/hour - 25% ED at 25° C
Process/Port connection & communication	
Electrical connection	Cable glands M20 x 1.5
Environment and installation	
Installation position	Do not mount the actuator upside down, max. installation angle: 90°
Ambient temperature	-25 °C...+70 °C (S2)
Degree of protection	IP67 acc. to EN 60529

## 1.2. Electrical data

Actuator		Power supply	Voltage								
Version	Torque		230 V AC 1~		115 V AC 1~		24 V AC 1~		400 V 3~		24 V DC
On/Off actuator	100 Nm	Frequency [Hz]	50	60	50	60	50	60	50	60	–
		Rotation time 90° [s]	23	19	23	19	23	19	23	19	–
		Nominal current [A]	0.12		0.23		1.1		0.065 <sup>1.)</sup>		–
		Max. current [A]	0.14		0.28		1.3		0.075 <sup>1.)</sup>		–
		Power consumption <sup>2.)</sup> [W]	27		27		27		45		–
	130 Nm	Frequency [Hz]	–	–	–	–	–	–	–	–	–
		Rotation time 90° [s]	–	–	–	–	–	–	–	–	32
		Nominal current [A]	–	–	–	–	–	–	–	–	1.3
		Max. current [A]	–	–	–	–	–	–	–	–	2.5
		Power consumption <sup>2.)</sup> [W]	–	–	–	–	–	–	–	–	31
	150 Nm	Frequency [Hz]	50	60	50	60	50	60	50	60	–
		Rotation time 90° [s]	23	19	23	19	23	19	23	19	–
		Nominal current [A]	0.17		0.3		1.5		0.08 <sup>1.)</sup>		–
		Max. current [A]	0.2		0.36		1.8		0.1 <sup>1.)</sup>		–
		Power consumption <sup>2.)</sup> [W]	39		39		39		55		–

1.) Per phase

2.) With max. torque and 50 Hz

## 2. Materials

### 2.1. Chemical Resistance Chart – Bürkert resistApp



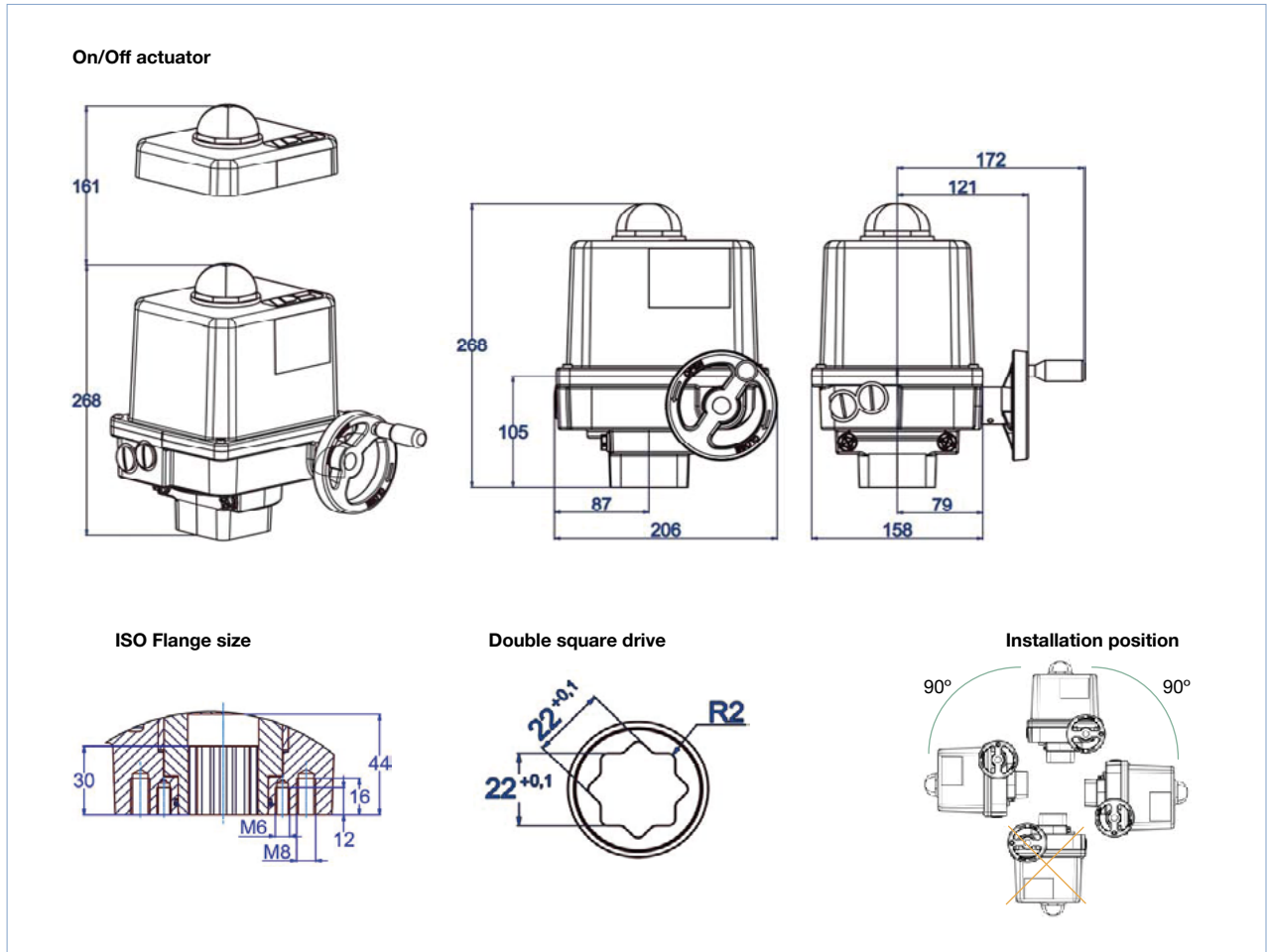
#### Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

### 3. Dimensions

**Note:**  
Dimensions in mm



ISO511	F05/F07
M	M6/M8
B	9/12 mm

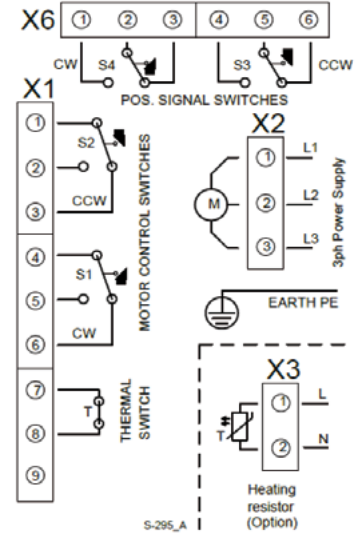
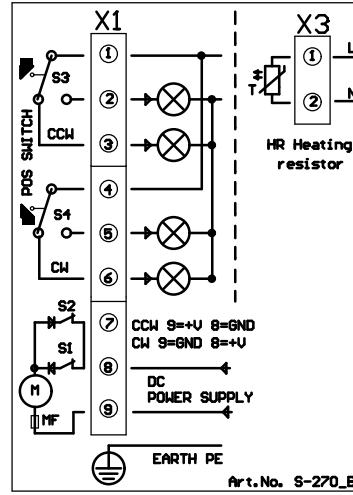
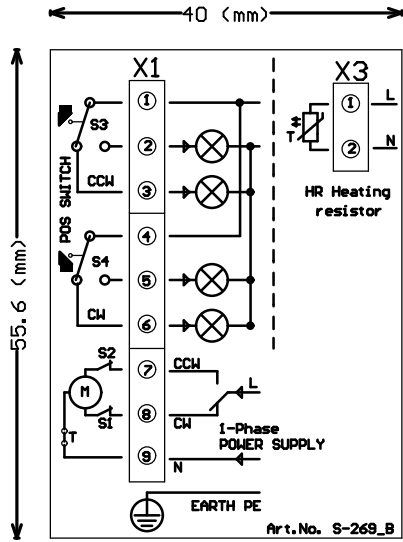
## 4. Device/Process connections

### 4.1. Electrical connections

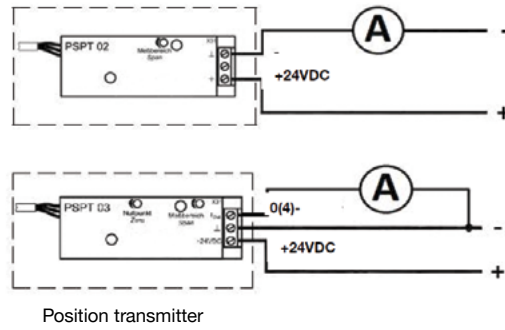
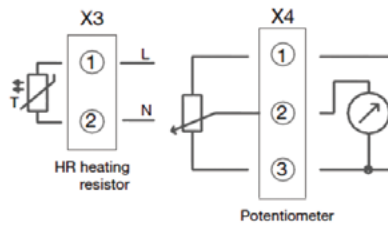
230 V, 115 V, 24 V  
AC supply

24 V  
DC supply

400 V AC

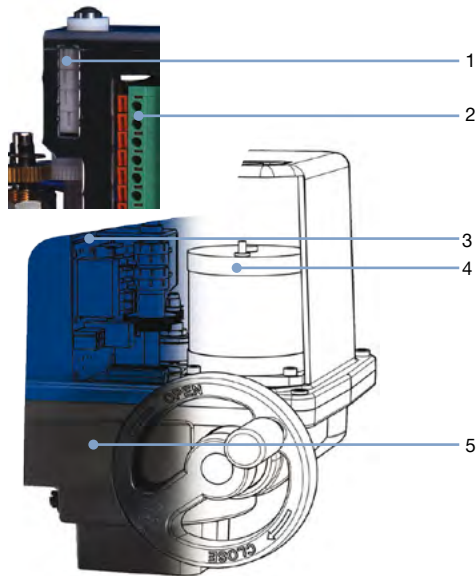


Options



## 5. Product design and assembly


### 5.1. Product assembly



No.	Element
1	Trip cam preset
2	Spring terminals
3	Metal central beam
4	Synchronous motor
5	Robust Wolfram planetary gear

## 6. Ordering information

### 6.1. Bürkert eShop – Easy ordering and quick delivery




**Bürkert eShop – Easy ordering and fast delivery**

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

### 6.2. Bürkert product filter



**Bürkert product filter – Get quickly to the right product**

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

### 6.3. Ordering chart

#### On/Off actuator

Torque <sup>1.)</sup>	90° rotation time <sup>2.)</sup>			Flange	Double Square	Article no. 230 V AC 1~	Article no. 115 V AC 1~	Article no. 24 V AC 1~	Article no. 400 V 3~	Article no. 24 V DC
	AC		DC							
	50 Hz	60 Hz								
[Nm]	[s]	[s]	[s]	[s]	[mm]					
100	23	19	-	F05/07	22	20024161	20024162	20024163	20024164	-
130	-	-	32			-	-	-	-	20024165
150	23	19	-			20024166	20024167	20024168	20024169	-

1.) For the actuator choice, we recommend a safety torque equal to 1.5 times of the valve maximal torque.

2.) Other rotation angles are available on request.

**Other versions on request**

**Voltage**

Other supply voltages

### 6.4. Ordering chart accessories

#### Actuator accessories

Description	Article no.
Heating resistor (for 230 V AC and 115 V AC actuators)	774106
Heating resistor (for 24 V AC/DC actuators)	774210
Position feedback 2-wire technology	774107
Position feedback 3-wire technology	774108
Potentiometer 100 Ω (for On/Off version)	774109
Potentiometer 200 Ω (for On/Off version)	774110
Potentiometer 500 Ω (for On/Off version)	774111
Potentiometer 1000 Ω (for On/Off version)	774112
Potentiometer 2000 Ω (for On/Off version)	774113

#### Conversion sleeves

Description	Article no.
Conversion sleeve star/square 14/9 mm	665288
Conversion sleeve star/square 14/11 mm	665289
Conversion sleeve square/square 22/19 mm	773836
Conversion sleeve star/square 22/17 mm	684858
Conversion sleeve star/star 22/14 mm	666684
Conversion sleeve star/square 22/11 mm	773344



# Bürkert – Close to You

For up-to-date addresses  
please visit us at  
[www.burkert.com](http://www.burkert.com)

DTS 1000532998 EN Version: B Status: RL (released | freigegeben | validé) printed: 18.01.2022

