

## Electrical Rotary Actuator - On/Off and control

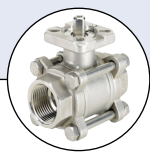


- Direct mounting on ball & butterfly valves
- Manual override standard
- Adjustable limit switches
- Robust housing

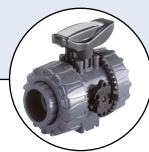
Type 3003 PS can be combined with...



**Type 2651**  
2-piece st.st.  
ball valve



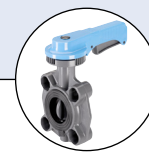
**Type 2654**  
3-piece st.st.  
ball valve



**Type 2657**  
Plastic  
ball valve



**Type 2671**  
Metal  
butterfly valve



**Type 2674**  
Plastic  
butterfly valve

The electrical rotary actuator type 3003 PS is a compact and powerful actuator system, which provides a long lifetime.

Materials and components have been chosen for maintenance-free operation even in aggressive environments and ensure low thermal loading on the actuator.

The robust housing protects the actuator against environmental influences and impacts. Moreover the modular design offers to add many additional features such as heating resistors and potentiometers.

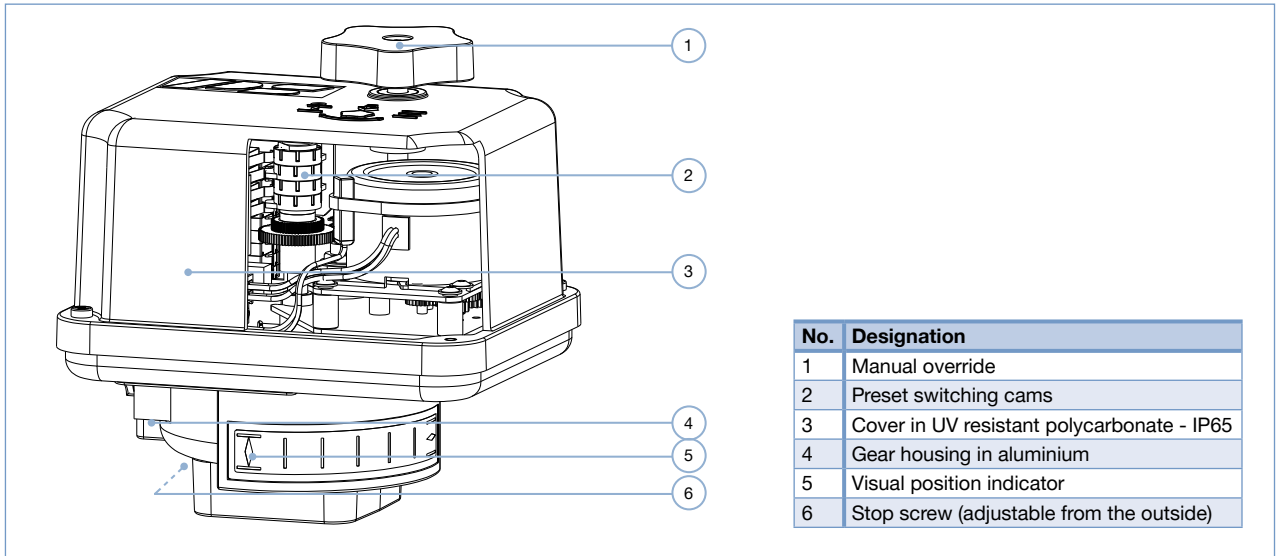
Technical data	
<b>Torque</b>	
On/Off version	25, 50 Nm
Control version	25, 45 Nm
<b>Angle of rotation</b>	90° (adjustable)
<b>90° rotation time</b>	5 sec. to 80 sec. (see ordering chart)
<b>Power supply</b>	
Synchronous motor	24 V AC / 115 V AC 1~ / 230 V AC 1~ / 400 V 3~
DC motor	24 V DC
<b>Power consumption</b>	8 W to 55 W (see ordering chart)
<b>Motor protection</b>	Thermo switch Multifuse for On/Off version with 24 V DC
<b>Electrical connection</b>	Cable glands M20x1.5
<b>Mounting</b> (acc. ISO 5211)	F05/07 or F04/07 optional
<b>Drive</b>	Double square 17 mm
<b>Installation</b>	Do not mount the actuator upside down!
<b>Limit switches</b>	4 adjustable (2 for the motor & 2 for the position feedback) max. 250 V AC 1 A inductive load 3 A ohmic load
<b>Standard signal (programmable)</b>	
Input	0/4-20mA & 0/2-10 V
Output	0-10 V
<b>Optical position indicator</b>	Standard

Technical data (continued)	
<b>Material</b>	
Cover	Polycarbonate (Lexan 943A)
Body	Aluminium-silicon alloy (AlSi12)
<b>Duty cycle</b>	
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
<b>Type of protection</b>	IP65 according to EN 60529
<b>Ambient temperature range</b>	
	-25°C up to 70°C (S2) -20°C up to 60°C (S4)
<b>Overvoltage Category</b>	II
<b>Weight</b>	
	2.5 kg - On/Off version (without accessories) 4 kg - Control version (without accessories)
<b>Options</b>	
	Heating resistor (except at 400 V 3~) Potentiometer (100/200/500/1000/2000Ohm)

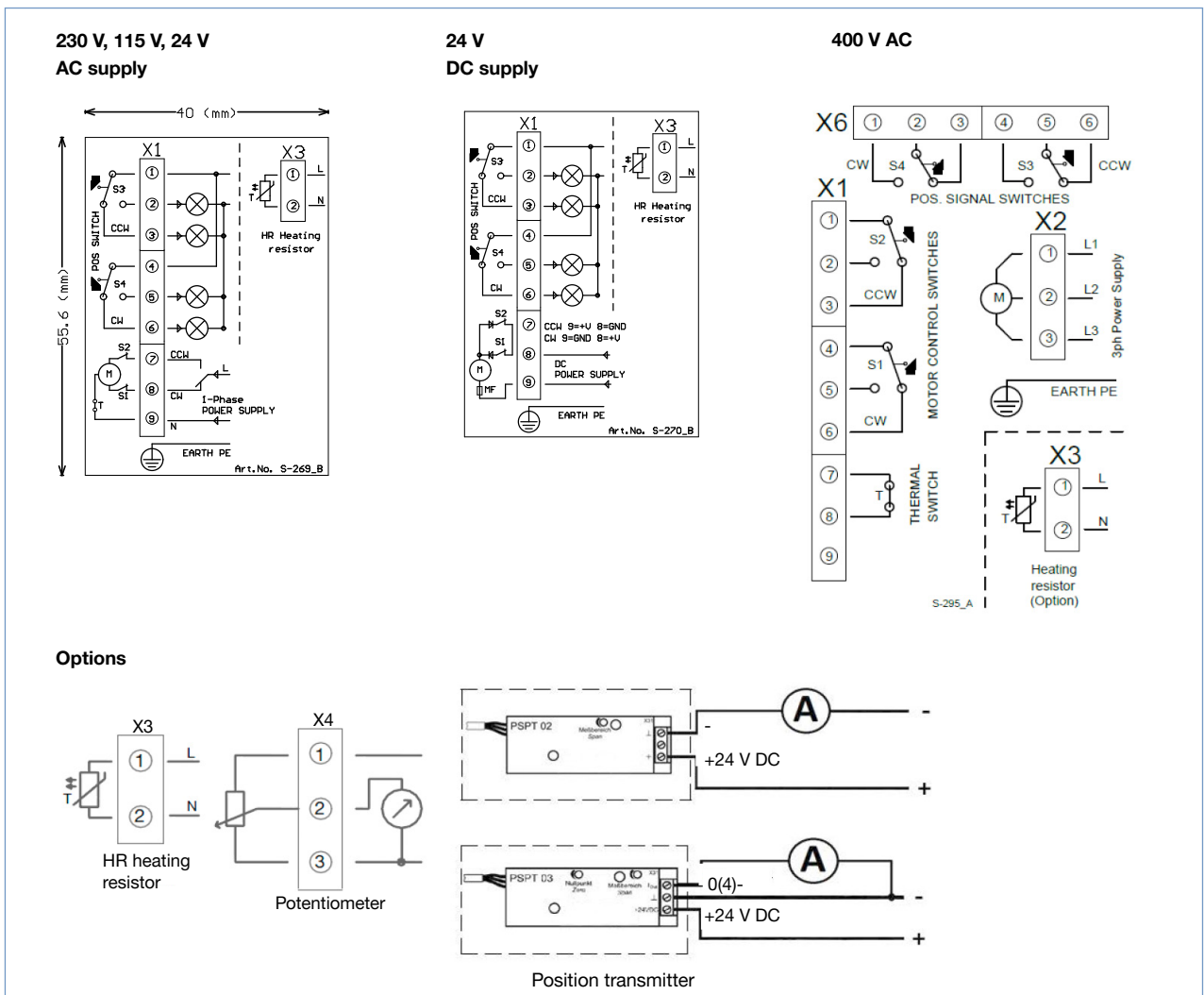
## Electrical specifications

Actuator Version	Torque	Power supply	Voltage				
			230 V AC 1~	115 V AC 1~	24 V AC 1~	400 V 3~	24 V DC
On/Off version	25 Nm	Frequency [Hz]	50 / 60	50 / 60	50 / 60	-	/
		Operation time [s]	17 / 14	17 / 14	17 / 14	-	9
		Nominal current [A]	0.08	0.15	0.8	-	0.6
		Max. current [A]	0.09	0.18	0.96	-	1.2
		Power consumption [W]	17 / 23	18 / 20	18 / 23	-	15
	50 Nm [fast rotation]	Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60	-
		Operation time [s]	6 / 5	6 / 5	6 / 5	6 / 5	-
		Nominal current [A]	0.17	0.34	1.6	0.08	-
		Max. current [A]	0.2	0.41	1.9	0.13	-
		Power consumption [W]	39	39	39	55	-
	50 Nm [medium rotation]	Frequency [Hz]	50 / 60	50 / 60	50 / 60	-	/
		Operation time [s]	33 / 28	33 / 28	33 / 28	-	16
		Nominal current [A]	0.05	0.13	0.6	-	0.6
		Max. current [A]	0.06	0.15	0.73	-	1.2
		Power consumption [W]	13	15	15	-	15
	50 Nm [slow rotation]	Frequency [Hz]	50 / 60	50 / 60	50 / 60	-	-
Operation time [s]		80 / 67	80 / 67	80 / 67	-	-	
Nominal current [A]		0.03	0.07	0.33	-	-	
Max. current [A]		0.04	0.08	0.4	-	-	
Power consumption [W]		8	8	8	-	-	
Control version	25 Nm	Frequency [Hz]	50 / 60	50 / 60	50 / 60	-	-
		Operation time [s]	17 / 14	17 / 14	17 / 14	-	-
		Nominal current [A]	0.05	0.13	0.6	-	-
		Max. current [A]	0.06	0.15	0.73	-	-
		Power consumption [W]	12	15	15	-	-
	45 Nm	Frequency [Hz]	50 / 60	50 / 60	50 / 60	-	-
		Operation time [s]	17 / 14	17 / 14	17 / 14	-	-
		Nominal current [A]	0.1	0.2	1	-	-
		Max. current [A]	0.12	0.24	1.2	-	-
		Power consumption [W]	22	22	22	-	-

Sectional view

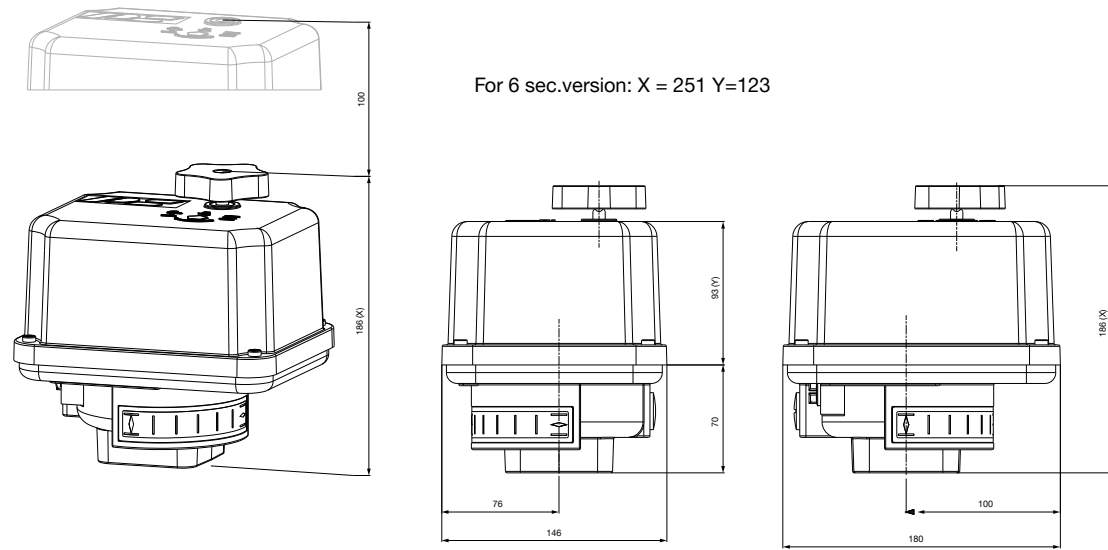


Electrical connections

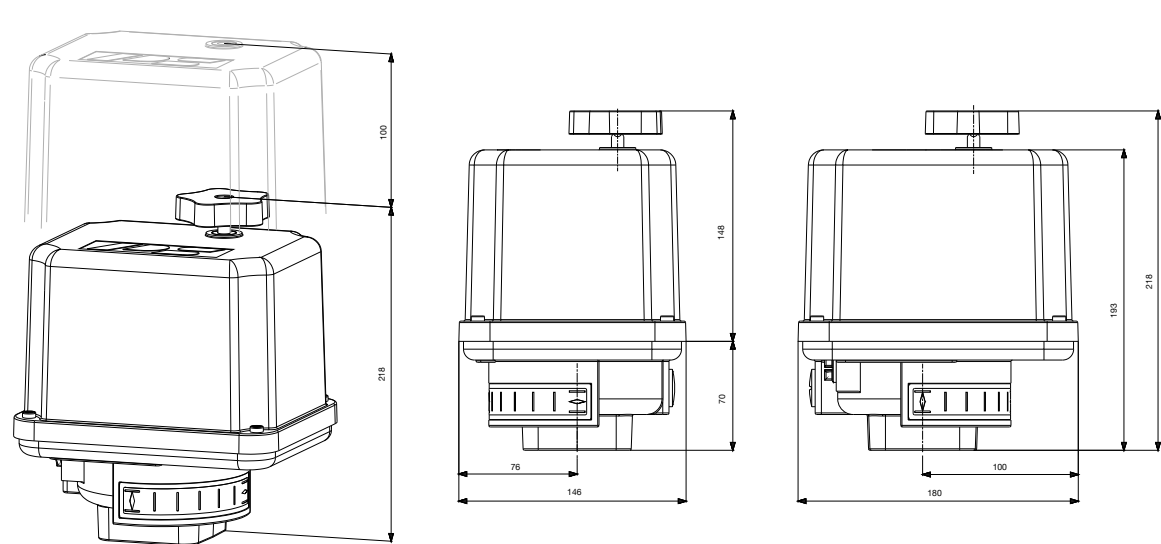


Dimensions [mm]

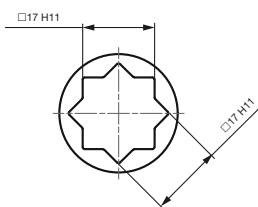
On/Off version



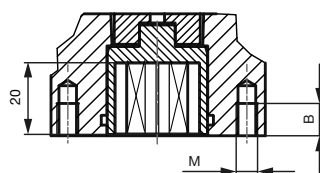
Control version



Double square drive

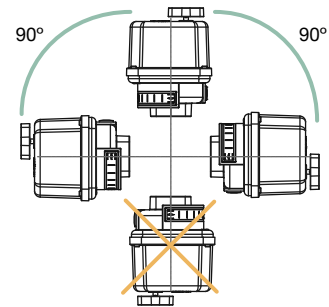


ISO flange dimension



ISO511	F04/F07	F05/F07
M	M5/M8	M6/M8
B	8/12 mm	9/12 mm

Mounting positions



**Ordering chart (other versions on request)**

**On/Off actuator**

Torque [Nm]	Rotation Time [s]			Flange	Double Square [mm]	Voltage					
	AC		DC			230 V AC 1~	115 V AC 1~	24 V AC 1~	400 V 3~	24 V DC	
	50 Hz	60 Hz									
25	17	14	-	F05/07	17	329988	329989	329990	-	-	
	-	-	-	F04/07		329991	329992	329993	-	-	
	-	-	9	F05/07		-	-	-	-	329994	
	-	-	-	F04/07		-	-	-	-	329995	
50	6	5	-	F05/07	17	329996	329997	329998	329999	-	
	-	-	16			-	-	-	-	330000	
	33	28	-			-	330001	330002	330003	-	-
	80	67	-			-	330004	330005	330006	-	-

**Remark** (On/Off actuator): For the actuator choice we recommend a safety torque equal to 1.5 times of the valve maximum torque.

**Control actuator with analogue signal input**

Torque [Nm]	Rotation Time [s]			Flange	Double Square [mm]	Voltage				
	AC		DC			230 V AC 1~	115 V AC 1~	24 V AC 1~	400 V 3~	24 V DC
	50 Hz	60 Hz								
25	17	14	-	F05/07	17	330007	330008	330010	-	-
			-	F04/07		330011	330012	330013	-	-
45	17	14	-	F05/07	17	330014	330015	330016	-	-
			-	F04/07		330017	330018	330019	-	-

**Remark** (Control actuator): For the actuator choice we recommend a safety torque equal to 2 times of the valve maximum torque.

**Ordering chart for 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 transmitter -2-wire technology	774107
Position transmitter -3-wire technology	774108
Potentiometer 100Ω (for On/Off version)	774109
Potentiometer 200Ω (for On/Off version)	774110
Potentiometer 500Ω (for On/Off version)	774111
Potentiometer 1000Ω (for On/Off version)	774112
Potentiometer 2000Ω (for On/Off version)	774113

**Ordering chart for conversion sleeves**

Description	Article no.
Conversion sleeve square/square 11/9 mm	666575
Conversion sleeve star/square 14/9 mm	665288
Conversion sleeve star/square 14/11 mm	665289
Conversion sleeve square/square 17/14 mm	665290
Conversion sleeve square/square 17/11 mm	665369

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In case of special application conditions, please consult for advice.

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