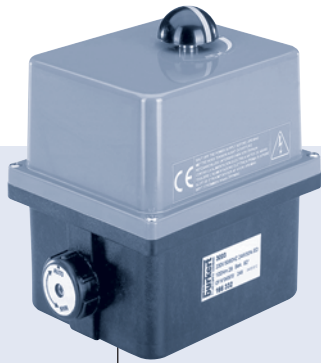
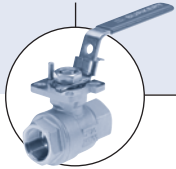


Electric Rotary Actuator for Quarter-Turn Valves

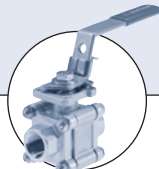


- Direct mounting for quarter-turn valves
- Manual override in standard
- Corrosion resistant
- Adjustable limit switches

Type 3003 can be combined with...



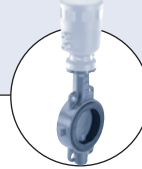
Type 2651
2-piece
Ball valve



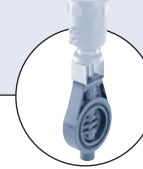
Type 2654
3-piece
Ball valve



Type 2657
Plastic
Ball valve



Type 2672
Metal
Butterfly valve



Type 2675
Plastic
Butterfly valve

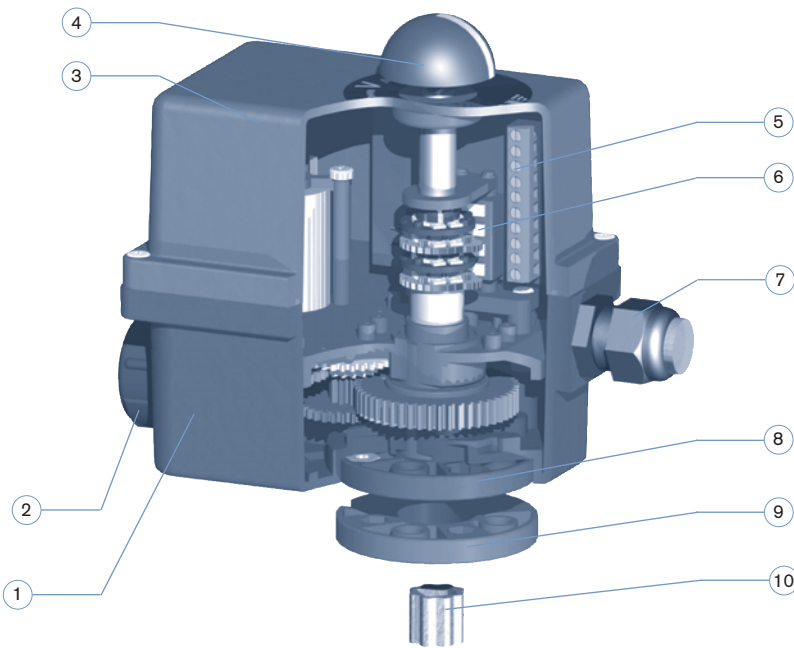
The rotary actuator type 3003 is a compact and powerful actuator system which provides a long service life.

Materials and components have been chosen for maintenance-free operation even in aggressive environments and ensure low thermal loading on the actuator. The modular design offers many options such as extra limit switches, potentiometers, 4-20 mA position control to be added to the basic unit.

| Technical data | |
|------------------------------|---|
| Torque | 20, 35, 60 and 100 Nm (see ordering chart) |
| Angle of rotation | 90° (+/- 5°) |
| 90° rotation time | 9 to 100 s (see ordering chart) |
| Duty rating | At max. torque: 50% of the time Regulating: 50% of max. torque |
| Power supply | |
| Motor 20 Nm | 115 V AC / 60 Hz, 230 V AC / 50 Hz or 24 V AC/DC (12 VDC on request) |
| Motor 35, 60, 100 Nm | 115-230 V AC / 50 and 60 Hz or 24 V AC/DC (12 VDC on request) |
| Tolerance | +/- 10% AC; +/- 20% DC |
| Power consumption | 11 W to 32 W (see ordering chart) |
| Motor protection | Thermic for version 24 V AC/DC - Torque limitation |
| Electrical connection | 2 cable glands ISO20 (EN 175301-803 on request) |
| ISO fixation | acc. ISO 5211 |
| Motor 20 Nm | F05 (removal fixation plate F03/F05) |
| Motor 35, 60, 100 Nm | F05/F07 |
| Drive | |
| Motor 20 Nm | Female star 14 mm |
| Motor 35, 60 Nm | Female star 22 mm; conversion sleeve star 22/14 mm enclosed |
| Motor 100 Nm | Female star 22 mm; conversion sleeve star 22/17 mm enclosed |

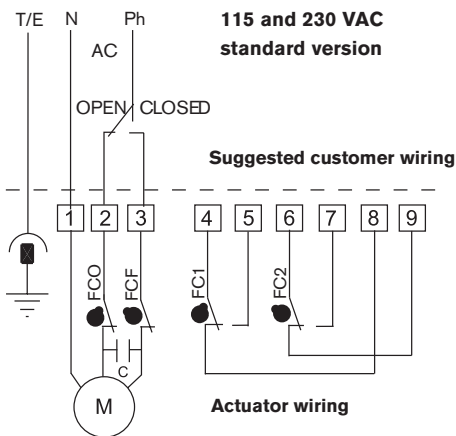
| Technical data | |
|----------------------------------|---|
| Limit switches | 4 adjustables (2 for engine and 2 free of potential) max. 250 V AC/1.5 A |
| Manual override | By outgoing axis with return spring |
| Mechanical limit stops | Standard |
| Visual position indicator | Standard |
| Material | |
| Cover / Housing | ABS / PA |
| Axis / screw | Stainless steel |
| Gear | Steel and PC |
| Protection class | IP65 with connectors plugged-in |
| Ambient temperature | -10 °C to + 55 °C (at <+15 °C heating resistor is recommended) |
| Weight | 1,5 Kg to 3 Kg |
| Options | Heating resistor 10 W Slow version Third position (for 180°) Feedback: - Potentiometer 1K, 5K, or 10K - Analog signal 4-20 mA Fail safe security block |

Exploded view

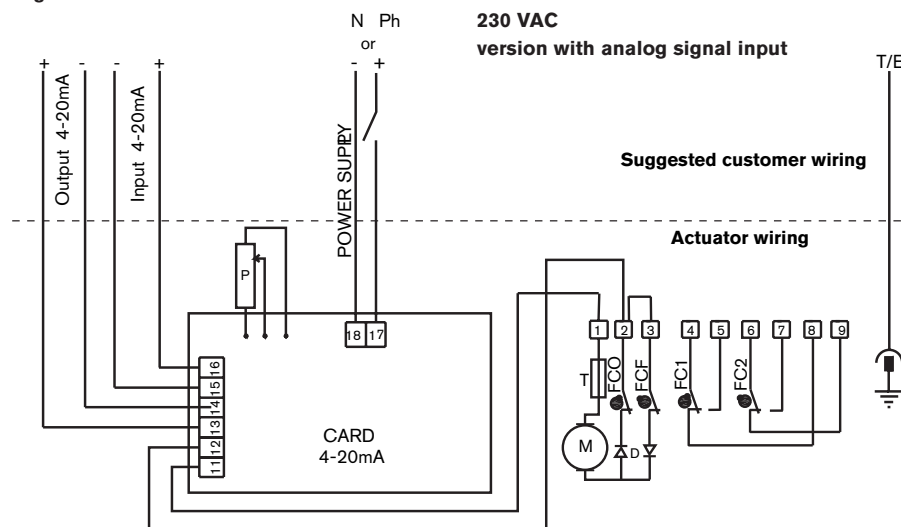


| No. | Designation |
|-----|------------------------------|
| 1 | Housing |
| 2 | Manual override |
| 3 | Cover |
| 4 | Visual position indicator |
| 5 | Terminal block |
| 6 | Limit switches |
| 7 | Cable gland |
| 8 | Fixation |
| 9 | Removable plate (20 Nm only) |
| 10 | Sleeve |

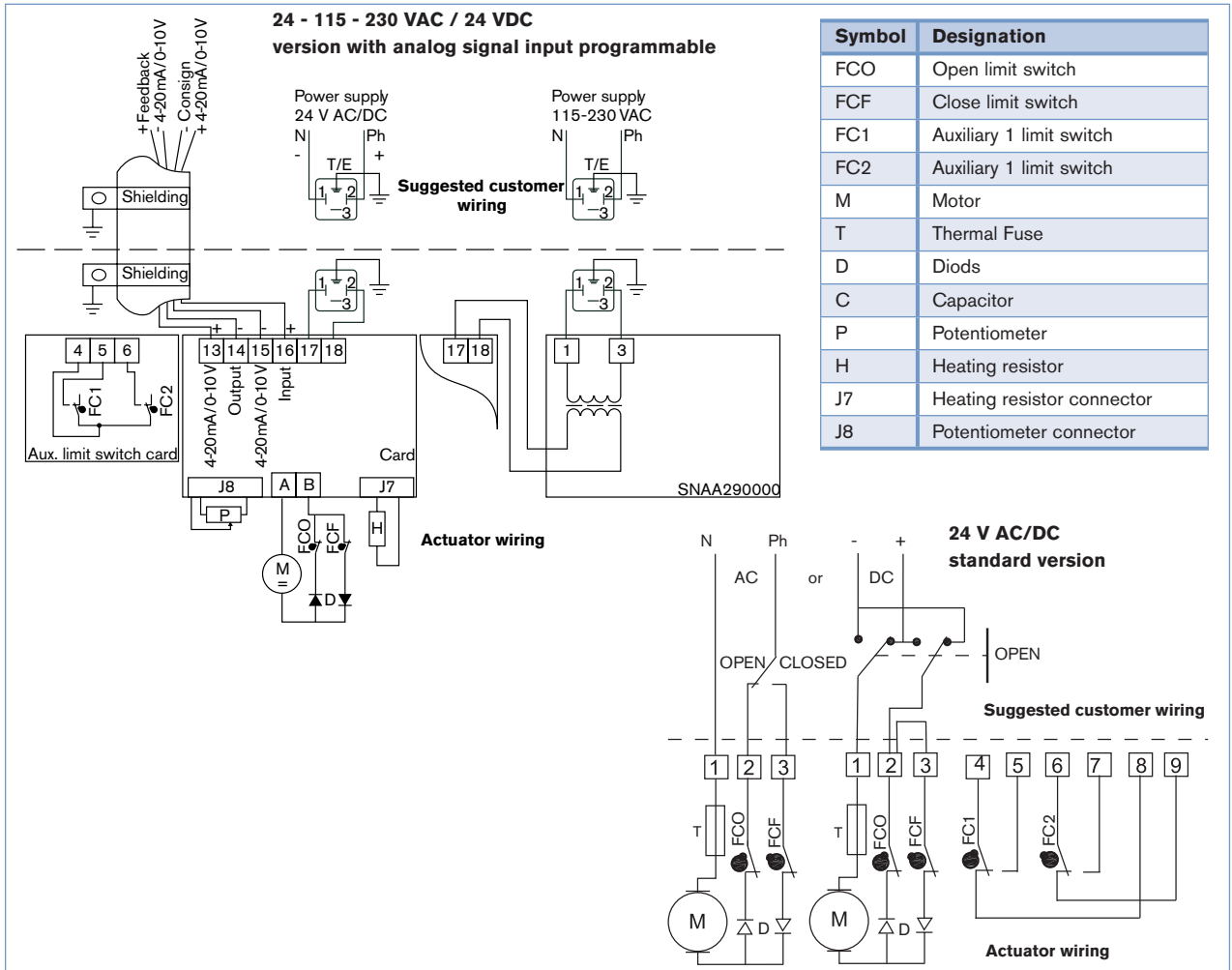
Electrical connections



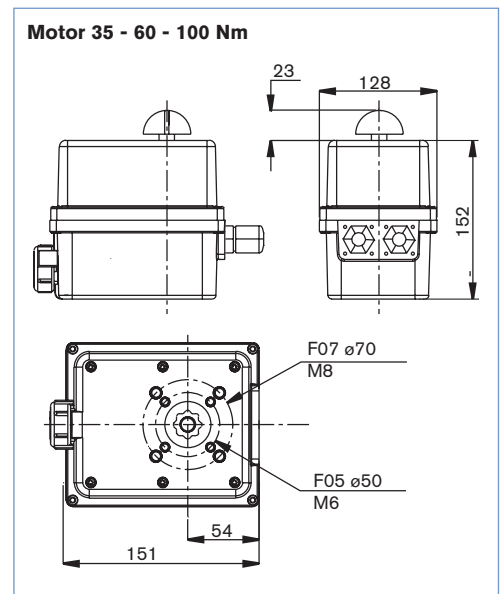
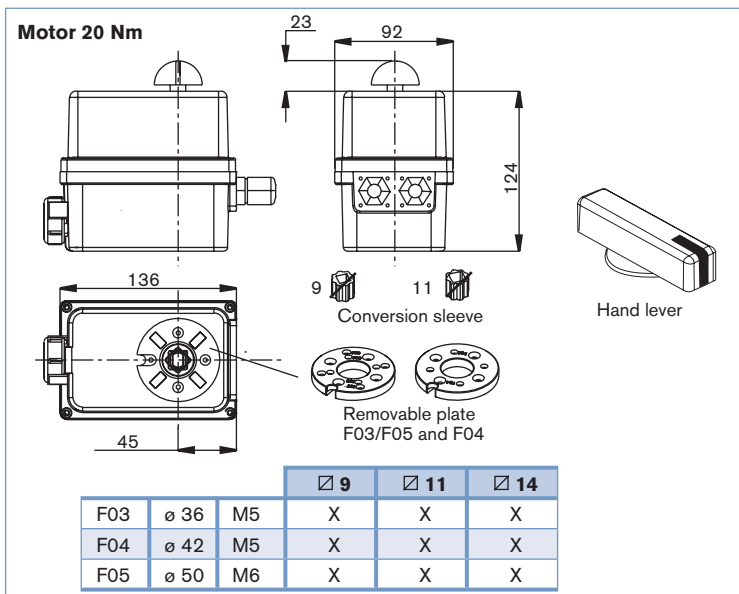
| Symbol | Designation |
|--------|--------------------------|
| FCO | Open limit switch |
| FCF | Close limit switch |
| FC1 | Auxiliary 1 limit switch |
| FC2 | Auxiliary 1 limit switch |
| M | Motor |
| T | Thermal Fuse |
| D | Diodes |
| C | Capacitor |
| P | Potentiometer |



Electrical connections (continued)



Dimensions [mm]



Ordering chart (other versions on request)

Standard version without analog signal input

| Drive stars [mm] | Conversion sleeve star [mm] | Fixation flange | Torque [Nm] | 90° travel [s] | Power [W] | Power supply* [V / Hz] | Item no. |
|------------------|-----------------------------|-----------------|-------------|----------------|-----------|------------------------|----------|
| 14 | -- | F05 (F03-F04) | 20 | 20 | 15 | 230 / 50 | 166 323 |
| | | | | | 15 | 115 / 60 | 173 234 |
| | | | | | 11 | 24 AC / DC | 166 325 |
| 22 | 22/14 | F05-F07 | 35 | 9 | 24 | 230 / 50-60 | 166 326 |
| | | | | | 24 | 115 / 50-60 | 166 327 |
| | | | | | 32 | 24 AC / DC | 166 328 |
| 22 | 22/14 | F05-F07 | 60 | 17 | 24 | 230 / 50-60 | 166 329 |
| | | | | | 24 | 115 / 50-60 | 166 330 |
| | | | | | 32 | 24 AC / DC | 166 331 |
| 22 | 22/17 | F05-F07 | 100 | 28 | 24 | 230 / 50-60 | 166 332 |
| | | | | | 24 | 115 / 50-60 | 166 333 |
| | | | | | 32 | 24 AC / DC | 166 334 |

* other power supply on request

Positioner version with 4-20 mA, 0-20 mA or 0-10 V analog signal input

| Drive stars [mm] | Conversion sleeve star [mm] | Fixation flange | Torque [Nm] | 90° travel [s] | Power [W] | Power supply* [V / Hz] | Item no. |
|------------------|-----------------------------|-----------------|-------------|----------------|-----------|------------------------|----------|
| 14 | -- | F05 (F03-F04) | 20 | 20 | 12 | 230 / 50-60 | 169 162 |
| | | | | | | 24 AC / DC | 169 164 |
| 22 | 22/14 | F05-F07 | 35 | 35 | 12 | 230 / 50-60 | 169 165 |
| | | | | | | 24 AC / DC | 169 167 |
| 22 | 22/14 | F05-F07 | 60 | 60 | 25 | 230 / 50-60 | 169 169 |
| | | | | | 12 | 24 AC / DC | 169 171 |
| 22 | 22/17 | F05-F07 | 100 | 100 | 25 | 230 / 50-60 | 169 173 |
| | | | | | 12 | 24 AC / DC | 169 175 |

* other power supply on request

Accessories

| Specifications | Item no. |
|--|----------|
| Fail safe security block 230 V AC for actuator 230 V / 50 Hz | 655 891 |
| Removable plate F04 for actuator F04 | 665 293 |
| Key adjustment of limit switches | 665 296 |
| 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/star 22/17 mm | 666 685 |
| Conversion sleeve square/square 17/14 mm | 665 290 |
| Conversion adapter external square 14/10 mm | 668 234 |

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

We reserve the right to make technical changes without notice.

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