

- > Industrial applications
- > Durable stepper motor
- > Wear-free position detection via Hall sensor
- > High power reserves for short-term peak load
- > International approvals



Technical features

Gearing:

Self-Locking

Mounting position:

Actuator vertical on top $\pm 60^\circ$

Torque:

Rated torque 120 Ncm

max. 300 Ncm (temporary)

Duration with rated torque:

90° swivel angle 5s

Ambient temperature:

-10 ... +40°C at max. 100% duty cycle of the drive

-10 ... +50°C at max. 25 % duty cycle of the drive; duty cycle 1 minute

Fluid temperature:

-10 ... +90°C at max. 100% duty cycle of the drive

Material:

Body:

Polybutylenterephthalat (PBT)

Cover:

Polycarbonat

Drive shaft:

1.4104

Drive shaft seal:

NBR

Cover seal:

CR

Electrical features

Rated voltage:

24 V $\pm 10\%$

Power supply residual ripple:

max. 1,2 Vss

Setpoint input:

0 – 10 Volt S1, S2: OFF-OFF

Input resistance: ca. 200 k Ω

0 – 20 mA S1, S2: ON-OFF

Input resistance: 500 Ω

4 – 20 mA S1, S2: ON-ON

Input resistance: 500 Ω

Position feedback output:

0 – 20 mA S2: OFF

max. load resistance 500 Ω

4 – 20 mA S2: ON

max. load resistance 500 Ω

Ripple of the setpoint input signal:

max. 40 mVpp

at voltage signal

max. 0,08 mApp

with current signal

Electromagnetic compatibility

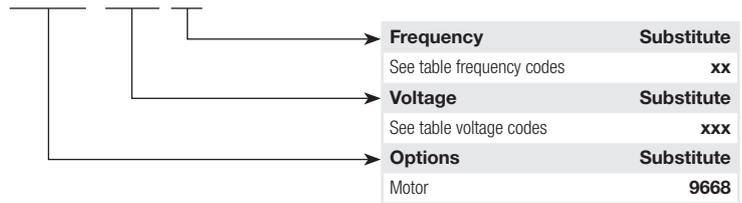
EN 61000-6-2 : 2005 Immunity

EN 61000-6-3 : 2007 and amend-

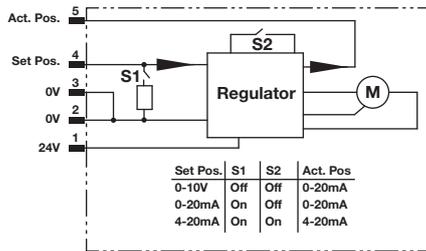
ment A1 : 2011 Emission

Option selector

XXXXXXX.*****.*****



Wiring diagram



Drive

Voltage and Frequency Motor 9668				
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption
024	00	24 V DC	-	<ul style="list-style-type: none"> Motor stopped: 1,0 W without analog output; max. 1,5 W with analog output; at rated load 120 Ncm: 3,3 W without analog output; max. 3,8 W with analog output; in high-load operation 300 Ncm: max. 9,1 W with analog output

Installation instructions

Don't operate the valve actuator in the immediate vicinity of strong sources of interference such as magnetic coils, transformers, frequency converters. Cable to the motor drive may not be laid together with cables carrying large currents. An improperly performed electrical wiring may destroy the built-in electronics.

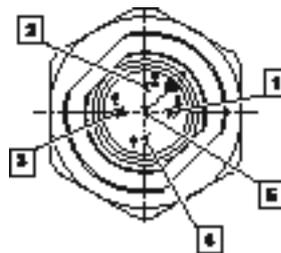
Accessories

Cable socket with metal locking mechanism, Screw terminal, Enclosure and contact bodies made of PA

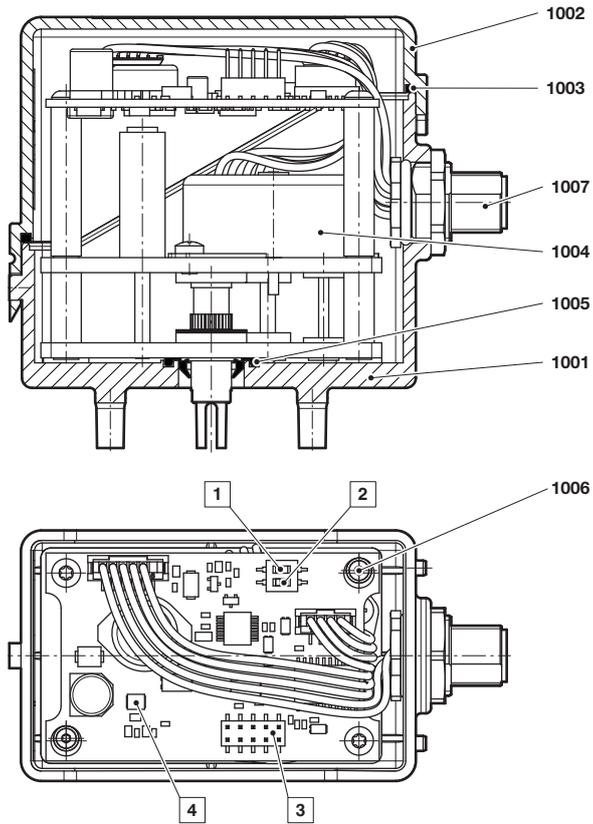


Connection cross-section	Cable feed-through	Plug connection	Model
0,75 mm ²	6...8 mm	M12	1704222

Terminal assignment M12 plug



Pin 1	Power supply 24 Volt
Pin 2	Power supply 0 Volt
Pin 3	Reference potential for set point input and position feedback output
Pin 4	Set point input 0 – 10 V / 0 (4) – 20 mA
Pin 5	Position feedback output 0 (4) – 20 mA

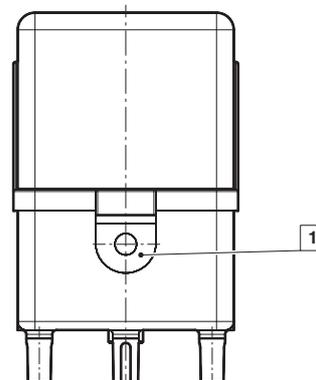
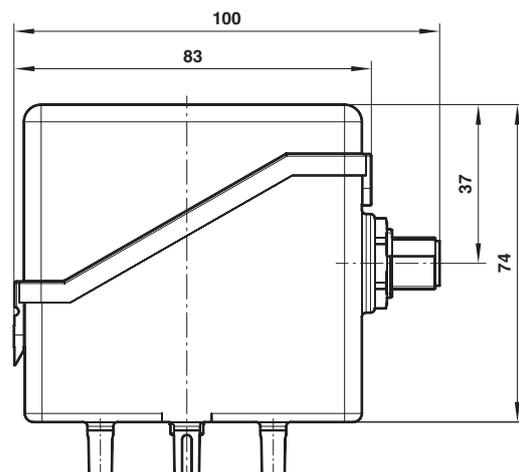
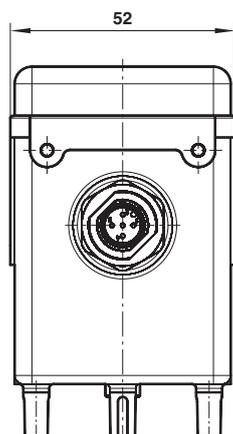
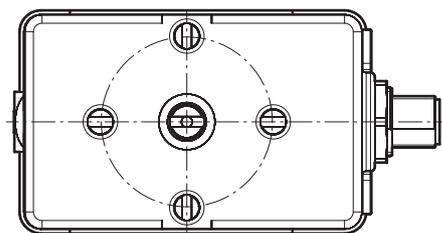
Section View


No.	Description
1001	Drive body
1002	Drive cover
1003	O-ring
1004	Stepping motor gear
1005	Sealing
1006	PT-screw
1007	M12 plug

Delivery status: OFF	
1	S1 = On: 0/4-20mA Off: 0-10V
2	S2 = On: 4-20mA Off: 0-20mA
3	Programming and diagnostic interfaces
4	Alarm LED

Dimensions

Dimensions in mm
Projection/First angle



Note

If the load torque exceeds a peak value of 300 Ncm even for a short period, the electronics will switch off the drive and thus protect it from overloading. This error status is signalled by the illumination of a red ALARM LED on the circuit board. A brief interruption to the supply voltage confirms the error.

1 Augmented deformation (max. 25°) of the cover flap to open the drive can lead to breakage.