

Electric multiturn actuators type EAMT



Product description

The EAMT electric multiturn actuator opens and closes the diaphragm valve fully automatic. Therefore with the EAMT actuator, volume flows are automatically controlled, closed and regulated via a diaphragm valve.

Applications

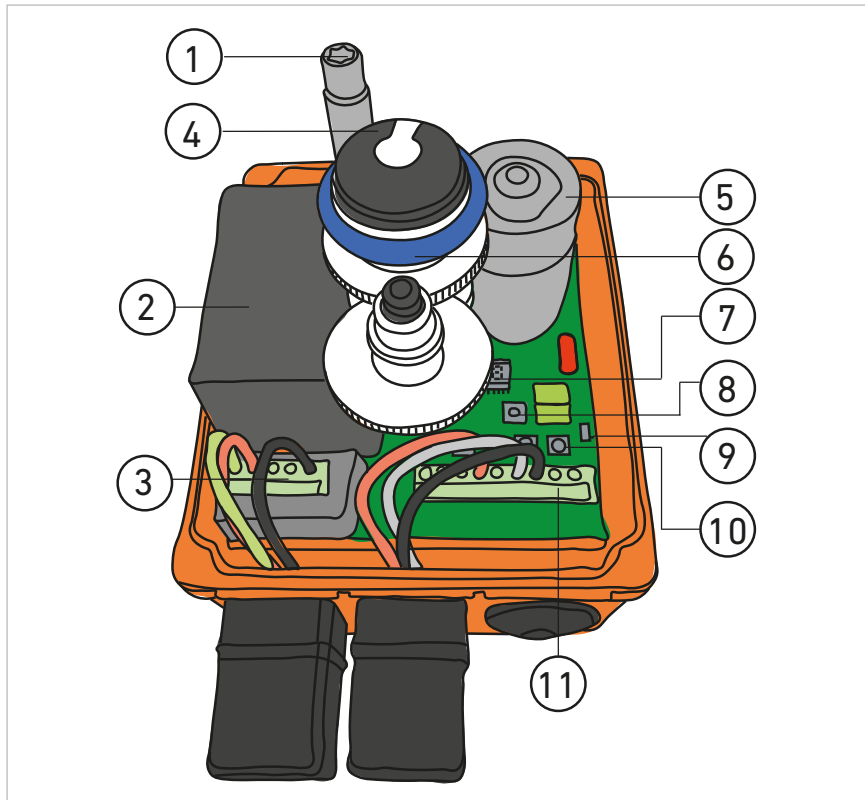
- Chemical process industry
- Microelectronics
- Water treatment
- Cooling
- Control applications

Benefits/features

- Multiturn actuator
- Adjustable integrated heating
- 7-segment error display
- Position feedback (open/close)
- Fully automatic end position teach-in
- Integrated emergency manual override
- Retrofit set includes: Conversion kit with drive, half shells and screws

Technical data

The standard version of the EAMT electric actuator consists of the following elements:



- ① Shaft for emergency manual override
- ② Power supply with cover
- ③ Control power for OPEN/CLOSED position
- ④ Optical position indicator
- ⑤ DC motor
- ⑥ Light tube for LED status feedback
- ⑦ 7-segment error display
- ⑧ Heating element (temperature threshold regulator)
- ⑨ Switch for diaphragm material
- ⑩ Buttons for end position adjustment
- ⑪ Terminal block to connect position feedback

Specification EAMT

Power input max.	65 VA
Current (calculated)	0.55A at 100V 0.24A at 230V 2.5A at 24V
Power Supply	AC: 100 – 230 V, 50/60 Hz AC/DC: 24 V, 50/60 Hz
Supply voltage tolerance	-10%...+15%
Mechanical interface	F05* (WS 11/14)
Duty cycle	50 %
Cycle time open/close	DN25: ≈ 85 sec. DN50: ≈ 130 sec.
Tested cycles (at 20 °C and Mdn)	5000
Weight	2.2 kg / 4.85 lbs
Actuating angle	Multiturn
Protection class	IP 65 (IP67) ¹⁾ per EN 60529 Designed for wet & dry locations (NEC), designed for indoor use (UV light may cause discoloration)
Pollution degree	Operation: Pollution Level 3 Commissioning (open housing cover): Only in controlled environments of pollution level 2
Overload protection	Current/time dependent, resetting

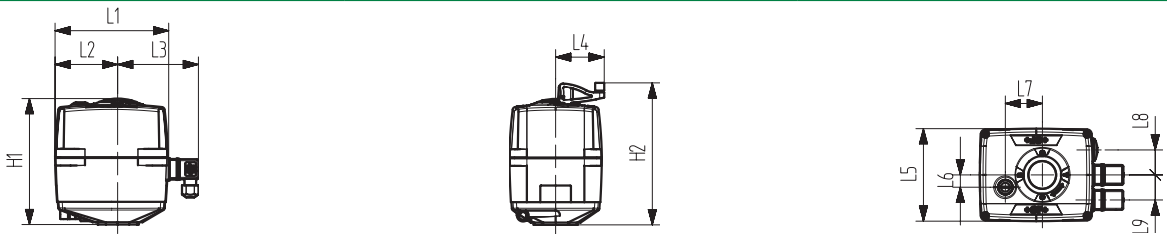
Specification EAMT

Overvoltage category	II
Fuse	Internal: SMD fuse 2 A, not replaceable. Req. external breakers on all live wires: Rated Current: max. 16A Trip Curve: C, Standards Compliance: UL489, CSA C22.2 No. 5.1, IEC 60947-2
Ambient temp.	-10 °C to +50 °C (14°F to 122°F)
Max. installation altitude	2000m above sea level (AMSL)
Feedback relays	Mono-stable change-over contacts Either max 6A @ 230VAC or 24VDC, no mixed voltage potentials allowed!
Recommended connecting cable	AWG 18-16, UL/cUL AWM 4486 min. 125°C 1000V , outside diameter 8-13mm (cable glands), 4-9mm (DIN-connectors)
Allowable humidity	Max. 90 % relative humidity, non-condensing
Housing material	Housing: PP-GF (POLYFLAM, RPP 4225 CS1) Inspection glass: Udel P-1700 (CL2611) Assembly shells and intermediate elements: PPGF 30

¹⁾ When used with cable glands and vertical installation.

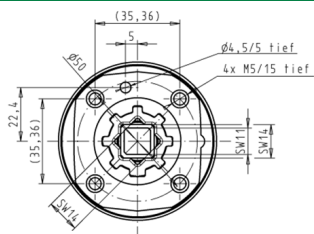
Dimensions

Actuator dimensions



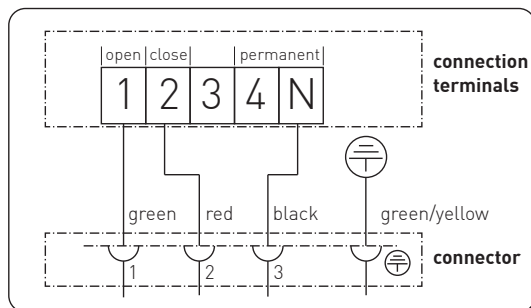
	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	L7 (mm)	L8 (mm)	L9 (mm)	H1 (mm)	H2 (mm)
EAMT	150	83	108	64	122	16	49	33	33	167	189

Interface dimensions

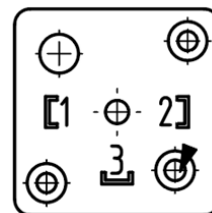
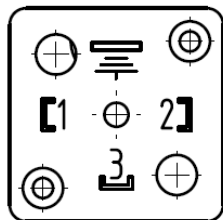
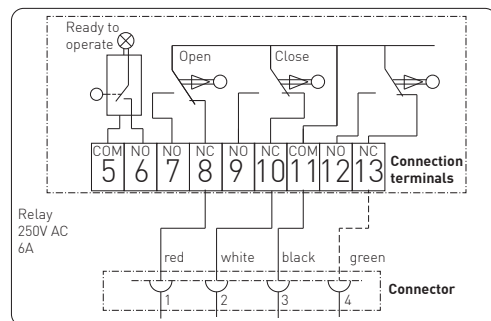


Connection diagram

Connector 1: supply and control



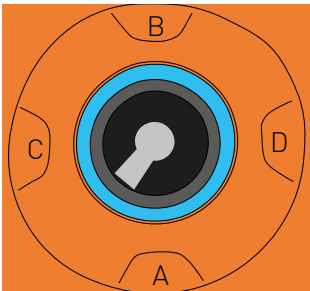
Connector 2: position feedback



LED status feedback

The LED status feedback shows the valve positions and the current status of the actuator.

The following table shows the colour assignment of the LED:

	Color	Meaning
	Red	OPEN position*
	Green	CLOSE position*
	Flashes white	Actuator moves
	Flashes yellow	Fault
	Green/yellow	Setpoint value reached (at positioner)
	Turquoise	Adjustment run / operation of color in-version
	Blue/red	Teach OPEN position
	Blue/green	Teach CLOSE position

*Factory color settings.

Accessories

- Fail-safe return unit with integrated battery pack
- External fail-safe return unit
- Positioner 4-20 mA
- EA Demo Box

i For further information on accessories, refer to the online product catalog at www.gfps.com

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.

09/2020-A

© Georg Fischer Piping Systems Ltd, 8201 Schaffhausen/Switzerland
 Tel. +41 52 631 11 11 • www.gfps.com • E-Mail: info.ps@georgfischer.com