GEMÜ 9468

Motorized quarter turn actuator

Features

- Increased torque in the end positions with consistent motor load/rotational speed through threaded spindle kinematics (closing curve matched to valves)
- Low weight
- Robust and low-wear because of the mechanically stable design

Description

GEMÜ 9468 is a motorized quarter turn actuator. A manual override and an optical position indicator are integrated as standard. The torque in the end positions is increased. This enables a closing curve matched to the valves.

Technical specifications

- Torques: 70 to 200 Nm
- Ambient temperature: -10 to 60 °C
- Supply voltages: 24 V DC

further information
webcode: GW-9468

Product description

GEMÜ 2070

Item	Name	Materials
1	Housing cover	ABS
2	CONEXO RFID label (available upon request)	Polyester (PET)
3	Optical position indicator	Natural PP-R
4	Housing base	ABS
5	Manual override	
6	Connection for manual override	

GEMÜ 4100, 4200

Item	Name	Materials
1	Housing cover	Aluminium
2	CONEXO RFID label (available upon request)	Polyester (PET)
3	Housing base	Aluminium
4	Optical position indicator	Natural PP-R
5	Manual override	

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Motorized quarter turn actuator, optical position indicator, manual override	9468

2 Fieldbus	Code
Without	000

3 Actuator use	Code
Accessory	Z

4 Actuator connection	Code
Flange type DIN EN ISO 5211, F07	F07
Flange type DIN EN ISO 5211, F10	F10

5 Location spigot	Code
Without location spigot	N
With location spigot	Y

6 Coupling and wrench size	Code
Star, WAF = 11 mm	S11
Star, WAF = 14 mm	S14
Star, WAF = 17 mm	S17
Star, WAF = 22 mm	S22

7 Voltage/Frequency	Code
24 V DC	C1

8 Control module	Code
On/Off actuator with relay, not reversible	00
On/Off actuator with 2 additional, potential-free limit switches, with relay, not reversible	0E
On/Off actuator with potentiometer output, with relay, not reversible	0P

9 Actuator version	Code
Torque 70 Nm, operating time 15 s, actuator size 2, supply voltage C1, C4, G4, L4	2070
Torque 100 Nm, operating time 20 s, actuator size 4, supply voltage C1	4100
Torque 200 Nm, operating time 16 s, actuator size 4, supply voltage C1	4200

10 Type of design	Code
1 Hirschmann connector N6R	6598

11 CONEXO	Code
without	
Integrated RFID chip for electronic identification and traceability	C

Order example

Order option	Code	Description
1 Type	9468	Motorized quarter turn actuator, optical position indicator, manual override
2 Fieldbus	000	Without
3 Actuator use	Z	Accessory
4 Actuator connection	F07	Flange type DIN EN ISO 5211, F07
5 Location spigot	Y	With location spigot
6 Coupling and wrench size	S17	Star, WAF = 17 mm
7 Voltage/Frequency	C1	24 V DC
8 Control module	00	On/Off actuator with relay, not reversible
9 Actuator version	4100	Drehmoment 100 Nm, Stellzeit 20 s, Antriebsgröße 4, Anschluss-Spannung C1, C4, G4, L4
10 CONEXO		without

Technical data

Temperature

Ambient temperature:	-10 to 60 °C
Storage temperature:	0 to 40 °C

Product compliance

Machinery Directive:	2006/42/EC
EMC Directive:	2014/30/EU
Low Voltage Directive:	2014/35/EU

Electrical data

Duty cycle:	Continuous duty
Electrical protection:	Internal for functional module 0x Actuator version 2070: MT 6.3 A Actuator version 4100, 4200: MT 10.0 A
Output signals (option):	Potential-free limit switches (change-over contact 250 V AC/6 A) Actual value potentiometer: 3 kΩ (± 20 %)
Input signals:	24 V DC
Electrical protection class:	I (DIN EN 61140)

Electrical connection

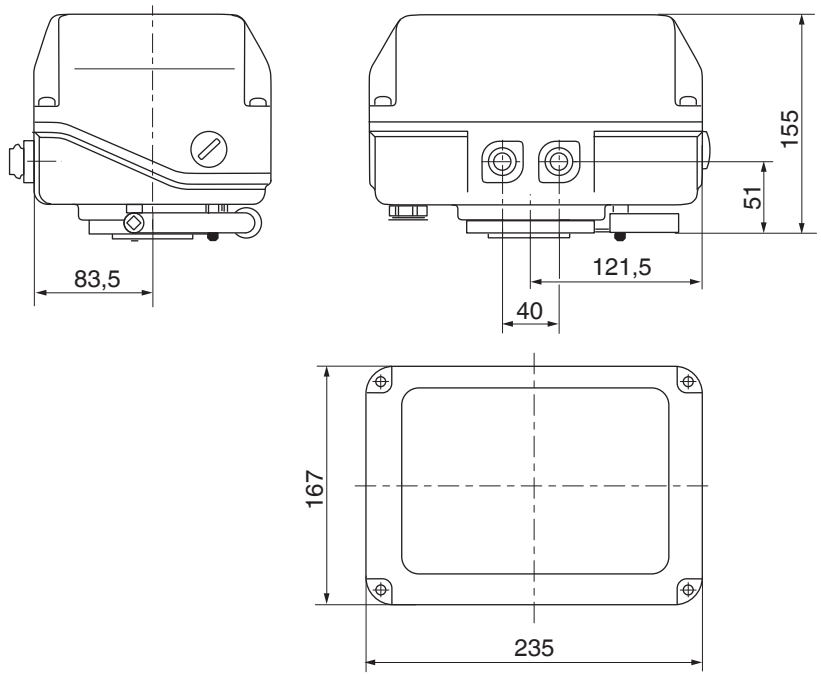
Electrical connection type:	Binder connector series 692/693
Cable diameter:	6.0 to 8.0 mm
Recommended motor protection:	The motor protection must be provided on-site. GEMÜ recommends the following motor protection: Motor protection switch type: Siemens 3RV 1011-1FA10 Set current: 4.0 A
Rated voltage:	24 V DC (+10/-15 %)
Power consumption:	Actuator version 2070: 63 W Actuator version 4100: 105W Actuator version 4200: 90 W
Current consumption:	Actuator version 2070: 2.6 A Actuator version 4100: 4.4 A Actuator version 4200: 3.6 A
Max. current at start up:	Actuator version 2070: 14.0 A Actuator version 4100: 35.0 A Actuator version 4200: 35.0 A

Mechanical data

Installation position:	Optional
Protection class:	IP 65 acc. to EN 60529
Weight:	Actuator version 2070: 4.6 kg Actuator version 4100, 4200: 11.6 kg
Manual override:	via enclosed hand crank
Operating time:	Actuator version 2070: approx. 15 s Actuator version 4100: approx. 20 s Actuator version 4200: approx. 16 s
Torques:	Actuator version 2070: 70 Nm Actuator version 4100: 100 Nm Actuator version 4200: 200 Nm
Nominal travel:	90°
Max. travel:	93°
Setting range:	0 to 20° (limit switch Min.) 70 to 93° (limit switch Max.)

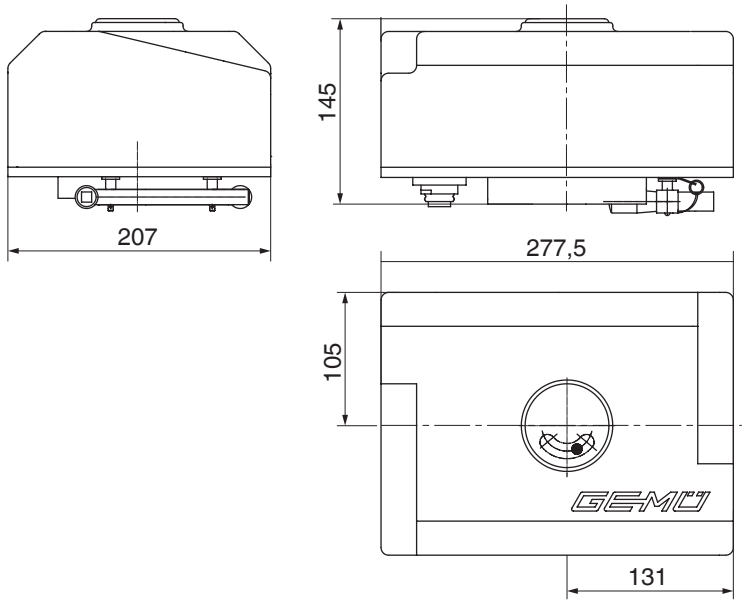
Dimensions

Actuator version 2070



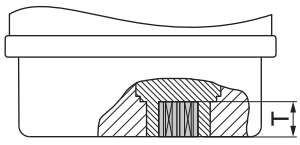
Dimensions in mm

Actuator version 4100, 4200

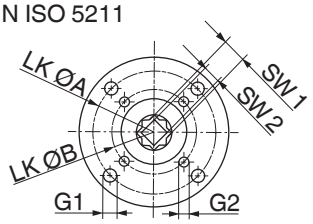


Dimensions in mm

Connection dimensions



DIN ISO 5211



Actuator version code	Connection size code	With flange type	LK øA	LK øB	G1	G2	SW1	SW2*	SW3*	T
2070	**F07**	F05 / F07	70	50	M8	M6	17	14	11	19.5
4100	**F10**	F07 / F10	102	70	M10	M8	17	14	-	23.0
4200	**F10**	F07 / F10	102	70	M10	M8	22	17	-	23.0

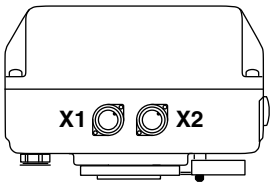
Dimensions in mm

Electrical connection

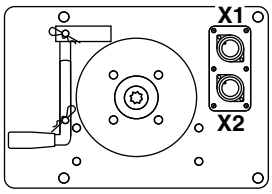
Connection/wiring diagram

On/Off actuator with relay (code 00), 24 V DC (code C1)

Position of the connectors

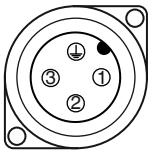


Actuator version 2070



Actuator version 4100, 4200

Electrical connection

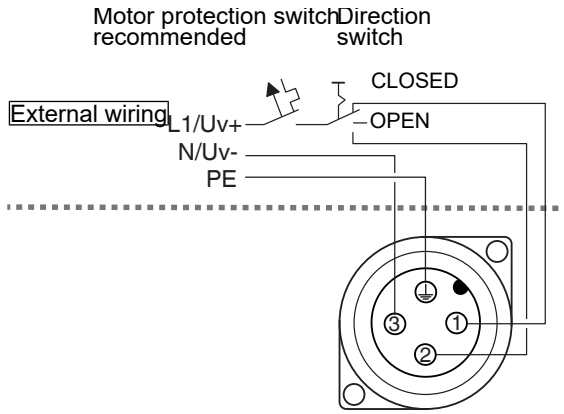


Plug assignment X1

Pin	Description
1	L1 / Uv+, direction of travel CLOSED
2	L1 / Uv+, direction of travel OPEN
3	N / Uv-, neutral conductor
⏚	PE, protective earth conductor

N / L- signals in the unit are separated.
The potential must be assigned by the user.
When the OPEN and CLOSED switches are operated simultaneously the actuator "CLOSES".

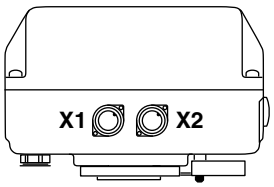
Connection diagram



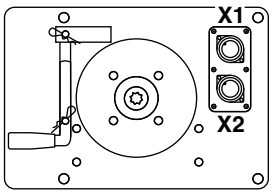
Connection assignment X1

On/Off actuator with 2 additional potential-free limit switches, with relay (code 0E), 24 V DC (code C1)

Position of the connectors

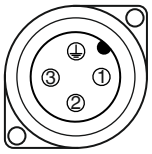


Actuator version 2070

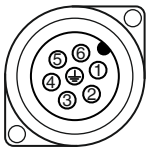


Actuator version 4100, 4200

Electrical connection



Plug assignment X1



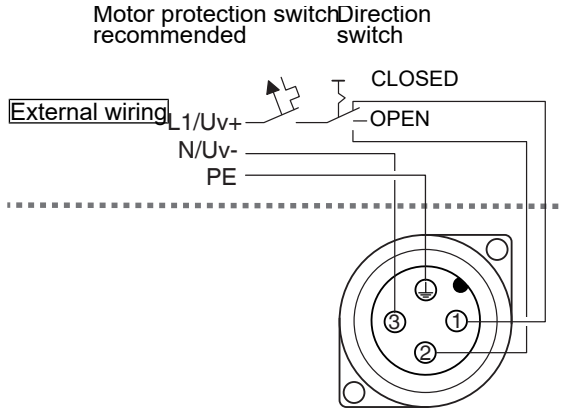
Plug assignment X2

Pin	Description
1	L1 / Uv+, direction of travel CLOSED
2	L1 / Uv+, direction of travel OPEN
3	N / Uv-, neutral conductor
⏚	PE, protective earth conductor

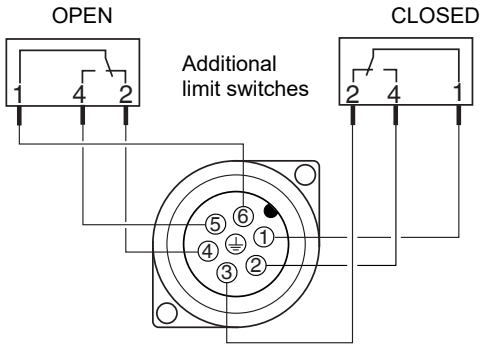
Pin	Description
1	Change-over contact limit switch CLOSED
2	Make contact limit switch CLOSED
3	Break contact limit switch CLOSED
4	Break contact limit switch OPEN
5	Make contact limit switch OPEN
6	Change-over contact limit switch OPEN
⏚	PE, protective earth conductor

N / L- signals in the unit are separated.
The potential must be assigned by the user.
When the OPEN and CLOSED switches are operated simultaneously the actuator "CLOSES".

Connection diagram



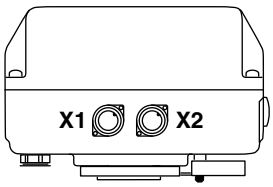
Connection assignment X1



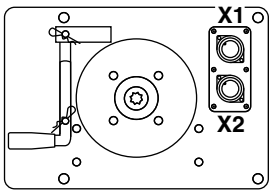
Connection assignment X2

On/Off actuator with potentiometer output, with relay (code 0P), 24 V DC (code C1)

Position of the connectors

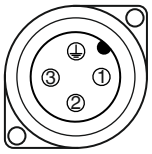


Actuator version 2070

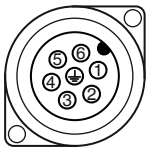


Actuator version 4100, 4200

Electrical connection



Plug assignment X1



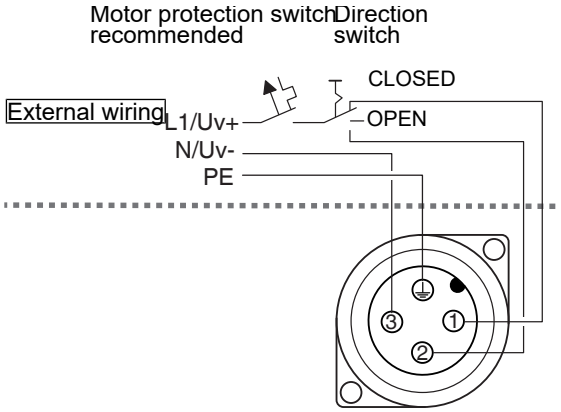
Plug assignment X2

Pin	Description
1	L1 / Uv+, direction of travel CLOSED
2	L1 / Uv+, direction of travel OPEN
3	N / Uv-, neutral conductor
⏚	PE, protective earth conductor

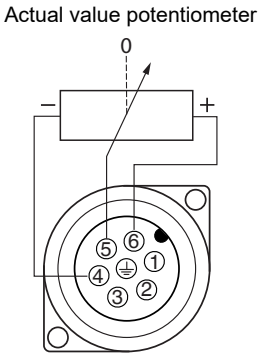
Pin	Description
1	n. c.
2	n. c.
3	n. c.
4	Us-, actual value potentiometer signal voltage minus
5	Us ⌐, actual value potentiometer signal output
6	Us+, actual value potentiometer signal voltage plus
⏚	PE, protective earth conductor

N / L- signals in the unit are separated.
The potential must be assigned by the user.
When the OPEN and CLOSED switches are operated simultaneously the actuator "CLOSES".

Connection diagram



Connection assignment X1



Connection assignment X2

Subject to alteration | 12.2019 | 88096174

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0)7940 123-0 · info@gemue.de
www.gemu-group.com