

Electric Actuator

ACTELEC

Quarter-turn Actuator with Multi-turn Actuator
AUMA Generation .2

ACTELEC 31:

Force Transmission via Rod-and-crank Kinematics

ACTELEC 200 to 1600:

Force Transmission via Toggle-lever Kinematics

Type Series Booklet



Legal information/Copyright

Type Series Booklet ACTELEC

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Electric Actuators

Electric Quarter-turn Actuators by AUMA

ACTELEC 31 to 1600



Main applications

- Water
- Waste water
- Energy
- Industry

Operating data

Operating properties

Characteristic	Value
ACTELEC	ACTELEC 31
	ACTELEC 200
	ACTELEC 400
	ACTELEC 500
	ACTELEC 800
	ACTELEC 950
	ACTELEC 1600
Max. permissible temperature	-40 °C to +70 °C
Enclosure	IP67 / IP68
Motor protection	Thermal class F
Power supply	230 V or 400 V, 3~, 50 Hz

Design details

- Electric actuator types ACTELEC 31 and 200 to 1600 with multi-turn actuators cover torques of up to 16,000 Nm.
- Actuator/valve interface to ISO 5211
- They are suitable for all fields of application and all types of quarter-turn valves (centred-disc or offset-disc butterfly valves, ball valves, etc.).
- The actuators are equipped with removable adapters allowing them to be mounted on valves with different types of stem end (square or flat ends).

- The valves meet the requirements of the REACH 1907/2006 regulation. None of the substances listed in the candidate list and in Annex XIV of the regulation is present in a concentration above 0.1 % (w/w) (Article 33/REACH).
- Mounts on the valve either directly or via installation components.
- This electric actuator type features irreversible gear kinematics operated by a multi-turn actuator. It is complemented by direct-mount quarter-turn actuators with irreversible gearboxes.
- Coating:
 - Gearbox for ACTELEC 31: polyurethane coating, thickness 80 µm, colour: RAL 7016, anthracite grey (KSB code P28)
 - Gearbox for ACTELEC 200 to 1600: cathodic coating, thickness 30 µm + polyurethane coating, thickness 80 µm, colour: RAL 7016, anthracite grey (KSB code P28)
 - Electric multi-turn actuator: two-component powder coating, thickness 140 µm, colour: RAL 7037, silver grey (Auma corrosion protection).

Variants

- Different power supply on request: three-phase or single-phase alternating current or direct current
- Intermittent operation S4 - 25 % (throttling) (SAR 07.6, SAR 10.2)
- Additional electrical switches for remote position indication (torque switch, limit position and/or intermediate position)
- Actual-position feedback via 1000-ohm potentiometer or 4-20 mA signal
- Integrated control system for local and remote control AUMA MATIC (SA 07.6 / AC 01.2; SAR 10.2 / AC 01.2)
- Integrated control system for local and remote control, and integrated positioner AUMATIC (SA 07.6 / AC 01.2; SAR 10.2 / AC 01.2)
- Large choice of actuating times

Technical data

Valve interface

Size	Nominal output torque (Nm)	Interface standardised to ISO*	Max. permissible stem dimensions			
			Height	Square end	Flat end	Key
31	900	-	40	36	22	Contact us.
200	2000	F16	80	60	Contact us.	
400	4000	F16	80	60		
500	5000	F16 - F25	95	70		
800	8000	F16 - F25	95	70		
950	9500	F25 - F30	110	90		
1600	16000	F25 - F30	110	90		

* Direct mounting in the case of identical interfaces

Mounting by means of intermediate flange in the case of different interface sizes and footprints

Technical data of type series

ACTELEC 31 to 1600 electric actuators feature an irreversible gearbox operated by an electrical multi-turn actuator with ISO 5211 interface. The interface between the electric actuator and the valve complies with the ISO 5211 standard.

Size	Gearbox	Output torque (Nm)	Input torque (Nm)	Number of turns of actuating stem	Electric multi-turn actuator	Interface of multi-turn actuator
ACTELEC 31	M 31	900	60	32	SA/SAR 07.6	ISO 5211 F10 Type B3
ACTELEC 200	MR 400	2000	50	47	SA-SAR 07.6	
ACTELEC 400	MR 400	4000	100	47	SA/SAR 10.2	
ACTELEC 500	MR 800	5000	60	135	SA/SAR 07.6	
ACTELEC 800	MR 800	8000	100	135	SA/SAR 10.2	
ACTELEC 950	MR 1600	9500	60	285	SA/SAR 07.6	
ACTELEC 1600	MR 1600	16000	100	285	SA/SAR 10.2	

Actuating time (in seconds)

Size	Output speed of multi-turn actuator (rpm) at 50 Hz*									
	8	11	16	22	32	45	63	90	125	180
	SA / SAR					SA only				
ACTELEC 31	240	172	120	88	60	43	30	22	-	-
ACTELEC 200	360	255	180	130	90	62	45	31	-	-
ACTELEC 400	360	255	180	130	90	62	45	31	-	-
ACTELEC 500	-	-	505	365	252	180	128	90	64	-
ACTELEC 800	-	-	505	365	252	180	128	90	64	45
ACTELEC 950	-	-	-	-	525	375	270	190	135	-
ACTELEC 1600	-	-	-	-	525	375	270	190	135	95

*For 60 Hz operation, the output speeds are multiplied by a factor of 1.2 and the actuating times by a factor of 0.83. Other actuating times are possible using different output speeds and/or a special gearbox. Contact us.

Electrical data (on/off duty)

Size	Output speed of multi-turn actuator	Speed of multi-turn actuator	Nominal power	Nominal current	Starting current	Amperage at max. torque	Cos φ	Current setting of thermal relay	Power class	
	rpm	rpm	kW	A	A	A		A	Contactor	Thyristor
On/off duty S2 - 15 min - 400 V 3~ - 50 Hz										
SA 07.6	8	1400	0,06	0,6	1,6	0,7	0,38	0,7	A1	B1
	11	1400	0,04	0,6	1,6	0,7	0,38	0,7	A1	B1
	16	2800	0,06	0,7	3,0	0,9	0,52	0,9	A1	B1
	22	2800	0,06	0,7	3,0	1,0	0,52	1,0	A1	B1
	32	1400	0,10	1,6	4,6	1,9	0,42	1,9	A1	B1
	45	1400	0,10	1,6	4,6	2,0	0,42	2,0	A1	B1
	63	2800	0,20	1,6	9,0	2,3	0,53	2,3	A1	B1
	90	2800	0,20	1,6	9,0	2,5	0,53	2,5	A1	B1
	125	2800	0,30	1,7	9,0	3,0	0,62	3,0	A1	B1
180	2800	0,30	1,7	9,0	3,2	0,62	3,2	A1	B1	
SA 10.2	11	1400	0,12	1,0	3,0	1,2	0,40	1,2	A1	B1
	16	2800	0,25	1,3	4,5	1,5	0,52	1,5	A1	B1
	22	2800	0,25	1,3	4,5	1,8	0,52	1,8	A1	B1
	32	1400	0,40	2,5	8,5	2,6	0,42	2,6	A1	B1
	45	1400	0,40	2,5	8,5	3,0	0,42	3,0	A1	B1
	63	2800	0,70	3,0	16,0	3,6	0,54	3,6	A1	B1
	90	2800	0,70	3,0	16,0	4,0	0,54	4,0	A1	B1
	125	2800	1,00	3,5	16,0	5,2	0,64	5,2	A1	B1
	180	2800	1,00	3,5	16,0	5,5	0,64	5,0	A1	B1
On/off duty S2 - 15 min - 230 V 3~ - 50 Hz										
SA 07.6	8	1400	0,06	1,0	2,8	1,1	0,38	1,1	A1	B1
	11	1400	0,06	1,0	2,8	1,2	0,38	1,2	A1	B1
	16	2800	0,12	1,2	5,2	1,6	0,52	1,6	A1	B1
	22	2800	0,12	1,2	5,2	1,7	0,52	1,7	A1	B1
	32	1400	0,20	2,8	8,0	3,3	0,42	3,3	A1	B1
	45	1400	0,20	2,8	8,0	3,5	0,42	3,5	A1	B1
	63	2800	0,40	2,8	16,0	4,0	0,53	4,0	A1	B1
	90	2800	0,40	2,8	16,0	4,3	0,53	0,43	A1	B1
	125	2800	0,50	3,0	16,0	5,2	0,62	5,2	A1	B1
180	2800	0,50	3,0	16,0	5,6	0,62	5,6	A1	B1	
SA 10.2	11	1400	0,12	1,7	5,2	2,1	0,40	2,1	A1	B1
	16	2800	0,25	2,3	7,8	2,6	0,52	2,6	A1	B1
	22	2800	0,25	2,3	7,8	3,1	0,52	3,1	A1	B1
	32	14000	0,40	4,3	15,0	4,5	0,42	4,5	A1	B1
	45	1400	0,40	4,3	15,0	5,2	0,42	5,2	A1	B1
	63	2800	0,70	5,2	28,0	6,3	0,54	6,3	A1	B1
	90	2800	0,70	5,2	28,0	7,0	0,54	7,0	A1	B1
	125	2800	1,00	6,1	28,0	9,0	0,64	9,0	A1	B1
	180	2800	1,00	6,1	28,0	9,6	0,64	9,6	A1	B1

Electrical data (intermittent operation)

Size	Output speed of multi-turn actuator	Speed of multi-turn actuator	Nominal power	Nominal current	Starting current	Amperage at max. torque	Cos φ	Current setting of thermal relay	Power class	
	rpm	rpm	kW	A	A	A		A	Contactor	Thyristor
Intermittent operation S4 - 25 % (throttling) - 400 V 3~ - 50 Hz										
SAR 07.6	8	1400	0,06	0,6	1,6	0,7	0,38	0,7	A1	B1
	11	1400	0,06	0,6	1,6	0,7	0,38	0,7	A1	B1
	16	2800	0,12	0,7	3,0	0,9	0,52	0,9	A1	B1
	22	2800	0,12	0,7	3,0	1,0	0,52	1,0	A1	B1
	32	1400	0,20	1,6	4,6	1,9	0,42	1,9	A1	B1
SAR 10.2	45	1400	0,20	1,6	4,6	2,0	0,42	2,0	A1	B1
	8	1400	0,12	1,0	1,0	1,1	0,40	1,1	A1	B1
	11	2800	0,12	1,0	3,0	1,2	0,40	1,2	A1	B1
	16	2800	0,25	1,3	4,5	1,5	0,52	1,5	A1	B1
	22	2800	0,25	1,3	4,5	1,8	0,52	1,8	A1	B1
	32	1400	0,40	2,5	8,5	2,6	0,42	2,6	A1	B1
	45	1400	0,40	2,5	8,5	3,0	0,42	3,0	A1	B1
Intermittent operation S4 - 25 % (throttling) - 230 V 3~ - 50 Hz										
SAR 07.6	8	1400	0,06	1,0	2,8	1,1	0,38	1,1	A1	B1
	11	1400	0,06	1,0	2,8	1,2	0,38	1,2	A1	B1
	16	2800	0,12	1,2	5,2	1,6	0,52	1,6	A1	B1
	22	2800	0,12	1,2	5,2	1,7	0,52	1,7	A1	B1
	32	1400	0,20	2,8	8,0	3,3	0,42	3,3	A1	B1
SAR 10.2	45	1400	0,20	2,8	8,0	3,5	0,42	3,5	A1	B1
	8	1400	0,12	1,7	5,2	1,9	0,40	1,9	A1	B1
	11	1400	0,12	1,7	5,2	2,1	0,40	2,1	A1	B1
	16	2800	0,25	2,3	7,8	2,6	0,52	2,6	A1	B1
	22	2800	0,25	2,3	7,8	3,1	0,52	3,1	A1	B1
	32	1400	0,40	4,3	15,0	4,5	0,42	4,5	A1	B1
	45	1400	0,40	4,3	15,0	5,2	0,42	5,2	A1	B1

Further information

The values indicated are for orientation only. Deviations may occur as a result of manufacturing tolerances.

The nominal voltage tolerance is ± 10 %. If the voltage drops below this tolerance, the nominal torque will be lower.

Temperature switches integrated in the motor winding protect the motor from overheating. If multi-turn actuators without integrated control systems (AUMA MATIC or AUMATIC) are used, the temperature switches must be connected to the external control circuit (see circuit diagram).

Failure to connect the temperature switches will result in forfeiture of the motor warranty.

Data of temperature switch

	AC	DC
250 V, 50 - 60 Hz		60 V
cos φ = 1	2.5 A	42 V
cos φ = 0.6	1.6 A	24 V
		1.0 A
		1.2 A
		1.5 A

We recommend specifying the relays as a function of their nominal power / of the multi-turn actuator's power in compliance with the AUMA power class.

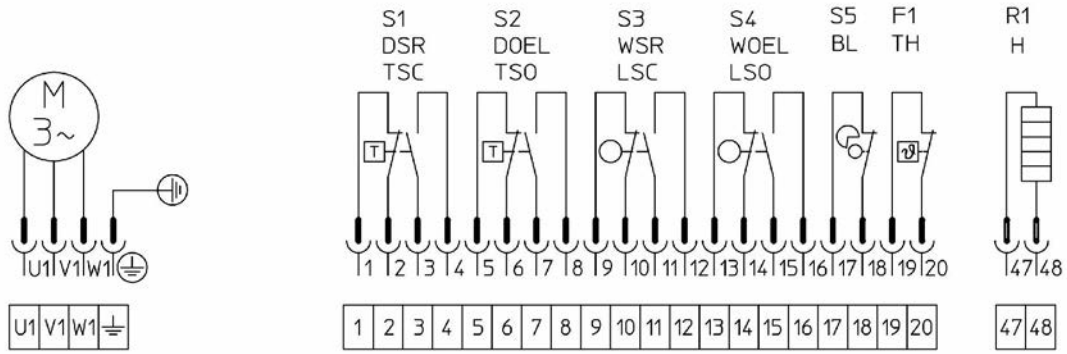
Power class	Nominal power switch to IEC standard, category AC-3 for	Motor power switch to UL / CSA standard for	
	400 V AC	480 V AC	600 V AC
A1	4.0 kW	5.0 hp	5.0 hp

On/off duty

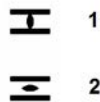
Technical data

ACTELEC	31 SA 07.6	200 SA 07.6	400 SA 10.2	500 SA 07.6	800 SA 10.2	950 SA 07.6	1600 SA 10.2
Miscellaneous							
Mode of operation of multi-turn actuator	S2 - 15 min (60 starts per hour)						
Enclosure	IP67	IP68 (8 m, 96 hours)					
Adjustable mechanical travel stops	-	Standard: for CLOSED only					
Manual override							
Number of handwheel turns (depending on output speed of multi-turn actuator)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalling							
Limit switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional limit switches for signalling	Optional: 2/Open and 2/Closed						
Additional switches for intermediate position signalling	Optional: 1/Open, 1/Closed, 2/Intermediate						
Motor protection							
Torque switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional torque switches for signalling	Optional: 2/Open and 2/Closed						
Thermal protection	Standard						
Heating resistor	Standard						
Position detection							
Potentiometer	Optional: 1000 Ohm						
Positioner	Optional: 4 - 20 mA signal, 2 or 4 wires						

Circuit diagram: TPA00R1AA-101-000



- | | |
|---------------|--|
| S1 DSR / DSR | Torque switch CLOSED, clockwise |
| S2 DOEL / TSO | Torque switch OPEN, anti-clockwise |
| S3 WSR / LSC | Limit switch CLOSED, clockwise |
| S4 WOEL / LSO | Limit switch OPEN, anti-clockwise |
| S5 BL | Flashing "Equipment running" lamp |
| F1 TH | Thermal protection (multi-turn actuator) |
| R1 H | Heating resistor |



3		0%	100%
4	5	8	9
S1 DSR/TSC	6 7	—	—
S2 DOEL/TSO	6 7	—	—
S3 WSR/LSC	6 7	—	—
S4 WOEL/LSO	6 7	—	—



- | | |
|---------------------------------|-------------------|
| 1 Stop by limit switch (closed) | 7 Normally open |
| 2 Stop by limit switch (open) | 8 Closed |
| 3 Status | 9 Open |
| 4 Limit switch | 10 Closed contact |
| 5 Contact | 11 Open contact |
| 6 Normally closed | |

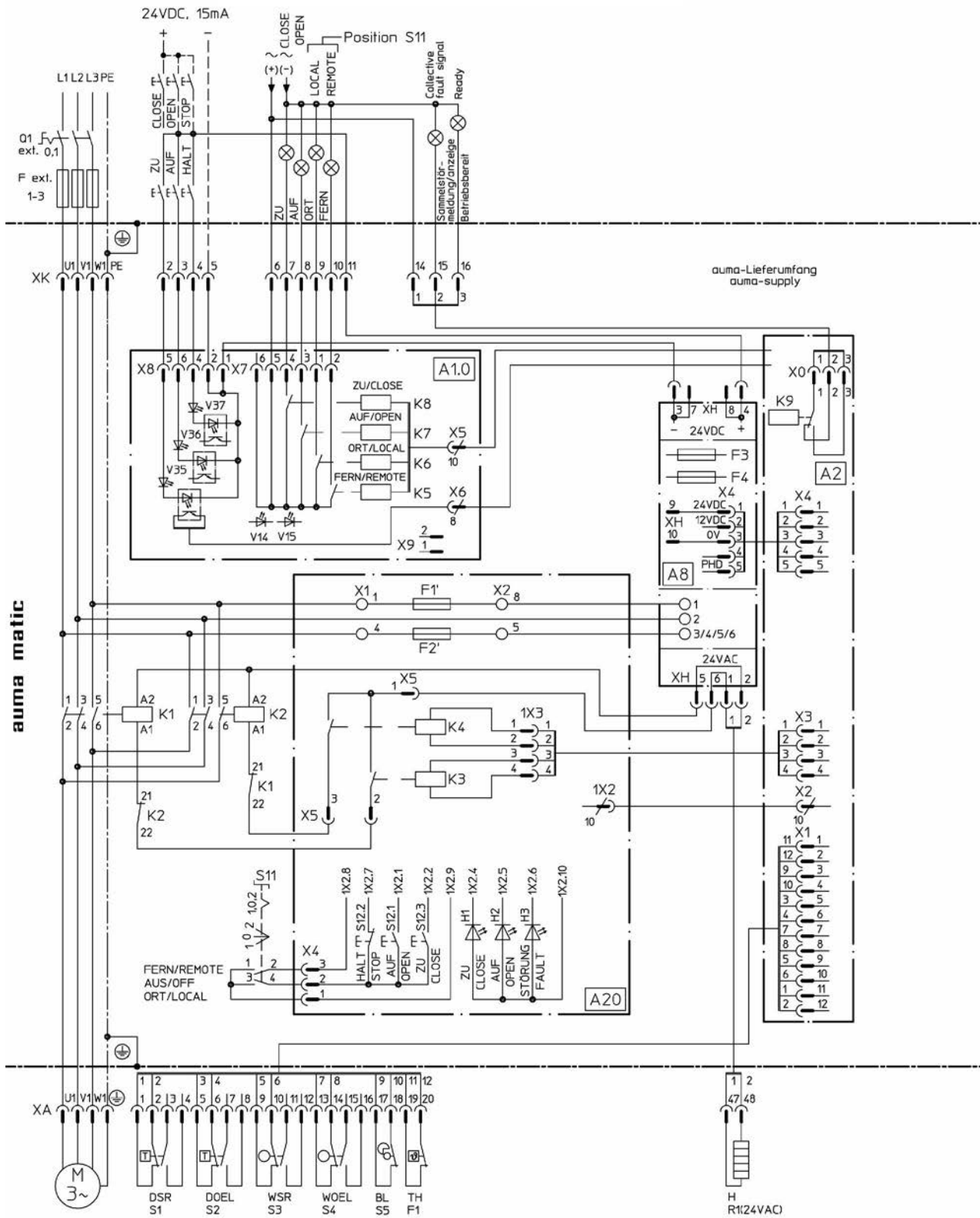
The circuit diagram refers to a multi-turn actuator in intermediate position, with the contacts in the non-actuated state.

On/off duty with local control system AUMA MATIC AM 01.1

Technical data

ACTELEC	31	200	400	500	800	950	1600
	SA 07.6 / AM 01.1	SA 07.6 / AM 01.1	SA 10.2 / AM 01.1	SA 07.6 / AM 01.1	SA 10.2 / AM 01.1	SA 07.6 / AM 01.1	SA 10.2 / AM 01.1
Miscellaneous							
Mode of operation of multi-turn actuator	S2 - 15 min (60 starts per hour)						
Enclosure	IP 67		IP 67				
Adjustable mechanical travel stops	- Standard: for CLOSED only						
Manual override Number of handwheel turns (depending on output speed of multi-turn actuator)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalling							
Limit switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional limit switches for signalling	Optional: 2/Open and 2/Closed						
Additional switches for intermediate position signalling	Optional: 1/Open, 1/Closed, 2/Intermediate						
Motor protection							
Torque switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional torque switches for signalling	Optional: 2/Open and 2/Closed						
Thermal protection	Standard						
Heating resistor	Standard						
Position detection							
Potentiometer	Optional: 1000 Ohm						
Positioner	Optional: 4 - 20 mA signal, 4 wires						

Circuit diagram MSP1110KC3-F18E1 TPA00R1AA- 101 - 000



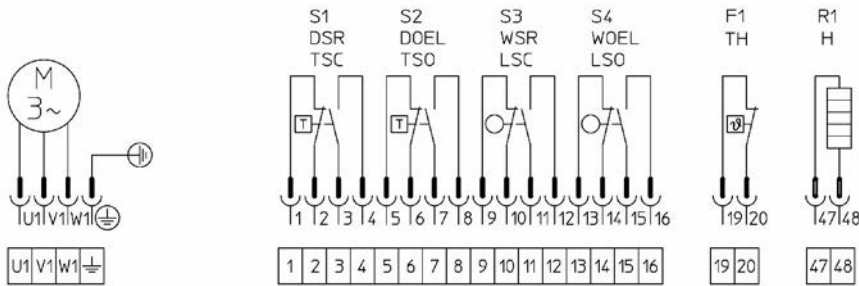
Key: see circuit diagram for control duty with AUMATIC AC 01.2 positioner

Control duty

Technical data

ACTELEC	31 SA 07.6	200 SA 07.6	400 SA 10.2	500 SA 07.6	800 SA 10.2	950 SA 07.6	1600 SA 10.2
Miscellaneous							
Mode of operation of multi-turn actuator	S4 - 25 %						
Enclosure	IP68 (8 m, 96 hours)						
Adjustable mechanical travel stops	-	Standard: for CLOSED only					
Manual override							
Number of handwheel turns (depending on output speed of multi-turn actuator)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalling							
Limit switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional limit switches for signalling	Optional: 2/Open and 2/Closed						
Additional switches for intermediate position signalling	Optional: 1/Open, 1/Closed, 2/Intermediate						
Motor protection							
Torque switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional torque switches for signalling	Optional: 2/Open and 2/Closed						
Thermal protection	Standard						
Heating resistor	Standard						
Position detection							
Potentiometer	Optional: 1000 Ohm						
Positioner	Optional: 4 - 20 mA signal, 4 wires						

Circuit diagram TPA 00R1AA-001-000



- S1 DSR / DSR Torque switch CLOSED, clockwise
- S2 DOEL / TSO Torque switch OPEN, anti-clockwise
- S3 WSR / LSC Limit switch CLOSED, clockwise
- S4 WOEL / LSO Limit switch OPEN, anti-clockwise
- F1 TH Thermal protection (multi-turn actuator)
- R1 H Heating resistor



1



2

3			
4	5	0% 8	100% 9
S1 DSR/TSC	6	---	---
	7	---	---
S2 DOEL/TSO	6	---	---
	7	---	---
S3 WSR/LSC	6	---	---
	7	---	---
S4 WOEL/LSO	6	---	---
	7	---	---



10



11

- 1 Stop by limit switch (closed)
- 7 Normally open
- 2 Stop by limit switch (open)
- 8 Closed
- 3 Status
- 9 Open
- 4 Limit switch
- 10 Closed contact
- 5 Contact
- 11 Open contact
- 6 Normally closed

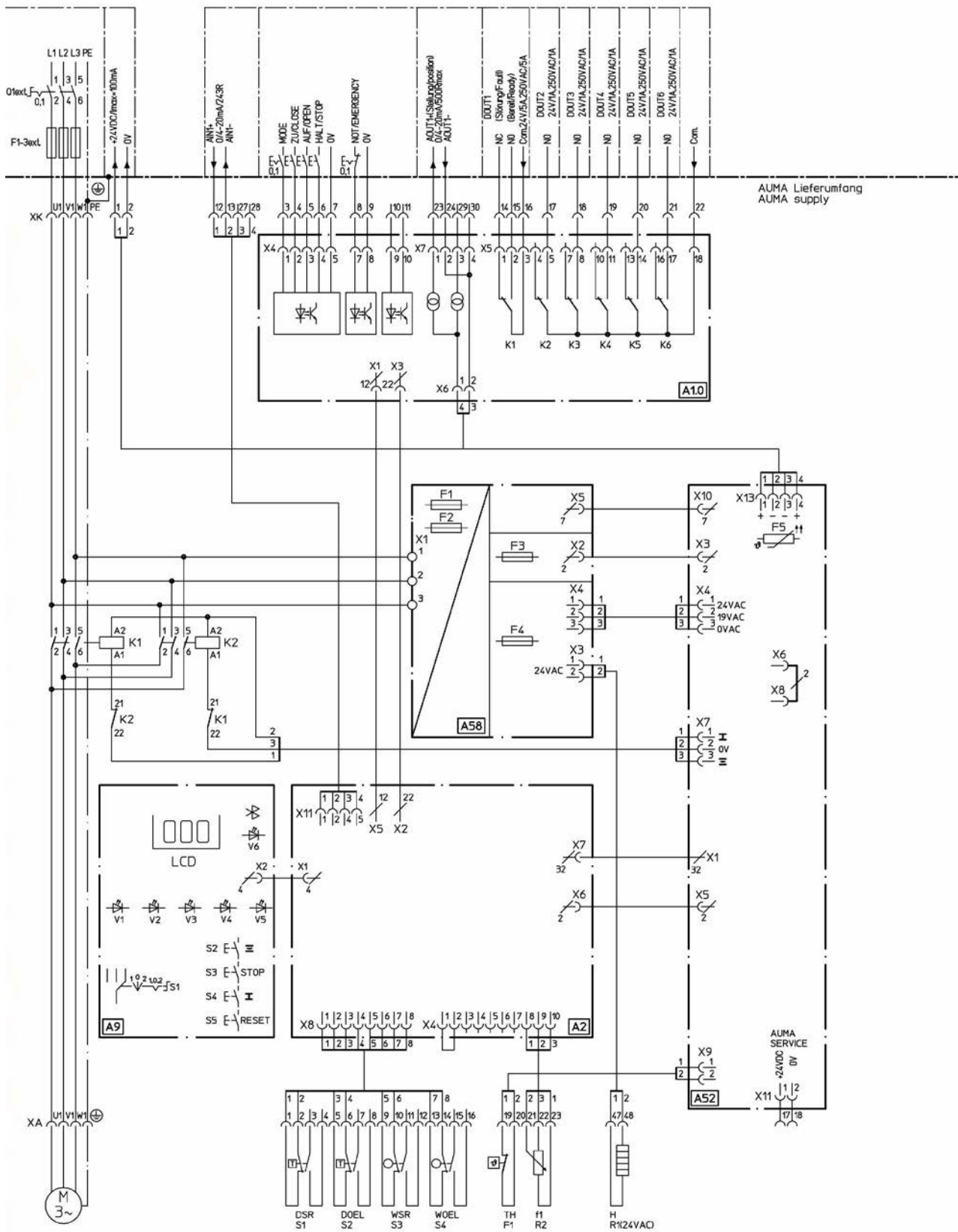
The circuit diagram refers to a multi-turn actuator in intermediate position, with the contacts in the non-actuated state.

Control duty with AUMATIC AC 01.2 positioner

Technical data

ACTELEC	31 SA 07.6 / AC 01.2	200 SA 07.6 / AC 01.2	400 SA 10.2 / AC 01.2	500 SA 07.6 / AC 01.2	800 SA 10.2 / AC 01.2	950 SA 07.6 / AC 01.2	1600 SA 10.2 / AC 01.2
Miscellaneous							
Mode of operation of multi-turn actuator	S4 - 25 %						
Enclosure	IP68 (8 m, 96 hours)						
Adjustable mechanical travel stops	-	Standard: for CLOSED only					
Manual override	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Number of handwheel turns (depending on output speed of multi-turn actuator)							
Signalling							
Limit switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional limit switches for signalling	Optional: 2/Open and 2/Closed						
Additional switches for intermediate position signalling	Optional: 1/Open, 1/Closed, 2/Intermediate						
Motor protection							
Torque switches for stopping of multi-turn actuator and signalling	Standard: 1/Open and 1/Closed						
Additional torque switches for signalling	Optional: 2/Open and 2/Closed						
Thermal protection	Standard						
Heating resistor	Standard						
Position detection							
Potentiometer	Optional: 1000 Ohm						
Positioner	Optional: 4 - 20 mA signal, 4 wires						

Circuit diagram



Key: circuit diagram for on/off and control duty with AUMATIC positioner

S 1	DSR	Torque switch, closing, clockwise
S 2	DÖL	Torque switch, opening, anti-clockwise
S3	WSR	Limit switch CLOSED, clockwise
S4	WÖL	Limit switch OPEN, anti-clockwise
S 3/2	WSR 1	Double switch for limit position with WSR / WÖL
S 4/2	WÖL 1	
S5	BI	Flashing "Equipment running" lamp
F 1	Th	Temperature switch (motor protection)
R 1	H	Heating resistor
A 1.0		Interface board
A 2		Logic board
A 7		Positioner board
A 8		Power supply unit board
A 20 / A 21		Signalling and control board
F 1', F 2'		Primary fuse - power supply
F 3, F 4		Secondary fuse
K 1, K 2		Changeover contact
K 3, K 4		Control relay for changeover contact
K 5 to K 9		Signalling relay
S 11 S 11/2		Selector switch Local - Off - Remote
S 12.1		Pushbutton Open
S 12.2		Pushbutton Stop
S 12.3		Pushbutton Close
S 13		Changeover switch for travel-dependent or torque-dependent closing
V 14		LED*, phase sequence and failure
V 15		LED*, torque switch tripped before limit position has been reached
V 35		LED, command CLOSE received from control station
V 36		LED, command OPEN received from control station
V 37		LED, command OFF received from control station

* If LEDs V14 and V15 are lit at the same time, the temperature switch has tripped.

Information details

Information A

Operation (opening and closing) can be indicated by integration of the flashing light (S5).

Opening direction: connections X_k6 - X_k7

Closing direction: connections X_k6 - X_k8

In the limit position, the contacts remain closed.

For connection to an external PLC the flashing signal can be switched off, see AUMA MATIC operating manual.

Information B

If changeover switch S 13 is in position "1", closing is controlled via limit switch WSR (S3).

The actuator stops and a fault message is generated if the torque switch DSR (S1) responds before or as the limit position is reached.

If changeover switch S 13 is in position "2", closing is controlled via torque switch DSR (S1).

The WSR (S3) switch serves as a signalling system. It must be set to trip shortly before the limit position CLOSED is reached.

If the torque switch trips before the limit switch, the actuator stops and a fault message is generated.

For detailed information on programming of the logic board, particularly regarding latching in REMOTE mode, refer to the AUMA MATIC operating manual.

Information D

The following faults, indicating operating malfunctions, are identified and transmitted to a relay with changeover contacts, from where they can be transmitted to the control station:

- Power failure
- Incorrect phase sequence
- Phase failure
- Temperature switch has tripped
- Torque switch has tripped before limit position has been reached

Storage of the fault messages can be disabled by programming the unit accordingly, see AUMA MATIC operating manual.

Information E

Input signals to DIN 19240. The nominal amperage of inputs X_k2, X_k3 and X_k4 is 10 - 15 mA.

If the internal voltage of 24 V DC is used for remote control, the external contacts used must be volt-free.

Information F

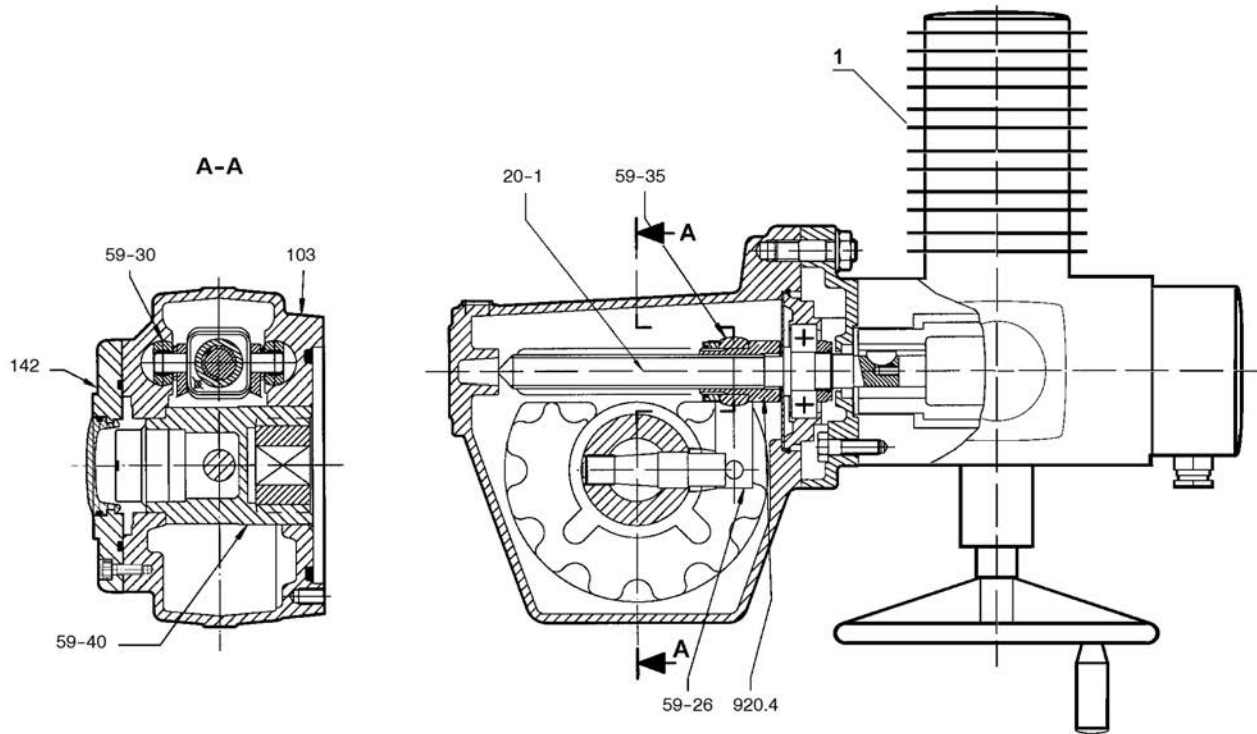
The actuator will not operate in the case of incorrect phase sequence or phase failure. These faults will be indicated by the LED V14 on the interface board. The various faults indicated are listed in the "Information D" item.

Information G

Volt-free contacts are provided for signalling. The internal control voltage (X_k11 / 24V+ or X_k5 / 24V-) must not be used for external lamps, relays, etc.

Materials

ACTELEC 31



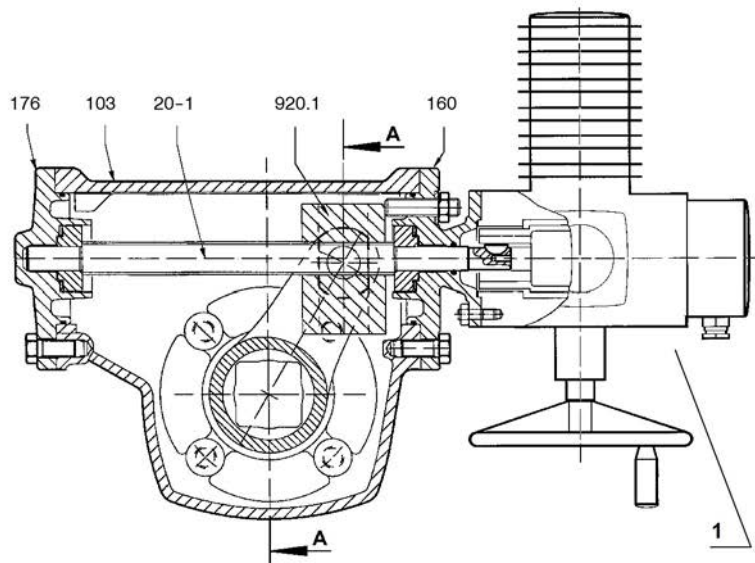
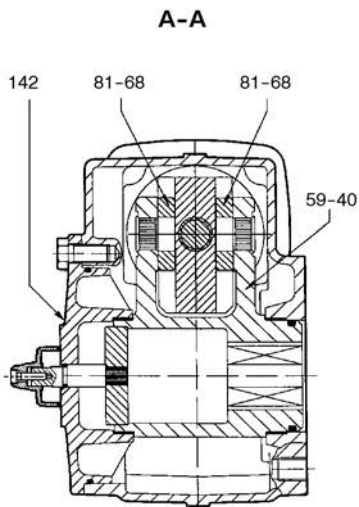
1 : Electric multi-turn actuator

Part No.	Description	Materials
103	Gear housing	Lamellar graphite cast iron JL 1040 *
142	Cap	Duroplast
20 - 1	Actuating stem	Phosphate steel, nickel-plated
59 - 26	Connecting rod	Steel
59 - 30	Roller	Tempered steel with PTFE coating
59 - 35	Socket	Steel
59 - 40	Actuating bush	Steel
920.4	Threaded nut	Bronze
- - -	Housing of electric multi-turn actuator	Lamellar graphite cast iron and light metal alloy

* Previous standards: DIN GG 25 / NF FGL 250

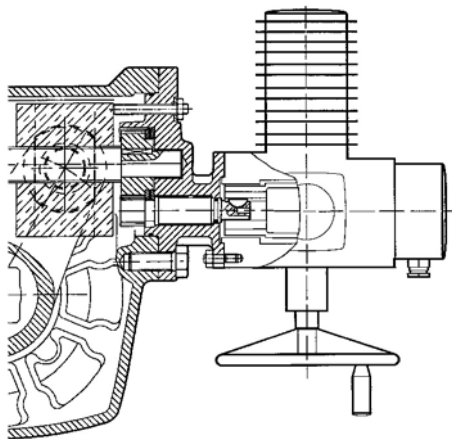
ACTELEC 200 to 1600

ACTELEC 200 and 400



1 - Electric multi-turn actuator

ACTELEC 500 to 1600



ACTELEC 500 to 800 actuators are equipped with input reducers.

Part No.	Description	Materials
103	Gear housing	Lamellar graphite cast iron JL 1040 *
142	Cap	or
160	Cover	nodular cast iron 5.3106
176	Bottom	Phosphate steel, nickel-plated
20- 1	Actuating stem	Nodular cast iron 5.3106 / stainless steel
59- 40	Actuating bush/indicator shaft assembly	Nitrided steel
81- 68	Sliding pad	Bronze
920.1	Sliding nut	Lamellar graphite cast iron and light metal alloy
----	Housing of electric multi-turn actuator	

* Previous standards: DIN GG 25 / NF FGL 250

** Previous standards: JS 1030 / DIN GGG 40 / NF FGS 400- 15

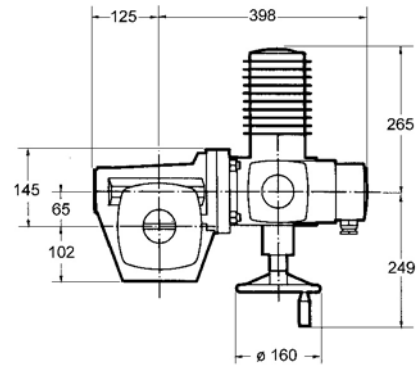
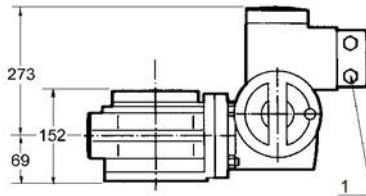
Dimensions

On/off duty - 3~

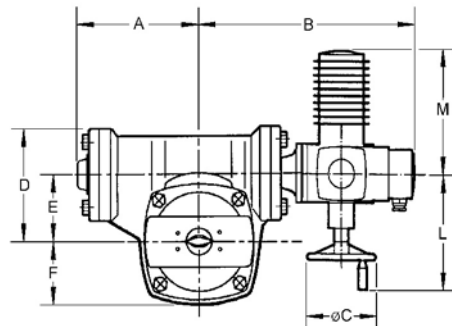
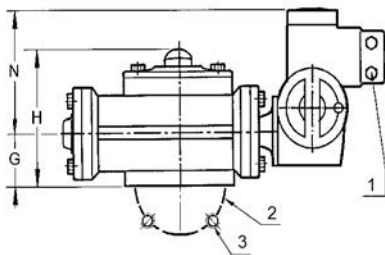
Drawings

Weight: 47 kg

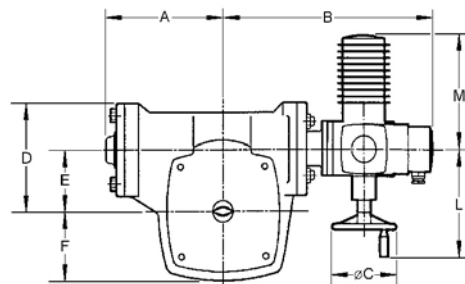
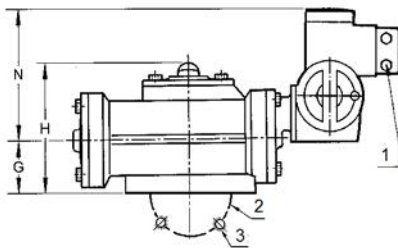
ACTELEC 31



ACTELEC 200 and 400



ACTELEC 500, 800, 950 and 1600



- 1 : 2 cable glands No. 21
- 2 : Bore diameter $\varnothing 1$
- 3 : n evenly spaced holes $\varnothing 2$

Dimensions

[mm]

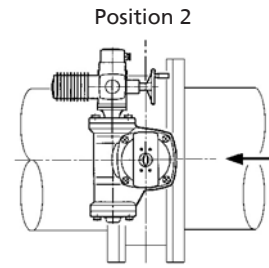
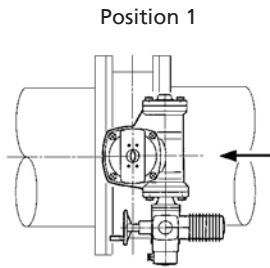
ACTELEC	Multi-turn actuator	A	B	ø C	D	E	F	G	H	L	M	N	ISO 5211 interface				Weight
													Code	ø d1	ø d2	n	kg
200	SA 07.6	229	469	160	208	125	115	95	246	249	265	273	F16	165	M20	4	77
400	SA 10.2	229	471	200	208	125	115	95	246	254	282	275	F16	165	M20	4	81
500	SA 07.6	271	523	160	245	140	155	109	280	249	265	323	F16	165	M20	4	129
													F25	254	M16	8	
800	SA 10.2	271	525	200	245	140	155	109	280	254	282	325	F16	165	M20	4	133
													F25	254	M16	8	
950	SA 07.6	337	573	160	338	180	180	131	336	249	265	365	F25	254	M16	8	202
													F30	298	M20	8	
1600	SA 10.2	337	575	200	338	180	180	131	336	254	282	367	F25	254	M16	8	206
													F30	298	M20	8	

Variants

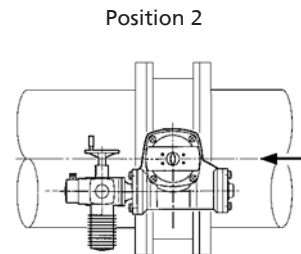
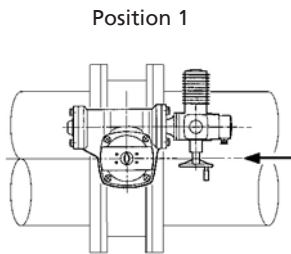
Mounting onto the valve

The actuator can be mounted onto the valve in 4 different positions, offset by 90°. Unless otherwise specified in the purchase order, the actuator is mounted onto the valve according to mounting option N, position 1.

Mounting option N



Mounting option M



← Flow direction of fluid handled – Valve shown in closed position



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