



**1/4 turn electric actuators
(irreversible reducer with multi-turn
electric actuator AUMA generation .2)**

**ACTELEC 31:
screw-nut kinematics
ACTELEC 200 to 1600:
yoke kinematics**

Output torques up to 16000 Nm

Applications

- All sectors of Water, Energy and Industry markets.

General features

- The range of ACTELEC series electric actuators developed and manufactured by KSB-AMRI covers output torque values up to 16000 Nm.
- These actuators have been designed for all applications and for the operation of any type 1/4 turn valves (centred or double eccentric disc valves, ball valves,...).
- The mounting interface is in accordance with ISO 5211 standard.
- Equipped with an interchangeable insert, they can be easily fitted on different valve shaft (square end, flat end, key,...).
- The actuator is mounted directly or by means of an adaptor onto the valve mounting plate.

Protection

- protection degree IP 67 or IP 68 following the configurations.
- Motor: insulation class F.

External coating

- Reducer for ACTELEC 31:
Polyurethane paint, thickness 80 µm color dark grey RAL 7016 (KSB system P28).
- Reducer for ACTELEC 200 to 1600:
Cataphoresis primary 30 µm + Polyurethane paint, thickness 80 µm color dark grey RAL 7016, (KSB system P58)
- Electric actuator: two-component powder paint thickness 140 µm, color silver gray RAL 7037 (KS Auma system).

Working temperature range

- Following the configurations of the ACTELEC.

Construction

- This electric actuators range constituted with irreversible kinematics reducer associated with a multi-turn electric actuator is completed by a direct 1/4 turn actuators range with irreversible kinematic.
- Please consult the type series booklet: Direct 1/4 turn actuator ACTELEC SG05.1 to SG12.1 ref. 8521.12-10.

Production range

Type	Nominal output torque (Nm)	ISO 5211 mounting plate*	Maximal allowable dimensions for the shaft			
			Height	Driving by square	Driving by flat	key
31	900	-----	40	36	22	Please, consult us
200	2000	F16	80	60	Please, consult 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 adaptation onto identical mounting plate.

Adaptation by intermediate flange onto different plate (different size or shape).

Construction

Basic equipments

- Open-Close duty S2-15min (SA 07.6; SA 10.2).
- Motor stop:
 - 2 travel limit microswitches
- Electric motor protection by:
 - integrated thermic protection,
 - Torque switch.
- Heating resistance anti-condensation.
- Manual emergency control by handwheel.
- Visual pointer position on the reducer.
- Mechanical travel stop(s).
- Electric connection : AUMA plug connector with screw type and cable entries 1 ISO M20, 1 ISO M25 and 1 ISO M32 + plugs.

Power supply

- Standard version:
 - 1-phase 230 V a.c. - 50 Hz,
 - 3-phase 400 V a.c. - 50 Hz
- On request:
 - Others voltages 3-phase, one phase, and direct current.

Options depending on the configurations

- Intermittent duty S4-25% (Throtling) (SAR 07.6 ; SAR 10.2).
- Additional microswitches for remote position signalisation (Torque limiter, On/off and/or intermediate position).
- Position transmission by potentiometer 1000 Ω or electronic transmitter 4-20 mA.
- Integral electric control local and remote AUMAMATIC (SA 07.6/AM01.1 ; SA 10.2/AM01.1).
- Integral electric control local and remote and integrated positioner AUMATIC (SAR 07.6/AC01.2 ; SAR 10.2/AC01.2).
- Wide choices of operating times.

Other constructions (Please, consult us)

- Other motor services.
- Explosion-proof protection ATEX Exde, Exd.
- Communication interface - Fieldbus
- Other corrosion protection coating and painting.

ACTELEC 31 to 1600 actuators are based on a reducer with irreversible kinematics motorized by a multi-turn electric actuator with a mounting plate in accordance with ISO 5210 standard.
The mounting interface of these actuators onto the valve is in accordance with ISO 5211 standard.

Manufacturing range - Characteristics

Actuator Type	Basic reducer	Output torque Nm	Input torque Nm	Number of turn the operating screw	Electric actuator type	Actuator mounting plate
ACTELEC 31	M 31	900	60	32	SA/SAR 07.6	ISO 5210 size F10 shape 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	

Operating times (in seconds)*

Type	Actuator output speed (rpm/mn) at 50 Hz*									
	8	11	16	22	32	45	63	90	125	180
	SA / SAR						Only SA			
ACTELEC 31	240	175	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

*At 60 Hz, output speeds are multiplied by 1.2 and the operating times by 0.83.

Operating times can be realised with other output speeds and / or special construction of the reducer: Please, contact us.

Electric characteristics

Electric actuator type	Actuator output speed	Motor speed	Nominal power (P _N)	Nominal current (I _N)	Starting current (I _A)	Current approx. (I _{Max})	Cos φ	Setting Overcurrent prot device	Power class	
	rpm/min	rpm/min	kW	A	A	A			Contactor	Thyristor
Open-close duty S2-15min - Power supply 3-phase 400V a.c. - 50Hz										
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
SA 10.2	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
	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
SA 10.2	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
	180	2800	1,00	3,5	16,0	5,5	0,64	5,0	A1	B1
Open-close duty S2-15min - Power supply 1-phase 230V a.c. - 50Hz										
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	4,3	A1	B1
SA 10.2	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
	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
	63	2800	0,70	5,2	28,0	6,3	0,54	6,3	A1	B1
SA 10.2	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
	180	2800	1,00	6,1	28,0	9,6	0,64	9,6	A1	B1
Intermittent duty S4-25% (Throtling) - Power supply 3-phase 400V a.c. - 50Hz										
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
	45	1400	0,20	1,6	4,6	2,0	0,42	2,0	A1	B1
SAR 10.2	8	1400	0,12	1,0	1,0	1,1	0,40	1,1	A1	B1
	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	
Intermittent duty S4-25% (Throtling) - Power supply 1-phase 230V a.c. - 50Hz										
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
SAR 10.2	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
	45	1400	0,40	4,3	15,0	5,2	0,42	5,2	A1	B1

Motor data is approximate. Due to usual manufacturing tolerances, there may be deviations from the values given.

The permissible fluctuation of the nominal voltage is $\pm 10\%$. If the voltage drops below, there is a reduction of the nominal output torque.

To protect against overheating, thermostats are embedded in the motor windings.

For actuators without integral controls (AUMAMATIC or AUMATIC), these have to be connected to the external control circuit (See wiring diagram).

If thermostats are not connected, this voids our warranty for the motor.

Rating of the thermostats:

AC		DC	
250 V, 50 - 60 Hz		60 V	1.0 A
$\cos \varphi = 1$	2.5 A	42 V	1.2 A
$\cos \varphi = 0,6$	1.6 A	24 V	1.5 A

We recommend to specify switchgears according to their rated power/motor in compliance with the assigned AUMA power class.

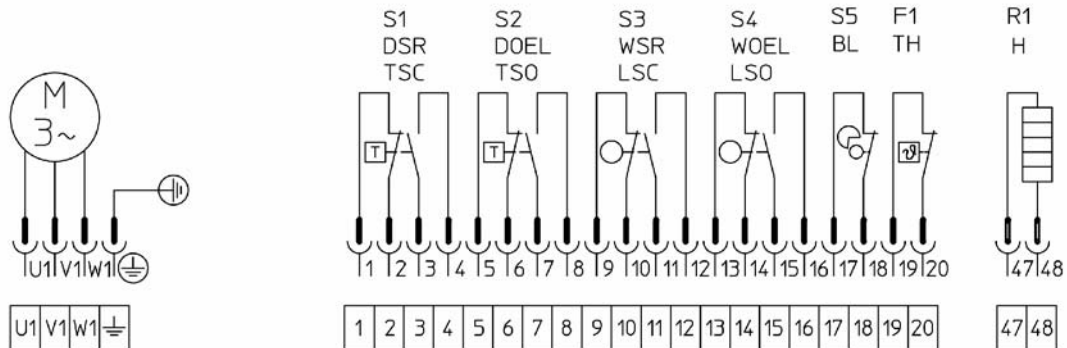
power class	Rated power contactor according to IEC AC-3 for	Motor power contactor according to UL/CSA for	
	400 V AC	480 V AC	600 V AC
A1	4.0 kW	5.0 hp	5.0 hp

On-off function:



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
Various							
Motor service	S2 - 15 min (60 starts per hour)						
Protection degree	IP 67	IP 68 (8m, 96H)					
Mechanical adjustable travel stops	Standard (Only for closing)						
Emergency control Number of handwheel turns (depends on the output speed of motor)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalisation							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Additional switches for intermediate signalisation	Option 1/O, 1/C, 2/I						
Motor protection							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Thermal protection	Standard						
Heating resistance	Standard						
Position transmission							
Potentiometer	Option 1000 Ohm						
Position transmitter	Option 4 - 20 mA 2 wires or 4 wires						

On-off function:



Wiring diagram: TPA00R1AA-101-000



- S1 DSR / DSR Torque limit switch, CLOSING, clockwise rotation
- S2 DOEL / TSO Torque limit switch, OPENING, anti-clockwise rotation
- S3 WSR / LSC Limit switch, CLOSING, clockwise rotation
- S4 WOEL / LSO Limit switch, OPENING, anti-clockwise rotation
- S5 BL Blinker transmitter
- F1 TH Thermal protection (motor)
- R1 H Heating resistance

-  ZU wegabhängig abschalten
CLOSED stop by limit switch
-  AUF wegabhängig abschalten
OPEN stop by limit switch

Schalterabwicklung / Switch development				
Schalter/ Switch	Kontakt/ Contact	0% ZU CLOSE		100% AUF OPEN
S1 DSR/TSC	Öffner / NC	—	—	—
	Schließer / NO	—	—	—
S2 DOEL/TSO	Öffner / NC	—	—	—
	Schließer / NO	—	—	—
S3 WSR/LSC	Öffner / NC	—	—	—
	Schließer / NO	—	—	—
S4 WOEL/LSO	Öffner / NC	—	—	—
	Schließer / NO	—	—	—

-  Contact closed
-  Contact opened

The wiring diagram show the servomotor in intermediate position, the switches are not in operation.

On-off function with locale control AUMA MATIC AM 01.1

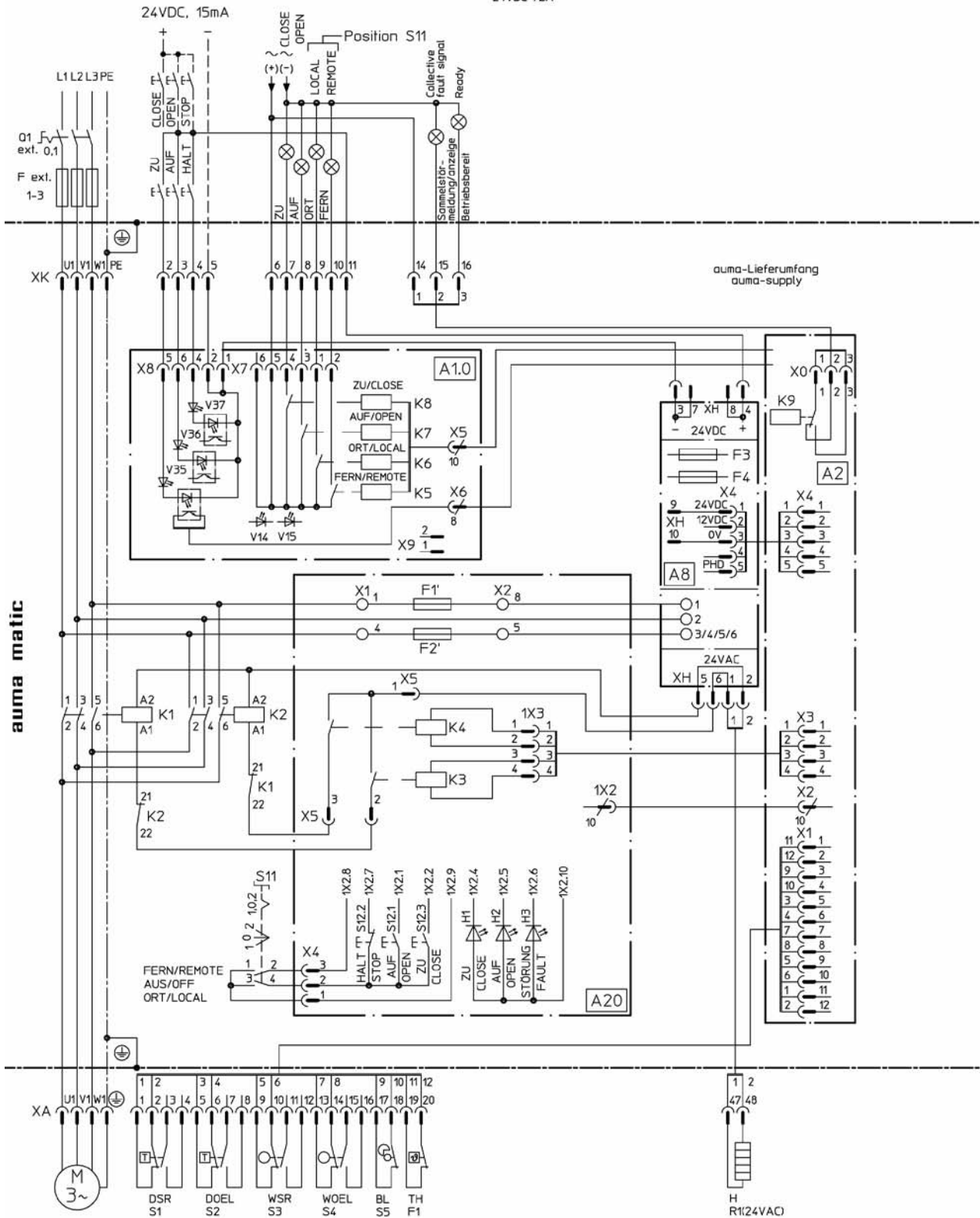
ACTELEC	31 SA 07.6 / AM 01.1	200 SA 07.6 / AM 01.1	400 SA 10.2 / AM 01.1	500 SA 07.6 / AM 01.1	800 SA 10.2 / AM 01.1	950 SA 07.6 / AM 01.1	1600 SA 10.2 / AM 01.1
Various							
Motor service	S2 - 15 min (60 starts per hour)						
Protection degree	IP 67						
Mechanical adjustable travel stops	-	Standard (only for closing)					
Emergency control Number of handwheel turns (depends on the output speed of motor)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalisation							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Additional switches for intermediate signalisation	Option 1/O, 1/C, 2/I						
Motor protection							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Thermal protection	Standard						
Heating resistance	Standard						
Position transmission							
Potentiometer	Option 1000 Ohm						
Position transmitter	Option 4 - 20 mA 4 wires						

On-off function with locale control AUMA MATIC AM 01.1:

Wiring diagram MSP1110KC3--F18E1 TPA00R1AA-101-000

DC oder/or AC
ext.Voltage
Info G

Schaltvermögen Melderelais K5-K9
Breaking capacity signal relays K5-K9
max. 250VAC /0,5A /cos phi=1
24VDC /2A



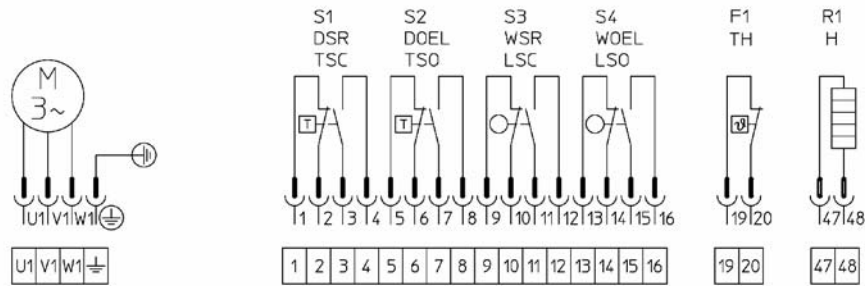
Anschlußplan zeigt den Stellantrieb in Zwischenstellung. Schalter sind nicht betätigt.
Terminal plan shows the actuator in intermediate position, switches are not actuated.

See legends on page 14



Throttling function

ACTELEC	31 SAR 07.6	200 SAR 07.6	400 SAR 10.2	500 SAR 07.6	800 SAR 10.2	950 SAR 07.6	1600 SAR 10.2
Various							
Motor service	S4 - 25%						
Protection degree	IP 68 (8 meters, 96 hours)						
Mechanical adjustable travel stops	-	Standard (only for closing)					
Emergency control Number of handwheel turns (depends on the output speed of motor)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalisation							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Additional switches for intermediate signalisation	Option 1/O, 1/C, 2/I						
Motor protection							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Thermal protection	Standard						
Heating resistance	Standard						
Position transmission							
Potentiometer	Option 1000 Ohm						
Position transmitter	Option 4 - 20 mA 4 wires						



Throttling function: Wiring diagram TPA 00R1AA-001-000



- S1 DSR / DSR Torque limit switch, CLOSING, clockwise rotation
- S2 DOEL / TSO Torque limit switch, OPENING, anti-clockwise rotation
- S3 WSR / LSC Travel limit switch, CLOSING, clockwise rotation
- S4 WOEL / LSO Travel limit switch, OPENING, anti-clockwise rotation
- S5 BL Blinker transmitter
- F1 TH Thermal protection (motor)
- R1 H Heating resistance

-  ZU wegabhängig abschalten
CLOSED stop by limit switch
-  AUF wegabhängig abschalten
OPEN stop by limit switch

Schalterabwicklung / Switch development			
Schalter/ Switch	Kontakt/ Contact	0% ZU CLOSE	100% AUF OPEN
S1 DSR/TSC	Öffner / NC	—	—
	Schließer / NO	—	—
S2 DOEL/TSO	Öffner / NC	—	—
	Schließer / NO	—	—
S3 WSR/LSC	Öffner / NC	—	—
	Schließer / NO	—	—
S4 WOEL/LSO	Öffner / NC	—	—
	Schließer / NO	—	—

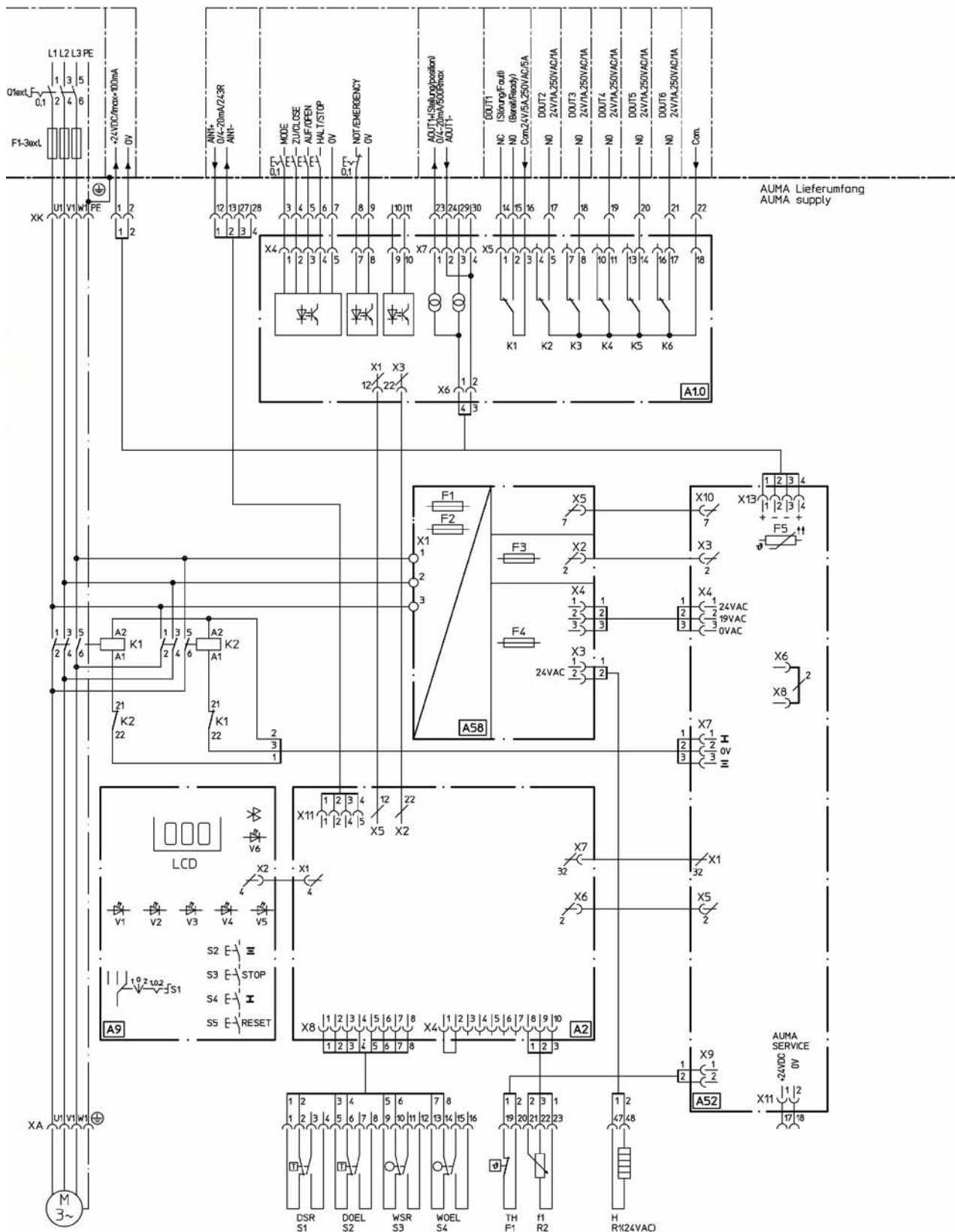
-  Contact closed
-  Contact opened

The wiring diagram show the servomotor in intermediate position, the switches are not in operation.

Throttling function with positioner AUMATIC AC 01.2

ACTELEC	31 SAR 07.6 / AC 01.2	200 SAR 07.6 / AC 01.2	400 SAR 10.2 / AC 01.2	500 SAR 07.6 / AC 01.2	800 SAR 10.2 / AC 01.2	950 SAR 07.6 / AC 01.2	1600 SAR 10.2 / AC 01.2
Various							
Motor service	S4 - 25%						
Protection degree	IP 68 (8 meters, 96 hours)						
Mechanical adjustable travel stops	-	Standard (Only for closing)					
Emergency control Number of handwheel turns (depends on the output speed of motor)	130 to 350	375 to 520	375 to 520	740 to 1490	540 to 1490	1560 to 3130	1140 to 3130
Signalisation							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Additional switches for intermediate signalisation	Option 1/O, 1/C, 2/I						
Motor protection							
Limit switches for motor stop and signalisation	Standard 1/O, 1/C						
Additional limit switches for signalisation	Option 2/O, 2/C						
Thermal protection	Standard						
Heating resistance	Standard						
Position transmission							
Potentiometer	Option 1000 Ohm						
Position transmitter	Option 4 - 20 mA 2 wires						

Throttling function with positioner AUMATIC AC 01.2:TPCA-1B1-A000 / TPA 00R1AA-001-000



Anschlussplan zeigt den Stellungtrieb in Zwischenstellung. Schalter sind nicht betätigt.
Terminal plan shows the actuator in intermediate position, switches are not actuated.

Bei Ex-Antrieben werden an Stelle der Stecker Schraubklemmen / Käfigzugfederklemmen verwendet !
For explosion-proof actuators terminals / cage clamps are used instead of plug / socket connector !

See legends on page 14

Legends of wiring diagrams on pages 9 and 13

S 1	DSR	Torque limit switch, closing, clockwise rotation
S 2	DÖL	Torque limit switch, opening, anti-clockwise rotation
S 3	WSR	Travel limit switch, closing, clockwise rotation
S 4	WÖL	Travel limit switch, opening, anti-clockwise rotation
S 3/2 S 4/2	WSR 1 WÖL 1	Travel limit switch in tandem operation with WSR/WÖL
S 5	Bl	Blinker transmitter
F 1	Th	Thermoswitch (motor protection)
R 1	H	Heating resistance
A 1.0		Interface board
A 2		Logic board
A 7		Positioner board
A 8		Power supply board
A 20 / A 21		Signal and control board
F 1', F 2'		Primary fuses power supply

F 3, F 4	Secondary fuses
K 1, K 2	Reversing contactors
K 3, K 4	Control relays for contactors
K 5 to K 9	Signal relays
S 11 S 11/2	Selector switch Local - Off - Remote
S 12.1 S 12.2 S 12.3	Push button Open Push button Stop Push button Close
S 13	Change-over switch for travel limit or torque limit seating
V 14	LED *, phase sequence, phase failure
V 15	LED *, torque limit switch tripped in mid-travel
V 35	LED, command Close available from remote control centre
V 36	LED, command Open available from remote control centre
V37	LED, command Stop available from remote control centre

* If V 14 and V15 LED's are illuminated simultaneously, thermoswitch has tripped.

Information A:

If blinker transmitter (S5) is provided, running indication is possible (contacts open and close).

Direction Close: connections X_{K6} - X_{K7}

Direction Open: connections X_{K6} - X_{K8}

In the end position, the contacts remain closed.

In case signals of end positions must be included in a PLC-system, the blinking signal can be switched off, refer to AUMA MATIC operation instructions.

Information B:

With change-over switch S 13 position "1" end position Closed will be switched off by travel limit switch WSR (S3).

If the torque limit switch DSR (S 1) trips in mid-travel or in the end position, actuator will be switched off and a fault signal given.

With change-over switch S 13 in position "2", end position Closed will be switched off by torque limit switch DSR (S1). Travel limit switch WSR (S3) serves for signalisation, it must be set to operate shortly before reaching the end position Closed.

If the torque limit switch trips before the travel limit switch, this will stop the actuator and cause a fault signal.

For further programming of the logic board, e.g. for self retaining in mode Remote, refer to AUMA MATIC operation instructions.

Information D:

The following faults are registered by the electronics and fed to a relay with change-over contacts, from where they can be transmitted as a collective fault signal to the remote control centre:

- power failure,
- wrong phase sequence,
- phase failure,
- thermoswitch tripped,
- torque switch tripped in mid travel

This fault signal can be switched off by programming, refer to AUMA MATIC operation instructions.

Information E:

Input signals are according to DIN 19 240. Nominal current at input X_{K2} , X_{K3} and X_{K4} : 10 - 15 mA.

If internal voltage 24VDC is used for remote control, switching must be by potential-free contacts.

Information F:

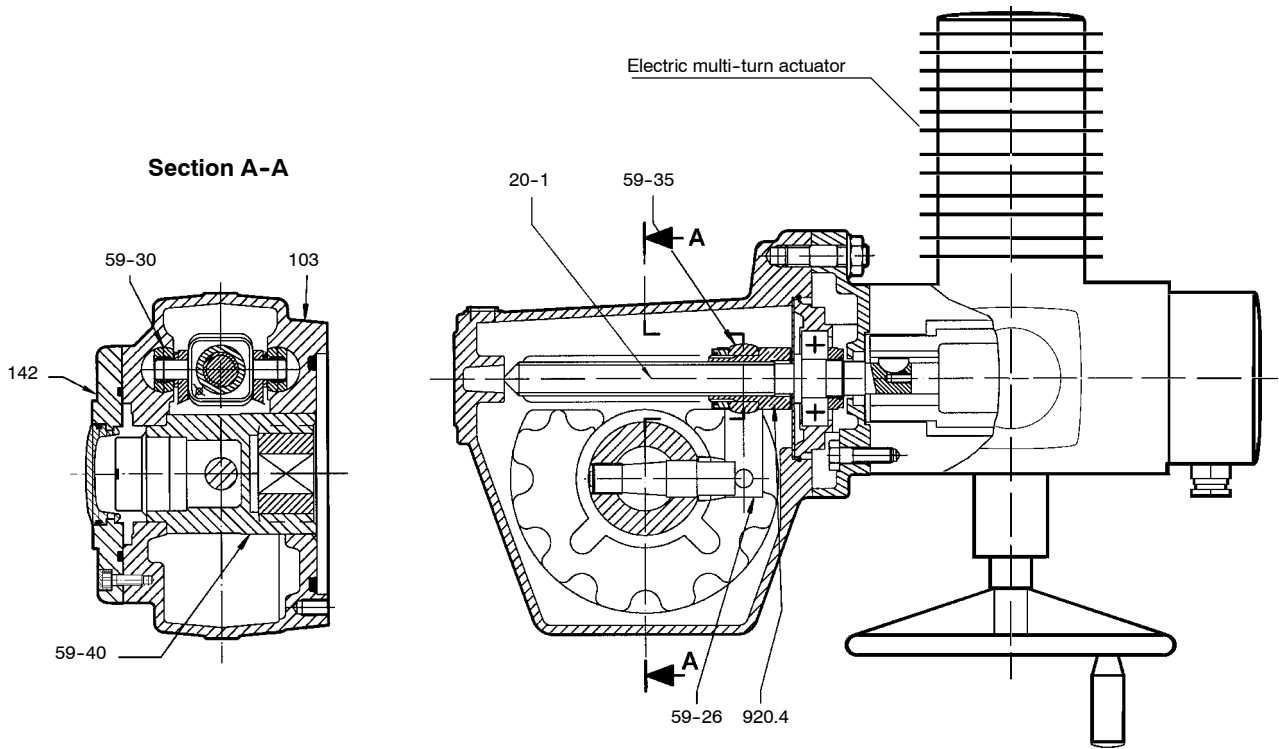
In case of wrong phase sequence or phase failure, the actuator does not run. The fault will be indicated at LED V14 on the interface board. For fault indications refer to information D.

Information G:

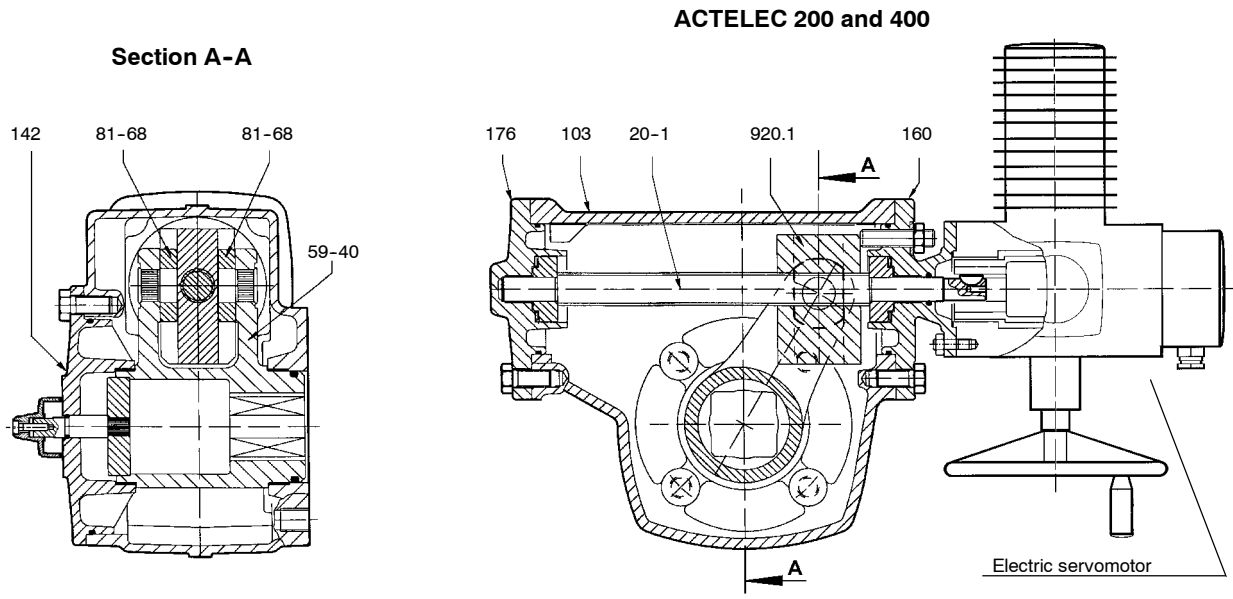
For monitoring, potential-free contacts are provided.

The internal control voltage (X_{K11} / 24V+ resp. X_{K5} / 24V-) should not be used for external lamps, relays, etc...

ACTELEC 31 - Construction

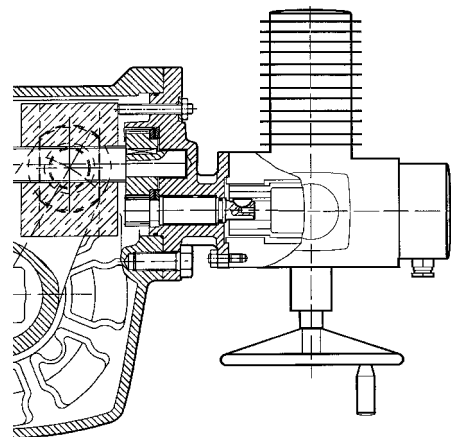


Item	Designation	Materials
103	Housing	JL 1040 cast iron
142	Cap	Thermoturcissable
20-1	Operating screw	Phosphated nickel coated steel
59-26	Connecting rod	Steel
59-30	Roller	Treated steel + PTFE
59-35	Arm	Steel
59-40	Chuck	Steel
920.4	Nut	Bronze
----	Electric servomotor housing	Cast iron and light alloy

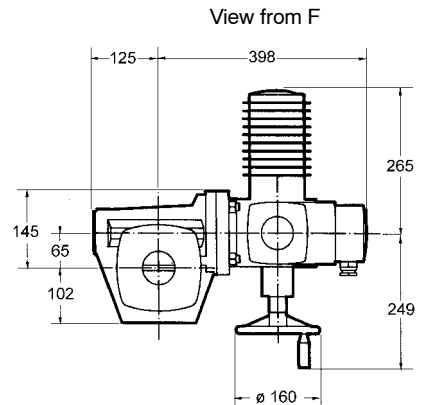
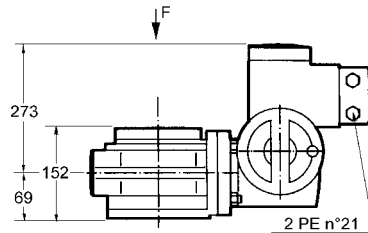
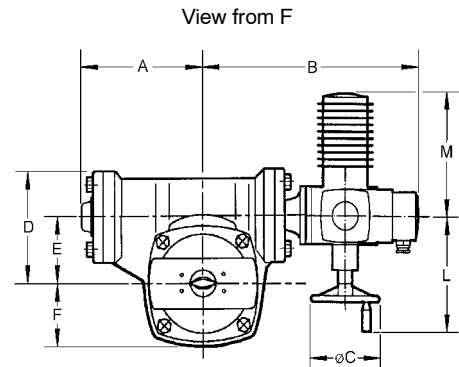
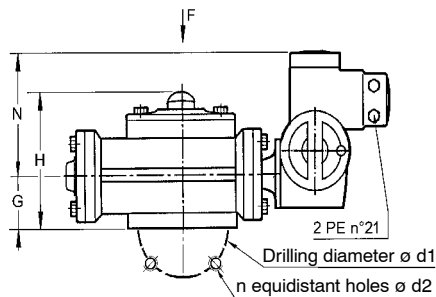
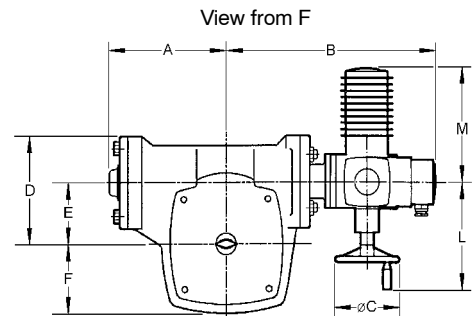
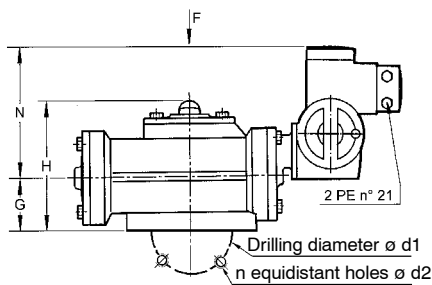
ACTELEC 200 to 1600 - Construction


ACTELEC 500 and 1600

ACTELEC 500 to 1600 actuators are equipped with input primary reduction gear



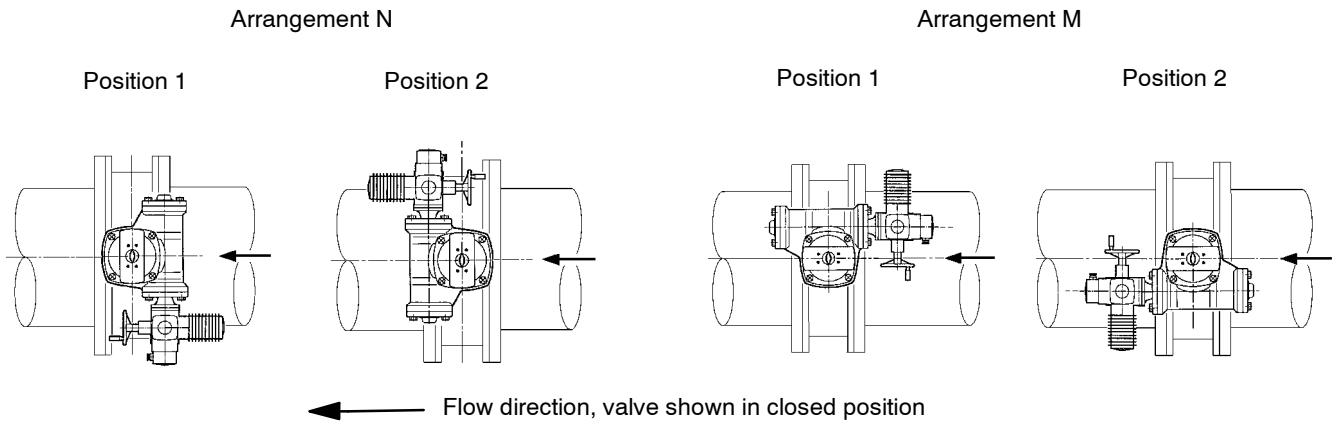
Item	Designation	Materials
103	Housing	JL 1040 cast iron or JS 1030 ductile iron
142	Cap	
160	Cover	
176	Bottom	
20-1	Operating screw	Phosphated nickel coated steel
59-40	Chuck + pointer shaft	JS 1030 ductile iron / stainless steel
81-68	Pressure pad	Nitrued steel
920.1	Operating nut	Bronze
-----	Electric actuator housing	Cast iron and light alloy

On-off function - 3-phase supply
Overall dimensions (mm) and weight (kg)
ACTELEC 31
 Weight: 47 kg

ACTELEC 200 and 400

ACTELEC 500, 800, 950 and 1600


ACTELEC	Actuator	A	B	ø C	D	E	F	G	H	L	M	N	mounting plate ISO 5211				Weight kg
													Ref.	ø d1	ø d2	n	
200	SA 07.5	229	469	160	208	125	115	95	246	249	265	273	F16	165	M20	4	77
400	SA 10.1	229	471	200	208	125	115	95	246	254	282	275	F16	165	M20	4	81
500	SA 05.7	271	523	160	245	140	155	109	280	249	265	323	F16	165	M20	4	129
													F25	254	M16	8	
800	SA 10.1	271	525	200	245	140	155	109	280	254	282	325	F16	165	M20	4	133
													F25	254	M16	8	
950	SA 07.5	337	573	160	338	180	180	131	336	249	265	365	F25	254	M16	8	202
													F30	298	M20	8	
1600	SA 10.1	337	575	200	338	180	180	131	336	254	282	367	F25	254	M16	8	206
													F30	298	M20	8	

Mounting on valves

The actuator can be positioned in four position, at intervals of 90°. Unless otherwise stated, the actuator is mounted according to the arrangement N position 1



This leaflet is not contractual and may be amended without notice.

11.01.12

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