

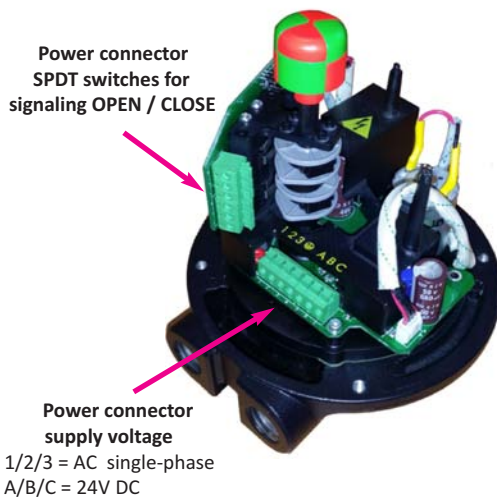
electric Quarter-turn Actuator Series AQ1L up to AQ7L (15 Nm bis 70 Nm)

Compact electric quarter-turn actuator series which was designed for the daily industrial use. Simple but robust design distinguishes this reliable rotary actuator.

Depending on the process requirement, there are two versions to choose:

OPEN / CLOSE version, class A according to EN 15714-2 or for Inching/Positioning, class B (S4 - 30%, engine power up to 120 starts per hour at peak load) according to EN 15714-2.

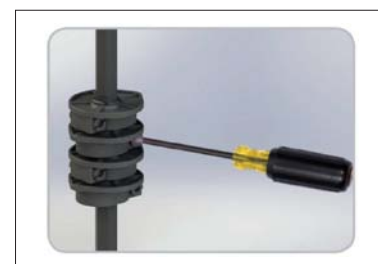
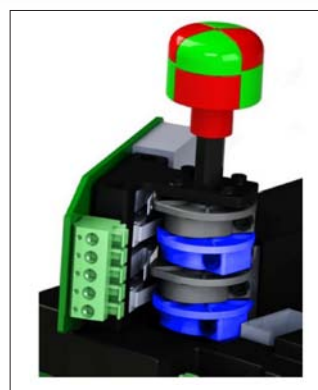
The actuators are maintenance-free and internally completely pre-wired. The self-locking gear with the high-performance lubricate guarantees a long service life.



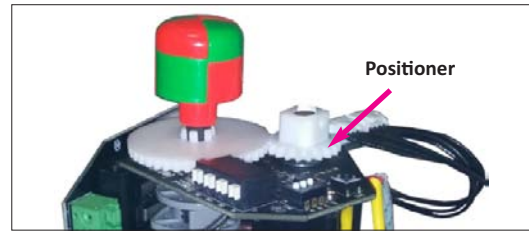
- Multi-Voltage-Solution for voltage range from 85 V to 250 V AC 50/60 Hz or directly 24 V DC (connect each on differently terminal block)
- DC motor with 2-wire connection
- 2 x cable gland M 20 x 1,5
- each separate terminal strip with compression fitting for motor and switch with internal earth grounding connection
- Protection class IP 68 standard (2,0 m/24h) according to NEMA 4x
- Ambient temperature range from -20 ° C up to + 60 ° C
- Housing made of aluminum casting, outside powder coating, minimum 160 µm, cover RAL 1014 (ivory); corrosivity protection class C3
- outer housing screws stainless steel, captive

Equipment AQ series (standard OPEN / CLOSE operation)

End positions	2 SPDT switches for switching off the motor in end position OPEN and CLOSED 2 auxiliary switches for signaling the End positions OPEN and CLOSE 250 V AC - 5A / 48 V DC - 2.5 A (resistive load) 2 mechanically adjustable from the outside end stops
Mechanical position indicator	Cover on top with 3D all around visible position indicator: red = CLOSE / green = OPEN
Emergency operation	manual emergency operation in case of power failure via handwheel -the motor is out of operating-
Anti-condensation heater	protection against moisture in the actuator housing
Self-locking	Gearbox is blocked when engine is stopped, prevents unintentional adjustment of the valve

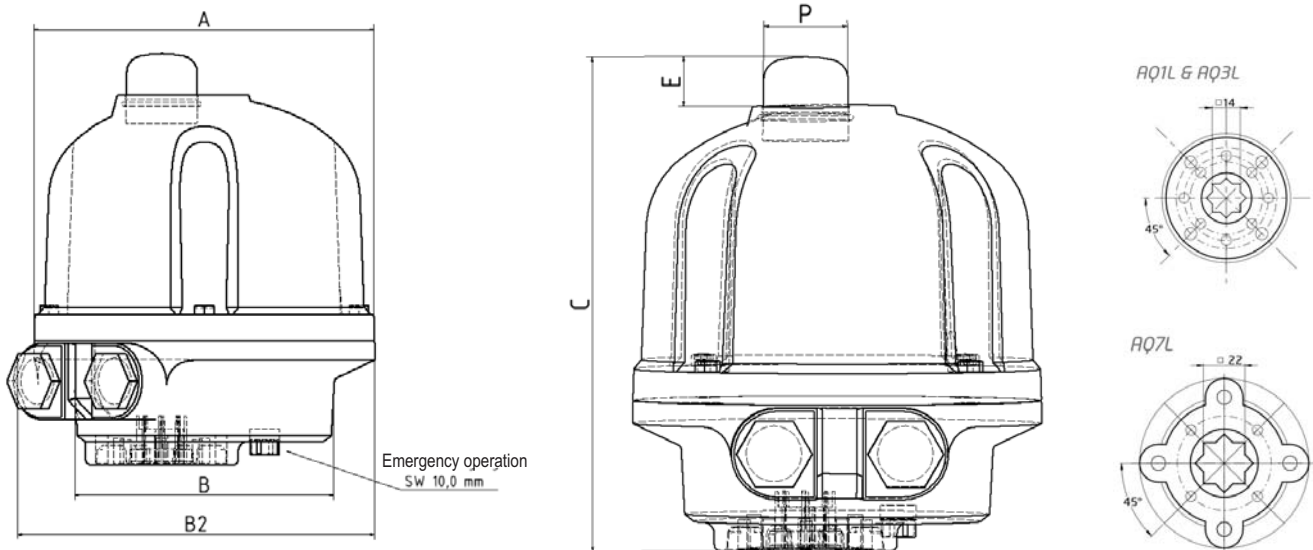


Additional options AQ-Serie (Inching/Positioning S4 - 30%)	
Positioner	Input signal (setpoint) and Output signal (actual value) are completely isolated from each other. Input signal 4 - 20 mA Output signal 4 - 20 mA (4 mA closed 20 mA open)



electric Motor datas 1-Ph 85 V - 260 V AC 50 - 60 Hz					
Actuator size	Torque (Nm max)	Operating time s / 90°	Power (KW)	Current rated (A)	Current start (A)
AQ1L	15	13	0,02	0,3	0,8
AQ3L	30	15	0,02	0,3	0,8
AQ7L	70	15	0,02	0,4	1,0

electric Motor datas 24 V DC (direct current)					
Actuator size	Torque (Nm max)	Operating time s / 90°	Power (KW)	Current rated (A)	Current start (A)
AQ1L	15	13	0,02	0,4	2,5
AQ3L	30	15	0,02	0,4	2,5
AQ7L	70	15	0,02	0,5	6,0



Dimensions											
actuator type	Operating-flange ISO 5211	for stem size max.		A (mm)	B (mm)	B2 (mm)	C (mm)	E (mm)	P (mm)	Conduit entries	Weight (kg)
		Square (mm)	Double "D" (mm)								
AQ1L	F03/F04/F05	14	9	145,0	107,0	150,0	175,0	17,5	30,0	M20 x 1,5	2,5
AQ3L	F03/F04/F05	14	9	145,0	107,0	150,0	175,0	17,5	30,0	M20 x 1,5	2,5
AQ7L	F05/F07	22	11 / 14	145,0	107,0	150,0	195,0	17,5	30,0	M20 x 1,5	3,5

Article-Number			
actuator type	Power 24 V DC	Power 85 - 260 V AC	additional for Potentiometer
AQ1L	171.8092.1L.13	171.8093.1L.13	-TPO
AQ3L	171.8092.3L.15	171.8093.3L.15	-TPO
AQ7L	171.8092.7L.15	171.8093.7L.15	-TPO

AQ1L_AQ7L_DE_2017_Rev.0

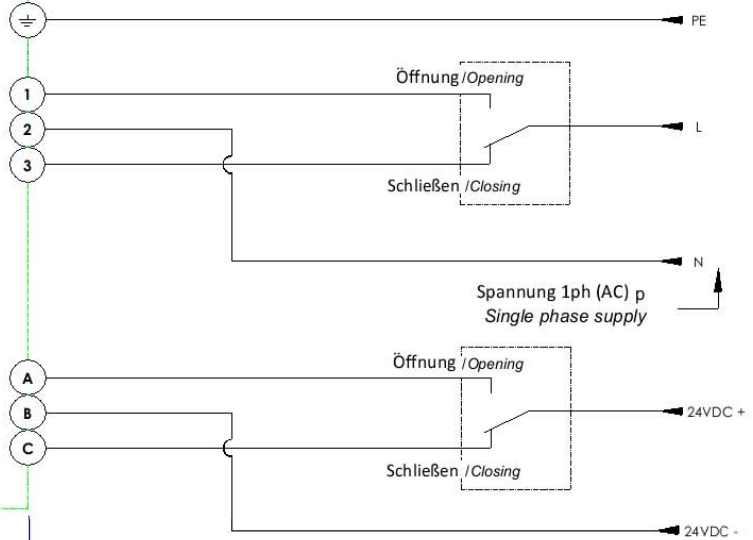
Antrieb / Actuator

AQ1L / AQ3L / AQ7L

Klemmplan
Power Board

WD_500032_FREN

Empfohlene Kundenseitige Verdrahtung
Recommended Customer wiring



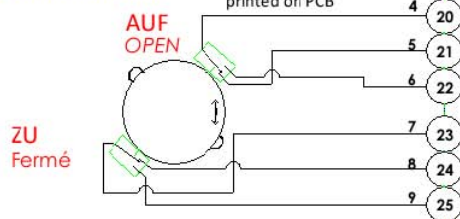
Output J2



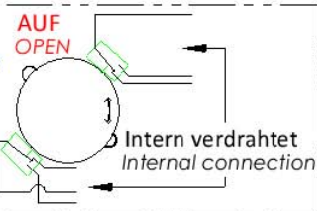
zusätzliche Wegenschalter
Extra travel limit switch

Input J3

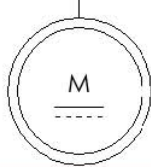
auf Leiterplatte gedruckt
printed on PCB



Wegenschalter
Travel limit switch



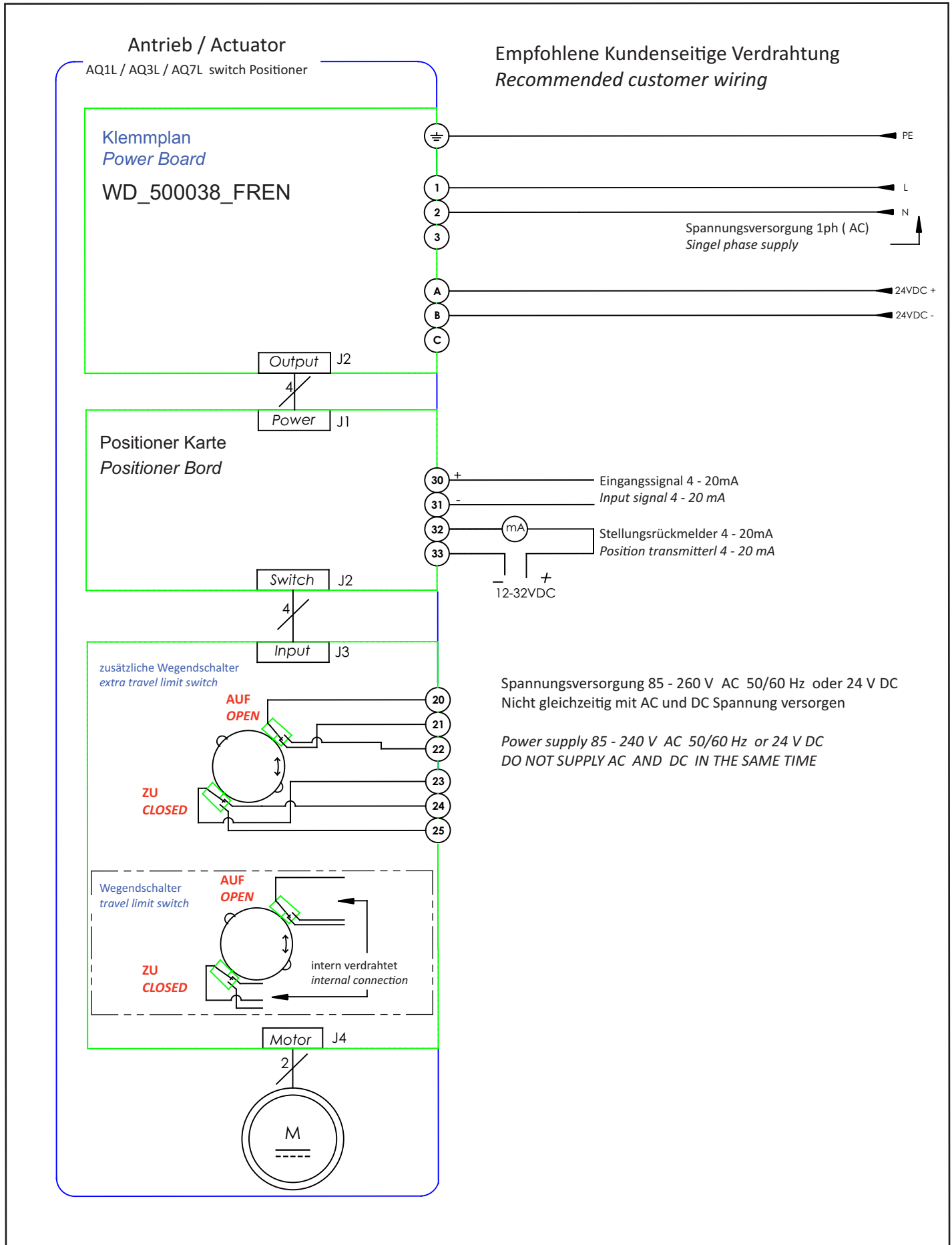
Motor J4



Spannungsversorgung 85 - 260 V AC, 50/60 Hz oder 24 V DC
Nicht gleichzeitig mit AC und DC Spannung versorgen !

Power supply 85 - 260VAC, 50/60Hz or 24VDC
DO NOT SUPPLY AC AND DC IN THE SAME TIME.

AQ1L_AQ7L_DE_2017_Rev.0



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