



## ELECTRIC ACTUATORS

ball valves, butterfly valves and  
damperlerin on-off veya oransal kontrolü



## Electric Actuators

### TREA40 Electric Actuators Standard Features

#### General Features

- Specifically designed for ball valve, butterfly valve and dampers control.
- Small, light and compact design.
- Electrostatic powder coated aluminium body
- 40 Nm torque value
- Easy mounting with ISO5211 standards
- Hand control unit
- Standard 2 pieces output limit switches
- Valve position indicator
- Long lasting
- For TREA40; 85-265 V AC and 24 V DC can be used.
- Working Rate: S2: % 100 max. 30 min.

#### On-Off Electric Actuator (TREA 40)

<b>Body</b>	: Aluminium injection, electrostatic powder coated
<b>Torque Output Value</b>	: 40 Nm
<b>Body Enclosure</b>	: IP67
<b>Hand Control Unit</b>	: It is on the actuator body and make on/off
<b>Supply Voltage</b>	: 85-265 V AC ve 24 V DC
<b>Open-Close Time</b>	: 14 sn (50 .. 60Hz, 90' turn)
<b>Motor</b>	: 24 V DC motor
<b>Environment Temperature</b>	: -20 °C ... 60 °C
<b>Cable Connection Entry</b>	: 0.5x11C - 1 meter assembled cable
<b>Valve Connection Flange</b>	: ISO5211 standard F03/F05
<b>Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A
<b>Auxiliary Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A

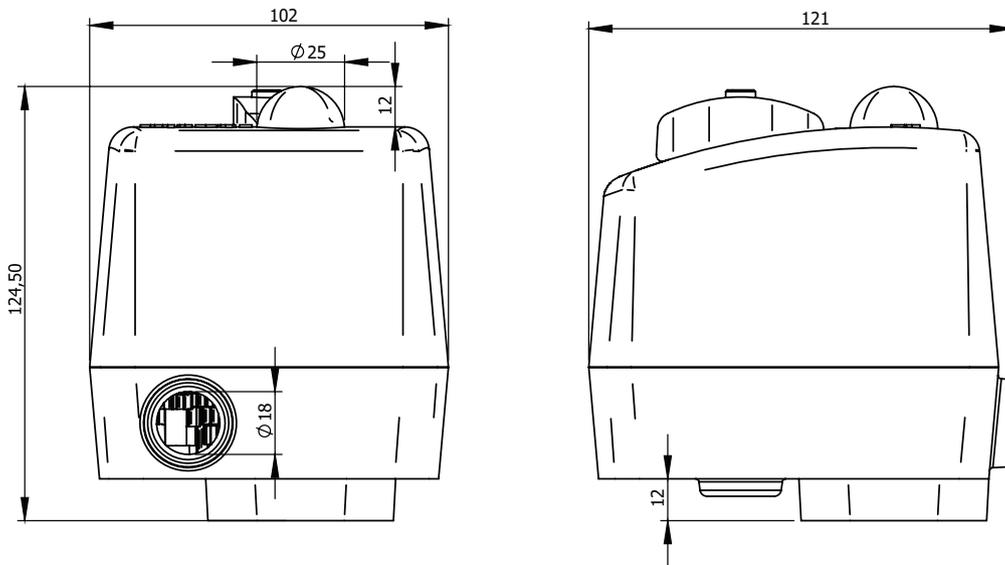


TREA 40

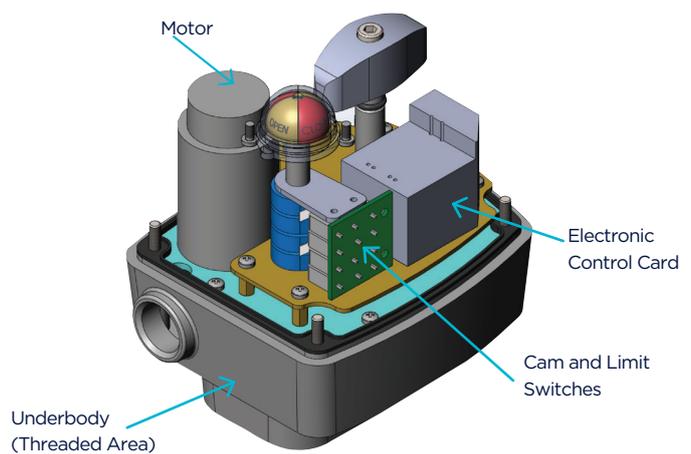
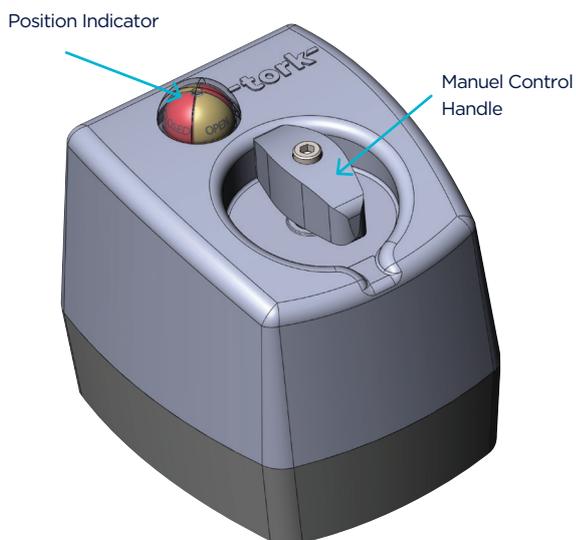


# Electric Actuators

## Sizes



## Product and Piece Pictures



## Electric Actuators

### TREA60 and TREA80 Electric Actuator Standard Features

#### General Features

- Specifically designed for ball valve, butterfly valve and dampers control.
- Electrostatic powder coated aluminium body
- 60 Nm and 80 Nm torque value options
- Water and dust insulation is generally produced with IP67 with O-ring structure. IP68 is optional.
- Easy mounting with ISO5211 standard
- Hand control unit
- Standard 2 pieces output limit switches
- Automatic de-clutch output when motor is energized
- Moisture resistance heater (5 watts)
- Valve position indicator
- Long lasting
- Working Rate: S2: % 100 max. 30 min. ( For open/close models)  
S4: %70, 1000 Start/Hour (For proportional models)



#### Optional Features

- Proportional working with PCU card
- On Open/Close models 230 VAC or 24 VDC supply voltage  
on proportional models 85-265 VAC or 24 VDC supply voltage
- IP 68 (10mt 72 hour)
- Suitable for ZONE 1 and ZONE 2 Atex environment



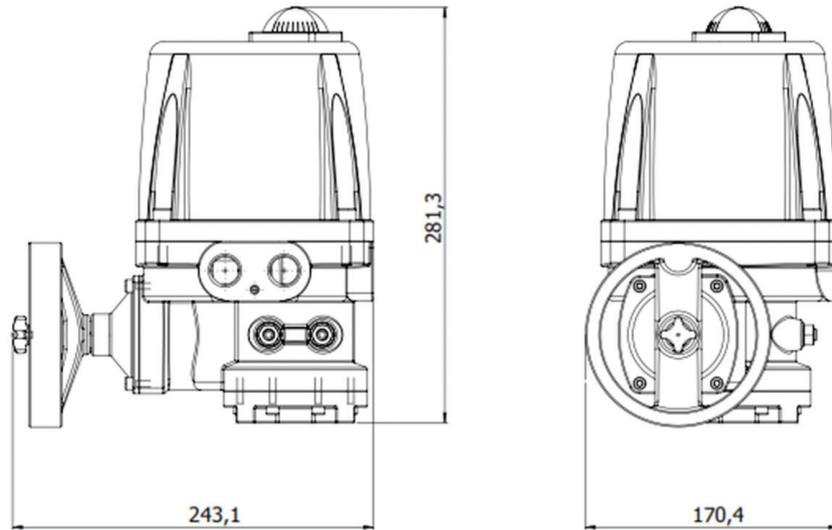
#### On-Off and Proportional Electric Actuator

<b>Body</b>	: Aluminium injection, electrostatic powder coated If ATEX, TEXN829 E/P BRIGHT Black Special Painted
<b>Torque Output Value</b>	: 60 Nm and 80 Nm
<b>Body Enclosure</b>	: IP67 IP68 (10 m (10 m depth 72 hour) Suitable for Atex (Ex II 2G Ex IIC T4 Gb) ZONE 1 and
<b>Handle Control Unit</b>	: On actuator body and for open / close.
<b>Supply Voltage</b>	: For On-Off TREA60 and TREA80, 230 used V AC or 24 V DC For Proportional TREA60 and TREA80, 85-265 V AC or 24 V DC
<b>Open Close Time</b>	: 14- 16 sec
<b>Motor</b>	: Reversible motor, it can rotate in two directions.
<b>Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A
<b>Auxiliary Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A
<b>Environment Temperature</b>	: -20 °C ... 60 °C
<b>Cable Connection Entrance</b>	: M20x1.5 Coupling
<b>Valve Connection Flange</b>	: ISO5211 standard F03/F05/F07
<b>Optional</b>	: Proportional control unit 4-20 mA input / 4-20 mA output signal 1-5 V DC input / 1-5 V DC output signal

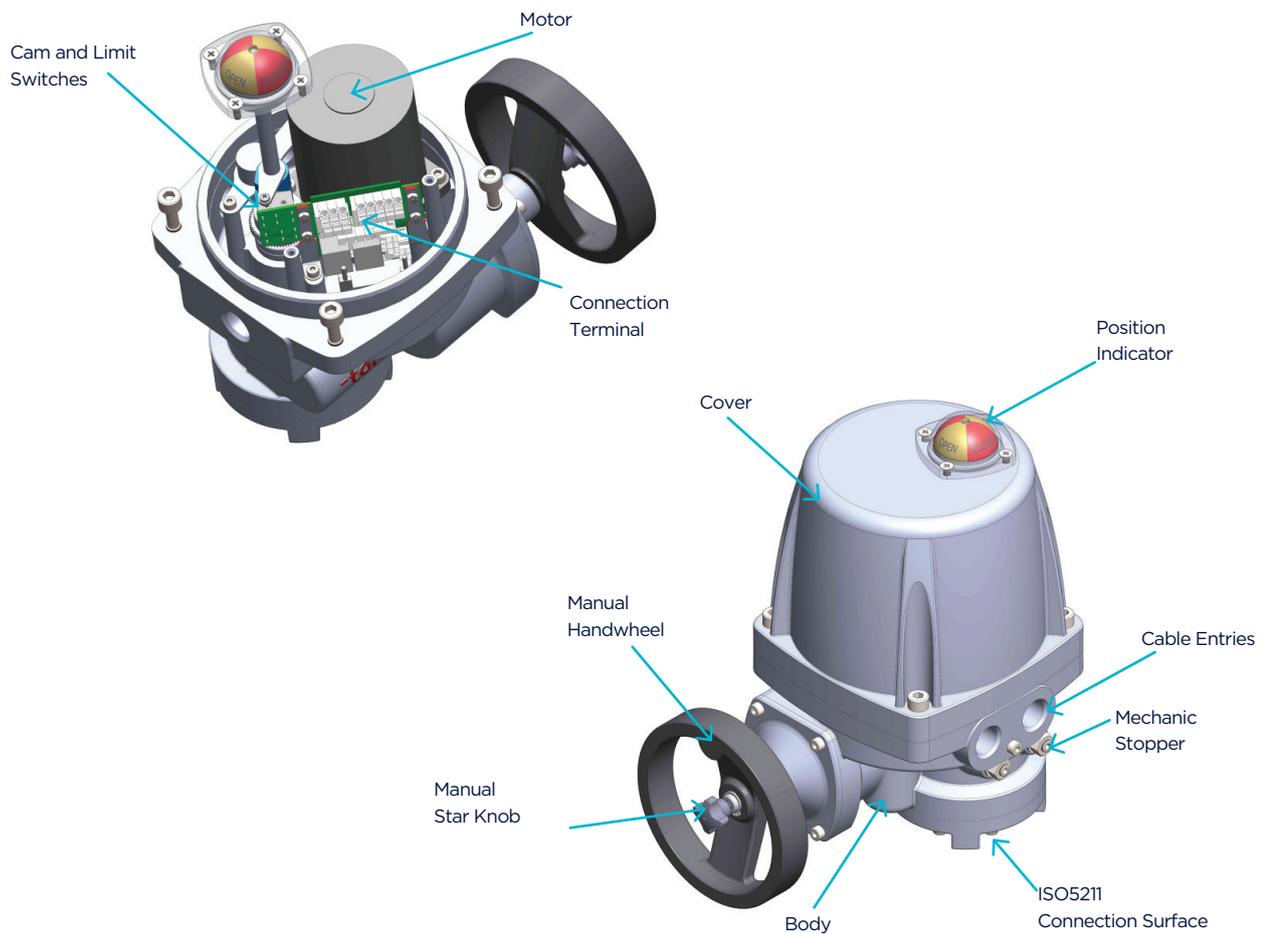


# Electric Actuators

## Sizes



## Product and Pieces Pictures



## Electric Actuators

### TREAE60 Elektrik Actuator Standard Features

#### General Features

- Specifically designed for ball valve, butterfly valve and dampers control.
- Economic structure
- 60 Nm torque value
- Waterproof and dustproof IP65 with O-ring structure
- ISO5211 standard and easy mounting
- Hand control unit
- Standard 2 piece output limit switches
- Valve position indicator
- Long lasting

#### Optional Features

- TREAE60 için 100-240 V AC or 24 V DC/AC

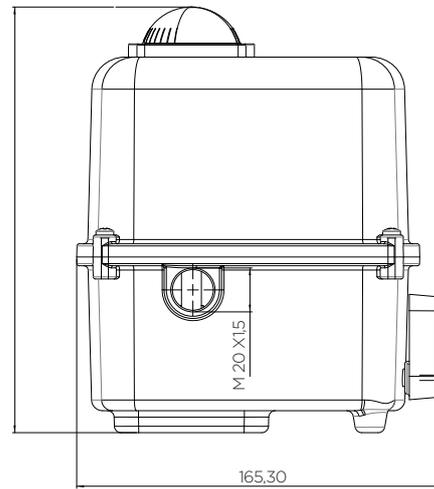
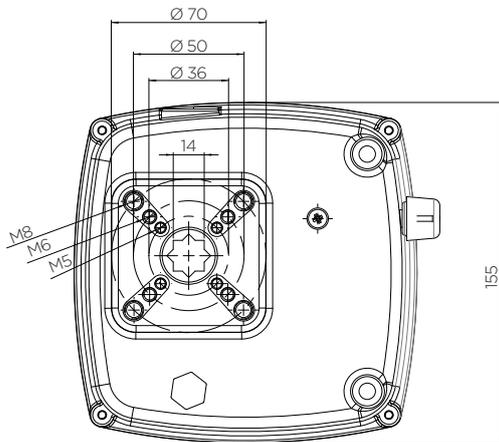
#### On-Off Electric Actuator

<b>Body</b>	: Plastic injection
<b>Torque Output Value</b>	: 60 Nm
<b>Body Enclosure</b>	: IP65
<b>Handle Control Unit</b>	: It is near the actuator body and make opening / closing
<b>Supply Voltage</b>	: 100-240 V AC or 24 V DC/AC
<b>Open Close Time</b>	: 14 sn
<b>Motor</b>	: Reversible DC Motor, it can rotate in two directions.
<b>Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A
<b>Auxiliary Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 5A
<b>Environment Temperature</b>	: -20 °C ... 60 °C
<b>Cable Connection Entrance</b>	: M20x1.5 coupling
<b>Valve Connection Flange</b>	: ISO5211 standard F03/F05/F07

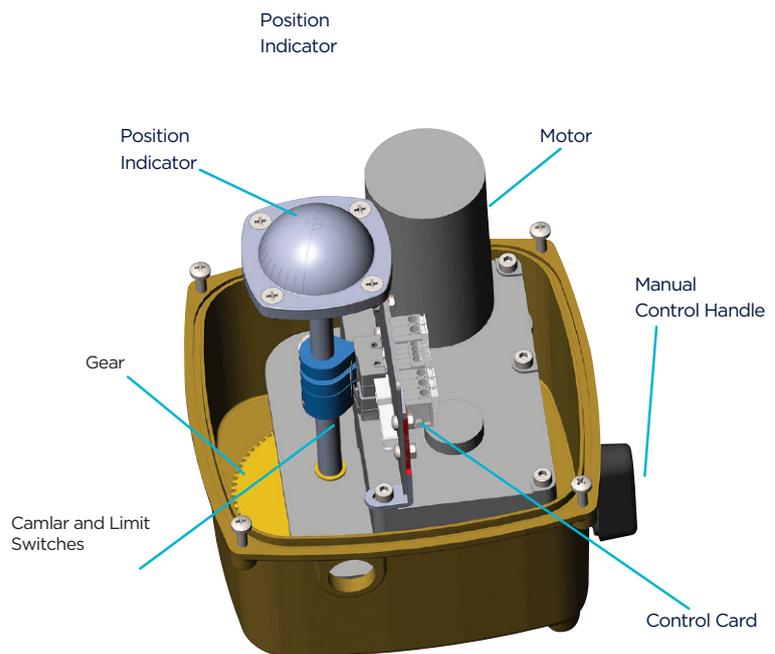
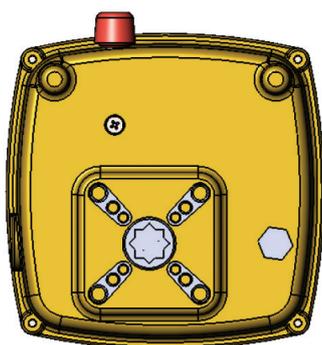
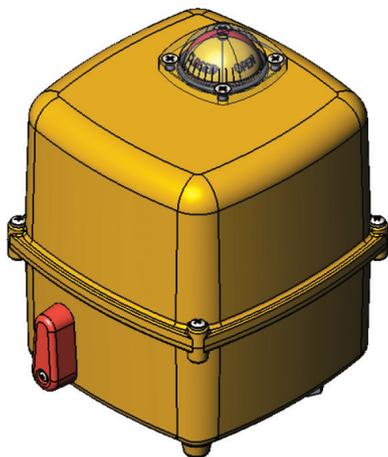


# Electric Actuators

## Sizes



## Product and Pieces Pictures



## Electric Actuators

### REA40 and REA60 Electric Actuator Standard Features

#### General Features

- Specifically designed for ball valve, butterfly valve and dampers control.
- Small, light and compact design, with high torque output, different control options
- Corrosion resistant polyester painted body
- Various output torque value from 40 Nm to 60 Nm
- Water and dust insulation with O-ring structure IP67
- ISO5211 standard and easy mounting
- Hand control unit
- Standard 4 pieces limit switches
- Space heater with thermostat far preventing overhear (On REA60 models)
- Valve position indicators
- Long lasting

#### Optional Features

- Proportional card PCU is suitable for REA60 models.
- 220 V AC/ 110 V AC: Suitable for all REA actuator series.
- 24 V DC/ 24 V AC: Suitable for REA 40, 60, 80, 150, 200, 300 series.
- Working Rate: S2: % 100 max. 30 min.; S4: % 70 1600 hour
- Thanks to its battery, system can be controlled like a spring return: Suitable for REA 80, 150, 200, 300 series.
- Working Rate: S4 %70 max. 30 min. 1600 start/hour
- Smart type control unit SICU (semi integral control unit), ICU (intelligent dijital control unit): REA 150 and upper series
- IP68 Staying under water (10 m) 72 hour

#### On-Off and Proportional Electric Actuator

<b>Body</b>	: Aluminium injection, electrostatic polyester coated
<b>Torque Output Value</b>	: 40 Nm ... 60 Nm
<b>Body Enclosure</b>	: Weatherproof, IP67, Inside the body there is a heater (2watt) against moisture.
<b>Handle Control Unit</b>	: It is under the actuator body and makes opening/closing.
<b>Supply Voltage</b>	: 220 V AC, (on request 110 V AC, 24 V DC)
<b>Open Close Time</b>	: 12 .. 14 sn (50 .. 60Hz, 90' turn)
<b>Motor</b>	: Reversible motor, it can rotate in two directions.
<b>Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 3A
<b>Auxiliary Limit Switches</b>	: 2x Open/Close SPDT, Max 250VAC 3A
<b>Environment Temperature</b>	: -20 °C ... 70 °C
<b>Cable Connection Entrance</b>	: 2 pieces PG 13,5 coupling
<b>Valve Connection Flange</b>	: ISO5211 standard F03/F05/F07
<b>Optional</b>	: Proportional control unit (4-20 mA input / 4-20 mA output signal at REA60 model)



REA 40



El Kontrol Ünitesi



On-Off Elektrik Aktüatör



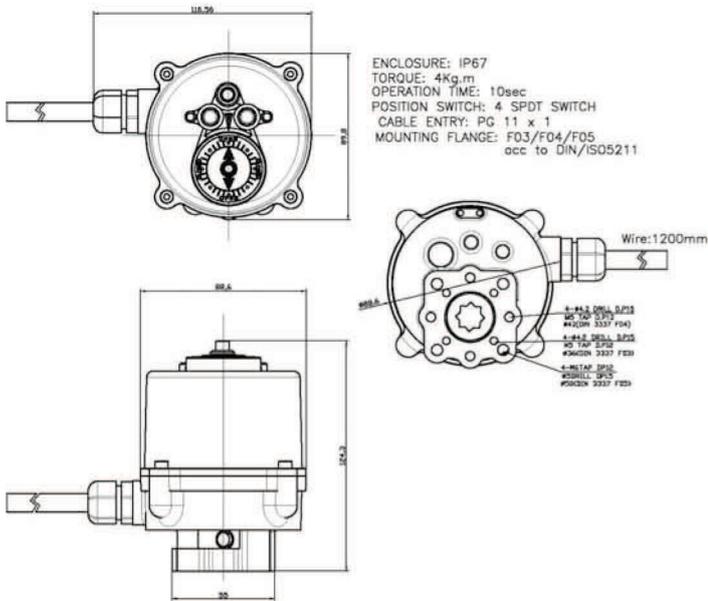
REA 60



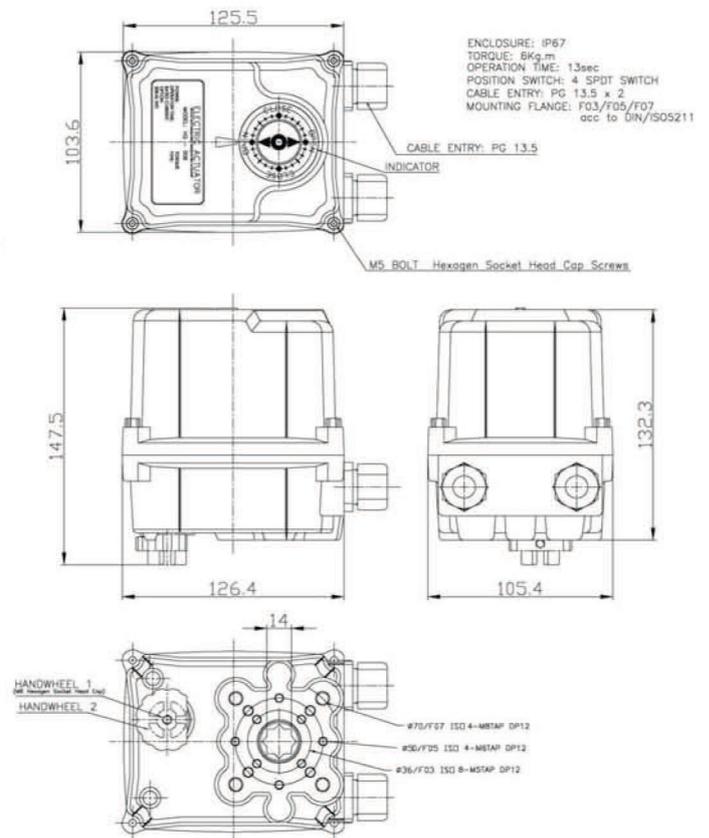
REA 80

# Electric Actuators

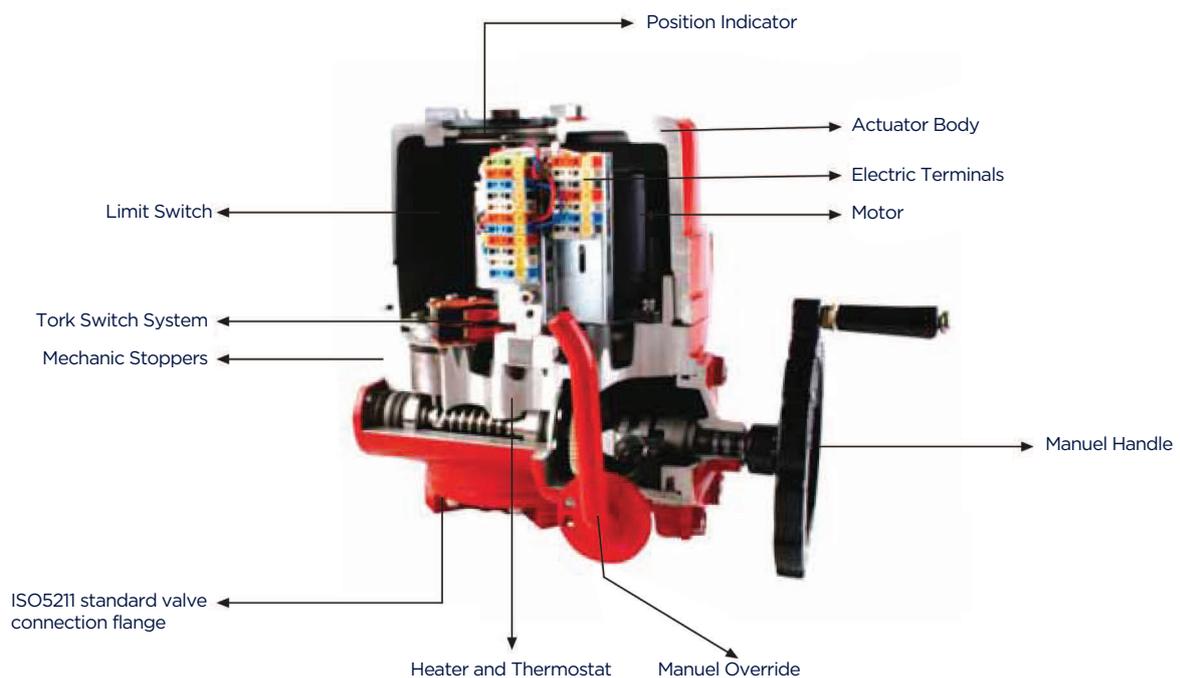
## REA 40



## REA 460



## REA80 ... REA3000 Serie



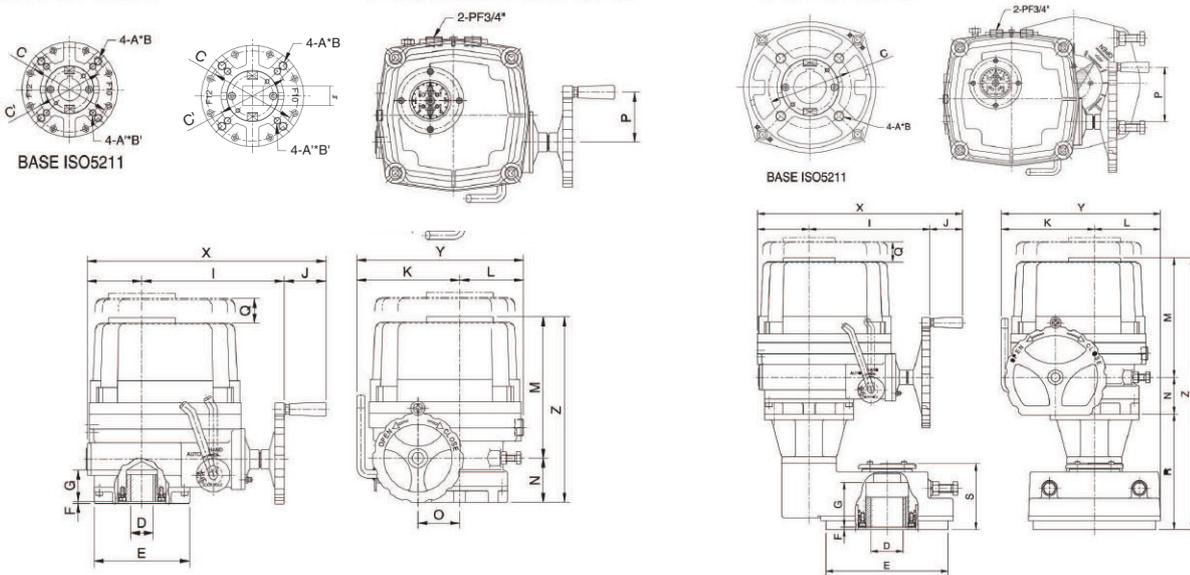
# Electric Actuators

## REA80 and REA3000 Electric Actuator Standard Feature:

- Body** : Aluminium injection, electrostatik polyester dyed
- Torque Output Value** : 80 Nm ... 3000 Nm
- Body Enclosure** : Weatherproof, IP67, NEMA4, and NEMA6,  
There is a heater (10 watt) against humidity inside the body. Optional IP68
- Handle Control Unit** : Delatching mechanism located outside the body,  
(locking gear lever, gearbox)
- Working Voltage** : 220V AC, (on request 110 V AC and 380V,  
440V AC 3 phase)
- Open Close Time** : 13 ... 112 sec varies by model (50 .. 60Hz, 900 turn)
- Motor** : Reversible motor, it can rotate in two directions.
- Limit Switches** : 2x Open/Close SPDT, Max 250VAC 10A
- Auxiliary Limit Switches** : 2x Open/Close SPDT, Max 250VAC 10A
- Torque Switch** : All for opening and closing (Except REA.80).
- Local Indicator** : It is under the glass housing on the actuator. Standard.
- Mechanic Stopper** : Two pieces
- Ambient Humidity** : %90 RH Max. (non- condensing)
- Ambient Temperature** : -20 °C ... 70 °C
- Cable Connection Entrance** : 2 pieces PG 13,5 coupling
- Valve Connection Flange** : ISO5211 standard F07... F16



On-Off and Proportional Electric Actuator is provided by adding Proportional card PCU.



Model	Basel ISO5211		D	SQ	E	F	G	H	I	J	K	L	M	N	O	P	R	S	X	Y	Z
	Ø C	A B																			
REA 80	F07	M8	20	14	88	3	32	50	157	51	100	70	182	53	40	60	-	-	258	170	235
	Ø70	12																			
REA 150	F07/F10	M8/M10	22	17	125	3	42	73	200	65	142	87	200	68	54	78	-	-	338	229	268
	Ø70/Ø102	12/15																			
REA200	F07/F10	M8/M10	22	22	125	3	42	73	200	65	142	87	200	68	54	78	-	-	338	229	268
	Ø70/Ø102	12/15																			
REA 300	F10/F12	M10/M12	35	27	148	3	49	82	221	65	160	99	221	69	65	78	-	-	368	259	290
	Ø102/Ø125	15/18																			
REA 600	F10/F12	M12/M12	35	27	148	3	49	82	221	65	160	99	235	69	65	78	-	-	368	259	304
	Ø102/Ø125	15/18																			
REA 800	F12/F14	M12/M16	45	36	178	3	57	103	242	65	186	111	256	74	78	110	-	-	410	297	330
	Ø125/Ø140	18/24																			
REA 1200	F12/F14	M12/M16	45	-	178	3	57	103	242	65	186	111	256	74	78	110	-	-	410	297	330
	Ø125/Ø140	18/24																			
REA 2000	F14/F16	M16/M20	65	-	245	5	245	103	242	65	186	133	256	74	78	110	233	133	410	319	583
	Ø140/Ø165	24/30																			
REA 3000	F14/F16	M16/M20	65	-	245	5	90	103	242	65	186	133	256	74	78	110	233	133	410	319	563
	Ø140/Ø165	24/30																			

## Electric Actuators

### Battery Operated Electric Actuator Standard Features (REA B Serie)

- Battery operated electric actuators developed for applications requiring safety.
- Act as spring return actuator.
- In an emergency or power failure situation, valve can be operated 5 times on-off.
- For REA 80 ... REA 3000 serie

<b>Body</b>	: Aluminium injection, electrostatic polyester dyed
<b>Torque Output Value</b>	: 80 Nm ... 3000 Nm
<b>Enclosure</b>	: Weatherproof, IP67, NEMA4, ve NEMA6 There is a heater (10 watt) against humidity inside the body
<b>Handle Control Unit</b>	: Delatching mechanism located on the actuator, (kilitlemeli vites kolları, dişli kutulu)
<b>Working Voltage</b>	: 220V AC, (on request 110 V AC and 380V, 440V AC 3 phase)
<b>Open Close Time</b>	: 13 ... 112 sec varies by model (50 .. 60Hz, 900 turn)
<b>Motor</b>	: Reversible motor, it can rotate in two directions.
<b>Limit Switch</b>	: 2 pieces.T.K.Ç.Y limit switches, 250V AC, 16A (on request 2 pieces additional switch)
<b>Torque Switch</b>	: All for open and close (Except REA 80).
<b>Local Indicator</b>	: It is under the glass housing on the actuator. Standard.
<b>Mechanic Stopper</b>	: Two pieces
<b>Ambient Humidity</b>	: %90 RH Max.(non- condensing)
<b>Ambient Temperature</b>	: -20 °C ... 70 °C
<b>Cable Connection Entrance</b>	: 2 pieces PG 13,5 coupling



### Local Control Unit Electric Actuator (LCU-B Serie)

- Applied REA 150 ... REA 3000 series.
- 110 V AC/ 220 V AC monophase application
- 220 V AC/ 460 V AC three-phase application
- Phase protection and indication against incorrect connection
- Operating light, power control, error, open - closed position signals are monitored on the LCU-B panel on the actuator and this information can be transmitted to the control unit with a cable.

<b>Body</b>	: Aluminium, injection, electrostatic polyester dyed.
<b>Enclosure</b>	: Weatherproof, IP67, NEMA4, and NEMA6. There is a heater (10 watt) against humidity inside the body.
<b>Handle Control Unit</b>	: Delatching mechanism located on the actuator, (locking gear lever, gearbox)
<b>Working Voltage</b>	: 220V AC, (on request 110 V AC and 380V, 440V AC 3 phase)
<b>Open Close Time</b>	: 13 ... 112 sec varies by model (50 .. 60Hz, 900 turn)
<b>Motor</b>	: Reversible motor, it can rotate in two directions.
<b>Limit Switch</b>	: 2 pieces.T.K.Ç.Y limit switched, 250V AC, 16A (on request 2 pieces. additional switch)
<b>Torque Switch</b>	: All for open and close



### Lineer Elektrik Aktüatörler (Glob vanalar için)

<b>Body</b>	: Aluminium injection, electrostatic polyester dyed
<b>Enclosure</b>	: Weatherproof, IP67, NEMA4, and NEMA6. There is a heater (10 watt) against humidity inside the body.
<b>Hand Control Unit</b>	: Delatching mechanism located on the actuator, (locking gear lever, gearbox)
<b>Working Voltage</b>	: 220V AC, (on request 110 V AC ve 380V, 440V AC 3 phase)

Model	Shaft Speed (mm/sec)	Power Value	Max. Stork (mm)
LEA 50	0.44/0.53	5 KN	60
LEA 70	0.44/0.53	7 KN	60
LEA 100	0.69/0.82	10 KN	70
LEA 120	0.69/0.82	12 KN	70
LEA 150	0.69/0.82	15 KN	80
LEA 180	0.69/0.83	18 KN	100
LEA 200	0.69/0.83	20 KN	100
LEA 250	0.69/0.83	25 KN	100



## Electric Actuators

### Dijital Local Control Unit (LCU-C Serie)

- For REA 150 ... REA 3000 serie
- 220 V AC / 460 V AC three-phase application
- Light, compact and integrated design
- The cable entry terminal can be moved outside the actuator.
- Resistant to water, vibration and temperature.
- RS485 communication connection feature
- Automatic phase distributor feature
- Operating panel, power control, error, open and closed position signals are displayed on the panel and this information is transmitted to the control unit via a cable and transmitted to the computer via RS485 connection feature.

<b>Body</b>	: Aluminium injection, electrostatic polyester dyed
<b>Enclosure</b>	: Weatherproof, IP67, NEMA4, ve NEMA6, There is a heater (10 watt) against humidity inside the body.
<b>Hand Control Unit</b>	: Delatching mechanism located on the actuator, (locking gear lever, gearbox)
<b>Working Voltage</b>	: 220V AC, (istek üzere 110 V AC ve 380V, 440V AC 3 phase)
<b>Open Close Time</b>	: 12 ... 37 sec (50 .. 60Hz, 900 phase)
<b>Motor</b>	: Reversible motor, it can rotate in two directions.
<b>Limit Switch</b>	: 2 pieces.T.K.Ç.Y limit switches, 250V AC, 10A (On request 2 pieces additional switch)
<b>Tork Switch</b>	: All for open and close (Except REA.80)



### Electric Actuator Stainless Steel Ball Valves (EAV 903 / 904 Serie)

#### Electric Actuator Features

<b>Control</b>	: On-off (optional; proportional)
<b>Working Voltage</b>	: 220V AC, 50Hz (optional 110 V AC, 24 V DC)
<b>Open Close Time</b>	: 13/14 sn
<b>Output Torque Value</b>	: 40 Nm, 60 Nm
<b>Enclosure</b>	: IP67
<b>Ambient Temperature</b>	: -20 °C ... 70 °C
<b>Optional</b>	: Local control unit can be added, potentiometer can be added, position transmitter can be added, proportional unit can be added.

#### Ball Valve Features

<b>Body</b>	: Full bore, AISI 316 stainless steel, three pieces
<b>Ways</b>	: Two-way / three-way is installed in any position and gives flow passage in two directions.
<b>O-ring</b>	: Ball is PTFE and neck o-ring is (two pieces) PTFE
<b>Pressure</b>	: It is designed for low pressure and high pressure.
<b>Working Temperature</b>	: -20 °C ... 180 °C
<b>Working Pressure</b>	: PN 40 bar (1/2" .. 1 1/4"), 16 bar (1 1/2" ... 3")
<b>Test</b>	: All valves are tested at 20 bar for 48 hours.
<b>Special Request</b>	: Two-piece ball valve available on request.



### S9190 Serie (Electric motorized Zone valve, (2/2 way, 3/2 way))

<b>Application Area</b>	: Heating, cooling, Water treatment systems,
<b>Size</b>	: 1/2", 3/4", 1", 1 1/2"
<b>Body</b>	: Stainless Steel
<b>Way</b>	: 2 way, 3 way
<b>Temperature</b>	: -20 °C ... 80 °C water, hot water
<b>Working Voltage</b>	: 24 V DC and AC, 220V AC on request 5V, 12V, 110V AC/DC
<b>Open Close Time</b>	: 5 -7 sec.



## Electric Actuators

### Electric Actuator Ball Valve (Brass, Carbon Steel, Stainless Steel, Cast Iron, PVC)

#### Electric Actuator Features

<b>Control</b>	: On-off (optional; proportional)
<b>Working Voltage</b>	: 220V AC, 50 Hz (proportional 110 V AC, 24 V DC) 380V AC Three-phase
<b>Open Close Time</b>	: 13/14/25/31/37/93 sn
<b>Output Torque Value</b>	: 40 Nm, 60 Nm ... 3000 Nm
<b>Enclosure</b>	: IP67 (on request IP 68, ex-proof)
<b>Ambient Temperature</b>	: -20 °C ... 70 °C
<b>Optional</b>	: Local control unit can be added, potentiometer can be added, position transmitter can be added, proportional unit can be added.

#### Ball Valve Features

<b>Body</b>	: Full bore, brass, carbon steel, stainless, cast iron, PVC
<b>Way</b>	: Two-way / three-way is installed in any position and gives flow passage in two directions.
<b>O-ring</b>	: Ball is PTFE and neck o-ring is (two pieces) PTFE PVC: Around ball: EPDM / VITON
<b>Pressure</b>	: It is designed for low pressure and high pressure.
<b>Working Temperature</b>	: (Acc. to body material) -20 °C ... 80 °C /130 °C /180 °C
<b>Working Pressure</b>	: PN16, PN 40 bar (1/2" .. 1 1/4"), 16 bar (1 1/2" ... 3") NW15 ... NW250
<b>Test</b>	: All valves are tested at 20 bar for 48 hours.
<b>Special Request</b>	: Two-piece ball valve available on request.



### Electric Actuator Stainless Steel Butterfly Valves (EAV 800 Serie)

#### Electric Actuator Features

<b>Control</b>	: On-off (optional proportional)
<b>Working Voltage</b>	: 220V AC, 50 Hz (Proportional 110 V AC, 24 V DC) 380V AC Three-phase
<b>Open Close Time</b>	: 13/14/25/31/37/93 sn
<b>Output Torque Value</b>	: 40 Nm, 60 Nm ... 3000 Nm
<b>Enclosure</b>	: IP67 (on request IP 68, ex-proof)
<b>Ambient Temperature</b>	: -20 °C ... 70 °C
<b>Optional</b>	: Local control unit can be added, potentiometer can be added, position transmitter can be added, proportional unit can be added.

#### Butterfly Valve Features

<b>Body</b>	: GG 25 grey cast, epoxy coated (121 serie); Optional: Rilsan coating body, stainless steel body
<b>Disc</b>	: GGG50 ductile iron epoxy dyed Optional: Rilsan coated On request disc: 304-316 stainless steel (specify in order)
<b>Sealing</b>	: EPDM (-30 °C ... 130 °C) or NBR (-30 °C ... 90 °C) (specify in order) Optional: PTFE, viton, silicon
<b>Working Temperature</b>	: -30 °C ... 130 °C degree works, EPDM (-30 °C ... 90 °C) or NBR (-30 °C ... 130 °C)
<b>Working Pressure</b>	: PN 6 (optional: PN 10, PN 16)
<b>Shaft</b>	: AISI 420 stainless



# tork

valve & automation