

# ER - Electric actuator quarter turn, with manual override

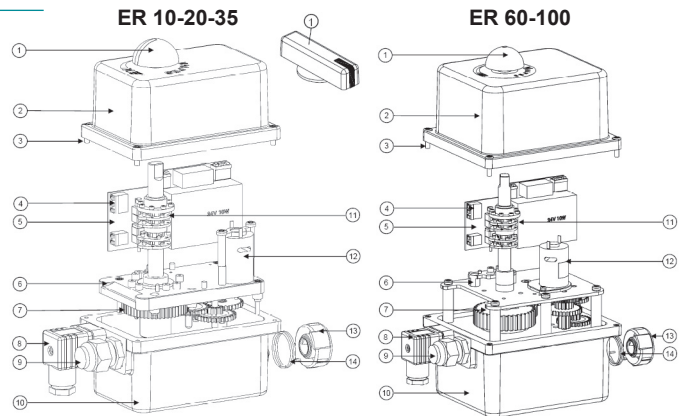
## Product features

- Torque range Md = 10-20-35-60-100 Nm
- Limit switches 4 adjustable limit switches 5A (2x int. + 2x ext.)
- Heating resistance ER 10 + 20 7 W, ER 35 + 100 10 W controlled
- Duty rating ED = 50%
- Protection IP66
- Temperature range -10°C ÷ 55°C (Fail Safe: -10°C ÷ 40°C)
- Electronic torque limiter, failure feedback relay



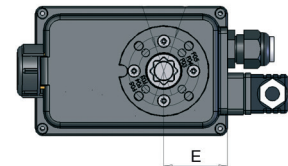
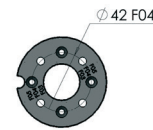
## Construction

1	Position indicator
2	Cover Polyamide 6.6 UL94VO
3	Stainless steel screws (4x)
4	Feedback limit switch
5	Circuit board
6	Gear box plate
7	Reducer
8	Connector (3P+T)
9	Gland PG, M20
10	Housing Polyamide 6.6 GF 25%
11	Cams (4x)
12	Motor
13	Clutch knob
14	Spring



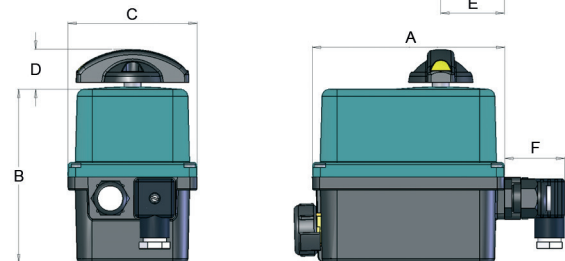
## Emergency manual override:

- In case of an electric supply failure, it is possible to operate the actuator manually:
- Turn the clutch knob «13» to position MAN and hold it in position (reduction «7» disengaged)
  - Turn the outgoing drive shaft of the actuator with the handlever (ER10-20) or a adjusting spanner (ER35-100).
  - In order to re-engage the reduction, release the clutch knob.



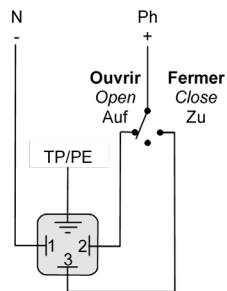
## Dimensions

	A	B	C	D	E	F	ISO 5211	[kg]
ER10	136	124	92	29	45	42	F03-F04-F05	1,5
ER20	136	124	92	29	45	42	F03-F04-F05	1,5
ER35	136	124	92	29	45	42	F03-F04-F05 / F05-F07	1,5
ER60	151	152	128	29	54	42	F05-F07	3,0
ER100	151	152	128	24	54	42	F05-F07	3,0

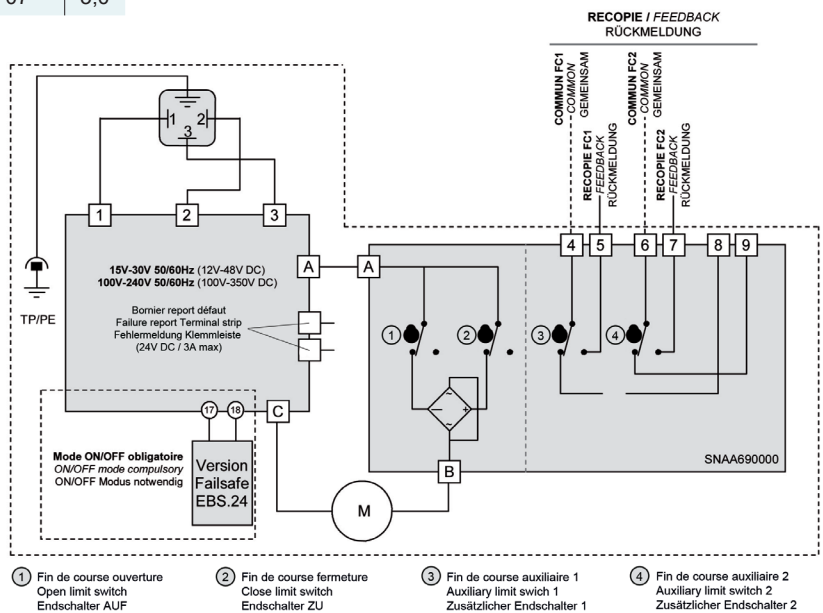
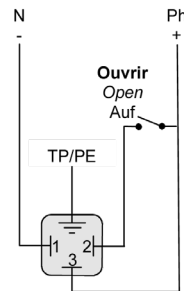


## Power supply: Connector 3P+G DIN43650

Mode 3 points modulants  
3-points modulating mode  
3 Modulationspunkte Modus



Mode Tout ou rien (ON/OFF)  
On-Off mode  
Auf-Zu Modus



## Executions

### Multivolt (Standard)

Type	ISO 5211	Shaft	Shaft reduction*			Torque	Voltage	ON-OFF	Power
ER10.100-240AC/100-350DC.11.F03-F04-F0514	F03-F04-F05	*14	□11	□9		10 Nm	100-240V 50/60Hz, 100-350VDC	11 s	15 W
ER10.15-30AC/12-48DC.11.F03-F04-F0514	F03-F04-F05	*14	□11	□9		10 Nm	24-30V 50/60Hz, 12-48VDC	11 s	15 W
ER20.100-240AC/100-350DC.12.F03-F04-F0514	F03-F04-F05	*14	□11	□9		20 Nm	100-240V 50/60Hz, 100-350VDC	12 s	15 W
ER20.15-30AC/12-48DC.12.F03-F04-F0514	F03-F04-F05	*14	□11	□9		20 Nm	24-30V 50/60Hz, 12-48VDC	12 s	15 W
ER35.100-240AC/100-350DC.26.F03-F04-F0514	F03-F04-F05	*14	□11	□9		35 Nm	100-240V 50/60Hz, 100-350VDC	7 s	45 W
ER35.15-30AC/12-48DC.24.F03-F04-F0514	F03-F04-F05	*14	□11	□9		35 Nm	24-30V 50/60Hz, 12-48VDC	7 s	45 W
ER60.100-240AC/100-350DC.12.F05-F0722	F05-F07	*22	□17	*14	□11	60 Nm	100-240V 50/60Hz, 100-350VDC	12 s	45 W
ER60.15-30AC/12-48DC.12.F05-F0722	F05-F07	*22	□17	*14	□11	60 Nm	24-30V 50/60Hz, 12-48VDC	12 s	45 W
ER100.100-240AC/100-350DC.23.F05-F0722	F05-F07	*22	□17	*14	□11	100 Nm	100-240V 50/60Hz, 100-350VDC	23 s	45 W
ER100.15-30AC/12-48DC.22.F05-F0722	F05-F07	*22	□17	*14	□11	100 Nm	15-30V 50/60Hz, 12-48VDC	23 s	45 W

### Multivolt (Slow)

Type	ISO 5211	Shaft	Shaft reduction*			Torque	Voltage	ON-OFF	Power
ER35.100-240AC/100-350DC.40.F05-F0722	F05-F07	*22	□17	*14	□11	35 Nm	100-240V 50/60Hz, 100-350VDC	41 s	45 W
ER35.15-30AC/12-48DC.41.F05-F0722	F05-F07	*22	□17	*14	□11	35 Nm	15-30V 50/60Hz, 12-48VDC	41 s	45 W
ER60.100-240AC/100-350DC.79.F05-F0722	F05-F07	*22	□17	*14	□11	60 Nm	100-240V 50/60Hz, 100-350VDC	79 s	45 W
ER60.15-30AC/12-48DC.79.F05-F0722	F05-F07	*22	□17	*14	□11	60 Nm	15-30V 50/60Hz, 12-48VDC	79 s	45 W
ER100.100-240AC/100-350DC.119.F05-F0722	F05-F07	*22	□17	*14	□11	100 Nm	100-240V 50/60Hz, 100-350VDC	119 s	45 W
ER100.15-30AC/12-48DC.119.F05-F0722	F05-F07	*22	□17	*14	□11	100 Nm	15-30V 50/60Hz, 12-48VDC	119 s	45 W

### Option Fail Safe position: (Code ER...S)

- In case of power failure the valve returns to the initial position.
- Same actuator as above listed versions but with additional module Fail Safe (temperature range -10°C ÷ 40°C), except ER35 with mounting flange F03-F04-F05.
- Battery loading indicator.
- Power shut off after 2 min. to avoid discharging battery.
- Quick and easy replacement of the battery.
- 2 initial safety position settings „normally close“ or „normally open“ upon order.

### Option with positioner POSI: (Code ER...P)

- Same Multivolt (**Slow**) actuators as listed above but with additional module POSI, except ER10. Furthermore use ER20 with longer operating time (see table below).
- Self configurable input signal 4-20mA, 0-20mA or 0-10V.
- Reversible input signal (20-4mA).
- Electronic torque limiter, failure feedback relay.

Type	ISO 5211	Shaft	Shaft reduction*			Torque	Voltage	ON-OFF	Power
ER20P.100-240AC/90-350DC.25.F03-F04-F0514	F03-F04-F05	*14	□11	□9		20 Nm	100-240V 50/60Hz, 100-350VDC	25 s	15 W
ER20P.15-30AC/12-48DC.25.F03-F04-F0514	F03-F04-F05	*14	□11	□9		20 Nm	15-30V 50/60Hz, 12-48VDC	25 s	15 W

### Additional equipment:

Type	Code actuator	for actuator ->	ER-Standard	ER-Fail Safe (ER...S)	ER-Positioner (ER...P)
<b>EPR.1B</b>	ER...R	Potentiometer 1000 Ohm			
<b>EPR.5B</b>	ER...Y	Potentiometer 5000 Ohm	✓	-	-
<b>EPR.10B</b>	ER...Z	Potentiometer 10000 Ohm			
<b>EFC.2</b>	ER...C	2 additional limit switches	✓	-	-
<b>EPT.C</b>	ER...T	Transmitter 4-20mA, 0-20mA, 0-10V	✓	-	included

Options EPR.B, EFC.2 and EPT.C each alone, no combination possible

\* Shaft reduction (grey values) optional available:

Type	
PSA.22/11	*22 / □11
PSS.22/14	*22 / *14
PSA.22/17	*22 / □17

