COMPACT ELECTRIC ACTUATORS

ER PLUS

90° electric actuator · 10 – 100 Nm

A 90° electric actuator in a PA6 UL 94 V-0 housing with secured manual override, for torques of 10, 20, 35, 60 and 100 Nm. In accordance with CE-RoHS-REACH Directives.

- Multivoltage: 100–240 V or 15–30 V 50/60 Hz, AC or DC
- 3-point modulating or on-off control
- IP66 · S4 50 % duty cycle
- Removable ISO 5211 adaptation plates
- Standard & long operating time versions

• PA6 UL 94 V-0 HOUSING



• DIN43650 CONNECTOR

10–100 Nm	IP66	50 %	1–2.3 kg
TORQUE RANGE	ENCLOSURE	DUTY CYCLE S4	WEIGHT

Pick the torque. Pick the function.

AVAILABLE CODES BY TORQUE

TORQUE	Std	Std long	BBPR	BBPR long	POSI	POSI Modbus	3-pos	3-pos long
10 Nm	G00	–	GS6	–	–	–	GF3	–
20 Nm	G00	–	GS6	–	GP6	–	GF3	–
35 Nm	G00	G00	GS6	GS6	GP6	GP8	GF3	GF3
60 Nm	G00	G00	GS6	GS6	GP6	GP8	GF3	GF3
100 Nm	G00	G00	GS6	GS6	GP6	GP8	GF3	GF3

BBPR
Battery backup returns the valve to a safety position (open or closed, set via AXMART®) on power failure. Bluetooth® included.

POSI
Positioning by 4–20 mA or 0–10 V analogue signal with 4–20 mA / 0–10 V feedback. Reversible signals, training mode.

3 positions
Intermediate position between 0° and 90°, 180° or 270°, with feedback switches for each position.

Modbus-RTU®
RS485 fieldbus: up to 31 actuators over 1200 m per line, up to 247 with repeaters.

Bluetooth® AXMART®
Monitoring, set-up and control within 15 m in open field. Free app for Android and iOS.

POWER SUPPLY
100–240 V 50/60 Hz (100–350 V DC) · 15–30 V 50/60 Hz (12–48 V DC)

MOUNTING
Removable ISO 5211 plates · ER 10 to 35 Nm: F03/F04/F05 · ER 35 to 100 Nm: F05/F07

CE cULus EAC UKCA

Technical data.

ER PLUS SERIES

CONSTRUCTION

Housing	PA6 UL 94 V-0
Mounting	Removable ISO 5211 adaptation plates · ER 10 to 35 Nm: F03/F04/F05 · ER 35 to 100 Nm: F05/F07 · star drive nut
Manual override	Secured manual override
Indicator	Modular position indicator
Travel stops	Mechanical travel stops at 0° and 90°
Connection	3P+T DIN43650 connector + 1 ISO M20 (ISO/NPT adapters available as option)
Weight	1 kg – 2.3 kg

VERSIONS

Rotation	Standard 90° · long operating time 90° · 180° or 270° on request

ELECTRICAL & CONTROL

Supply	Multivoltage: 100–240 V 50/60 Hz (100–350 V DC) · 15–30 V 50/60 Hz (12–48 V DC)
Control	3-point modulating or on-off
Duty cycle	S4 50 % (IEC34)
Feedback	2 adjustable position feedback switches
Heater	Anticondensation heater
Torque limiter	Electronic
Failure relay	Actuator failure feedback relay (normal duty, failure)
Comms	RS485 connection

ENVIRONMENT

Temperature	Standard -10 °C to +55 °C · BBPR -10 °C to +40 °C
Enclosure	IP66
Approvals	CE · cCSAus · EAC · UKCA

Ranges & ordering codes.

VOLTAGE VERSION SHOWN IN RED HEADER

Standard + 3-position

.G00 Standard · **.GF3** 3-position

100–240 V 50/60 Hz (100–350 V DC)	15–30 V 50/60 Hz (12–48 V DC)	Drive / ISO 5211	Torque	Power	Time 90°
ER10.X0A [1]	**ER10.X0B** [1]	14 F03/F04/F05	**10 Nm**	15 W	11 s
ER20.X0A [1]	**ER20.X0B** [1]	14 F03/F04/F05	**20 Nm**	15 W	12 s
ER35.X0A [1]	**ER35.X0B** [1]	14 F03/F04/F05	**35 Nm**	15 W	26 s
ER35.90A	**ER35.90B**	22 F05/F07	**35 Nm**	45 W	7 s
ER60.90A	**ER60.90B**	22 F05/F07	**60 Nm**	45 W	12 s
ER100.90A	**ER100.90B**	22 F05/F07	**100 Nm**	45 W	23 s

Full code = code shown + function suffix, e.g. ER10.X0A.G00

Long operating time + POSI Modbus-RTU + 3-position long operating time

.G00 Long op. time · **.GP8** POSI-Modbus-RTU · **.GF3** 3-position long op. time

100–240 V 50/60 Hz (100–350 V DC)	15–30 V 50/60 Hz (12–48 V DC)	Drive / ISO 5211	Torque	Power	Time 90°
ER35.93A	**ER35.93B**	22 F05/F07	**35 Nm**	45 W	41 s
ER60.93A	**ER60.93B**	22 F05/F07	**60 Nm**	45 W	79 s
ER100.93A	**ER100.93B**	22 F05/F07	**100 Nm**	45 W	119 s

Full code = code shown + function suffix, e.g. ER35.93A.G00

BBPR

.GS6 BBPR

100–240 V 50/60 Hz (100–350 V DC)	24–30 V 50/60 Hz (24–48 V DC)	Drive / ISO 5211	Torque	Power	Time 90°
ER10.X0A.GS6 [1]	**ER10.X0B.GS6** [1]	14 F03/F04/F05	**10 Nm**	15 W	11 s
ER20.X0A.GS6 [1]	**ER20.X0B.GS6** [1]	14 F03/F04/F05	**20 Nm**	15 W	12 s
ER35.90A.GS6	**ER35.90B.GS6**	22 F05/F07	**35 Nm**	45 W	7 s
ER60.90A.GS6	**ER60.90B.GS6**	22 F05/F07	**60 Nm**	45 W	12 s
ER100.90A.GS6	**ER100.90B.GS6**	22 F05/F07	**100 Nm**	45 W	23 s

1) Conversion sleeve star 14 to square 9-11 · X = removable plate F03/F05 or F04

BBPR long operating time

.GS6 BBPR long op. time

100–240 V 50/60 Hz (100–350 V DC)	24–30 V 50/60 Hz (24–48 V DC)	Drive / ISO 5211	Torque	Power	Time 90°
ER35.93A.GS6	**ER35.93B.GS6**	22 F05/F07	**35 Nm**	45 W	41 s
ER60.93A.GS6	**ER60.93B.GS6**	22 F05/F07	**60 Nm**	45 W	79 s
ER100.93A.GS6	**ER100.93B.GS6**	22 F05/F07	**100 Nm**	45 W	119 s

Data supplied by Valpes and provided for reference only. Specifications may change without notice – please confirm details with Actuation Valve & Control before ordering.

POSI

.GP6 POSI

100–240 V 50/60 Hz (100–350 V DC)	15–30 V 50/60 Hz (12–48 V DC)	Drive / ISO 5211	Torque	Power	Time 90°
ER20.X3A.GP6 1)	**ER20.X3B.GP6** 1)	14 F03/F04/F05	**20 Nm**	15 W	25 s
ER35.93A.GP6	**ER35.93B.GP6**	22 F05/F07	**35 Nm**	45 W	41 s
ER60.93A.GP6	**ER60.93B.GP6**	22 F05/F07	**60 Nm**	45 W	79 s
ER100.93A.GP6	**ER100.93B.GP6**	22 F05/F07	**100 Nm**	45 W	119 s

1) Conversion sleeve star 14 to square 9-11 · X = removable plate F03/F05 or F04

Sizing: Valpes recommend an actuator torque of 1.5 × the maximum valve torque (2 × for POSI versions).

Options.

CODE	DESCRIPTION
EPR....B 1)	Feedback potentiometer 100 / 1000 / 5000 / 10000 Ohms
EPT.C 2)	0-20 mA, 4-20 mA or 0-10 V transmitter
EFC.2	Card with two extra limit switches
LC	Local control box F05/F07
BLUETOOTH®	Powered by AXMART® Bluetooth® version
VIB	Version for applications with vibrations
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
LMO.F03F05	Padlockable manual override (ER10-35)
LMO.F05F07	Padlockable manual override (ER35-100)

1) Specify the model · 2) Only for a travel time higher or equal to 10 s

Connection.

CODE	DESCRIPTION
ECD.1A	3P+T Din 43 650 connector
ECM.4 1)	4P M12 power supply connector
ECM.8 2)	8P M12 feedback/option connector
ECM.4+8 1) 2)	2 connectors (4 and 8 pins)
NPT.1	ISO M20 to 1/2" NPT adapter
NPT.2	2 ISO M20 to 1/2" NPT adapters
ECD.NPT	Power supply connector (1/2" NPT input)
ECD.1A.NPT	Feedback connector (1/2" NPT input)
2PE	Set of 2 cable glands

1) ECM.4: 24 V 50/60 Hz and 24 V DC maximum · 2) ECM.8: 24 V 1.5 A maximum

Option compatibility.

BY RANGE

Option / connection	Std G00	Std long G00	BBPR GS6	BBPR long GS6	POSI GP6	POSI-Modbus GP8	3 positions GF3	3-pos long GF3
EPR....B Feedback potentiometer	●	●	–	–	–	–	–	–
EPT.C Signal transmitter	●	●	–	–	–	–	–	–
EFC.2 2 additional switches	●	●	–	–	–	–	–	–
LC Local control box	●	●	–	–	–	–	–	–
BLUETOOTH® Wireless control via AXMART®	●	●	**standard**	**standard**	–	**standard**	–	–
VIB Vibration proof	●	●	●	●	●	●	●	●
HUMPRO Varnished electronic boards	●	●	●	●	●	●	●	●
MODBUS Modbus-RTU control	(1)	(1)	●	●	–	**standard**	(1)	(1)
LMO.F03F05 / LMO.F05F07 Padlockable manual override	●	●	●	●	●	●	●	●
ECD.1A Additional DIN connector	●	●	●	●	–	–	–	–
ECM.4 Additional 3P+T M12 connector	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
ECM.8 Additional 8P M12 connector	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
NPT.1 1 ISO to 1/2" NPT adapter	●	●	●	●	●	●	●	●
NPT.2 2 ISO to 1/2" NPT adapters	●	●	●	●	●	●	●	●
ECD.NPT Additional NPT connector	●	●	●	●	●	●	–	–
ECD.1A.NPT Additional NPT connector	●	●	●	●	–	–	–	–
2PE 2 cable glands	●	●	●	●	●	●	**standard**	**standard**

(1) The feedback switches are not available · (2) ECM.4: 24 V 50/60 Hz and 24 V DC maximum · (3) ECM.8: 24 V 1.5 A maximum

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AV®

Automating a small quarter-turn valve?

Talk to our UK team about ER PLUS sizing, functions and complete actuated valve packages.

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