

CR-TEC Engineering Inc.

Electric actuators

Catalog 2021



Automation of all types of valves for all kinds of fluid. The design and development of our electric actuators is carried out by our own R&D department.

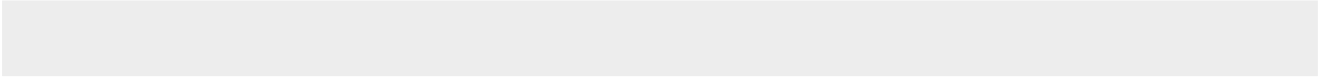
We have at our disposal all the necessary equipment and tools to study and manufacture specific products of high quality and reliability: laboratory, mechanical workshop equipped with machining tools and CNC machining.

FAST AND RELIABLE DELIVERIES
INNOVATION · QUALITY PRODUCTS
EFFICIENCY · CUSTOMER SATISFACTION

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Chapter 1
Electric actuators



Standard Models

Chapter 1

Electric actuators

ER PLUS

Description

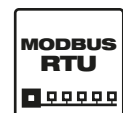
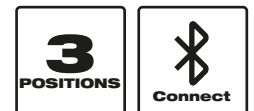
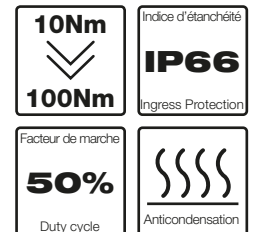
90° electric actuator, PA6 housing UL 94 V-0 with secured manual override for torques of 10-20-35-60-100 Nm and in accordance with CE-ROHS-REACH Directives.

Versions

- Standard version: 90°
- Long operating version: 90°
- 180° or 270° on request
- Compatible with functions:
 - BBPR · position recovery · p.56
 - POSI · 4-20 mA or 0-10 V signal control · p.57
 - 3 POSITIONS · p.58
 - MODBUS-RTU® · industrial fieldbus · p.59
 - BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 350 V DC)
 - 15 V to 30 V 50/60 Hz (12 V to 48 V DC)
- 3-point modulating or on-off control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5A
- 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
- Modular position indicator
- Anticondensation heater
- Electronic torque limiter
- Motor failure feedback relay (normal duty, failure)
- RS485 connection
- Mechanical travel stops at 0° and 90°
- 3P+T DIN43650 connector + 1 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -10 °C to +55 °C (BBPR -10 °C to +40 °C)
- Enclosure: IP66
- Weight: 1 kg - 2.2 kg



Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER10.X0A.G00 ⁽¹⁾	14 F03/F04/F05	10 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	11 s
ER10.X0B.G00 ⁽¹⁾	14 F03/F04/F05	10 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	11 s
ER20.X0A.G00 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	12 s
ER20.X0B.G00 ⁽¹⁾	14 F03/F04/F05	20 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	12 s
ER35.X0A.G00 ⁽¹⁾	14 F03/F04/F05	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	26 s
ER35.X0B.G00 ⁽¹⁾	14 F03/F04/F05	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	24 s
ER35.90A.G00	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
ER35.90B.G00	22 F05/F07	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
ER60.90A.G00	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	12 s
ER60.90B.G00	22 F05/F07	60 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	12 s
ER100.90A.G00	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	23 s
ER100.90B.G00	22 F05/F07	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	22 s

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

Long operating time range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER35.93A.G00	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	40 s
ER35.93B.G00	22 F05/F07	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	41 s
ER60.93A.G00	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	79 s
ER60.93B.G00	22 F05/F07	60 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	79 s
ER100.93A.G00	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	119 s
ER100.93B.G00	22 F05/F07	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	119 s

BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER10.X0A.GS6 ⁽¹⁾	14 F03/F04/F05	10 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	11 s
ER10.X0B.GS6 ⁽¹⁾	14 F03/F04/F05	10 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	15 W	11 s
ER20.X0A.GS6 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	12 s
ER20.X0B.GS6 ⁽¹⁾	14 F03/F04/F05	20 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	15 W	12 s
ER35.90A.GS6	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
ER35.90B.GS6	22 F05/F07	35 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
ER60.90A.GS6	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	12 s
ER60.90B.GS6	22 F05/F07	60 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	12 s
ER100.90A.GS6	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	23 s
ER100.90B.GS6	22 F05/F07	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	23 s

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



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Long operating time BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER35.93A.GS6	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	40 s
ER35.93B.GS6	22 F05/F07	35 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	40 s
ER60.93A.GS6	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	79 s
ER60.93B.GS6	22 F05/F07	60 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	79 s
ER100.93A.GS6	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	119 s
ER100.93B.GS6	22 F05/F07	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	119 s

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER20.X3A.GP6 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	25 s
ER20.X3B.GP6 ⁽¹⁾	14 F03/F04/F05	20 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	25 s
ER35.93A.GP6	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	40 s
ER35.93B.GP6	22 F05/F07	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	40 s
ER60.93A.GP6	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	79 s
ER60.93B.GP6	22 F05/F07	60 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	79 s
ER100.93A.GP6	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	119 s
ER100.93B.GP6	22 F05/F07	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	119 s

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

3-position-range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
ER10.X0A.GF3 ⁽¹⁾	14 F03/F04/F05	10 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	11 s
ER10.X0B.GF3 ⁽¹⁾	14 F03/F04/F05	10 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	11 s
ER20.X0A.GF3 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	12 s
ER20.X0B.GF3 ⁽¹⁾	14 F03/F04/F05	20 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	12 s
ER35.X0A.GF3 ⁽¹⁾	14 F03/F04/F05	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	26 s
ER35.X0B.GF3 ⁽¹⁾	14 F03/F04/F05	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	15 W	26 s
ER35.90A.GF3	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
ER35.90B.GF3	22 F05/F07	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
ER60.90A.GF3	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	12 s
ER60.90B.GF3	22 F05/F07	60 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	12 s
ER100.90A.GF3	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	23 s
ER100.90B.GF3	22 F05/F07	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	23 s

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



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Long operating time 3-position-range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
ER35.93A.GF3	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	40 s
ER35.93B.GF3	22 F05/F07	35 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	40 s
ER60.93A.GF3	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	79 s
ER60.93B.GF3	22 F05/F07	60 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	79 s
ER100.93A.GF3	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	119 s
ER100.93B.GF3	22 F05/F07	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	119 s

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
BLUETOOTH®	Powered by AXMART® Bluetooth® version
VIB	Version for applications with vibrations
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
P8	4-20 mA and 0-10 V positioning board with Bluetooth® (AXMART®) and Modbus-RTU

(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.1	3P+T M12 connector
ECM.2	Set of 2 pieces of M12 connectors
NPT.1	ISO M20 to 1/2" NPT adapters
NPT.2	Set of 2 pieces of ISO M20 to 1/2" NPT adapter
ECD.NPT	Power supply connector (1/2" NPT input)
ECD.1A.NPT	Feedback connector (1/2" NPT input)
2PE	Set of 2 cable glands



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Compatibility

Code	standard	standard long op. time	BBPR	BBPR long op. time	POSI	3 positions	3 positions long op. time
EPR...B	•	•					
EPT.C	•	•					
EFC.2	•	•					
BLUETOOTH®	•	•	standard	standard	option P8		
VIB	•	•			•		
HUMPRO	•	•	•	•	•	•	•
MODBUS	•	•	•	•	option P8	•	•
P8	• (ERxxx.90x.xxx)	• (ERxxx.93x.xxx)					
ECD.1A	•	•	•	•			
ECM.1	•	•	•	•	•		
ECM.2	•	•	•	•			
NPT.1	•	•	•	•	•	•	•
NPT.2	•	•	•	•	•	•	•
ECD.NPT	•	•	•	•	•		
ECD.1A.NPT	•	•	•	•			
2PE	•	•	•	•	•	standard	standard



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

	EPT.C	EFC.2	BLUETOOTH®	VIB	HUMPRO	MODBUS	P8	ECD.1A	ECM.1	ECM.2	NPT.1	NPT.2	ECD.NPT	ECD.1A.NPT	2PE
EPR...B	✗	✗	✓	✓	✓	✓	✗	(4)	✓	(4)	✓	✓	✓	(4)	✓
EPT.C		✗	✓	✓	✓	✓	✗	(4)	✓	(4)	✓	✓	✓	(4)	✓
EFC.2			✓	✓	✓	✓	✗	✗	✓	✗	✓	✓	✓	✗	✓
BLUETOOTH®				✗	✓	(3)	(2)	✗	✓	✓	✓	✓	✓	✓	✓
VIB					✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓
HUMPRO						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MODBUS							✓	(4)	✓	(4)	✓	✓	✓	(4)	✓
P8								✗	✓	✗	✓	✓	✓	✗	✓
ECD.1A									✓	✗	✓	✗	✓	✗	✗
ECM.1										✗	✓	✗	✗	✓	✗
ECM.2											✗	✗	✗	✗	✗
NPT.1												✗	✗	✗	✓
NPT.2													✗	✗	✓
ECD.NPT														✓	✗
ECD.1A.NPT															✗
	(1) Included (2) Bluetooth® integrated in P8 (3) Only for BBPR, POSI-BBPR and 3-POSITION-BBPR versions (4) The feedback switches are no longer available														



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

ER PREMIER

Description

90° electric actuator, PA6 housing UL 94 V-0 with secured manual override for torques of 10 to 20 Nm (ER FASTSTOP), 20 to 100 Nm (ER PREMIER standard) and in accordance with CE-ROHS-REACH Directives.



Versions

- Standard version 90°
- FASTSTOP version 90°



Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 350 V DC)
 - 24 V 50/60 Hz (24 V DC)
- 3-point modulating or on-off control
- Duty rating S4 30 % (IEC34)
- 4 adjustable limit switches 5A
- Removable ISO 5211 adaptation plates: ER
 - 10 to 20 Nm: F03/F04/F05
 - ER 35 to 100 Nm: F05/F07
- Star drive nut
- Manual override
- Modular position indicator
- Mechanical travel stops at 0° and 90°
- 3P+T DIN43650 connector + 1 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -10°C to +55°C
- Enclosure: IP65
- Weight: 1 kg - 2 kg



Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER20.X0A.M00 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	13 s
ER20.X03.M00 ⁽¹⁾	14 F03/F04/F05	20 Nm	24 V 50/60 Hz (24 V DC)	15 W	12 s
ER35.90A.M00	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	8 s
ER35.903.M00	22 F05/F07	35 Nm	24 V 50/60 Hz (24 V DC)	45 W	7 s
ER60.90A.M00	22 F05/F07	60 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
ER60.903.M00	22 F05/F07	60 Nm	24 V 50/60 Hz (24 V DC)	45 W	13 s
ER100.90A.M00	22 F05/F07	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	25 s
ER100.903.M00	22 F05/F07	100 Nm	24 V 50/60 Hz (24 V DC)	45 W	22 s

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

FASTSTOP Range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
ER20.X0A.M00 ⁽¹⁾	14 F03/F04/F05	20 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	15 W	13 s
ER20.X03.M00 ⁽¹⁾	14 F03/F04/F05	20 Nm	24 V 50/60 Hz (24 V DC)	15 W	12 s
ER35.90A.M00	22 F05/F07	35 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	8 s
ER35.903.M00	22 F05/F07	35 Nm	24 V 50/60 Hz (24 V DC)	45 W	7 s

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

Connection

Code	Description
ECD.1A	3P+T Din 43 650 connector
2PE	Set of 2 cable glands

Compatibility

Code	Standard	Faststop
ECD.1A	•	
2PE	•	standard



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

VR

Description

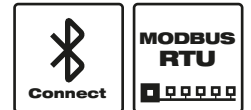
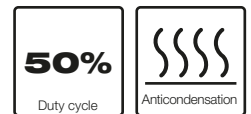
90° electric actuator, aluminium housing with C4 class coating and polyamide PA6 UL 94 V-0 or aluminium (option) cover with secured manual override for torques of 25 to 75 Nm and in accordance with CE-ROHS-REACH Directives.

Versions

- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions (except 400 V):
BBPR · position recovery · p.56
POSI · 4-20 mA or 0-10 V signal control · p.57
3 POSITIONS · p.58
GPS · POSI + BBPR
GFS · 3 POSITIONS + BBPR
MODBUS-RTU® · industrial fieldbus · p.59
BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
100 V to 240 V 50/60 Hz (100 V to 350 V DC)
15 V to 30 V 50/60 Hz (12 V to 48 V DC)
3-phase 400 V 50/60 Hz
- 3-point modulating or on-off control (400 V : 3-point modulating)
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection F05/F07 according to ISO5211
- Star drive nut
- Manual override
- Modular position indicator
- Anticondensation heater
- Electronic torque limiter (except 400 V)
- Motor failure feedback relay (normal duty, failure) · (except 400 V)
- RS485 connection (except 400 V)
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -20 °C to +70 °C (BBPR -10 °C to +40 °C)
- Enclosure:
IP68 2 m / 72 h (plastic cover)
IP68 5 m / 72 h (aluminium cover)
- Weight: 3.1 kg - 4.4 kg



Powered by
AXMART®

Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VR25.70A.G00	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VR25.70B.G00	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
VR45.70A.G00	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.G00	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VR75.70A.G00	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.G00	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s

3-phase 400 V range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VR25.709.R00	17 F05/F07	25 Nm	3-phase 400 V 50/60 Hz	52 W	10 s
VR45.709.R00	17 F05/F07	45 Nm	3-phase 400 V 50/60 Hz	52 W	10 s
VR75.709.R00	17 F05/F07	75 Nm	3-phase 400 V 50/60 Hz	52 W	15 s

BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VR25.70A.GS6	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VR25.70B.GS6	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
VR45.70A.GS6	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.GS6	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VR75.70A.GS6	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.GS6	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VR25.70A.GP5	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR25.70B.GP5	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VR45.70A.GP5	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.GP5	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VR75.70A.GP5	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.GP5	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VR25.70A.GF3	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VR25.70B.GF3	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
VR45.70A.GF3	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.GF3	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VR75.70A.GF3	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.GF3	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s

POSI-BBPR (GPS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VR25.70A.GPS	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR25.70B.GPS	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VR45.70A.GPS	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.GPS	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VR75.70A.GPS	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.GPS	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s

3-POSITION-BBPR (GFS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VR25.70A.GFS	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VR25.70B.GFS	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
VR45.70A.GFS	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VR45.70B.GFS	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VR75.70A.GFS	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VR75.70B.GFS	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

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
BLUETOOTH®	Powered by AXMART® Bluetooth® version
ECA	Aluminium cover (+0,9 kg)
MARINE	Marine coating
CHK	Chemical kit
VIB	Version for applications with vibrations
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
P8	4-20 mA and 0-10 V positioning board with Bluetooth® (AXMART®) and Modbus-RTU

(1) Specify the model,

(2) Only for a travel time higher or equal to 10 s

Connection

Code	Description
ECM.1	3P+T M12 connector
ECM.2	Set of 2 pieces of 3P+T M12 connectors
NPT.2	Set of 2 pieces of ISO M20 to 1/2" NPT adapters
MULTI	Multipin connector (400 V consult us)



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Compatibility

Code	Standard Multi-volt	Standard 400 V	BBPR	POSI	3 positions	POSI-BBPR	3-POSITION-BBPR
EPR...B	•	•					
EPT.C	•						
EFC.2	•	•					
BLUETOOTH®	•		standard	option P8		standard	standard
ECA	•	•	•	•	•	•	•
MARINE	•	•	•	•	•	•	•
VIB	•	•		•			
CHK	•	•	•	•	•	•	•
HUMPRO	•		•	•	•	•	•
MODBUS	•		•	option P8	•	•	•
P8	•						
ECM.1	•		•	•	•	•	•
ECM.2	•		•				
NPT.2	•	•	•	•	•	•	•
MULTI	•		•	•	•	•	•



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

	EPT.C	EFC.2	BLUETOOTH®	ECA	MARINE	CHK	VIB	HUMPRO	MODBUS	P8	ECM.1	ECM.2	NPT.2	MULTI
EPR...B	✗	✗	✓	✓	✓	✓	✗	✓	✓	✗	✗	✗	✓	✓
EPT.C		✗	✓	✓	✓	✓	✗	✓	✓	✗	✗	✗	✓	✓
EFC.2			✓	✓	✓	✓	✗	✓	✓	✗	✗	✗	✓	✓
BLUETOOTH®				✓	✓	✓	✗	✓	(3)	(2)	✓	✓	✓	✓
ECA					(1)	(1)	✓	✓	✓	✓	✓	✓	✓	✓
MARINE						✗	✓	✓	✓	✓	✓	✓	✓	✓
CHK							✓	✓	✓	✓	✓	✓	✓	✓
VIB								✓	✓	✗	✓	✓	✓	✗
HUMPRO									✓	✓	✓	✓	✓	✓
MODBUS										✓	✗	✗	✓	✓
P8											✓	✗	✓	✓
ECM.1												✗	✓	✗
ECM.2													✓	✗
NPT.2														✓
	(1) Included (2) Bluetooth® integrated in P8 (3) Only for BBPR, POSI-BBPR and 3-POSITION-BBPR Versions													



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

VS

Description

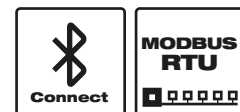
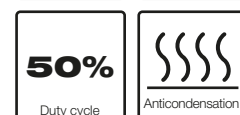
90° electric actuator, aluminium housing with C4 class coating and polyamide PA6 UL 94 V-0 or aluminium (option) cover with secured manual override by handwheel for torques of 100 to 300 Nm and in accordance with CE-ROHS-REACH Directives.

Versions

- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions (except 400 V):
BBPR · position recovery · p.56
POSI · 4-20 mA or 0-10 V signal control · p.57
3 POSITIONS · p.58
GPS · POSI + BBPR
GFS · 3 POSITIONS + BBPR
MODBUS-RTU® · industrial fieldbus · p.59
BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
100 V to 240 V 50/60 Hz (100 V to 350 V DC)
15 V to 30 V 50/60 Hz (12 V to 48 V DC)
3-phase 400 V 50/60 Hz
- 3-point modulating or on-off control (400 V : 3-point modulating)
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection F07/F10 according to ISO5211
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Electronic torque limiter (except 400 V)
- Motor failure feedback relay (normal duty, failure) · (except 400 V)
- RS485 connection (except 400 V)
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -20 °C to +70 °C (BBPR -10 °C to +40 °C)
- Enclosure:
IP68 2 m / 72 h (plastic cover)
IP68 5 m / 72 h (aluminium cover)
IP68 10 m / 72 h (aluminium cover + option)
- Weight: 5.1 kg - 6.4 kg



Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VS100.90A.G00	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS100.90B.G00	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VS150.90A.G00	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VS150.90B.G00	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VS300.90A.G00	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VS300.90B.G00	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

3-phase 400 V range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VS100.909.R00	22 F07/F10	100 Nm	3-phase 400 V 50/60 Hz	135 W	10 s
VS150.909.R00	22 F07/F10	150 Nm	3-phase 400 V 50/60 Hz	135 W	20 s
VS300.909.R00	22 F07/F10	300 Nm	3-phase 400 V 50/60 Hz	135 W	35 s

BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VS100.90A.GS6	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS100.90B.GS6	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VS150.90A.GS6	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VS150.90B.GS6	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
VS300.90A.GS6	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VS300.90B.GS6	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VS100.90A.GP5	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS100.90B.GP5	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VS150.90A.GP5	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VS150.90B.GP5	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VS300.90A.GP5	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VS300.90B.GP5	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VS100.90A.GF3	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS100.90B.GF3	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VS150.90A.GF3	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VS150.90B.GF3	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VS300.90A.GF3	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VS300.90B.GF3	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

POSI-BBPR (GPS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VS100.90A.GPS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS100.90B.GPS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VS150.90A.GPS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VS150.90B.GPS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
VS300.90A.GPS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VS300.90B.GPS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

3-POSITION-BBPR (GFS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VS100.90A.GFS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VS100.90B.GFS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
VS150.90A.GFS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VS150.90B.GFS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VS300.90A.GFS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VS300.90B.GFS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

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
BLUETOOTH®	Powered by AXMART® Bluetooth® version
ECA	Aluminium cover (+0,9 kg)
IP10 ³⁾	10 meters 72 hours IP68 tightness
MARINE	Marine coating
CHK	Chemical kit
VIB	Version for applications with vibrations
MONT H/B	Version for "upside down" positioning
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
P8	4-20 mA and 0-10 V positioning board with Bluetooth® (AXMART®) and Modbus-RTU

(1) Specify the model,

(2) Only for a travel time higher or equal to 10 s

(3) Delivered without cable gland

Connection

Code	Description
ECM.1	3P+T M12 connector
ECM.2	Set of 2 pieces of 3P+T M12 connectors
NPT.2	Set of 2 pieces of ISO M20 to 1/2" NPT adapters
MULTI	Multipin connector (400 V consult us)



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Compatibility

Code	standard multivolt	standard 400 V	BBPR	POSI	3 positions	POSI-BBPR	3-POSITION-BBPR
EPR...B	•	•					
EPT.C	•						
EFC.2	•	•					
BLUETOOTH®	•		standard	option P8		standard	standard
ECA	•	•	•	•	•	•	•
IP10	•	•	•	•	•	•	•
MARINE	•	•	•	•	•	•	•
CHK	•	•	•	•	•	•	•
VIB	•	•		•			
MONT H/B	•	•	•	•	•	•	•
HUMPRO	•		•	•	•	•	•
MODBUS	•		•	option P8	•	•	•
P8	•						



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

	EPT.C	EFC.2	BLUETOOTH®	ECA	IP10	MARINE	CHK	VIB	MONT H/B	HUMPRO	MODBUS	P8	ECM.1	ECM.2	NPT.2	MULTI
EPR...B	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✓	✓
EPT.C		✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✓	✓
EFC.2			✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✓	✓
BLUETOOTH®				✓	✓	✓	✓	✗	✓	✓	(3)	(2)	✓	✓	✓	✓
ECA					(1)	(1)	(1)	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP10						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MARINE							✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
CHK								✓	✓	✓	✓	✓	✓	✓	✓	✓
VIB									✓	✓	✓	✗	✓	✓	✓	✗
MONT H/B										✓	✓	✓	✓	✓	✓	✓
HUMPRO											✓	✓	✓	✓	✓	✓
MODBUS												✓	✗	✗	✓	✓
P8													✓	✗	✓	✓
ECM.1														✗	✓	✗
ECM.2															✓	✗
NPT.2																✓
	(1) included (2) Bluetooth® integrated in P8 (3) Only for BBPR, POSI-BBPR and 3-POSITION-BBPR versions															



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

VT

Description

90° electric actuator, aluminium housing with C4 class coating and polyamide PA6 UL 94 V-0 or aluminium (option) cover with secured manual override by handwheel for torques of 600 to 2400 Nm and in accordance with CE-ROHS-REACH Directives.

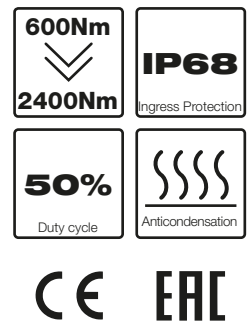
Versions

- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty



Technical data

- 3-phase 400 V 50 Hz actuator
- 3-point modulating control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection according to ISO5211
VT600-1000 Nm : F10/F12
VT1500-2400 Nm : F12/F14/F16
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Mechanical torque limiter
- Motor failure feedback relay (normal duty, failure)
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -20 °C to +70 °C
- Enclosure:
IP68 2 m / 72 h (plastic cover)
IP68 5 m / 72 h (aluminium cover)
- Weight:
VT600-1000 Nm : 24 kg
VT1500-2400 Nm : 53 kg



Code	Star drive nut/ connection	Torque	Power	Operating Time
VT600.A09.R00	36 F10/F12	600 Nm	250 W	38 s
VT1000.A09.R00	36 F10/F12	1000 Nm	250 W	38 s
VT1500.B09.R00	46 F14	1500 Nm	250 W	113 s
VT1500.C09.R00	46 F12/F16	1500 Nm	250 W	113 s
VT2400.B09.R00	46 F14	2400 Nm	250 W	113 s
VT2400.C09.R00	46 F12/F16	2400 Nm	250 W	113 s

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
ECA	Aluminium cover (+0,9 kg)
MARINE	Marine coating

(1) Specify the model,

(2) Only for a travel time higher or equal to 10 s

Connection

Code	Description
ECM.1	3P+T M12 connector
ECM.2	Set of 2 pieces of 3P+T M12 connectors



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

VT PLUS

Description

90° electric actuator, aluminium housing and C4 class coating, with manual override by hand wheel, for torques from 600 to 2400 Nm and in accordance with CE-ROHS-REACH Directives. The VT PLUS models include AXMART® Bluetooth® functionality (p.60).

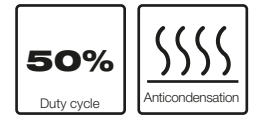


Versions

- Standard version 90°
- 180° or 270° on request for 600 and 1000 Nm models
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions:
 - BBPR · position recovery · p.56
 - POSI · 4-20 mA or 0-10 V signal control · p.57
 - 3 POSITIONS · p.58
 - GPS · POSI + BBPR
 - GFS · 3 POSITIONS + BBPR
 - MODBUS-RTU® · industrial fieldbus · p.59

Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 300 V DC)
 - 24 V to 48 V 50/60 Hz (24 V to 72 V DC)
- 3-point modulating, on-off and pulse control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection according to ISO5211
 - VT600-1000 Nm : F10/F12
 - VT1500-2400 Nm : F12/F14/F16
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Electronic torque limiter
- Motor failure feedback relay (normal duty, failure)
- RS485 connection
- Mechanical travel stops at 0° and 90°
- Single multipin connector
- Temperature: -20 °C to +70 °C (BBPR -10 °C to +40 °C)
- Enclosure: IP68 5 m / 72 h
- Weight:
 - VT600-1000 Nm : 25 kg
 - VT1500-2400 Nm : 54 kg



Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VT600.A0A.G00	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.G00	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.G00	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.G00	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.G00	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.G00	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.G00	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.G00	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.G00	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.G00	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.G00	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.G00	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s

BBPR range

Code	Star drive nut/ connection	Torque	Votages	Power	Operating time
VT600.A0A.GS6	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.GS6	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.GS6	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.GS6	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.GS6	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.GS6	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.GS6	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.GS6	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.GS6	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.GS6	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.GS6	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.GS6	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VT600.A0A.GP7	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.GP7	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.GP7	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.GP7	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.GP7	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.GP7	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.GP7	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.GP7	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.GP7	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.GP7	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.GP7	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.GP7	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VT600.A0A.GF3	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.GF3	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.GF3	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.GF3	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.GF3	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.GF3	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.GF3	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.GF3	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.GF3	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.GF3	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.GF3	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.GF3	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s

POSI-BBPR (GPS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VT600.A0A.GPS	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.GPS	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.GPS	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.GPS	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.GPS	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.GPS	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.GPS	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.GPS	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.GPS	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.GPS	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.GPS	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.GPS	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s

3-POSITION-BBPR (GFS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VT600.A0A.GFS	36 F10/F12	600 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	42 s
VT600.A0B.GFS	36 F10/F12	600 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	42 s
VT1000.A0A.GFS	36 F10/F12	1000 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	65 s
VT1000.A0B.GFS	36 F10/F12	1000 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	65 s
VT1500.B0A.GFS	46 F14	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.B0B.GFS	46 F14	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT1500.C0A.GFS	46 F12/F16	1500 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	155 s
VT1500.C0B.GFS	46 F12/F16	1500 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	155 s
VT2400.B0A.GFS	46 F14	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.B0B.GFS	46 F14	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s
VT2400.C0A.GFS	46 F12/F16	2400 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	210 s
VT2400.C0B.GFS	46 F12/F16	2400 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	210 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Options

Code	Description
MARINE	Marine coating (600-1000 Nm)
MARINE	Marine coating (1500-2400 Nm)
VIB	Version for applications with vibrations
MODBUS	MODBUS-RTU communication

- (1) Specify the model.
 (2) Only for a travel time higher or equal to 10 s
 (3) Delivered without cable gland

Compatibility

Code	standard multivolt	BBPR	POSI	3 positions	POSI-BBPR	3-POSITION-BBPR
MARINE	•	•	•	•	•	•
VIB	•		•			
MODBUS	•	•	•	•	•	•

MT

Description

Multiturn electric actuator, aluminium housing and C4 class coating, with manual override by hand wheel, for torques from 25 to 75 Nm and in accordance with CE-ROHS-REACH Directives. The MT models include AXMART® Bluetooth® functionality (p.60).

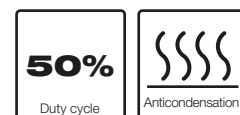


Versions

- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions:
 - BBPR · position recovery · p.56
 - POSI · 4-20 mA or 0-10 V signal control · p.57
 - GPS · POSI + BBPR
 - MODBUS-RTU® · industrial fieldbus · p.59

Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 300 V DC)
 - 24 V to 48 V 50/60 Hz (24 V to 72 V DC)
- 3-point modulating, on-off and pulse control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- From 5 up to 700 revolutions
- Connection F07/F10 according to ISO5210
 - A (with drive bush): Ø25 mm max
 - B1 (with drive bush): Ø42 mm max
 - B3: Ø20 mm max
 - C: Ø43 mm max
- Maximum allowable thrusts (A form)
 - F07: 13 kN
 - F10: 31 kN
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Electronic torque limiter
- Motor failure feedback relay (normal duty, failure)
- RS485 connection
- Single multipin connector
- Temperature: -20 °C to +70 °C (BBPR -10 °C to +40 °C)
- Enclosure: IP68 5 m / 72 h
- Weight: 19 to 23 kg





Form
A

Drive bush for threaded valve stem (Ø25 mm max.) Connection with four M10 threaded holes (depth 20 mm) or four M8 threaded holes (depth 15 mm)



Form
B1

Drive bush for large keyed bore (Ø42 mm & height 48 mm max.) Connection with four M10 threaded holes (depth 20 mm) or four M8 threaded holes (depth 15 mm)



Form
B3

Small keyed bore (Ø20 mm max.). Connection with four M10 threaded holes (depth 20 mm) or four M8 threaded holes (depth 15 mm)



Form
C

Shaft with claw coupling (Ø43 mm). Connection with four M10 threaded holes (depth 20 mm) or four M8 threaded holes (depth 15 mm)

Standard range

Code	Connection	Torque	Voltages	Power	RPM
MT25.xA00y.G00	F07/F10	25 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	22
MT25.xB00y.G00	F07/F10	25 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	22
MT50.xA00y.G00	F07/F10	50 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	13
MT50.xB00y.G00	F07/F10	50 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	13
MT75.xA00y.G00	F07/F10	75 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	9
MT75.xB00y.G00	F07/F10	75 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	9

x : Specify the form (A, B1, B3 or C)

y : Specify the number of turns needed to operate the valve



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

BBPR range

Code	Connection	Torque	Voltages	Power	RPM
MT25.xA00y.GS6	F07/F10	25 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	22
MT25.xB00y.GS6	F07/F10	25 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	22
MT50.xA00y.GS6	F07/F10	50 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	13
MT50.xB00y.GS6	F07/F10	50 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	13
MT75.xA00y.GS6	F07/F10	75 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	9
MT75.xB00y.GS6	F07/F10	75 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	9

x : Specify the form (A, B1, B3 or C)

y : Specify the number of turns needed to operate the valve

POSI range

Code	Connection	Torque	Voltages	Power	RPM
MT25.xA00y.GP7	F07/F10	25 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	22
MT25.xB00y.GP7	F07/F10	25 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	22
MT50.xA00y.GP7	F07/F10	50 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	13
MT50.xB00y.GP7	F07/F10	50 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	13
MT75.xA00y.GP7	F07/F10	75 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	9
MT75.xB00y.GP7	F07/F10	75 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	9

x : Specify the form (A, B1, B3 or C)

y : Specify the number of turns needed to operate the valve

POSI-BBPR (GPS) range

Code	Connection	Torque	Voltages	Power	RPM
MT25.xA00y.GPS	F07/F10	25 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	22
MT25.xB00y.GPS	F07/F10	25 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	22
MT50.xA00y.GPS	F07/F10	50 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	13
MT50.xB00y.GPS	F07/F10	50 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	13
MT75.xA00y.GPS	F07/F10	75 Nm	100 V to 240 V 50/60 Hz (100 V to 300 V DC)	300 W	9
MT75.xB00y.GPS	F07/F10	75 Nm	24 V to 48 V 50/60 Hz (24 V to 72 V DC)	300 W	9

x : Specify the form (A, B1, B3 or C)

y : Specify the number of turns needed to operate the valve

Options

Code	Description
BAE.A	Drive bush for A forms
USINAGE.A	Drive nut machining for A forms (Ø20/25 mm)
BAE.B1	Drive bush for B1 forms
CDT.5	316 stainless steel stem tube cover (500 mm)
CDT.10	316 stainless steel tube cover (1000 mm)
CDT.15	316 stainless steel tube cover (1500 mm)
MMT	Hand wheel multiplier (x2,5)
MARINE	Marine coating
VIB	Version for applications with vibrations
MODBUS	MODBUS-RTU communication

Compatibility

Code	standard multivolt	BBPR	POSI	POSI-BBPR
BAE.A	•	•	•	•
USINAGE.A	•	•	•	•
BAE.B1	•	•	•	•
CDT.5	•	•	•	•
CDT.10	•	•	•	•
CDT.15	•	•	•	•
MMT	•	•	•	•
MARINE	•	•	•	•
VIB	•		•	
MODBUS	•	•	•	•

Compatibility

	USINAGE.A	BAE.B1	CDT.5	CDT.10	CDT.15	MMT	MARINE	VIB	MODBUS
BAE.A	✓	✗	✓	✓	✓	✓	✓	✓	✓
USINAGE.A		✗	✓	✓	✓	✓	✓	✓	✓
BAE.B1			✓	✓	✓	✓	✓	✓	✓
CDT.5				✗	✗	✓	✓	✓	✓
CDT.10					✗	✓	✓	✓	✓
CDT.15						✓	✓	✓	✓
MMT							✗	✓	✓
MARINE								✓	✓
VIB									✓



Special Models

LT Special model “low temperature”

Description

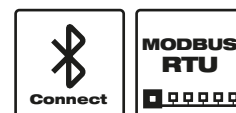
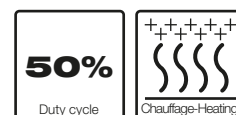
90° electric actuator, aluminium housing and C4 class coating, designed for low temperatures (-50 °C), with secured manual override by handwheel for torques of 25 to 300 Nm and in accordance with CE-ROHS-REACH Directives.

Versions

- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions:
 - POSI · 4-20 mA or 0-10 V signal control · p.57
 - 3 POSITIONS · p.58
 - MODBUS-RTU® · industrial fieldbus · p.59
 - BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 350 V DC)
 - 15 V to 30 V 50/60 Hz (12 V to 48 V DC)
- 3-point modulating or on-off control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection according to ISO5211
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Integrated 30 W heating unit
- Electronic torque limiter
- Motor failure feedback relay (normal duty, failure)
- RS485 connection
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Temperature: -50 °C to +70 °C
- Enclosure:
 - IP68 5 m / 72 h
 - IP68 10 m / 72 h (option)
- Weight: 6 kg to 6.4 kg



Powered by
AXMART®

Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
LT25.90Ax.G00	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT25.90Bx.G00	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT45.90Ax.G00	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT45.90Bx.G00	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT75.90Ax.G00	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT75.90Bx.G00	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT100.90Ax.G00	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT100.90Bx.G00	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT150.90Ax.G00	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	30 s
LT150.90Bx.G00	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	30 s
LT300.90Ax.G00	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	60 s
LT300.90Bx.G00	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	60 s

Delivered without cable gland

X : Specify the heating system voltage (3 = 24 V AC/DC | 7 = 110 V AC | 8 = 230 V AC)

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

POSI range (insulation jacket included)

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
LT25.90Ax.GP5	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT25.90Bx.GP5	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT45.90Ax.GP5	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT45.90Bx.GP5	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT75.90Ax.GP5	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT75.90Bx.GP5	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT100.90Ax.GP5	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT100.90Bx.GP5	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT150.90Ax.GP5	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	30 s
LT150.90Bx.GP5	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	30 s
LT300.90Ax.GP5	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	60 s
LT300.90Bx.GP5	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	60 s

Delivered without cable gland

X : Specify the heating system voltage (3 = 24 V AC/DC | 7 = 110 V AC | 8 = 230 V AC)

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
LT25.90Ax.GF3	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT25.90Bx.GF3	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT45.90Ax.GF3	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT45.90Bx.GF3	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT75.90Ax.GF3	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT75.90Bx.GF3	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT100.90Ax.GF3	22 F07/F10 ¹⁾	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	15 s
LT100.90Bx.GF3	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	15 s
LT150.90Ax.GF3	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	30 s
LT150.90Bx.GF3	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	30 s
LT300.90Ax.GF3	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	75 W	60 s
LT300.90Bx.GF3	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	75 W	60 s

Delivered without cable gland

X : Specify the heating system voltage (3 = 24 V AC/DC | 7 = 110 V AC | 8 = 230 V AC)

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

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
BLUETOOTH®	Powered by AXMART® Bluetooth® version
IP10	10 meters 72 hours IP68 tightness
MARINE	Marine coating
CHK	Chemical kit
VIB	Version for applications with vibrations
MONT H/B	Version for "upside down" positioning
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
ULT	Protective insulation jacket for -60 °C

(1) Specify the model.

(2) Only for a travel time higher or equal to 10 s

Connection

Code	Description
NPT.2	Set of 2 ISO M20 to 1/2" NPT adapters (up to -40 °C)
MULTI	Multipin connector (up to -40 °C)
HUM	Set of 2 Hummel IP68 6 pins connectors (up to -40 °C)



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Compatibility

Code	standard multivolt	POSI	3 positions
EPR....B	•		
EPT.C	•		
EFC.2	•		
BLUETOOTH®	•		
IP10	•	•	•
MARINE	•	•	•
CHK	•	•	•
VIB	•	•	
MONT H/B	•	•	•
HUMPRO	•	•	•
MODBUS	•		•
ULT	•	standard	•
NPT.2	•	•	•
MULTI (-40 °C)	•	•	•
HUM	•	•	•

	EPT.C	EFC.2	BLUETOOTH®	IP10	MARINE	CHK	VIB	MONT H/B	HUMPRO	MODBUS	ULT	NPT.2	MULTI	HUM
EPR....B	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓
EPT.C		✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓
EFC.2			✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✗
BLUETOOTH®				✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
IP10					✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
MARINE						✗	✓	✓	✓	✓	✗	✓	✓	✓
CHK							✓	✓	✓	✓	✗	✗	✗	✗
VIB								✓	✓	✓	✓	✓	✓	✓
MONT H/B									✓	✓	✓	✓	✓	✓
HUMPRO										✓	✓	✓	✓	✓
MODBUS											✓	✓	✓	✓
ULT												✗	✗	✗
NPT.2													✓	✗
MULTI														✗

VRX·VSX·VTX
Special Models
«ATEX Explosive Atmospheres»

Description

90° electric actuator, aluminium housing and C4 class coating, design for use in ATEX zones, with secured manual override by handwheel for torques of 25 to 1000 Nm and in accordance with CE-ROHS-REACH Directives.

Versions

- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions (except 400 V & VTX): BBPR · position recovery · p.56
 POSI · 4-20 mA or 0-10 V signal control · p.57
 3 POSITIONS · p.58
 GPS · POSI + BBPR
 GFS · 3 POSITIONS + BBPR
 MODBUS-RTU® · industrial fieldbus · p.59
 BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
 100 V to 240 V 50/60 Hz (100 V to 350 V DC)
 15 V to 30 V 50/60 Hz (12 V to 48 V DC)
 3-phase 400 V 50/60 Hz
- 3-point modulating or on-off control (400 V & VTX : 3-point modulating)
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection according to ISO5211
 VRX : F05/F07
 VSX : F07/F10
 VTX : F10/F12
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Torque limiter (except VRX & VSX 400 V)
- Failure feedback relay (except 400 V & VTX)
- RS485 connection (except 400 V & VTX)
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Enclosure: IP68 5 m / 72 h
- Weight:
 VRX: 4 kg - 4.4 kg
 VSX: 6 kg - 6.4 kg
 VTX: 24 kg



25Nm ∨ 1000Nm	IP68 Ingress Protection
50% Duty cycle	SSSS Anticondensation
Ex	EAC Ex
CE	CSA C US
Battery Backup BBPR Position Recovery	0-20 mA POSI 0-10 V
3 POSITIONS	
BBPR GPS POSI	BBPR GFS 3-POSITION
Connect	MODBUS RTU



ATEX marking

Series	Zones	ATEX marking			T _a
		Gas	Dust		
VRX/VSX · G00, GP5, GF3	II 2 G D	Ex db IIB T6 Gb	Ex tb IIIC T80°C Db	LCIE 06 ATEX 6006X	-20 °C à/to +70 °C
VRX/VSX · GS6, GPS, GFS	II 2 G D	Ex db IIB T6 Gb	Ex tb IIIC T80°C Db	LCIE 06 ATEX 6006X	-10 °C à/to +40 °C
VRX/VSX · 400 V	II 2 G D	Ex db IIB T5 Gb	Ex tb IIIC T95°C Db	LCIE 06 ATEX 6006X	-20 °C à/to +54 °C
VTX	II 2 G D	Ex db IIB T5 Gb	Ex tb IIIC T90°C Db	LCIE 06 ATEX 6006X IECEx LCIE 15.0074X	-20 °C à/to +63 °C

Denomination	VRX/VSX		VTX		
	Covered areas		Covered areas		
Installation places	II		II		Approved equipment for surface industries
Protection level	2	2 & 3	2	2 & 3	Installation into chemical, petrochemical, agriculture, food industry ...
Installation areas for gas, vapors, liquids	G	zone 1 zone 2	G	zone 1 zone 2	Zone 1 : presence of explosive substances (gas) between 10 and 1000 hours/year Zone 2 : presence of explosive substances (gas) less than 10 hours/year
Installation areas for dusts	D	zone 21 zone 22	D	zone 21 zone 22	Zone 21 : presence of explosive substances (gas) between 10 and 1000 hours/year Zone 22 : presence of explosive substances (gas) less than 10 hours/year
IEC marking	Ex		Ex		
Type of protection (gas)	db		db		Flameproof enclosure protection
Gases in the atmosphere	IIB	IIB & IIA & I	IIB	IIB & IIA & I	ethylene, propane, methane
Maximum surface temperature (gas)	T6	T6 (85°C) T5 (100°C) T4 (135°C) T3 (200°C) T2 (300°C) T1 (450°C)	T6	T5 (100°C) T4 (135°C) T3 (200°C) T2 (300°C) T1 (450°C)	Maximum authorized temperature of the housing for equipment installation (gas)
Equipment Protection Levels	Gb	zone 1 zone 2	Gb	zone 1 zone 2	Implantation possible en zones 1 & 2 Possible installation in zones 1 & 2
IEC marking	Ex		Ex		
Type of protection (dusts)	tb		tb		Flameproof enclosure protection
Dusts in the atmosphere	IIIC	IIIC IIIB IIIA	IIIC	IIIC IIIB IIIA	IIIC: conductive dusts IIIB: non conductive dusts IIIA: flammable fiber lints
Maximum surface temperature (dusts)	T 80°C		T 80°C		Maximum authorized temperature of the housing for equipment installation (dusts)
Equipment Protection Levels	Db	zone 21 zone 22	Db	zone 21 zone 22	Possible installation in zones 21 & 22



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Standard VRX/VSX range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VRX25.70A.G00	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VRX25.70B.G00	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
VRX45.70A.G00	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.G00	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VRX75.70A.G00	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.G00	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s
VSX100.90A.G00	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.G00	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VSX150.90A.G00	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.G00	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VSX300.90A.G00	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.G00	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

3-phase 400 V VRX/VSX range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VRX25.709.R00	17 F05/F07	25 Nm	3-phase 400 V 50/60 Hz	52 W	10 s
VRX45.709.R00	17 F05/F07	45 Nm	3-phase 400 V 50/60 Hz	52 W	10 s
VRX75.709.R00	17 F05/F07	75 Nm	3-phase 400 V 50/60 Hz	52 W	15 s
VSX100.909.R00	22 F07/F10	100 Nm	3-phase 400 V 50/60 Hz	135 W	10 s
VSX150.909.R00	22 F07/F10	150 Nm	3-phase 400 V 50/60 Hz	135 W	20 s
VSX300.909.R00	22 F07/F10	300 Nm	3-phase 400 V 50/60 Hz	135 W	35 s

Standard VTX range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VTX600.A08.G00	36 F10/F12	600 Nm	230 V 50/60 Hz	250 W	38 s
VTX600.A09.R00	36 F10/F12	600 Nm	3-phase 400 V 50/60 Hz	250 W	38 s
VTX1000.A08.G00	36 F10/F12	1000 Nm	230 V 50/60 Hz	250 W	38 s
VTX1000.A09.R00	36 F10/F12	1000 Nm	3-phase 400 V 50/60 Hz	250 W	38 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VRX25.70A.GS6	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VRX25.70B.GS6	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
VRX45.70A.GS6	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.GS6	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VRX75.70A.GS6	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.GS6	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
VSX100.90A.GS6	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.GS6	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VSX150.90A.GS6	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.GS6	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
VSX300.90A.GS6	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.GS6	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
VRX25.70A.GP5	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX25.70B.GP5	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VRX45.70A.GP5	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.GP5	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VRX75.70A.GP5	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.GP5	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s
VSX100.90A.GP5	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.GP5	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VSX150.90A.GP5	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.GP5	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VSX300.90A.GP5	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.GP5	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VRX25.70A.GF3	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VRX25.70B.GF3	17 F05/F07	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	7 s
VRX45.70A.GF3	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.GF3	17 F05/F07	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VRX75.70A.GF3	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.GF3	17 F05/F07	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s
VSX100.90A.GF3	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.GF3	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
VSX150.90A.GF3	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.GF3	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
VSX300.90A.GF3	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.GF3	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

POSI-BBPR (GPS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VRX25.70A.GPS	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX25.70B.GPS	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VRX45.70A.GPS	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.GPS	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VRX75.70A.GPS	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.GPS	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
VSX100.90A.GPS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.GPS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VSX150.90A.GPS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.GPS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
VSX300.90A.GPS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.GPS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

3-POSITION-BBPR (GFS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
VRX25.70A.GFS	17 F05/F07	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
VRX25.70B.GFS	17 F05/F07	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
VRX45.70A.GFS	17 F05/F07	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VRX45.70B.GFS	17 F05/F07	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VRX75.70A.GFS	17 F05/F07	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
VRX75.70B.GFS	17 F05/F07	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
VSX100.90A.GFS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
VSX100.90B.GFS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
VSX150.90A.GFS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
VSX150.90B.GFS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
VSX300.90A.GFS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
VSX300.90B.GFS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

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
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication
MARINE	Marine coating (VRX/VSX)
MARINE	Marine coating (VTX)

(1) Specify the model.

(2) Only for a travel time higher or equal to 10 s

Compatibility

Code	VRX/VSX							VTX	
	standard multivolt	standard 400 V	BBPR	POSI	3 positions	POSI-BBPR	3-POSITION-BBPR	standard	400 V
EPR...B	•	•						•	•
EPT.C	•							•	•
EFC.2	•	•						•	•
HUMPRO	•		•	•	•	•	•		
MODBUS	•		•	•	•	•	•		
MARINE	•	•	•	•	•	•	•	•	•

	EPT.C	EFC.2	HUMPRO	MODBUS	MARINE
EPR...B	✗	✗	✓	✓	✓
EPT.C		✗	✓	✓	✓
EFC.2			✓	✓	✓
HUMPRO				✓	✓
MODBUS					✓

DV
Special Models
Shipbuilding/offshore

Description

90° electric actuator, aluminium housing and C4 class coating, design for shipbuilding and offshore locations, with secured manual override by handwheel for torques of 25 to 300 Nm and in accordance with CE-ROHS-REACH Directives.



Versions

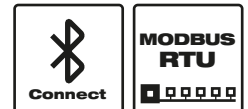
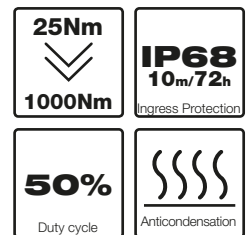
- Standard version 90°
- 180° or 270° on request
- Version for marine applications. High durability C5-M coating, 15-year warranty
- Compatible with functions:
 - BBPR · position recovery · p.56
 - POSI · 4-20 mA or 0-10 V signal control · p.57
 - 3 POSITIONS · p.58
 - GPS · POSI + BBPR
 - GFS · 3 POSITIONS + BBPR
 - MODBUS-RTU® · industrial fieldbus · p.59
 - BLUETOOTH® · connected actuator · p.60

Technical data

- Multivoltage actuator:
 - 100 V to 240 V 50/60 Hz (100 V to 350 V DC)
 - 15 V to 30 V 50/60 Hz (12 V to 48 V DC)
- 3-point modulating or on-off control
- Duty rating S4 50 % (IEC34)
- 4 adjustable limit switches 5 A
- Connection according to ISO5211
- Star drive nut
- Manual override by hand wheel
- Position indicator
- Anticondensation heater
- Torque limiter
- Motor failure feedback relay (normal duty, failure)
- RS485 connection
- Mechanical travel stops at 0° and 90°
- Cable entry: 2 ISO M20 (ISO/NPT adapters available as option)
- Temperature : -20 °C to +70 °C (BBPR -10 °C to +40 °C)
- Enclosure: IP68 10 m / 72 h
- Weight: 6 kg - 6.8 kg

Location classes

- Temperature D (A for BBPR)
- Humidity B
- Vibration B
- EMC A
- Enclosure D



Minimal class requirements (the higher the better: D covers from A to D)

Parameters	Location within main area	Main areas on board				
		Machinery spaces	Control room, accomodation	Bridge	Pump room, holds, rooms with no heating	Open decks
Temperature (A → D)	Inside cubicle, desks etc. with temperature rise of 5 °C or more	B	B	B	D	D
	All other locations	A	A	A	C	D
Humidity (A → B)	Location where special precautions are taken to avoid condensation	A	A	A	A	A
	All other locations	B	B	B	B	B
Vibrations (A → C)	On machinery such as internal combustion engines, compressors, pumps, including piping on such machinery	B	-	-	B	B
	Masts	-	-	-	-	C
	All other locations	A	A	A	A	A
EMC, electromagnetic compatibility (A → B)	All location within specified main areas	A	A	B	A	B
Enclosure (A → D)	Submerged application	D	-	-	D	D
	Below floor plates in engine room	C	-	-	-	-
	All other locations	B	A	A	B	C

Standard range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
DV25.90A.G00	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV25.90B.G00	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV45.90A.G00	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.G00	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV75.90A.G00	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV75.90B.G00	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV100.90A.G00	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.G00	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV150.90A.G00	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.G00	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
DV300.90A.G00	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.G00	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

BBPR range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
DV25.90A.GS6	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
DV25.90B.GS6	22 F07/F10 ¹⁾	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
DV45.90A.GS6	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.GS6	22 F07/F10 ¹⁾	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV75.90A.GS6	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
DV75.90B.GS6	22 F07/F10 ¹⁾	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
DV100.90A.GS6	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.GS6	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV150.90A.GS6	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.GS6	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
DV300.90A.GS6	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.GS6	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

POSI range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
DV25.90A.GP5	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV25.90B.GP5	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV45.90A.GP5	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.GP5	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV75.90A.GP5	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
DV75.90B.GP5	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s
DV100.90A.GP5	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.GP5	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV150.90A.GP5	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.GP5	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
DV300.90A.GP5	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.GP5	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

3-position range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
DV25.90A.GF3	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV25.90B.GF3	22 F07/F10 ¹⁾	25 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV45.90A.GF3	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.GF3	22 F07/F10 ¹⁾	45 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV75.90A.GF3	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
DV75.90B.GF3	22 F07/F10 ¹⁾	75 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	20 s
DV100.90A.GF3	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.GF3	22 F07/F10	100 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	15 s
DV150.90A.GF3	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.GF3	22 F07/F10	150 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	30 s
DV300.90A.GF3	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.GF3	22 F07/F10	300 Nm	15 V to 30 V 50/60 Hz (12 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

POSI-BBPR (GPS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time
DV25.90A.GPS	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
DV25.90B.GPS	22 F07/F10 ¹⁾	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
DV45.90A.GPS	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.GPS	22 F07/F10 ¹⁾	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV75.90A.GPS	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
DV75.90B.GPS	22 F07/F10 ¹⁾	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
DV100.90A.GPS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.GPS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV150.90A.GPS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.GPS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
DV300.90A.GPS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.GPS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

3-POSITION-BBPR (GFS) range

Code	Star drive nut/ connection	Torque	Voltages	Power	Operating time (90°)
DV25.90A.GFS	22 F07/F10 ¹⁾	25 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	7 s
DV25.90B.GFS	22 F07/F10 ¹⁾	25 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	7 s
DV45.90A.GFS	22 F07/F10 ¹⁾	45 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV45.90B.GFS	22 F07/F10 ¹⁾	45 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV75.90A.GFS	22 F07/F10 ¹⁾	75 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	20 s
DV75.90B.GFS	22 F07/F10 ¹⁾	75 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	20 s
DV100.90A.GFS	22 F07/F10	100 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	15 s
DV100.90B.GFS	22 F07/F10	100 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	15 s
DV150.90A.GFS	22 F07/F10	150 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	30 s
DV150.90B.GFS	22 F07/F10	150 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	30 s
DV300.90A.GFS	22 F07/F10	300 Nm	100 V to 240 V 50/60 Hz (100 V to 350 V DC)	45 W	60 s
DV300.90B.GFS	22 F07/F10	300 Nm	24 V to 30 V 50/60 Hz (24 V to 48 V DC)	45 W	60 s

Delivered without cable gland

1) Delivered with F05/F07 removable plate and 17 mm star adaptation sleeve

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
MARINE	Marine coating
HUMPRO	Mainboard conformal coating
MODBUS	MODBUS-RTU communication

(1) Specify the model,

(2) Only for a travel time higher or equal to 10 s



Please consider 1.5 safety factor (and 2.0 safety factor for POSI version) when sizing the actuator.

Connection

Code	Description
NPT.2	Set of 2 pieces of ISO M20 to 1/2" NPT adapters
MULTI	Multipin connector
HUM	Set of 2 Hummel IP68 6 pins connectors

Compatibility

Code	standard	BBPR	POSI	3 positions	POSI-BBPR	3-POSITION-BBPR
EPR...B	•					
EPT.C	•					
EFC.2	•					
MARINE	•	•	•	•	•	•
HUMPRO	•	•	•	•	•	•
MODBUS	•	•		•	•	•
NPT.2	•	•	•	•	•	•
MULTI	•	•	•	•	•	•
HUM	•	•	•	•	•	•

	EPT.C	EFC.2	MARINE	HUMPRO	MODBUS	NPT.2	MULTI	HUM
EPR...B	✗	✗	✓	✓	✓	✗	✓	✓
EPT.C		✗	✓	✓	✓	✗	✓	✓
EFC.2			✓	✓	✓	✗	✓	✗
MARINE				✓	✓	✓	✓	✓
HUMPRO					✓	✓	✓	✓
MODBUS						✓	✓	✓
NPT.2							✓	✗
MULTI								✗

BBPR

Actuators with battery backup position recovery system



Description

Actuators from 10 to 2400 Nm with function ensuring a return to initial position in case of power failure. This function includes all AXMART® Bluetooth® functionalities.

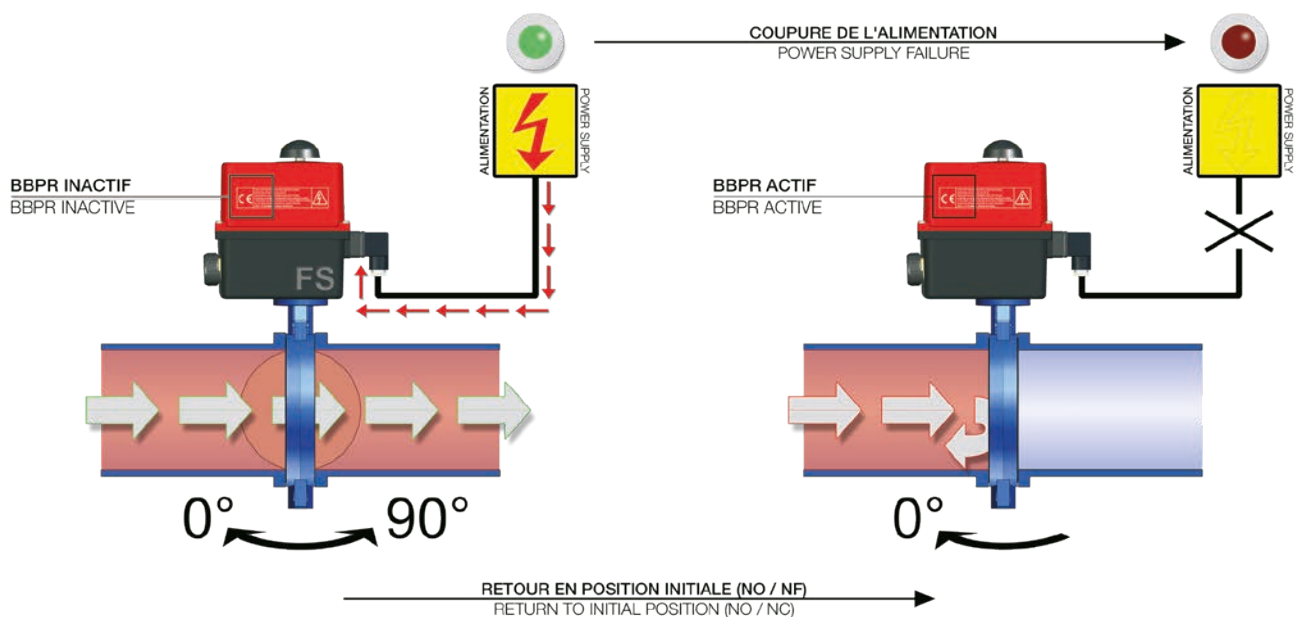
Customer benefits

- CSA/UL certified
- Warranted 18 month from delivery date (see general sales conditions)
- All in one: no additional wiring required
- "Fail to set" (closed, open, intermediate) easy switch with AXMART® application
- Real-time battery charge and system status information
- Power shut off after 2 mn to avoid battery discharging
- Torque limiter extended to emergency operation
- Quick and easy replacement of the battery
- Bluetooth® connection for monitoring, programming, control and setup of all actuators with AXMART® interface
- Robust and reliable over the entire temperature range, from -10 °C to +40 °C
- Compatible Posi, 3 positions and Modbus-RTU®



Compatible series

- ER PLUS · p.8
- VR/VS · p.16/22
- VT PLUS · p.30
- MT - multiturn · p.34
- VRX/VSX - ATEX · p.44
- DV – DNV-GL · p.50



POSI

Actuators with 4-20 mA or 0-10 V analogic control



Description

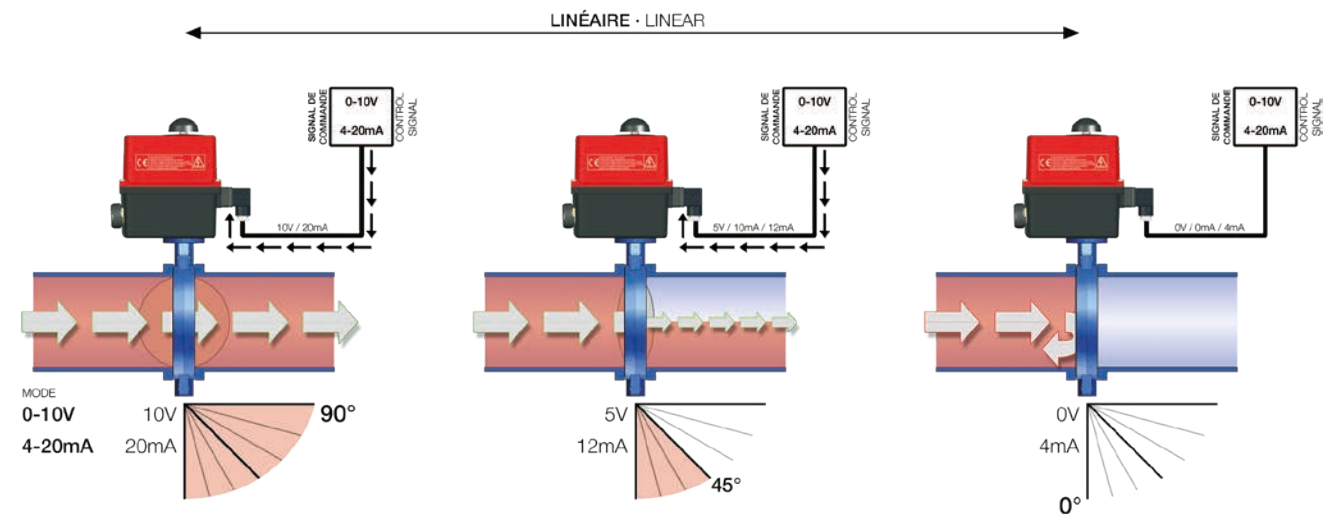
Actuators from 20 to 2400 Nm with 4-20 mA or 0-10 V analogic positioning function.

Customer benefits

- CSA/UL certified
- All in one: no additional wiring required
- Modulating duty:
resolution < 1 %
delay < 2 s
linearity < 2 %
- Reversible (example: 20-4 mA)
- Feedback signal 4-20 mA or 0-10 V
- Training mode
- Electronic torque limiter
- Rotation up to 180° or 270° (on request)
- Compatible BBPR (POSI-BBPR · GPS),
Modbus-RTU® (option P8) and Bluetooth® via
AXMART® (option P8).

Compatible series

- ER PLUS · p.8
- VR/VS · p.16/22
- VT PLUS · p.30
- MT - multiturn · p.34
- LT - low temperatures · p.40
- VRX/VSX - ATEX · p.44
- DV – DNV-GL · p.50



3 positions

Intermediate position

Description

Actuators from 10 to 2400 Nm with an intermediate position between 0° and 90°, 180° or 270°.

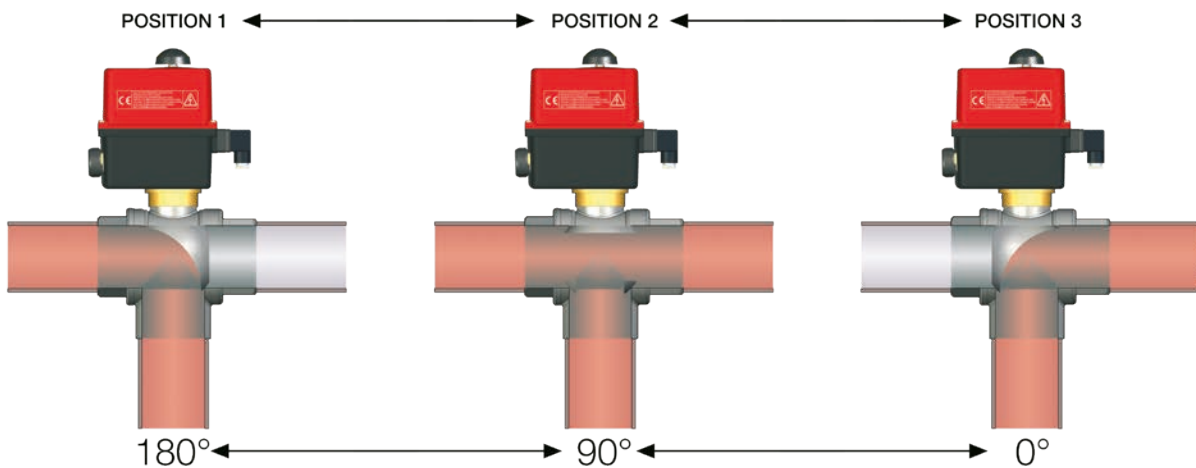
Customer benefits

- CSA/UL certified
- All in one: no additional wiring required
- 7 limit switches
- Electronic torque limiter
- Failure report
- Rotation up to 270°
- Compatible BBPR (3-POSITION-BBPR - GFS), Modbus-RTU® (depending of the model) and AXMART® (Bluetooth®).

Compatible series

- ER PLUS · p.8
- VR/VS · p.16/22
- VT PLUS · p.30
- LT - low temperatures · p.40
- VRX/VSX - ATEX · p.44
- DV – DNV-GL · p.50

Powered by
AXMART®



Modbus-RTU®

Communication fieldbus for electric actuators



Description

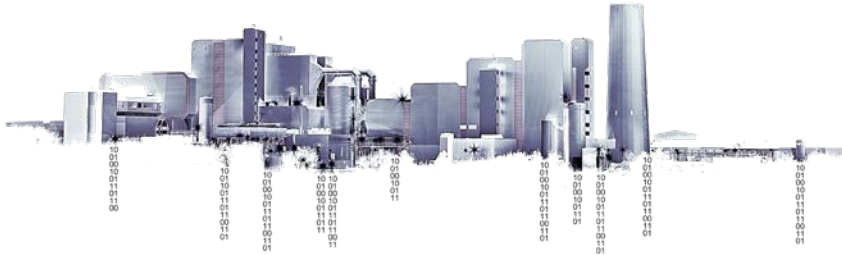
Industrial communication protocol via RS485 serial link for actuators from 10 to 2400 Nm.

Customer benefits

- Modbus-RTU approved by "Modbus organisation"
- RS485 interface
- Up to 31 actuators over 1200 meters per line
- Up to 247 actuators with repeaters
- Can be integrated into any type of network via gateways
- Removable termination resistor included.
- Compatible BBPR, POSI (P8) and 3-position functions.

Compatible series

- ER PLUS · p.8
- VR/VS · p.16/22
- VT PLUS · p.30
- MT - multiturn · p.34
- LT - low temperatures · p.40
- VRX/VSX - ATEX · p.44
- DV – DNV-GL · p.50



A simple and effective technical architecture

The "master-slave" architecture of Modbus-RTU offers great operating flexibility. Each RS485 line enables to associate a master device and 31 slaves over a maximum distance of 1200 meters. Using repeaters, Modbus-RTU allows the connection of 247 actuators to a PLC.

An easy integration with existing installations

The deployment of a Modbus-RTU actuator network requires very little infrastructure, that's only the addition of a serial link cable compatible with the EIA-485 standard.

An access to any type of network via gateways

Modbus TCP/IP	Profibus DP	Profinet
Ethernet/IP	Profibus PA	CANopen

A safe reliability

Modbus incorporates an error verification code named " cyclic redundancy check " or CRC, relating to all the frames sent. In the event of a weak electrical signal, an error may occur; in which case the message will be reissued until it is correctly understood.

Bluetooth®
Connected actuators



Description

Bluetooth® communication via AXMART® v3, the management and control interface for electric actuators from 10 to 2400 Nm.

Customer benefits

- Usable within a range of 15 meters in open field
- Compatible with ATEX devices for use in explosive atmospheres
- Available for free on Android and IOS

Compatible series

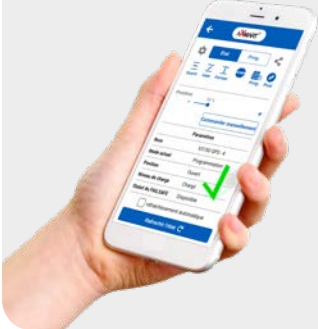
- ER PLUS · p.8
- VR/VS · p.16/22
- LT - low temperatures · p.40

As a standard on

- VT PLUS · p.30
- MT - multiturn · p.34
- All BBPR, POSI-BBPR and 3-POSITION-BBPR models · p.56 to 58

The application for CR-TEC actuators





Monitoring & Status

AXMART® provides a real time actuator parameters check. Servicing an installation with actuators equipped with the Bluetooth® communication module becomes an easy task. It only requires a few seconds to achieve and validate function tests using your tablet or smartphone once the CR-TEC Application AXMART® has been downloaded. Maintenance operations will be much easier as you can read operation records from actuators. This is a good way to save time while minimizing risks.

Connect & Control

The CR-TEC Bluetooth® communication module offers a secured connection. It enables the communication with any actuator, whether visible or not and even when concealed (actuators located under floor, in a pit, above ceiling, at height). In all situations, this interface is perfect as a local control device.

Weekly Programming

The actuator becomes autonomous with the integrated timer, which allows a scheduling of twenty operations a week. Simple and cost effective! Neither programmable logic controller (PLC) - electric cabinet nor control operator is required.

Configuration

Backup position (BBPR models), setpoint and feedback signals (POSI models), electrical wiring and operating mode can be set directly with AXMART®.

Standard models



Specifications

Rotation	90° (180°/270° On request)				
Torques	10-100 Nm	20-100 Nm	25-75 Nm	100-300 Nm	600-2400 Nm
Voltages	100-240 V 50/60 Hz 100-350 V DC 15-30 V 50/60 Hz 12-48 V DC	100-240 V 50/60 Hz 100-350 V DC 24 V 50/60 Hz 24 V DC	100-240 V 50/60 Hz · 100-350 V DC 15-30 V 50/60 Hz · 12-48 V DC 3-phase 400 V		3-phase 400 V
Duty cycle	S4 · 50 %	S4 · 30 %	S4 · 50 %	S4 · 50 %	S4 · 50 %
ISO connection	ER10-35: F03/F04/F05 ER35-100: F05/F07	ER10-20: F03/F04/F05 ER35-100: F05/F07	F05/F07	F07/F10	VT600-1000 : F10/F12 VT1500-2400 : F12/F14/ F16
Drive (star)	ER10-35: 14 mm ER35-100: 22 mm	ER10-20: 14 mm ER35-100: 22 mm	17 mm	22 mm	VT600-1000 : 36 mm VT1500-2400 : 46 mm
Ambient operating temperature	-10 °C to +55 °C		-20 °C to +70 °C		
Ingress protection	IP66	IP65	IP68 2-5 m / 72 h	IP68 2-10 m / 72 h	IP68 2-5 m / 72 h
Weight	1 kg to 2.2 kg	1 kg to 2 kg	3.1 kg to 4.4 kg	5.1 kg to 6.4 kg	VT600-1000 : 24 kg VT1500-2400 : 53 kg
Anticondensation heater	✓	✗	✓	✓	✓
Manual override	✓	✓	✓	✓	✓
Torque limiter	✓	✓	✓ (1)	✓ (1)	✓
Failure feedback	✓	✗	✓ (1)	✓ (1)	✓
On-off control	✓	✓	✓	✓	✗
3-point modulating control	✓	✓	✓	✓	✓
Pulse control	✓	✗	✓	✓	✗

(1) Except 3-phase 400 V

Standard models

Special models



VT PLUS
p.30

MT
p.34

LT
p.40

ATEX
p.44

DV
p.50

Specifications

Rotation	90° (180°/270° 0n request)	5 - 700 revolutions	90° (180°/270° 0n request)		
Torques	600-2400 Nm	25-75 Nm	25-300 Nm	25-1000 Nm	25-300 Nm
Voltages	100-240 V 50/60 Hz · 100-350 V DC 24-48 V 50/60 Hz · 24-72 V DC		100-240 V 50/60 Hz 100-350 V DC 15-30 V 50/60 Hz 12-48 V DC	100-240 V 50/60 Hz · 100-350 V DC 15-30 V 50/60 Hz · 12-48 V DC 3-phase 400 V	100-240 V 50/60 Hz 100-350 V DC 15-30 V 50/60 Hz 12-48 V DC
Duty cycle	S4 · 50 %				
ISO connection	VT600-1000 : F10/F12 VT1500-2400 : F12/F14/F16	F07/F10	LT25-75 : F05/F07/F10 LT100-300 : F07/F10	VRX : F05/F07 VSX : F07/F10 VTX : F10/F12	DV25-75 : F05/F07/F10 DV100-300 : F07/F10
Drive (star)	VT600-1000 : 36 mm VT1500-2400 : 46 mm	Formes · Forms A, B1, B3, C	LT25-75 : 17/22 mm LT100-300 : 22 mm	VRX : 17 mm VSX : 22 mm VTX : 36 mm	DV25-75 : 17/22 mm DV100-300 : 22 mm
Ambient operating temperature	-20 °C to +70 °C		-50 °C to +70 °C		Voir · See p.37
Ingress protection	IP68 5 m / 72 h		IP68 2-5 m / 72 h		IP68 5-10 m / 72 h
Weight	VT600-1000 : 25 kg VT1500-2400 : 54 kg	19 kg to 23 kg	6 kg to 6.4 kg	VRX : 4 kg to 4.4 kg VSX : 6 kg to 6.4 kg VTX : 24 kg	6 kg to 6.8 kg
Anticondensation heater	✓	✓	✓ (2)	✓	✓
Manual override	✓	✓	✓	✓	✓
Torque limiter	✓	✓	✓	✓ (1)	✓
Failure feedback	✓	✓	✓	✓ (1)	✓
On-off control	✓	✓	✓	✓ (1)	✓
3-point modulating control	✓	✓	✓	✓	✓
Pulse control	✓	✓	✓	✓ (1)	✓

(1) Except 3-phase 400 V
(2) Integrated heating system

Standard models



Special functions

BBPR · emergency position (NC std, NO via AXMART®)	✓	✗	✓ (1)	✓ (1)	✗
POSI · 4-20 mA (std) or 0-10 V (via AXMART®) control signal	✓	✗	✓ (1)	✓ (1)	✗
3 POSITIONS	✓	✗	✓ (1)	✓ (1)	✓ (3)
GPS · POSI + BBPR	✗	✗	✓ (1)	✓ (1)	✗
GFS · 3 POSITIONS + BBPR	✗	✗	✓ (1)	✓ (1)	✗
BLUETOOTH® Connected actuator	✓	✗	✓ (1)	✓ (1)	✗
MODBUS-RTU® Industrial fieldbus	✓	✗	✓ (1)	✓ (1)	✗






Special processes

Corrosive marine environments	✗	✗	✓	✓	✓
Corrosive chemical environments	✗	✗	✓	✓	✗
Processes with vibrations	✓	✗	✓	✓	✗

Options

4-20 mA or 0-10 V transmitter (EPT.C)	✓	✗	✓	✓	✓
100-10000 Ohms feedback potentiometer (EPR.B)	✓	✗	✓	✓	✓
Card with two extra limit switches (EFC.2)	✓	✗	✓	✓	✓
Mainboard conformal coating (HUMPRO)	✓	✗	✓	✓	✗
Protective insulation jacket for -60 °C (ULT)	✗	✗	✗	✗	✗
10 meters 72 hours IP68 tightness (IP10)	✗	✗	✗	✓	✗

Standards

CE 	✓	✓	✓	✓	✓
CSA/UL 	✓	✗	✓	✓	✗
EAC 	✓	✓	✓	✓	✓
DNV/GL 	✗	✗	✗	✗	✗
ATEX/EACEx 	✗	✗	✗	✗	✗

(1) Except 3-phase 400 V

(3) For 600 and 1000 Nm

Standard models

Special models



VT PLUS
p.30

MT
p.34

LT
p.40

ATEX
p.44

DV
p.50

Special functions

BBPR · emergency position (NC std, NO via AXMART®)	✓	✓	✗	✓	✓
POSI · 4-20 mA (std) or 0-10 V (via AXMART®) control signal	✓	✓	✓	✓	✓
3 POSITIONS	✓	✗	✓	✓ ⁽¹⁾⁽²⁾	✓
GPS · POSI + BBPR	✓	✓	✗	✓ ⁽¹⁾⁽²⁾	✓
GFS · 3 POSITIONS + BBPR	✓	✗	✗	✓ ⁽¹⁾⁽²⁾	✓
BLUETOOTH® Connected actuator	Standard	Standard	✓	✓ ⁽¹⁾⁽²⁾	✓
MODBUS-RTU® Industrial fieldbus	✓	✓	✓	✓ ⁽¹⁾⁽²⁾	✓

Special processes

Corrosive marine environments	✓	✓	✓	✓	✓
Corrosive chemical environments	✗	✗	✓	✗	✗
Processes with vibrations	✓	✓	✓	✗	Standard

Options

4-20 mA or 0-10 V transmitter (EPT.C)	Standard	Standard	✓	✓	✓
100-10000 Ohms feedback potentiometer (EPR.B)	✗	✗	✓	✓	✓
Card with two extra limit switches (EFC.2)	✗	✗	✓	✓	✓
Mainboard conformal coating (HUMPRO)	Standard	Standard	✓	✓	✓
Protective insulation jacket for -60 °C (ULT)	✗	✗	✓	✗	✗
10 meters 72 hours IP68 tightness (IP10)	✗	✗	✓	✓ ⁽⁵⁾	Standard

Standards

CE	✓	✓	✓	✓	✓
CSA/UL	✗	✗	✓	✓ ⁽¹⁾⁽²⁾	✓
EAC	✓	✓	✓	✓	✓
DNV/GL	✗	✗	✗	✗	✓
ATEX/EACEx	✗	✗	✗	✓	✗

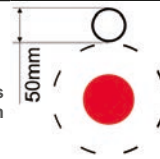
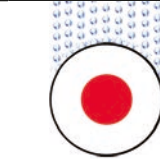
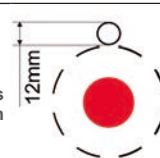
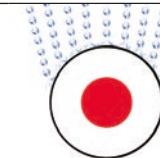
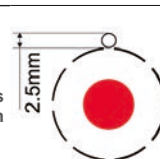
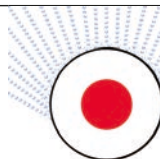
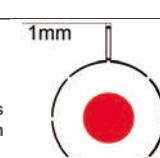
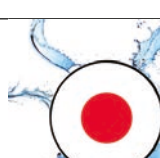

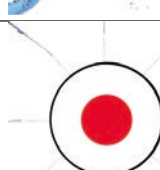



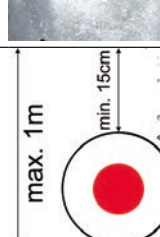

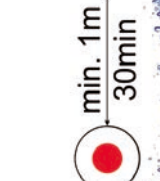
(1) Except 3-phase 400 V
 (2) Except VTX
 (3) For 600 and 1000 Nm
 (4) Except 3-phase 400 V
 (5) VSX only

Chapter **3**
Appendices

IP protection marking

Protection against solid parts

Protection against liquid parts

<p>IP1X</p> <p>Protection against solid parts bigger than 50 mm intrusion</p>		<p>1 1</p>		<p>IPX1</p> <p>Protection against vertically dripping water</p>
<p>IP2X</p> <p>Protection against solid parts > 12 mm intrusion</p>		<p>2 2</p>		<p>IPX2</p> <p>Protection against dripping water when tilted up to 15°</p>
<p>IP3X</p> <p>Protection against solid parts > 2.5 mm intrusion</p>		<p>3 3</p>		<p>IPX3</p> <p>Protection against water falling as a spray at any angle up to 60° from the vertical</p>
<p>IP4X</p> <p>Protection against solid parts > 1 mm intrusion</p>		<p>4 4</p>		<p>IPX4</p> <p>Protection against water splashing from any direction</p>
<p>IP5X</p> <p>Protection against dust (no harmful residues)</p>		<p>5 5</p>		<p>IPX5</p> <p>Protection against water projected in water jets from any direction (6.3 mm nozzle, distance 2.5 m-3 m, 12.5 l/min flow)</p>
<p>IP6X</p> <p>Full protection against dust</p>		<p>6 6</p>		<p>IPX6</p> <p>Protection against water projected in powerful water jets from any direction (12.5 mm nozzle, distance 2.5 m-3 m, 100 l/min flow)</p>
<p>7</p>		<p>7</p>		<p>IPX7</p> <p>Protection against temporary submersion effects (15 cm up to 1 m)</p>
<p>8</p>		<p>8</p>		<p>IPX8</p> <p>Protection against the effects of prolonged immersion under pressure (min. 1 m/30 min.)</p>

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