

QUARTER TURN ELECTRIC ACTUATORS



ON / OFF, SMART OR MODULATING ELECTRIC ACTUATORS

FUNCTION AND FEATURES

■ **Compact Size**

Ultra small form combined with a powerful motor, position indicator and manual override.

■ **Robust Construction**

Aluminium housing or PC+PET materials weatherproof to IP67.

■ **Range of options**

Various voltages, high speed, smart control, WiFi, failsafe, timer control, and more available.

■ **Inbuilt Heater**

Anti-condensation heater offered as standard to maximise service life.

■ **End of stroke switches**

Two SPDT volt free end of travel confirmation switches included as standard.

■ **ISO Mounting**

ISO5211 mounting with female star drive allows direct connection to many valves.

PRODUCT DETAILS

The TCN series quarter turn electric actuators are available in either a basic or smart model.

The **basic** model is constructed with internal mechanical cams to stop the motor in the required position. It offers a number of standard features such as a brushless motor, overload protection, IP67 rated housing, dome style visual indicator, manual override, end of stroke switches, anti-condensation heater, and a variety of voltages and wiring configurations

The **smart** model is fully electronic using magnetic positioning and operates using inbuilt firmware. In addition to the standard features, the smart model features an OLED screen which can display position indication, failure reports, along with menu operation and push button control to allow numerous advanced operations such as custom positions, speed control, local manual control, and more.

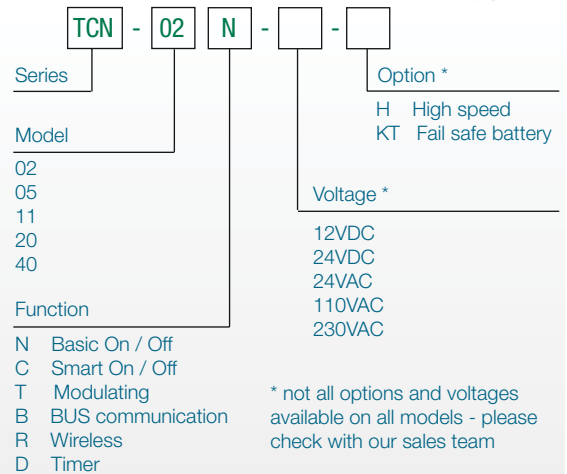
Both the basic and the smart models are available in a battery return failsafe option or high speed option with actuations as quick as just a few seconds.

OLED screen on smart model

Function C, T, B, R & D
See order code table



Order Codes



MODEL SELECTION

CODE	TCN-02	TCN-05	TCN-11	TCR-20/40
SIZE (L x W x H)	104 x 70 x 90	132 x 111 x 121	152 x 111 x 121	232 x 160 x 170
TORQUE (Nm) *	20 Nm 15Nm for failsafe	50 Nm 40Nm for failsafe	110 Nm 90Nm for failsafe	200 / 400 Nm Failsafe not available
OUTPUT FEMALE STAR DRIVE	14 x 14	14 x 14	17 x 17	22 x 22
ISO5211 MOUNT	F03 / F04 / F05	F05 / F07	F05 / F07	F07 / F10
SPEED (SECONDS)	10 (DC) 15 (AC)	12 (DC) 20 (AC)	10 (DC) 15 (AC)	25(DC) 25 (AC)

* Always allow a safety margin when matching a valve

* Failsafe and/or High speed models, as well as some speed control modes on the smart actuators will affect torque rating

SPECIFICATIONS

VOLTAGES *	AC 230V / 110V / 24V DC 24V / 12V
MAX FLUID TEMPERATURE	80°C (DIRECT MOUNT)
AMBIENT TEMP	- 20°C to 80°C
HUMIDITY	5 - 95% NON CONDENSING
INGRESS PROTECTION	IP67
POSITION INDICATOR	DOME
HOUSING	ALUMINIUM (TCN-02 / 05 / 11) PET + PC (TCR-20 / 40)
MANUAL OPERATION	HEX WRENCH SUPPLIED
END OF STROKE	MICRO-SWITCH (BASIC) ELECTRONIC RELAY (SMART)
OPERATING FREQUENCY	NOT CONTINUOUS SEE ACTUATOR SPECIFIC DATASHEET

See technical datasheets for power consumption and other electrical data

* Not all voltages available on all models

OTHER OPTIONS



Watermark approved butterfly valves, 2-way and 3-way ball valves, mounted and tested. See separate sales sheet.

Explosion-proof actuators available upon request
Ex d IIB T6 Gb / Ex tD
A21 IP68 T80°C.

All Valve
INDUSTRIES

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