



# Electrical Actuators

*The Complete Solution in Valve Automation*



## Introduction

**SDTORK** comprises a dynamic and committed team of young professionals blended with expertise and experience - Technocrats, Engineers and Managers. Sdtork team is well aware of the latest developments in modernization and automation with stress on economy, efficiency and quality. The present trend is 'speed' which means replacement of rather sluggish and outdated mechanical devices with faster and modern electronic and electrical devices. Sdtork is precisely in this business of automation of valves through intelligent approach to the same.

SDTORK's motto is Technology + Field Engineering + Implementation + Back-up supports. Sdtork team strives to give an optimal return to the customer for the money and effort they put in, in other words, keep the customer entirely satisfied.

With the above objectives in mind, SDTORK has developed Electric Actuators - 'Intelligent Actuators' to suit every valve application. The latest technology like PROFIBUS-interface is adopted in these Intelligent Actuators to provide greater advantage to the end user, apart from using feed-back devices and fail-safe devices. These Intelligent Actuators are designed for both on-off [open-close] application and also modulating application. Sdtork Intelligent Actuators are customer friendly and guarantee precise control every time, with repeated operations also. With a variety of valve types, Sdtork uses special adaptors with the Intelligent Actuators to suit each valve type for greater customer satisfaction.

Sdtork team assures that the customer will ever love to approach Sdtork for their further needs and will never regret the decision to go with Sdtork.

## Single Phase Quarter Turn / Half Turn Weather Proof Electrical Actuator

**1000 Series**

*Torque Range upto 200 Nm*



SDTORK Electric Actuator type 1000 series have been designed for remote control of Ball valves, Butterfly valves, Dampers & other actuating devices, which require up to 90 ° rotary actuation & tight closure in end positions.

It is simple in design with compact in size, lighter in weight due to high grade aluminum alloy housing.

1000-series electric actuator is designed with a specially developed low rpm synchronous stall duty motor with single stage worm reduction gear box which makes this actuator totally trouble free i.e. Fit and Forget type. Specially used in process industries for On-off/Inching and modulating duty.

## DC / Single Phase Quarter Turn Weather Proof Electrical Actuator

**1001 ECO Series**

*Torque Range upto 2,000 Nm*



ECO Series is a specially design, compact, lightweight & powerful function economical series electrical actuator. It offers customer better value for money by focusing both on low cost and upscale quality. The ultimate goal of the developing ECO series is to keep costs lower than other series with comparable quality and features.

ECO Series actuator has a proven performance for on/off valve and damper control with an extremely high life cycle, ECO-Series actuators are a truly cost-effective, reliable solution to simple valve actuation needs, easy to install, with almost nil maintenance, ECO-Series actuators are ideally suited for OEM applications. They are designed to supply years of trouble-free actuation with efficient & Consistent Performance.

**Single Phase / Three Phase Quarter Turn Weather Proof Electrical Actuator**

**1001 Series**

Torque Range upto 500 Nm



SD-1001 Series actuator is specially designed for quarter turn operating application such as Ball valve, Butterfly valve, plug valve, Dampers and similar usages. SD-1001 Series is highly reliable for heavy duty application, can withstand against impact, vibration & dusty environment. Over and above standard features of SD-1000 & SD-1001-ECO series, SD-1001 series is having an over torque protection Highly efficient spur, planetary gear train transmit motor torque directly through coaxial shafts to output of actuator & manual operation take place through worm reduction. It also adds self-locking feature in actuator design.

**Single Phase Linear Weather Proof Electrical Actuator / with Linear to Rotary Converter / With Linkages**

**2000 Series**

Thrust Range upto 9,806 N



Sdtork Electric Actuator type 2000-series is designed for linear, quarter turn & angular actuation applications for remote control of various types of valves such as Globe, V-notch ball, Butterfly, Diaphragm and various types of dampers such as single / multi louver / VIV dampers. sdtork's 2000-series is mainly used for control/regulating duty applications. The special design features of 2000 series give value addition to our customers in following ways VERSATILITY, ROBUSTNESS, RELIABILITY, ECONOMY

**Single / Three Phase Quarter Turn Electrical Actuator**

**FSD-1001-Ew-Series**

**Weather Proof**

Torque Range upto 600 Nm

**FSD-1001-Ex-Series**

**Flame Proof**



**FSD-1001-Ew** series actuator is an weather proof equipment. Good quality aluminium alloy body. Strong design body withstand against high pressure without any damage.

**FSD-1001-Ex** series actuator is an anti-explosive / flame-proof equipment. FSD-1001-Ex series actuator design restrict increase in surface temperature & electric spark caused due to transient current. Actuator complies to IEC60079-0:2017 & IEC60079-1:2014. Design feature of FSD-1001-Ex series prevent the contact of interior sparks or explosive carrier with the outside. Good quality aluminium alloy body strong stand against internal explosion. Strong design body withstand against high pressure caused due to interior explosion without any damage.

**Single Phase Linear Flame Proof Electrical Actuator with Linear to Rotary Converter / With Linkages**

**HQ Series**

Thrust Range upto 9,806 N



Sdtork Electric Actuator type HQ-series is designed for linear, quarter turn & angular actuation applications for remote control of various types of valves such as Globe, V-notch ball, Butterfly, Diaphragm and various types of dampers such as single / multi louver / VIV dampers. sdtork's 2000-series is mainly used for control/regulating duty applications. The special design features of 2000 series give value addition to our customers in following ways VERSATILITY, ROBUSTNESS, RELIABILITY, ECONOMY

**Single Phase / Three Phase Quarter Turn Flame Proof Electrical Actuator**

**FSD-1001-Series**

Torque Range upto 600 Nm



FSD-1001 series actuator is an anti-explosive / flame-proof equipment. FSD-1001 series actuator design restrict increase in surface temperature & electric spark caused due to transient current. Actuator complies to IEC60079-0:2011 & IEC60079-1:2014 and IEC 60529:2013. Design feature of FSD-1001 series prevent the contact of interior sparks or explosive carrier with the outside. Good quality aluminium alloy body strong stand against internal explosion. Appropriate flameproof joint gap and adequate flame path length assure restriction of flame outside atmosphere. Strong design body withstand against high pressure caused due to interior explosion without any damage.

**Single Phase / Three Phase Multi Turn Weather Proof Electrical Actuator**

**3000 Series**

Torque Range upto 2000 Nm



Sdtork Electric Actuator type 3000-Series is designed for multiturn application for remote control of various type valves such as Sluice Valve, Gate Valve, Knife Edge Gate Valve and Sluice Gate.



## Three Phase Multi Turn Flame Proof Electrical Actuator

### 12000 Series

Torque Range upto 1000 Nm (MT)



Sdtork Electrical Actuator 12000-Series have been designed for multiturn application to operate valves like Sluice valve, Gate valve, Knife-edge Gate valve, sluice gate & other actuating devices, which require multi turn actuation.



## GEAR BOX & THRUSTER UNIT

### WG-Quarter Turn/FWG-Full Turn Worm Gear Box

Torque Range upto 1,50,000 Nm



### SG-Spur Gear Box

Torque Range upto 18,500 Nm



### LTU-Linear Transmitting Unit

Thrust Range upto 1,81,424 N



### BG-Bevel Gear Box

Torque Range upto 5,400 Nm



### TU-Thruster Unit

Thrust Range upto 1,81,424 N



## CIRTIIFICATIONS

**BSCIC** **BSCIC**  
**Certificate**

QUALITY MANAGEMENT SYSTEM

This is to certify that:  
**SDTORK CONTROLS PVT. LTD.**  
GATE NO. 142, PLOT NO. 11, AGRIKULSHILDA ROAD, VILLAGER - CHENNAI - 600 035, PUNE - 411 001, MAHARASHTRA, INDIA

ISO 9001:2015  
Design, Manufacturing, Supply, Installation and Commissioning of Electrical Actuator

For the following scope:  
Design, Manufacturing, Supply, Installation and Commissioning of Electrical Actuator

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**Ex** **ATEX**

Allegata alla Notifica Garanzia di Qualità Prodotto  
Anno di Notificazione di Qualità Prodotto  
n. ECM 21 ATEX-E TW09

SDTORK Controls Pvt. Ltd.  
Gate No. 142, Plot No. 11, Agrikulshilda Road, Villager - Chennai - 600 035, Pune - 411 001, Maharashtra, India

SDTORK Controls Pvt. Ltd.  
Gate No. 142, Plot No. 11, Agrikulshilda Road, Villager - Chennai - 600 035, Pune - 411 001, Maharashtra, India

SDTORK Controls Pvt. Ltd.  
Gate No. 142, Plot No. 11, Agrikulshilda Road, Villager - Chennai - 600 035, Pune - 411 001, Maharashtra, India

**Indian Register of Shipping**

TYPE APPROVAL CERTIFICATE

SDTORK CONTROLS PVT. LTD.

REGISTRED BYTES & MARKS: SDTORK CONTROLS PVT. LTD.

PRODUCT DESCRIPTION: Three Phase Multi Turn Flame Proof Electrical Actuator

INDIAN REGISTER OF SHIPPING

**Certificate of Compliance**

SDTORK Controls Pvt. Ltd.

Certificate Holder: SDTORK Controls Pvt. Ltd.

Product: Three Phase Multi Turn Flame Proof Electrical Actuator

Model(s): SDTORK Controls Pvt. Ltd.

Verification by: SDTORK Controls Pvt. Ltd.

CE Mark

## Other Products

### Basic Actuator Series

- 1000 Series: Single Phase Quarter Turn / Half Turn Weather Proof Stayput Electrical Actuator
- 1001 ECO Series: DC / Single Phase Quarter Turn Weather Proof Stayput Electrical Actuator
- 1001 Series: Single Phase / Three Phase Quarter Turn Weather Proof Stayput Electrical Actuator
- 2000 Series: Single Phase Linear Weather Proof Stayput Electrical Actuator / with Linear to Rotary Converter / With Linkages
- 3000 Series: Single Phase / Three Phase Multi Turn Weather Proof Stayput Electrical Actuator
- FSD-1001-EW-Series : Single Phase / Three Phase Quarter Turn Weather Prof Stayput Electrical Actuator
- FSD-1001-Ex-Series: Single Phase / Three Phase Quarter Turn Flame Proof Stayput Electrical Actuator
- FSD-1001-Series: Single Phase / Three Phase Quarter Turn Flame Proof Stayput Electrical Actuator
- HQ Series: Single Phase Linear Flame Proof Stayput Electrical Actuator with Linear to Rotary Converter / With Linkages
- 12000 Series: Three Phase Multi Turn Flame Proof Stayput Electrical Actuator

### Supplimentary Attachment Type

- Quarter Turn / Full Turn Worm Gear Box
- Spur Gear Box / Bevel Gear Box
- Linear Transmitting Unit
- Thruster Unit

### Accessories available on demand

- Space Heater
- Thermostat
- Resistive / Inductive Type Potentiometer
- Position Transmitter
- Panel Mounted Servo Controller
- Actuator Mounted Position Control Unit
- Local Control Station with Battery Backup
- Local Control Station with Battery Back up with Solar Panel System
- Local Control Station with Battery Back up with GSM Operating
- Local Control Station with Battery Back up with Solar Panel System with GSM Operating
- Local Push Button Station
- Power Pack inbuild with DC Battery + Charger Circuit + Invertor Circuit with Logic Control Card for Fail Safe Position.
- Can be supplied with PLC, SCADA, Modbus, Profibus, Fieldbus Communication Protocol, RS485
- Complete pressure control loop / temperature control loop / flow control loop
- Automation of existing valves by means of retrofitting
- PID Controller
- 4-20 mA Source generator
- Digital Position Indicator
- Signal Multiplier
- Weather Proof / Flame Proof Reversible Starter
- Local Control Station

## SDTORK CONTROLS PVT. LTD.



### Registered Office

Shop No. 1106, 10th Main Road, R.P.C. Layout,  
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### Pune Office / Works :

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