

# Accessories

## SINGULAR CONSTRUCTION



## MODULAR CONSTRUCTION



## CONTROL PANEL WITH SERVO CONTROLLER



Local control panel is wall-mounted design made of sheet metal.

This can be supplied with the following components

- Main switch • MCB on fuses for power & control circuits • Contactors • Push buttons for open / stop / close commands • Indicating lamps for various indications such as power on, open, close, faulty operation • Remote position indicator • Selector switch for Auto / Manual operations • Overload relay cum single phase preventor • Phase sequence protector • Current transformer • Space heater • Electronic braking unit for motor • Electronic Positioner • Relays for non - self locking actuators • D.C. supply source for two wire transmitter • Relays for DCS compatibility • Digital indicator • Connectors

The above-mentioned items are provided as per customer's specific requirements & wired accordingly.

## LOCAL PUSH BUTTON STATION



This is a field switch unit to operate actuator locally & designed to work with reversing starter.

This version consist of

- Local push buttons for "Open-Close-Stop" commands • Selector switch for "Remote-Local-Off" commands

## INTEGRAL STARTER



This is an integral part of the actuator. This version consists of in-built features of Local Push Button Station and Local Control Panel with minimum configuration of :

- Reversing contactor
- Selector switches for 'Remote-Local-Off' commands
- Local push buttons for 'Open-Close-Stop' commands

## POSITIONER TRANSMITTER



resistance transmitter of 100-235Ω (alternative values are also available) or a current transmitter with a unified signal of 4-20 mA.

The maximum load resistance is 500 W. The supply voltage of the transmitter is 12 to 36 V D.C.

Also available with non contact type position transmitter

## POSITION INDICATOR



This will indicate 0-100% opening of the valve in control room. Input to this position indicator will be either from actuator mounted potentiometer (distance less than 5 m) or from actuator mounted current transmitter i.e.4-20mA.

## ELECTRONIC POSITIONER



- Supply : Single phase 230 V AC • Input signal : 4-20 mA or 0 to 10 VDC • Output signal : 4-20 mA or 0 to 10 VDC • Output : Reversible contacts for Open & Close operation • Auto / Manual selection : Selector switch provided In auto mode open close operations are controlled by 4-20mA input signal & under Manual mode operation is through push buttons, by way of inching operations. • LED Indications : Open / Close / Opening / Closing • Digital Indicator : 3 1/2 Digit for 0 to 100 % opening of final control element
- Fuse protection provided

## CONTROL STATION



## LINKAGES



## TRAVEL LIMIT & TORK LIMIT SWITCHES



Travel & Torque Limit Switches are available in 1NO + 1NC as well as 2NO + 2NC contact configuration.



## Selection Guide Line For Electrical Actuators



### SPACE HEATER

To prevent water condensation, actuator is fitted with an anti-condensation heater called space heater; the latter can be connected to AC or DC voltage of 230 V.



### POTENTIOMETER

Ohmic position transmitter are available in multiturn / single Turn pot with pot gears for require ohmic output.



### THERMOSTATE

Thermostat can be provided in motor for protection against overload.

## GEAR BOXES

### SPUR GEAR BOX



Sdork Spur gear box units are designed with electric multiturn 3000-series actuators. The unit is suitable to operate rising or non rising stem valves. These units are efficient, reliable & simple in construction.

### WORM GEAR BOX



Sdork worm gear box units are specially designed to operate quarter turn valves like Ball Valve, Butterfly Valve, Plug Valves & Dampers. Adjustable Mechanical stopper & position indicator is standard feature of WG gear Box.

### BEVEL GEAR BOX



These gear box have completely enclosed construction. The main casing is designed to withstand the shock & vibration of the piping system.

## ELECTRIC ACTUATOR IN DOSING PUMP



Sdork also supplies Electric Actuator in dosing pump application for stroke adjusting device.

## MOUNTING BRACKETS & SPECIAL ADAPTORS



Any automation solution should essentially take into account adaptation of new actuator to suit the existing valves, which invariably are with non-standard mounting flanges.

Hence the adaptor is to be designed to cater to the variety in valve mounting flange designs. Sdork's special adaptor design solution fulfils all applications and all valve mounting flanges.

## STANDARD FEATURES & ACCESSORIES

- Position Limit switches [1 NO + 1 NC] 2 nos. change-over type
- Travel Limit switches [1 NO + 1 NC]
- Hand wheel
- Wide speed range
- Easy maintenance
- Hammer blow effect
- Local position indication

## OPTIONAL ACCESSORIES, CONTROLS & PROTECTIONS

- Extra Limit switches
- 2 NO + 2 NC contacts for travel limit switches
- 2 NO + 2 NC contacts for torque Limit switches
- 'H' class insulation for motor
- Side mounted hand wheels to reduce rim pull effort, geared hand wheel is provided
- Remote position indicator Potentiometer, Current position transmitter, Non-contact type position transmitter
- Remote position indicator Analog / Digital
- Power supply
- Push button station
- Blinker switch
- Integral starter
- Control panel
- Electronic positioner
- Single phase protection
- Special control / protection features as per application demands can also be given for specific requirements.

## CODES & STANDARDS

sdork supplies actuators as per relevant National and International standards. As a minimum requirement, sdork products are made to the following standards :

- Electric Motor operated actuator IS9334
- Degree of protection provided by enclosures at low voltage switch gear & control gear IS2147
- Degree of protection provided by enclosures at low voltage switch gear & control gear IS13247
- AC contactors for voltages not exceeding 1000 volts IS2959
- Degree of protection provided by enclosures for rotating electrical machinery IS4091
- Specification for motor rating electrical machines IS4722
- Flame Proof IS2148, 2004.