



**Shinhwa Engineering**

# **All about Actuators & Positioners General Catalog**



# Damper Actuator (CA)

Damper actuator is a product unifying all components such as motor, reducer, limit s/w, overload torque s/w, current transmitter, balancing relay, manual handle device, and local control box, and especially allows for easy maintenance and management with high reliability. It is a electrically driven equipment used for air control driving item, boiler, incinerator, burner for combustion driving control or damper for pressure control and valve control etc.

## FEATURES

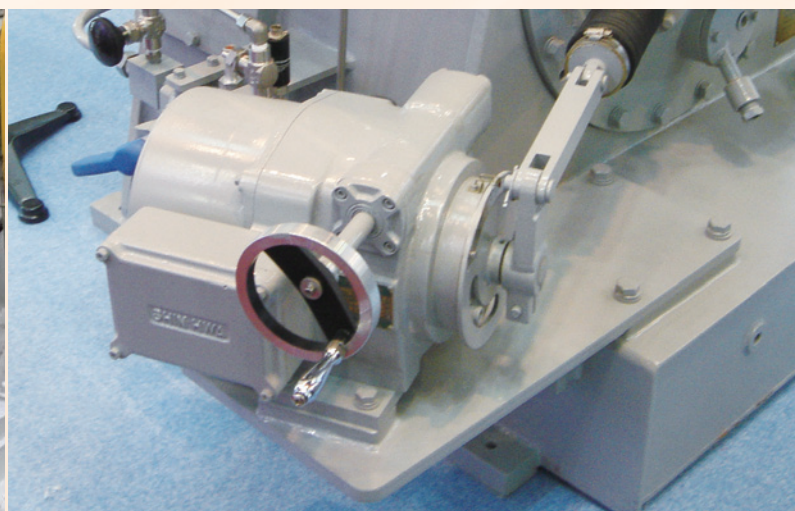
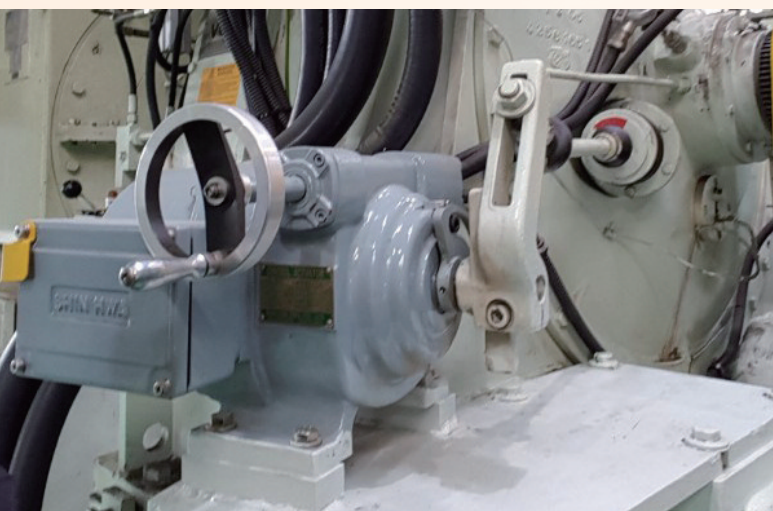
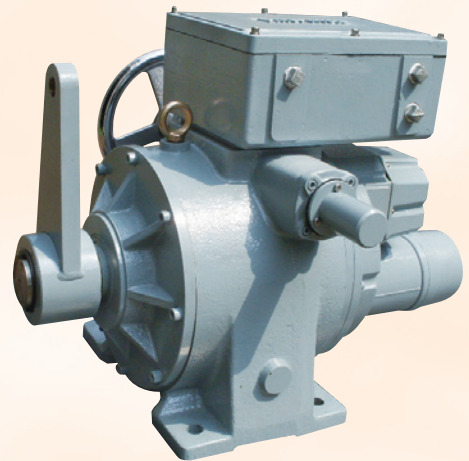
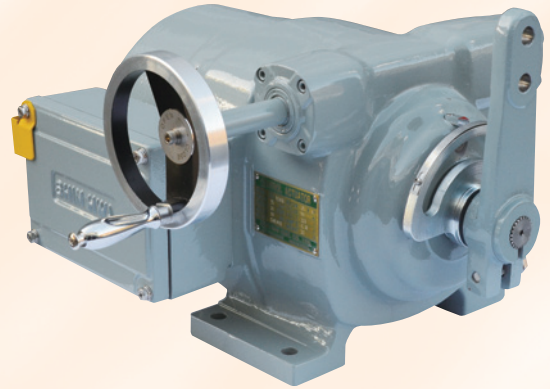
- Precision control feature
- Unified compact type
- Excellent durability
- Separation structure
- Overload protection apparatus
- Convenient feature of manual operation
- Protection structure : IP-65

## STANDARD SPECIFICATIONS

- Completely enclosed outdoor type
- Operating angle : 90°
- Operating Temp. : -20°C ~ 60°C
- Speed : 30sec/ 90°, 60sec/ 90°
- Humidity : below 85%
- Color : CA type - Munsell 7.5 BG 6/1.5
- Contact signal Current signal(4~20mA D.C)

## SPECIFICATION

- Type : CA-01H ~ CA-10H,  
CA-20H ~ CA-120H
- Torque : CA-01H ~ CA-10H - 15Kg·m ~ 100Kg·m,  
CA-20H ~ CA-120H - 200Kg·m ~ 1,200Kg·m



## Damper Actuator(CM)

### FEATURES

- Maximum precision control is available
- Unified type compact
- Excellent durability
- Separation structure
- Overload protection apparatus
- Convenient feature of manual operation
- Voltage supply : 220 V AC or 440 V AC

### STANDARD SPECIFICATIONS

- Completely enclosed outdoor type
- Operating angle : 90°
- Operating Temp. : -20°C~60°C
- Speed : 30sec/ 90°, 60sec/ 90°
- Humidity : below 85%
- Color : Black, Red
- Contact signal Current signal(4~20mA D.C)

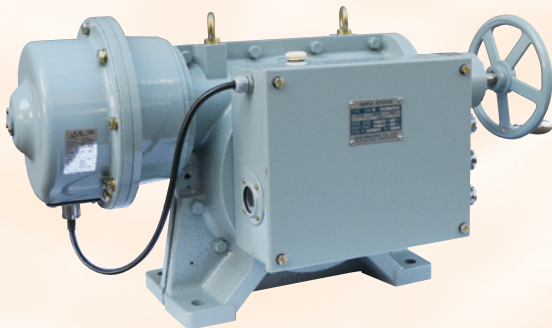


### SPECIFICATION

- Type : CM-01H ~ CM-10H
- Torque : 15Kg·m ~ 100Kg·m

## Damper Actuator(DMR)

The Damper Actuator is assembled compactly with a motor, a reducer, a manual handle, an opening transmitter, limit switches and torque switches for overload. The twelve type ranging from 10kg·m to 3000kg·m are standard, and are used with various equipment.



### FEATURES

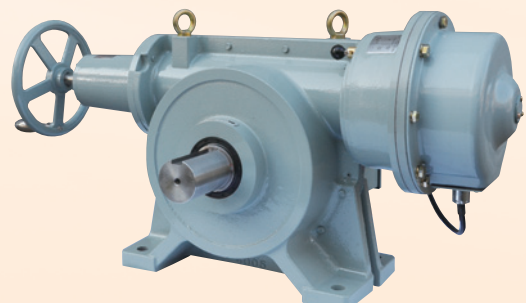
- Torque switches are fitted on all type
- Using continuous rating motors(under 400kg·m)
- Excellent durability
- Small and high powered reducer(special gears)
- Zero adjustment mechanism for limit switches.
- Protection structure : IP-54

### SPECIFICATION

- Type : DMR-0105 ~ DMR-30005
- Torque : 10Kg·m ~ 3000Kg·m

### STANDARD SPECIFICATIONS

- Main : 220V, 440V, AC50/60Hz, 3Φ
- Insulation class : E or B class
- Torque switches : open/close 2 contacts
- Limit switches : 4,6, or 8 contacts
- Mechanical opening indicator : 0~90°
- Temperature : -10°C~45°C
- Humidity : below 85%
- Color : Munsell 7.5GY 6/10
- Contact signal Current signal(4~20mA D.C)



# Motor cylinder

The motor cylinder is a linear actuator operated by a motor through simple electrical wiring. Its structure is completely enclosed, and consists of motor combined with precision deceleration gear, high efficiency lead screw, and overload protection.

## FEATURES

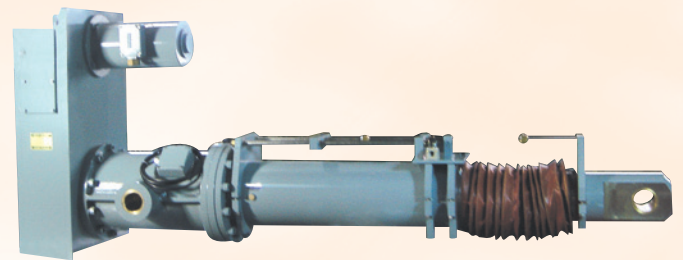
- Simple and Economical Equipment
- Overload Protection
- Continuous Pushing Stop
- Retaining Load
- Simple Installation and Maintenance
- Manual Operation

## SPECIFICATION

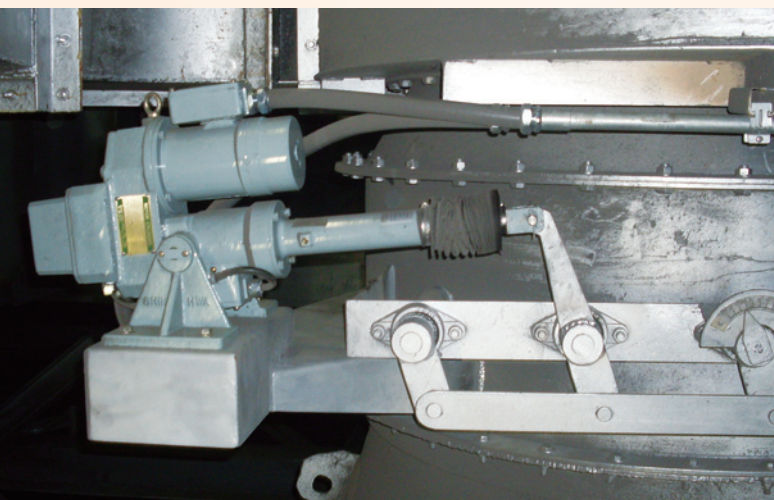
- Type : MSB-100K ~ MSB-1T,  
M(L)MB-100K ~ M(L)MB-100T
- Thrust Load : 100Kg ~ 1TON,  
100Kg ~ 100TON



PLB26T-8.5JT  
THRUST LOAD: 26TON



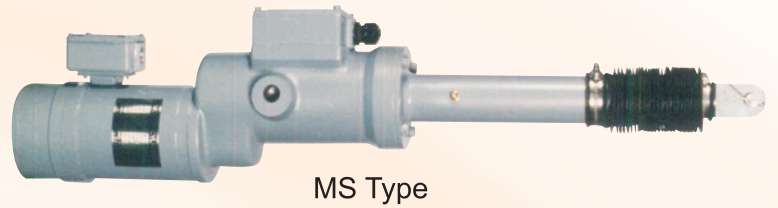
PLB32T-5JL  
THRUST LOAD: 32TON



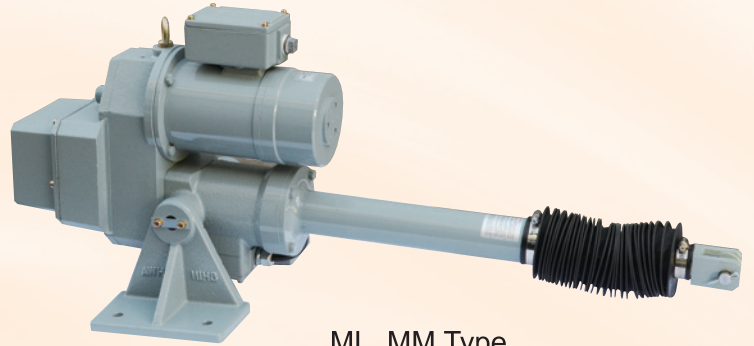
## Motor cylinder

### STANDARD SPECIFICATIONS

- Completely enclosed outdoor type
- Operating temp. : -15°C~60°C
- Humidity : below 85%
- Power : 220/440V, 3Ph, 60Hz
- Insulation : Class B
- Rating : 30minutes, 25% ED
- Brake : Current Response type
- Color : Munsell 7.5 BG 6/1.5

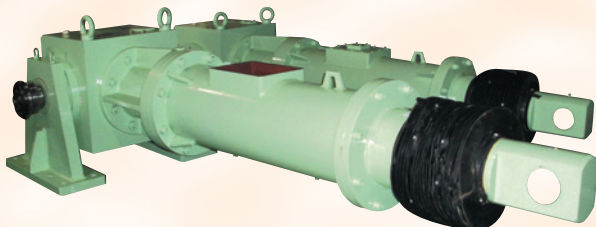


MS Type

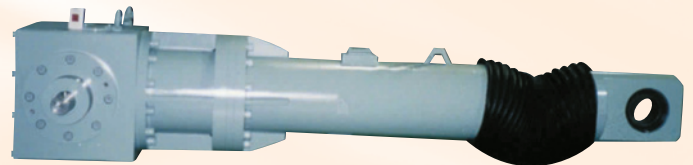


ML, MM Type

## Synchro cylinder

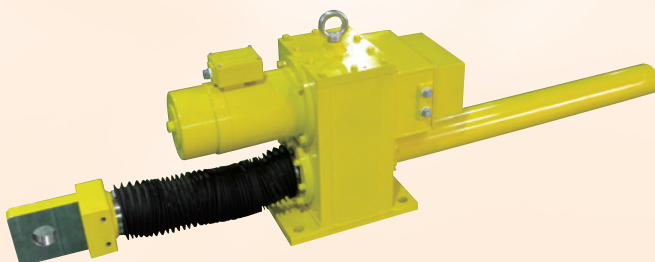


SGB50T-7.5J  
THRUST LOAD: 50TON



SGB20T-5J  
THRUST LOAD: 20TON

## Control Jack



SJ12.2T-15.6JL  
THRUST LOAD: 12.2TON



SJ10T-6JL  
THRUST LOAD: 10TON

# Pneumatic Control Drive

Pneumatic control drive is an equipment for remote position controlling of devices such as dampers, fan inlet vanes, butterfly valves, lever operated valves and other final control elements. The actuator has a completely enclosed structure and consists of an air cylinder combined linkage, positioner, air control set and electrical position transmitter etc.

## FEATURES

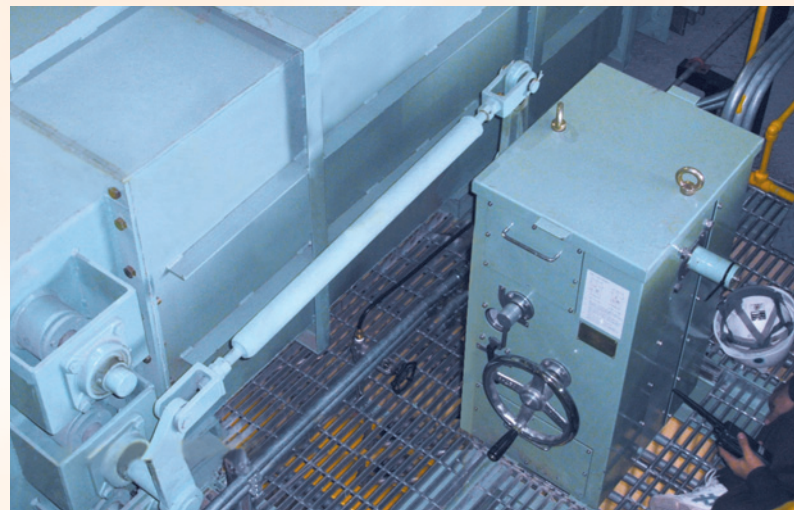
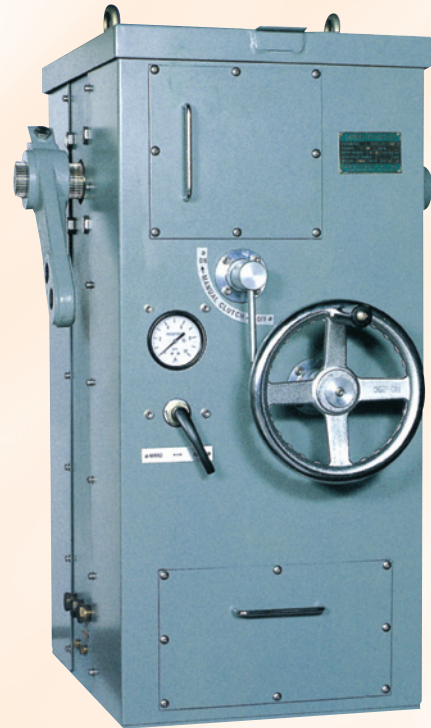
- Continuous Operation
- Adjustable Output Characteristics
- Applicable to diverse environments
- Wide Range of Options Available
- Manual Operation
- Protection structure : IP54, IP65

## STANDARD SPECIFICATIONS

- Completely enclosed outdoor type
- Operating Temp. :  $-10^{\circ}\text{C}\sim 50^{\circ}\text{C}$
- Humidity : below 85%
- Rating : Continuous
- Input signal : Current - 4~20mA D.C,
- Air pressure - 0.2~1.0 barG
- Operating air pressure : 3~7 barG
- Operating angle :  $90^{\circ}\pm 3^{\circ}$
- Color : Munsell 7.5 BG 6/1.5

## SPECIFICATION

- Type : SE-01H ~ SE-05H,  
SE-08H ~ SE-100H
- Torque : 17Kg·m ~ 45Kg·m,  
85Kg·m ~ 920Kg·m,  
970Kg·m ~ 1730Kg·m



# Smart Positioner

The SP740 Smart positioner provides precise control of valve modification according to the 4-20 mA current signal input from the controller and the central control center.

The SP740 Smart positioner is designed for easy commissioning with a simple setup.

Excellent product with high precision and accuracy for all instruments, showing high reliability in accurately translating control signals into valve readings.

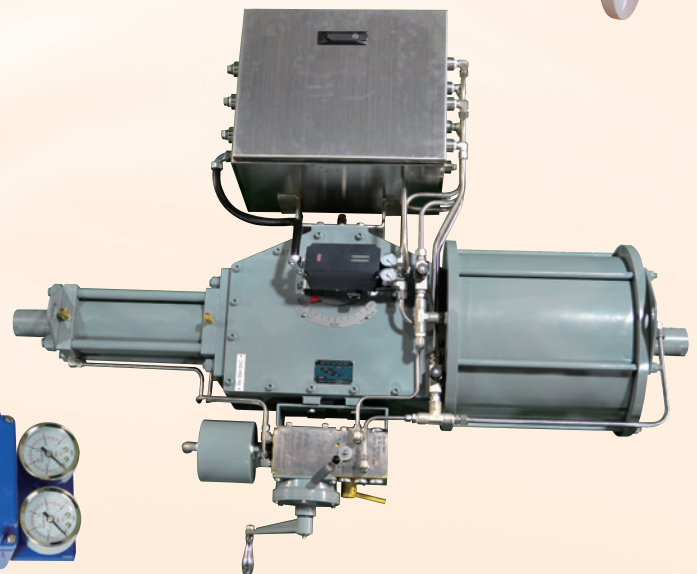
## FEATURES

- High reliability
- Single or Double acting actuator
- Quick and easy operation
  - Auto calibration
  - Simple Initialization
  - Self diagnostic function
- LCD and 4 button local control
- Enclosure IP66
- Global approvals for explosion protection
  - IECEx
  - KOSHA
- Vibration and impact resistance
- HART communication



## STANDARD SPECIFICATIONS

- Input Signal : 4~20mA DC
- Impedance : Max.450Ω @ 20mA DC
- Air Connection : PT 1/4, NPT 1/4
- Pres. Gauge Connection : PT 1/8, NPT 1/8
- Conduit Entry : PF(G) 1/2, NPT1/2
- Supply Pressure : 0.14~0.7 MPa
- Explosion Proof Grade : Ex ia IIC T5/T6  
(Certification in progress)
- Enclosure : IP66
- Ambient Temperature : -20~60°C
- Linearity : ±0.5% F.S.
- Hysteresis : ±0.5% F.S.
- Cam Characteristic : Linear(L), Square(S),  
Square root(R), User Set
- Humidity : 5~95% RH at 40°C
- Communication : HART(Optional)
- Feedback Signal : 4~20mA (DC10~30V)



**SEG**

## **Production item**

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- ◆ **Motor Cylinder**
- ◆ **Electrical Actuator**
- ◆ **Pneumatic Actuator**
- ◆ **Smart Positioner**

**SEG SHINHWA ENG. CO., LTD.**

242, CHEONGNEUNG-DAERO, NANDONG-GU,  
INCHEON-CITY KOREA  
TEL +82-32-817-8030  
FAX +82-32-815-8036  
Web <http://www.seg.co.kr>  
E-mail [8030@seg.co.kr](mailto:8030@seg.co.kr)

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