



DAEJU CONTROL ACTUATORS

Pneumatic Linear Actuators



DAEJU CONTROL CO., LTD.

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Spring Return, Pneumatic Linear Actuators

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Spring Return, Pneumatic Linear Actuators

General

Linear Actuator consists of one pneumatic single acting cylinder designed to operate linear valves as globe or gate valves which require a fail-safe action to close by means of spring return. Linear Actuator is designed and manufactured so as to operate in the heaviest work condition in every environment according to ISO specification. Typical features are the particularly simple and reliable construction, the special care in components material selection in order to reduce corrosion phenomenon. Linear Actuator can be supplied with helicoidal springs. For long strokes and low thrusts (gate valve) helicoidal springs are preferred.

Standard Features

- Hard chromium plated and polished cylinder for corrosion resistance and minimum friction
- Hard chromium plated and polished piston rod in stainless steel for corrosion resistance and minimum friction
- Floating type piston rod seals and piston seals for low hysteresis and high sensitivity preventing sticking problems.
- Piston rod supported by bushing made of bronze
- Stroke adjustment with mechanical travel stop in one direction. The stroke adjustment for the opposite direction is made with the stem joint
- Factory totally enclosed spring cartridge, for single acting version, to prevent any damage to personnel during assembling or disassembling.
- Modular design which allows to transform the linear actuator, also in field, from spring to close action to spring to open action or vice versa, using the same pieces.
- Adapter spool in fabricated carbon steel, specifically designed for adaptation to any type of valve with provision for local indicator, limit switches and other accessories.
- Extensive range of accessories:
 - Jackscrew and hydraulic manual override
 - limit switches boxes, explosion proof, intrinsically.
 - safe and/or water proof, in different types according to Customer requirements



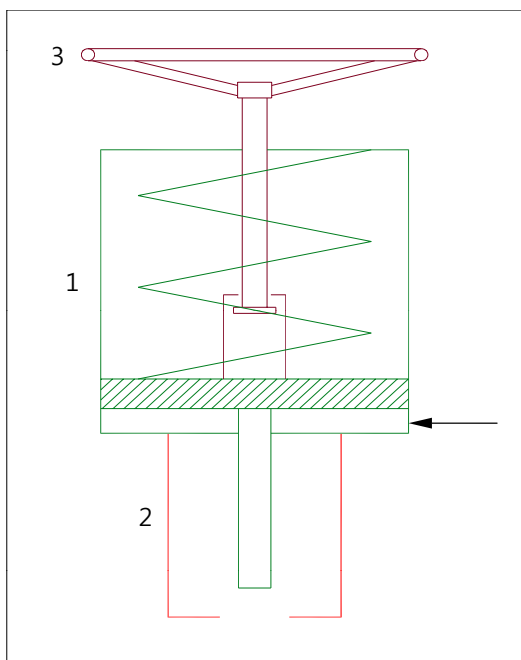
Spring Return, Pneumatic Linear Actuators

- Position transmitter, explosion proof, intrinsically safe and/or water proof.
- air filter and lubricator.
- air storage tanks available .
- Solenoid valves, explosion proof, intrinsically safe and/or waterproof.
- Base Actuators muscle will be
- Quick exhaust valves
- Pneumatic or electro pneumatic positioner
- Pneumatic or electro pneumatic pressure switch.
- Terminals enclosures, pushbutton panels, explosion proof or intrinsically safe and/or waterproof.
- Special coating for offshore or corrosive

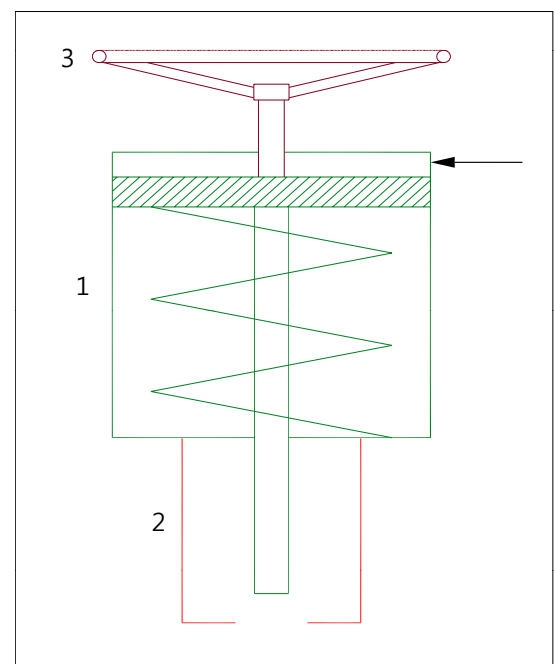
Technical Data

- Supply Pressure : 10.5 Bar Max.
- Supply medium : air, nitrogen or sweet gas
- Ambient Temp. : from -30°C to 100°C
- Applications : Gate, Globe valves

Manual overrides for linear actuator



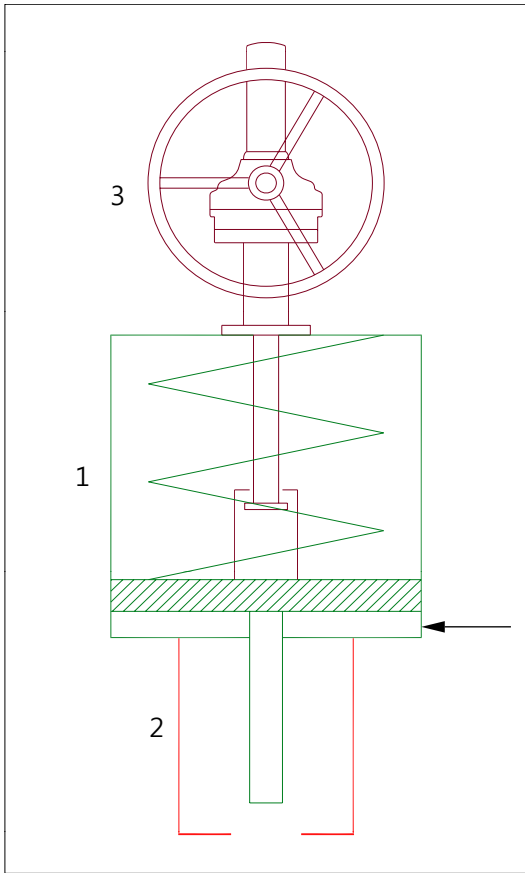
Jackscrew manual override for fail close



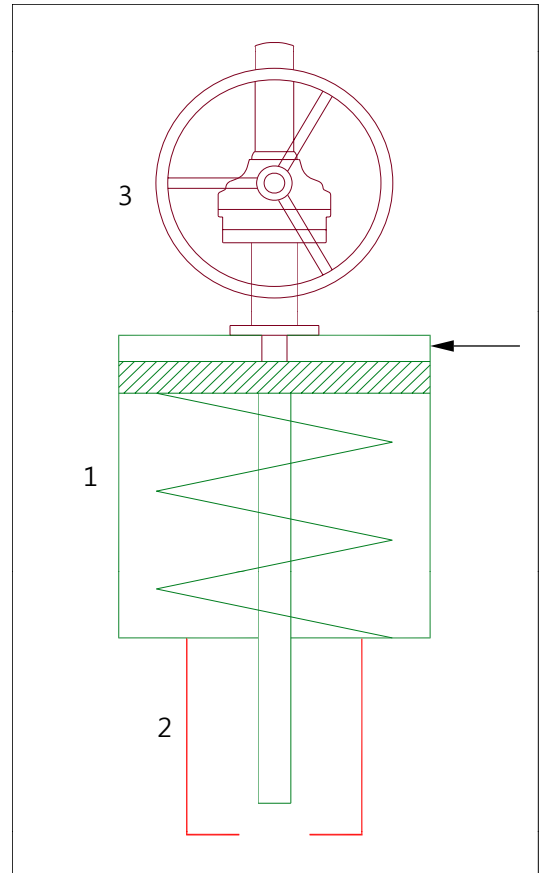
Jackscrew manual override for fail open

1. Cylinder 2. Yoke 3. Handwheel

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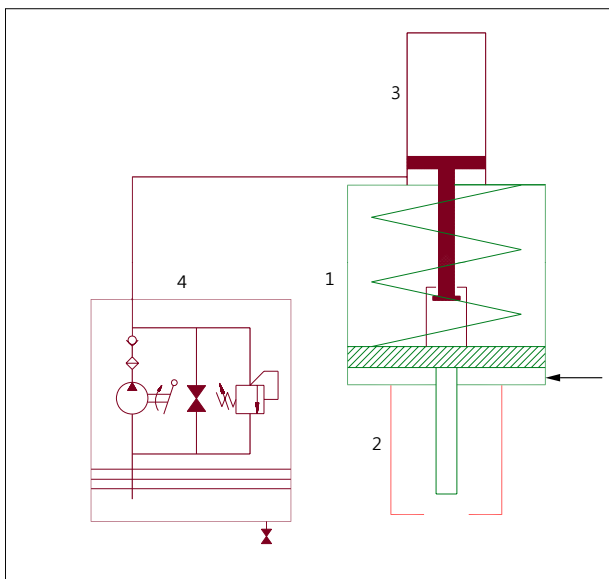
Jackscrew manual override for fail close



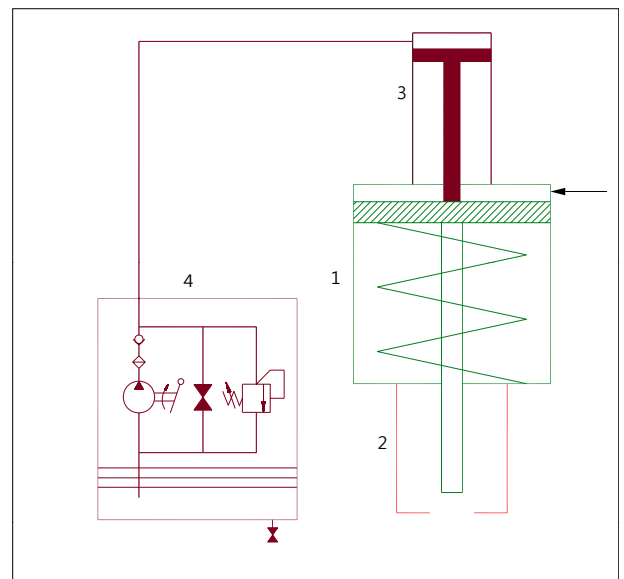
Jackscrew manual override for fail open

1. Cylinder 2. Yoke 3. Bevel gear A'ssy

Hydraulic manual override for fail close



Hydraulic manual override for fail open

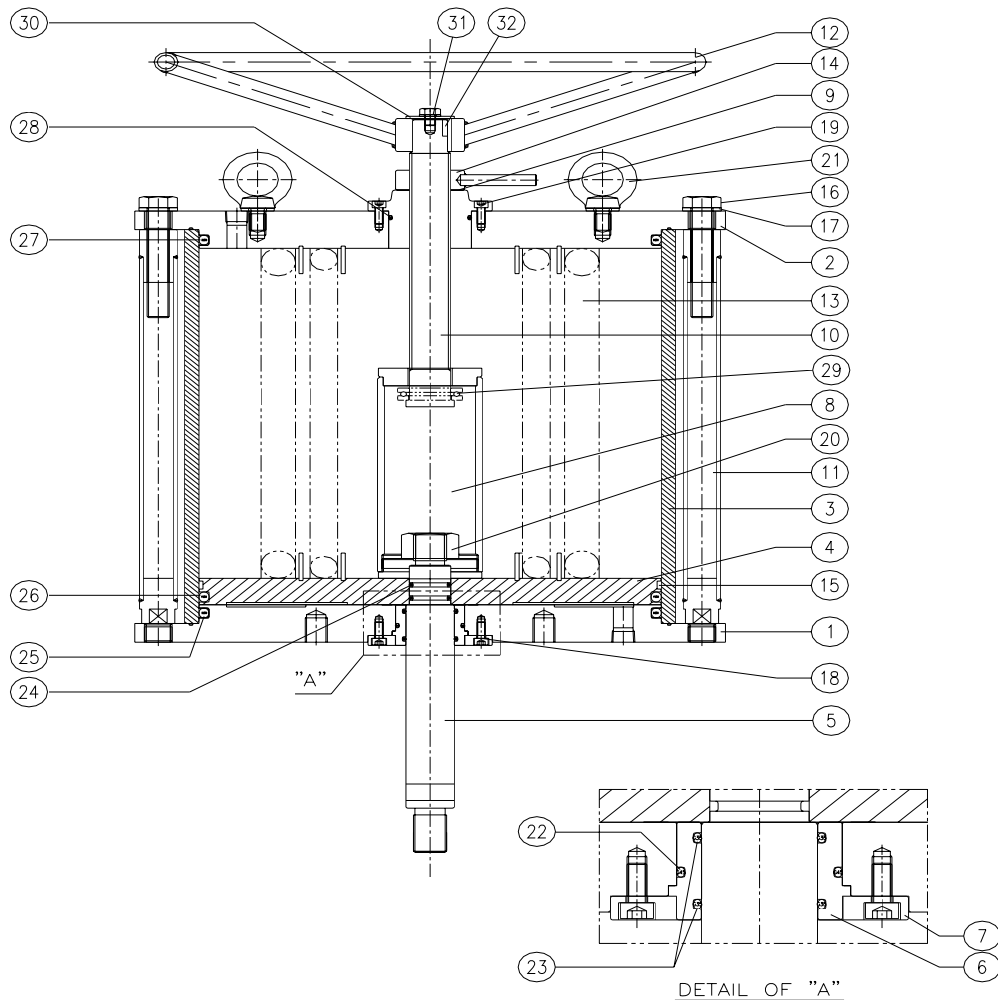


1. Cylinder 2. Yoke 3. Hydraulic cylinder 4. Hand pump unit

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Spring Return, Pneumatic Linear Actuators Standard Construction

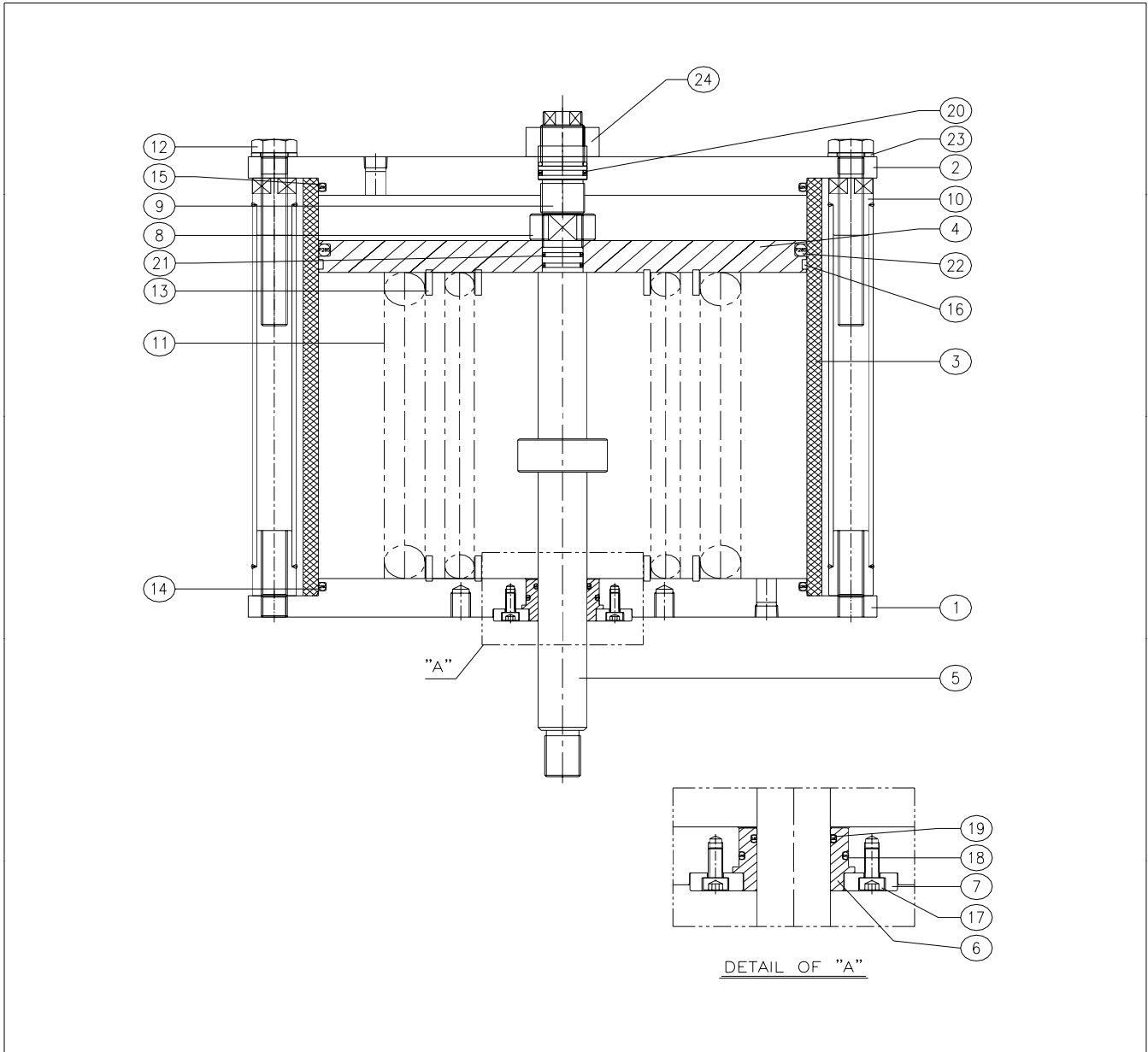
Fail Close



NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	BOTTOM FLANGE	CARBON STEEL	17	WASHER	CARBON STEEL
2	TOP FLANGE	CARBON STEEL	18	SEAL COVER BOLT	STAINLESS STEEL
3	CYLINDER	CARBON STEEL	19	TOP FLANGE BUSH BOLT	STAINLESS STEEL
4	PISTON	CARBON STEEL	20	NYLON NUT (HEX.)	STAINLESS STEEL
5	PISTON ROD	STAINLESS STEEL	21	EYE BOLT	STAINLESS STEEL
6	SEAL BUSH	BRASS	22	SEAL BUSH O-RING	NBR
7	SEAL BUSH COVER	CARBON STEEL	23	SEAL BUSH O-RING	NBR
8	LIFT ASS'Y	CARBON STEEL	24	PISTON ROD O-RING	NBR
9	TOP FLANGE BUSH	CARBON STEEL	25	BOTTOM FLANGE O-RING	NBR
10	HANDLE ROD	CARBON STEEL	26	PISTON O-RING	NBR
11	TIE ROD	CARBON STEEL	27	TOP FLANGE O-RING	NBR
12	HANDLE	CARBON STEEL	28	TOP FLANGE BUSH O-RING	NBR
13	SPRING	SPRING STEEL	29	THRUST BEARING	-
14	LOCK NUT	CARBON STEEL	30	INDICATOR	STAINLESS STEEL
15	BACK UP RING	TEFLON	31	HEX. BOLT & SPRING WASHER	STAINLESS STEEL
16	TIE BOLT	CARBON STEEL	32	KEY	CARBON STEEL

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Fail Open



NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	BOTTOM FLANGE	CARBON STEEL	13	PLAT BAR	CARBON STEEL
2	TOP FLANGE	CARBON STEEL	14	BOTTOM FLANGE O-RING	NBR
3	CYLINDER	CARBON STEEL	15	TOP FLANGE O-RING	NBR
4	PISTON	CARBON STEEL	16	PISTON GUIDE RING	TEFLON
5	PISTON ROD	STAINLESS STEEL	17	SEAL COVER BOLT	STAINLESS STEEL
6	SEAL BUSH	BRASS	18	SEAL BUSH O-RING	NBR
7	SEAL BUSH COVER	CARBON STEEL	19	SEAL BUSH O-RING	NBR
8	PISTON ROD NUT	CARBON STEEL	20	STOPPER BOLT O-RING	NBR
9	STOPPER BOLT	CARBON STEEL	21	PISTON ROD O-RING	NBR
10	TIE ROD	CARBON STEEL	22	PISTON O-RING	NBR
11	SPRING	SPRING STEEL	23	WASHER	CARBON STEEL
12	TIE BOLT	CARBON STEEL	24	HEX. NUT	CARBON STEEL

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