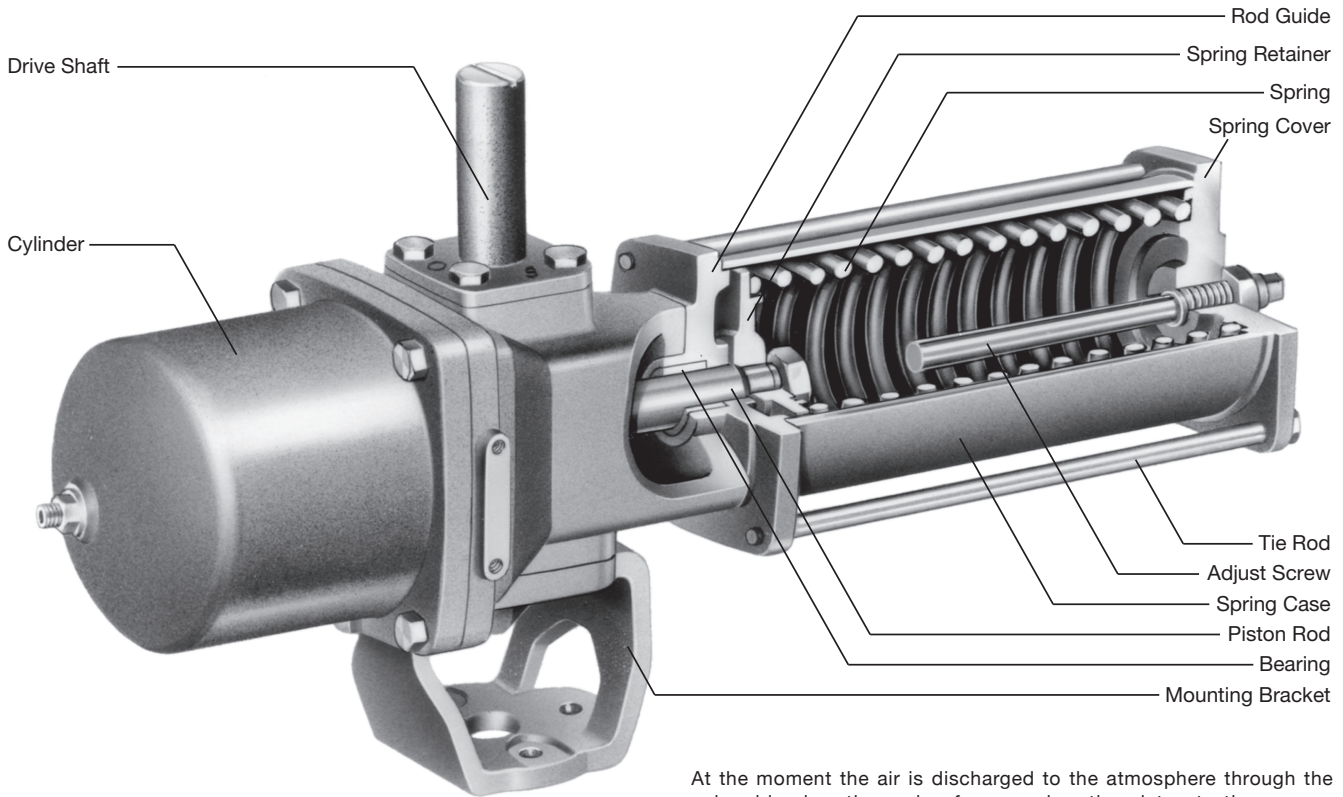


Internationally patented

Type BS (Spring-Return) Type BSW (Spring-Return with Manual Operation Device)



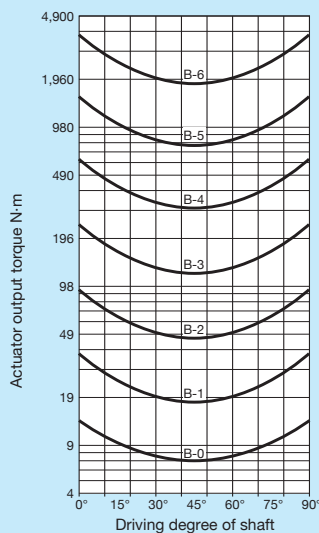
Operational Mechanism

The air pressure supplied into the cylinder pushes the piston outward and energizes its movement to rotate the scotch-yoke counterclockwise, compressing the spring. The scotch-yoke converts linear movement of the piston rod to counterclockwise rotational movement of the drive shaft by 90°, to open or close the valve, following the preset mode.

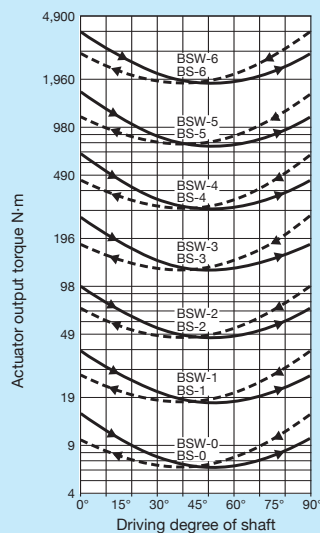
At the moment the air is discharged to the atmosphere through the solenoid valve, the spring force pushes the piston to the reverse direction, and the scotch-yoke activates clockwise rotation of the shaft to reversely operate the valve. Air failure will cause the valve to return to the original open or closed position automatically, following the preset mode, unlike the valve driven by Type B actuator.

The BSW actuator is driven with the same mechanism as Type BS, but provided with a handwheel for manual operation. Please bear it in mind that the handwheel must be **factory mounted**.

Type B Actuator Output Torque



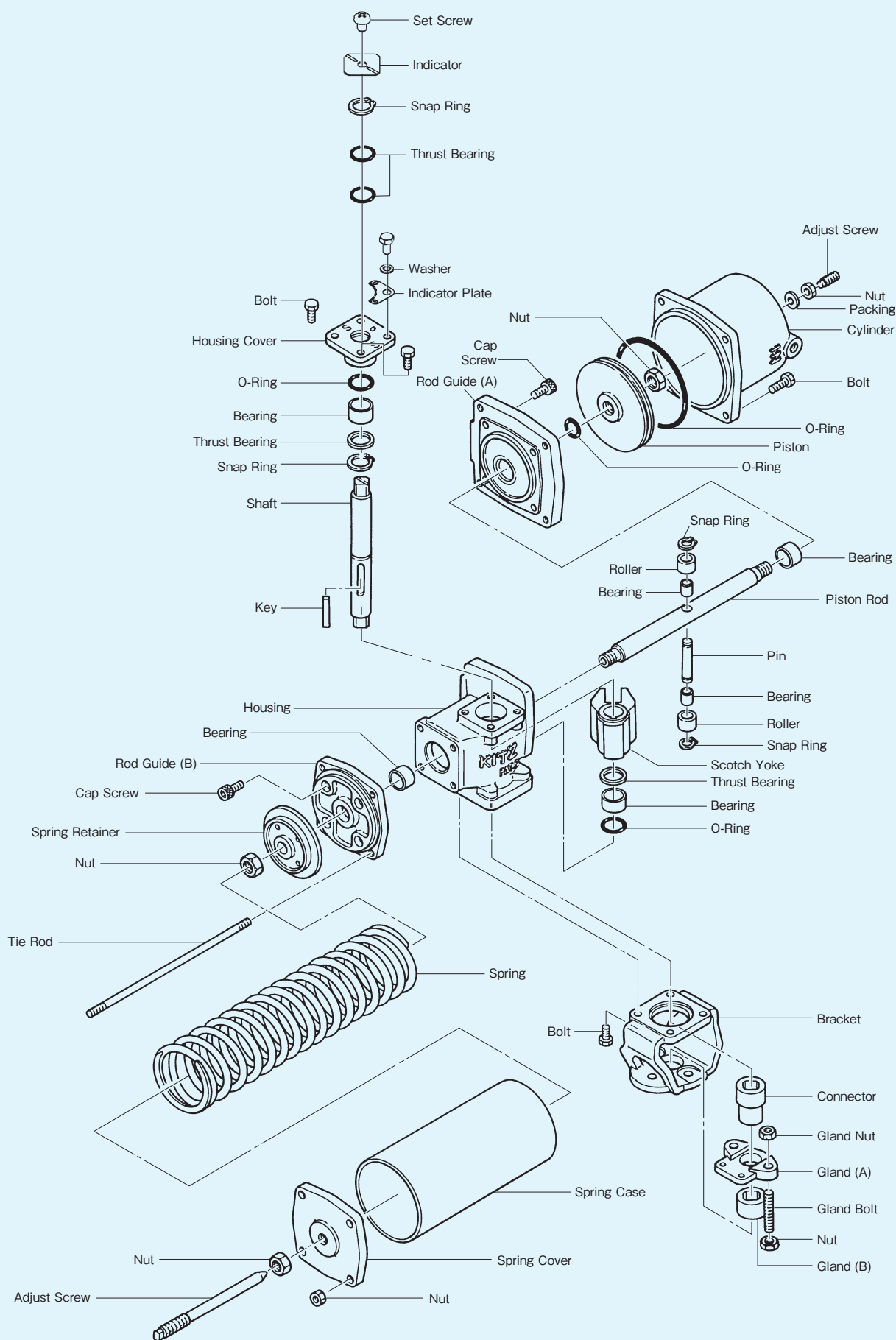
Type BS/BSW Actuator Output Torque



— Output torque when air pressure is supplied.
--- Output torque caused by spring force when air pressure is exhausted.

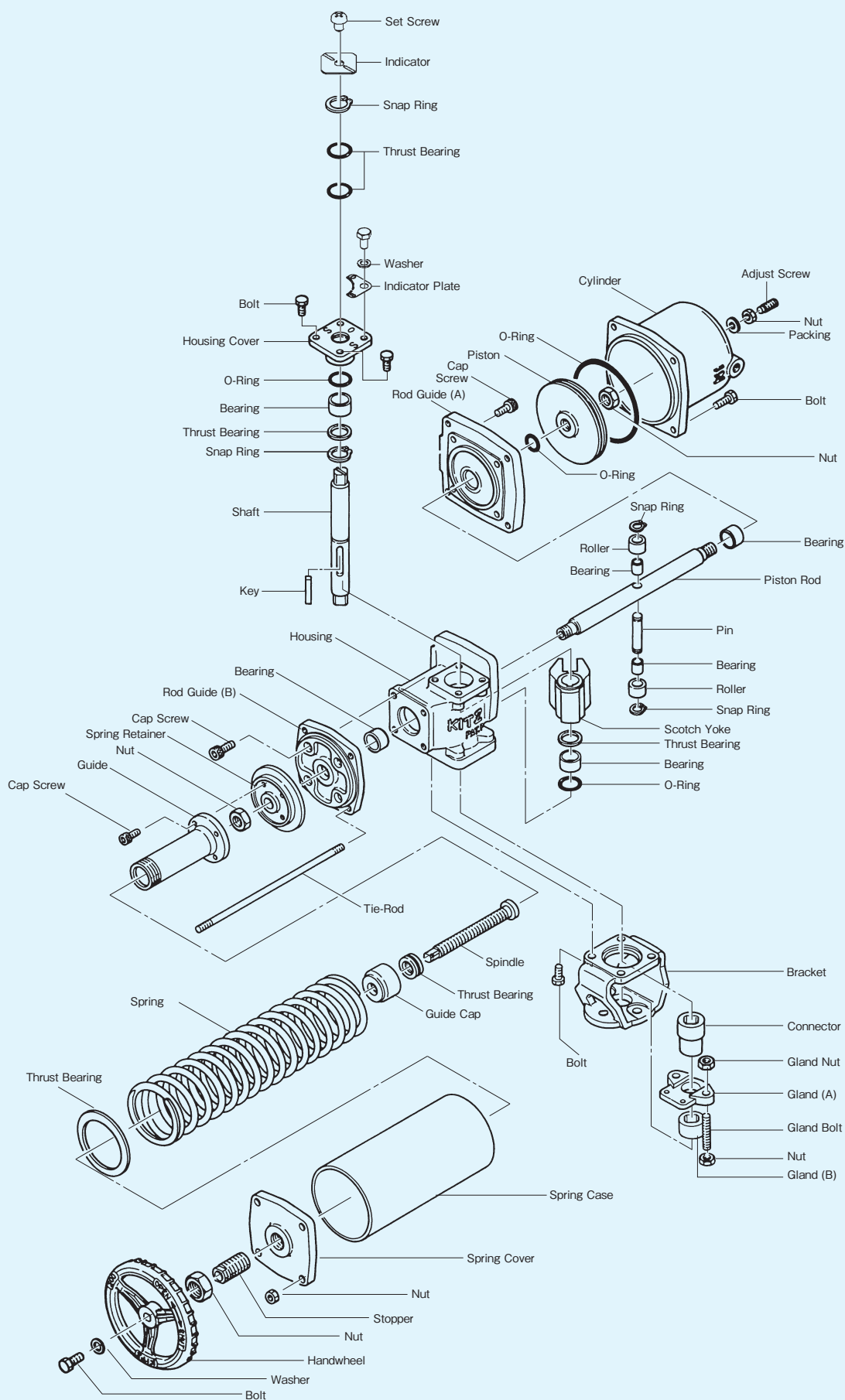
Operating pressure:
0.4 MPa

Construction Details of Type BS Actuators



Type BS-3 is illustrated here.

Construction Details of Type BSW Actuators



Type BSW-3 is illustrated here.