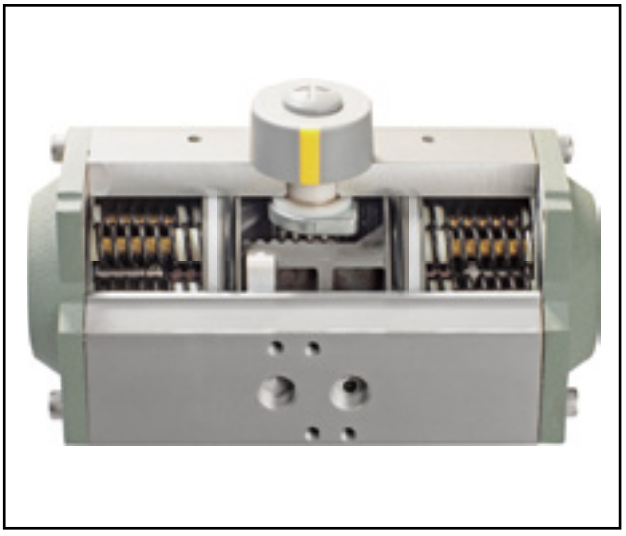


Sizing example of HAITIMA spring return actuator:

Spring to close when air fails(air to open):

Valve torque 60N.m plus 30% safety factor = 78N.m. Minimum operating pressure: 6bar. The spring return HAITIMA actuator selected is HTS-125-10. The HTS-125-10 has the following output torques:

1.air torque 0°(valve close) = 173N.m > 78N.m

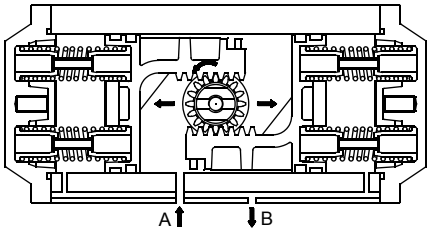
2.air torque 90°(valve open) = 118N.m > 78N.m

3.spring torque 90°(valve open) = 156N.m > 78N.m

4.spring torque 0°(valve close) = 119N.m > 78N.m

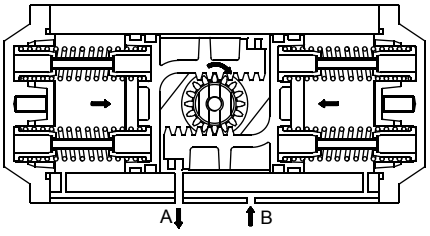
The operating principle of single acting spring return actuator

CCW-counter-clockwise



Air to port A forces the pistons outwards, causing the springs to compress. The pinion turns counter-clockwise while air is being exhausted through port B.

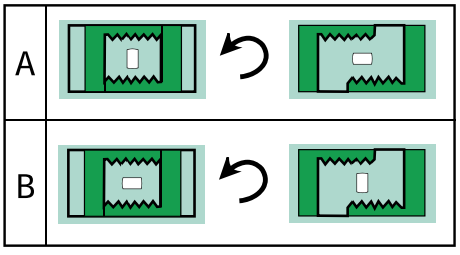
CW-clockwise



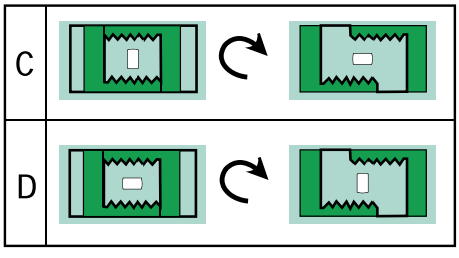
Loss of air pressure through port A allows the stored energy in the springs to force the pistons inwards. The pinion turns clockwise while air is being exhausted through port A.

Mounting Variations

CCW-counter-clockwise



CW-clockwise



Spring Arrangement