

SM



Engineering
GREAT Solutions

Stepper Motor Actuators

SM: Stepper Motor Actuators

The SM stepper motor actuator has an internal mechanism which is arranged to be interfaced to the female thread of the threaded valve stem. Two hydraulic or pneumatic actuators drive the rotation of the internal mechanism of the stepper motor, one clockwise and the other anticlockwise, thus allowing the rotation in defined steps and the linear movement of the threaded rod. These actuators are available in different sizes to meet different torque requirements.

Key features

- > Available in two different versions:
 - Hydraulic (SMH)
 - Pneumatic (SMP)
- > Manual override on the side
- > Manual override size: 300mm
- > Hydraulic actuators without internal springs (one spring allows the return of both hydraulic/pneumatic actuators)
- > Hydraulic / pneumatic actuator driven in both directions to provide control

Benefits

- > Direct connection between position transmitter and valve stem without intermediate mechanism
- > Linear and visible stroke indicator
- > Manual override detachable/attachable (user defined)
- > Manual override provided in case of loss of mechanism forces
- > Available with two 3-way solenoid valve and other accessories

Technical specifications

Operating pressure

70 bar to 250 bar (oil)
4 bar to 10 bar (air)

Standard supply medium

Oil, instrument air

Standard operating temperature

-20°C to 70°C (lower or higher temperature on request)

Output torque

Up to 400 Nm

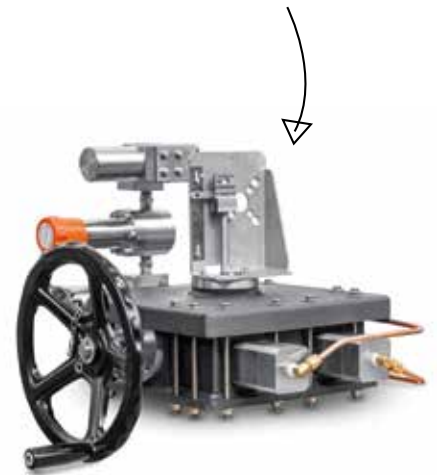
Stroke

Up to 4" (100mm)

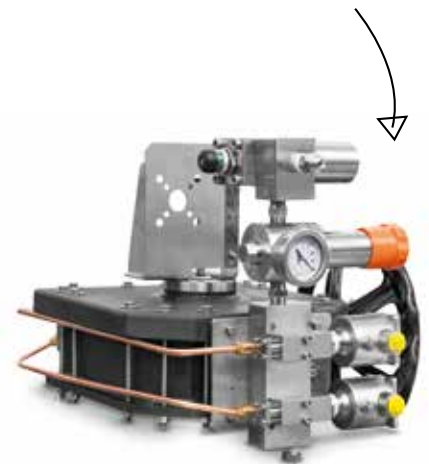
Internal mechanism

15 step / turn

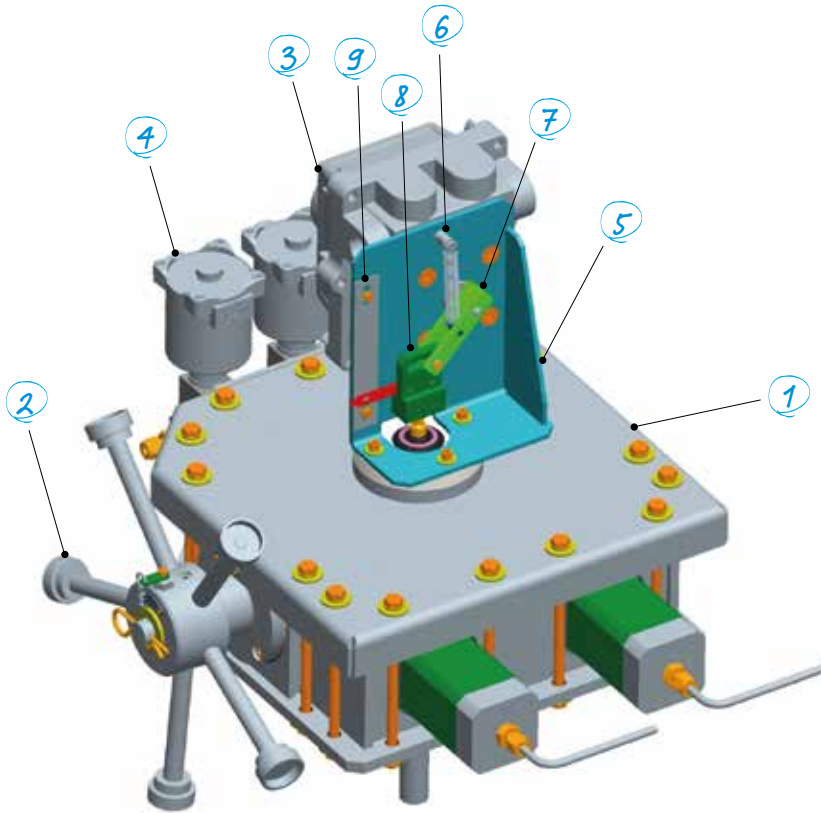
Total capability in valve actuation



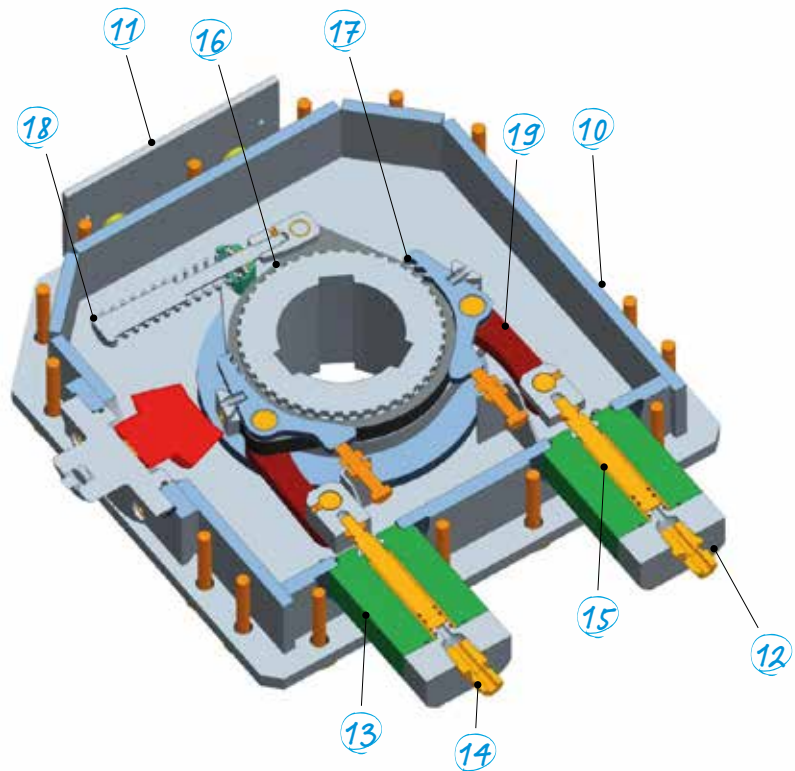
Manual override on the side



Product breakdown



	Description	Material
1.	Cover	Carbon steel
2.	Operating wheel	Carbon steel
3.	Position transmitter	Stainless steel
4.	Solenoid valves	Stainless steel
5.	Position transducer support	Stainless steel
6.	Extension spring	Stainless steel
7.	Transducer connecting rod	Stainless steel
8.	Link box transducer	Stainless steel
9.	Stroke indicator	Stainless steel
10.	Box	Carbon steel
11.	Tool plate	Stainless steel
12.	Head cylinder	Stainless steel
13.	Cylinder body	Stainless steel
14.	Piston bushing	Bronze
15.	Piston rod	Stainless steel
16.	Ratchet wheel	Alloy steel
17.	Ratchet	Alloy steel
18.	Spring	Carbon steel
19.	Connecting rod	Alloy steel



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