

Principle of Operation

Operation of Industrial Devices electric cylinders is simple. When power is supplied, the motor - through either a timing belt, gear drive or direct coupling - rotates the lead screw, causing the drive nut to translate, extending the thrust tube. Reversing the motor rotation retracts the thrust tube.

While the concept is simple, much expertise has been invested in the specification, design and selection of each component to provide performance, reliability and value.

IDC offers electric cylinder drive mechanisms based on either acme or ballscrews. Ballscrews, which utilize ball nuts riding on recirculating ball bearings, are the most efficient, allowing for higher speeds, loads and cycle rates. They can, however, be back-driven when power is removed. Acme screws are capable of holding the load in position when power is removed, but are less efficient in operation.

Industrial Devices' patented guide system prevents rotation of the drive nut, thus eliminating any torque loading to machine linkage.

NV Series

