



ITT

# Custom Actuation Products



*Engineered for life*

# Custom Actuation Solutions

## Cylinders (Inch, Metric and Clean-Act®)

COMPACT® cylinders are designed for limited space and weight applications. Cylinders are up to 60% smaller than conventional types and are ideal for clamping fixtures, robotics, parts feeders, and medical devices.

COMPACT®'s unique space efficient, patented design makes these products perfect for the semiconductor industry.



## Slides (Guided Slides, Ball Slides)

COMPACT® Slides are designed to outperform conventional non-rotating cylinders. Our slides are designed for short and long stroke. They are perfect for limited space applications where a cylinder is needed that guides and supports its own load.

The COMPACT® design of these slides makes them compatible for semiconductor, packaging and assembly applications.



## Workholding (Grippers, Twist Cylinders, Collet Closers, Intensifiers)

COMPACT® Grippers are designed for use in industrial applications such as robotics, automated assembly and manipulator/tooling. All units feature self-contained, double-acting COMPACT® actuators. All models feature low unit weight, high output and compact size.

COMPACT® Twist Cylinders are linear motion cylinders with internal cams that provide 90° swing motion. Twist cylinders are ideal swing clamps for automated and semi-automated assembly.

COMPACT® Collet Closers are stationary fixtures for metalworking, bench top assembly, precision robotics and assembly machine application. With an output gripping force ranging from several pounds to 4 tons, collet closers can also be used for crimping, forming and staking.

COMPACT® Intensifiers are simple boosters that utilize large pneumatic pistons to intensify oil pressure with a smaller piston. All intensifiers are designed to be highly space efficient and light weight.



## Turn-Act Rotary Vane Actuators

Turn-Act Rotary Vane Actuators have only one moving part which produces rotary motion with ZERO Backlash, 100% repeatability and continuous full torque. The actuator utilizes patented urethane seals which permit long cycle life and non-lube service. Numerous switch and stroke sensors, adjustable stroke control, special fixed rotations, various shaft styles and materials, and many other options are available to address your specific application requirements. Torque range is from 1.4 – 5200 inch pounds.



### NFPA

NFPA cylinders feature the patented Enersorb® piston which provides exceptionally low breakaway, high energy absorption and reduced noise output. The Floating Bearing design allows for minor misalignment and superior wear characteristics. 1-1/2" to 10" Bore.

## C Series

C Series Slides offers 2 Body Styles with Composite or Ball Bearing and 3 Guide Rod options to address the broadest range of guided linear motion applications. Available Bores: 3/4", 1-1/16", 1-1/4", 1-1/2" and 2". An extensive list of options is available including switches, shock absorbers and more. The C series is readily modifiable for custom applications.



### Turn-Dex®

Turn-Dex® is a Turn-Act Rotary Vane Actuator with an overrunning clutch providing unidirectional output shaft rotation, either clockwise or counter clockwise. Torque range is from 13 to 350 inch pounds.

## GRC

GRC Series combines high strength aluminum light weight extrusion bodies with the Enersorb® piston providing a guided motion with low breakaway and long life.



### Multi-Act® Actuators

Multi-Act® Actuator's exclusive design generates linear and rotary motion. The motions may be operated independently and/or simultaneously. Both, the linear and rotary strokes are fully adjustable. The load is carried by an oversized shaft and heavy duty guide rails.

## Val-U-Act® & Class-Act®

Val-U-Act® and Class-Act® are double acting and spring return pneumatic valve operators. Operates 1/4" through 12" ball, plug and butterfly valves.



## Accessories

Round, Standard and Husky Sensors are offered with a variety of options to meet your situational needs.

Flow controls are available for metered out, metered in or needle valve operations.

Alignment couplers are built from hardened steel with a black oxide finish in standard and metric sizes.



### Compact Automation Products

105 Commerce Way  
Westminster, SC 29693

p. 864 647 9521

f. 864 647 9574

[www.itt.com](http://www.itt.com)

[www.compactautomation.com](http://www.compactautomation.com)