



ESTAT

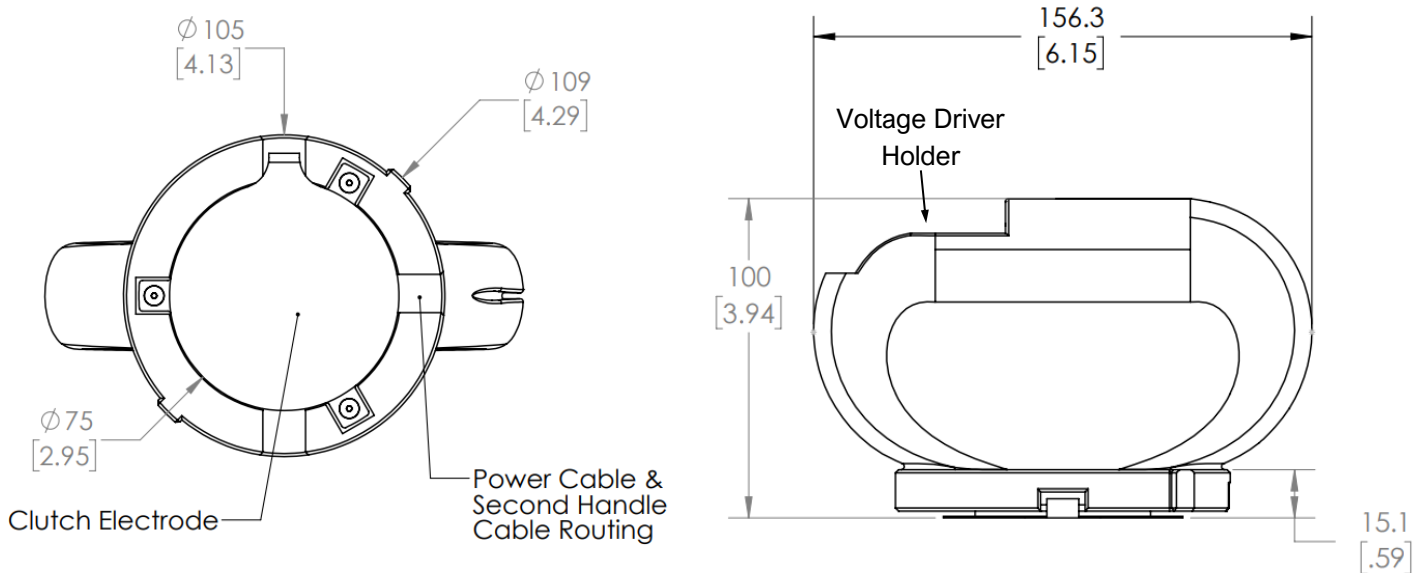
A C T U A T I O N

Compact motion starts—and stops—with us

Universal Clutch Evaluation Unit

Connector with no moving parts / conductive material handler

ESTAT universal clutches are capable of supporting complex loading and can act as a connector with no moving parts. They can also function as a material handler or gripper capable of attaching to any smooth, clean, conductive material. They can even manipulate some materials with a thin insulating coating such as paint. The Universal Clutch Evaluation Unit allows users to evaluate ESTAT's surface clutch within seconds of unboxing. The essential components are ultra thin (< .125") making them suitable for any application where saving space is essential.



| Technical Specifications | Universal Clutch Evaluation Unit |
|--|----------------------------------|
| Max. holding force — N (lb) | 100 (22.48) |
| Power Consumption with 1 Hz cycling — W @ 400 V | < 0.001 |
| Activated maintenance power — mW @ 400V | < 0.028 |
| Maximum Operating Voltage | 400V |
| Weight (including handles) — g (lb) | 650 (1.43) |
| Weight (both clutch halves without handles) — g (lb) | 100 (.22) |
| Thickness (clutch half without handle) — mm (inch) | 0.8 (0.032) |

Device overview:

Universal clutches act as connectors with no moving parts and as material handlers. They are simpler, lighter, more power-efficient replacements for magnet and suction-based grippers. Universal clutches can handle all clean, smooth and flat conductive materials. This includes ferrous and non-ferrous materials, parts with holes, and even some materials with thin insulating coatings, such as anodized aluminum or painted metal.

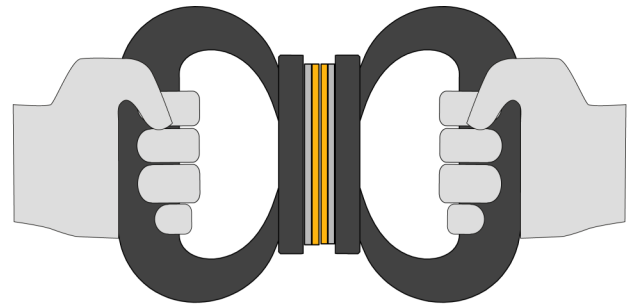


The **Evaluation Unit** allows users to experience a **Universal Electrostatic Clutch** within seconds of unboxing. The handles allow users to feel the forces that can be supported by the universal clutch and to experiment with different types of complex loads (normal, shear, and bending). The universal clutch is exceptionally thin with essential components less than 0.8 mm thick. This makes them suitable for any application where space and weight savings are essential.

Just insert the included voltage driver and you are ready to test the surface clutch!

To use as a connector with no moving parts:

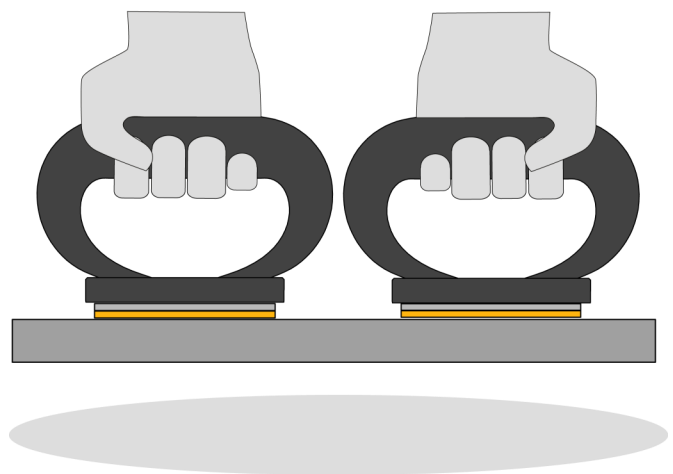
The two handles can be used against each other to simulate the use of this clutch as a lock or latch with no moving parts. Applications for this use case include fasteners, quick connections, and end-of-arm tooling.



To use as a material handler:

Place both handles down on a flat, smooth and clean conductive object such that the clutch surfaces are in complete contact with the object. Lift both handles simultaneously to lift the object. Try a number of different surface types to get a feel for how performance varies with material. Some materials to start with include: stainless steel, anodized aluminum, and brass.

Note: Performance is surface-dependent. Smoother surfaces will be most suitable for rated loads.



Sneak peek:

- Single-handle material gripping
- Multiple sizes
- Standard end-of-arm attachments

Email info@estat.tech for availability, questions, or to place an order.

ESTAT Actuation Inc. ● www.ESAT.tech ● 91 43rd St. Pittsburgh, PA 15201

Note: specifications subject to change without notice.