Tension Loop Control For Extruded Product Coiling

Conair's Ultrasonic Loop Control (ULC) uses sound waves and an ultrasonic sensor to determine loop tension of plastic tubing or rod before it is coiled. The ULC senses all types of plastic, regardless of material or color. While some tension loop control sensors can not detect clear plastic, or small diameter tube or rod, the ULC from Conair overcomes these issues with the latest technology.

The ULC is placed in the extrusion line, just before the coiler. The ULC bounces sound waves off of the product, and determines the current tension on the line. An output from the ULC feeds information to the coiler, directing it to increase or decrease coiling speed to maintain proper tension. All this happens in micro seconds, and automatically – without any operator interaction.

Continuously measure and automatically adjust product tension

Designed to be used in applications where coiling of medical tubing, 3D filament, or other extruded products are being coiled by Conair's MTC or ATC Coilers, the Ultrasonic Loop Control is used to properly measure the tension, so that the coiler can adjust speed as required to properly manage the product tension. Too much tension results in stretched product, a broken line, or even product "jammed" on the coiler. Too little tension results in poor quality coils that cause problems uncoiling later, a broken line, or the inability for the coiler to cut the product at the end of each spool.

The ULC is typically placed equidistant between the puller and the coiler. Often, this distance is typically two to six feet between it and the end of the puller, and then typically two to six feet between it and the start of the coiler. This allows the product to properly span the distance, and the ultrasonic sensors to determine the product tension. (Note – depending on your application, slightly more space may be necessary before and after the loop control).

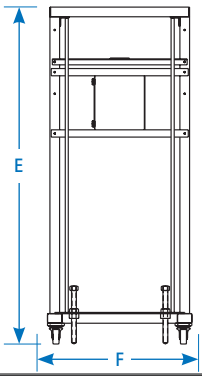
Proper tension is key proper coiling. Conair's ULC is the perfect tension sensing tool for Conair's ATC or MTC coilers.

- **Easy to use**
  No operator interaction is necessary during operation. Simply string the extrusion line through the ULC, and the ULC will send the signal to the Conair coiler. The ULC can be used in right-to-left, or left-to-right orientation.
- **Compact and mobile**
  This Ultrasonic Loop Control has a small footprint, and is lightweight and easy to move into position. Adjustments to positioning are simple.
- **For use with a variety of extruded products**
  Available for use with tubing, rod, or other small profiles, the ULC can include optional lightweight bobbin/roller attachment (for product diameters below 0.125 inch), or a heavy bobbin/roller attachment (2 lbs).

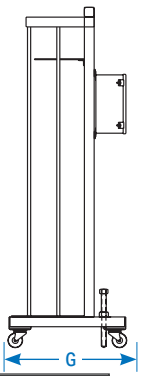
Specifications

Trim Control	
Dancer type	Non-contact ultrasonic for tube diameters 0.085 to 0.5 in. {2.16 to 12.7 mm} Ultra-lightweight roller contact ultrasonic for tube diameters 0.02 to 0.085 in. {0.5 to 2.16 mm}
Dimensions inches {mm}	
E - Overall height	70.2 {1778}
F - Overall length	30.6 {762}
G - Overall width	24.0 {620}
Approximate weight lb {kg}	
Shipping	250 {113}

Trim control front view



Trim control side view



Specification Notes

Specifications may change without notice. Check with a Conair representative for the most current information.