



**ORSCHN**<sup>®</sup>



INSPIRING  
SOLUTIONS

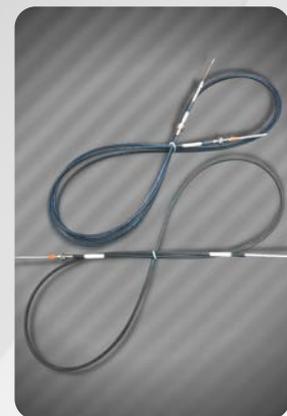
**DEFENSE &**

**AEROSPACE**

**PRODUCTS OVERVIEW**

# APPLICATIONS

- Ag. Spray Controls
- Ballistic Shield Control
- Bleed Air/Vacuum
- Bomb Hoist
- Bonding Strap
- Canopy Release
- Cargo Door Struts
- Cargo Release
- Cowl Flap
- Cowl Strut
- Coolant Transfer Tubes
- Crew Module
- Door Controls
- Ejection Seat Arm Restraint
- Electronic Throttle Controls
- Electronic Shift Controls
- Emergency Landing Gear
- Engine Shutoff
- Environmental (HVAC)
- Fire Suppression
- Flight Surface Controls
- Fluid Level Indicators (FLI)
- Fluid Transfer Tubes
- Fuel Shutoff
- Gust Lock
- Hard-Line Tubes



- Inertia Reel Release
- JATO Bottle Release
- Junction Box
- Landing Gear
- Mechanical Shift Controls
- Mixture
- Oxygen Controls
- Parking Brake
- Pedal Location Lock Controls
- Power Feeder Cable
- Propeller/Pitch
- RAT Release
- Seat Adjustment
- Stow Lock Pins
- Tank Steering
- Throttle
- Tow Target Lines
- Trailing Wire Antenna
- Waste Drain
- Wheel Lock



## TESTING

- Pressurization
- Humidity
- Fluids Susceptibility
- Sand & Dust
- Ultimate Load
- Remote Witness
- Cycle
- Temperature
- Thermal Shock
- Vibration
- Water Ingress
- Corrosion
- ISO 9001: 2015
- ISO 14001: 2015
- AS9100D
- FAA PMA
- 14 CFR 21.303



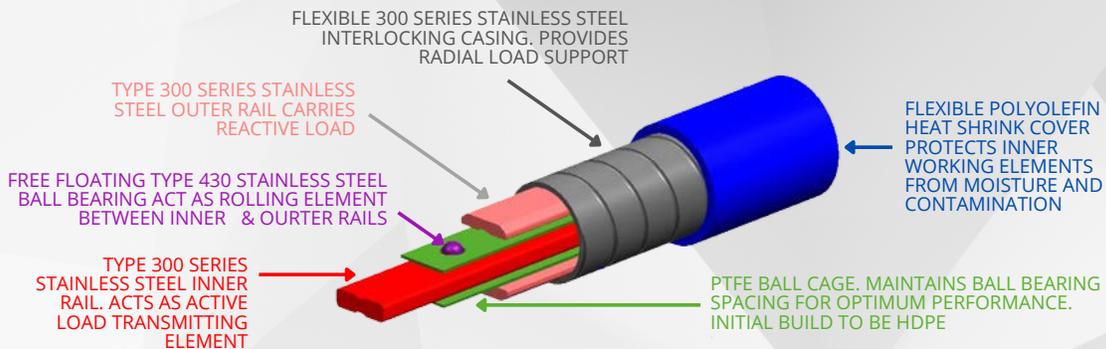
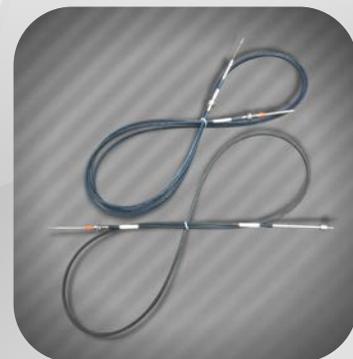
# HOLD-OPEN RODS & STRUTS

Orscheln offers a reliable solution for securing engine nacelles and cargo doors in an open position. Our Hold-Open Rods are meticulously designed and rigorously tested to meet the specific requirements of each customer. With a flexible design, our product solution can be adjusted for fixed or telescoping operations, ensuring optimal functionality in different situations.



# BALL-BEARING CABLES

Orscheln provides push-pull ball-bearing control cables. It is essentially a flexible linear ball bearing which transfers push-pull motion from one point to another. Its unique design allows for the transmission of movement with maximum efficiency and minimal lost motion.





## ELECTRONIC THROTTLE CONTROLS

Orscheln ETC is designed for easy installment and ensures a hassle-free setup process. The flexible mounting & positioning options allow for seamless integration into various vehicle configurations. With the validation of over 10,000,000 full-stroke cycles, they're built to long withstand rigorous usage and harsh environments. Equipped with a long-lasting programmable Hall-Effect sensor, our ETC ensures consistent & precise throttle response over extended periods of use. Such versatility makes our product suitable for various vehicle types.

## FLUID LEVEL INDICATORS

Our Twist2Lock™ sealing system eliminates oil leakage and offers repeatable accuracy. It can work with polymer or metal tube materials and has a maximum tube bending capability of 2 inches. Effectively operates in a temperature range of -40°F to +225°F (-40°C to +107°C).



## HARD LINE TUBES

Our Hard Line Tubes offer durable and reliable solutions for fluid and gas transportation, addressing the needs of both ICE and Zero-Emission vehicles.

# SHIFT CONTROLS

## **PBSS (Push Button Shift Selectors)**



Part of the *Shift-X-Wire* system, offers efficient and precise control for EV or Hybrid Transmissions. It is compatible with Allison Transmission models 1k, 2k, 3k, and 4k, ensuring seamless integration and functionality. The PBSS also includes a display that allows users to access Transmission DTC codes, providing valuable diagnostic information. Additionally, our PBSS supports custom DTC code text, enabling personalized troubleshooting. With its IP67 rating, the system is designed to withstand challenging environmental conditions, ensuring durability and reliability in various applications.



## **Hand-Lever Shifters**

Orscheln offers different handle styles, providing ergonomic and comfortable shifting options. Additionally, it supports auxiliary transmission shifting, allowing for enhanced control and versatility. Our shifter incorporates a CAN programmable sensor, enabling customization and integration with the vehicle's control systems. It also features a Hall Effect Sensor, ensuring accurate and reliable detection of lever position for precise shifting.



# PARK BRAKE SYSTEM

## Park Brake Levers

Orscheln has been setting the industry standard for over 75 years with our exceptional *over-center-style Park Brake Levers* and *Foot Pedal Levers*. With a wide range of mounting configurations, handle lengths, locking mechanisms, and light switch options, we offer unparalleled versatility. Our standard durable levers provide the ideal solution for various applications, and these reliable levers ensure secure and efficient operation. In situations that call for specific mounting or customized features, we possess the expertise and capability to design levers tailored to meet your unique requirements.

## Park Brake Cables

Orscheln park brake cables are a premium design. Our fully jacketed conduit and plastic-coated strand provide corrosion and abrasion protection while improving cable efficiency. Brake Cables are sealed to keep lubricant in and dirt and water out. We also offer cable hardware to connect your cable to any common parking brake systems, including equalizers for 2 brake systems.





**ORSCHELN**®

## CONNECT WITH US



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