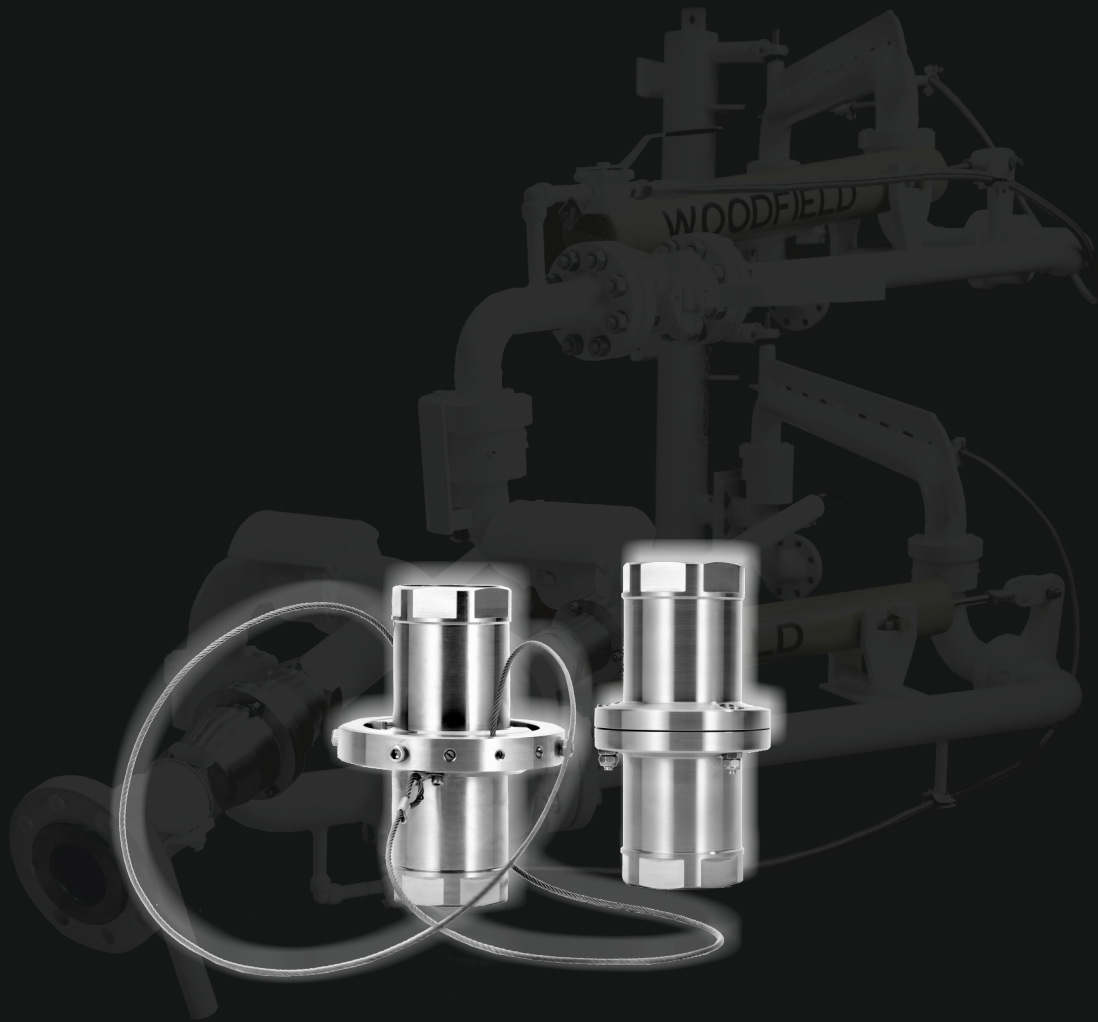


WOODFIELD

Safe Hands



# EMERGENCY SAFETY

# ERC

Emergency Release Coupling

# ERC

## Emergency Release Coupling

Woodfield Emergency Release Couplings (ERC) are designed & manufactured for safety of the operators and the environment in case of an emergency. ERC can be used with hoses or loading arms during transfer of product from terminal to tanker or vice-versa.

In case of emergency, if the tank truck moves, ERC shall get activated and detach itself from hose or loading arms safely with minimal spillage by instantly closing the safety valves in the ERC.

### Features of S-ERC and C-ERC

- ✓ Safe & reliable
- ✓ Spill-free separation
- ✓ Coupling automatically senses an excessive load and closes the valves and disconnects
- ✓ High flow rate / low pressure drop
- ✓ Simple design & easy to maintain onsite maintenance possible



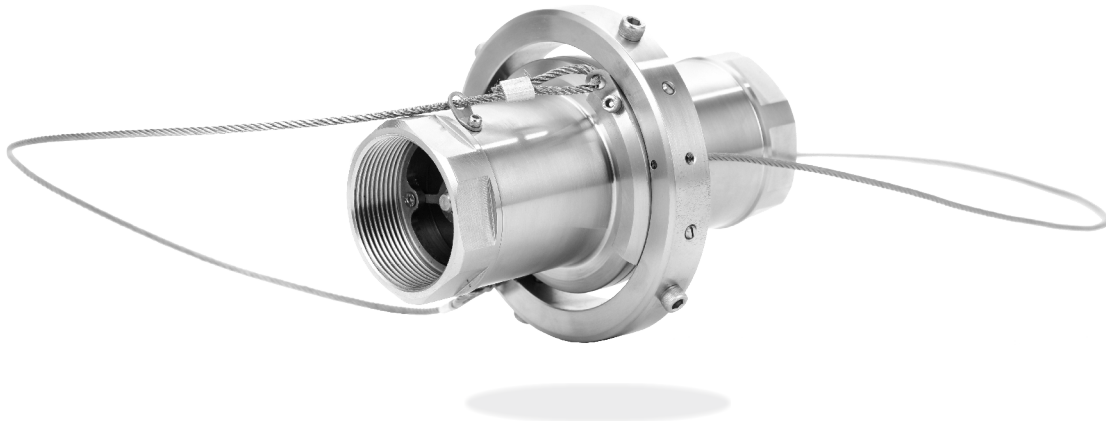


### **Shear Pin Type (S-ERC)**

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#### **Operation Philosophy**

Non-axial forces are generated on the shear bolts when tanker moves in case of an emergency. These bolts are sheared instantly closing the two valves present inside the ERC thus preventing any spillage.



### **Cable Release Type (C-ERC)**

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#### **Operation Philosophy**

Non-axial forces are generated as the tanker moves in case of an emergency and these forces are transferred on the ERC spring plungers through a cable. With this the ERC gets separated with instant closing of the two valves inside the ERC causing minimum spillage.

#### **Features**

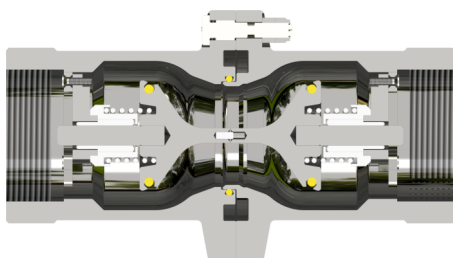
- No extra spares required to reassemble once activated
- Breaking force can be adjusted with same arrangement



## Working of ERC

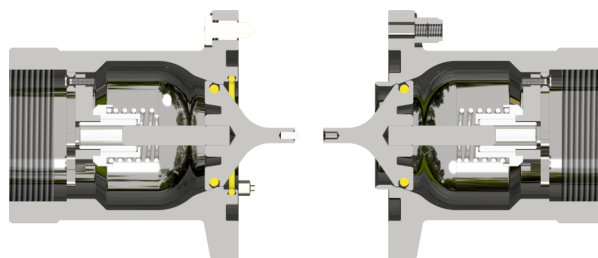
before and after emergency disconnect

### In connection



The ERC consists of two halves and when connected allows maximum flow

### After disconnection



When ERC activates and separates it allows the halves to close instantly thus ensuring leak proof spilling on both halves

## Technical Specifications

Type / Model	: Shear pin type (S-ERC), Cable release type (C-ERC)
Sizes available	: 2in., 3in., 4in.
Shear Bolt (For S-ERC)	: 13kN, 24kN, 33kN & 45kN
Material of construction	: AISI 304/304L, AISI 316/316L, Aluminum, 904L, Hastelloy, Duplex steel **Other materials available on request
Seals	: Viton B, Viton GFLT, Nitrile/Buna **other materials available on request
Test Pressure	: 38 bar (May vary upon size and material)
Working Pressure (Max.)	: 25 bar (May vary upon size and material)
Operating Temperature	: Viton-B: -40°F to 212°F (-40°C to +100°C); Viton GFLT: -40°F to +212°F (-40°C to +100°C); Nitrile/Buna: -22°F to 212°F (-30°C to +100°C);
End connection	: Flanged end & Threaded end (BSP/NPT)
Applications	: Tank truck loading / unloading arm / hose for LPG, Propane, Ammonia, Chemicals, and Hydrocarbons
Certification	: EN 10204 Type 2.2 with all supplies. On demand EN 10204 Type 3.1, CE certification, ATEX certification

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

**Woodfield Systems USA Inc**  
200 Business Park Boulevard,  
Columbia, South Carolina 29203. USA.  
US/Canada Toll Free : +1 888 915 6266  
International : +1 803 399 7597  
Email: [sales.usa@woodfieldsystems.com](mailto:sales.usa@woodfieldsystems.com)

**Woodfield Systems International**  
302 -A, Nitco Biz Park, Wagle Estate,  
Thane (W) - 400604.  
Maharashtra, India.  
Phone: +91-22-6704 0000  
Fax: +91-22-6704 0099  
Email: [sales@woodfieldsystems.com](mailto:sales@woodfieldsystems.com)

**Woodfield Systems Europe SL**  
Avda, San Francisco Javier, 9  
Off. 1129, 41018  
Sevilla, Spain  
Phone: +34 955 300 424  
Email: [sales.es@woodfieldsystems.com](mailto:sales.es@woodfieldsystems.com)