ERC

Emergency Release Coupling

Woodfield Emergency Release Coupling (ERC) is designed & manufactured for safety of operators and 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 an emergency if the tank truck has to move, ERC shall get activated and detach from the hose or loading arms safely with minimum 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



Cable Release Type (C-ERC)

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

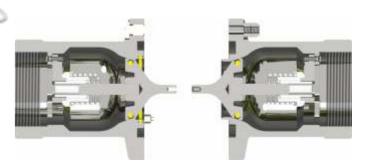
before and after emergency disconnect

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



Shear Pin Type (S-ERC)

Operation Philosophy

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

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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)

: Viton-B: -40°F to 212°F (-40°C to +100°C);

Operating Temperature : 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



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SAFETY

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