

## FEATURES AND BENEFITS: RRC-H-E-xxx-050-SF/TF

### RRC HS Retractable Rail Clamps – Side Flange and Top Flange mount

Brelx Rail Clamps are designed to release and retract completely from the rail head, with no mechanical guiding means at the rail level. Serrated shoes are fully protected from hitting the sides of the rails, which contributes to minimal wear and tear. There is no wear and tear to the guide means or to the rail head itself. Additionally, the effect of the vibrations on the rail clamp mechanism during crane travel is minimized. When in the set position, they provide a designed holding force (capacity) rated at  $\mu=0.5$  coefficient of friction.

**AVAILABLE HOLDING CAPACITIES** RRC-HS-SF from 50 kN to 1200 kN (SF Side Flange mounting)  
RRC-HS-TF from 50 kN to 700 kN (TF Top Flange mounting)

### KEY FEATURES:

Spring set – Hydraulic & Electric release

- Rail Clamp shoes retract completely above the rail head when in a released position, no mechanical guiding means at the rail level.
- Mechanism weight is evenly distributed on four low friction bearings guided on a channel bar at the top of the rail clamp. Low friction mechanism stability device allows for the reliable positioning on the rail and setting of the rail clamp mechanism.
- Top suspended mechanism allows for very low mechanism float forces, no need for lubrication points.
- Serrated shoes protected from hitting the rail sides, no wear and tear to guide means, brake shoes, or rail head itself.
- Release of the serrated shoes and mechanism retraction done with a single, top-mounted hydraulic cylinder.
- Top-mounted hydraulic cylinder with no rod connection, easily removable for quick maintenance and replacement (remove the hydraulic hose and four bolts).
- Mechanism compensates force loss as springs extend due to variations in rail head width, providing a constant designed clamping/holding force.
- Mechanism caging bolts in released position for maintenance safety.
- Rail clamp mounted on the crane by a Side Flange or Top Flange.
- Marine grade C4 paint system for superior corrosion protection.
- Stainless steel removable cover with the inspection doors located on both sides of a rail clamp (Side Flange mount model).
- Inspection doors with high quality rubber door latches (jeep style) and weatherproof strips.
- Horizontal Float:  $\pm 30$ mm
- Vertical Float:  $\pm 25$  mm
- Clamp release LS1, positioning on the rail for proper shoe to rail engagement LS2, and reserve stroke (out of adjustment) LS3 monitored by IFM proximity switches.

**Hydraulic Power Unit HPU:** Installed inside a rail clamp (integral unit).

- Rail Clamp Release Time: Up to 6-8 seconds nominal.
- Motor / Pump controlled by a pressure switch.
- In case of power loss, rail clamp sets on the rail within pre-set delay time, hydraulically adjustable at the site (8 – 30 sec).
- Hand Pump for hydraulic release in case of power loss.
- Prewired Junction box.
- Solenoid valve with manual override.
- Solenoid coil with LED indicator.
- Integrated Temperature/Level Switch.
- Top Flange model has inspection and maintenance doors located on both sides of a rail clamp.

**Electric Linear Actuator:** Installed inside a rail clamp (integral unit)

- No hydraulic oil, no possibility for oil spill / leaks
- Means for mechanical release in case of power loss
- Prewired Junction box
- Mechanically adjustable control of setting time at site
- Electric actuators are cleaner, easier to control, and require less maintenance than hydraulic cylinders
- Electric Actuators are much more reliable than hydraulic equipment
- Eliminate fossil-based hydraulic fluids which are potentially toxic to humans, along with being harmful to the environment

NOTE: Equipment controls and integration into crane's PLC – by others. Existing PLC loop time latency to be verified.