

## FEATURES AND BENEFITS

### RRC Retractable Rail Clamps

BRELX Rail Clamps are creatively designed to release and retract completely from the rail head and there are no mechanical guiding means at rail level. There is no wear and tear to guide means, brake shoes as well as rail head itself. Also the effect of the vibrations on the rail clamp mechanism during crane travel is minimized. When in set position, they provide a designed holding force (capacity).

AVAILABLE HOLDING CAPACITIES – RRC from 50 kN to 600 kN

### OPERATIONAL DESCRIPTION

The solenoid valve SV1 is normally open when de-energized to allow setting of the rail clamp when control power is lost. The hydraulic oil can flow from the cylinder to tank under spring pressure. To release the rail clamp, the solenoid valve is energized allowing the hydraulic pump flow to be blocked to the tank and sent to the hydraulic cylinder, thus compressing the rail clamp springs, opening the clamp jaws and retracting the rail clamp.

### MOST IMPORTANT FEATURES

- Rail Clamp jaws retract completely above the rail head when in a released position.
- There are no mechanical guiding means at rail level at any speed.
- No lubrication points required... ever
- Rail clamp shoes protected during crane traversing and are easy replaceable in the field.
- Clamp mechanism parks in a central position when fully retracted and locates on rail head when lowering or setting
- Vertical guiding fork is custom machined in accordance to a rail head profile for precise shoe / rail head engagement.
- Controlled setting time by a flow control valve (adjustable from 2 to 30 sec).
- Caging bolts to allow caging of rail clamps in open position (released).
- RRC Allowable Rail Float: Horizontal +/-30 mm; Vertical +/-25 mm (more can be provided on a special request).
- A single ram-type cylinder to carry out spring release compression, shoe retraction and mechanism lifting.
- Hand pump for hydraulic release and caging bolts for mechanical release.
- The ram cylinder is top mounted with no rod connections and can be easily removed for maintenance or replacement in minutes, by undoing four bolts.
- Clamp release, positioning on the rail for proper shoe to rail engagement and reserve stroke (out of adjustment) monitored by proximity switches.
- Modular design for clamping mechanism to be under same enclosure with the power unit.
- Stainless Steel removable cover comes with the inspection doors located on both sides of a rail clamp.

### BENEFITS

Rail Clamp jaws fully released and retracted above the rail means that there are no mechanical guiding means at rail level at any speed which is a paramount for high speed, modern cranes.

Serrated shoes are fully protected from hitting the sides of the rails contributes to less wear and tear.

A mechanism is compensating for a potential spring force loss due to rail width variation, shoe wear or mechanism out of adjustment.