Switchguard® HLM MkII Point Lock with Detector and HM Point Detector
Facing Points Capable with Upgraded Detection Switches

Benefits

<table>
<thead>
<tr>
<th>Benefits</th>
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<tbody>
<tr>
<td>Locks facing points or trailing points</td>
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<tr>
<td>Reliable detection switches for points and lock</td>
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<tr>
<td>Two sizes available: Wide profile and compact X series (extremely compact)</td>
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<tr>
<td>Lock state detected in all lock models</td>
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<tr>
<td>Electric release is incorporated in the lock unit</td>
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<tr>
<td>Optional, external hand-operated emergency release for locks</td>
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<tr>
<td>Wide profile can combine lock and points position detector or have 4 detector bars</td>
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<tr>
<td>Points detectors can prove both normal and reverse positions</td>
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<tr>
<td>HMX Series suitable for in-bearer point detection and swingnose crossings</td>
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<tr>
<td>Use as a replacement for switchlock</td>
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<tr>
<td>Parts are inter-changeable without need for adjustments or settings.</td>
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<tr>
<td>Robust and reliable</td>
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External Points Detection and Locking

Cost effective solution for:
- Electrical locking and detection of ground frame or hand thrown points and derails
- Detection of back drives
- Replacement for Switch Locks

Flexible Solutions

- Lock and point detector combined
- Lock only
- Points detector only

Wide profile combine lock and points detector or detector only with 1 to 4 detector slides. Narrow profile X series for locking or point detection in confined places or extremely complex turnouts. All models are low profile for easier under track height installation.

Datasheet 2D-6
HLM MKII Point Lock with Detector

Lock, and detect the lock state, of hand-throw points with one compact, sleeper mounted, unit. Detect point blade normal and reverse position with optional integrated slide detectors.

Ideal for use with most hand throw points—local lever, lever frame, T21, etc. where electrical locking is required to prevent unauthorised or unintended operation.

The HLM MKII lock meets AREMA recommendations for a facing point lock.

Remote electric lock release emulates conventional switch lock function when used in conjunction with control panel.

Use optional, locked manual release for emergency or failure states.

Lock Options
- Wide or narrow profiles
- Hand-operated release lever. Provided on the HDLM series (D = Dual control).

The Lock with point position detector is only available in wide profile. The lock only option is only available in narrow profile.

Points Position Detection
Robust Siemens detection switches with gold-flashed contacts ensure reliable points detection.

The 2-detector bar variations (HLM2 and HDLM2) prove both normal and reverse positions.

Lock Engagement
For right-side-failure functionality, the lock bolt drops into the locking slot by gravity and is released by power.

Lock Release
Controlled electrically (typically by the signalling system). An electro-magnet lifts the lock bolt free of the lock bar.

Hand operated release lever allows manual operation without removing the cover, when required.

Lock Detection
All MkII HLM point locks incorporate an upgraded lock detection switch that reliably indicates if the lock is engaged.
HM MkII Point Detector

Detect normal and reverse position of points and derails with a compact slide detector as used in 84 M series point machines.

Use on electric, hydraulic, pneumatic or hand throw points and detect both blades and optionally back and intermediate drives. Use one, two, three or four slide detectors as appropriate.

The narrow HMX unit installs within hollow bearers with the point rodding for protection.

Series HM—Wide Profile

Use the Series HM Point Detectors on main or secondary line points for one, two, three, or four slide bar point detection.

Series HMX—Narrow Profile

Use the HMX Point Detector for one or two slide bar point detection in confined places.

The smallest possible footprint makes the HMX ideal for detection of compact or extremely complex turnouts or installation in hollow trough bearers.

Detection

The detection switches are actuated by cutouts on the detector bars via bell cranks and rollers.

For ease of maintenance, the whole detector mechanism may be removed by unscrewing four bolts.

All MkII Models

Improved switches provide reliable detection of lock and points. The upgraded lock mechanism fits both wide and narrow profile cases.

Cases are cast iron fitted with a gasketed, removable cover.

Most replacement parts are common between HLM Point Locks and HM Point Detector models as well as the 84M Universal Point Machine.

Parts are designed for easy replacement and interchange.

The detector bars and lock bars are carried in replaceable, bolt-on bronze bearings.

The minimal footprint and below rail height simplify installation.
Specifications

Voltage 110 Vac, 110 Vdc, 50 Vdc, 24 Vdc, 12 Vdc

Power Cons. 11 W (approx.)

Detection Switch

Rating:
- Current (max) 20 A
- Voltage (max) 130 V

Weight (approx.)
- 50 kg (wide profile)
- 24 kg (narrow profile)

Cable Entry Diameter 40 mm

Dimensions

Fixing Centres:
- wide profile 228 x 335 mm
- narrow profile 288 x 170 mm

Height above mounting face 140 mm

Connections:
- top bar 20 mm
- bottom bar 20 or 46 mm below mounting
- Detector holes for M20
- Lock hole for Ø22 clevis pin

* or 59 mm above mounting face for inverted detector bars

Lock Bar Retrofit Kit

Two drop lugs are available for adapting the MkII Point Lock and Detector lock bar to existing installations. Part numbers:
- 3570203401—28 mm below mounting face
- 3570203402—46 mm below mounting face

Retrofit installations with drop lugs are not certified to meet AREMA recommendations for facing point locks

Ordering

Please discuss your requirements with our sales staff.

Options include:
- voltage (110 Vac, 110 Vdc, 50 Vdc, 24 Vdc or 12 Vdc)
- 1 or 2 detector bars
- hand-operated release
- wide profile or narrow profile
- number of slides
- stroke
- length of detection bar

Applications:
- normal points
- in-bearer points
- swingnose crossings

Styles

<table>
<thead>
<tr>
<th>Style</th>
<th>Hand Release</th>
<th>Detect Bars</th>
<th>Lock</th>
<th>Profile</th>
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<tr>
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<tr>
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<td>HMX1</td>
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<tr>
<td>HMX2</td>
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<td>2</td>
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** or 59 mm above mounting face for inverted detector bars