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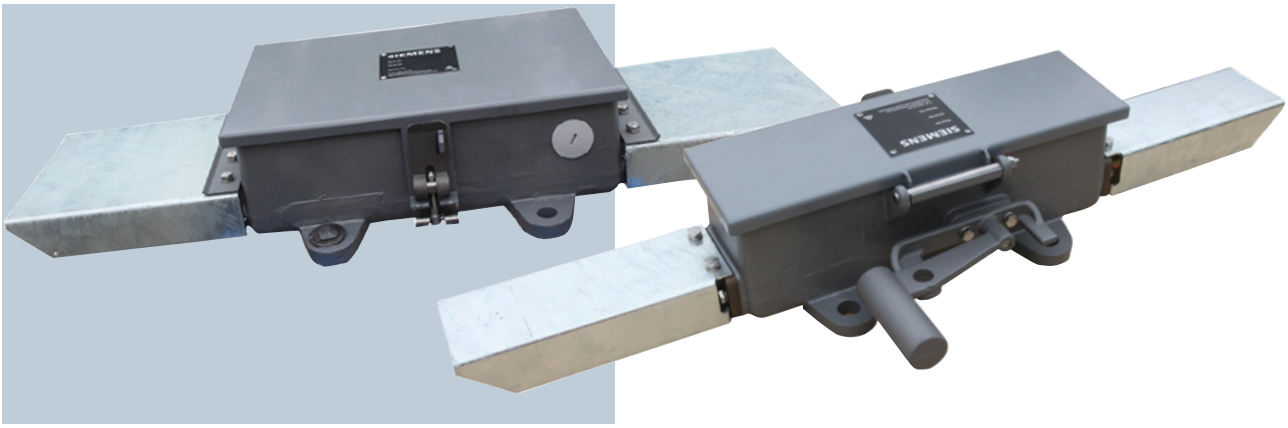
Switchguard® HLM MkII Point Lock with Detector and HM Point Detector

Facing Points Capable with Upgraded Detection Switches



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

External Points Detection and Locking

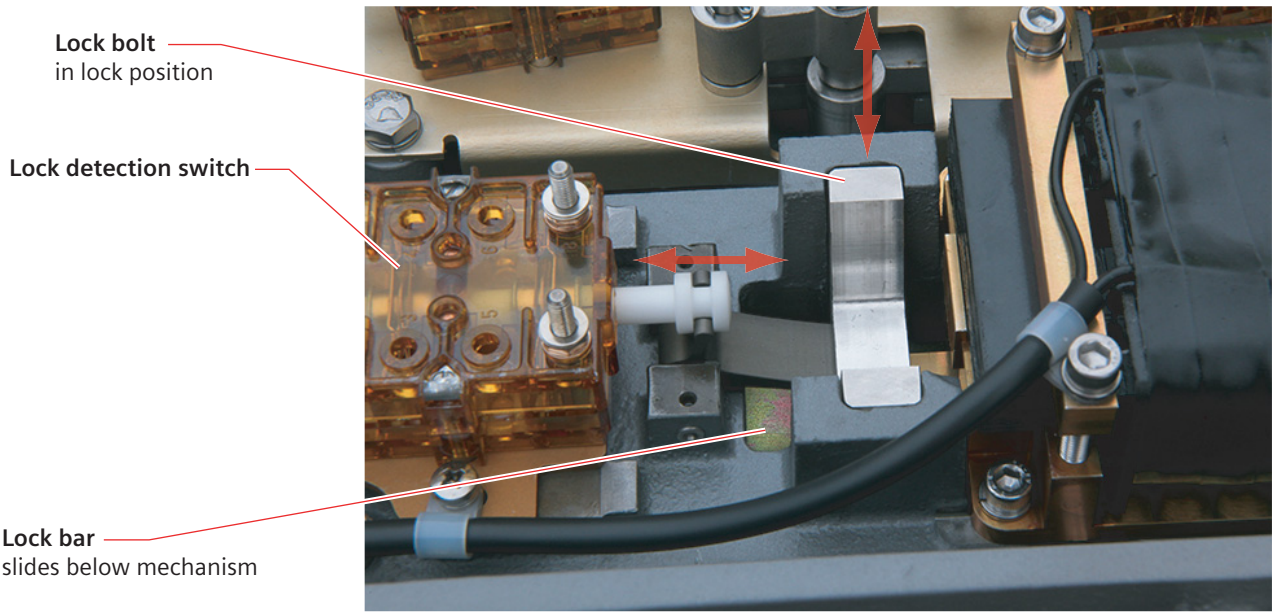
Cost effective solution for:

- 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.



HLM MKII Point Lock with Detector

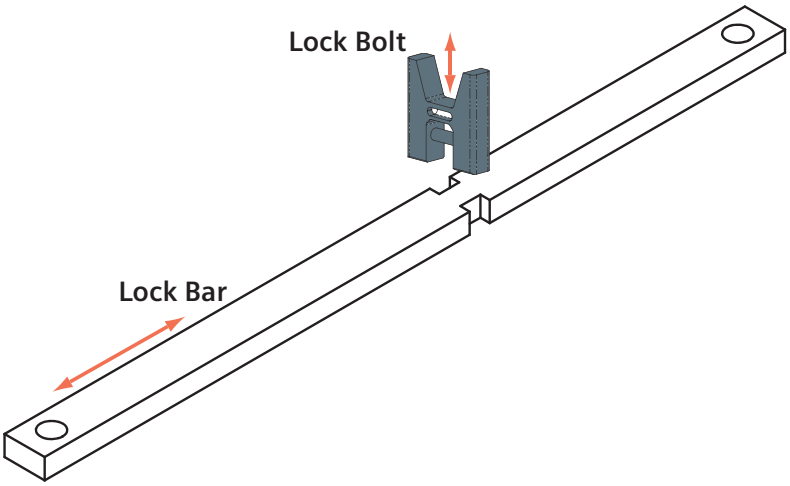
Lock, and detect the lock state, of hand-throw points with one compact, sleeper mounted, unit. Detect point blade normal and reverse position with optional integrated slide detectors.

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 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.

Lock Options

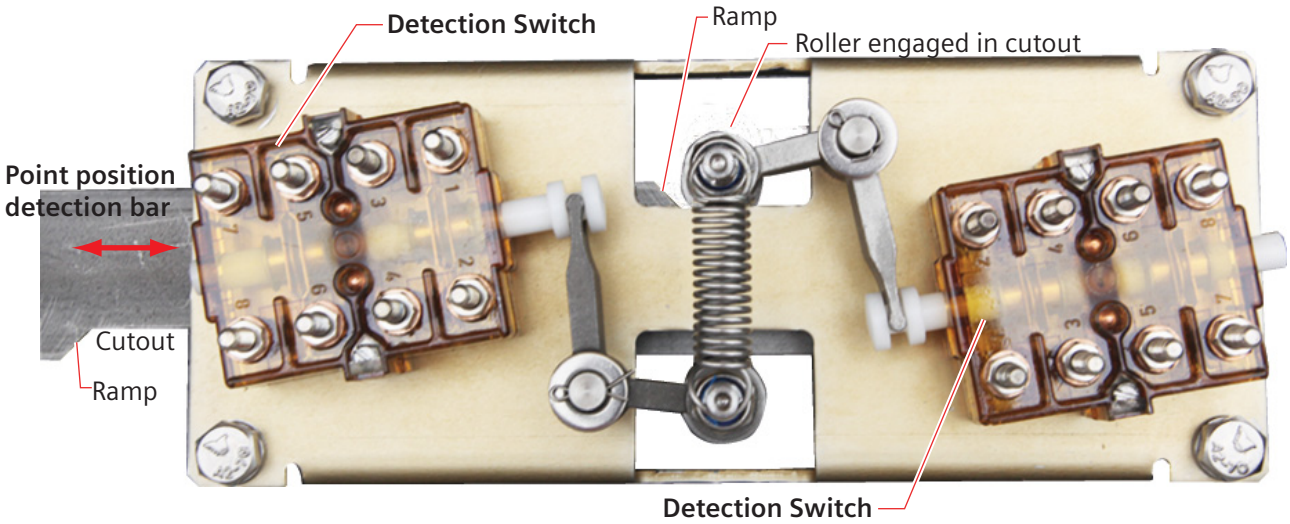
- Wide or narrow profiles
- Hand-operated release lever. Provided on the H**D**LM series (D = Dual control).

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.



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.

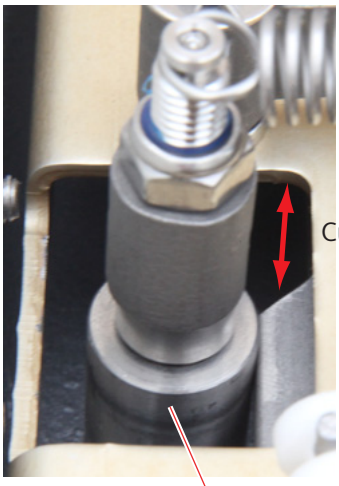
Series HM—Wide Profile

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.

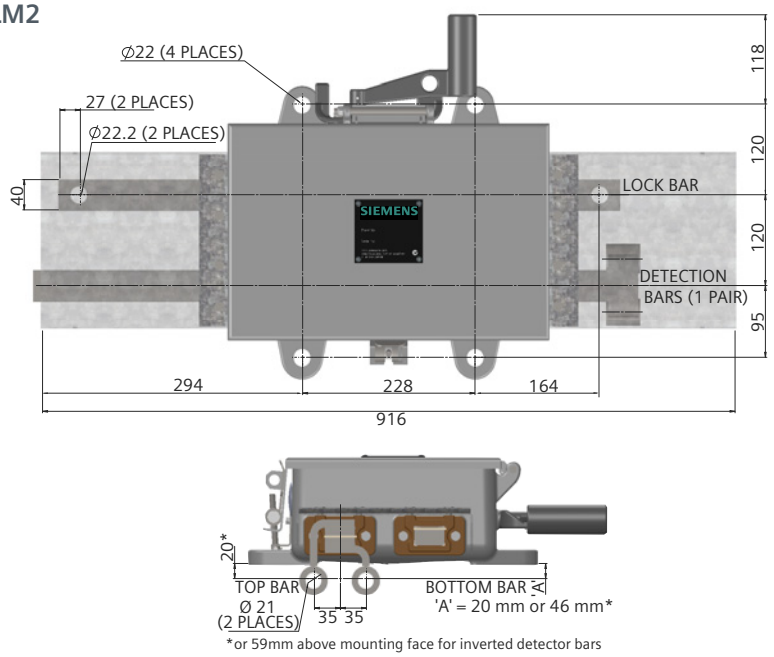
Most replacement parts are common between HLM Point Locks and HM Point Detector models as well as the 84M Universal Point Machine.

Parts are designed for easy replacement and interchange.

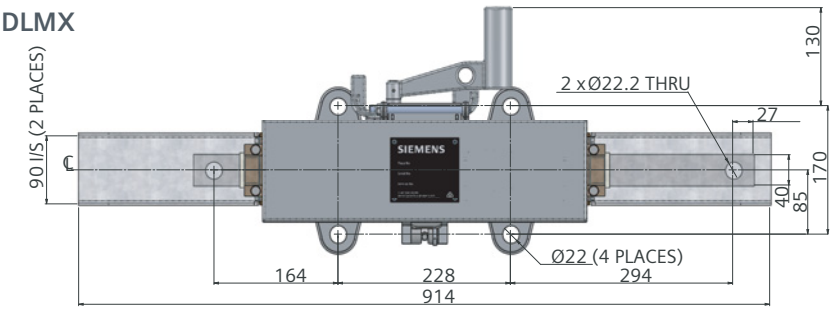
The detector bars and lock bars are carried in replaceable, bolt-on bronze bearings.

The minimal footprint and below rail height simplify installation.

HDLM2



HDLMX



Specifications

Voltage	110 Vac, 110 Vdc, 50 Vdc, 24 Vdc, 12 Vdc
Power Cons.	11 W (approx.)
Detection Switch Rating: • Current (max) • Voltage (max)	 20 A 130 V
Weight (approx.)	50 kg (wide profile) 24 kg (narrow profile)
Cable Entry Diameter	40 mm

Dimensions

Fixing Centres: • wide profile • narrow profile	 228 x 335 mm 288 x 170 mm
Height above mounting face	140mm
Connections: • top bar • bottom bar	 20 mm* 20 or 46 mm below mounting*
• Detector • Lock	holes for M20 hole for Ø22 clevis pin

* or 59mm above mounting face for inverted detector bars

Styles

Style	Hand Release	Detect Bars	Lock	Profile
HDLM	yes	0	yes	wide
HDLM1	yes	1	yes	wide
HDLM2	yes	2	yes	wide
HLM	no	0	yes	wide
HLM1	no	1	yes	wide
HLM2	no	2	yes	wide
HDLMX	yes	0	yes	narrow
HLMX	no	0	yes	narrow
HM1	no	1	no	wide
HM2	no	2	no	wide
HM3	no	3	no	wide
HM4	no	4	no	wide
HMX1	no	1	no	narrow
HMX2	no	2	no	narrow

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

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