



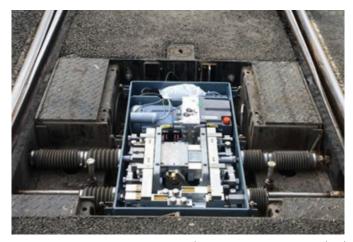
## Point Machine of the 61.1 Series

## The all-rounder for points

Safety and reliability in rail-based transportation have always been HANNING & KAHL's main concerns. The consistent upgrade of the world-wide proven HW(E)61 is distinguished by maximum reliability, functionality, economic efficiency and unmatched performance. With the HW(E)61.1, HANNING & KAHL sets yet another milestone on the way to maximum transport safety and operating efficiency. The modular design makes this point machine particularly versatile.

The 61.1 series point machines can easily be adapted to any operational requirements and it can also be modified subsequently to fit changing requirements.

The performance range of the series comprises both a variant for the depot according to SIL 2 in compliance with EN 50129 (non-positive locking for negotiating a set of facing points < 15 km/h) and a model for the track with a maximum safety up to SIL 4 in compliance with EN 50129 (positive locking).



Point machine HW(E) 61.1 in grooved rail

#### The features of the 61.1 series at a glance:

- Silicone bellows
- Housing with cable guidance and optimised cover attachment
- Sturdy lever box
- Optimised hydraulic cylinder
- Robust and conveniently adjustable damping unit for the electro-magnetic version
- Hydraulic unit now also for 600/750 V DC operation
- Corrosion protection of all components
- Diagnostic system as an option via ConnAct®

Technical data point machine 61.1 series	
Drive form	electro-magnetic, electro-hydraulic
Point type	grooved rail and flat-bottom
Setting force	up to 5,000 N
Point opening	up to 100 mm
Pressing force of the spring assembly	up to 3,000 N
Operating voltages*	600/750 V DC, 230/400 V AC
Temperature range	-25°C+70°C
Protection class	IP67 in compliance with EN 60529
Safety integrity (de- pending on version)	up to SIL 4 in compliance with EN 50129

\*Other operating voltages on request



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## Trend-Setting Technology

#### **HW(E)61.1 AVV-ZVV**

This version is designed for deployment on open track and has positive locking of drive rods and an independent detector lock device. This means maximum safety up to SIL 4 in all conditions. Drive type can be selected for all versions: electro-magnetic or electro-hydraulic. All common operating voltages can be catered for. A four-wire control version is available for deployment in EOW electric locally-set installations or electronic interlocking in mainline applications.

#### Another name for safety: HW(E)61.1

Current regulations demand that the movable parts of a point are held in end positions with positive locking when faced at speeds greater than 15 km/h. Here, the HW(E)61.1 falls back on the locking system of the HW(E)61 proven in thousandfold operation. This system meets all safety requirements and is certified for compliance SIL 4 with CENELEC EN 50129. The locking system acts on the drive and tongue detector rods which are uncoupled mechanically. The positive lock can be trailable or non-trailable. The locking system is safely monitored by signals and virtually wear-free.

#### The HW(E) 61.1 – at home in every location.

Greater safety and more operating ease on the rails – and not just for new or planned point installations. Compact design means the HW(E)61.1 can be installed in every existing type of point and every HANNING & KAHL earthcase with a corresponding adapter frame – and also in other makes of earthcases.



Point machine HW(E) 61.1 for a tunnel application



Point machine HW(E) 61.1 in the rail network

#### The HW(E) 61.1 adapts – progressively.

The HW(E) 61.1 can be deployed in all conventional point constructions. The point opening can be set progressively up to 100 mm. Setting is performed directly on the HW(E)61.1 on the spot, without replacing components, so the point machine can be deployed in identical technology in grooved-rail and flat-bottom points.

### Diagnostic System ConnAct®

With an extra package of sensors, you cannot lose track. Vital parameters (the number of throwover and trailing procedures, setting times, water ingress) are recorded and evaluated by an efficient diagnostic system in the point machine. You decide whether to service or repair as required, thus saving time and expense. The sensor technology comprises modules from our ConnAct® diagnosis system. ConnAct® enables extensive remote analysis and provides unsurpassed transparency in infrastructure management.



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