



# UNISTAR HR

## Electro-hydraulic Point Setting System for Freight, Urban and Mixed Traffic

### Description

The UNISTAR HR has already been installed in different countries with diverse climate conditions. It meets the strictest safety requirements and among other specifications of Network Rail, German Railways (DB), ProRail and AREMA.

Separate modules of the Power and Drive/Locking/Detection (DLD) units are arranged in individual housings. This enables versatile installation options – All-in-One and Ready-to-Use.

The UNISTAR HR series also include

- » UNISTAR HR EM (electro-mechanic)
- » UNISTAR HR COMPACT (Drive, Locking and Setting in one housing)
- » UNISTAR HR NG (designed for narrow gauge, min. 900 mm)



In combination with zentrak - Intelligent Diagnostic Platform, our Intelligent Turnout is an extremely effective tool for your maintenance team.

### System advantages

- » Prepared for zentrak – Intelligent Diagnostic Platform
- » Equipped with Remote Vital Inspection (RVI) to extend inspection intervals
- » Low Life-Cycle Costs
- » Operation of turnouts with and without stretcher bars (track rods)
- » One drive serves up to four setting levels
- » Operation of swing nose crossings (movable point frogs)
- » Reduced track downtime
- » Short and sturdy connecting rods with thermal expansion compensation
- » Low weight of components, no lifting gear required for installation



### Technical characteristic

Designation	Value / Type
Turnout Type	Vignol
Minimum gauge of the turnout (mm)	1435
Throw range (mm)	60 -160
Main dimensions (mm)	IP67: 1000 x 290 x 174 (DLD unit), 751x361x200 (power unit) IP68: 800 x 354 x 188 (DLD unit), 860 x 395 x 197 (power unit)
Overall mass (depending on protection class)	DLD unit approx. 80 kg, Power unit approx. 60 kg
Temperature range, max. humidity	-40°C - +80°C, tested for 95% rel humidity
Safety level/ class	SIL 4 according to DIN EN 50126, 50128 and 50129
Protection class	IP67 / IP68
Fixation to track	Stock Rail Fixation / Sleeper Fixation
Housing Material	Aluminium / Stainless steel
Locking system	internal prism lock, trailable and non-trailable
Max. number of possible locking and setting units	4
Throw time	3 sec
Throw force	up to 15 kN, adjustable
Holding Force	up to 90 kN, adjustable
Power supply	24 - 750 V
Trailing speed	40 km/h