

Vanguard

Rail fastening system

- Effective control of ground-borne noise
- Suitable for use with all track construction methods
- Can be configured to suit a wide range of customer requirements, including retro-fit to existing track
- Compact track form allows cost effective new tunnel construction

Typical application parameters

Rail inclination	Provided in the concrete or baseplate as required			
Clip type	Not applicable			
Typical applications	Light Rail/Tram	Metro/Urban	Mainline	Mainline/ High Speed
EN 13481-5 track category	A	B	C	D
Maximum axle load	130 kN	180 kN	260 kN	260 kN
Minimum curve radius	40 m	80 m	150 m	400 m

Typical assembly performance data*

EN 13481-5 track category	A	B	C&D
Static stiffness	>2.5 kN/mm	>3 kN/mm	>4 kN/mm
Dynamic stiffness	>3 kN/mm	>3.5 kN/mm	>4.5 kN/mm
Electrical resistance	>5 kΩ		
Clamping force	Not applicable		
Longitudinal restraint	>9 kN		
Lateral adjustment	+/- 20 mm (per rail seat)		
Vertical adjustment	30 mm (range)		

*Based on EN 13146 test methods. For specific test requirements consult Pandrol.

→ COMPLIANCE WITH STANDARDS

Pandrol Vanguard has been tested against the requirements of EN 13481-5 'Fastenings for slab tracks'. The system will meet the requirements of the European High Speed TSI (Technical Standards for Interoperability).

→ NOTE

Pandrol is a provider of innovative custom rail fastenings. Data in this document indicates typical performance. Actual performance is dependent on a range of factors. Please contact us to discuss how Pandrol can tailor products to suit local operating conditions and specific requirements. Technical information in this document was correct at the time of printing. Improvements may since have been introduced as a result of our continuous research and development programmes.

Learn more



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