

## VIPA SP Rail fastening system

- For use on non-ballasted tracks (slab tracks)
- Two-part base plate system suitable for top down, wet pour construction, pre-cast concrete or fixing directly to bridge decks
- Also suitable for concrete and wooden sleepers and blocks
- · Intended for applications where very good vibration reduction is required

Application data (Standard products - special variants may differ)								
Rail inclination	Provided in the baseplate or concrete as required							
Typical applications	LRT/Metro, General main line, high speed non ballasted tracks, bridges							
Clip type	Pandrol Fastclip FC1501, FC1504							
EN 13481-5 track category	Cat A	Cat B	Cat C	Cat D				
Maximum axle load*	130 kN	180 kN	260 kN	260 kN				
Minimum curve radius*	40 m	80 m	150 m	400 m				

<sup>\*</sup> For special applications consult Pandrol.

Typical performance data* As identified by Track Category in EN 13481-1								
	Cat A	Cat B	Cat C/D	Test method	Remarks			
Assembly static stiffness	10-15 kN/mm	11-16 kN/mm	12.5-17.5 kN/mm	EN 13146-9:2011	Dependent upon pad selection			
Assembly dynamic stiffness	12.5-17.5 kN/mm	13-18 kN/mm	17.5-22.5 kN/mm	EN 13146-9:2011				
Electrical insulation	>10 kΩ			EN 13146-5:2012				
Nominal toe load	1000 kgf							
Clamping force	>16 kN			EN 13146-7:2012				
Creep resistance	>9 kN		EN 13146-1:2012					
Lateral adjustment	+/- 20 mm			Per rail, depending on baseplate				
Vertical adjustment	+ 30 mm							

## → COMPLIANCE WITH STANDARDS

Pandrol VIPA SP has been tested against the requirements of EN 13481-5:2012 'Fastening systems for slab tracks'. The system will meet the requirements of the European High Speed TSI (Technical Standards for Interoperability).

## ightarrow 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 external 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 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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