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Fastclip FE

Rail fastening system

- For use on concrete sleepers
- Suitable for light rail, metro, general main line, high speed and heavy axle loads
- Suitable for use on monobloc sleepers (pre or post-tensioned) or reinforced bi-block sleepers

Application data (Standard products – special variants may differ)					
Rail inclination	As provided in the sleeper				
Pad type	Please consult Pandrol for appropriate pad types against operating requirements				
Typical applications	Light rail, Metro, general main line, mixed traffic, heavy haul and high speed				
Clip type	Pandrol Fastclip FE1400				Pandrol Fastclip FE1500
EN 13481-2 fastening category	Cat A	Cat B	Cat C	Cat D	For max axle load/ radius please consult Pandrol
Maximum axle load*	130 kN	180 kN	260 kN	260 kN	
Minimum curve radius*	40 m	80 m	150 m	400 m	

* For special applications consult Pandrol.

Typical performance data* As identified by Track Category in EN13481-2					
	Cat A	Cat B	Cat C/D	Test method	Remarks
Assembly static stiffness	>70-210 kN/mm	>80-220 kN/mm	>95-250 kN/mm	EN 13146-9:2011	Dependent upon pad selection
Assembly dynamic stiffness	>80-280 kN/mm	>90-310 kN/mm	>110-400 kN/mm	EN 13146-9:2011	
Impact load attenuation	≤ 30-50%			EN 13146-3:2012	
Electrical insulation	>10 kΩ			EN 13146-5:2012	
	FE1400 Series	FE1500 Series			
Nominal toe load	1000 kgf	1250 kgf			
Clamping force	>16 kN	>20 kN		EN 13146-7:2012	
Creep resistance	>9 kN	>11 kN		EN 13146-1:2012	

→ COMPLIANCE WITH STANDARDS

Pandrol Fastclip FE1400 series fastenings are compliant with the requirements of EN13481-2:2012 and the High Speed Interoperability Directive (TSI). Pandrol Fastclip FE1500 series fastenings are compliant with the requirements of EN13481-2:2012 – 'Fastening systems for track with heavy axle loads'. Some configurations of Pandrol Fastclip FE1400 and FE1500 series fastenings are compliant with the requirements of AREMA Manual Chapter 30 Part 4.

→ 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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