KÄCHELE VIBRASTOP

FX FLEXIX

STANDARD ELASTIC BASEPLATE PAD

FX.ST17 FX.ST22 FX.ST33

DESCRIPTION OF NEEDS

- Interaction between the train wheels and the tracks causes high levels of noise and vibration.
- Forces and impacts generated by rail traffic, as well as climatic conditions, produce high stiffness values, deformations and wear of the track and superstructure, reducing their service life.

ADVANTAGES OF STANDARD ELASTIC BASEPLATE PADS

- ✓ Effective noise and vibration reduction of the track, enhancing operational safety and passenger comfort.
- ✓ Minimization of structure-borne noise and vibrations, protecting adjacent structures and buildings, improving the quality of life for nearby residents.
- ✓ Improved load distribution for the passing rail vehicles ensuring homogeneous pressure distribution, lowering stress and fatigue of the components, increasing service life of the superstructure, and reducing system maintenance costs.

WHY CHOOSE THE FLEXIX SOLUTION?

- Universal design for different non-ballasted track systems: slab track, bridges, tunnels, but also on ballasted track systems: main lines, light rail tracks, metro, etc.
- Robust bonded solution to minimize the risk of part failure, increasing its durability and guaranteeing its functionality in a wide range of working conditions.
- Optimized design for easy part fixation, which facilitates handling and assembly.
- Improved geometry to minimize the number of special parts on the track, reducing costs.
- Low flammability, smoke generation and toxicity materials that ensure passenger safety in an emergency in tunnels or metro.
- Highly elastic parts under a certain degree of preload, with static vertical stiffness values from 17,5 kN/mm.
- Designed for optimal dynamic behavior, reducing system noise and vibrations, improving comfort and safety for passengers.

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TECHNICAL DATA SHEET

APPLICATION DATA* (Standard products – special variants may differ)

Typical applications:	Slab tracks Ballasted tracks	
Track category acc. to EN 13481-2	Cat B	Cat D
Maximum axle load	180 kN	260 kN
Minimum curve radius	80 m	400 m

TYPICAL PERFORMANCE DATA of the complete fastening system*

Vertical static stiffness acc. to EN 13146-9	17,5 kN/mm, 22,5 kN/mm, 33 kN/mm
Ratio between dynamic and static stiffness	< 1,4
Clamping force of the fastening solution EN 13146-7	> 17 kN

ELASTOMERIC MATERIAL DATA*

Compliance with the material specification	ADIF ET 03.360.572.6
Electrical insulation	> 10^8 Ω
Fire resistance	EN 45545-2:2013 R9 HL3 EN 13501-1:2007+A1 Cfl s1

*Flexix is a provider of innovative customized elastomeric solutions. The data in this document indicates the typical performance of the parts currently on the market. Actual performance depends on several external factors. Please contact us to discuss how Flexix can tailor its products to specific operating conditions and requirements. The technical information in this document was accurate at the time of printing. Improvements may have been introduced since then as a result of our ongoing research and development programs.