ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L213393 - ADJUSTMENT SWITCHES

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1 Introduction

1.1 Asset Details

Class Code:	L213393
Class Name:	Adjustment Switches
Class Lineage:	Construction Products>Complete construction entities and components>Civil engineering works products>Railway products>Rails>Connections>Expansion Switches

1.2 Description

Expansion (or adjustment) switches provide an intentional gap in the rail to allow long sections of rail to expand or contract as the rail temperature changes or to accommodate the expansion or contraction of the track bed. Expansion switches are commonly installed where the track environment or track bed changes significantly leading to different rates of expansion for example at tunnel portals, viaducts etc. These joints are typically tapered to minimise noise and wheel rail impact forces.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

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2 Asset Tag Identification Rules

Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031) in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

e.g. CR076-BAF-12345

Information and guidance on the standard naming convention for all asset classes is contained within the latest revision of the Asset Naming Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

2.1 Example Images

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3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
Anchor Type		PD		Paddles	Description of how the restraints are attached to the sleeper, e.g. paddles
Clip Toe Load (Kilograms/Metre)	Kilograms/Metre	NU	2		The maximum clip loading
Clip Type		PD		Pandrol Heyback PVT Schwihag Unknown	Description of the clip type
Expansion Length (Metres)	Metres	NU	2		The maximum the switch can expand
From Meterage (Metres)	Metres	NU	2		The location of the start of the asset based on overall meterage. (For points asset this will be the same as the “To” Meterage)
Number of sleepers (#)	#	NU	0		Where the adjustment switch is on sleepers, the number of sleepers supporting the switch
Pad Material		CH			What material is the pad made of

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Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Pad Thickness (Millimetres)	Millimetres	NU	0		What is the pad thickness
Pad Type		CH			Description of the pad type
Rail Section Type		PD		113lb CEN60 UIC60 CEN56	Rail section type by standard code
Switch Blade Length (Metres)	Metres	NU	2		Length of the tapered adjustment switch blade
To Meterage (Metres)	Metres	NU	2		The location of the end of the asset based on overall meterage (For points asset this will be the same as the “From” Meterage)

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Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
LRS Code		PD		C.EB C.EB.CRW5 C.EB.CR1 C.EB.CR7 C.EB.TBC C.WB C.WB.CRW9 C.WB.CRW6 C.WB.CR2 C.WB.CR5 C.WB.TBA C.WB.TBB CNE.EB CNE.WB CSE.EB CSE.EB.CR11 CSE.WB CSE.EB.CR13 CSE.WB.CR15 Non Track	The Crossrail Linear Referencing Standard code (CRL1-XRL-O6-STD-CR001-00026) where the asset is located. When the asset is not located on track then non track should be selected. The LRS codes are as follows: C.EB - Central Section Eastbound C.EB.CRW5 - Crossover between W5 and W4 Points C.EB.CR1 - Crossover between C1 and C4 Points C.EB.CR7 - Crossover between C7 and C8 Points C.EB.TBC - Turnback C C.WB - Central Section Westbound C.WB.CRW9 - Crossover between W9 and W8 Points C.WB.CRW6 - Crossover between W6 and W3 Points C.WB.CR2 - Crossover between C2 and C3 Points C.WB.CR5 - Crossover between C5 and C6 Points C.WB.TBA - Turnback A C.WB.TBB - Turnback B CNE.EB - Central Section North East Spur Eastbound CNE.WB - Central Section North East Spur Westbound CSE.EB - Central Section South East Spur Eastbound CSE.EB.CR11 - Crossover between C11 and C12 Points CSE.WB - Central Section South East Spur Westbound CSE.EB.CR13 - Crossover between C13 and C14 Points CSE.WB.CR15 - Crossover between C15 and C16 Points Non Track - Non Track Assets

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

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4 Performance Data

This section is to be used to specify the performance data gathered from this Class of asset when in operation. This section will be populated once performance measures have been agreed with Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- Asset Naming Convention Document - CRL1-XR1-Z3-ADDSD-CR001-50413

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8 Crossrail Technical Approvals

Name	Role	Date
Mark Maher	Track	19-Sep-2014

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