TheMotion | TheSubframe
Subframe for TheWheel
a hardware composer

Technical Specification
Revision: 1.2
Date: 09/2019

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1 Intended Use
- To be used as the hardware connection for TheWheel™ to complete the system as an axle

2 Highlights
- Developed to connect and fit direct-drive in-wheel-motors within electric vehicles.
- Allows for easy plug and play integration by standard interfaces for air suspension and shock absorbers.
- Easy to integrate in air brake systems with Knorr brake calipers and disks

3 Features
- Allowing a low floor bus set up
- Proving the necessary rods for a complete assembly
- Be the housing for the mechanical brake system
- Guiding of electrical/pneumatic connections of the braking system
- Guiding of HV, CANbus and coolant connections of TheWheel™
4 Technical Data

Specifications

<table>
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<th>TheMotion</th>
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<tr>
<td>Product-line</td>
<td>TheMotion</td>
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<tr>
<td>Product ID</td>
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<td>Product Type</td>
<td>In-wheel motor powertrain axle</td>
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Functionality and key features

| Intended Use | Heavy duty automotive applications |

Technical Specifications

| Maximum axle load (technical) | 13,000 [kg] |
| Brake system | Knorr SN7 |

Cooling

| Coolant connections |

Environmental conditions

| Operating temperature | –40 [°C] to 65 [°C] |

Other features

| Designed to comply to GB/T 18488:2015 |

Dimensions and Boundaries

| Dimensions | See mechanical drawing page 6 |
| Mass | 218 [kg] |

Mechanical interfaces

| Suspension | 4x mounting position for suspension carrier |
| Axle guiding | 4x mounting position for axle guiding and alignment |

Compliance

| Quality Management System | ISO 9001:2015 TUV Approved |
System Overview

Appearance Impression

Product Accessories

✓ Product Manual
✓ Suspension carriers 4x
✓ Reaction rods 4x
5 System Layout
6 Mechanical Design
A long history of proven technology

Founded in the Netherlands in an inventor’s workshop, e-Traction offers bespoke solutions and superior technology in e-mobility that are based on solid expertise and hard-won experience.

Since 1981, we have developed electric traction technology, evolving to unique, award-winning, electric in-wheel powertrain technology. With our sustainable, integrated technology, only a bare minimum of components is required to reach the highest efficiency level. The simplicity of our drivetrain is the ultimate sophistication for full electric and hybrid vehicles.

By creating the most energy efficient electric powertrain solutions, environmental impacts, energy consumption and costs of ownership of mobility are lowered substantially, e-Traction develops, realizes and implements superior, distinguished and patented powertrain technology in e-mobility.

e-Traction is convinced that teaming up with the customer is the most efficient way to achieve the perfect solution. We offer development, implementation and services in a dedicated working method and also participate in prototype and demonstration projects.

“e-Traction and their next in-wheel motor technology platform offers a revolution in motion.”