

# PRODUCT ENVIRONMENT PROFILE

## T-BOLT



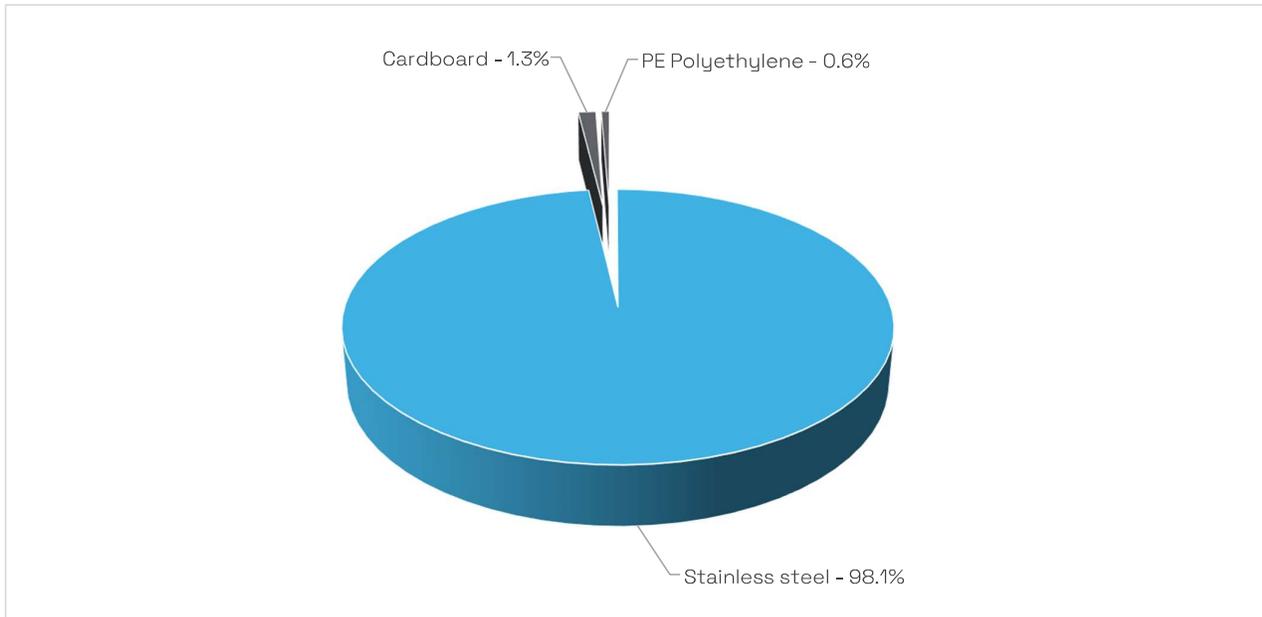


### General information

<b>Representative product</b>	T-BOLT - CSU795593
<b>Description of the product</b>	The main function of T-bolt is to establish the connection between rail and cantilever arm or Pendant where cable ladder/tray/Mesh tray is seated. T- bolt have also full flexibility in terms of height adjustability
<b>Functional unit</b>	To fasten rail and cantilever arm or Pendant where cable ladder/tray/Mesh tray is seated carrying load up to 800 kg for M8 and 1300 kg for M10 (safety working load) for 20 years.

### Constituent materials

<b>Reference product mass</b>	4905g, including the product, its packaging and additional elements, and accessories.
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Plastics	0.6%
Metals	98.1%
Others	1.3%

### Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium, or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.



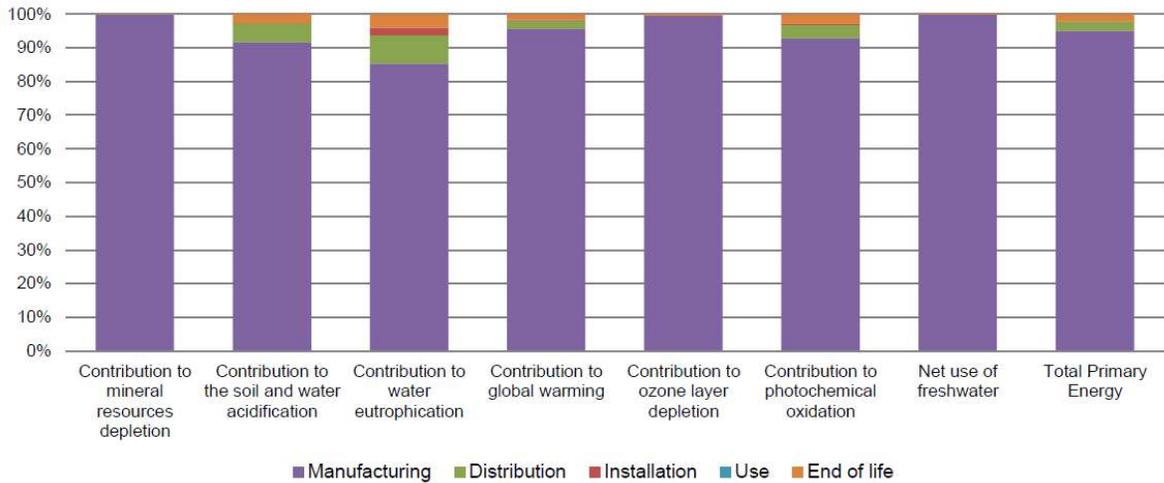
Additional environmental information

The T-BOLT presents the following relevant environmental aspects	
<b>Manufacturing</b>	Manufactured at a Wbe group production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 1.6 g, consisting of cardboard (68.75%), PE film (31.25%) Product distribution optimized by setting up local distribution canterers
<b>Installation</b>	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials is accounted during the installation phase (including transport to disposal).
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials  No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process.  Recyclability potential: <b>94%</b> Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

<b>Reference life time</b>	20 years			
<b>Product category</b>	Unequipped enclosures and cabinets			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	Non applicable for unequipped enclosures and cabinets			
<b>Geographical representativeness</b>	Sweden			
<b>Technological representativeness</b>	The main function of T-bolt is to establish the connection between rail and cantilever arm or Pendant where cable ladder/tray/Mesh tray is seated. T- bolt have also full flexibility in terms of height adjustability			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Manufacturing plant: Mora, Sweden	Electricity grid mix 1kV-60kV; AC. consumption mix, at consumer; 1kV - 60kV; SE	Electricity grid mix 1kV-60kV; AC. consumption mix, at consumer; 1kV - 60kV; SE	Electricity grid mix 1kV-60kV; AC. consumption mix, at consumer; 1kV - 60kV; SE

Compulsory indicators	T-BOLT - CSU795593						
	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	6.13E-05	6.13E-05	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	8.58E-04	7.86E-04	4.86E-05	0*	0*	2.31E-05
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1.33E-04	1.13E-04	1.12E-05	2.82E-06	0*	5.43E-06
Contribution to global warming	kg CO <sub>2</sub> eq	4.57E-01	4.38E-01	1.06E-02	1.45E-03	0*	7.49E-03
Contribution to ozone layer depletion	kg CFC11 eq	1.12E-07	1.12E-07	2.16E-11	0*	0*	4.79E-10
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	8.87E-05	8.24E-05	3.47E-06	3.48E-07	0*	2.50E-06
<b>Resources use</b>	<b>Unit</b>	<b>Total</b>	<b>Manufacturing</b>	<b>Distribution</b>	<b>Installation</b>	<b>Use</b>	<b>End of Life</b>
Net use of freshwater	m <sup>3</sup>	5.82E-03	5.81E-03	9.53E-07	0*	0*	9.16E-06
Total Primary Energy	MJ	5.33E+00	5.06E+00	1.51E-01	0*	0*	1.17E-01



Optional indicators	DEFEM MESH TRAY - 1149102, 1149156, 1149253, 1149180, 1149123, 1149155, 1149184						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4.41E+00	4.17E+00	1.50E-01	0*	0*	9.36E-02
Contribution to air pollution	m <sup>3</sup>	9.96E+01	9.83E+01	4.53E-01	0*	0*	8.23E-01
Contribution to water pollution	m <sup>3</sup>	1.56E+01	1.29E+01	1.75E+00	7.85E-02	0*	8.79E-01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	0.00E+00	0*	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	6.43E-02	6.40E-02	2.01E-04	0*	0*	1.31E-04
Total use of non-renewable primary energy resources	MJ	5.26E+00	4.99E+00	4.99E+00	0*	0*	1.17E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	4.35E-02	4.31E-02	2.01E-04	0*	0*	1.31E-04
Use of renewable primary energy resources used as raw material	MJ	2.09E-02	2.09E-02	0*	0*	0*	0
Use of nonrenewable primary energy excluding nonrenewable primary energy used as raw material	MJ	5.24E+00	4.97E+00	1.50E-01	0*	0*	1.17E-01
Use of nonrenewable primary energy resources used as raw material	MJ	2.59E-02	2.59E-02	0*	0*	0*	0*
Use of nonrenewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	4.54E+00	4.46E+00	0*	0*	0*	8.57E-02
Non hazardous waste disposed	kg	1.54E-01	1.53E-01	3.78E-04	1.05E-03	0*	3.60E-04
Radioactive waste disposed	kg	7.15E-05	7.07E-05	2.69E-07	0*	0*	5.51E-07
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	8.37E-02	8.06E-03	0*	0*	0*	7.57E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	5.00E-04	0*	0*	5.00E-04	0*	0*
Exported Energy	MJ	3.12E-07	3.12E-07	0*	0*	0*	0*
* represents less than 0.01% of the total life cycle of the reference flow							
**Life cycle assessment performed with EIME version EIME v5.8.0, database version 2016-11 in compliance with ISO14044.							
The manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).							



Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

Registration number	ENVPEP1907008_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	07/2019	Supplemented by	PSR-0003-ed1.1-EN-2015 10 16
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Independent verification of the declaration and data			
Internal	X	External	
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »			

\*\*LCA performed by Schneider Electric before the carve out.

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