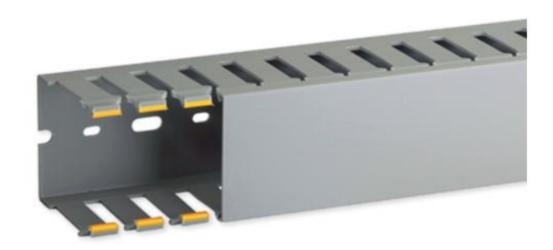




# **Product Environmental Profile**

T1 series wire duct (T1, T1-D, T1-EN, T1-N, T1-F, T1-EF, T1-E, TD, TPD)



# **Company information**

#### Iboco

132 Boulevard d'Europe F 67215 Obernai Cedex www.hagergroup.net

A question concerning the Product Environmental Profile: infopep@hager.com

## **References covered**

T1 series all dimensions and colors (T1, T1-D, T1-EN, T1-N, T1-F, T1-EF, T1-E, TD, TPD)

# Methodology

PEP has been performed according to the PCR version PEP-PCR-ed3-2015 04 02 and PSR version PSR-0003-ed1.1-2015 10 16 issued by the PEP ecopassport program.

For further information, please see the website of the program www.pep-ecopassport.org

# Reference product

# Reference product identification

T1 series wire duct - T1 60x60 (B00180)

#### **PSR** product Category:

Slotted cable trunking systems for cabinets

### **Functional unit**

Accomodate and protect the wiring along 1 meter for a reference life time of 20 years. The Slotted cable trunking system for cabinets with cross section 3180 mm² includes the profile and accessories that are representative of standard use

The functional unit is based on the use scenario recommended by the PCR for the category of the reference product.

## **Materials and substances**

All useful measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing.

Plast	Plastics		Metals			Others		
	g	%		g	%		g	%
PVC	567.50	94.1%				Cardboard + Paper	35.58	5.9%
						Other	0.02	<0.1%
Total mass of reference	otal mass of reference product : 602.99 g							

# **Manufacturing**

These products are manufactured by a site that has received an environmental certification ISO 14001.

# **Distribution**

The packaging has been designed in accordance with current regulations. In particular, the European directive 94/62/CE relative to packaging and packaging waste.

The used packaging is 100% recyclable or recoverable.

Packaging and logistic flows are continuously improved in order to reduce their impact.

### Installation

#### Installation processes

The processes to install the product are not considered in this study because of their weak impact compared to the other life cycles steps.

#### Installation elements (non delivered with the product)

Elements non delivered with the product and needed to install the product are not considered.

### Use

For the considered scenario, the product has no energy consumption.

Energy model of the use phase:

None

Consumables and maintenance:

None

# **End of life**

Considering the complexity and the lack of knowledge of the electric and electronic recycling channel and processes, the standard scenario set in the PCR is considered.

The recycling potential of the product is: 3%. The calculation of this rate is based on the method of the IEC/TR 62635.

# **Environmental impacts**

Evaluation of the environmental impact covers the following life cycle stages: raw materials + manufacturing (RMM), distribution (D), installation (I), use (U) and end of life (EoL).

All calculations are done with EIME software version 5.9.3 with the database version CODDE-2022-01 .

PEP representative of the covered products marketed in: Europe

Energy models considered for each phase

Manufacturing	Distribution	Installation	Use	End Of Life
RMM	D	I	U	EoL
Europe	-	Europe	-	

#### **Environmental impact indicators**

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Global Warming	kg CO₂ eq.	2.39E+00	1.05E-01	2.20E-03	0.00E+00	6.81E-02	2.56E+00
Ozone Depletion	kg CFC-11 eq.	2.39E-07	2.13E-10	1.50E-11	0.00E+00	1.74E-09	2.41E-07
Acidification of soil and water	kg SO2 eq	4.70E-03	4.72E-04	1.08E-05	0.00E+00	2.59E-04	5.44E-03
Eutrophication	kg PO <sub>4</sub> 3- eq.	8.74E-04	1.08E-04	1.16E-05	0.00E+00	2.95E-04	1.29E-03
Photochemical Ozone Creation	kg C₂H₄ eq.	4.44E-04	3.35E-05	7.62E-07	0.00E+00	2.02E-05	4.99E-04
Depletion of abiotic resources - elements	kg Sb eq	1.28E-05	4.20E-09	9.57E-11	0.00E+00	4.39E-09	1.28E-05
Depletion of abiotic resources – fossil fuels	MJ	2.92E+01	1.48E+00	2.94E-02	0.00E+00	6.63E-01	3.13E+01
Water Pollution	m³	3.30E+02	1.73E+01	3.41E-01	0.00E+00	7.69E+00	3.55E+02
Air Pollution	m³	2.50E+02	4.31E+00	2.79E-01	0.00E+00	8.08E+00	2.63E+02

#### Resource use indicators

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials		2.14E+00	1.98E-03	3.46E-04	0.00E+00	1.87E-02	2.16E+00
Use of renewable primary energy resources as raw materials		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources	MJ	2.14E+00	1.98E-03	3.46E-04	0.00E+00	1.87E-02	2.16E+00
Use of non-renewable primary energy, excluding non renewable primary energy resources used as raw materials	MJ	5.18E+01	1.48E+00	2.99E-02	0.00E+00	7.24E-01	5.40E+01
Use of non-renewable primary energy resources as raw materials		1.27E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E+01
Total use of non renewable primary energy resources	MJ	6.45E+01	1.48E+00	2.99E-02	0.00E+00	7.24E-01	6.67E+01
Total use of primary energy	MJ	6.66E+01	1.49E+00	3.03E-02	0.00E+00	7.42E-01	6.89E+01
Use of secondary materials	kg	2.96E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-02
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net fresh water use	m³	1.59E-01	9.40E-06	6.88E-07	0.00E+00	6.00E-05	1.59E-01

### Waste category indicators

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Hazardous waste disposed	kg	1.27E+00	3.73E-03	3.65E-02	0.00E+00	6.34E-01	1.94E+00
Non-hazardous waste disposed	kg	6.96E-02	0.00E+00	8.05E-06	0.00E+00	3.02E-04	6.99E-02
Radioactive waste disposed	kg	8.78E-04	2.66E-06	1.88E-07	0.00E+00	2.17E-05	9.02E-04

#### **Output flow indicators**

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

The environmental impact of a system covered by the PEP Ecopassport® other than the reference system for which it was drawn up can be calculated by multiplying the values of the environmental indicators by the corresponding factor.

Series	T1
Dimension	Factor
60x60*	1,0
25x30	0,4
25x40	0,5
40x40	0,6
60x40	0,8
25x60	0,6
75x125	1,9
100x60	1,5
25x100	1,0
120x60	1,7
80x40	1,0
100x40	1,1
80x60	1,3
15x18	0,2
15x30	0,2
15x40	0,3
15x60	0,5
100x125	2,2
40x60	0,8
60x100	1,5
80x80	1,5
40x80	0,9
Series	TD

Series	TD
Dimension	Factor
100x125	2,1
37,5x50	0,7
37,5x75	0,9
125x75	2,2
50x37,5	0,7
25x25	0,4

40,000	0,9	-
Series	TD	
Dimension	Factor	
100x125	2,1	
37,5x50	0,7	
37,5x75	0,9	
125x75	2,2	
50x37,5	0,7	
25x25	0.4	

Dimension	Factor
25x40	0,4
40x40	0,6
60x40	0,8
25x60	0,5
40x60	0,7
60x60	1,0
80x60	1,2
100x60	1,4
25x80	0,7
40x80	0,9
60x80	1,2
80x80	1,4
100x80	1,7
120x80	2,1
40x100	1,1
60x100	1,4
80x100	1,6
100x100	1,9
Series	T1-EF

Series	T1-EF
Dimension	Factor
120x80	2,2
40x100	1,2
60x100	1,5
80x100	1,8
25x80	0,8
40x80	1,0
60x80	1,3
80x80	1,5
100x80	1,8
100x100	2,1
25x100	1,0

Series	T1-EN
Dimension	Factor
60x40	0,8
80x40	1,0
80x60	1,2
100x60	1,5
120x80	2,2
120x60	1,7
100x40	1,1
25x100	1,0
25x40	0,4
25x60	0,6
25x80	0,7
40x40	0,6
40x60	0,7
40x80	0,9
40x100	1,2
60x60	1,0
60x80	1,2
60x100	1,5
80x80	1,5
80x100	1,7
100x80	1,7
100x100	2,0

Series	TPD	
Dimension	Factor	
37,5x50	0,7	
75x50	1,1	
125X50	1,1 1,9	
50X50	0,9	
100x50	1,4	

ponding factor.				
Series	T1-N			
Dimension	Factor			
25x30	0,4			
60x40	0,8			
80x40	1,0			
80x60	1,2			
100x60	1,5			
120x80	2,2			
150x100	2,9			
120x60	1,7			
100x40	1,1			
25x40	0,4			
25x60	0,6			
25x80	0,7			
25x100	1,0			
40x40	0,6			
40x60	0,7			
40x80	0,9			
40x100	1,2			
60x60	1,0			
60x80	1,2			
60x100	1,5			
80x80	1,5			
80x100	1,7			
100x80	1,7			
100x100	2,0			

Series	T1-F
Dimension	Factor
120x80	2,2
25x80	0,8
60x80	1,3
80x80	1,5
100x80	1,8
40x100	1,2
100x100	2,1
150x100	3,0
60x100	1,5
40x80	1,0
25x100	1,0
80x100	1,8

Series	T1-E	
Dimension	Factor	
40x40	0,6	
100x60	1,5	
120x60	1,7	
80x40	1,0	
100x40	1,1	
25x60	0,6	
40x60	0,8	
60x60	1,0	
60x40	0,8	
80x60	1,3	
25x40	0.5	

# Verification

Registration N°: HAGE-00699-V01.01-EN	Drafting Rules PEF	PEP-PCR-ed3-2015 04 02			
	Supplemented by PSR	R-0003-ed1.1-201	5 10 16		
Verifier accreditation N°: VH35	Information and reference documents: www.pep-ecopassport.org				
Date of issue: 7-2022	Validity period: 5 years				
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010					
Internal ● External ○					
The PCR review was conducted by a panel of experts chaired by Phili	ope Osset (SOLINNEN)				
PEP are compliant with XP C08-100-1:2014 The elements of the present PEP cannot be compared with elements from another program			PEP eco PASS		
Document in compliance with ISO 14025 : 2010 « Environmental labe declarations »	s and declarations. Type III env	vironmental	PORT		

The picture has no contractual value.

All numerical values indicated in this document may vary and depend of many factors such as the tolerance related to materials, the usage and environment conditions of the products, installation characteristics ... , real values for a product in a concrete application may therefore change.

The usage time mentioned in this document is an average duration chosen for the need of the calculations. This value cannot be assimilated to the minimum, average or real life time.

The responsibility of the company, issuing this document, can never be engaged if differences would be noticed between the values given by this document and real ones, whatever the causes and/or consequences would be.

<sup>\*</sup>reference product