

## Product Environmental Profile

### GSIG-GSI flexible spiral pipe 2311



#### Company information

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#### References covered

GSIG-GSI flexible spiral pipe 2311, all colors and diameters (8-10-12-14-16-20-22-25-28-32-35-40-50) and accessories.  
Following list concerns only pipe references:  
B10462, B10463, B10464, B10466, B10467, B10469, B10471, B10472, B10474, B10475, B10476, B10477, B10478, B10448, B10449, B10450, B10451, B10452, B10453, B10454, B10455, B10456, B10457, B10458, B10459, B10460

#### 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](http://www.pep-ecopassport.org)

## Reference product

### Reference product identification

GSIG flexible spiral pipe 2311, diameter 16, grey (B10467)

### PSR product Category :

Conduit system

## Functional unit

Accommodate and protect the wiring along 1 meter for a reference life time of 20 years.

The surface-mounted or embedded flexible conduit system with cross-section (50 - 1964) mm<sup>2</sup> 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.

Plastics			Metals			Others		
	g	%		g	%		g	%
PVC	108.15	98.9%				Cardboard + Paper	0.04	<0.1%
PE-LD	0.71	0.6%				Other	0.01	<0.1%
PET	0.49	0.4%						
Total mass of reference product :			109.35 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: 0%. 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 5.9.4 with the database version CODDE-2022-01 .

PEP representative of the covered products marketed in: Europe

Energy models considered for each phase

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

### Environmental impact indicators

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Global Warming	kg CO <sub>2</sub> eq.	5.35E-01	1.90E-02	5.22E-04	0.00E+00	1.26E-02	5.67E-01
Ozone Depletion	kg CFC-11 eq.	1.42E-08	3.86E-11	1.33E-11	0.00E+00	3.22E-10	1.45E-08
Acidification of soil and water	kg SO <sub>2</sub> eq.	5.05E-04	8.56E-05	1.99E-06	0.00E+00	4.80E-05	6.41E-04
Eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq.	1.72E-04	1.97E-05	2.26E-06	0.00E+00	5.47E-05	2.49E-04
Photochemical Ozone Creation	kg C <sub>2</sub> H <sub>4</sub> eq.	7.56E-05	6.08E-06	1.55E-07	0.00E+00	3.74E-06	8.56E-05
Depletion of abiotic resources - elements	kg Sb eq	6.83E-08	7.62E-10	3.36E-11	0.00E+00	8.11E-10	6.99E-08
Depletion of abiotic resources – fossil fuels	MJ	4.82E+00	2.68E-01	5.08E-03	0.00E+00	1.23E-01	5.22E+00
Water Pollution	m <sup>3</sup>	6.19E+01	3.13E+00	5.89E-02	0.00E+00	1.42E+00	6.65E+01
Air Pollution	m <sup>3</sup>	3.32E+01	7.81E-01	6.19E-02	0.00E+00	1.49E+00	3.55E+01

### 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	MJ	2.30E-01	3.59E-04	1.43E-04	0.00E+00	3.45E-03	2.33E-01
Use of renewable primary energy resources as raw materials	MJ	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	2.30E-01	3.59E-04	1.43E-04	0.00E+00	3.45E-03	2.33E-01
Use of non-renewable primary energy, excluding non renewable primary energy resources used as raw materials	MJ	6.50E+00	2.69E-01	5.55E-03	0.00E+00	1.34E-01	6.91E+00
Use of non-renewable primary energy resources as raw materials	MJ	2.46E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E+00
Total use of non renewable primary energy resources	MJ	8.95E+00	2.69E-01	5.55E-03	0.00E+00	1.34E-01	9.36E+00
Total use of primary energy	MJ	9.18E+00	2.69E-01	5.69E-03	0.00E+00	1.37E-01	9.60E+00
Use of secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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	m <sup>3</sup>	2.89E-02	1.71E-06	4.60E-07	0.00E+00	1.11E-05	2.89E-02

## Waste category indicators

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Hazardous waste disposed	kg	2.33E-02	6.77E-04	4.86E-03	0.00E+00	1.17E-01	1.46E-01
Non-hazardous waste disposed	kg	1.52E-02	0.00E+00	2.31E-06	0.00E+00	5.58E-05	1.53E-02
Radioactive waste disposed	kg	1.38E-05	4.82E-07	1.67E-07	0.00E+00	4.02E-06	1.84E-05

## 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.


References	B10462 B10448	B10463 B10449	B10464 B10450	B10466 B10451	B10467* B10452	B10469 B10453	B10471 B10454	B10472 B10455	B10474 B10456	B10475 B10457	B10476 B10458	B10477 B10459	B10478 B10460
Product Type	GSIG/GSI Ø8	GSIG/GSI Ø10	GSIG/GSI Ø12	GSIG/GSI Ø14	GSIG/GSI Ø16	GSIG/GSI Ø20	GSIG/GSI Ø22	GSIG/GSI Ø25	GSIG/GSI Ø28	GSIG/GSI Ø32	GSIG/GSI Ø35	GSIG/GSI Ø40	GSIG/GSI Ø50
Factor	0.25	0.39	0.56	0.77	1.00	1.56	1.89	2.44	3.06	4.00	4.79	6.25	9.77

External diameter [mm]	11.5	14.7	16.4	18.9	20.7	24.7	27.7	30.6	33.5	38	41	46.4	57
Internal diameter [mm]	8	10	12	14	16	20	22	25	28	32	35	40	50
Internal section used for functional unit [mm²]	50	79	113	154	201	314	380	491	616	804	962	1257	1963

\* reference product

## Verification

Registration N°: HAGE-00741-V01.01-EN	Drafting Rules	PEP-PCR-ed3-2015 04 02
	Supplemented by	PSR-0003-ed1.1-2015 10 16
Verifier accreditation N°: VH35	Information and reference documents: <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>	
Date of issue: 12-2022	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 Philippe Osset (SOLINNEN)		
PEP are compliant with XP C08-100-1:2014		
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.		
Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »		

### Nota :

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.

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