

Product Environmental Profile

Connected lock Door Keeper



Reference product



> Reference product

Somfy Door Keeper

Ref **1241680**

> Functional unit

Ensure the opening and closing movements of a wirelessly controlled lock by performing 36,500 operating cycles, with a maximum torque of 2 Nm, over a 10-year reference service life.

This product is intended to be installed on a standard door lock. All the elements delivered with the connected lock are considered (mounting plate, removable battery, USB recharging cable).

This PEP is representative of a product distributed and used worldwide.



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			Other		
	g	%		g	%		g	%
ABS	42,0	2,8%	Zamak	656,0	44,1%	Lithium	13,2	0,9%
POM	22,1	1,5%	Steel	39,0	2,6%	Ferrite	13,0	0,9%
PBT	16,5	1,1%	Stainless Steel	34,9	2,3%	Neodymium	11,5	0,8%
PET	11,2	0,8%	Copper	18,5	1,2%			
Nylon 66	6,8	0,5%	Aluminium	15,6	1,0%			
Other	64,1	4,3%	Other	12,1	0,8%			
						Packaging		
						Cardboard	422,0	28,4%
						Paper	88,0	5,9%
Total mass of reference product: 1490g								
Estimated recyclable content: 64,4%								

> CHEMICAL SUBSTANCES

All our products comply, on voluntary basis, with the restrictions on substances specified in the RoHS directive.

> REACH

At the date of PEP release, the product doesn't contain, as far as we knew, any substance of the candidate list to authorization of the REACH regulation with a concentration above 0,1% w/w.



— Manufacturing

The devices covered in this PEP are manufactured in China in a production that have adopted environmental management approach.



— Distribution

The packaging is 100% recyclable. Paper is 100% recycled fibers and cardboard is minimum 50% recycled fibers. Packaging is continuously improved by reducing the amount and using a maximum of recycled material.



— Installation

> Installation processes

The product needs to be fixed to the door by screwing a plate. The installation of the product may consume electrical energy for drilling and screwing if power tools are used, but the lack of a standardized installation scenario and the probably extremely low amount of energy involved allows it to be neglected.



— Use

> An electricity consumption of 348 Wh has been considered over the reference lifetime to recharge the product's removable battery 20 times based on 10 opening and closing cycles per day. The average torque considered is 0.6Nm.

> Energy model of the use phase: Europe mix

> As an indication, insofar as the device is connected, an estimate of the environmental impact on the global warming indicator was made on the basis of the energy consumption related to data transfers on the Internet network and their storage on Somfy's IT servers during the reference lifespan. A value of 0.83 kg CO2 equivalent was thus calculated but is not considered in the table of results.

> The product requires the use of a smartphone to be controlled, but the environmental impacts associated with it were excluded from the scope of the study. Similarly, the Somfy Tahoma automation box to which this product can be linked has not been considered. However, it is the subject of a dedicated PEP (SOMF-00055-V01.01-EN).



— End of life

> Typical transport conditions

At the end of its life, this product requires specific treatment in a specialized facility for the reprocessing of electrical and electronic waste. For more information on the WEEE channels specific to your country, please contact your local representative.

Considering the complexity of the electric and electronic recycling channel and our lack of knowledge about the end of life processes implemented all around the world, we considered as indicated in PCR:

- 1000 km of local transport
- A specific treatment for the lithium-ion battery and a landfill treatment for other constitutive materials

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Environmental impacts

Evaluation of the environmental impact covers the following life cycle stages: manufacturing, distribution, installation, use and end of life.
All calculations are done with EIME software version EIME© v5.8.1

Indicators	Global	Unit	Manufacturing	Distribution	Installation	Usage	End of Life
Global warming	2,04E+01	kg.equivalent. CO2	1,90E+01	4,43E-01	6,83E-01	1,71E-01	8,84E-02
Ozone depletion	4,15E-06	kg.equivalent. CFC-11	4,13E-06	7,59E-10	1,76E-09	1,11E-08	3,53E-09
Acidification of soil and water	5,99E-02	kg.equivalent. SO2	4,62E-02	1,25E-02	1,65E-04	7,11E-04	3,24E-04
Water eutrophication	1,16E-02	kg.equivalent. PO4 3-	8,68E-03	1,24E-03	1,21E-03	4,29E-05	4,37E-04
Photochemical Ozone formation	5,37E-03	kg.equivalent. C2H4	4,52E-03	6,22E-04	1,64E-04	3,91E-05	2,47E-05
Depletion of abiotic resources - elements	1,68E-03	kg.equivalent. Sb	1,68E-03	1,60E-08	1,60E-09	1,48E-08	1,88E-08
Depletion of abiotic resources fossil fuels	1,75E+02	MJ	1,67E+02	5,62E+00	4,52E-01	1,94E+00	9,85E-01
Water pollution	1,59E+03	m³	1,47E+03	6,59E+01	3,56E+01	7,04E+00	1,06E+01
Air pollution	2,91E+03	m³	2,83E+03	6,07E+01	5,01E+00	7,34E+00	8,52E+00
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	-1,40E+00	MJ	-1,86E+00	7,23E-03	3,29E-03	4,33E-01	8,41E-03
Use of renewable primary energy resources used as raw materials	9,94E+00	MJ	9,94E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	8,54E+00	MJ	8,09E+00	7,23E-03	3,29E-03	4,33E-01	8,41E-03
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	2,28E+02	MJ	2,17E+02	5,65E+00	4,93E-01	2,97E+00	1,07E+00
Use of non-renewable primary energy resources used as raw materials	4,48E+00	MJ	4,48E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	2,32E+02	MJ	2,22E+02	5,65E+00	4,93E-01	2,97E+00	1,07E+00
Use of secondary materials	1,95E-02	kg	1,95E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	0,00E+00	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	0,00E+00	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water	9,18E-01	m³	3,00E-01	3,42E-05	4,17E-05	6,18E-01	1,47E-04
Hazardous waste disposed of	3,24E+01	kg	3,23E+01	0,00E+00	4,88E-04	8,89E-05	6,68E-02
Non-hazardous waste disposed of	1,89E+01	kg	1,67E+01	1,36E-02	5,21E-01	6,36E-01	9,88E-01
Radioactive waste disposed of	3,37E-03	kg	2,92E-03	9,47E-06	4,57E-06	4,25E-04	1,12E-05
Components for re-use	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	5,55E-02	MJ by energy vector	5,04E-03	0,00E+00	5,04E-02	0,00E+00	0,00E+00
Total use of primary energy during the life cycle	2,41E+02	MJ	2,30E+02	5,66E+00	4,96E-01	3,41E+00	1,08E+00

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Registration number : SOMF-00053-V01.02-EN	Drafting Rules: PCR-ed3-EN-2015 04 02
Accreditation number: VH18	Programme information: www.pep-ecopassport.org
Date of issue: 11-2020	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 Internal ☐ External ☒ Bureau Veritas LCIE	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
PEP are compliant with XP C08-100-1: 2016	
The elements of the present PEP cannot be compared with elements from another programme.	
Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"	
Somfy contact: Justine ZAWADA, Sustainable Development Engineer, justine.zawada@somfy.com	

