

HALOGEN FREE CONDUITS

PEP ecopassport®

Product Environmental Profile



Registration number:	ABBG-00749-V01.01-EN	Drafting rules:	PCR-ed4-EN-2021 09 06
Contact information:	Ella Helynranta - ella.helynranta@fi.abb.com	Supplemented by:	PSR-0005-ed3-EN-2023 06 06
Verifier accreditation number:	VH08	Information and reference documents:	www.pep-ecopassport.org
Date of issue:	03-2025	Validity period:	5 years
Independent verification of the declaration and data in compliance with ISO 14025: 2006			
Internal:	☐	External:	☒
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (Ddomain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022 The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"			





ABB Purpose & Embedding Sustainability

ABB is committed to continually promoting and embedding sustainability across its operations and value chain, aspiring to become a role model for others to follow. With its ABB Purpose, ABB is focusing on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior. The context of this PEP cannot be compared with the content based on another program/database.

Scan QR code for more information

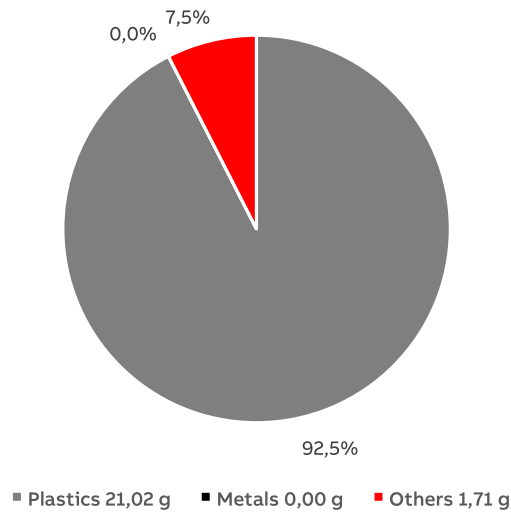


General information

Reference product	2TKA00004492
Description of the product	JMKL20HF Conduit bend, HF, Ø20 mm, 90°
Functional unit	Ensure to safety and working efficiency in conduit installations for the reference life of 20 years.
Other products covered	The PEP covers other ABB WA's Halogen free Conduit bends and pre-bent conduits. These products are listed on page 9
Manufacturing address	Porvoon Sisäkehä 2, Porvoo Finland www.new.abb.com



Constituent Materials



Total weight of reference product and packaging

22,7

g

Plastics as % of weight		Metals as % of weight		Others as % of weight	
Name and CAS number	Weight%	Name and CAS number	Weight%	Name and CAS number	Weight%
PC/ABS	91,4			Carton	7,5
LDPE film	1,1				
Synthetic rubber based adhesive	< 0,01				

The material used in the conduit bends is Halogen free. The analysed product is in conformity with the provisions of Low Voltage Directive 2014/35/EU, RoHS directive 2011/65/EU, covering 2015/863(EU), REACH regulation No 1907/2006, and national legislation.



Additional Information

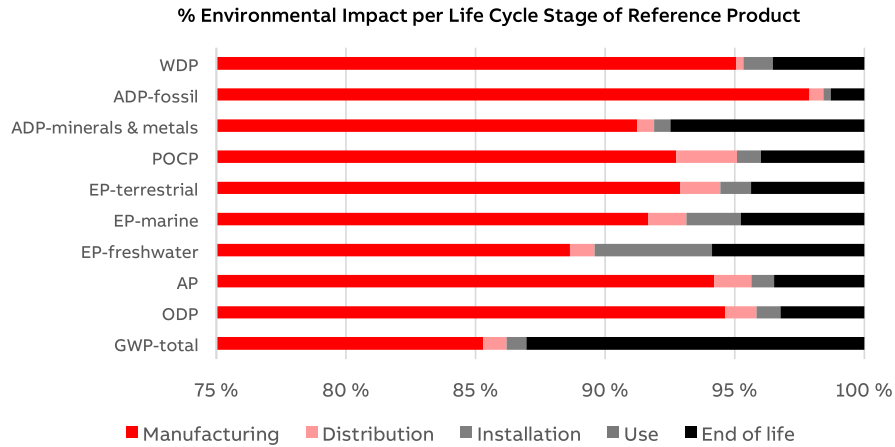
Manufacturing	Includes the environmental impacts associated with extraction and processing of the raw materials used to produce the product and its packaging, transport to the manufacturing site and assembly, covering modules A1-A3. The product is manufactured at an ISO 14000 certified plant.
Distribution	Includes the transportation of the packaged product from the manufacturer's last logistic platform to the distributor, covering module A4
Installation	Includes the manual installation of the products and the end-of-life of packaging, covering module A5.
Use	The product does not require special maintenance operations, covering modules B1-B7.
End of life	Includes the transportation of the product to the final end-of-life treatment site and treatment processes, covering modules C1-C4.
Benefits and loads beyond the system boundaries	Prevented impacts of recycling materials, covering module D.



Environmental Impacts

Reference lifetime	20 years
Product category	Other equipment
Installation elements	No additional materials needed
Use scenario	Non applicable for this product
Geographical representativeness	Finland and Sweden
Technological representativeness	The manufacturing processes considered are representative of the products production
Software and database used	Software: SimaPro version 9.6.0.1 Database: ecoinvent 3.10 and Industry data 2.0
Energy model used	
Manufacturing	Finland
Installation	Finland and Sweden
Use	-
End of life	Finland and Sweden

Common base of mandatory indicators



Environmental impact indicators

Indicator		Unit	Total	Manu- facturing	Distri- bution	Installation	Use	End of life	Benefits
GWP	Total	kg CO2 eq.	1,05E-01	8,97E-02	9,43E-04	8,09E-04	0,00E+00	1,37E-02	-2,65E-02
	Fossil	kg CO2 eq.	1,03E-01	8,73E-02	9,42E-04	7,35E-04	0,00E+00	1,37E-02	-2,65E-02
	Biogenic	kg CO2 eq.	2,15E-03	2,07E-03	4,65E-07	6,94E-05	0,00E+00	5,80E-06	4,71E-05
	Luluc	kg CO2 eq.	2,92E-04	2,72E-04	3,42E-07	4,69E-06	0,00E+00	1,46E-05	-4,96E-05
ODP		kg CFC-11 eq.	1,60E-09	1,51E-09	1,93E-11	1,48E-11	0,00E+00	5,16E-11	-4,61E-10
AP		H+ eq.	2,41E-04	2,27E-04	3,45E-06	2,11E-06	0,00E+00	8,37E-06	-5,98E-05
EP	Freshwater	kg P eq.	6,81E-06	6,04E-06	6,46E-08	3,09E-07	0,00E+00	4,00E-07	-8,26E-07
	Marine	kg N eq.	6,02E-05	5,51E-05	8,87E-07	1,26E-06	0,00E+00	2,87E-06	-1,58E-05
	Terrestrial	mol N eq.	6,21E-04	5,77E-04	9,69E-06	7,37E-06	0,00E+00	2,71E-05	-1,63E-04
POCP		kg NMVOC eq.	1,99E-04	1,85E-04	4,67E-06	1,85E-06	0,00E+00	7,94E-06	-5,07E-05
ADP	Minerals & metals	kg SB eq.	3,91E-07	3,56E-07	2,55E-09	2,48E-09	0,00E+00	2,92E-08	-4,86E-08
	Fossil	MJ	2,53E+00	2,47E+00	1,40E-02	7,28E-03	0,00E+00	3,27E-02	-7,37E-01
WDP		m³ eq. depr.	2,44E-02	2,32E-02	6,54E-05	2,78E-04	0,00E+00	8,61E-04	-6,45E-03

Resource use indicators

Indicator	Unit	Total	Manu- facturing	Distribution	Installation	Use	End of life	Benefits
PERE	MJ	2,90E-01	2,77E-01	2,11E-04	1,30E-03	0,00E+00	1,12E-02	-6,73E-02
PERM	MJ	2,20E-02	2,20E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,12E-01	2,99E-01	2,11E-04	1,30E-03	0,00E+00	1,12E-02	-6,73E-02
PENRE	MJ	1,88E+00	1,82E+00	1,40E-02	7,30E-03	0,00E+00	3,27E-02	-7,37E-01
PENRM	MJ	6,50E-01	6,50E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,53E+00	2,47E+00	1,40E-02	7,30E-03	0,00E+00	3,27E-02	-7,37E-01

Common base of mandatory indicators

Use of secondary materials, water, and energy resources

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
SM	kg	1,31E-03	1,31E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	9,01E-04	8,55E-04	2,18E-06	1,02E-05	0,00E+00	3,34E-05	-2,11E-04

Waste category indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
HWD	kg	6,05E-06	5,84E-06	9,13E-08	3,25E-08	0,00E+00	8,79E-08	-1,79E-06
N-HWD	kg	5,11E-02	5,10E-02	7,67E-05	9,55E-06	0,00E+00	5,40E-05	-1,83E-02
RWD	kg	3,48E-05	3,45E-05	4,11E-09	1,48E-08	0,00E+00	3,24E-07	-1,08E-05

Output flow indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
CfRu	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MfR	kg	7,22E-03	0,00E+00	0,00E+00	7,76E-04	0,00E+00	6,45E-03	0,00E+00
MfER	kg	8,82E-03	3,38E-03	0,00E+00	9,51E-05	0,00E+00	5,34E-03	0,00E+00
EE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Other indicators

Indicator		Unit	Total
Biogenic Carbon	Product	kg of C	0,00E+00
	Packaging	kg of C	7,69E-04

Extrapolation Factors

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manu- facturing	Distri- bution	Installation	Use	End of life	Benefits
2TKA00004492	1,00	1,00	1,00	1,00	1,00	1,00
2TKA00004491	0,77	0,77	1,08	1,00	0,74	0,77
2TKA00004493	1,79	1,79	2,78	1,00	1,70	1,79
2TKA00004494	3,25	3,25	3,18	1,00	3,26	3,25
2TKA00004495	5,16	5,16	8,00	1,00	4,89	5,16
2TKA00004496	11,66	11,66	13,32	1,00	11,51	11,66
2TKA00004497	1,65	1,65	4,16	1,00	1,41	1,65
2TKA00004498	1,52	1,52	2,40	1,00	1,44	1,52
2TKA00004499	2,16	2,16	2,93	1,00	2,09	2,16
2TKA00004500	2,64	2,64	3,46	1,00	2,56	2,64
2TKA00004501	1,46	1,46	1,66	1,00	1,44	1,46
2TKA00004741	1,50	1,50	2,00	1,00	1,46	1,50
2TKA00004742	1,85	1,85	2,93	1,00	1,75	1,85
2TKA00004743	0,53	0,53	0,77	1,00	0,51	0,53
2TKA00004744	1,10	1,10	1,29	1,00	1,08	1,10
2TKA00004745	2,15	2,15	2,59	1,00	2,11	2,15
2TKA00004746	1,90	1,90	2,59	1,00	1,84	1,90
2TKA00004747	2,97	2,97	3,46	1,00	2,92	2,97
2TKA00004702	4,81	4,81	16,52	1,00	3,72	4,81
2TKA00004704	5,99	5,99	16,52	1,00	5,00	5,99
2TKA00004706	4,71	4,71	18,71	1,00	3,40	4,71

Glossary

Environmental impact Indicators			
GWP-total	Global Warming Potential total (Climate change)		
GWP-fossil	Global Warming Potential fossil		
GWP-biogenic	Global Warming Potential biogenic		
GWP-luluc	Global Warming Potential land use and land use change		
ODP	Depletion potential of the stratospheric ozone layer		
AP	Acidification potential		
EP-freshwater	Eutrophication potential - freshwater compartment		
EP-marine	Eutrophication potential - fraction of nutrients reachin marine end compartment		
EP-terrestrial	Eutrophication potential - Accumulated Exceedance		
POCP	Formation potential of tropospheric ozone		
ADP-m&m	Abiotic Depletion for non-fossil resources potential		
ADP-fossil	Abiotic Depletion for fossil resources potential, WDP		
WDP	Water deprivation potential		
Resource indicators			
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw		
PENRM	Use of non-renewable primary energy resources used as raw material		
PENRT	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials		
PERE	Use of renewable primary energy excluding non-renewable primary energy resources used as raw material.		
PERM	Use of renewable primary energy resources used as raw material		
PERT	Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)		
Secondary materials, water and energy resources		Waste category indicators	
SM	Use of secondary materials	HWD	Hazardous waste disposed
RSF	Use of renewable secondary fuels	N-HWD	Non-hazardous waste disposed
NRSF	Use of non-renewable secondary fuels	RWD	Radioactive waste disposed
FW	Net use of fresh water		
Output flow indicators			
CfRu	Components for re-use		
MfR	Materials for recycling		
MfER	Materials for energy recovery		
EE	Exported Energy		