

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Dolphin Inform Sensor tap
Dolphin Solutions Ltd



EPD HUB, HUB-0313

Publishing date 26 February 2023, last updated date 26 February 2023, valid until 26 February 2028

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Dolphin Solutions
Address	Southpoint, Compass Park, Junction Road, Bodiam, East Sussex. U.K. TN32 5BS
Contact details	info@dolphinsolutions.co.uk
Website	www.dolphinsolutions.co.uk

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with modules A4, A5, C1-C4, D
EPD author	Joe Johnson & Chris Brooks
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal certification <input checked="" type="checkbox"/> External verification
EPD verifier	E.A as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Dolphin Inform Sensor tap
Additional labels	-
Product reference	DS101,102,103,104.111,112,113,114, 121, 122, 211,213, 221, 223. See Appendix 1 for configurations.
Place of production	United Kingdom
Period for data	2021
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3	-4.5, +13.5 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of Dolphin Inform Sensor tap
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	7.94
GWP-total, A1-A3 (kgCO ₂ e)	8.06
Secondary material, inputs (%)	38.4
Secondary material, outputs (%)	73.2
Total energy use, A1-A3 (kWh)	34.9
Total water use, A1-A3 (m ³ e)	0.1

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Founded on the core values of care, quality, integrity, and enthusiasm, we take pride in having helped to revolutionise commercial washrooms since 1999. With innovative and creative solutions, we have addressed the needs of clients across the globe.

For nearly 30 years, we've worked closely with architects, contractors, and developers to create beautiful, high-performance, and sustainable commercial washrooms featuring state-of-the-art technology.

Dolphin Solutions remains relentless in its aim to redefine washroom innovation that incorporates beauty, timeless design, and functionality with high regard for user experience and focuses on a sustainable cradle-to-cradle commitment.

PRODUCT DESCRIPTION

Panel and counter mounted commercial washroom taps with ultra-low flow rate, infrared sensors, and SMART technology.

Economical supply of water for hand washing within a washroom environment.

1.4401 (316) Marine grade stainless steel.

Straight, 55° or 90° spout options with Infrared Touch Free activation. (Sensor mounted in end of spout for panel mounted units or vertical body for counter mounted units)

Flow rate – nominal 3.5 litres/minute (other flow rates such as 1.75 and 1.25 LPM available)

Operating pressure: 0.5 bar minimum to 8.0 bar maximum

Maximum operating water temperature - 65°C

Power supply - Nominal current: Less than 1mA. Nominal power: Less than 1W.

urity time can be adjusted – default 20 seconds (60 seconds max)
IP68 connector

Complies with the following certifications: SKA, WELL, DOC M, and WRAS and can contribute indirectly to BREEAM & LEED building accreditations. See catalogue details at: https://www.dolphinsolutions.co.uk/?s=DS*** (***) - insert three numeral tap code)

Further information can be found at www.dolphinsolutions.co.uk.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	78	Europe
Minerals	0	-
Fossil materials	22	Europe/Asia
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.0011

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit VP-011	1 kg of Dolphin Inform Sensor tap
Mass per declared unit VP-012	1 kg
Functional unit	N/A
Reference service life	N/A

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).



PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The manufacturing process takes place at the Dolphin Solutions production and distribution facility located at Southpoint, Compass Park, Junction Rd. Bodiam. UK. TN32 5BS

A1 – Extraction and processing of raw materials.

Dolphin uses prefabricated high grade stainless steel and brass components supplied by manufacturing partners to ensure that the products are built to last.

Prefabricated polymer and electronic components are also sourced from approved suppliers located mostly from within the UK.

The materials that are used to pack all incoming components are cardboard and PE.

A2 – Transport to the Southpoint production site in the UK.

The production components are transported to the manufacturing site at Southpoint from the suppliers.

All the domestically and near continent supplied items are transported by road in trucks with very small amounts of intercontinental flight transportation where necessary.

A3 – Manufacturing processes

The production of packaging materials is considered at this stage including the processing of any waste arising from the production operation.

The manufacturing operation consists of the assembly of sensor taps utilising handheld manual and battery powered electric tools and the marking of product using a laser etching unit.

The assembly of the components which are 80 to 90 % 304L or 316L stainless steel with some brass, plastic and electronic items generates no waste other than the packaging that the components arrive in.

Finished products are tested for watertightness and electrical compliance, cleaned and polished by hand and placed in final packaging.

Production is based on LEAN techniques, where stocks are minimized and products are put into production as soon as they are ordered.

This stage of production produces minimal waste. Defective components are Identified during the goods Inward Inspection process and are returned to suppliers so they don't enter the production stream.

Products that fail the batch release tests are reworked and re-tested, not discarded.

Coloured surface finishes using powder coating, ceramic coating or PVD techniques are offered as an option and applied in a downstream operation.

The disposal of the cardboard and PE packaging of raw materials is achieved by sorting, compacting, baling and palletising the waste which is then stored on site until a full truck quantity is achieved. It is then collected and removed by an approved waste transfer/recycling contractor.

Transportation to the recycling centre is covered by a European average EURO 3 16 t diesel lorry.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

A4 – Transportation from the Dolphin Southpoint production site in Bodiam to customers.

Distribution to customers within the UK is achieved using approved pallet carriers and courier companies using small trucks (7.5-16t) from Southpoint to a distribution hub (36km) and then in larger trucks (16-32t) for delivery to the customer. These are primarily Euro 3 diesel vehicles travelling on average 300km.

Transportation to Continental customers is generally by 32t + Euro 3 diesel vehicles travelling an average of 1210 km.

Transportation to intercontinental customers is by Sea freight container

ship. The average voyage distance is 18750 km

A5 - Installation is simple and does not require any relevant energy consumption or use of materials, due to manual instalment by the clients' own technicians.

Mounting instructions are included with the product or can be downloaded from the Dolphin website.

Apart from the waste of packaging for the final product (paper, cardboard, rubber), no additional material flows are generated during installation.

The packaging that is either recycled, transported to the landfill or incinerated has the potential benefits reported in module D.

It is determined that waste packaging materials are transported an average 20 km to the waste treatment centre by 16t EURO 3 lorry with a diesel engine.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase. Air, soil, and water impacts during the use phase have not been studied

PRODUCT END OF LIFE (C1-C4, D)

End of life stage (C1-C4).

The end-of-life stage consists of the deconstruction/demolition, transport, waste management, and disposal processes to manage the product as waste after the service life of the product.

The generated waste in modules C1-C4 is included up to the “end-of-waste state or final disposal, with the potential net benefits reported in module D.

C1 – Deconstruction, Demolition

For the demolition of sensor taps, the energy consumption is 0,0 MJ

C2 – Transport

It is determined that materials end of life disposal/demolition materials are transported an average 100 km to the recycling centre, 100 km to the incineration station, and 50 km to the landfill. Transportation is covered by a European average EURO 3 16-32 mt lorry with a diesel engine. The proportions of each is reported in C3.

C3 & C4– Waste Processing and Disposal

The end-of-life stage represents the waste scenario after the use stage. In C3, electronic components are assumed to be WEEE shredded first. 60% of copper and brass, and 80% of steel and stainless steel is assumed to be recycled, and 50% of plastics and rubber is incinerated with >60% energy efficiency (from EN 50693, Table G.4). The remaining percentages are assumed to be landfilled in C4.

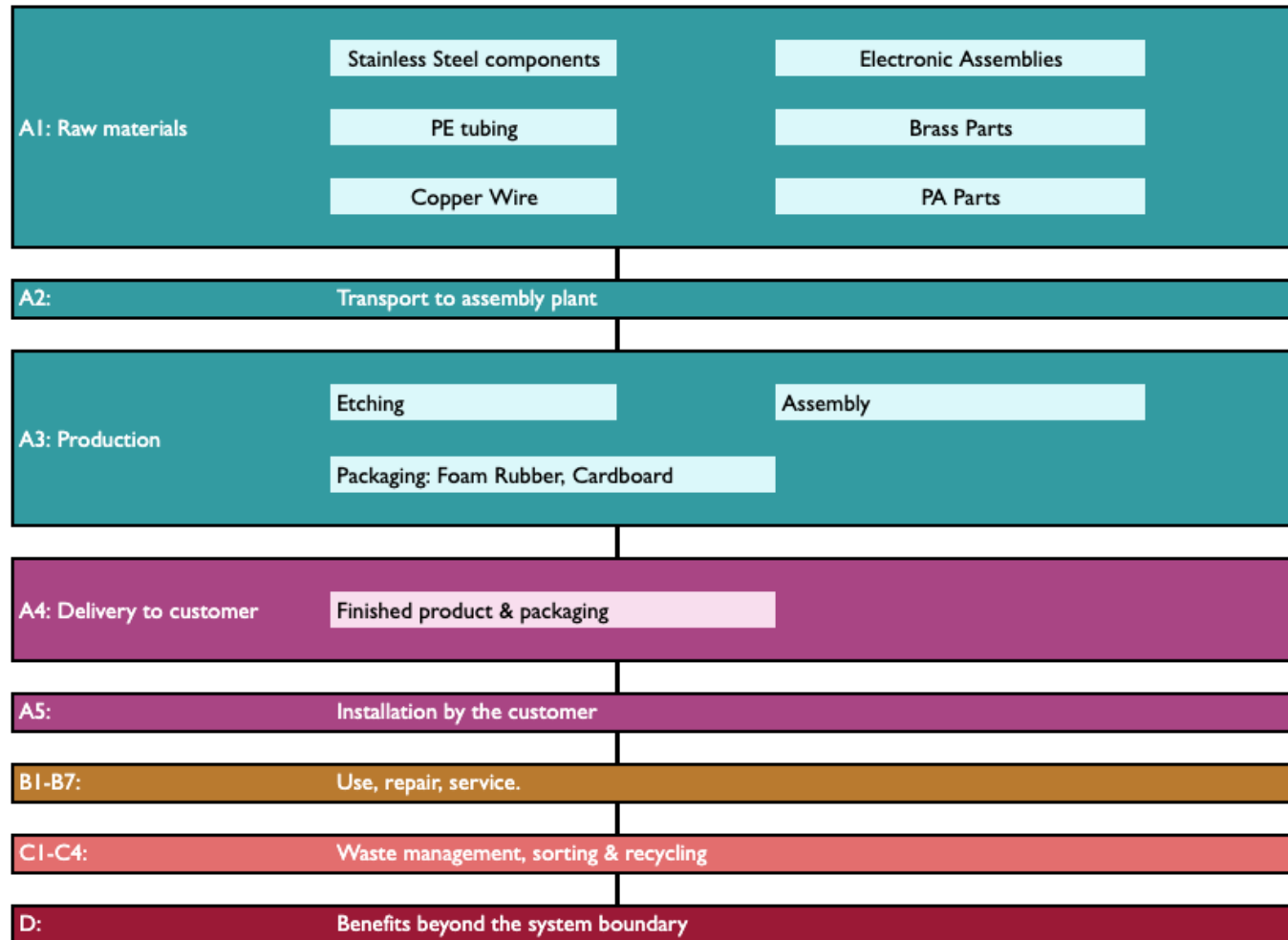
Beyond the system boundary (D)

Module D includes reuse, recovery, and/or recycling potential, expressed as net impact and benefits, due to reuse, recycling, and incineration of materials with energy recovery in modules A5 and C3.

Due to the material and energy recovery potential of parts in the end-of-life product and packaging, recycled raw materials lead to avoided virgin material production, while the energy recovered from incineration displaces electricity and heat production (D). The benefits and loads of incineration and recycling are included in Module D.



MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	Allocated by mass or volume
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	Multiple products
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	-4.5, +13.5 %

The range of Inform Sensor DS Taps covered by this EPD is represented by the identification of the lightest tap, a mid-range tap (the base line) and the heaviest tap by total mass.

All other taps in the DS range fall within these margins.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. Ecoinvent version 3.6 and One Click LCA databases were used as sources of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	7,04E0	3,06E-1	7,21E-1	8.06	9,79E-2	7,71E-1	MND	MND	MND	MND	MND	MND	MND	0E0	4,55E-3	5,83E-2	1,48E-2	-1,95E0
GWP – fossil	kg CO ₂ e	6,9E0	3,06E-1	7,29E-1	7.94	9,87E-2	7,62E-1	MND	MND	MND	MND	MND	MND	MND	0E0	4,54E-3	5,93E-2	1,48E-2	-1,95E0
GWP – biogenic	kg CO ₂ e	1,27E-1	1,06E-4	-9,74E-3	1,17E-1	1,06E-5	8,55E-3	MND	MND	MND	MND	MND	MND	MND	0E0	3,3E-6	-1,03E-3	1,47E-5	2,09E-4
GWP – LULUC	kg CO ₂ e	6,59E-3	2,24E-5	1,73E-3	8,34E-3	5,24E-5	9,72E-6	MND	MND	MND	MND	MND	MND	MND	0E0	1,37E-6	4,81E-5	1,05E-6	-3,72E-4
Ozone depletion pot.	kg CFC ₁₁ e	4,16E-7	6,97E-8	1,7E-7	6,55E-7	2,11E-8	3,9E-9	MND	MND	MND	MND	MND	MND	MND	0E0	1,07E-9	5,23E-9	8,69E-10	-1,5E-7
Acidification potential	mol H ⁺ e	1,09E-1	1,59E-3	4,11E-3	1,15E-1	1,93E-3	1,93E-4	MND	MND	MND	MND	MND	MND	MND	0E0	1,91E-5	3,16E-4	2,13E-5	-2,84E-2
EP-freshwater ²⁾	kg Pe	9,22E-4	7,64E-7	3,4E-5	9,57E-4	6,66E-7	4,21E-7	MND	MND	MND	MND	MND	MND	MND	0E0	3,7E-8	1,92E-6	3,92E-8	-1,78E-4
EP-marine	kg Ne	1,02E-2	5,78E-4	7,43E-4	1,15E-2	5,21E-4	6,98E-5	MND	MND	MND	MND	MND	MND	MND	0E0	5,75E-6	7,49E-5	1,4E-5	-2,3E-3
EP-terrestrial	mol Ne	1,23E-1	6,33E-3	7,95E-3	1,37E-1	5,78E-3	7,61E-4	MND	MND	MND	MND	MND	MND	MND	0E0	6,35E-5	8,48E-4	7,72E-5	-2,88E-2
POCP (“smog”) ³⁾	kg NMVOCe	3,57E-2	1,65E-3	3,23E-3	4,05E-2	1,52E-3	2,16E-4	MND	MND	MND	MND	MND	MND	MND	0E0	2,04E-5	2,49E-4	2,54E-5	-8,86E-3
ADP-minerals & metals ⁴⁾	kg Sbe	3,97E-3	5,72E-7	2,5E-4	4,23E-3	1,81E-6	6,31E-7	MND	MND	MND	MND	MND	MND	MND	0E0	7,75E-8	1,43E-6	2,44E-8	-1,03E-3
ADP-fossil resources	MJ	9E1	4,34E0	2,02E1	1,14E2	1,38E0	2,79E-1	MND	MND	MND	MND	MND	MND	MND	0E0	7,07E-2	6,53E-1	6,29E-2	-2,18E1
Water use ⁵⁾	m ³ e depr.	6,3E0	4,34E-3	4,44E-1	6,75E0	3,88E-3	1,25E-2	MND	MND	MND	MND	MND	MND	MND	0E0	2,63E-4	1,23E-2	2,91E-3	-4,73E-1

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	5,76E-7	4,73E-9	5,33E-8	6,34E-7	6,37E-9	2,49E-9	MND	MND	MND	MND	MND	MND	MND	0E0	4,11E-10	4,4E-9	3,92E-10	-1,23E-7
Ionizing radiation ⁶⁾	kBq U235e	2,55E-1	1,9E-2	6,89E-2	3,43E-1	5,95E-3	9,79E-4	MND	MND	MND	MND	MND	MND	MND	0E0	3,09E-4	2,44E-3	2,51E-4	-1,9E-1
Ecotoxicity (freshwater)	CTUe	9,36E2	2,34E0	3,07E1	9,69E2	9,88E-1	2,32E0	MND	MND	MND	MND	MND	MND	MND	0E0	5,4E-2	1,39E0	4,95E-1	-2,01E2
Human toxicity, cancer	CTUh	6,92E-8	3,17E-11	5,08E-10	6,98E-8	5,63E-11	2,89E-11	MND	MND	MND	MND	MND	MND	MND	0E0	1,38E-12	6,65E-11	1,54E-9	-1E-9
Human tox. non-cancer	CTUh	1,1E-6	3,76E-9	1,08E-8	1,12E-6	1,11E-9	7,8E-10	MND	MND	MND	MND	MND	MND	MND	0E0	6,4E-11	1,75E-9	1,06E-7	-1,07E-7
SQP ⁷⁾	-	2,49E1	6,07E-1	1,55E0	2,71E1	6,34E-1	7,52E-2	MND	MND	MND	MND	MND	MND	MND	0E0	1,07E-1	2,98E-1	2,11E-1	-3,35E0

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	1,56E1	1,63E-2	2,23E0	1,78E1	1,51E-2	1,03E-2	MND	MND	MND	MND	MND	MND	MND	0E0	8,9E-4	5,78E-2	8,17E-4	-3,61E0
Renew. PER as material	MJ	1,36E0	0E0	2,46E0	3,82E0	0E0	-3,82E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	3,82E0
Total use of renew. PER	MJ	1,69E1	1,63E-2	4,7E0	2,16E1	1,51E-2	-3,81E0	MND	MND	MND	MND	MND	MND	MND	0E0	8,9E-4	5,78E-2	8,17E-4	2,09E-1
Non-re. PER as energy	MJ	8,34E1	4,34E0	2,02E1	1,08E2	1,38E0	2,79E-1	MND	MND	MND	MND	MND	MND	MND	0E0	7,07E-2	6,53E-1	6,29E-2	-2,18E1
Non-re. PER as material	MJ	8,86E0	0E0	9,47E0	1,83E1	0E0	-9,47E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-4,43E0	-4,43E0	8,86E0
Total use of non-re. PER	MJ	9,22E1	4,34E0	2,96E1	1,26E2	1,38E0	-9,19E0	MND	MND	MND	MND	MND	MND	MND	0E0	7,07E-2	-3,78E0	-4,37E0	-1,29E1
Secondary materials	kg	2,42E-1	0E0	1,42E-1	3,84E-1	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	2,74E-1
Renew. secondary fuels	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Non-ren. secondary fuels	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Use of net fresh water	m ³	9,27E-2	3,61E-4	7,35E-3	0.1	1,89E-4	1,1E-3	MND	MND	MND	MND	MND	MND	MND	0E0	1,47E-5	2,21E-4	7,08E-5	-1,56E-2

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	3,83E0	1,47E-3	3,68E-2	3,86E0	1,55E-3	1,46E-2	MND	MND	MND	MND	MND	MND	MND	0E0	6,87E-5	0E0	6,62E-2	-1,42E-1
Non-hazardous waste	kg	5,57E1	5,81E-2	1,34E0	5,71E1	6,22E-2	2,41E-1	MND	MND	MND	MND	MND	MND	MND	0E0	7,6E-3	0E0	2,33E-1	-1,12E1
Radioactive waste	kg	2,18E-4	3,12E-5	8,59E-5	3,35E-4	9,51E-6	1,38E-6	MND	MND	MND	MND	MND	MND	MND	0E0	4,85E-7	0E0	3,93E-7	-1,2E-4

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Materials for recycling	kg	0E0	0E0	8E-2	8E-2	0E0	4,59E-1	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	5,91E-1	0E0	0E0
Materials for energy rec	kg	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	1,41E-1	0E0	0E0
Exported energy	MJ	0E0	0E0	0E0	0E0	0E0	6,91E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	6,68E0	3,05E-1	7,07E-1	7,69E0	9,79E-2	7,66E-1	MND	MND	MND	MND	MND	MND	MND	0E0	4,5E-3	5,81E-2	1,08E-2	-1,91E0
Ozone depletion Pot.	kg CFC ₁₁ e	3,81E-7	5,51E-8	1,41E-7	5,77E-7	1,67E-8	3,65E-9	MND	MND	MND	MND	MND	MND	MND	0E0	8,49E-10	4,41E-9	6,91E-10	-1,35E-7
Acidification	kg SO ₂ e	9,79E-2	1,15E-3	3,48E-3	1,03E-1	1,4E-3	1,46E-4	MND	MND	MND	MND	MND	MND	MND	0E0	9,25E-6	2,03E-4	2,21E-5	-2,56E-2
Eutrophication	kg PO ₄ ³ e	3,94E-2	2,25E-4	1,27E-3	4,09E-2	1,68E-4	1,21E-4	MND	MND	MND	MND	MND	MND	MND	0E0	1,87E-6	1,38E-4	5,07E-4	-8,21E-3
POCP ("smog")	kg C ₂ H ₄ e	4,13E-3	2,51E-5	1,82E-4	4,34E-3	4,08E-5	7,52E-6	MND	MND	MND	MND	MND	MND	MND	0E0	5,86E-7	1,28E-5	2,43E-6	-1,17E-3
ADP-elements	kg Sbe	3,97E-3	5,72E-7	2,5E-4	4,23E-3	1,81E-6	6,31E-7	MND	MND	MND	MND	MND	MND	MND	0E0	7,75E-8	1,43E-6	2,44E-8	-1,03E-3
ADP-fossil	MJ	9E1	4,34E0	2,02E1	1,14E2	1,38E0	2,79E-1	MND	MND	MND	MND	MND	MND	MND	0E0	7,07E-2	6,53E-1	6,29E-2	-2,18E1



VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.


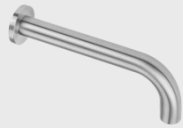



I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Elisabet Amat as an authorized verifier acting for EPD Hub Limited
26.02.2023



APPENDIX 1: DOLPHIN INFORM SENSOR TAP RANGE – CONFIGURATION VARIATIONS.

Image	Main Code	Description	Configuration Codes
	DS101	Thru panel mount, 28mm dia, 90 deg spout	DS101.xxx.xx - Main tap code, eg. DS101 xxxxx.230.xx - Tap length, eg. 230mm xxxxx.xxx.01 - Tap finish, eg. 01 = satin eg. DS101.230.01
	DS102	Wall plate mount, 28mm dia, 90 deg spout	
	DS103	Thru panel mount, 28mm dia, 55 deg spout	
	DS104	Wall plate mount, 28mm dia, 55 deg spout	
	DS111	Thru panel mount, 22mm dia, 90 deg spout	DS111.xxx.xx - Main tap code eg. DS111 xxxxx.225.xx - Tap length, eg. 225mm xxxxx.xxx.01 - Tap finish, e.g. 01 = satin eg. DS111.225.01
	DS112	Wall plate mount, 22mm dia, 90 deg spout	
	DS113	Thru panel mount, 22mm dia, 55 deg spout	
	DS114	Wall plate mount, 22mm dia, 55 deg spout	
	DS121	Wall mounted, 28mm dia, straight spout	DS121.xxx.xx - Main tap code, eg. DS121 xxxxx.200.xx - Tap length, eg. 200mm xxxxx.xxx.02 - Tap finish, eg. 02 = mirror eg. DS121.200.02
	DS122	Wall plate mount, 28mm dia, straight spout	
	D211	Basin mounted, 22mm dia, 90 deg spout	DS211.xxx.xxx.xx - Main tap code, eg. DS211 xxxxx.200.xxx.xx - Tap length, eg. 200mm xxxxx.xxx.200.xx - Tap height eg. 200mm xxxxx.xxx.xxx.02 - Tap finish, eg. 02 = mirror eg. DS211.200.200.02
	D213	Basin mounted, 22mm dia, 55 deg spout	
	DS221	Counter mounted, 35mm dia, straight spout	DS221.xxx.xxx.xx - Main tap code, eg. DS221 xxxxx.120.xxx.xx - Tap length, eg. 120mm xxxxx.xxx.170.xx - Tap height eg. 170mm xxxxx.xxx.xxx.01 - Tap finish, eg. 01 = satin eg. DS221.120.170.01
	DS223	Counter mounted, 35mm dia, 55 deg spout	