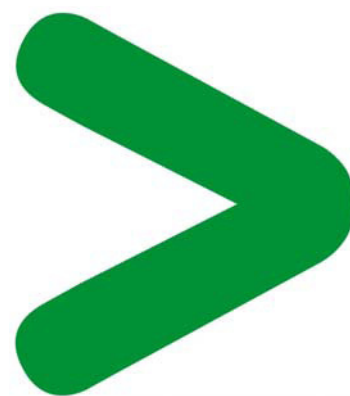


# Product Environmental Profile

**XY2SB Ergonomic 2 hands control stations  
range.**



# Product Environmental Profile - PEP

## Product overview

The main purpose of the XY2SB range is to pilot an electrical equipment, using necessarily the 2 hands.

This range consists of: one empty ergonomic 2 hands control station or one complete ergonomic 2 hands control station with its control buttons. In this last case, to know the environmental impacts, use the present PEP and add the impacts described on complete buttons PEP (XB4BA31 for example, PEP n°: ENVPEP101107EN).

The representative product used for the analysis is the XY2SB511.

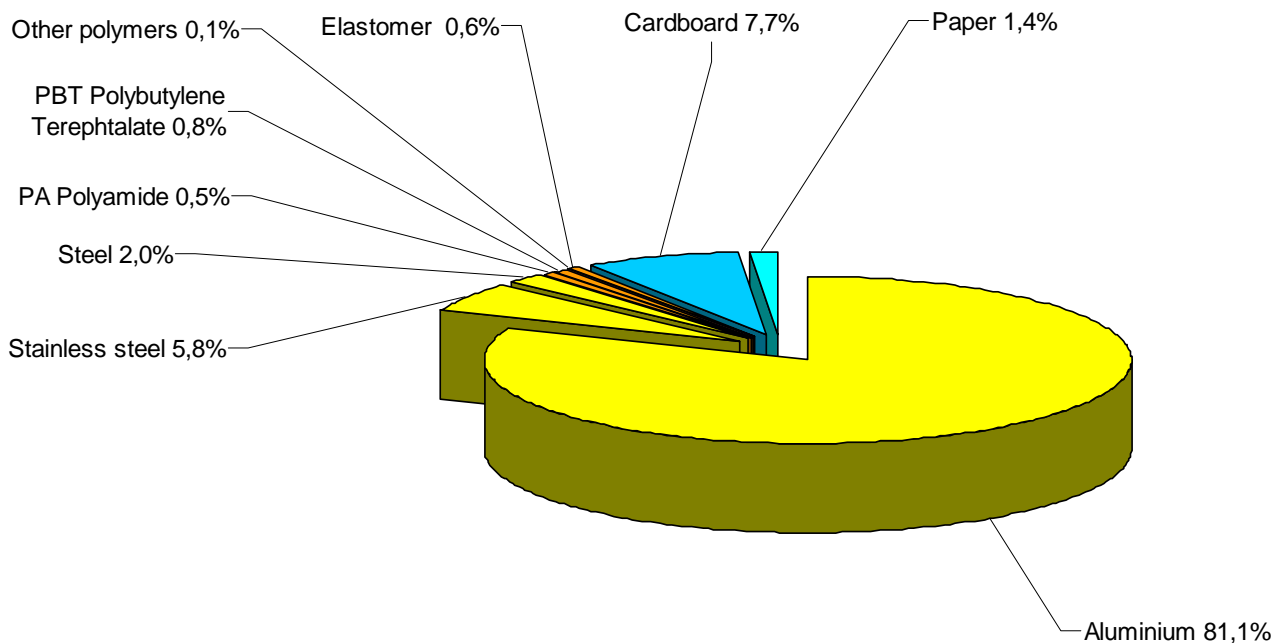
The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.

The environmental analysis was performed in conformity with ISO 14040.

## Constituent materials

The mass of the product range is from 5230 g and 5630 g including packaging. It is 5237 g for the XY2SB511.

The constituent materials are distributed as follows:



## Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2002/95/EC of 27 January 2003) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

## Manufacturing

The XY2SB products range is manufactured at a Schneider Electric production site on which an ISO14001 certified environmental management system has been established.

## Distribution

The weight and volume of the packaging have been optimized, based on the European Union's packaging directive.

The XY2SB511 packaging weight is 402 g. It consists of cardboard.

The product distribution flows have been optimised by setting up local distribution centres close to the market areas.

# Product Environmental Profile - PEP

## Use

The products of the XY2SB range do not generate environmental pollution (noise, emissions) requiring special precautionary measures in standard use and do not require specific maintenance operation.

## End of life

At end of life, the products in the XY2SB range have been optimized to decrease the amount of waste and allow recovery of the product components and materials.

This product range doesn't need any special end-of-life treatment. According to countries' practices this product can enter the usual end-of-life treatment process.

The recyclability potential of the products has been evaluated using the "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

According to this method, the potential recyclability ratio is: 81 %.

As described in the recyclability calculation method this ratio includes only metals and plastics which have proven industrial recycling processes.

## Environmental impacts

Life cycle assessment has been performed on the following life cycle phases: Materials and Manufacturing (M), Distribution (D), Installation (I) Use (U), and End of life (E).

Modeling hypothesis and method:

- the calculation was performed on the XY2SB511

- product packaging: is included

- installation components: no special components included.

- scenario for the Use phase: this product range is included in the category 3: assumed service life is 20 years and don't need define the using scenario.

End of life impacts are based on a worst case transport distance to the recycling plant (1000km)

### Presentation of the product environmental impacts

Environmental indicators	Unit	XY2SB511					
		S = M + D + I + U + E	M	D	I	U	E
Raw Material Depletion	Y <sup>-1</sup>	1,94E-14	1,94E-14	8,54E-18	0	0	1,07E-17
Energy Depletion	MJ	1,57E+02	1,43E+02	6,27	0	0	7,83
Water depletion	dm <sup>3</sup>	3,96E+01	3,83E+01	5,95E-01	0	0	7,43E-01
Global Warming	g ~CO <sub>2</sub>	9,37E+03	8,25E+03	4,96E+02	0	0	6,20E+02
Ozone Depletion	g ~CFC-11	2,82E-03	2,03E-03	3,51E-04	0	0	4,38E-04
Air Toxicity	m <sup>3</sup>	1,55E+06	1,34E+06	9,35E+04	0	0	1,17E+05
Photochemical Ozone Creation	g ~C <sub>2</sub> H <sub>4</sub>	4,99	4,04	4,24E-01	0	0	5,30E-01
Air acidification	g ~H <sup>+</sup>	1,15	1,01	6,32E-02	0	0	7,90E-02
Water Toxicity	dm <sup>3</sup>	1,85E+03	1,71E+03	6,20E+01	0	0	7,75E+01
Water Eutrophication	g ~PO <sub>4</sub>	2,31E-01	2,13E-01	8,25E-03	0	0	1,03E-02
Hazardous waste production	kg	5,60E-02	5,56E-02	1,85E-04	0	0	2,30E-04

Life cycle assessment has been performed with the EIME software (Environmental Impact and Management Explorer), version 4, and with its database version 11.

The manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators.

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range according to the weight of the product.

## System approach

This emergency stop head can be mounted on a new generation metal base using only one screw (2 screws needed in the past generation).

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

# Product Environmental Profile - PEP

## Glossary

<b>Raw Material Depletion (RMD)</b>	
<b>Energy Depletion (ED)</b>	
<b>Water Depletion (WD)</b>	
<b>Global Warming (GW)</b>	
<b>Ozone Depletion (OD)</b>	
<b>Air Toxicity (AT)</b>	
<b>Photochemical Ozone Creation (POC)</b>	
<b>Air Acidification (AA)</b>	
<b>Water Toxicity (WT)</b>	
<b>Hazardous Waste Production (HWP)</b>	
