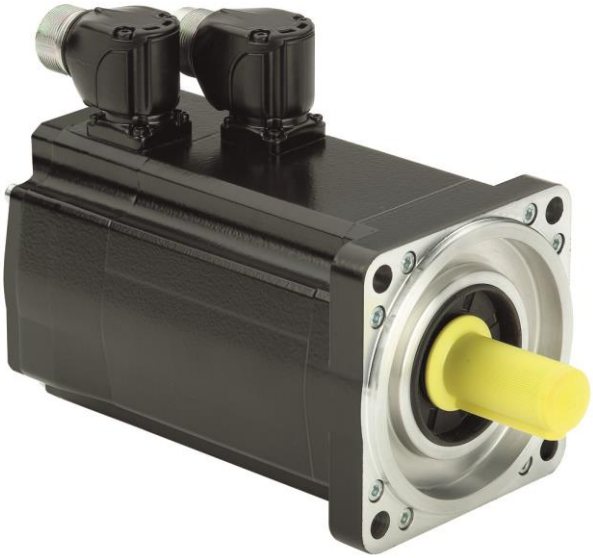
Product Environmental Profile

Lexium Servo Motor

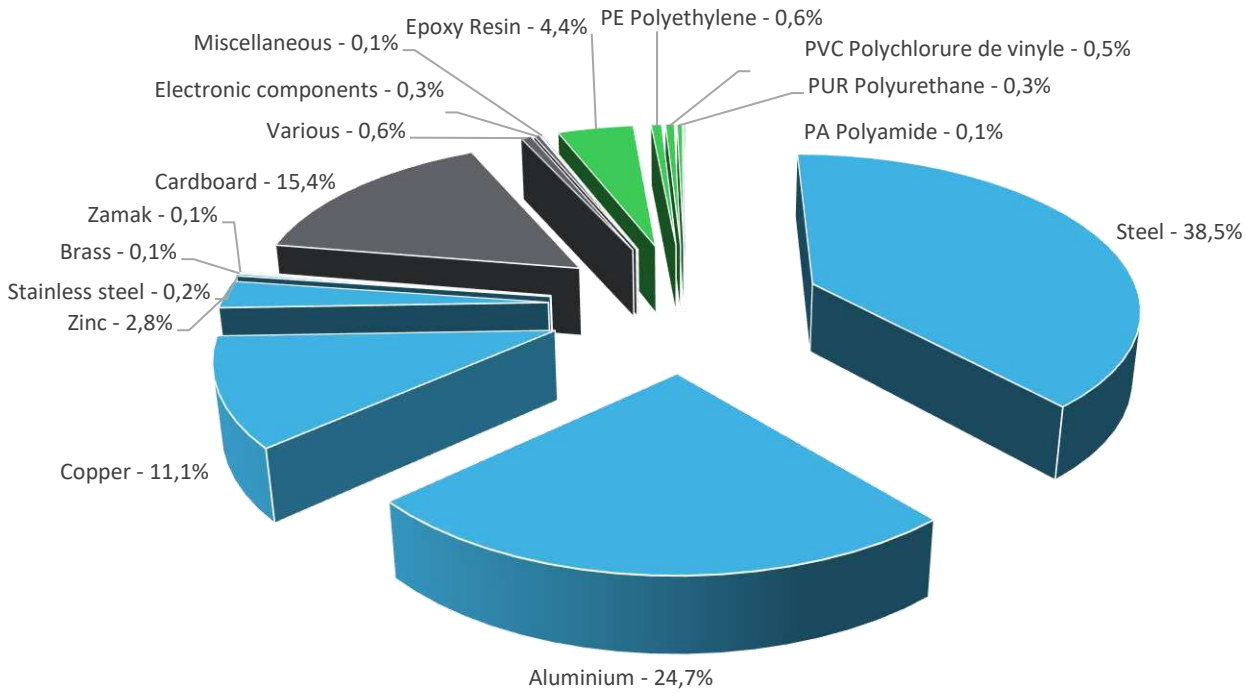


General information

Representative product	Lexium Servo Motor - SH31002P12F2200
Description of the product	The servo motors meet rigorous requirements of dynamics and precision. Five flange sizes with different torque outputs offer the correct drive solution for your application.
Description of the range	The main purpose of the Lexium Servo Motor (BSH; SH3; MH190 to BMH205; MH3190) range is to provide our customer a servo motor product range in combination with the servo drive offer Lexium05 and Lexium 32 ; 52 and 62. 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.
Functional unit	Coordinate and synchronize motion control up to 207W during 10 years and a 70% use rate.

Constituent materials

Reference product mass	8140 g including the product, its packaging and additional elements and accessories



Plastics	5,9%
Metals	77,5%
Others	16,4%

Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate– BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page

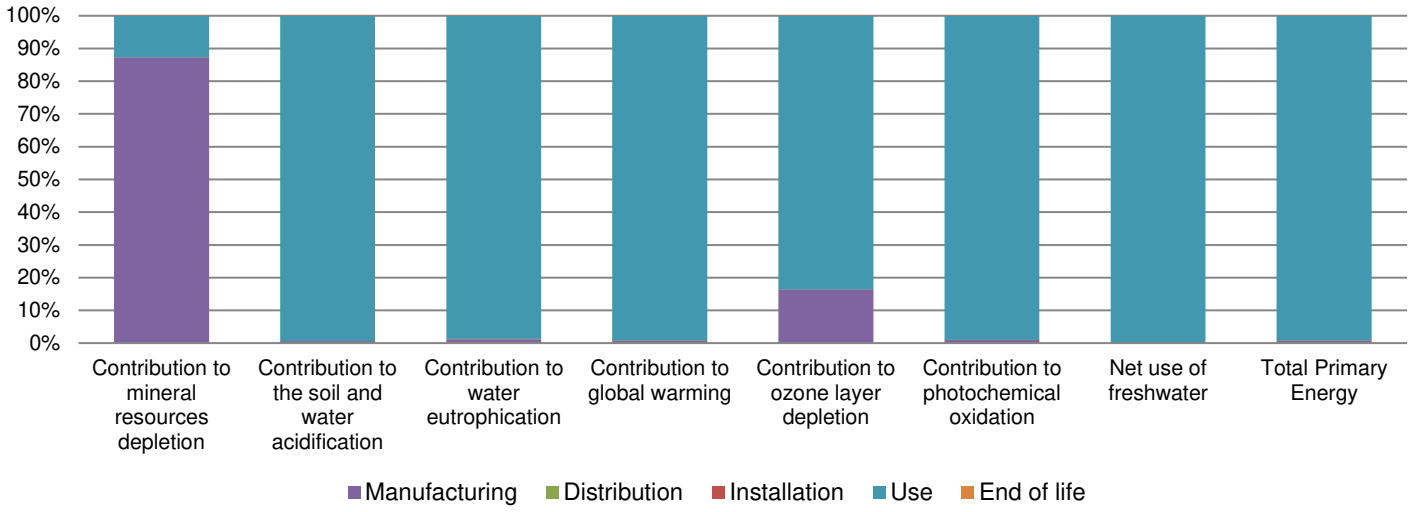
Additional environmental information

The Lexium Servo Motor presents the following relevent environmental aspects	
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 1313,2 g, consisting of cardboard (95,7%), PE film (3,9%) and paper (0,4%) Product distribution optimised by setting up local distribution centres
Installation	SH31002P12F2200 does not require any installation operations.
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: **84%** Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	10 years			
Installation elements	No special components needed			
Use scenario	The use scenario is: 207 W for 50% service uptime and 2 W in standby mode, 20% service uptime.			
Geographical representativeness	Europe			
Technological representativeness	The servo motors meet rigorous requirements of dynamics and precision. Five flange sizes with different torque outputs offer the correct drive solution for your application.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: Germany	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators	**Lexium Servo Motor - SH31002P12F2200**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3,04E-03	2,66E-03	0*	0*	3,87E-04	0*
Contribution to the soil and water acidification	kg SO_2 eq	1,87E+01	1,19E-01	4,80E-03	0*	1,86E+01	1,99E-03
Contribution to water eutrophication	kg PO_4^{3-} eq	1,14E+00	1,35E-02	1,10E-03	0*	1,12E+00	4,94E-04
Contribution to global warming	kg CO_2 eq	4,50E+03	3,56E+01	1,05E+00	0*	4,46E+03	7,67E-01
Contribution to ozone layer depletion	kg CFC11 eq	3,47E-04	5,68E-05	0*	0*	2,91E-04	4,21E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1,03E+00	1,03E-02	3,42E-04	0*	1,02E+00	2,13E-04
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1,62E+04	0*	0*	0*	1,62E+04	0*
Total Primary Energy	MJ	8,98E+04	7,20E+02	1,49E+01	0*	8,91E+04	9,94E+00



Optional indicators		Lexium Servo Motor - SH31002P12F2200					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	5,10E+04	3,15E+02	1,48E+01	0*	5,06E+04	7,98E+00
Contribution to air pollution	m³	2,02E+05	1,02E+04	4,47E+01	0*	1,92E+05	7,06E+01
Contribution to water pollution	m³	1,87E+05	2,66E+03	1,73E+02	0*	1,84E+05	7,83E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2,52E+00	2,52E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1,14E+04	4,20E+01	0*	0*	1,13E+04	0*
Total use of non-renewable primary energy resources	MJ	7,84E+04	6,78E+02	1,48E+01	0*	7,77E+04	9,93E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1,13E+04	1,70E+01	0*	0*	1,13E+04	0*
Use of renewable primary energy resources used as raw material	MJ	2,50E+01	2,50E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7,84E+04	6,70E+02	1,48E+01	0*	7,77E+04	9,93E+00
Use of non renewable primary energy resources used as raw material	MJ	7,82E+00	7,82E+00	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Waste categories	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	1,36E+02	1,26E+02	0*	0*	2,32E+00	7,96E+00
Non hazardous waste disposed	kg	1,67E+04	3,35E+01	0*	0*	1,66E+04	0*
Radioactive waste disposed	kg	1,11E+01	2,36E-02	0*	0*	1,11E+01	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	7,78E+00	7,69E-01	0*	1,27E+00	0*	5,75E+00
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	4,25E-02	0*	0*	0*	0*	4,25E-02
Exported Energy	MJ	3,99E-03	3,75E-04	0*	3,62E-03	0*	0*

** represents less than 0.01% of the total life cycle of the reference flow*

Life cycle assessment performed with EIME version EIME v5.8.1, database version 2016-11 in compliance with ISO14044.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

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

Depending on the impact analysis, the environmental indicators (without "contribution to Mineral Resources Depletion" and "contribution to ozone layer depletion") of other products in this family may be proportional extrapolated by energy consumption values. For mineral Resources Depletion, 88% is caused by manufacturing and 12% is caused by the use phase therefore 88% of the impact may be proportional extrapolated by mass of the product and 12% may be proportional extrapolated by energy consumption values. For ozone layer depletion, 16% is caused by manufacturing and 84% is caused by the use phase therefore 16% of the impact may be proportional extrapolated by mass of the product and 84% may be proportional extrapolated by energy consumption values.

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.

Registration number	ENVPEP111049EN_V2	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	08/2020		
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »

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