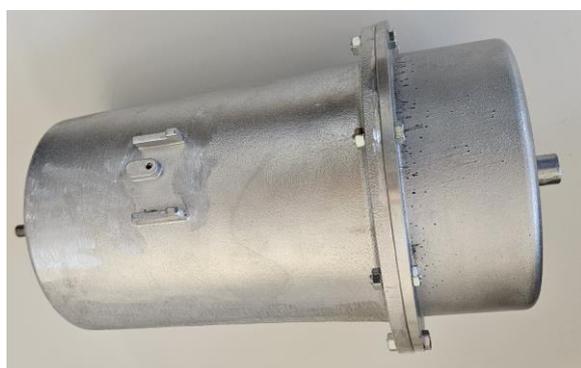


SAUTER Declaration on materials and the environment

Product



Type	AK43PF002
Designation	Pneumatic actuator
Product range	Pneumatic room pressure control, damper actuators
Product group of eco-balance	actuator

Manufacturer

Fr. Sauter AG
Im Surinam 55, CH-4058 Basel

Management system certified according to

	Since	With
ISO 9001:2015	10 Oct. 2018	SQS
ISO 14001:2015	10 Oct. 2018	SQS
ISO 45001:2018	10 Oct. 2018	SQS

Environmentally-compatible product design

Basis	Management system Fr. Sauter AG
Process	Business process <ul style="list-style-type: none"> • Product innovation • Ecological accounting

Product description	CE conformity, function, operation, maintenance, servicing	See PDS 71.111
Environmental risk	Fire protection according to Fire load Hazardous substances ¹ according to Prohibited substances ² according to Parts containing halogen (causing corrosive smoke) Liquids polluting the aquatic environment Explosive substances Transport hazardous goods class	EN 60695-2-11, EN 60695-10-2 2.6 MJ RoHS 2011/65/EU & 2015/863/EU compliant. Product category 9. Regulation (EC) No. 1907/2006 (REACH) compliant None Lubricant None None

Materials

	Total weight of product	Material Safety Data Sheet (MSDS)	EU waste code ³
Plastic			
Silicone rubber VQM	61,9 g	available	20 01 39
plug closure - PE	0,8 g	Not required	20 01 39
Metal			
housing, aluminum	2372 g	Not required	20 01 40
Stainless steel spindle	950,8 g	Not required	20 01 40
Spring, steel various alloys	1426,4 g	Not required	20 01 40
Special components			
Lubricant Polybulb GLY801	0,1 g	available	20 01 25
Packaging ⁴			
Corrugated board PAP 20	110 g	Not required	20 01 01
Paper PAP 22	10 g	Not required	20 01 01
wrapping paper PAP 22	73,5 g	Not required	20 01 01

Hazardous ingredients

SVHC ingredient		Name of the ingredient	Effective concentration per article, %w/w
CAS number	EN number		

SCIP number will be communicated upon justified request.

[Link to ECHA candidate list](#)

¹ Only applies to electrical devices

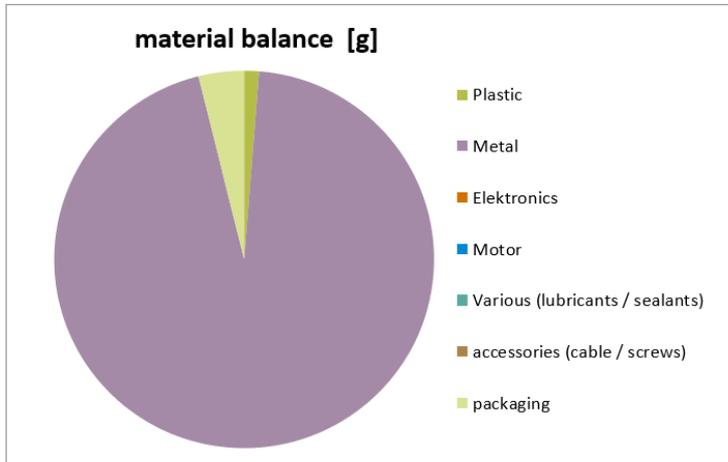
² SVHC substances >0.1%w/w: see **Hazardous ingredients**

³ Directive 2008/98/EC, directive (EU) 2018/851

⁴ Directive 94/62/EC, 2004/12/EC, 2005/20/EC, 2018/852/EC

Materials balance

AK43PF002



Material balance	g
Plastic	62,7
Metal	4749,2
Elektronics	0,0
Motor	0,0
Various (lubricants / sealants)	0,1
accessories (cable / screws)	0,0
packaging	193,5
	5005,5

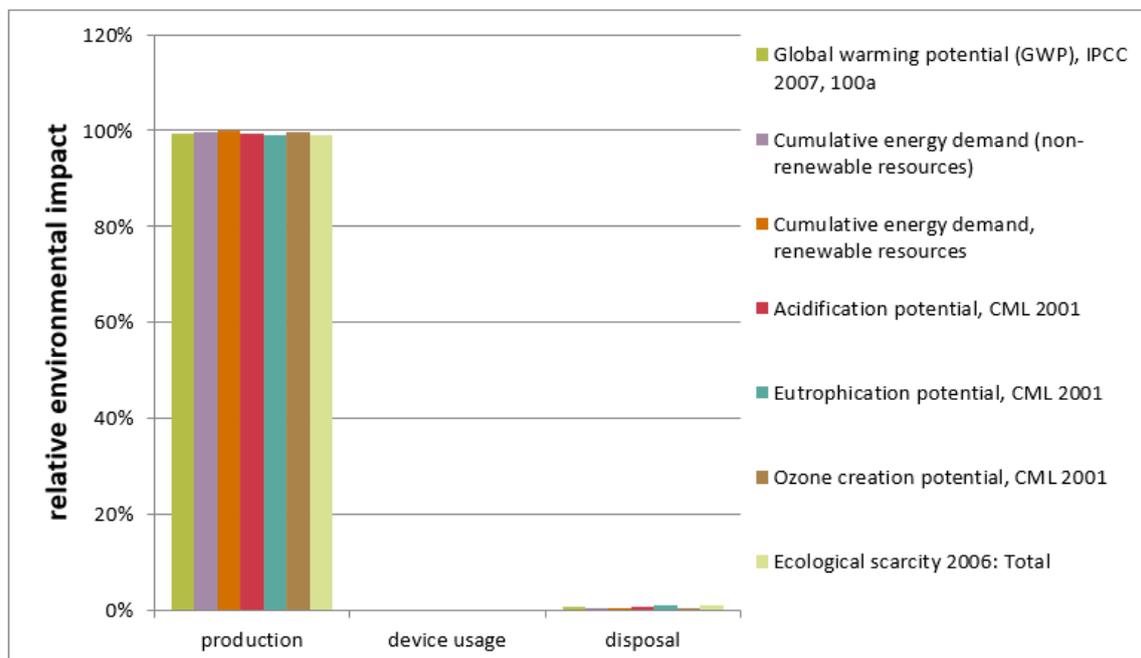
Energy requirement in the utilisation phase

Pneumatic actuator, operated with compressed air. Typical energy consumption per year is not applicable.

Calculation of the environmental impact

Evaluation over the entire life stage of 8 years in a typical utilisation scenario. The results shown are based on a method of ecological scarcity that combines various environmental effects into an “environmental impact points” key figure. The method is based on Switzerland’s environmental targets and evaluates the individual effects depending on the “Distance to Target”.

Indikator	unit	production	device usage	disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	23,9	-	0,2	24,1
Cumulative energy demand (non-renewable resources)	MJ eq.	449	-	1,1	450
Cumulative energy demand, renewable resources	MJ eq.	62,5	-	0,02	62,6
Acidification potential, CML 2001	kg SO2 eq.	1,01E-01	0,00E+00	8,00E-04	1,02E-01
Eutrophication potential, CML 2001	kg PO4-- eq.	4,30E-02	0,00E+00	3,64E-04	4,34E-02
Ozone creation potential, CML 2001	kg C2H4 eq.	8,19E-03	0,00E+00	3,27E-05	8,23E-03
Ecological scarcity 2006: Total	UBP	40.680	-	370	41.100



The relationship of the contributions made by the utilisation in comparison to those made by the reduction and disposal depends on the intensity of the utilisation (utilisation scenario).



Disposal

Product:

The device must be disposed of as waste from electrical and electronic equipment (electrical/electronic scrap) and must not be disposed of as household waste. This applies in particular to the assembled PCB.

Special treatment for special components may be compulsory by law or may make ecological sense.

WEEE (Waste Electrical and Electronic Equipment)

The local and currently valid laws (WEEE2012/19/EU) must be observed.

Packaging:

Recyclable. Any packaging disposal fees are the responsibility of the importer.

Special notes on hazards: none.

Note	The device contains a silicone rubber membrane as a seal
How the environment benefits	<p>With these products, we make a significant contribution to energy savings in buildings and to reducing climate change.</p> <p>Its resource-saving compact design and easy single-sort disassembly result in optimal sustainability with a life expectancy of 8 years.</p> <p>The eco-balance becomes even more optimal, with the use of energy from renewable sources.</p>
Extent of applicability	<p>This declaration is an environmental declaration based on ISO 14025 and describes the environmental impact of the product over its entire life stage. The declaration is made in a compact form without an external check or registration.</p> <p>The data gathered with existing data inventories for production processes has been evaluated from the ecoinvent 2.2 European database.</p> <p>For the determination of the energy requirement during the utilisation phase of the product, standard HVAC applications and average climatic conditions in Switzerland were assumed, based on the ecological accounting for the corresponding product group.</p>



Disclaimer: This declaration is for information purposes only.

Deviations from the information it contains can occur without notification. Fr. Sauter AG explicitly rules out any liability for any consequences that may result due to the above information.



Your local SAUTER representative will provide further information on environmental aspects, and specifically on disposal.

References

Ecoinvent 2010 ecoinvent data v2.2, Swiss Centre for Life Cycle Inventories, Dübendorf

FOEN 2008 eco-balances: method of ecological scarcity – eco-factors 2006, FOEN