

ENVIRONMENTAL DECLARATION Product, brand name, item no., etc.: DORMA TS 83 Door Closer Type of product: **Company information** DORMA GmbH + Co. KG Manufacturer of the product: Supplier of the product: This form was filled in by: Guenter Gollnik date: 10.09.98 Contact person regarding product issues: Telephone number: +49 2333 793 789 Fax number: +49 2333 793 617 Do the manufacturer and the supplier have a manager or a person that is responsible for environmental issues? X Yes No ☐ No Manufacturer Supplier Yes If yes, please state name: Joachim Balzer Do the manufacturer and the supplier have an environmental policy? Manufacturer x Yes No Supplier ☐ Yes If yes, enclose a copy of the environmental policy. Are the manufacturer and the supplier working according to an environmental management system? ISO 14000 Manufacturer Yes No Supplier ☐ Yes ☐ No If yes, please state which system. If the companies are registrated, please state the registration number: **Product information** The product may be used for the following purpose(s): Closing and controlling of doors Please enclose user's manual together with recommendations regarding installation, usage, maintenance and repair and safety instructions. Yes X No Does the product carry any environmental label? If yes, please state name and certificate number: Weight of the product (per piece, m² or other suitable unit): 2,4 kg / piece **Product composition** Please state all of the product's components (as % of its weight) and specify the composition of the various components. State whether the components do not contain any substances from the Swedish National Chemicals Inspectorate's "List of Restricted Chemical Substances" and/or "Observation list". Also state if the substances are not classified as allergenic (according to 94/69/EC). Specification of component's composition Products components As % of No substance(s) from: weight List of Obs.list Allergy (EC) Restr. Parts list enclosed ρ ρ ρ ρ ρ ρ ρ ρ ρ ρ ρ ρ



PRODUCT COMPONENTS DORMA TS 83

Product's components	Weight	As % of	Specification of component's composition	No substance(s) from:		
	Kg	Weight		List of Restr.	Obs. List	Allergy (EC)
Carton	0,118	5,02%	Cardboard	Х	Х	X
Lock screw	0,012	0,51%	Steel 8.8	Х	Х	Х
12 x fixing screws	0,056	2,38%	Steel 4.8	Х	Χ	Х
Housing / closer body	0,980	41,67%	Aluminium Gk-AlSi6Cu4	X	Х	X
3 x steel ball	0,003	0,13%	Steel 100Cr6	Х	Х	Х
Snap ring	0,004	0,17%	Spring steel	Х	Х	Х
End cap	0,032	1,36%	Aluminium AlCuMgPb	Х	Х	Х
3 x Regulating valve	0,008	0,34%	Zinc / POM (Polyoxymethylen)	Х		Х
Outer spring	0,204	8,67%	Spring steel	Х	Х	Х
Inner spring	0,144	6,12%	Spring steel	Х	Х	Х
2 x bearing housing	0,046	1,96%	Steel 9SMnPb36K	Х	Х	Х
2 x needle bearing	0,016	0,68%	Steel 100Cr6	Х	Х	Х
Gear washer	0,002	0,09%	Steel C75	Х	Х	Х
Pinion	0,114	4,85%	Steel 16MnCr5	Х	Х	Х
Spring adj. screw	0,038	1,62%	Steel 45S20k	Х	Х	Х
Disc washer	0,001	0,04%	Steel 1203	Х	Х	Х
Retaining ring	0,001	0,04%	Spring steel	Х	Х	Х
Pressure disc	0,028	1,19%	Steel 9SMnPb28K	Χ	Χ	Х
Checkball bushing	0,002	0,09%	ABS (Acrylnitril-Butadien-Styrol)	Χ		Χ
Bushing	0,004	0,17%	Brass	Χ	Χ	Χ
Relief valve plug	0,001	0,04%	POM (Polyoxymethylen)	X		Χ
Spring	0,001	0,04%	Spring steel	X	Χ	Χ
Pin	0,001	0,04%	Steel 9SMnPb28k	X	Х	Χ
Cushion BC valve	0,006	0,26%	Zinc	X		Χ
Piston	0,394	16,75%	Steel 16MnCrS5	X	Χ	Х
8 x o-ring	0,002	0,09%	NBR (Butadien-acrylonitrile-copolymer)	X		Х
Water-soluble paint	0,006	0,26%	LITAL-paint 80-4650-0008 (Material Data Sheet)	Х		Х
Hydraulic oil typ	0,128	5,44%	DS 16FTV (Material Data Sheet)	Х	Χ	Х
•	2,352	100%				



ENVIRONMENTAL DECLARATION

Environmental performance

1. Consumption of raw material
Is any recycled material part of the product?
If yes, please specify what kind and in what proportion (%):
Is any renewable material part of the product? \overline{x} Yes $\overline{\ }$ No
If yes, please specify what kind and in what proportion (%): recycling of iron- and aluminium scrap
2. Production of the product
What kind of energy source(s) is/are used when the product is manufactured? electricity
State the energy consumption for manufacturing the product (kWh per unit e.g.kg, m^2 or piece): ca 5,5 KW/h
What kind of discharges to ground, atmosphere and water are occurring by manufacturing the product? State
present requirements and limits of these discharges accordign to existing law:
3. Discription of product
Location of manufacturing (place, country): DORMA Ennepetal, Germany - DORMA Singapore
What mode(s) of transport is/are used? Ship
What company will transport the product?
Where is/are the warehouse(s) located?
What materials are used to package the product? cardboard
The average amount of packaging material per kg of the product (state the weight for each material separately)
0,120 kg / piece - cardboard
Is there any recycling system for the packaging material? \overline{x} Yes $\overline{}$ No
If yes, please provide its name and a description: standard cardboard and paper recycling
Recycling of iron- and aluminium scrap
Troopoining of their and didinining the appropriate
Are you a member of the Swedish producer responsibility register for packaging materials (REPA)?
$\overline{\mathbf{x}}$ Yes $\overline{}$ No If yes, please state corporate identity number:
4. Building phase
Are there any working environment risks documented by handling the product during the installation and building
phase? Yes X No If yes, what kind of risks?
Is any protection equipment required to handle the product during the installation and building phase?
\square Yes \square No If yes, what kind of equipment?
Is it possible to obtain products with adjusted proportions?



5. Usage Phase

What kind of maintenance is required? none If the product consume energy or water during usage, state the consumption here: What lifetime is expected for normally use of the product (state according to a standard for the line of the business if such exist)? 20 years 6. Demolishing How do you dismount the product? Dismounting of serveral screws, iron- and aluminium parts 7. Residual products (Comprehends packaging and residual products from the building and demolishing phase.) If yes, please state how recovered worn out products are handled? Taking back for dismounting and scrapping the metal parts Who is responsible for the retransport of a worn out product? Local branches Is it possible to re-use the product and the packaging? Yes x No If yes, please state how: Recycling of metal parts and packing separately Is it possible to recycle the material of the product and the packaging? \square Yes $|_{X}$ No If yes, please state how: Is it possible to extract energy form the material of the product and the packaging? Yes X No If yes, please state how: 8. Waste products Is a worn out product classified as hazardous waste (according to 94/31/EC)? Yes X No If yes, please state reason(s): 9. Indoor environment Is the product containing substances classified as allergenic (according to 94/69/EC) or other substances known as having influence on health \square Yes \rceil_X No If yes, which substance(s)? Have emissions from the product been measured? \square Yes \square No Have emissions from the product, in combination with other products, been measured? Yes X No

If the product cause any sound and/or other disturbances, then state loudness and/or disturbances here:

Please enclose report(s) of results from measurements of emissions.

10. Other information