

# **ENVIRONMENTAL DECLARATION**

| Product, brand name, item no., etc.:               | DORMA TS 83   |
|--|---|
| Type of product:                                   | Door Closer   |
| Company information                                |   |
| Manufacturer of the product:                       | DORMA GmbH + Co. KG   |
| 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 man    | nager or a person that is responsible for environmental issues? |
| Manufacturer X Yes No Supplier                     | Yes No  |
| If yes, please state name: Joachim Balzer          |   |
| Do the manufacturer and the supplier have an en    | vironmental policy?   |
| Manufacturer X Yes No Supplier                     | Yes No  |
| If yes, enclose a copy of the environmental policy |   |
| Are the manufacturer and the supplier working ac   | cording to an environmental management system?                  |
| Manufacturer X Yes No Supplier                     | Yes No ISO 14000  |
| If yes, please state which system. If the companie | s are registrated, please state the registration number:        |
| Product information                                |   |
| The product may be used for the following purpos   | se(s): Closing and controlling of doors                         |

Please enclose user's manual together with recommendations regarding installation, usage, maintenance and repair and safety instructions.

Does the product carry any environmental label? Yes XNo

If yes, please state name and certificate number:

Weight of the product (per piece, m<sup>2</sup> 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).

| Products components | As % of weight | Specification of component's composition | No substance(s) from: |          |                 |
|---------------------|----------------|--|-----------------------|----------|-----------------|
|                     |                |  | List of Restr.        | Obs.list | Allergy<br>(EC) |
|                     |                | Parts list enclosed                      | ρ                     | ρ        | ρ               |
|                     |                |  | ρ                     | ρ        | ρ               |
|                     |                |  | ρ                     | ρ        | ρ               |
|                     |                |  | ρ                     | ρ        | ρ               |
|                     |                |  | ρ                     | ρ        | ρ               |
|                     |                |  | ρ                     | ρ        | ρ               |

Enclose, when available, Material Safety Data Sheet (according to 93/112/EEC) for all components together with Material Safety Data Sheet for the assembled product.



# **PRODUCT COMPONENTS DORMA TS 83**

| Product's components                    | Weight | As % of | Specification of component's composition | No sub | o substance(s) fron |         |  |
|---|--------|---------|--|--------|---------------------|---------|--|
|   | Kg     | Weight  | eight                                    |        | Obs.                | Allergy |  |
|   |        |         |  | Restr. | List                | (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      | Х                   | Х       |  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |        |         |  |        |                     |         |  |
| Housing / closer body                   | 0,980  | 41,67%  | Aluminium Gk-AlSi6Cu4                    | Х      | Х                   | Х       |  |
| 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                          | Х      | Х                   | Х       |  |
| Checkball bushing                       | 0,002  | 0,09%   | ABS (AcryInitril-Butadien-Styrol)        | Х      |                     | Х       |  |
| Bushing                                 | 0,004  | 0,17%   | Brass                                    | Х      | Х                   | Х       |  |
| Relief valve plug                       | 0,001  | 0,04%   | POM (Polyoxymethylen)                    | Х      |                     | Х       |  |
| Spring                                  | 0,001  | 0,04%   | Spring steel                             | Х      | Х                   | Х       |  |
| Pin                                     | 0,001  | 0,04%   | Steel 9SMnPb28k                          | Х      | Х                   | Х       |  |
| Cushion BC valve                        | 0,006  | 0,26%   | Zinc                                     | Х      |                     | Х       |  |
| Piston                                  | 0,394  | 16,75%  | Steel 16MnCrS5                           | Х      | Х                   | Х       |  |
| 8 x o-ring                              | 0,002  | 0,09%   | NBR (Butadien-acrylonitrile-copolymer)   | Х      |                     | Х       |  |
| Water-soluble paint                     | 0,006  | 0,26%   | LITAL-paint 80-4650-0008                 | X      |                     | Х       |  |
|   |        |         | (Material Data Sheet)                    |        |                     |         |  |
| Hydraulic oil typ                       | 0,128  | 5,44%   | DS 16FTV (Material Data Sheet)           | Х      | Х                   | Х       |  |
|   | 2,352  | 100%    |  |        |                     |         |  |



### **ENVIRONMENTAL DECLARATION**

#### **Environmental performance**

### 1. Consumption of raw material

| Is any recycled material part of the product? | х | Yes |  | No |
|---|---|-----|--|----|
|---|---|-----|--|----|

If yes, please specify what kind and in what proportion (%):

| Is any renewable material part of the product? | x | Yes |  | 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<sup>2</sup> 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 m  | naterial? 🗴 Yes 🗌 No                   |
|--|--|
| If yes, please provide its name and a description: | standard cardboard and paper recycling |
|  | Recycling of iron- and aluminium scrap |

| Are you a me | mber | of the Swedish producer responsibility register for packaging materials (REPA)? |
|--------------|------|---|
| X Yes        | 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 🗵 No If yes, what kind of risks?   |
| Is any protection equipment required to handle the product during the installation and building phase?          |
| Yes $\underline{x}$ No If yes, what kind of equipment?  |
| Is it possible to obtain products with adjusted proportions? $\Box$ Yes $\mathbf{x}$ No                         |



# 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.)

# 9. Indoor environment

| Is the product containing substa | inces classi | fied as al | llergenic (according to 94/69/EC) or other substances kno | own |
|----------------------------------|--------------|------------|---|-----|
| as having influence on health    | Yes          | X No       | If yes, which substance(s)?                               |     |

| Have emissions from the product been measured? $\Box$ Yes $x$ No  |          |
|---|----------|
| Have emissions from the product, in combination with other products, been measured? Please enclose report(s) of results from measurements of emissions. | Yes X No |

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

#### 10. Other information