

DORMA TS92 EN 1-4 CAM ACTION DOOR CLOSER

This folder contains all technical documentation detailing the compliance of the DORMA TS92 Cam Action EN1-4 Slide Arm Door Closer complies with the technical and product requirements contained within United Kingdom Building Regulations and Construction Product Regulations 1991.

Contents

1. Declaration of Performance

The TS92 is CE marked to BS EN1154

2. EN1154 Certificate of Constancy of Performance

The TS92 has been successfully independently third party tested to BS EN1154

3. Certifire Certificate CF119

The TS92 is Certifire Approved as per enclosed Certificate and is suitable for the following applications:-

- a) Timber doors of up to 2 hours fire resistance when installed on the door on the pull side or push side or on the frame on the pull side
- b) Insulated or un-insulated steel doors of up to 4 hours fire resistance when installed on the door on the pull or push side or on the frame on the pull side

4. Torque Curve to demonstrate compliance with requirements of ADM and BS8300

The TS92 when fitted to size EN3 (Minimum size for a fire door) will exert an opening force of 30N or less between 0 and 30 degrees and 22.5N or less between 30 and 60 degrees of opening when applied to doors 733mm wide or above.

Technical Specification

DORMA TS92 EN1-4 Cam Action Door Closer with linear drive and rapidly decreasing opening resistance/torque, adjustable closing speed in two independent ranges and mounting backplate with universal fixing hole pattern, closing force infinitely variable between EN1-4, Non Handed, CE Marked to BS EN1154 and Certifire Certificated CF119.

Once the TS92 Door Closer has been fitted and adjusted accordingly this document can be passed to Building Control to demonstrate compliance with UK Building Regulations and to the 'responsible person' of the Building owner/occupier for use in respect of RR(FS)O requirements.

LEISTUNGSERKLÄRUNG

DECLARATION OF PERFORMANCE

DOP_0015

EN EU Nr. 305/2011 Declaration of Performance

- Unique identification code of the product-type: Controlled door closing devices
DORMA TS 92 B EN 1-4, DORMA TS 92 G EN 1-4
- Intended use/es: On fire and smoke compartmentation doors to fulfil the self closing requirements of such doors.
- Manufacturer: dormakaba Deutschland GmbH - DORMA Platz 1 - 58256 Ennepetal
- System/s of assessment and verification of constancy of performance (AVCP): System 1
- Harmonised standard: EN 1154: 1996/A1: 2002/AC: 2006
- Notified body/ies: MPA NRW 0432
- Declared performance/s:

Essential characteristic	Performance	Harmonised technical specification
Self-closing	<ul style="list-style-type: none"> ▪ Closing doors from $\geq 180^\circ$ open grade 4 ▪ Door closer power size EN 1-4 ▪ Suitability for fire/smoke door use grade1 ▪ Safety grade 1 ▪ Temperature dependence $+40^\circ\text{C}$ and -15°C: $\geq 3\text{s}$ $\leq 25\text{s}$ ▪ Adjustable closing force 	EN 1154: 1996/A1: 2002/AC: 2006
Durability of self-closing	<ul style="list-style-type: none"> ▪ Durability 500000 cycles grade 8 ▪ high corrosion resistance grade 3 	
Dangerous substances	<ul style="list-style-type: none"> ▪ Substances of very high concern < threshold values 	

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Ennepetal 04.11.2016



Michael Hensel

Senior Vice President
Access Solutions DACH



Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

Certificate of constancy of performance

0432-CPR-00026-37

Version 02

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Overhead door closer of model series TS 91, TS 92, TS 92 XEA

Controlled door closing devices for single and double leaf swing doors
according to the composition and classification in annex 1

placed on the market under the name or trade mark of

dormakaba Deutschland GmbH

DORMA Platz 1
58256 Ennepetal
Germany

and produced in the manufacturing plant(s)

DO 2.20

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the standard(s)

EN 1154:1996/A1:2002/AC:2006

under **system 1** for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on 11.11.2015 and will remain valid until 11.11.2020 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Dortmund, 21st March 2018



By order

Dip.-Ing. Friedrich
Head of Certification Body

This Certificate consists of 1 page and 1 annex(es).

This Certificate replaces the Certificate no. 0432-CPR-00026-37 dated November 11th 2015, Version 01.



The original of this document was issued in German language.

In case of doubt only the German version is valid.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

List of Products

Type :	„TS 91 B EN 3“		
Description :	Overhead door closer with hydraulic damping.		
Arm system :	Slide channel arm assembly		
Installation :	Door-leaf fixing, pull side according to manufacturer specifications (standard installation)		
	Frame fixing, push side according to manufacturer specifications		
Size :	3		
Classification :	Door-leaf fixing, pull side	4	8 3 1 1 3
	Frame fixing, push side	3	8 3 1 1 3
Manufacturing plant :	DO 2.20		
Remarks :	Optionally with or without mounting plate		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
<i>Self-closing</i>	TS 91 B EN 3 5.2.1 <i>General</i> 5.2.3 <i>Closing torque</i> 5.2.4 <i>Opening torque</i> 5.2.5 <i>Efficiency</i> 5.2.6 <i>Closing time</i> 5.2.7 <i>Opening angle</i> Door-leaf fixing, pull side Frame fixing, push side 5.2.8 <i>Overload behaviour</i> 5.2.9 <i>Temperature dependence</i> 5.2.10 <i>Leaking</i> 5.2.11 <i>Damage</i> 5.2.12 <i>Latch</i> 5.2.13 <i>Back check</i> 5.2.14 <i>Delayed action</i> 5.2.15 <i>Adjustable closing force</i> 5.2.16 <i>Play at zero position</i> 5.2.18 <i>Suitability for fire-/smoke-protection doors</i>	Passed Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Class 4) Passed (Class 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Not applicable Not applicable Not applicable Not applicable Not applicable Passed (Class 1)
<i>Survability of self-closing</i>	5.2.2 <i>Durability</i> 5.2.17.1 <i>Corrosion resistance</i> 5.2.17.2 <i>Corrosion resistance</i> 5.2.17.3 <i>Corrosion resistance</i>	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
<i>Dangerous substances</i>	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 91 G EN 3“	
Description :	Overhead door closer with hydraulic damping.	
Arm system :	Slide channel arm assembly	
Installation :	Frame fixing, pull side according to manufacturer specifications (standard installation)	
	Door-leaf fixing, push side according to manufacturer specifications	
Size :	3	
Classification :	Frame fixing, pull side	4 8 3 1 1 3
	Door-leaf fixing, push side	3 8 3 1 1 3
Manufacturing plant :	DO 2.20	
Remarks :	Optionally with or without mounting plate	

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	TS 91 G EN 3 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, push side Frame fixing, pull side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Class 3) Passed (Class 4) Passed (Size 3) Passed (Size 3) Passed (Size 3) Passed (Size 3) Not applicable Not applicable Not applicable Not applicable Not applicable Passed (Class 1)
Durability of self-closing	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 91 B EN 4“	
Description :	Overhead door closer with hydraulic damping.	
Arm system :	Slide channel arm assembly	
Installation :	Door-leaf fixing, pull side according to manufacturer specifications (standard installation)	
	Frame fixing, push side according to manufacturer specifications	
Size :	4	
Classification :	Door-leaf fixing, pull side	4 8 4 1 1 3
	Frame fixing, push side	3 8 4 1 1 3
Manufacturing plant :	DO 2.20	
Remarks :	Optionally with or without mounting plate	

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
<i>Self-closing</i>	TS 91 B EN 4 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, pull side Frame fixing, push side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 4) Passed (Size 4) Passed (Size 4) Passed (Size 4) Passed (Class 4) Passed (Class 3) Passed (Size 4) Passed (Size 4) Passed (Size 4) Passed (Size 4) Not applicable Not applicable Not applicable Not applicable Not applicable Passed (Class 1)
<i>Durability of self-closing</i>	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
<i>Dangerous substances</i>	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 92 B EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Door-leaf fixing, pull side according to manufacturer specifications (standard installation) Frame fixing, push side according to manufacturer specifications		
Size :	1 - 4		
Classification :	Door-leaf fixing, pull side	4	8 1-4 1 1 3
	Frame fixing, push side	3	8 1-4 1 1 3
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	TS 92 B EN 1-4 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, pull side Frame fixing, push side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Class 4) Passed (Class 3) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Not applicable Not applicable Not applicable Passed (Size 1-4) Not applicable Passed (Class 1)
Durability of self-closing	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 92 G EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Frame fixing, pull side according to manufacturer specifications (standard installation) Door-leaf fixing, push side according to manufacturer specifications		
Size :	1 - 4		
Classification :	Frame fixing, pull side	4	8 1-4 1 1 3
	Door-leaf fixing, push side	3	8 1-4 1 1 3
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	TS 92 G EN 1-4 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, push side Frame fixing, pull side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Class 3) Passed (Class 4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Not applicable Not applicable Not applicable Passed (Size 1-4) Not applicable Passed (Class 1)
Durability of self-closing	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

Type :	„TS 92 B Basic EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Door-leaf fixing, pull side according to manufacturer specifications (standard installation) Frame fixing, push side according to manufacturer specifications		
Size :	1 - 4		
Classification :	Door-leaf fixing, pull side	4	8 1-4 1 1 3
	Frame fixing, push side	3	8 1-4 1 1 3
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	TS 92 B Basic EN 1-4 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, pull side Frame fixing, push side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Class 4) Passed (Class 3) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Not applicable Not applicable Not applicable Passed (Size 1-4) Not applicable Passed (Class 1)
Durability of self-closing	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 3 (96h) Passed Class 3 (96h) Passed Class 3 (96h)
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 92 G Basic EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Frame fixing, pull side according to manufacturer specifications (standard installation) Door-leaf fixing, push side according to manufacturer specifications		
Size :	1 - 4		
Classification :	Frame fixing, pull side	4	8 1-4 1 1 3
	Door-leaf fixing, push side	3	8 1-4 1 1 3
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	<p>TS 92 G Basic EN 1-4</p> <p>5.2.1 General</p> <p>5.2.3 Closing torque</p> <p>5.2.4 Opening torque</p> <p>5.2.5 Efficiency</p> <p>5.2.6 Closing time</p> <p>5.2.7 Opening angle</p> <p>Door-leaf fixing, push side</p> <p>Frame fixing, pull side</p> <p>5.2.8 Overload behaviour</p> <p>5.2.9 Temperature dependence</p> <p>5.2.10 Leaking</p> <p>5.2.11 Damage</p> <p>5.2.12 Latch</p> <p>5.2.13 Back check</p> <p>5.2.14 Delayed action</p> <p>5.2.15 Adjustable closing force</p> <p>5.2.16 Play at zero position</p> <p>5.2.18 Suitability for fire-/smoke-protection doors</p>	<p>Passed</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Class 3)</p> <p>Passed (Class 4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p> <p>Passed (Size 1-4)</p> <p>Not applicable</p> <p>Passed (Class 1)</p>
Durability of self-closing	<p>5.2.2 Durability</p> <p>5.2.17.1 Corrosion resistance</p> <p>5.2.17.2 Corrosion resistance</p> <p>5.2.17.3 Corrosion resistance</p>	<p>Passed Class 8 (500 000 Cycles)</p> <p>Passed Class 3 (96h)</p> <p>Passed Class 3 (96h)</p> <p>Passed Class 3 (96h)</p>
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 92 B XEA EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Door-leaf fixing, pull side according to manufacturer specifications (standard installation) Frame fixing, push side der Tür gemäß Herstellerangaben		
Size :	1 - 4		
Classification :	Door-leaf fixing, pull side	4	8 1-4 1 1 4
	Frame fixing, push side	3	8 1-4 1 1 4
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	<p>TS 92 B XEA EN 1-4</p> <p>5.2.1 General</p> <p>5.2.3 Closing torque</p> <p>5.2.4 Opening torque</p> <p>5.2.5 Efficiency</p> <p>5.2.6 Closing time</p> <p>5.2.7 Opening angle</p> <p>Door-leaf fixing, pull side</p> <p>Frame fixing, push side</p> <p>5.2.8 Overload behaviour</p> <p>5.2.9 Temperature dependence</p> <p>5.2.10 Leaking</p> <p>5.2.11 Damage</p> <p>5.2.12 Latch</p> <p>5.2.13 Back check</p> <p>5.2.14 Delayed action</p> <p>5.2.15 Adjustable closing force</p> <p>5.2.16 Play at zero position</p> <p>5.2.18 Suitability for fire-/smoke-protection doors</p>	<p>Passed</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Class 4)</p> <p>Passed (Class 3)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Passed (Size 1-4)</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p> <p>Passed (Size 1-4)</p> <p>Not applicable</p> <p>Passed (Class 1)</p>
Durability of self-closing	<p>5.2.2 Durability</p> <p>5.2.17.1 Corrosion resistance</p> <p>5.2.17.2 Corrosion resistance</p> <p>5.2.17.3 Corrosion resistance</p>	<p>Passed Class 8 (500 000 Cycles)</p> <p>Passed Class 4 (240h)</p> <p>Passed Class 4 (240h)</p> <p>Passed Class 4 (240h)</p>
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.

Materialprüfungsamt Nordrhein-Westfalen

Prüfen · Überwachen · Zertifizieren

Type :	„TS 92 G XEA EN 1-4“		
Description :	Overhead door closer with hydraulic damping and adjustable closing force.		
Arm system :	Slide channel arm assembly		
Installation :	Frame fixing, pull side according to manufacturer specifications (standard installation) Door-leaf fixing, push side according to manufacturer specifications		
Size :	1 - 4		
Classification :	Frame fixing, pull side	4	8 1-4 1 1 4
	Door-leaf fixing, push side	3	8 1-4 1 1 4
Manufacturing plant :	DO 2.20		
Remarks :	When used on fire and smoke protection doors, the closing device must be set at least to door closer size EN 3.		

Intended use:

On single- and double-leaf fire- and/or smoke-protection swing doors

Essential property	Sections with requirements in EN 1154:1996/A1:2002/AC:2006	Performance of the product
Self-closing	TS 92 G XEA EN 1-4 5.2.1 General 5.2.3 Closing torque 5.2.4 Opening torque 5.2.5 Efficiency 5.2.6 Closing time 5.2.7 Opening angle Door-leaf fixing, push side Frame fixing, pull side 5.2.8 Overload behaviour 5.2.9 Temperature dependence 5.2.10 Leaking 5.2.11 Damage 5.2.12 Latch 5.2.13 Back check 5.2.14 Delayed action 5.2.15 Adjustable closing force 5.2.16 Play at zero position 5.2.18 Suitability for fire-/smoke-protection doors	Passed Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Class 3) Passed (Class 4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Passed (Size 1-4) Not applicable Not applicable Not applicable Passed (Size 1-4) Not applicable Passed (Class 1)
Durability of self-closing	5.2.2 Durability 5.2.17.1 Corrosion resistance 5.2.17.2 Corrosion resistance 5.2.17.3 Corrosion resistance	Passed Class 8 (500 000 Cycles) Passed Class 4 (240h) Passed Class 4 (240h) Passed Class 4 (240h)
Dangerous substances	Annex ZA.3	The manufacturer has not declared any dangerous substances.



CERTIFICATE OF APPROVAL

No CF 119

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

DORMA UK LTD

Wilbury Way, Hitchin, Hertfordshire SG4 0AB
Tel: 01462 477600 Fax: 01462 477601

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT
DORMA TS 90, TS 91, TS 92, TS
93, TS 97, TS 98 and TS 99
OVERHEAD MOUNTED DOOR
CLOSERS

TECHNICAL SCHEDULE
TS 34 - The Contribution Of
Controlled Door Closing
Devices And Accessories To
Fire Resisting Doorsets

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager



Issued: 3rd February 1992
Revised: 04th October 2019
Valid to: 28th June 2022

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CERTIFICATE No CF 119 DORMA UK LTD

DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

1. Dorma TS90, TS 91, TS 92, TS 93, TS 97, TS98 and TS 99 are overhead mounted cam action door closing devices. The TS 92, TS 93, TS98 and TS 99 have adjustable power. The TS 93 and TS 98 also includes integral back check and delayed action. The TS 99 is a free swing unit complying with EN 1155. This approval relates to the following configurations:

	Link-arms			Slide arms			
	Projecting arm (Fig. 1) Body door mounted on pull face	Projecting arm (Fig. 61) Body transom mounted on push face	Parallel arm (Fig. 6) Body door mounted on push face	Body door mounted on pull face	Body transom mounted on push face	Body door mounted on push face	Body transom mounted on pull face
TS 90	*	*	*	✓	*	*	✓
TS 91 B	*	*	*	✓	✓	*	*
TS 92 B	*	*	*	✓	✓	*	*
TS 92 G	*	*	*	*	*	✓	✓
TS 93 B 2-5	*	*	*	✓	✓	*	*
TS 93 G 2-5	*	*	*	*	*	✓	✓
TS 93 B 5-7	*	*	*	✓	*	*	*
TS 93 G 5-7	*	*	*	*	*	*	✓
TS 97	*	*	*	✓	*	*	✓
TS98	*	*	*	✓	✓	✓	✓
TS 99 FL	*	*	*	✓	*	*	✓
G-EMF	*	*	*	✓	*	✓	*
G-EMR	*	*	*	✓	*	✓	*
GSR	*	*	*	✓	*	✓	*
GSR EMF	*	*	*	✓	*	✓	*
GSR EMR	*	*	*	✓	*	✓	*

Key: ✓ - approved * - Not approved

Note: Where alternative arms for non-fire applications are included within the packaging, the use of these components on fire resisting door assemblies will invalidate the certification.

2. This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

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3. This approval relates to its use with the following door assemblies:-

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance up to 120 minutes (Code ITT).

Latched and unlatched, door assemblies consisting of metal faced and edged leaves in metal frames, fully-insulated for the required classification period, with or without intumescent sealing, and having a fire resistance up to 240 minutes (Codes MM & IMM)

Latched and unlatched, door assemblies consisting of metal faced and edged leaves in metal frames, uninsulated for the required classification period, with or without intumescent sealing, and having a fire resistance up to 240 minutes (Codes MM & IMM) with closers fitted to the fire risk face only*

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in fully-insulated steel frames having a fire resistance up to 120 minutes (Code ITM)

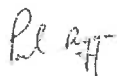
****The closer must not be used in this application where a specific direction of fire exposure for the doorset cannot be identified***

4. The closers are approved on the basis of:

- i) Initial type testing to EN1154 and BS EN 1634-1.
- ii) An appraisal against TS34
- iii) Inspection of quality management system
- iv) Inspection and surveillance of factory production control
- v) Ongoing audit testing in accordance with EN 1154 requirements

5. This approval is applicable only to the specified closers when mounted in the applications stated above and under the classification codes section of this certificate and used with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987) and having power ratings appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

6. The closers shall be fixed with screws supplied by the closer manufacturer. Bolt-through fixings shall not be used.





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7. Where the closers are fitted to door leaves or frames that are manufactured from mineral composite-based materials, or low-density cellulosic-based material, the door assembly shall have previously been shown capable of accommodating the installation of closers at the head of the doorset, without detriment to the door assembly's performance.

8. The approval relates to on-going production. The product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

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Revised: 04th October 2019
Valid to: 28th June 2022

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Class	Approved Door Type				
	MM	IMM	ITT	ITM	ITC
FD20	✓*#	✓*#	✓	✓*	✓
FD30	✓*#	✓*#	✓	✓*	✓
FD60	✓*#	✓*#	✓	✓*	✓
FD120	✓*#	✓*#	✓	✓*	✓
FD240	✓*#	✓*#	✗	✗	✗
E 20	✓#	✓#	✓	✓*	✓
EI 20	✓*	✓*	✓	✓*	✓
E 30	✓#	✓#	✓	✓*	✓
EI 30	✓*	✓*	✓	✓*	✓
E 60	✓#	✓#	✓	✓*	✓
EI 60	✓*	✓*	✓	✓*	✓
E 90	✓#	✓#	✓	✓*	✓
EI 90	✓*	✓*	✓	✓*	✓
E 120	✓#	✓#	✓	✓*	✓
EI 120	✓*	✓*	✓	✓*	✓
E 240	✓#	✓#	✗	✗	✗
EI 240	✓*	✓*	✗	✗	✗

Key:

- ✓ - approved
- ✗ - Not approved
- ✓* - Fully-insulated steel-based doors and frames only
- ✓# - Fitted to the fire risk face only of Uninsulated steel-based doors and frames only
- ✓*# - Fitted to Fully-insulated steel-based doors and frames, or the fire risk face only of Uninsulated steel-based doors and frames

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9. Doors are classified as the following types:

Type MM - 20 minute to 240 minute doorsets that consist of metallic leaves in metallic frames that do not contain intumescent materials in the frame to leaf gap.

Type IMM - 20 minute to 240 minute doorsets that consist of metallic leaves in metallic frames that contain intumescent materials in the frame to leaf gap.

Type ITT - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in timber frames

Type ITM - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in metal frames.

Type ITC - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in proprietary composite frames, of which the principal material is other than timber or metal but which may include any other materials.

Scope of Approval:

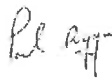
- Doors may not include uninsulated glass above 20% of their total area.
- All closer models are only approved in the fitting applications detailed with their classification codes.
- Closers are approved for use on both sides of steel-based doors and frames that are fully-insulated for the required classification period.
- For uninsulated steel-based doors and frames the closers shall be fitted to the fire risk face only. The closer must not be used in this application where a specific direction of fire exposure for the doorset cannot be identified
- Mechanical Hold open option is not approved.

Classification codes

The approval provides the following classifications:

Dorma TS 90
Door leaf mounted pull side only:

3	8	4 3	1	1	3
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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

Classification codes (continued)

Dorma TS 90
Transom mounted pull side only:

3	8	3	1	1	3
---	---	---	---	---	---

Dorma TS 91 B
Door leaf mounted pull side and transom mounted push side only (model suffixed B)

4	8	3	1	1	3
---	---	---	---	---	---

Dorma TS 92 B & TS 92 G
Door leaf mounted pull side and transom mounted push side (model suffixed B)
Door leaf mounted push side and transom mounted pull side (model suffixed G)

4	8	4 1	1	1	3
---	---	--------	---	---	---

Dorma TS 93 B & TS 93 G (EN 2-5)
Door leaf mounted pull side and transom mounted push side (model suffixed B)
Door leaf mounted push side and transom mounted pull side (model suffixed G)

4	8	5 2	1	1	4
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Dorma TS 93 B/G EN 5-7
Door leaf mounted pull side (model suffixed B)
Transom mounted pull side (model suffixed G)

4	8	7 5	1	1	4
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Note: power ratings shall be appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

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Classification codes (continued)

Dorma TS 97
Door leaf mounted pull side and transom mounted pull side only

3	8	4 2	1	1	3
---	---	--------	---	---	---

Dorma TS 98
Door leaf mounted pull side and transom mounted pull side only

4	8	6 1	1	1	4
---	---	--------	---	---	---

Dorma TS 98
Door leaf mounted push side only

3	8	6 1	1	1	4
---	---	--------	---	---	---

Dorma TS 98
Transom mounted push side only

4	8	5 1	1	1	4
---	---	--------	---	---	---

Dorma TS 99 FL EN 2-5 (EN1155) – Standard or Top jamb Installation
Door leaf mounted pull side and transom mounted pull side only

3	8	5 3	1	1	3
---	---	--------	---	---	---

Note: power ratings shall be appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

Accessories

The following accessories are approved for use with the TS 91, TS 92 and TS 93:

- G-EMF Electro-mechanical hold-open
- G-EMR Electro-mechanical hold-open and integral smoke detector
- GSR Standard door co-ordinator
- GSR EMF Door co-ordinator with electro-mechanical hold-open
- GSR EMR Door co-ordinator with integral smoke detector

Classification of these slide arm channels is given as follows:

G-EMR & G-EMF

Closer body door leaf mounted pull side and door leaf mounted push side only

3	8	5 3	1	1	3
---	---	--------	---	---	---

GSR & GSR-EMF

Closer body door leaf mounted pull side and door leaf mounted push side only

3	8	5 3	1	1	3
---	---	--------	---	---	---

GSR-EMR

Closer body door leaf mounted pull side and door leaf mounted push side only

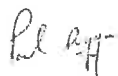
3	8	5 3	1	1	0
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Note: Where one of the above slide arm channels are used in conjunction with a closer model having a differing classification code, the lower code shall apply.

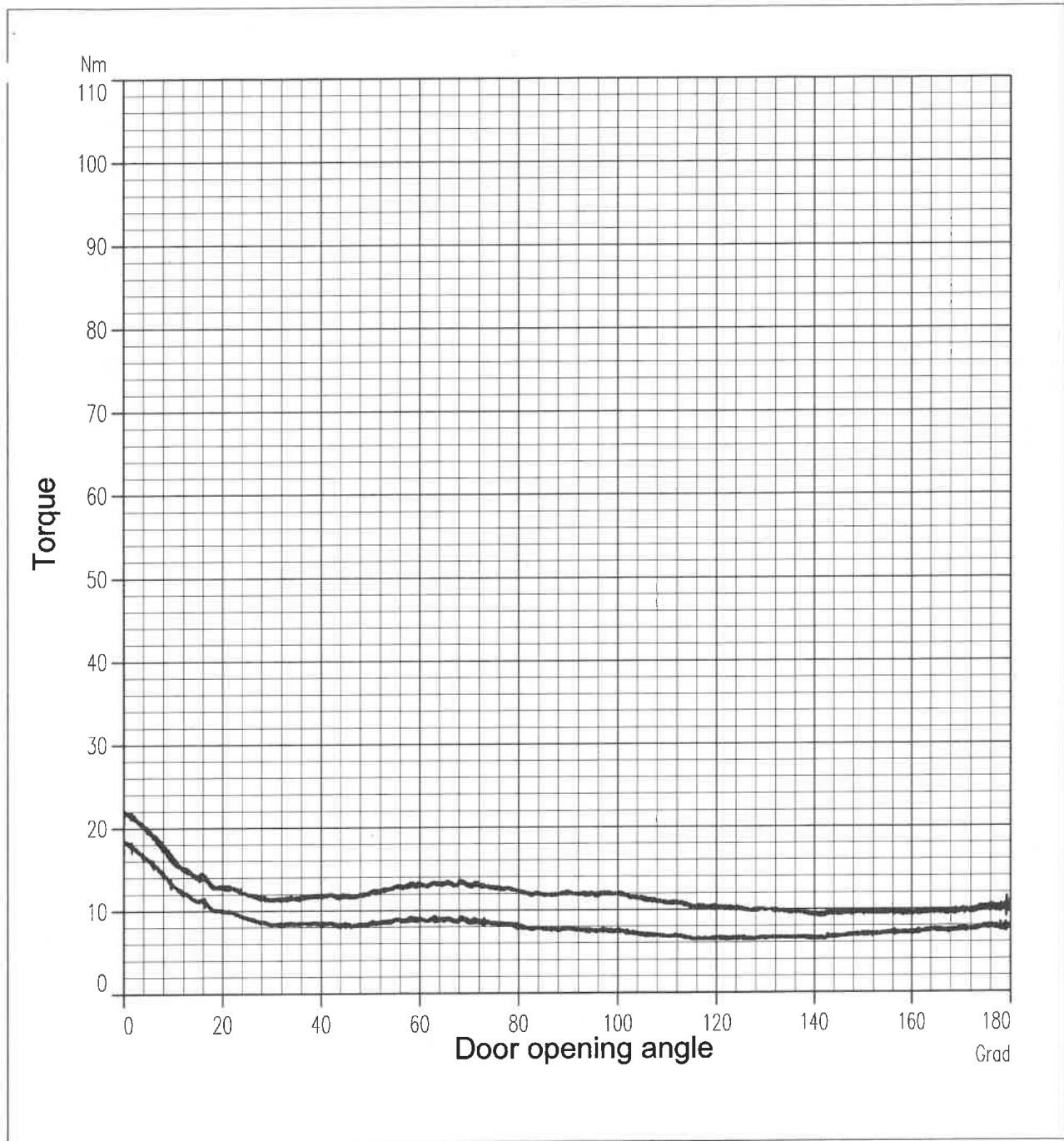
Further Information

Further information regarding the details contained in this data sheet may be obtained from Dorma UK Limited (Tel: 01462 477600).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).



Torque curve



Controlled door closing device EN 1154

Manufacturer: DORMA
Model: TS 92 EN 1-4
Sample: B 1
Size: 3
5000 Cycles

Standard installation



17.04.2013

Jh. Hümb