

**Materialprüfungsamt Nordrhein-Westfalen**

Prüfen • Überwachen • Zertifizieren

**Certificate of constancy of performance****0432-CPR-00099-12**

Version 06

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

**ECO TS-51, ECO TS-52, ECO TS-61**

Door Closer with a controlled closing-sequence for single- and double leaf doors in accordance with the combination and classification in Annex 1

placed on the market under the name or trade mark of

**ECO Schulte GmbH & Co.KG**

Iserlohner Landstraße 89  
58706 Menden, Germany

and produced in the manufacturing plant(s)

**DO 2.32**

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 14.05.2024 and will remain valid until 27.10.2027 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.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, 14.05.2024



By order

RBA Thorsten Meinks

Deputy Head of Certification Body Department  
22.30

This Certificate consists of 1 page and 1 annex.  
This Certificate replaces the Certificate no. 0432-CPR-00099-12 dated  
24.03.2023, Version 05.

The original of this document was issued in German language.  
In case of doubt only the German version is valid.



# Materialprüfungsamt Nordrhein-Westfalen

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## List of Products

|                             |                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-51 EN 1-4“                                                                                                                                                                                                               |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable back check                                                                                                                                                 |
| <b>Arm system:</b>          | slide channel arm assembly (long)                                                                                                                                                                                                |
| <b>Installation:</b>        | Door-leaf fixing, pull side in accordance with manufacturer specification (standard installation)<br>Frame fixing, push side in accordance with manufacturer specification                                                       |
| <b>Size:</b>                | 1 - 4                                                                                                                                                                                                                            |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>4 8 1-4 1 1 3<br>Frame fixing, push side<br>3 8 1-4 1 1 3<br><br>With slide channel arm assembly RIII<br>Door-leaf fixing, pull side<br>4 8 1-4 1 1 0<br>Frame fixing, push side<br>3 8 1-4 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                          |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                            |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                        |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, pull side<br>Frame fixing, push side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br><br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Not applicable<br>Passed (Size 1-4)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 3 (96h)<br>Passed Class 3 (96h)<br>Passed Class 3 (96h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                               |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                       |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

|                             |                                                                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-51 G“                                                                                                                                                                                                                     |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable back check                                                                                                                                                  |
| <b>Arm system:</b>          | slide channel arm assembly (long)                                                                                                                                                                                                 |
| <b>Installation:</b>        | Door-leaf fixing, push side in accordance with manufacturer specification (standard installation)<br>Frame fixing, pull side in accordance with manufacturer specification                                                        |
| <b>Size:</b>                | 1 - 4                                                                                                                                                                                                                             |
| <b>Classification:</b>      | Door-leaf fixing, push side<br>3 8 1-4 1 1 3<br>Frame fixing, pull side<br>4 8 1-4 1 1 3<br><br>With slide channel arm assembly RIII:<br>Door-leaf fixing, push side<br>3 8 1-4 1 1 0<br>Frame fixing, pull side<br>4 8 1-4 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                           |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                             |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, push side<br>Frame fixing, pull side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Class 3)<br>Passed (Class 4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Passed (Size 1-4)<br>Not applicable<br>Passed (Size 1-4)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 3 (96h)<br>Passed Class 3 (96h)<br>Passed Class 3 (96h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                           |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                   |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-52 EN 2-5“                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Arm system:</b>          | slide channel arm assembly                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Installation:</b>        | Door-leaf fixing, pull side in accordance with manufacturer specification (standard installation)<br>Door-leaf fixing, push side in accordance with manufacturer specification<br>Frame fixing, pull side in accordance with manufacturer specification<br>Frame fixing, push side in accordance with manufacturer specification                                                                                         |
| <b>Size:</b>                | 2 - 5                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>4 8 2-5 1 1 4<br>Door-leaf fixing, push side<br>3 8 2-5 1 1 4<br>Frame fixing, pull side<br>4 8 2-5 1 1 4<br>Frame fixing, push side<br>3 8 2-5 1 1 4<br><br>With slide channel arm assembly RIII<br>Door-leaf fixing, pull side<br>4 8 2-5 1 1 0<br>Door-leaf fixing, push side<br>3 8 2-5 1 1 0<br>Frame fixing, pull side<br>4 8 2-5 1 1 0<br>Frame fixing, push side<br>3 8 2-5 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                                                                                                                                                                                                                    |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Performance of the product                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, pull side<br>Door-leaf fixing, push side<br>Frame fixing, pull side<br>Frame fixing, push side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Not applicable<br>Not applicable<br>Passed (Size 2-5)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                                                                                    | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                                                             |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                                                        |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

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|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 EN 2-5“                                                                                                                                                                                                               |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable back check                                                                                                                                                 |
| <b>Arm system:</b>          | slide channel arm assembly (short and long)                                                                                                                                                                                      |
| <b>Installation:</b>        | Door-leaf fixing, pull side in accordance with manufacturer specification (standard installation)<br>Frame fixing, push side in accordance with manufacturer specification                                                       |
| <b>Size:</b>                | 2-5                                                                                                                                                                                                                              |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>4 8 2-5 1 1 4<br>Frame fixing, push side<br>3 8 2-5 1 1 4<br><br>With slide channel arm assembly RIII<br>Door-leaf fixing, pull side<br>4 8 2-5 1 1 0<br>Frame fixing, push side<br>3 8 2-5 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                          |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                            |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, pull side<br>Frame fixing, push side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Not applicable<br>Passed (Size 2-5)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                   |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                              |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

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|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 G EN 2-5“                                                                                                                                                                                                              |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable back check                                                                                                                                                  |
| <b>Arm system:</b>          | slide channel arm assembly (long)                                                                                                                                                                                                 |
| <b>Installation:</b>        | Door-leaf fixing, push side in accordance with manufacturer specification (standard installation)<br>Frame fixing, pull side in accordance with manufacturer specification                                                        |
| <b>Size:</b>                | 2 - 5                                                                                                                                                                                                                             |
| <b>Classification:</b>      | Door-leaf fixing, push side<br>3 8 2-5 1 1 4<br>Frame fixing, pull side<br>4 8 2-5 1 1 4<br><br>With slide channel arm assembly RIII:<br>Door-leaf fixing, push side<br>3 8 2-5 1 1 0<br>Frame fixing, pull side<br>4 8 2-5 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                           |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                             |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, push side<br>Frame fixing, pull side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Class 3)<br>Passed (Class 4)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Passed (Size 2-5)<br>Not applicable<br>Passed (Size 2-5)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                        |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                   |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

|                             |                                                                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 EN 3-6“                                                                                                                                                                                                                |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence, adjustable delayed action and adjustable back check                                                                                                                       |
| <b>Arm system:</b>          | slide channel arm assembly (short and long)                                                                                                                                                                                       |
| <b>Installation:</b>        | Door-leaf fixing, pull side in accordance with manufacturer specification (standard installation)<br>Frame fixing, push side in accordance with manufacturer specification                                                        |
| <b>Size:</b>                | 3 - 6                                                                                                                                                                                                                             |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>4 8 3-6 1 1 4<br>Frame fixing, push side<br>3 8 3-6 1 1 4<br><br>With slide channel arm assembly RIII:<br>Door-leaf fixing, pull side<br>4 8 3-6 1 1 0<br>Frame fixing, push side<br>3 8 3-6 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                           |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                             |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, pull side<br>Frame fixing, push side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                           |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                      |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

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|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 G EN 3-6“                                                                                                                                                                                                              |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence, adjustable delayed action and adjustable back check                                                                                                                       |
| <b>Arm system:</b>          | slide channel arm assembly (long)                                                                                                                                                                                                 |
| <b>Installation:</b>        | Door-leaf fixing, push side in accordance with manufacturer specification (standard installation)<br>Frame fixing, pull side in accordance with manufacturer specification                                                        |
| <b>Size:</b>                | 3 - 6                                                                                                                                                                                                                             |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>3 8 3-6 1 1 4<br>Frame fixing, push side<br>4 8 3-6 1 1 4<br><br>With slide channel arm assembly RIII:<br>Door-leaf fixing, pull side<br>3 8 3-6 1 1 0<br>Frame fixing, push side<br>4 8 3-6 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                           |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                             |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, push side<br>Frame fixing, pull side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Class 3)<br>Passed (Class 4)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Passed (Size 3-6)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                           |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                      |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

|                             |                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 EN 5-6“                                                                                                                                                                                                               |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable back check                                                                                                                                                 |
| <b>Arm system:</b>          | slide channel arm assembly (short and long)                                                                                                                                                                                      |
| <b>Installation:</b>        | Door-leaf fixing, pull side in accordance with manufacturer specification (standard installation)<br>Frame fixing, push side in accordance with manufacturer specification                                                       |
| <b>Size:</b>                | 5 - 6                                                                                                                                                                                                                            |
| <b>Classification:</b>      | Door-leaf fixing, pull side<br>4 8 5-6 1 1 4<br>Frame fixing, push side<br>3 8 5-6 1 1 4<br><br>With slide channel arm assembly RIII<br>Door-leaf fixing, pull side<br>4 8 5-6 1 1 0<br>Frame fixing, push side<br>3 8 5-6 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                          |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                            |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, pull side<br>Frame fixing, push side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Class 4)<br>Passed (Class 3)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Not applicable<br>Passed (Size 5-6)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                        |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                   |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

|                             |                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type:</b>                | „ECO TS-61 G EN 5-6“                                                                                                                                                                                                             |
| <b>Description:</b>         | Hydraulic door closer with controlled closing sequence and adjustable opening dampening                                                                                                                                          |
| <b>Arm system:</b>          | slide channel arm assembly (long)                                                                                                                                                                                                |
| <b>Installation:</b>        | Door-leaf fixing, push side in accordance with manufacturer specification (standard installation)<br>Frame fixing, pull side in accordance with manufacturer specification                                                       |
| <b>Size:</b>                | 5 - 6                                                                                                                                                                                                                            |
| <b>Classification:</b>      | Door-leaf fixing, push side<br>3 8 5-6 1 1 4<br>Frame fixing, pull side<br>4 8 5-6 1 1 4<br><br>With slide channel arm assembly RIII<br>Door-leaf fixing, push side<br>3 8 5-6 1 1 0<br>Frame fixing, pull side<br>4 8 5-6 1 1 0 |
| <b>Manufacturing Plant:</b> | DO 2.32                                                                                                                                                                                                                          |
| <b>Remarks:</b>             | Optionally with and without mounting plate, optionally with slide channel assembly GS-G, GS-H, GS-HF, GS-STM or RIII, optionally with arm 6*336mm, 4*336mm or 4*358mm                                                            |

# Materialprüfungsamt Nordrhein-Westfalen

Prüfen • Überwachen • Zertifizieren

## Intended Use:

On single- and double leaf fire- and smoke protection doors

| Essential properties       | Clauses with requirements in<br>EN 1154:1996/A1:2002/AC:2006                                                                                                                                                                                                                                                                                                                                                                                                                | Performance of the product                                                                                                                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-closing               | 5.2.1 General<br>5.2.3 Closing torque<br>5.2.4 Opening torque<br>5.2.5 Efficiency<br>5.2.6 Closing time<br>5.2.7 Opening angle<br>Door-leaf fixing, push side<br>Frame fixing, pull side<br>5.2.8 Overload test<br>5.2.9 Temperature dependence<br>5.2.10 Leakage<br>5.2.11 Damage<br>5.2.12 Latch regulation<br>5.2.13 Back check<br>5.2.14 Delayed action<br>5.2.15 Adjustable force<br>5.2.16 Play at zero point position<br>5.2.18 Use on fire-/ smoke protection doors | Passed<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Class 3)<br>Passed (Class 4)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Passed (Size 5-6)<br>Not applicable<br>Passed (Size 5-6)<br>Not applicable<br>Passed (Class 1) |
| Durability<br>Self-closing | 5.2.2 Durability<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance<br><br>With slide channel arm assembly RIII<br>5.2.17.1 Corrosion resistance<br>5.2.17.2 Corrosion resistance<br>5.2.17.3 Corrosion resistance                                                                                                                                                                                                          | Passed (Class 8)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br>Passed Class 4 (240h)<br><br>No requirements (Class 0)<br>No requirements (Class 0)<br>No requirements (Class 0)                                                                                                                                                        |
| Dangerous substances       | Annex ZA.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The manufacturer has not declared any dangerous substances.                                                                                                                                                                                                                                                                                   |