

# LEISTUNGSERKLÄRUNG

DoP Nr.: DB21025

|                                                                       |                                                                                          |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1. Eindeutiger Kenncode des Produkttyps                               | WBS - Holzbauschraube / WBS - Wood Building Screw<br>d = 3,5 - 12,0mm und L = 20 - 600mm |
| 2. Verwendungszweck(e)                                                | Selbstbohrende Schrauben als Verbindungsmittel in tragenden Holzkonstruktionen           |
| 3. Hersteller                                                         | Din Ling GmbH<br>8042 Graz Schmiedlstraße 1<br>Österreich<br>www.din-ling.eu             |
| 4. Bevollmächtigter                                                   | nicht relevant                                                                           |
| 5. System(e) zur Bewertung und Überprüfung der Leistungsbeständigkeit | System 3                                                                                 |
| 6a)                                                                   | -                                                                                        |
| 6b)                                                                   | -                                                                                        |
| Europäisches Bewertungsdokument                                       | EAD 130118-00-0603 von 10.2016                                                           |
| Europäische Technische Bewertung                                      | ETA-12/0276 von 16.02.2017                                                               |
| Technische Bewertungsstelle                                           | DIBt - Deutsches Institut für Bautechnik                                                 |
| Notifizierte Stelle                                                   | -                                                                                        |
| 7. Erklärte Leistung(en)                                              |                                                                                          |

| Wesentliche Merkmale                                                                                            | Deklarierte Leistung                                                                                                                                                                                                                                                                                                                                                                                           |         |         |          |          |          |          |          | Harmonisierte Technische Spezifikation |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|----------|----------|----------|----------|----------|----------------------------------------|
| Nenndurchmesser<br>d [mm]                                                                                       | 3,5                                                                                                                                                                                                                                                                                                                                                                                                            | 4,0     | 4,5     | 5,0      | 6,0      | 8,0      | 10,0     | 12,0     | ETA-12/0276 Annex 4                    |
| Innendurchmesser<br>d1 [mm]                                                                                     | 1,90                                                                                                                                                                                                                                                                                                                                                                                                           | 2,05    | 2,40    | 2,80     | 3,65     | 5,05     | 6,20     | 7,00     | ETA-12/0276 Annex 4                    |
| Schaftdurchmesser<br>ds [mm]                                                                                    | 2,50                                                                                                                                                                                                                                                                                                                                                                                                           | 2,80    | 3,16    | 3,47     | 4,15     | 5,70     | 6,80     | 7,90     | ETA-12/0276 Annex 4                    |
| Kopfdurchmesser CSK<br>dh [mm]                                                                                  | 6,60                                                                                                                                                                                                                                                                                                                                                                                                           | 7,60    | 8,60    | 9,60     | 11,40    | 14,00    | 17,00    | 20,00    | ETA-12/0276 Annex 4                    |
| Kopfdurchmesser WAF<br>dh [mm]                                                                                  | -                                                                                                                                                                                                                                                                                                                                                                                                              | -       | -       | -        | 14,50    | 20,50    | 23,50    | 27,50    | ETA-12/0276 Annex 4                    |
| Gewindesteigung<br>p [mm]                                                                                       | 2,70                                                                                                                                                                                                                                                                                                                                                                                                           | 2,80    | 3,10    | 3,20     | 4,50     | 5,20     | 5,60     | 6,00     | ETA-12/0276 Annex 4                    |
| Schraubenlänge<br>L [mm]                                                                                        | 20 - 70                                                                                                                                                                                                                                                                                                                                                                                                        | 20 - 80 | 20 - 80 | 25 - 120 | 40 - 300 | 40 - 600 | 80 - 600 | 80 - 600 | ETA-12/0276 Annex 4                    |
| Gewindelänge<br>L1 [mm]                                                                                         | 14 - 42                                                                                                                                                                                                                                                                                                                                                                                                        | 16 - 49 | 18 - 49 | 20 - 74  | 24 - 75  | 32 - 150 | 40 - 150 | 50 - 150 | ETA-12/0276 Annex 4                    |
| Fliemoment<br>M <sub>y,k</sub> [Nm]                                                                            | 2,3                                                                                                                                                                                                                                                                                                                                                                                                            | 3,3     | 4,5     | 5,9      | 9,5      | 20,0     | 36,0     | 58,0     | EAD 130118-01-0603                     |
| Charakt. Ausziehparameter<br>f <sub>ax,k</sub> [N/mm²] bei 350 kg/m³                                            | 12,0                                                                                                                                                                                                                                                                                                                                                                                                           |         |         |          | 11,0     |          | 10,0     |          | EAD 130118-01-0603                     |
| Charakt. Kopfdurchziehparameter alle Kpfe<br>f <sub>head,k</sub> [N/mm²] bei 350 kg/m³ t: <12 / 12-20 / >20 mm | 8 / 8 / 9,4                                                                                                                                                                                                                                                                                                                                                                                                    |         |         |          |          |          |          |          | EAD 130118-01-0603                     |
| Charakt. Zugtragfhigkeit<br>f <sub>tens,k</sub> [kN]                                                           | 4,0                                                                                                                                                                                                                                                                                                                                                                                                            | 5,0     | 6,0     | 8,0      | 9,5      | 19,0     | 25,0     | 42,0     | EAD 130118-01-0603                     |
| Charakt. Streckgrenze<br>f <sub>y,k</sub> [N/mm²]                                                               | NPD                                                                                                                                                                                                                                                                                                                                                                                                            |         |         |          |          |          |          |          | EAD 130118-01-0603                     |
| Charakt. Bruchdrehmoment<br>f <sub>tor,k</sub> [Nm]                                                             | 2,2                                                                                                                                                                                                                                                                                                                                                                                                            | 3,3     | 4,5     | 6,1      | 9,0      | 24,0     | 40,0     | 68,0     | EAD 130118-01-0603                     |
| Charakt. Einschraubdrehmoment<br>R <sub>tor,mean</sub> [Nm]                                                     | NPD                                                                                                                                                                                                                                                                                                                                                                                                            |         |         |          |          |          |          |          | EAD 130118-01-0603                     |
| Torsionsverhltnis<br>f <sub>tor,k</sub> /R <sub>tor,mean</sub>                                                 | ≥ 1,5                                                                                                                                                                                                                                                                                                                                                                                                          |         |         |          |          |          |          |          | EAD 130118-01-0603                     |
| Mindestabstnde der Schrauben und Mindestdicke des Holzes                                                       | Fr Brettsperrholz gem. ETA:<br>Seite: a <sub>1</sub> =4·d   a <sub>1,i</sub> =6·d   a <sub>1,c</sub> =6·d   a <sub>2</sub> =2,5·d   a <sub>2,i</sub> =6·d   a <sub>2,c</sub> =2,5·d<br>Stirn: a <sub>1</sub> =10·d   a <sub>1,i</sub> =12·d   a <sub>1,c</sub> =7·d   a <sub>2</sub> =4·d   a <sub>2,i</sub> =6·d   a <sub>2,c</sub> =3·d<br>Fr alle anderer Anwendungen und fr Mindestdicke s. EN 1995-1-1 |         |         |          |          |          |          |          | EAD 130118-01-0603<br>EN 1995-1-1      |
| Verschiebungsmodul<br>K <sub>ser</sub> [N/mm]                                                                   | K <sub>ser</sub> = 780 * d <sup>0,2</sup> * l <sub>ef</sub> <sup>0,4</sup>                                                                                                                                                                                                                                                                                                                                     |         |         |          |          |          |          |          | EAD 130118-01-0603                     |
| Korrosionsschutz<br>[Nutzungsklasse]                                                                            | 1                                                                                                                                                                                                                                                                                                                                                                                                              |         | 2       |          |          |          |          |          | EN 1995-1-1                            |
| Brandverhalten<br>[Klasse]                                                                                      | A1                                                                                                                                                                                                                                                                                                                                                                                                             |         |         |          |          |          |          |          | EAD 130118-01-0603                     |

8. Angemessene Technische Dokumentation und/oder Spezifische Technische Dokumentation: nicht relevant

Die Leistung des vorstehenden Produktes entspricht der erklrten Leistung/den erklrten Leistungen. Fr die Erstellung der Leistungserklrung im Einklang mit der Verordnung (EU) Nr. 305/2011 ist allein der obengenannte Hersteller verantwortlich.

Unterzeichnet fr den Hersteller und im Namen des Herstellers von:

Mag.Ing. Gerhard Hubmann

Graz - 2024-12-15

Ort, Datum

**DIN LING GmbH**  
www.din-ling.com | www.din-ling.eu  
8042 Graz T +43 316/269 139  
Schmiedlstrae 1 Unterschrift +43 316/269 139 5  
AUSTRIA UID: ATU67434699

# DECLARATION of PERFORMANCE

DoP No.: DB21025

1. Unique Identification Code of the Product-Type:

WBS - Wood Building Screw  
d = 3,5 - 12,0mm und L = 20 - 600mm
2. Intended Use/es:

Screws used for connections in timber constructions
3. Manufacturer:

Din Ling GmbH  
8042 Graz Schmiedlstraße 1  
Austria  
www.din-ling.eu
4. Authorized Representative:

not relevant
5. System/s of AVCP:

System 3
- 6a)

-
- 6b)

European Assessment Document: EAD 130118-00-0603 of 10.2016  
European Technical Assessment: ETA-12/0276 of 16.02.2017  
Technical Assessment Body: DIBt - Deutsches Institut für Bautechnik  
Notified Body/ies: -
7. Declared Performances

| Essential Characteristics                                                                                          | Performance Declared                                                                                                                                                                                                                                                                                                                                                                                                             |         |         |          |          |          |          |          | Harmonized Technical Specification |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|----------|----------|----------|----------|----------|------------------------------------|
| Nominal Diameter<br>d [mm]                                                                                         | 3,5                                                                                                                                                                                                                                                                                                                                                                                                                              | 4,0     | 4,5     | 5,0      | 6,0      | 8,0      | 10,0     | 12,0     | ETA-12/0276 Annex 4                |
| Minor Diameter<br>d1 [mm]                                                                                          | 1,90                                                                                                                                                                                                                                                                                                                                                                                                                             | 2,05    | 2,40    | 2,80     | 3,65     | 5,05     | 6,20     | 7,00     | ETA-12/0276 Annex 4                |
| Shaft Diameter<br>ds [mm]                                                                                          | 2,50                                                                                                                                                                                                                                                                                                                                                                                                                             | 2,80    | 3,16    | 3,47     | 4,15     | 5,70     | 6,80     | 7,90     | ETA-12/0276 Annex 4                |
| Head Diameter CSK<br>dh [mm]                                                                                       | 6,60                                                                                                                                                                                                                                                                                                                                                                                                                             | 7,60    | 8,60    | 9,60     | 11,40    | 14,00    | 17,00    | 20,00    | ETA-12/0276 Annex 4                |
| Head Diameter WAF<br>dh [mm]                                                                                       | -                                                                                                                                                                                                                                                                                                                                                                                                                                | -       | -       | -        | 14,50    | 20,50    | 23,50    | 27,50    | ETA-12/0276 Annex 4                |
| Pitch<br>p [mm]                                                                                                    | 2,70                                                                                                                                                                                                                                                                                                                                                                                                                             | 2,80    | 3,10    | 3,20     | 4,50     | 5,20     | 5,60     | 6,00     | ETA-12/0276 Annex 4                |
| Screw Length<br>L [mm]                                                                                             | 20 - 70                                                                                                                                                                                                                                                                                                                                                                                                                          | 20 - 80 | 20 - 80 | 25 - 120 | 40 - 300 | 40 - 600 | 80 - 600 | 80 - 600 | ETA-12/0276 Annex 4                |
| Thread Length<br>L1 [mm]                                                                                           | 14 - 42                                                                                                                                                                                                                                                                                                                                                                                                                          | 16 - 49 | 18 - 49 | 20 - 74  | 24 - 75  | 32 - 150 | 40 - 150 | 50 - 150 | ETA-12/0276 Annex 4                |
| Yield Moment<br>M <sub>y,k</sub> [Nm]                                                                              | 2,3                                                                                                                                                                                                                                                                                                                                                                                                                              | 3,3     | 4,5     | 5,9      | 9,5      | 20,0     | 36,0     | 58,0     | EAD 130118-01-0603                 |
| Charact. Withdrawal Parameter<br>f <sub>ax,k</sub> [N/mm²] at 350 kg/m³                                            | 12,0                                                                                                                                                                                                                                                                                                                                                                                                                             |         |         |          | 11,0     |          | 10,0     |          | EAD 130118-01-0603                 |
| Charact. Head Pull-through Parameter all Heads<br>f <sub>head,k</sub> [N/mm²] at 350 kg/m³ t: <12 / 12-20 / >20 mm | 8 / 8 / 9,4                                                                                                                                                                                                                                                                                                                                                                                                                      |         |         |          |          |          |          |          | EAD 130118-01-0603                 |
| Charact. Tensile Strength<br>f <sub>tens,k</sub> [kN]                                                              | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                              | 5,0     | 6,0     | 8,0      | 9,5      | 19,0     | 25,0     | 42,0     | EAD 130118-01-0603                 |
| Charact. Yield Strength<br>f <sub>y,k</sub> [N/mm²]                                                                | NPD                                                                                                                                                                                                                                                                                                                                                                                                                              |         |         |          |          |          |          |          | EAD 130118-01-0603                 |
| Charact. Torsional Strength<br>f <sub>tor,k</sub> [Nm]                                                             | 2,2                                                                                                                                                                                                                                                                                                                                                                                                                              | 3,3     | 4,5     | 6,1      | 9,0      | 24,0     | 40,0     | 68,0     | EAD 130118-01-0603                 |
| Charact. Insertion Moment<br>R <sub>tor,mean</sub> [Nm]                                                            | NPD                                                                                                                                                                                                                                                                                                                                                                                                                              |         |         |          |          |          |          |          | EAD 130118-01-0603                 |
| Torsional Ratio<br>f <sub>tor,k</sub> /R <sub>tor,mean</sub>                                                       | ≥ 1,5                                                                                                                                                                                                                                                                                                                                                                                                                            |         |         |          |          |          |          |          | EAD 130118-01-0603                 |
| Spacing, End and Edge Distances and<br>Minimum Thickness of Timber                                                 | For cross laminated timber (CLT) acc. to ETA:<br>Face: a <sub>1</sub> =4·d   a <sub>1,t</sub> =6·d   a <sub>1,c</sub> =6·d   a <sub>2</sub> =2,5·d   a <sub>2,t</sub> =6·d   a <sub>2,c</sub> =2,5·d<br>Edge: a <sub>1</sub> =10·d   a <sub>1,t</sub> =12·d   a <sub>1,c</sub> =7·d   a <sub>2</sub> =4·d   a <sub>2,t</sub> =6·d   a <sub>2,c</sub> =3·d<br>For all other applications and for minimum thickness s. EN 1995-1-1 |         |         |          |          |          |          |          | EAD 130118-01-0603<br>EN 1995-1-1  |
| Slip Modulus<br>K <sub>ser</sub> [N/mm]                                                                            | K <sub>ser</sub> = 780 * d <sup>0,2</sup> * l <sub>ef</sub> <sup>0,4</sup>                                                                                                                                                                                                                                                                                                                                                       |         |         |          |          |          |          |          | EAD 130118-01-0603                 |
| Durability<br>[Class]                                                                                              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                |         | 2       |          |          |          |          |          | EN 1995-1-1                        |
| Reaction to Fire<br>[Class]                                                                                        | A1                                                                                                                                                                                                                                                                                                                                                                                                                               |         |         |          |          |          |          |          | EAD 130118-01-0603                 |

8. Appropriate Technical Documentation and/or Specific Technical Documentation:

not relevant
- 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:

Graz - 2024-12-15

Place, Date

Mag.Ing. Gerhard Hubmann

DIN LING GmbH

www.din-ling.com | www.din-ling.eu

8042 Graz T +43 316/269 139

Schmiedlstraße 1 F +43 316/269 139 5

AUSTRIA UID: ATU67434699