



KOMO®  
Product certificate  
K96857/02



Issued 2019-09-27 Replaces K96857/01  
Valid until Indefinite Dated 2017-10-24  
Pagina 1 van 3

**Mechanical Connections for Reinforcement Steel:  
Type AT-SA and AT-GSE - Category 1, Ductility Class B**

**AT-Ankertechneik B.V.**

STATEMENT BY KIWA

This product certificate is issued on the basis of BRL 0504 " Mechanical Connections for Reinforcement Steel " issued on 2012-11-08 including amendment sheet dated December 12, 2018 in accordance with the Kiwa-Regulations for Certification.

The quality system and product characteristics associated with it are checked periodically.

On this basis, Kiwa declares that there is justifiable confidence that the delivered by the certificate holder on delivery meet:

- The technical specification laid down in this product certificate,
- The product requirements laid down in this product certificate and in the BRL provided it is provided with the KOMO® brand in a manner as indicated in this product certificate;

Ronald Karel  
Kiwa

The certificate is included in the summary on the website of KOMO: [www.komo.nl](http://www.komo.nl).  
Advice: consult [www.kiwa.nl](http://www.kiwa.nl) in order to ensure that this certificate is still valid

*Disclosure of the certificate is permitted.*

CERTIFICATE

472180711

**Kiwa Nederland B.V.**  
Sir Winston Churchillaan 273  
Postbus 70  
2280 AB RIJSWIJK  
Tel. +31 (0)88 998 44 00  
Fax +31 (0)88 998 44 20  
[info@kiwa.nl](mailto:info@kiwa.nl)  
[www.kiwa.nl](http://www.kiwa.nl)

**Holder of Certificate**  
AT-Ankertechneik B.V.  
Waardsedijk-Oost 6A  
3417 XJ MONTFOORT  
Phone +31 (0)88 643 0600  
[info@ankertechneik.com](mailto:info@ankertechneik.com)  
[www.ankertechneik.com](http://www.ankertechneik.com)



Evaluated is:  
quality system  
product  
Periodic inspection

# Mechanical Connections for Reinforcement Steel

## TECHNICAL SPECIFICATION

### Product specification

#### General

Mechanical connections for reinforcement steel meet the requirements of section 2 of BRL 0504. Cutting and bending of the rebar ends and rebar anchors meet the requirements of BRL 0503 "Cutting, bending and tack welded (prefab) reinforcing steel structures". The reinforcement steel of these couplers in the grade B500B meet the requirements of BRL 0501 "Reinforcement Steel" and, therefore of table 1 "performance requirements" of NEN 6008.

Only complete mechanical rebar connections made from the rebar anchors and rebar ends mentioned under "additional information" are covered by this KOMO product certificate.

### Further specification

#### Scope

The products are intended to make mechanical connections with KOMO-certified reinforcement steel, grade B500B according to NEN6008, and to be applied in predominantly statically loaded structures in accordance with NEN-EN 1992-1-1+C2: 2011/NB:2016.

#### Category 1

For the mechanical connection, category 1, applies a fatigue strength (stress amplitude  $2\sigma_a$ ) of 60 MPa to  $2 \times 10^6$  load cycles, resulting from predominantly in the static loaded structure.

#### Reinforcement steel diameter

Product are manufactured of:

reinforcement steel grade B500B (hot rolled) with diameter: Ø12, 16, 20, 25, 32 and 40 mm.

#### Reinforcement steel Grade

The reinforcement steel is supplied in the grade B500B. (hot rolled).

The reinforcement steel can be supplied in any required length.

The reinforcement steel can be supplied as straight and bent rods where the bending mandrel must meet the requirements of section 4.3.2 of BRL 0503 "Cutting, bending and tack welded (prefab) reinforcing steel structures".

#### Markings

The products are provided with a label on which at least the following information is specified clearly and indelibly:

- KOMO<sup>®</sup> logo;
- certificate number;
- name or logo supplier;
- coupler type;
- ductility class;
- category number.



#### Marking on the product:

The connectorpiece: a type code designation: "AT" and a production code, with or without "SI"

The Rebar end: "AT" at the head.

For more details, see the documentation and processing instructions of the certificate holder.

## TIPS FOR THE USER

Inspect the following upon delivery:

- That what has been agreed has been delivered;
- The mark and marking method are correct;
- The products do not exhibit any damage or defect as a result of transport or handling.

If you decide to reject the product(s) based on the above, contact:

- AT-Ankertechnik B.V.
- and, if required,
- Kiwa Nederland B.V.

For the proper handling of the product, refer to the installation instructions of the manufacturer.



## LIST OF DOCUMENTS MENTIONED\*

NEN-EN 1992-1-1	Eurocode 2: Design of concrete structures – Part 1-1: General rules and rules for buildings
+C2+NB	+ National Annex
NEN 6008	Reinforcement Steel
BRL 0501	Reinforcement Steel
BRL 0503	"Cutting, bending and tack welded (prefab) reinforcing steel structures"

\* For the correct version of the specified standards please refer to the last change sheet with BRL 0504.

## Mechanical Connections for Reinforcement Steel

### ADDITIONAL INFORMATION

<p>Rebar Anchor type: AT-SA Ø 12 - 40 mm</p>	 <p>A detailed technical drawing of a rebar anchor. It features a long, cylindrical body with a series of curved, hook-like protrusions along its length. At the right end, there is a distinct, wider section with a textured surface, likely for identification or grip. The drawing is shown in a perspective view.</p>
<p>Rebar End type: AT-GSE Ø 12 - 40 mm</p>	 <p>A detailed technical drawing of a rebar end. It shows a long, cylindrical bar with a series of diagonal, V-shaped grooves or ribs along its length. At the right end, there is a wider, fluted section, possibly a sleeve or a specific end profile. The drawing is shown in a perspective view.</p>

### **Tightening torque**

The tightening torque of the connection between reinforcing bar and connecting piece depends on the diameter of the reinforcing bar and amounts to:

Reinforcing bar diameter in mm	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40
Tightening torque ± 5% in Nm	60	80	100	125	160	200