

AT-CONNECT

Instructions for use

Design loads and ductility

AT-Connect design loads are based on the load-bearing capacity of the B500B reinforcing steel used, see the table below.

Design loads and ductility

d (mm)	Cross-sectional area A_s (mm ²)	Design loads N_{rd} (kN)	R_m/R_e (-)	Agt(%)
Ø12	113	49,2	$\geq 1,08$	$\geq 5,0$
Ø16	201	87,4	$\geq 1,08$	$\geq 5,0$
Ø20	314	136,6	$\geq 1,08$	$\geq 5,0$
Ø25	491	213,4	$\geq 1,08$	$\geq 5,0$
Ø32	804	349,7	$\geq 1,08$	$\geq 5,0$
Ø40	1256	546,4	$\geq 1,08$	$\geq 5,0$

Anchorage length:

The anchorage length of the reinforcing bar in the concrete must be checked in accordance with EN 1992-1-1. Once this check has been completed, the required minimum anchorage length is known. The corresponding minimum product length can then be determined.

Our starter bars and starter bar anchors have a length tolerance of $\pm 1 \times$ the bar diameter, plus a sleeve or threaded section that must be added to the anchorage length to determine the minimum product length.

Calculate product length for AT-SA Starter Bar Anchor and AT-SE Starter Bar:

Add the following to the anchorage length: the length tolerance $\pm 1 \times$ bar diameter d and the length of the swaged sleeve l .

Minimum product length $L = \text{anchorage length} + d + l$

Calculate product length for AT-GSE Starter Bar:

Add the following to the anchorage length: the length tolerance $\pm 1 \times$ bar diameter d and the length of threaded section a .

Minimum product length $L = \text{anchorage length} + d + a$



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Torque wrench

AT-Connect rebar coupling systems are KOMO-certified when the couplings are tightened according to the table below. The KOMO quality mark only applies to a combination of an AT-SA Starter Bar Anchor and an AT-SE or AT-GSE Starter Bar. See page 5.



Torque wrench - AT CONNECT

Reinforcing steel diameter: (mm)	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40
Tightening torque: +/- 5% (Nm)	60	80	100	125	160	200

Installation instructions

Store materials free from dirt to ensure trouble-free installation. Install the starter bars using a torque wrench.



Welding

Welding can affect the material properties of steel. AT-Ankertechnik therefore cannot accept any liability if welding is carried out on the products.