



Rohloff SPEEDHUB 500/14 XL - CC-170mm / TS-170mm / A12-177mm Mounting Data (extension)

The complete documentation can found at:

<http://www.rohloff.de/en/service/downloads/documentation/index.html>

The new SPEEDHUB 500/14 XL versions are identical to the regular SPEEDHUB 500/14 models except for their additional length resulting in a 170mm O.L.D. These XL units are available in a black anodized finish only. These are all 32 hole disc-brake versions and will use the external gear mech. They are available with a choice of M10x1 threaded (TS)* or 10mm hollow quick release (CC) axles and a choice of **OEM, OEM2** or **standard long torque arm** axleplates. Alternatively the XL SPEEDHUB versions can be supplied with an A12** axle (177mm) and either the **OEM or PM axleplate for mounting into 12mm thru-axle frames**. The method of installing each hub is identical to all other SPEEDHUB versions currently available.

*TS hubs must be used when mounting a SPEEDHUB into horizontally slotted dropouts – the quick release axle will not hold the hub securely in the frame.

**A12 hubs can only be used in frames which have been compatibility tested by a local bicycle shop using the special Rohloff dropout measurement kit.

SPEEDHUB XL versions are not authorized for tandem use!

Chainline/Beltline:

The SPEEDHUB 500/14 XL versions use the following chainlines:

Traditional chain use:

15, 16 and 17 tooth threaded, reversible sprockets = 72.00mm
13 tooth threaded, non-reversible sprocket = 75.00mm

13-19 + 21 tooth splined, reversible sprockets = 75.00mm with splined carrier standard (Art.#8540)
15-19 + 21 tooth splined, reversible sprockets = 73.00mm with splined carrier slim (Art.#8540s)

Gates Carbon Drive (Centertrack system) in combination with Gates Snubber:

Original threaded carrier (text facing inward to hub body) = 73mm (Art.#8224)
Splined carrier (text facing outward from hub body) = 73mm (Art.#8540)

All chainlines / beltlines provide sufficient chain/tire clearance even when using 5" tires on 100mm rims.

Transmission Ratios:

Please refer to the table below for gear-inches (meters):

Entfaltungstabelle SPEEDHUB XL für 26" Fatbikes (Radumfang=2.32m)																
Solofahrer bis max. 100kg																
Ritzel	13 Zähne		14 Zähne	15 Zähne		16 Zähne		17 Zähne		18 Zähne		19 Zähne		21 Zähne		
Kettenblatt	von	bis	von	to	von	bis	von	bis	von	bis	von	bis	von	bis	von	bis
26 Zähne	1,29m	- 6,81m	1,20m	- 6,32m												
28 Zähne	1,39m	- 7,33m	1,29m	- 6,81m	1,21m	- 6,35m										
30 Zähne	1,49m	- 7,85m	1,39m	- 7,29m	1,29m	- 6,81m	1,21m	- 6,38m								
32 Zähne	1,59m	- 8,38m	1,48m	- 7,78m	1,38m	- 7,26m	1,29m	- 6,81m	1,22m	- 6,41m						
34 Zähne	1,69m	- 8,90m	1,57m	- 8,27m	1,47m	- 7,71m	1,38m	- 7,23m	1,29m	- 6,81m	1,22m	- 6,43m				
36 Zähne	1,79m	- 9,42m	1,66m	- 8,75m	1,55m	- 8,17m	1,46m	- 7,66m	1,37m	- 7,21m	1,29m	- 6,81m	1,23m	- 6,45m		
38 Zähne	1,89m	- 9,95m	1,76m	- 9,24m	1,64m	- 8,62m	1,54m	- 8,08m	1,45m	- 7,61m	1,37m	- 7,19m	1,29m	- 6,81m		
40 Zähne	1,99m	- 10,47m	1,85m	- 9,72m	1,73m	- 9,08m	1,62m	- 8,51m	1,52m	- 8,01m	1,44m	- 7,56m	1,36m	- 7,17m	1,23m	- 6,48m
42 Zähne	2,09m	- 11,00m	1,94m	- 10,21m	1,81m	- 9,53m	1,70m	- 8,93m	1,60m	- 8,41m	1,51m	- 7,94m	1,43m	- 7,52m	1,29m	- 6,81m
44 Zähne	2,19m	- 11,52m	2,03m	- 10,70m	1,90m	- 9,98m	1,78m	- 9,36m	1,68m	- 8,81m	1,58m	- 8,32m	1,50m	- 7,88m	1,36m	- 7,13m
46 Zähne	2,29m	- 12,04m	2,13m	- 11,18m	1,98m	- 10,44m	1,86m	- 9,78m	1,75m	- 9,21m	1,65m	- 8,70m	1,57m	- 8,24m	1,42m	- 7,46m
48 Zähne	2,39m	- 12,57m	2,22m	- 11,67m	2,07m	- 10,89m	1,94m	- 10,21m	1,83m	- 9,61m	1,73m	- 9,08m	1,64m	- 8,60m	1,48m	- 7,78m



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Wheel Lacing:

As with all other SPEEDHUB versions, wheels of 26" diameter and over must be laced in a 2x pattern. They should use high quality DB spokes and be laced to a **minimum 1000N** (please note this value must be checked after the tire is inflated -air pressure can cause the spoke tension to drop by up to 30%).

We recommend the use of 2.0/1.8/2.0 spokes with [2.9mm Spoke bend length](#), from quality manufacturers such as the Sapim Race or DTSwiss Competition. **Extra thick 2.34mm spokes must not be used!** The head length of these spokes is too short and their use will eventually lead to flange failures!

Please refer to the table below for Spoke lengths of the most common ERD values:

FATBIKE (170mm, 177mm, 190mm, 197mm)



32-Loch Gehäuse Speichenlänge
32-spokehole hubshell spokelength

Laufradgröße / Wheel Size	Anzahl Kreuzungen / Number of Spoke Crosses	ERD*	32-Loch Speichenlänge / 32-hole Spoke lengths	32-Loch Speichenlänge / 32-hole Spoke lengths	32-Loch Speichenlänge / 32-hole Spoke lengths
			7mm Offset	12.5mm Offset	20mm Offset
26"	2-X	516-519	228	226	226
		520-523	230	228	228
		524-527	232	230	230
		528-531	234	232	232
		532-535	236	234	234
		536-539	238	236	236
		540-543	240	238	238
544-547	242	240	240		

* ERD Messung - siehe Rohloff Handbuch 'Bestimmen des Felgeninnendurchmessers'.

* ERD Measurement - please refer to the Rohloff SPEEDHUB Owners Manual - 'Determining the effective rim diameter'.

Please note:- The Rohloff AG does not recommend the use of rims with a nipple offset of less than 12.5m. A nipple offset of less can lead to spokes 'kinking' at the nipple join and thus prematurely failing in this area!

SPEEDHUB 500/14 XL Article Codes/Numbers:

-CC DB 170mm - Art.#8022XL

- TS DB 170mm - Art.#8062XL

-CC DB OEM 170mm Art.#8027XL

- TS DB OEM 170mm - Art.# 8067XL

-CC DB OEM2 170mm - Art.#8027ZXL

- TS DB OEM2 170mm - Art.#8067ZXL

-CC DB PM 170mm – Art.#8027PLXL

-A12 DB PM 177mm - Art.#8097PMXL

-A12 DB OEM2 177mm - Art.#8097ZXL

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