

WEB CONTROL PRODUCTS

User Manual



Safety Chuck

MODELS: CSB25P, CSB25F, CSB50P, CSB50F, CSB75P,
CSB75F, CSB125P, CSB125F, CSB150P, CSB150F,
CSB175P, CSB175F



DANGER

Read this manual carefully before installation and operation.

Follow Nexen's instructions and integrate this unit into your system with care.

This unit should be installed, operated and maintained by qualified personnel **ONLY**.

Improper installation can damage your system or cause injury or death.

Comply with all applicable codes.

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this manual are subject to change without notice. Technical data listed in this manual are based on the latest information available at the time of printing and are also subject to change without notice.

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INTRODUCTION

Nexen's Safety Chuck is used as a bearing support for rotary shafts. It is designed to increase safety on winding and unwinding machinery.

⚠ WARNING

Installation and maintenance of the Safety Chuck must only be done by qualified personnel. Nexen does not recommend performing any repairs on the Safety Chuck and does not provide any repair kits for the product. Contact the factory for service.

⚠ WARNING

Never add weldings, flame or tool cuts, or holes to the Safety Chuck structure.

SHAFT DIMENSIONS

The dimensions below are essential for proper machine setup. Figure 1 and Table 1 show the shaft sizes that Nexen's Safety Chucks can accommodate. If you have any questions about shaft compatibility, contact the factory.

Figure 2 and Table 2 show the distance the handwheel protrudes from the Safety Chuck Socket Edge when the Handwheel is tilted open. Be sure to allow for this protrusion when setting up your machine.

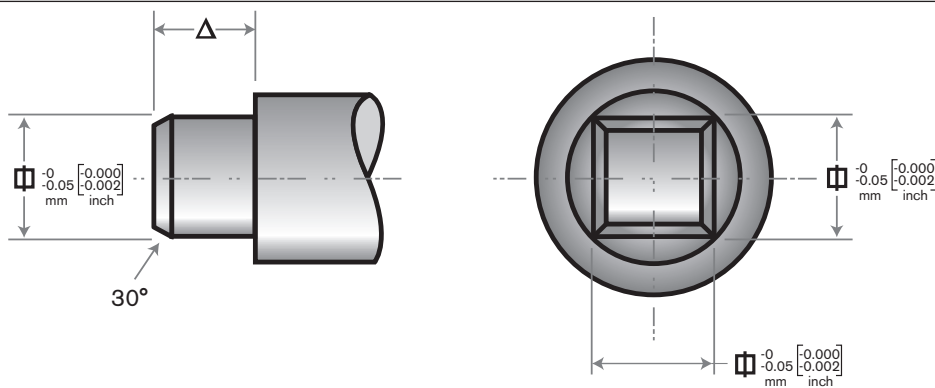


Figure 1 Refer to Table 1 for square shaft dimensions compatible with Nexen's Safety Chuck

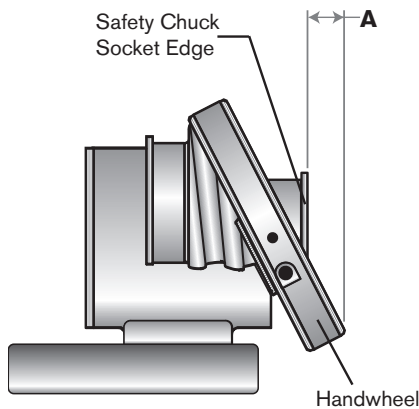


Figure 2

Table 1

Dimensions	
$\varnothing \begin{matrix} -0 \\ -0.05 \end{matrix} \begin{matrix} [0] \\ [-0.002] \end{matrix}$	Δ
25.40 mm [1.00 in]	30 mm [1.18 in]
31.75 mm [1.25 in]	30 mm [1.18 in]
38.10 mm [1.50 in]	30 mm [1.18 in]
50.80 mm [2.00 in]	27 mm [1.06 in]
76.20 mm [3.00 in]	35 mm [1.38 in]

Table 2

Handwheel Tilt Protrusion	
Model	A
25 Series	10 mm [0.39 in]
50 Series	14 mm [0.55 in]
75 Series	17 mm [0.67 in]
125 Series	22 mm [0.87 in]
150 Series	19.18 mm [0.76 in]
175 Series	19.18 mm [0.76 in]

NOTE: Dimension "A" represents the distance the handwheel protrudes from the Safety Chuck socket edge when the handwheel is tilted open. Refer to Table 2 for "A" dimensions in each series. (Additional clearance between the handwheel and roll may be desired.)

INSTALLATION

NOTE: Check alignment before operating machinery. Safety Chucks must be aligned on all axes for proper functioning. See ALIGNMENT section for details.

1. Secure machine in a stopped position before performing the following procedures.
2. Securely attach the Safety Chuck (flange or foot) using grade 8 (or equivalent) screws with washers and Loctite® (or equivalent). Tighten screws to torque listed in Table 3.
3. Open the Safety Chuck by pressing the safety button* and manually tilting the handwheel back, pressing with the palm of your hand (See Figure 3).



CAUTION

Keep fingers away from the back of the handwheel. Use the palm of the hand to push the handwheel back to avoid pinching fingers.

4. Using proper measures to support the load, insert the shaft end into the Safety Chuck.
5. Close Chuck by pulling the top of the handwheel towards the shaft. The handwheel will stop in a vertical position, securing the shaft (See Figure 4).

NOTE: Support is provided with a safety cam upon closing, which engages within the first quarter-turn.

NOTE: Do not use the Safety Chuck as an automatic closing system.

6. Close handwheel manually before starting the machine.



WARNING

Do not operate machine while handwheel is open. Do not touch or lean on the Safety Chuck while the machine is running. Improper operation could cause serious injury.

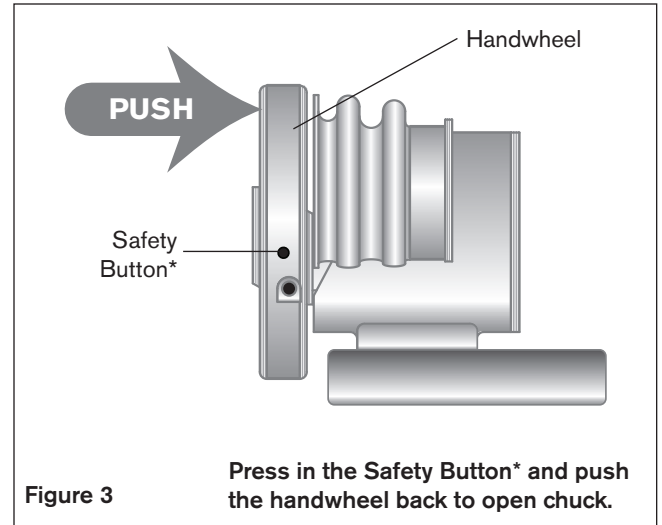


Figure 3

Press in the Safety Button* and push the handwheel back to open chuck.

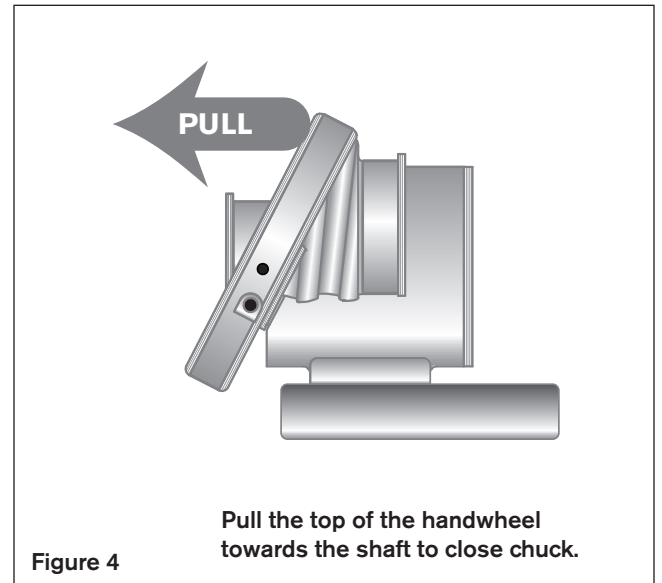


Figure 4

Pull the top of the handwheel towards the shaft to close chuck.

Table 3

Screw Diameter	Tightening Torque
10 mm [0.39 in]	50 Nm [442 in-lb]
12 mm [0.47 in]	90 Nm [796 in-lb]
16 mm [0.63 in]	230 Nm [2036 in-lb]

* Safety Button not available on all sizes.

® Loctite is a register trademark of Henkel Loctite Corporation.

ALIGNMENT

Check alignment before operating machine. Misalignment between Safety Chucks interferes with the proper functioning of the system and decreases product life. The following specifications must be met for proper alignment:

- Mount Safety Chucks at same height with respect to the center-line of the machine roller
- Mount Safety Chucks at same distance from the center-line of the machine roller
- Mount the Safety Chucks parallel with transport rollers in the machine
- Mount only to a flat surface ± 0.10 mm [± 0.004 in]
- Ensure alignment on all axis

NOTE: Deflection of either the mounting frame or shaft under the load can substantially reduce product life.

NOTE: Nexen recommends maintaining a 0.5 mm [0.02 inch] clearance between the back of the Safety Chuck Socket and the end of the shaft journal.

VERIFYING ALIGNMENT

Verify alignment on both the vertical and horizontal planes.

1. Insert an empty square shaft into the two Safety Chucks following the INSTALLATION procedures.
2. Place a level on top of the square shaft to ensure Chucks are aligned on the same vertical plane.
3. Adjust height using appropriate materials and repeat step two until the shaft is level.
4. Locate the nearest roller on the machine.
5. Determine the center of the transport roller.
6. Measure the distance from the center of the transport roller to the back of each Safety Chuck socket.
7. Adjust chuck position until the distances from the center of the transport roller are equal.

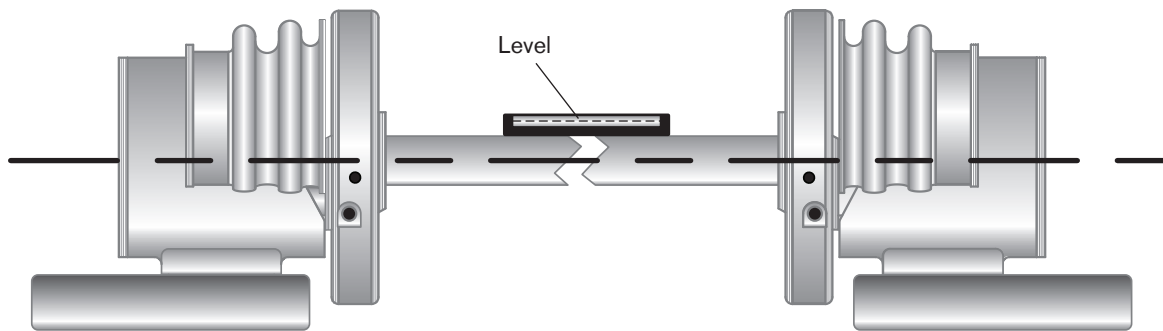


Figure 5 Ensure alignment between Safety Chucks before use. (Side View)

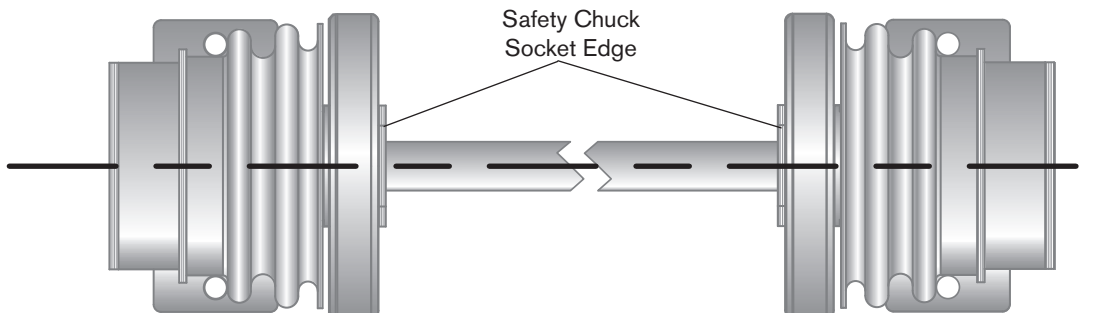


Figure 6 Ensure alignment between Safety Chucks before use. (Top View)

WARRANTY

WARRANTIES

Nexen warrants that the Products will be free from any defects in material or workmanship for a period of 12 months from the date of shipment. NEXEN MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. This warranty applies only if (a) the Product has been installed, used and maintained in accordance with any applicable Nexen installation or maintenance manual for the Product; (b) the alleged defect is not attributable to normal wear and tear; (c) the Product has not been altered, misused or used for purposes other than those for which it was intended; and (d) Buyer has given written notice of the alleged defect to Nexen, and delivered the allegedly defective Product to Nexen, within one year of the date of shipment.

EXCLUSIVE REMEDY

The exclusive remedy of the Buyer for any breach of the warranties set out above will be, at the sole discretion of Nexen, a repair or replacement with new, serviceably used or reconditioned Product, or issuance of credit in the amount of the purchase price paid to Nexen by the Buyer for the Products.

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WARRANTY CLAIM PROCEDURES

To make a claim under this warranty, the claimant must give written notice of the alleged defect to whom the Product was purchased from and deliver the Product to same within one year of the date on which the alleged defect first became apparent.

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