

**100% of SmartBolts®** are inspected and tested to ensure that each one we produce complies with our demanding quality control standards. Each product design is tested in tension until the color of the indicator, as measured by a monochromatic reflectometer, reaches a prescribed value.

The undersigned attests to the fact that these products have undergone and passed all of the specified test, inspection and packaging requirements.

If you have any questions about this shipment, please contact Industrial Indicators immediately.

Your satisfaction is guaranteed.

*Christopher C. Bunai*

Chief Engineer

## INDUSTRIAL INDICATORS

### One Year Limited Warranty

SmartBolts® are warranted to the **original end user** for one year from the date of purchase. Within the period of this warranty, we will replace any defective product, upon return of the part, prepaid to the factory.

This warranty does not extend to damage resulting from abuse, misuse, over-tightening, exceeding specified temperature limits, accident (including shipping damage), or use in hostile environments including, but not limited to, acidic, petroleum, solvents or solvent vapors.

In no event shall any liability of **Industrial Indicators** arising from this warranty exceed the purchase price of the products. Before using, the user shall determine the suitability of the product for their intended use, and the user assumes all risk and liability whatsoever of the product in connection therewith.

**Industrial Indicators makes no warranty of merchantability or fitness for a particular purpose. In no event shall Industrial Indicators be liable for incidental or consequential damages.**

### **Fastener Quality Act Conformance**

Products may not be identical to the original record of conformance to the FGA due to their alteration and conversion to **SmartBolts®**. The raw bolts have been drilled and machined and tension-indicating components have been installed. In most cases, the conversion process will have negligible effect on bolt strength. The customer will be informed of any significant weakening due to the alteration.

## Specifications

**John Doe**

Customer Name

**AA4F66D114-A**

Bolt Part Number

**June 6, 2020**

Date

**AB123456789**

Purchase Order Number, Release (if applicable)

**530447 - 530456 (10)**

Serial Number Range (Qty)

**HHCS / 1 1/4" - 7 x 8" / 5 / PL/ PTL / 70%P / RCS**

Head Type / Bolt Dimensions / Grade / Finish / Thread Length / Nom. DT / Specials

**50.0 ± 10% (222 ± 10%)**

Basic Design Tension, klf (kN)

**50.9 (228)**

Production Testing Mean, klf (kN)

**1.45 (6)**

Production Testing Standard Deviation, klf (kN)

**71.6 (318)**

Proof Load, as modified, klf (kN)

**101.6 (451)**

Minimum Ultimate Load, as modified, klf (kN)

**N/A**

Grip Length, minimum, in (mm)

Quality Tested and Inspected



3951 Dartmouth Court, Suite 8,  
Frederick, MD 21703  
www.industrialindicators.com