

Hex Lock Nuts, Class 8, All-Metal, Zn Cr Plated, Coarse Threads**1. SCOPE**

1.1 The fasteners defined by this specification are gold zinc chromate (Zn Cr) plated Class 8 Hex Lock Nuts with coarse threads.

1.2 The Hex Lock Nut Class 8 Zn Cr plated is preferred item to be used in joint applications which requires integrity when tightened and does not loosen when subjected to vibration.

2. DESIGNATION

2.1 Typical call out on a drawing shall be:

Dutch	100038	ZMR	CL8	G	M12	86505664
English	100038	LN	CL8	P	M12	86505664
Part Number	100038					
Hex Lock Nut						
Class 8						
Plated (Zn Cr) (G – Gal Zn 5)						
Diameter						
Engr. Spec. Number						

NOTE: The above description is required for use in all company wide computer generated documents. The description on hand drawn assembly drawings should follow the same practice.

2.2 Table 2 contains the Preferred part numbers to be used in future designs. Table 3 lists the Non-Preferred part numbers which should not be used in future designs.

2.3 When requesting a new part number, refer to the instructions in standard 86505922 (FNHA-3-A-005.00).

3. RELATED SPECIFICATIONS**3.1 REFERENCE STANDARDS**

86508305 (FNHA-2-H-500.00)—Zinc Electroplating on Ferrous Surfaces
 86505922 (FNHA-3-A-005.00)—Assignment of Standard Part Numbers
 ISO 965/2—ISO General Purpose Metric Screw Threads—Tolerances—Part 2: Limits of Sizes for General Purpose Bolt and Nut Threads—Medium Quality
 ISO 898/2—Mechanical Properties of Fasteners—Part 2: Nuts with Specified Proof Load Values
 DIN 980—All Metal Prevailing Torque Hex Lock Nuts
 ISO 2320—Prevailing Torque Type Steel Hexagon Nuts—Mechanical and Performance Properties
 ASTM F812—Surface Discontinuities on Nuts

3.2 This standard replaces the following company standards:

New Holland (Partial)	ES10.03
Versatile (Partial)	1-M-044

					NAME	STD LN CL8 ZNCR		
					 NEW HOLLAND		ENGINEERING SPECIFICATION	
ALL	J	BJF	118225	24APR02			FRAME 1	OF 4
ALL	H	BJF	117315	19MAR02	THE INFORMATION HEREON IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF NEW HOLLAND N. V. AND/OR ITS SUBSIDIARIES. ANY USE, EXCEPT THAT FOR WHICH IT MAY BE LOANED, IS PROHIBITED.		PART NUMBER	
FRAME NO.	REV	BY	ECN NO.	DATE				
APP.	DRAWN	BJFJR		2/94				
KHH 3/94	CHECKED							

4. REQUIREMENTS

4.1 MATERIAL

4.1.1 Class 8 according to ISO 2320—steel with the following chemical composition: max. .58% Carbon, min. .25% Manganese, max. .060% Phosphorus, and max. .15% Sulfur.

4.1.2 Nuts of diameter M5 and larger shall be marked legibly to identify property class and manufacturer. Property class identification symbols shall conform to ISO 898/II.

4.2 PLATING

The plating shall be gold Zinc Chromate (Zn Cr) Electroplate 86508316 (FNHA-2-H-500.16) per standard 86508305 (FNHA-2-H-500.00) with supplemental lubricant. Baking is not required for hydrogen embrittlement relief.

4.3 MECHANICAL REQUIREMENTS PER ISO 2320.

See Chart A below for mechanical requirements.

4.4 MECHANICAL DIMENSIONS

The Hex Lock Nut thread geometry shall be coarse threads, tolerance class 6H (medium grade) according to ISO 965/II. The general dimensions

shall meet the requirements in Table 1. All other dimensions shall be according to DIN 980 type V.

4.5 SURFACE DISCONTINUITIES

All products under this specification shall meet the Surface Discontinuities on Nuts per ASTM F812.

5. SUPPLIER RESPONSIBILITY

5.1 Suppliers shall perform the necessary test for sample approval for initial lots. After this approval, suppliers are not required to perform the specific tests, but ascertain that their product will conform to the specification limits. These specified requirements will be used to reconcile any disputed values.

5.2 All materials supplied to this specification shall be equivalent in all characteristics to the material upon which approval was originally granted. Prior to making of any changes in the properties, composition, construction, color, dimensions, processing or labeling of the material originally approved under this specification, the supplier shall notify Purchasing and the affected Materials Engineering activity of the proposed changes and obtain the written acknowledgement of the Material Engineering activity. Test data, test samples and a new identification code are to be submitted with the request.

Chart A: Mechanical Requirements per ISO 2320

Class	Nut Size Diameter	Proof Load Stress	Hardness *
	mm	N/mm ² (min.)	Rockwell
8	thru 4	800	C30 max.
	over 4 thru 7	855	C30 max.
	over 7 thru 10	870	C30 max.
	over 10 thru 16	880	C30 max.
	over 16 thru 24	920	C36 max.

* Hardness shall be determined on the top of the nut.

 NEW HOLLAND	NAME				PART NUMBER	
	STD LN CL8 ZNCR				86505664	
ENGINEERING SPECIFICATION				REV. J	FRAME 2	OF 4