

Hex Lock Nuts, Class 10, 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 10 Hex Lock Nuts with coarse threads.

1.2 The Hex Lock Nut Class 10 Zn Cr plated is to be used when higher strength is needed 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	412672	ZMR CL10 G	M12	86505684
English	412672	LN CL10 P	M12	86505684
Part Number				
Hex Lock Nut				
Class 10				
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 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:

Versatile(Partial) 1-M-044

ALL	G	BJF	114523	3/00	NAME	STD LN CL10 ZNCR	
ALL	F	BJF	114025	11/99			
ALL	E	BJF	113897	9/99	 NEW HOLLAND	ENGINEERING SPECIFICATION	
2	D	BJF	110082	5/97			
4	C	BJF	108931	1/97			
3	B	BJF	108139	7/96			
ALL	A	RE	104739	1/95			
FRAME NO.	REV.	BY	ECN NO.	DATE	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.	FRAME 1 OF 4	
APP.	DRAWN	BJFJR	2/94			PART NUMBER	
KHH 3/94	CHECKED					86505684	

4. REQUIREMENTS**4.1 MATERIAL**

4.1.1 Class 10 according to ISO 2320 - steel with the following chemical composition: max. .58% Carbon, min. .30% Manganese, max. .048% Phosphorus, and max. .058% 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-500.25) per standard 86508305 (FNHA-2-H-500.00) plus supplemental lubricant. Baking is not required for hydrogen embrittlement relief.

4.3 MECHANICAL REQUIREMENTS per ISO 2320.

Class	Thread Size	Proof Load Stress	Hardness *
	mm	N/mm ² (min.)	Rockwell
10	thru 4	1040	C26/C36
	over 4 thru 7	1040	C26/C36
	over 7 thru 10	1040	C26/C36
	over 10 thru 16	1050	C26/C36
	over 16 thru 24	1060	C26/C36

* Hardness shall be determined on the top of the Nut

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.

	NAME				PART NUMBER	
	STD LN CL10 ZNCR				86505684	
ENGINEERING SPECIFICATION			REV. G	FRAME 2	OF 4	