DIN EN 14399-7:2019-06 (E)

High-strength structural bolting assemblies for preloading - Part 7: System HR - Countersunk head bolt and nut assemblies

Contents

Page

European foreword 3

Introduction 4

1 Scope 6

2 Normative references 6

3 Bolts 7
3.1 Dimensions of bolts 7
3.2 Specification for bolts and reference standard 11
3.3 Marking of bolts 11

4 Nuts 12
4.1 Dimensions of nuts 12
4.2 Specification for nuts and reference standards 14
4.3 Proof load values of nuts 15
4.4 Decarburisation of the nut thread 15
4.5 Marking of nuts 16

5 Designation of the bolt/nut assemblies 16

6 Associated washers 16

7 Functional characteristics of the bolt/nut/washer assembly 17
7.1 General 17
7.2 Maximum individual value of the bolt force during fitness for purpose test (Fbi max) 18
7.3 Values of angle 1 18
7.4 Values of angle 2 19
7.5 Individual values of the k-factor (ki), mean value of the k-factor (km) and coefficient of variation of the k-factor (Vk) 19
7.5.1 Individual values of the k-factor (ki) for k-class K1 19
7.5.2 Mean value of the k-factor (km) and coefficient of variation of the k-factor (Vk) for k-class K2 19

Annex A (normative) Clamp lengths and grip lengths 21

A.1 Clamp lengths for countersunk head bolting assemblies 21
A.2 Grip lengths for countersunk head bolting assemblies 24

Bibliography 27