DIN EN 818-4:2008-12 (E)

Short link chain for lifting purposes - Safety - Part 4: Chain slings - Grade 8 (includes Amendment A1:2008)

Contents

Page

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 !Terms and definitions" 7

4 Hazards 8

5 Safety requirements 9
5.1 Components of a chain sling 9
5.1.1 Chain 9
5.1.2 Forged steel components 9
5.1.3 Links 9
5.1.4 Hooks 9
5.2 Design and construction 10
5.2.1 !Chain slings" assembled with mechanical joining devices 10
5.2.2 !Chain" slings assembled by welding 10
5.2.3 Endless !chain" slings 10
5.2.4 Tolerance on length 10
5.3 Working load rating 11
5.3.1 Single-leg !chain" slings 11
5.3.2 Multi-leg !chain" slings 11
5.3.3 Endless !chain" slings 11

6 Verification of safety requirements 12
6.1 !Qualification of personnel 12
6.2 Manufacturing proof force 13
6.2.1 General 13
6.2.2 Manufacturing proof force factors 13
6.2.3 Post-test examination 13
6.3 Final examination 13
6.3.1 !Chain" slings joined by mechanical devices 13
6.3.2 !Chain" slings of welded construction 13

7 Marking 14
7.1 General 14
7.2 Single-leg !chain" slings 14
7.3 Multi-leg !chain" slings rated for a range of angles from 0° to 45° to the vertical 14

8 Manufacturer's certificate 15
8.1 General 15
8.2 !Chain" slings of welded construction 15
8.3 !Chain" slings joined by mechanical devices 15

9 !Information" for use 16

Annex A (normative) Alternative method of rating and marking a chain sling for a specific lifting application 21

A.1 General 21
A.2 Alternative method of rating 21
A.3 Manufacturing proof force 21
A.4 Marking of !chain" slings rated by the alternative method of rating 22

Annex B (informative) !Bases for calculation of values for the working load limits" 23

B.1 Calculated values of working load limits (WLL) for single-leg !chain" slings 23
B.2 Calculated values of working load limits (WLL) for multi-leg !chain" slings 23

Annex C (informative) Designation system for chain slings - Grade 8 24

Annex D (!normative") Identification tags for chain slings 25

D.1 General 25
D.2 Tags for chain slings 25

Annex ZA (informative) !Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC 27

Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 28

!Bibliography 29