ISO 13856-3:2013-07 (E)

Safety of machinery - Pressure-sensitive protective devices - Part 3 : General principles for design and testing of pressure-sensitive bumpers, plates, wires and similar devices

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Requirements for design and testing 8
4.1 General 8
4.2 Basic requirements 8
4.3 Specific requirements for pressure-sensitive bumpers 15
4.4 Specific requirements for pressure-sensitive plates 16
4.5 Specific requirements for pressure-sensitive wires (trip wires) 16

5 Marking 17
5.1 General 17
5.2 Labels 17
5.3 Marking of the control unit 17
5.4 Marking of the sensor 17

6 Information for selection and use 17
6.1 General 17
6.2 Essential data for selection of suitable pressure-sensitive protective device 18
6.3 Information for use 19

7 Verificationofrequirements 21
7.1 Verification of requirements applicable to all pressure-sensitive protective devices 7.2 Verification of requirements for pressure-sensitive bumpers only 31
7.3 Verification of requirements for pressure-sensitive plates only 32
7.4 Verification of requirements for pressure-sensitive wires only 32
7.5 Other tests 33

Annex A (normative) Timing diagrams for pressure-sensitive bumpers, plates, wires and similar devices with/without reset 34

Annex B (informative) Device characteristics -- Explanatory remarks and recommendations 38

Annex C (informative) Design guidance 40

Annex D (informative) Application guidance 50

Annex E (informative) Commissioning and inspection 54

Bibliography 56