

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 Terms and definitions | 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 Verification of requirements | 21 |
| 7.1 Verification of requirements applicable to all pressure-sensitive protective devices 7.2 | 31 |
| 7.3 Verification of requirements for pressure-sensitive bumpers only | 32 |
| 7.4 Verification of requirements for pressure-sensitive plates only | 32 |
| 7.5 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 |