

DIN EN ISO 13856-3:2013-12 (E)

Safe ty of machinery - Pressure-sensitive protective devices - Part 3: General principles for design and testing of pressure-sensitive bumpers, plates, wires and similar devices (ISO 13856-3:2013)

Contents	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Requirements for design and testing	12
4.1 General	12
4.2 Basic requirements	12
4.3 Specific requirements for pressure-sensitive bumpers	19
4.4 Specific requirements for pressure-sensitive plates	20
4.5 Specific requirements for pressure-sensitive wires (trip wires)	20
5 Marking	21
5.1 General	21
5.2 Labels	21
5.3 Marking of the control unit	21
5.4 Marking of the sensor	21
6 Information for selection and use	21
6.1 General	21
6.2 Essential data for selection of suitable pressure-sensitive protective device	22
6.3 Information for use	23
7 Verification of requirements	25
7.1 Verification of requirements applicable to all pressure-sensitive protective devices covered by this part of ISO 13856	25
7.2 Verification of requirements for pressure-sensitive bumpers only	35
7.3 Verification of requirements for pressure-sensitive plates only	36
7.4 Verification of requirements for pressure-sensitive wires only	36
7.5 Other tests	37
Annex A (normative) Timing diagrams for pressure-sensitive bumpers, plates, wires and similar devices with/without reset	38
Annex B (informative) Device characteristics -- Explanatory remarks and recommendations	42
Annex C (informative) Design guidance	44
Annex D (informative) Application guidance	54
Annex E (informative) Commissioning and inspection	58
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	60
Bibliography	61