ISO 16301:2017-09 (E)

Rubber and plastics hoses and hose assemblies, wire- or textile-reinforced, for manually operated hydraulic jacks - Specification

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 List of significant hazards 2
4.1 General 2
4.2 Hazards due to bursting or leaking of hoses 2
4.3 Hazards due to failure of connectors 3
4.4 Hazards due to errors by the operator 4
4.5 Hazards due to change in length of hose assembly 5

5 Classification 5
5.1 Classes 5
5.2 Grades 5

6 Materials and construction 6
6.1 Hoses 6
6.2 Hose assemblies 6

7 Dimensions and tolerances 6
7.1 Diameters 6
7.2 Cover thickness 6
7.3 Concentricity 6

8 Physical properties 7
8.1 Fluid resistance 7
8.1.1 Test pieces 7
8.1.2 Oil resistance 7
8.2 Performance requirements 7
8.2.1 Hydrostatic requirements 7
8.2.2 Change in length 7
8.2.3 Minimum bend radius 8
8.2.4 Resistance to impulse 8
8.2.5 Leakage of hose assemblies 9
8.2.6 Cold bending test 9
8.2.7 Ozone resistance 9
8.2.8 Electrical conductivity 10
8.2.9 Visual examination 10

9 Frequency of testing 10

10 Marking 10
10.1 Hoses 10
10.2 Hose assemblies 11

11 Test report 11

12 Recommendations for packaging and storage 11

Annex A (informative) Selection of hoses 12

Annex B (normative) Test frequency 13

Annex C (informative) Production tests 14

Annex D (informative) Recommendations for lengths of supplied hoses and hose assemblies 15

Annex E (normative) Test method for electrical conductivity 16

Bibliography 17