ISO 7176-31:2023-05 (E)

Wheelchairs - Part 31: Lithium-ion battery systems and chargers for powered wheelchairs - Requirements and test methods

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Lithium-ion batteries 3
4.1 Battery performance and safety requirements 3
4.1.1 General 3
4.1.2 Fire 4
4.1.3 Battery cyclic endurance 4
4.2 Requirements for battery management systems 4
4.2.1 General 4
4.2.2 Functional requirements 5
4.2.3 Electromagnetic compatibility (EMC) 5
4.2.4 Climatic tests 5

5 Requirements for the battery charging system 6
5.1 Charger connector 6
5.1.1 General 6
5.1.2 XLR battery charger connector 6
5.1.3 XLR wheelchair charger connector 6
5.2 Battery charger function 7
5.2.1 Requirements 7

6 Instructions for use 8
6.1 Battery charger 8
6.2 Battery 8

7 Battery labelling 9

8 Test report 9

Bibliography 10