

ISO 18646-2:2024-01 (E)

Robotics - Performance criteria and related test methods for service robots - Part 2: Navigation

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Test conditions		4
4.1 General		4
4.2 Environmental conditions		5
4.3 Travel surface conditions		5
4.4 Operating conditions		5
4.5 Test paths		5
5 Pose characteristics		7
5.1 Purpose		7
5.2 Relevant characteristics		7
5.2.1 Pose accuracy		7
5.2.2 Pose repeatability		9
5.3 Test facility		10
5.4 Test procedure		10
5.5 Test result		11
6 Obstacle detection		11
6.1 Purpose		11
6.2 Test facility		11
6.3 Test procedure		13
6.4 Test result		13
7 Obstacle avoidance		14
7.1 Purpose		14
7.2 Test facility		14
7.3 Test procedure		15
7.4 Test result		16
8 Path deviation		16
8.1 Purpose		16
8.2 Test facility		16
8.3 Test procedure		17
8.4 Test result		17
9 Narrow passage		18
9.1 Purpose		18
9.2 Test facility		18
9.3 Test procedure		18
9.4 Test result		19
10 Mapping accuracy		19
10.1 Purpose		19
10.2 Test facility		19
10.3 Test procedure		21
10.4 Test result		21
Annex A (informative) Outdoor navigation		22
Bibliography		24