

ISO 19885-1:2024-05 (E)

Gaseous hydrogen - Fuelling protocols for hydrogen- fuelled vehicles - Part 1: Design and development process for fuelling protocols

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Abbreviations and symbols	7
5	General description of the fuelling protocol design and development process	8
6	Definition of fuelling protocol requirements for dispensing	9
6.1	Definition of basic requirements for the fuelling protocol	9
6.2	Definition of the fuelling envelope	9
6.2.1	Fuelling requirements based on vehicle regulations and standards	9
6.2.2	Additional information for vehicle requirements when regulatory requirements and standards are not available	10
6.2.3	Requirements based on dispenser design and operating characteristics	11
6.3	Dispenser application considerations	11
7	Fuelling protocol design and definition	12
7.1	Fuelling protocol design	12
7.2	Communications between the vehicle and dispensing system	12
7.3	Risk assessment and fault management	13
8	Development and verification of the fuelling protocol	14
8.1	Verification of the fuelling protocol	14
8.2	Documentation and standardization of the fuelling protocol	16
9	Validation of the fuelling protocol in the dispenser control systems	16
Annex A (Normative)	Development requirements for fuelling protocols of road vehicles	18
Annex B (Informative)	Information and Guidance for Clauses 6 Through 9	26
Bibliography		34