

DIN EN 13160-4:2025-05 (E)

Leak detection systems - Part 4: Requirements and test/assessment methods for sensor based leak detection systems (includes Amendment A1:2024)

Contents		Page
European foreword		4
1	Scope	4
2	Normative references	5
3	Terms and definitions	5
4	Requirements	5
4.1	Effectiveness	5
4.1.1	General	5
4.1.2	Presence of liquids	6
4.1.3	Presence of vapours	6
4.1.4	Re-usability of the sensor	6
4.1.5	Requirements for software, (only if provided)	6
4.2	Durability of effectiveness	7
4.2.1	Durability of effectiveness against temperature	7
4.2.2	Durability of effectiveness against chemical attack	7
5	Testing, assessment and sampling methods	7
5.1	Effectiveness of the leak detection systems	7
5.1.1	General	7
5.1.2	Presence of liquid	7
5.1.3	Presence of vapours	11
5.1.4	Re-usability of the discriminating and non-discriminating sensors	11
5.1.5	Re-usability of vapour sensors	12
5.1.6	Software (only if provided)	12
5.2	Durability of effectiveness	13
5.2.1	Durability of effectiveness against temperature	13
5.2.2	Durability of effectiveness against chemical attack	15
6	Assessment and verification of constancy of performance - AVCP	16
6.1	General	16
6.2	Type testing	17
6.2.1	General	17
6.2.2	Test samples, testing and compliance criteria	17
6.2.3	Test reports	18
6.2.4	Shared other party results	18
6.2.5	Cascading determination of the product type results	19
6.3	Factory production control (FPC)	20
6.3.1	General	20
6.3.2	Requirements	20
6.3.3	Product specific requirements	22
6.3.4	Procedure for modifications	23
6.3.5	One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity	23
7	Marking, labelling and packaging	24
8	Environmental aspects	25

Annex A (informative) Environmental aspects	26
Bibliography	29