

DIN EN 15625:2021-04 (E)

Railway applications - Braking - Automatic variable load sensing devices

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Symbols and abbreviations	7
5	Design and manufacture	7
5.1	General	7
5.2	Functional requirements	7
5.2.1	Operating requirements	7
5.2.2	Characteristics of weighing valves	7
5.2.3	Mechanical requirements	8
5.2.4	Tightness	8
5.3	Fire behaviour	8
5.4	Shock and vibration	9
5.5	Service life	9
5.6	Compressed air quality	9
5.7	Environmental conditions	9
5.7.1	General	9
5.7.2	Ambient temperature	9
5.7.3	Altitude	9
5.7.4	Humidity	10
5.7.5	Rain	10
5.7.6	Snow, ice and hail	10
5.7.7	Solar radiation	10
5.7.8	Pollution	10
5.8	External appearance	11
5.9	Design requirements regarding pressure stress	11
5.10	Pneumatic connections	11
6	Type tests	11
6.1	General	11
6.2	Individual automatic variable load sensing device type tests	12
6.2.1	Test bench for individual automatic variable load sensing devices type tests	12
6.2.2	Sampling for type test	13
6.2.3	Test requirements	13
6.2.4	Check of physical and geometrical characteristics	14
6.2.5	Tightness	14
6.2.6	Characteristic, hysteresis	15
6.2.7	Operation at extreme temperature	16
6.2.8	Shock and vibration tests	18
7	In-service assessment	19
8	Designation	19
9	Identification and marking	19

Annex A(informative) Assessment of an automatic variable load sensing device when fitted to a vehicle	21
A.1 General	21
A.2 Design acceptance testing set up	21
A.3 Running tests	21
A.3.1 General	21
A.3.2 Pneumatic automatic variable load sensing device - Air consumption	21
A.3.2.1 Procedure	21
A.3.2.2 Pass/fail criteria	21
A.3.3 Automatic variable load sensing device - Output signal variation	22
A.3.3.1 Procedure	22
A.3.3.2 Pass/fail criteria	22
Annex B(normative) In-service assessment	23
Annex ZA(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2016/797/EU aimed to be covered	24
Bibliography	26