

DIN EN 13799:2012-06 (E)

LPG equipment and accessories - Contents gauges for Liquefied Petroleum Gas (LPG) pressure vessels

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Operating conditions	8
5	Materials	8
5.1	General	8
5.2	Metallic materials	8
5.3	Non-metallic components	9
5.4	Lubricants, sealants and adhesives	9
6	Design - General requirements	9
6.1	General	9
6.2	Seals	10
6.3	Springs	10
6.4	Threads	10
6.5	Flanges	11
7	Design- Specific requirements	11
7.1	Contents gauge	11
7.1.1	Float gauge	11
7.1.2	Rotary gauge	11
7.1.3	Fixed liquid level gauge	11
7.1.4	Slip tube gauge	12
7.2	Dials for contents gauges	12
8	Design testing	12
8.1	General	12
8.2	Over-torquing deformation test	13
8.3	External tightness test	14
8.4	Internal tightness test	14
8.5	Endurance test	15
8.6	Pressure strength test	15
8.7	Stress cracking test	15
8.7.1	General	15
8.7.2	Mercurous nitrate immersion test	16
8.7.3	Moist ammonia air stress cracking test	16
8.8	Float pressure test	16
8.9	Dimensional inspection	16
8.10	Function test	16
8.11	Vacuum test	16
8.12	Float Test	16
8.13	Accuracy assessment	17

9	Production testing and inspection	17
10	Marking	17
11	Documentation	17
	Annex A (normative) Float gauge flange and gasket dimensions	19
	Annex B (normative) Special low temperature requirements	22
	Annex C (normative) Production testing and inspection	23
	Annex D (informative) Vibration Testing	24
D.1	General	24
D.2	Test samples	24
D.3	Test method	24
D.4	Criteria for passing the test	25
	Annex E (informative) Environment checklist	26
	Bibliography	27