

DIN EN 13175:2008-01 (E)

LPG equipment and accessories - Specification and testing for Liquefied Petroleum Gas (LPG) tank valves and fittings (includes Amendment A2:2007)

Contents		Page
Foreword		4
1	Scope	4
2	Normative references	4
3	Terms and definitions	6
4	Operating conditions	7
5	Materials	8
5.1	General	8
5.2	Metallic materials	8
5.3	Non-metallic components	8
5.4	Lubricants, sealants, and adhesives	9
6	Design - general requirements	9
6.1	General	9
6.2	Seats and seals	9
6.3	Springs	9
6.4	Threads	10
6.5	Flanges	10
7	Design - specific requirements	10
7.1	Excess flow valve	10
7.2	Non-return valve	10
7.3	!!!Shut-off valves	10
7.3.1	General	10
7.3.2	Excess flow protection	10
7.3.3	Service valve	11
7.4	Filler valve	11
7.5	Occasional liquid withdrawal valve	12
7.6	Internal valve	12
7.7	Vapour equalising valve	12
7.8	Multipurpose valve	13
7.9	Breakaway coupling	13
7.10	Pressure gauge	13
7.11	Temperature gauge	13
7.12	Plugs and caps	13
8	Testing of the design	13
8.1	General	13
8.2	Over torquing deformation test	15
8.3	External leakage test	15
8.4	Seat leakage test	16
8.5	Residual flow test	16
8.6	Endurance test	17
8.7	Pressure strength test	17
8.8	Excess flow test	17
8.8.1	General	17
8.8.2	Excess flow test with air	18

8.8.3	Excess flow test with water	18
8.8.4	Excess flow strength test	19
8.9	Weak section strength test	19
8.10	Stress cracking test	19
8.10.1	General	19
8.10.2	Mercurous nitrate immersion test	19
8.10.3	Moist ammonia air stress cracking test	19
8.11	Vacuum test	19
8.12	Flow resistance test	19
8.13	Test report	19
9	Production testing	20
10	Marking	20
11	Documentation	20
~~	Requirements of EU Directive 97/23/EC	26
	Bibliography	27
	Annex ZA (informative) Relationship between this European Standard and the Essential Annex C (normative) Production testing and inspection	24
	Annex B (normative) Special low temperature requirements for valves	23
	Annex A (normative) ACME connections	21