

DIN EN 14071:2019-08 (E)

LPG equipment and accessories - Pressure relief valves for LPG pressure vessels - Ancillary equipment (includes Amendment :2019)

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Operating conditions	9
5	Materials	9
5.1	General	9
5.2	Metallic materials	10
5.3	Non-metallic components	10
5.4	Lubricants, sealants, and adhesives	10
5.5	Inspection Documents	10
6	Design	11
6.1	Introduction	11
6.2	Pressure relief valve isolating devices	11
6.2.1	General	11
6.2.2	Actuation	11
6.2.3	Indication of closure	11
6.2.4	Guiding arrangements	12
6.2.5	Isolating mechanism security	12
6.2.6	Interchangeability	12
6.3	PRV manifold	12
6.3.1	General	12
6.3.2	Indication of port closure	15
6.3.3	Port closure	15
6.4	Vent pipe	15
6.4.1	Design	15
6.4.2	Materials	15
6.4.3	Effect from external conditions	15
6.5	Connections	15
6.6	Threads	15
6.7	Minimum requirements for springs	16
7	Testing of the design	16
7.1	General	16
7.2	Test requirements	16
7.3	Hydraulic proof test	17
7.4	Relief valve isolator test	17
7.5	Testing of audible signal of isolating devices and residual flow of isolating devices and PRV manifolds	17
7.6	Resistance of the isolating mechanism	17
7.7	Over-torque deformation test	18
7.8	Operation test	18
7.8.1	General	18

7.8.2	System test	18
7.9	Stress cracking test	18
7.9.1	General	18
7.9.2	Mercury(I)nitrate immersion test	18
7.9.3	Moist ammonia air stress cracking test	19
8	Production testing of isolating devices and PRV manifolds	19
9	Marking and labelling	19
9.1	PRV isolating device	19
9.2	Pressure relief valve PRV manifolds	19
10	User instructions	20
10.1	PRV isolating devices	20
10.2	PRV manifolds	20
Annex A (normative) Dimensions of master test pieces for PRV and isolating devices		21
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2014/68/EU (Pressure equipment Directive) aimed to be covered		23
Bibliography		25