

DIN EN ISO 16852:2010-09 (E)

Flame arresters - Performance requirements, test methods and limits for use (ISO 16852:2008, including Cor 1:2008 and Cor 2:2009)

Contents		Page
Foreword		4
Introduction		7
1	Scope	8
2	Normative references	8
3	Terms and definitions	9
4	Symbols	11
5	Hazards and flame arrester classifications	13
5.1	Flame transmission: deflagration, stable and unstable detonation	13
5.2	Flame transmission: stabilized burning	14
6	General requirements	14
6.1	Measuring instruments	14
6.2	Construction	14
6.3	Housings	15
6.4	Joints	15
6.5	Pressure test	15
6.6	Leak test	15
6.7	Flow measurement (air)	15
6.8	Flame transmission test	16
6.9	Summary of tests to be conducted	18
7	Specific requirements for static flame arresters	19
7.1	Construction	19
7.2	Design series	19
7.3	Flame transmission test	20
7.4	Limits for use	33
8	Specific requirements for liquid product detonation flame arresters	34
8.1	Liquid seals	34
8.2	Foot valves	35
8.3	Flame transmission test	36
8.4	Limits for use	37
9	Specific requirements for dynamic flame arresters (high velocity vent valves)	37
9.1	General	37
9.2	Flame transmission test	37
9.3	Endurance burning test	38
9.4	Limits for use	40
10	Specific requirements for hydraulic flame arresters	40
10.1	Equipment	40
10.2	Flame transmission test	41
10.3	Limits for use	42
11	Information for use	44

11.1	Instructions for use	44
11.2	Marking	44
	Annex A (normative) Flow measurement	47
	Annex B (informative) Information for selecting flame arresters	51
	Annex C (informative) Best practice	52
	Annex D (informative) Use of in-line stable detonation flame arresters	53
	Bibliography	54
	Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC concerning equipment and protective systems for use in potentially explosive atmospheres	55