

DIN EN 671-1:2012-07 (E)

Fixed firefighting systems - Hose systems - Part 1: Hose reels with semi-rigid hose

Contents		Page
Foreword		5
Introduction		6
1 Scope		6
2 Normative references		6
3 Terms and definitions		6
4 Requirements		7
4.1 General		7
4.2 Distribution of extinguishing media		7
4.2.1 Hose bore		7
4.2.2 Minimum flow rate		7
4.2.3 Effective throw range		8
4.2.4 Spray discharge		8
4.3 Operational reliability		8
4.3.1 Hose -- General		8
4.3.2 Shut-off nozzle -- General		9
4.3.3 Reel - Construction		9
4.3.4 Reel - Rotating		9
4.3.5 Reel - Swinging		9
4.3.6 Reel - Resistance to impact and load		9
4.3.7 Shut-off nozzle - Resistance to impact		9
4.3.8 Shut-off nozzle - Operating torque		9
4.3.9 Inlet stop valve - General		9
4.3.10 Inlet stop valve - Manual inlet stop valve		9
4.3.11 Inlet stop valve - Automatic inlet stop valve		10
4.3.12 Hydraulic properties - Resistance to internal pressure		10
4.3.13 Hydraulic properties - Strength		10
4.4 Ability to pull out the hose		10
4.4.1 Reel -- Unwinding load		10
4.4.2 Reel -- Dynamic braking		11
4.4.3 Hose -- Maximum length		11
4.5 Colour		11
4.6 Shut-off nozzle		11
4.6.1 Marking of control conditions - Rotary operated nozzles		11
4.6.2 Marking of control conditions - Lever and trigger operated nozzles		11
4.7 Cabinet		11
4.7.1 General		11
4.7.2 Opening/closing device		12
4.7.3 Cabinet for manual hose reel with screw down type valve		12
4.7.4 Identification symbol		12
4.8 Durability aspects - Durability of operational reliability		12
4.8.1 Resistance to corrosion on coated parts		12
4.8.2 Resistance to corrosion of waterways		12
4.8.3 Ageing tests for plastics materials		12
5 Test methods		13
5.1 General		13
5.2 Distribution of extinguishing media		13

5.2.1	Hose bore	13
5.2.2	Minimum flow rate	13
5.2.3	Effective throw range	13
5.2.4	Spray discharge	13
5.3	Operational reliability	13
5.3.1	Hose - General	13
5.3.2	Shut-off nozzle - General	13
5.3.3	Reel - Construction	13
5.3.4	Reel - Rotating	13
5.3.5	Reel - Swinging	13
5.3.6	Reel - Resistance to impact and load	13
5.3.7	Shut-off nozzle - Resistance to impact	13
5.3.8	Shut-off nozzle - Operating torque	14
5.3.9	Inlet stop valve - General	14
5.3.10	Inlet stop valve - Manual inlet stop valve	14
5.3.11	Inlet stop valve - Automatic inlet stop valve	14
5.3.12	Hydraulic properties - Resistance to internal pressure	14
5.3.13	Hydraulic properties - Strength	14
5.4	Ability to pull out the hose	14
5.4.1	Reel - Unwinding load	14
5.4.2	Reel - Dynamic braking	14
5.4.3	Hose - Maximum length	14
5.5	Colour	14
5.6	Shut-off nozzle	14
5.7	Cabinet	14
5.8	Durability of operational reliability	15
5.8.1	Resistance to external corrosion on coated parts	15
5.8.2	Resistance to corrosion of waterways	15
5.8.3	Ageing tests for plastics materials	15
6	Evaluation of conformity	15
6.1	General	15
6.2	Initial Type Testing - Type Testing	15
6.2.1	General	15
6.2.2	Test samples	16
6.2.3	Test reports	16
6.3	Factory Production Control (FPC)	16
6.3.1	General	16
6.3.2	Requirements	17
6.3.3	Product specific requirements	19
6.3.4	Initial inspection of factory and of FPC	20
6.3.5	Continuous surveillance of FPC	20
6.3.6	Procedure for modifications	21
6.3.7	One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity	21
7	Marking	22
8	Instruction	22
8.1	Instructions for use	22
8.2	Installation and maintenance instructions	22
	Annex A (normative) Schedule for testing sequence	23
	Annex B (normative) Test method for resistance to external corrosion of coated parts	24
	Annex C (normative) Ageing test for resistance of plastics materials	25
	Annex D (normative) Test method for resistance to corrosion of waterways	26
	Annex E (normative) Test methods for nozzle	27

E.1	Resistance to impact	27
E.2	Operating torque	27
E.3	Spray discharge	27
E.4	Flow rate and throw range	29
E.4.1	Flow rate	29
E.4.2	Throw range	30
Annex F (normative) Test methods for physical endurance		31
F.1	General	31
F.2	Test method for rotation	31
F.3	Test method for swinging	31
F.4	Test method for unwinding load	31
F.5	Test method for dynamic braking	31
F.6	Test method for resistance to impact and load	32
F.6.1	Impact test	32
F.6.2	Load test	33
F.7	Test method for resistance to internal pressure	33
F.8	Test method for strength	34
Annex ZA (informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive		35
Z.A.1	Scope and relevant characteristics	35
Z.A.2	Procedure for the attestation of conformity of hose reel with semi-rigid hose	37
Z.A.2.1	System of attestation of conformity	37
Z.A.2.2	EC certificate of conformity	39
Z.A.3	CE marking and labelling	39