

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

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

---

<b>Contents</b>		<b>Page</b>
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
<b>Annex F (normative) Test methods for physical endurance .....</b>		<b>31</b>
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
<b>Annex ZA (informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive .....</b>		<b>35</b>
<b>ZA.1 Scope and relevant characteristics .....</b>		<b>35</b>
<b>ZA.2 Procedure for the attestation of conformity of hose reel with semi-rigid hose .....</b>		<b>37</b>
<b>ZA.2.1 System of attestation of conformity .....</b>		<b>37</b>
<b>ZA.2.2 EC certificate of conformity .....</b>		<b>39</b>
<b>ZA.3 CE marking and labelling .....</b>		<b>39</b>