

DIN EN 13483:2013-09 (E)

Rubber and plastic hoses and hose assemblies with internal vapour recovery for measured fuel dispensing systems - Specification

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Classification	6
5	Materials and construction	6
5.1	Fuel hose	6
5.2	Vapour hose	7
5.3	Vapour tubing	7
5.4	Vapour recovery fuel hose assembly	7
6	Pressure requirements	7
7	Dimensions and tolerances	7
7.1	Diameters and bend radii	7
7.2	Minimum thickness of lining and cover of the fuel hose	8
7.3	Concentricity	8
7.4	Tolerance on cut lengths	8
8	Physical properties	8
8.1	Compounds	8
8.2	Finished hoses/tubing	9
8.3	Hose assembly	11
9	End fittings	11
10	Type tests	12
11	Frequency of testing	13
12	Marking	13
12.1	Hoses	13
12.2	End fittings	13
12.3	Hose assemblies	13
Annex A (normative)	Test method for determination of low temperature class resistance at - 30 °C (for normal temperature class) and -40 °C (for low temperature class)	14
A.1	Test piece	14
A.2	Apparatus	14
A.3	Test method	14
Annex B (normative)	Test method for pressure requirements of vapour recovery hoses and tubes ..	15
B.1	Principle	15
B.2	Test method	15

Annex C (normative) Test method for determination of change in length due to swelling	16
C.1 Principle	16
C.2 Test method	16
Annex D (normative) Test method for determination of pressure loss	17
D.1 Vapour tubing/hose	17
D.2 Fuel hose	17
Annex E (normative) Method for determination of adhesion between components	18
E.1 Dry adhesion	18
E.2 Adhesion after contact with fuel	18
Annex F (normative) Test method for the determination of low temperature flexibility	19
F.1 Test piece	19
F.2 Apparatus	19
F.3 Test method	19
Annex G (normative) Test method for the determination of rate of fuel permeation	21
G.1 Test piece	21
G.2 Apparatus	21
G.3 Test method	21
Annex H (normative) Test method for flammability	22
H.1 Test piece	22
H.2 Apparatus	22
H.3 Test method	22
Annex I (normative) Test method for the determination of leakage (leak test)	24
Annex J (normative) Test method for fatigue strength under reversed bending stresses (flex test) .	25
J.1 Apparatus and test piece	25
J.2 Test method	25
J.3 Test observations and report	26
Annex K (normative) End-fitting pull-off test	27
K.1 Test piece	27
K.2 Apparatus	27
K.3 Test method	27
Annex L (normative) Test frequency for type tests and routine tests	28
Annex M (informative) Test frequency for production acceptance tests	30
Bibliography	32