

ISO 24605:2024-06 (E)

Road vehicles - Dimethyl ether (DME) refuelling connector with pressure equalizing port

Contents		Page
Foreword.....		iv
Introduction.....		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General construction requirements	3
5	Nozzles	3
6	Standard receptacle dimensions	4
7	Receptacles	5
8	Instructions	6
9	Marking	6
10	Tests	7
10.1	General requirements.....	7
10.2	Impact resistance.....	7
10.2.1	Nozzle test.....	7
10.2.2	Receptacle test.....	8
10.3	Leakage at room temperature.....	8
10.4	Abnormal loads.....	9
10.4.1	Test in unpressurised condition.....	10
10.4.2	Test in pressurised condition.....	10
10.5	Mounting hardware torque.....	10
10.6	Leakage at low and high temperatures.....	10
10.7	Nozzle freezing.....	10
10.8	Durability.....	11
10.8.1	Endurance.....	11
10.8.2	Corrosion resistance.....	12
10.8.3	Brass material compatibility.....	12
10.8.4	Resistance to dry heat.....	13
10.8.5	Ozone ageing.....	13
10.8.6	Temperature cycle.....	13
10.8.7	Compatibility to dimethyl ether.....	13
10.8.8	Electrical continuity.....	14
10.9	Hydrostatic strength.....	14
10.10	Oxygen ageing.....	14
10.11	Non-metallic material immersion.....	14
10.12	Vibration resistance.....	15
10.13	Creep.....	16
10.14	Automotive fluid exposure.....	16
10.14.1	General.....	16
10.14.2	Test method.....	16
10.14.3	Fluids.....	17
10.14.4	Pass criteria.....	17
Annex A (normative)	Critical dimensions of the nozzles	18
Annex B (normative)	Manufacturing and production test plan	19
Bibliography		20