

ISO 9170-1:2017-07 (E)

Terminal units for medical gas pipeline systems - Part 1: Terminal units for use with compressed medical gases and vacuum

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	*Normative references	2
3	Terms and definitions	2
4	General requirements	7
4.1	Safety	7
4.2	*Alternative construction	7
4.3	Materials	7
5	Design requirements	8
5.1	Medical gas supply	8
5.2	Terminal units for different pressures	9
5.3	Retention of gas specificity	9
5.4	Gas-specific connection point	9
5.5	Terminal unit check valve	9
5.6	Terminal unit maintenance valve	9
5.7	Connection of terminal units to the pipeline (see also 9.2)	10
5.8	Socket	10
5.9	Compliance	10
5.10	Endurance (connection/release)	10
5.10.1	Socket	10
5.10.2	Probe	10
5.11	*Pressure drop	10
5.12	Connection force and torque	11
5.13	Disconnection force and torque	11
5.14	Mechanical strength	11
5.15	Leakage	12
5.16	Gas specificity	12
5.17	Effective connection of probes	12
5.18	Electrical requirements	12
6	Constructional requirements	12
6.1	Cleaning	12
6.2	Lubricants	12
7	Test methods	12
7.1	General	12
7.2	Test for endurance	13
7.3	Test for pressure drop	13
7.4	Test for connection force and torque	15
7.5	Test for disconnection force and torque	15
7.6	Test for mechanical strength	16
7.7	Test for leakage	16
7.8	Test for gas specificity	17
7.9	Test for effective connection of probe	17

7.10	Test for durability of markings and colour coding	17
8	Marking, colour coding and packaging	17
8.1	Marking	17
8.2	Colour coding	17
8.3	Packaging	18
9	Information to be supplied by the manufacturer	18
9.1	Technical description	18
9.2	Instructions	18
Annex A (informative) Rationale		19
Annex B (informative) Environmental aspects		20
Annex C (informative) Special national and regional conditions for electrical installations		22
Bibliography		24