

# ISO 5359:2008-06 (E)

## Low-pressure hose assemblies for use with medical gases

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
0.1	General .....	vi
0.2	Standardization of screw-threaded connectors for use in hose assemblies .....	vi
1	Scope .....	1
2	Normative references .....	2
3	Terms and definitions .....	2
4	General requirements .....	5
4.1	Safety .....	5
4.2	* Alternative construction .....	6
4.3	Materials .....	6
4.4	Design requirements .....	6
4.4.1	Hose internal diameter .....	6
4.4.2	Mechanical strength .....	6
4.4.3	Deformation under pressure .....	7
4.4.4	Resistance to occlusion .....	7
4.4.5	Adhesion strength .....	7
4.4.6	Flexibility .....	7
4.4.7	Gas-specificity .....	7
4.4.8	End connectors .....	8
4.4.9	Design of NIST connectors .....	8
4.4.10	Design of DISS connectors .....	8
4.4.11	Design of SIS connectors .....	16
4.4.12	Joining hoses to hose inserts .....	16
4.4.13	Leakage .....	17
4.4.14	* Pressure drop .....	17
4.4.15	Expulsion of nipple .....	17
4.5	Constructional requirements .....	17
4.5.1	* Cleaning .....	17
4.5.2	* Lubricants .....	18
5	Test methods .....	18
5.1	General .....	18
5.1.1	Ambient conditions .....	18
5.1.2	Test gas .....	18
5.1.3	Reference conditions .....	18
5.2	Test method for pressure drop .....	18
5.3	Test method for leakage .....	18
5.3.1	For all hose assemblies .....	18
5.3.2	For hose assemblies fitted with a hose assembly check valve .....	18
5.4	Test method for gas-specificity .....	18
5.5	Test method for mechanical strength .....	19
5.6	Test method for deformation under pressure .....	19
5.7	Test method for resistance to occlusion .....	19
5.8	Test method for durability of markings and colour coding .....	21

<b>6</b>	<b>Marking, colour coding and packaging .....</b>	<b>21</b>
<b>6.1</b>	<b>Marking .....</b>	<b>21</b>
<b>6.2</b>	<b>Colour coding .....</b>	<b>22</b>
<b>6.3</b>	<b>Packaging .....</b>	<b>22</b>
<b>7</b>	<b>Information to be supplied by the manufacturer .....</b>	<b>22</b>
	<b>Annex A (informative) Rationale .....</b>	<b>24</b>
	<b>Annex B (informative) Environmental aspects .....</b>	<b>25</b>
	<b>Annex C (informative) Reported regional and national deviations of colour coding and nomenclature for medical gases .....</b>	<b>26</b>
	<b>Bibliography .....</b>	<b>28</b>