

DIN EN ISO 2503:2015-12 (E)

Gas welding equipment - Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa) (ISO 2503:2009 + Amd 1:2015) (includes Amendment :2015)

Contents		Page
1	Scope	5
2	Normative references	6
3	Terms and definitions	6
4	Symbols and abbreviated terms	8
5	Design requirements	8
5.1	Materials	8
5.2	Design and construction	8
6	Physical performance and operating characteristics	11
6.1	Pressures	11
6.2	Flow rates for pressure regulators without flow-metering devices	11
6.3	Equipment classes for pressure regulators without flow-metering devices	11
6.4	Pressure-relief valve	13
6.5	Operating-temperature range	13
6.6	Performance and operating characteristics	13
7	Marking	15
7.1	Pressure regulators without flow-metering devices	15
7.2	Pressure regulators with flow-metering devices	15
8	Instructions for use	16
9	Type-test procedure	16
9.1	General	16
9.2	Test samples and necessary documents	17
9.3	Test conditions	17
9.4	Units	17
9.5	Test for performance and operating characteristics of pressure regulators without flow-metering devices	18
9.6	Test for performance and operating characteristics of pressure regulators with flow-metering devices	21
9.7	Tests for mechanical resistance of pressure regulators or pressure regulators with a flow-metering device	23
9.8	Test for durability of markings	27
Annex A (informative) Pressure regulators		28
Annex B (informative) Operating principles of pressure regulators with flow-metering devices		32
Bibliography		34