

DIN EN ISO 22435:2013-03 (E)

Gas cylinders - Cylinder valves with integrated pressure regulators - Specification and type testing (ISO 2 2435:2007 + Amd.1:2012) (includes Amendment :2012)

Contents	Page
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Symbols and terminology	9
5 Design requirements	9
5.1 General	9
5.2 Description	10
5.3 Materials	10
5.4 Pressure indicators	11
5.5 Filling connection	11
5.6 Cylinder connection	11
5.7 Outlet connection	11
5.8 Outlet pressure for acetylene	12
5.9 Flow control valve (flow controller)	12
5.10 Pressure adjusting device	12
5.11 Filtration	12
5.12 Main shut-off valve	12
5.13 Flow and pressure performance for regulators without flow metering devices	12
5.14 Pressure relief valve	13
5.15 Leakage	13
5.16 Mechanical strength	13
5.17 Resistance to ignition	13
5.18 Requirement for VIPR with flow metering devices	13
5.19 Constructional requirements	14
5.20 Valve operating device	14
6 Test methods	15
6.1 General	15
6.2 Documentation	16
6.3 Number of test samples	16
6.4 Test sequence	17
6.5 Test method for mechanical strength	18
6.6 Test methods for flow and pressure performance for regulators without flow metering Devices	18
6.7 Test method for relief valve	26
6.8 Pressure retention of the low-pressure side of the pressure regulator	26
6.9 Test method for flowmeter mechanical strength	27
6.10 Test method for accuracy of VIPR with flowmeter	27
6.11 Test method for accuracy of VIPR with flowmeter and with fixed orifices	27
6.12 Test methods for leakage	27
6.13 Test method for operating and loosening torques	28
6.14 Test method for endurance of the main shut-off mechanism	28
6.15 Test method for endurance of the non-return valve	30
6.16 Test method for ignition	30
6.17 Decomposition test method for VIPRs for acetylene	31

6.18	Test method for flame resistance of the valve operating device	32
7	Marking	35
8	Instructions	35
	Annex A (normative) Valve impact test	36
	Annex B (informative) Endurance test	38
	Bibliography	42