

Symbol	Typ	Titel
G	Sektion	PHYSICS
G01	Untersektion	INSTRUMENTS
G01	Klasse	MEASURING; TESTING
G01L	Unterklasse	MEASURING FORCE, STRESS, TORQUE, WORK, MECHANICAL POWER, MECHANICAL EFFICIENCY, OR FLUID PRESSURE (weighing G01G) [4]
G01L 1/00	Hauptgruppe	Measuring force or stress, in general (measuring force due to impact G01L 5/00) [1, 4, 2006.01]
G01L 1/02	1-Punkt Untergruppe	. by hydraulic or pneumatic means [1, 2006.01]
G01L 1/04	1-Punkt Untergruppe	. by measuring elastic deformation of gauges, e.g. of springs [1, 2006.01]
G01L 1/06	1-Punkt Untergruppe	. by measuring the permanent deformation of gauges, e.g. of compressed bodies [1, 2006.01]
G01L 1/08	1-Punkt Untergruppe	. by the use of counterbalancing forces [1, 2006.01]
G01L 1/10	1-Punkt Untergruppe	. by measuring variations of frequency of stressed vibrating elements, e.g. of stressed strings (using resistance strain gauges G01L 1/22) [1, 2006.01]
G01L 1/12	1-Punkt Untergruppe	. by measuring variations in the magnetic properties of materials resulting from the application of stress [1, 2006.01]
G01L 1/14	1-Punkt Untergruppe	. by measuring variations in capacitance or inductance of electrical elements, e.g. by measuring variations of frequency of electrical oscillators [1, 2006.01]
G01L 1/16	1-Punkt Untergruppe	. using properties of piezo-electric devices [1, 2006.01]
G01L 1/18	1-Punkt Untergruppe	. using properties of piezo-resistive materials, i.e. materials of which the ohmic resistance varies according to changes in magnitude or direction of force applied to the material [1, 2006.01]
G01L 1/20	1-Punkt Untergruppe	. by measuring variations in ohmic resistance of solid materials or of electrically-conductive fluids (of piezo-resistive materials G01L 1/18); by making use of electrokinetic cells, i.e. liquid-containing cells wherein an electrical potential is produced or varied upon the application of stress [1, 2006.01]
G01L 1/22	2-Punkt Untergruppe	... using resistance strain gauges [1, 2006.01]
G01L 1/24	1-Punkt Untergruppe	. by measuring variations of optical properties of material when it is stressed, e.g. by photoelastic stress analysis [1, 2006.01]
G01L 1/25	1-Punkt Untergruppe	. using wave or particle radiation, e.g. X-rays, neutrons (G01L 1/24 takes precedence) [4, 2006.01]
G01L 1/26	1-Punkt Untergruppe	. Auxiliary measures taken, or devices used, in connection with the measurement of force, e.g. for preventing influence of transverse components of force, for preventing overload [1, 2006.01]
G01L 3/00	Hauptgruppe	Measuring torque, work, mechanical power, or mechanical efficiency, in general [1, 2006.01]
G01L 3/02	1-Punkt Untergruppe	. Rotary-transmission dynamometers [1, 2006.01]
G01L 3/04	2-Punkt Untergruppe	... wherein the torque-transmitting element comprises a torsionally-flexible shaft [1, 2006.01]
G01L 3/06	3-Punkt Untergruppe	... involving mechanical means for indicating [1, 2006.01]
G01L 3/08	3-Punkt Untergruppe	... involving optical means for indicating [1, 2006.01]
G01L 3/10	3-Punkt Untergruppe	... involving electric or magnetic means for indicating [1, 2006.01]
G01L 3/12	4-Punkt Untergruppe involving photoelectric means [1, 2006.01]
G01L 3/14	2-Punkt Untergruppe	... wherein the torque-transmitting element is other than a torsionally-flexible shaft [1, 2006.01]
G01L 3/16	1-Punkt Untergruppe	. Rotary-absorption dynamometers, e.g. of brake type [1, 2006.01]

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G01L 3/18	2-Punkt Untergruppe	... mechanically actuated [1, 2006.01]
G01L 3/20	2-Punkt Untergruppe	... fluid actuated [1, 2006.01]
G01L 3/22	2-Punkt Untergruppe	... electrically or magnetically actuated [1, 2006.01]
G01L 3/24	1-Punkt Untergruppe	. Devices for determining the value of power, e.g. by measuring and simultaneously multiplying the values of torque and revolutions per unit of time, by multiplying the values of tractive or propulsive force and velocity [1, 2006.01]
G01L 3/26	1-Punkt Untergruppe	. Devices for measuring efficiency, i.e. the ratio of power output to power input [1, 2006.01]
G01L 5/00	Hauptgruppe	Apparatus for, or methods of, measuring force, e.g. due to impact, work, mechanical power, or torque, adapted for special purposes [1, 2006.01]
G01L 5/03	1-Punkt Untergruppe	. for measuring release force of ski safety bindings [1, 2006.01]
G01L 5/04	1-Punkt Untergruppe	. for measuring tension in ropes, cables, wires, threads, belts, bands, or like flexible members [1, 2006.01]
G01L 5/06	2-Punkt Untergruppe	... using mechanical means [1, 2006.01]
G01L 5/08	2-Punkt Untergruppe	... using fluid means [1, 2006.01]
G01L 5/10	2-Punkt Untergruppe	... using electric means [1, 2006.01]
G01L 5/12	1-Punkt Untergruppe	. for measuring axial thrust in a rotary shaft, e.g. of propulsion plants [1, 2006.01]
G01L 5/13	1-Punkt Untergruppe	. for measuring the tractive or propulsive power of vehicles [1, 2006.01]
G01L 5/14	1-Punkt Untergruppe	. for measuring the force of explosions; for measuring the energy of projectiles [1, 2006.01]
G01L 5/16	1-Punkt Untergruppe	. for measuring several components of force [1, 2006.01]
G01L 5/18	1-Punkt Untergruppe	. for measuring ratios of force [1, 2006.01]
G01L 5/20	1-Punkt Untergruppe	. for measuring wheel side-thrust [1, 2006.01]
G01L 5/22	1-Punkt Untergruppe	. for measuring the force applied to control members, e.g. control members of vehicles, triggers [1, 2006.01]
G01L 5/24	1-Punkt Untergruppe	. for determining value of torque or twisting moment for tightening a nut or other member which is similarly stressed [1, 2006.01]
G01L 5/26	1-Punkt Untergruppe	. for determining the characteristic of torque in relation to revolutions per unit of time [1, 2006.01]
G01L 5/28	1-Punkt Untergruppe	. for testing brakes [1, 2006.01]
<u>Measuring fluid pressure</u>		
G01L 7/00	Hauptgruppe	Measuring the steady or quasi-steady pressure of a fluid or a fluent solid material by mechanical or fluid pressure-sensitive elements (transmitting or indicating the displacement of mechanical pressure-sensitive elements by electric or magnetic means G01L 9/00; measuring differences of two or more pressure values G01L 13/00; measuring two or more pressure values simultaneously G01L 15/00) [1, 2006.01]
G01L 7/02	1-Punkt Untergruppe	. in the form of elastically-deformable gauges [1, 2006.01]
G01L 7/04	2-Punkt Untergruppe	... in the form of flexible, deformable tubes, e.g. Bourdon gauges [1, 2006.01]
G01L 7/06	2-Punkt Untergruppe	... of the bellows type [1, 2006.01]
G01L 7/08	2-Punkt Untergruppe	... of the flexible-diaphragm type [1, 2006.01]
G01L 7/10	2-Punkt Untergruppe	... of the capsule type [1, 2006.01]
G01L 7/12	3-Punkt Untergruppe	... with exhausted chamber; Aneroid barometers [1, 2006.01]

Symbol	Typ	Titel
G01L 7/14	4-Punkt Untergruppe with zero-setting means [1, 2006.01]
G01L 7/16	1-Punkt Untergruppe	. in the form of pistons [1, 2006.01]
G01L 7/18	1-Punkt Untergruppe	. using liquid as the pressure-sensitive medium, e.g. liquid-column gauges [1, 2006.01]
G01L 7/20	2-Punkt Untergruppe	.. involving a closed chamber above the liquid level, the chamber being exhausted or housing low-pressure gas; Liquid barometers [1, 2006.01]
G01L 7/22	2-Punkt Untergruppe	.. involving floats, e.g. floating bells [1, 2006.01]
G01L 7/24	2-Punkt Untergruppe	.. involving balances in the form of rings partly filled with liquid [1, 2006.01]
G01L 9/00	Hauptgruppe	Measuring steady or quasi-steady pressure of a fluid or a fluent solid material by electric or magnetic pressure-sensitive elements; Transmitting or indicating the displacement of mechanical pressure-sensitive elements, used to measure the steady or quasi-steady pressure of a fluid or fluent solid material, by electric or magnetic means (measuring differences of two or more pressure values G01L 13/00; measuring two or more pressure values simultaneously G01L 15/00) [1, 2006.01]
G01L 9/02	1-Punkt Untergruppe	. by making use of variations in ohmic resistance, e.g. of potentiometers [1, 2006.01]
G01L 9/04	2-Punkt Untergruppe	.. of resistance strain gauges [1, 2006.01]
G01L 9/06	2-Punkt Untergruppe	.. of piezo-resistive devices [1, 2006.01]
G01L 9/08	1-Punkt Untergruppe	. by making use of piezo-electric devices [1, 2006.01]
G01L 9/10	1-Punkt Untergruppe	. by making use of variations in inductance [1, 2006.01]
G01L 9/12	1-Punkt Untergruppe	. by making use of variations in capacitance [1, 2006.01]
G01L 9/14	1-Punkt Untergruppe	. involving the displacement of magnets, e.g. electromagnets [1, 2006.01]
G01L 9/16	1-Punkt Untergruppe	. by making use of variations in the magnetic properties of material resulting from the application of stress [1, 2006.01]
G01L 9/18	1-Punkt Untergruppe	. by making use of electrokinetic cells, i.e. liquid-containing cells wherein an electric potential is produced or varied upon the application of stress [1, 2006.01]
G01L 11/00	Hauptgruppe	Measuring steady or quasi-steady pressure of a fluid or a fluent solid material by means not provided for in group G01L 7/00 or G01L 9/00 [1, 2006.01]
G01L 11/02	1-Punkt Untergruppe	. by optical means [6, 2006.01]
G01L 11/04	1-Punkt Untergruppe	. by acoustic means [6, 2006.01]
G01L 11/06	2-Punkt Untergruppe	.. Ultrasonic means [6, 2006.01]
G01L 13/00	Hauptgruppe	Devices or apparatus for measuring differences of two or more fluid pressure values [1, 2006.01]
G01L 13/02	1-Punkt Untergruppe	. using elastically-deformable members or pistons as sensing elements [1, 2006.01]
G01L 13/04	1-Punkt Untergruppe	. using floats or liquids as sensing elements [1, 2006.01]
G01L 13/06	1-Punkt Untergruppe	. using electric or magnetic pressure-sensitive elements [1, 2006.01]
G01L 15/00	Hauptgruppe	Devices or apparatus for measuring two or more fluid pressure values simultaneously [1, 2006.01]
G01L 17/00	Hauptgruppe	Devices or apparatus for measuring tyre pressure or the pressure in other inflated bodies [1, 2006.01]
G01L 19/00	Hauptgruppe	Details of, or accessories for, apparatus for measuring steady or quasi-steady pressure of a fluent medium insofar as such details or accessories are not special to particular types of pressure gauges [1, 2006.01]

Symbol	Typ	Titel
G01L 19/02	1-Punkt Untergruppe	. Arrangements for preventing, or for compensating for, effects of inclination or acceleration of the measuring device; Zero-setting means (for aneroid barometers G01L 7/14) [1, 2006.01]
G01L 19/04	1-Punkt Untergruppe	. Means for compensating for effects of changes of temperature [1, 2006.01]
G01L 19/06	1-Punkt Untergruppe	. Means for preventing overload or deleterious influence of the measured medium on the measuring device or <u>vice versa</u> [1, 2006.01]
G01L 19/08	1-Punkt Untergruppe	. Means for indicating or recording, e.g. for remote indication [1, 2006.01]
G01L 19/10	2-Punkt Untergruppe	.. mechanical [1, 2006.01]
G01L 19/12	2-Punkt Untergruppe	.. Alarms or signals [1, 2006.01]
G01L 19/14	1-Punkt Untergruppe	. Housings [1, 2006.01]
G01L 19/16	1-Punkt Untergruppe	. Dials; Mounting of dials [1, 2006.01]
G01L 21/00	Hauptgruppe	Vacuum gauges [1, 2006.01]
G01L 21/02	1-Punkt Untergruppe	. having a compression chamber in which gas, whose pressure is to be measured, is compressed [1, 2006.01]
G01L 21/04	2-Punkt Untergruppe	.. wherein the chamber is closed by liquid; Vacuum gauges of the McLeod type [1, 2006.01]
G01L 21/06	3-Punkt Untergruppe	... actuated by rotating or inverting the measuring device [1, 2006.01]
G01L 21/08	1-Punkt Untergruppe	. by measuring variations in the transmission of acoustic waves through the medium, the pressure of which is to be measured [1, 2006.01]
G01L 21/10	1-Punkt Untergruppe	. by measuring variations in the heat conductivity of the medium, the pressure of which is to be measured [1, 2006.01]
G01L 21/12	2-Punkt Untergruppe	.. measuring changes in electric resistance of measuring members, e.g. of filaments; Vacuum gauges of the Pirani type [1, 2006.01]
G01L 21/14	2-Punkt Untergruppe	.. using thermocouples [1, 2006.01]
G01L 21/16	1-Punkt Untergruppe	. by measuring variation of frictional resistance of gases [1, 2006.01]
G01L 21/18	2-Punkt Untergruppe	.. using a pendulum [1, 2006.01]
G01L 21/20	2-Punkt Untergruppe	.. using members oscillating about a vertical axis [1, 2006.01]
G01L 21/22	2-Punkt Untergruppe	.. using resonance effects of a vibrating body; Vacuum gauges of the Klumb type [1, 2006.01]
G01L 21/24	2-Punkt Untergruppe	.. using rotating members; Vacuum gauges of the Langmuir type [1, 2006.01]
G01L 21/26	1-Punkt Untergruppe	. by making use of radiometer action, i.e. of the pressure caused by the momentum of molecules passing from a hotter to a cooler member; Vacuum gauges of the Knudsen type [1, 2006.01]
G01L 21/28	2-Punkt Untergruppe	.. using torsional rotary measuring members [1, 2006.01]
G01L 21/30	1-Punkt Untergruppe	. by making use of ionisation effects [1, 2006.01]
G01L 21/32	2-Punkt Untergruppe	.. using electric discharge tubes with thermionic cathodes [1, 2006.01]
G01L 21/34	2-Punkt Untergruppe	.. using electric discharge tubes with cold cathodes [1, 2006.01]
G01L 21/36	2-Punkt Untergruppe	.. using radioactive substances [1, 2006.01]
G01L 23/00	Hauptgruppe	Devices or apparatus for measuring or indicating or recording rapid changes, such as oscillations, in the pressure of steam, gas, or liquid; Indicators for determining work or energy of steam, internal-combustion, or other fluid-pressure engines from the condition of the working fluid [1, 2006.01]

Symbol	Typ	Titel
G01L 23/02	1-Punkt Untergruppe	. mechanically indicating or recording and involving loaded or return springs [1, 2006.01]
G01L 23/04	1-Punkt Untergruppe	. involving means subjected to known counteracting pressure [1, 2006.01]
G01L 23/06	1-Punkt Untergruppe	. Indicating or recording by optical means [1, 2006.01]
G01L 23/08	1-Punkt Untergruppe	. operated electrically [1, 2006.01]
G01L 23/10	2-Punkt Untergruppe	.. by pressure-sensitive members of the piezo-electric type [1, 2006.01]
G01L 23/12	2-Punkt Untergruppe	.. by changing capacitance or inductance [1, 2006.01]
G01L 23/14	2-Punkt Untergruppe	.. by electromagnetic elements [1, 2006.01]
G01L 23/16	2-Punkt Untergruppe	.. by photoelectric means [1, 2006.01]
G01L 23/18	2-Punkt Untergruppe	.. by resistance strain gauges [1, 2006.01]
G01L 23/20	1-Punkt Untergruppe	. combined with planimeters or integrators [1, 2006.01]
G01L 23/22	1-Punkt Untergruppe	. for detecting or indicating knocks in internal-combustion engines; Units comprising pressure-sensitive members combined with ignitors for firing internal-combustion engines [1, 2006.01]
G01L 23/24	1-Punkt Untergruppe	. for measuring pressure in inlet or exhaust ducts of internal-combustion engines [1, 2006.01]
G01L 23/26	1-Punkt Untergruppe	. Details or accessories [1, 2006.01]
G01L 23/28	2-Punkt Untergruppe	.. Cooling means [1, 2006.01]
G01L 23/30	2-Punkt Untergruppe	.. Means for indicating consecutively positions of pistons or cranks of internal-combustion engines in combination with pressure indicators [1, 2006.01]
G01L 23/32	2-Punkt Untergruppe	.. Apparatus specially adapted for recording pressure changes measured by indicators [1, 2006.01]
G01L 25/00	Hauptgruppe	Testing or calibrating of apparatus for measuring force, torque, work, mechanical power, or mechanical efficiency [1, 2, 2006.01]
G01L 27/00	Hauptgruppe	Testing or calibrating of apparatus for measuring fluid pressure [1, 2, 2006.01]
G01L 27/02	1-Punkt Untergruppe	. of indicators [1, 2006.01]