COOPERATIVE PATENT CLASSIFICATION

G PHYSICS

INSTRUMENTS

G01 MEASURING; TESTING

G01F MEASURING VOLUME, VOLUME FLOW, MASS FLOW OR LIQUID LEVEL; METERING BY VOLUME

NOTE
Attention is drawn to the Notes following the title of class G01.

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Measuring volume flow

1/00 Measuring the volume flow or mass flow of fluid or fluent solid material wherein the fluid passes through the meter in a continuous flow (measuring a proportion of the volume flow G01F 5/00)

NOTE
G01F 1/72, G01F 1/74 and G01F 1/76 take precedence over G01F 1/05 - G01F 1/68

1/02 . . . [specially adapted to be used in open channels]
1/05 . . . [using floats]
1/07 . . . [by measuring the level variations of storage tanks relative to the time]
1/05 . . . [by using mechanical effects]
1/053 . . . [using rotating vanes with tangential and axial admission]
1/056 . . . [Orbital ball flowmeters]
1/06 . . . [using rotating vanes with tangential admission]
1/065 . . . [with radiation as transfer means to the indicating device, e.g. light transmission]
1/07 . . . [with mechanical coupling to the indicating device]
1/075 . . . [with magnetic or electromagnetic coupling to the indicating device]
1/0755 . . . [with magnetic coupling only in a mechanical transmission path]
1/08 . . . [Adjusting, correcting or compensating means therefor]
1/10 . . . [using rotating vanes with axial admission]
1/103 . . . [with radiation as transfer means to the indicating device, e.g. light transmission]
1/106 . . . [with electrostatic coupling to the indicating device]
1/11 . . . [with mechanical coupling to the indicating device]
1/115 . . . [with magnetic or electromagnetic coupling to the indicating device]
1/1155 . . . [with magnetic coupling only in a mechanical transmission path]
1/12 . . . [with electric, electro-mechanical or electronic means]
1/20 . . . [by detection of dynamic effects of the fluid flow]
1/203 . . . [Jet stream flowmeters]
1/206 . . . [Measuring pressure, force or momentum of a fluid flow which is forced to change its direction]
1/22 . . . [by variable-area meters, e.g. rotameters]
1/24 . . . [with magnetic or electric coupling to the indicating device]
1/26 . . . [of the valve type]
1/28 . . . [by drag-force, e.g. vane type or impact flowmeter]
1/30 . . . [for fluent solid material]
1/32 . . . [by swirl flowmeter, e.g. using Karmann vortices]
1/309 . . . [using Karmann vortices]
1/3218 . . . [bluff body design]
1/3227 . . . [using fluidic oscillators (fluidic oscillators F15C 1/00)]
1/3236 . . . [guide vanes as swirling means]
1/3245 . . . [detection means for swirl flowmeters (detection means in general G01H)]
1/3254 . . . [for detecting fluid pressure oscillations]
1/3263 . . . [by sensing mechanical vibrations]
1/3272 . . . [for detecting fluid speed oscillations by thermal sensors]
1/3281 . . . [for detecting variations in infrasonic, sonic or ultrasonic waves, due to modulation by passing through the swirling fluid]
1/329 . . . [circuits therefore]
1/34 . . . [by measuring pressure or differential pressure]
1/36 . . . [the pressure or differential pressure being created by the use of flow constriction]
1/363 . . . [with electrical or electro-mechanical indication (G01F 1/37 and G01F 1/38 take precedence)]
Measuring volume flow

1/366 . . . . [with mechanical or fluidic indication (G01F 1/37 and G01F 1/38 take precedence)]

1/37 . . . . the pressure or differential pressure being measured by means of communicating tubes or reservoirs with movable fluid levels, e.g. by U-tubes

1/372 . . . . [with electrical or electro-mechanical indication]

1/375 . . . . [with mechanical or fluidic indication]

1/377 . . . . [using a ring-balance as indicating element]

1/38 . . . . the pressure or differential pressure being measured by means of a movable element, e.g. diaphragm, piston, Bourdon tube or flexible capsule

1/383 . . . . [with electrical or electro-mechanical indication]

1/386 . . . . [with mechanical or fluidic indication]

1/40 . . . . Details or construction of the flow constriction devices

1/42 . . . . Orifices or nozzles

1/44 . . . . Venturi tubes

1/46 . . . . Pitot tubes

1/48 . . . . the pressure of differential pressure being created by a capillary element

1/50 . . . . Correcting or compensating means

1/52 . . . . by measuring the height of the fluid level due to the lifting power of the fluid flow

1/54 . . . . by means of chains, flexible bands or wires introduced into and moved by the flow

1/56 . . . . by using electric or magnetic effects (G01F 1/66 takes precedence)

1/58 . . . . by electromagnetic flowmeters

1/582 . . . . [without electrodes]

1/584 . . . . [constructions of electrodes, accessories therefor]

1/586 . . . . [constructions of coils, magnetic circuits, accessories therefor (G01F 1/582 takes precedence; magnet; inductances; transformers; selection of materials for their magnetic properties per se H01F)]

1/588 . . . . [combined constructions of electrodes, coils or magnetic circuits, accessories therefor]

1/60 . . . . Circuits therefor

1/64 . . . . by measuring electrical currents passing through the fluid flow; measuring electrical potential generated by the fluid flow, e.g. by electrochemical, contact or friction effects (G01F 1/58 takes precedence)

1/66 . . . . by measuring frequency, phase shift, or propagation time of electromagnetic or other waves, e.g. ultrasonic flowmeters

1/661 . . . . [using light]

1/662 . . . . [Constructional details]

1/663 . . . . [by measuring Doppler frequency shift]

1/665 . . . . [of the drag-type]

1/666 . . . . [by detecting noise and sounds generated by the flowing fluid]

1/667 . . . . [Schematic arrangements of transducers of ultrasonic flowmeters; Circuits therefor (G01F 1/663, G01F 1/665, G01F 1/666 take precedence)]

1/668 . . . . [Compensating or correcting for variations in velocity of sound]

1/68 . . . . by using thermal effects

1/684 . . . . Structural arrangements; Mounting of elements, e.g. in relation to fluid flow

1/6842 . . . . [with means for influencing the fluid flow]

1/6845 . . . . [Micromachined devices]

1/6847 . . . . [where sensing or heating elements are not disturbing the fluid flow, e.g. elements mounted outside the flow duct]

1/688 . . . . using a particular type of heating, cooling or sensing element ((G01F 1/6847 takes precedence)]

1/6882 . . . . [making use of temperature dependence of acoustic properties, e.g. propagation speed of surface acoustic waves]

1/6884 . . . . [making use of temperature dependence of optical properties]

1/6886 . . . . [Pyroelectric elements]

1/6888 . . . . [Thermoelectric elements, e.g. thermocouples, thermopiles]

1/69 . . . . of resistive type

1/692 . . . . Thin-film arrangements

1/696 . . . . Circuits therefor, e.g. constant-current flow meters

1/6965 . . . . [comprising means to store calibration data for flow signal calculation or correction]

1/698 . . . . Feedback or rebalancing circuits, e.g. self heated constant temperature flowmeters

1/6983 . . . . [adapted for burning-off deposits]

1/6986 . . . . [with pulsed heating, e.g. dynamic methods]

1/699 . . . . by control of a separate heating or cooling element

1/704 . . . . using marked regions or existing inhomogeneities within the fluid stream, e.g. statistically occurring variations in a fluid parameter (G01F 1/76, G01F 25/00 take precedence)

1/7042 . . . . [using radioactive tracers]

1/7044 . . . . [using thermal tracers]

1/7046 . . . . [using electrical loaded particles as tracer, e.g. ions or electrons]

1/7048 . . . . [the concentration of electrical loaded particles giving an indication of the flow]

1/708 . . . . Measuring the time taken to traverse a fixed distance

1/7082 . . . . [using acoustic detecting arrangements]

1/7084 . . . . [using thermal detecting arrangements]

1/7086 . . . . [using optical detecting arrangements]

1/7088 . . . . [using electrical loaded particles as tracers]

1/712 . . . . using auto-correlation or cross-correlation detection means ((G01F 1/7082 - G01F 1/7088 take precedence)]

1/716 . . . . using electron paramagnetic resonance [EPR] or nuclear magnetic resonance [NMR]

1/72 . . . . Devices for measuring pulsing fluid flows

1/74 . . . . Devices for measuring flow of a fluid or flow of a fluent solid material in suspension in another fluid

1/76 . . . . Devices for measuring mass flow of a fluid or a fluent solid material

1/78 . . . . Direct mass flowmeters

1/785 . . . . [using fluidic bridge circuits]
Measuring volume flow

3/00 Measuring the volume flow of fluids or fluent solid material wherein the fluid passes through the meter in successive and more or less isolated quantities, the meter being driven by the flow (measuring a proportion of the volume flow)

G01F 5/00

3/06 . . . comprising members rotating in a fluid-tight or substantially fluid-tight manner in a housing

G01F 9/006

3/065 . . . [slider-vane meters]

G01F 9/008 . . . Rotary piston or ring piston meters

G01F 9/003

3/10 . . . Geared or lobed impeller meters

G01F 9/001

3/12 . . . Meters with notating members, e.g. discs

G01F 9/02

3/14 . . . comprising reciprocating pistons, e.g. reciprocating in a rotary body

G01F 9/003

3/16 . . . in stationary cylinders

G01F 9/005

3/18 . . . involving two or more cylinders

G01F 9/003

3/20 . . . having flexible movable walls, e.g. diaphragms, bellows

G01F 9/02

3/22 . . . for gases

G01F 9/005

3/21 . . . [Valves therefor (valves for flowmeters in general G01F 15/005)]

G01F 9/005

3/222 . . . [characterised by drive mechanism for valves or membrane index mechanism]

G01F 9/005

3/223 . . . [with adjustment of stroke or timing; Calibration thereof; Testing]

G01F 9/003

3/224 . . . [with means for pressure or temperature compensation]

G01F 9/003

3/225 . . . [characterised by constructional features of membranes or by means for improving proper functioning of membranes (diaphragms for flowmeters in general G01F 15/16)]

G01F 9/005

3/226 . . . [characterised by features of meter body or housing]

G01F 9/003

3/227 . . . [characterised by the means for transfer of membrane movement information to indicating means]

G01F 9/003

3/228 . . . [using mechanical transmission means]

G01F 9/003

3/24 . with measuring chambers moved during operation (wet gasmeters G01F 3/30)

G01F 9/003

3/26 . . Tilting-trap meters

G01F 9/003

3/28 . . on carriers rotated by the weight of the liquid in the measuring chambers

G01F 9/003

3/30 . . Wet gas-meters

G01F 9/003

3/32 . . comprising partitioned drums rotating or notuating in a liquid

G01F 9/003

3/34 . . comprising bells reciprocating in a liquid

G01F 9/003

3/36 . with stationary measuring chambers having constant volume during measurement (with measuring chambers which expand or contract during measurement G01F 3/02)

G01F 9/003

3/38 . . having only one measuring chamber

G01F 9/003

5/00 Measuring a proportion of the volume flow

G01F 5/00

5/005 . [by measuring pressure or differential pressure, created by the use of flow constriction]

G01F 9/003

7/00 Volume-flow measuring devices with two or more measuring ranges; Compound meters

G01F 9/003

7/005 . [by measuring pressure or differential pressure, created by the use of flow constriction]

G01F 9/003

9/00 Measuring volume flow relative to another variable, e.g. of liquid fuel for an engine

G01F 9/003

9/001 . [with electric, electro-mechanic or electronic means (G01F 9/008 and G01F 9/02 take precedence)]

G01F 9/003

9/003 . [by measuring the weight]

G01F 9/003

9/005 . [by using calibrated reservoirs]

G01F 9/003

9/006 . [with mechanic means (G01F 9/008 and G01F 9/02 take precedence)]

G01F 9/003

Measuring volume flow

3/02 . . with measuring chambers which expand or contract during measurement

G01F 9/003

3/04 . . having rigid movable walls

G01F 9/003
Measuring volume flow

**Metering by volume**

11/00 Apparatus requiring external operation and adapted at each repeated and identical operation to measure and separate a predetermined volume of fluid or fluent solid material from a supply or container without regard to weight and to deliver it

11/03 . . . (for fluent solid material)
11/06 . . . (Details or accessories (general details G01F 15/00))
11/02 . . . with measuring chambers which expand or contract during measurement
11/01 . . . (of the piston type (G01F 11/04 takes precedence))
11/02 . . . [of the gun type and actuated by fluid pressure or by a motor (air-operated grease guns FI6N 5/02; devices to fill holes or cracks B05C 17/002)]
11/03 . . . [with provision for varying the stroke of the piston]
11/04 . . . [the pistons reciprocating in rotatable cylinders (dough-dividing machines with division boxes in a revolving body with radially-working pistons A21C 5/04)]
11/05 . . . [with manually operated pistons (G01F 19/005 takes precedence)]
11/06 . . . [of the gun type (hand operated grease guns FI6N 3/12)]
11/07 . . . [of the syringe type]
11/08 . . . [the dosing device being provided with a dip tube and fitted to a container, e.g. to a bottleneck]
11/09 . . . [provided with electric controlling means (G01F 11/02 and G01F 11/024 take precedence)]
11/04 . . . of the free-piston type
11/05 . . . with provision for varying the stroke of the piston
11/06 . . . of the diaphragm or bellows type
11/07 . . . [of the squeeze container type (using squeeze bottles or the like for soap A47K 5/122)]
11/08 . . . [using a bulb to pressurise the fluid to be dispersed]
11/09 . . . [using an auxiliary pressure to cooperate with the diaphragm or bellows]
11/10 . . . [using a deformable conduit-like element]
11/11 . . . [with measuring chambers moved during operation]
11/12 . . . [of the valve type, i.e. the separating being effected by fluid-tight or powder-tight movements (including the tilting or inverting of the supply vessel G01F 11/26)]
11/13 . . . of the peristaltic pump type (peristaltic pumps per se F04B 43/12)]
11/14 . . . wherein the measuring chamber reciprocates
11/15 . . . for liquid or semiliquid
11/16 . . . for fluent solid material
11/17 . . . wherein the measuring chamber rotates or oscillates
11/18 . . . for liquid or semiliquid
11/19 . . . for fluent solid material
11/20 . . . wherein the measuring chamber is filled and emptied by tilting or inverting the supply vessel, e.g. bottle emptying apparatus
11/21 . . . (for fluent solid material)
11/22 . . . (for liquid or semiliquid)
11/23 . . . (with valves)
11/24 . . . (of the ball type)
11/25 . . . (using the syphonic effect)
11/26 . . . (with counters for counting the numbers of measures delivered)
11/27 . . . (with provision for varying the volume to be delivered)
11/28 . . . with stationary measuring chambers having constant volume during measurement
11/29 . . . (for fluent solid material not provided for in G01F 11/34, G01F 11/40, G01F 11/46)
11/30 . . . (combined with electric level detecting means (G01F 11/282, G01F 11/30 - G01F 11/46 takes precedence))
11/31 . . . [squeezing of the supply vessel causing filling of the measuring chamber and backflow from the measuring chamber to the supply vessel being prevented by a check valve (G01F 11/46 take precedence)]
11/32 . . . with supply and discharge valves of the lift or plug-lift type
11/33 . . . for liquid or semiliquid
11/34 . . . for fluent solid material
11/35 . . . with supply and discharge valves of the rectilinearly-moved slide type
11/36 . . . for liquid or semiliquid
11/37 . . . for fluent solid material
11/38 . . . with supply and discharge valves of the rotary or oscillatory type
11/39 . . . for liquid or semiliquid
11/40 . . . for fluent solid material
11/41 . . . for fluent solid material
13/00 Apparatus for measuring by volume and delivering fluids or fluent solid materials, not provided for in the preceding groups
13/01 . . . (for fluent solid material)
13/02 . . . (comprising a conveyor belt)
13/03 . . . (comprising a screw conveyor)
13/04 . . . (measuring volume in function of time)
13/05 . . . (taps comprising counting- and recording means (counting devices, counting of objects in general G06M))
15/00 Details of, or accessories for, apparatus of the preceding groups insofar as such details or appliances are not adapted to particular types of such apparatus
15/01 . . . (Means for regulating or setting the meter for a predetermined quantity)
15/02 . . . (for gases)
Measuring volume

15/003 . . [using electromagnetic, electric or electronic means (G01F 15/002, G01F 15/02 take precedence)]
15/005 . . [Valves (valves in general F16K)]
15/006 . . [characterised by the use of a particular material, e.g. anti-corrosive material (G01F 15/14 takes precedence)]
15/007 . . [comprising means to prevent fraud]
15/008 . . [comprising lubricating means]
15/02 . . Compensating or correcting for variations in pressure, density or temperature
15/022 . . . [using electrical means]
15/024 . . . . [involving digital counting]
15/026 . . [using means to maintain zero differential pressure across the motor (G01F 1/08 and G01F 1/12 take precedence)]
15/028 . . . [for low flow rates]
15/04 . . . of gases to be measured
15/043 . . . . [using electrical means]
15/046 . . . . . [involving digital counting]
15/06 . . Indicating or recording devices, e.g. for remote indication
15/061 . . . [for remote indication]
15/063 . . . . [using electrical means]
15/065 . . . . . [with transmission devices, e.g. mechanical]
15/066 . . . . . . [involving magnetic transmission devices]
15/068 . . . . [with electrical means (G01F 15/063 takes precedence)]
15/07 . . Integration to give total flow, e.g. using mechanically-operated integration mechanisms
15/075 . . . using electrically operated integrating means
15/0755 . . . [involving digital counting]
15/08 . . Air or gas separators in combination with liquid meters; Liquid separators in combination with gas meters
15/10 . . Preventing damage by freezing or excess pressure or insufficient pressure
15/105 . . . [Preventing damage by hydraulic shocks]
15/12 . . Cleaning arrangements; Filters
15/125 . . . [Filters]
15/14 . . Casings, e.g. of special material
15/16 . . Diaphragms; Bellows; Mountings therefor
15/18 . . Supports or connecting means for meters
15/185 . . . {Connecting means, e.g. bypass conduits}

Level indicators

23/00 Indicating or measuring liquid level, or level of fluent solid material, e.g. indicating in terms of volume, indicating by means of an alarm
23/0007 . [for discrete indicating and measuring (G01F 23/02 - G01F 23/28 take precedence)]
23/0015 . . [with a whistle or other sonorous signal]
23/0023 . . [with a probe suspended by a wire or thread (with floats G01F 23/40)]
23/003 . . [with a probe suspended by rotatable arms (with floats G01F 23/32)]
23/0038 . . [using buoyant probes (with floats G01F 23/30 - G01F 23/76)]
23/0046 . . [with a stationary probe, where a liquid specimen is separated from the mean mass and measured (by gauge glasses G01F 23/02)]
23/0053 . . [with over-flow pipes]
23/0061 . . [characterised by the level signal processing means]
23/0069 . . . [particular electronic circuits for digital processing equipment]
23/0076 . . . . [containing circuits handling parameters other than liquid level]
23/0084 . . . [particular electronic circuits for handling non-digital processing equipment]
23/0092 . . . . [containing circuits handling parameters other than liquid level]
23/02 . . by gauge glasses or other apparatus involving a window or transparent tube for directly observing the level to be measured or the level of a liquid column in free communication with the main body of the liquid
23/04 . . by dip members, e.g. dip-sticks
23/045 . . . [cleaning means therefor (e.g. dip-stick wipers)]
23/14 . . by measurement of pressure
23/16 . . . Indicating, recording, or alarm devices being actuated by mechanical or fluid means, e.g. using gas, mercury, or a diaphragm as transmitting element, or by a column of liquid
23/161 . . . . [for discrete levels (G01F 23/162 - G01F 23/165 take precedence)]
23/162 . . . . [by a liquid column]
23/164 . . . . [using a diaphragm, bellow as transmitting element]
23/165 . . . . . [of bubbler type]
23/167 . . . . . . [with mechanic or fluid indicating or recording]
23/168 . . . . . . [with electric indicating or recording]
23/18 . . . Indicating, recording or alarm devices actuated electrically
23/185 . . . [for discrete levels]
23/20 . . by measurement of weight, e.g. to determine the level of stored liquefied gas
23/205 . . . [for discrete levels]
23/22 . . by measurement of physical variables, other than linear dimensions, pressure or weight, dependent on the level to be measured, e.g. by difference of heat transfer of steam or water (involving use of floats G01F 23/30)
23/223 . . . [using a melting or dissolving material as a part of alarm-means]
23/226 . . . . [measuring the braking of a rotatable element]
by measuring variations of resistance of resistors due to contact with conductor fluid

[Mounting arrangements for electrodes] 23/241

[Schematic arrangements of probes combined with measuring circuits] 23/243

[comprising oscillating circuits] 23/244

[with a probe moved by an auxiliary power, e.g. meter, to follow automatically the level] 23/245

[thermal devices] 23/246

[for discrete levels] 23/247

[Constructional details; Mounting of probes] 23/248

by measuring variations of capacity or inductance of capacitors or inductors arising from the presence of liquid or fluent solid material in the electric or electromagnetic fields

[for discrete levels] 23/261

[using capacitors] 23/263

[for discrete levels] 23/265

[measuring circuits therefor] 23/266

[mounting arrangements of probes] 23/268

by measuring the variations of parameters of electric or acoustic waves applied directly to the liquid or fluent solid material

[for discrete levels (G01F 23/284, G01F 23/296 take precedence)] 23/282

[Electromagnetic waves] 23/284

[X-rays; Gamma rays (or other forms of ionising radiation)] 23/288

[for discrete levels] 23/285

[Light, e.g. infra-red or ultra-violet] 23/292

[for discrete levels] 23/2921

[with light-conducting sensing elements, e.g. prisms] 23/2922

[for several discrete levels, e.g. with more than one light-conducting sensing element (G01F 23/2927 takes precedence)] 23/2924

[using electrical detecting means] 23/2925

[for several discrete levels, e.g. with more than one light-conducting sensing element] 23/2927

[using light reflected on the material surface] 23/2928

[Acoustic waves] 23/296

[for discrete levels (G01F 23/2962 - G01F 23/2968 take precedence)] 23/2961

[Transit time measurement] 23/2962

[magnetostriuctive] 23/2963

[measuring wave attenuation] 23/2965

[making use of acoustical resonance or standing waves] 23/2966

[for discrete levels] 23/2967

[Transducers specially adapted for acoustic level indicators] 23/2968

(by floats) 23/30

[characterised by means to prevent fault-level readings due to turbulence of the fluid, e.g. special float housings] 23/303

[using radioactive radiation] 23/306

[using rotatable arms or other pivotable transmission elements] 23/32

[using mechanically actuated indicating means (G01F 23/38 takes precedence)] 23/34

[using pneumatically or hydraulically actuated indicating means] 23/345

[using electrically actuated indicating means (G01F 23/38 takes precedence)] 23/346

[using electromechanically actuated indicating means] 23/347

[using optoelectrically actuated indicating means] 23/348

[using magnetically actuated indicating means] 23/349

[using bands or wires as transmission elements] 23/350

[using mechanically actuated indicating means] 23/351

[using pneumatically or hydraulically actuated indicating means] 23/352

[using electromechanically actuated indicating means] 23/353

[using optoelectrically actuated indicating means] 23/354

[using magnetically actuated indicating means] 23/355

[using magnet only as coupling means in a mechanical transmission path] 23/356

[using magnets only for directly actuating of switches] 23/357

[using elements rigidly fixed to and rectilinearly moving with the floats as transmission elements] 23/358

[using mechanically actuated indicating means] 23/359

[using pneumatically or hydraulically actuated indicating means] 23/360

[using electrically actuated indicating means] 23/361

[using electromechanically actuated indicating means] 23/362

[using optoelectrically actuated indicating means] 23/363

[using magnetically actuated indicating means] 23/364

[of the free float type (without mechanical transmission elements)] 23/365

[using mechanically actuated indicating means] 23/366

[using pneumatically or hydraulically actuated indicating means] 23/367

[using electrically actuated indicating means] 23/368

[using electromechanically actuated indicating means] 23/369

[using optoelectrically actuated indicating means] 23/370

[for sensing changes in level only at discrete points] 23/371

[using electromechanically actuated indicating means] 23/372
Level indicators

G01F

23/76 . . . . (using opto-electrically actuated indicating means)
23/72 . . . using magnetically actuated indicating means
23/74 . . . . for sensing changes in level only at discrete points
23/76 . . characterised by the construction of the float

25/00 Testing or calibrating apparatus for measuring volume, volume flow or liquid level, or for metering by volume

25/0007 . { for measuring volume flow }
25/0015 . { using a seal ball or piston in a test loop }
25/0023 . { using tracer }
25/003 . { using a reference counter }
25/0038 . { using a calibrated reservoir }
25/0046 . { using a weighing apparatus }
25/0053 . { specially adapted for gas meters (G01F 25/0015 - G01F 25/0046 take precedence) }
25/0061 . { for measuring liquid level }
25/0069 . { checking proper indicating of discrete level by floats }
25/0076 . { testing proper functioning of electronic circuits }
25/0084 . { for measuring volume }
25/0092 . { for metering by volume }