

ECLA**EUROPEAN CLASSIFICATION****A61M**

DEVICES FOR INTRODUCING MEDIA INTO, OR ONTO, THE BODY (introducing media into or onto the bodies of animals [A61D7/00](#); means for inserting tampons [A61F13/26](#); devices for administering food or medicines orally [A61J](#); containers for collecting, storing or administering blood or medical fluids [A61J1/05](#)); **DEVICES FOR TRANSDUCING BODY MEDIA OR FOR TAKING MEDIA FROM THE BODY** (surgery [A61B](#); chemical aspects of surgical articles [A61L](#)); **DEVICES FOR PRODUCING OR ENDING SLEEP OR STUPOR**

[N: **WARNING** [C2012.04]

The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:

[A61M1/18](#) covered by [B01D63/02](#), [B01D63/04](#)

[A61M1/20](#) covered by [B01D63/06](#)

[A61M1/22](#) covered by [B01D63/08](#)

[A61M1/24](#) covered by [B01D63/10](#)

[A61M3/04](#) covered by [A61M3/02](#)

[A61M5/175](#) covered by [A61M5/168](#)

[A61M5/303](#) covered by [A61M5/30](#)

[A61M5/307](#) covered by [A61M5/30](#)

[A61M23/00](#) covered by [A61M25/01](#), [A61M29/00](#)

[A61M25/08](#) covered by [A61M25/01C](#)

[A61M25/082](#) covered by [A61M25/01C4](#)

[A61M25/085](#) covered by [A61M25/01C6](#)

[A61M25/088](#) covered by [A61M25/01](#)

[A61M25/092](#) covered by [A61M25/01C10](#)

[A61M25/095](#) covered by [A61M25/01](#), [A61B5/00](#), [A61N1/05N](#) [A61M25/098](#) covered by [A61M25/01C1](#)

[A61M25/12](#) covered by [A61M25/10](#), [A61M29/02](#)

[A61M25/14](#) covered by [A61M25/00R](#)

[A61M25/16](#) covered by [A61M25/00G](#)

[A61M25/18](#) covered by [A61M25/00G5](#)

[A61M29/04](#) covered by [A61M29/02](#)

[A61M36/00](#) covered by [A61M37/00P](#), [A61N5/10](#)

[A61M36/02](#) covered by [A61M37/00P](#), [A61N5/10](#)

[A61M36/04](#) covered by [A61M37/00P](#), [A61N5/10](#), [A61M15/02](#) [A61M36/06](#) covered by

[A61M37/00P](#), [A61N5/10](#); [A61M15/02](#) [A61M36/08](#) covered by [A61M5/178R](#)

[A61M36/10](#) covered by [A61M37/00P](#), [A61N5/10](#)

[A61M36/12](#) covered by [A61M37/00P](#), [A61N5/10](#)

[A61M36/14](#) covered by [A61M37/00P](#), [A61N5/10](#)

Notes

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A61M1/00

Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids; Drainage systems ([N: [A61M3/00](#) to [A61M5/00](#), [A61M11/00](#) to [A61M16/00](#), [A61M27/00](#) to [A61M35/00](#) take precedence]; catheters [A61M25/00](#); tube connectors, tube couplings, valves or branch units specially adapted for medical use [A61M39/00](#); devices for taking samples of blood [A61B5/14](#); implements for holding wounds open [A61B17/02](#); [N: saliva removers for dentists [A61C17/04](#)]; filters implantable into blood vessels [A61F2/01](#); pumps in general [F04](#)] [C9809]

A61M1/00A

. [N: Containers for suction drainage, e.g. rigid containers]

- A61M1/00A2 . . [N: Self-contained vacuum aspirators]
- A61M1/00A3 . . [N: with means for emptying the suction container, e.g. by interrupting suction] [N9603]
- A61M1/00A4 . . [N: incorporating a movable wall to create suction, e.g. syringes (with a flexible member creating suction [A61M1/00A5](#); cupping glasses [A61M1/08](#))] [C9603]
- A61M1/00A5 . . [N: Drainage containers incorporating a flexible member creating suction, e.g. bags in a low-pressure chamber, bellows] [C9508]
- A61M1/00A6 . . [N: Two- or three-bottle systems for underwater drainage, e.g. for chest cavity drainage]

- A61M1/00B . [N: Drainage containers not being adapted for subjection to vacuum, e.g. bags (devices worn by the patient for reception of urine [A61F5/44](#); emptying devices for drainage bags [B65B69/00A2](#))] [C9508]

- A61M1/00G . [N: Gravity drainage systems ([A61M1/00B](#) takes precedence)] [C9809]

- A61M1/00H . [N: Suction drainage systems (containers therefor [A61M1/00A](#); suction-irrigation systems [A61M1/00K](#))]
- A61M1/00H2 . . [N: Suction control ([A61M1/00A6](#), [A61M1/00H10B](#) take precedence)]
- A61M1/00H4 . . [N: Intermittent or pulsating suction ([A61M1/00A3](#), [A61M1/00K2](#) take precedence)] [C9603]
- A61M1/00H10 . . [N: Handpieces (aspiration tips [A61M1/00T](#))]
- A61M1/00H10B . . . [N: with means for varying suction manually (suction control [A61M1/00H2](#))]
- A61M1/00H10B2 [N: by changing the section of the line]
- A61M1/00H10B4 [N: by changing the size of a vent (in combination with changing the section of the line [A61M1/00H10B2](#))]
- A61M1/00H12 . . [N: Means preventing overflow or contamination of the pumping systems (combined with rigid drainage containers [A61M1/00A](#))]
- A61M1/00H14 . . [N: Filters for solid matter (similar devices for dental use [A61C17/04C](#))]

- A61M1/00K . [N: Suction-irrigation systems (aspiration tips supplying fluids [A61M1/00T2](#); combined with tracheal tubes [A61M16/04D](#))] [C9712]
- A61M1/00K2 . . [N: operating alternately ([A61M1/00K4](#) takes precedence)]
- A61M1/00K4 . . [N: Handpieces therefor]

- A61M1/00P . [N: Suction pumps ([A61M1/00A2](#), [A61M1/00A5](#), [A61M1/00H](#), [A61M1/10](#) take precedence)] [C9712]
- A61M1/00P6 . . [N: by vacuum created above a liquid flowing from a closed container] [N9712]
- A61M1/00P8 . . [N: using Laval or Venturi jet pumps] [N9712]

- A61M1/00R . [N: Tube strippers, i.e. for clearing the contents of the tubes (vein strippers [A61B17/00B](#))]

- A61M1/00T . [N: Drainage tubes; Aspiration tips] [M1108]
- A61M1/00T2 . . [N: With gas or fluid supply means, e.g. for supplying rinsing fluids, anticoagulants (for irrigation without suction [A61M3/02H](#); combined with tracheal tubes [A61M16/04D](#); dental instruments with combined rinsing and aspirating [A61C17/02D](#))] [C9712]
- A61M1/00T6 . . [N: with a seal, e.g. to stick around a wound for isolating the treatment area] [N1108]

- A61M1/02 . Blood transfusion apparatus ([blood infusion by syringes A61M5/14](#))
- A61M1/02B . . [N: Multiple bag systems for separating or storing blood components][N0404]
- A61M1/02C . . [N: Means for controlling the quantity of transfused blood, e.g. by weighing the container and automatic stopping of the transfusion after reaching a determined amount]
- A61M1/02C2 . . . [N: combined with blood container shaking means]
- A61M1/02D . . [N: Means for agitating or shaking blood containers ([A61M1/02C2](#) takes precedence; shaking in general [B01F11/00](#))]
- A61M1/02E . . [N: Apparatus for treatment of blood or blood constituents not otherwise provided for ([for agitating A61M1/02D](#); [for separating blood components present in distinct layers in a container A61M1/02K](#))]
- A61M1/02E2 . . . [N: prior to or for conservation, e.g. for freezing, drying, centrifuging]
- [N: **WARNING**
Not complete, see also [A61M1/02](#)
]
- A61M1/02E4 . . . [N: prior to transfusion, e.g. for washing, filtering, thawing]
- [N: **WARNING**
Not complete, see also [A61M1/02](#)
]
- A61M1/02F . . [N: Apparatus for treatment of blood or blood constituents prior to or for conservation, e.g. freezing, drying or centrifuging] [N1108]
- A61M1/02G . . [N: Apparatus for treatment of blood or blood constituents prior to transfusion, e.g. washing, filtering or thawing] [N1108]
- A61M1/02K . . [N: Separating blood components present in distinct layers in a container, not otherwise provided for ([containers for storing blood or blood components A61J1/00T](#); [sampling or analysing blood by separating blood components G01N33/49C](#))] [C0003]
- A61M1/04 . [N: Artificial] pneumothorax apparatus
- A61M1/06 . Milking pumps ([feeding-bottles A61J9/00](#))
- A61M1/08 . Cupping glasses
- A61M1/10 . Blood pumps; Artificial hearts; Devices for mechanical circulatory assistance, e.g. intra-aortic balloon pumps ([artificial heart valves A61F2/24](#); [heart stimulation A61H31/00](#))
- A61M1/10C . . [N: Non-positive displacement pumps, e.g. impeller, centrifugal, vane pumps] [C9603]
- A61M1/10E . . [N: Pumps having flexible elements, e.g. with membranes, diaphragms, or bladder pumps] [C0009]
- A61M1/10E4 . . . [N: Drive systems therefor, e.g. mechanically, electromechanically or skeletal muscle drive means] [N9908]
- [N: using non-rotary electrical means] [N9908]
- [N: using hydraulic or pneumatic means] [N9908]
- [N: using a blood vessel as flexible element (not used, see subgroups)] [N9810]
- [N: using the heart as flexible element] [N9810]
- A61M1/10E51 . . . [N: Pulsating membrane pumps without valves, e.g. for counter pulsation,

- extra-arterial balloon pumps] [N9908]
- A61M1/10E51D [N: Intra-arterial balloon pumps, e.g. intra-aortic] [N9908]
- A61M1/10F . . [N: Piston pumps]
- A61M1/10R . . [N: Regulating or controlling systems therefor] [C0605]
- A61M1/12 . . implantable into the body [N: (not used, see subgroups)] [N9908]
- A61M1/12F . . . [N: Energy supply devices, converters therefor] [N9908]

- A61M1/14 . Dialysis systems; Artificial kidneys; Blood oxygenators; [N: Reciprocating systems for treatment of body fluids, e.g. single needle systems for haemofiltration, pheresis (haemofiltration using non reciprocating systems [A61M1/34](#); extracorporeal blood circuit aspects [A61M1/36](#)); (processes of separation using semi-permeable membranes [B01D61/00](#); semi-permeable membranes characterised by the material, manufacturing processes therefor [B01D71/00](#)) [C0003]
- A61M1/16 . . with membranes [N: ([A61M1/30](#) takes precedence; membranes per se [B01D69/00](#), [B01D71/00](#))]
- A61M1/16D . . . [N: Dialysates therefor]
- A61M1/16D2 [N: Apparatus for preparing dialysates (with regeneration of dialysates [A61M1/16R2](#))]
- A61M1/16D2A [N: Degasification (in general [B01D19/00](#))]
- A61M1/16E . . . [N: intracorporeal ([A61M1/28](#) and [A61F2/02B](#) take precedence)]
- A61M1/16F . . . [N: Sterilisation or cleaning before or after use (sterilisation of materials in general [A61L](#); cleaning or sterilisation of membrane modules apart from the machine [B01D65/02](#))]
- A61M1/16F2 [N: by heat]
- A61M1/16F4 [N: using chemical substances]
- A61M1/16L . . . [N: Detection of blood traces in dialysate (testing of the membrane modules [B01D65/10](#); investigating fluid-tightness of structures in general [G01M3/00](#)) [C9702]
- A61M1/16R . . . [N: with recirculating dialysing liquid]
- A61M1/16R2 [N: with dialysate regeneration]
- A61M1/16S . . . [N: Blood oxygenators with or without heat-exchangers ([A61M1/16E](#) takes precedence; membranes therefor [B01D67/00](#), [B01D69/00](#), [B01D71/00](#))]
- A61M1/26 . . . [N: and internal elements] which are moving [N0407]
- A61M1/28 . . Peritoneal dialysis; [N: Other peritoneal treatment, e.g. oxygenation]
- A61M1/28C . . . [N: Catheters therefor]
- A61M1/28D . . . [N: Dialysates therefor] [C9711]
- A61M1/30 . . [N: Reciprocating systems, alternately withdrawing blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle systems for haemofiltration, pheresis] [C0003]
- A61M1/32 . . Oxygenators without membranes

- A61M1/34 . Filtering material out of the blood by passing it through a membrane, i.e. haemofiltration, diafiltration [N: ([A61M1/30](#) takes precedence; extracorporeal blood circuit aspects [A61M1/36](#))] [C0003]
- A61M1/34B . . [N: Diafiltration]
- A61M1/34E . . [N: Adding solutions to the blood, e.g. substitution solutions (for preventing coagulation [A61M1/36H](#))] [C9805]
- A61M1/34E2 . . . [N: Substitution rate control as a function of the ultrafiltration rate]

- A61M1/34E4 . . . [N: Substitution fluids]
- A61M1/34E4C [N: Circuits for the preparation thereof]
- A61M1/34F . . [N: with treatment of the filtrate]
- A61M1/34P . . [N: Plasmapheresis; Leucopheresis; Lymphopheresis ([A61M1/34F](#) takes precedence; single-needle processes [A61M1/34S](#))] [C0311]

- A61M1/36 . . Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation; [N: Extra-corporeal blood circuits]
- A61M1/36C . . [N: Extra-corporeal blood circuits (single-needle circuits [A61M1/30](#))] [C0003]
- A61M1/36C2 . . . [N: Level detectors; Level control]
- A61M1/36C3 . . . [N: Gas bubble detectors (blood leak detection by change of transparency of dialysate [A61M1/16L](#); in infusion devices [A61M5/36B](#); observing bubbles in a liquid pool for leak detection, in general [G01M3/06](#))] [C9707]
- A61M1/36C4 . . . [N: Degassing devices; Buffer reservoirs; Drip chambers; Blood filters (priming [A61M1/36C6](#); blood filters for infusion [A61M5/165](#))]
- A61M1/36C4F [N: Blood component filters, e.g. leukocyte filters] [N9903]
- A61M1/36C5 . . . [N: Blood pressure control, pressure transducers specially adapted therefor]
- A61M1/36C6 . . . [N: Priming, rinsing before or after use]
- A61M1/36C7 . . . [N: Interfaces between patient blood circulation and extra-corporal blood circuit] [N0107]
- A61M1/36C7A [N: Arterio-venous shunts, fistulae] [N0905]
- A61M1/36C8 . . . [N: Flow rate transducers; Flow integrators (measuring the flow in general [G01F](#))] [C0607]
- A61M1/36C9 . . . [N: for preparing cardioplegia solutions][N9905]
- A61M1/36C10 . . . [N: Cardiac or cardiopulmonary bypass, e.g. heart-lung machines[N0303]]
- A61M1/36C11 . . . [N: Electrical impedance measurement of body fluids; transducers specially adapted therefor] [N0203]
- A61M1/36C99 . . . [N: Circuit parts not covered by the preceding subgroups of group [A61M1/36C](#)][N0303]
- A61M1/36H . . [N: Means preventing coagulation (aspiration tips with anticoagulant delivery [A61M1/00T2](#))]
- A61M1/36H2 . . . [N: Deactivation]
- A61M1/36P . . [N: by absorption ([A61M1/36H2](#) takes precedence)]
- A61M1/36R . . [N: by irradiation]
- A61M1/36S . . [N: Chemical treatment ([A61M1/36H2](#) takes precedence)]
- A61M1/36T . . [N: Temperature treatment (heating or cooling infusion media [A61M5/44](#))] [C9605]
- A61M1/36Z . . [N: using separation based on different densities of components, e.g. centrifuging] [C9502]

- A61M1/38 . . Removing constituents from donor blood and [N: storing or] returning remainder to body, [N: e.g. for transfusion][N0301]
- A61M1/38B . . . [N: Optimization of blood component yield] [N1112]
- A61M1/38B2 [N: taking into account of the patient characteristics] [N1112]
- A61M1/38B4 [N: taking into account of the needs or inventory] [N1112]

Guide heading: Syringes; Irrigators; Baths for subaquatic intestinal cleaning (other apparatus for introducing medicines into the body [A61M29/00](#) to [A61M37/00](#))

- A61M3/00** **Medical syringes, e.g. enemata; Irrigators** ([A61M5/00](#) takes precedence; pistons [A61M5/315](#))
- A61M3/00M . [N: comprising means for injection of two or more media, e.g. by mixing]
 - A61M3/02 . Enemata; Irrigators
 - A61M3/02B . . [N: Devices on which the patient can sit, e.g. mounted on a toilet bowl (**combined with bidets** [A61M3/06](#)); Devices containing liquid pumped by the patient's weight]
 - A61M3/02C . . [N: Devices operating in a closed circuit, i.e. recycling the irrigating fluid]
 - A61M3/02D . . [N: characterised by liquid supply means, e.g. from pressurised reservoirs]
 - A61M3/02D2 . . . [N: the pressure being generated in the reservoir, e.g. by gas generating tablets]
 - A61M3/02D4 . . . [N: the liquid being supplied by gravity]
 - A61M3/02D4B [N: Containers therefor, e.g. with heating means, with storage means for cannula]
 - A61M3/02D6 . . . [N: supplied directly from the pressurised water source, e.g. with medicament supply (**combined with bidets** [A61M3/06](#))]
 - A61M3/02D8 . . . [N: the liquid being pumped (**by the patient's weight** [A61M3/02B](#))]
 - A61M3/02D8B [N: by means of electric pumps]
 - A61M3/02D8C [N: manually, e.g. by squeezing a bulb]
 - A61M3/02E . . [N: Stands, holders or storage means for irrigation devices (**containers with storage means for cannula** [A61M3/02D4B](#))]
 - A61M3/02F . . [N: Devices for holding the cannula in position, e.g. belts (**cannula details** [A61M3/02H](#))]
 - A61M3/02G . . [N: Pulsating jets; Vibrating nozzles]
 - A61M3/02H . . [N: Cannula; Nozzles; Tips; their connection means]
 - A61M3/02H2 . . . [N: with at least two inner passageways, a first one for irrigating and a second for evacuating]
 - A61M3/02H4 . . . [N: with an external liquid collector]
 - A61M3/02H6 . . . [N: with dilating fingers]
 - A61M3/02H8 . . . [N: with inflatable balloon]
 - A61M3/06 . . combined with bidets
- A61M5/00** **Devices for bringing media into the body in a subcutaneous, intra-vascular or intramuscular way; Accessories therefor, e.g. filling or cleaning devices, arm-rests** ([N: vaccination appliances for veterinary use [A61D1/02B](#)]; tube connectors, tube couplings, valves or branch units specially adapted for medical use [A61M39/00](#); containers specially adapted for medical or pharmaceutical purposes [A61J1/00](#); [N: combinations of vial and syringe for mixing or transferring their contents [A61J1/00M](#); holders for containers for collecting, storing or administering blood or medical fluids [A61J1/16](#)])
- A61M5/00C . [N: Apparatus specially adapted for cleaning or sterilising syringes or needles]
 - A61M5/00P . [N: Packages specially adapted therefor, e.g. for syringes or needles, kits for diabetics (**needle protection, e.g. caps, [A61M5/32B](#); for sharps [A61B19/02P2](#)**)] [C0210]
 - A61M5/00P2 . . [N: Kits for diabetics] [N0210]

- A61M5/00R . [N: for contrast media]
- A61M5/00S . [N: Racks for supporting syringes or needles ([A61M5/00C](#) takes precedence)]
- A61M5/14 . Infusion devices, e.g. infusing by gravity; Blood infusion; Accessories therefor (suction in pumping blood transfusion [A61M1/02](#); [N: infusion containers [A61J1/00T](#)])
- A61M5/14B . . [N: Infusion of two or more substances]
- A61M5/14B1 . . . [N: in parallel, e.g. manifolds, sequencing valves (access sites [A61M39/02](#); tube connectors [A61M39/10](#))] [C9809]
- A61M5/14B2 . . . [N: in series, e.g. first substance passing through container holding second substance, e.g. reconstitution systems (needle sets [A61M5/162](#))]
- A61M5/14C . . [N: with capillaries for restricting fluid flow]
- A61M5/14F . . [N: Drip chambers ([A61M5/162](#), [A61M5/168M4](#), [A61M5/40](#) take precedence)] [C9605]
- A61M5/14H . . [N: Burettes, measuring cylinders (for laboratory use [B01L3/02](#))]
- A61M5/14M . . [N: Modular systems comprising interconnecting elements] [N9602]
- A61M5/14R . . [N: Hanging-up devices]
- A61M5/14R2 . . . [N: Stands, brackets or the like for supporting infusion accessories]
- A61M5/14R4 . . . [N: Holders or handles for hanging up infusion containers]
- A61M5/14R6 . . . [N: Clips, separators or the like for supporting tubes or leads]
- A61M5/142 . . Pressure infusion, e.g. using pumps

Note

In this group, the following expression is used with the meaning indicated:

- "pressure infusion" includes powered injection working at a controlled rate

- A61M5/142G . . . [N: Pumping with an aspiration and an expulsion action] [N9912] [C0807]
- A61M5/142G2 [N: Reciprocating piston type] [N9912]
- A61M5/142G2D [N: with double acting or multiple pistons] [N9912]
- A61M5/142G4 [N: Diaphragm type] [N9912]
- A61M5/142G6 [N: with linear peristaltic action, i.e. comprising at least three pressurising members or a helical member] [N9912]
- [N: **Informative note**
Pumps having tubular flexible working members [F04B43/08](#)
]
- A61M5/142G8 [N: Roller pumps] [N9912]
- [N: **Informative note**
Pumps having rollers for peristaltic action [F04B43/12](#)
]
- A61M5/142G10 [N: Screw, impeller or centrifugal type pumps] [N0508]
- A61M5/142G20 [N: Manually operated pumps] [N9912]
- A61M5/142P . . . [N: adapted to be carried by the patient, e.g. portable on the body] [C0807]
- A61M5/142P2 [N: of the skin patch type] [N0810]
- A61M5/142P10 [N: specially adapted for implantation] [N0807]

A61M5/142P10M	. . . . .	[N: with manual pumping action] [N0807]
A61M5/145	. . .	using pressurised reservoirs, e.g. pressurised by means of pistons [C0807]
A61M5/145B	. . . . .	[N: pressurised by means of pistons] [C9510]
A61M5/145B2	. . . . .	[N: the piston being actuated by fluid pressure] [N9510]
A61M5/145B4	. . . . .	[N: spring-actuated, e.g. by a clockwork] [N9804]
A61M5/145B6	. . . . .	[N: Front-loading type injectors] [N0101]
A61M5/145B10	. . . . .	[N: with a replaceable reservoir comprising a piston rod to be moved into the reservoir, e.g. the piston rod is part of the removable reservoir] [N0901]
A61M5/145B12	. . . . .	[N: with a replaceable reservoir for receiving a piston rod of the pump] [N0901]
A61M5/145B20	. . . . .	[N: Means for capture of the plunger flange] [N0011]
A61M5/145D	. . . . .	[N: pressurised by means of a flexible diaphragm] [N9510]
A61M5/145D2	. . . . .	[N: the diaphragm being actuated by fluid pressure] [N9510]
A61M5/148	. . . . .	flexible, [N: e.g. independent bags] (A61M5/155 takes precedence)
A61M5/148B	. . . . .	[N: using flexible bags externally pressurised by fluid pressure] [N9510]
A61M5/148B2	. . . . .	[N: the bags being substantially completely surrounded by fluid] [N9510]
A61M5/152	. . . . .	pressurised by contraction of elastic reservoirs [N: (containers for dispensing contents by contraction of an elastic bag provided therein, in general B65D83/00B1)]
A61M5/155	. . . . .	pressurised by gas [N: introduced into the reservoir] [C9510]
A61M5/158	. .	Needles [N: for infusions; Accessories therefor, e.g. for inserting infusion needles, or for holding them on the body]
A61M5/158B	. . .	[N: Double lumen needles]
A61M5/162	. .	Needle sets, i.e. connections by puncture between reservoir and tube; [N: Connections between reservoir and tube (in jet-action syringes A61M5/30 ; connectors for tubes having sealed ends and a needle for piercing them A61M39/14)] [C9809]
A61M5/162B	. . .	[N: Needle protectors therefor (in combination with syringes A61M5/32B ; protectors for sharps A61B19/02P2)]
A61M5/165	. .	Filtering accessories, e.g. blood filters, filters for infusion liquids ([N: A61M1/14], A61M1/34 , [N: A61M1/36C4 , A61M1/36P , A61M1/36S] take precedence; [N: needle sets with incorporated air inlet filters A61M5/162])
A61M5/168	. .	Means for controlling media flow to the body or for metering media to the body, e.g. drip meters, counters; [N: Monitoring media flow to the body (flow control in general G05D7/00)]
A61M5/168A	. . .	[N: Flow controllers]
A61M5/168A3	. . . . .	[N: by repeated filling and emptying of an intermediate volume (pressure infusion using positive displacement pumps A61M5/142)]
A61M5/168A5	. . . . .	[N: by controlling the degree of opening of the flow line]
A61M5/168A7	. . . . .	[N: by changing the height of the reservoir]
A61M5/168A9	. . . . .	[N: by controlling air intake into infusion reservoir (needle sets with air inlet A61M5/162)]
A61M5/168A11	. . . . .	[N: controlling delivery of multiple fluids, e.g. sequencing, mixing or via separate flow-paths (infusion of multiple fluids without using a controller A61M5/14B)]

- A61M5/168D . . . [N: Monitoring, detecting, signalling or eliminating infusion flow anomalies (low-level float-valves causing cut-off [A61M5/40](#); indicating or recording presence, absence or direction of flow in general [G01P13/00B14](#))]
- A61M5/168D2 [N: by sensing tissue properties at the infusion site, e.g. for detecting infiltration (detecting tissue temperature for diagnostic purposes [A61B5/00H](#))]
- A61M5/168D3 [N: by detecting the amount of infusate remaining, e.g. signalling end of infusion]
- A61M5/168D3B [N: by weight]
- A61M5/168D3F [N: by detection of position of a floating member] [N9508]
- A61M5/168D4 [N: by monitoring line pressure]
- A61M5/168D4B [N: Evaluation of pressure response, e.g. to an applied pulse] [N9801]
- A61M5/168F [N: Adjusting flow; Devices for setting a flow rate]
- A61M5/168F1 [N: Regulating valves (on-off valves, e.g. clamps [A61M39/28](#))] [C9809]
- A61M5/168M [N: for measuring fluid flow rate, i.e. flowmeters]
- A61M5/168M4 [N: Drip counters]
- A61M5/168M6 [N: by monitoring weight change, e.g. of infusion container]
- A61M5/172 electrical or electronic [N: ([A61M5/168A](#) and [A61M5/168D](#) take precedence)]
- A61M5/172B [N: using feedback of body parameters, e.g. blood-sugar, pressure (measurement of body parameters [A61B5/00](#))]

- A61M5/178 . . Syringes [N9410]
- A61M5/178F . . . [N: Devices aiding filling of syringes in situ (combination of a vial and a syringe for transferring or mixing their contents [A61J1/20F](#), filling of medical containers in general [B65B3/00B](#))] [N9711]
- A61M5/178R . . . [N: comprising radioactive shield means (syringe shields or holders for storage of radioactive sources [G21F5/018](#))] [N9410][C0105]
- A61M5/19 . . . having more than one chamber, [N: e.g. including a manifold coupling two parallelly aligned syringes through separate channels to a common discharge assembly (surgical glue applicators [A61B17/00L](#))] [N9410] [C0801]
- A61M5/20 . . . Automatic syringes, e.g. with automatically actuated piston rod, with automatic needle injection, filling automatically ([A61M5/142](#) [N: , [A61M5/46](#)] take precedence; [N: hypodermic projectiles [F42B12/54](#)]) [C9410]
- A61M5/20C [N: Spring-loaded one-shot injectors with or without automatic needle insertion (multishot dosing syringes [A61M5/315D](#), needle insertion only [A61M5/32E](#))] [N9410] [C9602]
- A61M5/20D [N: connected to external reservoirs for multiple refilling] [N9908]
- A61M5/20E [N: Media being expelled from injector by gas generation, e.g. explosive charge] [N9410] [C9902]
- A61M5/20F [N: Media being expelled from injector by pressurised fluid or vacuum (for infusion [A61M5/145](#), [A61M5/155](#))] [N9410] [C9410]
- A61M5/20M [N: comprising means for injection of two or more media, e.g. by mixing] [C9410]
- A61M5/24 . . . Ampoule syringes, i.e. syringes with needle for use in combination with replaceable ampoules or carpules, e.g. automatic (ampoules or carpules [A61J1/06](#)) [C9410]
- A61M5/24E [N: not used, see subgroups and [A61M5/24](#)] [C9601]
- A61M5/24E1 [N: emptied by compression of deformable ampoule or carpule wall] [C9410]
- A61M5/24E2 [N: emptied by telescoping of ampoules or carpules with the syringe body] [C9410]

- A61M5/24M . . . [N: comprising means for injection of two or more media, e.g. by mixing] [C9410]
- A61M5/24S . . . [N: with sealing means to be broken or opened] [N0610]
- A61M5/24S2 [N: upon internal pressure increase, e.g. pierced or burst (A61M5/24E2 takes precedence)] [N0610]
- A61M5/24S3 [N: by piercing without internal pressure increase (A61M5/24E2 takes precedence)] [N0610]
- A61M5/28 . . Syringe ampoules or carpules, i.e. ampoules or carpules provided with a needle [C9410]
- A61M5/28E . . . [N: Not used, see subgroups and [A61M5/28](#)] [N9410] [C9601]
- A61M5/28E1 [N: emptied by compression of deformable ampoule or carpule wall] [N9410] [C9410]
- A61M5/28E2 [N: emptied by sliding the ampoules or carpules relative to the needle holding base] [N9410]
- A61M5/28M . . . [N: comprising means for injection of two or more media, e.g. by mixing] [C9410]
- A61M5/28S . . . [N: with sealing means to be broken or opened (not used, see subgroups)] [C9410]
- A61M5/28S2 [N: upon internal pressure increase, e.g. pierced or burst ([A61M5/28E2](#) takes precedence)] [N9410]
- A61M5/28S3 [N: by piercing without internal pressure increase ([A61M5/28E2](#) takes precedence)] [N9410]
- A61M5/30 . . Syringes for injection by jet action, without needle, e.g. for use with replaceable ampoules or carpules [C9410]
- A61M5/30J . . . [N: with specially designed jet passages at the injector's distal end] [N0210]
- A61M5/30P . . . [N: for injecting a dose of particles in form of powdered drug, e.g. mounted on a rupturable membrane and accelerated by a gaseous shock wave or supersonic gas flow ([cell injection devices C12M3/00E](#))] [N0105]
- A61M5/31 . . Details [C9410]
- A61M5/31C . . . [N: Syringe barrels ([A61M5/32C](#) and [A61M5/50](#) take precedence)] [C9410]
- A61M5/31C2 [N: characterised by constructional features of the distal end, i.e. end closest to the tip of the needle cannula] [N9702]
- A61M5/31C3 [N: characterised by constructional features of the proximal end] [N9702]
- A61M5/31C4 [N: Specially designed finger grip means, e.g. for easy manipulation of the syringe rod] [N0210]
- A61M5/31F . . . [N: Filters incorporated in syringes] [C9410]
- A61M5/31P . . . [N: Priming, e.g. purging, reducing backlash or clearance] [N1111]
- A61M5/31S . . . [N: Means for causing or aiding aspiration or plunger retraction] [N9507]
- A61M5/315 . . . Pistons; Piston-rods; Guiding, blocking or restricting the movement of the rod [N: or piston]; Appliances on the rod for facilitating dosing; [N: Dosing mechanisms] [C0308]
- A61M5/315B [N: Means for blocking or restricting the movement of the rod or piston ([A61M5/50B](#) takes precedence)] [N0111][C0308]
- A61M5/315B1C [N: Integral with the syringe barrel, i.e. connected to the barrel so as to make up a single complete piece or unit]
- A61M5/315C [N: Piston or piston-rod constructions, e.g. connection of piston with piston-rod ([A61M5/50C](#) takes precedence)] [C9410]
- A61M5/315C1 [N: Piston constructions to improve sealing or sliding] [C9410]

A61M5/315C2	. . . . .	[N: Connection of piston with piston rod][N0507]
A61M5/315D	. . . . .	[N: Dosing (burettes, pipettes B01L3/02)] [C9604]
A61M5/315D1	. . . . .	[N: by means of stepwise axial movements, e.g. ratchet mechanisms or detents] [C9502]
A61M5/315D2	. . . . .	[N: by means of rotational movements, e.g. screw-thread mechanisms] [C9410]
A61M5/315D3	. . . . .	[N: by single stroke limiting means] [C9410]
A61M5/315D4	. . . . .	[N: Micro syringes, e.g. having piston bore diameter close or equal to needle shaft diameter] [N0111]
A61M5/315E	. . . . .	[N: Dosing mechanisms, i.e. setting a dose (administrating mechanisms A61M5/315E)] [N1111]
A61M5/315E1	. . . . .	[N: Means improving security or handling thereof, e.g. blocking means, means preventing insufficient dosing, means allowing correction of overset dose] [N1111]
A61M5/315E1A	. . . . .	[N: Blocking means to immobilize a selected dose, e.g. to administer equal doses] [N1111]
A61M5/315E1A2	. . . . .	{7 dots} [N: Permanent blocking, e.g. by medical personnel] [N1111]
A61M5/315E1B	. . . . .	[N: Means preventing setting of a dose beyond the amount remaining in the cartridge] [N1111]
A61M5/315E1C	. . . . .	[N: piston rod reset means, i.e. means for causing or facilitating retraction of piston rod to its starting position during cartridge change] [N1111]
A61M5/315E2	. . . . .	[N: Setting modes for dosing] [N1111]
A61M5/315E2A	. . . . .	[N: Electrically operated dose setting, e.g. input via touch screen or plus/minus buttons] [N1111]
A61M5/315E2B	. . . . .	[N: Mechanically operated dose setting member] [N1111]
A61M5/315E2B1	. . . . .	{7 dots} [N: by rotational movement of dose setting member, e.g. during setting or filling of a syringe] [N1111]
A61M5/315E2B1A	. . . . .	{8 dots} [N: including axial movement of dose setting member] [N1111]
A61M5/315E2B1B	. . . . .	{8 dots} [N: without axial movement of dose setting member] [N1111]
A61M5/315E2B2	. . . . .	{7 dots} [N: by purely axial movement of dose setting member, e.g. during setting or filling of a syringe] [N1111]
A61M5/315E2B3	. . . . .	{7 dots} [N: Accuracy improving means] [N1111]
A61M5/315E2B3G	. . . . .	{8 dots} [N: using scaling up or down transmissions, e.g. gearbox] [N1111]
A61M5/315E2B4	. . . . .	{7 dots} [N: using volume steps only adjustable in discrete intervals, i.e. individually distinct intervals] [N1111]
A61M5/315E2B5	. . . . .	{7 dots} [N: using freely adjustable volume steps] [N1111]
A61M5/315E2B6	. . . . .	{7 dots} [N: interacting with a displaceable stop member] [N1111]
A61M5/315F	. . . . .	[N: Administration mechanisms, i.e. constructional features, modes of administering a dose (dosing mechanisms for setting a dose A61M5/315E)] [N1111]
A61M5/315F1	. . . . .	[N: Means improving security or handling thereof] [N1111]
A61M5/315F1A	. . . . .	[N: Means keeping track of the total dose administered, e.g. since the cartridge was inserted] [N1111]

A61M5/315F1B	. . . . .	[N: Means providing feedback signals when administration is completed (A61M5/20 takes precedence)] [N1111]
A61M5/315F1C	. . . . .	[N: Means preventing accidental administration (for automatic syringes A61M5/20)] [N1111]
A61M5/315F1D	. . . . .	[N: Accuracy improving means] [N1111]
A61M5/315F1D2	. . . . .	{7 dots} [N: using scaling up or down transmissions, e.g. gearbox] [N1111]
A61M5/315F2	. . . . .	[N: Constructional features or modes of drive mechanisms for piston rods] [N1111]
A61M5/315F2A	. . . . .	[N: based on axial translation, i.e. components directly operatively associated and axially moved with plunger rod] [N1111]
A61M5/315F2A1	. . . . .	{7 dots} [N: performed by axially moving actuator operated by user, e.g. an injection button] [N1111]
A61M5/315F2A2	. . . . .	{7 dots} [N: performed by rotationally moving or pivoting actuator operated by user, e.g. an injection lever or handle] [N1111]
A61M5/315F2B	. . . . .	[N: based on rotational translation, i.e. movement of piston rod is caused by relative rotation between the user activated actuator and the piston rod] [N1111]
A61M5/315F2B1	. . . . .	{7 dots} [N: performed by axially moving actuator, e.g. an injection button] [N1111]
A61M5/315F2B2	. . . . .	{7 dots} [N: performed by rotationally moving or pivoted actuator, e.g. an injection lever or handle] [N1111]
A61M5/315F3	. . . . .	[N: Dose expelling manners] [N1111]
A61M5/315F3A	. . . . .	[N: Single dose, i.e. individually set dose administered only once from the same medicament reservoir, e.g. including single stroke limiting means] [N1111]
A61M5/315F3B	. . . . .	[N: Multi-dose, i.e. individually set dose repeatedly administered from the same medicament reservoir] [N1111]
A61M5/315F3B2	. . . . .	{7 dots} [N: Pre-defined multi-dose administration by repeated overcoming of means blocking the free advancing movement of piston rod, e.g. by tearing or de-blocking] [N1111]
A61M5/315M	. . . . .	[N: comprising means for injection of two or more media, e.g. by mixing] [C9410]
A61M5/32	. . . . .	Needles; Details of needles pertaining to their connection with syringe or hub (infusion needles A61M5/158); Accessories for bringing the needle into, or holding the needle on, the body [N: (A61M5/42 , 5/46 take precedence; guide needles for catheters A61M25/06E); Devices for protection of needles [N: (apparatus specially adapted for cleaning or sterilising needles A61M5/00C)] [C9410]
A61M5/32B	. . . . .	[N: Devices for protection of the needle before use, e.g. caps (A61M5/50 takes precedence; for infusion spikes A61M5/162B ; protectors for sharps A61B19/02P2)] [C9410]
A61M5/32B2	. . . . .	[N: Needle cap remover, i.e. devices to dislodge protection cover from needle or needle hub, e.g. deshielding devices] [N1111]
A61M5/32C	. . . . .	[N: Apparatus for removing or disposing of used needles or syringes, e.g. containers; Means for protection against accidental injuries from used needles (for sharps A61B19/02R2 ; disintegrating apparatus in general B02C , e.g. B02C19/12M , B23H9/00B ; disposal of medical waste in general B09B3/00M ; receptacles for refuse disposal in general B65F1/00)] [C9604]
A61M5/32C2	. . . . .	[N: Means for protection against accidental injuries by used needles] [C9904]

A61M5/32C2B	. . . . .	[N: Caps placed axially onto the needle, e.g. equipped with finger protection guards (axially-extensible protective sleeves A61M5/32C2H)] [C9803]
A61M5/32C2D	. . . . .	[N: Caps placed transversally onto the needle, e.g. pivotally attached to the needle base] [C9410]
A61M5/32C2D2	. . . . .	{7 dots} [N: Semi-automatic repositioning of the cap, i.e. in which the repositioning of the cap to the needle covering position requires a deliberate action by the user to trigger the repositioning of the cap, e.g. manual release of spring-biased cap repositioning means][N0406]
A61M5/32C2F	. . . . .	[N: Retractable needles, i.e. disconnected from and withdrawn into the syringe barrel by the piston (devices for protecting guide needles in combination with catheters A61M25/06E3)] [C0704]
A61M5/32C2F1	. . . . .	{7 dots} [N: Constructional features thereof, e.g. to improve manipulation or functioning] [N0606]
A61M5/32C2F2	. . . . .	{7 dots} [N: Semi-automatic needle retraction, i.e. in which the triggering of the needle retraction requires a deliberate action by the user, e.g. manual release of spring-biased retraction means] [C0308]
A61M5/32C2F2F	. . . . .	{8 dots} [N: Fully automatic, i.e. in which the triggering does not require a deliberate action by the user][N0308]
A61M5/32C2H	. . . . .	[N: being axially-extensible, e.g. protective sleeves coaxially slidable on the syringe barrel (devices for protecting guide needles in combination with catheters A61M25/06E3)] [C9803]
A61M5/32C2H1	. . . . .	{7 dots} [N: Constructional features thereof, e.g. to improve manipulation or functioning][N0406]
A61M5/32C2H2	. . . . .	{7 dots} [N: Semi-automatic sleeve extension, i.e. in which the triggering of the sleeve extension requires a deliberate action by the user, e.g. manual release of spring-biased extension means] [N9803][C0308]
A61M5/32C2H2F	. . . . .	{8 dots} [N: Fully automatic, i.e. in which the triggering does not require][N0308]
A61M5/32C2H4	. . . . .	{7 dots} [N: guided by means not coaxially aligned with syringe barrel, e.g. channel-like member formed on exterior surface of syringe barrel for guiding a pushing rod connected to and displacing needle safety sheath] [N9803]
A61M5/32C2H5	. . . . .	{7 dots} [N: with guiding tracks for controlled sliding of needle protective sleeve from needle exposing to needle covering position] [N9803] [C0111]
A61M5/32C2H5L	. . . . .	{8 dots} [N: having projections following labyrinth paths] [N0111]
A61M5/32C2H6	. . . . .	{7 dots} [N: freely sliding on needle shaft without connection to syringe or needle] [N0105]
A61M5/32C2H7	. . . . .	{7 dots} [N: being connected to the needle hub or syringe by radially deflectable members, e.g. longitudinal slats, cords or bands][N0310] [C0607]
A61M5/32C3	. . . . .	[N: Means imparting rotational movement to the needle or needle hub in order to assist in its disconnection from syringe nozzle] [N0805]
A61M5/32C4	. . . . .	[N: Apparatus for destroying used needles or syringes (needle resheathing means destroying the needle A61M5/32C2)] [C9410]
A61M5/32D	. . . . .	[N: Needle tip design, e.g. for improved penetration] [C9410]
A61M5/32E	. . . . .	[N: Accessories for bringing the needle into the body; Automatic needle insertion (A61M5/20 , A61M5/315D take precedence)] [N9410]

- A61M5/32F [N: characterised by features of the needle shaft] [N0211]
- A61M5/32F2 [N: Shafts with additional lateral openings] [N0211]
- A61M5/32H [N: characterised by features of the needle hub] [N1111]
- A61M5/32M [N: comprising means for injection of two or more media, e.g. by mixing] [N1111]
- A61M5/32P [Multiple needle devices, e.g. a plurality of needles arranged coaxially or in parallel] [N1111]
- A61M5/32P1 [Needles arranged coaxially] [N1111]
- A61M5/32P2 [Needles arranged in parallel] [N1111]
- A61M5/34 Constructions for connecting the needle, [N: e.g. to syringe nozzle or needle hub (connecting catheter tubes to hubs [A61M25/00G5](#))] [C9707]
- A61M5/34B [N: Connection of needle cannula to needle hub, or directly to syringe nozzle without a needle hub (A61M5/32C2F takes precedence)] [N9606] [C0607]
- A61M5/34C [N: using additional parts, e.g. clamping rings or collets] [C9410]
- A61M5/34C2 [N: Adaptors positioned between needle hub and syringe nozzle] [N1111]
- A61M5/34D [N: friction fit ([A61M5/34C](#) takes precedence)] [C9410]
- A61M5/34E [N: rotatable, e.g. bayonet or screw ([A61M5/34C](#) takes precedence)] [C9410]
- A61M5/34F [N: snap lock, i.e. upon axial displacement of needle assembly ([A61M5/34C](#) takes precedence)] [C9410]
- A61M5/34G [N: using adhesive bond or glues] [N0210]
- A61M5/36 with means for eliminating or preventing injection or infusion of air into body (dialysis systems, blood oxygenators [A61M1/14](#); haemofiltration equipment [A61M1/34](#); [N: automatic tube cut-off [A61M39/28A](#)])
- A61M5/36B [N: Air detectors ([A61M5/168D3](#) takes precedence; in extracorporeal blood circuits [A61M1/36C3](#))]
- A61M5/38 using hydrophilic or hydrophobic filters
- A61M5/38B [N: using hydrophobic filters]
- A61M5/40 using low-level float-valve to cut off media flow from reservoir [N: (position detection of a floating member [A61M5/168D3F](#))] [C9508]
- A61M5/42 having means for desensitising skin, for protruding skin to facilitate piercing, or for locating point where body is to be pierced [N: not used, see subgroups]
- A61M5/42B [N: Desensitising skin]
- A61M5/42C [N: Protruding skin to facilitate piercing, e.g. vacuum cylinders, vein immobilising means]
- A61M5/42D [N: Locating point where body is to be pierced, e.g. vein location means using ultrasonic waves, injection site templates]
- A61M5/44 having means for cooling or heating the devices or media
- A61M5/44B [N: the media being heated in the reservoir, e.g. warming bloodbags]
- A61M5/46 having means for controlling depth of insertion
- A61M5/48 having means for varying, regulating, indicating or limiting injection pressure (A61M5/142 takes precedence; [N: monitoring pressure in infusion systems [A61M5/168D4](#)])

- A61M5/48B . . [N: Varying injection pressure, e.g. by varying speed of injection]
- A61M5/48C . . [N: Regulating injection pressure]
- A61M5/48D . . [N: Indicating injection pressure]
- A61M5/48E . . [N: Limiting injection pressure]

- A61M5/50 . Having means for preventing re-use, or for indicating if defective, used, tampered with or unsterile [N: (retractable needles or needle protectors with means for preventing re-use [A61M5/32C2](#))]
- A61M5/50B . . [N: Means for blocking the piston or the fluid passageway to prevent illegal refilling of a syringe] [N9904] [C0007]
- A61M5/50B2 . . . [N: for blocking the piston] [N0809]
- A61M5/50B4 . . . [N: for blocking the fluid passageway] [N0809]
- A61M5/50C . . [N: Means for preventing re-use by disconnection of piston and piston-rod] [C0007]
- A61M5/50D . . [N: Means for preventing re-use by disrupting the piston seal, e.g. by puncturing] [C0007]
- A61M5/50H . . [N: for indicating if defective, used, tampered with or unsterile]

- A61M5/52 . Arm-rests

A61M9/00 Baths for subaquatic intestinal cleaning

Guide heading: Sprayers; Atomisers; Insufflators

A61M11/00 Sprayers or atomisers specially adapted for therapeutic purposes (in general [B05B](#); [N: aerosol containers [B65D83/14](#)])

- A61M11/00F . [N: using ultrasonics (spraying or atomising liquids using ultrasonic vibrations in general [B05B17/06](#))]
- A61M11/02 . operated by air [N: or other gas] pressure applied to the liquid [N: or other product] to be sprayed or atomised [N: (sprayers for horticulture [A01G](#), [A01H](#); killing insects [A01M](#); air humidifying by nozzles [F24F6/14](#), [F24F6/18](#); cooling by spraying [F28B](#), [F28C](#))] [C9510]
- A61M11/04 . operated by the vapour pressure of the liquid to be sprayed or atomised [N: (air-humidification, e.g. "room humidifiers" [F24F6/00](#))]
- A61M11/04H . . [N: using heaters]
- A61M11/06 . of the injector type
- A61M11/08 . Pocket atomisers of the injector type [N: (aerosol cans [A61M15/00P](#))] [N0405]

A61M13/00 Insufflators for therapeutic or disinfectant purposes, [N: i.e. devices for blowing a gas, powder or vapour into the body (hand-held units in which gas flow is produced by muscular energy at the moment of use [B05B11/06B](#))]

- A61M13/00G . [N: Blowing gases other than for carrying powders, e.g. for inflating, dilating or rinsing]

Guide heading: Inhaling devices

- A61M15/00** **Inhalators** [N: (drug delivery in endotracheal tubes [A61M16/04](#))] [C9712]
- A61M15/00C . [N: using prepacked dosages, one for each application, e.g. capsules to be perforated or broken-up]
- A61M15/00C2 . . [N: using multiple prepacked dosages on a same carrier, e.g. blisters]
- A61M15/00D . [N: Inhalators with dosage or measuring devices ([A61M15/00C](#) takes precedence; dosage devices incorporated in aerosol cans [B65D83/52](#))] [M1108]
- A61M15/00F . [N: using ultrasonics (spraying or atomising liquids using ultrasonic vibrations in general [B05B17/06](#))]
- A61M15/00K . [N: Inhalation chambers]
- A61M15/00P . [N: using medicine packages with incorporated spraying means, e.g. aerosol cans (pocket atomiser of the injector type [A61M11/08](#))] [C0405]
- A61M15/00T . [N: mechanically breath-triggered] [N9901]
- A61M15/02 . with activated or ionised [N: fluids, e.g. electrohydrodynamic (EHD) or electrostatic devices]; Ozone-inhalators [N: with radioactive tagged particles] [C0202]
- A61M15/06 . Inhaling appliances shaped like cigars, cigarettes or pipes [N: (simulated smoking devices, e.g. imitation cigarettes, [A24F47/00B](#))]
- A61M15/08 . Inhaling devices inserted into the nose
- A61M16/00** **Devices for influencing the respiratory system of patients by gas treatment, e.g. mouth-to-mouth respiration; Tracheal tubes** (stimulating the respiratory movement by mechanical, pneumatic or electrical means, iron lungs combined with gas breathing means [A61H31/00](#); [N: supine patient supports therefor [A61H31/00S](#)]; respiratory apparatus in general [A62B](#); respirators for working under water [B63C11/00](#)) [M1207]
- A61M16/00C . [N: Means for re-breathing exhaled gases, e.g. for hyperventilation treatment]
- A61M16/00H . [N: Mouth-to-mouth respiration (teaching or training models [G09B23/28W](#))]
- A61M16/00K . [N: with alarm devices]
- A61M16/00L . [N: Liquid ventilation] [C9905]
- A61M16/00M . [N: Pumps therefor] [N9911]
- A61M16/00M6 . . [N: Blowers or centrifugal pumps] [N0902]
- A61M16/00M7 . . [N: Tidal volume piston pumps] [N9604]
- A61M16/00M8 . . [N: Bellows-type] [N9507]
- A61M16/00M9 . . [N: Breathing bags] [N9507]
- A61M16/00P . [N: Environmental safety or protection means, e.g. preventing explosion] [N9902]
- A61M16/00P2 . . [N: Removing used or expired gases or anaesthetic vapours] [N9902]

- A61M16/00T . [N: High frequency jet ventilation]
- A61M16/01 . specially adapted for anaesthetising [N: ([A61M16/10B](#), [A61M16/18](#) take precedence)] [N9902]
- A61M16/04 . Tracheal tubes (catheters in general [A61M25/00](#))
- A61M16/04B . . [N: Cuffs] [C1110]
- A61M16/04B2 . . . [N: External cuff pressure control or supply, e.g. synchronisation with respiration]
- A61M16/04C . . [N: Nasoendotracheal tubes]
- A61M16/04D . . [N: combined with suction tubes, catheters or the like; Outside connections] [N9712]
- A61M16/04E . . [N: Tracheostomy tubes; Devices for performing a tracheostomy; Accessories therefor, e.g. masks, filters]
- A61M16/04E4 . . . [N: with valves at the proximal end limiting exhalation, e.g. during speaking or coughing (air passages from trachea to oesophagus or to pharynx, artificial epiglottis [A61F2/20B](#))]
- A61M16/04E6 . . . [N: Masks, filters, surgical pads, devices for absorbing secretions, specially adapted therefor]
- A61M16/04E8 . . . [N: Devices for performing a tracheostomy]
- A61M16/04M . . [N: Mouthpieces; Means for guiding, securing or introducing the tubes (guiding or introducing with laryngoscopes [A61B1/267](#); holding devices on the body [A61M25/02](#))] [N9712] [C9809]
- A61M16/04M2 . . . [N: Tube stabilizer] [N1201]
- A61M16/06 . Respiratory or anaesthetic masks
- A61M16/06L . . [N: Nasal cannulas or tubing (devices for improving normal breathing through the nose [A61F5/08](#); nose filters [A62B23/06](#); outside holding devices [A61M25/02](#))] [N9902]
- A61M16/06S . . [N: Holding devices therefor] [N0306]
- A61M16/08 . Bellows; Connecting tubes [N: (having means for taking samples [G01N1/22](#)); Water traps; Patient circuits] [C1204]
- A61M16/08C . . [N: Condensation traps]
- A61M16/08D . . [N: Joints or connectors] [N0902]
- A61M16/08T . . [N: Connecting tubes] [N0902]
- A61M16/10 . Preparation of respiratory gases or vapours
- A61M16/10B . . [N: specially adapted for anaesthetics ([A61M16/18](#) takes precedence)] [N9902]
- A61M16/10E . . [N: Devices for humidifying or heating the inspired gas by using recovered moisture or heat from the expired gas]
- A61M16/10F . . [N: Filters ([A61M16/04E6](#), [A61M16/22](#) take precedence; water traps [A61M16/08](#))]
- A61M16/10F1 . . . [N: bacterial]
- A61M16/10H . . [N: by influencing the temperature ([A61M16/10E](#) takes precedence)] [C9901]
- A61M16/12 . . by mixing different gases
- A61M16/14 . . by mixing different fluids, one of them being in a liquid phase
- A61M16/16 . . . Devices to humidify the respiration air [N: ([A61M16/10E](#) takes precedence)]

- A61M16/16F [N: Water-reservoir filling system, e.g. automatic]
- A61M16/18 . . . Vaporising devices for anaesthetic preparations
- A61M16/18F [N: Filling systems]
- A61M16/18L [N: Locking systems]
- A61M16/20 . Valves specially adapted to medical respiratory devices
- A61M16/20B . . [N: Non-controlled one-way valves, e.g. exhalation, check, pop-off non-rebreathing valves] [N9707]
- A61M16/22 . Carbon dioxide-absorbing devices; [N: Other means for removing carbon dioxide] (cartridges with absorbing substances for respiratory apparatus [A62B19/00](#)) [C9410]

Guide heading: Other devices for producing sleep or stupor; Devices for ending sleep or stupor

A61M19/00 **Local anaesthesia** (syringes therefor [A61M5/00](#)); **Hypothermia** ([A61M5/42](#) takes precedence; cooling blood in a bypass of the arterial system [A61M1/36](#))

[N: **WARNING** [M1207]

Groups [A61B19/20](#) - [A61B19/56L](#) do not correspond to former or current IPC groups.

Concordance ECLA : IPC for these groups is as follows: - [A61B19/20](#) - [A61B19/56](#) : [A61B19/00](#)

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A61M21/00 **Other devices or methods to cause a change in the state of consciousness; Devices for producing or ending sleep by mechanical, optical, or acoustical means, e.g. for hypnosis**

- A61M21/00B . [N: Isolation chambers used therewith, i.e. for isolating individuals from external stimuli (other treatment rooms or enclosures [A61G10/00](#))]
- A61M21/02 . for inducing sleep or relaxation, e.g. by direct nerve stimulation, hypnosis, analgesia (for massage [A61H](#); electrotherapy [A61N](#), e.g. applying alternating or intermittent electric currents for producing anaesthesia [A61N1/34](#))[N0405]

Guide heading: Probes; Catheters; Dilators; Drainage appliances for wounds

A61M25/00 **Catheters; Hollow probes** (dilators [A61M29/00](#); [N: peritoneal catheters [A61M1/28C](#); tracheal tubes [A61M16/04](#); for drainage [A61M27/00](#); for uterus, vagina or rectum [A61M31/00](#)]; for measuring or testing [A61B](#); [N: materials for catheters [A61L29/00](#)])

- A61M25/00G . [N: Making of catheters or other medical or surgical tubes]
- A61M25/00G2 . . [N: Forming the tip of a catheter, e.g. bevelling process, join or taper] [N1102]
- A61M25/00G3 . . [N: with embedded structures, e.g. coils, braids, meshes, strands or radiopaque coils] [N1102]
- A61M25/00G4 . . [N: Weakening parts of a catheter tubing, e.g. by making cuts in the tube or reducing thickness of a layer at one point to adjust the flexibility] [N1102]
- A61M25/00G5 . . [N: Connecting a tube to a hub] [M1108]
- A61M25/00G6 . . [N: Making lateral openings in a catheter tube, e.g. holes, slits, ports, piercings of

- guidewire ports; Methods for processing the holes, e.g. smoothing the edges] [N1102]
- A61M25/00H . [N: specially adapted for long-term hygiene care, e.g. urethral or indwelling catheters to prevent infections]
- A61M25/00P . [N: Packages specially adapted therefor (combined with means for introducing catheters, e.g. dispensers, [A61M25/01C3](#)); catheter kit packages (for surgical articles [A61B19/02P](#))]
- A61M25/00R . [N: characterised by the form of the tubing ([A61M25/00S3](#) takes precedence)]
- A61M25/00R1 . . [N: by the form of the lumen, e.g. cross-section, variable diameter]
- A61M25/00R1M . . . [N: Multi-lumen catheters with stationary elements (catheter assemblies comprising a catheter in combination with a guide tube, sheath or sleeve [K61M25/06H2](#); catheters comprising telescoping coaxial elements [K61M25/01H](#))] [C1203]
- A61M25/00R1M2 [N: characterized by features relating to at least one lumen located at the proximal part of the catheter, e.g. alterations in lumen shape or valves (catheter hubs [A61M25/00V](#))] [N1203]
- A61M25/00R1M4 [N: characterized by features relating to least one lumen located at the middle part of the catheter, e.g. slots, flaps, valves, cuffs, apertures, notches, grooves or rapid exchange ports (catheter shaft surface irregularities [K61M25/00S8](#))] [N1203]
- A61M25/00R1M6 [N: characterized by features relating to least one lumen located at the distal part of the catheter, e.g. filters, plugs or valves (catheter tips [A61M25/00T](#))] [N1203]
- A61M25/00R1M8 [N: characterized by at least one unconventionally shaped lumen, e.g. polygons, ellipsoids, wedges or shapes comprising concave and convex parts] [N1203]
- A61M25/00R2 . . [N: pre-formed, e.g. specially adapted to fit with the anatomy of body channels (urethral catheters [A61F2/04](#))]
- A61M25/00S . [N: characterised by structural features] [M1108]
- A61M25/00S1 . . [N: multi-layered, e.g. coated (coating materials [A61L29/00K](#))]
- A61M25/00S2 . . [N: with embedded materials for reinforcement, e.g. wires, coils, braids] [C1207]
- A61M25/00S2A . . . [N: made from fenestrated or weakened tubing layer] [N1204]
- A61M25/00S2B . . . [N: Localized reinforcement, e.g. where only a specific part of the catheter is reinforced, for rapid exchange guidewire port] [N1204]
- A61M25/00S2C . . . [N: having a variable stiffness along the longitudinal axis, e.g. by varying the pitch of the coil or braid] [N1204]
- A61M25/00S3 . . [N: with regions for increasing flexibility]
- A61M25/00T . [N: characterised by the distal end, e.g. tips ([A61M25/00S3](#), [A61M25/04](#) take precedence; balloon catheters [A61M25/10](#))]
- A61M25/00T10 . . [N: Static characteristics of the catheter tip, e.g. shape, atraumatic tip, curved tip or tip structure] [N1204]
- A61M25/00T10A . . . [N: Tip not integral with tube] [N1204]
- A61M25/00T10C . . . [N: Side holes, e.g. their profiles or arrangements; Provisions to keep side holes unblocked] [N1204]
- A61M25/00T10E . . . [N: Multiple separate lumens (multiple separate lumens throughout the catheter [A61M25/00R1M](#))] [N1204]

- A61M25/00T20 . . [N: Dynamic characteristics of the catheter tip, e.g. openable, closable, expandable or deformable] [N1204]
- A61M25/00T20A . . . [N: Valve means] [N1204]
- A61M25/00T30 . . [N: Strength or flexibility characteristics of the catheter tip] [N1204]
- A61M25/00T40 . . [N: Catheter tip comprising a tool] [N1204]
- A61M25/00T40A . . . [N: being one or more injection needles] [N1204]

- A61M25/00V . [N: characterised by the hub (connectors [A61M39/10](#))] [N9805]

- A61M25/01 . Introducing, guiding, advancing, emplacing or holding catheters ([A61M25/10](#) takes precedence)
- A61M25/01A . . [N: Insertion or introduction using an inner stiffening member, e.g. stylet or push-rod] [N1104]
- A61M25/01C . . [N: Steering means as part of the catheter or advancing means; Markers for positioning (systems for detection of markers A61B)] [M1108]
- A61M25/01C1 . . . [N: using radio-opaque or ultrasound markers] [M1108]
- A61M25/01C2 . . . [N: Aseptic insertion devices]
- A61M25/01C3 . . . [N: Mechanical advancing means, e.g. catheter dispensers]
- A61M25/01C4 . . . [N: self-propelled, e.g. autonomous robots ([A61M25/01C6](#) takes precedence)] [M1108]
- A61M25/01C5 . . . [N: Eversible catheters]
- A61M25/01C6 . . . [N: with fluid drive by external fluid in an open fluid circuit] [M1108]
- A61M25/01C7 . . . [N: Catheters carried by the bloodstream, e.g. with parachutes; Balloon catheters specially designed for this purpose]
- A61M25/01C8 . . . [N: Magnetic means; Magnetic markers] [M1108]
- A61M25/01C9 . . . [N: One-way gripping collars]
- A61M25/01C10 . . . [N: Tip steering devices]
- A61M25/01C10A [N: Handles therefor] [N0302]
- A61M25/01C10C [N: having flexible regions as a result of weakened outer material, e.g. slots, slits, cuts, joints or coils] [N1102]
- A61M25/01C10E [N: having flexible regions as a result of using materials with different mechanical properties] [N1102]
- A61M25/01C10G [N: having flexible regions as a result of inner reinforcement means, e.g. struts or rods] [N1102]
- A61M25/01C10K [N: with movable mechanical means, e.g. pull wires] [N1102]
- A61M25/01C10M [N: with pre-shaped mechanisms, e.g. pre-shaped stylets or pre-shaped outer tubes] [N1102]
- A61M25/01C10P [N: with hydraulic or pneumatic means, e.g. balloons or inflatable compartments] [N1102]
- A61M25/01C10Q [N: with magnetic or electrical means, e.g. by using piezo materials, electroactive polymers, magnetic materials or by heating of shape memory materials] [N1102]

- A61M25/01E . . [N: Exchanging a catheter while keeping the guidewire in place] [N1104]
- A61M25/01G . . [N: Exchanging a guidewire while keeping the catheter in place] [N1104]
- A61M25/01T . . [N: Tunnelling catheters] [N1104]
- A61M25/02 . . Holding devices, e.g. on the body
- A61M25/04 . . . in the body, e.g. expansible [N: ([A61M25/10](#), [A61M16/04M](#) take precedence)]

C9712]

- A61M25/06 . . Body-piercing guide needles or the like
- A61M25/06C . . . [N: "Over-the-needle" catheter assemblies, e.g. I.V. catheters]
- A61M25/06D . . . [N: Devices for protecting the needle; Devices to help insertion of the needle, e.g. wings or holders] [N1108]
- A61M25/06D1 [N: having means for protecting only the distal tip of the needle, e.g. a needle guard] [N1108]
- A61M25/06D1A [N: with a permanent connection to the needle hub, e.g. a guiding rail, a locking mechanism or a guard advancement mechanism] [N1108]
- A61M25/06D2 [N: having means for fully covering the needle after its withdrawal, e.g. needle being withdrawn inside the handle or a cover being advanced over the needle] [N1108]
- A61M25/06D3 [N: Butterfly or winged devices, e.g. for facilitating handling or for attachment to the skin] [N1108]
- A61M25/06D4 [N: Devices having a blunt needle tip, e.g. due to an additional inner component] [N1108]
- A61M25/06E . . . [N: Guide needles]
- A61M25/06H . . . [N: Guide tubes]
- A61M25/06H1 [N: splittable, tear apart]
- A61M25/06K . . . [N: Flashback chambers]
- A61M25/09 . . Guide wires [N0508]
- A61M25/09B . . . [N: with mandrils] [N0508]
- A61M25/09B1 [N: with sliding mandrils] [N0508]
- A61M25/09B2 [N: with fixed mandrils, e.g. mandrils fixed to tip; Tensionable wires] [N0508]
- A61M25/09C . . . [N: Mechanisms for insertion of guide wires] [N0508]
- A61M25/09D . . . [N: extendable; e.g. mechanisms for extension] [N0508]
- A61M25/10 . . Balloon catheters ([N: [A61M25/01C7](#) takes precedence; embolectomy [A61B17/22E2](#); retractors [A61B17/02](#)]; inflatable balloons for placing stents or stent-grafts [A61F2/958](#); [N: stomach balloons for treatment of obesity [A61F5/00B](#); oesophageal tubes [A61J15/00](#)]) [M1108]
- A61M25/10A . . [N: characterised by balloon shape ([A61M25/10B](#), [A61M25/10C](#) take precedence)]
- A61M25/10B . . [N: Balloons formed between concentric tubes]
- A61M25/10C . . [N: Balloons anchored to a disc or plate]
- A61M25/10D . . [N: Multiple balloon catheters]
- A61M25/10E . . [N: Balloon inflating or inflation control devices]
- A61M25/10F . . [N: Connections between catheter tubes and inflation tubes]
- A61M25/10G . . [N: Making of balloon catheters] [N1108]
- A61M25/10G1 . . . [N: Production methods of the balloon members, e.g. blow-moulding, extruding, deposition or by wrapping a plurality of layers of balloon material around a mandril] [N1108]
- A61M25/10G2 . . . [N: Joining of shaft and balloon] [N1108]
- A61M25/10G3 . . . [N: Making parts for balloon catheter systems, e.g. shafts or distal ends ([A61M25/10G1](#) takes precedence)] [N1108]
- A61M25/10G4 . . . [N: Wrapping or folding devices for use with balloon catheters] [N1108]
- A61M25/10P . . [N: used for angioplasty] [N1110]

- A61M27/00** **Drainage appliances for wounds or the like**, [N: i.e. wound drains, implanted drains] (implements for holding wounds open [A61B17/02](#); [N: middle ear drainage [A61F11/00B](#); other drainage devices [A61M1/00](#)]) [C9604]
- A61M27/00C . [N: Implant devices for drainage of body fluids from one part of the body to another (intraocular [A61F9/00V](#); middle ear [A61F11/00B](#))] [N9410] [C9809]
- A61M27/00C2 . . [N: Cerebrospinal drainage; Accessories therefor, e.g. valves] [N9410]
- A61M27/00C3 . . [N: pre-shaped, for use in the urethral or ureteral tract] [N1108]
- A61M29/00** **Dilators with or without means for introducing media, e.g. remedies** (instruments for performing visual medical inspections of cavities or tubes of the body [A61B1/00](#))
- A61M29/02 . Dilators made of swellable material [N: (balloon catheters for angioplasty [A61M25/10P](#))] [C1110]
- A61M31/00** **Devices for introducing or retaining media, e.g. remedies, in cavities of the body** ([A61M25/00](#) takes precedence; [N: introducing or retaining ophthalmic products into the ocular cavities [A61F9/00B](#)])
- A61M31/00D . [N: Devices for releasing a drug at a continuous and controlled rate for a prolonged period of time (artificial gland structures or devices [A61F2/02B](#); intra-uterine contraceptive devices [A61F6/14](#); tampons for introducing into the vagina [A61F13/20](#), [A61L15/00](#); suppositories or bougies for intra-vaginal or intra-uterine application [A61K9/02](#); physical forms of medicinal preparations for sustained or differential drug release [A61K9/20](#), [A61K9/50](#))] [C9809]
- A61M31/00R . [N: for contrast media]
- A61M31/00S . [N: Injectors for solid bodies, e.g. suppositories]
- A61M35/00** **Devices for applying, [N: e.g. spreading], media, e.g. remedies, on the human body** (devices for handling toilet or cosmetic substances [A45D](#); absorbent pads, e.g. swabs, [A61F13/15](#)); [N: Introducing media, e.g. remedies, into the body by diffusion through the skin (using salt baths [A61H33/04](#))]
- A61M35/00B . [N: Hand-held applicator instruments having media dispensing or spreading means (apparatus for iontophoresis [A61N1/30](#); hand tools for applying fluent material to surfaces, in general [B05C17/00](#); container closures with pads or like contents-applying means, in general [B65D47/42](#))]
- A61M35/00B2 . . [N: Absorbent pads, e.g. swabs, containing a liquid, e.g. in a rupturable reservoir (absorbent pads, e.g. swabs, for medical use, in general [A61F13/00](#), e.g. [A61F13/38](#))]
- A61M37/00** **Other apparatus for introducing media into the body** (for reproduction or fertilisation [A61B17/425](#); apparatus for iontophoresis or cataphoresis [A61N1/30](#)); **Percutany, i.e. introducing medicines into the body by diffusion through the skin** (salt baths [A61H33/04](#))
- A61M37/00M . [N: by using microneedles] [N1108]
- A61M37/00P . [N: Devices for implanting pellets, e.g. markers or solid medicaments (for introducing

of radioactive sources for interstitial radiation therapy, i.e. brachytherapy
[A61N5/10B7](#)] [N1109]

- A61M37/00T . [N: Tattooing apparatus (apparatus for marking animals [A01K11/00](#); vaccine applicators having needles or other puncturing means [A61B17/20B](#))]
- A61M37/00T2 . . [N: Tattooing apparatus with incorporated liquid feeding device]
- A61M37/00U . [N: using ultrasonic, sonic or infrasonic vibrations, e.g. phonophoresis]

- A61M39/00** **Tubes, tube connectors, tube couplings, valves, access sites or the like, specially adapted for medical use** (for respiratory devices, e.g. tracheal tubes [A61M16/00](#); artificial heart valves [A61F2/24](#))

- [N: **WARNING**
 Not complete, see [A61J1/00C](#)
]

- A61M39/02 . Access sites
- A61M39/02B . . [N: Subcutaneous access sites for injecting or removing fluids (transcutaneous access sites [A61M1/00S](#); implantable infusion devices [A61M5/142P10](#))] [C0807]
- A61M39/02T . . [N: Semi-permanent or permanent transcutaneous or percutaneous access sites to the inside of the body (peritoneal dialysis catheters [A61M1/28C](#); tracheostomy devices [A61M16/04E](#); measuring pressure within the body [A61B5/03](#); colostomy devices [A61F5/445](#); gastrotomy feeding tubes [A61J15/00A](#); means for fixing a feeding tube outside of the body [A61J15/00P2](#))] [N1008] [C1203]
- A61M39/04 . . having pierceable self-sealing members
- A61M39/04B . . . [N: pre-slit to be pierced by blunt instrument] [N9410]
- A61M39/06 . . Haemostasis valves, i.e. gaskets sealing around a needle, catheter or the like, closing on removal thereof
- A61M39/06B . . . [N: without means for adjusting the seal opening or pressure ([A61M39/06P](#) takes precedence)] [N0011]
- A61M39/06D . . . [N: with means for adjusting the seal opening or pressure ([A61M39/06P](#) takes precedence)] [N0011]
- A61M39/06P . . . [N: including means for seal penetration] [N0011]
- A61M39/08 . Tubes; Storage means specially adapted therefor
- A61M39/10 . Tube connectors; Tube couplings [N: ([A61M39/02](#) takes precedence; connecting needles to syringes or hubs [A61M5/34](#); connecting catheter tubes to hubs [A61M25/00G5](#))]
- A61M39/10B . . [N: Locking means for securing connection; Additional tamper safeties ([A61M39/16](#) takes precedence)]
- A61M39/10M . . [N: Multi-channel connectors or couplings, e.g. for connecting multi-lumen tubes (multi-channel connectors in general [F16L37/56](#))] [N1203]
- A61M39/10R . . [N: Rotating or swivel joints (in general [F16L27/00](#))] [N9505]
- A61M39/12 . . for joining a flexible tube to a rigid attachment
- A61M39/14 . . for connecting tubes having sealed ends [N: (needle sets [A61M5/162](#); having valves closing automatically on disconnection of line [A61M39/26](#))]
- A61M39/14B . . . [N: both tube ends being sealed by meltable membranes pierced after connection by use of heat, e.g. using radiant energy]

- A61M39/14D . . . [N: by cutting and welding] [N0004]
- A61M39/16 . . . having provision for disinfection or sterilisation [N: ([A61M39/14B](#) takes precedence; methods or apparatus for disinfection or sterilisation [A61L2/00](#))]
- A61M39/16B . . . [N: with antiseptic agent incorporated within the connector]
- A61M39/16D . . . [N: Shrouds or protectors for aseptically enclosing the connector]
- A61M39/18 . . . Methods or apparatus for making the connection under sterile conditions, i.e. sterile docking

- A61M39/20 . Closure caps or plugs for connectors or open ends of tubes

- A61M39/22 . Valves or arrangement of valves [N: ([A61M39/02](#), [A61M39/10D](#), [A61M39/16](#) take precedence; regulating valves in infusion systems [A61M5/168F1](#); in devices worn by the patient for the reception of urine, faeces, catamenial or other discharge, or in colostomy devices [A61F5/44E2](#))]
- A61M39/22C . . [N: Frangible or pierceable closures within tubing ([A61M39/14](#) takes precedence; frangible closures for containers [A61J1/00C](#))]
- A61M39/22D . . [N: Multiway valves]
- A61M39/22F . . [N: Flush valves, i.e. bypass valves for flushing line]
- A61M39/22H . . [N: Valves actuated by a secondary fluid, e.g. hydraulically or pneumatically actuated valves] [N1203]
- A61M39/22H3 . . . [N: with a tubular diaphragm constrictable by radial fluid force] [N1203]
- A61M39/24 . . Check- or non-return valves
- A61M39/26 . . Valves closing automatically on disconnecting the line and opening on reconnection thereof [N: ([check valves](#) [A61M39/24](#))]
- A61M39/28 . . Clamping means for squeezing flexible tubes, e.g. roller clamps [N: ([tube strippers](#) [A61M1/00R](#))]
- A61M39/28A . . . [N: Automatic tube cut-off devices, e.g. squeezing tube on detection of air]
- A61M39/28B . . . [N: Screw clamps]
- A61M39/28C . . . [N: Lever clamps]
- A61M39/28D . . . [N: Cam clamps, e.g. roller clamps with eccentric axis]
- A61M39/28F . . . [N: Wedge clamps, e.g. roller clamps with inclined guides]
- A61M39/28F2 [N: Wedge formed by a slot having varying width, e.g. slide clamps] [N9904]
- A61M39/28G . . . [N: by bending or twisting the tube]