

| Symbol           | Typ                 | Titel                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>F</b>         | <b>Sektion</b>      | <b>SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING</b>                                                                                                                                                                                                                                                                                                                           |
| <b>F01</b>       | <b>Untersektion</b> | <b>ENGINES OR PUMPS</b>                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>F01</b>       | <b>Klasse</b>       | <b>MACHINES OR ENGINES IN GENERAL (combustion engines F02; machines for liquids F03, F04); ENGINE PLANTS IN GENERAL; STEAM ENGINES</b>                                                                                                                                                                                                                                                                    |
| <b>F01L</b>      | <b>Unterklasse</b>  | <b>CYCLICALLY OPERATING VALVES FOR MACHINES OR ENGINES (valves in general F16K)</b><br><b><u>Valve-gear for internal-combustion piston engines or for other machines or engines with positive working-fluid displacement (valve-gear specially for steam engines or specially for other machines or engines with variable fluid distribution F01L 15/00-F01L 35/00)</u></b>                               |
| <b>F01L 1/00</b> | <b>Hauptgruppe</b>  | <b>Valve-gear or valve arrangements, e.g. lift-valve gear (lift valve and valve seat assemblies <u>per se</u> F01L 3/00; slide-valve gear F01L 5/00; actuated non-mechanically F01L 9/00; valve arrangements in working piston or piston-rod F01L 11/00; modifications of valve-gear to facilitate reversing, braking, starting, changing compression ratio, or other specific operations F01L 13/00)</b> |
| F01L 1/02        | 1-Punkt Untergruppe | . Valve drive (transmitting-gear between valve drive and valve F01L 1/12)                                                                                                                                                                                                                                                                                                                                 |
| F01L 1/04        | 2-Punkt Untergruppe | . . by means of cams, camshafts, cam discs, eccentrics, or the like (F01L 1/10 takes precedence)                                                                                                                                                                                                                                                                                                          |
| F01L 1/047       | 3-Punkt Untergruppe | . . . Camshafts [6]                                                                                                                                                                                                                                                                                                                                                                                       |
| F01L 1/053       | 4-Punkt Untergruppe | . . . . overhead type [6]                                                                                                                                                                                                                                                                                                                                                                                 |
| F01L 1/06        | 3-Punkt Untergruppe | . . . the cams, or the like, rotating at a higher speed than that corresponding to the valve cycle, e.g. operating four-stroke engine valves directly from crankshaft                                                                                                                                                                                                                                     |
| F01L 1/08        | 3-Punkt Untergruppe | . . . Shape of cams                                                                                                                                                                                                                                                                                                                                                                                       |
| F01L 1/10        | 2-Punkt Untergruppe | . . by means of crank- or eccentric-driven rods                                                                                                                                                                                                                                                                                                                                                           |
| F01L 1/12        | 1-Punkt Untergruppe | . Transmitting-gear between valve drive and valve (simultaneously operating two or more valves F01L 1/26)                                                                                                                                                                                                                                                                                                 |
| F01L 1/14        | 2-Punkt Untergruppe | . . Tappets; Push-rods                                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 1/16        | 3-Punkt Untergruppe | . . . Silencing impact; Reducing wear                                                                                                                                                                                                                                                                                                                                                                     |
| F01L 1/18        | 2-Punkt Untergruppe | . . Rocking arms or levers                                                                                                                                                                                                                                                                                                                                                                                |
| F01L 1/20        | 1-Punkt Untergruppe | . Adjusting or compensating clearance, i.e. lash adjustment                                                                                                                                                                                                                                                                                                                                               |
| F01L 1/22        | 2-Punkt Untergruppe | . . automatically                                                                                                                                                                                                                                                                                                                                                                                         |
| F01L 1/24        | 3-Punkt Untergruppe | . . . by fluid means, e.g. hydraulically                                                                                                                                                                                                                                                                                                                                                                  |
| F01L 1/245       | 4-Punkt Untergruppe | . . . . Hydraulic tappets [6]                                                                                                                                                                                                                                                                                                                                                                             |
| F01L 1/25        | 5-Punkt Untergruppe | . . . . . between cam and valve stem [6]                                                                                                                                                                                                                                                                                                                                                                  |
| F01L 1/255       | 5-Punkt Untergruppe | . . . . . between cam and rocker arm [6]                                                                                                                                                                                                                                                                                                                                                                  |
| F01L 1/26        | 1-Punkt Untergruppe | . characterised by the provision of two or more valves operated simultaneously by same transmitting-gear; peculiar to machines or engines with more than two lift valves per cylinder (with coaxial valves F01L 1/28)                                                                                                                                                                                     |
| F01L 1/28        | 1-Punkt Untergruppe | . characterised by the provision of coaxial valves; characterised by the provision of valves co-operating with both intake and exhaust ports                                                                                                                                                                                                                                                              |
| F01L 1/30        | 1-Punkt Untergruppe | . characterised by the provision of positively opened and closed valves, i.e. desmodromic valves                                                                                                                                                                                                                                                                                                          |
| F01L 1/32        | 1-Punkt Untergruppe | . characterised by the provision of means for rotating lift valves, e.g. to diminish wear                                                                                                                                                                                                                                                                                                                 |

| Symbol           | Typ                 | Titel                                                                                                                                                                                                  |
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| F01L 1/34        | 1-Punkt Untergruppe | . characterised by the provision of means for changing the timing of the valves without changing the duration of opening                                                                               |
| F01L 1/344       | 2-Punkt Untergruppe | . . changing the angular relationship between crankshaft and camshaft, e.g. using helicoidal gear [6]                                                                                                  |
| F01L 1/348       | 3-Punkt Untergruppe | . . . by means acting on timing belts or chains [6]                                                                                                                                                    |
| F01L 1/352       | 3-Punkt Untergruppe | . . . using bevel or epicyclic gear [6]                                                                                                                                                                |
| F01L 1/356       | 3-Punkt Untergruppe | . . . making the angular relationship oscillate [6]                                                                                                                                                    |
| F01L 1/36        | 1-Punkt Untergruppe | . peculiar to machines or engines of specific type other than four-stroke cycle                                                                                                                        |
| F01L 1/38        | 2-Punkt Untergruppe | . . for engines with other than four-stroke cycle, e.g. with two-stroke cycle (F01L 1/26, F01L 1/28 take precedence)                                                                                   |
| F01L 1/40        | 2-Punkt Untergruppe | . . for engines with scavenging charge near top dead-centre position, e.g. by overlapping inlet and exhaust time (scavenging aspects F02B)                                                             |
| F01L 1/42        | 2-Punkt Untergruppe | . . for machines or engines characterised by cylinder arrangement, e.g. star or fan                                                                                                                    |
| F01L 1/44        | 1-Punkt Untergruppe | . Multiple-valve gear or arrangements, not provided for in preceding subgroups, e.g. with lift and different valves                                                                                    |
| F01L 1/46        | 1-Punkt Untergruppe | . Component parts, details, or accessories, not provided for in preceding subgroups                                                                                                                    |
| <b>F01L 3/00</b> | <b>Hauptgruppe</b>  | <b>Lift valves, i.e. cut-off apparatus with closure members having at least a component of their opening and closing motion perpendicular to the closing faces; Parts or accessories thereof</b>       |
| F01L 3/02        | 1-Punkt Untergruppe | . Selecting particular materials for valve members or valve seats; Valve members or valve seats composed of two or more materials                                                                      |
| F01L 3/04        | 2-Punkt Untergruppe | . . Coated valve members or valve seats                                                                                                                                                                |
| F01L 3/06        | 1-Punkt Untergruppe | . Valve members or valve seats with means for guiding or deflecting the medium controlled thereby, e.g. producing a rotary motion of the drawn-in cylinder charge (for rotating lift valves F01L 1/32) |
| F01L 3/08        | 1-Punkt Untergruppe | . Valve guides; Sealing of valve stem, e.g. sealing by lubricant                                                                                                                                       |
| F01L 3/10        | 1-Punkt Untergruppe | . Connecting springs to valve members                                                                                                                                                                  |
| F01L 3/12        | 1-Punkt Untergruppe | . Cooling of valves                                                                                                                                                                                    |
| F01L 3/14        | 2-Punkt Untergruppe | . . by means of a liquid or solid coolant, e.g. sodium, in a closed chamber in a valve                                                                                                                 |
| F01L 3/16        | 2-Punkt Untergruppe | . . by means of a fluid flowing through or along valve, e.g. air (for sealing only F01L 3/08)                                                                                                          |
| F01L 3/18        | 3-Punkt Untergruppe | . . . Liquid cooling of valve                                                                                                                                                                          |
| F01L 3/20        | 1-Punkt Untergruppe | . Shapes or constructions of valve members, not provided for in preceding subgroups of this group                                                                                                      |
| F01L 3/22        | 1-Punkt Untergruppe | . Valve seats not provided for in preceding subgroups of this group; Fixing of valve seats                                                                                                             |
| F01L 3/24        | 1-Punkt Untergruppe | . Safety means or accessories, not provided for in preceding subgroups of this group                                                                                                                   |
| <b>F01L 5/00</b> | <b>Hauptgruppe</b>  | <b>Slide-valve gear or valve arrangements (with pure rotary or oscillatory movement F01L 7/00)</b>                                                                                                     |
| F01L 5/02        | 1-Punkt Untergruppe | . with other than cylindrical, sleeve, or part-annularly-shaped valves, e.g. with flat-type valves                                                                                                     |
| F01L 5/04        | 1-Punkt Untergruppe | . with cylindrical, sleeve, or part-annularly-shaped valves                                                                                                                                            |
| F01L 5/06        | 2-Punkt Untergruppe | . . surrounding working cylinder or piston                                                                                                                                                             |
| F01L 5/08        | 3-Punkt Untergruppe | . . . Arrangements with several movements or several valves, e.g. one valve inside the other (with part-annularly-shaped valves F01L 5/12)                                                             |

| Symbol                                                                                                    | Typ                 | Titel                                                                                                                                                                                          |
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| F01L 5/10                                                                                                 | 4-Punkt Untergruppe | . . . with reciprocating and other movement of same valve                                                                                                                                      |
| F01L 5/12                                                                                                 | 3-Punkt Untergruppe | . . . Arrangements with part-annularly-shaped valves                                                                                                                                           |
| F01L 5/14                                                                                                 | 1-Punkt Untergruppe | . characterised by the provision of valves with reciprocating and other movements (surrounding working cylinder or piston F01L 5/06)                                                           |
| F01L 5/16                                                                                                 | 2-Punkt Untergruppe | . . with reciprocating and other movement of same valve, e.g. longitudinally and in cross direction of working cylinder                                                                        |
| F01L 5/18                                                                                                 | 2-Punkt Untergruppe | . . with reciprocatory valve and other slide valve                                                                                                                                             |
| F01L 5/20                                                                                                 | 1-Punkt Untergruppe | . specially for two-stroke engines (F01L 5/06, F01L 5/14 take precedence)                                                                                                                      |
| F01L 5/22                                                                                                 | 1-Punkt Untergruppe | . Multiple-valve arrangements (with valves surrounding working cylinder or piston F01L 5/06; with reciprocatory and other slide valves F01L 5/18; specially for two-stroke engines F01L 5/20)  |
| F01L 5/24                                                                                                 | 1-Punkt Untergruppe | . Component parts, details, or accessories, not provided for in preceding subgroups of this group                                                                                              |
| <b>F01L 7/00</b>                                                                                          | <b>Hauptgruppe</b>  | <b>Rotary or oscillatory slide-valve gear or valve arrangements (slide valves with combined rotary and non-rotary movements, combinations of rotary and non-rotary slide valves F01L 5/00)</b> |
| F01L 7/02                                                                                                 | 1-Punkt Untergruppe | . with cylindrical, sleeve, or part-annularly-shaped valves (of disc type F01L 7/06; of conical type F01L 7/08)                                                                                |
| F01L 7/04                                                                                                 | 2-Punkt Untergruppe | . . surrounding working cylinder or piston                                                                                                                                                     |
| F01L 7/06                                                                                                 | 1-Punkt Untergruppe | . with disc-type valves                                                                                                                                                                        |
| F01L 7/08                                                                                                 | 1-Punkt Untergruppe | . with conically- or frusto-conically-shaped valves                                                                                                                                            |
| F01L 7/10                                                                                                 | 1-Punkt Untergruppe | . with valves of other specific shape, e.g. spherical                                                                                                                                          |
| F01L 7/12                                                                                                 | 1-Punkt Untergruppe | . specially for two-stroke engines (F01L 7/04 takes precedence)                                                                                                                                |
| F01L 7/14                                                                                                 | 1-Punkt Untergruppe | . Multiple-valve arrangements (with valves surrounding working cylinder or piston F01L 7/04; specially for two-stroke engines F01L 7/12)                                                       |
| F01L 7/16                                                                                                 | 1-Punkt Untergruppe | . Sealing or packing arrangements specially therefor                                                                                                                                           |
| F01L 7/18                                                                                                 | 1-Punkt Untergruppe | . Component parts, details, or accessories, not provided for in preceding subgroups of this group                                                                                              |
| <b>F01L 9/00</b>                                                                                          | <b>Hauptgruppe</b>  | <b>Valve-gear or valve arrangements actuated non-mechanically</b>                                                                                                                              |
| F01L 9/02                                                                                                 | 1-Punkt Untergruppe | . by fluid means, e.g. hydraulic                                                                                                                                                               |
| F01L 9/04                                                                                                 | 1-Punkt Untergruppe | . by electric means                                                                                                                                                                            |
| <b>F01L 11/00</b>                                                                                         | <b>Hauptgruppe</b>  | <b>Valve arrangements in working piston or piston-rod</b>                                                                                                                                      |
| F01L 11/02                                                                                                | 1-Punkt Untergruppe | . in piston                                                                                                                                                                                    |
| F01L 11/04                                                                                                | 2-Punkt Untergruppe | . . operated by movement of connecting-rod                                                                                                                                                     |
| F01L 11/06                                                                                                | 3-Punkt Untergruppe | . . . operating oscillatory valve                                                                                                                                                              |
| <b>F01L 13/00</b>                                                                                         | <b>Hauptgruppe</b>  | <b>Modifications of valve-gear to facilitate reversing, braking, starting, changing compression ratio, or other specific operations</b>                                                        |
| F01L 13/02                                                                                                | 1-Punkt Untergruppe | . for reversing                                                                                                                                                                                |
| F01L 13/04                                                                                                | 1-Punkt Untergruppe | . for starting by means of fluid pressure                                                                                                                                                      |
| F01L 13/06                                                                                                | 1-Punkt Untergruppe | . for braking                                                                                                                                                                                  |
| F01L 13/08                                                                                                | 1-Punkt Untergruppe | . for decompression, e.g. during starting; for changing compression ratio                                                                                                                      |
| <b><u>Valve-gear or valve arrangements, e.g. with reciprocatory slide valves, specially for steam</u></b> |                     |                                                                                                                                                                                                |

| Symbol            | Typ                 | Titel                                                                                                                                                                                                                                                                                               |
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|                   |                     | <b><u>engines, or specially for other machines or engines with variable working-fluid distribution</u></b>                                                                                                                                                                                          |
| <b>F01L 15/00</b> | <b>Hauptgruppe</b>  | <b>Valve-gear or valve arrangements, e.g. with reciprocatory slide valves, other than provided for in groups F01L 17/00-F01L 29/00 (valve drive or external valve-adjustment during operation, <u>see</u> the relevant groups, e.g. F01L 31/00; tripping-gear or tripping of valves F01L 31/00)</b> |
| F01L 15/02        | 1-Punkt Untergruppe | . with valves other than cylindrical, sleeve, or part-annularly-shaped, e.g. flat D-valves                                                                                                                                                                                                          |
| F01L 15/04        | 2-Punkt Untergruppe | . . main valve being combined with auxiliary valve (of drag-valve type F01L 15/10)                                                                                                                                                                                                                  |
| F01L 15/06        | 3-Punkt Untergruppe | . . . of Meyer or Rider type, i.e. in which the expansion is varied at the expansion valve itself                                                                                                                                                                                                   |
| F01L 15/08        | 1-Punkt Untergruppe | . with cylindrical, sleeve, or part-annularly-shaped valves; Such main valves combined with auxiliary valves                                                                                                                                                                                        |
| F01L 15/10        | 1-Punkt Untergruppe | . with main slide valve and auxiliary valve dragged thereby                                                                                                                                                                                                                                         |
| F01L 15/12        | 1-Punkt Untergruppe | . characterised by having means for effecting pressure equilibrium between two different cylinder spaces at idling                                                                                                                                                                                  |
| F01L 15/14        | 1-Punkt Untergruppe | . Arrangements with several co-operating main valves, e.g. reciprocatory and rotary                                                                                                                                                                                                                 |
| F01L 15/16        | 2-Punkt Untergruppe | . . with reciprocatory slide valves only                                                                                                                                                                                                                                                            |
| F01L 15/18        | 1-Punkt Untergruppe | . Valve arrangements not provided for in preceding subgroups of this group                                                                                                                                                                                                                          |
| F01L 15/20        | 1-Punkt Untergruppe | . Component parts, details, or accessories, not provided for in preceding subgroups of this group                                                                                                                                                                                                   |
| <b>F01L 17/00</b> | <b>Hauptgruppe</b>  | <b>Slide-valve gear or valve arrangements with cylindrical, sleeve, or part-annularly-shaped valves surrounding working cylinder or piston</b>                                                                                                                                                      |
| F01L 17/02        | 1-Punkt Untergruppe | . Drive, or adjustment during operation, peculiar thereto, e.g. for reciprocating and oscillating movements or for several valves one inside the other                                                                                                                                              |
| <b>F01L 19/00</b> | <b>Hauptgruppe</b>  | <b>Slide-valve gear or valve arrangements with reciprocatory and other movement of same valve, other than provided for in group F01L 17/00, e.g. longitudinally and in cross direction of working cylinder</b>                                                                                      |
| F01L 19/02        | 1-Punkt Untergruppe | . Drive, or adjustment during operation, peculiar thereto                                                                                                                                                                                                                                           |
| <b>F01L 21/00</b> | <b>Hauptgruppe</b>  | <b>Use of working pistons or piston-rods as fluid-distributing valves or as valve-supporting elements, e.g. in free-piston machines</b>                                                                                                                                                             |
| F01L 21/02        | 1-Punkt Untergruppe | . Piston or piston-rod used as valve member                                                                                                                                                                                                                                                         |
| F01L 21/04        | 1-Punkt Untergruppe | . Valves arranged in or on piston or piston-rod                                                                                                                                                                                                                                                     |
| <b>F01L 23/00</b> | <b>Hauptgruppe</b>  | <b>Valves controlled by impact of piston, e.g. in free-piston machines</b>                                                                                                                                                                                                                          |
| <b>F01L 25/00</b> | <b>Hauptgruppe</b>  | <b>Drive, or adjustment during operation, of distribution or expansion valves by non-mechanical means</b>                                                                                                                                                                                           |
| F01L 25/02        | 1-Punkt Untergruppe | . by fluid means                                                                                                                                                                                                                                                                                    |
| F01L 25/04        | 2-Punkt Untergruppe | . . by working fluid of machine or engine, e.g. free-piston machine                                                                                                                                                                                                                                 |
| F01L 25/06        | 3-Punkt Untergruppe | . . . Arrangements with main and auxiliary valves, at least one of them being fluid-driven                                                                                                                                                                                                          |
| F01L 25/08        | 1-Punkt Untergruppe | . by electric or magnetic means                                                                                                                                                                                                                                                                     |
| <b>F01L 27/00</b> | <b>Hauptgruppe</b>  | <b>Distribution or expansion-valve gear peculiar to free-piston machines or engines and not provided for in groups F01L 21/00-F01L 25/00</b>                                                                                                                                                        |
| F01L 27/02        | 1-Punkt Untergruppe | . the machine or engine having rotary or oscillatory valves                                                                                                                                                                                                                                         |
| F01L 27/04        | 1-Punkt Untergruppe | . Delayed-action controls, e.g. of cataract- or dash-pot-type                                                                                                                                                                                                                                       |
| <b>F01L 29/00</b> | <b>Hauptgruppe</b>  | <b>Reversing-gear (equally usable for control of degree of working fluid admission, and reversing being of secondary importance F01L 31/00)</b>                                                                                                                                                     |

| Symbol            | Typ                 | Titel                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| F01L 29/02        | 1-Punkt Untergruppe | . by displacing eccentric                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| F01L 29/04        | 1-Punkt Untergruppe | . by links or guide rods                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 29/06        | 1-Punkt Untergruppe | . by interchanging inlet and exhaust ports                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| F01L 29/08        | 1-Punkt Untergruppe | . specially for rotary or oscillatory valves                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F01L 29/10        | 1-Punkt Untergruppe | . Details, e.g. drive                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| F01L 29/12        | 2-Punkt Untergruppe | . . Powered reverse gear                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>F01L 31/00</b> | <b>Hauptgruppe</b>  | <b>Valve drive, valve adjustment during operation, or other valve control, not provided for in groups F01L 15/00-F01L 29/00 (sensing elements measuring the variable or condition to be controlled or regulated F01B)</b>                                                                                                                                                                                                                                                   |
| F01L 31/02        | 1-Punkt Untergruppe | . with tripping-gear (for oscillatory valves F01L 31/06); Tripping of valves                                                                                                                                                                                                                                                                                                                                                                                                |
| F01L 31/04        | 2-Punkt Untergruppe | . . with positively-driven trip levers                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F01L 31/06        | 1-Punkt Untergruppe | . with tripping-gear specially for oscillatory valves; Oscillatory tripping-valves, e.g. of Corliss type                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 31/08        | 1-Punkt Untergruppe | . Valve drive or valve adjustment, apart from tripping aspects; Positively-driven gear                                                                                                                                                                                                                                                                                                                                                                                      |
| F01L 31/10        | 2-Punkt Untergruppe | . . the drive being effected by eccentrics (F01L 31/14 takes precedence)                                                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 31/12        | 3-Punkt Untergruppe | . . . Valve adjustment by displacing eccentric                                                                                                                                                                                                                                                                                                                                                                                                                              |
| F01L 31/14        | 2-Punkt Untergruppe | . . Valve adjustment by links or guide rods, e.g. in valve-gears with eccentric drive                                                                                                                                                                                                                                                                                                                                                                                       |
| F01L 31/16        | 2-Punkt Untergruppe | . . the drive being effected by specific means other than eccentric, e.g. cams; Valve adjustment in connection with such drives                                                                                                                                                                                                                                                                                                                                             |
| F01L 31/18        | 2-Punkt Untergruppe | . . specially for rotary or oscillatory valves                                                                                                                                                                                                                                                                                                                                                                                                                              |
| F01L 31/20        | 3-Punkt Untergruppe | . . . Valve adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F01L 31/22        | 2-Punkt Untergruppe | . . specially for lift valves                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| F01L 31/24        | 3-Punkt Untergruppe | . . . Valve adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                     | <b><u>Rotary or oscillatory slide-valve gear or lift-valve gear or such valve arrangements specially for steam engines or specially for other machines or engines with variable working-fluid distribution (drive, adjustment during operation, tripping-gear, reversing-gear, use of working pistons or piston-rods as valves or as valve-supporting elements, valve-gear or valve arrangements peculiar to free-piston machines or engines F01L 15/00-F01L 31/00)</u></b> |
| <b>F01L 33/00</b> | <b>Hauptgruppe</b>  | <b>Rotary or oscillatory slide-valve gear or valve arrangements</b>                                                                                                                                                                                                                                                                                                                                                                                                         |
| F01L 33/02        | 1-Punkt Untergruppe | . rotary                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 33/04        | 1-Punkt Untergruppe | . oscillatory                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>F01L 35/00</b> | <b>Hauptgruppe</b>  | <b>Lift-valve gear or valve arrangements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F01L 35/02        | 1-Punkt Untergruppe | . Valves                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| F01L 35/04        | 1-Punkt Untergruppe | . Arrangements of valves in the machine or engine, e.g. relative to working cylinder                                                                                                                                                                                                                                                                                                                                                                                        |