

**F 01 C ROTARY-PISTON OR OSCILLATING-PISTON MACHINES OR ENGINES** (internal-combustion aspects [F 02 B 53/00](#), [55/00](#))

**Notes**

- (1) This subclass covers:
- rotary-piston or oscillating-piston engines for elastic fluids, e.g. steam;
  - rotary-piston or oscillating-piston engines for liquids and elastic fluids;
  - rotary-piston or oscillating-piston machines for elastic fluids;
  - rotary-piston or oscillating-piston machines for liquids and elastic fluids.
- (2) In this subclass, the following expression is used with the meaning indicated:
- “rotary-piston machine” includes the German expressions “Drehkolbenmaschinen”, “Kreiskolbenmaschinen”, and “Umlaufkolbenmaschinen”.
- (3) Attention is drawn to the Notes preceding class [F 01](#), especially as regards the definitions of “rotary-piston machine”, “oscillating-piston machine”, “rotary piston”, “co-operating members”, “movement of co-operating members”, “teeth or tooth-equivalents” and “internal-axis”.

**Subclass Index**
**MACHINES OR ENGINES**

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**COMBINATIONS OR ADAPTATIONS OF**

**MACHINES OR ENGINES** ..... [11/00](#), [13/00](#)  
**DRIVE OF CO-OPERATING MEMBERS;**  
**SEALING ARRANGEMENTS** ..... [17/00](#); [19/00](#)  
**OTHER DETAILS OR ACCESSORIES** ..... [21/00](#)

**1/00 Rotary-piston machines or engines** (with axes of co-operating members non-parallel [3/00](#); with the working-chamber walls at least partly resiliently deformable [5/00](#); with fluid ring or the like [7/00](#); rotary-piston machines or engines in which the working fluid is exclusively displaced by, or exclusively displaces, one or more reciprocating pistons [F 01 B 13/00](#))

**Note**

Group [1/30](#) takes precedence over groups [1/02](#) to [1/28](#).

[1/02](#) . . . of arcuate-engagement type, i.e. with circular translatory movement of co-operating members, each member having the same number of teeth or tooth-equivalents

[1/04](#) . . . of internal-axis type

[1/06](#) . . . of other than internal-axis type ([1/063](#) takes precedence)

[1/063](#) . . . with coaxially-mounted members having continuously-changing circumferential spacing between them **[3]**

[1/067](#) . . . . having cam-and-follower type drive **[3]**

[1/07](#) . . . . having crankshaft-and-connecting-rod type drive **[3]**

[1/073](#) . . . . having pawl-and-ratchet type drive **[3]**

[1/077](#) . . . . having toothed-gearing type drive **[3]**

[1/08](#) . . . of intermeshing-engagement type, i.e. with engagement of co-operating members similar to that of toothed gearing

[1/10](#) . . . of internal-axis type with the outer member having more teeth or tooth-equivalents, e.g. rollers, than the inner member

[1/107](#) . . . . with helical teeth **[3]**

[1/113](#) . . . . the inner member carrying rollers intermeshing with the outer member **[3]**

[1/12](#) . . . of other than internal-axis type

[1/14](#) . . . . with toothed rotary pistons

[1/16](#) . . . . . with helical teeth, e.g. chevron-shaped, screw type

[1/18](#) . . . . with similar tooth forms ([1/16](#) takes precedence)

[1/20](#) . . . . with dissimilar tooth forms ([1/16](#) takes precedence)

[1/22](#) . . . of internal-axis type with equidirectional movement of co-operating members at the points of engagement, or with one of the co-operating members being stationary, the inner member having more teeth or tooth-equivalents than the outer member

[1/24](#) . . . of counter-engagement type, i.e. the movement of co-operating members at the points of engagement being in opposite directions

[1/26](#) . . . of internal-axis type

[1/28](#) . . . of other than internal-axis type

[1/30](#) . . . having the characteristics covered by two or more of groups [1/02](#), [1/08](#), [1/22](#), [1/24](#) or having the characteristics covered by one of these groups together with some other type of movement between co-operating members

[1/32](#) . . . having both the movement defined in group [1/02](#) and relative reciprocation between the co-operating members

[1/324](#) . . . . with vanes hinged to the inner member and reciprocating with respect to the outer member **[3]**

[1/328](#) . . . . . and hinged to the outer member **[3]**

[1/332](#) . . . . with vanes hinged to the outer member and reciprocating with respect to the inner member **[3]**

[1/336](#) . . . . . and hinged to the inner member **[3]**

[1/34](#) . . . having the movement defined in group [1/08](#) or [1/22](#) and relative reciprocation between the co-operating members

[1/344](#) . . . . with vanes reciprocating with respect to the inner member **[3]**

[1/348](#) . . . . . the vanes positively engaging, with circumferential play, an outer rotatable member **[3]**

[1/352](#) . . . . . the vanes being pivoted on the axis of the outer member **[3]**

- 1/356 . . . with vanes reciprocating with respect to the outer member [3]
- 1/36 . . . having both the movements defined in groups 1/22 and 1/24
- 1/38 . . . having the movement defined in group 1/02 and having a hinged member (1/32 takes precedence) [3]
- 1/39 . . . with vanes hinged to the inner as well as to the outer member [3]
- 1/40 . . . having the movement defined in group 1/08 or 1/22 and having a hinged member
- 1/44 . . . with vanes hinged to the inner member [3]
- 1/46 . . . with vanes hinged to the outer member [3]
- 3/00 Rotary-piston machines or engines with non-parallel axes of movement of co-operating members** (with the working-chamber walls being at least partly resiliently deformable 5/00)
  - 3/02 . the axes being arranged at an angle of 90°
  - 3/04 . . with axially-sliding vanes
  - 3/06 . the axes being arranged otherwise than at an angle of 90°
  - 3/08 . . of intermeshing-engagement type, i.e. with engagement of co-operating members similar to that of toothed gearing
- 5/00 Rotary-piston machines or engines with the working-chamber walls at least partly resiliently deformable**
  - 5/02 . the resiliently-deformable wall being part of the inner member, e.g. of a rotary piston
  - 5/04 . the resiliently-deformable wall being part of the outer member, e.g. of a housing
  - 5/06 . the resiliently-deformable wall being a separate member
  - 5/08 . . of tubular form, e.g. hose
- 7/00 Rotary-piston machines or engines with fluid ring or the like**
- 9/00 Oscillating-piston machines or engines**
- 11/00 Combinations of two or more machines or engines, each being of rotary-piston or oscillating-piston type** (13/00 takes precedence; combinations of two or more pumps F 04; fluid gearing F 16 H)
  - 13/00 Adaptations of machines or engines for special use; Combinations of engines with devices driven thereby** (aspects predominantly concerning driven devices, see the relevant classes for these devices)
    - 13/02 . for driving hand-held tools or the like
    - 13/04 . for driving pumps or compressors
  - 17/00 Arrangements for drive of co-operating members, e.g. for rotary piston and casing**
    - 17/02 . of toothed-gearing type (1/077 takes precedence) [3]
    - 17/04 . of cam-and-follower type (1/067 takes precedence) [3]
    - 17/06 . using cranks, universal joints, or similar elements (1/07 takes precedence) [3]
  - 19/00 Sealing arrangements in rotary-piston machines or engines** (sealings in general F 16 J)
    - 19/02 . Radially-movable sealings for working fluids
      - 19/04 . . of rigid material
      - 19/06 . . of resilient material
    - 19/08 . Axially-movable sealings for working fluids
    - 19/10 . Sealings for working fluids between radially and axially movable parts
    - 19/12 . for other than working fluid
  - 21/00 Component parts, details, or accessories, not provided for in, or of interest apart from, other groups**
    - 21/02 . Arrangements of bearings (bearing constructions F 16 C)
    - 21/04 . Lubrication (of machines or engines in general F 01 M)
    - 21/06 . Heating; Cooling (of machines or engines in general F 01 P); Heat insulation (heat insulation in general F 16 L)
    - 21/08 . Rotary pistons (reciprocating pistons in general F 16 J)
    - 21/10 . Outer members for co-operation with rotary pistons; Casings (casings for rotary engines or machines in general F 16 M)
    - 21/12 . Control of working-fluid admission or discharge (suitable for more general application F 01 L)
      - 21/14 . . for variable fluid distribution
      - 21/16 . Other regulation or control