

F02 COMBUSTION ENGINES (cyclically operating valves therefor, lubricating, exhausting, or silencing engines F01); **HOT-GAS OR COMBUSTION-PRODUCT ENGINE PLANTS**

F02F CYLINDERS, PISTONS, OR CASINGS FOR COMBUSTION ENGINES; ARRANGEMENTS OF SEALINGS IN COMBUSTION ENGINES (specially adapted for rotary-piston or oscillating-piston internal-combustion engines F02B; specially adapted for gas-turbine plants F02C; specially adapted for jet-propulsion plants F02K) [2]

- (1) Attention is drawn to the Notes preceding class F01.
 (2) Class F16 takes precedence over this subclass, except for subject matter specific to combustion engines.

1/00	Cylinders; Cylinder heads (in general F16J)	1/40	 cylinder heads with means for directing, guiding, or distributing liquid stream (F02F 1/38 takes precedence)
1/02	. having cooling means (cylinder heads F02F 1/26)	1/42	. . Shape or arrangement of intake or exhaust channels in cylinder heads
1/04	. . for air cooling		
1/06	. . . Shape or arrangement of cooling fins; Finned cylinders		
1/08	 running-liner and cooling-part of cylinder being different parts or of different material	3/00	Pistons (in general F16J)
1/10	. . for liquid cooling	3/02	. having means for accommodating or controlling heat expansion
1/12	. . . Preventing corrosion of liquid-swept surfaces	3/04	. . having expansion-controlling inserts
1/14	. . . Cylinders with means for directing, guiding, or distributing liquid stream	3/06	. . . the inserts having bimetallic effect
1/16	. . . Cylinder liners of wet type	3/08	. . . the inserts being ring-shaped
1/18	. Other cylinders	3/10	. having surface coverings (F02F 3/02 takes precedence)
1/20	. . characterised by constructional features providing for lubrication	3/12	. . on piston heads
1/22	. . characterised by having ports in cylinder wall for scavenging or charging	3/14	. . . within combustion chambers
1/24	. Cylinder heads	3/16	. having cooling means
1/26	. . having cooling means	3/18	. . the means being a liquid or solid coolant, e.g. sodium, in a closed chamber in piston
1/28	. . . for air cooling	3/20	. . the means being a fluid flowing through or along piston
1/30	 Finned cylinder heads	3/22	. . . the fluid being liquid
1/32	 the cylinder heads being of overhead-valve type	3/24	. having means for guiding gases in cylinders, e.g. for guiding scavenging charge in two-stroke engines
1/34	 with means for directing or distributing cooling medium (F02F 1/32 takes precedence)	3/26	. having combustion chamber in piston head (the surface thereof being covered F02F 3/14)
1/36	. . . for liquid cooling	3/28	. Other pistons with specially-shaped head
1/38	 the cylinder heads being of overhead-valve type	5/00	Piston rings, e.g. associated with piston crown
		7/00	Casings, e.g. crankcases (engine casings in general F16M)
		11/00	Arrangements of sealings in combustion engines (piston rings F02F 5/00; sealings <u>per se</u> F16J)