

## SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

### F02 COMBUSTION ENGINES; 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]

#### Note(s)

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.

<b>1/00</b>	<b>Cylinders; Cylinder heads</b> (in general F16J) [1, 2006.01]	1/42	• • Shape or arrangement of intake or exhaust channels in cylinder heads [1, 2006.01]
1/02	• having cooling means (cylinder heads F02F 1/26) [1, 2006.01]	<b>3/00</b>	<b>Pistons</b> (in general F16J) [1, 2006.01]
1/04	• • for air cooling [1, 2006.01]	3/02	• having means for accommodating or controlling heat expansion [1, 2006.01]
1/06	• • • Shape or arrangement of cooling fins; Finned cylinders [1, 2006.01]	3/04	• • having expansion-controlling inserts [1, 2006.01]
1/08	• • • • running-liner and cooling-part of cylinder being different parts or of different material [1, 2006.01]	3/06	• • • the inserts having bimetallic effect [1, 2006.01]
1/10	• • for liquid cooling [1, 2006.01]	3/08	• • • the inserts being ring-shaped [1, 2006.01]
1/12	• • • Preventing corrosion of liquid-swept surfaces [1, 2006.01]	3/10	• having surface coverings (F02F 3/02 takes precedence) [1, 2006.01]
1/14	• • • Cylinders with means for directing, guiding, or distributing liquid stream [1, 2006.01]	3/12	• • on piston heads [1, 2006.01]
1/16	• • • Cylinder liners of wet type [1, 2006.01]	3/14	• • • within combustion chambers [1, 2006.01]
1/18	• Other cylinders [1, 2006.01]	3/16	• having cooling means [1, 2006.01]
1/20	• • characterised by means for constructional features providing for lubrication [1, 2006.01]	3/18	• • the means being a liquid or solid coolant, e.g. sodium, in a closed chamber in piston [1, 2006.01]
1/22	• • characterised by having ports in cylinder wall for scavenging or charging [1, 2006.01]	3/20	• • the means being a fluid flowing through or along piston [1, 2006.01]
1/24	• Cylinder heads [1, 2006.01]	3/22	• • • the fluid being liquid [1, 2006.01]
1/26	• • having cooling means [1, 2006.01]	3/24	• having means for guiding gases in cylinders, e.g. for guiding scavenging charge in two-stroke engines [1, 2006.01]
1/28	• • • for air cooling [1, 2006.01]	3/26	• having combustion chamber in piston head (the surface thereof being covered F02F 3/14) [1, 2006.01]
1/30	• • • • Finned cylinder heads [1, 2006.01]	3/28	• Other pistons with specially-shaped head [1, 2006.01]
1/32	• • • • • the cylinder heads being of overhead-valve type [1, 2006.01]	<b>5/00</b>	<b>Piston rings, e.g. associated with piston crown</b> [1, 2006.01]
1/34	• • • • • with means for directing or distributing cooling medium (F02F 1/32 takes precedence) [1, 2006.01]	<b>7/00</b>	<b>Casings, e.g. crankcases</b> (engine casings in general F16M) [1, 2006.01]
1/36	• • • for liquid cooling [1, 2006.01]	<b>11/00</b>	<b>Arrangements of sealings in combustion engines</b> (piston rings F02F 5/00; sealings <u>per se</u> F16J) [1, 2006.01]
1/38	• • • • the cylinder heads being of overhead-valve type [1, 2006.01]		
1/40	• • • • cylinder heads with means for directing, guiding, or distributing liquid stream (F02F 1/38 takes precedence) [1, 2006.01]		