

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

F01 MACHINES OR ENGINES IN GENERAL; ENGINE PLANTS IN GENERAL; STEAM ENGINES

F01M LUBRICATING OF MACHINES OR ENGINES IN GENERAL; LUBRICATING INTERNAL-COMBUSTION ENGINES; CRANKCASE VENTILATING [2]

Note(s)

1. Attention is drawn to the Notes preceding class F01, especially as regards Note (3).
2. Attention is drawn to the following places, which cover lubrication of specific machines or engines:
 - F01B 31/10.....Steam engines
 - F01C 21/04.....Rotary-piston or oscillating-piston machines or engines
 - F01D 25/18.....Non-positive-displacement machines
 - F02C 7/06.....Gas-turbine plants
 - F02F 1/20.....Cylinders of combustion engines
 - F04B 39/02.....Pumps for elastic fluids
 - F04C 29/02.....Rotary-piston or oscillating-piston pumps for liquids
 - F04D 29/04.....Non-positive-displacement pumps

Subclass index

PRESSURE LUBRICATION.....	1/00
SPECIAL LUBRICATION.....	3/00, 7/00, 9/00
LUBRICANT CONDITIONING.....	5/00
DETAILS, ACCESSORIES.....	11/00
CRANKCASE VENTILATION.....	13/00

1/00 Pressure lubrication

- 1/02 • using lubricating pumps
- 1/04 • using pressure in working cylinder or crankcase to operate lubricant-feeding devices
- 1/06 • Lubricating systems characterised by the provision therein of crankshafts or connecting-rods with lubricant passageways, e.g. bores
- 1/08 • Lubricating systems characterised by the provision therein of lubricant-jetting means
- 1/10 • Lubricating systems characterised by the provision therein of lubricant venting or purifying means, e.g. of filters (mounting of, connecting of, or constructional details of lubricant purifying means F01M 11/03)
- 1/12 • Closed-circuit lubricating systems not provided for in groups F01M 1/02-F01M 1/10
- 1/14 • Timed lubrication (F01M 1/08 takes precedence)
- 1/16 • Controlling lubricant pressure or quantity
- 1/18 • Indicating or safety devices (concerning lubricant level F01M 11/06, F01M 11/12)
- 1/20 • • concerning lubricant pressure
- 1/22 • • • rendering machines or engines inoperative or idling on pressure failure
- 1/24 • • • • acting on engine fuel system
- 1/26 • • • • acting on engine ignition system
- 1/28 • • • • acting on engine combustion-air supply

3/00 Lubrication specially adapted for engines with crankcase compression of fuel-air mixture, or for other engines in which lubricant is contained in fuel, combustion air, or fuel-air mixture (separating lubricant from air or fuel-air mixture before entry into cylinder F01M 11/08)

- 3/02 • with variable proportion of lubricant to fuel, lubricant to air, or lubricant to fuel-air mixture
- 3/04 • for upper cylinder lubrication only

5/00 Heating, cooling, or controlling temperature of lubricant (arrangement of lubricant coolers in engine cooling system F01P 11/08); **Lubrication means facilitating engine starting**

- 5/02 • Conditioning lubricant for aiding engine starting, e.g. heating
- 5/04 • • Diluting, e.g. with fuel

7/00 Lubrication means specially adapted for machine or engine running-in

9/00 Lubrication means having pertinent characteristics not provided for in, or of interest apart from, groups F01M 1/00-F01M 7/00

- 9/02 • having means for introducing additives to lubricant
- 9/04 • Use of fuel as lubricant
- 9/06 • Dip or splash lubrication
- 9/08 • Drip lubrication
- 9/10 • Lubrication of valve gear or auxiliaries

F01M

- 9/12

- Non-pressurised lubrication, or non-closed-circuit lubrication, not otherwise provided for
- 11/00

Component parts, details, or accessories, not provided for in, or of interest apart from, groups F01M 1/00-F01M 9/00
- 11/02

- Arrangements of lubricant conduits
- 11/03

- Mounting or connecting of lubricant purifying means relative to the machine or engine; Details of lubricant purifying means [3]
- 11/04

- Filling or draining lubricant of or from machines or engines
- 11/06

- Means for keeping lubricant level constant or for accommodating movement or position of machines or engines
- 11/08

- Separating lubricant from air or fuel-air mixture before entry into cylinder
- 11/10

- Indicating devices; Other safety devices
- 11/12

- • concerning lubricant level
- 13/00

Crankcase ventilating or breathing [2]
- 13/02

- by means of additional source of positive or negative pressure [2]
- 13/04

- having means for purifying air before leaving crankcase, e.g. removing oil [2]
- 13/06

- specially adapted for submersible engines, e.g. of armoured vehicles [2]