

## ECLA EUROPEAN CLASSIFICATION

**F41F**                    **APPARATUS FOR LAUNCHING PROJECTILES OR MISSILES FROM BARRELS, e.g. CANNONS** ([smallarms F41C](#)); **LAUNCHERS FOR ROCKETS OR TORPEDOES; HARPOON GUNS** ([functional features or details common to both smallarms and ordnance, mountings therefor F41A](#); [projecting missiles without use of explosive or combustible propellant charge F41B](#))

### **Note**

This subclass does not cover the arrangement of armaments, adaptation of mountings therefor, or arrangements of ammunition handlers on ships or aircraft, if they present a shipbuilding or aircraft-building aspect, which are covered by subclass [B63G](#) or [B64D](#).

**F41F1/00**                    **Launching apparatus for projecting projectiles or missiles from barrels, e.g. cannons** ([F41F3/00](#) takes precedence); **Harpoon guns**

- F41F1/06                    . Mortars ([base plates therefor F41A23/54](#)) [C0506]
- F41F1/08                    . Multibarrel guns, e.g. twin guns
- F41F1/08B                    . . [N: with oscillating barrels; with barrels having variable relative orientation ([scatter-fire arrangements F41A27/04](#))]
- F41F1/10                    . . Revolving-cannon guns, i.e. multibarrel guns with the barrels and their respective breeches mounted on a rotor; Breech mechanisms therefor

**F41F3/00**                    **Rocket or torpedo launchers**

- F41F3/04                    . for rockets
- F41F3/04B                    . . [N: Rail launchers] [N9409]
- F41F3/04C                    . . [N: Means for exhaust gas disposal, e.g. exhaust deflectors, gas evacuation systems] [N9409]
- F41F3/042                    . . the launching apparatus being used also as a transport container for the rocket [N: ([F41F3/065](#) takes precedence)]
- F41F3/045                    . . adapted to be carried and used by a person, e.g. bazookas ([F41F3/042](#) takes precedence)
- F41F3/045B                    . . . [N: Bazookas]
- F41F3/048                    . . Means for imparting spin to the rocket before launching
- F41F3/052                    . . Means for securing the rocket in the launching apparatus
- F41F3/055                    . . Umbilical connecting means [N: ([Means for facilitating disengagement of electric line connector coupling parts in general H01R13/633](#))]
- F41F3/058                    . . Means for removing duds or misfires
- F41F3/06                    . . from aircraft [N: ([F41F3/04B](#) takes precedence; [arrangements of rocket launchers on aircraft B64D7/08](#); [bomb releasing in flight B64D1/06](#))] [C0502]
- F41F3/065                    . . . Rocket pods, i.e. detachable containers for launching a plurality of rockets
- F41F3/07                    . . Underwater launching-apparatus
- F41F3/073                    . . Silos for rockets, e.g. mounting or sealing rockets therein ([F41F3/077](#) takes precedence)

- F41F3/077 . . Doors or covers for launching tubes
- F41F3/08 . for marine torpedoes [N: [F41A23/22](#) takes precedence]
- F41F3/10 . . from below the surface of the water
  
- F41F5/00** **Launching-apparatus for gravity-propelled missiles or projectiles** (from aircraft [B64D1/04](#))
  
- F41F5/04 . from ships, e.g. for mines, for depth charges
  
- F41F7/00** **Launching-apparatus for projecting missiles or projectiles otherwise than from barrels**, [N: e.g. using spigots] ([F41F3/04](#) takes precedence; [N: centrifugal sling apparatus [F41B3/04](#)])