

| Symbol           | Typ                 | Titel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>F</b>         | <b>Sektion</b>      | <b>MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>F17</b>       | <b>Klasse</b>       | <b>STORING OR DISTRIBUTING GASES OR LIQUIDS (water supply E03B)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>F17C</b>      | <b>Unterklasse</b>  | <b>VESSELS FOR CONTAINING OR STORING COMPRESSED, LIQUEFIED, OR SOLIDIFIED GASES; FIXED-CAPACITY GAS-HOLDERS; FILLING VESSELS WITH, OR DISCHARGING FROM VESSELS, COMPRESSED, LIQUEFIED, OR SOLIDIFIED GASES (storing fluids in natural or artificial cavities or chambers in the earth B65G 5/00; construction or assembling of bulk storage containers employing civil-engineering techniques E04H 7/00; variable-capacity gas-holders F17B; liquefaction or refrigeration machines, plants, or systems F25)</b> |
| <b>F17C 1/00</b> | <b>Hauptgruppe</b>  | <b>Pressure vessels, e.g. gas cylinder, gas tank, replaceable cartridge (pressurised apparatus for purposes other than storage, see the relevant subclasses such as A62C , B05B; associated with vehicles, see the appropriate subclass of classes B60 to B64; pressure vessels in general F16J 12/00)</b>                                                                                                                                                                                                       |
| F17C 1/02        | 1-Punkt Untergruppe | . involving reinforcing arrangements [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| F17C 1/04        | 2-Punkt Untergruppe | . . Protecting sheatings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| F17C 1/06        | 3-Punkt Untergruppe | . . . built-up from wound-on bands or filamentary material, e.g. wires [4]                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| F17C 1/08        | 2-Punkt Untergruppe | . . Integral reinforcements, e.g. ribs                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| F17C 1/10        | 1-Punkt Untergruppe | . with provision for protection against corrosion, e.g. due to gaseous acid (inhibiting corrosion of metallic material or incrustation in general C23F) [4]                                                                                                                                                                                                                                                                                                                                                      |
| F17C 1/12        | 1-Punkt Untergruppe | . with provision for thermal insulation (thermal insulation in general F16L 59/00) [4]                                                                                                                                                                                                                                                                                                                                                                                                                           |
| F17C 1/14        | 1-Punkt Untergruppe | . constructed of aluminium; constructed of non-magnetic steel                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| F17C 1/16        | 1-Punkt Untergruppe | . constructed of plastics materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>F17C 3/00</b> | <b>Hauptgruppe</b>  | <b>Vessels not under pressure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F17C 3/02        | 1-Punkt Untergruppe | . with provision for thermal insulation (thermal insulation in general F16L 59/00)                                                                                                                                                                                                                                                                                                                                                                                                                               |
| F17C 3/04        | 2-Punkt Untergruppe | . . by insulating layers (F17C 3/08 takes precedence)                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| F17C 3/06        | 3-Punkt Untergruppe | . . . on the inner surface, i.e. in contact with the stored fluid [4]                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| F17C 3/08        | 2-Punkt Untergruppe | . . by vacuum spaces, e.g. Dewar flask (for household use A47J 41/02)                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| F17C 3/10        | 2-Punkt Untergruppe | . . by liquid-circulating or vapour-circulating jackets                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| F17C 3/12        | 1-Punkt Untergruppe | . with provision for protection against corrosion, e.g. due to gaseous acid (protection against corrosion in general C23F)                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>F17C 5/00</b> | <b>Hauptgruppe</b>  | <b>Methods or apparatus for filling pressure vessels with liquefied, solidified, or compressed gases ( adding propellants to aerosol containers B65B 31/00)</b>                                                                                                                                                                                                                                                                                                                                                  |
| F17C 5/02        | 1-Punkt Untergruppe | . for filling with liquefied gases                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| F17C 5/04        | 2-Punkt Untergruppe | . . requiring the use of refrigeration, e.g. filling with helium or hydrogen                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| F17C 5/06        | 1-Punkt Untergruppe | . for filling with compressed gases                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>F17C 6/00</b> | <b>Hauptgruppe</b>  | <b>Methods or apparatus for filling vessels not under pressure with liquefied or solidified gases [3]</b>                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>F17C 7/00</b> | <b>Hauptgruppe</b>  | <b>Methods or apparatus for discharging liquefied, solidified, or compressed gases from pressure vessels, not covered by another subclass</b>                                                                                                                                                                                                                                                                                                                                                                    |
| F17C 7/02        | 1-Punkt Untergruppe | . Discharging liquefied gases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| F17C 7/04        | 2-Punkt Untergruppe | . . with change of state, e.g. vaporisation [3]                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Symbol            | Typ                 | Titel                                                                                                              |
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| <b>F17C 9/00</b>  | <b>Hauptgruppe</b>  | <b>Methods or apparatus for discharging liquefied or solidified gases from vessels not under pressure</b>          |
| F17C 9/02         | 1-Punkt Untergruppe | . with change of state, e.g. vaporisation                                                                          |
| F17C 9/04         | 2-Punkt Untergruppe | . . Recovery of thermal energy [3]                                                                                 |
| <b>F17C 11/00</b> | <b>Hauptgruppe</b>  | <b>Use of gas-solvents or gas-sorbents in vessels</b>                                                              |
| <b>F17C 13/00</b> | <b>Hauptgruppe</b>  | <b>Details of vessels or of the filling or discharging of vessels</b>                                              |
| F17C 13/02        | 1-Punkt Untergruppe | . Special adaptations of indicating, measuring, or monitoring equipment (measuring in general G01)                 |
| F17C 13/04        | 1-Punkt Untergruppe | . Arrangement or mounting of valves (valves per se F16K)                                                           |
| F17C 13/06        | 1-Punkt Untergruppe | . Closures, e.g. cap, breakable member (closures for containers in general B65D)                                   |
| F17C 13/08        | 1-Punkt Untergruppe | . Mounting arrangements for vessels                                                                                |
| F17C 13/10        | 1-Punkt Untergruppe | . Arrangements for preventing freezing                                                                             |
| F17C 13/12        | 1-Punkt Untergruppe | . Arrangements or mounting of devices for preventing or minimising the effect of explosion (flame traps A62C 4/00) |