

ECLA**EUROPEAN CLASSIFICATION****H01T**

SPARK GAPS; OVERVOLTAGE ARRESTERS USING SPARK GAPS; SPARKING PLUGS; CORONA DEVICES; GENERATING IONS TO BE INTRODUCED INTO NON-ENCLOSED GASES (working of metal by the action of a high concentration of electric current B23H; welding, e.g. arc welding, electron beam welding or electrolytic welding B23K; gas-filled discharge tubes with solid cathode H01J17/00; electric arc lamps H05B31/00) [C9501]

Note

In this subclass, the term "spark gaps" is used with the following meaning:

- enclosed or non-enclosed discharge device having cold electrodes and used exclusively to discharge a quantity of electrical energy in a small time duration.

H01T1/00**Details of spark gaps**

- H01T1/02 . Means for extinguishing arc
- H01T1/04 . . using magnetic blow-out
- H01T1/06 . . . with permanent magnet
- H01T1/08 . . using flow of arc-extinguishing fluid
- H01T1/10 . . . with extinguishing fluid evolved from solid material by heat of arc
- H01T1/12 . Means structurally associated with spark gap for recording operation thereof
- H01T1/14 . Means structurally associated with spark gap for protecting it against overload or for disconnecting it in case of failure (H01T1/15, H01T1/16, H01T1/18 take precedence)
- H01T1/15 . for protection against excessive pressure
- H01T1/16 . Series resistor structurally associated with spark gap
- H01T1/18 . Electrolytic device structurally associated with spark gap
- H01T1/20 . Means for starting arc or facilitating ignition of spark gap
- H01T1/22 . . by the shape or the composition of the electrodes
- H01T1/24 . Selection of materials for electrodes (H01T1/22 takes precedence)

H01T2/00**Spark gaps comprising auxiliary triggering means** (triggering circuits H01T15/00)

- H01T2/02 . comprising a trigger electrode or an auxiliary spark gap

H01T4/00**Overvoltage arresters using spark gaps** (H01T2/00 takes precedence; overvoltage protection circuits using spark gaps H02H9/06)

- H01T4/02 . Details (of spark gaps H01T1/00)

- H01T4/04 . Housings ([H01T4/06](#) takes precedence)
- H01T4/06 . Mounting arrangements for a plurality of overvoltage arresters
- H01T4/08 . structurally associated with protected apparatus ([with switches H01H9/14](#); [with fuses H01H85/44](#))
- H01T4/10 . having a single gap or a plurality of gaps in parallel
- H01T4/12 . . hermetically sealed
- H01T4/14 . . Arcing horns ([associated with insulators H01B17/46](#))
- H01T4/16 . having a plurality of gaps arranged in series
- H01T4/18 . . Arrangements for reducing height of stocked spark gaps
- H01T4/20 . . Arrangements for improving potential distribution
- H01T7/00 Rotary spark gaps, i.e. devices having one or more rotating electrodes**
- H01T9/00 Spark gaps specially adapted for generating oscillations**
- H01T11/00 Spark gaps specially adapted as rectifiers**
- H01T13/00 Sparking plugs [\[C1012\]](#)**
 - H01T13/02 . Details
 - H01T13/04 . . Means providing electrical connection to sparking plug ([electric connections in general H01R](#))
 - H01T13/05 . . . combined with interference suppressing or shielding means
 - H01T13/06 . . Covers forming a part of the plug and protecting it against adverse environment
 - H01T13/08 . . Mounting, fixing or sealing of sparking plugs, e.g. in combustion chamber
 - H01T13/10 . . . by bayonet-type connection
 - H01T13/12 . . Means on sparking plugs for facilitating engagement by tool or by hand
 - H01T13/14 . . Means for self-cleaning
 - H01T13/16 . . Means for dissipating heat
 - H01T13/18 . . Means for heating, e.g. for drying
 - H01T13/20 . characterised by features of the electrodes or insulation
 - H01T13/22 . . having two or more electrodes embedded in insulation ([for two or more sparks H01T13/46](#))
 - H01T13/24 . . having movable electrodes ([H01T13/28](#) takes precedence)
 - H01T13/26 . . . for adjusting spark gap otherwise than by bending of electrode
 - H01T13/28 . . having spherically shaped electrodes, e.g. ball-shaped
 - H01T13/30 . . . mounted so as to permit free movement
 - H01T13/32 . . characterised by features of the earthed electrode
 - H01T13/34 . . characterised by the mounting of electrodes in insulation, e.g. by embedding

- H01T13/36 . . characterised by the joint between insulation and body, e.g. using cement
- H01T13/38 . . Selection of materials for insulation (in general [H01B3/00](#))
- H01T13/39 . . Selection of materials for electrodes
- H01T13/40 . structurally combined with other devices (combined or associated with fuel injectors [F02M57/06](#); structurally combined with other parts of internal-combustion engines [F02P13/00](#))
- H01T13/41 . . with interference suppressing or shielding means
- H01T13/42 . . with magnetic spark generators
- H01T13/44 . . with transformers, e.g. for high-frequency ignition
- H01T13/46 . having two or more spark gaps
- H01T13/46B . . [N: in series connection]
- H01T13/46B2 . . . [N: one spark gap being incorporated in the sparking plug]
- H01T13/46C . . [N: in parallel connection]
- H01T13/48 . having means for rendering sparks visible
- H01T13/50 . having means for ionisation of gap ([H01T13/52](#) takes precedence)
- H01T13/52 . characterised by a discharge along a surface
- H01T13/54 . having electrodes arranged in a partly-enclosed ignition chamber
- H01T13/56 . characterised by having component parts which are easily assembled or disassembled
- H01T13/58 . Testing (testing characteristics of the spark in internal-combustion engine ignition [F02P17/12](#)) [N1012]
- H01T13/60 . . of electrical properties [N1012]
- H01T14/00** **Spark gaps not provided for in groups [H01T2/00](#) to [H01T13/00](#)** (devices providing for corona discharge [H01T19/00](#))
- H01T15/00** **Circuits specially adapted for spark gaps, e.g. ignition circuits** (ignition circuits for internal-combustion engines [F02P](#); electric spark ignition for combustion apparatus [F23Q](#); protection circuits using spark gaps [H02H9/06](#))
- H01T19/00** **Devices providing for corona discharge** (for charging electrographic elements [G03G15/02](#))
- H01T19/02 . Corona rings
- H01T19/04 . having pointed electrodes
- H01T21/00** **Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or sparking plugs**
- H01T21/02 . of sparking plugs

- H01T21/04
 - . . . Cleaning (abrasive blasting devices for cleaning sparking-plugs [B24C3/34](#))
- H01T21/06
 - . . . Adjustment of spark gaps (sparking-plugs having movable electrodes for adjusting the gap [H01T13/26](#))
- H01T23/00**
 - Apparatus for generating ions to be introduced into non-enclosed gases, e.g. into the atmosphere** (discharge tubes with provision for emergence of ions from the vessel [H01J33/00](#); generating plasma H05H)