H02G

INSTALLATION OF ELECTRIC CABLES OR LINES, OR OF COMBINED OPTICAL AND ELECTRIC CABLES OR LINES (distribution points incorporating switches H02B; guiding telephone cords H04M 1/15; cable ducts or mountings for telephone or telegraph exchange installations H04Q 1/06)

Definition statement
This place covers:
Installation of communication cables or lines, including those comprising a combination of optical and electrical conductors, or of lightning conductors as well as installation of power cables or lines.

References
Limiting references
This place does not cover:
Installation of purely optical cables G02B 6/4401, G02B 6/46

Glossary of terms
In this place, the following terms or expressions are used with the meaning indicated:

| "electric cable" | includes cables comprising optical conductors, e.g. fibres, in combination with electrical conductors |

H02G 1/00

Methods or apparatus specially adapted for installing, maintaining, repairing or dismantling electric cables or lines

Definition statement
This place covers:
• Installation planning
• Tools for preparing walls, floor and ceilings, e.g. drilling tools
• Templates for positioning electrical boxes
• Laying cables
• Removing insulation from cables
• Joining or terminating cables

H02G 1/02

for overhead lines or cables

Definition statement
This place covers:
• Planning of high voltage electrical networks
• Maintenance and repair of overhead lines
• Apparatus for workers, e.g. robots or carriages travelling along the lines
• Specialized vehicles
• Cleaning of electrical lines
References

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Cleaning of insulators</th>
<th>H01B 17/52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthing sticks for live working</td>
<td>H01R 4/64</td>
</tr>
</tbody>
</table>

H02G 1/04

for mounting or stretching (wire stretchers in general B25B 25/00)

Definition statement

This place covers:

- Ground vehicles or Helicopter stringing
- Methods for stringing
- Devices temporarily fixed to pole for stringing lines

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Wire stretchers in generalInstallation of trolley lines | B25B 25/00, B60M 1/28 |

H02G 1/06

for laying cables, e.g. laying apparatus on vehicle (combined with trench digging or back-filling machines or dredgers E02F 5/00)

Definition statement

This place covers:

The process of laying cables.

References

Limiting references

This place does not cover:

| Installations of electric cables or lines in or on the ground or water | H02G 9/00 |

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Trench digging or back-filling machines or dredgers | E02F 5/00 |
H02G 1/08
through tubing or conduit, e.g. rod or draw wire for pushing or pulling
{(inserting electrical cables into tubes using wallbores E21B 17/206; for optical
cables G02B 6/4401)}

Definition statement
This place covers:
Not only inserting wires into conduits, but also removing wires from conduit where conduit stays intact.

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>Activity</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inserting cables into tubes using drills</td>
<td>E21B 17/206</td>
</tr>
<tr>
<td>Installing optical cables in ducts</td>
<td>G02B 6/4463</td>
</tr>
<tr>
<td>Apparatus or processes for salvaging material from cables where cables are cut and destroyed</td>
<td>H01B 15/00</td>
</tr>
</tbody>
</table>

H02G 1/12
for removing insulation or armouring from cables, e.g. from the end thereof
(pliers in general B25B; cutters in general B26B)

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pliers in general</td>
<td>B25B</td>
</tr>
<tr>
<td>Cutters in general</td>
<td>B26B</td>
</tr>
</tbody>
</table>

H02G 1/1207
{the cutting element not rotating about the wire or cable (making longitudinal and transverse or helical cut H02G 1/1229)}

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>Action</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a longitudinal and transverse or helical cut</td>
<td>H02G 1/1229</td>
</tr>
</tbody>
</table>
H02G 1/1221
{the cutting element rotating about the wire or cable (making longitudinal and transverse or helical cut H02G 1/1229)}

References
Limiting references
This place does not cover:

| The cutting element making a longitudinal and a transverse or helical cut | H02G 1/1229 |

H02G 1/1251
{the cutting element not rotating about the wire or cable (making longitudinal and transverse or helical cut H02G 1/1268)}

References
Limiting references
This place does not cover:

| The cutting element making a longitudinal and a transverse or helical cut | H02G 1/1268 |

H02G 1/1265
{the cutting element rotating about the wire or cable (making longitudinal and transverse or helical cut H02G 1/1268)}

References
Limiting references
This place does not cover:

| Making a longitudinal and transverse or helical cut | H02G 1/1268 |

H02G 1/14
for joining or terminating cables (joining electric conductors H01R 43/00)

Definition statement
This place covers:
The process of joining (end-to-end) or bundling (side-by-side) or terminating cables

References
Limiting references
This place does not cover:

| Details of the cable terminations | H02G 15/02 |
| Details of the cable joints | H02G 15/08 |
| Joining electric conductors | H01R 43/00 |
H02G 3/00

Installations of electric cables or lines in or on buildings, equivalent structures or vehicles (installations of bus-bars H02G 5/00; overhead installations H02G 7/00; installations in or on the ground H02G 9/00; channels or vertical ducts for receiving utility lines E04F 17/08; wiring of electric apparatus in general H05K)

Definition statement

This place covers:
- Complete wiring of buildings or rooms
- Pre-wired installation
- Wirings for modular walls

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Installations of bus-bars</th>
<th>H02G 5/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead installations</td>
<td>H02G 7/00</td>
</tr>
<tr>
<td>Installations in or on the ground</td>
<td>H02G 9/00</td>
</tr>
<tr>
<td>Channels or vertical ducts for receiving utility lines</td>
<td>E04F 17/08</td>
</tr>
</tbody>
</table>

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Supports for pipes, cables or protective tubing, specially adapted for supporting the pipes all along their length, e.g. pipe channels or ducts</th>
<th>F16L 3/26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wiring of electric apparatus in general</td>
<td>H05K</td>
</tr>
</tbody>
</table>

H02G 3/02

Details

Definition statement

This place covers:
Marking or labelling of cable channels

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Labels | G09F 3/00 |
H02G 3/04

Protective tubings or conduits {or channels or other supports} (pipes or tubings in general F16L)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Pipes or tubings in general | F16L |

H02G 3/0406

{Details thereof (installation or suspension of conduit channels and other supports H02G 3/263)}

Definition statement

This place covers:
- Manufacture of cable channels
- End pieces
- Dividers inside channels

References

Limiting references

This place does not cover:

| Installation or suspension of conduit channels and other supports | H02G 3/263 |

H02G 3/0412

{Heat or fire protective means (for fire in electric circuits A62C 3/16)}

Definition statement

This place covers:
- Protection for fire coming from outside or inside.
- Use of intumescent materials

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| For fire in electric circuits | A62C 3/16 |
| For tubing in general | F16L 5/04 |

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

| Intumescent | Material expanding in case of fire or heat to fill air gaps |
H02G 3/0418
{Covers or lids; Their fastenings}

**Definition statement**

This place covers:
Covers or lids only for cable channels, not for electrical boxes, housing or enclosures.

---

H02G 3/0425

{Plinths (borders for use between floor or ceiling and wall E04F 19/04)}

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Borders for use between floor or ceiling and wall | E04F 19/04 |

---

H02G 3/0437

{Channels}

**Definition statement**

This place covers:
Non circular channels or raceways or wire harness fully enclosing the cables

**References**

*Limiting references*

This place does not cover:

| Tubings for cables | H02G 3/0462 |

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Pipe channels or ducts | F16L 3/26 |

---

H02G 3/045

{provided with perforations or slots permitting introduction or exit of wires}

**Definition statement**

This place covers:
Raceways or conduits or wire harness having side exits for cables, e.g. breakable parts.
H02G 3/0456
{Ladders or other supports}

Definition statement

This place covers:
Open supports for cables or wire harness

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| For pipes or ducts in general | F16L 3/22 |

H02G 3/0462
{Tubings, i.e. having a closed section}

Definition statement

This place covers:
Single piece channels

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Pipes placed side by side in contact with each other | F16L 3/23 |

H02G 3/0468
{Corrugated}

Definition statement

This place covers:
Tubings having radial ondulations

H02G 3/0475
{formed by a succession of articulated units}

References

Limiting references

This place does not cover:

| Between movable parts | H02G 11/00 |
H02G 3/0481

{with a circular cross-section (H02G 3/0468, H02G 3/0475 take precedence)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Corrugated tubings</th>
<th>H02G 3/0468</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubings formed by a succession of articulated units</td>
<td>H02G 3/0475</td>
</tr>
</tbody>
</table>

H02G 3/0487

{with a non-circular cross-section (H02G 3/0468, H02G 3/0475 take precedence)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Corrugated tubings</th>
<th>H02G 3/0468</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubings formed by a succession of articulated units</td>
<td>H02G 3/0475</td>
</tr>
</tbody>
</table>

H02G 3/0493

{Service poles}

Definition statement

This place covers:

Vertical ducts

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Medical bed nursing arrangements | A61G 12/00                      |

H02G 3/06

Joints for connecting lengths of protective tubing {or channels}, to each other or to casings, e.g. to distribution boxes; Ensuring electrical continuity in the joint

Definition statement

This place covers:

Only cylindrical conduits joint
References

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Connecting general pipes to walls | F16L 5/00 |

H02G 3/065

{with means biting into the conductor-insulation, e.g. teeth-like elements or gripping fingers (H02G 3/0675, H02G 3/0683 take precedence)}

References

Limiting references
This place does not cover:

| Joints for connecting tubing to casing with bolts operating in a direction parallel to the conductors | H02G 3/0675 |
| Joints for connecting tubing to casing with bolts operating in a direction transverse to the conductors | H02G 3/0683 |

H02G 3/0658

{with means constricting the conductor-insulation (H02G 3/065, H02G 3/0675, H02G 3/0683 take precedence)}

References

Limiting references
This place does not cover:

| Joints for connecting tubing to casing with means biting into the conductor-insulation, e.g. teeth-like elements or gripping fingers | H02G 3/065 |
| Joints for connecting tubing to casing with bolts operating in a direction parallel to the conductors | H02G 3/0675 |
| Joints for connecting tubing to casing with bolts operating in a direction transverse to the conductors | H02G 3/0683 |

H02G 3/0666

{with means clamping the armour of the conductor (H02G 3/0675, H02G 3/0683 take precedence)}

References

Limiting references
This place does not cover:

| Joints for connecting tubing to casing with bolts operating in a direction parallel to the conductors | H02G 3/0675 |
Joints for connecting tubing to casing with bolts operating in a direction transverse to the conductors

Electrcally connecting said armour

**H02G 3/0675**

{with bolts operating in a direction parallel to the conductors}

**References**

*Limiting references*

*This place does not cover:*

| Corrugated tubings | H02G 3/0691 |

**H02G 3/0683**

{with bolts operating in a direction transverse to the conductors}

**References**

*Limiting references*

*This place does not cover:*

| Corrugated tubings | H02G 3/0691 |

**H02G 3/0691**

{Fixing tubing to casing by auxiliary means co-operating with indentations of the tubing, e.g. with tubing-convolutions}

**Definition statement**

*This place covers:*

Connection of corrugated tubings

**H02G 3/08**

Distribution boxes; Connection or junction boxes (cable terminations **H02G 15/02**)

**References**

*Limiting references*

*This place does not cover:*

| Cable terminations | H02G 15/02 |
| Electrical connections | H01R 13/00 |
**H02G 3/081**

*Bases, casings or covers*

**Definition statement**

*This place covers:*

Constructional details of boxes, housings and enclosures

**H02G 3/083**

*Inlets*

**Definition statement**

*This place covers:*

Cable entry into electrical box, housings and enclosures

Through holes or openings

Grommets

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

| Cable fitting | cable entry |

**H02G 3/085**

*including knock-out or tear-out sections*

**Definition statement**

*This place covers:*

The cable entry is closed before use by a removable part

**H02G 3/086**

*Assembled boxes*

**Definition statement**

*This place covers:*

Connection of two boxes, housings and enclosures or part of boxes in order to increase inner volume

**H02G 3/088**

*Dustproof, splashproof, drip-proof, waterproof, or flameproof casings or inlets*

**Definition statement**

*This place covers:*

- Fire or heat protection of boxes, housings and enclosures
- Sound protection
- Water ingress protection, e.g. with rubber joint
• Evacuation of water from inside of box, housings and enclosures

**H02G 3/105**

*in association with a plinth, channel, raceway or similar*

**Definition statement**

*This place covers:*

Mounting of boxes, housings and enclosures on raceway or at a distance of raceway

**H02G 3/12**

*for flush mounting*

**Definition statement**

*This place covers:*

Boxes, housings and enclosures mounted inside walls

**References**

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Place Description</th>
<th>Classification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre establishment of boxes in concrete</td>
<td>E04G 15/04, E04G 15/06</td>
</tr>
</tbody>
</table>

**H02G 3/121**

*{in plain walls}*

**Definition statement**

*This place covers:*

Boxes, housings and enclosures are covered by wall material on sides and bottom

**H02G 3/123**

*{in thin walls}*

**Definition statement**

*This place covers:*

Boxes, housings and enclosures are inserted and fixed into a hole in dry walls

**H02G 3/125**

*{with supporting bar extending between two separate studs of a wall frame}*

**Definition statement**

*This place covers:*

Boxes, housings and enclosures mounted between two studs behind dry wall or ceiling panels
H02G 3/126
{with supporting means for mounting on a single wall stud}

Definition statement
This place covers:
• Boxes, housings and enclosures mounted on one stud behind dry wall or ceiling panels
• Boxes, housings and enclosures comprising nail or screw passage

H02G 3/128
{in plinths, channels, raceways or similar}

Definition statement
This place covers:
Flush mounted boxes, housings and enclosures into raceways

H02G 3/16
structurally associated with support for line-connecting terminals within the box (terminals H01R 9/00)

Definition statement
This place covers:
Provisions inside the boxes, housings and enclosures for cable connecting

References
Limiting references
This place does not cover:
Details of connectors, e.g. terminals H01R 9/00, H01R 13/00

H02G 3/18
providing line outlets

Definition statement
This place covers:
Fastening of apparatus into electrical boxes, housings and enclosures

H02G 3/185
{Floor outlets and access cups}

References
Limiting references
This place does not cover:
Manholes or similar in outside ground H02G 9/00
H02G 3/20
Ceiling roses {or other lighting sets}

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Wall, ceiling, or floor base for lamps | F21V 21/02 |

H02G 3/22
Arrangements for leading cables or lines through walls, floors, or ceilings, e.g. into building (devices for use where pipes, cables or protective tubing pass through walls or partitions F16L 5/00; lead-in or lead-through insulators H01B 17/26; insulating tubes or sleeves H01B 17/58)

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Pipes, cables or protective tubing passing through walls | F16L 5/00 |
| Lead-in or lead-through insulators | H01B 17/26 |
| Insulating tubes or sleeves | H01B 17/58 |

H02G 3/24
{Installation of lines or cables on walls, ceilings or floors by means of insulators (insulators H01B 17/00)}

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Insulators in general | H01B 17/00 |

H02G 3/26
{Installations of cables, lines, or separate protective tubing therefor directly on or in walls, ceilings, or floors (by means of insulators H02G 3/24; supports for pipes, cables or protective tubing F16L 3/00; hose-clips F16L 33/02)}

References
Limiting references
This place does not cover:

| Installations of cables by means of insulators | H02G 3/24 |
**Informative references**

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports for pipes, cables or protective tubing</td>
<td>F16L 3/00</td>
</tr>
<tr>
<td>Hose clips</td>
<td>F16L 33/02</td>
</tr>
</tbody>
</table>

**H02G 3/30**

**Installations of cables or lines on walls, floors or ceilings (supports for pipes, cables or protective tubing F16L 3/00; hose clips F16L 33/02)**

**Definition statement**

This place covers:

Means for fastening cables to walls

**References**

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for pipes, cables or protective tubing</td>
<td>F16L 3/00</td>
</tr>
<tr>
<td>Hose clips</td>
<td>F16L 33/02</td>
</tr>
</tbody>
</table>

**H02G 3/32**

**using mounting clamps**

**Definition statement**

This place covers:

Clips, anchors, bands directly in contact with cables

**References**

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose clips</td>
<td>F16L 33/02</td>
</tr>
</tbody>
</table>

**H02G 3/34**

**using separate protective tubing**

**Definition statement**

This place covers:

Mounting of cable conduits
H02G 3/36

Installations of cables or lines in walls, floors or ceilings (H02G 3/22 takes precedence)

Definition statement

This place covers:
Holding means for cables in walls

H02G 3/385

{in modular floors, e.g. access floors}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Construction of modular floors | E04F 15/02 |

H02G 3/388

{in modular walls, e.g. wall panels}

References

Limiting references

This place does not cover:
Structure of wall panels

E04B 2/7416

H02G 5/00

Installations of bus-bars

Definition statement

This place covers:
• Installation of flat, laminated or tubular non-insulated busbars, mostly for high current/voltage applications.
• Medium to very high voltage, gas-insulated tubular busbars arranged in a metallic casing.

Relationships with other classification places

• When the focus is on details of the electrical connections between different parts and not so much the installation of the busbars, these documents should be classified instead in H01R 3/00.
• When the subject matter is a supporting insulator for very heavy busbars and not the busbar itself, it should be classified in H01B 17/18 and not in H02G 5/025.
• The subject matter might be double classified in H02B 1/20 or H02B 1/21 when related to the installation in electric cabinets.
• Details involving the busbar casing and means for detecting mechanical or electrical defects are normally also classified in H02B 13/045 and H02B 13/065.
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of cables</td>
<td>H02G 3/00</td>
</tr>
<tr>
<td>Cable fittings</td>
<td>H02G 15/00</td>
</tr>
<tr>
<td>Power rails for vehicles</td>
<td>B60M 1/30</td>
</tr>
<tr>
<td>Electric conductors</td>
<td>H01B</td>
</tr>
</tbody>
</table>

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power rails for vehicles</td>
<td>B60M 1/30</td>
</tr>
<tr>
<td>Lighting systems having parts displaceable along a guiding element, normally a busbar</td>
<td>F21V 21/34</td>
</tr>
</tbody>
</table>

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat insulated conductors</td>
<td>H01B 7/08</td>
</tr>
<tr>
<td>Busbar connections in ac/dc conversion</td>
<td>H02M 7/003</td>
</tr>
<tr>
<td>Printed high current conductors</td>
<td>H05K 1/0263</td>
</tr>
<tr>
<td>Wiring on insulating boards</td>
<td>H05K 7/08</td>
</tr>
</tbody>
</table>

H02G 5/04

Partially-enclosed installations, e.g. in ducts and adapted for sliding or rolling current collection (non-rotary current collectors H01R 41/00)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-rotary current collectors</td>
<td>H01R 41/00</td>
</tr>
</tbody>
</table>

H02G 7/00

Overhead installations of electric lines or cables (installations of bus-bars H02G 5/00; trolley wires or contact lines for electric railways B60M; fastening conductors to insulators H01B 17/00, e.g. H01B 17/06, H01B 17/16, H01B 17/22; protection against abnormal electric conditions H01H; hook contacts for temporary connections to overhead lines H01R 11/14)

Definition statement

This place covers:

- Installation of field power lines
• Fastening to masts and poles
• Warning devices
• Birds or rodents deterring means

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Installations of bus-bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>H02G 5/00</td>
</tr>
</tbody>
</table>

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Trolley wires or contact lines for electric railways</th>
</tr>
</thead>
<tbody>
<tr>
<td>B60M 1/00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fastening conductors to insulators</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01B 17/00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection against abnormal electric conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01H</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hook contacts for temporary connections to overhead lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01R 11/14</td>
</tr>
</tbody>
</table>

H02G 7/02

Devices for adjusting or maintaining mechanical tension, e.g. take-up device

Definition statement

This place covers:
Weight or spring activated means pulling on the cables

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Arrangements for supporting or suspending trolley wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>B60M 1/20</td>
</tr>
</tbody>
</table>

H02G 7/04

Arrangements or devices for relieving mechanical tension

Definition statement

This place covers:
Means releasing the cables in case of mechanical overload

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Arrangements for supporting or suspending trolley wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>B60M 1/20</td>
</tr>
</tbody>
</table>
H02G 7/05
Suspension arrangements or devices for electric cables or lines

Definition statement
This place covers:
End or middle fastening of cables along poles

References
Limiting references
This place does not cover:

| Devices for stringing cables between poles | H02G 1/04 |

H02G 7/053
{Suspension clamps and clips for electric overhead lines not suspended to a supporting wire}

Definition statement
This place covers:
Fastening of cables directly between two poles,

H02G 7/056
{Dead-end clamps}

Definition statement
This place covers:
Fastening of cables ends to poles.

H02G 7/06
Suspensions for lines or cables along a separate supporting wire, e.g. S-hook

Definition statement
This place covers:
A separate mechanical wire is used as parallel supporting device

H02G 7/08
Members clamped to the supporting wire or to the line or cable

Definition statement
This place covers:
One side of the supporting means acts as a clamp
H02G 7/10
Flexible members or lashings wrapped around both the supporting wire and the line or cable

Definition statement
This place covers:
Bands or wire loops,

H02G 7/12
Devices for maintaining distance between parallel conductors, e.g. spacer

Definition statement
This place covers:
Rigid devices with a given length are fixed between two lines

H02G 7/125
{Damping spacers}

Definition statement
This place covers:
Device with variable length fixed between two line

H02G 7/14
Arrangements or devices for damping mechanical oscillations of lines, e.g. for reducing production of sound {(damping spacers H02G 7/125)}

Definition statement
This place covers:
Weights or dynamic devices added to lines

References
Limiting references
This place does not cover:

Damping spacers H02G 7/125

H02G 7/16
Devices for removing snow or ice from lines or cables (from insulators H01B 17/52)

Definition statement
This place covers:
Mechanical or electrical devices, eventually using transported electricity
References

Limiting references

This place does not cover:

- Removing snow or ice from insulators

H02G 7/18

Devices affording mechanical protection in the event of breakage of a line or cable, e.g. net for catching broken lines

Definition statement

This place covers:

- Device placed under the lines for receiving broken lines

H02G 7/20

Spatial arrangements or dispositions of lines or cables on poles, posts, or towers (construction of poles, posts or towers E04H 12/22)

Definition statement

This place covers:

- Crossarms
- Spatial disposition of parallel lines

References

Limiting references

This place does not cover:

- Construction of poles, posts or towers

H02G 9/00

Installations of electric cables or lines in or on the ground or water (cathodic protection C23F 13/02; detection of buried cables G01V)

References

Limiting references

This place does not cover:

- Detection of buried cables

Informative references

Attention is drawn to the following places, which may be of interest for search:

- Cathodic protection C23F 13/02
- Installations of optical cables in or on the ground or water G02B 6/46
**H02G 9/02**

laid directly in or on the ground, river-bed or sea-bottom; Coverings therefor, e.g. tile

**Definition statement**

*This place covers:*

Cables installed in or on the ground without any protection

**References**

**Limiting references**

*This place does not cover:*

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of laying cables in or on the ground</td>
<td>H02G 1/06</td>
</tr>
<tr>
<td>The process of laying cables in or on the sea-bottom</td>
<td>H02G 1/10</td>
</tr>
<tr>
<td>Coverings for cables laid in or on the ground</td>
<td>H02G 9/025</td>
</tr>
</tbody>
</table>

**H02G 9/06**

in underground tubes or conduits; Tubes or conduits therefor

**References**

**Limiting references**

*This place does not cover:*

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of laying cables in a tube or conduit</td>
<td>H02G 1/08</td>
</tr>
</tbody>
</table>

**H02G 9/10**

in cable chambers, e.g. in manhole, in handhole (building aspects of cable chambers Section E, e.g. E04H 5/06)

**References**

**Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manholes or similar</td>
<td>E02D 29/12</td>
</tr>
<tr>
<td>Building aspects of cable chambers</td>
<td>E04H 5/06</td>
</tr>
</tbody>
</table>

**H02G 9/12**

supported on or from floats, e.g. in water (floating cables H01B 7/12)

**Definition statement**

*This place covers:*

Installations of cables in water
References

Limiting references

This place does not cover:

- Floating cables per se

Informative references

Attention is drawn to the following places, which may be of interest for search:

- The process of laying cables in water
- Submarine cables per se

H02G 11/00

Arrangements of electric cables or lines between relatively-movable parts

{storing means for coiled material specially adapted for repeatedly paying-out and re-storing length of material for particular purposes B65H 75/34} ; current collectors H01R {; winding-up telephone cord H04M 1/15}

Definition statement

This place covers:

Transmission of electric energy between relatively-movable parts through flexible conductors

References

Limiting references

This place does not cover:

- Supplying energy to the end effector of a robot or similar manipulator
- Current collectors for power supply lines of electrically-propelled vehicles
- Flexible or turnable connectors
- Collectors for maintaining electrical contact between moving and stationary parts
- Winding up of telephone cord

Informative references

Attention is drawn to the following places, which may be of interest for search:

- Tubings for conductors
- Storing means for coiled material specially adapted for repeatedly paying-out and re-storing length of material for particular purposes
H02G 11/003
{using gravity-loaded or spring-loaded loop}

Definition statement
This place covers:
Supply cables for gantry crane or similar

H02G 11/006
{using extensible carrier for the cable, e.g. self-coiling spring (extensible conductors or cables H01B 7/06)}

Definition statement
This place covers:
• Chain with articulated elements for supporting a cable
• Cable arrangement in sliding doors

References
Limiting references
This place does not cover:

| Extensible conductors or cables       | H01B 7/06 |

H02G 11/02
using take-up reel or drum

Definition statement
This place covers:
Apparatus where part of the cable is stored on a reel or similar while power is supplied to the apparatus

References
Limiting references
This place does not cover:

| Storage of cables on reels where there is no power transfer | B65H 75/00 |

H02G 13/00
Installations of lightning conductors; Fastening thereof to supporting structure (indicating, counting or recording lightning strokes G01; lightning arrestors H01C 7/12, H01C 8/04, H01G 9/18, H01T; earth plates, pins or other contacts H01R)

Definition statement
This place covers:
• Lightning protection devices
• Devices modifying air characteristics in order to attract lightning stroke, e.g. radioactive
• Routing of lightning to ground
• Measuring electromagnetic field
• Airplane or wind turbine protection

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Lightning arrestors</th>
<th>H01C 7/12, H01C 8/04, H01G 9/18, H01T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth plates, pins or other contacts</td>
<td>H01R 4/66</td>
</tr>
</tbody>
</table>

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Indicating, counting or recording lightning strokes | G01 |

H02G 15/00

Cable fittings

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

| Condenser | Capacitor |

H02G 15/003

{Filling materials, e.g. solid or fluid insulation}

Definition statement

This place covers:
Details of the filling material per se

H02G 15/013

Sealing means for cable inlets (inlets for cables filled with, or surrounded by, gas or oil H02G 15/32)

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Details of the sealing material</th>
<th>H02G 15/003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlets for cables filled with, or surrounded by, gas or oil</td>
<td>H02G 15/32</td>
</tr>
</tbody>
</table>
**H02G 15/02**

Cable terminations (for gas- or oil-filled cables [H02G 15/22](#))

**References**

**Limiting references**

This place does not cover:

| Terminations for gas- or oil-filled cables | H02G 15/22 |

**H02G 15/025**

{for coaxial cables or hollow conductors (connections between HF conductors [H01P 1/04](#); plug and socket connections per se [H01R 24/38](#))}

**References**

**Limiting references**

This place does not cover:

| Connections between HF conductors | H01P 1/04 |
| Plug and socket connections per se | H01R 24/38 |

**H02G 15/06**

Cable terminating boxes, frames, or other structures (terminal blocks [H01R 9/00](#))

**References**

**Limiting references**

This place does not cover:

| Terminal blocks | H01R 9/00 |

**H02G 15/068**

connected to the cable shield only ([H02G 15/072](#) takes precedence)

**References**

**Limiting references**

This place does not cover:

| Condenser type devices for relieving electrical stress | H02G 15/072 |
H02G 15/08
Cable junctions (for gas- or oil-filled cables H02G 15/24; disconnectible junctions, electrical connections H01R)

References
Limiting references
This place does not cover:

| Junctions for gas- or oil-filled cables | H02G 15/24 |
| Disconnectable junctions; Electrical connections per se | H01R |

H02G 15/085
{for coaxial cables or hollow conductors (plug and socket connections between HF conductors H01P 1/04; plug and socket connections per se H01R 24/38)}

References
Limiting references
This place does not cover:

| Connections between HF conductors | H01P 1/04 |
| Plug and socket connections per se | H01R 24/38 |

H02G 15/10
protected by boxes, e.g. by distribution, connection or junction boxes (terminal blocks H01R 9/00 {; distribution boxes per se H02G 3/08})

References
Limiting references
This place does not cover:

| Distribution boxes per se | H02G 3/08 |
| Terminal blocks | H01R 9/00 |

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Cable junctions protected by sleeves | H02G 15/18 |
**H02G 15/105**

connected to the cable shield only (**H02G 15/107** takes precedence)

References

*Limiting references*

This place does not cover:

<table>
<thead>
<tr>
<th>Condenser type</th>
<th><strong>H02G 15/107</strong></th>
</tr>
</thead>
</table>

**H02G 15/18**

protected by sleeves, e.g. for communication cable (two-part covers **H02G 15/10** {; preforms having internal stresses **B29C 61/00**})

References

*Limiting references*

This place does not cover:

<table>
<thead>
<tr>
<th>Two-part coverings</th>
<th><strong>H02G 15/113, H02G 15/115</strong></th>
</tr>
</thead>
</table>

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Preforms having internal stresses</th>
<th><strong>B29C 61/00</strong></th>
</tr>
</thead>
</table>

**H02G 15/1806**

{Heat shrinkable sleeves (insulation of electrical connections using a heat shrinking insulating sleeve **H01R 4/72**)}

References

*Limiting references*

This place does not cover:

<table>
<thead>
<tr>
<th>Insulation of electrical connectors per se using a heat shrinking insulating sleeve</th>
<th><strong>H01R 4/72</strong></th>
</tr>
</thead>
</table>

**H02G 15/20**

Cable fittings for cables filled with or surrounded by gas or oil (**H02G 15/34** takes precedence)

References

*Limiting references*

This place does not cover:

<table>
<thead>
<tr>
<th>Cable fittings for cryogenic cables</th>
<th><strong>H02G 15/34</strong></th>
</tr>
</thead>
</table>
H02G 15/28

structurally associated with devices for indicating the presence or location of non-electric faults (combined with electric protective means H02H)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Emergency protective circuit arrangements | H02H |

H02G 15/34

Cable fittings for cryogenic cables { (superconductive cables per se H01B 12/00) }

Definition statement

This place covers:

Cable fittings for very low temperature environments including superconducting cable arrangements

References

Limiting references

This place does not cover:

| Superconductive cables per se | H01B 12/00 |