## **H02G**

# INSTALLATION OF ELECTRIC CABLES OR LINES, OR OF COMBINED OPTICAL AND ELECTRIC CABLES OR LINES

#### **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.

## Relationships with other classification places

Installation of purely optical cables is covered by G02B 6/46.

#### References

#### Informative references

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

Mechanical structures of optical cables	G02B 6/4401
Insulated conductors or cables with arrangements for facilitating mounting or securing	H01B 7/40
Distribution points incorporating switches	<u>H02B</u>
Guiding telephone cords	H04M 1/15
Cable ducts or mountings for telephone or telegraph exchange installations	H04Q 1/06

# **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

## 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:

Cleaning of insulators	H01B 17/52
Earthing sticks for live working	H01R 4/64

## H02G 1/04

# for mounting or stretching

## **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 general	B25B 25/00
Manufacturing or repairing trolley lines	B60M 1/28

# H02G 1/06

# for laying cables, e.g. laying apparatus on vehicle

#### **Definition statement**

This place covers:

The process of laying cables.

## References

#### Informative references

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

Installations of electric cables or lines in or on the ground or water	H02G 9/00
Laying cables combined with 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 <u>E21B 17/206</u>; for optical cables <u>G02B 6/4401</u>)}

## **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:

Inserting cables into tubes using drills	E21B 17/206
Installing optical cables in ducts	G02B 6/50
Apparatus or processes for salvaging material from cables where cables are cut and destroyed	H01B 15/00

## H02G 1/12

# for removing insulation or armouring from cables, e.g. from the end thereof

#### References

## Informative references

Pliers in general	<u>B25B</u>
Cutters in general	<u>B26B</u>
Insulated conductors or cables with arrangements for facilitating removal of insulation	H01B 7/38

{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:

Making a longitudinal and transverse or helical cut	H02G 1/1229
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# 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 cu	t H02G 1/1229
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# 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

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

# for joining or terminating cables

#### **Definition statement**

This place covers:

The process of joining (end-to end) or bundling (side-by-side) or terminating cables.

### References

#### Informative references

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

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 or protective tubing therefor 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)

#### **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:

Installations of bus-bars	H02G 5/00
Overhead installations	H02G 7/00
Installations in or on the ground	H02G 9/00

#### Informative references

Channels or vertical ducts for receiving utility lines on buildings	E04F 17/08
Supports for pipes, cables or protective tubing, specially adapted for supporting the pipes all along their length, e.g. pipe channels or ducts	F16L 3/26
Wiring of electric apparatus in general	<u>H05K</u>

#### **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
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# H02G 3/04

# Protective tubing or conduits, e.g. cable ladders or cable troughs

## References

#### Informative references

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

Pipes or tubing in general	<u>F16L</u>
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# 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
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# 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.

**Definition statement** 

· 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
mamosoon	Material expanding in case of the of fleat to the 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

Tubings for cables	H02G 3/0462
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#### 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

# {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:

Corrugated tubings	H02G 3/0468
Tubings formed by a succession of articulated units	H02G 3/0475

# H02G 3/0487

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

## References

# Limiting references

This place does not cover:

Corrugated tubings	H02G 3/0468
Tubings formed by a succession of articulated units	H02G 3/0475

# H02G 3/0493

# {Service poles}

#### **Definition statement**

This place covers:

Vertical ducts

#### References

#### Informative references

Medical bed nursing arrangements	A61G 12/00

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	<u>F16L 5/00</u>
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# 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

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

{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	H02G 3/0683
Electricaly connecting said armour	H02G 15/068

# 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
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# 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

# Distribution boxes; Connection or junction boxes

## References

#### Informative references

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

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
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# 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

## {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:

Pre establishment of boxes in concrete

E04G 15/04, E04G 15/06

## H02G 3/121

## {in plain walls}

#### **Definition statement**

This place covers:

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

# {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

#### **Definition statement**

This place covers:

Provisions inside the boxes, housings and enclosures for cable connecting.

#### References

## Informative references

Terminals	H01R 9/00
Details of coupling devices	H01R 13/00

# 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
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# 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
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# H02G 3/22

# Installations of cables or lines through walls, floors or ceilings, e.g. into buildings

#### References

#### Informative references

Devices for use where pipes or cables pass through walls or partitions	F16L 5/00
Lead-in or lead-through insulators	H01B 17/26
Insulating tubes or sleeves	H01B 17/58

{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
modiatoro in gonorar	<u>1101D 11700</u>

# H02G 3/26

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

#### References

## Limiting references

This place does not cover:

Installations of cables by means of insulators	H02G 3/24
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:

Supports for pipes, cables or protective tubing	F16L 3/00
Hose clips	F16L 33/02

# H02G 3/30

## Installations of cables or lines on walls, floors or ceilings

## **Definition statement**

This place covers:

Means for fastening cables to walls.

#### References

#### Informative references

Supports for pipes, cables or protective tubing	F16L 3/00
Hose clips	F16L 33/02

# 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:

Hose clips	F16L 33/02
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## 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

#### **Definition statement**

This place covers:

Holding means for cables in walls.

#### References

#### Informative references

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

Installations of cables or lines through walls, floors or ceilings, e.g. into	H02G 3/22
buildings	

# H02G 3/385

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

#### References

## Informative references

Construction of modular floors	E04F 15/02
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## {in modular walls, e.g. wall panels}

#### References

#### Limiting references

This place does not cover:

Structure of wall panels	E04B 2/7416
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## 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 <a href="HolR 3/00">HOLR 3/00</a>.
- 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 <a href="H02B 1/20">H02B 1/21</a> 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 <a href="https://hubbar.normally.nd/">https://hubbar.normally.nd/</a> and <a href="https://hubbar.nd/">https://hubbar.nd/</a> a

## References

#### Limiting references

This place does not cover:

Installation of cables	H02G 3/00
Cable fittings	H02G 15/00
Power rails for vehicles	B60M 1/30
Electric conductors	<u>H01B</u>

#### 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:

Power rails for vehicles	B60M 1/30
Lighting systems having parts displaceable along a guiding element, normally a busbar	F21V 21/34

#### Informative references

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

Flat insulated conductors	H01B 7/08
Busbar connections in AC/DC conversion	H02M 7/003
Printed high current conductors	H05K 1/0263
Wiring on insulating boards	H05K 7/08

# H02G 5/04

# Partially-enclosed installations, e.g. in ducts and adapted for sliding or rolling current collection

#### References

#### Informative references

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

Non-rotary current collectors	H01R 41/00
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## H02G 7/00

# Overhead installations of electric lines or cables (installations of bus-bars H02G 5/00)

## **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:

Installations of bus-bars	H02G 5/00

### 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:

Trolley wires or contact lines for electric railways	<u>B60M</u>

#### Informative references

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

	H01B 17/00, e.g. H01B 17/06, H01B 17/16 or H01B 17/22
Protection against abnormal electric conditions	<u>H01H</u>
Hook contacts for temporary connections to overhead lines	H01R 11/14

# 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:

Arrangements for supporting or suspending trolley wires	B60M 1/20
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## 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:

Arrangements for supporting or suspending trolley wires	B60M 1/20
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# 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:

ı	Damping spacers	H02G 7/125

## H02G 7/16

## Devices for removing snow or ice from lines or cables

## **Definition statement**

This place covers:

Mechanical or electrical devices, eventually using transported electricity.

#### References

#### Informative references

Devices for removing snow or ice from insulators	H01B 17/52

## 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

## **Definition statement**

This place covers:

- · Crossarms;
- Spatial disposition of parallel lines.

#### References

#### Informative references

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

Details of construction of poles, posts or towers	E04H 12/02	
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## H02G 9/00

# Installations of electric cables or lines in or on the ground or water

#### References

### Informative references

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

Cathodic protection	C23F 13/02
Detection of buried cables	<u>G01V</u>
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:

The process of laying cables in or on the ground	H02G 1/06
The process of laying cables in or on the sea-bottom	H02G 1/10
Coverings for cables laid in or on the ground	H02G 9/025

# H02G 9/06

# in underground tubes or conduits; Tubes or conduits therefor

#### References

# Limiting references

This place does not cover:

The process of laying cables in a tube or conduit	H02G 1/08

# H02G 9/10

# in cable chambers, e.g. in manhole or in handhole

## References

## Informative references

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

Manholes shafts	E02D 29/12
Structures for inspection	E04H 5/06

# H02G 9/12

# supported on or from floats, e.g. in water

## **Definition statement**

This place covers:

Installations of cables in water.

#### References

#### Informative references

The process of laying cables in water	H02G 1/10
Floating cables	H01B 7/12
Submarine cables per se	H01B 7/14

## H02G 11/00

# Arrangements of electric cables or lines between relatively-movable parts

## **Definition statement**

This place covers:

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

#### References

#### Informative references

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

Tubings for conductors	H02G 3/0462
Supplying energy to the end effector of a robot or similar manipulator	B25J 19/0025
Current collectors for power supply lines of electrically-propelled vehicles	B60L 5/00
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	<u>H01R</u>
Flexible or turnable connectors	H01R 35/00
Collectors for maintaining electrical contact between moving and stationary parts	H01R 41/00
Winding up of telephone cord	H04M 1/15

# 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

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
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# H02G 13/00

# Installations of lightning conductors; Fastening thereof to supporting structure

#### **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

#### Informative references

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

Indicating, counting or recording lightning strokes	<u>G01</u>
	H01C 7/12, H01C 8/04, H01G 9/18, H01T
Earth plates, pins or other contacts	<u>H01R</u>

## H02G 15/00

# **Cable fittings**

# **Glossary of terms**

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

<u></u>	
Condenser	Capacitor

# {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  $\frac{\text{H02G }15/32}{\text{H02G }15/32}$ )

# References

### Limiting references

This place does not cover:

Details of the sealing material	H02G 15/003
Inlets for cables filled with, or surrounded by, gas or oil	H02G 15/32

# 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

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

# Cable terminating boxes, frames or other structures

#### References

#### Informative references

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

Terminal blocks H01R 9/00
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## 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
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## H02G 15/08

Cable junctions (for gas or oil filled cables H02G 15/24)

#### References

## Limiting references

This place does not cover:

Cable Junctions for gas or oil-filled cables  H02G 15/24
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#### Informative references

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

Disconnectable junctions or electrical connections	<u>H01R</u>	
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# 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

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

# protected by boxes, e.g. by distribution, connection or junction boxes

#### References

#### Informative references

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

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

## H02G 15/105

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

#### References

#### Limiting references

This place does not cover:

Condenser type	H02G 15/107
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## 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:

Two-part coverings	H02G 15/113,
	<u>H02G 15/115</u>

#### Informative references

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

Preforms having internal stresses	B29C 61/00
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## H02G 15/1806

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

#### References

#### Limiting references

Insulation of electrical connectors per se using a heat shrinking insulating	H01R 4/72
sleeve	

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:

Cable fittings for cryogenic cables	H02G 15/34
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# H02G 15/28

structurally associated with devices for indicating the presence or location of non-electric faults

#### References

#### Informative references

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

Emergency protective circuit arrangements	<u>H02H</u>
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# 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

Superconductive cables per se	H01B 12/00