

## **B64G**

### **COSMONAUTICS; VEHICLES OR EQUIPMENT THEREFOR (apparatus for, or methods of, winning materials from extraterrestrial sources E21C51/00)**

#### **Definition statement**

*This subclass/group covers:*

- Cosmonautic vehicles.
- Observing or tracking cosmonautic vehicles.
- Tools specially adapted for use in space.
- Space suits.
- Simulating cosmonautic conditions.
- Cosmonautics not otherwise provided for.

#### **Special rules of classification within this subclass**

Indexing Codes with identical symbols starting with [L64D](#) are used for classifying additional information.

## **B64G 1/00**

### **Cosmonautic vehicles**

#### **Definition statement**

*This subclass/group covers:*

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## **B64G 1/002**

### **[N: Launch systems]**

## Definition statement

*This subclass/group covers:*

One use launching systems; e.g. rockets

## Informative references

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

Rockets	<a href="#">F41F 3/04</a>
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## Special rules of classification within this group

There will be an indexing scheme for the following:

Devices specially adapted to launch spacecraft from a platform at sea.

Dispensers arranging multiple satellites in a single launcher.

## B64G 1/005

[N: Air launch]

## Definition statement

*This subclass/group covers:*

Launching using aircraft.

## Informative references

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

Flying units formed by separate aircraft	<a href="#">B64C 37/02</a>
Aircraft transported by aircraft	<a href="#">B64D 5/00</a>

## B64G 1/007

[N: Orbit transfer]

## Definition statement

*This subclass/group covers:*

Devices used to orbit transfer of cosmonautic vehicles.

## B64G 1/10

**Artificial satellites; Systems of such satellites; Interplanetary vehicles (space shuttles B64G1/14; radio transmission systems using satellites H04B7/185)**

### Definition statement

*This subclass/group covers:*

- Satellites.
- Satellite constellations.
- Interplanetary vehicles.

### Informative references

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

Space shuttles	<a href="#">B64G 1/14</a>
Radio systems using satellites	<a href="#">H04B 7/185</a>

### Special rules of classification within this group

There will be an indexing scheme for the following:

- Earth observation satellites using optical means for mapping, surveying, Detection or intelligence.
- Earth observation satellites using radar for mapping, surveying, detection or intelligence.
- Meteorological satellites.
- Spacecraft specially adapted for astronomy observation.
- Spacecraft specially adapted for interplanetary, solar or interstellar exploration.
- Spacecraft specially adapted for the exploration of the surface of planets, Moons or comets.

## B64G 1/12

**manned**

## Definition statement

*This subclass/group covers:*

Space stations, e.g. International Space Station (ISS), Soviet Space station Mir.

## B64G 1/14

### Space shuttles

## Definition statement

*This subclass/group covers:*

Reusable space vehicles.

## B64G 1/24

**Guiding or controlling apparatus, e.g. for attitude control (jet-propulsion plants F02K; navigation or navigational instruments, see the relevant subclass, e.g. G01C; automatic pilots G05D1/00)**

## Definition statement

*This subclass/group covers:*

Means for attitude control.

## Informative references

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

Attitude control by solar sailing	<a href="#">B64G 1/407</a>
Jet propulsion plants	<a href="#">F02K</a>
Navigation or navigational instruments, see the relevant subclasses, e.g.	<a href="#">G01C</a>
Automatic pilots	<a href="#">G05D 1/00</a>

## Special rules of classification within this group

There will be an indexing scheme for:

Numerical aspects of spacecraft attitude control.

Advanced concepts for autonomous, robotic spacecraft, e.g. neural networks therefor.

## **B64G 1/242**

**[N: Orbits and trajectories]**

### **Definition statement**

*This subclass/group covers:*

- Position control.
- Station keeping.

## **B64G 1/26**

**using jets**

### **Definition statement**

*This subclass/group covers:*

Type of actuator device used for position control and station keeping.

## **B64G 1/36**

**using sensors, e.g. sun-sensors, horizon sensors**

### **Definition statement**

*This subclass/group covers:*

Type of sensor used for position control and station keeping.

## **B64G 1/40**

**Arrangements or adaptations of propulsion systems  
(B64G1/26 takes precedence; propulsion plants per se, see  
the relevant subclasses e.g. F02K, F03H)**

### **Definition statement**

*This subclass/group covers:*

Types of propulsion systems for cosmonautic vehicles

### **Informative references**

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

Power supply systems	<a href="#">B64G 1/42</a>
Propulsion plants per se, see the relevant subclasses, e.g.	<a href="#">F02K</a> , <a href="#">F03H</a>

## **B64G 1/42**

**Arrangements or adaptations of power supply systems  
(power supply systems per se, see the relevant subclasses)**

### **Definition statement**

*This subclass/group covers:*

Types of power supply systems for cosmonautic vehicles.

### **Informative references**

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

Propulsion systems	<a href="#">B64G 1/40</a>
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## **B64G 1/66**

**Arrangements or adaptations of apparatus or instruments, not otherwise provided for (instruments per se, see the relevant classes, e.g. aerials for use in satellites H01Q1/28)**

### **Definition statement**

*This subclass/group covers:*

Antennas.

### **Informative references**

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

Aerials for use in satellites	<a href="#">H01Q 1/28</a>
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## **B64G 1/68**

**of meteorite detectors**

## Definition statement

*This subclass/group covers:*  
Meteorite detectors.

## Informative references

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

Protection against meteorites	<a href="#">B64G 1/56</a>
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## B64G 3/00

**Observing or tracking cosmonautic vehicles (radio or other waves systems for navigating or tracking G01S)**

## B64G 4/00

**Tools specially adapted for use in space**

## Definition statement

*This subclass/group covers:*  
Space robots.

## Informative references

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

Robot arms	<a href="#">B25J 1/00</a>
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## Special rules of classification within this group

There will be an indexing scheme for the following:

Robotic manipulator systems in space

## B64G 5/00

**Simulating cosmonautic conditions, e.g. for conditioning crews (simulators for teaching or training purposes G09B9/00)**

## B64G 6/00

## Space suits

### Definition statement

*This subclass/group covers:*  
Space suits.

### Informative references

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

Flying suits	<a href="#">B64D 1/00</a>
High-altitude pressure suits	<a href="#">A62B 17/008</a>

## B64G 7/00

**Simulating cosmonautic conditions, e.g. for conditioning crews (simulators for teaching or training purposes G09B9/00)**

### Definition statement

*This subclass/group covers:*

- Space simulators.
- Training astronauts.

### Informative references

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

Simulators in general for training or teaching purposes	<a href="#">G09B 9/00</a>
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## Special rules of classification within this group

There will be an indexing scheme for the following:

Vacuum chambers

## B64G 9/00

**Cosmonautics not otherwise provided for**

## **Definition statement**

*This subclass/group covers:*

Space structures, e.g. space frames.

## **Special rules of classification within this group**

There will be an indexing scheme for the following:

Inflatable space structures.

High-frequency vibration effects on spacecraft structures.

Modular space systems.