

**ECLA****EUROPEAN CLASSIFICATION****G05G**

**CONTROL DEVICES OR SYSTEMS INsofar AS CHARACTERISED BY MECHANICAL FEATURES ONLY** ("Bowden" or like mechanisms [F16C1/10](#); gearings or mechanisms not peculiar to this purpose [F16H](#); speed changing or reversing mechanisms for gearings conveying rotary motion [F16H59/00](#) to [F16H63/00](#)) [[C9610](#)]

**Notes**

1. This subclass covers :

- members of general applicability for mechanical control;
- mechanical systems for moving members to one or more definite settings.

2. Systems peculiar to the control of particular machines or apparatus provided for in a single other class are classified in the relevant class for such machines or apparatus, for example:

<a href="#">A61G13/02</a>	Controls for adjusting operating tables
<a href="#">A61G15/02</a>	Controls for adjusting operating chairs
<a href="#">B25J</a>	Manipulators, e.g. controls therefor
<a href="#">B60K26/00</a>	Arrangement or mounting of propulsion-unit
control devices in vehicles	
<a href="#">B60T7/00</a>	Vehicle brake-action initiating means
<a href="#">B62D33/073</a>	Adaptations of control devices for movable
vehicle cabs	
<a href="#">B62K21/00</a>	Cycle-steering devices
<a href="#">B62K23/00</a>	Rider-operated controls specially adapted
for cycles	
<a href="#">B62L3/00</a>	Brake-actuating mechanisms specially adapted
for cycles	
<a href="#">B63H25/02</a>	Marine steering initiating means
<a href="#">B66B1/00</a>	Controls for elevators
<a href="#">B66C13/18</a>	Control systems or devices for cranes
<a href="#">B66C13/56</a>	Arrangements of handles or pedals for crane
operation	
<a href="#">E02F9/20</a>	Control devices for dredging or soil
shifting machines	
<a href="#">F16C3/28</a>	Adjustable cranks or eccentrics
<a href="#">F16D43/00</a>	Automatic clutches
[N: <a href="#">F16H59/00</a> to <a href="#">F16H63/00</a>	Speed changing or reversing
mechanisms for gearings conveying rotary motion]	
<a href="#">F16K31/00</a> , <a href="#">F16K33/00</a>	Controls for valves
<a href="#">F16P3/00</a>	Safety devices acting in conjunction with
the control or operation of a machine	
<a href="#">F16P7/02</a>	Stopping machines on occurrence of dangerous
conditions therein	
<a href="#">G02B21/32</a>	Micromanipulators structurally combined with
microscopes	
<a href="#">G04B1/00</a> to <a href="#">G04B18/00</a>	Driving mechanisms in clocks or
watches	
<a href="#">G06C</a>	Digital computers in which all the
computation is effected mechanically	
<a href="#">G06F3/02</a>	Manual computer input arrangements
<a href="#">G06K11/00</a>	Converting a pattern of mechanical
parameters into electric signals	
<a href="#">G21C7/08</a>	Displacement of solid control elements in
nuclear reactors	
<a href="#">H01H</a>	Mechanisms for operating switch contacts

[H03J1/00](#)

Mechanical control of resonant circuits.

- G05G1/00** **Controlling members, e.g. knobs or handles; Assemblies or arrangements thereof; Indicating position of controlling members** ([N: means for preventing, limiting or returning the movements of parts of a control mechanism [G05G5/00](#); providing feel, e.g. means to create a counterforce [G05G5/03](#); specially adapted for programme control [G05G21/00](#); vibration damping [G05G25/02](#);) joysticks [G05G9/04](#); steering wheels for motor vehicles [B62D](#)) [C0804]
- Notes**In this group the first place priority rule is applied, i.e. at each hierarchical level classification is made in the first appropriate place [N0804]
- G05G1/01 . Arrangements of two or more controlling members with respect to one another (double foot control, e.g. for instruction vehicles [G05G1/34](#); mounting units comprising an assembly with two or more pedals [G05G1/36](#)) [N0804]
  - G05G1/015 . Arrangements for indicating the position of a controlling member (means for continuously detecting pedal position [G05G1/38](#); means for detecting position through tactile feedback [G05G5/03](#)) [N0804]
  - G05G1/02 . Controlling members for hand actuation by linear movement, e.g. push buttons [C0804]
  - G05G1/02S . . [N: actuated by sliding movement]
  - G05G1/04 . Controlling members for hand actuation by pivoting movement, e.g. levers [C0804]
  - G05G1/06 . . Details of their grip parts [N: ([G05G1/10](#) takes precedence)] [C0804]
  - G05G1/08 . Controlling members for hand actuation by rotary movement, e.g. hand wheels [C0804]
  - G05G1/08A . . [N: having safety devices, e.g. means for disengaging the control member from the actuated member]
  - G05G1/08B . . [N: Crank handles ([G05G1/08A](#) takes precedence)]
  - G05G1/08R . . [N: retractable; Flush control knobs]
  - G05G1/10 . . Details, e.g. of discs, knobs, wheels or handles [N: ([G05G1/08B](#) takes precedence)] [C0804]
  - G05G1/10B . . . [N: comprising arrangements for illumination]
  - G05G1/12 . . . Means for securing the members on rotatable spindles or the like
  - G05G1/30 . Controlling members actuated by foot [N0804]
  - G05G1/30B . . [N: Compound pedal co-operating with two or more controlled members] [N0804]
  - G05G1/32 . . with means to prevent injury [N0804]
  - G05G1/323 . . . means disconnecting the connection between pedal and controlled member, e.g. by breaking or bending the connecting rod [N0804]
  - G05G1/327 . . . means disconnecting the pedal from its hinge or support, e.g. by breaking or bending the support [N0804]

- G05G1/34 . . Double foot controls, e.g. for instruction vehicles [N0804]
- G05G1/36 . . Mounting units comprising an assembly of two or more pedals, e.g. for facilitating mounting [N0804]
- G05G1/38 . . comprising means to continuously detect pedal position [N0804]
- G05G1/40 . . adjustable [N0804]
- G05G1/405 . . . infinitely adjustable [N0804]
- G05G1/42 . . non-pivoting, e.g. sliding [N0804]
- G05G1/44 . . pivoting [N0804]
- G05G1/445 . . . about a central fulcrum [N0804]
- G05G1/46 . . Means, e.g. links, for connecting the pedal to the controlled unit [N0804]
- G05G1/48 . . Non-slip pedal treads; Pedal extensions or attachments characterised by mechanical features only [N0804]
- G05G1/483 . . . Non-slip treads; Pedal extensions or attachments characterised by mechanical features only [N0804]
- G05G1/487 . . . Pedal extensions [N0804]
- G05G1/50 . . Manufacturing of pedals; Pedals characterised by the material used [N0804]
- G05G1/50B . . . [N: Controlling members for hand-actuation] [N0804]
- G05G1/50D . . . [N: Controlling members for foot-actuation] [N0804]
  
- G05G1/52 . Controlling members specially adapted for actuation by other parts of the human body than hand or foot [N0804]
  
- G05G1/54 . Controlling members specially adapted for actuation by auxiliary operating members or extensions; Operating members or extensions therefor (pedal extensions) [N0804]
- G05G1/56 . . Controlling members specially adapted for actuation by keys, screwdrivers or like tools [N0804]
  
- G05G1/58 . Rests or guides for relevant parts of the operator's body [N0804]
- G05G1/60 . . Foot rests or foot guides [N0804]
- G05G1/62 . . Arm rests [N0804]
  
- G05G3/00** **Controlled members; Assemblies or arrangements thereof** (interlocking of controlled members [G05G5/08](#))
  
- G05G5/00** **Means for preventing, limiting or returning the movements of parts of a control mechanism, e.g. locking controlling member** ([G05G17/00](#) takes precedence) [C9610]
  
- G05G5/00B . [N: for preventing unintentional use of a control mechanism ([G05G5/28](#) takes precedence)]
  
- G05G5/02 . Means preventing undesired movements of a controlling member which can be moved in two or more separate steps or ways, e.g. restricting to a stepwise movement or to a particular sequence of movements ([G05G5/28](#) takes precedence)
  
- G05G5/03 . Means for enhancing the operator's awareness of arrival of the controlling member at a command or datum position; Providing feel, e.g. means for creating a counterforce ([arrangements for indicating the position of the controlling member G05G1/015](#)) [C0811]

- G05G5/04 . Stops for limiting movement of members e.g. adjustable stop ([G05G5/03](#), [G05G5/05](#), [G05G5/28](#) take precedence)
- G05G5/05 . Means for returning or tending to return controlling members to an inoperative or neutral position, e.g. by providing return springs or resilient end-stops ([G05G5/28](#) takes precedence)
- G05G5/06 . for holding members in one or a limited number of definite positions only ([N: [G05G5/00B](#)], [G05G5/03](#), [G05G5/05](#), [G05G5/28](#) take precedence)
- G05G5/06R . . [N: using a spring-loaded ball] [N9508]
- G05G5/08 . . Interlocking of members, e.g. locking member in a particular position before or during the movement of another member
- G05G5/12 . for holding members in an indefinite number of positions, e.g. by a toothed quadrant ([G05G5/28](#) takes precedence)
- G05G5/14 . . by locking a member with respect to a fixed quadrant, rod, or the like
- G05G5/16 . . . by friction
- G05G5/18 . . . by positive interengagement, e.g. by a pawl
- G05G5/20 . . by locking a quadrant, rod, or the like carried by the member
- G05G5/22 . . . by friction
- G05G5/24 . . . by positive interengagement, e.g. by a pawl
- G05G5/26 . . by other means than a quadrant, rod, or the like
- G05G5/28 . for preventing unauthorised access to the controlling member or its movement to a command position
- G05G7/00** **Manually-actuated control mechanisms provided with one single controlling member co-operating with one single controlled member; Details thereof** ([controlling members G05G1/00](#))
- G05G7/02 . Characterised by special provisions for conveying or converting motion, or for acting at a distance
- G05G7/04 . . altering the ratio of motion or force between controlling member and controlled member as a function of the position of the controlling member
- G05G7/06 . . in which repeated movement of the controlling member produces increments of movement of the controlled member ([G05G7/08](#) takes precedence)
- G05G7/08 . . in which repeated movement of the controlling member moves the controlling member through a cycle of distinct positions
- G05G7/10 . . specially adapted for remote control ([G05G7/04](#) to [G05G7/08](#) take precedence)
- G05G7/12 . specially adapted for actuating a member on a system in motion with respect to the controlling member, e.g. on a rotating shaft [[C9610](#)]
- G05G7/14 . characterised by means for delaying initiation of, or making more gradual throughout, the movement of the controlled member in response to a given input from the controlling member, e.g. by providing lost motion in the command train
- G05G7/16 . Special provisions for reducing the effect of slight relative movement between supports of the mechanism e.g. resulting from resilient mounting of a controlled mechanism

- G05G9/00**      **Manually-actuated control mechanisms provided with one single controlling member co-operating with two or more controlled members, e.g. selectively, simultaneously**
- G05G9/02      . the controlling member being movable in different independent ways, movement in each individual way actuating one controlled member only
- G05G9/04      . . in which movement in two or more ways can occur simultaneously
- G05G9/047      . . . the controlling member being movable by hand about orthogonal axes, e.g. joysticks [N: (for switches [H01H25/04](#))]
- G05G9/047B      . . . . [N: with six degrees of freedom]
- G05G9/047S      . . . . [N: the controlling member being the operating part of a switch arrangement] [N9804]
- G05G9/047S2      . . . . . [N: comprising additional control elements] [N9804]
- G05G9/047S2B      . . . . . [N: for rotary control around the axis of the controlling member] [N9804]
- G05G9/047S2C      . . . . . [N: for rectilinear control along the axis of the controlling member] [N9804]
- G05G9/053      . . . . the controlling member comprising a ball [N: (graph-reading using a tracing ball or mouse [G06K11/18](#))]
- G05G9/06      . the controlled members being actuated successively by repeated movement of the controlling member
- G05G9/08      . the controlled members being actuated successively by progressive movement of the controlling member [N: (Single lever throttle and clutch control for marine engines [B63H21/22B](#))]
- G05G9/08D      . . [N: the controlling member acting on a set of cams or slot cams] [C9610]
- G05G9/10      . with preselection and subsequent movement of each controlled member by movement of the controlling member in two different ways, e.g. guided by a shift gate
- G05G11/00**      **Manually-actuated control mechanisms provided with two or more controlling members co-operating with one single controlled member**
- G05G13/00**      **Manually-actuated control mechanisms provided with two or more controlling members and also two or more controlled members (interlocking [G05G5/08](#))**
- G05G13/02      . with separate controlling members for preselection and shifting of controlled members
- G05G15/00**      **Mechanical devices for initiating a movement automatically due to a specific cause [C9610]**
- G05G15/00A      . [N: due to an abnormal functioning of the controlled apparatus (if speed is abnormal [G05G15/06](#))] [N9512]
- G05G15/00D      . [N: due to a dangerous situation for the operator] [N9512]
- G05G15/00P      . [N: due to an exerted pressure] [N9512]

- G05G15/02
  - . due to alteration of the sense of movement of a member
- G05G15/04
  - . due to distance or angle travelled by a member
- G05G15/06
  - . due to the speed of rotation or of bodily movement of a member, e.g. passing an upper or lower limit thereof ([speedometers G01P](#))
- G05G15/08
  - . due to the load or torque on a member, e.g. if exceeding a predetermined value thereof
- G05G17/00**
  - Mechanical devices for moving a member after being released; Trip or release mechanisms characterised thereby**
- G05G19/00**
  - Servo-mechanisms with follow-up action, e.g. occurring in steps**
- G05G21/00**
  - Mechanical apparatus for control of a series of operations, i.e. programme control, e.g. involving a set of cams ([G05G5/02](#) takes precedence)**
- G05G23/00**
  - Means for ensuring the correct positioning of parts of control mechanisms, e.g. for taking-up play**
- G05G23/02
  - . self-adjusting
- G05G25/00**
  - Other details or appurtenances of control mechanisms, e.g. supporting intermediate members elastically**
- G05G25/02
  - . Inhibiting the generation or transmission of noise [**N: (suppression of noise or vibrations in selector apparatus for gearings [F16H59/02B](#))**]
- G05G25/04
  - . Sealing against entry of dust, weather or the like [**N: (in selector apparatus for gearings, [F16H59/02C](#))**]