

**ECLA****EUROPEAN CLASSIFICATION****G06M****COUNTING MECHANISMS; COUNTING OF OBJECTS NOT OTHERWISE PROVIDED FOR**

(counting by measuring volume or weight of articles to be counted [G01F](#), [G01G](#); computers [G06C](#) to [G06J](#); counting electric pulses [H03K](#); counting characters, words or messages in switching networks for transmission of digital information [H04L12/08](#))

**Note**

This subclass covers:

- stepping or continuously-moving mechanical counters operated through one or more inputs applied to the lowest order mechanically or electrically;
- counting systems involving applications of either mechanical, electrical, or electronic counters.

**G06M1/00****Design features of general application**

- G06M1/02 . Housing (for measuring instruments in general [G01D](#))
- G06M1/02B . . [N: Plates]
- G06M1/02B2 . . . [N: Bearings]
- G06M1/02C . . [N: Connecting or supporting parts]
- G06M1/02D . . [N: Arbors, drum fixing and adjusting means (arbor-fixing means [F16C17/08](#))]
- G06M1/04 . for driving the stage of lowest order (with variable ratio of drive [G06M1/38](#))
- G06M1/04B . . [N: for drum-type indicating means]
- G06M1/04B2 . . . [N: with click devices (electromagnetic driving means [G06M1/10C](#))]
- G06M1/04B4 . . . [N: with escapements (electromagnetic driving means [G06M1/10C](#))]
- G06M1/04C . . [N: for dial, pointer, or similar type indicating means]
- G06M1/04D . . [N: for arithmetical operations]
- G06M1/04F . . [N: with switching means between two or more counting devices]
- G06M1/06 . . producing continuous revolution of the stage, e.g. with gear train
- G06M1/06B . . . [N: for drum type indicating means]
- G06M1/06C . . . [N: for dial, pointer, or similar type indicating means]
- G06M1/06D . . . [N: for arithmetical operations]
- G06M1/06F . . . [N: with switching means between two or more counting devices]
- G06M1/08 . for actuating the drive
- G06M1/08B . . [N: by mechanical means (counting of stacked objects [G06M9/00](#))]
- G06M1/08B2 . . . [N: including barriers (counting of conveyed objects [G06M7/00](#))]
- G06M1/10 . . by electric or magnetic means
- G06M1/10B . . . [N: by electro-optical means]
- G06M1/10C . . . [N: by magnetic or electromagnetic means]
- G06M1/10C2 . . . . [N: electromagnets, clicks]

- G06M1/10C2B . . . . . [N: electronic circuits for actuating the electromagnets]
- G06M1/10C4 . . . . . [N: electromotors]
- G06M1/10D . . . . . [N: by electronic means]
- G06M1/12 . . . . . by fluid means
- G06M1/12B . . . . . [N: by pneumatic means]
- G06M1/12C . . . . . [N: by hydraulic means]
  
- G06M1/14 . . . . . for transferring a condition from one stage to a higher stage (with variable ratio of transfer [G06M1/38](#))
- G06M1/14B . . . . . [N: with drums]
- G06M1/14C . . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/16 . . . . . self-operating, e.g. by Geneva mechanism
- G06M1/16B . . . . . [N: with drums]
- G06M1/16C . . . . . [N: with dials, pointers or similar type indicating means]
- G06M1/18 . . . . . requiring external operation, e.g. by electromagnetic force
- G06M1/18B . . . . . [N: with drums]
- G06M1/18C . . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/20 . . . . . specially adapted for denominations with unequal numbers in each stage, e.g. degrees and minutes of angle
  
- G06M1/22 . . . . . for visual indication of the result of count on counting mechanisms, e.g. by window with magnifying lens
- G06M1/24 . . . . . Drums; Dials; Pointers (for measuring instruments in general [G01D](#); [N: for time measuring instruments [G04B19/00](#), including drums [G04B19/20C](#), [G04C19/04](#); date indicating [G04B19/24](#)])
- G06M1/24B . . . . . [N: Drums]
- G06M1/24B2 . . . . . [N: Drums with presetting means]
- G06M1/24C . . . . . [N: Dials; Pointers]
- G06M1/24D . . . . . [N: Bands; Sheets]
- G06M1/24F . . . . . [N: Discs]
- G06M1/26 . . . . . Aligning means
  
- G06M1/27 . . . . . for representing the result of count in the form of electric signals, e.g. by sensing markings on the counter drum
- G06M1/272 . . . . . using photoelectric means
- G06M1/274 . . . . . using magnetic means; using Hall-effect devices
- G06M1/276 . . . . . using mechanically-actuated contacts
  
- G06M1/28 . . . . . for zeroising or setting to a particular value
- G06M1/28B . . . . . [N: with drums]
- G06M1/28C . . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/30 . . . . . using heart-shaped or similar cams; using levers
- G06M1/30B . . . . . [N: with drums]
- G06M1/30C . . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/32 . . . . . Actuating means, e.g. magnet, spring, weight

- G06M1/32B . . . . [N: with drums]
- G06M1/32C . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/34 . . using reset shafts
- G06M1/34B . . . . [N: with drums]
- G06M1/34C . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/36 . . . . Actuating means, e.g. magnet, spring, weight
- G06M1/36B . . . . [N: with drums]
- G06M1/36C . . . . [N: with dials, pointers, or similar type indicating means]
- G06M1/38 . . for varying ratio of drive or transfer mechanism, e.g. by using alternative counting trains
- G06M1/38B . . [N: differentials]

**G06M3/00** **Counters with additional facilities** (generating electric pulses at random intervals [H03K3/84](#))

- G06M3/02 . . for performing an operation at a predetermined value of the count, e.g. arresting a machine [N: ([G06M3/04](#) takes precedence)]
- G06M3/02B . . . . [N: with drums type indicating means]
- G06M3/02B2 . . . . [N: by subtracting]
- G06M3/02B4 . . . . [N: by adding]
- G06M3/02C . . . . [N: with dial, pointer, or similar type indicating means]
- G06M3/02C2 . . . . [N: by subtracting]
- G06M3/02C4 . . . . [N: by adding]
- G06M3/04 . . with an additional counter train operating in the reverse direction
- G06M3/04B . . . . [N: with drums]
- G06M3/04C . . . . [N: with dials, pointers, or similar type indicating means]
- G06M3/06 . . for printing or separately displaying result of count (display systems [G09](#))
- G06M3/06B . . . . [N: for printing]
- G06M3/06B2 . . . . [N: with drums]
- G06M3/06B4 . . . . [N: with dials, pointers, or similar type indicating means]
- G06M3/08 . . for counting the input from several sources; for counting inputs of different amounts
- G06M3/10 . . for counting denominations with unequal numbers in each stage, e.g. degrees and minutes of angle (transfer mechanism therefor [G06M1/20](#))
- G06M3/12 . . for preventing incorrect actuation, e.g. for preventing falsification
- G06M3/14 . . for registering difference of positive and negative actuations

**Guide heading:** **Counting of objects** (in machines for shaping metal without removing material [B21C51/00](#); in printing machines or presses [B41F33/02](#); in office copying machines [B41L39/02](#); of axles of rail vehicles [B61L1/16](#); in packaging machines [B65B65/08](#); of objects conveyed through a pipe or tube [B65G51/36](#); entry or exit registers [G07C9/00](#))

## **G06M7/00**

### **Counting of objects carried by a conveyer**

G06M7/02

- . wherein objects ahead of the sensing element are separated to produce a distinct gap between successive objects

G06M7/04

- . . Counting of piece goods, e.g. of boxes

G06M7/06

- . . Counting of flat articles, e.g. of sheets of paper

G06M7/08

- . wherein the direction of movement of the objects is changed at the station where they are sensed

G06M7/10

- . . Counting of flat overlapped articles, e.g. of cards

## **G06M9/00**

### **Counting of objects in a stack thereof**

G06M9/02

- . by using a rotating separator incorporating pneumatic suction nozzles

G06M9/02B

- . . [N: the rotation axis being substantially parallel to the stacking direction] [N9411]

## **G06M11/00**

### **Counting of objects distributed at random, e.g. on a surface**

G06M11/02

- . using an electron beam scanning a surface line by line, e.g. of blood cells on a substrate

G06M11/04

- . . with provision for distinguishing between different sizes of objects ([investigating particle size in general G01N15/00](#))