Position indicators

Principles of operation

Position indicators are mechanical measuring devices which indicate and monitor the movement of a machine component along a linear shaft or threaded lead spindle.

They are used to move and give a read out of values such as lengths [m, mm], force [N], volumes [l], revolutions [rpm] etc.

Position indicators are split into the following categories:

Operating principle of the measuring mechanism

- Energized by a weighted pendulum and gravity (pendulum system) for connecting to a horizontal spindle

  GN 000.8 → *Page xx*

  GN 000.3 → *Page xx*

- Self energized, direct or indirect, stationary system to be connected in any required position

  GN 000.9 → *Page xx*

  GN 000.13 → *Page xx*

  GN 953 → *Page xx*

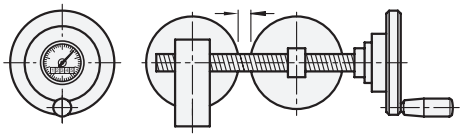
  GN 954 → *Page xx*

  GN 955 → *Page xx*

Type of read out

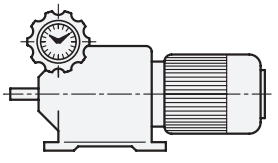
- analogue (GN 000.8 / 000.9)
- digital / analogue (GN 000.3 / 000.13)
- digital (GN 953 / 954 / 955)

The movement is in most cases initiated by control systems. There is an extensive range of handwheels and hand knobs available which can be used for incorporaring position indicators in their hubs.



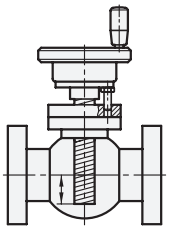
Handwheel with position indicators GN 000.3
Operating principle pendulum system, digital and analogue read out

Applications:
Movement of shafts (rollers) in the machine construction industry (Printing machines, steel and sheet metal straightening machines)



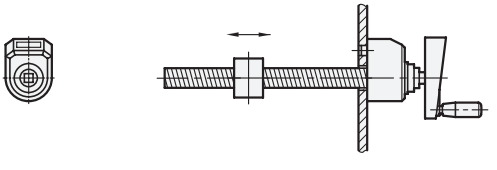
Handwheel with position indicators GN 000.8
Operating principle pendulum system, analogue read out

Applications:
Regulating rpm speed on steplessly adjustable gear boxes



Handwheel with position indicators GN 000.9 / GN 000.13
Operating principle stationary system, digital and analogue read out

Applications:
Valve timing at vertical adjusting spindle



Hand lever with position indicators GN 953 / GN 954 / GN 955
Operating principle stationary system (direct driven), digital read out

Applications:
Positioning of machine parts