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:

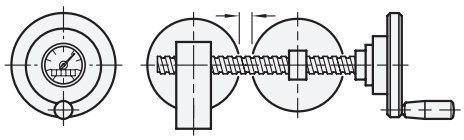
Operating principle of the measuring mechanism

- Energized by a weighted pendulum and gravity (pendulum system) for connecting to a horizontal spindle
  - GN 000.8 → *Page 283*
  - GN 000.3 → *Page XYZ*
- Self energized, direct or indirect, (stationary system) to be connected in any required position
  - GN 000.9 → *Page 288*
  - GN 000.13 → *Page 291*
  - GN 953 → *Page 296*
  - GN 954 → *Page 298*
  - GN 955 → *Page 300*
- Drive, direct and contact-free
  - GN 9053 → *Page 302*
  - GN 9054 → *Page 304*
  - GN 9153 → *Page XYZ*

Type of read out

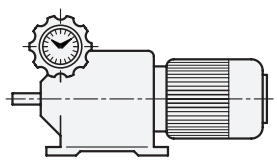
- analog (GN 000.8 / 000.9)
- digital / analog (GN 000.3 / 000.13)
- digital (GN 953 / 954 / 955)
- digital, electronic, LCD-display (GN 9053 / GN 9054)
- digital, electronic, LCD-display, with data transmission via radio frequency (GN 9153)

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.



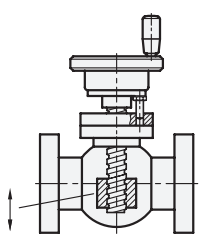
Handwheel with position indicator GN 000.3
Operating principle pendulum system,
digital and analog read out

Application example:
Positioning of rollers in mechanical engineering
(pressing machines, straightening machines)



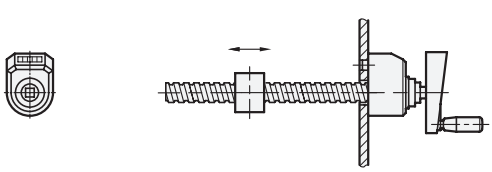
Handwheel with position indicator GN 000.8
Operating principle pendulum system, analog read out

Application example:
Regulating rpm speed on steplessly adjustable gear boxes



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

Application example:
Valve adjustment with vertically oriented adjusting spindle



Cranked handle with position indicators GN 953 / GN 954 / GN 955 / GN 9053 / GN 9054 / GN 9153
Operating principle stationary system (direct driven), digital read out

Application example:
Positioning of machine parts