

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 [I], 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 spind	le
GN 000.8	→ Page 366
GN 000.3	→ Page 367
- Self energized, direct or indirect, (stationary system) to be connected in any required position	
GN 000.9	→ Page 386
GN 000.13	→ Page 387
GN 953	→ Page 396
GN 954	→ Page 398
GN 955	→ Page 400
- Drive, direct and contact-free	
GN 9053	→ Page 402
GN 9054	→ Page 404
GN 9153	→ Page 406
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)

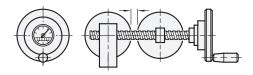
The movement is in most cases initiated by control systems. There is an extensive range of handwheels and hand knobs available which can be used for incorporaring position indicators in their hubs.



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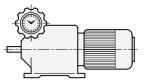
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Handwheel with position indicator GN 000.3 Operating principle pendulum system, digital and analog read out

## Application example:

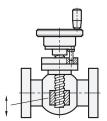
Positioning of rollers in mechanical engineering (pressing machines, straightening machines)



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:

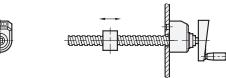
Valve adjustment with vertically oriented adjustment spindle

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2.1

2.2



Cranked handle with position indicator 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