

Position Digital Indicators - Overview

Features

Digital Display is easy to read.

Positioning and indexing with Feed Screw is easy.

It prevents wrong setting caused by error in display indication when the screw mechanism is changed at the factory.

Various Lineup

MISUMI Digital Position Indicators are designed to use in combination with our Lead Screws. Two sizes of display, three mounting types, two body colors are available.

4-Digit and 5-Digit indication and With Counter Reset are available.

Mounting Position	Standard Spindle	Front Spindle	Vertical Spindle	Counter Indication
Large (with Counter Reset)				<p>5-Digit Type</p> <p>One tenth 1/100</p> <p>Dimensions: 4.1, 5.8, 5.5</p> <p>• On the counter initialized to the "all zeros" state, insert the wrench and rotate it counter-clockwise. The counter is switched to the "all 9s" state.</p>
Compact (without Counter Reset)				<p>4-Digit Type</p> <p>One tenth 1/100</p> <p>5-Digit Type</p> <p>Dimensions: 3.6, 5.2, 4.8</p> <p>• The leftmost position is blank on the 4-digit counter.</p> <p>• On the counter initialized to the "all zeros" state, insert the wrench and rotate it counter-clockwise. The counter is switched to the "all 9s" state.</p>

Large

Color	Display Digits	Feed Screw Pitch (Display Number per Revolution)
Orange	Silver	5-Digit
		3 4 5 6

- With Counter Reset
- Applicable to mounting shaft end dia. 12, 14, 15, 16, 17 and 20.
- * When used with a lead screw with the same pitch, display number and pitch number will be the same.

Compact

Color	Display Digits	Feed Screw Pitch (Display Number per Revolution)
Orange	Silver	4-Digit 5-Digit
		2 3 4 5 6

- 4-Digit Type and 5-Digit Type are available for the same size.
- Applicable to mounting shaft end dia. 6, 8, 10, 12 and 14.
- * When used with a lead screw with the same pitch, display number and pitch number will be the same.

Color

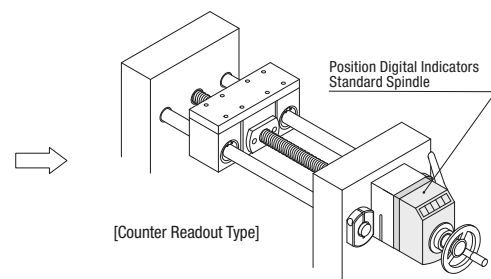
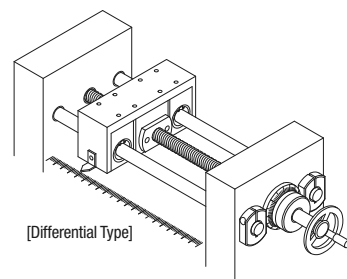


Usage

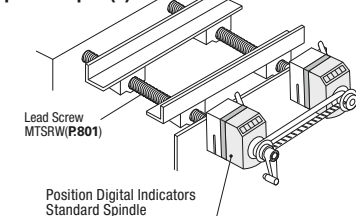
Can be used to confirm the present setting position such as the transfer of table that utilizes screw feed mechanism and the slide adjustment.

Conventional Method : Reading errors occur.

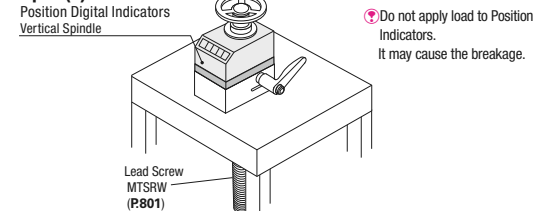
When Indicator is Used : Digital indication reduces the reading errors.



App. Example (1)



App. Example (2)



How to Mount: Large

- Provide a hole used for locating.

End of Thread Shaft

(Not necessary if a clamp plate is used.)
- Mount the included cushion sheet and pass it through the screw shaft.

Cushion Sheet
- Make sure that the screw shaft is in the correct position and that the indicator is set at 0, fix it with the included set screw.

* Large Position Indicators can be mounted same as Compact Position Indicators.

Caution
Do not move the position indicator with set screws installed on the shaft. Otherwise, the axial load is applied and thereby, may damage the indicator.

How to Mount: Compact

- Provide a hole used for locating.

End of Thread Shaft

(Not necessary if a clamp plate is used.)
- Mount the included cushion sheet and pass it through the screw shaft.

Cushion Sheet
- Set the indicator at "0" and then fix it with the attached set screws.

Caution
Do not move the position indicator with set screws installed on the shaft. Otherwise, the axial load is applied and thereby, may damage the indicator.

Counter Reset Procedures (Only for Large Type)

Standard Spindle

- Remove the cap.
- Insert a hex wrench (3.0mm Hex.) and turn until all zeros are indicated, then stop.
- Turn the hex wrench to the original position.

Front Spindle

- Remove the cap.
- Insert a hex wrench (3.0mm Hex.) and turn until all zeros are indicated, then stop.
- Turn the hex wrench to the original position.

Vertical Spindle

- Remove the cap.
- Insert a hex wrench (3.0mm Hex.) and turn until all zeros are indicated, then stop.
- Turn the hex wrench to the original position.

Caution

Turning the wrench more than necessary may cause damages on the unit. Turn the wrench slowly.

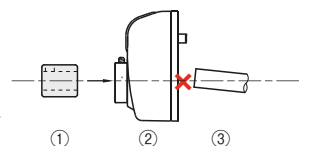
Please note that there should be space for hex wrench.

When all zeros are not indicated on the counter panel, even if counter reset is tried, retry counter reset, so the counter is initialized to the all zeros state.

00000	Completed successfully, because the all zeros are indicated.
00040	Failed, because all the zeros are not indicated. => Repeat Counter Reset until the counter is initialized to the all zeros state.

Notes

- The count goes up depending on turning distance, as the screw shaft (lead screw, slide screw, etc.) is turned clockwise.
- The count goes down as the screw shaft is turned counterclockwise.
- The rotational speed at the start-up should not exceed 1/3 of maximum rotational speed (rpm).
- Must not be abruptly accelerated or decelerated.
- Do not use an electric screwdriver. It may cause damages.
- Do not use when shafts move to the thrust (shaft) direction. It may cause damages.
- Insert a screw shaft into the indicator in such a way that it is positioned quite vertically to the I.D. center of the indicator. Otherwise, malfunction may occur.



Selection of Position Indicator Collar

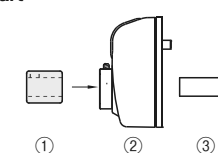
Position Indicator ② has a fixed I.D. (Large Ø20, Compact Ø14)

Shafts ③ whose O.D. is less than 20mm (Large) / 14mm (Compact) are used with a collar ① attached.

Indicator Collar Details P701, 702

Indicator Collar Selection Chart

Indicator Shaft O.D.	Indicator Alteration Part Number
06	-CSE6
08	-CSE8
010	-CSE10
012	-CSE12
014	-CSE14
015	-CSE15
016	-CSE16
017	-CSE17



- ① Indicator Collar
- ② Digital Position Indicators (Large Ø20, Compact Ø14)
- ③ Shaft O.D.