

Z 300 OVERVIEW

The Digital Readout Z 300 is especially suited for use on milling, drilling and boring machines and lathes with up to three axes. A separate I/O unit provides switching input/outputs for simple tasks in automation (optional: IFB 48).

Description

The Z 300 display unit is designed as a sturdy upright unit with splash-proof fulltravel keypad for use in a workshop. It is equipped with a monochrome flat screen for position values, dialog and input displays, graphic functions and graphic positioning support.

Functions

The Z 300 display unit is characterized by its plain language dialog guidance. The distance-to-go display facilitates positioning. You approach the next position quickly and reliably by simply traversing until the display reads "zero". The functions for each application are easily activated by parameter input. Special functions are available for producing hole patterns (linear patterns and circular patterns). Datums can be determined quickly and accurately with an edge finder. The Z 300 readout supports you with special probing functions.

You can easily switch between radius and diameter display when the position display is configured for turning. The readout also offers support for lathes with separate top slide: The sum display feature allows you to display the saddle and top slides together or separately. To set a datum, touch the workpiece and freeze the tool position. Then retract and measure the workpiece.

Data interfaces

The Z 300 features an RS-232-C/V.24 serial interface for measured value transfer to a PC or printer, for input/output of parameters and compensation value lists and for diagnostics.

Mounting

Z 300 is conceived as an upright unit.

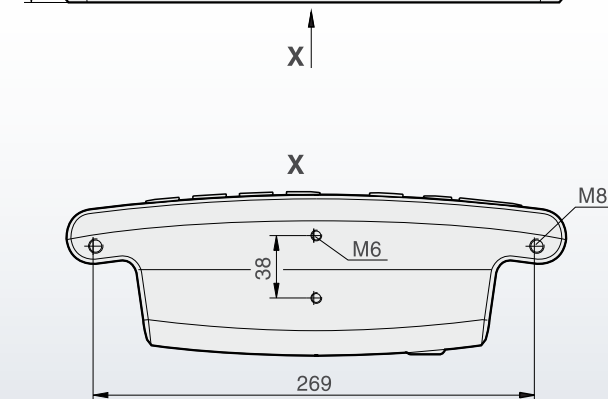
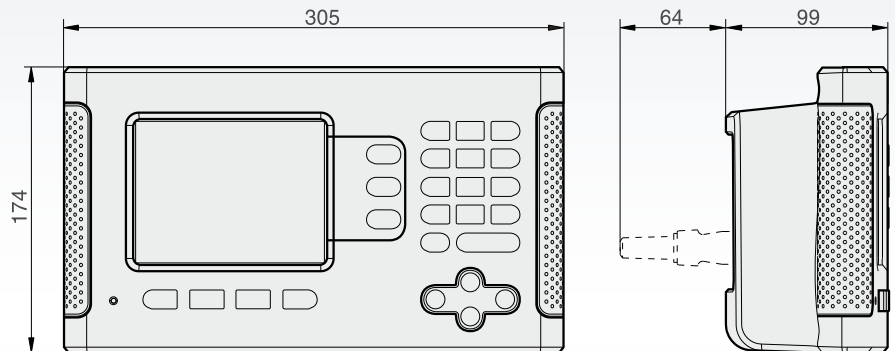
Mounting possibilities:

- Threaded mounting holes M6 and M8 on the housing floor
- Mounting frame (optional)

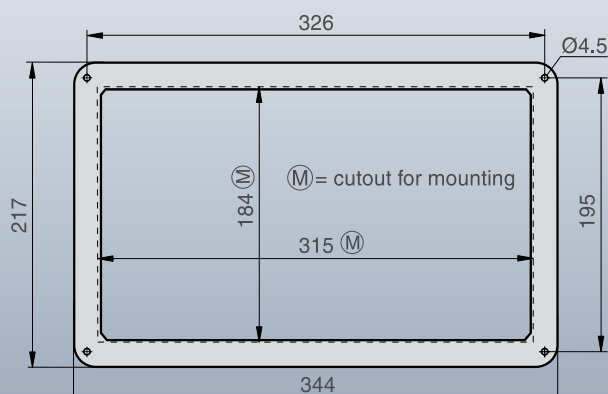
Mounting frame (optional accessory)

ID 532 811-01

For mounting the digital readout in a housing or operating panel.



mm
 tolerances ISO 8015
 ISO 2768 - m H
 < 6 mm: ±0.2 mm



Z 300 TECHNICAL DATA

Features

Axes	2 or 3
Encoder inputs	RS-422 inputs for quadrature signals and reference pulse
Display steps*	Adjustable, max. 7 digits Linear axes: 1 mm to 0.0001 mm Angular axes: 1° to 0.001° (00° 00' 00")
Display	5.7 " monochrome flat-panel display for position values, dialogs and inputs, and soft keys
Status display	Tool, reference point, operating function, feed rate, ABS/INC, mm/inch, stopwatch
Functions	<ul style="list-style-type: none"> ■ 10 datums ■ 16 tools ■ REF reference mark evaluation for distance-coded or single reference marks ■ Distance-to-go mode ■ Scaling factor ■ mm/inch switching ■ Absolute/incremental display ■ On-screen help and operating instructions ■ Graphic positioning support ("Near Zero" warning) ■ Calculator
Mode: milling/drilling/boring	<ul style="list-style-type: none"> ■ Calculation of positions for hole patterns (circular patterns as well as linear patterns) ■ Tool radius and tool length compensation ■ Probing functions for reference-point acquisition with KT edge finder: "Edge," "Centerline" and "Circle center" ■ Linear hole patterns, bolt hole circles
Mode: turning	<ul style="list-style-type: none"> ■ Taper calculator ■ Radius/diameter switching ■ Freezing the tool position for back-off ■ Vectoring: X/Z display of the traverse path with inclined top slide ■ Sum displays for Z and ZO (axis coupling)
Error compensation	<ul style="list-style-type: none"> ■ Axis error: Linear and multipoint over up to 200 correction points ■ Backlash compensation: for compensation of reversal error
Data interface	V.24/RS-232-C: 300 to 115 200 Baud
Switching I/O	<ul style="list-style-type: none"> ■ Input for edge finder (with switching signal or contact triggering) ■ Further inputs/outputs over the IFB 48 external input/output unit
Accessories	Mounting frame, external input/output unit IFB 48
Main power input	100 V AC to 240 V AC (-10 % to +10 %), 47 Hz to 63 Hz; max. 135 W
Operating temperature	0 °C to 45 °C
Protection EN 60529	IP 40, front panel: IP 54
Weight	2.6 kg

* depends on the signal period of the connected encoder