Datasheet

- Completely touch screen digital readout, with a compact, modern and functional design, for absolute and incremental systems.
- Intuitive graphic interface to support the operator in using the available functions.
- Universal software for any kind of machine tool.
- 10.1" touch-screen, TFT panel which allows the displaying of up to 4 axes.
- Absolute (SSI - BiSS unidirectional protocol) or incremental encoder input signals.

Mechanical characteristics

Dimensions	274 x 190 x 99 mm (W, H, D)
Weight	1.5 kg
Display	TFT 10.1"
Available resolutions	1,000 / 500 / 200 / 100 / 50 / 20 / 10 / 5 / 2 / 1 / 0.5 / 0.2 / 0.1 / 0.005 / 0.001 µm 1° / 0.5° / 0.2° / 0.1° / 0.05° / 0.02° / 0.01° (Degrees)
Connectors	D-SUB 9p F axes D-SUB 9p M (RS-232 / CAN bus)
Storage temperature	-20°C ÷ 70°C
Operating temperature	0°C ÷ 45°C
Protection class (EN 60529)	IP40 IP54 with plastic cover provided
Options	CAN interface for RB900

Electrical characteristics

Power supply	230 Vac ±10% (50/60 Hz) 110 Vac ±10% (60 Hz) 24 Vac ±10% (50/60 Hz)
Current consumption	100 mA$_{MAX}$ (230 V) 220 mA$_{MAX}$ (110 V) 870 mA$_{MAX}$ (24 V)
Incremental encoder input signals	2 square waves with phase displacement of 90° ± 5° + synchronized index 5 Vdc Total 4 encoder current consumption: 1 AMAX
Version	Standard or flush-mounted
Absolute (SSI - BiSS unidirectional)	
Encoder input signals	RS-422 – Clock, Clock, Data, Data
Maximum input frequenzy	Max. 300 kHz
Number of positions bits	8 – 32 bit
Output code	Binary, Gray
Optional bits	Parity bit, Error bit

Technical characteristics

interface	CAN interface and serial output RS-232
Connection option	Possibility of connection to a digital (up to 8 relay outputs) or analog (constant surface speed) remote board
Read out	Reading of coded reference indexes
Option	Flush-mounted version (on a panel)

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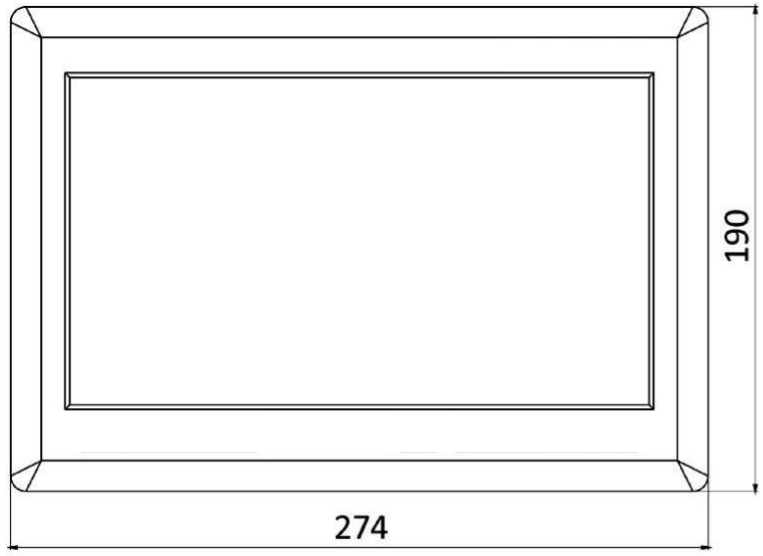
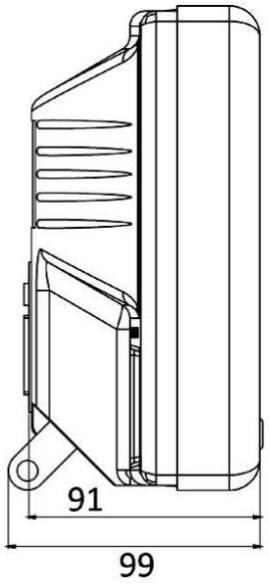
Fax: +49 7665 93465-22 • info@willtec.de • www.willtec.de

Functions

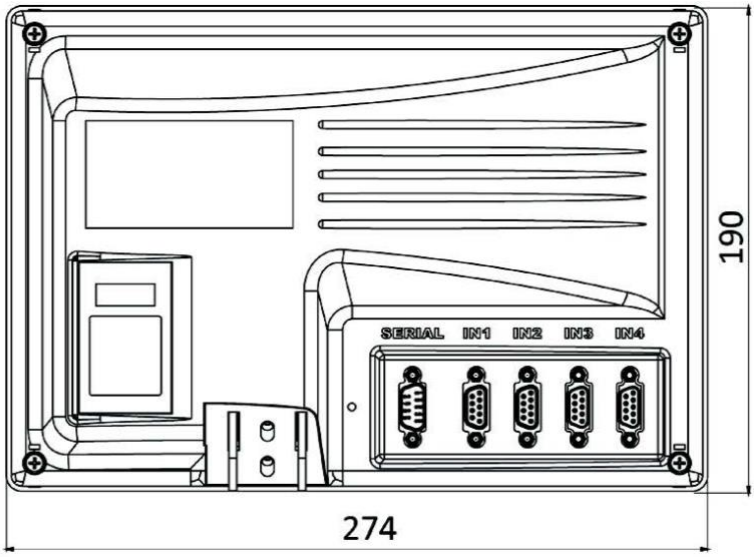
Absolute position display
Midpoint calculation
Absolute or incremental counting
Axis reset
Scale zero reference
Position preset
mm/inch conversion
Constant step
Axis coupling
Round flange
Radius/diameter conversion
Scale factor
Taper calculation
Linear correction
Material weight calculation
Speed calculation
Thread calculation
Axes speed
Tools
OriginsInversion of counting direction
Disable REF
Variable resolution
Disable axes
Absolute position display
Language selection
Instrument info

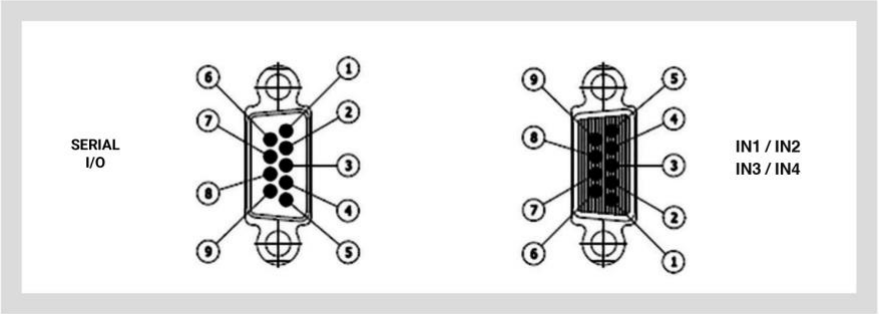
Dimensions





All information in mm





SERIAL	PIN LAYOUT	1	2	3	4	5	6	7	8	9
	SIGNALS	GND (CAN bus)	RX (RS-232)	TX (RS-232)	GND (TP)	GND (RS-232)	IN (TP)	5V*	CAN_H	CAN_L
IN1 / IN2 IN3 / IN4	PIN LAYOUT	1	2	3	4	5	6	7	8	9
	SIGNALS	B	CK	Z	A	D	$\overline{CK}$	V+	GND	$\overline{D}$

* Imax = 100 mA

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Ordering code

Type	Vi1033	-	3	-	3	-	TO	-	230V	-	0	-	1G	-

Axes
2 = 2 Axes
3 = 3 Axes
4 = 4 Axes

Input
2 = 2 Axes
3 = 3 Axes
4 = 4 Axes

Machine
IN = Generic
TO = Lathe
FR = Milling
FV = Vertical milling
FT = Transv. milling
AL = Boring

Power supply
230V = 230 VAC
110V = 110 VAC
24V = 24 VAC

Version
0 = Standard
1 = Flush-mount version (Panel)

Resolution (for more information, see the mechanical data table)
1K = 1.000 µm
100 = 100 µm
10 = 10 µm
1 = 1 µm
0,1 = 0,1 µm
1G = 1G (G = °)*
0,5G = 0,5G (G = °)*

Options
2 = SSI - BISS inputs
3 = SSI inputs + CAN interface (only for use with RB900)

* (Degrees)

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.

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