

Code <b>ST04</b>	Project <b>A23</b>	Release <b>B</b>	Title <b>TECHNICAL DATASHEET</b>
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## DIGITAL READOUT ME800

### GENERAL FEATURES

- 7-digit axis display.
- Auxiliary back-lit LCD display.
- Variable resolution, selectable up to 0.5  $\mu\text{m}$ .
- Up to 3 axes displayed, up to 4 input axes.
- Easy and immediate use thanks to dedicated keys and coded functions.
- Tactile watertight front keyboard, protected against electrostatic discharge.
- Special cover made of shockproof expanded tecnopolymer with conductive treatment for protection against interference.
- High versatility: applicable on different types of machine tools, since it is keyboard-programmed.
- Options available, such as relay outputs, serial output and constant cut output.



### MECHANICAL AND ELECTRICAL FEATURES

<b>Axis display</b>	7 high-efficiency digits h = 17 mm
<b>Auxiliary display</b>	back-lit LCD h = 5.5 mm
<b>Signal input per axis</b>	2 square waves out of phase $90^\circ \pm 5^\circ$ + index TTL 05 Vdc or 12 Vdc
<b>Max. input frequency</b>	250 kHz
<b>Linear resolution</b>	200 - 100 - 50 - 20 - 10 - 5 - 2 - 1 - 0.5 $\mu\text{m}$
<b>Angular resolution</b>	$1^\circ - 0.5^\circ - 0.2^\circ - 0.1^\circ - 0.05^\circ - 0.02^\circ - 0.01^\circ - 0.005^\circ - 0.002^\circ - 0.001^\circ$
<b>Memory</b>	permanent for configuration and special functions
<b>Power supply</b>	230 Vac $\pm 10\%$ - 50/60 Hz / 110 Vac $\pm 10\%$ - 60 Hz / 24 Vac $\pm 10\%$ - 50/60 Hz
<b>Power consumption</b>	30 mA (230 Vac) - 60 mA (110 Vac) - 300 mA (24 Vac)
<b>Dimensions</b>	front: 300x210 mm – depth 120 mm
<b>Operating temperature</b>	$0^\circ \div 50^\circ \text{C}$
<b>Storage temperature</b>	$-20^\circ \div 70^\circ \text{C}$
<b>Relative humidity</b>	95% (not condensed)
<b>Vibration resistance (EN 60068-2-6)</b>	25 $\text{m/s}^2$ [55 $\div$ 2000 Hz]
<b>Protection class (EN 60529)</b>	keyboard IP 67 rear panel IP 42
<b>Weight</b>	~ 3 kg

### ORDERING CODE

MOD.	DISPLAYED AXES	INPUT AXES	MACHINE	VERSION	POWER SUPPLY	INPUT VOLTAGE	CONNECTOR	RESOLUTION	OPTIONS
<b>ME8</b>	<b>3</b>	<b>3</b>	<b>TO</b>	<b>R</b>	<b>230</b>	<b>12</b>	<b>C3</b>	<b>1</b>	<b>R2STCO2B</b>

2 = 2 axes  
3 = 3 axes

2 = 2 axes  
3 = 3 axes  
4 = 4 axes

**TO** = LATHE  
**FR** = MILLING M.  
**FV** = VERT.MILL.  
**FT** = TRANSV.MILL.  
**AL** = BORING M.

**R** = standard red  
**RI** = flush-mounted red  
**V** = standard green  
**VI** = flush-mounted green

**230** = 230 V  
**110** = 110 V  
**24** = 24 V

**12** = 12V  
**05** = 5V

**C3** = C3  
**C4** = C4

**10** = 0,1 mm  
**100** = 0,01 mm  
**5** = 0,005 mm  
**1** = 0,001 mm

**Rx** = RELAY OUTPUTS (x = no. 1-2-3)

**S** = SERIAL OUTPUT RS-232

**TCO** = CONSTANT CUT

**1B** = STANDARD AUTON. BATTERY  
**3B** = DOUBLE AUTON. BATTERY

Example  COUNTER ME833 TOR 230/12 C4 1 R2TCOS3B

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## FUNCTIONS

<b>F 0 EXE</b>	DELETING STORED DATA
<b>F 9 EXE</b>	SETTING PRINTING LINE SPACINGS
<b>F 26 EXE</b>	CONSTANT STEP
<b>F 28 EXE</b>	AXIS COUPLING
<b>F 30 EXE</b>	LINEAR CORRECTION
<b>F 31 EXE</b>	NON-LINEAR CORRECTION
<b>F 32 EXE</b>	SCALE FACTOR
<b>F 34 EXE</b>	RADIUS/DIAMETER CONVERSION
<b>F 36 EXE</b>	VARIABLE RESOLUTION
<b>F 37 EXE</b>	SEXAGESIMAL DEGREE READNG
<b>F 38 EXE</b>	ANGULAR READING MODE
<b>F 44 EXE</b>	CALCULATING THE TAPER
<b>F 46 EXE</b>	AUTOMATIC CALCULATING THE TAPER
<b>F 48 EXE</b>	CALCULATING THREADS
<b>F 50 EXE</b>	CALCULATING THE WEIGHT OF MATERIALS
<b>F 52 EXE</b>	CALCULATING THE TIP SPEED
<b>F 54 EXE</b>	CALCULATING THE ANGULAR SPEED
<b>F 55 EXE</b>	ENABLING THE AUTOMATIC QUOTA TRANSMISSION
<b>F 64 EXE</b>	ROUND FLANGE
<b>F 66 EXE</b>	SPECIAL ROUND FLANGE
<b>F 68 EXE</b>	INCLINED CONSTANT PITCH
<b>F 72 EXE</b>	CIRCUMFERENCE CENTER
<b>F 74 EXE</b>	MIRROR IMAGE
<b>F 78 EXE</b>	SCALE VALUE SET
<b>F 80 EXE</b>	AXIS SPEED DISPLAYING
<b>SPF</b>	RICHIAMO FUNZIONE SPECIALE
<b>F Z</b>	DISPLAYING W AXIS
<b>STO</b>	100 TOOL OFFSETS
<b>F 98717 EXE</b>	SETTING THE SPEED LIMIT OF SPINDLE ROTATION
<b>F 98718 EXE</b>	SETTING THE TYPE OF SPINDLE ROTATION SPEED
<b>F 98762 EXE</b>	LANGUAGE SELECTION
	CALCULATOR
	INVERSION OF COUNTING DIRECTION
	SCALE ZERO REFERENCE (REF)
	SELF-TEST/MANUAL TEST
	ABSOLUTE/INCREMENTAL COUNT
	RESETTING/PRE-SETTING A VALUE
	MM/INCH CONVERSION
	MIDPOINT CALCULATION
<b>F40 EXE / F42 EXE</b>	RELAY OUTPUTS
	SERIAL OUTPUT RS-232
	CONSTANT CUT OUTPUT

## WARNING!!

### WHAT TO AVOID

1. All mechanical reworks (cutting, drilling, face milling a.s.o.).
2. All mishandling.
3. Impacts and external stress.
4. Exposure to external magnetic fields.

