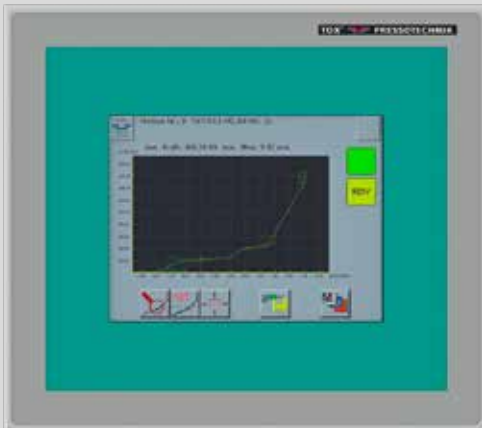


TOX®-Pressing Monitors

Data sheet 100.10
2020/02



TOX[®]-Pressing Monitors

Real-time monitoring of production processes

The TOX[®]-Pressing Monitors monitor processes where a precisely defined functional correlation between forces and distances must be examined. This equipment is used widely to monitor joining, riveting, pressfitting and caulking processes and leads to continuous improvement of quality in production.

Here, during measuring the devices read force-path data pairs belonging together from two measuring channels ,X' and ,Y'. The data are stored in a memory and can be displayed graphically. The resulting force-path function is compared with specified maximum ratings of the configured window values or envelope. If the maximum ratings are complied with, an IO message is issued, otherwise an NIO message.

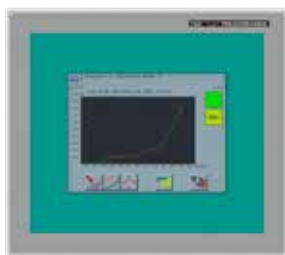
Configuration

Thanks to the built-in display and the understandable menu the device can be comfortably configured and parameterized. The complete production-data is stored and can be edited and displayed easily.

The change of piece parts is quickly performed due to 64 specific parameter settings, which can be selected either directly by the touch screen or by PLC.

Features

- Real-time monitoring of production processes
- Provides important data about process sequence
- Special monitoring by using window technique and envelopes
- Individual measuring programs can be selected
- User interface language can be switched
- Backup of measurement data and final values
- Various password levels
- Colour touchscreen



The EPW 400 monitors pressing processes and is available as built-in device and wall mounted version.

Extensions

- TOX[®]-Evaluation Box with extended display and acceptance function
- Fieldbus interfaces



EPW 500FP: the economical alternative is available as wall mounted version.

Compact design

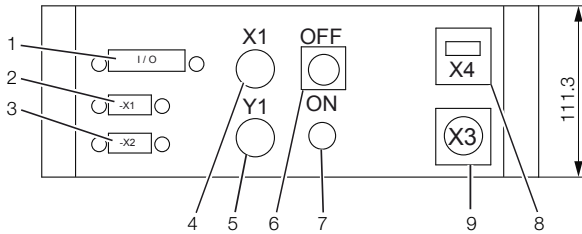
- Swivelling housing
- Compatible with Rittal CP60 and VESA 75x75 mm fixtures

Technical data	EPW 400	EPW 500FP
Application	Monitoring of pressing processes	Monitoring of pressing processes, particularly for the bench top presses TOX®-FinePress
Supply voltage	24VDC	24VDC
Current consumption	≤ 1 A	≤ 1 A
Display	5.7" colour touchscreen TFT LCD 640x480 (VGA) Colour depth 16 bit	7" colour touchscreen LCD 800x480 (WVGA) Colour depth 16 bit
Inputs / Outputs	- Digital: 16 inputs / 8 outputs - Analogue: 2 outputs	- Digital: 13 inputs / 8 outputs - Analogue: 3 outputs
Number of measuring programs	64	128
Dimensions W x H x D (mm)	Built-in version: 210x185x123.5 (D 99 for two slots) Wall mounted version: 320x305x149	Housing dimensions: 244x207x75
Weight	Built-in version: 1.5 kg Wall mounted version: 4 kg	2.5 kg
Interfaces connections	Ethernet, USB, Digital In/Out	USB, Digital In/Out
Fieldbus interfaces	Ethernet, PROFIBUS DP, PROFINET CU, DeviceNet, Ethernet IP, CANopen, PROFINET LWL, EtherCA	–
Protection class	Built-in device IP54 front panel IP20 housing Wall mounted version IP54	IP 67 front panel IP 40 rear of housing
Measuring channels: Force DMS Force standard signal Path standard signal	■ ■ ■	■ (1.1 mV/V) ■ ■
Measuring channel resolution	16 bit	16 bit
Max. sampling rate	2000 Hz	2000 Hz
Monitoring by means of window and/or envelope technology	max. 10 windows ■	max. 10 windows ■
Password protection	■	■
Display of last measured curves in diagram	10	10
Number of last final values in memory Number of last measured curves in memory	1000 100	1000 100
Backup	100 measured curves and 1000 final values trans- ferrable to USB memory stick as CSV file Backup with TOX®softWare	100 measured curves and 1000 final values trans- ferrable to USB memory stick as CSV file

TOX[®]-Pressing Monitor EPW 400

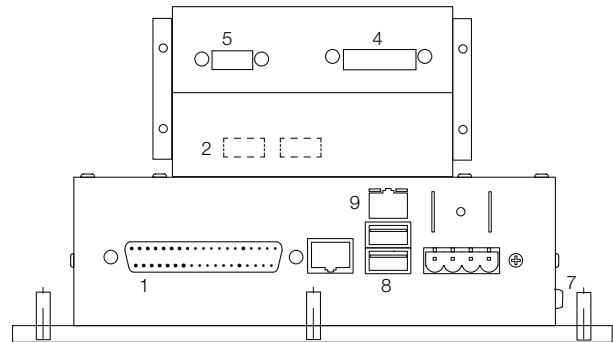
Connections and Dimensions

Connections wall mounted version

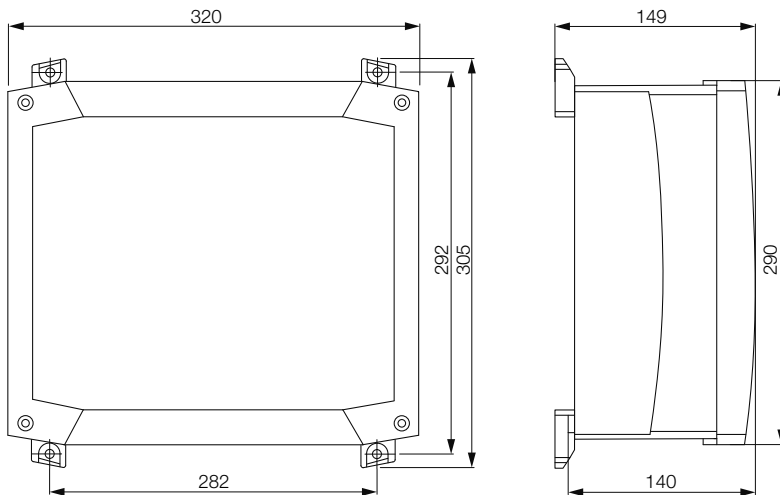


- 1 Digital input/output
- 2 Fieldbus interface (option)
- 3 Reserve
- 4 Travel transducer X1
- 5 Force transducer Y1
- 6 Main switch
- 7 Supply voltage 24 VDC
- 8 USB interface
- 9 Ethernet interface

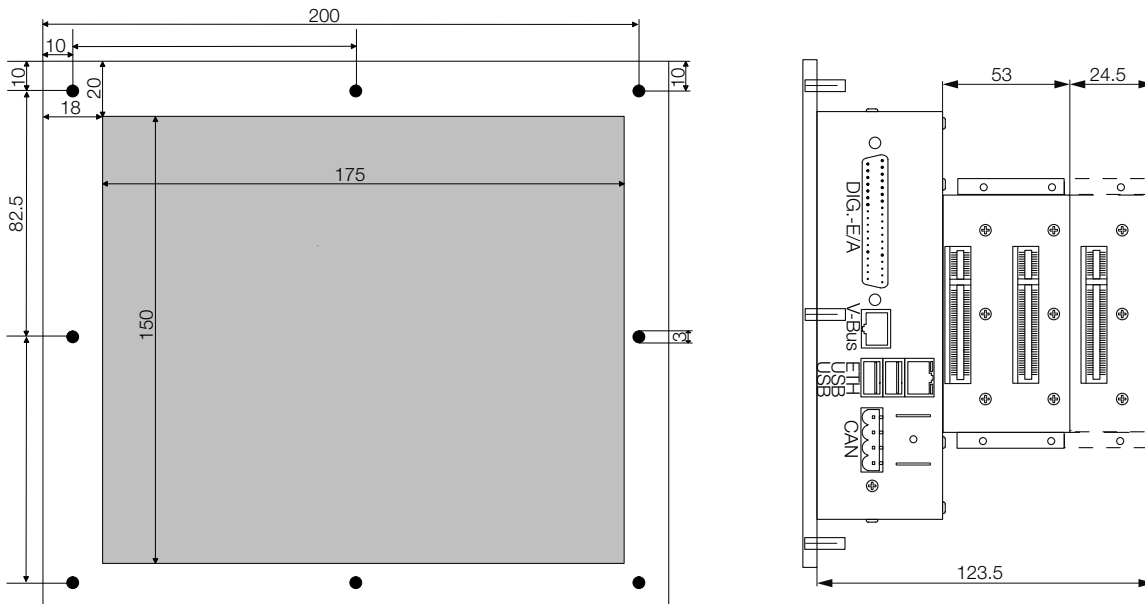
Connections build-in version



Dimensions wall mounted version



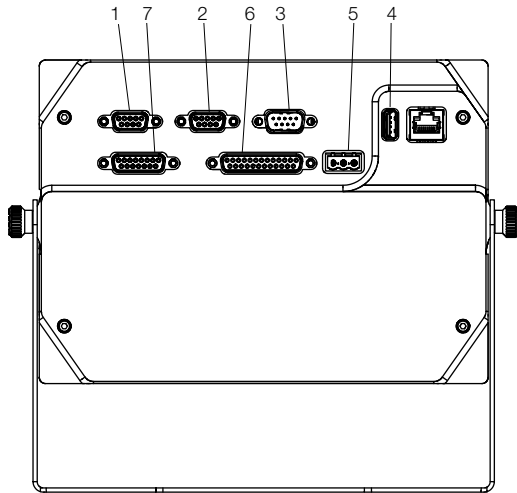
Dimensions build-in version



TOX®-Pressing Monitor EPW 500FP

Connections and Dimensions

Connections



- 1 DMS force signal
- 2 Standard signal force
- 3 Analog output
- 4 USB interface
- 5 Power supply
- 6 Digital input/output
- 7 Travel sensor potentiometric and with standard signal output

Dimensions

