TOX®-Process Monitoring
CEP 400T

Data sheet 100.20
2020/02
The TOX®-Process monitoring monitors clinching and joining processes and provides important data about the process sequence.

Functions:
- Real names for program memory, up to 40 characters
- 64 sensor configurations per channel
- 4 password levels: operator, setup technician, integrator, manufacturer
- 16 digital inputs and 8 digital outputs
- Status indicator menu of digital I/O ports
- Stores up to 1000 values with time stamp
- Includes TOX®softWare for parameterization and data recording
- Choice of panel mount unit or wall mount unit IP54
- Ethernet interface
- Provides important information about the process sequence
- Special monitoring by means of window technology for clinching processes
- Individual measuring programs available
- Storage of final values
- Several password levels
- Color touchscreen
- Versions with 1/2/4/8/12 channels
- Individual evaluation with 1-/2 channel versions

Optional expansion:
- Field bus interfaces of all common bus systems*
- Process sequence control for TOX®-Clinching Processes
- Service modules such as
  - Remote maintenance
  - Test control unit to check measuring chain
- Analog output 0 – 10V
- Evaluation unit for bench top presses TOX®-FinePress
- Display of control dimension X (absolute value)

*With field bus connection, individual evaluation IO/NIO and end values are displayed, independent of the number of measuring channels in the device.
### Technical data

<table>
<thead>
<tr>
<th>Application</th>
<th>Monitoring of force processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>24 V DC</td>
</tr>
<tr>
<td>Current consumption</td>
<td>≤ 1 A</td>
</tr>
<tr>
<td>Display</td>
<td>5.7” color touchscreen</td>
</tr>
<tr>
<td></td>
<td>TFT LCD 640x480 (VGA)</td>
</tr>
<tr>
<td></td>
<td>Color depth 16 bit</td>
</tr>
<tr>
<td>Inputs / Outputs</td>
<td>Digital: 16 inputs / 8 outputs</td>
</tr>
<tr>
<td>Number of measuring programs</td>
<td>64</td>
</tr>
<tr>
<td>Dimensions W x H x D (mm)</td>
<td>Built-in unit: 210 x 185 x 123.5 (D 99 for two slots) Wall mounted unit: 400 x 360 x 160</td>
</tr>
<tr>
<td>Weight</td>
<td>Built-in unit: 1.5 kg Wall mounted unit: 4 kg</td>
</tr>
<tr>
<td>Interfaces</td>
<td>Ethernet, USB, Digital In/Out</td>
</tr>
<tr>
<td>Fieldbus interfaces</td>
<td>PROFIBUS DP, PROFINET CU, DeviceNet, Ethernet IP, CANopen, PROFINET LWL, EtherCAT separate gateway for 12 channel devices</td>
</tr>
<tr>
<td>Protection class</td>
<td>Built-in unit IP54 front panel IP20 housing Wall mounted unit IP54</td>
</tr>
<tr>
<td>Number of measuring channels</td>
<td>1/2/4/8/12</td>
</tr>
<tr>
<td>Measuring channels:</td>
<td>Force DMS Force standard signal</td>
</tr>
<tr>
<td>Measuring channel resolution</td>
<td>12/16 Bit</td>
</tr>
<tr>
<td>Max. measuring interval</td>
<td>2000 Hz</td>
</tr>
<tr>
<td>Monitoring by means of window technology</td>
<td>✔</td>
</tr>
<tr>
<td>Password protection</td>
<td>✔</td>
</tr>
<tr>
<td>Number of last final values in memory</td>
<td>1000</td>
</tr>
<tr>
<td>Data backup</td>
<td>1000 final values transferrable to USB memory stick as CSV file Data backup with TOX®softWare</td>
</tr>
</tbody>
</table>
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Connections

Wall mounted unit

Build-in unit

1 Input/Output digital
2 Fieldbus interface (option)
3 Reserve
4 XK 1-4 Force transducer
5 XK 5-8 Force transducer
6 XK 9-12 Force transducer
7 Main switch
8 Supply voltage 24 VDC
9 USB interface
10 Ethernet interface
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Dimensions

Wall mounted unit

Built-in unit

Subject to technical modifications.

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