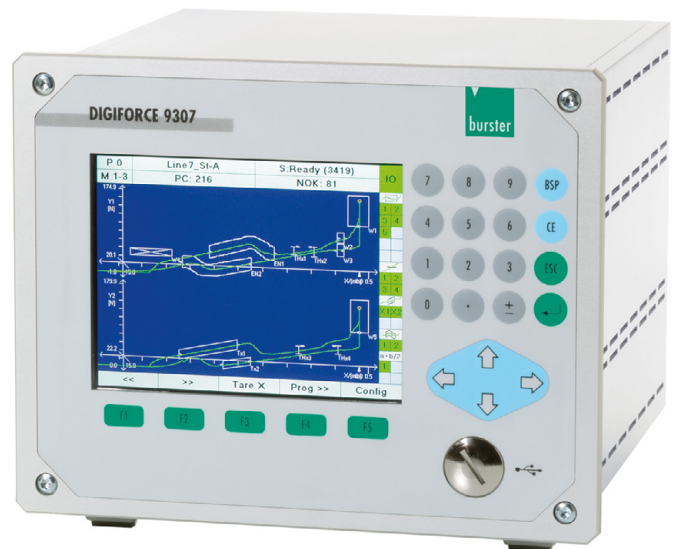


Universal Process-Controller

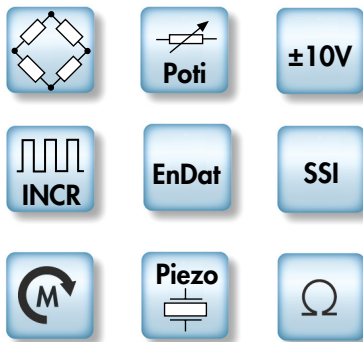
For monitoring press-fit and joining operations, torque and process curves, plus spring and switch testing, including resistance measurement, signal testing and leak detection
DIGIFORCE®

Series 9307

Code:	9307 EN
Delivery:	ex stock/4 weeks
Warranty:	24 months



Compatible sensors



Application

The DIGIFORCE® 9307 monitors processes in which precisely defined functional relationships between two or more measured quantities need to be demonstrated. These measured quantities are recorded synchronously during the manufacturing process or subsequent functional testing to produce a measurement curve, which is then assessed using graphical and mathematical evaluation techniques. After internal evaluation, the measurement curve and computed evaluation results are visualized on the color display and are also output at the external control interfaces. The processes in the controller are optimized by a powerful real-time operating system to achieve an extremely fast evaluation cycle: it typically takes just 15 ms to deliver the global OK or NOK evaluation result, which can then be analyzed by the higher-level controller.

In addition to the traditional evaluation windows with defined entry and exit sides, the DIGIFORCE® 9307 also offers thresholds, trapeziums of type X or Y and envelopes as graphical evaluation elements. Individual evaluation results from the graphical tools can then be combined by mathematical operations to provide even more analysis flexibility for a huge range of signal curves.

DIGIFORCE® has a wide range of process control applications, including monitoring processes such as joining, riveting or caulking, or checking torque curves, for instance for hinges or high-quality rotary controls. Even complex signal/time curves (e.g. pressure curves, leaks etc.) can be monitored using the large choice of evaluation techniques.

Simultaneous recording of up to two Y variables (Y_1 and Y_2) with respect to a common X variable allows many applications to

- Comprehensive process monitoring delivered by innovative evaluation elements window, thresholds, trapeziums, envelopes and mathematical operations
- High measurement accuracy 0.05 % possible at 10 KHz sampling rate
- Flexible process integration thanks to a range of Fieldbus interfaces
- Simultaneous monitoring of two synchronous processes
- Ultra-fast evaluation and data transfer for dynamic measurements
- Ethernet, USB, RS232 as standard
- Up to 128 measurement programs for a large variety of parts
- Transfer of process, component and worker data
- Intelligent signal sampling using a combination of Δt , ΔX , ΔY
- Independent and variable start/stop logic
- Convenient configuration screens
- DigiControl PC software with powerful data-logging function for process data

use one DIGIFORCE® controller to monitor two synchronous processes.

Alternatively, this feature can be used to evaluate an application with three process variables, for instance the force/displacement curve and associated current consumption of a lifting electromagnet. While DIGIFORCE® is used in many automated production areas, it is equally at home in the manual workstation, for instance to monitor force/displacement when using hand presses for assembly or for random spot-checking in goods inwards.