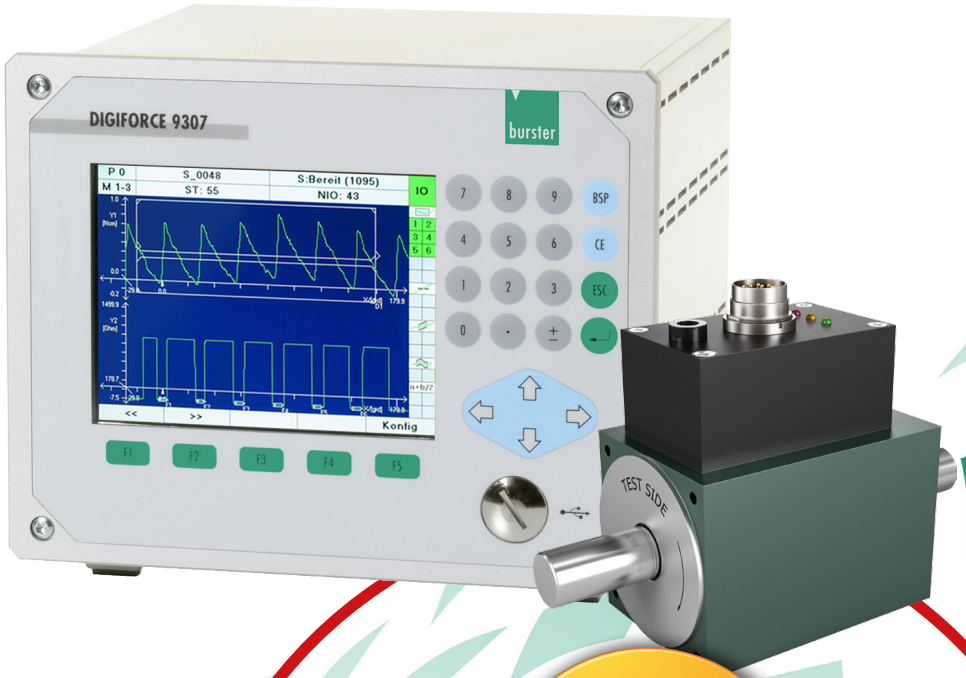
Precise Torque Monitoring with DIGIFORCE® 9307 and Torque Sensor 8661

burster

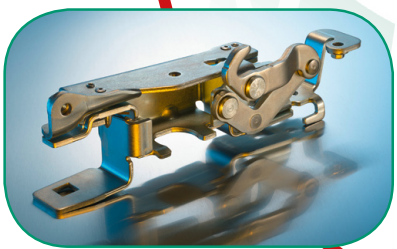
- Measuring range from ± 0.02 Nm to ± 1000 Nm
- Records torque/angle curves (clockwise/counterclockwise)
- High precision with a system accuracy of better than 0.1 % and angle resolution of 0.088 °
- Comprehensive and high-speed process monitoring thanks to versatile evaluation elements
- Process integration using all popular fieldbus systems (PROFIBUS, PROFINET, Ethernet/IP and EtherCAT)



Together unbeatable

Protect switch

Rotary switch haptics



Hinges

Nutrunner calibration

Safety couplings

PRECISION TORQUE MONITORING

Product highlights torque sensor 8661

- Measurement uncertainty ≤ 0.05 of full scale
- High-resolution angle measurements
- Intelligent operating state indicator
- Dual-range sensor

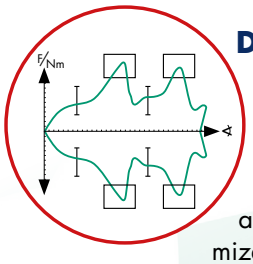
The perfect bundle for your process monitoring task

Product highlights DIGIFORCE® 9307

- Measurement uncertainty ≤ 0.05 of full scale
- Versatile and comprehensive curve analysis
- Process integration thanks to a range of Fieldbus interfaces
- Measurement-data logging using DigiControl software

8661 Dual-range torque sensor

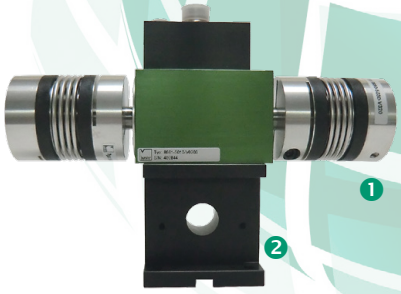
- Precision in two separately calibrated measurement ranges
- 5-times overload protection in the low measurement range
- Measurement ranges can be switched via DIGIFORCE® 9307
- No time wasted on changing sensors and only one pair of couplings required



DIGIFORCE® curve analysis using X/Y graph

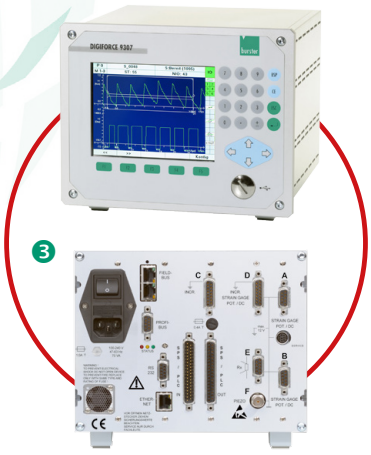
The **DIGIFORCE® 9307** can record a torque/angle characteristic as a forward and return measurement curve - the figure shows a typical curve during opening and closing of a hinge with catch positions. The X/Y graph can be customized to monitor compliance with quality features. Evaluation tools provided for this purpose include not only classic window techniques but also thresholds, trapeziums, envelopes and mathematical operators. A global good/bad result is available as soon as the test is finished. The DIGIFORCE® control unit can be connected both to a machine controller (I/Os or Fieldbus) and to a host PC for logging measurement data. This setup enables synchronous management of full process-data acquisition, including the entire torque/angle curve, even using more than one controller.

Torque sensor 8661



Drop cable
99163-540A-0150030 99209-215A-0090004

DIGIFORCE® 9307



Options:

1	Self-aligning couplings
2	Mounting block for 8661 sensor
3	9307 combined analog/INCR channel D (no need for Y-cable 99209-215A-0090004) Fieldbus interface
4	DigiControl 9307-P101/P100 (basic version available free of charge)

Ethernet
USB
RS-232

E/A or Fieldbus
PROFIBUS DP/DP-V1
PROFINET, Ethernet/IP
EtherCAT

4 PC-Software DigiControL

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