

### REFERENCE MEASURING SYSTEM

QS-Box is a digital measuring system for the quality assurance of operating sequences. The reference measuring system can be used for the monitoring and control as well as for the adjustment or calibration of tightening and press-fit systems. The use of slide-in modules for all current measuring sensors enables this flexibility. That means that every type of sensor can be equipped with an adequate measuring module.

In combination with the intelligent Sensor-Converter by DSM-sensors but also by third-party products, the QS-Box works on a digital level via the measuring channel DSM-digital.

Advantages of the modern digital measuring system are an interference-free signal transfer, the direct status report near the measuring point as well as an intelligent memory chip.

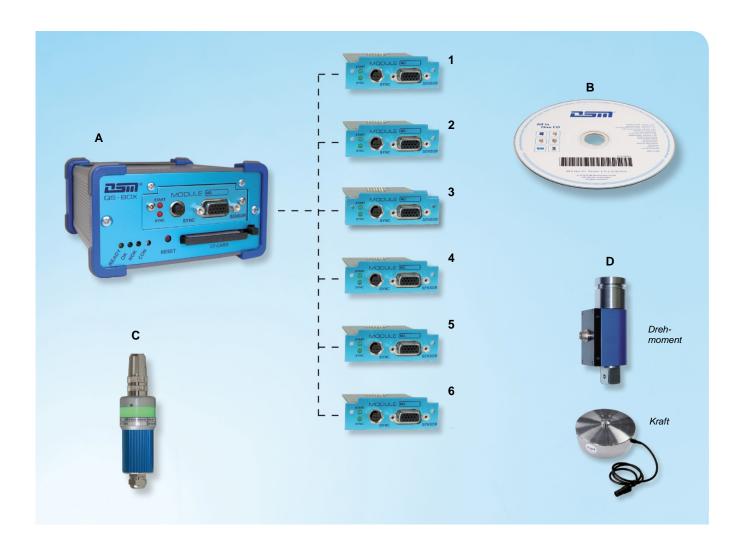
The stored sensor data are adjusted automatically by connection to the QS-Box. Only the sensor and not the complete measuring chain is calibrated by periodic calibrations.

Measurements are made in the online mode in combination with the QS-Center software. The QS-Box transfers the measured data immediately to the connected computer.

Without computer, in the offline mode, the QS-Box records the measurands. The data are written onto CF card and analysed later on at the computer.

#### **Features**

- · Reference measuring system for monitoring and calibration
- · Exchangeable plug-in modules for analogue and digital measurement signals
- · Measurements possible in online and offline mode
- · Measured value recording and graphics monitoring
- · Data storage directly on the CF card or via QS-Center software
- · Test equipment monitoring with integrated measuring system
- · Synchronisation input for angle of rotation and length/stroke tests
- · Interfaces: USB, RS232, TCP/IP, Profibus (optional)
- · QS-Center software for administration, parameterisation and analysis



# Reference measuring system QS-Box

A) QS-Box with slot for measuring module		
Туре		Article number
QS measurement box, basic device		DSM-161000
Accessories		
Туре	Cable length	Article number
QS-Box plug-in power supply AC 230 V / 50 Hz   DC 24 V / 1A	1,5 m	DSM-600640

1/2/3/4/5/6/7) QS plug-in	modules	
Туре	Measuring signal	Article number
1) QS plug-in module	DSM-Digital	DSM-161110
2) QS plug-in module	±1 mV/V	DSM-161111
3) QS plug-in module	±2 mV/V	DSM-161112
4) QS plug-in module	4-20 mA	DSM-161113
5) QS plug-in module	±5 V	DSM-161114
6) QS plug-in module	±10 V	DSM-161115

B) QS-Center software		
Туре		Article number
QS-Box analysis software pro		DSM-161901
Accessories		
Туре	Cable length	Article number
USB cable 2.0, Hi-Speed, A male   B male	1,8 m	MK-1001702

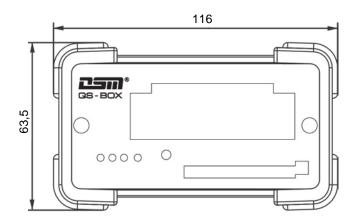
C) SCI module Signal converter intelligent		
Туре		Article number
QS SCI module		DSM-161200
Accessories		
Туре	Cable length	Article number
SCI connection cable	5 m	DSM-910050

D) Measuring sensors	
Туре	Article number
Digital torque transducer	Available on request
Digital force load cell	Available on request

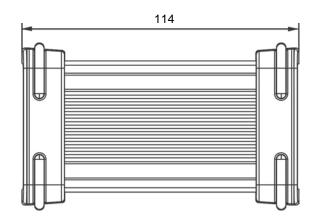
# Technical drawings Reference measuring system

## QS-Box

Front view



Side view



### **SCI** module

### Connector measuring module

