MEASURING TECHNOLOGY & TEST SERVICE 2023

LOAD CELLS



Static torque sensors SAUTER DC Y1 · DC Y2





DC Y1

Alloy steel static torque sensor

DC Y2

Alloy steel static torque sensor

STANDARD



- High precision (comprehensive Error 0,5 % F.S.)
- · RoHS compliant
- For monitoring or measurement of static torques, tests of manual torque wrenches or transfer of static load torques
- Nominal sensitivity 1.0~1.5 mV/V, depending on nominal load
- Supply voltage max. 10 V DC
- 4-wire connection
- · Simple and quick installation
- High torsional stiffness
- Other designs and nominal loads on request





- High precision (comprehensive Error 0,3 % F.S.)
- · RoHS compliant
- Dust and spray protection to IP65 (in accordance with EN 60529)
- For monitoring or measurement of static torques, tests of manual torque wrenches or transfer of static load torques
- Nominal sensitivity 1,5 mV/V
- Supply voltage max. 15 V DC
- 4-wire connection
- High torsional stiffness
- · Other designs and nominal loads on request

Model	Nominal load	
SAUTER	Nm	
DC 5-Y1	5	
DC 10-Y1	10	
DC 20-Y1	20	
DC 50-Y1	50	
DC 100-Y1	100	
DC 200-Y1	200	
DC 500-Y1	500	

Model	Nominal load	
SAUTER	Nm	
DC 200M-Y2	0,2	
DC 1-Y2	1	
DC 10-Y2	10	
DC 20-Y2	20	
DC 50-Y2	50	

MEASURING TECHNOLOGY & TEST SERVICE 2023

SAUTER PICTOGRAMS





Adjusting program (CAL):

For quick setting of the instrument's accuracy. External adjusting weight required



Calibration block:

Standard for adjusting or correcting the measuring device



Peak hold function:

Capturing a peak value within a measuring process



Scan mode:

Continuous capture and display of measurements



Push and Pull:

The measuring device can capture tension and compression forces



Length measurement:

Captures the geometric dimensions of a test object or the movement during a test process



Focus function:

Increases the measuring accuracy of a device within a defined measuring range



Internal memory:

To save measurements in the device memory



Data interface RS-232:

Bidirectional, for connection of printer and PC



Profibus:

For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference.



Profinet:

Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible



Data interface USB:

To connect the measuring instrument to a printer, PC or other peripheral devices



Bluetooth* data interface:

To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals



WLAN data interface:

To transfer data from the balance/ measuring instrument to a printer, PC or other peripherals



Data interface Infrared:

To transfer data from the measuring instrument to a printer, PC or other peripheral devices



Control outputs

(optocoupler, digital I/O): To connect relays, signal lamps,

valves, etc.



Analogue interface:

To connect a suitable peripheral device for analogue processing of the measurements



Analog output:

For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



Statistics:

Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.



PC Software:

To transfer the measurement data from the device to a PC



Printer:

A printer can be connected to the device to print out the measurement



Network interface:

For connecting the scale/measuring instrument to an Ethernet network



KERN Communication Protocol (KCP):

It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems



GLP/ISO record keeping:

Of measurement data with date, time and serial number. Only with SAUTER printers



Measuring units:

Weighing units can be switched to e.g. non-metric. Please refer to website for more details



Measuring with tolerance range (limit-setting function):
Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013

ZERO:

Resets the display to "0"



Battery operation:

Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack:

Rechargeable set



Plug-in power supply:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available



Integrated power supply unit: Integrated, 230V/50Hz in EU.

More standards e.g. GB, AUS or USA on request



Motorised drive:

The mechanical movement is carried out by a electric motor



Motorised drive:

The mechanical movement is carried out by a synchronous motor (stepper)



Fast-Move:

The total length of travel can be covered by a single lever movement



Verification possible:

Models with type approval for construction of verifiable systems



DAkkS calibration possible:

The time required for DAkkS calibration is shown in days in the pictogram



Factory calibration:

The time required for factory calibration is specified in the pictogram



Package shipment:

The time required for internal shipping preparations is shown in days in the



Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram

[→]0+

^{*}The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Othear trademarks and trade names are those of their respective owners.