

ControlMonitor CoMo Torque

Evaluation Instrument for Torque Sensors

Type 4700B...

The evaluation instrument CoMo Torque Type 4700B... is ideal for industrial use and for research and development applications. Torque sensors with strain gage technology and standardised voltage output or frequency output can be connected directly.

- Display with indication of exact measured data for torque, speed, angle of rotation, force and mechanical power
- 4x20 character display
- Multiple menu language operation
- High measuring accuracy <0,05 %
- High scan rate 10 kHz
- Low-pass filter (filter off, 0,1 Hz ... 1 kHz)
- Memory with up to 5 000 measured values, each channel
- Min/max capture and limit value monitoring
- Can be remoted via USB or RS-232C
- Scaled analog outputs

Description

The simple parameterisation allows it to be used in production when evaluating torque/revolution measurements or torque/angle of rotation measurements. The intuitive menu of the Type 4700B... allows it to be quickly adapted to new measurements and inspection tasks. Settings can be made easily for all functions, such as taring, saving peak values, average determination, setting limits, measurement duration, pre- and post triggers, calibration, scope of display, units, and the interface. Up to 20 parameter records can be stored internally in the non-volatile flashmemory.

The desktop unit can be operated with a supply voltage of 100 ... 240 VAC. All connections are plug-in.



Application

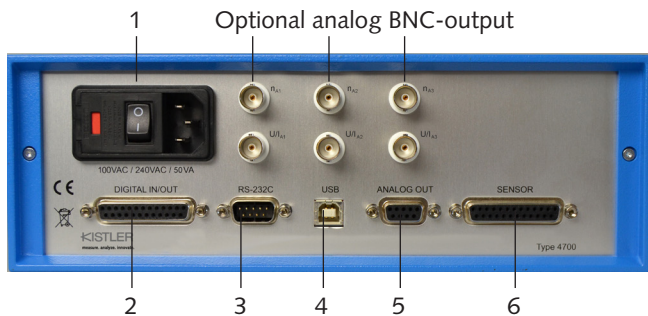
The industrial usages are numerous and various:

- Determination of the performance of powered equipment using torque input and revolution
- Design of transfer components or systems by determining the efficiency factor (for example, for clutches, brakes, gear boxes, motors and turbines)
- Process control when screwing or verifying the inflexion point for torque wrenches
- Function control during assembly, if the torque is evaluated in dependence of the angle of rotation; for example, when checking seat adjustments and hinges. The result of the evaluation is shown on the digital display as an OK or NOK signal

Regarding the precision of measurements, logging of extreme values and the measured data storage, the Type 4700B... is also suitable for use in research and development.

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Pin Assignment and Connection Diagram



- 1 Power input with voltage selector
100 ... 240 V/50 VA, 400 mA MT
- 2 Digital input/output lines
- 3 RS-232C
- 4 USB connector
- 5 Analog output signals
- 6 Sensor connector

Included Accessories

	Art. No.
• Country specific power connector for EU	18008438
for US	18008555
for UK	18008811
• 9 pin null modem cable	18008475
• USB cable 2.0	18008778
• CD with software SensorTool Type 4706A	18025770

Optional Accessories

	Art. No.
• Type 4700B... – analog output connection cable, 5 m	18008591
• Connection cable analog, 2,5 m, 12 pin for Type 4700B... to Type 4503... and 4510B...	18008967
• Connection cable frequency, 2,5 m, 12 pin for Type 4700B... to Type 4503... and 4510B...	18008969
• Connection cable analog, 2,5 m, 12 pin for Type 4700B... to Type 4502A..., 4520A...	18008963
• Connection cable analog, 2,5 m, 6 pin for Type 4700B... to Type 4501A... Q/R (respectively force)	18008959
• Connection cable strain gage with angle, 2,5 m, 12 pin for Type 4700B... to Type 4501A... QA	18008961

Typical Application

- Measurement of Torque, Speed and Mechanical Power
Electric motors, gear-boxes, fans, combustion engines, compressors, easy movement at lubrication pumps and cooler pumps, crankshaft drives and camshafts.
- Test of Friction Clutches for Pneumatic and Electronic Screw-drivers
- Viscosity Measurements
- Measurement of Forces
Verification of mating and press-fit force. Test of contactors and push buttons.

Ordering Key

		Type 4700B	
Operating voltage			
100 ... 240 VAC/50 VA	P0		
Analog BNC-output			
Without	00		
For voltage	UA		
For current	IA		
For voltage a. speed/rotation angle	UN		

Order Example:

Type 4700BP0UN

ControlMonitoring CoMo Torque, evaluation instrument for torque sensors **Type 4700B**, **P0**: 100 ... 240 VAC/50 VA, analog BNC-output **UN**: for voltage and speed/rotation angle

See data sheet 000-615 for other cables.