

Checking Device for Force, Torque, Displacement and Pressure TRANS CAL

Model 7280

Code:	7280 EN
Delivery:	ex stock
Warranty:	24 months



NEW !
USB interface
standard

- **Sensors: Strain gauge/standard signal 10 V/0/4-20 mA**
- **Accuracy 0.1 % F.S.**
- **Up to 10 sensor parameter sets storable**
- **Data logger to 15,000 measuring values**
- **Min/Max memory**
- **Mobile use with accumulator or battery, but also operable with power supply**
- **Manifold accessories optionally available**
- **DKD/DAkkS/manufacture calibration certificate for the complete measurement chain available (option)**

7280 EN

Application

The portable digital indicator model TRANS CAL 7280 is an universal checking device for instrumentation examination of mechanical components like presses, equipment of torque and so on. The fields of application range from quality assurance over start-up installations to process monitoring.

Very fast reaction times to the measuring signals are possible with the high measuring rates available. A min/max-memory enables this device for further applications. An universal configurable data logger can store up to 15,000 measured values. Different calibration data such as sensor designation and physical units are possible with the help of 10 possible parameter sets. Measured values or logging values can be transferred via RS232/USB interface to a PC or a printer.

In order to have traceable results from this measurement chain a DKD/DAkkS/manufacture calibration certificate can be provided. The traceability of the calibration is based on the references applied.

Description

The model TRANS CAL 7280 can either be battery- or accumulator-operated in the field or supplied with an external power supply unit. High measuring accuracy paired with fast measuring rate are ensured by the employment of highly precise amplifiers, the 16 bit A/D converter and a microprocessor. The handy digital indicator model 7280 supports sensors on strain gauge basis and active sensors up to 10 V/20 mA. The 10 mm high LCD main display will inform about the presently measured value. An existing basic load can be tared away with the function tare. Due to its high measurement accuracy the device can be used in highly accurate measurements. For a measuring chain we recommend to use the tension/compression load cell model 8524.

Depending on the existing press force this load cell features measuring ranges from 500 N up to 200 kN (divided in 9 levels).

Technical Data

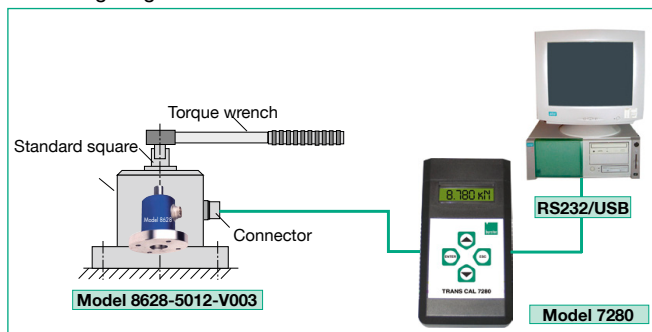
Accuracy:	0.1% F.S. ± 1 digit
Measuring rate:	1/10/100/1000/sec.
Average value:	x/1, x/2, x/4, x/8, x/16, x/32
Display counts:	± 9.999 + 3 dig. unit
Zero point alignment:	automatic/manual
Sensor selection for measurement mode:	10
Data logger mode:	window, diagram, manual, auto
Memory values:	max. 15.288
Bridge resistance of the strain gauges:	350 ... 2000 Ω
Sensitivity, passive:	± 3.3 mV/V
Sensitivity, active:	± 10 V
Sensitivity, current:	0/4 ... 20 mA at 75 Ω
Connection technology:	2 or 3 wire
Voltage supply passive/active:	5 V/20 mA / ± 12 V / over 100 mA ± 12 V altogether max 120 mA

Working time with 50 % cyclic duration with accus:	passive sensors > 20 h
	active sensors > 8 h
Nominal temperature range:	+ 15 °C ... + 35 °C
Range of operating temperature:	+ 5 °C ... + 45 °C
Storage temperature range:	- 10 °C ... + 70 °C
Dimensions [D x W x H]:	200 x 100 x 40 [mm]
Protection class:	IP40
Weight:	500 g

Applications

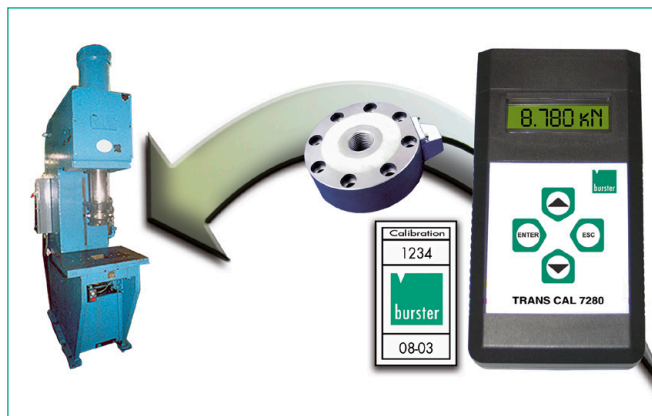
Test object - torque wrench

Measuring range 0 ... 12 Nm



With torque wrenches the desired torque is set through turning the handle. The tolerance of the torque and the repeating accuracy must therefore be examined at regular intervals before and during use. With TRANS CAL model 7280 and torque sensor model 8628 these values can be determined with high accuracy fast and economically.

Test object - hydraulic press



The model TRANS CAL 7280 together with a load cell is a universal reference measuring chain for the calibration of power presses. During calibration on-site the reference force is brought into the flux of the press-fit measurement system. For traceability reasons a DKD/DAkKs- or manufacturer calibration certificate can be supplied.

Order Information

Digital indicator TRANS CAL model 7280 with battery and test certificate including traceability verification **Model 7280**

Order Example

Measuring range 20 kN with manufacturer calibration in compression direction:

Tension and compression load cell	Model 8524-6020
Connector	Model 9900-V280
Mounting of connector	Model 99004
Checking device	Model 7280
Calibration of entire measuring chain	Model 72ABG
Load button	Model 8580-V012
Manufacturer Calibration in 20 % steps, compressive direction	Model 85WKS-85DXM

Accessories

6 V plug-in mains adapter and accumulator charging	Model 7280-Z001
Accumulator set 4x Mignon 1,2V/2300 mA	Model 7280-Z002
MIN D connector plug 15 pin for sensor connection	Model 9900-V280
Complete set of mating plugs	Model 7280-Z003
Measuring and evaluation software for model 7280 via RS232/USB interface	Model 7280-P001
USB connection cable	Model 9900-K349
RS232 connection cable	Model 9900-K380
Adapter cable, length 0.2 m; for TRANS CAL model 7280 to strain gauge sensors with 12 pin connector model 9941	Model 99280-540A-0090002
Adapter cable, length 0.2 m; for TRANS CAL model 7280 to strain gauge sensors with 9 pin Min D connector model 9900-V209	Model 99280-609A-0090002

Aluminium case for TRANS CAL model 7280 and accessories



Model 4493-V005

Protective case for TRANS CAL model 7280 **Model 4499-Z001**

For a large selection of load cells see section 8.4 and 8.5 in our catalog.

DKD/DAkKs Calibration Certificate

DKD/DAkKs Calibration Certificate for force to 200 kN, pressure to 5000 bar and torque to 5 kNm

Manufacturer Calibration Certificate

Manufacturer Calibration Certificate for force to 200 kN, pressure to 5000 bar, torque to 5 kNm and displacement to 300 mm