

# Checking Device for Force, Torque, Length and Pressure TRANS CAL

Model 7280

Code:	7280 E
Manufacturer:	burster
Delivery:	ex stock
Warranty:	24 months



- Measurement ranges selectable
- DKD-/Manufacturer calibration certificate over the complete measurement chain available
- Passive und active sensors
- RS 232 Interface/USB
- Simple sensor integration into flux possible
- Accuracy 0,1 % of range  $\pm$  1 digit
- 10 sensor selection

7280-E

## Application

The portable digital indicator model 7280 is a universal checking device to the 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. A universally configurable data logger can store up to 2000 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 interface to a PC or a printer. In order to have traceable results from this measurement chain a manufacturer calibration certificate can be provided. The traceability of the calibration is based on the references applied.

## Description

The model 7280 can either be battery- or accu-operated in the field or supplied with an external power supply. A high measuring accuracy paired with a 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 5 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. For a measuring chain we recommend to use the tension/compression load cell model 8524.

Depending on the present press force this load cell features measuring ranges from 500 N up to 200 kN. The reference measuring chain can be completely configured and calibrated optionally.

## Technical Data

### Digitalanzeiger Model 7280

Accuracy:	0.1 % of range $\pm 1$ digit
Measuring rate:	1/10/100/1000/sec.
Average value:	x/1, x/2, x/4, x/8, x/16, x/32
Display counts:	$\pm 9.999 + 3$ dig. unit
Zero point alignment:	automatic/manual
Sensor selection for measuring mode:	10
Data logger adjustment:	window, diagram, manual, auto
Memory values:	max. 2000
Bridge resistance of the strain gauge:	350 ... 2000 $\Omega$
Sensitivity, passive:	0.35 ... 3.3 mV/V
Sensitivity, active:	0 ... $\pm 1$ , 0 ... $\pm 5$ V
Sensitivity, current:	0/4 ... 20 mA at 75 Ohm
Power connection:	2 or 3 wire
Voltage supply passive/active:	5V/20 mA 12V/100 mA
Working time with 50 % cyclic duration	
with power pack (4 x mignon 1600mA/h)	> 20 h
with batteries	> 30 h
Nominal temperature range:	+ 15 °C ... + 35 °C
Customs temperature range:	+ 5 °C ... + 45 °C
Storage temperature range:	- 10 °C ... + 70 °C
Dimensions (DxWxH):	200 x 100 x 40 [mm]
Protection class:	IP 40

### Bestellbezeichnung

Digitalanzeiger TRANSCAL Typ 7280 einschließlich Batterien und Prüfzertifikat mit Rückführbarkeitsnachweis

### Sonstiges Zubehör

6 V Netzteil und Akkulader für Typ 7280	<b>Typ 7280-Z001</b>
Akkusatz 4x Mignon 1,2V/2300 mA	<b>Typ 7280-Z002</b>
MIN-D-Kupplungsstecker 15-polig 7280 für Sensoranschluss	<b>Typ 9900-V280</b>
kompletter Satz Gegenstecker Mess- und Auswertesoftware für den	<b>Typ 7280-Z003</b>
Typ 7280 über RS232-Interface/Datenkabel	<b>Typ 7280-P001</b>
Adapterkabel, Länge 0,2 m; für TRANSCAL Typ 7280 auf DMS Sensoren mit 12 pol. Stecker 9941	<b>Typ 99280-540A-0090002</b>
USB/Seriell RS232 Konverter, 9 pol.	<b>Typ 9900-K350</b>
Schutztasche für TRANSCAL Typ 7280	<b>Typ 4499-Z001</b>

Eine große Auswahl an Kraftsensoren entnehmen Sie der Sektion 8.4 und 8.5 in unserem Katalog.

### Manufacturer Calibration Certificate (WKS) Load cell with measuring device

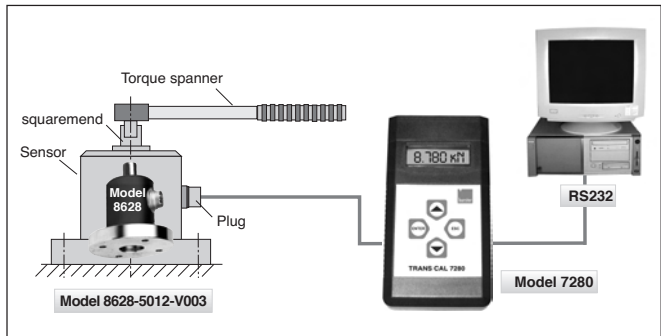
Calibration at 20 % steps of the measuring range, up and down with unchanged installation position (11 measurement points in compression direction).

**Typ 72 WKS-7280**  
**Typ 72 DKD-7280**

## APPLICATIONS

### Equipment under test - Torque Spanner

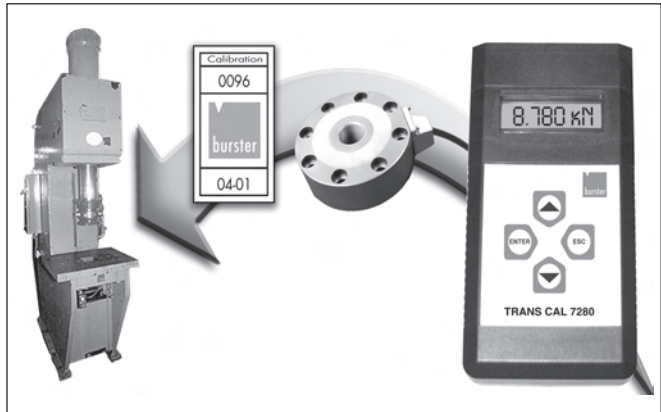
Measuring range 0 ... 30 Nm



With torque spanners the desired torque is set through tricks of the handle. The tolerance of the torque and the repeat accuracy must therefore before and during the employment be examined at regular intervals.

With the TRANSCAL model 7280 and the torque sensor model 8628 this values can be determined with high accuracy fast and economically.

### Equipment under test - Power press



The model TRANSCAL 7280 together with a force sensor is a universal reference measuring chain for calibration of power press. During the calibration at site the reference force is brought into the flux of the press in measurement installation. For traceability it is possible to order it with DKD- or manufacturer calibration certificate.

### Ordering Example

#### Measuring range 20 kN with manufacturer calibration in compression direction:

- Tension and compression load cell	<b>Model 8524-6020</b>
- Connector	<b>Model 9900-V280</b>
- Mounting of connector	<b>Model 990004</b>
- Checking device	<b>Model 7280</b>
- Calibration of entire measuring chain	<b>Model 72ABG</b>
- Load button	<b>Model 8580-V012</b>
- WKS manufacturer calibration certificate	<b>Model 72WKS-7280</b>