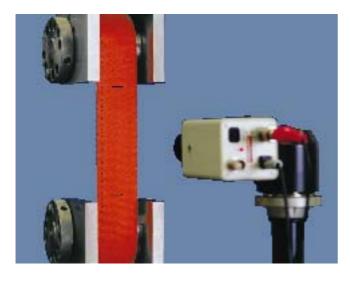


# **Zwick** Materials Testing

## **Product Information**

## Video extensometer W40220 / TC-EXVIDEO





### **Applications area**

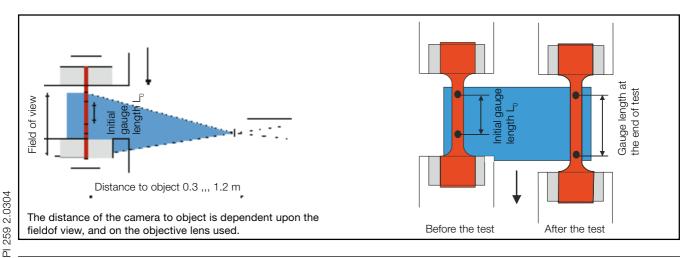
The video extensometer measures contact-free, and with high resolution, tensile and compression deformations on all types of plastic, metals, rubber, composites, panels and foils.

It is also suitable for determination of reduction-inwidth, r- & n values according to ISO 10113 and ISO 10275, and the yield strength in tensile tests according to EN 10002-1.

## Advantages of the video extensometer

- It is the ideal measuring system for elongation measurements of whipping materials (safety belts, steel ropes, rubber ropes, etc.)
- The resolution and measuring accuracy is high over the entire field of view

- Extensions as well as reduction-in-width are possible at the same time
- Test paths are variable and very large, according to the selection of the picture size or objective
- Automatic test mark recognition and acquisition of the initial gauge length L<sub>0</sub>
- Optional determination of reduction-in-width, r- & n values according to ISO 10113 and ISO 10275, and the yield strength in tensile tests according to EN 10002-1
- Accuracy class 1 (at a field of view ≤ 100 mm) according to EN ISO 9513 and accuracy class 2 according to EN ISO 9513 (with 8 mm objective or at a field of view > 100 mm)
- The entire test sequence can be followed on the
- Capturing and printing out the picture of the specimen at the moment of failure





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## **Product Information**

## Video extensometer W40220 / TC-EXVIDEO

Order item	W40220.01.00/TC-EXVIDEO.001			
Field of view	Resolution	Unit		
50 mm	0.5	μm		
100 mm	1	μm		
200 mm	2	μm		
500 mm	5	μm		
1000 mm	10	μm		
Measurement path dependent upon the field of view				
L <sub>0</sub> = 5 mm to 1000 mm. Maximum test speed: 1000 mm/min				
Distance of camera to specimen dependent upon the field of view and the objective lens				
Accuracy grade 1 (at a field of view ≤ 100 mm), according to EN ISO 9513				
Accuracy grade 2 (at 8 mm objective or field of view > 100 mm), according to EN ISO 9513				
High resolution Video extensometer as above, but with		W40220.01.10 /		
Dialogues and documentation in <b>English</b>		TC-EXVIDEO.002		
Also required:				
Software, plug-in testXpert®		069099.07.xx		

**Please note:** Danger of misting exists when using the extensometer with  $CO_2$  and  $LN_2$  temperature chambers at certain humidity and temperature of - 20 ... 0 °C. Then there may be several minutes to wait until the test can be started.

The temperature range is restricted to - 40 ... + 120 °C in operation with a temperature chamber because of the measurement markers.

If extension and reduction-in-width measurement get combined, the field of view must not be quitted!

#### **Objective lenses**

Objective lens and lamp, see below

RS232 interface in the PC

Description	Order item
Objective lens 8 mm focal length, manual iris, max. distance to object = 1200 mm, grade 2*	W40220.01.01
Objective lens 12 mm focal length, F/1.8, manual iris, max. distance to object = 1200 mm, grade 1*	W40220.01.02
Objective lens 25 mm focal length, F/1.6, manual iris, max. distance to object = 1200 mm, grade 1*	W40220.01.04
Objective lens 50 mm focal length, F/1.6, manual iris, max. distance to object = 1200 mm, grade 1*	W40220.01.05

<sup>\*</sup> EN ISO 9513

Lamps	
Description	Order item
Lamp for normal field of view illumination, active length: approx. 300 mm, suitable for objective	W40223.01.01
lenses with focal length: 25 mm and 50 mm	
Special lamp for increased field of view illumination, active length: 500 mm, suitable for objective	W40223.01.02
lenses with focal length: 8 mm, 12 mm, 25 mm, and 50 mm	

