

ZwickMaterials Testing

Product Information

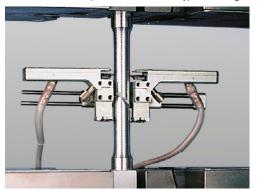
Strain gage (DMS) clip-on extensometer



Clip-on extensometer of type DMS length 1 with extension piece



Clip-on extensometer of type DMS length 2



Clip-on extensometer of type DMS length 4

Applications area

Extensometer of type DMS length 1 is foreseen for fixed gage lengths $\rm L_{\rm e}=25~mm$ and $\rm L_{\rm e}=50~mm$, with a measuring range of 25 mm. The extensometer is not suitable for temperature chambers or for compression or flexure testing.

The extensometers of type DMS length 2, DMS length 3 and DMS length 4 are foreseen for fixed gage lengths $L_{\rm e}=20$ mm and $L_{\rm e}=10$ mm with a measuring range of 2 mm in tensile and 1 mm in compression direction.

The extensometer of type DMS length 5 is a double-sided clip-on extensometer with measuring systems send two single signal. It is foreseen for fixed gage lengths $L_{\rm e}=10$ mm with a measuring range of 1.5 mm in tensile and compression direction.

Suitable for use in temperature chambers are the extensometers of type DMS length 3, DMS length 5 and DMS length type 4. Additional the type DMS length 5 is suitable for use with HCCF.

Extensometer advantages

- Extremely good linearity, thus reliable test results
- High resolutions enables smallest deformations to be measured during test
- Miniaturised, light construction makes it easy to handle even for specimen with a small parallel portion
- Initial gage length optionally can be switched by extension pieces from 10 up to 100 mm (not to type DMS length 1)
- Temperature resistant measurement systems for use from - 50 °C to + 200 °C
- Extensometer for two-sided measurement of specimen deformation permits exact E-modulus and technical elasticity limits
- Variable measurement possibilities with 2 separate measurement systems, single signals or the average value signal are displayable
- The extensometer clamped to the specimen is protected by stops against overshooting the measurement displacement or at specimen break (only for DMS length 1)



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Strain gage (DMS) clip-on extensometer

Туре	DMS length 1	DMS length 2	DMS length 3	DMS length 4	DMS length 5
Item number	057808	057809	057810 ⁽¹	057811 ⁽¹	056893
Measurement system	one sided strain	one sided strain	one sided strain	twin sided strain	twin sided strain
	gage system	gage system	gage system	gage system	gage system
Gage length	25 mm	20 mm	20 mm	20 mm	10 mm
convertible to	50 mm	10 mm	10 mm	10 mm	-
Meas. range for tensile	25 mm	2 mm	2 mm	2 mm	1.5 mm
Meas. range for compr.	-	1	1 mm	1 mm	1.5 mm
Specimen dimension					
for round specimen	up to 28 mm	25 mm	25 mm	25 mm	25 mm
for flat specimen txw	max. 28 x 30 mm	25 x 25 mm	25 x 25 mm	25 x 25 mm	25 x 25 mm
Accuracy grade 0.5 according to EN ISO 9513					
Weight	95 g	45 g	45 g	70 g	70 g
Height	gage length +2 mm	24 mm	24mm	24 mm	14 mm
Number of sensors	1	1	1	2	2
Type of output signal	single signal	single signal	single signal	average	average
Temperature range	> 0 + 60 °C	> 0 + 80 °C	- 50 + 200 °C	- 50 + 200 °C	- 50+ 200 °C
Factory calibration at	21 °C	21 °C	21 °C	21 °C	21 °C
Also required is: Item number					
1 USC-module for Allround-Line with testControl II				029443	
1 DCSC or ACSC-module for zwicki-Line				318870 oder 320300	

⁽¹ For use in temperature chambers

Optional accessories for type DMS length 2, DMS length 3 and DMS length 4

Set of extension pieces for use with DMS length 2, DMS length 3 and DMS length 4

for initial gage length $\,$ 15 mm / 25 mm / 30 mm / 50 mm / 80 mm or 100 mm

Press-on piece with 2 counter rollers for use with DMS length 2

(alternative to basic equipment with one counter roller), applicable at ambient temperature ... at a distance of 15 mm / 20 mm / 25 mm / 30 mm / 50 mm / 80 mm or 100 mm

Press-on piece with spring for use with DMS length 3

(alternative to basic equipment with press-on pieces with a spring at a distance of 10 and 20 mm), applicable in temperature range - 50 ... + 200 °C ... at a distance of 15 mm / 25 mm or 50 mm

Auxiliary device for use with DMS length 3 and DMS length 4

for opening the clamping device in the closed temperature chamber by an activation wire

Rubber knife edges for use with DMS length 1, DMS length 2, DMS length 3, DMS length 4 and DMS length 5 Rectangular knife edges with 6 x 9.5 mm width for testing on round specimens