

Digital Tensile Force Indicating Instrument SA DMS 610



The SA DMS 610 is a high-precise digital tensile force indicating instrument, which is programmable. It is optimal suited for direct connection of Tensometric strain-gage-sensors series 11xx. On the basis of the high solution and interference-stability, application is as well in rough production as in labs and testing departments.

For operation the strain-gage sensors, this instrument supplies the service-voltage. Big red digits, readable from afar, indicate the measuring results.

Indicators show the actual working condition.

Additionally the instrument can be equipped with the offered options.

Easy programmable and easy to operate by means of the 5 front-panel buttons:

Programmable:

- Calibration the indication by feeding of value-pairs.
- Calibration the indication with connected strain-gage-sensors
- Linear-calibration with 16 value-pairs

- Locking the programme-function
- Individual getting-free of some programme-key-functions for the operator
p.e.: reset the min-max-values

- Zero-setting of the indication (tare)

- Digital filter for a smooth and exact indication
- Adjusting the min-max-indication. Display as marginal-value or continuous tone, hysteresis
- Adjusting the decimal-point

- Locking the programme-mode for unauthorized user

- external control is individual programmable
 - to reset the min-max storage
 - to reset the alarm-output
 - to * freeze * the indication
 - synchronize the indication with the course of production

2 different instruments are available: for sensors working only on the strain-gage system
or for sensors working on strain-gage system and have a built-in amplifier

SA DMS 610

To work with the strain-gage system - sensors series M 11xx or LC11xx or STAK11xx - this instrument supplies the service-voltage of 5 V or 10 V. This instrument amplifies the low output-voltage of the measuring-bridge.

SA DMS 610 - E

To work with the strain-gage system -sensors series M13xx or LC13xx or STAK13xx with built-in amplifier – this instrument supplies a service voltage of 24 V. The sensor can direct connected to this instrument.

Technical data :

<i>Display</i>	14 mm high, red LED indication, 5 - digits
<i>Solution</i>	16 Bit
<i>Accuracy</i>	0,03%
<i>Linearity</i>	0,03% of the range
<i>Protection</i>	front-page for wash-down and / or dusty environments, IP 65
<i>Measuring cycle</i>	20 / s
<i>Ambient temperature</i>	operating range: 0°C up to + 50°C, storage-range : -40°C up to +70°C
<i>Power supply</i>	85 up to 250 VAC, 50 / 60Hz, 15 VA
<i>Connection</i>	via 2 plugs, at the rear of the instrument
<i>Housing</i>	high impact plastic housing
<i>Dimensions DIN</i>	W 96 mm x H 48 mm x D 104 mm
<i>Weight</i>	approx. 300 g (without options)
<i>Volume of delivery</i>	Instrument, mounting-clips, sealing-material, instruction manual

Digital Tensile Force Indicating Instrument SA DMS 610

<i>Utilization</i>	Tensile Force Indicating Instrument for strain-gage-sensors series M11xx, STAK11xx or LC11xx
<i>Output for bridge-excitation</i>	via jumper, 5 V or 10 V, stable

Digital Tensile Force Indicating Instrument SA DMS 610-E

<i>Utilization</i>	Tensile Force Indicating Instrument for sensors with integrated amplifier series M13xx, STAK13xx or LC13xx
<i>Power supply for sensor</i>	24 V, stable

Options:

It is very easy to equip this instrument with different output-cards.

Each instrument can max. be equipped with one serial interface, one relay- or one open-collector output and one analog-output.

Relay - output	dual setpoint relay 5 A @ 120/230 V AC or 28 V DC (resistive load), 80 W @ 120 V AC (inductive load)	Type DS 10
	quad setpoint relay 3 A @ 250 V AC or 30 V DC (resistive load) 80 W @i 120 V AC (inductive load)	Type DS 20
Serial communications	Half-Duplex, RS232, programmable	Type DC 20
	Multipoint RS 485, programmable	Type DC 10
	Profibus-DP, programmable	Type DC 50
Analog Output	outputsignal can be selected: 0 ... 20 mA, 4 mA ...20 mA, 0 ... 10 V compliance 500 Ohm load max.; Digital direct-reading, resolution 1/3500 isolated from all other commons	Type DL 10
Open Collector	Quad sinking open collector: type four isolated sinking NPN-transistors Type DS 30 not isolated from all other commons rating :100 mA max. Vsat =0,7V, Vmax.= 30 V	
	Quad sourcing open collector: type four isolated sourcing PNP-transistors not isolated from all other commons. rating: internal supply 24 VDC +/-10%, 30 mA max. total all four outputs External supply: 30 V DC, 100 mA max. each output	Type DS 40