TESA TT 300 and MERCER EL 300

The best choice for series inspection – Instantaneous measuring and displaying through colour signals – Value classification with green, amber and red – High-contrast diode chain offering fast and sure reading even at a great distance – Alphanumeric display providing detailed measurement results – Vast range of programmable functions – Digital and analogue interfaces – Signal outputs for the control functions.

- Allow a direct connection of 2 or 4 electronic probes or any plug gauge with built-in probe such as TESADIA.
- Choice of 6 measuring ranges either self set or selected by the user.
- PRESET facility enabling values such as the nominal or actual size of setting standards to be entered.
- Signal combinations in sum or difference measurements, programmable.
- Added features such as selectable digital filters used for the displaye values, also programmable.

Executions with memory for one single inspection characteristic

- Used for both static and dynamic measuring.
- Computing functions «max.», «min.», «max.-min.» as well as mean of both values «max.» and «min.» for value storage.
- Value classification with one good class. Possible entry of tolerances as well as control limits.

Executions for multi-gauging with four inspection characteristics

- Automatic switch-over and recognition or manual switching from one measuring point to another (maximum 4 points).
- Value classification with 1 good class. Possible entry of tolerances as well as control limits for each single characteristic.

Executions with possible classification of up to 30 good classes for one inspection characteristic

- Input of a desired number of good classes along with both LSL and USL specification limits related to the entire tolerance range.

✓

DIN 32876 Part 1

Analogue and digital display as shown in the table

mm in ✓

Automatic or selectable display range based on the size of the tolerance field with enabled value classification

254 mm long

100 LEDs (3 colours) 1,75 x 5 mm each (L x l)

Alphanumeric, red colour LED display with 6 signs (7 segments per sign)

7 x 3,2 mm (H x L)

Analogue display with colour LEDs green, red and amber for classification once 4 size limits have been entered.

2 or 4 probe inputs plus 2 DC signal inputs depending on the model. Polarity signs: (+) positive and (–) negative. Besides single measurement, combining the signals in sum or difference measurement is also possible.

Amplification factors for the signal inputs: 0,01 ... 99,99

Response time of the analogue/ digital display and outputs with classification included: ≤ 100 ms with a max. perm. error of < 0,1% for extra measuring deviations.

Max. perm. error of digital display: ±0,5% with reference to 20°C and ≤ 50%relative humidity

Zero drift: < 0,004%/ °C. Drift of the signal amplification: < 0,008%/ °C.

RS 232

Sensitivity of analogue input/ output: 1,525 V/mm
Voltage: ≤ ± 5 V
Output current: ≤ 3 mA
Adjustment load: ≥ 2 kΩ

100 to 250 Vac, 47 to 60 Hz
Power consumption: 5,5 VA

0°C to 50°C

-10°C to 70°C

80%, non-condensing

Painted aluminium housing with acrylic front plate. Integrated keypad with touch keys

IP50 (IEC 60529)

EN 50081-2, EN 50082-2

45 mm wide, 370 mm high, 102,5 mm in depth, column base and rear-mounted sockets not included

0,65 kg

Provided with base and two M3 x 6 tightening screws for safe positioning of the tool unit

Shipping packaging

Identification number

Declaration of conformity

TESA TT 300 and MERCER EL 300 Length Measuring Instruments

With analogue and digital display, 6 measuring ranges, metric/inch selection, classification with tolerances as well as control limits. Also with both analogue and RS 232 digital outputs.

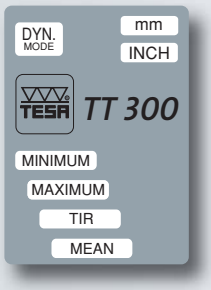
	Number of signal inputs Probe	DC
Executions with memory for one single inspection characteristic		
04030002	**04036002**	2	2
04030004	**04036004**	4	–
Executions for multi-gauging with four inspection characteristics		
04030012	**04036012**	2	2
04030014	**04036014**	4	–
Executions with classification of up to 30 good classes for one inspection characteristic		
04030022	**04036022**	2	2
04030024	**04036024**	4	–

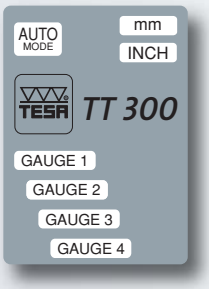
Supplied with either of the following cables depending on the country where goods are to be delivered (must be specified when ordering):

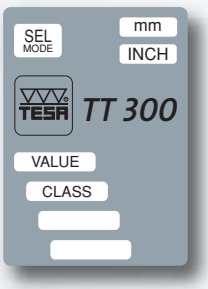
03160015	Mains cable fitted with SEV connector, 3-wire cable, 2 m long.
03160016	Mains cable fitted with VDE connector, 3-wire cable, 2 m long.
03160017	Mains cable without connector, 3-wire cable, 2 m long.

Optional accessories

S40040021	OC3 Open Collector Adapter, low level. Consists of a plug-in module with outputs for open collector and built-in suppression LEDs for inductive load.
S40040022	OE3 Open Emitter-Adapter, high level. Consists of a plug-in module with outputs for open collector as well as positive output voltage.
S40040520	OP3 Opto Coupler Adapter. Consists of a plug-in module with opto-coupled outputs as well as a Trigger input.
S40040521	CA2 Adapter with pins and potentiometer for connecting one column to the other (only for the version fitted with 2 analogue inputs/outputs).
S40040023	Hand switch, protection degree to IP65
S40040024	Hand switch, protection degree to IP32 (IEC 60529)
S40040025	Hand switch, protection degree to IP65 (IEC 60529)
04761052	Connection cable TT 300/PC or TESA PRINTER SPC; 9-pin/m/9-pin/f







Measuring or display ranges along with scale divisions or numerical intervals

µm	µm	µm	*in*	*in*	*in*	*in*
± 1500	30	1, 0,1	*± 0.1500*	*± 0.0590*	*0.0030*	*0.0001, 0.00001*
± 500	10	1, 0,1	*± 0.0500*	*± 0.0500*	*0.0010*	*0.0001, 0.00001*
± 150	3	1, 0,1	*± 0.0150*	*± 0.0150*	*0.0003*	*0.0001, 0.00001*
± 50	1	1, 0,1	*± 0.0050*	*± 0.0050*	*0.0001*	*0.0001, 0.00001*
± 15	0,3	1, 0,1	*± 0.0015*	*± 0.0015*	*0.00003*	*0.0001, 0.00001*
± 5	0,1	1, 0,1	*± 0.0005*	*± 0.0005*	*0.00001*	*0.0001, 0.00001*