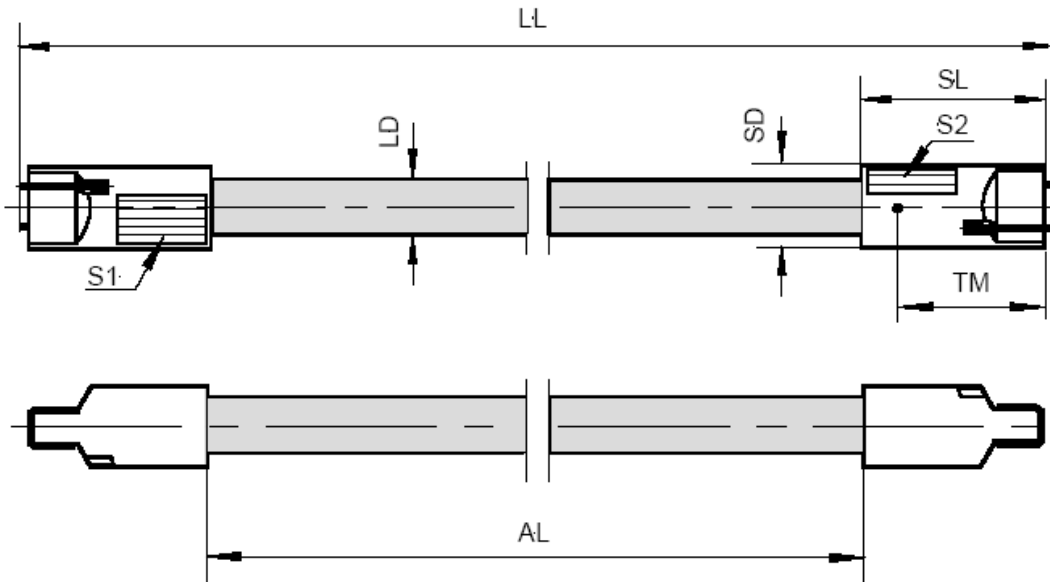


**GEOMETRY**

Dimensions for fixation and contact of the lamp are specified in IEC 61.



**S1:** Etch  
**S2:** Production date

**Cap:** W 4.3x8.5d  
**TM:** 16,5mm < 120°C

Feature	Marking	Unit	Nominal value	Tolerance
Lamp length	LL	mm	523,1	± 1,0
Active lamp length	AL	mm	485,0	
Lamp diameter	LD	mm	< 7	
Cap length	SL	mm	≤ 18	
Cap diameter	SD	mm	8,38	± 0,2
Torque consistency cap	TF	Ncm	≥ 10	
Torque value	AF	N	≥ 10	

**PRODUCT FEATURES**

- Only for EVG-operation.
- Only 7mm of lamp diameter.
- High light efficiency (>50 lm/W).
- High luminance (3,6 cd/cm<sup>2</sup>).
- Luminous flux maximum at ca. 33°C (± 2°K).
- Average life time of 8.000 h (3 h switching cycle).
- Optimal for modern illuminated acrylic displays.
- Special lamp for scanner with high colour stability available.

**Electrical Features IEC 60081**

		Nominal value	Min.	Max.
Frequency <sup>1)</sup>	(kHz) :	25	24,75	25,25
Lamp wattage <sup>1)</sup>	(W) :	13,3		
Lamp voltage <sup>1)</sup>	(V) :	136	122	150
Lamp current <sup>1)</sup>	(mA) :	100	90	110

**Electrical Features with EVG**

System performance with ...QT FM 1x13/230-240 L	(W) :	16
...QT ECO FM 1x11-13/230-240	(W) :	16

**Operation Conditions**

		Nominal value	Min.	Max.
Base edge temperature <sup>2)</sup>	(°C) :	100		<120
Cold Spot <sup>3)</sup>	(°C) :	55	± 12	± 95
EVG	:	QT FM 1x13/230-240 L or QT ECO FM 1x11-13/230-240		
Burning position	:	horizontal; for vertical operation, the stamp should be at the bottom.		

**Life time and maintenance**

Average life time (50% failure rate)	(h) :	8 000 <sup>4)</sup>
Useful life (80% luminous flux)	(h) :	6 000 <sup>4)</sup>

**PHOTOMETRIC DATA**

Labeling	Luminous flux n.v. (lm) *	Luminous flux max. (lm) **	Colour rendering (Ra)	Colour temp. (K)
FM 13W/760	710	860	≥70	6 000
FM 13W/740	770	930	≥70	4 000
FM 13W/730	770	930	≥70	3 000

\*) 25°C ±2 K; \*\*) 33°C ±2 K

- 1) Rated values of lamp characteristics at 25 kHz are to be multiplied by factor  $X_1$  for wattage and voltage and  $X_2$  for luminous flux in order to receive the respective values at  $47,5 \pm 2,5$  kHz. The factors are based on unmodulated sine-wave voltage supply. Present value:  $X_1 = 1,04$ ; values for  $X_2$  are to be specified in the manufacturer's literature.
- 2) TM = 16,5mm distance.
- 3) Measured on the glass (stamp side), 1mm distance from the cap material.
- 4) At 3 h switching cycle On/Off 165min./15min..