



Switching spark gap

Triggered SSG

Series/Type: TF25E
Ordering code: B88069X1093B011
Date: 2017-08-21
Version: 05

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Features

- Long life time
- Stable performance over life
- High voltage and high current switching
- Very short breakdown time
- High reliability by robust design
- RoHS-compatible

Application

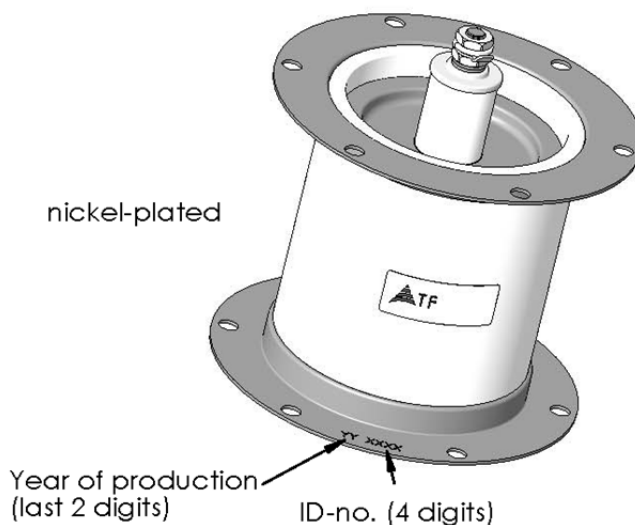
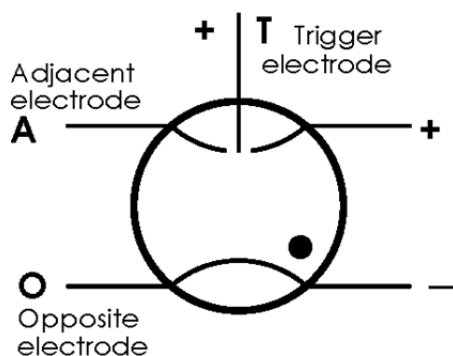
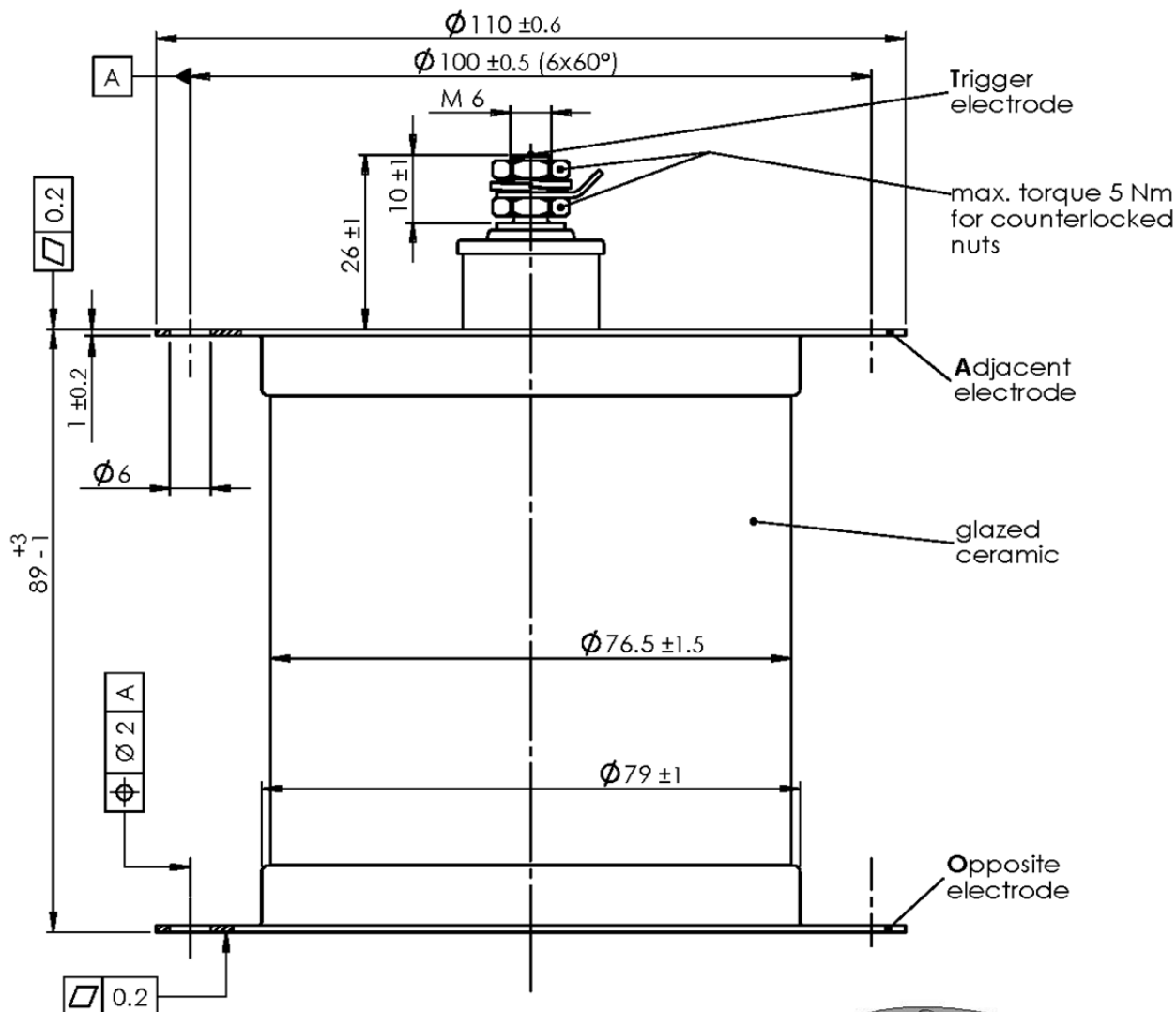
- High power impulse switching for medical applications

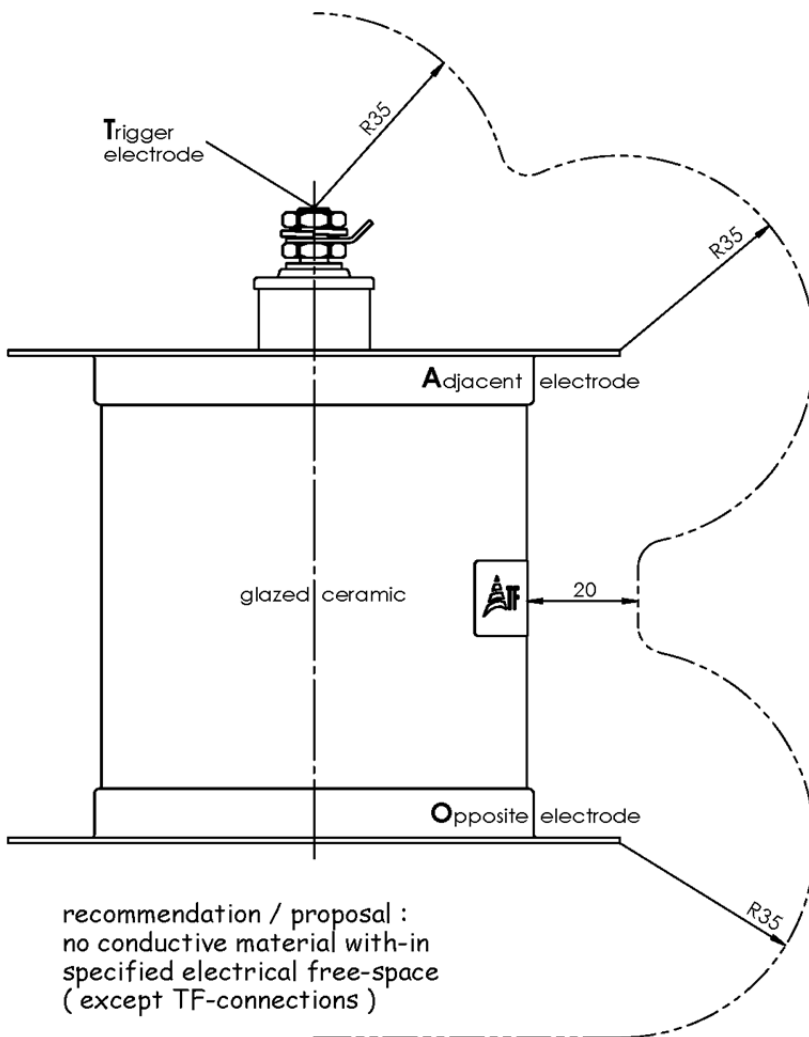
Electrical specifications

Self breakdown voltage - SBV	25 ±10	kV %
Electrical life time		
Triggered breakdown voltage V_B , initial	8 ... 19	kV
Triggered breakdown voltage V_B , during life test	8 ... 16	kV
Switching operations in total (minimum)	4 000 000	Impulses
at $V_B = 8$ kV	800 000	Impulses
at $V_B = 14$ kV	2 400 000	Impulses
at $V_B = 16$ kV	800 000	Impulses
Typical failure rate	< 0.05	%
Test circuit parameters ¹⁾		
Operation voltage V_B	16	kV
Discharge capacitance C	1.2	µF
Load circuit inductance L	1.0	µH
Load circuit ohmic resistance R	0.75	Ω
Discharge peak current I_P	~ 7	kA
Inhibit time before charging	50	ms
Trigger parameters ¹⁾		
Trigger transformer primary voltage	240	V
Trigger capacitance	1.36	µF
Open circuit peak amplitude	≥ 15	kV
Trigger voltage slope	≥ 15	kV/µs
Trigger peak current	~ 10	A
General technical data		
Insulation resistance at 100 V	> 100	MΩ
Typical breakdown time	≤ 50	ns
Typical delay time, V_B at 70% SBV	< 100	ns
Typical delay time, V_B at 40% SBV	< 100	µs
Maximum switching frequency	2	Hz
Weight	~ 750	g
Marking, black positive	 TF 25 E YY TF __ E - Series 25 - Nominal voltage in kV YY - Year of production	

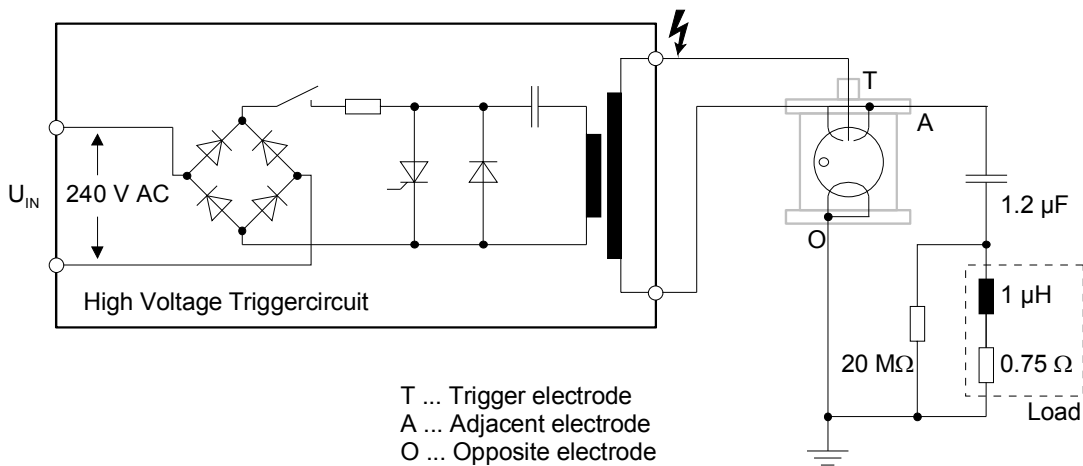
¹⁾ According to enclosed test circuit (page 4) with strongly damped oscillation, 3 half waves

Dimensional drawing in mm



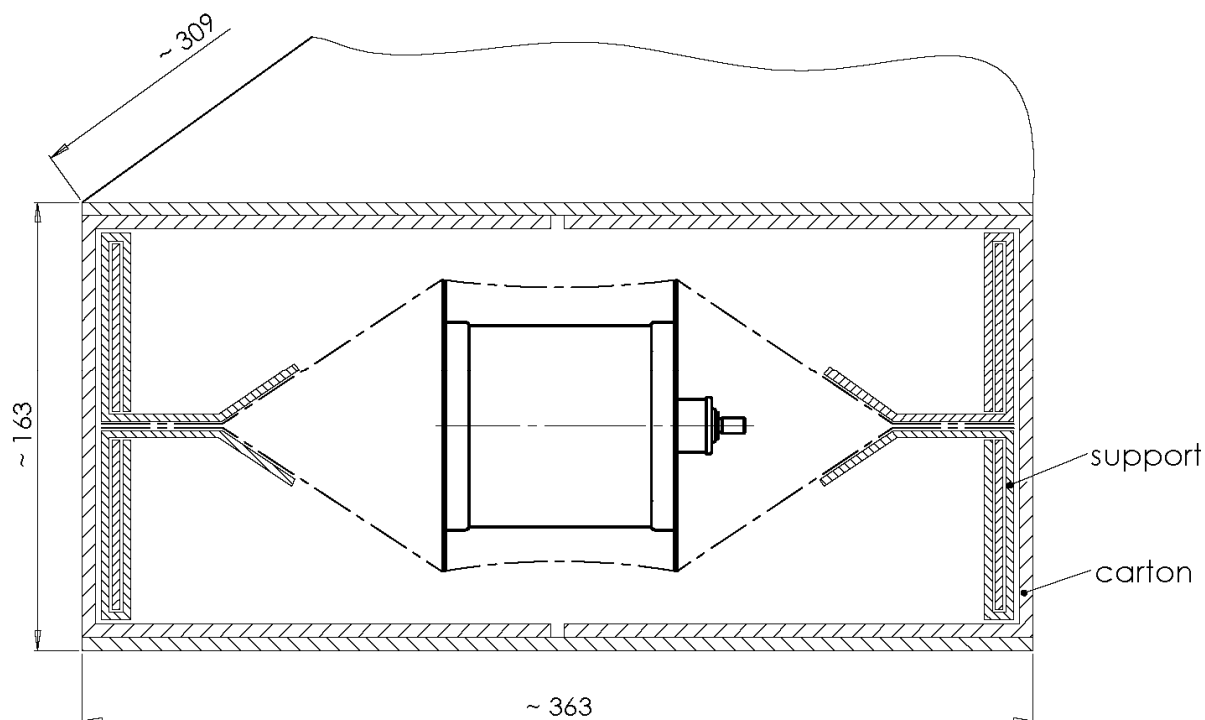


Test circuit



Ordering code and packing advice

B88069X1093B011 = 1 pc. in a box


Cautions and warnings

- Switching spark gaps may be used only within their specified values.
- Switching spark gaps must be handled with care and must not be dropped.
- Do not continue to use damaged switching spark gaps.
- Store switching spark gaps in original packaging only. Do not open the package prior to storage.
- Operators who suffer from excessive sensitivity to metals should wear light gloves (e.g. cotton gloves) when performing manual assembly operations involving switching spark gaps.

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