

Very fast , high PHR, 6-stage, 51 mm (2") round tube

Applications :	High and medium energy physics, time of flight PET applications and fast crystals scintillation detection. This tube features a good linearity, a good gain stability at high count rates, double anode for optimised time resolution, a good single electron spectrum, and a high energy resolution.		
Description :	Window :	Material :	borosilicate glass
		Photocathode :	bi-alkali
		Refr. index at 420 nm :	1.48
	Multiplier :	Structure :	linear focused
		Nb of stages :	6
	Mass :		240 g

Photocathode characteristics

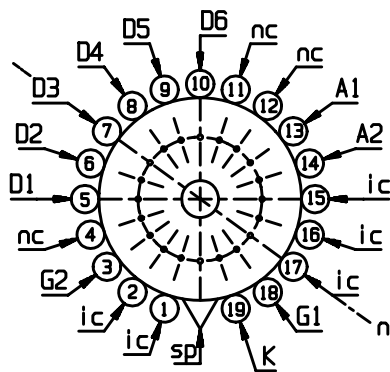
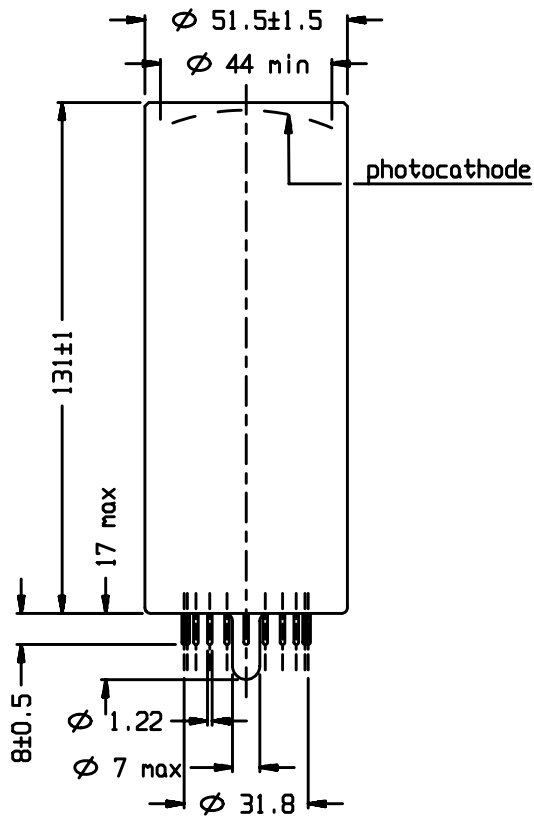
Spectral range :				270-650	nm
Maximum sensitivity at :				420	nm
Sensitivity ① :	Luminous :			130	µA/lm
<input checked="" type="checkbox"/>	Blue :	min.:	10	typ.:	12.5 µA/lmF
	Radiant, at 420 nm :			typ.:	100 mA/W

Characteristics with voltage divider A

Gain slope (vs supp. volt., log/log) :				4.2	
For an anode sensitivity of :				0.5	A/lmF
Gain of :				4x10 ⁴	
<input checked="" type="checkbox"/>	Supply voltage :	max.:	1300	typ.:	1100 V
		min.:	900		
<input checked="" type="checkbox"/>	Anode dark current ② :	max.:	10	typ.:	1 nA
	Single electron spectrum resolution :			typ.:	70 %
	peak to valley ratio ③ :			typ.:	2.5 %
<input checked="" type="checkbox"/>	Pulse height resolution ⁵⁷ Co ④ :	max.	11.5	typ.	10.3 %
	Gain halved for a magnetic field of :				
	perpendicular to axis "n" :			0.15	mT
	parallel with axis "n" :			0.12	mT

Characteristics with voltage divider A ⑤ :

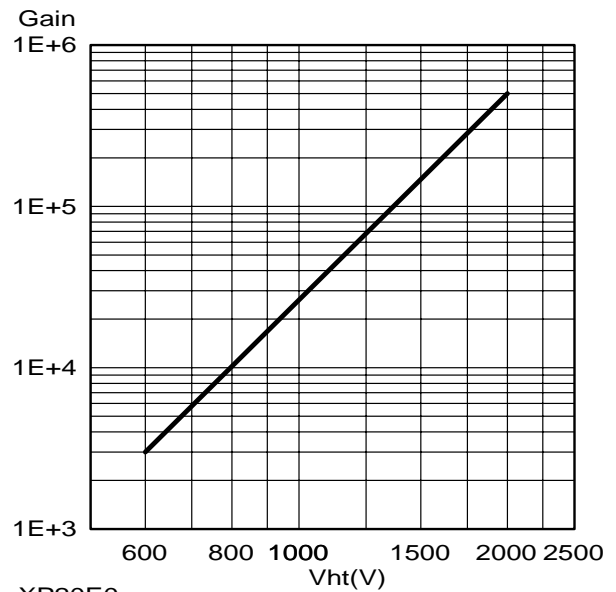
For a supply voltage of :				1700	V
Gain :				2.5x10 ⁵	
Linearity (2%) of anode current up to ⑤ :				90	mA
Anode pulse ⑥ :	Rise time :			1.5	ns
	Duration at half height :			2.2	ns
	Time Resolution (511 keV) ⑦ :			with LSO	220 ps
				with LaB ₃ :Ce	205 ps



ref.: 99902880

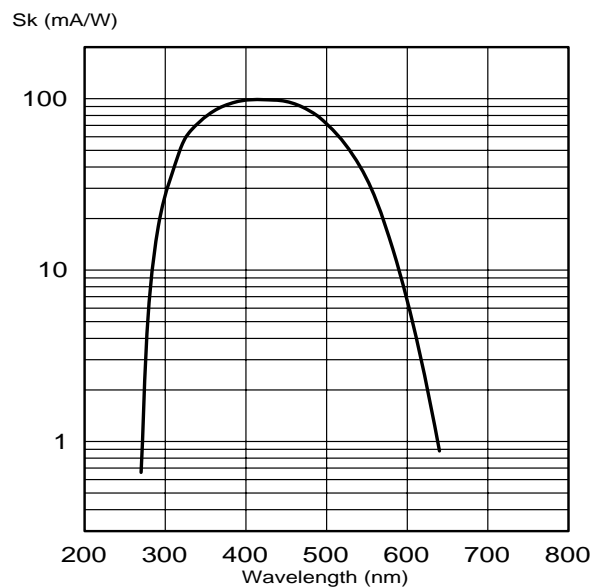
- nc: not connected
- ic: internal connection
- n: plane of symmetry of the multiplier
- K: cathode
- A1: anode
- A2: anode grid
- G1, 2: focusing electrodes
- Dn: dynode

Typical gain curve



XP20E0

Typical spectral characteristics



XP20E0

Accessories

- Socket : FE2019
- Mu-metal shield : MS172