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Product Lineup

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Proportional Counters

An X-ray proportional counter (PC) is a detector that makes use of the ionization effect of X-rays on an internal gas that may be either xenon or neon (for low energy X-rays). Its signal can be amplified by applying a high voltage to the center electrode. A pulse-height signal proportional to the energy of the X-rays applied can also be obtained.



PCs are suitable for measuring thickness of metal plating.

Features

Long life and high stability

Chemical cleaning and high-temperature exhausting under vacuum condition on the detector completely eliminates impurities.
Strict management of the filler gas.

Improved shock resistance

Lineup

Image	—	—	—	—	—	—	—
Tube Type	E6858	E6859B	E6859C	E6864	E6860 (C)	E6860 (P)	E6874
General Specifications							
Fill Gas	Xe+ additive gas				Ne+ additive gas		
Housing Material	Stainless steel						
Gas Pressure	approx. 100kPa	approx. 90kPa	approx. 100kPa	approx. 100kPa	approx. 70kPa		approx. 100kPa
Maximum Length	252mm	204mm	204mm	178mm	156mm	126mm	120mm
Maximum Diameter	50.8mm	50.8mm	50.8mm	50.8mm	38mm		25.4mm
Effective Length	175mm	142mm	142mm	116mm	75mm		68mm
Connector	Pin	MHV	MHV	MHV	MHV	Pin	SHV or MHV
Operating Temperature	−20° C – 70° C	−20° C – 70° C	−20° C – 70° C	−20° C – 70° C	−20° C – 70° C		−20° C – 70° C
Window Specifications							
Material	Beryllium				Beryllium		Beryllium
Thickness	0.3mm	0.2mm	0.1mm	0.1mm	0.062mm		0.025mm
Dimention	40mm(W) × 82mm(L)	40mm(W) × 82mm(L)	26mm(W) × 52mm(L)	26mm(W) × 52mm(L)	20mm(W) × 20mm(L)		9.5mm(W) × 25.4mm(L)
Electrical Specifications							
Operating Voltage Range	1,900 – 2,300V	1,800 – 2,100V	1,900 – 2,300V	1,900 – 2,300V	1,100 – 1,400V		1,300 – 1,500V
Recommended Voltage	2,000V	1,850V	2,000V	2,000V	1,300V		1,360V
Resolution							
Fe-55(5.9keV)	21%FWHM (Max.)	19%FWHM (Max.)	19%FWHM (Max.)	19%FWHM (Max.)	20%FWHM (Max.)		20%FWHM (Max.)
Cd-109 (22.1keV)	10%FWHM (Max.)	9%FWHM (Max.)	9%FWHM (Max.)	9%FWHM (Max.)	—		—

Inquiry About Products

048-631-1020

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