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| ION`X® UHV ROUND MAGNETRONS

- INTRODUCTION
- SPECIFICATIONS
- OPTIONS
- ACCESSORIES



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→ ROUND MAGNETRONS → UHV MAGNETRONS → RECTANGULAR MAGNETRONS
→ РОУНД МАГНЕТРОНЫ → УВН МАГНЕТРОНЫ → РЕКТАНГУЛЯР МАГНЕТРОНЫ

PLANAR MAGNETRON SPUTTERING SOURCE ION`X-8"UHV

» INTRODUCTION



- metallic vacuum sealing
- mounts on DN 250/100 CF
- bakeable up to 200 °C

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» PRODUCT OVERVIEW

ULTRAHIGH VACUUM MAGNETRON				
ITEM	SIZE	PART NUMBER	DESCRIPTION	VACUUM INTERFACE
6.1	8" Ø	IX8U_9110_CF250	<ul style="list-style-type: none"> • 8" UHV magnetron on DN 250 CF • targets 6–14 mm thick • discrete target clamp • welded and brazed ceramic insulator • 1x FPM seal • SmCo magnets, bakeable 200 °C • reference drawing IX8U_8110 	DN 250 CF
6.2	8" Ø	IX8U_9150_CF250	<ul style="list-style-type: none"> • 8" UHV magnetron on DN 250 CF • targets 6–14 mm thick • discrete target clamp • welded and brazed ceramic insulator • 1x internal CF seal • SmCo magnets, bakeable 200 °C • reference drawing IX8U_8150 	DN 250 CF
6.3	8" Ø	IX8U_9200_CF100	<ul style="list-style-type: none"> • 8" UHV magnetron with DN 100 CF inverted internal mounting • targets 6–12 mm thick • welded and brazed ceramic insulator • 1x FPM seal • SmCo magnets, bakeable 200 °C • reference drawing IX8U_8200 	DN 100 CF inv.
6.4	8" Ø	IX8U_9250_CF100	<ul style="list-style-type: none"> • 8" UHV magnetron with DN 100 CF internal mounting • targets 6–12 mm thick • welded and brazed ceramic insulator • 1x internal CF seal • SmCo magnets, bakeable 200 °C • reference drawing IX8U_8250 	DN 100 CF

OPTIONS

8" Ø		• argon injection	
8" Ø		• on request	
8" Ø		• chimney	
8" Ø		• on request	
8" Ø		• extended flange mounting	



2" UHV
 3" UHV
 4" UHV
 5" UHV
 6" UHV
 8" UHV

» SPECIFICATIONS

8" ULTRAHIGH VACUUM MAGNETRON				
Model No.	IX8U_9110	IX8U_9150	IX8U_9200	IX8U_9250
	8" UHV FLANGE MOUNTED		8" UHV INTERNAL	
Target				
< form	circular/planar			
< diameter	8" ± 0.3 mm			
< thickness	6 to 14 mm			
< cooling	indirect			
Operating pressure				
	argon			
< nonmagnetic targets	3 x 10 ⁻³ to 10 ⁻¹ mbar			
< best performance	5 x 10 ⁻³ to 5 x 10 ⁻² mbar			
< vacuum sealing	welding, brazing, FPM	welding, brazing, CF	welding, brazing, FPM	welding, brazing, CF
Electrical specifications				
< max. power, watts DC/RF	6000 W DC / 3000 W RF * **			
< max. voltage DC	1000 V			
< max. current DC	10 A			
< rec. power supply	6 kW DC / 3 kW RF			
Power connector				
< connector DC/RF	7/16 type		custom type	
Cooling water				
< flow	0.5–1 l / (min x kW)			
< min. flow	2 l/min			
< max. inlet temperature	≤ 30 °C			
< max. pressure	≤ 2 bar open drain			
< water tubes	Ø 8 x Ø 6 mm PTFE			

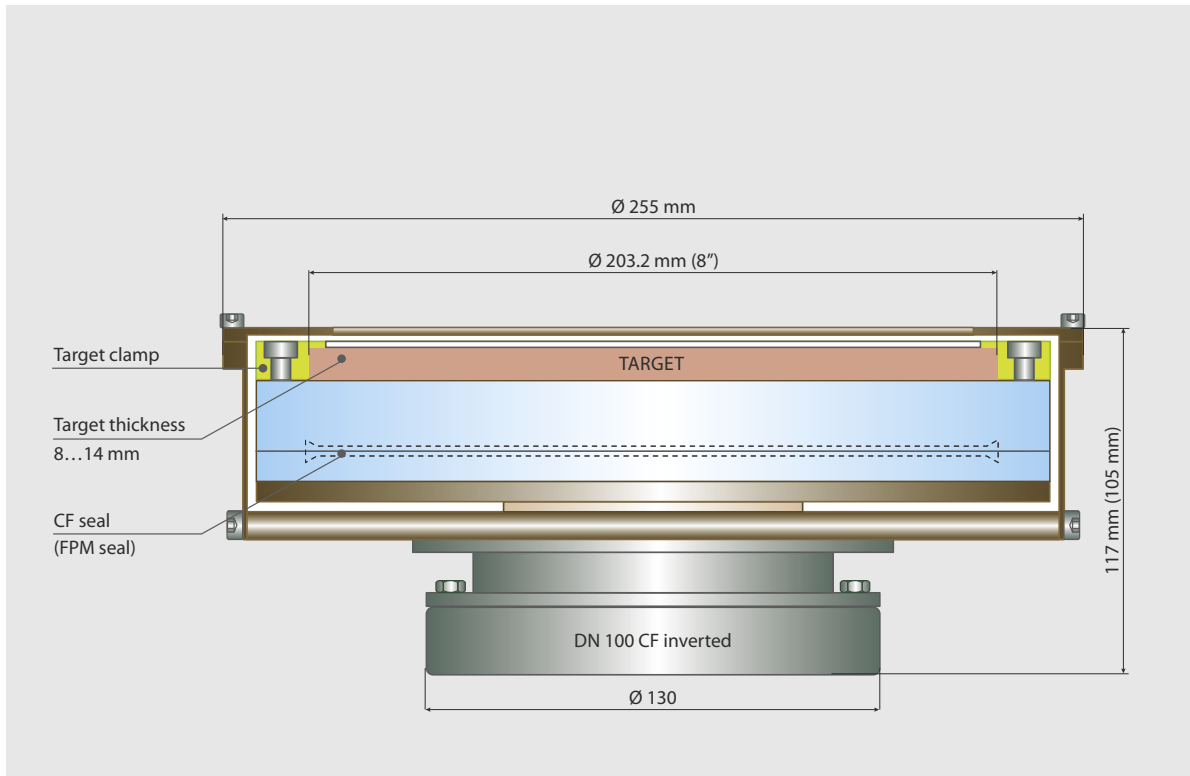
8" ULTRAHIGH VACUUM MAGNETRON

Model No.	IX8U_9110	IX8U_9150	IX8U_9200	IX8U_9250
Magnet array	permanent SmCo			
Bakeout temperature				
< max. temperature	200 °C			
Magnetron dimensions				
< diameter	243 (255) mm	243 (255) mm	243 (255) mm	243 mm
< height	79 mm	91 mm	105 mm	117 mm
< weight	33 kg	34 kg	18 kg	19 kg
Vacuum interface	DN 250 CF		DN 100 CF inv.	DN 100 CF
Proposed mounting style	DN 250 CF		_CF 250	_CF 250
Construction materials	stainless steel OFHC - type copper Al ₂ O ₃			
Typical rates				
	Ti, 11 Å/s, 2 kW DC, 75 mm Cu, 13 Å/s, 2 kW DC, 200 mm			
Accessories & Options				
< target diameter	200 mm			
< argon injection	✓		✓	
< power connector	HN-type		custom type	
< magnet array for magnetic materials	on request		on request	
< ± 30° tilt	n.a.		✓	
< flange mounting	DN 250 CF		DN 250 CF	
< SS target clamps for specified thickness	✓	✓	✓	✓
< SS target clamps for bond targets	✓	✓	✓	✓

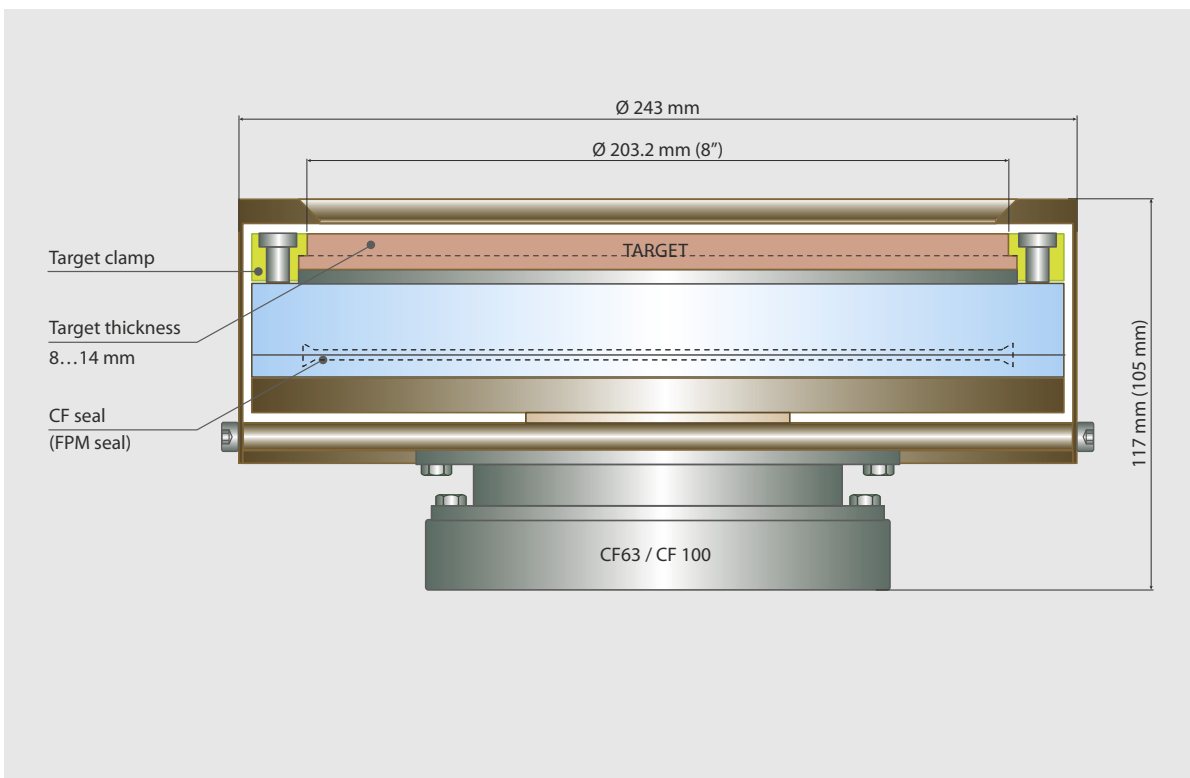
* This value refers to the magnetron itself. The maximum power is determined by the target material and bonding technique.

** RF-Version requires special connector and installation. More details on request.

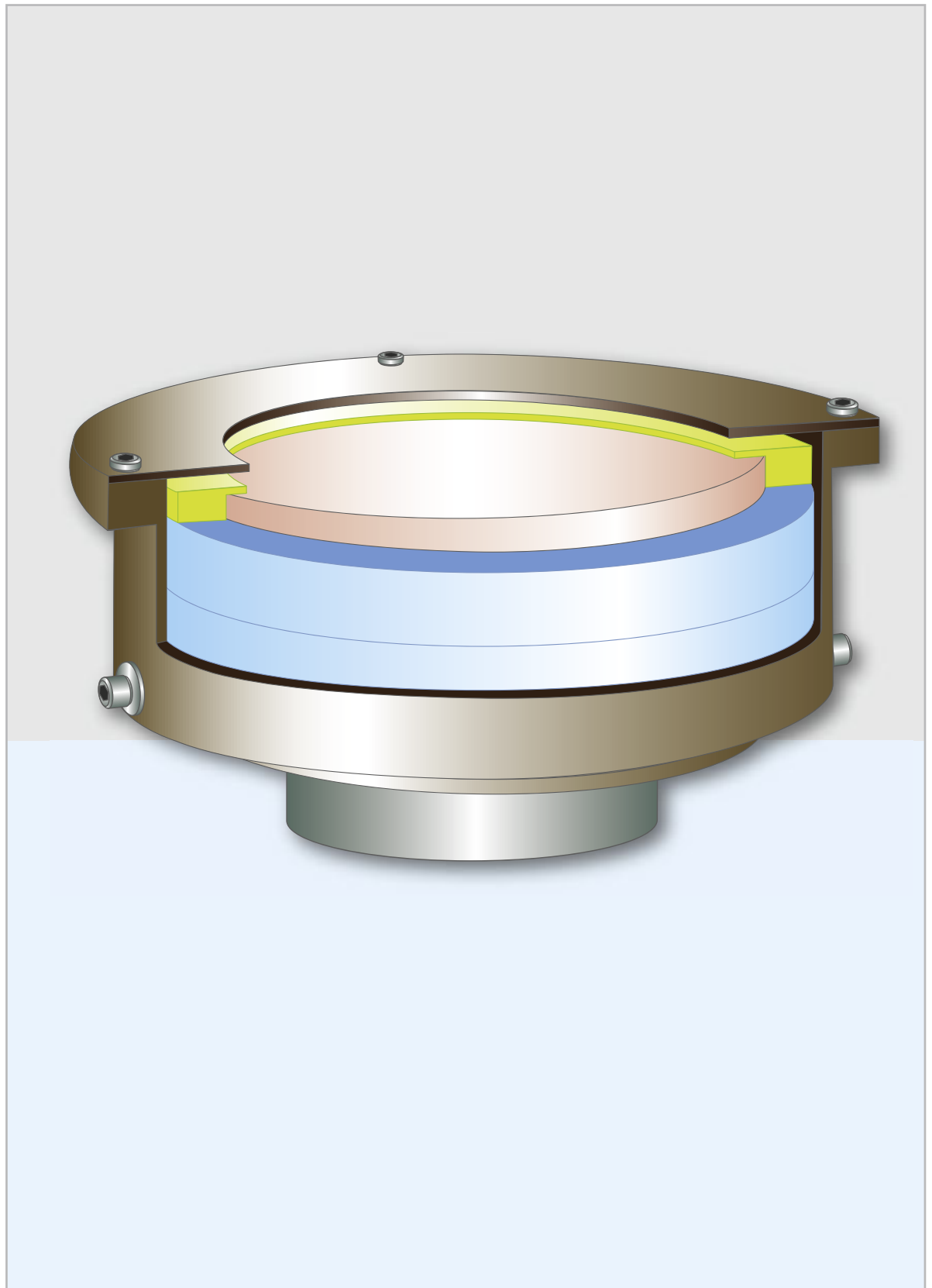
REFERENCE VIEW IX8U_83x0



REFERENCE VIEW IX8U_82x0



PLANAR MAGNETRON SPUTTERING SOURCE ION'X-8"UHV



8" UHV

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Hermann Gebhardt

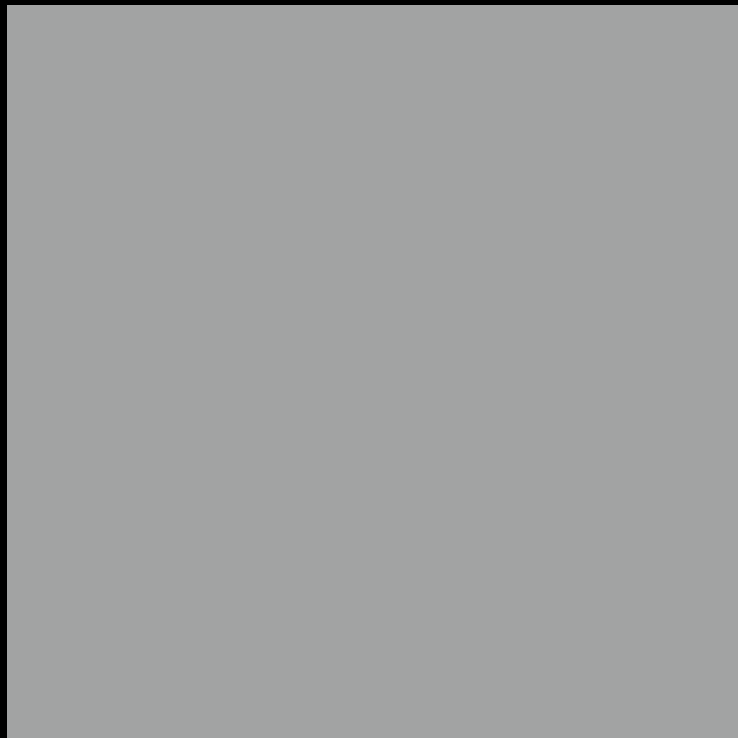
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