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| ION`X® UHV ROUND MAGNETRONS

- INTRODUCTION
- SPECIFICATIONS
- OPTIONS
- ACCESSORIES

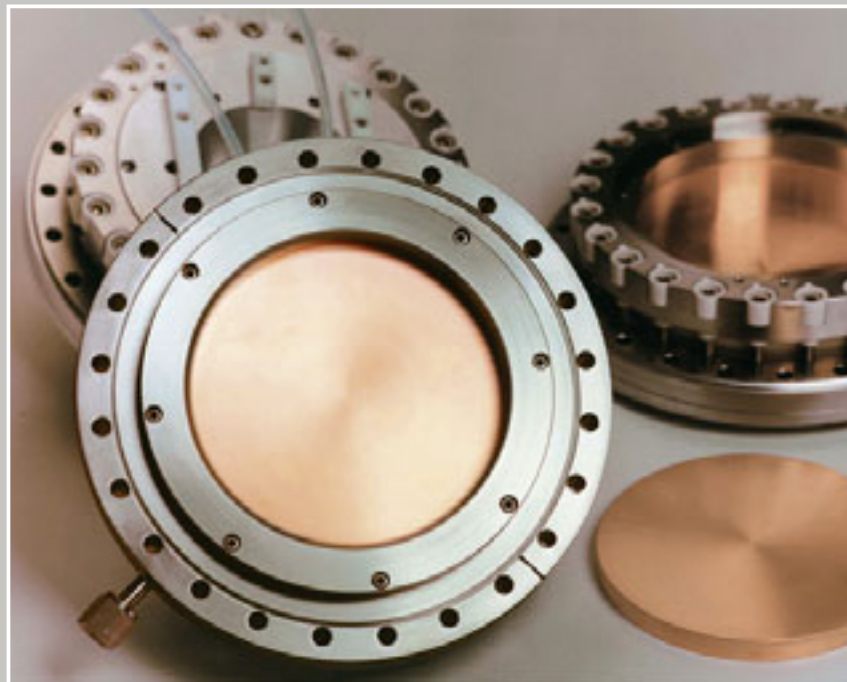


THIN FILM CONSULTING 

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

PLANAR MAGNETRON SPUTTERING SOURCE ION`X-6"UHV

» INTRODUCTION



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

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» PRODUCT OVERVIEW

ULTRAHIGH VACUUM MAGNETRON				
ITEM	SIZE	PART NUMBER	DESCRIPTION	VACUUM INTERFACE
5.1	6" Ø	IX6U_9100_CF200	<ul style="list-style-type: none"> • 6" UHV magnetron on DN 200 CF • targets 6–12 mm thick • discrete target clamp • welded and brazed ceramic insulator • 1x FPM seal • SmCo magnets, bakeable 200 °C • reference drawing IX6U_8100 	DN 200 CF
5.2	6" Ø	IX6U_9150_CF200	<ul style="list-style-type: none"> • 6" UHV magnetron on DN 200 CF • targets 6–12 mm thick • discrete target clamp • welded and brazed ceramic insulator • 1x internal CF seal • SmCo magnets, bakeable 200 °C • reference drawing IX6U_8150 	DN 200 CF
5.3	6" Ø	IX6U_9200_CF100	<ul style="list-style-type: none"> • 6" UHV magnetron with DN 100 CF internal mounting • targets 6–12 mm thick • welded and brazed ceramic insulator • 1x FPM seal • SmCo magnets, bakeable 200 °C • reference drawing IX6U_8200 	DN 100 CF
5.4	6" Ø	IX6U_9250_CF100	<ul style="list-style-type: none"> • 6" 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 IX6U_8250 	DN 100 CF

OPTIONS

6" Ø		• argon injection	
6" Ø		• ferromagnetic targets, 4 mm Ni, 2 mm Fe	
6" Ø		• chimney	
6" Ø		• ± 30° tilt	
6" Ø		• extended flange mounting	



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

» SPECIFICATIONS

6" ULTRAHIGH VACUUM MAGNETRON				
Model No.	IX6U_9100	IX6U_9150	IX6U_9200	IX6U_9250
	6" UHV FLANGE MOUNTED		6" UHV INTERNAL	
Target				
< form	circular/planar			
< diameter	6" ± 0.25 mm			
< thickness	6 to 12 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	3500 W DC / 1500 W RF * **			
< max. voltage DC	1000 V			
< max. current DC	10 A			
< rec. power supply	3 kW DC / 1.5 kW RF			
Power connector				
< connector DC/RF	7/16 type		custom type	
Cooling water				
< flow	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			

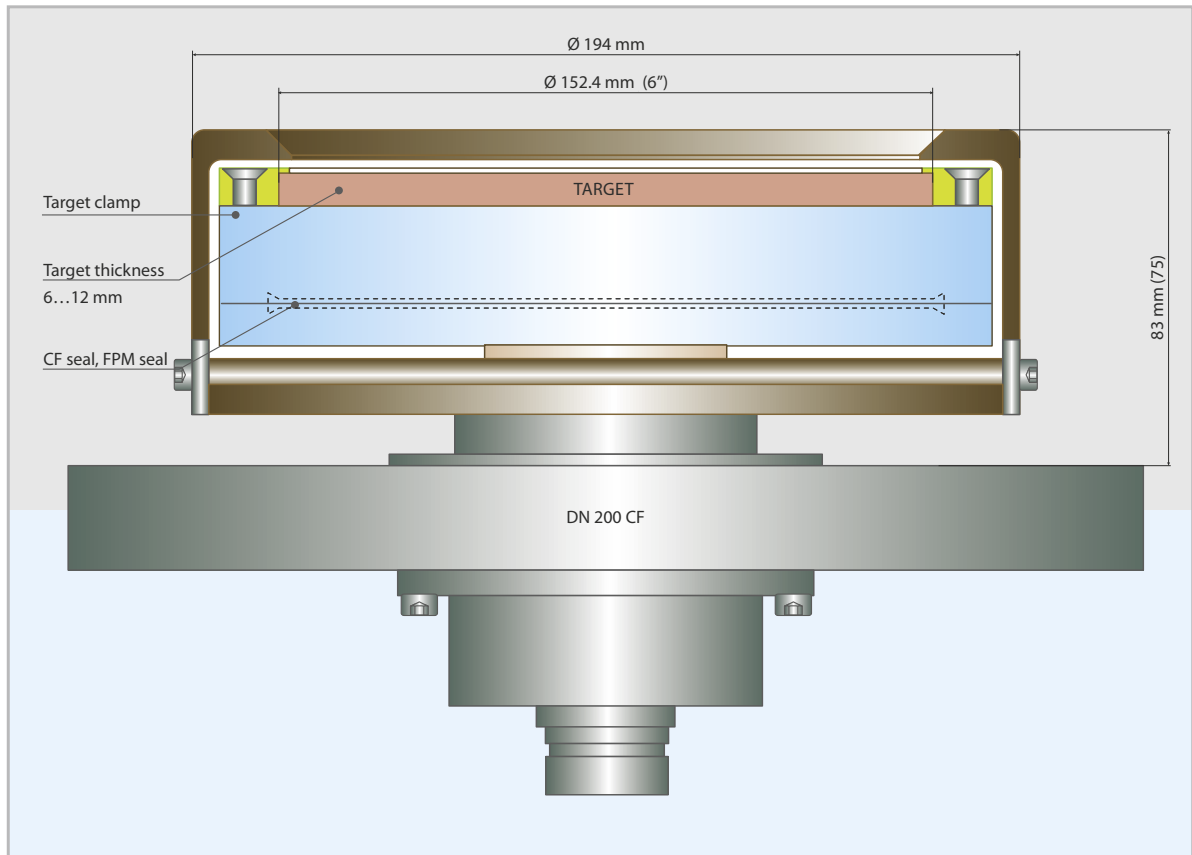
6" ULTRAHIGH VACUUM MAGNETRON

Model No.	IX6U_9100	IX6U_9150	IX6U_9200	IX6U_9250
Magnet array	permanent SmCo			
Bakeout temperature				
< max. temperature	200 °C			
Magnetron dimensions				
< diameter	194 mm	194 mm	194 mm	194 mm
< height	75 mm	83 mm	95 mm	103 mm
< weight	15 kg	16 kg	9 kg	10 kg
Vacuum interface	DN 200 CF		DN 100 CF	DN 100 CF
Proposed mounting style	DN 200 CF		_CF 200	_CF 200
Construction materials	stainless steel OFHC - type copper Al ₂ O ₃			
Typical rates				
	Mo, 8 Å/s, 1 kW DC, 150 mm Cu, 24 Å/s, 1 kW DC, 150 mm			
Accessories & Options				
< target diameter	150 mm			
< argon injection	✓		✓	
< power connector	HN-type		custom type	
< magnet array for magnetic materials	Fe 2 mm, Ni 4 mm		Fe 2 mm, Ni 4 mm	
< ± 30° tilt	n.a.		✓	
< flange mounting	DN 250 CF		DN 200 CF / DN 250 CF	
< SS target clamps for specified thickness	✓	✓	✓	✓
< SS target clamps for bond targets	✓	✓	✓	✓

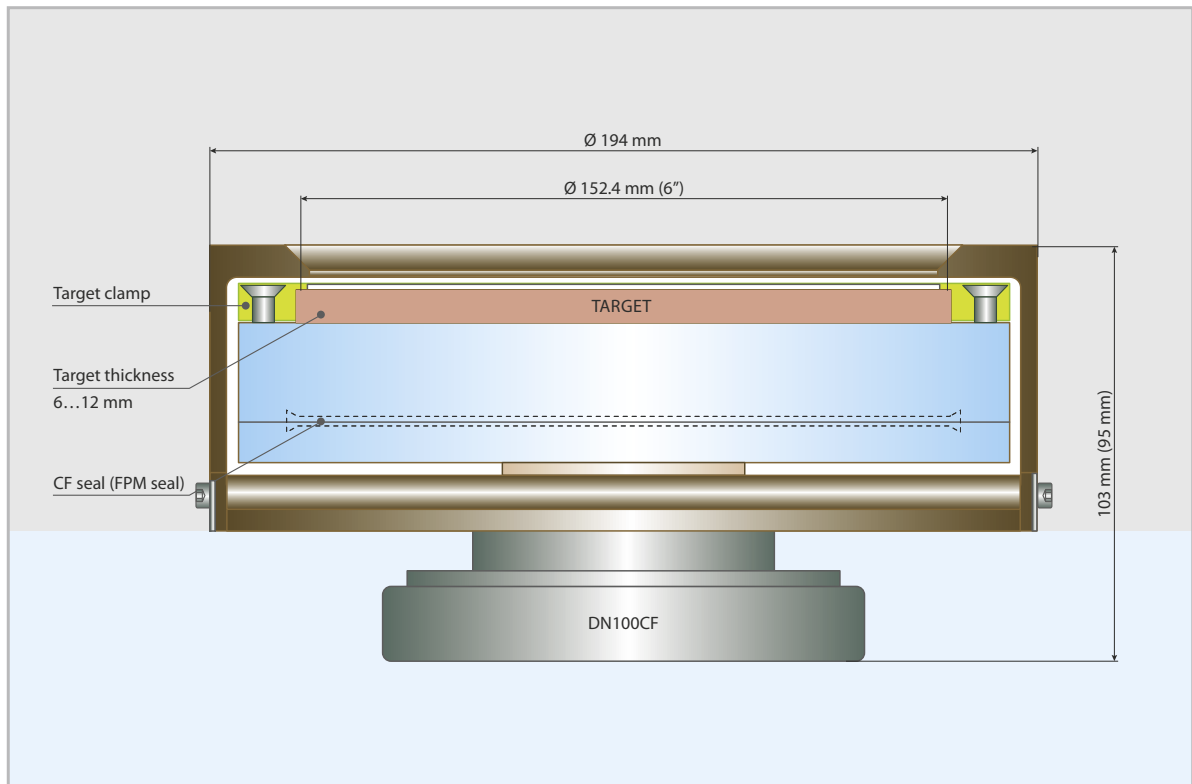
* This value refers to the magnetron itself. The maximum power is determined by the target material and bonding technique.

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

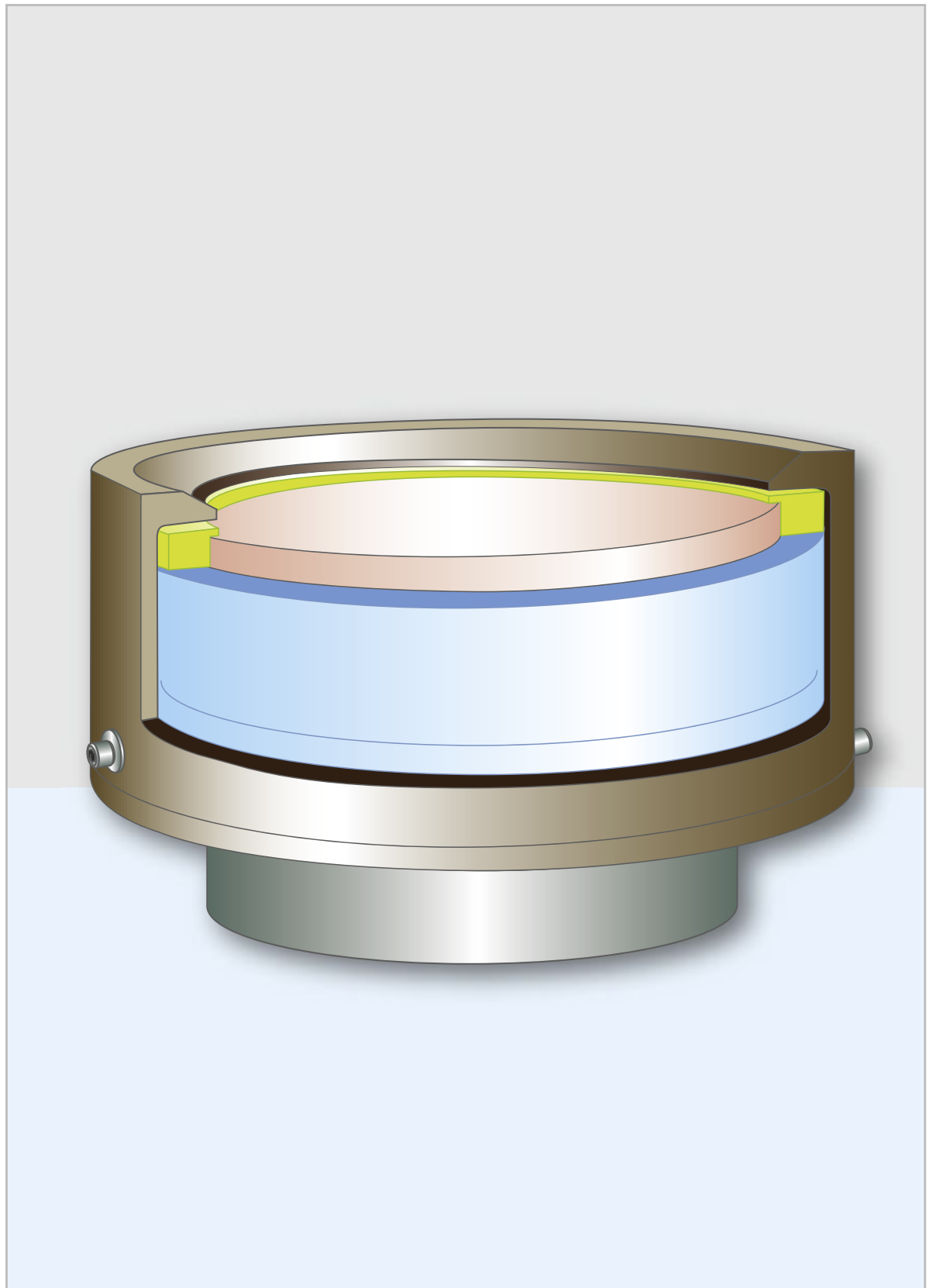
REFERENCE VIEW IX6U_81x0



REFERENCE VIEW IX6U_82x0



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Hermann Gebhardt

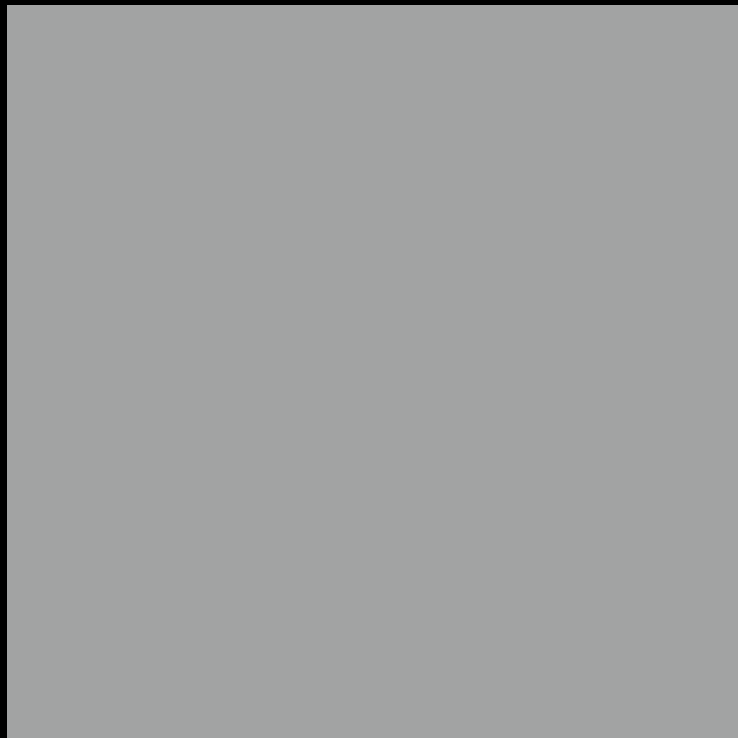
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