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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-3"UHV

» INTRODUCTION



- metallic vacuum sealing
- mounts on DN 100/16 CF
- adjustable target clamping
- bakeable 200 °C
- magnet array for ferromagnetic targets

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>> PRODUCT OVERVIEW

ULTRAHIGH VACUUM MAGNETRON				
ITEM	SIZE	PART NUMBER	DESCRIPTION	VACUUM INTERFACE
2.1	3" Ø	IX3U_9104	<ul style="list-style-type: none"> • 3" UHV magnetron on DN 100 CF • targets 4–8 mm thick, sliding anode • threaded target clamp • SmCo magnets, bakeable 200 °C • power connector 7/16-type • reference drawing IX3U_8104 	DN 100 CF
2.2	3" Ø	IX3U_9200_CF16	<ul style="list-style-type: none"> • 3" UHV magnetron with DN 16 CF, internal mounting • targets 4–8 mm thick, sliding anode • SmCo magnets, bakeable 200 °C • reference drawing IX3U_8200_CF16 	DN 16 CF
2.3	3" Ø	IX3U_9200_CF40	<ul style="list-style-type: none"> • 3" UHV magnetron with DN 40 CF, internal mounting • targets 4–8 mm thick, sliding anode • SmCo magnets, bakeable 200 °C • reference drawing IX3U_8200_CF40 	DN 40 CF

OPTIONS

	3" Ø		• argon injection	
	3" Ø		• chimney	
	3" Ø		• ± 30° tilt	
	3" Ø		• extended flange mounting	



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

» SPECIFICATIONS

3" ULTRAHIGH VACUUM MAGNETRON		
Model No.	IX3U_9104	IX3U_9200
	3" UHV FLANGE MOUNTED	3" UHV INTERNAL
Target		
< form	circular/planar	
< diameter	3" ± 0.25 mm	
< thickness	4 to 8 mm	
< cooling	indirect	
Operating pressure		
< 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, CF	
Electrical specifications		
< max. power, watts DC/RF	1000 W DC / 600 W RF * **	
< max. voltage DC	1000 V	
< max. current DC	5 A	
< rec. power supply	1000 W DC / 600 W RF	
Power connector		
< DC/RF	7/16 type	custom type
Cooling water		
< flow	1 l / (min x kW)	
< min. flow	1 l/min	
< max. inlet temperature	≤ 30 °C	
< max. pressure	≤ 2 bar open drain	
< water tubes	Ø 6 x Ø 4 mm PTFE	

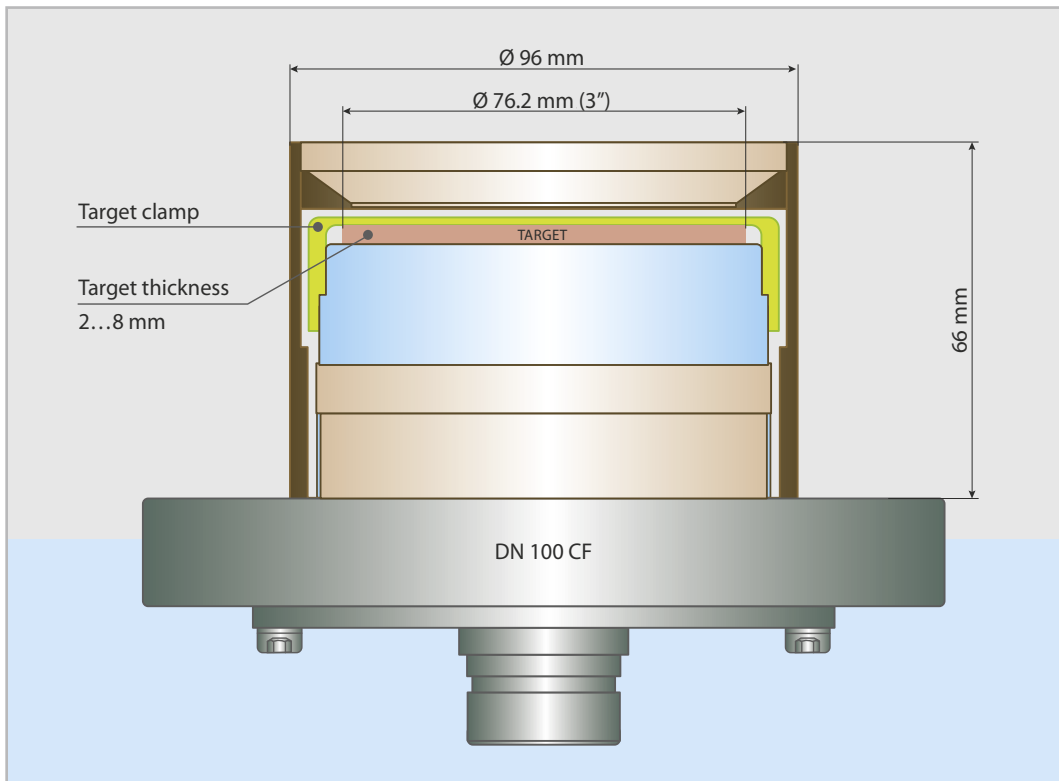
3 " ULTRAHIGH VACUUM MAGNETRON

Model No.	IX3U_9104	IX3U_9200
Magnet array	permanent SmCo	
Bakeout temperature		
< max. temperature	200 °C	
Magnetron dimensions		
< diameter	96 mm	103 mm
< height	66 mm	103 mm (+ 48 mm CF 16)
< weight	4.5 kg	4 kg
Vacuum interface	DN 100 CF	DN 63 CF
Proposed mounting style	DN 100 CF	_CF 16 / _CF 40
Construction materials	stainless steel OFHC - type copper Al ₂ O ₃	
Typical rates		
	Al, 14 Å/s, 1 kW DC, 100 mm Cu, 25 Å/s, 1 kW DC, 100 mm	
Accessories & Options		
< target diameter	75 mm	
< argon injection	✓	✓
< power connector	N-type, HN-type	custom type
< magnet array for magnetic materials	Fe 1 mm, Ni 3 mm	Fe 1 mm, Ni 3 mm
< ± 30° tilt	n.a.	✓
< flange mounting	DN 160 CF	DN 100 CF / DN 160 CF
< SS target clamps for specified thickness	n.a.	✓
< SS target clamps for bond targets	n.a.	✓

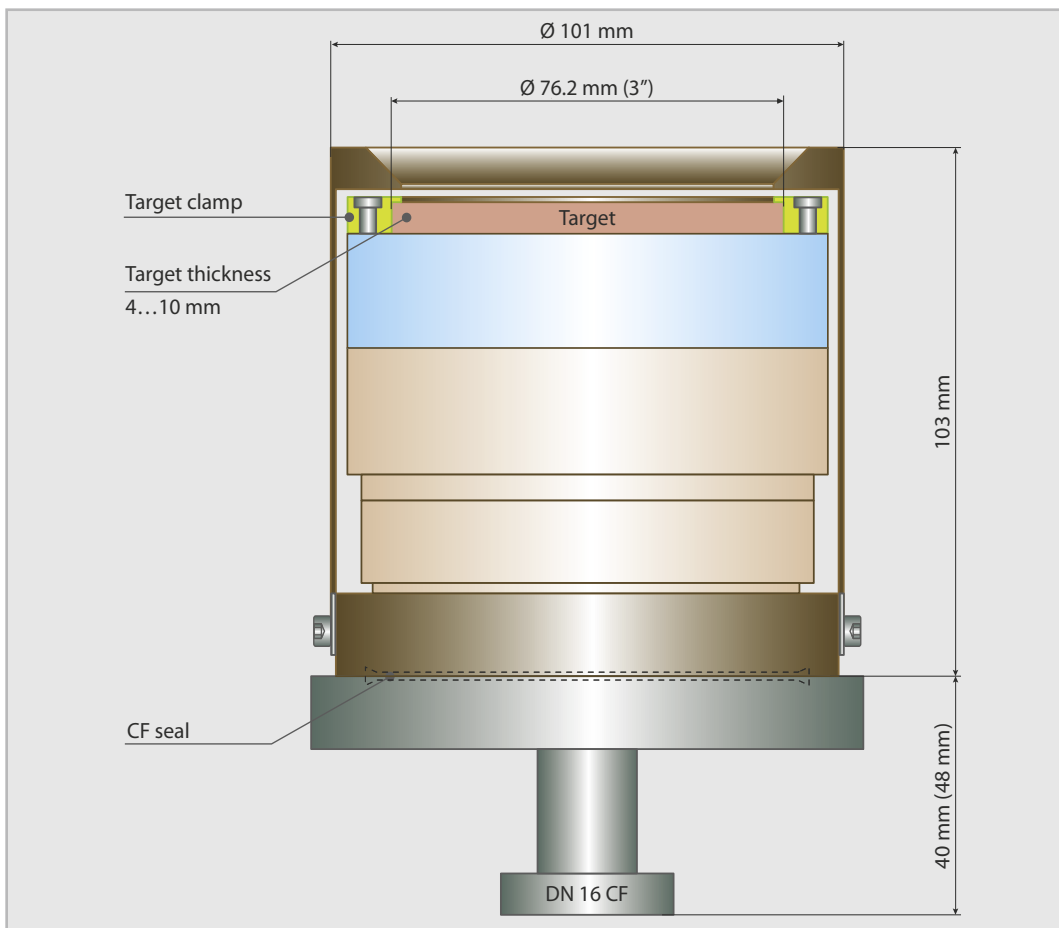
* This value refers to the magnetron itself. The maximum power is determined by the target material and bonding technique.

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

REFERENCE VIEW IX3U_8104

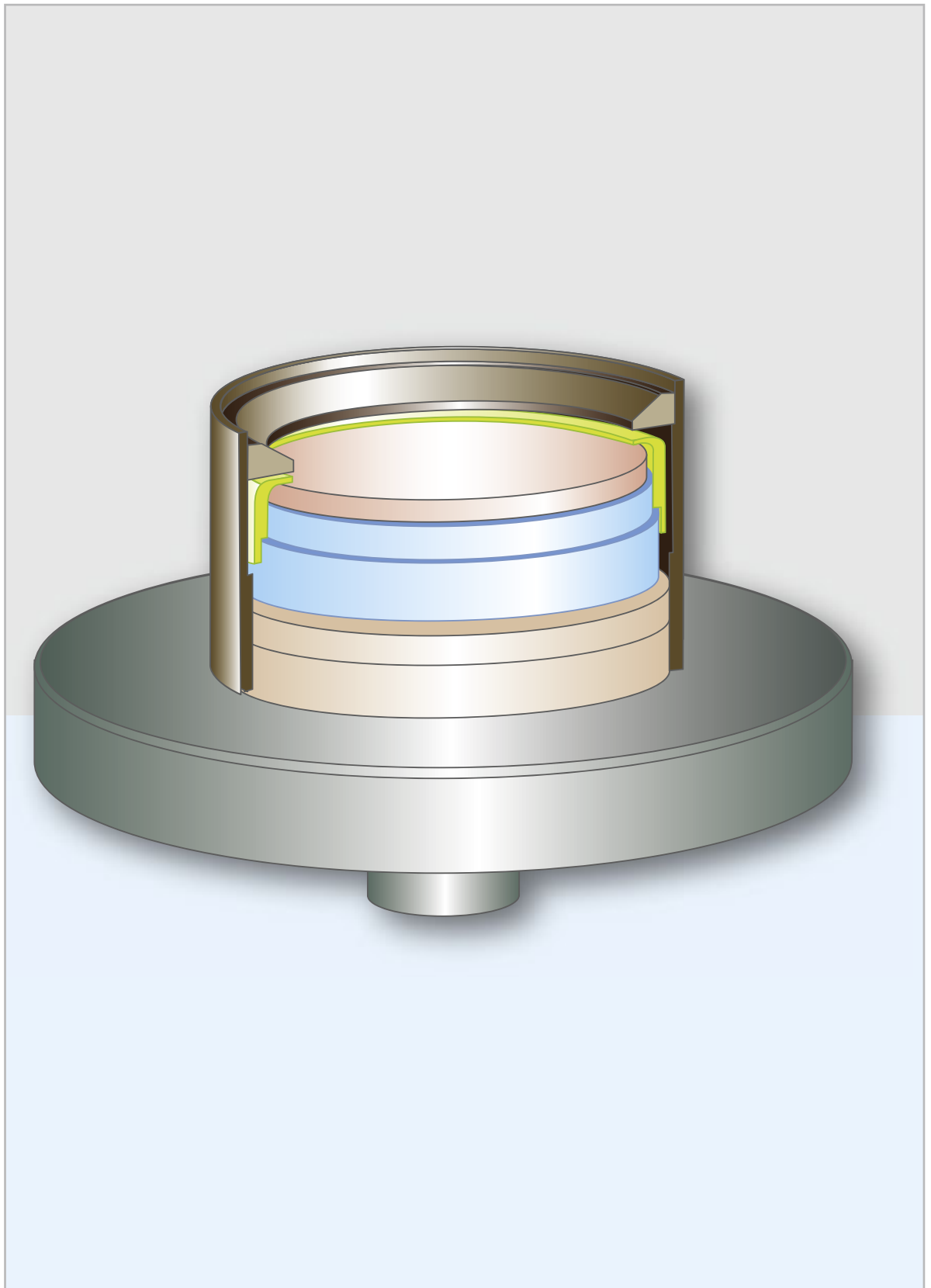


REFERENCE VIEW IX3U_8200



PLANAR MAGNETRON SPUTTERING SOURCE ION'X-3"UHV

3" UHV



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THIN FILM CONSULTING

Hermann Gebhardt

Robert Bosch Str. 11
D-72661 Grafenberg
GERMANY

Tel.: +49 (0) 71 23/9 36 66

Fax: +49 (0) 71 23/93 66 89

E-Mail: info@thfc.de

Web: www.thfc.de



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