

ION`X®

Rely on • quality • know-how • performance

| ION`X® HV ROUND MAGNETRONS

- INTRODUCTION
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- OPTIONS
- ACCESSORIES



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PLANAR MAGNETRON SPUTTERING SOURCE ION`X-8" HV

» INTRODUCTION



- 8" target diameter
- DN 63 ISO vacuum interface

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» PRODUCT OVERVIEW

HIGH VACUUM MAGNETRON				
ITEM	SIZE	PART NUMBER	DESCRIPTION	VACUUM INTERFACE
5.1	8" Ø	IX8_A120	<ul style="list-style-type: none"> • 8" magnetron with DN 63 ISO • targets 6–14 mm thick • discrete target clamp • indirect cooling • water tubes 10/8 mm • power connection screw terminal • reference drawing IX8_8A120 	DN 63 ISO
5.2	8" Ø	IX8_A020	<ul style="list-style-type: none"> • 8" magnetron with DN 63 ISO • targets 6–14 mm thick • discrete target clamp • directly cooled backing plate • water tubes 10/8 mm • power connection screw terminal • reference drawing IX8_8A020 	DN 63 ISO
5.3	8" Ø	IX8_B120	<ul style="list-style-type: none"> • 8" magnetron on DN 250 ISO-K • targets 6–14 mm thick • discrete target clamp • indirect cooling • water tubes 10/8 mm • power connection screw terminal • reference drawing IX8_8B120 	DN 250 ISO-K
5.4	8" Ø	IX8_B020	<ul style="list-style-type: none"> • 8" magnetron with DN 250 ISO-K • targets 6–14 mm thick • discrete target clamp • directly cooled backing plate • water tubes 10/8 mm • power connection screw terminal • reference drawing IX8_8B020 	DN 250 ISO-K

ACCESSORIES				
		SK 6350	• adapter ISO 63 - KF 50	
		SK 6340	• adapter ISO 63 - KF 40	
			• other ISO hardware on request	



2" HV
 3" HV
 4" HV
 6" HV
8" HV
 10" HV

» SPECIFICATIONS

8" HIGH VACUUM MAGNETRON		
Model No.	IX8_A120/_A020	IX8_B120/_B020
Target		
< form	circular/planar	
< diameter	8" ± 0.5 mm	
< thickness	6 mm to 14 mm	
< cooling	indirect/direct	
Operating pressure		
argon		
< nonmagnetic targets	3 x 10 ⁻³ to 1 x 10 ⁻¹ mbar	
< best performance	5 x 10 ⁻³ to 5 x 10 ⁻² mbar	
< vacuum sealing	FPM	
Electrical specifications		
< max. power, watts DC/ RF	10 kW DC / 5 kW RF * **	
< max. voltage DC	1000 V	
< max. current DC	25 A DC	
< rec. power supply	10 kW DC / 3 kW RF	
Power connector		
< DC/RF	screw terminal	
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 10 x Ø 8 mm PTFE	

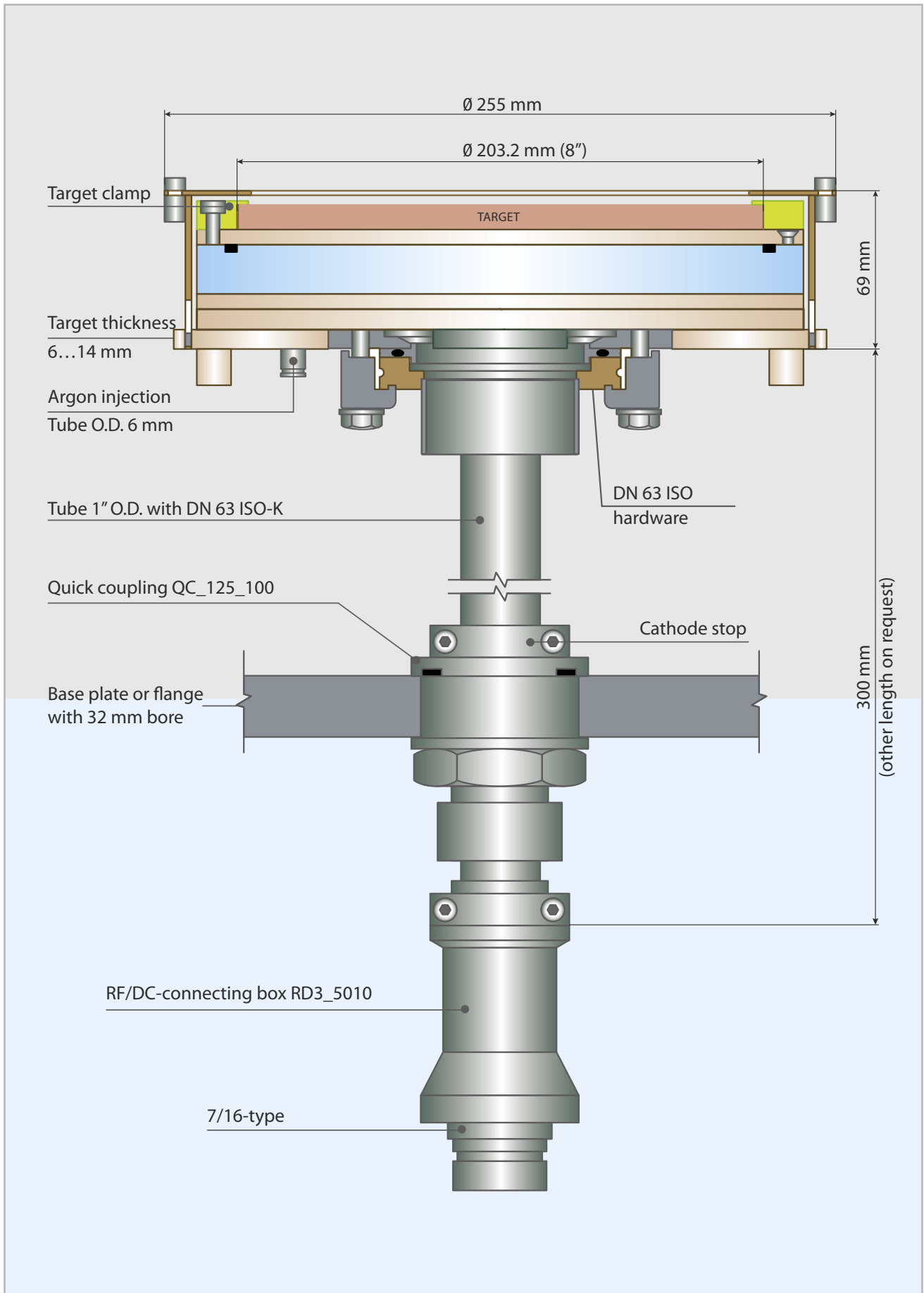
8" HIGH VACUUM MAGNETRON

Model No.	IX8_A120/_A020	IX8_B120/_B020
Magnet array	multipolar NdFeB	
Bakeout temperature		
< max. temperature	60 °C	
Magnetron dimensions		
< diameter	255 mm	
< height	68 mm (75 mm)	70 mm
< weight	18 kg	22 kg
Interface	DN 63 ISO K	DN 250 ISO K
Proposed mounting style	tube Ø1" x 300 mm	DN 250 ISO K
Construction materials	stainless steel OFHC - type copper Al2O3, PTFE	
Typical rates		
	Ti, 11 Å/s, 2 kW DC, 75 mm	
	Cu, 13 Å/s, 2 kW DC, 200 mm	
Accessories & Options		
< mounting option	tube Ø1" x 300 mm	other flanges on request
< quick coupling feedthrough	for tube Ø 1"	-
< argon injection	✓	✓
< power connector	**	**
< magnet array for magnetic materials	on request	
< ± 30° tilt	✓	-
< SS target clamps for specified thickness	✓	
< SS target clamps for bond targets	✓	

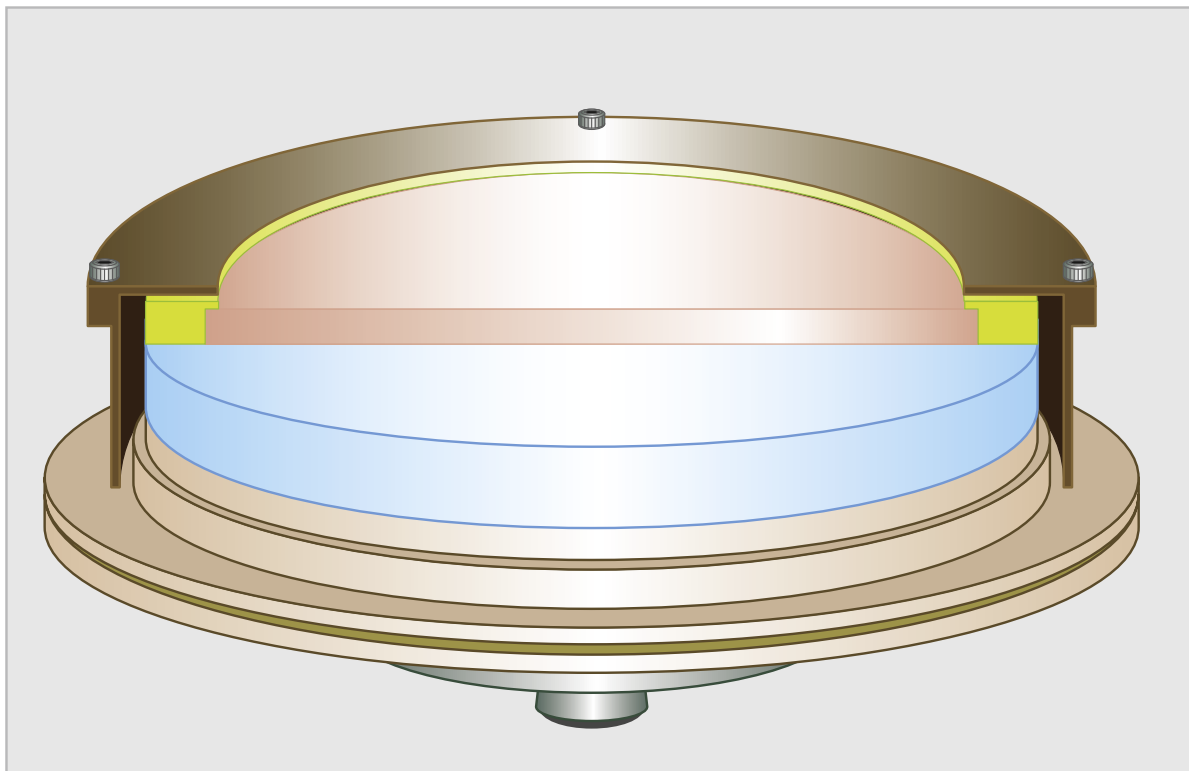
* This value refers to the magnetron itself. The maximum power is determined by the target material and bonding technique.

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

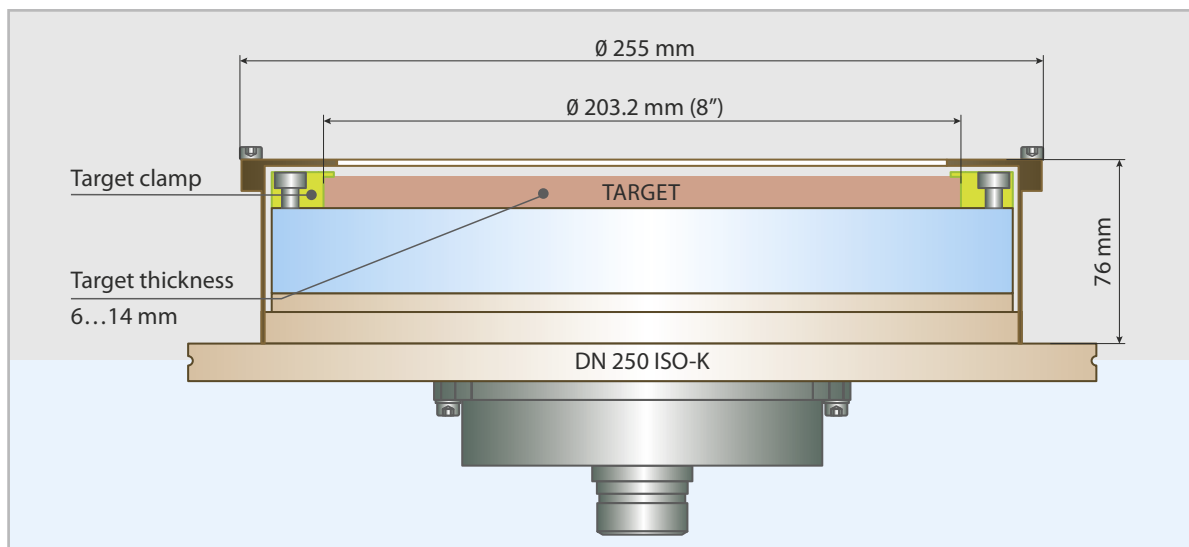
REFERENCE VIEW IX8_8A020



PLANAR MAGNETRON SPUTTERING SOURCE ION'X-8" HV FLANGE MOUNT

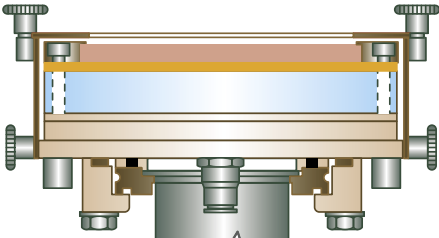


REFERENCE VIEW IX8_8B120

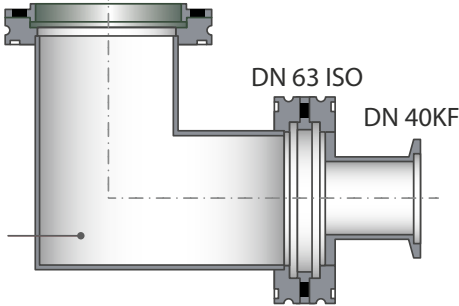


8" HV

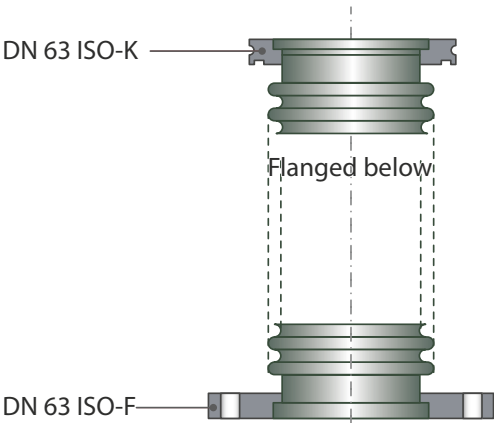
MOUNTING OPTIONS ISO 63



continue with ISO 63 hardware tubes, bellows or 90° Elbows



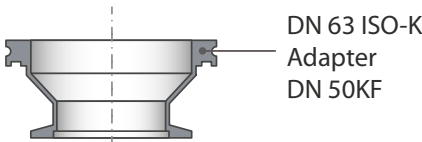
90° Elbows



DN 63 ISO-K

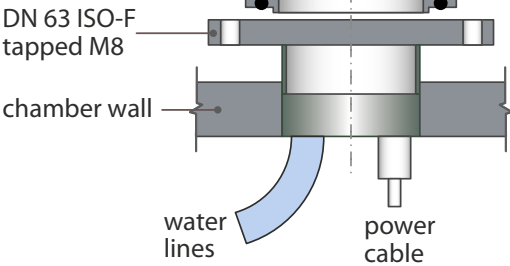
Flanged below

DN 63 ISO-F



DN 63 ISO-K Adapter DN 50KF

continue with KF 50 hardware tubes, bellows or 90° Elbows



DN 63 ISO-F tapped M8

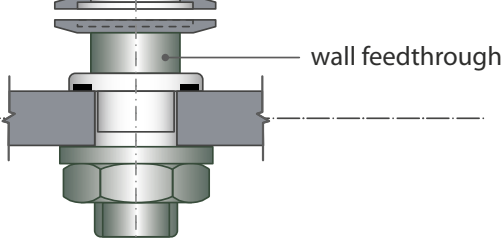
chamber wall

water lines

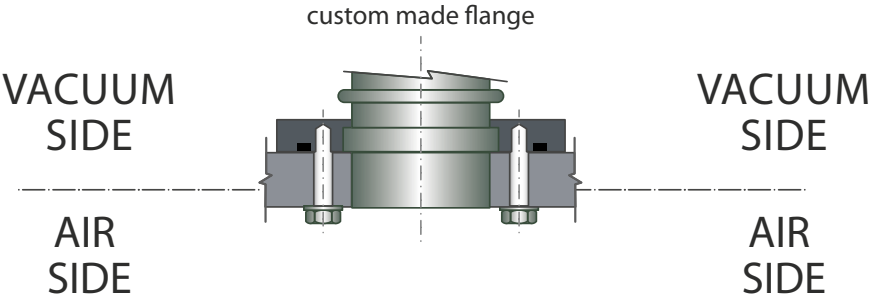
power cable

VACUUM SIDE

AIR SIDE



wall feedthrough



custom made flange

VACUUM SIDE

VACUUM SIDE

AIR SIDE

AIR SIDE

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