

Graphite Seal Rings

Graphite seal rings are widely applied across the mechanical industry. We can supply suitable graphite grades tailored to your specific working conditions.

- **Resin- impregnated carbon graphite:** Improves mechanical strength and wear resistance while reducing material porosity.
- **Metal- impregnated carbon graphite:** Delivers higher density and enhanced high- temperature performance.

Resin- impregnated carbon graphite is manufactured by infusing carbon- graphite base with resin under high- temperature and high- pressure conditions. It features high mechanical strength, strong load- bearing capacity, low friction coefficient, excellent self- lubricating property and good corrosion resistance.

Antimony- impregnated graphite is produced by impregnating graphite substrate with antimony at high temperature and high pressure. It offers outstanding high- temperature resistance, low friction coefficient, reliable self- lubrication, superior corrosion resistance, as well as high thermal conductivity and great thermal- shock resistance.

These materials allow easy precision machining and can be fabricated into a wide range of custom geometries.

Technical index:

Isostatic graphite technical data

Index	Units	FSDK-4	FSDK-6 S	FSDK-7	FSDK-8	FSDK-9	FSDW-7	FSDW-8
Bulk density	$\geq \text{g/cm}^3$	1.72	1.86	1.83	1.86	1.9	1.85	1.91
Electric resistivity	$\mu \Omega \cdot \text{m}$	10-13	10-13	11-14	10-14	10-14	11-13	11-13
Compressive strength	Mpa	65	100	110	120	125	115	135
Flexural strength	Mpa	30	48	50	55	60	51	60
Shore hardness		40	65	67	72	75	65	70
Ash content/ purification	ppm	500/50	500/50	500/50	500/50	500/50	500/50	500/50
Average granularity	μm	25	12	8	6	2-4	8-10	8-10
Coefficient of thermal expansion	$\times 10^{-6}/^{\circ}\text{C}$	5	4.2	3.8	4	3.9	5.6	5.85
Young's modulus	Gpa	9.2	11	11	12	12	11	12
Applications		>Vacuum furnace >Sintering	>Photovoltaic >Vacuum	>EDM	>EDM >Melting gold crucible	>EDM >Melting gold crucible	>EDM >Photovoltaic	>EDM >Photovoltaic

		ng	furnace >Melting gold crucible					
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Mold graphite technical data

Index	Units	FSM-1	FSM-2	FSMK-3	FSMK-5	FSMK-5S	FSMW-4	FSMW-5
Bulk density	$\geq$ g/cm ³	1.6	1.7	1.68	1.8	1.85	1.75	1.85
Electric resistivity	$\mu \Omega \cdot m$	8	7.5	9-13	8-10	8-10	8.5	8.5
Compressive strength	Mpa	28	36	45	70	80	65	85
Flexural strength	Mpa	14	18	20	35	40	38	46
Shore hardness		25	30	35	48	55	42	48
Ash content/ purification	ppm	2000/-	2000/-	1000/50	1000/50	1000/50	1000/50	1000/50
Average granularity	μm	2000, 4000	800,2000	15-45	15-45	15-45	14-45	14-45
Coefficient of thermal expansion	$\times 10^{-6}/^{\circ}C$	5.8	5.7	5.7	4.9	4.8	5.46	4.75
Young's modulus	Gpa	7	8	8	9.5	10	9	11.8

Product Name	Industry	Application
Crucible, Boat, Dish, etc.	Metallurgy	Melting, refining and analysis
Dies, Molds, Ingot Chassis, etc.		EDM graphite electrodes, semiconductor manufacturing, iron, steel and nonferrous metal making, continuous casting, metallurgy pressing machine
Graphite Roller, etc.		Heat treatment of steel plate in furnace
Conduit, Skateboard, etc.		Aluminum molding
Graphite Pipe		Guard pipe for measuring temperature, blowpipe, etc
Graphite Block		Masonry furnace and other heat resistance material

Chemical Equipment	Chemistry	Heat exchanger, reaction tower, distillation columns, absorption equipment, centrifugal pumps, etc
Electrolytic Plate		Salt solution and baking molten salt electrolyte
Electrolytic Mercury		NaCl electrolyte
Grounded Anode		Electrical anticorrosion
Motor Brush	Electricity	Commutator, slipping ring
Current Collector		Skate, slide, trolley
Contact		Switches, relays
Mercury Ferry And Electronic Pipe	Electronics	Anode, grid pole, repeller pole, ignition pole of the Mercury rectifier and anode, grid electrode
Graphite Bearing	Machinery	High temperature resistance sliding bearing
Sealing Element		Sealing ring, stuffing box seal, packing seal
Product Element		Braking in plane and vehicle

FAQ

1. When can i get the price?

We usually quote within 24 hours after getting your detailed requirements, like size, quantity etc. .

If it is an urgent order, you can call us directly.

2. Do you provide samples?

Yes, samples are available for test our quality.

Samples delivery time will be about 7-10 days.

3. What about the lead time for mass product?

The lead time is based on the quantity, production time about 7-12 days. For graphite product, apply Dual-use items license need about 45 working days.

4. What is your terms of delivery?

We accept FOB, CFR, CIF, EXW, etc. You can choose the most convenient way for you. Besides that, we can also shipping by Air and Express.

5. Product packaging?

We are packed in customized wooden case, or according to your requirements.

Hope to cooperation with you,Thanks !