

Grade Standard And Item For Silicon Carbide Mechanical Sealing Ring.

Item	Unit	Reaction-Bonded Silicon Carbide (RBSC)			
		Qualified	Grade one	High-class	
∝ Planeness of sealing ring =	mm	0.0009	0.0006	0.0003	
Surface roughness of sealing face Ra=	μ m	0.2			
∝ Air pressure test, pressure 0.3Mpa, last 10min.	--	No spillage of Visible air bubble			
Appearance quality	pore space quantity & dimension of sealing face =	mm	0.3	0.2	0.1
		quantity/cm ²	1	3	3
	(pore space quantity & dimension of sealing face)/5cm ² =	mm	0.3	0.2	0.1
		quantity/cm ²	5	n	n
Volume density =	g/cm ³	2.95	3.00	3.10	
Bending strength =	MPa	300	350	400	
Hardness =	HRA(HS)	88(100)	99(105)	91(100)	
Porosity =	%	0.3			
Surface roughness of contact surface with Auxiliary joint ring Ra=	μ m	3.2			
Parallel of sealing face with auxiliary joint ring	mm	Grade 7 of GB/T 1184-1996			
Tolerance dimension	mm	According to different drawings			
<p>Note: (1) ∝ is key item, the rest is main item. (2) n=7+sealing area/5 (3) Connecting to qualified, one pore space of 0.3~ 0.5mm existing in non- rubbing surface is allowed. (4) Totality of pore space for sealing face is calculated based on per 5cm².</p>					