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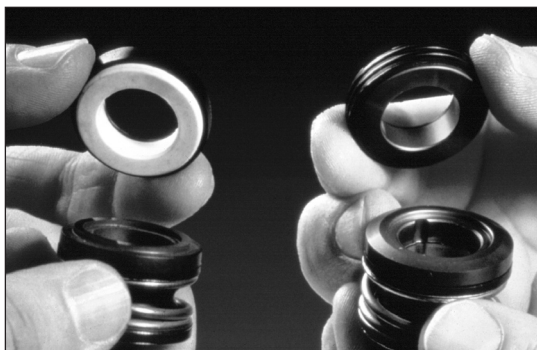
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Bell & Gossett

Silicon-Carbide Mechanical Seals

Carbon-to-Ceramic

Silicon Carbide-to-Silicon Carbide



FEATURES

Silicon-Carbide Mechanical Seal Faces vs. Carbon-Ceramic Mechanical Seal Faces

	Carbon-Ceramic	Silicon-Carbide	Performance Ratio
Hardness	600	2,700	4.5
Strength, PSI (tensile)	6,000	45,000	7.5
Strength, PSI (compressive)	22,000	360,000	16.4
Max. Temp.	525°F	3,000°F	5.7

■ The Bell & Gossett line of Wastewater Pumps includes pumps from 1/4 HP to 30 HP and covers a range of applications from simple water transfer to multi-pump engineered lift station arrangements. These pumps handle solids up to 3" in diameter, by passing these solids through the pump impeller and casing or by grinding the solids into finer pieces to enable the use of small diameter pipes.

The chart above makes a comparison between seal face materials – Carbon and Ceramic typically used in clear water pumps and the Bell & Gossett premium material – Silicon Carbide and Silicon Carbide, specifically selected for use in Wastewater. Remember – the mechanical seal is one of the most important components in the entire pumping system.

Your Bell & Gossett distributor has access to a full selection of pumps and accessories for simplex, duplex and multi-pump applications.

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Pump Models	Size P/N	Seal Type	Stationary Face Material	Rotary Face Material	Metal Components
2EC, 2WT, 2WF 1/2 to 1 HP 2DES, 2DWC, 2DWS (outer)	5/8" 10K120	6 or 16	Silicon Carbide (Sintered Chemical Grade)	Silicon Carbide (Sintered Chemical Grade)	300 Series S.S.
2EC 2HP 2WF 1 1/2, 2HP 12GS	3/4" 10K119	6 or 16			
3WDA, 4WDA, 3DWS, 4DWS, 12GDS (outer)	1 1/8" 10K28	21			
4DWC, 4XWS (*optional) (outer)	1 3/8" 10K83	21	Tungsten Carbide	Tungsten Carbide	

Optional Seal Tungsten Carbide/Silicon Carbide/SS/Buna		
Shaft Dia.		
10K122	5/8"	2EC, 2WT, 2WF
10K123	3/4"	12GS, 1 1/2HP - 2WF, 2HP - 2EC, 2WF
10K22	1 1/8"	3WDA, 4WDA, 3DWS, 4DWS
Inner Seal (Dual Seal Models) Carbon/Ceramic/SS/Buna		
10K121	5/8"	2DES, 2DWC, 2DWS
10K21	1 1/8"	3WDA, 4WDA, 3DWS, 4DWS

Bell & Gossett Hard Faced Seals

The most vulnerable part in the pump is the mechanical seal. This type of application exposes the pump to many fine suspended solids in the liquid as it passes through the pump. In order to insure the longest life possible in this environment Bell & Gossett has chosen to provide mechanical seals with hard sealing faces in all its premium products. The best material for this job in today's world is Silicon Carbide. Both the Stationary and Rotating faces are constructed of sintered chemical grade Silicon Carbide. This results in a face combination that has proven to be the toughest, most reliable mechanical seal face combination in this very demanding environment. Every seal manufacturer agrees that this is the best seal face selection that can be made for pumping wastewater. Bell & Gossett provides this premium seal face material as the standard seal face material in our premium Wastewater pumps.

Consult factory for other Seal Options to fit your specific application.



Bell & Gossett

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2881 East Bayard Street, Seneca Falls NY 13148

Phone 315-568-7123 • Fax 888-322-5877

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