



BURGMANN®

M7iM Seal...

The component seal with interchangeable parts engineered to handle practically every industrial fluid

For the thousands of ANSI pumps worldwide, the BURGMANN M7iM seal is specifically engineered to provide robust performance. In addition, this seal features a buttoned-up compression unit with faces that are easily changed for quick installation to provide you the highest flexibility in material selection and reduction of inventory. Where seal chamber size limitations are a problem, the M7iM is a solution because its installation length is equal to, or shorter than conventional component seals. So the M7iM seal will fit most boxes without equipment modifications.

The self-cleaning, self-cooling open drive collar is also engineered to spin away clogging solids while it supports active cooling. And because the torque transmission is located near the gliding area, there is no risk of excessive loads on the seal face.

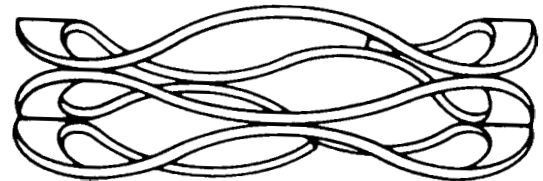
The M7iM seal is based on the well-established and reliable BURGMANN M7 design, and a tested rotating seal face made of Carbon.

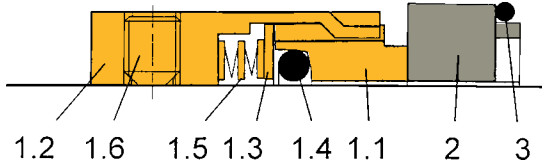


Simple Super-Sinus spring design provides uniform distribution of axial force at the sealing faces

The one-piece Super-Sinus spring eliminates the need to handle multiple springs and has a flatter spring characteristic that provides a more uniform axial force. This gives the seal additional tolerance to installation and increases lifetime even under rough operating conditions. Its self-cleaning, self-cooling design also eliminates the potential for clogging, and facilitates maximum heat and liquid exchange. Because there is little change in spring force per unit of axial movement, this seal more evenly controls leakage rate and heat generation. Made of heavy, flat wire without the traditional welding spots, the Super-Sinus spring is highly resistant to corrosion. With the larger cross section, this spring survives far longer in a corrosive environment compared to the regular multi-springs. It also features a cold-formed material structure that reduces the risk of spring fracture.

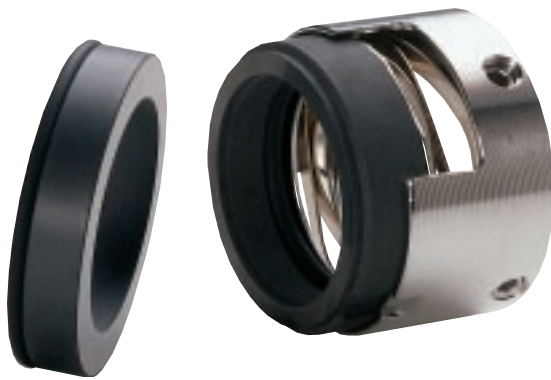
Super-Sinus springs are available in 316 SS or optional Hastelloy® C276.





Item	Designation
1.1	Seal Face
1.2	Driver
1.3	Thrust Ring
1.4	O-Ring
1.5	Spring
1.6	Set Screw
2	Seat
3	O-Ring

■ Rotating
■ Stationary



M7iM seal materials

Seal Component			Standard	Non-standard
Seal Face		Carbon graphite resin impregnated	■	
		Silicon carbide	■	■
		Tungsten carbide		■
Seat	G305	Silicon carbide	■	
		Tungsten carbide		■
		Ceramics		■
Spring		316 SS Hastelloy®	■	■
Driver		316 SS Hastelloy®	■	■
O-rings		Viton® EPDM Perfluorocarbon rubber NBR Perfluorocarbon/PTFE	■	■ ■ ■ ■

Viton® is a DuPont registered trademark.

Hastelloy® is a registered trademark of Haynes International, Inc.

M7iM seal operating limits

Shaft diameter:	1.000" to 4.000"		
	Other sizes on request.		
Maximum pressure:	SiC/SiC	230 psi	16 bar
	Carbon/SiC	360 psi	25 bar
Temperature range:	-58°F to +430°F		-50°C to +220°C
Permitted axial movement:			
	<u>Shaft diameter</u>	<u>Axial tolerance</u>	
	1.125"	±0.040"	±1 mm
	1.750" to 2.500"	±0.060"	±1.5mm
	2.625"	±0.080"	±2 mm
Speed:	66 ft/s	20 m/s	



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