



MATERIALS OF CONSTRUCTION
Models: MAGNES SERIES – MS4

Page Number	110-094
Effective	Apr 2025
Replaces	Oct 2021
Section	110

NOTE: Temperature and viscosity ratings given below apply to individual components **Only**. For actual maximum temperatures and viscosities for the rated pump, see "**Operating Limits**" on backside.

PART NAME	STANDARD MATERIALS	AVAILABLE OPTIONS
Heads	17-4 PH Stainless Steel	
Cylinder	17-4 PH Stainless Steel	
Driven Hub (Wetted)	17-4 PH Stainless Steel	
Driving Hub	Ductile Iron, ASTM A536	
Bearing Cover	304 Stainless Steel	
Sleeve Bearings	Metal Impregnated Graphite	
Rotor & Shaft		
Rotor	17-4 PH Stainless Steel (Thrust Bushing Pads: Carbon)	
Shaft	17-4 PH Stainless Steel (Fused Nickel-Based Alloy Coating)	
Bearing Housing	Cast Iron, ASTM A48	
Relief Valve Spring	Stainless Steel	
R/V Spring Ranges	151-200 psi	
O-Rings / Seal Rings	FKM	PTFE
Capscrews	Steel	
Vanes	Duravane - Full Size with 316 Stainless Steel wear plate to 240°F (115°C) (150 psi differential pressure maximum)	Laminate – Stainless Steel Wear Plane (200 psi differential pressure maximum) Enduravane - Full Size with 316 Stainless Steel wear plate to 240°F (115°C) (200 psi differential pressure maximum)
Relief Valve	316 Stainless Steel	
Push Rods	Nitronic "60"® Chrome Plated	
Magnet Housing	Cast Iron	
Magnet Assembly		
Inner Magnet	Neodymium Iron Boron	
Outer Magnet	Neodymium Iron Boron	
Containment Can	PEEK Composite	
Hub Sleeve	316 Stainless Steel	
Driven Key (Wetted)	17-4 PH Stainless Steel	
Gage Ports	1/4" NPT	

Centipoise (cP) = centistokes (cSt) at fluid specific gravity of 1.0.

Models: MS4**PIPE COMPANION FLANGES**

PUMP SIZE	STANDARD¹	OPTIONAL
MS4	4" Integral Stainless Steel ANSI 150 lb Compatible RF Flanges	

OPERATING LIMITS

	STANDARD MATERIALS	OPTIONAL MATERIALS
Maximum Temperature	-30°F (-29°C) to 250°F (121°C)	Consult Factory for higher temperature ratings.
Maximum Viscosity	2200 Cp	Some viscosities may have differential pressure limits; consult performance curves for limits. Consult Factory for higher viscosity ratings.
Maximum Pump Speed	537 rpm	
Maximum Differential Pressure	200 psi	
Maximum Working Pressure	225 psi	

Centipoise (cP) = centistokes (cSt) at fluid specific gravity of 1.0.

