

# Wash Down Motor Design – WD Standard Operating Parameters

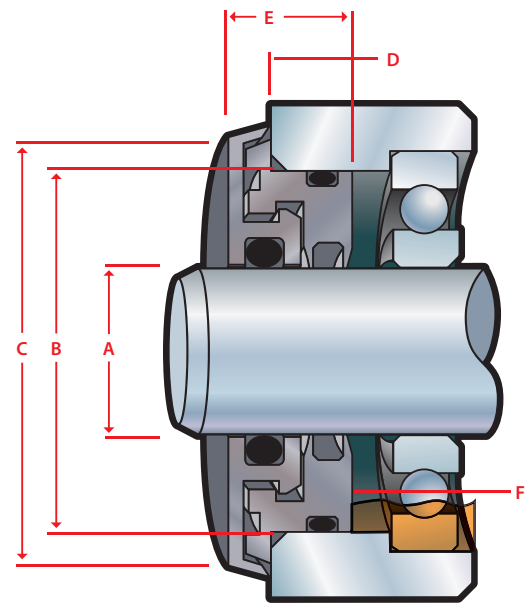
Total Eccentricity: .020" (.51 mm)  
 Shaft Speed: Up to 3,000 fpm<sup>3</sup> (15 m/s)  
 Pressure: 0 psi / bar  
 Temperature Range: -40 to 250 F (-40 to 121 C)  
 Axial Movement: .020" (.51 mm) special designs up to .070" (1.78 mm)  
 Shaft / Bore Tolerances: ± .002" (± .05 mm)  
 Special designs available

**Seal Material:**

Standard Proprietary PTFE  
 Optional Food grade, Anti microbial, FDA 3A

**O-Ring Material:**

Standard FKM  
 Optional NBR, FDA silicone, EPDM, Aflas®



Anti Microbial Available

MOUNTING		LUBRICATION		
	Position	Grease	Oil	Dry
Horizontal	Y	Y	N	Y
Vertical Up	Y	Y	N	Y
Vertical Down	Y	Y	N	Y

**Retain**

Grease and oil splash (operating oil level in cavity between seal and bearing must be below inboard oil drain-back port of seal "F")

**Exclude Equipment**

Heavy water spray and dry contaminants from bearing cavity  
 Small disposable motors and equipment for food processing industry; economical seal for 140 and 180 frame motors and other high volume OEM equipment requiring wash down protection where cost to upgrade the seal has been a deterrent

STANDARD DIMENSIONS					
Type	"A" Shaft Diameter Range Inch	"B" Bore Diameter Range Is Shaft Diameter "A" + Min-Max	"C" Flange Diameter = "B" +	"D" In Bore Depth	"E" Overall Seal Width
WDE	0.492 – 1.575	0.551 – 1.575	0.269 <sup>1</sup>	0.248	0.373
WDE	1.576 – 2.362	0.669 – 1.575	0.269 <sup>1</sup>	0.248	0.373
WDE	2.363 – 3.150	0.787 – 1.575	0.269 <sup>1</sup>	0.287	0.412
WDE	3.151 – 5.118	0.866 – 1.575	0.269	0.287	0.412
WDE	5.119 – 10.000 <sup>2</sup>	0.945 – 1.575	0.269	0.287	0.412

Type	"A" Shaft Diameter Range Metric	"B" Bore Diameter Range Is Shaft Diameter "A" + Min-Max	"C" Flange Diameter = "B" +	"D" In Bore Depth	"E" Overall Seal Width
WDM	12.5 – 40.0	14.0 – 40.0	6.8 <sup>1</sup>	6.3	9.5
WDM	40.1 – 60.0	17.0 – 40.0	6.8 <sup>1</sup>	6.3	9.5
WDM	60.1 – 80.0	20.0 – 40.0	6.8 <sup>1</sup>	7.3	10.5
WDM	80.1 – 130.0	22.0 – 40.0	6.8	7.3	10.5
WDM	130.1 – 254.0 <sup>2</sup>	24.0 – 40.0	6.8	7.3	10.5

<sup>1</sup> May be larger for small cross sections, consult factory for dimensions  
<sup>2</sup> Contact factory for requirements outside of standard dimensions listed above  
<sup>3</sup> Contact factory for speeds over 3,000 fpm (15 m/s)  
 Note: Cross Section = (Bore – Shaft) / 2