

Data/Type	SF-1	SF-2
Base Material	Steel/Bronze/304/316 Steel (DIN-St12 ASTM-A366/A366M-97 JIS-SPCC)+ Bronze (CuSn8Zn3)+PTFE	Steel/Bronze/304/316 Steel- (DIN-St12 ASTM-A366/A366M-97 JIS-SPCC)+Bronze (CuSn8Zn3)+POM
Material Organization	<ol style="list-style-type: none"> <li>1. PTFE with lead 0.01~0.03mm</li> <li>2. Porous bronze 0.2~0.3mm</li> <li>3. Steel backing 0.7~2.3mm</li> <li>4. Tin plating 0.005mm or Copper plating 0.008mm</li> </ol>	<ol style="list-style-type: none"> <li>1. POM with fiber 0.3~0.5mm</li> <li>2. Porous bronze 0.2~0.3mm</li> <li>3. Steel backing 0.4~2.2mm</li> <li>4. Tin plating 0.005mm or Copper plating 0.008mm</li> </ol>
Max load Capacity P	140N/mm <sup>2</sup>	70N/mm <sup>2</sup>
Friction Coef $\mu$	0.03~0.18	0.05~0.25
Working Temperature	-195°C~+280°C	-40°C~+130°C
Speed limit V	10m/s	2.5m/s
Maximum PV Value	(Dry)4.3N/mm <sup>2</sup> m/s (Oil)60N/mm <sup>2</sup> m/s	22N/mm <sup>2</sup> m/s

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#### Common Questions on SF-1 and SF-2 Bushing Performance

**Q:** What are the primary differences in material composition between SF-1 and SF-2 bushings?

**A:** Both bushings use a base of Steel/Bronze/304/316 with a porous bronze interlayer. However, the top sliding layer differs: SF-1 features a PTFE with lead layer (0.01-0.03mm) for dry running, while SF-2 utilizes a thicker POM with fiber layer (0.3-0.5mm) designed for marginal lubrication.

**Q:** Which bushing type offers higher load capacity and a wider operating temperature range?

**A:** SF-1 oilless bushings offer a maximum load capacity of 140N/mm<sup>2</sup> and a working temperature range of -195°C to +280°C. In contrast, SF-2 supports up to 70N/mm<sup>2</sup> and operates between -40°C and +130°C.

**Q:** How do the sliding speed limits and friction coefficients compare?

**A:** SF-1 is better suited for higher speed applications with a limit of 10m/s and a lower friction coefficient of 0.03-0.18. SF-2 has a speed limit of 2.5m/s and a friction coefficient of 0.05-0.25.

**Q:** What is the Maximum PV Value for SF-1 bushings?

**A:** For SF-1, the Maximum PV Value is 4.3N/mm<sup>2</sup> \* m/s under dry conditions and increases to 60N/mm<sup>2</sup> \* m/s with oil lubrication. For SF-2, it is rated at 22N/mm<sup>2</sup> \* m/s.