




Oil Free Bushings - Guide




Copper Alloy

	Type		Part Number	Appearance	Features	Page
Straight	Standard	I.D. F7 I.D. E7 I.D. G6	MPBZ MPBZU MPBR MPBRU MPBP MPBPU C-MPBZ		Optimal for use in heavy load and low speed applications. Provides high friction resistance when oil film formation is discouraged by reciprocating motions or frequent starts and stops. Thin Wall version is also available. (C-VALUE Products are suitable for medium load and low speed applications)	P381 P382 P385 P386
		I.D. E7 I.D. F7	MPFZ MPFZU C-MPFZ			P383 P384 P387
Thrust	Standard	I.D. E7	MPGZ		Lubricant is embedded in the flange so that one bushing can bear radial load and thrust load at the same time.	P388
	Countersunk Hole	I.D. F7	MPSZ			
	Low Head Cap Screw Hole	I.D. F7	MPKZ			
Flange Integrated	Standard	I.D. F7	MPTZ MPTSZ MPTNZ		Reduces the time of assembling. Requires less space compared to Flanged Copper Alloy Built-in Type.	P389
	Pilot	I.D. F7	MPIZ MPITZ			P390
	Center	I.D. F7	MPCZ MPCTZ			
Flanged Housing Units Built-In Copper Alloy Bushings	Standard	Single	MF□S MF□S-S MF□S-DS		Reduces the time of manufacturing and assembling the housing. Space-saving Compact Type is available in 2 types : Single and Double (Only for Standard and Pilot Flanged) ☞ "S" signifies Built-in Non-Contact Sealed Type. ☞ "DS" signifies Built-in Contact Sealed Type.	P393
		Double	MF□W MF□W-S MF□W-DS			P394
	Pilot	Single	MFI□S MFI□S-S			
		Double	MFI□W MFI□W-S			
	Center	Double	MFC□W MFC□W-S			P392
Housing Units - Blocks Built-In Copper Alloy Bushings	Tall Blocks	Single	MHUTS MHUTS-S MHCTS MHCTS-S		Reduces the time of manufacturing and assembling the housing. Added Space-saving Compact Type to the lineup of the conventional products compatible with the Linear Bushing Housing Units.	P395 P396
		Double	MHUTW MHUTW-S MHCTW MHCTW-S			
	Wide Blocks	Single	MHUAS MHUAS-S MHCAS MHCAS-S			
		Double	MHUAW MHUAW-S MHCAW MHCAW-S			








■ Bronze

Type			Part Number	Appearance	Features	Page
Straight	Standard	I.D. E7 I.D. F7	SHBZ SHBR		Porous bronze casting soaked in lubricant. You can use it as oil free, but much superior abrasion and seizing resistance can be achieved when used with lubricant. Best suited for high-speed and low-load applications when used with lubricant. Lubrication frequency can be reduced.	P391
Flanged	Standard	I.D. E7	SHFZ			P392
Flange Integrated	Standard	I.D. F7	SHTZ SHTNZ			


■ Casting

Type			Part Number	Appearance	Features	Page
Straight	Standard		SMZ		Oil free, high performance in medium load and low speed applications. The spirally embedded Molybdenum Disulfide lubricant enables a low friction coefficient in both reciprocal and oscillating motion.	P397
Flanged	Standard		SMZF			
Housing Units	Short / Long		MHSR			
Flange Integrated	Standard		SMZH			





■ Multi-Layer LF

Type			Part Number	Appearance	Features	Page
Straight	Standard		MDZB		Thin Wall, Compact Type Excels in friction and chemical resistance. Low abrasion coefficient under heavy load and low speed conditions.	P398
Flanged	Standard		MDZF		When used with lubricant, it can be used in mid-to-high speed area at a high PV value.	
Flanged Housing Units Built-In Multi-Layer LF Bushings	Standard	Single	MD□A		Flanged Housing Unit Type of the above. Flanged Housing Unit Type can reduce the time of manufacturing and assembling the housing.	P399
		Double	MD□AW			
Housing Units - Blocks Built-In Multi-Layer LF Bushings	Tall Blocks	Single	MDBA MDBAC		Housing Unit Type of the above. Housing Unit Type can reduce the time of manufacturing and assembling the housing.	P400
		Double	MDBAW			
	Wide Blocks	Single	MDWBA			


■ High Precision

Type			Part Number	Appearance	Features	Page
Straight	Standard		BFLB		Thin wall, light weight and compact. Fine accuracy of I.O./D.O. tolerances allows easy mounting. Maintains high abrasion resistance and low friction coefficient under high speed condition. Mild metals such as Aluminum can be used as mating shafts.	P399

■ Polyacetal (Polyacetal Resin)

Type			Part Number	Appearance	Features	Page
Straight	Standard		JZB		Excels in load capacities and abrasion resistance. With low static friction coefficient, provides high velocity properties. Prevents stick-slips and rasping noise. Conforms to Food Sanitation Law.	P401
Flanged	Standard		JZF			
Flanged Housing Units Built-In Polyacetal Bushings	Standard	Single	JFMA JFRA		Built-in Polyacetal bushings can reduce the time of manufacturing and assembling the housing.	P402
Housing Units - Blocks Built-In Polyacetal Bushings	Tall Blocks	Single	JFBA			

■ Polyacetal (PTFE)

Type			Part Number	Appearance	Features	Page
Straight	Standard		TFZB		Low static friction coefficient on start-up and no stick slips during operation. Maintains high abrasion resistance and low friction coefficient under high speed condition. Excels in chemical resistance and conforms to Food Sanitation Law. Mild metals such as Aluminum can be used as mating shafts.	P401
Flanged	Standard		TFZF	