

# Oil-Free Bushings (Polyacetal Resin & PTFE Resin)

Straight / Shouldered (PTFE Resin)

Oil-Free Bushings

**Oil-Free Bushings – Straight / Shouldered (PTFE Resin)**

**RoHS10**

**TFZB Straight**

**Material:** PTFE Resin  
Lubricant and Special Filler Added  
**Allowable Temperature:** -200~200°C

\*L Dimension Tolerance:  $8 \geq L \begin{matrix} 0 \\ -0.2 \end{matrix}$   $10 \leq L \begin{matrix} 0 \\ -0.25 \end{matrix}$

Ⓢ Press fitting is recommended to affix bushings.

**TFZF Shoulder**

**Material:** PTFE Resin  
Lubricant and Special Filler Added  
**Allowable Temperature:** -200~200°C

\*L Dimension Tolerance:  $8 \geq L \begin{matrix} 0 \\ -0.2 \end{matrix}$

Ⓢ Press fitting is recommended to affix bushings.

Part Number	Type	d (Tol. before Press-Fit)	L	D	*Housing Dia.		I.D. After Press-Fit		*Shaft Diameter		F	T	Chamfer a
					Ref. Dim.	Tolerance (H7)	Tol. (Ref. Value)	Ref. Dim.	Tolerance (g6)				
3	Straight TFZB	+0.179	3 5	6	6	+0.012 0	+0.120 +0.070	3	-0.002 -0.008	9	1.5	C0.3	
4		+0.129	3 5 8	7	7		+0.122 +0.072	4	-0.004 -0.012	11			
5			5 8 10	8	8	+0.015 0	+0.125 +0.075	5		12			
6		+0.182 +0.132	5 8 10	9	9		+0.131 +0.081	6	-0.005 -0.014	16			
8		+0.197 +0.147	8 10 12 15	12	12		+0.144 +0.094	8	-0.006 -0.017	20			
10	Shoulder TFZF**	+0.210 +0.160	8 10 12 15	14	14	+0.018 0	+0.175 +0.105	10	-0.007 -0.020	20	2	C0.5	
12		+0.212 +0.162	10 12 15 20	16	16		+0.229 +0.109	12		28			
16		+0.239 +0.169	12 15 20 25	22	22	+0.021 0		16		32			
20		+0.303 +0.183	15 20 25 30	26	26			20		32			

Ⓢ Dimension tolerance is measured at +25°C. d tolerance is the value before press-fitted into housing.  
\* Housing diameters and shaft diameters listed here are recommended dimensions.  
\*\* Columns F and T apply to TFZF only.

Part Number	Type	d	L3	L5	L8	L10	L12	L15	L20	L25	L30
3	TFZB	3	•	•	—	—	—	—	—	—	—
4		4	•	•	•	—	—	—	—	—	—
5		5	—	•	•	•	—	—	—	—	—
6		6	—	•	•	•	•	—	—	—	—
8		8	—	—	•	•	•	•	—	—	—
10		10	—	—	•	•	•	•	•	—	—
12		12	—	—	—	•	•	•	•	•	—
16	16	—	—	—	—	•	•	•	•	•	
20	20	—	—	—	—	—	•	•	•	•	

Part Number	Type	d	L3	L5	L8	L10	L12	L15	L20	L25	L30
3	TFZF	3	•	•	—	—	—	—	—	—	—
4		4	•	•	•	—	—	—	—	—	—
5		5	—	•	•	•	—	—	—	—	—
6		6	—	•	•	•	•	—	—	—	—
8		8	—	—	•	•	•	•	—	—	—
10		10	—	—	•	•	•	•	•	—	—
12		12	—	—	—	•	•	•	•	•	—
16	16	—	—	—	—	•	•	•	•	•	
20	20	—	—	—	—	—	•	•	•	•	

Part Number Example: TFZF12 - 15



# Oil-Free Resin Washers / Flanged Bushings / Pillow Blocks

Polyacetal Bushings Built-In

Oil-Free Bushings

**Oil-Free Resin Washers**

**RoHS10**

**JZW**

**Material:** Polyacetal Resin  
Lubricant and Special Filler Added  
**Allowable Temperature:** -40~80°C

0.5 or less (Gate Cut)

Part Number	Type	No.	T	d	D
8	JZW	8	1.5	8.5	17
10		10	10.5	24	
12		12	12.5	28	
17		17	30		
21		21	37		
23	23	39			

**Flanged Oil-Free Bushings**

**RoHS10**

Type	Material	Surface Treatment	Bushings Material
JFMA	Aluminum Alloy	Clear Anodizing	Polyacetal Resin
JFRA	Aluminum Alloy	Clear Anodizing	JZB

Type	Part Number	d	Tolerance	D <sub>h7</sub>	Tolerance	L	L <sub>1</sub>	S	H	T	d <sub>1</sub>	d <sub>2</sub>	t	P.C.D.	F	A
JFMA JFRA	6	6	+0.095 +0.045	12	0 -0.018	19	5	13	28	5	3.5	6	3.1	20	—	20
	8	8		15		24		18	32					24		24
	10	10		19		29		21	40					29		29
	12	12	+0.120 +0.060	21	0 -0.021	30		21.6	42	6	4.5	7.5	4.1	32		32
	15	15		26		35		26.6	46					36	22	36
	16	16		28		37			48					38		31
	20	20	+0.145 +0.075	32	0 -0.025	42	10	31.6	54	8	5.5	9	5.1	43	24	36
	25	25	+0.170 +0.090	40		42			62					51	32	40
	30	30		45		54		41.6	74	10	6.6	11	6.1	60	35	49

Ⓢ Flanged Height-Adjusting Spacers are selectable from P.384.

**Oil-Free Bushing Pillow Blocks**

**RoHS10**

Type	Material	Surface Treatment	Bushings Material
JFBA	Aluminum Alloy	Clear Anodizing	Polyacetal Resin
	Aluminum Alloy	Clear Anodizing	JZB

Type	Part Number	d	Tolerance	h	W	H	L	L <sub>1</sub>	L <sub>2</sub>	S	ℓ	M1	M2	d1 x t	
JFBA	6	6	+0.095 +0.045	14	16	22	27	18	9	21	5	M4	M4	6 x 5 (For M3 Screws)	
	8	8		16	20	26	32	20	10	26		M5	M4		
	10	10	+0.120 +0.060	19	26	32	39	27	15	31	6	M6	M5	8 x 6 (For M4 Screws)	
	12	12		20	28	34	40			31.6			M6	M5	
	16	16		27	36	49	47	32	18	36.6	7		M6	M6	9 x 7 (For M5 Screws)

Part Number Example: JZW10, JFRA10, JFBA8