
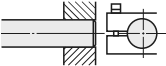

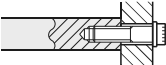
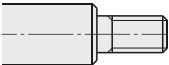
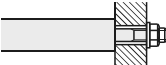
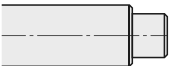
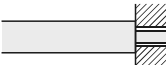
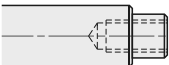
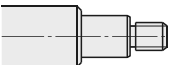
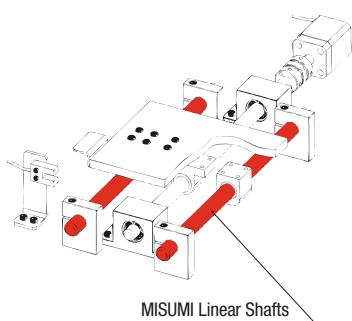
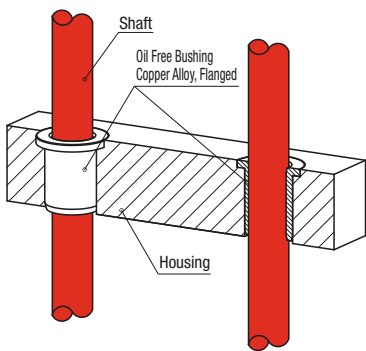





Guide to Shaft Products / Features by Shapes

List of Features by Shapes

Shape	Figures	Mounting Examples	Features
Solid			<ul style="list-style-type: none"> • Simple Shape • Used in combination with Shaft Supports
Tapped			<ul style="list-style-type: none"> • Can be easily mounted only with screw through holes. • Mounting position accuracy is low. • Horizontal mountings are for light load applications.
Threaded			<ul style="list-style-type: none"> • High accuracy assembly is possible with threaded shaft and mating bore fits. • Stable when used for heavy loads, horizontally, and in long lengths.
Stepped Solid			<ul style="list-style-type: none"> • High accuracy assembly is possible with stepped shaft section and mating bore fits. • Stable when used for heavy loads, horizontally, and in long lengths. • The step enables axial direction constraining. • Shaft diameters can be freely set to match the mating bores.
Stepped and Tapped			
Stepped and Threaded			

Selective Shaft Use

App. Example	High Precision		For Oil Free Bushing																		
	g6/g6 Precision Grade /h5		f8																		
	 <p>MISUMI Linear Shafts</p>		 <p>Shaft Oil Free Bushing Copper Alloy, Flanged Housing</p>																		
Recommended Apps.	<ul style="list-style-type: none">• For high accuracy applications (Outer diameter, Straightness and Circularity)• for high load/high durability purposes<ul style="list-style-type: none">- For horizontal use and heavy load applications- Extensive sliding distance, frequency and speed.		<ul style="list-style-type: none">• For use with oil-free bushings• Sufficient clearance for surface contact sliding can be obtained.																		
Standards	Material	EN 1.3505 Equiv.	EN 1.4125 Equiv.	EN 1.1191 Equiv.																	
	Hardness	58HRC~	56HRC~	No hardening																	
	Surface treatment	None/ Hard Chrome Plating Plating hardness HV750~ Plating thickness 5μ or more		Hard Chrome Plating Plating Hardness HV750 ~ Plating Thickness 10μ or More																	
	O.D.	Ø3~50		Ø6~50																	
	Length	L10~1500		L20~1500																	
Accuracy	Circularity	<table><tr><td>Ø3~13</td><td>0.004</td></tr><tr><td>Ø15~20</td><td>0.005</td></tr><tr><td>Ø20~30</td><td>0.006</td></tr><tr><td>Ø40~50</td><td>0.007</td></tr></table>		Ø3~13	0.004	Ø15~20	0.005	Ø20~30	0.006	Ø40~50	0.007	<table><tr><td>Ø6~10</td><td>0.011</td></tr><tr><td>Ø12~18</td><td>0.014</td></tr><tr><td>Ø20~30</td><td>0.017</td></tr><tr><td>Ø40~50</td><td>0.020</td></tr></table>		Ø6~10	0.011	Ø12~18	0.014	Ø20~30	0.017	Ø40~50	0.020
	Ø3~13	0.004																			
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Ø6~10	0.011																				
Ø12~18	0.014																				
Ø20~30	0.017																				
Ø40~50	0.020																				
Straightness	<table><tr><td>Ø3, 4</td><td rowspan="2">N/A</td><td>(L/100)x0.05 or Less</td></tr><tr><td>Ø5</td><td>(L/100)x0.03 or Less</td></tr><tr><td rowspan="2">Ø6~50</td><td>100 or Less</td><td>0.01 or Less</td></tr><tr><td>Over 100</td><td>(L/100)x0.01 or Less</td></tr></table>		Ø3, 4	N/A	(L/100)x0.05 or Less	Ø5	(L/100)x0.03 or Less	Ø6~50	100 or Less	0.01 or Less	Over 100	(L/100)x0.01 or Less	<table><tr><td>L≤100</td><td>0.025 or Less</td></tr><tr><td>L>100</td><td>(L/100)x0.025 or Less</td></tr></table>		L≤100	0.025 or Less	L>100	(L/100)x0.025 or Less			
Ø3, 4	N/A	(L/100)x0.05 or Less																			
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L≤100	0.025 or Less																				
L>100	(L/100)x0.025 or Less																				
Related Products	<div>■ Linear Bushings (P.297~)</div> 		<div>■ Oil Free Bushing (P.369~)</div> 																		
	<div>■ Shaft Support (P.229~)</div> 		<div>■ Shaft Collar (P.263~)</div> 