

Driving Shafts

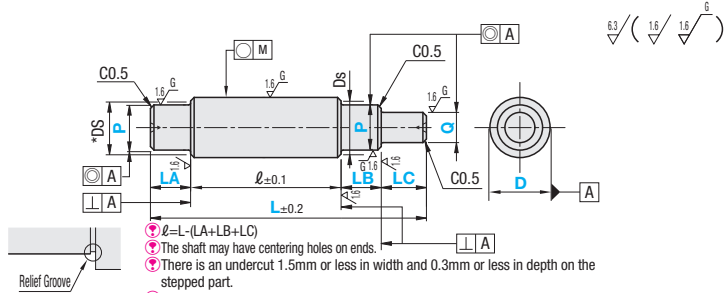
One End Stepped One End Double Stepped

Features: Rotary Shafts suitable for driving motion. Accuracies and shapes needed for rotary driving applications are selectable.



RoHS10

Type	D, P, Q Tolerance	Concentricity	Perpendicularity	Material	Hardness	Surface Treatment	D	Tolerance h7	h6	D	Circularity M	Others
KZDE	h7	0.05	0.05	S45C	-	Black Oxide	10	0	0	10	0.004	0.003
KZDN				S45C		-	12	0	0	12		
KZDC				S45C		Black Oxide	15	-0.018	-0.011	15	0.005	
KZDP				SUS304		Electroless Nickel Plating	20	0	0	20	0.006	
KZDS				SUS304		-	25	0	-0.013	25	0.006	
KZDF	h6	0.01	0.01	S45C	Induction Hardened Surface Hardness 50HRC-	-	30	-	0	30		0.005
							35	-	0	35		
							40	-	-0.016	40		
							45			45		
							50			50		



- ① $L = L_1 + L_2 + L_3$
- ② The shaft may have centering holes on ends.
- ③ There is an undercut 1.5mm or less in width and 0.3mm or less in depth on the stepped part.
- ④ Step P, Q of KZDE has no grinding undercut, Step R=0.2 or Less
- *Ds: Tap dimension of Bearing Inner Race \Rightarrow Reference: P991

Part Number	0.5mm Increment	Selection	0.5mm Increment	1mm Increment	0.5mm Increment	*Ds		
Type	D	L	P	LA	LB	Q	LC	
KZDE (D10~30)	10	50.0~300.0	6	4.0~40.0	4.0~40.0	5~7	3.0~30.0	8
			8				4.0~40.0	10
			10				5.0~50.0	11.5
			12				5.0~50.0	13
			15				5.0~50.0	14
KZDN	15	100.0~400.0	12	5.0~75.0	5.0~50.0	7~11	5.0~60.0	14
			15				5.0~75.0	18
			17				5.0~100.0	19
			20				5.0~100.0	21
			25				5.0~100.0	24
KZDC	20	100.0~500.0	17	10.0~100.0	10.0~60.0	14~19	10.0~100.0	27
			20				10.0~100.0	24
			25				10.0~125.0	29
			30				10.0~125.0	31
			35				10.0~125.0	34
KZDP	30	200.0~500.0	30	15.0~150.0	15.0~70.0	20~29	15.0~150.0	37
			35				15.0~150.0	39
			40				15.0~150.0	42
			45				15.0~150.0	44
			50				15.0~150.0	49

Ordering Example Part Number - L - P - LA - LB - Q - LC
KZDN25 - 500 - P20 - LA100 - LB60 - Q15 - LC80

About KZDF (Induction Hardened)

When alterations on the right-hand page are specified, the shafts are induction hardened (except the threaded sections) after machining.
 As a result, these may occur:
 ①: Due to thermal conduction to the thread, the threads may be hardened by 2 ~ 3mm.
 ②: Induction Hardened may shrink the keyway width (around -0.01 ~ -0.02). If the key becomes hard to fit, adjust it by gauging.

* marked sizes are not available for KZDE.

Type	KZDE					KZDN					KZDC				
	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0
10															
12															
15															
20															
25															
30															
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Type	KZDP					KZDS					KZDF				
	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0	Min. L ~100.0	L100.5 ~200.0	L200.5 ~300.0	L300.5 ~400.0	L400.5 ~500.0
10															
12															
15															
20															
25															
30															
35															
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-