

Bushings for Inspection Components

D-Shape

Bushings for Inspection Components

Oval

For compatible Pins, see P.1823 (D-Shape Tip) and P.1833-P.1834 (D-Shape Tip).

Straight

Shouldered

Material	Hardness	Surface Treatment	Type				P	H7
			Straight		Shouldered			
			P ^{+0.03} F ^{+0.05}	PH7 F ^{+0.03}	P ^{+0.03} F ^{+0.05}	PH7 F ^{+0.03}		
SKS93 Equivalent	50~60HRC	-	KJBBSK	KJBHSM	KJBSTK	KJBHSTK	3.00- 6.00	+0.012 0
SKS93 Equivalent	50~60HRC	Electroless Nickel Plating	KJBBSKM	KJBHSMK	-	-	6.01-10.00	+0.015 0
SUS304 ^{1,2}	-	-	KJBBSKS	KJBHSMKS	-	-	10.01-18.00	+0.018 0
SUS440C or 13Cr stainless	45~50HRC	-	KJBBSKC	KJBHSMKC	KJBSTKC	KJBHSTKC	18.01-21.00	+0.021 0

Part Number				D	P 0.01mm Increment	F (F<P/2) 0.1mm Increment	L 1mm Increment	Shouldered Type only	
Type		Shouldered						T Selection	H
P ^{+0.03} F ^{+0.05}	PH7 F ^{+0.03}	P ^{+0.03} F ^{+0.05}	PH7 F ^{+0.03}						
KJBBSK	KJBHSM	KJBSTK	KJBHSTK	8 ³	3.00~ 5.00	0.3~ 2.4	5~25	2 3 5	D+4
KJBBSKM	KJBHSMK			10	3.00~ 7.00	0.3~ 3.0			
KJBBSKS	KJBHSMKS			12	3.00~ 9.00	0.5~ 4.0			
KJBBSKC	KJBHSMKC	KJBSTKC	KJBHSTKC	16	4.00~13.00	0.5~ 6.0			
				20	6.00~17.00	1.0~ 8.0			
				25	8.00~21.00	2.0~10.0			

1. For Straight Type, there must be 1mm or greater wall thickness between D bore part and dowel hole (D/2-F≥3). For SUS304, there must be a 2mm or greater wall thickness (D/2-F≥4).
 2. For SUS304, there must be a 2mm or greater wall thickness between D bore part and outer dia. (D-P/2≥2). 3. D=8 is not available for SUS304 Straight Type.

Ordering Example: Part Number - P - F - L - T
 KJBSTK12 - P8.00 - F3.0 - L10 - T3

D	Unit Price									
	1 Straight					2 Shouldered				
	P ^{+0.03} F ^{+0.05}	KJBBSK	KJBBSKM	KJBBSKS	KJBBSKC	PH7 F ^{+0.03}	KJBHSM	KJBHSMK	KJBHSMKS	KJBHSMKC
8										
10										
12										
16										
20										
25										

Alterations: Part Number - P - F - L - T - (FC, NC-etc.)
 KJBBSK12 - P8.00 - F2.0 - L10 - FC

Alterations	Code	Spec.
Groove (for Adhesive Reservoir)	FC	Adds an adhesive reservoir groove. 1. D≥P+3: Applicable only when a wall of 1.5mm or thicker is remaining. 2. Applicable when L≥10 for Straight Type, L≥15 for Shouldered Type.
Groove (for Retaining)	NC	Adds groove for retaining. 1. D≥P+3: Applicable only when a wall of 1.5mm or thicker is remaining. 2. Applicable when L≥10 for Straight Type, L≥15 for Shouldered Type.

Alterations	Code	Spec.
Additional Surface Treatment (Black Oxide)	STC	Adds black oxide surface treatment. 1. Applicable only to material SKS93 (except electroless nickel plating).
Shoulder Thickness Tolerance	TKC	Changes shoulder thickness tolerance to ±0.01. 1. Applicable to Shouldered Type only. 2. Combination with alteration LKC is not available.
L Dimension Tolerance	LKC	Changes L dimension tolerance to 0/-0.05. 1. Combination with TKC is not available.

For compatible Pins, see P.1825 (Standard Type).

Straight (Dowel Pin)

Straight (D Cut)

Shouldered (Dowel Pin)

Shouldered (D Cut)

Material	Hardness	Type								P,W	H7
		Straight				Shouldered					
		Dowel Pin	D Cut	Dowel Pin	D Cut	Dowel Pin	D Cut	Dowel Pin	D Cut		
SKS93 Equivalent	50~60HRC	KJBSC	KJBHSC	KJBSCD	KJBHSCD	KJBSTC	KJBHSTC	KJBSTCD	KJBHSTCD	3.00-6.00	+0.012 0
SUS304	-	KJBSCS	KJBHSCS	KJBSCDS	KJBHSCDS	KJBSTCS	KJBHSTCS	-	-	6.01-10.00	+0.015 0
SUS440C or 13Cr stainless	45~50HRC	KJBSCC	KJBHSCC	-	-	KJBSTCC	KJBHSTCC	KJBSTCCD	KJBHSTCCD	10.01-18.00	+0.018 0
										18.01-27.00	+0.021 0

Some combinations are unavailable. Refer to the price list to select the available combination.

Part Number										D	P 0.01mm Increment	W 0.01mm Increment	L 1mm Increment	Shouldered Type only	
Type		Shouldered		T Selection	H										
Dowel Pin	D Cut	Dowel Pin	D Cut												
KJBSC	KJBHSC	KJBSCD	KJBHSCD	KJBSTC	KJBHSTC	KJBSTCD	KJBHSTCD	8 ³	4.00~ 6.00	P>W (W≥3.00)	(Straight) 5~20 (Shouldered) 10~20	2 3 5	D+4		
KJBSCS	KJBHSCS	KJBSCDS	KJBHSCDS	KJBSTCS	KJBHSTCS			10	4.00~ 8.00						
KJBSCC	KJBHSCC			KJBSTCC	KJBHSTCC	KJBSTCCD	KJBHSTCCD	12	4.00~10.00						
								16	6.00~14.00						
								20	10.00~18.00						
								25	14.00~22.00						
								30 ^{3,4}	20.00~27.00						

1. For Straight Type, there must be a 1mm or greater wall thickness between dowel hole and slotted hole ((D-W)/2-2≥1).
 2. D=8 is applicable to Shouldered Type only. 3. D=30 is applicable to material of SKS93 Straight Type only.

Ordering Example: Part Number - P - W - L - T
 KJB STC 12 - P9.50 - W4.50 - L15 - T2

D	1 Straight Type Unit Price									
	Dowel Pin					D Cut				
	KJBSC	P ^{+0.03} F ^{+0.05}	KJBSCS	KJBSCC	KJBHSC	PH7	WH7	KJBHSCS	KJBHSCC	KJBHSCD
10										
12										
16										
20										
25										
30										

D	2 Shouldered Unit Price									
	Dowel Pin					D Cut				
	KJBSTC	P ^{+0.03} F ^{+0.05}	KJBSTCS	KJBSTCC	KJBHSTC	PH7	WH7	KJBHSTCS	KJBHSTCC	KJBHSTCD
8										
10										
12										
16										
20										
25										

Alterations: Part Number - P - W - L - T - (FC, NC-etc.)
 KJBHSC20 - P15.00 - W12.00 - L20 - NC

Alterations	Code	Spec.
Groove (for Adhesive Reservoir)	FC	Adds an adhesive reservoir groove. 1. D≥P+3: Applicable only when a wall of 1.5mm or thicker is remaining. 2. Applicable when L≥8 for Straight Type, L≥15 for Shouldered Type.
Groove (for Retaining)	NC	Adds groove for retaining. 1. D≥P+3: Applicable only when a wall of 1.5mm or thicker is remaining. 2. Applicable when L≥8 for Straight Type, L≥15 for Shouldered Type.

Alterations	Code	Spec.
Radius R C Chamfered	RN	Adds C Chamfering (0.1 or less) to R.
Shoulder Thickness Tolerance	TKC	Changes shoulder thickness tolerance to ±0.01. 1. Applicable to Shouldered Type only.
L Dimension Tolerance	LKC	Changes L dimension tolerance. 1. Applicable only when L≤19.