Bushings for Inspection Jigs

Oval

Applicable Pins: (Diamond-Shaped Edge Type) **P.1806**, (Standard) **P.1810**

Bushings for Inspection Jigs – Oval

RoHS10

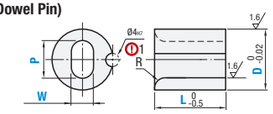
	Material	Hardness	(1) Straight Type	(1) Straight Material Code	(2) Shouldered Type	(2) Shouldered Material Code
Dowel Pin	SKS93 Tool Steel (JIS) Equivalent	50–60 HRC min.	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	SC	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	STC
	304 Stainless Steel	—		SCS		STCS
	440C Stainless Steelor Equivalent	45–50 HRC min.		SCC		STCC
D Cut	SKS93 Tool Steel (JIS) Equivalent	50–60 HRC min.	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	SCD	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	STCD
	304 Stainless Steel	—		SCDS		—
	440C Stainless Steelor Equivalent	45–50 HRC min.		—		STCDC

P, W	H7
3.00–6.00	+0.012 / 0
6.01–10.00	+0.015 / 0
10.01–18.00	+0.018 / 0
18.01–27.00	+0.021 / 0

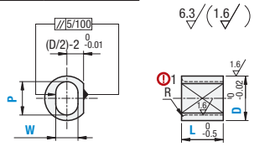
(1) Some combinations are unavailable. Please refer to the table below.

(1) 1. When wall is 2 mm or less {(D−P)/2≤2}, R is 0.5.

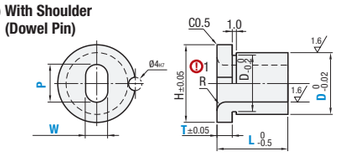
(1) Straight (Dowel Pin)



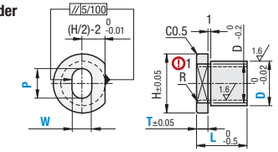
(1) Straight (D-Cut)



(2) With Shoulder (Dowel Pin)



(2) With Shoulder (D-Cut)



Select Type, Material Code, D Dimension (For details, refer to ordering example below).

Type	Material Code: Straight, Dowel (1)2	Straight, D-Cut	Shouldered, Dowel (1)2	Shouldered, D-Cut	D	All Types: 0.01mm Increment P	W	L 1mm Increment	R	2Shouldered Type only: T	H
($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	SC SCS SCC	SCD SCDS	STC STCS STCC	STCD STCDC	8 (1)3	4.00–6.00	P>W (W≥3.00)	(Straight) 5–20 (Shouldered) 10–20	2.0	2 3 5 T≤L−2	D+4
					10	4.00–8.00					
					12	4.00–10.00					
					16	6.00–14.00					
					20	10.00–18.00					
					25	14.00–22.00					
					30 (1)4	20.00–27.00				—	—

(1) 2 For Straight Type, there must be a 1mm or greater wall thickness between dowel hole and slotted hole ({(D−W)/2}−2≥1).
(1) 3 D=8 is applicable to Shouldered Type only. (1) 4 D=30 is applicable to material of SKS93 Tool Steel (JIS) Straight Type only.

D	1Straight – Available Types: Dowel Pin $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSC	KJBSCS	KJBSCC	Dowel Pin P_{H7} W_{H7} KJBHSC	KJBHSCS	KJBHSCC	D-Cut $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSCD	KJBSCDS	D-Cut P_{H7} W_{H7} KJBHSCD	KJBHSCDS
10	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•
30	•	—	—	•	—	—	•	—	•	—

D	2Shouldered – Available Types: Dowel Pin $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSTC	KJBSTCS	KJBSTCC	Dowel Pin P_{H7} W_{H7} KJBHSTC	KJBHSTCC	D-Cut $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSTCD	KJBSTCDC	D-Cut P_{H7} W_{H7} KJBHSTCD
8	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•

Part Number 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 a groove for adhesive. (1) D≥P+3: Applicable only when a wall of 1.5 mm or thicker is remaining. (1) Applicable when L≥8 for Straight Type, L≥15 for Shoulder Type.
Groove (Retaining)	NC	Adds s groove for retaining. (1) D≥P+3: Applicable only when a wall of 1.5 mm or thicker is remaining. (1) Applicable when L≥8 for Straight Type, L≥15 for Shoulder Type.

Part Number Example

Part Number			-	P	-	W	-	L	-	T
Type	Material	D								
KJB	STC	12	-	P9.50	-	W4.50	-	L15	-	T2

Alterations	Code	Spec.
Radius R 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 With Shoulder Type only.
Changes L Dimension Tolerance	LKC	Changes L dimension tolerance to $^{0}_{-0.05}$. (1) Applicable only when L≤19.

There's more on the web: misumiusa.com

Bushings for Inspection Jigs

Square

Applicable Pins: (Standard) **P.1811**

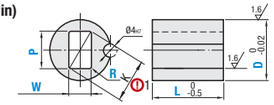
Bushings for Inspection Jigs – Square

RoHS10

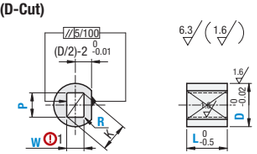
	Material	Hardness	(1) Straight Type	(1) Straight Material Code	(2) Shouldered Type	(2) Shouldered Material Code
Dowel Pin	SKS93 Tool Steel (JIS) Equivalent	50–60 HRC min.	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	SR	($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	STR
	304 Stainless Steel	—		SRS		—
D Cut	SKS93 Tool Steel (JIS) Equivalent	50–60 HRC min.		SRD	—	—
	304 Stainless Steel	—		SRDS		—

P, W	H7
3.00–6.00	+0.012 / 0
6.01–10.00	+0.015 / 0
10.01–18.00	+0.018 / 0
18.01–22.00	+0.021

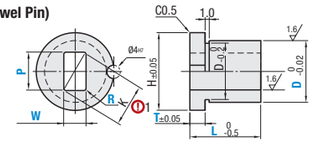
(1) Straight (Dowel Pin)



(1) Straight (D-Cut)



(2) With Shoulder (Dowel Pin)



(1) 1. $K=\sqrt{(P-2R)^2+(W-2R)^2}+2R$

Type	Material Code: Straight, Dowel (1)2	Straight, D-Cut	Shouldered, Dowel (1)2	D (1)3	All Types: 0.01 mm Increment P	W	R	L 1 mm Increment	2 Shouldered Type only: T	H
($P^{+0.03}_{+0.01}$/$W^{+0.03}_{+0.01}$) KJB (P_{H7}/W_{H7}) KJBH	SR SRS	SRD SRDS	STR	8 (1)4	4.00–6.00	P≧W (W≧3.00)	0.20≦R≦W/2	(Straight) 5–20 (Shouldered) 10–20	2 3 5 T≦L−2	D+4
				10	4.00–8.00					
				12	4.00–10.00					
				16	6.00–14.00					
				20	10.00–18.00					
				25	12.00–22.00					

(1) 2 For Straight Type, there must be a 1mm or greater wall thickness between Dowel Hole and Square ({(D−W)/2}−2≥1).
(1) 3 There must be a 1mm or greater wall thickness between O.D. and square hole (For D=25, 1.5mm or more). (K≦Pmax) (1) 4 D=8 is applicable to Shouldered Type only.

D	1 Straight – Available Types: Dowel Pin $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSR	KJBSRS	Dowel Pin P_{H7} W_{H7} KJBHSR	KJBHSRS	D-Cut $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSRD	KJBSRDS	D-Cut P_{H7} W_{H7} KJBHSRD	2 Shouldered – Available Types: Dowel Pin $P^{+0.03}_{+0.01}$ $W^{+0.03}_{+0.01}$ KJBSTR	P_{H7} W_{H7} KJBHSTR
8	—	—	—	—	—	—	—	•	•
10	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•

(1) 2. There must be a 1mm or greater wall thickness between O.D. and square hole (For D=25, 1.5mm or more). (K≦Pmax)

Part Number Example

Part Number			-	P	-	W	-	R	-	L	-	T
Type	Material	D										
KJB	STR	12	-	P9.00	-	W4.00	-	R0.3	-	L15	-	T2

Part Number Alterations

Part Number	-	P	-	W	-	R	-	L	-	T	-	(FC / NC...etc.)
KJBHSR20	-	P12.00	-	W10.00	-	R0.3	-	L20			-	NC

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

Alterations	Code	Spec.
Shoulder Thickness Tolerance	TKC	Changes shoulder thickness tolerance to ±0.01. (1) Applicable to With Shoulder Type only.
Changes L Dimension Tolerance	LKC	Changes L dimension tolerance to $^{0}_{-0.05}$. (1) Applicable only when L≤19.

Check out misumiusa.com for the most current pricing and lead time.