

Slot Pins for Inspection Jigs

Stepped Diamond, Straight Fixed

Feature: Diamond-shaped Inspection Pins to determine the workpiece location.

Applicable Bushings: (1) Round Edge Type P.1828-1830, (2) D-Shaped Tip Type P.1831

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Alteration ZC

RoHS 10

Material ①	Hardness	(1) Round Tip		(2) D-Shape Tip	
		Type	Material Code	Type	Material Code
1045 Carbon Steel or Equivalent	—	S _{0.02}	DKM	S _{0.02} / F _{0.05}	DK
1045 Carbon Steel or Equivalent	45 HRC min.	KJP	DKMH	KJP	DKH
304 Stainless Steel	—	Sg6	DKMS	Sg6 / F _{0.03}	DKS
② 440C or 420 Stainless Steel	45-50 HRC min.	KJPG	—	KJPG	DKC

⑤ Some combinations are unavailable. Refer to the available list to select the available combination.

S	g6
3.00	-0.002 -0.008
3.01-6.00	-0.004 -0.012
6.01-10.00	-0.005 -0.014
10.01-18.00	-0.006 -0.017
18.01-29.00	-0.007 -0.020

(1) Round Tip Small Head: D=8-25

Large Head: D=10L-20L ④

(2) D-Shape Tip Small Head: D=8-25

Large Head: D=10L-20L ④

①. For electroless nickel plating, please refer to the alteration MN.
 ②. 440C or 420 Stainless Steel has an identification groove on D part.
 ③. For shorter handle length, refer to the alteration ZC.
 ④. Dimensions not specified are the same as Small Head Type.
 ⑤. There is a relief groove that is approx. 1 mm wide (approx. 0.2 mm deep).
 ⑥. $K \geq (S+0.3)$
 $K = \sqrt{P^2 - W^2} \sin 30^\circ + W \cos 30^\circ$
 Reference: $\sin 30^\circ = 0.5$, $\cos 30^\circ = 0.866$

Select Type, Material Code & D Dimension

Part Number	(1) Round Tip		(2) D-Shape Tip		0.01 mm Increment		0.1 mm Increment	1 mm Increment		W	M
	Type	Material Code	Type	Material Code	P	S(P>S)	F (F<S/2) (2) D-Shape Tip only	L	B		
S _{0.02} KJP Sg6 KJPG	DKM DKMH DKMS	S _{0.02} KJP Sg6 / F _{0.03} KJPG	DK DKH DKS DKC	8	4.00-6.00	3.00-5.00	0.3-2.0	5-10	5-15	2	M4
				10	4.00-8.00	3.00-7.00	0.3-3.0	5-25 For 304 Stainless Steel, L≤Px5	5-25 For 304 Stainless Steel, B≤Px5	8	
				12	6.00-10.00	3.00-9.00	0.3-4.0				
				16	8.00-14.00	3.00-13.00	0.5-6.0				
				20	12.00-18.00	5.00-17.00	1.0-8.0				
				25	16.00-23.00	8.00-22.00	2.0-10.0				
				10L	10.00-16.00	5.00-15.00	1.0-7.0				
				12L	12.00-20.00	6.00-19.00	2.0-9.0				
				16L	16.00-25.00	8.00-24.00	2.0-11.0				
				20L	20.00-30.00	10.00-29.00	2.0-14.0				

① Large head type (D=10L-20L) is only available in 1045 Carbon Steel or Equivalent.

Part Number Example

Part Number: KKJP DK 12L - P16.00 - S6.00 - F2.2 - L10 - B10

Type: KKJP, Config. Code: DK, D: 12L, P: P16.00, S: S6.00, F: F2.2, L: L10, B: B10

D	1 Round Tip Type – Available Types				2D-Shape Tip Type – Available Types			
	S _{0.02}	S _{0.05}	Sg6	Sg6 / F _{0.03}	S _{0.02} / F _{0.05}	S _{0.05} / F _{0.03}	Sg6 / F _{0.03}	Sg6 / F _{0.03}
Small Head	8	•	•	•	•	•	•	•
	10	•	•	•	•	•	•	•
	12	•	•	•	•	•	•	•
	16	•	•	•	•	•	•	•
	20	•	•	•	•	•	•	•
Large Head	10L	•	•	•	•	•	•	•
	12L	•	•	•	•	•	•	•
	16L	•	•	•	•	•	•	•
	20L	•	•	•	•	•	•	•

Part Number Alterations

Part Number: KJPDK12 - P8.00 - S6.00 - F2.2 - L10 - B10 - CH
 KJPDKM20 - P17.90 - S10 - L15 - B20 - ZC10

Alterations	Code	Spec.	Alterations	Code	Spec.
Chain Attachment	CH	Retaining chain (length 600 mm) is attached to gauge body. ① For chains only, refer to P.1845.	P Dimension Tolerance	PKC	Changes P dimension tolerance to g6.
Engraving of P Dimension	KH	Machines flats on knurled head and engraves P dimension. ⊗ Not applicable to handle length 10.	No Relief Groove	NMN	Omits the relief groove between knurled part and straight part on the step. ⊗ Not applicable to Large Head Type.
Additional Surface Treatment (Electroless Nickel Plating)	MN	Electroless nickel plating is applied. ① Applicable to Material 1045 Carbon Steel or Equivalent only. ⊗ Combination with STC is not available.	Handle Length	ZC	Changes handle length to 50 to 10, 20, 30 and 40. Ordering Code: ZC20 ① Handle length 10 and 20 are available only when P≥5 and pin length (L+B)≤30. ② For large head type, only ZC30 and 40 are applicable. ⊗ For handle length 10, there is no tapped hole. ⊗ For handle length 10, combination with KH is not available.
Additional Surface Treatment (Black Oxide)	STC	Adds Black Oxide Surface Treatment ① Applicable to Material 1045 Carbon Steel or Equivalent only. ⊗ Combination with MN is not available.			

Slot Pins for Inspection Jigs

Stepped Diamond, Straight Configurable

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Alteration ZC

RoHS 10

Material ①	Hardness	(1) Round Tip		(2) D-Shape Tip	
		Type	Material Code	Type	Material Code
1045 Carbon Steel or Equivalent	—	S _{0.02}	VM	S _{0.02} / F _{0.05}	V
1045 Carbon Steel or Equivalent	45 HRC min.	KJP	—	KJP	VH
304 Stainless Steel	—	Sg6	—	Sg6 / F _{0.03}	VS
② 440C or 420 Stainless Steel	45-50 HRC min.	KJPG	—	KJPG	—

⑤ Some combinations are unavailable. Refer to the available list to select the available combination.

S	g6
3.00	-0.002 -0.008
3.01-6.00	-0.004 -0.012
6.01-10.00	-0.005 -0.014
10.01-18.00	-0.006 -0.017
18.01-28.00	-0.007 -0.020

(1) Round Edge Type Small Head: D=8-25

Large Head: D=10L-20L ③

(2) D-Shaped Tip Type Small Head: D=8-25

Large Head: D=10L-20L ③

①. For electroless nickel plating, please refer to the alteration MN.
 ②. For shorter handle length, please refer to the alteration ZC.
 ③. Dimensions not specified are same as Small Head Type.
 ④. There may be a centering hole at tip and a relief groove approx. 1 mm in width (approx. 0.2 mm in depth) at joint of each step. For no relief grooves, refer to the alteration NMN.

Select Type, Material Code & D Dimension

Part Number	(1) Round Tip		(2) D-Shape Tip		0.01 mm Increment		0.1 mm Increment	1 mm Increment		0.1 mm Increment		0.5 mm Increment		M
	Type	Material Code	Type	Material Code	P	S(P-1≥S)	F (F<S/2) (2) For D-Shape Tip only	L	B	V	P-V V≥S+1	W(V>W)		
S _{0.02} KJP Sg6 KJPG	DKM DKMH DKMS	S _{0.02} KJP Sg6 / F _{0.03} KJPG	V VH VS	8	4.00-6.00	3.00-4.00	0.3-2.0	5-10	5-15	4.0-5.0	1.0-4.5	M4		
				10	4.00-8.00	3.00-6.00	0.3-3.0	5-25 For 304 Stainless Steel, L≤Px5	5-25 For 304 Stainless Steel, B≤Px5	8				
				12	6.00-10.00	3.00-8.00	0.3-4.0							
				16	8.00-14.00	3.00-12.00	0.5-6.0							
				20	10.00-18.00	5.00-16.00	1.0-8.0							
				25	15.00-23.00	8.00-21.00	2.0-10.0							
				10L	10.00-16.00	5.00-14.00	1.0-7.0							
				12L	12.00-20.00	6.00-18.00	2.0-9.0							
				16L	16.00-25.00	8.00-23.00	2.0-11.0							
				20L	20.00-30.00	10.00-28.00	2.0-14.0							

① Large Head Type (D=10L-20L) is available for 1045 Carbon Steel or Equivalent only. ② Please select V, W and S dimension so that S dimension is smaller.

Part Number Example

Part Number: KJP V 16 - P8.00 - S4.00 - F1.0 - L10 - B10 - V7.0 - W5.0

D	1 Round Tip Type – Available Types			2D-Shape Tip Type – Available Types		
	S _{0.02}	S _{0.05}	Sg6	S _{0.02} / F _{0.05}	S _{0.05} / F _{0.03}	Sg6 / F _{0.03}
Small Head	8	•	•	•	•	•
	10	•	•	•	•	•
	12	•	•	•	•	•
	16	•	•	•	•	•
	20	•	•	•	•	•
Large Head	10L	•	•	•	•	•
	12L	•	•	•	•	•
	16L	•	•	•	•	•
	20L	•	•	•	•	•

Part Number Alterations

Part Number: KJPV16 - P8.00 - S4.00 - F1.0 - L10 - B10 - V7.0 - W5.0 - CH
 KJPVM20 - P16.55 - S10.00 - F1.0 - L7 - B7 - V12.2 - W1.0 - ZC30

Alterations	Code	Spec.	Alterations	Code	Spec.
Chain Attachment	CH	Loss-prevention chain (length 600 mm) is attached to gauge body. ① For chains only, refer to P.1845.	P Dimension Tolerance	PKC	Changes P dimension tolerance to g6.
Engraving of P Dimension	KH	Machines flats on knurled head and engraves P dimension. ⊗ Not applicable to handle length 10.	No Relief Groove	NMN	Clears the relief groove between knurled part and straight part on the step. ⊗ Not applicable to Large Head.
Additional Surface Treatment (Electroless Nickel Plating)	MN	Electroless nickel plating is applied. ① Applicable to Material 1045 Carbon Steel or Equivalent only. ⊗ Combination with STC is not available.	Handle Length	ZC	Changes handle length to 10, 20, 30 and 40. Ordering Code: ZC20 ① Handle length 10 and 20 are only available when P≥5 and pin length (L+B)≤30. ② For large head type, handle length 30 and 40 only are applicable. ⊗ For handle length 10, there is no tapped hole. ⊗ For handle length 10, combination with KH is not available.
Additional Surface Treatment (Black Oxide)	STC	Adds Black Oxide Surface Treatment ① Applicable to Material 1045 Carbon Steel or Equivalent only. ⊗ Combination with MN is not available.			