CARBIDE STRAIGHT PUNCHES WITH AIR HOLES

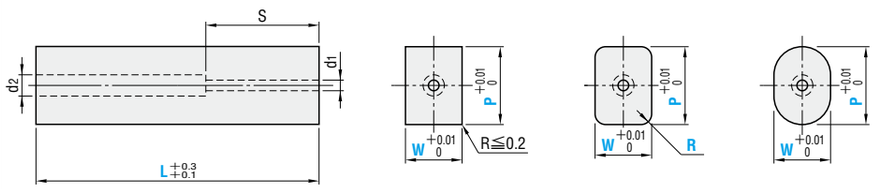
RoHS

●Tip machining limit

Tip shape D	Tip shape R	Tip shape E
P≧W	P≧W 0.15≦R<$\frac{W}{2}$	P＞W

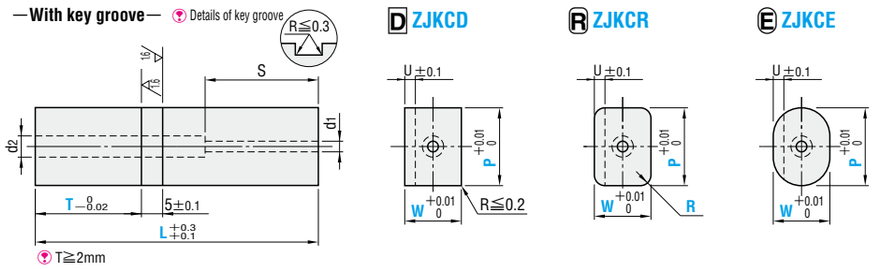
HRC	Tip dimension P·W
V30(HIP) 88～89HRA	P·W 5.00～20.00

—Normal—



HRC	Tip dimension P·W
V30(HIP) 88～89HRA	P·W 5.00～20.00

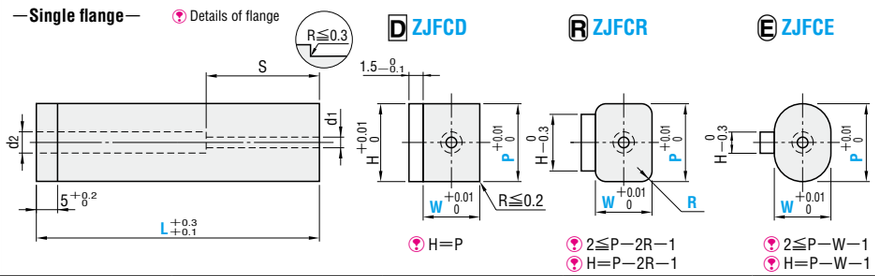
—With key groove— Details of key groove



T≧2mm

HRC	Tip dimension P·W
V30(HIP) 88～89HRA	P·W 5.00～16.00 Cannot be used for products marked with ● in the specification table.

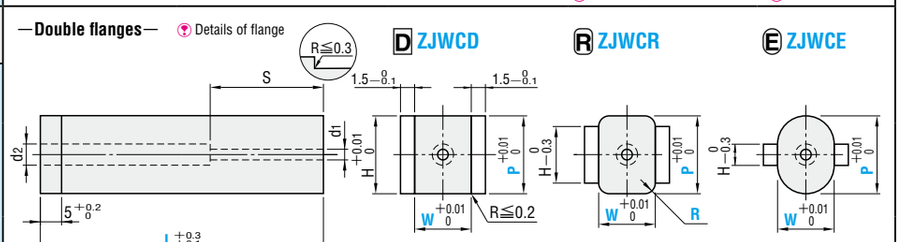
—Single flange— Details of flange



H=P　2≦P−2R−1　H=P−2R−1　2≦P−W−1　H=P−W−1

HRC	Tip dimension P·W
V30(HIP) 88～89HRA	P·W 5.00～16.00 Cannot be used for products marked with ● in the specification table.

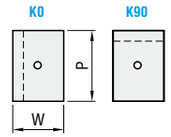
—Double flanges— Details of flange



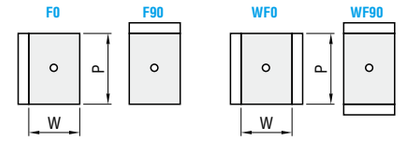
H=P　2≦P−2R−1　H=P−2R−1　2≦P−W−1　H=P−W−1

Catalog No. Type	Tip shape	L	W \ P	5.00～6.00	6.01～8.00	8.01～10.00	10.01～16.00	16.01～20.00	0.1mm T	d_1×S L=40	d_1×S L=50	d_1×S L=60·70	d_2	U
ZJC ZJKC ZJFC ZJWC	D	40 50 60 70	5.00～6.00	○	○	○	○	●	T≧2.0	0.8×17	0.8×20		2.6	1.0
			6.01～8.00		○	○	○	●		1.2×17	1.2×27		3.4	
	R		8.01～10.00			○	○	●		1.6×17	1.6×28		4.4	1.5
			10.01～13.00				○	●		1.9×17	1.9×28			
	E		13.01～16.00				○	●		2.9×17	2.9×24	2.9×36		
			16.01～20.00					●						

■Key groove position specified



■Flange position specified



Tip shape E can be selected for F0·WF0 only.

For F90·WF90, H dimension is shown below.

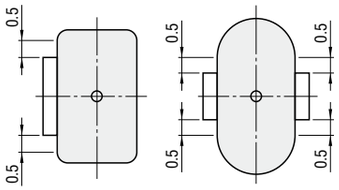
Tip shape D : 2≦W　H=W

Tip shape R : 2≦W−2R−1　H=W−2R−1

Order

Catalog No.	L	0.01mm increments P	W	R (R only)	0.1mm increments T≧2	K·F·WF
ZJCD	60	P14.28	W9.28			
ZJKCR	60	P14.28	W9.28	R0.15	T25.5	K0
ZJFCE	60	P13.18	W6.50			F0
ZJWCD	60	P14.28	W14.28			WF90

Flanged types (both single flange and double flanges) with shapes R·E include 0.5mm straight parts on each of the flange sides.



Days to Ship Quotation

Price Quotation

Alterations

Catalog No. — L(LC) — P — W — R — T — K·F·WF — (PKC, etc.)

ZJCD — LC65.5 — P5.80 — W5.20 — PKC

Alteration		Code	Spec.	1Code
Tip	W T P	PKC	Tip tolerance change P·W +0.01 0 ⇨ +0.005 0	
		PKM	Tip tolerance change P·W +0.01 0 ⇨ 0 −0.005	
		PKV	Tip tolerance change P·W +0.01 0 ⇨ ±0.005	
Alterations to full length	LC L	LC	Full length change 30≦LC＜L 0.1mm increments (If combined with LKC·LKZ, 0.01mm increments can be selected.) Dimension S is shortened by (L−LC)	Quotation
	LCX L	LCX	Full length change with the same tip length S 30≦LC＜L 0.1mm increments If combined with LKC or LKZ, 0.01mm increments can be selected. ⊗ Cannot be used for flanged types.	
	L T	LKC	Full length tolerance change L +0.3 +0.1 ⇨ +0.05 0	
		LKZ	Full length tolerance change L +0.3 +0.1 ⇨ +0.01 0	
Alterations to key groove	T T	RTC	Key groove position tolerance change T 0 −0.02 ⇨ +0.05 0	
	IK J	UK	Key groove depth change 0.5≦UK≦U+0.2 0.1mm increments W(P) − {UK+d_2(d_1)} ≧2.0 Can be used for key groove types.	

Alteration		Code	Spec.	1Code
Alterations to flange	HC	HC	Flange width change 0≦HC＜1.5 0.1mm increments	Quotation
	T TC	TC	Flange thickness change 2≦TC＜5 0.1mm increments (If combined with TKC·TKM, 0.01mm increments can be selected.) Full length L is shortened by (5−TC). If combined with LC, full length is equal to LC.	
	T T	TKC	Flange thickness tolerance change T +0.2 0 ⇨ +0.02 0	
		TKM	Flange thickness tolerance change T +0.2 0 ⇨ 0 −0.02	
		FK	Relief chamfering to flange top edge Flange edge is chamfered to prevent flange breakage. ⊗ Cannot be used for normal and key groove types.	
Alterations to shape	4−C0.5 CCN	CCN	Chamfering to shank (4 locations) 5≦CCN≦L 1mm increments Can be used for tip shape D only. Flange side of flanged punch becomes CCN−T(TC).	