

High Speed Steel
SKH51 equivalent

R-chamfered Precision
P · W_{-0.005}
Free designation

R-CHAMFERED PRECISION RECTANGULAR EJECTOR PINS

—FREE DESIGNATION · R POSITION SELECTION TYPE—

Ⓜ Non JIS material definition is listed on P.1351 - 1352

RoHS

Part Number				Head thickness	P · W	R parts					
1 place is rounded.	2 places are rounded.	3 places are rounded.	4 places are rounded.			No. of R	Shape	① Upper left	② Upper right	③ Lower left	④ Lower right
ERV1AR ERV1BR	ERVWR ERV2BR ERV2CR ERV2DR	ERV3AR ERV3BR	ERVFR	4mm(T4)	0 -0.005	1	1AR 1BR	①	②	③	④
ERVJ1AR ERVJ1BR	ERVJWR ERVJ2BR ERVJ2CR ERVJ2DR	ERVJ3AR ERVJ3BR	ERVJFR	4 · 6 · 8mm(JIS)		2	WR 2BR 2CR 2DR	①	②	③	④
						3	3AR 3BR	①	②	③	④
						4	FR	①	②	③	④

Range of guaranteed shaft diameter precision (D) (Details [P.1301](#))
Step R (Details [P.1302](#))

SKH51 equivalent
58~60HRC
Range of guaranteed base material hardness (Details [P.1303](#))

R-position Designation

One place of R	Two places of R		Three places of R	Four places of R
	Horizontal/Longitudinal	Diagonal		
1AR ① Upper left 	WR ① Upper left ② Upper right 	2CR ① Upper left ④ Lower right 	3AR ① Upper left ② Upper right ③ Lower left 	FR 4 places
1BR ② Upper right 	2BR ① Upper left ③ Lower left 	2DR ② Upper right ③ Lower right 	3BR ① Upper left ② Upper right ④ Lower right 	R tolerance ±0.01

Order **Part Number** — L — P — W — R — N
 ERV1AR 4 — 200.00 — P2.00 — W1.00 — R0.1 — N150

Days to Ship **Quotation**

Price **Quotation**

Precision Standard	
Squareness of the tip corner 	Pmax. Pmin. W plane as the base (Pmax. - Pmin.) ≤ 0.01
Corner R value of the tip corner 	Rmax. ≤ 0.03 (Trimming R) Corner R value outside R processing range The tip corners have been slightly trimmed to measure the P · W dimensions. (Details P.1313)

4mm head		JIS head		Part Number		0.01mm increments			R	Kmax.	N 1mm increments	Nmin.		
H	T	H	T	Type	Shape	D	L	P					W	
3		3		ERV (4mm head D1.5~10)	1AR 1BR WR 2BR 2CR 2DR 3AR 3BR FR	1.5	50.00~250.00	0.60~1.30	0.30~	0.05	20 ≤ (L-N) ≤ 250	23		
4		4				2	50.00~300.00	0.80~1.80					26	
5		5				3	50.00~300.00	0.80~2.30						27
6		6				4	50.00~300.00	1.00~3.30						
7		7		ERVJ (JIS head D1.5~15)	2BR 2CR 2DR 3AR 3BR FR	4.5	50.00~350.00	1.20~4.30	0.40~	0.15	20 ≤ (L-N) ≤ 250	31		
8		8				5	50.00~300.00	1.50~4.80					33	
9		9				6	50.00~350.00	1.80~5.30						40
10		10				7	50.00~300.00	2.00~5.80						
11		11				8	50.00~300.00	2.30~6.30	40					
15		15				9	50.00~350.00	2.30~6.80		40				
17		17				10	50.00~350.00	2.30~7.80	40					
20		20				12	50.00~350.00	3.00~9.80		40				
				15	50.00~350.00	3.50~11.80	40							
						3.50~14.80		1.50~						

Ⓜ Designate P · W dimensions within the Kmax. $K = \sqrt{P^2 + W^2}$ (Dimension before R processing) Ⓜ $P \geq W$
 Ⓜ Select R dimension from the range of $R \leq \frac{W}{2} - 0.05$. Ⓜ L dimension in () will be available for ERVJ□□R.

Alterations **Part Number** — L — P — W — R — N — (AKC · AWC · etc.)
 ERV1AR 4 — 200.00 — P2.00 — W1.00 — R0.1 — N150 — AKC 0-CS1-E30-RC25

Alterations	Code	Spec.	1Code
	AKC	AKC=1° increments 0 ≤ AKC < 360 When combined with KSA/WSA, 90° increments only.	
	AWC	AWC=1° increments 0 ≤ AWC < 360 When combined with KSA/WSA, 90° increments only.	
	ARC	ARC=1° increments 0 ≤ ARC < 360 When combined with KSA/WSA, 90° increments only.	
	ADC	ADC=1° increments 0 ≤ ADC < 360 When combined with KSA/WSA, 90° increments only.	
	KGA	KGA=1° increments 0 < KGA < 360	Quotation
	KGD	KGD=1° increments 0 < KGD < 360	
	KSA	KSA=0.1mm increments W/2 + 0.1 ≤ KSA ≤ D/2 - 0.1	
	WSA	WSA=0.1mm increments W/2 + 0.1 ≤ WSA ≤ D/2 - 0.1	
	TC	TC=0.1mm increments T/2 ≤ TC < T (Dimensions L and N remain unchanged) T - TC ≤ Lmax. - L	
	HC HCC (precision)	HC · HCC=0.1mm increments (HC) D + 1 ≤ HC < H (HCC) D + 1 ≤ HCC < H - 0.3	

Alterations	Code	Spec.	1Code
	NHC	Numbering on the head How to order P.196	
	NHN	Automatic sequential numbering on the head How to order P.196	
	TMC	Lapping on the tip face	
	LKC	L dimension tolerance alteration $L + 0.02 \dots + 0.01$ Available when $L \leq 200$	
	MC	Tapping D8 → M4 D10 → M5 D12 · 15 → M6 Available when $D \geq 8$ Only available combination is with CS · CSF · TMC	
	CS	Process C recess at the bottom of R processed (except tip). Process C recess at all places R processed. [Designation method] CS1—E25	Quotation
	CSF	C-chamfering processing at 4 corners of the blade (except tip) for relief. [Designation method] CSF0.5—E30	
	RC	Designate the length of R processed part. $5 \leq RC \leq (L-N) - 30$ and $RC \leq 40$ RC=1mm increments [Designation method] RC25 Adds RC recess processing at all places R processed RC processing is prioritized when combining with CSW · CSF	

Rectangular Ejector Pins

High Speed Steel SKH51 equivalent

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Quotation