

High Speed Steel
SKH51 equivalent

R-chamfered
Free designation
P · W_{-0.01}

R-CHAMFERED RECTANGULAR EJECTOR PINS

— FREE DESIGNATION TYPE —

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

Part Number		Head Thickness	P · W
ERWR	ERFR	4mm(T4)	$\begin{matrix} 0 \\ -0.01 \end{matrix}$
ERJWR	ERJFR	4 · 6 · 8mm(JIS)	$\begin{matrix} 0 \\ -0.01 \end{matrix}$

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

Ⓜ P ≥ W Ⓜ K = √(P² + W²) (Dimension before R processing)
Ⓜ SKH51 equivalent
Ⓜ 58~60HRC
Range of guaranteed base material hardness (Details Ⓜ P.1303)

Alterations

Part Number: ERFR 4 - 200.00 - P2.00 - W0.80 - R0.1 - N150 - AKC 0

(AKC · AWC...etc.)

Alteration details Ⓜ P.195

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	Quotation
	HC HCC	HC · HCC=0.1mm increments (HC) D+1 ≤ HC < H (HCC) D+1 ≤ HCC < H-0.3	
	KSA	KSA=0.1mm increments W/2+0.1 ≤ KSA ≤ D/2-0.1	
	WSA	WSA=0.1mm increments /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	

Alterations	Code	Spec.	1Code
	NC	Dowel hole boring NC=90° increments Available when H ≥ 4 Combination with other than NHC · NHN not available. How to order and detailed specifications Ⓜ P.195	
	NCW	Dowel hole boring + Spring pin driving NCW=90° increments Available when H ≥ 4 Combination with other than NHC · NHN not available. How to order and detailed specifications Ⓜ P.195	
	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	Quotation
	LKC	L dimension tolerance alteration L +0.02 ... +0.01 Available when L ≤ 200	Quotation
	MC	Tapping Not available for D8 · 8.5 ... M4 ERWR · ERFR Available when D ≥ 8 D10 · 10.5 ... M5 D12 · 15 ... M6 Only available combination is with CSW · CSF · TMC	
	CSW	C chamfering processing at 2 points on top (except tip) for relief is performed. Designation method CSW1-E25	CSW, CSF Range of designation W CSW, CSF 1.0 ≤ W < 1.5 0.3 W ≥ 1.5 0.5 1 1.5 P ≥ 1.5 CSW, CSF < W/2
	CSF	C chamfering processing at 4 points (except tip) for relief is performed. Designation method CSF0.5-E30	E=1mm increments 5 ≤ E ≤ (L-N)-20 R process range P.196

4mm head		JIS head		Part Number		0.01mm increments			R	Kmax.	N 1mm increments	Nmin.	
H	T	H	T	4mm head	JIS head	D	L	P					W
3	4	3	4	ERWR (2 places on the upper side are rounded.) ERFR (4 places are rounded.)	ERJWR (2 places on the upper side are rounded.) ERJFR (4 places are rounded.)	1.5	50.00~250.00	0.60~1.30	0.30~ 0.40~ 0.50~ 0.80~ 1.50~	0.1 0.15 0.2 0.3	20 ≤ (L-N) (L-N) ≤ 250	23	
4	5	4	5			2	50.00~300.00	0.80~1.80					1.4 1.9 2.4 2.9 3.4 3.9 4.4 4.9 5.4 5.9 6.4 6.9 7.9 8.4 9.9 10.4 11.9 14.9
5	6	5	6			2.5	50.00~300.00	0.80~2.30					
6	7	6	7			3	50.00~350.00	0.80~2.80					
7	8	7	8			3.5	50.00~350.00	1.00~3.30					
8	9	8	9			4	50.00~350.00	1.00~3.80					
9	10	9	10			4.5	50.00~350.00	1.20~4.30					
10	11	10	11			5	50.00~350.00	1.50~4.80					
11	12	11	12			5.5	50.00~350.00	1.80~5.30					
12	13	12	13			6	50.00~350.00	2.00~5.80					
13	14	13	14			6.5	50.00~350.00	2.00~6.30					
14	15	14	15			7	50.00~350.00	2.30~6.80					
15	16	15	16			7.5	50.00~350.00	2.30~7.30					
16	17	16	17			8	50.00~350.00	3.00~9.80					
17	18	17	18			8.5	50.00~350.00	3.00~10.30					
18	19	18	19			10	50.00~350.00	3.50~11.80					
19	20	19	20			10.5	50.00~350.00	3.50~14.80					
20	21	20	21	12	50.00~350.00	3.50~14.80							
21	22	21	22	15	50.00~350.00	3.50~14.80							

Ⓜ Designate P · W dimensions within the Kmax. K = √(P² + W²) (Dimension before R processing) Ⓜ P ≥ W Ⓜ Select R dimension from the range of R ≤ W/2 - 0.05.

Order

Days to Ship

Price

Part Number: ERFR 4 - 200.00 - P2.00 - W0.80 - R0.1 - N150

Quotation

Quotation

Precision Standard	
Squareness of the tip corner	 Pmax. Pmin. W plane as the base (Pmax. - Pmin.) ≤ 0.02
Corner R value of the tip corner	 Rmax. 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)

Rectangular Ejector Pins

High Speed Steel SKH51 equivalent

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