

High Speed Steel
SKH51 equivalent

Precision
P · W_{-0.005}
L dimension designation

PRECISION RECTANGULAR EJECTOR PINS

— L DIMENSION DESIGNATION TYPE —

Ⓢ Non JIS material definition is listed on P.1359 - 1360

Part Number | **Head Thickness** | **P · W**

ERVL	4mm(T4)	0 -0.005
※P-ERVL(Angular tip corner)		
ERVJL	6 · 8mm(JIS)	

Ⓢ Range of guaranteed shaft diameter precision (D) (Details P.1309)
Ⓢ Step R (Details P.1310)

Ⓢ SKH51 equivalent
Ⓢ 58~60HRC
Ⓢ Range of guaranteed base material hardness (Details P.1311)

Alterations

Part Number: ERVL 4 - 105.03 - P3.0 - W2.0 - N50 - AKC · AWC · etc.

3 Days Express A Express services not available for KSA · WSA · NHC · NHN · TMC

Alterations	Code	Spec.	1Code
	VAK (precision)	VAK=45° increments AKC=1° increments 0 ≤ VAK or AKC < 360 Ⓢ (VAK) KSA, WSA not available Ⓢ (AKC) When combined with KSA/WSA, 90° increments only.	
	VAW	VAW=45° increments 0 ≤ VAW < 360 Ⓢ Combination with KSA/WSA not available.	
	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.	Quotation
	KGA	KGA=1° increments 0 < KGA < 360	
	KGD	KGD=1° increments 0 < KGD < 360	
	HC HCC (precision)	HC, HCC=0.1mm increments Ⓢ (HC) D+1 ≤ HC < H, D ≥ 1.5 Ⓢ (HCC) D+1 ≤ HCC < H-0.3, D ≥ 1.5	
	KSA	KSA=0.1mm increments Ⓢ W/2+0.1 ≤ KSA ≤ D/2-0.1 Ⓢ D ≥ 1.5	
	WSA	WSA=0.1mm increments Ⓢ W/2+0.1 ≤ WSA ≤ D/2-0.1 Ⓢ D ≥ 1.5	

Alteration details P.197

Alterations	Code	Spec.	1Code
	TC	TC=0.1mm increments T/2 ≤ TC < T Ⓢ Dimensions N becomes shorter by (T-TC). (Dimension L remains unchanged.) Ⓢ T-TC ≤ Lmax.-L	
	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.197	
	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.197	
	NHC	Numbering on the head How to order P.198	
	NHN	Automatic sequential numbering on the head How to order P.198	Quotation
	TMC	Lapping on the tip face Ⓢ Available when P ≥ 0.6	
	CSW	C chamfering processing at 2 points on top (except tip) for relief is performed. Designation method CSW1-E25 Ⓢ 5 Days Ⓢ Express service not available	
	CSF	C chamfering processing at 4 points (except tip) for relief is performed. Designation method CSF0.5-E30 Ⓢ 5 Days Ⓢ Express service not available	

4mm head JIS head	Part Number		L		P	W				N							
	H	T	4mm head	JIS head		D	0.01mm increments										
2					1	50.00~100.00	0.3 0.4 0.5 0.6	0.3 0.4 0.5 0.6					40 50 60				
3					1.5	50.00~100.00 100.01~150.00	0.6 0.7 0.8 1.0(1.2)	0.3 0.4 0.5 0.6 (0.8)					40 50 60	50 60 70 75 80 90 100			
4					2	50.00~100.00 100.01~150.00	1.0 1.2 1.5 1.6(1.8)	0.3 0.4 0.5 0.6 0.7 (0.8) (1.0)					40 50 60	40 50 60 70 80 90 100			
5					2.5	50.00~100.00 100.01~150.00 150.01~200.00	1.5 1.6(2.0)	0.4 0.5 0.6 0.7 0.8 1.0 1.2 (1.5)					40 50 60	40 50 60 70 80 90 100			
6					3	50.00~100.00 100.01~150.00 150.01~200.00	2.0(2.5)	0.4 0.5 0.6 0.7 0.8 1.0 1.2 (1.5)					40 50 60	40 50 60 70 80 90 100			
7	4				3.5	50.00~100.00	2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5 2.0					40 50 60				
						100.01~150.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5					40 50 60 70 80 90 100				
						150.01~200.00	2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5					40 50 60 70 80 90 100				
						200.01~250.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5					40 50 60 70 80 90 100				
8					4	50.00~100.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2					40 50 60	60 70 80 90 100			
						100.01~150.00	3.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2					40 50 60	60 70 80 90 100			
						150.01~200.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2					40 50 60	60 70 80 90 100			
						200.01~250.00	3.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2					40 50 60	60 70 80 90 100			
9					4.5	100.00~150.00	4.0	0.6 0.8 1.0 1.2 1.5					40 50 60 70	60 70 80			
						150.01~200.00	4.0	0.8 1.0 1.2 2.0					50 60 80	60 70 80			
						200.01~250.00	4.0	0.8 1.0 1.2 2.0					50 60 80	60 70 80			
						250.01~300.00	5.0	0.5 0.6 1.0					50 60 80	50 60 70 80			
10					5.5	100.00~150.00	5.0	0.8 1.0 1.5					50 60 70 80	60 75 80			
						150.01~200.00	5.0	0.8 1.0 1.2					50 60 80	60 75 80			
						200.01~250.00	6.0	0.8 1.0 1.2					50 60 80	60 80 100			
						250.01~300.00	6.0	0.8 1.0 1.2					50 60 80	60 80 100			
11					6	100.00~150.00	6.0 7.0	0.8 1.0 1.2					50 60 80	60 80 100			
						150.01~200.00	6.0 7.0	0.8 1.0 1.2					50 60 80	60 80 100			
						200.01~250.00	6.0 7.0	0.8 1.0 1.2					50 60 80	60 80 100			
						250.01~300.00	6.0 7.0	0.8 1.0 1.2					50 60 80	60 80 100			
15					8	100.00~150.00	8.0	0.8 1.0 1.2 2.0					50 60 80	60 80 100			
						150.01~200.00	8.0	0.8 1.0 1.2 2.0					50 60 80	60 80 100			
						200.01~250.00	8.0	0.8 1.0 1.2 2.0					50 60 80	60 80 100			
						250.01~300.00	8.0	0.8 1.0 1.2 2.0					50 60 80	60 80 100			
17					10	100.00~150.00	4.0	0.5 0.8 1.0 1.2					50 60 70	90 100			
						150.01~200.00	4.0	0.5 0.8 1.0 1.2					50 60	90 100			
						200.01~250.00	5.0	0.8 1.0 1.2					100	100			
						250.01~300.00	5.0	0.8 1.0 1.2					100	100			
19					12	150.00~200.00	7.5	1.2 1.5					150	120 130			
						200.01~250.00	7.5	1.2 1.5					150	120 130			
						250.01~300.00	8.0 9.0	1.5 3.0 5.0 5.5					80 100	120			
						300.01~350.00	8.0 9.0	1.5 3.0 5.0 5.5					80 100	120 150			
21					12	150.00~200.00	10.0	2.0 2.5 3.0 5.0					100	120 150			
						200.01~250.00	10.0	2.0 2.5 3.0 5.0					100	120 150			
						250.01~300.00	10.0	2.0 2.5 3.0 5.0					100	120 150			
						300.01~350.00	10.0	2.0 2.5 3.0 5.0					100	120 150			

Order

Part Number: ERVL 4 - 105.03 - P3.0 - W2.0 - N50

3 Days Express A P.46

Ⓢ Delivery days depend on subsidiary. P.45

Price

Quantity discount rate P.45

Quantity	1~4	5~12	13~49	50~100
Rate	—	5%	10%	15%

Ⓢ To be quoted on price & lead time above Max. Q'ty.

Precision Standard

Squareness of the tip corner	ERVL P-ERVL ERVJL	W plane as the base (Pmax. - Pmin.) ≤ 0.01
Corner R value of the tip corner	ERVL ERVJL P-ERVL	Rmax. ≤ 0.03 (Trimming R) Ⓢ The tip corners have been slightly trimmed to measure the P · W dimensions. (Details P.1321)