High Speed Steel
SKH51 equivalent

R-chamfered Precision P・W$_{-0.005}^{0}$ L dimension designation

R-CHAMFERED PRECISION RECTANGULAR EJECTOR PINS

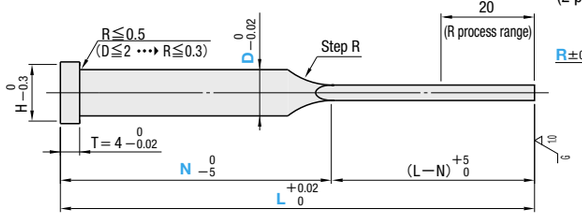
—L DIMENSION DESIGNATION TYPE—

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

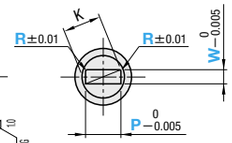
RoHS

Part Number		Head Thickness	T P・W
2 places on the upper side are rounded.	4 places are rounded.		
ERVLWR	ERVLFR	4mm(T4)	$^{0}_{-0.005}$

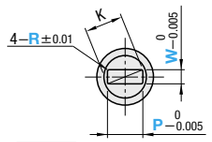
Range of guaranteed shaft diameter precision (D) (Details P.1301)
Step R (Details P.1302)



ERVLWR
(2 places on top are rounded.)



ERVLFR
(4 places are rounded.)



P≧W
K=$\sqrt{P^2+W^2}$ (Dimension before R processing)

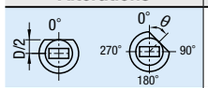
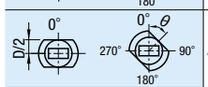
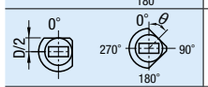
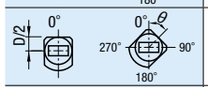
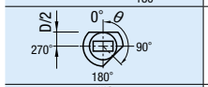
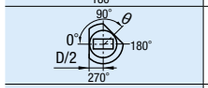
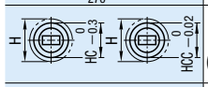
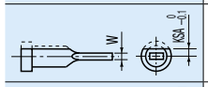
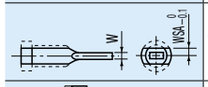
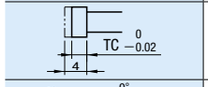
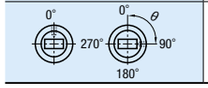
M SKH51 equivalent
H 58～60HRC
Range of guaranteed base material hardness (Details P.1303)

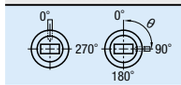
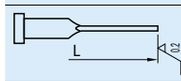
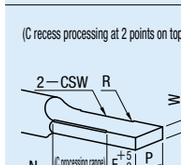
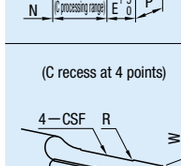
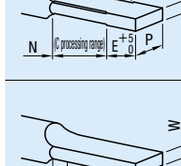
Alterations

Part Number — L — P — W — R — N — (AKC・AWC…etc.)
ERVLFR 3 — 200.00 — P2.0 — W0.8 — R0.1 — N100 — AKC0

Quotation

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	
	HC HCC (precision)	HC・HCC=0.1mm increments (HC) D+1≦HC<H (HCC)D+1≦HCC<H−0.3	
	KSA	KSA=0.1mm increments /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 2.0≦TC<4 Dimensions N become shorter by (4−TC) (Dimension L remains unchanged.) 4−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.195	

Alterations	Code	Spec.	1Code
	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	
(C recess processing at 2 points on top) 	CSW	C-chamfering processing at 2 corners of the blade (except tip) for relief. Designation method CSW1—E25 CSW, CSF: Range of designation W: 1.0≦W<1.5 → CSW, CSF 0.3; W≧1.5 → 0.5, 1, 1.5 P≧1.5 CSW, CSF<W/2 E=1mm increments 5≦E≦(L−N)−20 R process range P.196 RC processing is prioritized when combining with RC.	Quotation
(C recess at 4 points) 	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≦RC≦(L−N)−30 and RC≦40 RC=1mm increments Designation method RC25 Adds RC recess processing at all places R processed.	

H	T	Part Number Type	Part Number D	L 0.01mm increments	P	W	R	N
3	4	ERVLWR (2 places on the upper side are rounded.) ERVLFR (4 places are rounded.)	1.5	60.00～100.00	0.6 0.7 0.8 1.0 1.2	0.3 0.4 0.5 0.6	0.05	40 50 60
				100.01～150.00				50 60 70 75 80 90
4			2	60.00～100.00	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
				100.01～150.00				50 60 70 80 90 100
5			2.5	60.00～100.00	1.5 1.6 2.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2		40 50 60
				100.01～150.00				50 60 70 80 90 100
				150.01～200.00		0.4 0.5 0.6 0.7 0.8 1.0		50 60 70 80 90 100
6			3	60.00～100.00	2.0 2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2		40 50 60
				100.01～150.00				50 60 70 80 90 100
				150.01～200.00		0.4 0.5 0.6 0.7 0.8 1.0		60 70 80 90 100
7			3.5	60.00～100.00	2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5 2.0	0.1	40 50 60
					3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5		
				100.01～150.00	2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2 1.5	0.15	50 60 70 80 90 100
					3.0			
				150.01～200.00	2.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2	0.2	60 70 80 90 100
					3.0			
			4	60.00～100.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2 2.0	0.3	40 50 60
					3.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2		
				100.01～150.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2 2.0	R≦W/2−0.05	50 60 70 80 90 100
					3.5	0.4 0.5 0.6 0.7 0.8 1.0 1.2		
				150.01～200.00	3.0	0.4 0.5 0.6 0.7 0.8 1.0 1.2		60 70 80 90 100
					3.5			
8			4.5	100.00～150.00	4.0	0.6 0.8 1.0 1.2 1.5		40 50 60 70 80 90
				150.01～200.00				60 70 80 90 100
			5	100.00～150.00	4.0	0.8 1.0 2.0		50 60 70 80 90
				150.01～200.00				60 70 80 90 100
9			5.5	100.00～150.00	5.0	0.5 0.6 1.0		50 60 70 80 90
				150.01～200.00				70 80 90 100
			6	100.00～150.00	5.0	0.8 1.0 1.5		50 60 70 80 90
				150.01～200.00				75 80 90 100

Select R dimension from the range of R≦$\frac{W}{2}$−0.05. L−N≧20

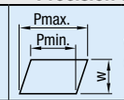
Order — Part Number — L — P — W — R — N
ERVLFR 3 — 200.00 — P2.0 — W0.8 — R0.1 — N100

Days to Ship — Quotation

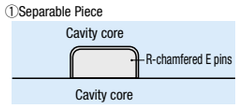
Price — Quotation

Example — Please select the chamfering R size to suit for the corner R on the cavity core generated by WEDM.

Precision Standard

Squareness of the tip corner		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)

①Separable Piece



②Cavity core in wire hole.