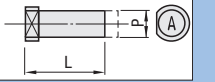


STRAIGHT EJECTOR PINS WITH ENGRAVING

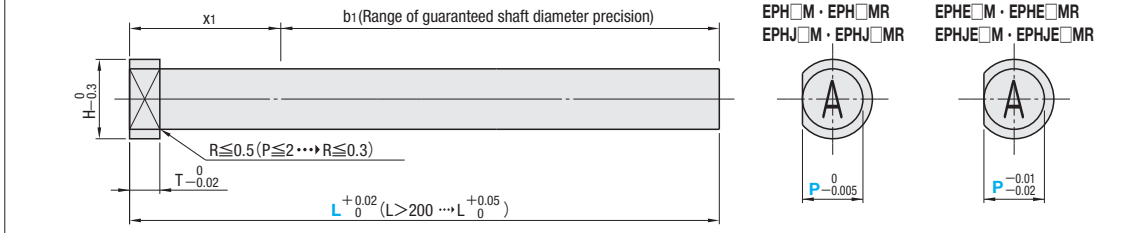
— L DIMENSION DESIGNATION TYPE —

L Dimension Designation Type



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

Part Number	Head thickness	P	RoHS	
			Type	Character
EPH	4mm(T4)	0	☑	☑
EPHJ	6 · 8mm(JIS)	-0.005	☑	☑
EPHE	4mm(T4)	-0.01	☑	☑
EPHJE	6 · 8mm(JIS)	-0.02	☑	☑



Ⓜ To determine the engraving position, key flat cutting is made at the standard 0°
 Range of guaranteed shaft diameter precision (Details P.1301)
 T4 → x1 max.30
 JIS → x1 max.35
 SKH51 equivalent
 58~60HRC
 Range of guaranteed base material hardness (Details P.1303)

1M · 1MR (1 character)	2M · 2MR (2 characters)	3M (3 characters)	4M (4 characters)	5M (5 characters)
0.3 ≤ P ≤ 12	1.5 ≤ P ≤ 12	2.8 ≤ P ≤ 12	3.6 ≤ P ≤ 12	4.5 ≤ P ≤ 12

Ⓜ Designate characters in the right reading order to appear on the finished products. Ⓜ Refer to P.118 for character font.

4mm head	JIS head		Part Number		0.01mm increments	Characters for engraving (Round Gothic type)
	H	T	Type	Character		
3	4	—	EPH (P ⁰ -0.005)	0.3	40.00~60.00	0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
				0.4 0.5	40.00~100.00	
				0.6 0.7 0.8 0.9	40.00~150.00	
				1 1.1 1.2 1.3 1.4	40.00~200.00	
				1.5	40.00~250.00	
				1.6	40.00~250.00	
				1.7 1.8 1.9	40.00~200.00	
				2	40.00~250.00	
				2.1	40.00~250.00	
				2.2 2.3 2.4	40.00~200.00	
				2.5	40.00~250.00	
				2.6	40.00~250.00	
4	8	6	EPHE (P ^{-0.01} -0.02)	3	40.00~250.00	
				3.1	40.00~250.00	
				3.2 3.3 3.4	40.00~200.00	
				3.5 3.6	40.00~250.00	
				3.7 3.8 3.9	40.00~200.00	
				4	40.00~250.00	
				4.5		
				5		
				5.5		
				6		
				6.5		
				7		
8						
9						
10						
12						

Ⓜ Use ¥ for indicating / (slash), # for - (minus), % for % (percent), @ for · (centered dot), & for . (period).
 Ⓜ 1MR and 2MR are sequential numbering designation. In the case of bulk order of two or more ejector pins with the same size, the sequential numbering engraving is performed.
 Ⓜ In case of 1MR, "0" is next to "9" while "A" is next to "Z".
 Ⓜ In case of 2MR, the 1st digit is sequential, and if next to "9" or "Z", it starts from "0" or "A" while the 2nd digit is increased by one.
 Ⓜ In case of 1MR and 2MR, other engraving characters cannot be used for designation.
 1MR (Example) • When placing the order for 5 pieces of EPH1MR2—150—1, characters for engraving "1 2 3 4 5"
 • When placing the order for 3 pieces of EPH1MR3—150—Z, characters for engraving "Z A B"
 2MR (Example) • When placing the order for 4 pieces of EPH2MR4—100—01, characters for engraving "01 02 03 04"
 • When placing the order for 4 pieces of EPH2MR4—100—A8, characters for engraving "A8 A9 B0 B1"
 • When placing the order for 6 pieces of EPH2MR6—150—1X, characters for engraving "1X 1Y 1Z 2A 2B 2C"

Order **Part Number** **L** **Characters for engraving** (0~9, A~Z)

Type Character P L Characters for engraving

EPH 5M 6 — 200.00 — ABC20
 EPH 3M 5 — 184.25 — @ ¥ +

Days to Ship **Quotation**

Alterations **Part Number** **L** **Characters for engraving** (AKC · AWC...etc.)

EPH5M 6 — 200.00 — ABC20 — AKC120

Quotation

Alterations	Code	Spec.	tCode
	AKC	AKC=1° increments 0 < AKC < 360 When combined with GCB/GCD, 90° increments only No need to designate AKCO	Quotation
	AWC	AWC=1° increments 0 ≤ AWC < 360 When combined with GCB/GCD, 90° increments only	
	ARC	ARC=1° increments 0 ≤ ARC < 360 When combined with GCB/GCD, 90° increments only	
	ADC	ADC=1° increments 0 ≤ ADC < 360 When combined with GCB/GCD, 90° increments only	
	KGA	KGA=1° increments 0 < KGA < 360	
	KGB	KGB=1° increments 0 < KGB < 360	
	KAC KBC	Varied width parallel flats cutting P/2 ≤ KAC < H/2 KBC=0.1mm increments only KAC < KBC < H/2 Combination with other key flat cutting not available	
	GCB	GCB=1° increments 60 ≤ GCB < 90 L ≤ 200, Available when P ≥ 2 Combination with GCD not available.	
	GCD	GCD=1° increments 60 ≤ GCD < 90 L ≤ 200, Available when P ≥ 2 Combination with GCB not available.	
	EC	Engraving depth alteration 0.05 ~ 0.1 Available when P ≥ 1 Combination with GCB, GCD not available.	

■ Relationship between Shaft Diameter (P) and Character Size (Q, W)

No. of characters	P			No. of characters	P		
	P	Q	W		P	Q	W
1M 1MR (1 character)	0.3	0.2	0.1	2M 2MR (2 characters)	1.5~1.9	0.7	1.1
	0.4	0.25	0.13		2~2.2	0.8	1.2
	0.5	0.35	0.18		2.3~2.9	1.0	1.3
	0.6~0.7	0.4	0.2		3~3.9	1.5	2.0
	0.8~0.9	0.6	0.3		4~4.5	2.0	2.6
	1~1.2	0.8	0.4		5~5.5	2.5	3.3
	1.3~1.4	1.0	0.5		6~7	3.0	3.9
	1.5~1.9	1.2	0.6		8~12	4.0	5.2
	2~2.4	1.5	0.8		2.8~3	0.8	1.8
	2.5~3.4	2.0	1.0		3.1~4	1.0	2.1
	3.5~4	3.0	1.5		4.5~5	1.5	3.2
	4.5~5	4.0	2.0		5.5~6.5	2.0	4.2
5.5~12	5.0	2.5	7~12	2.5	5.3		
			3.6~3.8	0.8	2.4		
			3.9~5	1.0	2.9		
			5.5~6.5	1.5	4.4		
			7~12	2.0	5.8		
			4.5~4.9	0.8	3.0		
			5~6.5	1.0	3.7		
			7~12	1.5	5.6		

Ejector pins	Finished products
Reversed reading (Concave character)	Right reading (Convex character)
Width of engraving (a) 0.1×Q~0.2×Q	
Angle of engraving (b°) 35° ± 2°	
Depth of engraving (e)	
When P ≤ 0.9 0.03 ± 0.01 When P ≥ 1 0.05 ± 0.02 When EC code is used 0.1 ± 0.02	

Alteration details P.53

Alterations	Code	Spec.	tCode
	TC	TC=0.1mm increments T/2 ≤ TC < T, P ≥ 1.5 (Dimension L remains unchanged.) T - TC ≤ Lmax. - L	Quotation
	HC	HC=0.1mm increments P+1 ≤ HC < H, P ≥ 1.5	
	HCC	HCC=0.1mm increments P+1 ≤ HCC < H-0.3, P ≥ 1.5	
	NHC	Numbering on the head How to order P.54	
	NHN	Automatic sequential numbering on the head How to order P.54	
	GCB	GCB=1° increments 60 ≤ GCB < 90 L ≤ 200, Available when P ≥ 2 Combination with GCD not available.	
	GCD	GCD=1° increments 60 ≤ GCD < 90 L ≤ 200, Available when P ≥ 2 Combination with GCB not available.	
	EC	Engraving depth alteration 0.05 ~ 0.1 Available when P ≥ 1 Combination with GCB, GCD not available.	

P Price **Quotation**

Straight Ejector Pins
High Speed Steel SKH51 equivalent