



INCH PINS, SLEEVES & BLADES

A COMPREHENSIVE LINE OF INCH EJECTOR PINS



Ejector Pins

Nitrided, Through-Hardened, Close Tolerance..... 3-6, 8-11



Shoulder Ejector Pins

Nitrided, Through-Hardened, Close Tolerance..... 7, 11



Keyed Ejector Pins..... 8, 10



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DuPont™ Krytox® TM7 Grease 23



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P-PIN EJECTOR PINS - STAINLESS STEEL STRAIGHT

Developed for a wide range of applications, DME Stainless Steel pins should be used whenever a tool is likely to be exposed to humid warm environments, where the processing of corrosive plastics is planned and, in any clean room environments such as medical and packaging where a stainless steel tool is required.

- 440C Stainless Steel
- Core hardness 52-55 HRC
- Surface hardness 68-72 HRC
- Annealed and finished heads permit **easy machining**
- Centerless ground D diameter
- Silver Nitride finish **minimizes wear, prolongs pin life and reduces flashing**

INCH



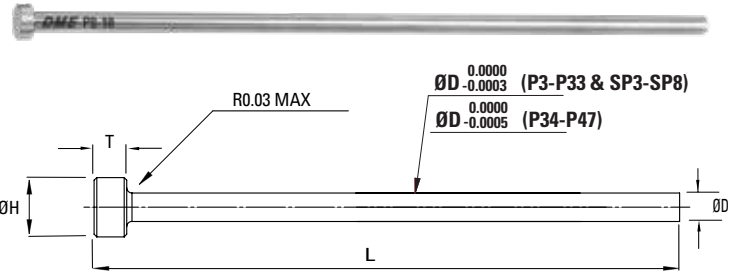
NOM. DIA	ØD DIAMETER		ØD TOLERANCE		Ø H HEAD DIA		K HEAD THICKNESS		L - OVERALL LENGTH (+.038/-0.000) INCH / (+9.65/-0.00) MM			
	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	6.00 INCH / 152.4 MM	10.00 INCH / 254 MM	14.00 INCH / 355.6 MM	18.00 INCH / 457.2 MM
3/32	0.0933	2.370	0.0000 -0.0003	0.0000 -0.0076	0.250	6.350	0.125	3.175		P7-10SSHT		
1/8	0.1245	3.162			0.250	6.350				P9-10SSHT	P9-14SSHT	
5/32	0.1557	3.955			0.281	7.137	0.156	3.962		P11-10SSHT	P11-14SSHT	
3/16	0.1870	4.750			0.375	9.525				P13-10SSHT	P13-14SSHT	
7/32	0.2183	5.545			0.406	10.312	0.187	4.750		P15-10SSHT	P15-14SSHT	
1/4	0.2495	6.337			0.437	11.100				P17-10SSHT	P17-14SSHT	
9/32	0.2807	7.130			0.437	11.100	0.250	6.350		P19-10SSHT	P19-14SSHT	
5/16	0.3120	7.925			0.500	12.700				P21-10SSHT	P21-14SSHT	
11/32	0.3433	8.720			0.562	14.275				P23-10SSHT	P23-14SSHT	
3/8	0.3745	9.512			0.625	15.875				P25-10SSHT	P25-14SSHT	P25-18SSHT
13/32	0.4057	10.305			0.687	17.450					P27-14SSHT	P27-18SSHT
7/16	0.4370	11.100			0.687	17.450					P29-14SSHT	P29-18SSHT
15/32	0.4683	11.895			0.750	19.050					P31-14SSHT	P31-18SSHT
1/2	0.4995	12.687			0.750	19.050					P33-14SSHT	P33-18SSHT
9/16	0.5620	14.275	0.0000 -0.0005	0.0000 -0.0127	0.812	20.625					P35-14SSHT	P35-18SSHT
5/8	0.6545	16.624			0.875	22.225					P37-14SSHT	P37-18SSHT
3/4	0.7495	19.037			1.000	25.400					P41-14SSHT	P41-18SSHT

METRIC

NOM. DIA	ØD DIAMETER g6 TOLERANCE		Ø H HEAD DIA		K HEAD THICKNESS		R RADIUS		L - OVERALL LENGTH (+2.0/-0.0) MM / (+0.0787/-0.000) INCH			
	METRIC	INCH	METRIC	INCH	METRIC	INCH	METRIC	INCH	200MM / 7.8740 INCH	250MM / 9.8425 INCH	315MM / 12.4016 INCH	400MM / 15.748 INCH
1.50	1.50	0.0591	3	0.118	1.5	0.0591	0.2	0.0079	EJP-015-0200SSHT			
2.00	2.00	0.0787	4	0.1575	2	0.0787	0.2	0.0079	EJP-020-0200SSHT			
2.50	2.50	0.0984	5	0.1969	2	0.0787	0.3	0.0118	EJP-025-0200SSHT			
3.00	3.00	0.1181	6	0.2362	3	0.1181	0.3	0.0118		EJP-030-0250SSHT	EJP-030-0315SSHT	
3.50	3.50	0.1378	7	0.2756	3	0.1181	0.3	0.0118		EJP-035-0250SSHT	EJP-035-0315SSHT	
4.00	4.00	0.1575	8	0.3150	3	0.1181	0.3	0.0118		EJP-040-0250SSHT	EJP-040-0315SSHT	
4.50	4.50	0.1772	8	0.3150	3	0.1181	0.3	0.0118		EJP-045-0250SSHT	EJP-045-0315SSHT	
5.00	5.00	0.1969	10	0.3937	3	0.1181	0.3	0.0118		EJP-050-0250SSHT	EJP-050-0315SSHT	
6.00	6.00	0.2362	12	0.4724	5	0.1969	0.5	0.0197		EJP-060-0250SSHT	EJP-060-0315SSHT	
7.00	7.00	0.2756	12	0.4724	5	0.1969	0.5	0.0197		EJP-070-0250SSHT	EJP-070-0315SSHT	
8.00	8.00	0.3150	14	0.5512	5	0.1969	0.5	0.0197		EJP-080-0250SSHT	EJP-080-0315SSHT	
9.00	9.00	0.3543	14	0.5512	5	0.1969	0.5	0.0197		EJP-090-0250SSHT	EJP-090-0315SSHT	
10.00	10.00	0.3937	16	0.6299	5	0.1969	0.5	0.0197			EJP-100-0315SSHT	EJP-100-0400SSHT
10.50	10.50	0.4134	16	0.6299	5	0.1969	0.5	0.0197			EJP-105-0315SSHT	EJP-105-0400SSHT
11.00	11.00	0.4331	16	0.6299	5	0.1969	0.5	0.0197			EJP-110-0315SSHT	EJP-110-0400SSHT
12.00	12.00	0.4724	18	0.7087	7	0.2756	0.8	0.0315			EJP-120-0315SSHT	EJP-120-0400SSHT
12.50	12.50	0.4921	18	0.7087	7	0.2756	0.8	0.0315			EJP-125-0315SSHT	EJP-125-0400SSHT
14.00	14.00	0.5512	22	0.8661	7	0.2756	0.8	0.0315			EJP-140-0315SSHT	EJP-140-0400SSHT
16.00	16.00	0.6299	22	0.8661	7	0.2756	0.8	0.0315			EJP-160-0315SSHT	EJP-160-0400SSHT
20.00	20.00	0.7874	26	1.0236	8	0.3150	1.0	0.0394			EJP-200-0315SSHT	EJP-200-0400SSHT

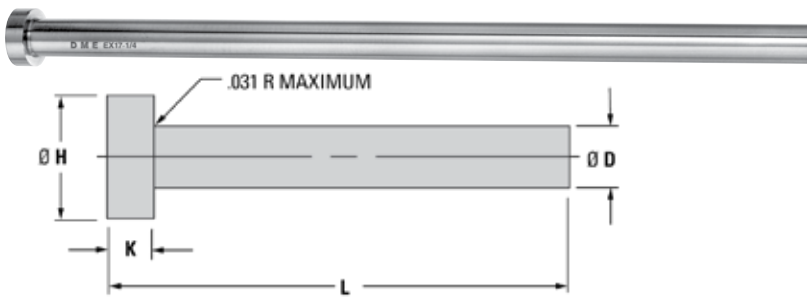
P-PIN EJECTOR PINS - THROUGH HARDENED - STRAIGHT

- Made from premium H-13 steel
- Core hardness 47-52 HRC **minimizes bending**
- Non-chipping surface treatment **alleviates flashing and minimizes nicking & dishing** - 65-70 HRC
- Annealed and finished heads permit **easy machining**
- Centerless ground D diameter
- Final finish **minimizes wear and prolongs pin life**



NOMINAL DIA	D DIAMETER	D TOLERANCE	H HEAD DIA 0.000/-0.010	T HEAD THICKNESS 0.000/-0.002	L - OVERALL LENGTH (+.062/- .000)								
					4"	6"		8"	10"		12"	14"	
					D STANDARD	D STANDARD	D .005 OVERSIZED	D STANDARD	D STANDARD	D .005 OVERSIZED	D STANDARD	D STANDARD	D .005 OVERSIZED
1/32	0.0307	0.0000 -0.0003	1/8	1/8	P3-4	P3-6	P3-60S						
3/64	0.0464		5/32		P4-4	P4-6	P4-60S						
1/16	0.0620		3/16		P5-4	P5-6	P5-60S	P5-8	P5-10	P5-100S			
5/64	0.0776		13/64		P6-4	P6-6	P6-60S	P6-8	P6-10	P6-100S			
3/32	0.0933		7/32		P7-4	P7-6	P7-60S	P7-8	P7-10	P7-100S			
7/64	0.1089		15/64		P8-4	P8-6	P8-60S	P8-8	P8-10	P8-100S			
1/8	0.1245		1/4		P9-4	P9-6	P9-60S	P9-8	P9-10	P9-100S	P9-12	P9-14	P9-140S
9/64	0.1401		1/4		P10-4	P10-6	P10-60S		P10-10	P10-100S		P10-14	P10-140S
5/32	0.1557		9/32	5/32	P11-4	P11-6	P11-60S	P11-8	P11-10	P11-100S	P11-12	P11-14	P11-140S
11/64	0.1714		11/32	3/16	P12-4	P12-6	P12-60S		P12-10	P12-100S		P12-14	P12-140S
3/16	0.1870		3/8		P13-4	P13-6	P13-60S	P13-8	P13-10	P13-100S	P13-12	P13-14	P13-140S
13/64	0.2026		3/8		P14-4	P14-6	P14-60S		P14-10	P14-100S		P14-14	P14-140S
7/32	0.2183		13/32		P15-4	P15-6	P15-60S	P15-8	P15-10	P15-100S		P15-14	P15-140S
15/64	0.2339		13/32		P16-4	P16-6			P16-10	P16-100S		P16-14	P16-140S
1/4	0.2495		7/16		P17-4	P17-6	P17-60S	P17-8	P17-10	P17-100S	P17-12	P17-14	P17-140S
17/64	0.2651		7/16	1/4	P18-4	P18-6			P18-10	P18-100S		P18-14	P18-140S
9/32	0.2807		7/16		P19-4	P19-6		P19-8	P19-10	P19-100S		P19-14	P19-140S
19/64	0.2964		1/2		P20-4	P20-6			P20-10	P20-100S		P20-14	P20-140S
5/16	0.3120		1/2		P21-4	P21-6	P21-60S	P21-8	P21-10	P21-100S		P21-14	P21-140S
21/64	0.3276		9/16		P22-4	P22-6			P22-10	P22-100S		P22-14	P22-140S
11/32	0.3433		9/16		P23-4	P23-6		P23-8	P23-10	P23-100S		P23-14	P23-140S
23/64	0.3589		5/8		P24-4	P24-6			P24-10	P24-100S		P24-14	P24-140S
3/8	0.3745		5/8		P25-4	P25-6	P25-60S	P25-8	P25-10	P25-100S	P25-12	P25-14	P25-140S
25/64	0.3901		37/64		P26-4	P26-6			P26-10	P26-100S		P26-14	P26-140S
13/32	0.4057		11/16		P27-4	P27-6			P27-10	P27-100S		P27-14	P27-140S
27/64	0.4214		11/16		P28-4	P28-6			P28-10	P28-100S		P28-14	P28-140S
7/16	0.4370		11/16		P29-4	P29-6			P29-10	P29-100S		P29-14	P29-140S
29/64	0.4526		45/64		P30-4	P30-6			P30-10	P30-100S		P30-14	P30-140S
15/32	0.4683		3/4		P31-4	P31-6			P31-10	P31-100S		P31-14	P31-140S
31/64	0.4839		3/4		P32-4	P32-6			P32-10	P32-100S		P32-14	P32-140S
1/2	0.4995		3/4		P33-4	P33-6	P33-60S	P33-8	P33-10	P33-100S	P33-12	P33-14	P33-140S
17/32	0.5307	0.0000 -0.0005	25/32		P34-4	P34-6	P34-60S	P34-8	P34-10	P34-100S	P34-12	P34-14	P34-140S
9/16	0.5620		13/16		P35-4	P35-6	P35-60S	P35-8	P35-10	P35-100S	P35-12	P35-14	P35-140S
5/8	0.6245		7/8		P37-4	P37-6	P37-60S	P37-8	P37-10	P37-100S	P37-12	P37-14	P37-140S
11/16	0.6870		15/16		P39-4	P39-6	P39-60S	P39-8	P39-10	P39-100S	P39-12	P39-14	P39-140S
3/4	0.7495		1		P41-4	P41-6	P41-60S	P41-8	P41-10	P41-100S	P41-12	P41-14	P41-140S
7/8	0.8745		1-1/8		P45-4	P45-6	P45-60S	P45-8	P45-10	P45-100S	P45-12	P45-14	P45-140S
1	0.9995		1-1/4		P47-4	P47-6	P47-60S	P47-8	P47-10	P47-100S	P47-12	P47-14	P47-140S

EX EJECTOR PINS - THROUGH HARDENED - STRAIGHT



- Precision made of superior quality H13 type thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Core hardness 40-45 HRC
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground D diameter

INCH Ejector Pins – EX

L = LENGTH																				
ITEM NUMBER PREFIX	Ø D PIN DIA	Ø D PIN DIA TOL	Ø H HEAD DIA	K HEAD THK	6		10		14		18		25	36	39	42	45			
					D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	Ø D PIN DIA TOL					-0.0003 -0.0008		
													D STD	D STD	D STD	D STD	D STD	D STD	D STD	D STD
EX3M * NS	3/64 (.0468)	-.0003 -.0006	.250	.125																
EX5M * NS	1/16 (.0625)		.250	.125																
EX6M * NS	5/64 (.0781)		.250	.125																
EX7M * NS	3/32 (.0937)		.250	.125																
EX8M * NS	7/64 (.1093)		.250	.125																
EX9M *	1/8 (.1250)	-.0003 -.0006	.250	.125																
EX10M *	9/64 (.1406)		.250	.125																
EX11M *	5/32 (.1562)		.281	.156																
EX12M *	11/64 (.1718)		.343	.187																
EX13M *	3/16 (.1875)		.375	.187																
EX14M *	13/64 (.2031)		.375	.187																
EX15M *	7/32 (.2187)		.406	.187																
EX16M *	15/64 (.2343)		.406	.187																
EX17M *	1/4 (.2500)		.437	.187																
EX18M *	17/64 (.2656)		.437	.250																
EX19M *	9/32 (.2812)		.437	.250																
EX20M *	19/64 (.2968)		.500	.250																
EX21M *	5/16 (.3125)		.500	.250																
EX22M *	21/64 (.3281)		.562	.250																
EX23M *	11/32 (.3437)		.562	.250																
EX24M *	23/64 (.3593)		.625	.250																
EX25M *	3/8 (.3750)		.625	.250																
EX26M *	25/64 (.3906)		.625	.250																
EX27M *	13/32 (.4062)		.687	.250																
EX28M *	27/64 (.4218)		.687	.250																
EX29M *	7/16 (.4375)	.687	.250																	
EX30M *	29/64 (.4531)	.687	.250																	
EX31M *	15/32 (.4687)	.750	.250																	
EX32M *	31/64 (.4843)	.750	.250																	
EX33M *	1/2 (.5000)	-.0003 -.0008	.750	.250																
EX34M *	17/32 (.5312)		.750	.250																
EX35M *	9/16 (.5625)		.812	.250																
EX37M *	5/8 (.6250)		.875	.250																
EX39M *	11/16 (.6875)		.937	.250																
EX41M *	3/4 (.7500)		1.000	.250																
EX45M *	7/8 (.8750)		1.125	.250																
EX47M *	1" (1.0000)		1.250	.250																

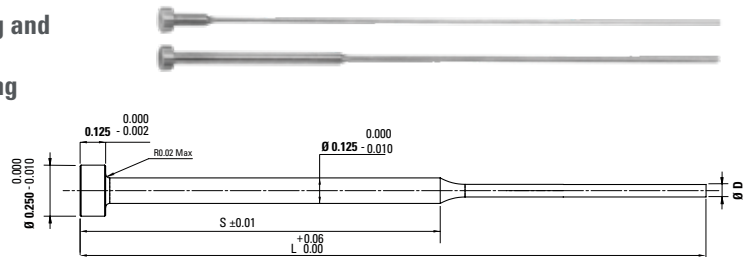
KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Specify Item Number by combining Item Number Prefix with the length (L dimension) desired.
 ■ Omit spaces and dashes, as shown. Examples: EX9M10, EX33M10
 • Add "OS" at end of Item Number for .005" oversize diameters. Examples: EX3M6NSOS, EX25M14OS, EX33M10OS
 NOTE: NS suffix shown in chart for No Shoulder for items EX3M through EX8M. Examples: EX3M6NS, EX7M10NS

EX EJECTOR PINS - THROUGH HARDENED - SHOULDER

- Made from premium H-13 steel
- Core hardness 47-52 HRC **minimizes bending**
- Non-chipping surface treatment **alleviates flashing and minimizes nicking & dishing** - 65-70 HRC
- Annealed and finished heads permit **easy machining**
- Centerless ground D diameter
- Final finish **minimizes wear and prolongs pin life**
- 1/2", 2", 3" and 4" Shoulder**
- .001 to .005 **Over Sized diameters** available



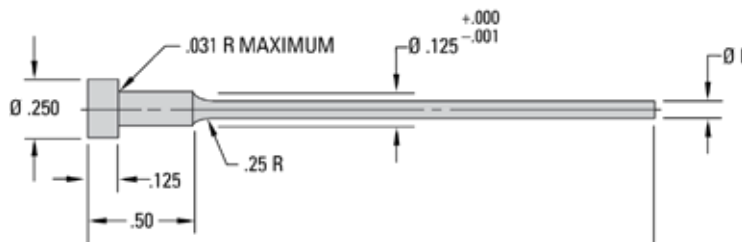
Standard & .005 OS Diameters

NOMINAL DIA	D DIAMETER	D TOLERANCE	S SHOULDER LENGTH	L - OVERALL LENGTH (+.062/- .000)							
				6"		8"		10"		14"	
				D	D. .005 OS	D	D. .005 OS	D	D .005 OS	D	D .005 OS
1/32	0.0307	0.0000 -0.0003	1/2	SP3-61/2	SP3-61/20S						
			2	SP3-62	SP3-620S	SP3-82	SP3-820S			SP3-142	
			3			SP3-83	SP3-830S				
			4			SP3-84	SP3-840S				
3/64	0.0464		1/2	SP4-61/2	SP4-61/20S						
			2	SP4-62	SP4-620S	SP4-82	SP4-820S	SP4-102	SP4-1020S		
			3			SP4-83	SP4-830S				
			4			SP4-84	SP4-840S	SP4-104	SP4-1040S		
1/16	0.0620		1/2	SP5-61/2	SP5-61/20S			SP5-101/2	SP5-101/20S		
			2	SP5-62	SP5-620S	SP5-82	SP5-820S	SP5-102	SP5-1020S	SP5-142	SP5-1420S
			3			SP5-83	SP5-830S				
			4			SP5-84	SP5-840S	SP5-104	SP5-1040S		
5/64	0.0776		1/2	SP6-61/2	SP6-61/20S			SP6-101/2	SP6-101/20S	SP6-141/2	
			2	SP6-62	SP6-620S	SP6-82	SP6-820S	SP6-102	SP6-1020S	SP6-142	SP6-1420S
			3			SP6-83	SP6-830S				
			4			SP6-84	SP6-840S	SP6-104	SP6-1040S		
3/32	0.0933		1/2	SP7-61/2	SP7-61/20S			SP7-101/2	SP7-101/20S	SP7-141/2	
			2	SP7-62	SP7-620S	SP7-82	SP7-820S	SP7-102	SP7-1020S	SP7-142	SP7-1420S
			3			SP7-83	SP7-830S				
			4			SP7-84	SP7-840S	SP7-104	SP7-1040S		
7/64	0.1089		1/2	SP8-61/2	SP8-61/20S			SP8-101/2	SP8-101/20S		
			2	SP8-62	SP8-620S	SP8-82	SP8-820S	SP8-102	SP8-1020S	SP8-142	SP8-1420S
			3			SP8-83	SP8-830S				
			4			SP8-84	SP8-840S	SP8-104	SP8-1040S		

.001/.002/.003/.004 Oversized Diameter - 1/2 and 2" Shoulder - 8" Length

NOMINAL DIA	D DIAMETER	D TOLERANCE	S SHOULDER LENGTH	L - OVERALL LENGTH (+.062/- .000)			
				8"			
				D .001 OS	D. .002 OS	D .003 OS	D. .004 OS
1/32	0.0307	0.0000 -0.0003	2	SP3-820S-1	SP3-820S-2	SP3-820S-3	SP3-820S-4
3/64	0.0464		1/2	SP4-81/20S-1	SP4-81/20S-2	SP4-81/20S-3	SP4-81/20S-4
			2	SP4-820S-1	SP4-820S-2	SP4-820S-3	SP4-820S-4
1/16	0.0620		1/2	SP5-81/20S-1	SP5-81/20S-2	SP5-81/20S-3	SP5-81/20S-4
			2	SP5-820S-1	SP5-820S-2	SP5-820S-3	SP5-820S-4
5/64	0.0776		1/2	SP6-81/20S-1	SP6-81/20S-2	SP6-81/20S-3	SP6-81/20S-4
			2	SP6-820S-1	SP6-820S-2	SP6-820S-3	SP6-820S-4
3/32	0.0933		1/2	SP7-81/20S-1	SP7-81/20S-2	SP7-81/20S-3	SP7-81/20S-4
			2	SP7-820S-1	SP7-820S-2	SP7-820S-3	SP7-820S-4
7/64	0.1089		2	SP8-820S-1	SP8-820S-2	SP8-820S-3	SP8-820S-4

EX EJECTOR PINS - H13 NITRIDED - SHOULDER



1/2" Shoulder Length – EX

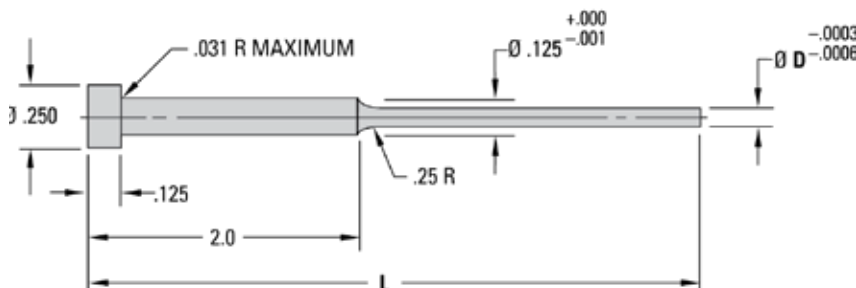
ITEM NUMBER PREFIX	Ø D PIN DIA	L = LENGTH				
		6		10		14
		D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD
EX2M_ * 12SH	1/32 (.0312)					
EX3M_ * 12SH	3/64 (.0468)					
EX5M_ * 12SH	1/16 (.0625)					
EX6M_ * 12SH	5/64 (.0781)					
EX7M_ * 12SH	3/32 (.0937)					
EX8M_ * 12SH	7/64 (.1093)					

- Precision made of superior quality H13 type thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Core hardness 40-45 HRC
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground D diameter

KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Specify Item Number by combining Item Number Prefix and the length (L dimension) desired. Omit spaces and dashes, as shown. Add "OS" for .005" oversize diameters.



2" Shoulder Length – EX

ITEM NUMBER PREFIX	Ø D PIN DIA	L = LENGTH				
		6		10		14
		D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD
EX2M_ *	1/32 (.0312)					
EX3M_ *	3/64 (.0468)					
EX5M_ *	1/16 (.0625)					
EX6M_ *	5/64 (.0781)					
EX7M_ *	3/32 (.0937)					
EX8M_ *	7/64 (.1093)					

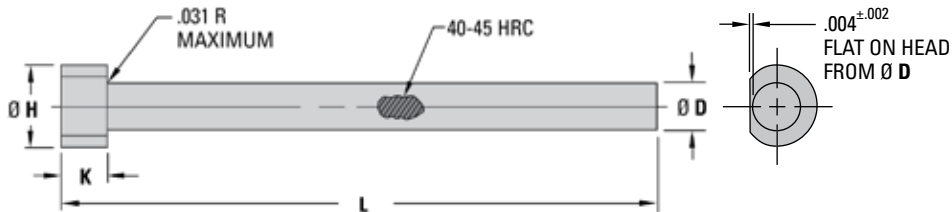
NOTE: For 2" Shoulder Length, no suffix should be used (see example below).

KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Specify Item Number by combining Item Number Prefix and the length (L dimension) desired. Omit spaces and dashes, as shown. Examples: EX2M6, EX8M14. Add "OS" for .005" oversize diameters. Examples: EX2M6OS, EX5M10OS, EX8M10OS. NOTE: For 2" Shoulder, no suffix is used. Examples: EX3M6, EX7M10.

KEYED EX EJECTOR PINS



INFORMATION KEY:

D = Pin Diameter

H = Head Diameter

K = Head Thickness

L = Length

Material: H-13 / 1.2344 / SKD61

Surface Treatment: Nitrided

Surface Hardness: 65-74 HRC

Core Hardness: 40-45 HRC

- Precision-machined flat on head keeps pin from rotating
- Made from superior quality thermal shock-resisting hotwork steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Core hardness 40-45 HRC
- Outside diameter nitrided to 65-74 HRC (.001-.007 case depth)
- Heads annealed for easy machining
- Centerless ground D diameter

KEY TO CHART

Standard

Contact DME for quote

Keyed Ejector Pins – EXK

L = LENGTH														
ITEM NUMBER PREFIX	Ø D PIN DIA	Ø D PIN DIA TOL	Ø H HEAD DIA	K HEAD THK	6	10	14	18	25	36	39	42	45	
					D STD	D STD	D STD	D STD	Ø D PIN DIA TOL					- .0003 - .0008
									D STD	D STD	D STD	D STD	D STD	
EXK9M *	1/8 (.1250)	-.0003 -.0006	.250	.125										
EXK10M *	9/64 (.1406)		.250	.125										
EXK11M *	5/32 (.1562)		.281	.156										
EXK13M *	3/16 (.1875)		.375	.187										
EXK15M *	7/32 (.2187)		.406	.187										
EXK17M *	1/4 (.2500)		.437	.187										
EXK21M *	5/16 (.3125)		.500	.250										
EXK25M *	3/8 (.3750)		.625	.250										
EXK29M *	7/16 (.4375)		.687	.250										
EXK33M *	1/2 (.5000)	-.0003 -.0008	.750	.250										
EXK37M *	5/8 (.6250)		.875	.250										
EXK41M *	3/4 (.7500)		1.000	.250										
EXK47M *	1" (1.0000)		1.250	.250										

For use with all DME Pins, Sleeves & Blades

Econo-Spray® Pin Lube & Grease 46010

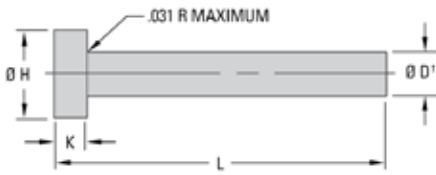
A white lithium grease that protects equipment by reducing the friction and sticking that can cause pre-mature wear and hinder productivity. Pin Lube & Grease is ideal for knock-out pins where part marking could be a problem. A heavy-duty grease, it is water resistant, protects against corrosion and works at a wide range of temperatures. Operating temperature: -20°F to 400°F.

Net wt. 11 oz.



ITEM NUMBER	(12 cans)
46010	Case
46010CAN	11 oz. can
46000-7	7 lbs.
46000-35	35 lbs.
46000-400	400 lbs.

HIGH-HARDNESS EJECTOR PINS- H13 NITRIDED - STRAIGHT



INCH High-Hardness Ejector Pins – THX

- Higher core hardness makes the THX pins ideal for use in die cast dies or other high temperature applications
- Core hardness of 50-55 HRC minimizes nicking, dishing and bending
- Non-chipping surface treatment of 65-74 HRC alleviates flashing
- Annealed and finished heads permit easy machining
- Centerless ground D diameter
- Final finish minimizes wear and prolongs pin life

ITEM NUMBER PREFIX	Ø D PIN DIA	D [†] PIN DIA TOLERANCES	H HEAD DIA	K HEAD THICK	L = LENGTH							
					06		10		14		18	
					D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE	D STD	D .005 OVER SIZE
THX03 * NS	3/64 (.0468)	-.0003 -.0006 <i>EXCEPTION- PINS 25" LONG ARE</i> -.0003 -.0008	.250	.125								
THX05 * NS	1/16 (.0625)		.250	.125								
THX06 * NS	5/64 (.0781)		.250	.125								
THX07 * NS	3/32 (.0937)		.250	.125								
THX08 * NS	7/64 (.1093)		.250	.125								
THX09 *	1/8 (.1250)		.250	.125								
THX10 *	9/64 (.1406)		.250	.125								
THX11 *	5/32 (.1562)		.281	.156								
THX12 *	11/64 (.1718)		.343	.187								
THX13 *	3/16 (.1875)		.375	.187								
THX14 *	13/64 (.2031)		.375	.187								
THX15 *	7/32 (.2187)		.406	.187								
THX16 *	15/64 (.2343)		.406	.187								
THX17 *	1/4 (.2500)		.437	.187								
THX18 *	17/64 (.2656)		.437	.250								
THX19 *	9/32 (.2812)		.437	.250								
THX20 *	19/64 (.2968)		.500	.250								
THX21 *	5/16 (.3125)		.500	.250								
THX22 *	21/64 (.3281)		.562	.250								
THX23 *	11/32 (.3437)		.562	.250								
THX24 *	23/64 (.3593)		.625	.250								
THX25 *	3/8 (.3750)		.625	.250								
THX26 *	25/64 (.3906)		.625	.250								
THX27 *	13/32 (.4062)		.687	.250								
THX28 *	27/64 (.4218)		.687	.250								
THX29 *	7/16 (.4375)		.687	.250								
THX30 *	29/64 (.4531)		.687	.250								
THX31 *	15/32 (.4687)		.750	.250								
THX32 *	31/64 (.4843)		.750	.250								
THX33 *	1/2 (.5000)		.750	.250								
THX34 *	17/32 (.5312)		.750	.250								
THX35 *	9/16 (.5625)		.812	.250								
THX37 *	5/8 (.6250)		.875	.250								
THX39 *	11/16 (.6875)		.937	.250								
THX41 *	3/4 (.7500)		1.000	.250								
THX45 *	7/8 (.8750)		1.125	.250								
THX47 *	1" (1.0000)		1.250	.250								

***HOW to order:** Specify Item Number by combining Item Number Prefix and the length (L dimension) desired.

• Omit spaces & dashes, as shown. Examples: THX0910, THX4118

• Precede 6" length with a zero. Examples: THX0906, THX3306

• Add "OS" for .005" oversize diameters. Examples: THX0306NSOS, THX0906OS, THX2514OS, THX3310OS

NOTE: NS suffix shown in chart for No Shoulder for items THX03 through THX08. Examples: THX306NS, THX710NS

KEY TO CHART

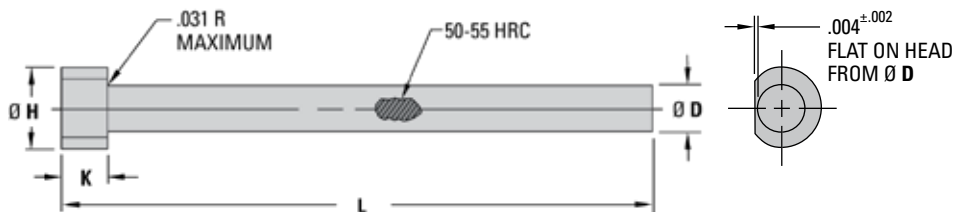
 Standard

 Contact DME
for quote

KEYED THX EJECTOR PINS



- Precision-machined flat on head keeps pin from rotating
- Made from superior quality thermal shock-resisting hotwork steel
- Core hardness of 50-55 HRC makes these pins ideal for use in die-cast dies or other high temperature applications
- Annealed hot-forged heads provide uniform grain flow while allowing for easier machining



INFORMATION KEY:

D = Pin Diameter

H = Head Diameter

K = Head Thickness

L = Length

Material: H-13 / 1.2344 / SKD61

Surface Treatment: Nitrided

Surface Hardness: 65-74 HRC

Core Hardness: 50-55 HRC

Keyed Ejector Pins – THXK

ITEM NUMBER PREFIX	Ø D PIN DIA	D' PIN DIA TOLERANCES	H HEAD DIA	K HEAD THICK	L = LENGTH						
					4	6	8	10	12	14	25
THXK07_*	3/32	(.0937)	.250	.125							
THXK09_*	1/8	(.1250)	.250	.125							
THXK10_*	9/64	(.1406)	.250	.125							
THXK11_*	5/32	(.1562)	.281	.156							
THXK13_*	3/16	(.1875)	.375	.187							
THXK15_*	7/32	(.2187)	.406	.187							
THXK17_*	1/4	(.2500)	.437	.187							
THXK19_*	9/32	(.2812)	.437	.250							
THXK21_*	5/16	(.3125)	.500	.250							
THXK23_*	11/32	(.3437)	.562	.250							
THXK25_*	3/8	(.3750)	.625	.250							
THXK27_*	13/32	(.4062)	.687	.250							
THXK29_*	7/16	(.4375)	.687	.250							
THXK33_*	1/2	(.5000)	.750	.250							
THXK35_*	9/16	(.5625)	.812	.250							
THXK37_*	5/8	(.6250)	.875	.250							
THXK41_*	3/4	(.7500)	1.000	.250							
THX45_*	7/8	(.8750)	1.125	.250							
THXK47_*	1"	(1.0000)	1.250	.250							

-.0003
-.0006
EXCEPTION-
PINS 25" LONG
ARE
-.0003
-.0008

KEY TO CHART

	Standard
	Contact DME for quote

CLOSE TOLERANCE M2 THROUGH-HARDENED EJECTOR PINS

INFORMATION KEY:

D = Pin Body Diameter

H = Head Diameter

K = Head Thickness

L = Length

S = Shoulder Length

Tolerance on Ø D: -.0003/-.0005

Material: M2 / 1.3343 / SKH51

Heat Treat: Hardened 58-62 HRC

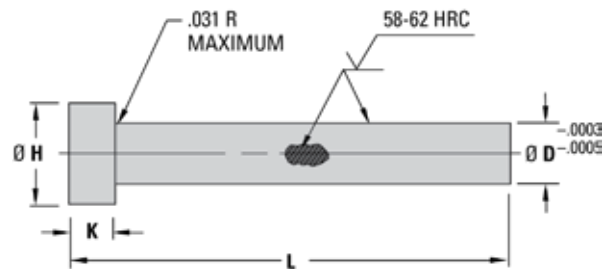
Surface Treatment: None (Through-Hard)

- Industry-Leading .0002" Tolerance Band
- Centerless ground D diameter
- Precision made of superior quality M-2 high-speed tool steel
- Superior wear resistance
- Exceptional performance at elevated temperatures
- Hot-forged heads provide uniform grain flow, higher tensile strength



Straight Ejector Pins – EJP-IMH

ITEM NUMBER PREFIX (WITH DIAMETER)	Ø D PIN BODY DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L = 06 LENGTH (INCHES)	L = 10 LENGTH (INCHES)
EJP-IMH-0062-_-*	1/16 (0.0625)	.250	.125		
EJP-IMH-0093-_-*	3/32 (0.0937)	.250	.125		
EJP-IMH-0125-_-*	1/8 (0.1250)	.250	.125		
EJP-IMH-0187-_-*	3/16 (0.1875)	.375	.187		
EJP-IMH-0250-_-*	1/4 (0.2500)	.437	.187		



KEY TO CHART

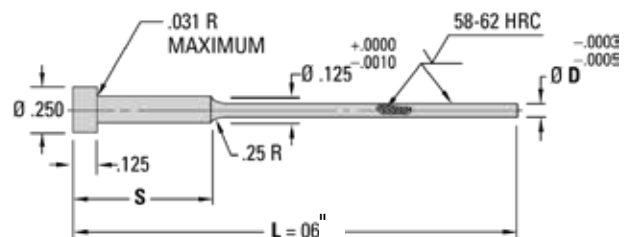
	Standard
	Contact DME for quote

*HOW TO ORDER: Specify Item Number by adding L length in inches (06 or 10) after Item Number Prefix.
• Include zeros and dashes, as shown. Examples: EJP-IMH-0062-06; EJP-IMH-0125-10; EJP-IMH-0250-10



2" Shoulder Ejector Pins – EJP-IMH

ITEM NUMBER (WITH DIAMETER, LENGTH & SHOULDER LENGTH)	Ø D PIN BODY DIAMETER	L = 06 LENGTH (INCHES)	S SHOULDER LENGTH
EJP-IMH-0062-06-200	1/16 (0.0625)		2.00
EJP-IMH-0078-06-200	5/64 (0.0781)		2.00
EJP-IMH-0093-06-200	3/32 (0.0937)		2.00



KEY TO CHART

	Standard
	Contact DME for quote

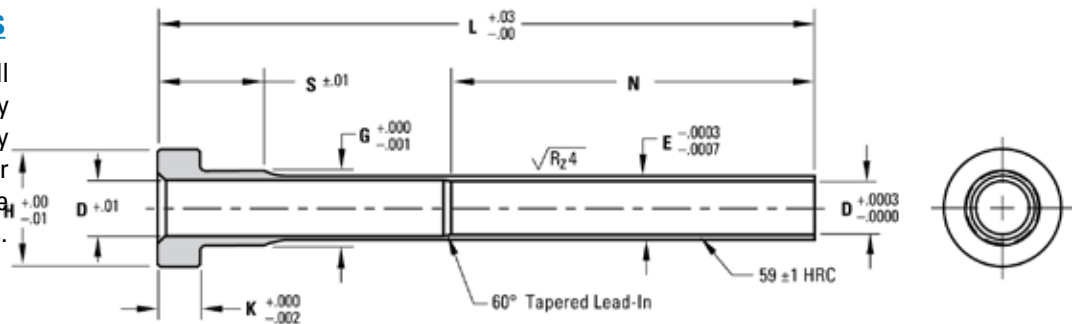
*HOW TO ORDER: Specify Item Number including zeros and dashes, as shown.
Examples: EJP-IMH-0062-06-200; EJP-IMH-0093-06-200

All dimensions are specified in inches.

THINWALL EJECTOR SLEEVES & SLEEVE EXTENSIONS

Thin Wall Sleeves

DME Standard Thin Wall Sleeves reduce cost by replacing the need to buy expensive custom ejector sleeves or to machine steps in standard sleeves.

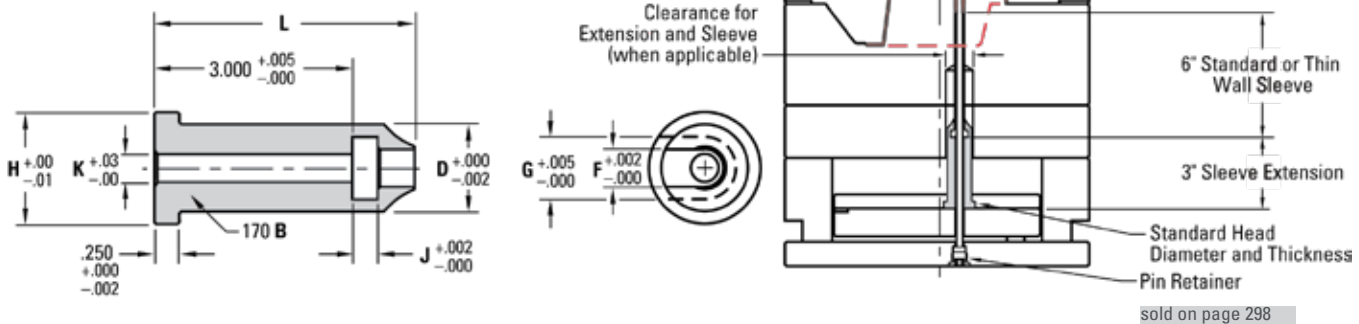


ITEM NUMBER		Ø D I.D.	E O.D.	G	S SHOULDER LENGTH	H HEAD DIA.	K HEAD THICK.	N BEARING LENGTH
4"	6"							
TWS13M4	TWS13M6	3/32	(.0937)	.1563	.188	.375	.187	1.75
TWS15M4	TWS15M6	1/8	(.1250)	.1875	.219	.406	.187	1.75
TWS17M4	TWS17M6	5/32	(.1562)	.2187	.250	.437	.187	1.75
TWS21M4	TWS21M6	3/16	(.1875)	.2500	.312	.500	.250	2.50
TWS23M4	TWS23M6	7/32	(.2187)	.2813	.344	.562	.250	2.50
TWS25M4	TWS25M6	1/4	(.2500)	.3125	.375	.625	.250	2.50
TWS29M4	TWS29M6	5/16	(.3125)	.3750	.438	.687	.250	2.50
TWS33M4	TWS33M6	3/8	(.3750)	.4375	.500	.750	.250	2.50

Electroless nickel coated .00003"–.00007" thick A2 58-60 HRC.
To achieve longer lengths, use Sleeve Extensions.

Sleeve Extensions

Compatible with all industry-standard sleeves. DME Sleeve Extensions.



ITEM NUMBER	NOMINAL SLEEVE I.D.		Ø D O.D.	Ø F	G	K	J	H HEAD DIA.	L REF
SSE13M3	3/32	(.0937)	.625	.193	.385	.17	.188	.875	3.500
SSE15M3	1/8	(.1250)	.625	.224	.416	.17	.188	.875	3.500
SSE17M3	5/32	(.1562)	.625	.255	.448	.17	.188	.875	3.500
SSE21M3	3/16	(.1875)	.875	.318	.520	.28	.251	1.125	3.625
SSE23M3	7/32	(.2187)	.875	.349	.570	.28	.251	1.125	3.625
SSE25M3	1/4	(.2500)	.875	.380	.630	.28	.251	1.125	3.625
SSE29M3	5/16	(.3125)	1.000	.443	.698	.39	.251	1.250	3.625
SSE33M3	3/8	(.3750)	1.000	.505	.760	.39	.251	1.250	3.625

AISI 1215 (170 Brinell)
Black oxide

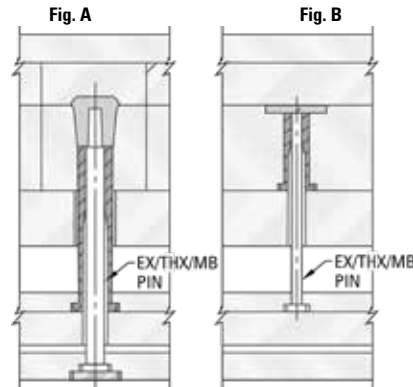
US Patent No. 6,872,069

EJECTOR SLEEVES- NITRIDED O.D.

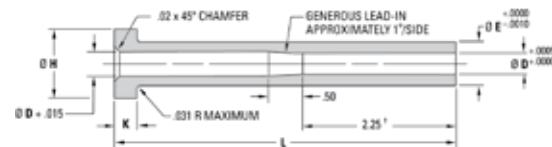
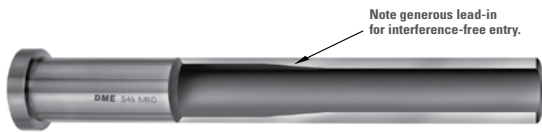
Ejector sleeve applications

Fig. A shows a typical Ejector Sleeve application for plastics molding or die casting where the sleeve is used to eject the piece part.

Fig. B shows an application where the sleeve serves as a bushing for the ejector pin. This allows replacement without machining if wear occurs. This practice is also desirable where the ejector pin is located between cavity inserts. Using a sleeve as a bushing provides a full bearing diameter for the pin.



- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter
- Inside bearing diameter is 30-35 HRC hardness and finished honed
- Lead-in taper designed to allow interference-free entry of the ejector pin into the sleeve



INCH Ejector Sleeves – S

ITEM NUMBER PREFIX	Ø D I.D.		Ø E O.D.		Ø H HEAD DIA	K HEAD THICK	L = LENGTH									
							3	4	5	6	7	8	9	10	11	12
'S13M * _	3/32	(.0937)	3/16	(.1875)	.375	.187										
'S13M * OS	3/32	(.0937)	0.1925		.375	.187										
'S15M * _	1/8	(.1250)	7/32	(.2187)	.406	.187										
'S15M * OS	1/8	(.1250)	0.2237		.406	.187										
S17M * _	5/32	(.1562)	1/4	(.2500)	.437	.187										
S17M * OS	5/32	(.1562)	0.2550		.437	.187										
S21M * _	3/16	(.1875)	5/16	(.3125)	.500	.250										
S21M * OS	3/16	(.1875)	0.3175		.500	.250										
S23M * _	7/32	(.2187)	11/32	(.3437)	.562	.250										
S23M * OS	7/32	(.2187)	0.3487		.562	.250										
S25 * _	1/4	(.2500)	3/8	(.3750)	.625	.250										
S25M * OS	1/4	(.2500)	0.3800		.625	.250										
S29M * _	5/16	(.3125)	7/16	(.4375)	.687	.250										
S29M * OS	5/16	(.3125)	0.4425		.687	.250										
S33M * _	3/8	(.3750)	1/2	(.5000)	.750	.250										
S33M * OS	3/8	(.3750)	0.5050		.750	.250										
S37M * _	7/16	(.4375)	5/8	(.6250)	.875	.250										
S37M * OS	7/16	(.4375)	0.6300		.875	.250										
S39M * _	1/2	(.5000)	11/16	(.6875)	.937	.250										
S39M * OS	1/2	(.5000)	0.6925		.937	.250										
S41M * _	9/16	(.5625)	3/4	(.7500)	1.000	.250										
S41M * OS	9/16	(.5625)	0.7550		1.000	.250										
S45M * _	5/8	(.6250)	7/8	(.8750)	1.125	.250										
S45M * OS	5/8	(.6250)	0.8800		1.125	.250										
S47M * _	3/4	(.7500)	1	(1.0000)	1.250	.250										
S47M * OS	3/4	(.7500)	1.0050		1.250	.250										

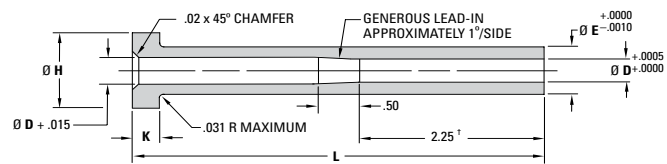
†SND13 and SND15 have a 1.75 bearing length. All sleeves are for use with DME INCH Ejector Pins.

KEY TO CHART

	Standard
	Contact DME for quote

*HOW TO ORDER: Combine Item Prefix and the length (L dimension) desired.
Examples: S15M6, S39M10

EJECTOR SLEEVES - NITRIDED O.D. & I.D.



- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter
- Inside bearing diameter is nitrided to 65-74 HRC hardness and finished honed
- Lead-in taper designed to allow interference-free entry of the ejector pin into the sleeve
- SND sleeve I.D. is nitrided for prolonged wear resistance and improved lubricity

INCH Ejector Sleeves – SND

ITEM NUMBER PREFIX	Ø D I.D.	Ø E O.D.	Ø H HEAD DIA	K HEAD THICK	L = LENGTH											
					3	4	5	6	7	8	9	10	11	12	13	14
†SND13_*	3/32 (.0937)	3/16 (.1875)	.375	.187												
†SND13_* OS	3/32 (.0937)	0.1925	.375	.187												
†SND15_*	1/8 (.1250)	7/32 (.2187)	.406	.187												
†SND15_* OS	1/8 (.1250)	0.2237	.406	.187												
SND17_*	5/32 (.1562)	1/4 (.2500)	.437	.187												
SND17_* OS	5/32 (.1562)	0.2550	.437	.187												
SND21_*	3/16 (.1875)	5/16 (.3125)	.500	.250												
SND21_* OS	3/16 (.1875)	0.3175	.500	.250												
SND23_*	7/32 (.2187)	11/32 (.3437)	.562	.250												
SND23_* OS	7/32 (.2187)	0.3487	.562	.250												
SND25_*	1/4 (.2500)	3/8 (.3750)	.625	.250												
SND25_* OS	1/4 (.2500)	0.3800	.625	.250												
SND29_*	5/16 (.3125)	7/16 (.4375)	.687	.250												
SND29_* OS	5/16 (.3125)	0.4425	.687	.250												
SND33_*	3/8 (.3750)	1/2 (.5000)	.750	.250												
SND33_* OS	3/8 (.3750)	0.5050	.750	.250												
SND37_*	7/16 (.4375)	5/8 (.6250)	.875	.250												
SND37_* OS	7/16 (.4375)	0.6300	.875	.250												
SND39_*	1/2 (.5000)	11/16 (.6875)	.937	.250												
SND39_* OS	1/2 (.5000)	0.6925	.937	.250												
SND41_*	9/16 (.5625)	3/4 (.7500)	1.000	.250												
SND41_* OS	9/16 (.5625)	0.7550	1.000	.250												
SND45_*	5/8 (.6250)	7/8 (.8750)	1.125	.250												
SND45_* OS	5/8 (.6250)	0.8800	1.125	.250												
SND47_*	3/4 (.7500)	1 (1.0000)	1.250	.250												
SND47_* OS	3/4 (.7500)	1.0050	1.250	.250												

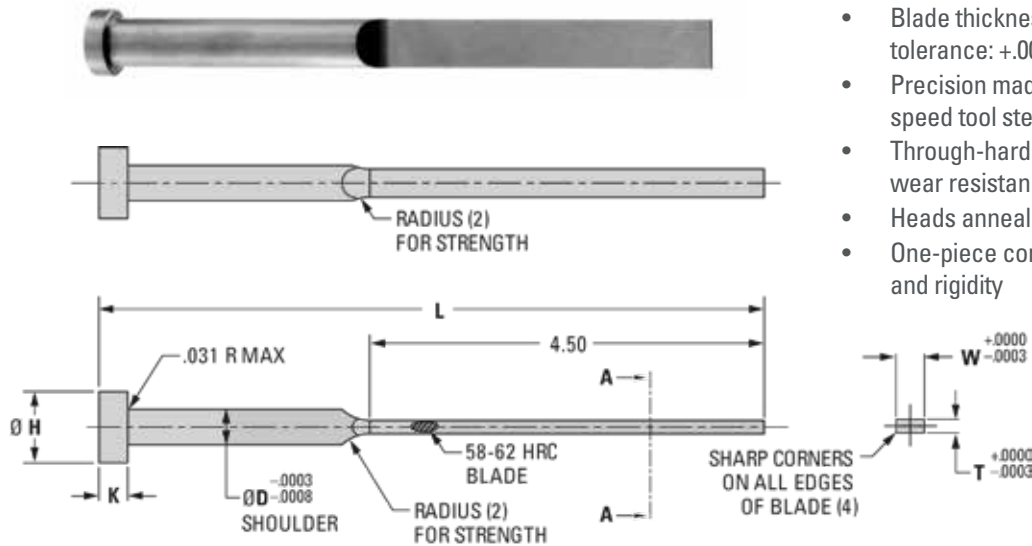
†SND13 and SND15 have a 1.75 bearing length. All sleeves are for use with DME INCH Ejector Pins.

KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Combine Item Prefix and the length (L dimension) desired.
• Precede single digit lengths with a zero. Examples: SND2506, SND1710

EJECTOR BLADES - M2 THROUGH HARD



- Blade thickness and width are held to close tolerance: $+.0000/-0.0003$
- Precision made of superior quality M2 high-speed tool steel
- Through-hardened to 58-62 HRC for superior wear resistance
- Heads annealed for easy machining
- One-piece construction for increased strength and rigidity

INFORMATION KEY:

D = Shoulder Diameter

H = Head Diameter

K = Head Thickness

L = Overall Length

T = Blade Thickness

W = Blade Width

Material: M2 / 1.3343 / SKH51

Surface Treatment: None
(Through-Hard)

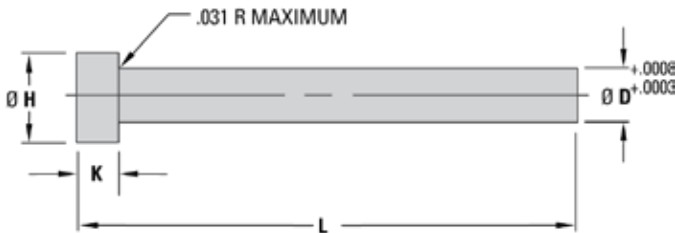
INCH Ejector Blades – EJB-IMH

ITEM NUMBER	T BLADE THICKNESS	W BLADE WIDTH	Ø D SHOULDER DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L OVERALL LENGTH
EJB-IMH-024-100-065	0.0240	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-032-100-065	0.0320	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-032-100-075	0.0320	0.1000	0.1250	0.250	0.125	7.50
EJB-IMH-046-100-065	0.0460	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-046-100-075	0.0460	0.1000	0.1250	0.250	0.125	7.50
EJB-IMH-024-140-065	0.0240	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-032-140-065	0.0320	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-032-140-075	0.0320	0.1400	0.1562	0.281	0.156	7.50
EJB-IMH-032-140-085	0.0320	0.1400	0.1562	0.281	0.156	8.50
EJB-IMH-046-140-065	0.0460	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-046-140-075	0.0460	0.1400	0.1562	0.281	0.156	7.50
EJB-IMH-046-140-085	0.0460	0.1400	0.1562	0.281	0.156	8.50
EJB-IMH-024-172-065	0.0240	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-032-172-065	0.0320	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-032-172-075	0.0320	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-032-172-085	0.0320	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-046-172-065	0.0460	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-046-172-075	0.0460	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-046-172-085	0.0460	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-062-172-065	0.0620	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-062-172-075	0.0620	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-062-172-085	0.0620	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-032-234-065	0.0320	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-032-234-075	0.0320	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-032-234-085	0.0320	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-046-234-065	0.0460	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-046-234-075	0.0460	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-046-234-085	0.0460	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-062-234-065	0.0620	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-062-234-075	0.0620	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-062-234-085	0.0620	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-062-234-095	0.0620	0.2340	0.2500	0.437	0.187	9.50
EJB-IMH-032-296-065	0.0320	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-032-296-075	0.0320	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-032-296-085	0.0320	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-032-296-095	0.0320	0.2960	0.3125	0.500	0.250	9.50

EJECTOR BLADES - M2 THROUGH HARD

ITEM NUMBER	T BLADE THICKNESS	W BLADE WIDTH	Ø D SHOULDER DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L OVERALL LENGTH
EJB-IMH-046-296-065	0.0460	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-046-296-075	0.0460	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-046-296-085	0.0460	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-046-296-095	0.0460	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-062-296-065	0.0620	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-062-296-075	0.0620	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-062-296-085	0.0620	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-062-296-095	0.0620	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-078-296-065	0.0780	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-078-296-075	0.0780	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-078-296-085	0.0780	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-078-296-095	0.0780	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-032-359-065	0.0320	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-032-359-075	0.0320	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-032-359-085	0.0320	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-032-359-095	0.0320	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-046-359-065	0.0460	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-046-359-075	0.0460	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-046-359-085	0.0460	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-046-359-095	0.0460	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-062-359-065	0.0620	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-062-359-075	0.0620	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-062-359-085	0.0620	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-062-359-095	0.0620	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-078-359-065	0.0780	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-078-359-075	0.0780	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-078-359-085	0.0780	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-078-359-095	0.0780	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-094-422-065	0.0940	0.4220	0.4375	0.687	0.250	6.50
EJB-IMH-094-422-075	0.0940	0.4220	0.4375	0.687	0.250	7.50
EJB-IMH-094-422-085	0.0940	0.4220	0.4375	0.687	0.250	8.50
EJB-IMH-094-422-095	0.0940	0.4220	0.4375	0.687	0.250	9.50
EJB-IMH-078-484-065	0.0780	0.4840	0.5000	0.750	0.250	6.50
EJB-IMH-078-484-075	0.0780	0.4840	0.5000	0.750	0.250	7.50
EJB-IMH-078-484-085	0.0780	0.4840	0.5000	0.750	0.250	8.50
EJB-IMH-078-484-095	0.0780	0.4840	0.5000	0.750	0.250	9.50
EJB-IMH-094-484-065	0.0940	0.4840	0.5000	0.750	0.250	6.50
EJB-IMH-094-484-075	0.0940	0.4840	0.5000	0.750	0.250	7.50
EJB-IMH-094-484-085	0.0940	0.4840	0.5000	0.750	0.250	8.50
EJB-IMH-094-484-095	0.0940	0.4840	0.5000	0.750	0.250	9.50
EJB-IMH-078-547-065	0.0780	0.5470	0.5625	0.812	0.250	6.50
EJB-IMH-078-547-075	0.0780	0.5470	0.5625	0.812	0.250	7.50
EJB-IMH-078-547-085	0.0780	0.5470	0.5625	0.812	0.250	8.50
EJB-IMH-078-547-095	0.0780	0.5470	0.5625	0.812	0.250	9.50
EJB-IMH-094-547-065	0.0940	0.5470	0.5625	0.812	0.250	6.50
EJB-IMH-094-547-075	0.0940	0.5470	0.5625	0.812	0.250	7.50
EJB-IMH-094-547-085	0.0940	0.5470	0.5625	0.812	0.250	8.50
EJB-IMH-094-547-095	0.0940	0.5470	0.5625	0.812	0.250	9.50
EJB-IMH-078-609-065	0.0780	0.6090	0.6250	0.875	0.250	6.50
EJB-IMH-078-609-075	0.0780	0.6090	0.6250	0.875	0.250	7.50
EJB-IMH-078-609-085	0.0780	0.6090	0.6250	0.875	0.250	8.50
EJB-IMH-078-609-095	0.0780	0.6090	0.6250	0.875	0.250	9.50
EJB-IMH-094-609-065	0.0940	0.6090	0.6250	0.875	0.250	6.50
EJB-IMH-094-609-075	0.0940	0.6090	0.6250	0.875	0.250	7.50
EJB-IMH-094-609-085	0.0940	0.6090	0.6250	0.875	0.250	8.50
EJB-IMH-094-609-095	0.0940	0.6090	0.6250	0.875	0.250	9.50

CORE PINS - H13 - STANDARD HARDNESS

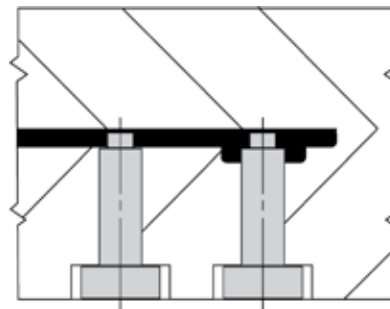


- Precision made of superior quality hotwork die steel standard hardness 38-42HRC
- Heads are hot-forged for uniform grain flow, higher tensile strength, then annealed to permit easier machining and stamping
- $+.0008"/-.0003"$ tolerance on pin diameter ensures a close fit for coring purposes
- Pin body and head are finish ground
- Centerless ground and polished outer diameter

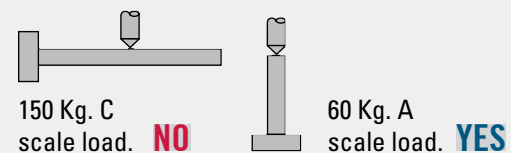
INCH Core Pins – C

ITEM PREFIX	Ø D PIN DIA		Ø H HEAD DIA	K HEAD THICK	L = LENGTH			
					3 [†]	6	10	14
C7M *	3/32	(.0937)	.250	.125				
C8M *	7/64	(.1093)	.250	.125				
C9M *	1/8	(.1250)	.250	.125				
C10M *	9/64	(.1406)	.250	.125				
C11M *	5/32	(.1562)	.281	.156				
C12M *	11/64	(.1718)	.343	.187				
C13M *	3/16	(.1875)	.375	.187				
C14M *	13/64	(.2031)	.375	.187				
C15M *	7/32	(.2187)	.406	.187				
C17M *	1/4	(.2500)	.437	.187				
C19M *	9/32	(.2812)	.437	.250				
C21M *	5/16	(.3125)	.500	.250				
C23M *	11/32	(.3437)	.562	.250				
C25M *	3/8	(.3750)	.625	.250				
C27M *	13/32	(.4062)	.687	.250				
C29M *	7/16	(.4375)	.687	.250				
C31M *	15/32	(.4687)	.750	.250				
C33M *	1/2	(.5000)	.750	.250				
C35M *	9/16	(.5625)	.812	.250				
C37M *	5/8	(.6250)	.875	.250				
C41M *	3/4	(.7500)	1.000	.250				

Typical application



Hardness checking guidelines



If checking hardness of core pins, do not use method "NO" above, since it will provide an inaccurately low reading. The preferred method is to stand the pin on its head and check the cut end using the A scale, 60 Kg. load as shown above.

PRECAUTIONS:

The cut end must be parallel to head end, with stem length of 2" minimum. Use cutting fluid to avoid overheating and localized annealing. Position indentation in middle of pin diameter.

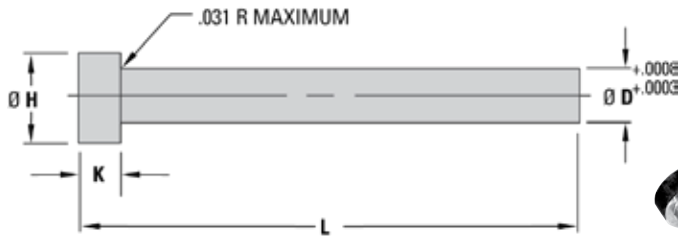
KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Combine Item Number Prefix and the length (L dimension) desired.
Examples: C9M3, C33M10

CORE PINS - HIGH HARDNESS

INCH Core Pins – High Hardness



- Precision made of superior quality hotwork die steel in high hardness 50-55 HRC
- Heads are hot-forged for uniform grain flow, higher tensile strength, then annealed to permit easier machining and stamping
- $+.0008"/+.0003"$ - tolerance on pin diameter ensures a close fit for coring purposes
- Pin body and head are finish ground
- Centerless ground and liquid polished



Specials available.
See "Special Pins and Sleeves."

INCH Core Pins – CX

ITEM PREFIX	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	LENGTH			
				3 [†]	6	10	14
CX7M *	3/32 (.0937)	.250	.125				
CX8M *	7/64 (.1093)	.250	.125				
CX9M *	1/8 (.1250)	.250	.125				
CX10M *	9/64 (.1406)	.250	.125				
CX11M *	5/32 (.1562)	.281	.156				
CX12M *	11/64 (.1718)	.343	.187				
CX13M *	3/16 (.1875)	.375	.187				
CX14M *	13/64 (.2031)	.375	.187				
CX15M *	7/32 (.2187)	.406	.187				
CX17M *	1/4 (.2500)	.437	.187				
CX19M *	9/32 (.2812)	.437	.250				
CX21M *	5/16 (.3125)	.500	.250				
CX23M *	11/32 (.3437)	.562	.250				
CX25M *	3/8 (.3750)	.625	.250				
CX27M *	13/32 (.4062)	.687	.250				
CX29M *	7/16 (.4375)	.687	.250				
CX31M *	15/32 (.4687)	.750	.250				
CX33M *	1/2 (.5000)	.750	.250				
CX35M *	9/16 (.5625)	.812	.250				
CX37M *	5/8 (.6250)	.875	.250				
CX41M *	3/4 (.7500)	1.000	.250				

[†]Heads of 3"-length pins are not annealed. If annealed heads on 3"-length pins are required, they must be special ordered. (Alternately, you may purchase 6" pins and cut to required length.)

KEY TO CHART

	Standard
	Contact DME for quote

***HOW TO ORDER:** Combine Item Number Prefix and the length (L dimension) desired.
Examples: CX9M3, CX33M10

VORTEX® CORE PINS & PLUGS

Porcerax II™

Vortex Core Pins and Plugs are made from Porcerax II. Porcerax II is a porous, sintered metal with a porosity of 20 to 30% by volume. With a series of interconnected pores averaging a diameter of 7 (.0003") or 20 (.0008") microns throughout, the primary function is the elimination of gas.

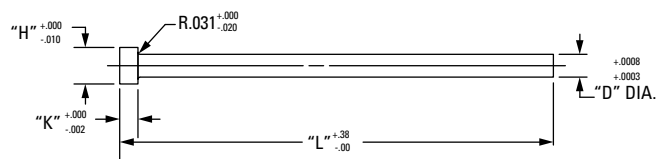
Vortex Pins and Plugs provide a location-specific method of venting gas. Due to its porosity volume, one fourth of the surface becomes a vent.

Vortex Pins & Plugs

- Pins are 3" long and are available in diameters of .250", .375" and .500"
- Plugs are offered in .250", .500" and 1.00" lengths in diameters of .250" and .375"
- Heat treated to 30–40 HRC [Hardness: HMV 300–400]
- Tensile strength: 74,000 lbs./sq.in.
- Thermal Linear Expansion Coefficient: (at 68°F - 302°F) 6.67-6.94 E-06 in./in./F°
- Porosity: 20 to 30% air by volume
- Heat transfer co-efficient (at room temperature): 16.93–19.35 BTU/ft. hr. F°



Vortex Core Pin

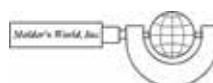


ITEM NUMBER	D PIN DIA	H HEAD DIA	L PIN LENGTH	K HEAD THICKNESS	PORE SIZE MICRONS
PC17M320	.250	0.437	3	0.187	20
PC17M307	.250	0.437	3	0.187	7
PC25M320	.375	0.625	3	0.25	20
PC25M307	.375	0.625	3	0.25	7
PC33M320	.5000	0.75	3	0.25	20
PC33M307	.5000	0.75	3	0.25	7

Vortex Plug



ITEM NUMBER	D PIN DIA	L PIN LENGTH	MICRONS
PP141407	0.25	0.25	7
PP141420	0.25	0.25	20
PP141207	.250	0.50	7
PP141220	.250	0.50	20
PP381207	.375	0.50	7
PP381220	.375	0.50	20
PP38107	.375	1.00	7
PP38120	.375	1.00	20



"All technical and engineering data and suggested procedures, specifications and applications contained in this publication are for general information only. Sinto Steel, Molder's World, Inc., International Mold Steel and/or their distributors disclaim any and all express or implied warranties of merchantability, suitability for any particular purpose or use, or freedom from infringement of any patent, trademark or copyright. Porcerax II® is a registered trademark of International Mold Steel, Inc. and SintoSteel."

COPPER-BASED ALLOY CORE PINS - HIGH CONDUCTIVITY



DME's Copper-based Alloy Core Pins are precision made using a high-strength, beryllium-free copper alloy, rather than traditional steels used in core pins. This alloy provides several advantages, including better conductivity, increased strength, reduced wear and resistance to rusting. These Core Pins are ideal for use in high-volume applications where part quality, fit and finish are critical.

Reduced cycle time

It is often difficult or expensive to adequately cool the area surrounding the core pin in a mold, especially when molding thick-walled parts. Depending on the design of the mold, it may even be impossible to run water lines near the pin, thus greatly increasing cycle times.

The copper-based alloy used in these Core Pins can significantly reduce mold cycle times by increasing the rate of heat transfer. When used in place of traditional C- or CX-type pins, will provide up to 10 times the rate of heat transfer. Heat is transferred at twice the rate of pins made of a beryllium-copper alloy.

In addition, the low-adhesion characteristics of the pins make part ejection faster and easier. All of these advantages combine to reduce the overall cycle time and increase productivity.

Improved part quality

The excellent thermal diffusivity of the pins provide a homogenous temperature profile throughout the core surface. Uniform temperatures result in reduced post-mold shrinkage and warpage, improving the quality of the part. Also, because of the low-adhesion characteristics of the pin, parts are not damaged by adhesion to the pin during part ejection.

- Reduces cycle times
- Ten times better conductivity than steel
- Beryllium-free copper-based alloy
- Hardness of 90-98 Rockwell B
- Available in 18 diameters and four lengths

Lower machining costs

The high thermal conductivity of Copper-Based Alloy Core Pins reduces the need for complex cooling designs that can require hours of additional machining. Plus, the pins require no additional heat treatment and can be machined using conventional methods or EDM.

Longer service life

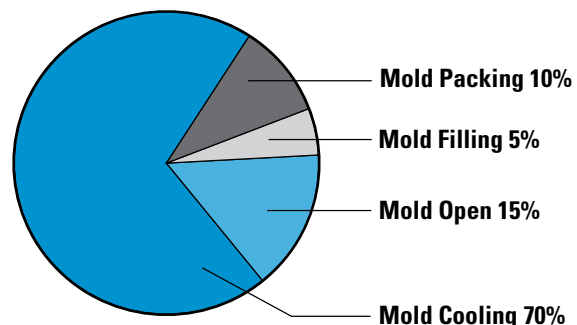
A high resistance to thermal stress, wear and abrasion helps assure long life under virtually any molding conditions. With appropriate alteration to pin diameter, they can be used in conjunction with standard ejector sleeves. The dissimilar metals and compatible coefficient of friction will reduce metal-to-metal pick up and wear.

Wide range of sizes

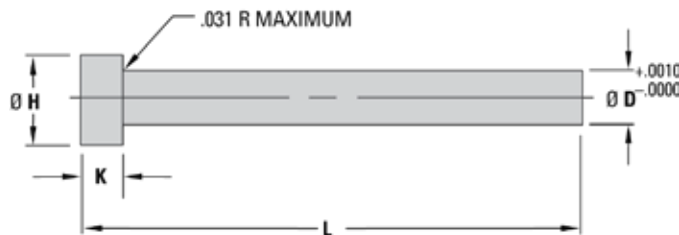
Available in 18 pin diameters from 3/32- to 3/4- and 3-, 6-, 14- or 20-inch lengths.

Typical Mold

As shown in the pie chart, mold cooling comprises the largest part of the mold cycle. Copper-Based Alloy Core Pins can significantly reduce this mold cooling portion to reduce overall cycle time!



COPPER-BASED ALLOY CORE PINS - HIGH CONDUCTIVITY



- Beryllium-free copper-based alloy
- Ten times better conductivity than steel
- Reduces cycle times
- Hardness of 90-98 Rockwell B
- Specials are also available upon request

PCL Performance Core Pins – PCL

ITEM PREFIX	Ø D PIN DIA		Ø H HEAD DIA	K HEAD THICK	L = LENGTH			
					3	6	14	20
PCL07 *	3/32	(.0937)	.250	.125	⚡	⚡	⚡	
PCL09 *	1/8	(.1250)	.250	.125	⚡	⚡	⚡	⚡
PCL11 *	5/32	(.1562)	.281	.156	⚡	⚡	⚡	⚡
PCL12 *	11/64	(.1718)	.343	.187	⚡	⚡		
PCL13 *	3/16	(.1875)	.375	.187	⚡	⚡	⚡	⚡
PCL14 *	13/64	(.2031)	.375	.187	⚡	⚡	⚡	
PCL15 *	7/32	(.2187)	.406	.187	⚡	⚡	⚡	⚡
PCL17 *	1/4	(.2500)	.437	.187	⚡	⚡	⚡	⚡
PCL19 *	9/32	(.2812)	.437	.250	⚡	⚡	⚡	
PCL21 *	5/16	(.3125)	.500	.250	⚡	⚡	⚡	⚡
PCL23 *	11/32	(.3437)	.562	.250	⚡	⚡	⚡	
PCL25 *	3/8	(.3750)	.625	.250	⚡	⚡	⚡	⚡
PCL27 *	13/32	(.4062)	.687	.250		⚡		
PCL29 *	7/16	(.4375)	.687	.250	⚡	⚡	⚡	
PCL33 *	1/2	(.5000)	.750	.250	⚡	⚡	⚡	
PCL35 *	9/16	(.5625)	.812	.250	⚡	⚡	⚡	
PCL37 *	5/8	(.6250)	.875	.250	⚡	⚡	⚡	
PCL41 *	3/4	(.7500)	1.000	.250	⚡	⚡	⚡	

KEY TO CHART



Standard

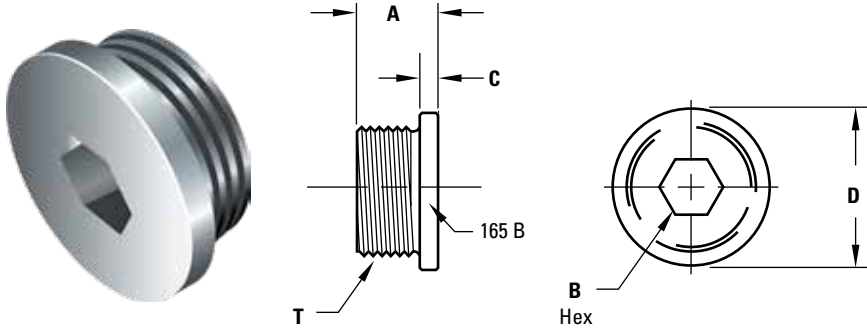
Contact DME
for quote

*HOW TO ORDER: Combine Item Number Prefix and the length (L dimension) desired.

• Precede single digit lengths with a zero. Examples: PCL2514, PCL0703, PCL2520

CORE PIN RETAINERS

Core Pin retainers



DME Standard Core Pin Retainers offer better performance than a set screw and allow the core pin to float within the counter-bore. Conveniently machined in the same setup and location as the corresponding pin hole, Core Pin Retainers eliminate labor costs to make individual backup plates.

INCH Standard

ITEM NUMBER	A +.002/- .000	C +.000/- .002	D O.D.	B HEX	T THREAD
CPR50	.437	.125	.750	.25	1/2-20
CPR87	.437	.125	1.060	.37	7/8-14

AISI 12L14 (165 Brinell)
Black oxide

METRIC Standard

ITEM NUMBER	A +.00/- .05	C +.00/- .05	D O.D.	B HEX	T THREAD
CPRM16	11	4	20	8	M16-1.5

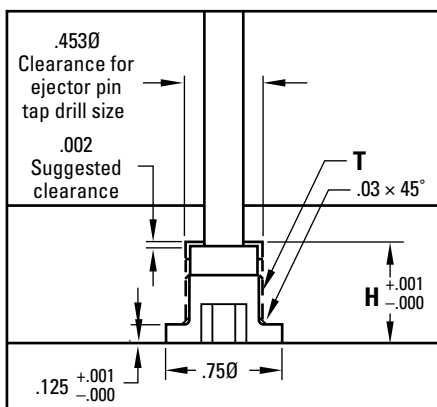
AISI 12L14 (165 Brinell)
Black oxide

CPR-50	
CORE PIN DIAMETER	H
3/32 Ø – 9/64 Ø	.563
5/32 Ø	.594
11/64 Ø – 1/4 Ø	.625
5/16 Ø	.688

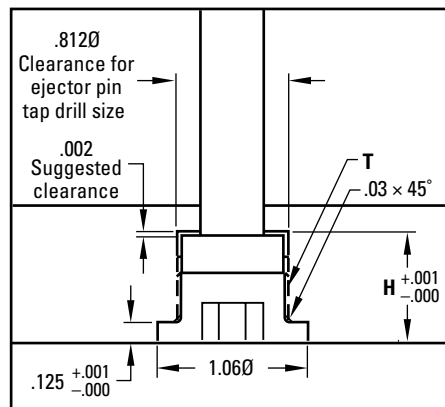
CPR-87	
CORE PIN DIAMETER	H
5/16 Ø – 1/2 Ø	.688

CPRM-16	
CORE PIN DIAMETER	H
2 – 2.5mm	13mm
3 – 6mm	14mm

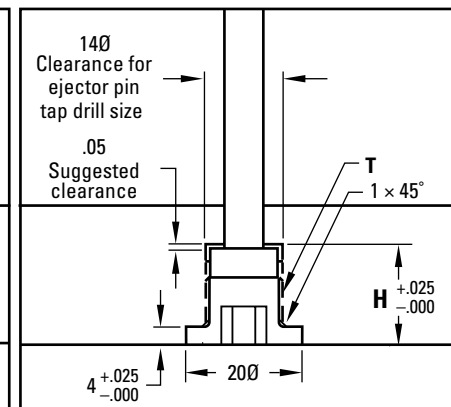
CPR-50 Machining Specifications



CPR-87 Machining Specifications

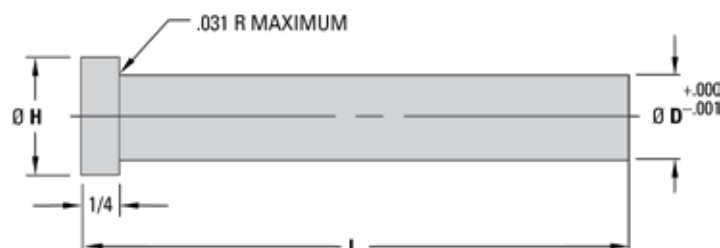


CPRM-16 Machining Specifications



US Patent No. 6,872,069

RETURN PINS & KRYOX® GREASE



- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter

.500 (1/2") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7410	.500	.750	3.563
7411			4.063
7412			4.563
7413			5.063
7414			5.563
7415			6.063
7416			6.563

For longer lengths, use EX33 Ejector Pins.

.625 (5/8") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7510	.625	.875	4.063
7511			4.563
7512			5.063
7513			5.563
7514			6.063
7515			6.563
7516			7.063
7517			7.563
7518			8.063

For longer lengths, use EX37 Ejector Pins.

Use Item Number in charts above for ordering. All items in stock.

.750 (3/4") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7610	.750	1.000	4.938
7611			5.438
7612			5.938
7613			6.438
7614			6.938
7615			7.438
7616			7.938
7617			8.438
7618			8.938
7619			9.438

For longer lengths, use EX41 Ejector Pins.

DuPont™ Performance Lubricants Extreme conditions. Extreme performance. For use with all DME Pins, Sleeves & Blades

DuPont™ Krytox® TM7 grease is specifically designed for the lubrication of segmented molds, both electrically and steam-heated. This lubricant eliminates carbon residue buildup on the molds associated with hydrocarbon and hydrocarbon-based synthetic greases. It exhibits excellent adhesion, allowing the operator to significantly increase production by extending lubrication intervals. The TM7 will not bleed out to the parting line due to high heat tolerance and will last in excess of 5000 cycles, based on average curing times, without relubrication.

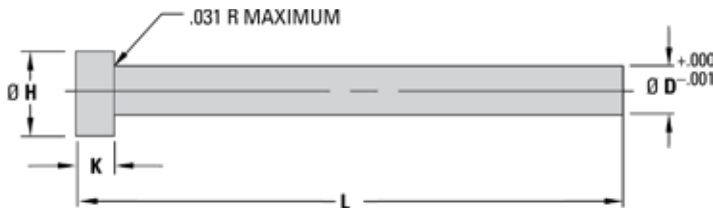
Krytox® TM7 is a fluorinated grease with polytetrafluoroethylene (PTFE) thickeners and selected additives. It has excellent thermal stability and load-carrying abilities. TM7 has a high degree of chemical inertness and extremely high hydrolytic stability. Contact with boiling water or steam has no effect on this product, it will stay in the location it was applied, providing the best lubrication possible.

PART NUMBER	DESCRIPTION
TM7TUBE20Z	TM7 KRYTOX GREASE 20Z TUBE
TM7TUBE80Z	TM7 KRYTOX GREASE 80Z TUBE
TM7JAR1KG	TM7 KRYTOX GREASE 1KG JAR



TYPICAL PROPERTIES OF DuPont™ Krytox® TM7	
Standard NLGI Penetration Grade	#2
Estimation Useful Temperature Range	-20 to 290 (-4 to 555)
Pour Point, °C (°F)	-25 (-13)
Base Oil Viscosity, cSt	
20 °C (68 °F)	1,715
40 °C (104 °F)	500
100 °C (212 °F)	46
Oil Volatility, % in 22 hr, 260 °C (500 °F), D972 modified	<1
Appearance	White, creamy consistency
Specific Gravity	2.0

SPRUE PULLER PINS



- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground and polished outer diameter

.250 (1/4") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L PIN LENGTH
7110	.250	.437	.187	3.44
7111				3.94
7112				4.44
7113				4.94
7114				5.44
7115				5.94
7116				6.44

For longer lengths, use EX17 Ejector Pins.

.375 (3/8") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L PIN LENGTH
7210	.375	.625	.250	3.88
7211				4.38
7212				4.88
7213				5.38
7214				5.88
7215				6.38
7216				6.88
7217				7.38
7218				7.88
7219				8.38
7220				8.88
7221				9.38

For longer lengths, use EX25 Ejector Pins.

Use Item Number in charts above for ordering. All items in stock.

CUSTOM PINS, SLEEVES, BLADES - QUOTE REQUEST FORM

EMAIL COMPLETED FORM TO: DMEUS-CSSSPECIALS@DME.NET

Custom Pins

Quantity: _____

Choose a pin type:

☐ **EX** (35 - 43 HRC core hardness with 65 - 70 HRC case hardness)

☐ **THX** (50 HRC - 55 HRC core hardness with 65 - 70 HRC case hardness)

☐ **CX** (50 - 55 HRC through hard)

☐ **C** (30 - 35 HRC through hard)

Material H-13 ☐

Other _____

Hardness _____ RC

Nitrided Yes ☐ No ☐

Comments _____

Custom Sleeves

Quantity: _____

☐ Nitride on OD (S)

☐ Nitride on OD + ID (SND)

Material H-13 ☐

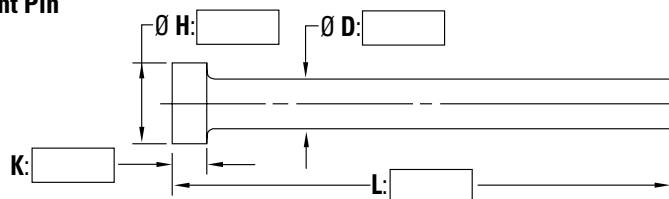
Other _____

Hardness _____ RC

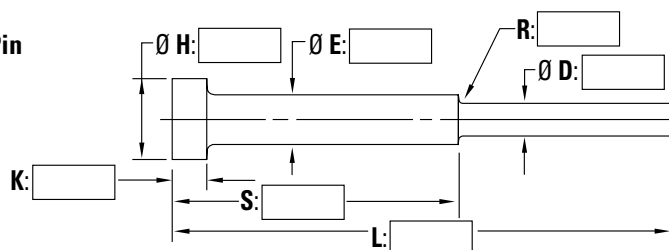
Nitrided Yes ☐ No ☐

Comments _____

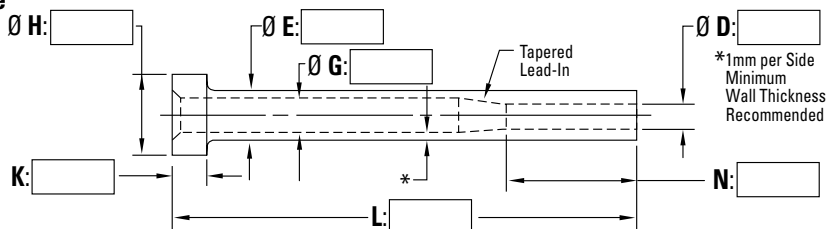
Straight Pin



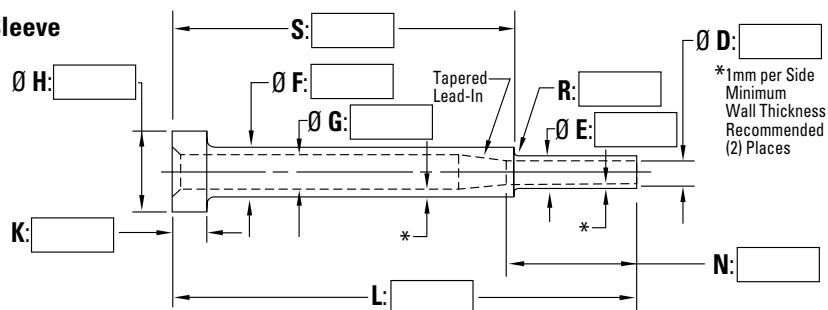
Step Pin



Sleeve



Step Sleeve



Company name: _____ DME account #: _____

Contact name: _____ P.O.#: _____

Phone: _____ FAX: _____

Address: _____ E-mail: _____

City: _____ State/Province: _____

ZIP/Postal Code: _____ Country: _____

Shipping method:

☐ UPS Ground ☐ UPS 2nd Day Air ☐ UPS Next Day ☐ FedEx ☐ Other _____

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Pins, Sleeves & Blades
online Quote Request Forms



With tens of thousands of products to choose from, DME is your one-stop shop for everything molding. From complex undercuts solutions and plate control to standard pins, bushings and interlocks, the DME line of **Mold Components** will help you build or rebuild your mold base inside out, top to bottom. **Industrial Supplies, MUD Quick-Change, Control Systems, and Hot Runner solutions** round out our extensive offering to truly be your one-stop shop.



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