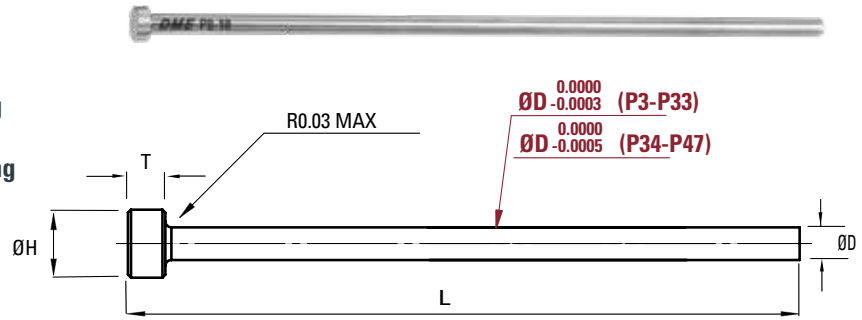


# P-Pins

## Through Hardened Ejector Pins



- 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**
- •



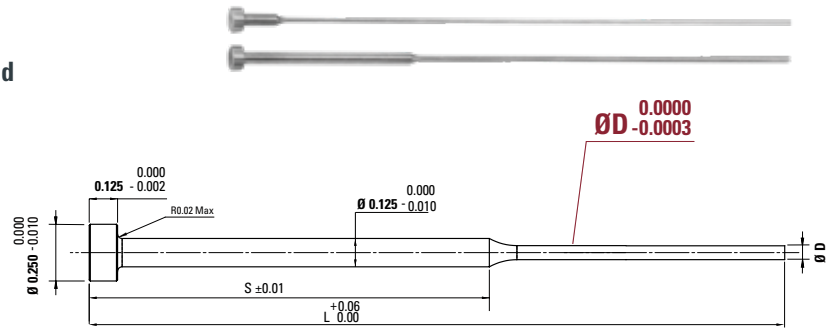
NOMINAL DIA	D DIAMETER	D TOLERANCE	H HEAD DIA 0.000/-0.010	T HEAD THICKNESS 0.000/-0.002	L - OVERALL LENGTH (+.062/- .000)													
					4"			6"			8"		10"		12"		14"	
					D STANDARD	D STANDARD	D .005 OVERSIZED	D STANDARD	D STANDARD	D .005 OVERSIZED	D STANDARD	D STANDARD	D STANDARD	D STANDARD	D .005 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		P11-4	P11-6	P11-60S	P11-8	P11-10	P11-100S	P11-12	P11-14	P11-140S					
11/64	0.1714		11/32		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	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	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	.06870	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							

# Step P-Pins

## Through Hardened Ejector Pins



- 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	.005 OS	D	.005 OS	D	.005 OS	D	.005 OS		
1/32	0.0307	0.0000 -0.0003	1/2	SP3-61/2	SP3-61/2OS								
			2	SP3-62	SP3-62OS	SP3-82	SP3-82OS				SP3-142		
			3			SP3-83	SP3-83OS						
			4			SP3-84	SP3-84OS						
3/64	0.0464		1/2	SP4-61/2	SP4-61/2OS								
			2	SP4-62	SP4-62OS	SP4-82	SP4-82OS	SP4-102	SP4-102OS				
			3			SP4-83	SP4-83OS						
			4			SP4-84	SP4-84OS	SP4-104	SP4-104OS				
1/16	0.0620		1/2	SP5-61/2	SP5-61/2OS				SP5-101/2	SP5-101/2OS			
			2	SP5-62	SP5-62OS	SP5-82	SP5-82OS	SP5-102	SP5-102OS	SP5-142	SP5-142OS		
			3			SP5-83	SP5-83OS						
			4			SP5-84	SP5-84OS	SP5-104	SP5-104OS				
5/64	0.0776		1/2	SP6-61/2	SP6-61/2OS				SP6-101/2	SP6-101/2OS	SP6-141/2		
			2	SP6-62	SP6-62OS	SP6-82	SP6-82OS	SP6-102	SP6-102OS	SP6-142	SP6-142OS		
			3			SP6-83	SP6-83OS						
			4			SP6-84	SP6-84OS	SP6-104	SP6-104OS				
3/32	0.0933	1/2	SP7-61/2	SP7-61/2OS				SP7-101/2	SP7-101/2OS	SP7-141/2			
		2	SP7-62	SP7-62OS	SP7-82	SP7-82OS	SP7-102	SP7-102OS	SP7-142	SP7-142OS			
		3			SP7-83	SP7-83OS							
		4			SP7-84	SP7-84OS	SP7-104	SP7-104OS					
7/64	0.1089	1/2	SP8-61/2	SP8-61/2OS				SP8-101/2	SP8-101/2OS				
		2	SP8-62	SP8-62OS	SP8-82	SP8-82OS	SP8-102	SP8-102OS	SP8-142	SP8-142OS			
		3			SP8-83	SP8-83OS							
		4			SP8-84	SP8-84OS	SP8-104	SP8-104OS					

### .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	SP3-82OS-1	SP3-82OS-2	SP3-82OS-3	SP3-82OS-4
3/64	0.0464		1/2	SP4-81/2OS-1	SP4-81/2OS-2	SP4-81/2OS-3	SP4-81/2OS-4
			2	SP4-82OS-1	SP4-82OS-2	SP4-82OS-3	SP4-82OS-4
1/16	0.0620		1/2	SP5-81/2OS-1	SP5-81/2OS-2	SP5-81/2OS-3	SP5-81/2OS-4
			2	SP5-82OS-1	SP5-82OS-2	SP5-82OS-3	SP5-82OS-4
5/64	0.0776		1/2	SP6-81/2OS-1	SP6-81/2OS-2	SP6-81/2OS-3	SP6-81/2OS-4
			2	SP6-82OS-1	SP6-82OS-2	SP6-82OS-3	SP6-82OS-4
3/32	0.0933		1/2	SP7-81/2OS-1	SP7-81/2OS-2	SP7-81/2OS-3	SP7-81/2OS-4
			2	SP7-82OS-1	SP7-82OS-2	SP7-82OS-3	SP7-82OS-4
7/64	0.1089		2	SP8-82OS-1	SP8-82OS-2	SP8-82OS-3	SP8-82OS-4

