

Helilaps Data Sheet

Expanding Internal Helical Slot Laps

for holes from $\frac{3}{64}$ " to $\frac{9}{32}$ "

Lap Expansion (in)	Lap Size (in)	Lap Expansion (mm)	Arbor
0.046 to 0.055	$\frac{3}{64}$	1.168 to 1.397	4/0
0.062 to 0.076	$\frac{1}{16}$	1.574 to 1.930	3/0
0.077 to 0.091	$\frac{5}{64}$	1.956 to 2.311	3/0
0.093 to 0.108	$\frac{3}{32}$	2.362 to 2.743	2/0
0.108 to 0.122	$\frac{7}{64}$	2.743 to 3.099	2/0
0.124 to 0.137	$\frac{1}{8}$	3.149 to 3.479	0
0.139 to 0.153	$\frac{9}{64}$	3.530 to 3.886	0
0.155 to 0.170	$\frac{5}{32}$	3.937 to 4.318	0
0.170 to 0.184	$\frac{11}{64}$	4.318 to 4.673	0
0.186 to 0.201	$\frac{3}{16}$	4.724 to 5.105	1
0.202 to 0.215	$\frac{13}{64}$	5.130 to 5.461	1
0.218 to 0.233	$\frac{7}{32}$	5.537 to 5.918	2
0.233 to 0.246	$\frac{15}{64}$	5.918 to 6.248	2
0.249 to 0.264	$\frac{1}{4}$	6.324 to 6.705	3
0.265 to 0.276	$\frac{17}{64}$	6.731 to 7.010	3
0.280 to 0.289	$\frac{9}{32}$	7.112 to 7.340	3

for holes from $\frac{9}{32}$ " to $\frac{33}{64}$ "

Lap Expansion (in)	Lap Size (in)	Lap Expansion (mm)	Arbor
0.280 to 0.289	$\frac{9}{32}$	7.112 to 7.340	3
0.296 to 0.302	$\frac{19}{64}$	7.518 to 7.670	3
0.312 to 0.327	$\frac{5}{16}$	7.924 to 8.305	4
0.327 to 0.339	$\frac{21}{64}$	8.305 to 8.610	4
0.343 to 0.351	$\frac{11}{32}$	8.712 to 8.915	4
0.358 to 0.364	$\frac{23}{64}$	9.093 to 9.245	4
0.374 to 0.388	$\frac{3}{8}$	9.499 to 9.855	5
0.390 to 0.401	$\frac{25}{64}$	9.906 to 10.185	5
0.405 to 0.414	$\frac{13}{32}$	10.287 to 10.515	5
0.421 to 0.427	$\frac{27}{64}$	10.693 to 10.845	5
0.436 to 0.450	$\frac{7}{16}$	11.074 to 11.430	6
0.452 to 0.464	$\frac{29}{64}$	11.480 to 11.785	6
0.467 to 0.476	$\frac{15}{32}$	11.861 to 12.090	6
0.483 to 0.489	$\frac{31}{64}$	12.268 to 12.420	6
0.499 to 0.515	$\frac{1}{2}$	12.674 to 13.081	7
0.515 to 0.531	$\frac{33}{64}$	13.081 to 13.487	7

Expanding Internal Helical Slot Laps

for holes from $\frac{33}{64}$ " to $\frac{3}{4}$ "

Lap Expansion (in)	Lap Size (in)	Lap Expansion (mm)	Arbor
0.515 to 0.531	$\frac{33}{64}$	13.081 to 13.487	7
0.530 to 0.546	$\frac{17}{32}$	13.462 to 13.868	7
0.546 to 0.560	$\frac{35}{64}$	13.868 to 14.224	7
0.561 to 0.574	$\frac{9}{16}$	14.249 to 14.579	7
0.577 to 0.588	$\frac{37}{64}$	14.655 to 14.935	7
0.593 to 0.602	$\frac{19}{32}$	15.062 to 15.290	7
0.608 to 0.614	$\frac{39}{64}$	15.443 to 15.595	7
0.624 to 0.640	$\frac{5}{8}$	15.849 to 16.256	8
0.640 to 0.654	$\frac{41}{64}$	16.256 to 16.611	8
0.655 to 0.667	$\frac{21}{32}$	16.637 to 16.941	8
0.671 to 0.681	$\frac{43}{64}$	17.043 to 17.297	8
0.686 to 0.694	$\frac{11}{16}$	17.424 to 17.627	8
0.702 to 0.709	$\frac{45}{64}$	17.830 to 18.008	8
0.718 to 0.725	$\frac{23}{32}$	18.237 to 18.415	8
0.733 to 0.739	$\frac{47}{64}$	18.618 to 18.770	8
0.749 to 0.763	$\frac{3}{4}$	19.024 to 19.380	9

for holes from $\frac{3}{4}$ " to $\frac{63}{64}$ "

Lap Expansion (in)	Lap Size (in)	Lap Expansion (mm)	Arbor
0.749 to 0.763	$\frac{3}{4}$	19.024 to 19.380	9
0.764 to 0.777	$\frac{49}{64}$	19.405 to 19.735	9
0.780 to 0.792	$\frac{25}{32}$	19.812 to 20.116	9
0.796 to 0.807	$\frac{51}{64}$	20.218 to 20.497	9
0.811 to 0.821	$\frac{13}{16}$	20.599 to 20.853	9
0.827 to 0.836	$\frac{53}{64}$	21.005 to 21.234	9
0.843 to 0.851	$\frac{27}{32}$	21.412 to 21.615	9
0.858 to 0.865	$\frac{55}{64}$	21.793 to 21.971	9
0.874 to 0.889	$\frac{7}{8}$	22.199 to 22.580	10
0.889 to 0.903	$\frac{57}{64}$	22.580 to 22.936	10
0.905 to 0.919	$\frac{29}{32}$	22.987 to 23.342	10
0.921 to 0.934	$\frac{59}{64}$	23.393 to 23.723	10
0.936 to 0.948	$\frac{15}{16}$	23.774 to 24.079	10
0.952 to 0.962	$\frac{61}{64}$	24.180 to 24.434	10
0.968 to 0.976	$\frac{31}{32}$	24.587 to 24.790	10
0.983 to 0.990	$\frac{63}{64}$	24.968 to 25.146	10

Laps			Corresponding Arbors					Expanders		Pullers	
Nominal Lap dia 'E'	Length 'D'	Code	Arbor No.	Shank Dia 'A'	Shank Length 'B'	Taper Length 'C'	Code	Expander No.	Code	Size	Code
3/64in	1/2in	303101	4/0	1/8in	3/4in	1 1/2in	303401	4/0	303201	Extra Small	303301
1/16in	5/8in	303102	3/0	1/8in	3/4in	1 1/2in	303402	3/0	303216		
5/64in		303103									
3/32in	3/4in	303104	2/0	1/8in	3/4in	1 5/8in	303403	2/0	303202		
7/64in		303105									
1/8in	7/8in	303106	0	1/8in	3/4in	1 3/4in	303404	0	303203		
9/64in		303107									
5/32in		303108									
11/64in		303109									
3/16in	1 3/8in	303110	1	3/16in	1in	2 3/4in	303405	1	303204	Small	303302
13/64in		303111									
7/32in	1 3/4in	303112	2	3/16in	1in	3in	303406	2	303205		
15/64in		303113									
1/4in	2in	303114	3	3/16in	1in	4in	303407	3	303206		
17/64in		303115									
9/32in		303116									
19/64in		303152									
5/16in	2in	303117	4	7/32in	1in	4in	303408	4	303207		
21/64in		303153									
11/32in		303154									
23/64in		303118									
3/8in	2 1/2in	303119	5	9/32in	1 1/2in	5in	303409	5	303208		
25/64in		303120									
13/32in		303121									
27/64in		303122									
7/16in	2 1/2in	303123	6	5/16in	1 1/2in	5in	303410	6	303209		

29/64in		303124																			
15/32in		303125																			
31/64in		303166																			
1/2in	3 1/4in	303126	7	3/8in	1 1/2in	6in	303411	7	303210												
33/64in		303127																			
17/32in		303155																			
35/64in		303156																			
9/16in		303157																			
37/64in		303174																			
19/32in		303128																			
39/64in		303168																			
5/8in		3 1/4in										303129	8	13/32in	1 1/2in	6in	303412	8	303211		
41/64in												303170									
21/32in	303130																				
43/64in	303175																				
11/16in	303131																				
45/64in	303132																				
23/32in	303133																				
47/64in	303171																				
3/4in	3 1/2in	303134	9	1/2in	2in	7in	303413	9	303212	large	303303										
49/64in		303158																			
25/32in		303135																			
51/64in		303167																			
13/16in		303136																			
53/64in		303159																			
27/32in		303160																			
55/64in	303161																				
7/8in	3 1/2in	303172	10	9/16in	2in	7in	303414	10	303213												

