

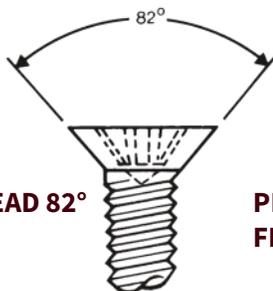


**THE NATIONAL LEADER FOR FASTENER
TOOLING & GAGE TECHNOLOGY.**

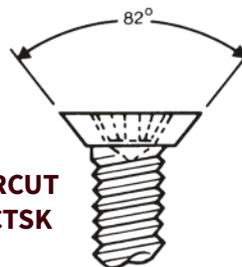
PHILLIPS® FLAT HEAD

SCREW SIZE	WOOD 82° CTSK	MACHINE 82° CTSK	TYPE A TAPPING 82° CTSK	82° UNDERCUT CSTK	TAPPING 82° UNDERCUT CSTK	MACHINE & TAPPING 100° CTSK
0	3P 00-4	3P 00-4	3P 00-4	3P 00-4	3P 00-4	3P 00-19
1	3P 00-5	3P 00-5	3P 00-5	3P 00-5	3P 00-5	3P 00-4
2	3P 10-1	3P 10-1	3P 10-1	3P 10-80	3P 10-80	3P 10-80
3	3P 10-2	3P 10-2	3P 10-2	3P 10-1	3P 10-1	3P 10-1
4	3P 10-3	3P 10-3	3P 10-3	3P 10-54	3P 10-54	3P 10-54
5	3P 20-1	3P 20-1	3P 20-1	3P 10-3	3P 10-3	3P 20-123
6	3P 20-2	3P 20-2	3P 20-2	3P 20-285	3P 20-285	3P 20-1
7	3P 20-3	3P 20-6	3P 20-6	3P 20-1	3P 20-1	3P 20-1
8	3P 20-4	3P 20-3	3P 20-3	3P 20-2	3P 20-2	3P 20-135
9	3P 20-5					3P 20-2
10	3P 30-1	3P 20-4	3P 20-4	3P 20-3	3P 20-3	3P 20-136
12	3P 30-3	3P 30-2	3P 30-2	3P 30-166	3P 30-166	3P 30-46
14	3P 30-4		3P 30-3		3P 30-85	3P 30-93
1/4		3P 30-3		3P 30-85		3P 30-93
16	3P 30-5		3P 30-4		3P 30-2	3P 30-2
18	3P 40-1		3P 40-4		3P 40-79	3P 30-3**
5/16		3P 40-4		3P 40-79		3P 40-79
3/8		3P 40-2		3P 40-4		3P 40-106
20	3P 40-2		3P 40-1		3P 40-64	
7/16		3P 40-5		3P 40-2		3P 40-24
24	3P 40-3		3P 40-2		3P 40-4	
1/2		3P 40-3		3P 40-5		3P 40-2

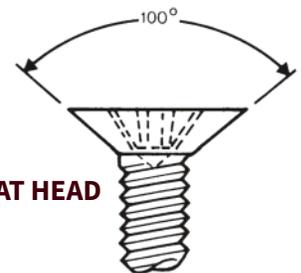
AVAILABLE WITH POZIDRIV® RECESS



PHILLIPS FLAT HEAD 82° CTSK



PHILLIPS UNDERCUT FLAT HEAD 82° CTSK



PHILLIPS FLAT HEAD 100° CTSK

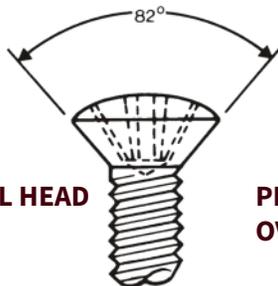
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

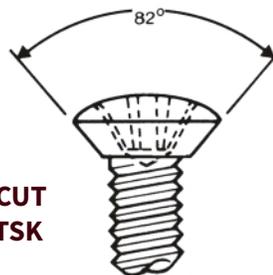
PHILLIPS® OVAL HEAD

SCREW SIZE	WOOD 82° CTSK.	MACHINE 82° CTSK.	TYPE A TAPPING 82° - CTSK.	MACHINE 82° UNDERCUT CTSK.	TYPE A TAPPING 82° UNDERCUT CTSK.	MACHINE & TAPPING - 100° CTSK.
0	3P 00-8	3P 00-8	3P 00-8	3P 00-8	3P 00-8	
1	3P 00-9	3P 00-9	3P 00-9	3P 00-9	3P 00-9	
2	3P 10-4	3P 10-4	3P 10-4	3P 10-4	3P 10-4	3P 10-82
3	3P 10-5	3P 10-5	3P 10-5	3P 10-5	3P 10-5	3P 10-83
4	3P 10-6	3P 10-6	3P 10-6	3P 10-6	3P 10-6	3P 10-84
5	3P 20-7	3P 20-7	3P 20-7	3P 20-7	3P 20-7	3P 20-7
6	3P 20-8	3P 20-8	3P 20-8	3P 20-8	3P 20-8	3P 20-8
7	3P 20-9	3P 20-14	3P 20-14	3P 20-14	3P 20-14	3P 20-14
8	3P 20-10	3P 20-12	3P 20-12	3P 20-12	3P 20-12	3P 20-12
9	3P 20-11					3P 20-203
10	3P 30-6	3P 20-13	3P 20-13	3P 20-13	3P 20-13	3P 20-13
12	3P 30-8	3P 30-11	3P 30-11	3P 30-11	3P 30-11	3P 30-11
14	3P 30-9		3P 30-13			3P 30-13
1/4		3P 30-12		3P 30-12		3P 30-12
16	3P 30-10		3P 30-10		3P 30-142	3P 30-142
18	3P 40-6		3P 40-6		3P 40-145	3P 40-6
5/16		3P 40-13		3P 40-254		3P 40-13
3/8		3P 40-10		3P 40-255		3P 40-10
20	3P 40-7		3P 40-7		3P 40-13	
7/16		3P 40-11		3P 40-256		
24	3P 40-8		3P 40-8		3P 40-7	
1/2		3P 40-12		3P 40-257		

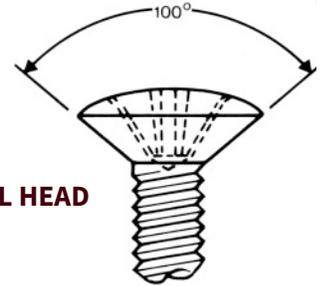
AVAILABLE WITH POZIDRIV® RECESS



**PHILLIPS OVAL HEAD
82° CTSK**



**PHILLIPS UNDERCUT
OVAL HEAD 82° CTSK**



**PHILLIPS OVAL HEAD
100° CTSK**

WARNING

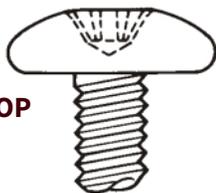
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PHILLIPS® TRUSS HEAD

SCREW SIZE	PUNCH DIAMETER	FLAT TOP MACHINE	FULL CONTOUR MACHINE	FULL CONTOUR TAPPING
0		3P 00-16	3P 00-12	
1		3P 00-17	3P 00-13	
2		3P 10-100	3P 00-13	3P 10-13
3		3P 10-101	3P 10-61	3P 10-61
4		3P 10-102	3P 10-17	3P 10-17
5		3P 10-103	3P 10-18	3P 10-18
6	9/16"	3P 20-321	3P 20-63	3P 20-63
6	7/16"	3P 20-338	3P 20-142	3P 20-142
7		3P 20-322		3P 20-71
8		3P 20-323	3P 20-33	3P 20-33
9		3P 20-340		3P 20-64
10	7/8"	3P 20-324	3P 20-34	3P 20-34
10	3/4"	3P 20-339	3P 20-153	3P 20-153
12		3P 30-167	3P 30-24	3P 30-24
14	7/8"	3P 30-227		3P 30-25
14	1"	3P 30-228		3P 30-115
1/4	7/8"	3P 30-168	3P 30-25	
1/4	1"	3P 30-180	3P 30-115	
5/16	1"	3P 40-172	3P 40-20	3P 40-20
5/16	1-1/4"	3P 40-189	3P 40-94	3P 40-94
24		3P 40-173		
3/8		3P 40-173	3P 40-21	3P 40-21
7/16		3P 40-174	3P 40-22	3P 40-22
1/2		3P 40-175	3P 40-31	

AVAILABLE WITH POZIDRIV®
RECESS

**PHILLIPS FLAT TOP
TRUSS HEAD**



**PHILLIPS FULL CONTOUR
TRUSS HEAD**



WARNING

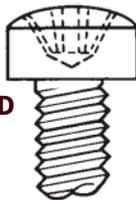
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PHILLIPS® FILLISTER HEAD

SCREW SIZE	FINISHED MACHINE & TAPPING	SHAVED MACHINE & TAPPING	WOOD
0	3P 00-20	3P 00-14	3P 00-14
1	3P 00-21	3P 00-15	3P 00-15
2	3P 10-35	3P 00-13	3P 10-13
3	3P 10-37	3P 10-14	3P 10-14
4	3P 10-36	3P 10-15	3P 10-15
5	3P 20-265	3P 20-346	3P 20-20
6	3P 20-257	3P 20-21	3P 20-21
7	3P 20-278	3P 20-22	3P 20-22
8	3P 20-266	3P 20-33	3P 20-33
9			3P 20-24
10	3P 20-258	3P 20-25	3P 20-25
12	3P 30-68	3P 30-21	3P 30-21
14	3P 30-67		3P 30-22
1/4	3P 30-67	3P 30-22	
16			3P 30-185
18			3P 40-201
5/16	3P 30-69	3P 30-140	
20			3P 40-9
24			3P 40-26
3/8	3P 40-162	3P 40-26	
7/16	3P 40-163	3P 40-27	
1/2	3P 40-164	3P 40-28	

AVAILABLE WITH POZIDRIV® RECESS

PHILLIPS FILLISTER HEAD (SHAVED HEAD)



PHILLIPS FILLISTER HEAD (FINISHED HEAD)



PHILLIPS FILLISTER WOOD HEAD



WARNING

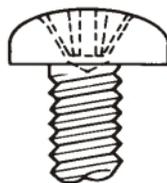
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PHILLIPS® PAN HEAD

SCREW SIZE	MACHINE & TAPPING	COMB. SLOTTED-MACHINE & TAPPING	ALUMINUM
0	3P 00-14		
1	3P 00-15		
2	3P 10-13	3P 10-154	
3	3P 10-14	3P 10-155	
4	3P 10-15	3P 10-156	
5	3P 20-20	3P 20-551	
6	3P 20-21	3P 20-552	3P 20-21A
7	3P 20-22	3P 20-553	
8	3P 20-23	3P 20-554	3P 20-23A
10	3P 20-25	3P 20-555	3P 20-25A
12	3P 30-21	3P 30-236	
14	3P 30-226		
1/4	3P 30-22	3P 30-237	3P 30-22A
16	3P 30-185		
18	3P 40-201		
5/16	3P 40-9	3P 40-267	
20	3P 40-9		
24	3P 40-26		
3/8	3P 40-26		
7/16	3P 40-27		
1/2	3P 40-28		

AVAILABLE WITH POZIDRIV® RECESS

PHILLIPS PAN HEAD



COMBINATION PHILLIPS SLOTTED HEAD



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PHILLIPS® ROUND HEAD

SCREW SIZE	MACHINE & TAPPING	WOOD	ALUMINUM	COMBINATION SLOTTED
0	3P 00-6	3P 00-6		
1	3P 00-7	3P 00-7		
2	3P 10-46	3P 10-9		3P 10-129
3	3P 10-45	3P 10-10	3P 10-45A	3P 10-130
4	3P 10-44	3P 10-11	3P 10-44A	3P 10-131
5	3P 20-30	3P 20-30	3P 20-30A	3P 20-475
6	3P 20-15	3P 20-15	3P 20-15A	3P 20-389
7	3P 20-16	3P 20-16	3P 20-16A	3P 20-476
8	3P 20-17	3P 20-17	3P 20-17A	3P 20-390
10	3P 20-19	3P 20-19	3P 20-19A	3P 20-391
12	3P 30-16	3P 30-16	3P 30-16A	3P 30-207
14	3P 30-17	3P 30-17	3P 30-17A	
1/4	3P 30-19		3P 30-19A	3P 30-208
16	3P 30-18	3P 30-18	3P 30-18A	
5/16	3P 30-20		3P 30-20A	3P 30-209
18	3P 40-110	3P 40-14		
20	3P 40-111	3P 40-15		
24	3P 40-16	3P 40-16		
3/8	3P 40-16		3P 40-16A	
7/16	3P 40-17			
1/2	3P 40-18			

AVAILABLE WITH POZIDRIV® RECESS

PHILLIPS ROUND HEAD



PHILLIPS ROUND HEAD COMBINATION SLOTTED

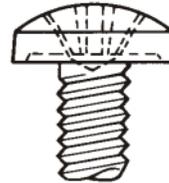


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

SCREW SIZE	PUNCH NUMBER
0	3P 00-24
1	3P 00-25
2	3P 10-63
3	3P 10-64
4	3P 10-62
5	3P 20-144
6	3P 20-133
8	3P 20-145
10	3P 20-143
12	3P 30-96
1/4	3P 30-97
5/16	3P 40-107
3/8	3P 40-108

PHILLIPS® BINDING HEAD MACHINE

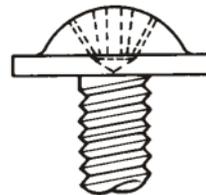


PHILLIPS BINDING HEAD

AVAILABLE WITH POZIDRIV® RECESS

SCREW SIZE	PUNCH NUMBER
2	3P 10-23
3	3P 10-24
4	3P 10-25
5	3P 20-45
6	3P 20-46
7	3P 20-47
8	3P 20-48
10	3P 20-49
12	3P 30-42
14	3P 30-39
1/4	3P 30-43
5/16	3P 30-44
3/8	3P 40-36
7/16	3P 40-37
1/2	3P 40-38

PHILLIPS® WASHER HEAD WOOD, MACHINE & TAPPING TYPE



PHILLIPS WASHER HEAD

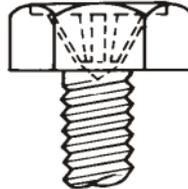
AVAILABLE WITH POZIDRIV® RECESS

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PHILLIPS® INDENTED HEXAGON HEAD TAPPING

**PHILLIPS INDENTED
HEXAGON HEAD**

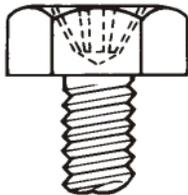


AVAILABLE WITH POZIDRIV®
RECESS

SCREW SIZE	PUNCH NUMBER
1	3P 00-18
2	3P 10-127
3	3P 10-128
4	3P 10-41
5	3P 10-42
6	3P 20-100
7	3P 20-101
8	3P 20-102
10	3P 20-103
12	3P 30-59
1/4	3P 30-71
1/4(7/16)	3P 30-87
5/16	3P 40-242
3/8	3P 40-243

PHILLIPS® TRIMMED HEXAGON MACHINE TYPE

**PHILLIPS TRIMMED
HEXAGON HEAD**



AVAILABLE WITH POZIDRIV®
RECESS

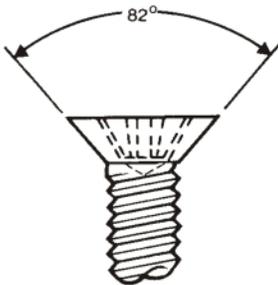
SCREW SIZE	PUNCH NUMBER
4	3P 10-157
6	3P 20-137
8	3P 20-474
10	3P 20-147
12	3P 30-94
14	3P 30-39
1/4	3P 30-58
5/16	3P 40-65
3/8	3P 40-66
7/16	3P 40-67
1/2	3P 40-68

WARNING

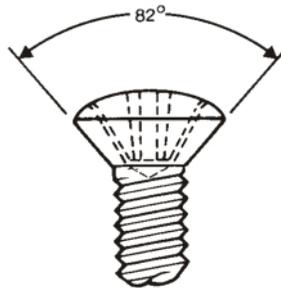
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

SCREW SIZE	HEAD SIZE	OVAL HEAD	FLAT HEAD
4	3	3P 10-5	3P 10-2
5	4	3P 10-6	3P 10-3
6	4	3P 10-6	3P 10-3
6	5	3P 20-7	3P 20-1
6	5	3P 20-176	
8	5	3P 20-7	3P 20-134
8	5	3P 20-176	
8	6	3P 20-8	3P 20-6
8	6	3P 20-28	
10	8	3P 20-12	3P 20-3
10	8	3P 20-255	
12	8	3P 20-12	3P 20-254
12	8	3P 20-255	
12	10	3P 20-13	3P 20-4
12	10	3P 20-256	
14	10	3P 20-13	3P 20-4
14	10	3P 20-256	
14	12	3P 30-11	3P 30-2
5/16	12		3P 30-2
5/16	14		3P 30-3
5/16	1/4		3P 30-3
3/8	5/16		3P 40-4

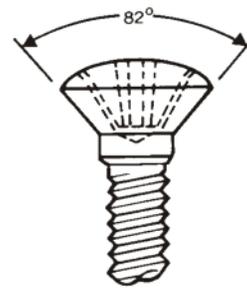
AVAILABLE WITH POZIDRIV® RECESS



PHILLIPS FLAT TRIM HEADS 82°



PHILLIPS OVAL TRIM HEADS - SHORT LENGTHS



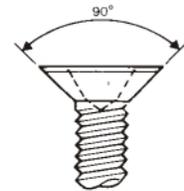
PHILLIPS OVAL TRIM HEADS - LONG LENGTHS

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

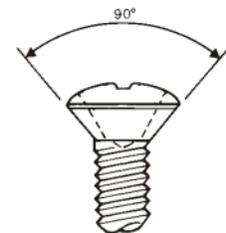
DIN 965 - 90° FLAT COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
1.6	965-1.6	7/16	PZ965-1.6	7/16	1A965-1.6	7/16
2	965-2	7/16	PZ965-2	7/16	1A965-2	7/16
2.5	965-2.5	7/16	PZ965-2.5	7/16	1A965-2.5	7/16
3	965-3	7/16	PZ965-3	7/16	1A965-3	7/16
3.5	965-3.5	7/16	PZ965-3.5	7/16	1A965-3.5	7/16
4	965-4	9/16	PZ965-4	9/16	1A965-4	9/16
5	965-5	9/16	PZ965-5	9/16	1A965-5	9/16
6	965-6	7/8	PZ965-6	7/8	1A965-6	7/8
8	965-8	1	PZ965-8	1	1A965-8	1
10	965-10	1	PZ965-10	1	1A965-10	1



DIN 966 - 90° OVAL COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
1.6	966-1.6	7/16	PZ966-1.6	7/16	1A966-1.6	7/16
2	966-2	7/16	PZ966-2	7/16	1A966-2	7/16
2.5	966-2.5	7/16	PZ966-2.5	7/16	1A966-2.5	7/16
3	966-3	7/16	PZ966-3	7/16	1A966-3	7/16
3.5	966-3.5	7/16	PZ966-3.5	7/16	1A966-3.5	7/16
4	966-4	9/16	PZ966-4	9/16	1A966-4	9/16
5	966-5	9/16	PZ966-5	9/16	1A966-5	9/16
6	966-6	7/8	PZ966-6	7/8	1A966-6	7/8
8	966-8	1	PZ966-8	1	1A966-8	1
10	966-10	1	PZ966-10	1	1A966-10	1

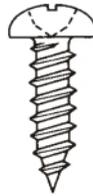


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

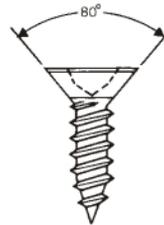
DIN 7981 - PAN HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2.2	7981-2.2	7/16	PZ7981-2.2	7/16	1A7981-2.2	7/16
2.9	7981-2.9	7/16	PZ7981-2.9	7/16	1A7981-2.9	7/16
3.5	7981-3.5	7/16	PZ7981-3.5	7/16	1A7981-3.5	7/16
3.9	7981-3.9	9/16	PZ7981-3.9	9/16	1A7981-3.9	9/16
4.2	7981-4.2	9/16	PZ7981-4.2	9/16	1A7981-4.2	9/16
4.8	7981-4.8	9/16	PZ7981-4.8	9/16	1A7981-4.8	9/16
5.5	7981-5.5	7/8	PZ7981-5.5	7/8	1A7981-5.5	7/8
6.3	7981-6.3	7/8	PZ7981-6.3	7/8	1A7981-6.3	7/8



DIN 7982 - 80° FLAT COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2.2	7982-2.2	7/16	PZ7982-2.2	7/16	1A7982-2.2	7/16
2.9	7982-2.9	7/16	PZ7982-2.9	7/16	1A7982-2.9	7/16
3.5	7982-3.5	7/16	PZ7982-3.5	7/16	1A7982-3.5	7/16
3.9	7982-3.9	9/16	PZ7982-3.9	9/16	1A7982-3.9	9/16
4.2	7982-4.2	9/16	PZ7982-4.2	9/16	1A7982-4.2	9/16
4.8	7982-4.8	9/16	PZ7982-4.8	9/16	1A7982-4.8	9/16
5.5	7982-5.5	7/8	PZ7982-5.5	7/8	1A7982-5.5	7/8
6.3	7982-6.3	7/8	PZ7982-6.3	7/8	1A7982-6.3	7/8

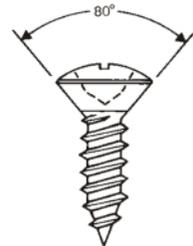


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

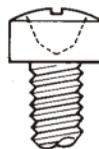
DIN 7983 - 80° OVAL COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2.2	7983-2.2	7/16	PZ7983-2.2	7/16	1A7983-2.2	7/16
2.9	7983-2.9	7/16	PZ7983-2.9	7/16	1A7983-2.9	7/16
3.5	7983-3.5	7/16	PZ7983-3.5	7/16	1A7983-3.5	7/16
3.9	7983-3.9	9/16	PZ7983-3.9	9/16	1A7983-3.9	9/16
4.2	7983-4.2	9/16	PZ7983-4.2	9/16	1A7983-4.2	9/16
4.8	7983-4.8	9/16	PZ7983-4.8	9/16	1A7983-4.8	9/16
5.5	7983-5.5	7/8	PZ7983-5.5	7/8	1A7983-5.5	7/8
6.3	7983-6.3	7/8	PZ7983-6.3	7/8	1A7983-6.3	7/8



DIN 7985 - CHEESE HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
1.6	7985-1.6	7/16	PZ7985-1.6	7/16	1A7985-1.6	7/16
2	7985-2	7/16	PZ7985-2	7/16	1A7985-2	7/16
2.5	7985-2.5	7/16	PZ7985-2.5	7/16	1A7985-2.5	7/16
3	7985-3	7/16	PZ7985-3	7/16	1A7985-3	7/16
3.5	7985-3.5	7/16	PZ7985-3.5	7/16	1A7985-3.5	7/16
4	7985-4	9/16	PZ7985-4	9/16	1A7985-4	9/16
5	7985-5	9/16	PZ7985-5	9/16	1A7985-5	9/16
6	7985-6	7/8	PZ7985-6	7/8	1A7985-6	7/8
8	7985-8	1	PZ7985-8	1	1A7985-8	1
10	7985-10	1-1/4	PZ7985-10	1-1/4	1A7985-10	1-1/4

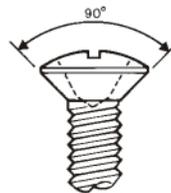


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

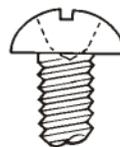
DIN 7995 - 90° OVAL COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2	7995-2	7/16	PZ7995-2	7/16	1A7995-2	7/16
2.5	7995-2.5	7/16	PZ7995-2.5	7/16	1A7995-2.5	7/16
3	7995-3	7/16	PZ7995-3	7/16	1A7995-3	7/16
3.5	7995-3.5	7/16	PZ7995-3.5	7/16	1A7995-3.5	7/16
4	7995-4	9/16	PZ7995-4	9/16	1A7995-4	9/16
5	7995-5	9/16	PZ7995-5	9/16	1A7995-5	9/16
5.5	7995-5.5	7/8	PZ7995-5.5	7/8	1A7995-5.5	7/8
6	7995-6	7/8	PZ7995-6	7/8	1A7995-6	7/8
8	7995-8	1	PZ7995-8	1	1A7995-8	1



DIN 7996 - ROUND HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2.2	7996-2.2	7/16	PZ7996-2.2	7/16	1A7996-2.2	7/16
2.5	7996-2.5	7/16	PZ7996-2.5	7/16	1A7996-2.5	7/16
3	7996-3	7/16	PZ7996-3	7/16	1A7996-3	7/16
3.5	7996-3.5	7/16	PZ7996-3.5	7/16	1A7996-3.5	7/16
4	7996-4	9/16	PZ7996-4	9/16	1A7996-4	9/16
4.5	7996-4.5	9/16	PZ7996-4.5	9/16	1A7996-4.5	9/16
5	7996-5	9/16	PZ7996-5	9/16	1A7996-5	9/16
5.5	7996-5.5	7/8	PZ7996-5.5	7/8	1A7996-5.5	7/8
6	7996-6	7/8	PZ7996-6	7/8	1A7996-6	7/8
7	7996-7	7/8	PZ7996-7	7/8	1A7996-7	7/8
8	7996-8	1	PZ7996-8	1	1A7996-8	1

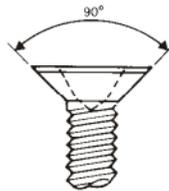


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

DIN 7997 - 90° FLAT COUNTERSUNK HEAD

SCREW SIZE	PHILLIPS		POZIDRIV		1A	
2.5	7997-2.5	7/16	PZ7997-2.5	7/16	1A7997-2.5	7/16
3	7997-3	7/16	PZ7997-3	7/16	1A7997-3	7/16
3.5	7997-3.5	7/16	PZ7997-3.5	7/16	1A7997-3.5	7/16
4	7997-4	7/16	PZ7997-4	7/16	1A7997-4	7/16
4.5	7997-4.5	9/16	PZ7997-4.5	9/16	1A7997-4.5	9/16
5	7997-5	9/16	PZ7997-5	9/16	1A7997-5	9/16
5.5	7997-5.5	7/8	PZ7997-5.5	7/8	1A7997-5.5	7/8
6	7997-6	7/8	PZ7997-6	7/8	1A7997-6	7/8
7	7997-7	7/8	PZ7997-7	7/8	1A7997-7	7/8
8	7997-8	1	PZ7997-8	1	1A7997-8	1

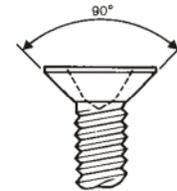


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

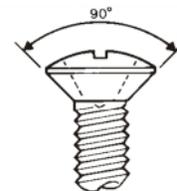
ASME B18.6.7M 1998 IFI 90° FLAT COUNTERSUNK HEAD (MACHINE)

SCREW SIZE	PHILLIPS		1A		PUNCH DIAMETER
M2	3PM2F	1998	1AM2F	1998	7/16
M2.5	3PM2.5F	1998	1AM2.5F	1998	7/16
M3	3PM3F	1998	1AM3F	1998	7/16
M3.5	3PM3.5F	1998	1AM3.5F	1998	9/16
M4	3PM4F	1998	1AM4F	1998	9/16
M5	3PM5F	1998	1AM5F	1998	9/16
M6	3PM6F	1998	1AM6F	1998	9/16
M8	3PM8F	1998	1AM8F	1998	7/8
M10	3PM10F	1998	1AM10F	1998	1 1/4



ASME B18.6.7M 1998 IFI 90° OVAL COUNTERSUNK HEAD (MACHINE)

SCREW SIZE	PHILLIPS		1A		PUNCH DIAMETER
M2	3PM2O	1998	1AM2O	1998	7/16
M2.5	3PM2.5O	1998	1AM2.5O	1998	7/16
M3	3PM3O	1998	1AM3O	1998	7/16
M3.5	3PM3.5O	1998	1AM3.5O	1998	7/16
M4	3PM4O	1998	1AM4O	1998	9/16
M5	3PM5O	1998	1AM5O	1998	9/16
M6	3PM6O	1998	1AM6O	1998	7/8
M8	3PM8O	1998	1AM8O	1998	7/8
M10	3PM10O	1998	1AM10O	1998	1 1/4



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

STRUCK SLOT HAMMERS

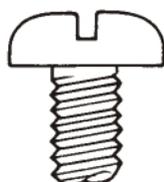
SCREW SIZE	ROUND TYPE	PAN TYPE	TRUSS TYPE	BINDING TYPE
1	1RSS 9/16	1PSS 9/16	1TSS 9/16	1BSS 9/16
2	2RSS 9/16	2PSS 9/16	2TSS 9/16	2BSS 9/16
3	3RSS 9/16	3PSS 9/16	3TSS 9/16	3BSS 9/16
4	4RSS 9/16	4PSS 9/16	4TSS 9/16	4BSS 9/16
5	5RSS 9/16	5PSS 9/16	5TSS 9/16	5BSS 9/16
6	6RSS 9/16	6PSS 9/16	6TSS 9/16	6BSS 9/16
7	7RSS 9/16	7PSS 9/16	7TSS 9/16	7BSS 9/16
8	8RSS 9/16	8PSS 9/16	8TSS 9/16	8BSS 9/16
9	9RSS 9/16	9PSS 9/16	9TSS 9/16	9BSS 9/16
10	10RSS 9/16	10PSS 9/16	10TSS 9/16	10BSS 9/16
12	12RSS 7/8	12PSS 7/8	12TSS 7/8	12BSS 7/8
14	14RSS 7/8	14PSS 7/8	14TSS 7/8	14BSS 7/8
1/4	1/4RSS 7/8	1/4PSS 7/8	1/4TSS 7/8	1/4BSS 1
5/16	5/16RSS 1	5/16PSS 1	5/16TSS 1	5/16BSS 1-1/4
3/8	3/8RSS 1-1/4	3/8PSS 1-1/4	3/8TSS 1-1/4	3/8BSS 1-1/4

Other types of slotted head hammers are available on a special order basis. These include Holt Heads, Coin Slots, Oneway Slots, and others. Special blank sizes are also available upon request.

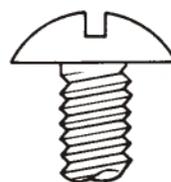
STRUCK SLOT HAMMER STYLE



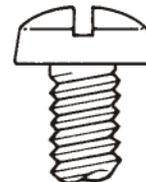
ROUND



PAN



TRUSS



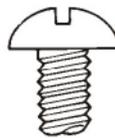
BINDING

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

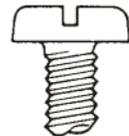
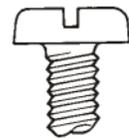
METRIC STRUCK SLOT PUNCHES

SCREW SIZE	DIN 85		DIN 96		DIN 84 MOD.	
1.6	---		96-1.6SS	9/16	84-1.6SS	9/16
2	---		96-2SS	9/16	84-2SS	9/16
2.5	---		96-2.5SS	9/16	84-2.5SS	9/16
3	85-3SS	9/16	96-3SS	9/16	84-3SS	9/16
3.5	85-3.5SS	9/16	96-3.5SS	9/16	84-3.5SS	9/16
4	85-4SS	9/16	96-4SS	9/16	84-4SS	9/16
4.5	---		96-4.5SS	9/16	---	
5	85-5SS	7/8	96-5SS	3/4	84-5SS	3/4
5.5	---		96-5.5SS	7/8	---	
6	85-6SS	7/8	96-6SS	7/8	84-6SS	7/8
7	---		96-7SS	7/8	---	
8	85-8SS	1-1/4	96-8SS	1-1/4	84-8SS	7/8
10	85-10SS	1-1/4	---		84-10SS	1-1/4



FI METRIC STRUCK SLOT HAMMERS

DIN 7971			ASME B18.6.7M 1998 PAN (MACHINE)			
SCREW SIZE	PUNCH NUMBERS	DIAMETER	SCREW SIZE	PUNCH NUMBERS	DIAMETER	
2, 2.2	7971-2.2SS	9/16	M2	M2PSS 1998	9/16	
2.5	---		M2.5	M2.5PSS 1998	9/16	
2.9, 3	7971-2.9SS	9/16	M3	M3PSS 1998	9/16	
3.5	7971-3.5SS	9/16	M3.5	M3.5PSS 1998	9/16	
4, 4.2	7971-4.2SS	3/4	M4	M4PSS 1998	9/16	
4.8, 5	7971-4.8SS	3/4	M5	M5PSS 1998	7/8	
6	7971-6SS	7/8	M6	M6PSS 1998	7/8	
8	---		M8	M8PSS 1998	1	
10	---		M10	M10PSS 1998	1 1/4	



WARNING

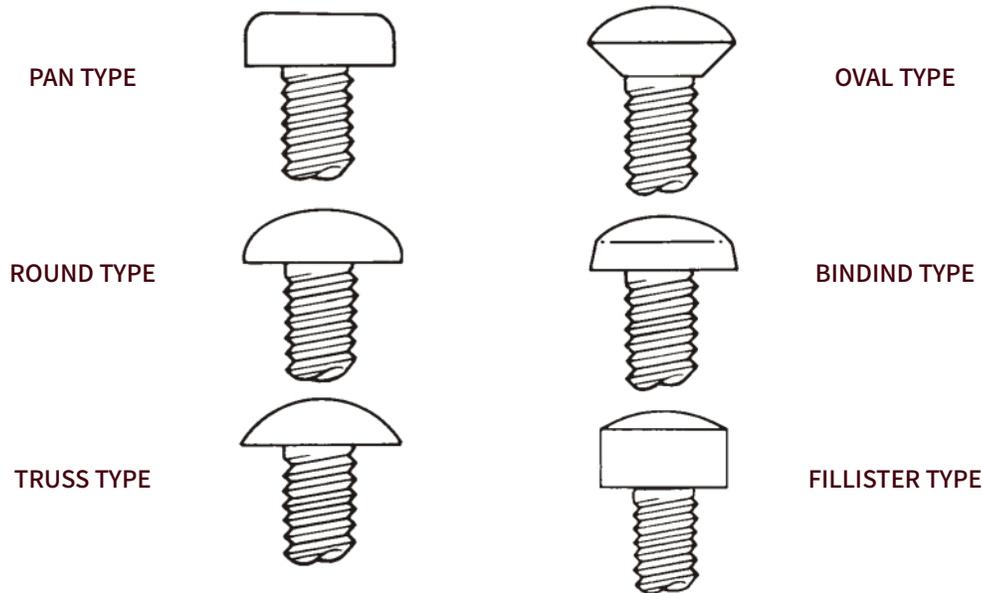
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

CONVENTIONAL PUNCHES

SCREW SIZE	FILLISTER TYPE	ROUND TYPE	PAN TYPE	TRUSS TYPE	BINDING TYPE	OVAL TYPE
1	1FILC 9/16	1RC 9/16	1PC 9/16	1TC 9/16	1BC 9/16	1OC 9/16
2	2FILC 9/16	2RC 9/16	2PC 9/16	2TC 9/16	2BC 9/16	2OC 9/16
3	3FILC 9/16	3RC 9/16	3PC 9/16	3TC 9/16	3BC 9/16	3OC 9/16
4	4FILC 9/16	4RC 9/16	4PC 9/16	4TC 9/16	4BC 9/16	4OC 9/16
5	5FILC 9/16	5RC 9/16	5PC 9/16	5TC 9/16	5BC 9/16	5OC 9/16
6	6FILC 9/16	6RC 9/16	6PC 9/16	6TC 9/16	6BC 9/16	6OC 9/16
7	7FILC 9/16	7RC 9/16	7PC 9/16	7TC 9/16	7BC 9/16	7OC 9/16
8	8FILC 9/16	8RC 9/16	8PC 9/16	8TC 9/16	8BC 9/16	8OC 9/16
9	9FILC 9/16	9RC 9/16	9PC 9/16	9TC 9/16	9BC 9/16	9OC 9/16
10	10FILC 9/16	10RC 9/16	10PC 9/16	10TC 9/16	10BC 9/16	10OC 9/16
12	12FILC 7/8	12RC 7/8	12PC 7/8	12TC 7/8	12BC 7/8	12OC 7/8
14	14FILC 7/8	14RC 7/8	14PC 7/8	14TC 7/8	14BC 7/8	14OC 7/8
1/4	1/4FILC 7/8	1/4RC 7/8	1/4PC 7/8	1/4TC 7/8	1/4BC 1	1/4OC 7/8
5/16	5/16FILC 1	5/16RC 1	5/16PC 1	5/16TC 1	5/16BC 1	5/16OC 1
3/8	3/8FILC 1-1/4	3/8RC 1-1/4	3/8PC 1-1/4	3/8TC 1-1/4	3/8BC 1-1/4	3/8OC 1-1/4

Made to order specials to meet customer specifications are available upon request.

CONVENTIONAL HAMMER STYLE

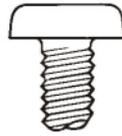
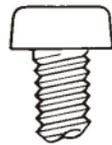


WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

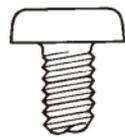
METRIC CONVENTIONAL PUNCHES

SCREW SIZE	DIN 84		DIN 85		DIN 96	
1.6	84-1.6C	9/16	---	---	96-1.6C	9/16
2	84-2C	9/16	---	---	96-2C	9/16
2.5	84-2.5C	9/16	85-2.5C	9/16	96-2.5C	9/16
3	84-3C	9/16	85-3C	9/16	96-3C	9/16
3.5	84-3.5C	9/16	85-3.5C	9/16	96-3.5C	9/16
4	84-4C	9/16	85-4C	9/16	96-4C	9/16
4.5	---	---	---	---	96-4.5C	9/16
5	84-5C	7/8	85-5C	7/8	96-5C	3/4
5.5	---	---	---	---	96-5.5C	7/8
6	84-6C	7/8	85-6C	7/8	96-6C	7/8
7	---	---	---	---	96-7C	7/8
8	84-8C	7/8	85-8C	1-1/4	96-8C	1-1/4
10	84-10C	1-1/4	85-10C	1-1/4	---	---



IFI METRIC CONVENTIONAL HAMMERS ASME B18.6.7M 1998

SCREW SIZE	DIN 7971 PUNCH NUMBERS	SCREW SIZE	PAN (MACHINE)		PUNCH NUMBERS OVAL (MACHINE)		PUNCH DIAMETER
2, 2.2	7971-2.2C	M2	M2PC	1998	M2OC	1998	9/16
2.5	---	M2.5	M2.5PC	1998	M2.5OC	1998	9/16
2.9, 3	7971-2.9C	M3	M3PC	1998	M3OC	1998	9/16
3.5	7971-3.5C	M3.5	M3.5PC	1998	M3.5OC	1998	9/16
4, 4.2	7971-4.2C	M4	M4PC	1998	M4OC	1998	9/16
4.8, 5	7971-4.8C	M5	M5PC	1998	M5OC	1998	7/8
6.3	7971-6.3C	M6	M6PC	1998	M6OC	1998	7/8
8	---	M8	M8PC	1998	M8OC	1998	1
10	---	M10	M10PC	1998	M10OC	1998	1 1/4



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

MARKINGS ON SQUARE SOCKET PUNCHES

ORDER PUNCHES PER MARKING

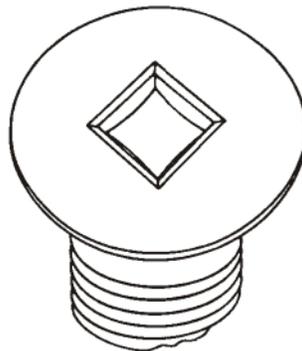
1ST NUMBER HEAD SIZE	1ST LETTER HEAD STYLE	2ND NUMBER RECESS SIZE	3RD NUMBER PUNCH DIAMETER
2 THRU 3/8	*F = FLAT	00	7 = 7/16
	R = ROUND	0 OR 0S	9 = 9/16
	O = OVAL	1 OR 1S	12 = 3/4
	P = PAN	2 OR 2S	14 = 7/8
	T = TRUSS	3 OR 3S	16 = 1"
	PH = FILLISTER	4 OR 4S	20 = 1-1/4"
	W = WASHER		

EXAMPLES:

- #1 F29 = FLAT HEAD, #2 RECESS ON 9/16 BLANK
- #2 8P29 = #8 PAN HEAD, #2 RECESS ON 9/16 BLANK
- #3 10T214 = #10 TRUSS HEAD, #2 RECESS ON 7/8 BLANK

NOTE: "S" added to recess number indicates short.

* Flat heads only will have no head size markings.



WARNING

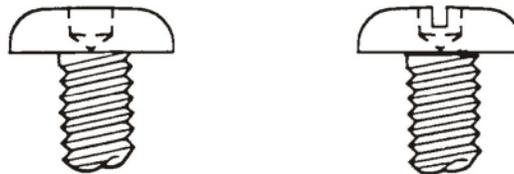
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

SQUARE SOCKET TYPE

SCREW SIZE	FLAT HEAD	OVAL HEAD	ROUND HEAD	PAN HEAD	TRUSS HEAD
2	F007	20007	2R007	2P007	2T007
3	F07	3007	3R07	3P07	3T07
4	F07	4007	4R07	4P07	4T07
5	F1S7	5017	5R17	5P17	5T1S7
6	F1S7	6017	6R17	6P17	6T1S7
7	F17	7017	7R19	7P19	7T1S9
8	F2S9	8029	8R29	8P29	8T2S9
9	F29	9029	9R29	9P29	9T2S9
10	F29	10029	10R29	10P29	10T2S9
12	F314	120314	12R314	12P314	12T3S14
14	F314	140314	14R314	14P314	14T3S14
1/4	F314	1/40314	1/4R314	1/4P314	1/4T3S14
5/16	F416	5/160416	5/16R416	5/16P416	5/16T416
3/8	F416	3/80416	3/8R416	3/8P416	3/8T416

Use Oval Type for Fillister Screws.
Use Round Type for Washer Type Screws.

Add "COMB" to the part number when ordering square and slot combinations.



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

QUADREX® PUNCHES

SCREW SIZE	FLAT (RECOMMENDED)	OVAL	PAN	PAN PLUS (COMBINATION)	TRUSS	TRUSS PLUS (COMBINATION)	FILLISTER	RND. WASHER *ROUND
4	QF-02	QO4-02	QP4-02	QPU4-02	QT4-01	QTU4-01	QFL4-02	QRW4-02
5	QF-11	QO5-13	QP5-12	QPU5-12	QT5-12	QTU5-12	QFL5-03	QRW5-13
6	—	—	—	—	—	—	—	QRW6-13
6	QF-12	QO6-14	QP6-13	QPU6-13	QT6-13	QTU6-13	QFL6-12	QRW6-14
6QX	QF-21	QO6-23	QP6-24	QPU6-24	QT6-23	QTU6-23	—	QRW6-24
7	QF-13	QO7-25	QP7-14	QPU7-14	QT7-14	QTU7-14	QFL7-13	QRW7-25
7QX	QF-22	—	QP7-24	QPU7-24	QT7-24	QTU7-24	—	—
8	QF-23	QO8-26	QP8-24	QPU8-24	QT8-24	QTU8-24	QFL8-14	QRW8-24
8QX	—	—	QP8-26	QPU8-26	QT8-26	QTU8-26	—	QRW8-26
9	QF-24	QO9-26	—	—	QT9-25	—	—	—
10	QF-26	QO10-27	QP10-26	QPU10-26	QT10-26	QTU10-26	QFL10-25	QRW10-27
12	QF-32	QO12-33	QP12-33	QPU12-33	QT12-33	QTU12-33	QFL12-32	QRW12-33
1/4	QF-34	QO1/4-34	QP1/4-34	QPU1/4-34	QT1/4-34	QTU1/4-34	QFL1/4-33	QRW1/4-34
5/16	QF-42	QO5/16-43	QP5/16-43	QPU5/16-43	QT5/16-43	QTU5/16-43	QFL5/16-34	QRW5/16-36
3/8	QF-44	QO3/8-44	QP3/8-44	QPU3/8-44	QT3/8-44	QTU3/8-44	QFL3/8-43	—

**NOTE: *USE ROUND WASHER HEAD PUNCHES FOR ROUND HEAD SCREWS,
QUADREX® IS A REGISTERED TRADEMARK OF ISOTECH PARTNERS,
QUADREX® PUNCHES WILL ONLY BE SOLD TO QUADREX® LICENSEES.**

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

POZIDRIV® PUNCHES

For every PHILLIPS® Recess Punch there is a comparable POZIDRIV® Recess Punch. To determine the appropriate punch number, please use the PHILLIPS® Recess Punch standards tables or the description section. When the number of the PHILLIPS® Recess Punch is located, add a “Z” after the “P” to call out the punch for the POZIDRIV® Recess configuration.

Example: PHILLIPS® 3P20-23
POZIDRIV® 3PZ20 - 23

POZIDRIV® Punches may be sold only to fastener producers that are licensed to make and sell POZIDRIV® Recess fasteners. For information regarding the licensees of fasteners or for a license, contact.

Phillips Screw Company
One Van de Graaff Drive
Burlington, MA 01803

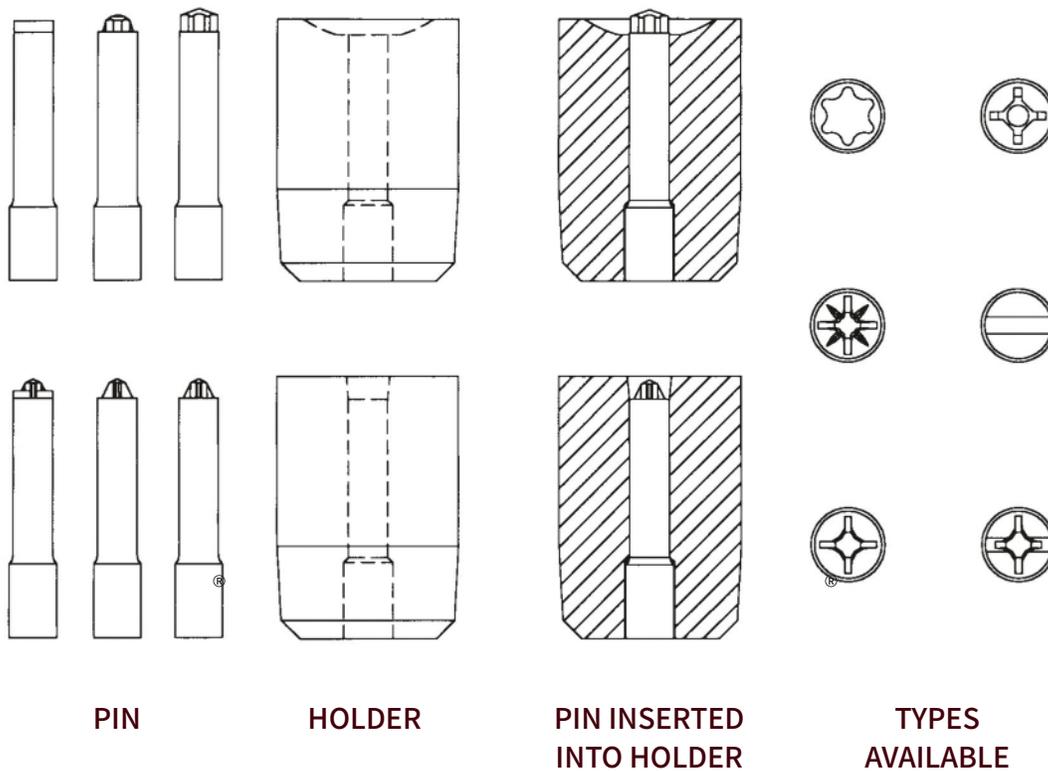
POZIDRIV® and PHILLIPS® are registered trademarks of the Phillips Screw Company.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TWO - PIECE PUNCHES

Pins and Holders used in two-piece punch applications are available on request. The pins are designed specifically to customer requirements and come in a variety of recess types. Two - piece punches are typically used for applications where solid-type punches are impractical. Usually, customer dimensional criteria are request to develop custom made pins to suit your needs.



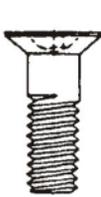
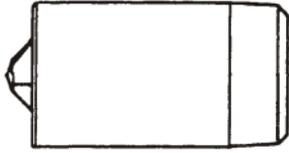
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORQ-SET® RECESS PUNCHES

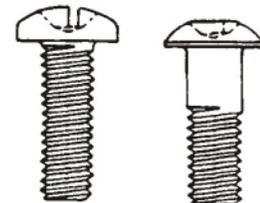
Also available in ACR® Torq-Set®

TORQ-SET® is a registered trademark of the Phillips® Screw Company.
 ACR® is a registered trademark of the Phillips® Screw Company.



SCREW SIZE	100° FLAT HEAD TORQ-SET®	82° FLAT & FLAT TORQ-SET®
0	3K0-1-3M	3K0-1-82
1	3K1-1-3M	3K1-1-82
2	3K2-1-3M	3K2-1-82
3	3K3-1-3M	3K3-1-82
4	3K4-1-3M	3K4-1-82
5	3K5-1-3M	3K5-1-82
6	3K6-1-3M	3K6-1-82
8	3K8-1-3M	3K8-1-82
10	3K10-1-3M	3K10-1-82
1/4	3K25-1-3M	3K25-1-82
5/16	3K31-1-3M	3K31-1-82
3/8	3K37-1-3M	3K37-1-82
7/16	3K43-1-3M	3K43-1-82
1/2	3K50-1-3M	3K50-1-82

SCREW SIZE	PAN HEAD TORQ-SET™	BUTTON HEAD TORQ-SET™
0	3K0-4-4M	—
1	3K1-4-4M	—
2	3K2-4-4M	3K2-6-1
3	3K3-4-4M	—
4	3K4-4-4M	3K4-6-1
5	3K5-4-4M	—
6	3K6-4-4M	3K6-6-1
8	3K8-4-4M	3K8-6-1
10	3K10-4-4M	3K10-6-1
1/4	3K25-4-4M	3K25-6-1
5/16	3K31-4-4M	3K31-6-1
3/8	3K37-4-4M	3K37-6-1
7/16	3K43-4-4M	—
1/2	3K50-4-4M	3K50-6-1



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

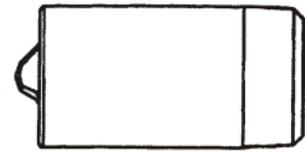
TRI-WING® RECESS PUNCHES

ACR® TRI-WING® also available

TORQ-SET® is a registered trademark of the Phillips® Screw Company.

ACR® is a registered trademark of the Phillips® Screw Company.

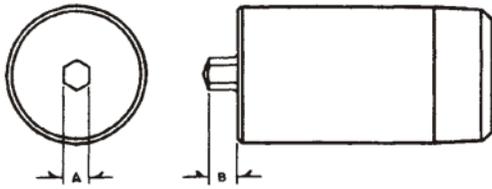
SCREW SIZE	FLAT HEAD TRI-WING®	100° OVAL HEAD TRI-WING®
0	TW00-1-1	—
2	TW02-1-1	—
4	TW04-1-1	TW04-3-1
6	TW06-1-1	TW06-3-1
8	TW08-1-1	TW08-3-1
10	TW10-1-1	TW10-3-1
1/4	TW25-1-1	TW25-3-1
5/16	TW31-1-1	TW31-3-1
3/8	TW37-1-1	TW37-3-1
7/16	TW43-1-1	—
1/2	TW50-1-1	—



SCREW SIZE	MODIFIED PAN HEAD TRI-WING®	TRIMMED HEX HEAD TRI-WING®
0	TW00-11-1	—
2	TW02-11-1	—
4	TW04-11-1	TW04-10-1
6	TW06-11-1	TW06-10-1
8	TW08-11-1	TW08-10-1
10	TW10-11-1	TW10-10-1
1/4	TW25-12-1	—
5/16	TW31-12-1	—
3/8	TW37-12-1	—
7/16	TW43-12-1	—
1/2	TW50-12-1	—

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.



SOLID HEX RECESS PUNCHES

AMERICAN

SCREW SIZE	82° FLAT	A	B	BUTTON HEAD	A	B	SOCKET CAP	A	B
2	9PHRP-02L	.0505	.043	9PHRP-02U	.0510	.033			
3	9PHRP-03L	.0630	.049	9PHRP-03U	.0630	.040			
4	9PHRP-04L	.0630	.060	9PHRP-04U	.0630	.040	9PHRP-04C	.0945	.056
5	9PHRP-05L	.0786	.066	9PHRP-05U	.0786	.050	9PHRP-05C	.0945	.063
6	9PHRP-06L	.0786	.071	9PHRP-06U	.0786	.050	9PHRP-06C	.1105	.070
8	9PHRP-08L	.0945	.086	9PHRP-08U	.0945	.060	9PHRP-08C	.1424	.084
10	9PHRP-10L	.1260	.097	9PHRP-10U	.1260	.080	9PHRP-10C	.1577	.100
1/4	14PHRP-25L	.1577	.121	*	.1580	.095	14PHRP-25C	.1890	.140
5/16	16PHRP-31L	.1890	.150	*	.1890	.115	16PHRP-31C	.2525	.170
3/8	16PHRP-37L	.2200	.175	*	.2205	.135	16PHRP-37C	.3150	.200
7/16	20PHRP-43L	.2515	.175						
1/2	20PHRP-50L	.3145	.190						
5/8	20PHRP-62L	.3775	.235						
3/4	24PHRP-75L	.5035	.235						

AVAILABLE IN PIN SLOT ON REQUEST "ONLY AVAILABLE AS TWO-PIECE PUNCHES"



METRIC

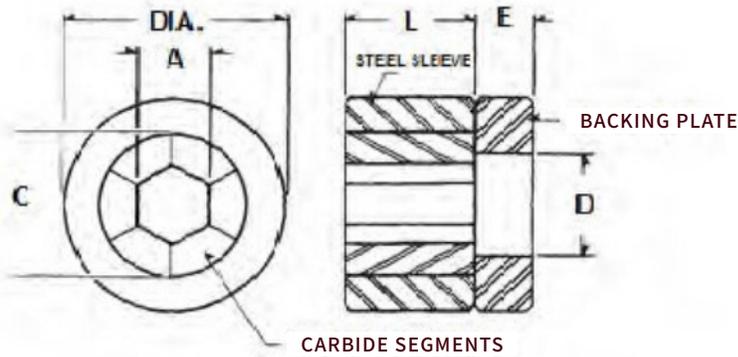
SIZE	DIN 912	A (mm)	B (mm)	DIN 7991	A (mm)	B (mm)	DIN 7984	A (mm)	B (mm)
M3	9AHRP-912-3	2.56	1.65	9AHRP-7991-3	2.05	1.18			
M4	9AHRP-912-4	3.06	2.34	9AHRP-7991-4	2.57	1.75	9AHRP-7984-4	2.56	2.36
M5	9AHRP-912-5	4.08	2.84	9AHRP-7991-5	3.06	2.29	9AHRP-7984-5	3.06	2.77
M6	14AHRP-912-6	5.12	3.35	14AHRP-7991-6	4.07	2.49	14AHRP-7984-6	4.09	3.06
M8	14AHRP-912-8	6.12	4.80	16AHRP-7991-8	5.11	3.51	14AHRP-7984-8	5.11	4.27
M10	16AHRP-912-10	8.16	5.56	20AHRP-7991-10	6.11	4.39			
M12	20AHRP-912-12	10.16	6.65	20AHRP-7991-12	8.14	4.55			



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

CARBIDE SEGMENTED HEXAGON WASHER HEAD INSERTS



SLEEVED ASSEMBLY
- segments assembled in Retaining Sleeve -
ready for pressing into casing.

FREE FLOW TYPE

HEX SIZE	PUNCH NO.	A	B	L	C	BACKING PLATE NO.	D	E
3/16	CSHI-3/16	.183	.625	.313	.500	BP1000-16	5/16	.313
1/4	CSHI-1/4	.246	.742	.438	.500	BP1000-4	3/8	.313
5/16	CSHI-5/16	.307	.742	.438	.560	BP1000-17	7/16	.313
3/8	CSHI-3/8	.369	.993	.438	.718	BP1000-6	1/2	.563
7/16	CSHI-7/16	.430	.993	.500	.812	BP1000-8	1/2	.500
1/2	CSHI-1/2	.493	1.244	.500	.950	BP1000-12	5/8	.500
9/16	CSHI-9/16	.554	1.244	.500	1.000	BP1000-12	5/8	.500
5/8	CSHI-5/8	.612	1.244	.500	1.000	BP1000-20	3/4	.500
3/4	CSHI-3/4	.737	1.495	.750	1.250	BP1000-23	1	.250

METRIC FREE FLOW TYPE

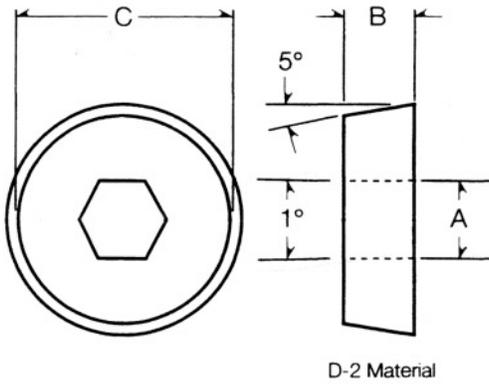
HEX SIZE (mm)	PUNCH NO.	A	B	L	C	BACKING PLATE NO.	D	E
5	CSHI-5MM	.193	.625	.313	.500	BP1000-16	5/16	.313
5.5	CSHI-5.5MM	.213	.742	.438	.500	BP1000-2	5/16	.313
6	CSHI-6MM	.232	.742	.438	.500	BP1000-2	5/16	.313
7	CSHI-7MM	.270	.742	.438	.560	BP1000-4	3/8	.313
8	CSHI-8MM	.310	.742	.438	.560	BP1000-4	3/8	.313
10	CSHI-10MM	.388	.993	.438	.718	BP1000-6	1/2	.563
12	CSHI-12MM	.466	.993	.500	.812	BP1000-19	5/8	.500
13	CSHI-13MM	.504	1.244	.500	.950	BP1000-12	5/8	.500
15	CSHI-15MM	.583	1.244	.500	1.000	BP1000-20	3/4	.500
17	CSHI-17MM	.662	1.244	.625	1.125	BP1000-22	3/4	.500
18	CSHI-18MM	.703	1.495	.750	1.250	---	---	---

FLANGE and CONFINED washer head inserts are available upon request.
COMPLETE CASED ASSEMBLIES available to your specifications.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

HEXAGON WAFERS



IFI STANDARD

SCREW SIZE	CODE	A	B	C
2	HW-20	.120	.040	.445
3	HW-30	.182	.044	.445
4	HW-40	.182	.049	.445
5	HW-50	.182	.058	.445
6	HW-60	.245	.067	.445
6	HW-60-1	.245	.080	.445
6	HW-60-2	.245	.067	.671
6	HW-60-3	.245	.080	.671
7	HW-70	.245	.080	.671
8	HW-80	.245	.096	.671
10	HW-100	.306	.106	.671
12	HW-120	.306	.139	.671
14 & 1/4	HW-140	.368	.172	.671
14 & 1/4	HW-140-1	.430	.172	.671
14 & 1/4	HW-140-2	.430	.172	.875
14 & 1/4	HW-140-3	.368	.172	.875
5/16	HW-5160	.490	.207	.875
3/8	HW-380	.554	.270	.875

IFI METRIC STANDARD

NOMINAL HEX(mm)	CODE	A(mm)	A	B	C
3.2	MHW-3.2	3.05	.120	.040	.445
4	MHW-4	3.84	.151	.044	.445
5	MHW-5	4.85	.191	.050	.445
5.5	MHW-5.5	5.36	.211	.080	.445
7	MHW-7	6.83	.269	.096	.671
8	MHW-8	7.82	.308	.105	.671
8	MHW-8-1	7.82	.308	.139	.671
10	MHW-10	9.83	.387	.172	.875
13	MHW-13	12.78	.503	.208	.875

DIN 558

NOMINAL SIZE(mm)	CODE	A	B	C
M4	HW-558-4	.267	.100	.875
M5	HW-558-5	.303	.128	.875
M6	HW-558-6	.383	.147	.875
M8	HW-558-8	.502	.206	.875
M10	HW-558-10	.658	.265	1.125
M12	HW-558-12	.749	.305	1.250

WAFERS CAN BE MADE ON SPECIAL ORDER TO YOUR SPECIFICATIONS

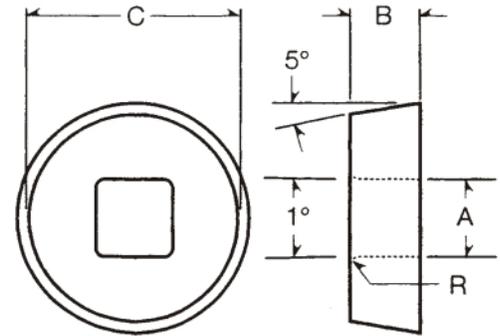
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

SQUARE & FILLISTER WAFERS

CARRIAGE BOLT

SCREW SIZE	CODE	A	B	C
10	SW-100	.190	.115	.671
1/4	SW-140	.249	.146	.671
5/16	SW-5160	.310	.177	.875
3/8	SW-380	.380	.209	.875



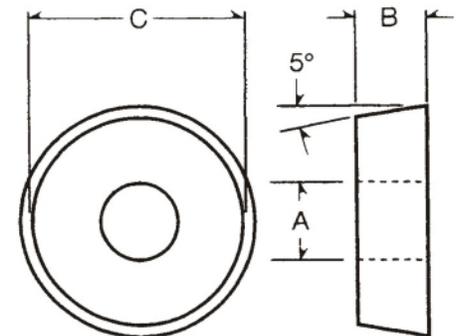
D-2 Material

DIN 603

NOMINAL SIZE(mm)	CODE	A	B	C
M5	SW-603-5	.193	.138	.875
M6	SW-603-6	.232	.158	.875
M8	SW-603-8	.310	.197	.875
M10	SW-603-10	.380	.236	1.125
M12	SW-603-12	.457	.135	1.250

FILLISTER

SCREW SIZE	CODE	A	B	C
1	FW-10	.111	.042	.445
2	FW-20	.132	.048	.445
3	FW-30	.153	.057	.445
4	FW-40	.174	.065	.445
4	FW-40-1	.174	.065	.671
5	FW-50	.196	.074	.445
5	FW-50-1	.196	.074	.671
6	FW-60	.217	.082	.445
6	FW-60-1	.217	.082	.671
7	FW-70	.238	.090	.671
8	FW-80	.260	.098	.671
10	FW-100	.302	.114	.671
10	FW-100-1	.302	.114	.875
12	FW-120	.345	.128	.671
1/4	FW-140	.400	.149	.671
1/4	FW-140-1	.400	.149	.875
5/16	FW-5160	.504	.186	.875
3/8	FW-380	.606	.227	.875



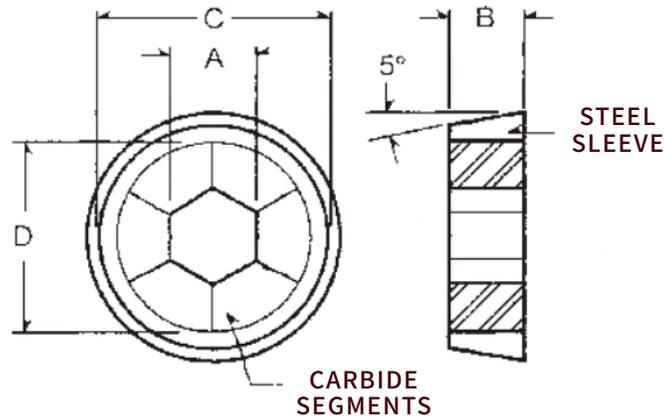
D-2 Material

WAFERS CAN BE MADE ON SPECIAL ORDER TO YOUR SPECIFICATIONS

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

CARBIDE SEGMENTED HEXAGON WAFERS



AMERICAN STAND-

SCREW SIZE	CODE	A	B	C	D
8	CSHW-80	.245	.096	.875	.500
10	CSHW-100	.306	.106	.875	.500
12	CSHW-120	.306	.139	.875	.500
14 & 1/4	CSHW-140	.368	.172	1.000	.625
14 & 1/4	CSHW-140-1	.430	.172	1.000	.625
5/16	CSHW-5160	.490	.207	1.125	.750
3/8	CSHW-380	.554	.270	1.125	.750

METRIC STANDARD

NOMINAL HEX(mm)	CODE	A(mm)	A	B	C	D
7	CSHW-7MM	6.83	.269	.096	.875	.500
8	CSHW-8MM	7.82	.308	.105	.875	.500
8	CSHW-8-1MM	7.82	.308	.139	.875	.500
10	CSHW-10MM	9.83	.387	.172	1.000	.625
13	CSHW-13MM	12.78	.503	.208	1.125	.750

WARNING

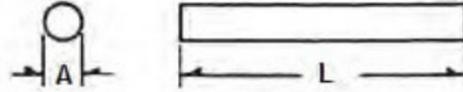
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

KNOCKOUT PINS

STYLE 1

KNOCKOUT PIN WITHOUT HEAD
M2 HIGH SPEED MATERIAL
R/C 62 - 64

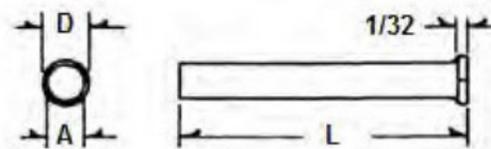
See page 75



STYLE 2

KNOCKOUT PIN WITH HEAD
M2 HIGH SPEED MATERIAL
R/C 62 - 64
 $D = A + .010-.025$

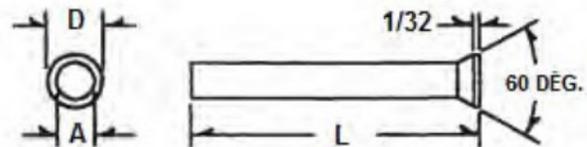
See page 75



STYLE 3

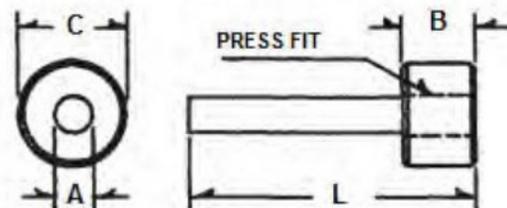
KNOCKOUT PIN WITH 60° HEAD
M2 HIGH SPEED MATERIAL
R/C 62 - 64
“D: VARIES WITH “A” AS FOLLOWS:

A	D
.059-.156	A + .020 MIN.
.1565-.236	A + .025 MIN.
.2365-.453	A + .040 MIN.
.4535 UP	A + .060 MIN.



STYLE 5

KNOCKOUT PIN WITH BUTTON ASSEMBLY
PIN: M2 HIGH SPEED MATERIAL - R/C 62 - 64
BUTTON: 01 MATERIAL - H/T AS SPECIFIED



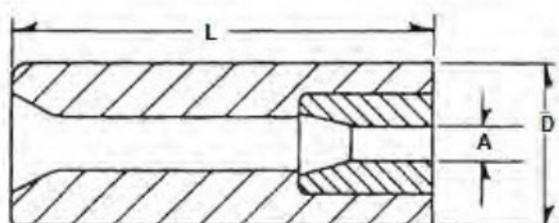
TO ORDER: SPECIFY STYLE, DIAMETER AND LENGTH.

WARNING

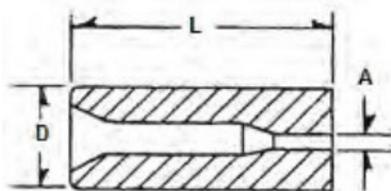
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

CARBIDE QUILLS

**CARBIDE
INSERTED**



**SOLID
CARBIDE**



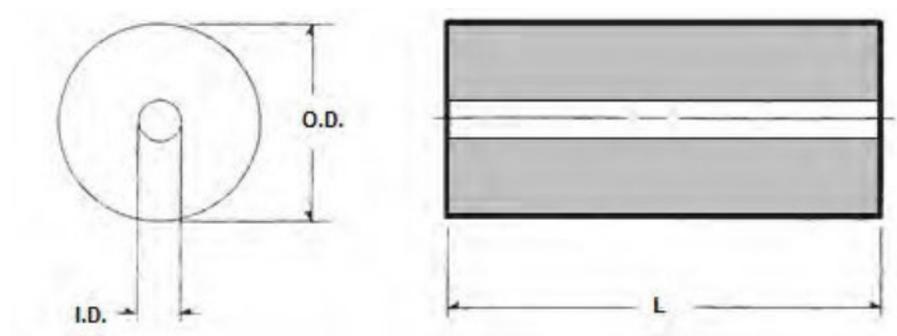
MACHINE	CODE NO.	D	L
1/8 National H.S.	Q-125-3C	.437*	25/32
1/8 National DSSD	Q-125-1C	.437*	1-3/16
1/8 Hartford	Q-125-1C	.437*	1-3/16
1/8 Headmaster	Q-125-C	.562	1-3/8
0 Waterbury Toggle	Q-125-2C	.562	1-1/8
25 National H.S. DSSD	Q-187-3C	.499*	1-5/32
10 Wat. Tub. Riv. Hdr.	Q-187-5C	.499*	1-3/8
3/16 National H.S. DSSD	Q-187-3C	.499*	1-5/32
1 Waterbury Toggle	Q-187-1C	.687	1-5/8
3/16 HiPro	Q-187-1C	.687	1-5/8
3/16 Headmaster	Q-187-1C	.687	1-5/8
SP 01 Sacma	Q-187-1C	.687	1-5/8
3/16 Waterbury	Q-187-2C	.874	1-3/8
SP 11 Sacma	Q-250-5C	.874	1-5/8
3/16 Hartford	Q-250-C	.874	2
1/4 National DSSD	Q-250-C	.874	2
1/4 Sacma	Q-250-C	.874	2
45 National L.S. DSSD	Q-250-C	.874	2
H20A Nakashimada	Q-250-C	.874	2
1/4 National H.S. DSSD	Q-250-3C	.749	1-1/2
1/4 Waterbury	Q-250-2C	.999	1-3/4
2 Waterbury Toggle	Q-312-C	.874	2-1/2
5/16 National DSSD	Q-312-C	.874	2-1/2
5/16 HiPro	Q-312-3C	.999	2-1/2
SP 21 Sacma	Q-312-3C	.999	2-1/2
5/16 National H.S. DSSD	Q-312-5C	1.124	1-7/8
56 National L.S. DSSD	Q-312-6C	1.124	2-1/2
5/16 Waterbury	Q-312-4C	1.249	2-1/4
5/16 Hartford	Q-312-2C	1.249	2-1/2
3/8 Waterbury	Q-375-1C	1.499	2-1/2
68 National L.S. DSSD	Q-375-2C	1.374	3
810 National L.S. DSSD	Q-500-C	1.624	3-1/4
525 Raycarl	Q-525RC-C	1.060	1-5/16
45 Raycarl	Q-45RC-C	.998	2-1/4
575 Raycarl	Q-575RC-C	1.624	1-15/16
100 Raycarl	Q-100RC-C	1.498	3-1/2

* These sizes furnished in solid carbide.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

SEMI - FINISHED CARBIDE INSERTS



INSERTS MADE TO ORDER

Standard Tolerances

O.D.- Outside Diameters are accurately ground to specified sizes plus .0005" (.013mm), minus .0000 tolerance

I.D.- Inner Diameter is burned on a wire EDM, then lapped and honed **straight** and round with a minus .003" (.08mm) to minus .005" (.13mm) tolerance

L- Ends are ground square with O.D. to a plus .010" (.25mm) to a plus .020" (.51mm) tolerance.

T.I.R. - Less than .001" (.025mm)

Sizes to 3.250" (38.1mm) O.D. and 3.000* (76.2mm) Long

Other tolerances are available up request. All grades of carbide are available.

OUR STRAIGHT HOLES MEAN. . .

... BETTER QUALITY FINISHED DIES

... EXTRUSION DIES THAT ARE CONCENTRIC

... MULTIPLE INSERTS WILL BE CONCENTRIC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

INDENTED HEX PINS AND PUNCHES

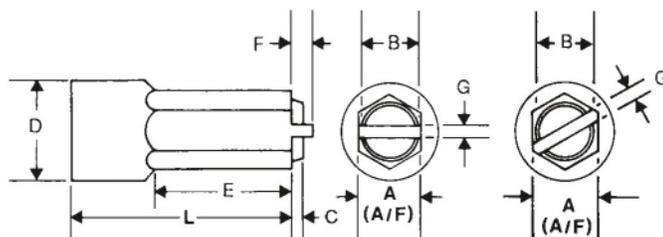
INDENTED HEX PINS AND PUNCHES

Indented hexagon pin and punches are available in many sizes and varieties.
 They can be made to meet your individual specifications.
 Hex pins are available in plain, struck slot, POZIDRIV® and Phillips® type styles.
 Pricing is done on an individual basis.

INDENTED HEXAGON SLOTTED PINS

SCREW SIZE	HEX SIZE A/F	PIN NUMBER	A/F	B	C	D	E	F	G	L	OPTIONAL L
			+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000	+0.002 -0.000	+0.002 -0.000	WTP STD	
4	3/16	4IHPSS 520	0.179	0.135	0.012	0.311	0.500	0.031	0.034	1.250	2.500
6	1/4	6IHPSS 520	0.242	0.210	0.015	0.311	0.562	0.040	0.043	1.250	2.500
7	1/4	7IHPSS 520	0.242	0.210	0.016	0.311	0.562	0.053	0.043	1.250	2.500
8	1/4	8IHPSS 520	0.242	0.210	0.018	0.311	0.562	0.060	0.049	1.250	2.500
10	5/16	10IHPSS 620	0.302	0.270	0.020	0.374	0.625	0.068	0.054	1.250	2.500
12	5/16	12IHPSS 620	0.302	0.270	0.020	0.374	0.625	0.087	0.059	1.250	2.500
1/4	3/8	1/4IHPSS 820	0.364	0.320	0.033	0.499	0.625	0.088	0.068	1.250	2.500
1/4	7/16	1/4(7)IHPSS 820	0.425	0.380	0.038	0.499	0.625	0.090	0.068	1.250	2.562

Add "AC" to the PIN number when ordering PINS with the slot across the corners.
 ** IN STOCK ITEM



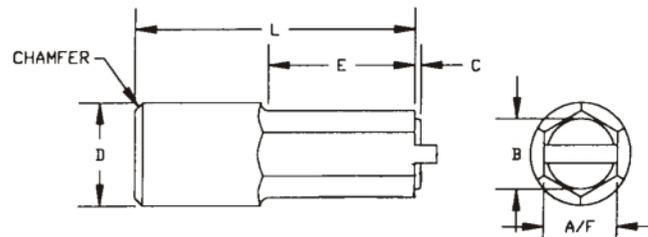
NOTE:
 Please specify length of pin when ordering.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

METRIC INDENTED STRUCK SLOT (ACROSS FLATS) HEXAGON PINS

HEXAGON SIZE A/F M/M	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L	SLOT WIDTH +/- .001	SLOT DEPTH +/- .001
		+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000	WTP STD			
5	M5IHPSS 520	0.189	0.156	0.019	0.311	0.562	1.250	2.500	0.031	0.043
5.5	M5.5IHPSS 520	0.209	0.173	0.019	0.311	0.562	1.250	2.500	0.039	0.049
6	M6IHPSS 520	0.228	0.189	0.019	0.311	0.562	1.250	2.500	0.044	0.054
7	M7IHPSS 620	0.265	0.220	0.022	0.374	0.562	1.250	2.500	0.047	0.059
7.3	M7.3IHPSS 520	0.265	0.220	0.022	0.311	0.562	1.250	2.500	0.047	0.059
8	M8IHPSS 620	0.305	0.252	0.026	0.374	0.562	1.250	2.500	0.063	0.074
10	M10IHPSS 820	0.383	0.321	0.039	0.499	0.625	1.250	2.500	0.078	0.089
11	M11IHPSS 820	0.422	0.353	0.039	0.499	0.625	1.250	2.562	0.089	0.099
12	M12IHPSS 1020	0.461	0.387	0.047	0.624	0.687	1.250	2.562	0.098	0.108
13	M13IHPSS 1020	0.499	0.419	0.047	0.624	0.687	1.250	2.562	0.098	0.108
15	M15IHPSS 1220	0.578	0.486	0.061	0.749	0.687	1.250	2.562	0.113	0.123



NOTE:

Please specify length of pin when ordering.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

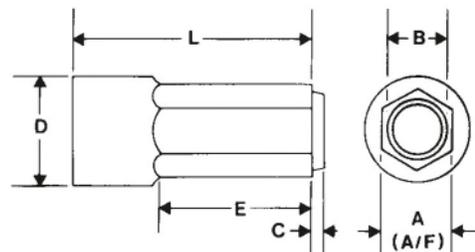
PLAN INDENTED HEX PINS

STANDARD INDENTED HEXAGON PINS

SCREW SIZE	HEX SIZE A/F	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L
			+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000	WTP STD	
2-3	1/8	2IHP 520	0.119	0.095	0.014	0.311	0.500	1.250	2.500
4-5	3/16	4IHP 520	0.179	0.150	0.020	0.311	0.500	1.250	2.500
6-8	1/4	6IHP 520	0.242	0.200	0.020	0.311	0.562	1.250	2.500
10-12	5/16	10IHP 620	0.302	0.265	0.030	0.374	0.562	1.250	2.500
1/4	3/8	1/4IHP 820	0.364	0.315	0.037	0.499	0.625	1.250	2.500
1/4	7/16	1/4(7)IHP 820	0.425	0.375	0.040	0.499	0.625	1.250	2.562
5/16	1/2	5/16IHP 1024	0.487	0.445	0.055	0.624	0.687	1.500	2.562
3/8	9/16	3/8IHP 1024	0.548	0.495	0.055	0.624	0.687	1.500	2.562

** IN STOCK ITEM

HEXAGON SIZE A/F	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L
		+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000	WTP STD	
4	M4IHP 520	0.150	0.123	0.016	0.311	0.500	1.250	2.500
5	M5IHP 520	0.189	0.156	0.019	0.311	0.562	1.250	2.500
5.5	M5.5IHP 520	0.209	0.173	0.019	0.311	0.562	1.250	2.500
6	M6IHP 520	0.228	0.189	0.019	0.311	0.562	1.250	2.500
7	M7IHP 620	0.265	0.220	0.022	0.374	0.562	1.250	2.500
7.3	M7.3IHP 520	0.265	0.220	0.022	0.311	0.562	1.250	2.500
8	M8IHP 620	0.305	0.252	0.026	0.374	0.562	1.250	2.500
10	M10IHP 820**	0.383	0.321	0.039	0.499	0.625	1.250	2.500
12	M12IHP 1020	0.461	0.387	0.047	0.624	0.687	1.250	2.562
13	M13IHP 1020	0.499	0.419	0.047	0.624	0.687	1.250	2.562
15	M15IHP 1020	0.578	0.486	0.061	0.749	0.687	1.250	2.562



NOTE: Please specify length of pin when ordering.

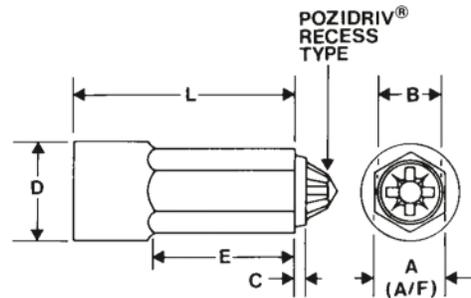
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

POZIDRIV® INDENTED HEXAGON PINS

STANDARD INDENTED POZIDRIV® HEXAGON PINS

SCREW SIZE	HEX SIZE A/F	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L	PUNCH PEN.
			+0.000 -0.001	+0.005 -0.000	+0.003 -0.000	+0.000 -0.001	+0.015 -0.000	WTP STD		+0.000 -0.006
6	1/4	3RPZ 20-100 520	0.242	0.208	0.017	0.311	0.562	1.250	2.500	0.087
8	1/4	3RPZ 20-102 520	0.242	0.208	0.017	0.311	0.562	1.250	2.500	0.106
10	5/16	3RPZ 20-103 620	0.302	0.258	0.027	0.374	0.562	1.250	2.500	0.125
1/4	3/8	3RPZ 30-71 820	0.364	0.314	0.034	0.499	0.625	1.250	2.500	0.180
1/4	7/16	3RPZ 30-87 820	0.425	0.360	0.037	0.499	0.625	1.250	2.562	0.183



NOTE: Please specify length of pin when ordering.

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

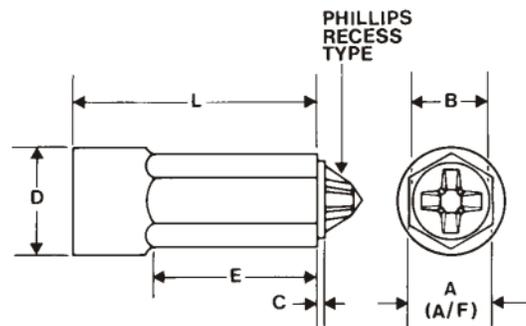
PHILLIPS® INDENTED HEXAGON PINS

STANDARD INDENTED PHILLIPS® HEXAGON PINS

SCREW SIZE	HEX SIZE A/F	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L	PUNCH PEN.
			+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000			
4	3/16	3P10-41IHP 520	0.179	0.153	0.006	0.311	0.562	1.250	2.500	0.057/0.065
5	3/16	3P10-42IHP 520	0.179	0.153	0.006	0.311	0.562	1.250	2.500	0.065/0.073
6	1/4	3P20-1IHP 520	0.242	0.210	0.012	0.311	0.562	1.250	2.500	0.089
8	1/4	3P20-2IHP 520	0.242	0.210	0.018	0.311	0.562	1.250	2.500	0.115
8	1/4	3P20-2IHP 620	0.242	0.210	0.018	0.374	0.562	1.250	2.500	0.115
10	5/16	3P20-6IHP 620	0.302	0.270	0.020	0.374	0.562	1.250	2.500	0.125
1/4	3/8	3P30-3IHP 820	0.364	0.320	0.030	0.499	0.625	1.250	2.500	0.186
1/4	7/16	3P30-3(7)IHP 820	0.425	0.381	0.030	0.499	0.625	1.250	2.562	0.186

METRIC PHILLIPS® TYPE HEXAGON PINS

HEXAGON SIZE A/F MM	PIN NUMBER	A/F	B	C	D	E	L	OPTIONAL L	PUNCH PEN.
		+0.000 -0.001	+0.005 -0.000	+0.002 -0.000	+0.000 -0.001	+0.015 -0.000			
4	M4IHP-3P10-1 520	0.150	0.125	0.016	0.311	0.500	1.250	2.500	0.066/0.074
5.5	M5.5IHP-3P20-1 520	0.209	0.182	0.019	0.311	0.562	1.250	2.500	0.096
6	M6IHP-3P20-2 520	0.228	0.198	0.019	0.311	0.562	1.250	2.500	0.116
7	M7IHP-3P20-6 620	0.265	0.232	0.022	0.374	0.562	1.250	2.500	0.125
8	M8IHP-3P20-3 620	0.305	0.268	0.027	0.374	0.562	1.250	2.500	0.139



NOTE: Please specify length of pin when ordering.

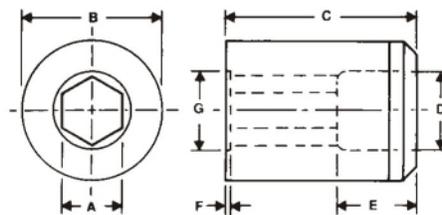
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

HEXAGON WASHER HEAD INSERTS

CONTAINED WASHER

SCREW SIZE	HEX SIZE	CODE	A	B	C	D	E	F	G
			+0.001 -0.001	+0.0005 -0.0000	+0.003 -0.000	+1/64 -0	+1/64 -0	+0.003 -0.000	
4	3/16	HWI-187	0.182	0.5520	0.750	5/16	5/16	0.009	0.234
5	3/16	HWI-187-1	0.182	0.5520	0.750	5/16	5/16	0.013	0.250
6	1/4	HWI-250-2	0.245	0.5520	0.750	5/16	5/16	0.016	0.315
6	1/4	HWI-250-1	0.245	0.7400	0.750	3/8	5/16	0.013	0.315
8	1/4	HWI-250-3	0.245	0.5520	0.750	5/16	5/16	0.017	0.335
8	1/4	HWI-250-4	0.245	0.7400	0.750	3/8	5/16	0.017	0.335
10	5/16	HWI-312	0.306	0.7400	0.750	7/16	5/16	0.017	0.400
10	5/16	HWI-312-1	0.306	0.5520	0.750	3/8	5/16	0.017	0.400
12	5/16	HWI-312-2	0.306	0.7400	0.750	7/16	5/16	0.020	0.415
1/4	3/8	HWI-375	0.368	0.9900	1.000	1/2	9/16	0.028	0.500
1/4	3/8	HWI-375-2	0.368	0.7400	0.750	1/2	5/16	0.023	0.500
1/4	7/16	HWI-437	0.429	0.9900	1.000	0.503	1/2	0.035	0.500
5/16	1/2	HWI-500	0.492	0.9900	1.000	5/8	1/2	0.030	0.650
5/16	1/2	HWI-500-1	0.492	1.2400	1.000	5/8	1/2	0.030	0.650
3/8	9/16	HWI-562	0.554	1.2400	1.000	3/4	1/2	0.032	0.750



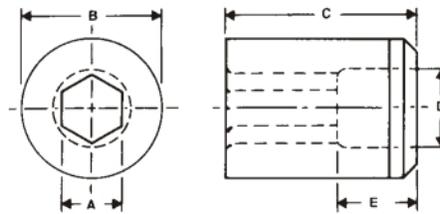
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

HEXAGON WASHER HEAD INSERTS

FREE FLOWED WASHER

SCREW SIZE	HEX SIZE	CODE	A +0.001 -0.001	B +0.0005 -0.0000	C +0.003 -0.000	D +1/64 -0	E +1/64 -0
2-3	1/8	HI-125	0.121	0.5520	0.750	5/16	1/2
4-5	3/16	HI-187	0.182	0.5520	0.750	5/16	5/16
4-5	3/16	HI-187-1	0.182	0.7400	0.750	3/8	5/16
6-8	1/4	HI-250	0.245	0.5520	0.750	5/16	5/16
6-8	1/4	HI-250-1	0.245	0.7400	0.750	3/8	5/16
10-12	5/16	HI-312	0.306	0.7400	0.750	7/16	5/16
10-12	5/16	HI-312-1	0.306	0.5520	0.750	3/8	5/16
1/4	3/8	HI-375	0.368	0.9900	1.000	1/2	9/16
1/4	3/8	HI-375-2	0.368	0.7400	0.750	1/2	5/16
1/4	7/16	HI-437	0.429	0.9900	1.000	1/2	1/2
5/16	1/2	HI-500	0.492	0.9900	1.000	5/8	1/2
5/16	1/2	HI-500-1	0.492	1.2400	1.000	5/8	1/2
3/8	9/16	HI-562	0.553	1.2400	1.000	3/4	1/2
3/8	9/16	HI-562-1	0.553	1.4900	1.000	3/4	1/2
7/16	5/8	HI-625	0.612	1.4900	1.000	3/4	1/4
1/2	3/4	HI-750	0.737	1.4900	1.000	1 1/64	1/4



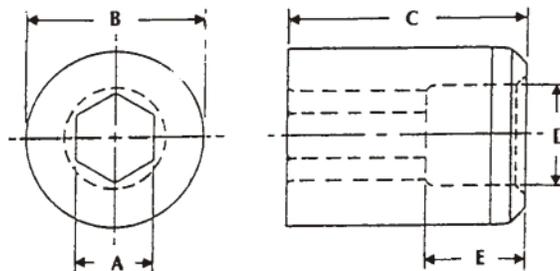
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

METRIC HEXAGON WASHER HEAD INSERTS

FREE FLOWED TYPE

NOMINAL HEX A/F	CODE	A (MM)	B +0.0005 -0.0000	C +0.003 -0.000	D + 1/64 - 0	E + 1/64 - 0
4	MHI-4	3.89	0.5520	0.750	5/16	5/16
5	MHI-5	4.85	0.5520	0.750	5/16	5/16
5.5	MHI-5.5	5.36	0.5520	0.750	5/16	5/16
6	MHI-6	5.87	0.5520	0.750	5/16	5/16
7	MHI-7	6.83	0.7400	0.750	3/8	3/8
7	MHI-7-3	6.83	0.5520	0.750	5/16	3/8
8	MHI-8	7.85	0.7400	0.750	7/16	3/8
8	MHI-8-2	7.85	0.5520	0.750	3/8	3/8
10	MHI-10	9.83	0.7400	0.750	1/2	3/8
10	MHI-10-1	9.83	0.9900	1.000	1/2	9/16
11	MHI-11	10.82	0.9900	1.000	1/2	1/2
12	MHI-12	11.81	0.9900	1.000	5/8	1/2
13	MHI-13	12.80	0.9900	1.000	5/8	1/2
13	MHI-13-1	12.80	1.2400	1.000	5/8	1/2
15	MHI-15	14.80	1.2400	1.000	3/4	1/2
16	MHI-16	15.77	1.2400	1.000	3/4	1/2
17	MHI-17	16.79	1.2400	1.000	3/4	1/2
18	MHI-18	17.78	1.4900	1.250	1	5/8
19	MHI-19	18.71	1.4900	1.250	1	5/8
21	MHI-21	20.78	1.4900	1.250	1	5/8



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

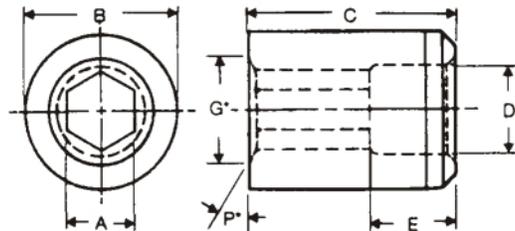
FLANGE TYPE

SCREW SIZE	HEX SIZE	CODE*	A ±0.001	B +0.0005 -0.0000	C +0.003 -0.000	D + 1/64 - 0	E + 1/64 - 0
4	3/16	HI-187-FL	0.182	0.5520	0.750	5/16	5/16
5	3/16	HI-187-1-FL	0.182	0.7400	0.750	3/8	5/16
6-8	1/4	HI-250-FL	0.245	0.5520	0.750	5/16	5/16
6-8	1/4	HI-250-1-FL	0.245	0.7400	0.750	3/8	5/16
10-12	5/16	HI-312-FL	0.306	0.7400	0.750	7/16	5/16
10	5/16	HI-312-1-FL	0.306	0.5520	0.750	3/8	5/16
1/4	3/8	HI-375-FL	0.368	0.9900	1.000	1/2	9/16
5/16	1/2	HI-500-FL	0.492	0.9900	1.000	5/8	1/2
5/16	1/2	HI-500-1-FL	0.492	1.2400	1.000	5/8	1/2
3/8	9/16	HI-562-FL	0.554	1.2400	1.000	3/8	1/2

METRIC FLANGE TYPE

NOMINAL HEX A/F	CODE*	A (mm)	A ±0.001	B +0.0005 -0.0000	C +0.003 -0.000	D + 1/64 - 0	E + 1/64 - 0
5	MHI-5-FL	4.85	0.191	0.5520	0.750	5/16	5/16
5.5	MHI-5.5-FL	5.36	0.211	0.5520	0.750	5/16	5/16
6	MHI-6-FL	5.87	0.231	0.5520	0.750	5/16	5/16
7	MHI-7-FL	6.83	0.269	0.7400	0.750	3/8	3/8
7	MHI-7-3-FL	6.83	0.269	0.5520	0.750	5/16	3/8
8	MHI-8-FL	7.85	0.309	0.7400	0.750	3/8	3/8
8	MHI-8-2-FL	7.85	0.309	0.5520	0.750	3/8	3/8
10	MHI-10-FL	9.83	0.387	0.7400	0.750	1/2	3/8
10	MHI-10-1-FL	9.83	0.387	0.9900	1.000	1/2	9/16
11	MHI-11-FL	10.82	0.426	0.9900	1.000	1/2	1/2
12	MHI-12-FL	11.81	0.465	0.9900	1.000	5/8	1/2
13	MHI-13-FL	12.80	0.504	0.9900	1.000	5/8	1/2
13	MHI-13-1-FL	12.80	0.504	1.2400	1.000	5/8	1/2
15	MHI-15-FL	14.80	0.582	1.2400	1.000	3/4	1/2

*Specify P and G when ordering.

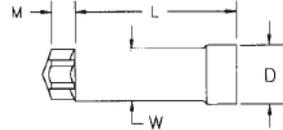
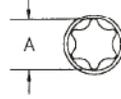
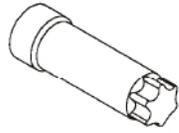


PRICES FURNISHED
UPON REQUEST

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PINS TXP-20, 21



T5

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
5-TXI-250	0.031				
5-TXI-251	0.017	0.0590	0.073	0.375	0.0625
5-TXI-252	0.025				

T6

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
6-TXI-250	0.041				
6-TXI-251	0.022	0.0700	0.086	0.375	0.0740
6-TXI-252	0.030				
6-TXI-253	0.033				

T7

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
7-TXI-250	0.033				
7-TXI-251	0.038				
7-TXI-252	0.043	0.0825	0.099	0.375	0.0865
7-TXI-253	0.030				
7-TXI-254	0.025				
7-TXI-255	0.035				

T8

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
8-TXI-250	0.033				
8-TXI-252	0.051				
8-TXI-253	0.038				
8-TXI-254	0.030	0.0952	0.111	0.375	0.0995
8-TXI-255	0.028				
8-TXI-256	0.043				
8-TXI-257	0.035				
8-TXI-258	0.041				

T9

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
9-TXI-250	0.040				
9-TXI-251	0.055	0.1025	0.118	0.375	0.1065
9-TXI-252	0.046				
9-TXI-253	0.037				

T10

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
10-TXI-250	0.050				
10-TXI-251	0.040				
10-TXI-252	0.060	0.1110	0.128	0.629	0.1150
10-TXI-253	0.035				
10-TXI-254	0.045				
10-TXI-255	0.030				
10-TXI-256	0.033				

T15

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
15-TXI-250	0.060				
15-TXI-251	0.045				
15-TXI-252	0.070				
15-TXI-253	0.035	0.1320	0.149	0.629	0.1360
15-TXI-254	0.050				
15-TXI-255	0.033				
15-TXI-256	0.041				

T20

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
20-TXI-250	0.089				
20-TXI-251	0.065				
20-TXI-252	0.080				
20-TXI-253	0.050				
20-TXI-254	0.038	0.1550	0.183	0.629	0.1590
20-TXI-255	0.060				
20-TXI-256	0.056				
20-TXI-257	0.036				
20-TXI-258	0.045				

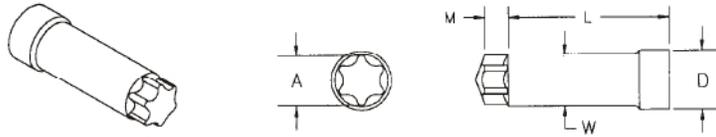
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PINS

TORX® PUNCH PINS TXP-20, 21



T25

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
25-TXI-250	0.115				
25-TXI-251	0.065				
25-TXI-252	0.090				
25-TXI-253	0.055	0.1785	0.204	0.632	0.1825
25-TXI-254	0.075				
25-TXI-255	0.044				
25-TXI-256	0.060				

T27

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
27-TXI-250	0.120				
27-TXI-251	0.065				
27-TXI-252	0.105				
27-TXI-253	0.085	0.2005	0.225	0.632	0.2080
27-TXI-254	0.075				
27-TXI-255	0.050				
27-TXI-258	0.060				
27-TXI-259	0.090				

T30

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
30-TXI-250	0.125				
30-TXI-251	0.090				
30-TXI-252	0.105				
30-TXI-253	0.070				
30-TXI-254	0.055	0.2215	0.254	0.632	0.2255
30-TXI-255	0.043				
30-TXI-256	0.080				
30-TXI-257	0.075				
30-TXI-258	0.060				
30-TXI-260	0.065				

T40

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
40-TXI-250	0.135				
40-TXI-251	0.110				
40-TXI-252	0.125				
40-TXI-253	0.120	0.2670	0.300	0.760	0.2710
40-TXI-254	0.097				
40-TXI-255	0.085				
40-TXI-256	0.070				
40-TXI-257	0.090				
40-TXI-260	0.080				

T45

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
45-TXI-250	0.155				
45-TXI-251	0.115				
45-TXI-252	0.140	0.3130	0.374	1.010	0.3300
45-TXI-253	0.110				
45-TXI-254	0.085				
45-TXI-256	0.105				

T50

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
50-TXI-250	0.154				
50-TXI-251	0.135				
50-TXI-252	0.160				
50-TXI-253	0.095				
50-TXI-255	0.176	0.3530	0.417	1.010	0.3740
50-TXI-256	0.129				
50-TXI-257	0.110				
50-TXI-258	0.143				
50-TXI-259	0.120				

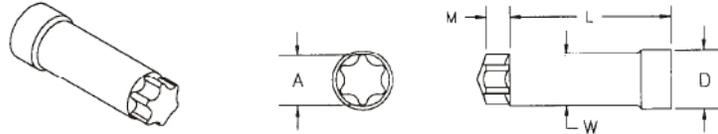
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PINS

TORX® PUNCH PINS TXP-20, 21



T55

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
55-TXI-250	0.215				
55-TXI-251	0.110				
55-TXI-252	0.200				
55-TXI-253	0.145				
55-TXI-254	0.175	0.4475	0.515	1.010	0.4690
55-TXI-255	0.095				
55-TXI-256	0.155				
55-TXI-257	0.135				
55-TXI-258	0.115				
55-TXI-259	0.190				

T60

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
60-TXI-250	0.280				
60-TXI-251	0.145				
60-TXI-252	0.245				
60-TXI-253	0.215	0.5295	0.592	1.010	0.5620
60-TXI-254	0.185				
60-TXI-256	0.150				
60-TXI-257	0.221				

T70

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
70-TXI-250	0.320				
70-TXI-251	0.240				
70-TXI-252	0.280	0.6195	0.682	1.510	0.6520
70-TXI-255	0.174				
70-TXI-256	0.261				

T80

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
80-TXI-250	0.370				
80-TXI-251	0.315	0.7005	0.762	1.510	0.7330
80-TXI-254	0.202				
80-TXI-255	0.300				

T90

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
90-TXI-250	0.380				
90-TXI-251	0.300				
90-TXI-252	0.360	0.7960	0.870	1.510	0.8295
90-TXI-253	0.240				
90-TXI-255	0.221				
90-TXI-256	0.347				

T100

PIN NUMBER	M REF	A REF	D REF	L REF	W REF
100-TXI-250	0.400				
100-TXI-251	0.450	0.8830	0.948	1.510	0.9165
100-TXI-252	0.510				

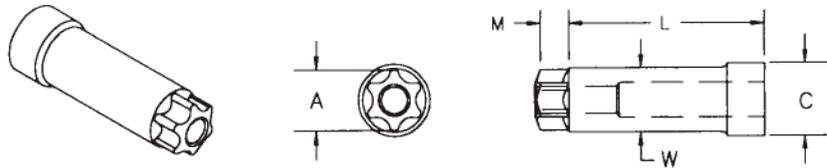
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PIN

TAMPER RESISTANCE TORX® PUNCH PINS TXP-19



T8

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
8TXI-257-HX	0.035	0.0952	0.111	0.375	0.0995

T27

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
27TXI-251-HX	0.065	0.2005	0.225	0.632	0.2080

T10

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
10TXI-251-HX**	0.040	0.1110	0.128	0.629	0.1150

T30

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
30TXI-253-HX	0.070	0.2215	0.254	0.632	0.2255

T15

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
15TXI-251-HX	0.045	0.1320	0.149	0.629	0.1360

T40

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
40TXI-254-HX	0.097	0.2670	0.300	0.760	0.2710

T20

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
20TXI-253-HX	0.050	0.1550	0.183	0.629	0.1590

T45

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
45TXI-253-HX	0.110	0.3130	0.374	1.010	0.3300

T25

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
25TXI-253-HX	0.055	0.1785	0.204	0.632	0.1825

T50

PIN NUMBER	M +0.005	A REF	C REF	L REF	W REF
50TXI-257-HX	0.110	0.3530	0.417	1.010	0.3740

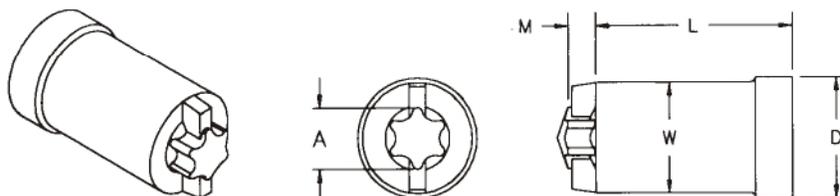
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PIN

STRUCK SLOT TORX® PUNCH PIN TXP-33.4A



Also available in HEXLOBE® style

DRIVE SIZE	PIN NUMBER	M +0.005	A REF	D REF	L REF	W REF
T7	7-TXI-277	0.030	0.0820	0.161		0.1410
T8	8-TXI-277	0.040	0.0947	0.178		0.1580
T9	9-TXI-277	0.040	0.1020	0.196	0.629	0.1760
T10	10-TXI-277	0.045	0.1110	0.214		0.1940
T15	15-TXI-277	0.050	0.1320	0.237		0.2170
T20	20-TXI-277	0.060	0.1550	0.286		0.2560
T25	25-TXI-277	0.075	0.1785	0.325		0.2950
T27	27-TXI-277	0.080	0.2005	0.364	0.632	0.3340
T30	30-TXI-277	0.095	0.2215	0.410		0.3800
T40	40-TXI-277	0.110	0.2670	0.519	0.760	0.4690
T45	45-TXI-277	0.140	0.3130	0.614	1.010	0.5640

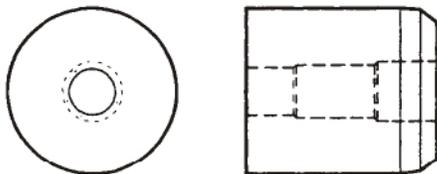
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

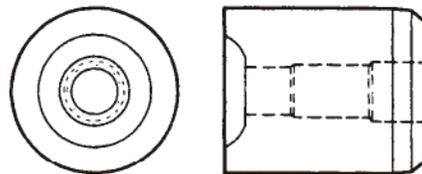
FLAT HEAD TORX® PIN HOLDER TXP-22

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-201	.5625
T15	15TXI-201	.5625
T20	20TXI-201	.5625
T25	25TXI-201	.875
T27	27TXI-201	.875
T30	30TXI-201	.875
T40	40TXI-201	.875
T45	45TXI-201	1.000
T50	50TXI-201	1.000
T55	55TXI-201	1.250



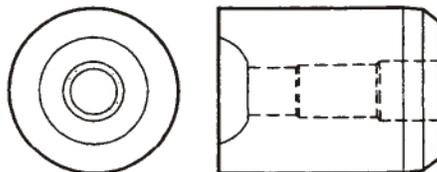
STRUCK SLOT PAN HEAD TORX® PIN HOLDER TXP-33.4B

DRIVE SIZE	PUNCH CODE	DIA.
T7	7TXI-270	.5625
T8	8TXI-270	.5625
T9	9TXI-270	.5625
T10	10TXI-270	.5625
T15	15TXI-270	.5625
T20	20TXI-270	.5625
T25	25TXI-270	.875
T27	27TXI-270	.875
T30	30TXI-270	.875
T40	40TXI-270	.875
T45	45TXI-270	1.000
T50	50TXI-270	1.000
T55	55TXI-270	1.250



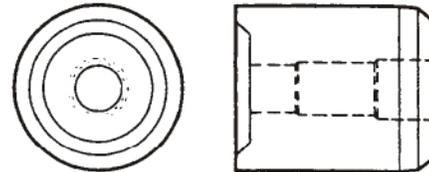
ROUND WASHER HEAD TORX® PIN HOLDER TXP-32

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-280	.5625
T10	10TXI-281	.5625
T15	15TXI-280	.5625
T20	20TXI-280	.5625
T25	25TXI-280	.875
T27	27TXI-280	.875
T30	30TXI-280	.875



SOCKET HEAD TORX® PIN HOLDER TXP-23

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-300	.5625
T10	10TXI-300A	.5625
T15	15TXI-300	.5625
T25	25TXI-300	.875
T27	27TXI-300	.875
T30	30TXI-300	.875



TORX® is a registered trademark of Acument Intellectual Properties, LLC

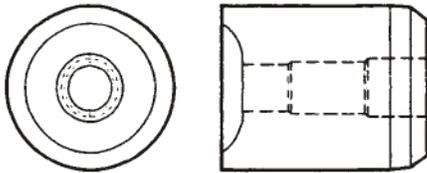
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCH PIN HOLDERS

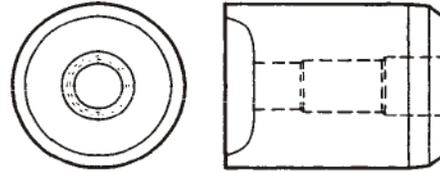
BUTTON HEAD TORX® PIN HOLDER TXP-26

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-301	.5625
T10	10TXI-301A	.5625
T15	15TXI-301	.5625
T25	25TXI-301	.875
T27	27TXI-301	.875
T30	30TXI-301	.875
T40	40TXI-301	.875
T45	45TXI-301	1.000
T50	50TXI-301	1.000
T55	55TXI-301	1.250
T60	60TXI-301	1.500



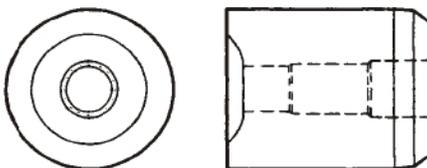
PAN HEAD TORX® PIN HOLDER TXP-33

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-303	.5625
T15	15TXI-303	.5625
T20	20TXI-303	.5625
T25	25TXI-303	.875
T27	27TXI-303	.875
T30	30TXI-303	.875
T40	40TXI-303	.875
T45	45TXI-303	1.000
T50	50TXI-303	1.000
T55	55TXI-303	1.250



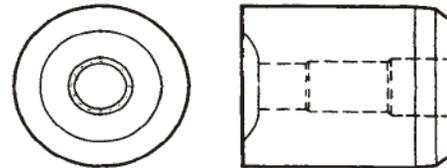
PAN HEAD TORX® PIN HOLDER TXP-33.5

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-307	.5625
T15	15TXI-307	.5625
T20	20TXI-307	.5625
T25	25TXI-307	.875
T27	27TXI-307	.875
T30	30TXI-307	.875
T40	40TXI-307	.875
T45	45TXI-307	1.000
T50	50TXI-307	1.000
T55	55TXI-307	1.250



PAN HEAD TORX® PIN HOLDER TXP-33.5A

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-308	.5625
T15	15TXI-308	.5625
T20	20TXI-308	.5625
T25	25TXI-308	.875
T27	27TXI-308	.875
T30	30TXI-308	.875
T40	40TXI-308	.875
T45	45TXI-308	1.000
T50	50TXI-308	1.000
T55	55TXI-308	1.250



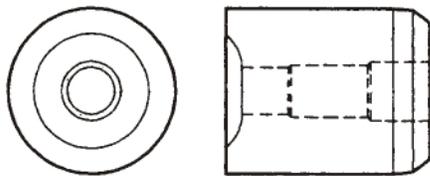
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

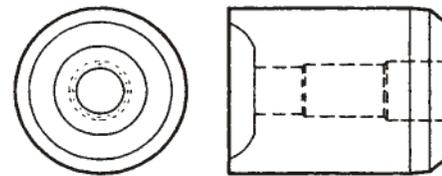
OVAL HEAD TORX® PIN HOLDER TXP-36

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-350	.5625
T15	15TXI-350	.5625
T20	20TXI-350	.5625
T25	25TXI-350	.875
T27	27TXI-350	.875
T30	30TXI-350	.875
T40	40TXI-350	.875
T45	45TXI-350	1.000
T50	50TXI-350	1.000
T55	55TXI-350A	1.250
T60	60TXI-350	1.500



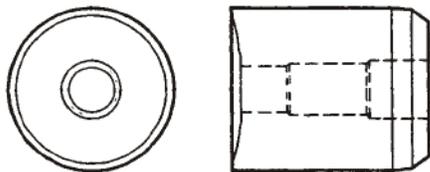
TRUSS HEAD TORX® PIN HOLDER TXP-35

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-360	.5625
T15	15TXI-360	.5625
T20	20TXI-360	.5625
T25	25TXI-360	.875
T27	27TXI-360	.875
T30	30TXI-360	.875
T40	40TXI-360	.875
T45	45TXI-360	1.000
T50	50TXI-360	1.000
T55	55TXI-360	1.250



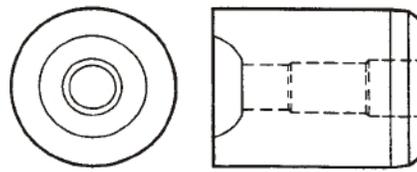
FILLISTER HEAD TORX® PIN HOLDER TXP-37

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TXI-370	.5625
T10	10TXI-371	.5625
T15	15TXI-370	.5625
T20	20TXI-370	.5625
T25	25TXI-370	.875
T27	27TXI-370	.875
T30	30TXI-370	.875
T40	40TXI-370	.875
T45	45TXI-370	1.000
T50	50TXI-370	1.000
T55	55TXI-370	1.250



ROUND WASHER HEAD TORX® HOLDERS TMP-44,45

DRIVE SIZE	PUNCH CODE	DIA.
T6	6TMI-318	.4375
T8	8TMI-318	.5625
T10	10TMI-318	.5625
T15	15TMI-318	.5625
T20	20TMI-318	.5625
T25	25TMI-318	.875
T30	30TMI-318	.875
T40	40TMI-318	.875
T50	50TMI-318	1.250
T55	50TMI-318	1.250



HEAD STYLE NOT SHOWN ARE AVAILABLE UPON REQUEST.

TORX® is a registered trademark of Acument Intellectual Properties, LLC

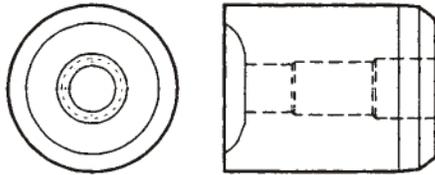
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

METRIC TORX® PUNCH PIN HOLDERS

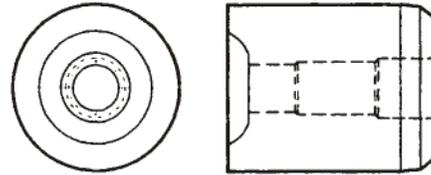
BUTTON HEAD TORX® PIN HOLDER TXP-46

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-302	.5625
T10	10TMI-302A	.5625
T15	15TMI-320	.5625
T25	25TMI-302	.875
T27	27TMI-302	.875
T30	30TMI-302	.875
T40	40TMI-320	1.000
T45	45TMI-302	1.000
T50	50TMI-302	1.500
T50	50TMI-302	1.500
T55	55TMI-320	1.500



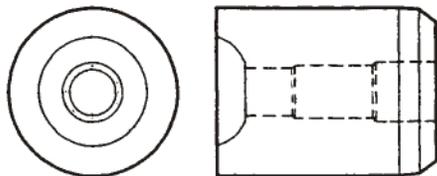
STRUCK SLOT PAN HEAD TORX® PIN HOLDER TMP-49B

DRIVE SIZE	PUNCH CODE	DIA.
T8	8TMI-272*	.5625
T10	10TMI-272	.5625
T10	10TMI-273	.5625
T15	15TMI-271	.5625
T20	20TMI-272	.5625
T20	20TMI-273	.5625
T25	25TMI-271	.875
T30	30TMI-272	.875
T30	30TMI-273	.875
T40	40TMI-272	1.000
T50	50TMI-272	1.250
T50	50TMI-273	1.250



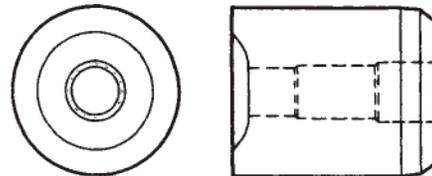
ROUND WASHER HEAD TORX® PIN HOLDER TMP-50

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-281	.5625
T10	10TMI-282	.5625
T20	20TMI-281	.5625
T20	20TMI-282	.5625
T20	20TMI-283	.5625
T30	30TMI-282	.875
T40	40TMI-281	.875
T50	50TMI-281	1.000



PAN HEAD TORX® PIN HOLDER TMP-44,45

DRIVE SIZE	PUNCH CODE	DIA.
T6	6TMI-315*	.4375
T8	8TMI-315*	.5625
T10	10TMI-315	.5625
T15	15TMI-315	.5625
T20	20TMI-315	.5625
T25	25TMI-315	.875
T27	27TMI-315	.875
T30	30TMI-315	.875
T40	40TMI-315	.875
T50	50TMI-315	1.000



*1-PC. PUNCH

TORX® is a registered trademark of Acument Intellectual Properties, LLC

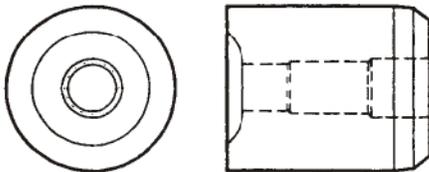
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

METRIC TORX® PUNCH PIN HOLDERS

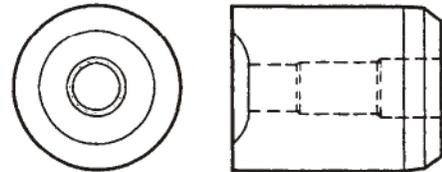
PAN HEAD TORX® PIN HOLDER TXP-51

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-307	.5625
T15	15TMI-307	.5625
T20	20TMI-307	.5625
T25	25TMI-307	.875
T25	25TMI-307A	.875
T30	30TMI-307	.875
T40	40TMI-307	.875
T50	50TMI-307	1.000



PAN HEAD TORX® PIN HOLDER TXP-51A

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-308	.5625
T15	15TMI-308	.5625
T20	20TMI-308	.5625
T25	25TMI-308	.875
T25	25TMI-308A	.875
T30	30TMI-308	.875
T40	40TMI-308	.875
T50	50TMI-308	1.000



OVAL HEAD TORX® PIN HOLDER TMP-44,45

DRIVE SIZE	PUNCH CODE	DIA.
T8	8TMI-620*	.5625
T10	10TMI-620	.5625
T10	10TMI-621	.5625
T15	15TMI-620	.5625
T20	20TMI-620	.5625
T25	25TMI-620	.875
T25	25TMI-621	.875

*1-PC.
PUNCH

ROUND WASHER HEAD TORX® PIN HOLDER TMP-44,45

DRIVE SIZE	PUNCH CODE	DIA.
T6	6TMI-305*	.4375
T8	8TMI-305*	.5625
T10	10TMI-305	.5625
T15	15TMI-305	.5625
T20	20TMI-305	.5625
T25	25TMI-305	.875
T30	30TMI-305	.875
T40	40TMI-305	.875
T50	50TMI-305	1.000

TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

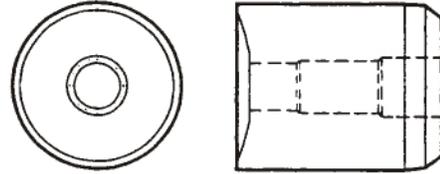
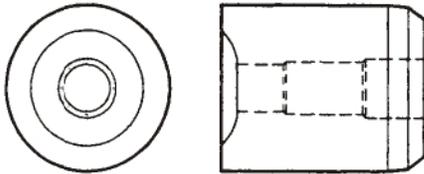
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PAN HEAD TORX® PIN HOLDER TMP-48

DRIVE SIZE	PUNCH CODE	DIA.
T6	6TMI-343*	.4375
T8	8TMI-340*	.5625
T8	8TMI-342*	.5625
T10	10TMI-340	.5625
T10	10TMI-341	.5625
T15	15TMI-340	.5625
T20	20TMI-340	.5625
T20	20TMI-341	.5625
T20	20TMI-342	.5625
T25	25TMI-340	.875
T25	25TMI-341	.875
T25	25TMI-342	.875
T30	30TMI-340	.875
T30	30TMI-341	.875
T30	30TMI-342	.875
T30	30TMI-343	.875
T40	40TMI-341	.875

OVAL HEAD TORX® PIN HOLDER TMP-45,47

DRIVE SIZE	PUNCH CODE	DIA.
T8	8TMI-350*	.5625
T8	8TMI-351*	.5625
T8	8TMI-352*	.5625
T8	8TMI-353*	.5625
T10	10TMI-351	.5625
T10	10TMI-352	.5625
T15	15TMI-351	.5625
T15	15TMI-352	.5625
T20	20TMI-351	.5625
T20	20TMI-352	.5625
T20	20TMI-353	.5625
T25	25TMI-351	.875
T25	25TMI-352	.875
T30	30TMI-351	.875
T30	30TMI-352	.875
T30	30TMI-353	.875
T40	40TMI-352	.875



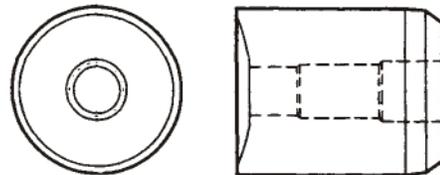
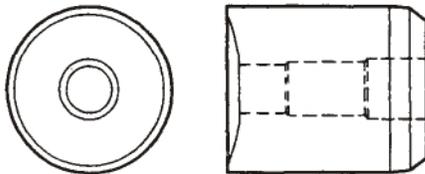
OVAL HEAD TORX® PIN HOLDER TMP-53

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-313	.5625
T15	15TMI-313	.5625
T20	20TMI-313	.5625
T25	25TMI-313	.875

OVAL HEAD TORX® PIN HOLDER TMP-52

DRIVE SIZE	PUNCH CODE	DIA.
T10	10TMI-332	.5625
T15	15TMI-332	.5625
T20	20TMI-332	.5625
T25	25TMI-332	.875
T30	30TMI-332	.875
T40	40TMI-332	.875
T50	50TMI-332	1.000

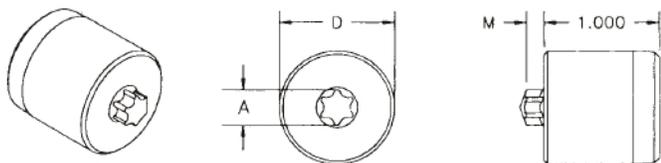
TORX® is a registered trademark of Acument Intellectual Properties, LLC



WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

ONCE PIECE FLAT TORX® PUNCHES TXP-21.1



T10

PIN NUMBER	M +0.003	A REF	D REF
10-TXI-150	0.055		
10-TXI-151	0.047		
10-TXI-152	0.065		
10-TXI-153	0.040	0.1110	0.5625
10-TXI-154	0.053		
10-TXI-155	0.037		
10-TXI-156	0.030		

T15

PIN NUMBER	M +0.003	A REF	D REF
15-TXI-150	0.065		
15-TXI-151	0.050		
15-TXI-152	0.075		
15-TXI-153	0.040	0.1320	0.5625
15-TXI-154	0.047		
15-TXI-155	0.037		
15-TXI-156	0.063		

T20

PIN NUMBER	M +0.003	A REF	D REF
20-TXI-150	0.094		
20-TXI-152	0.085		
20-TXI-153	0.062	0.1550	0.5625
20-TXI-154	0.052		
20-TXI-155	0.065		
20-TXI-156	0.042		

T25

PIN NUMBER	M +0.003	A REF	D REF
25-TXI-150	0.120		
25-TXI-151	0.070		
25-TXI-152	0.095	0.1785	0.8750
25-TXI-153	0.062		
25-TXI-154	0.088		

T27

PIN NUMBER	M +0.003	A REF	D REF
27-TXI-150	0.125		
27-TXI-151	0.077		
27-TXI-152	0.110	0.2005	0.8750
27-TXI-153	0.090		
27-TXI-154	0.080		

T30

PIN NUMBER	M +0.003	A REF	D REF
30-TXI-150	0.130		
30-TXI-151	0.098		
30-TXI-152	0.110		
30-TXI-153	0.075	0.2215	0.8750
30-TXI-154	0.062		
30-TXI-155	0.048		
30-TXI-156	0.092		
30-TXI-157	0.072		

T40

PIN NUMBER	M +0.003	A REF	D REF
40-TXI-150	0.140		
40-TXI-151	0.115		
40-TXI-152	0.130		
40-TXI-153	0.125	0.2670	0.8750
40-TXI-154	0.108		
40-TXI-155	0.090		
40-TXI-156	0.077		
40-TXI-157	0.112		

T45

PIN NUMBER	M +0.003	A REF	D REF
45-TXI-150	0.160		
45-TXI-151	0.120		
45-TXI-152	0.145		
45-TXI-153	0.115	0.3130	1.0000
45-TXI-154	0.097		
45-TXI-155	0.087		
45-TXI-156	0.142		

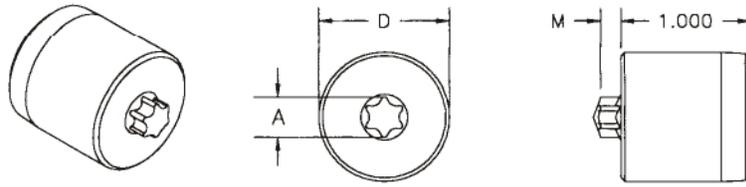
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

FLAT TORX® PUNCHES

ONCE PIECE FLAT TORX® PUNCHES TXP-15, 15.1



DRIVE SIZE	PIN NUMBER	M +0.003	A REF	D
T1	1-TXI-275	0.014	0.0354	0.4375
T2	2-TXI-275	0.016	0.0398	0.4375
T3	3-TXI-275	0.018	0.0478	0.4375
T4	4-TXI-275	0.022	0.0541	0.4375
T5	5-TXI-009	0.014		
T5	5-TXI-017	0.022	0.0590	0.4375
T5	5-TXI-025	0.028		
T6	6-TXI-015	0.019		
T6	6-TXI-022	0.027	0.0700	0.4375
T6	6-TXI-030	0.030		
T6	6-TXI-035	0.038		
T7	7-TXI-015	0.022		
T7	7-TXI-020	0.027		
T7	7-TXI-025	0.030		
T7	7-TXI-027	0.032	0.0825	0.4375
T7	7-TXI-030	0.035		
T7	7-TXI-035	0.040		
T8	8-TXI-018	0.025		
T8	8-TXI-020	0.027		
T8	8-TXI-025	0.030		
T8	8-TXI-028	0.035		
T8	8-TXI-030	0.032	0.0952	0.5625
T8	8-TXI-033	0.038		
T8	8-TXI-040	0.040		
T8	8-TXI-043	0.048		
T9	9-TXI-029	0.034		
T9	9-TXI-032	0.037	0.1025	0.5625
T9	9-TXI-035	0.043		
T9	9-TXI-047	0.052		

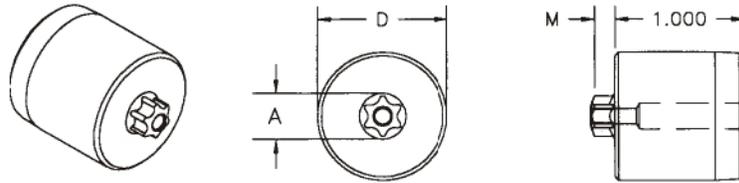
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

FLAT TORX® PUNCHES

TAMPER RESISTANT FLAT TORX® PUNCHES TXP-19.1



DRIVE SIZE	PIN NUMBER	M +0.003	A REF	D
T8	8-TXI-30-HX	0.032 / 0.035	0.0942	0.4375
T9	9-TXI-250-HX	0.035 / 0.040	0.1015	0.5625

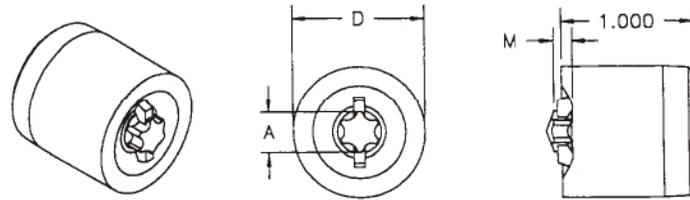
TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

TORX® PUNCHES

COMBINATION TORX® STRUCK SLOT PAN HEAD PUNCHES TXP-33.4



DRIVE SIZE	PIN NUMBER	M +0.004	A REF	D
T7	7-TXI-175	0.031	0.0815	
T8	8-TXI-175	0.041	0.0942	0.4375
T8	8-TXI-176	0.041	0.0942	
T9	9-TXI-175	0.040	0.1015	
T10	10-TXI-175	0.051	0.1110	
T10	10-TXI-176	0.051	0.1110	0.5625
T15	15-TXI-175	0.051	0.1320	
T20	20-TXI-175	0.060	0.1550	
T25	25-TXI-175	0.075	0.1785	
T27	27-TXI-175	0.075	0.2005	0.8750
T30	30-TXI-175	0.090	0.2215	
T40	40-TXI-175	0.110	0.2665	
T45	45-TXI-175	0.140	0.3125	1.0000

TORX® is a registered trademark of Acument Intellectual Properties, LLC

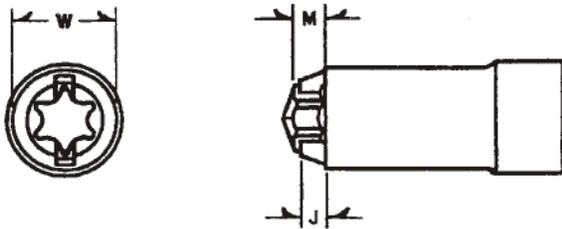
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

METRIC TORX® PUNCHES

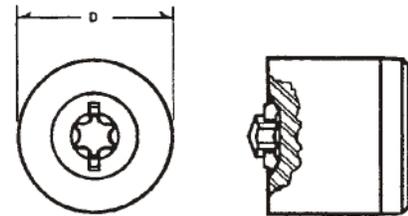
STRUCK SLOT TORX® PIN TMP-49A

DRIVE SIZE	PUNCH CODE	M REF.	J
T7	7TXI-170	.030	.027
T8	8TXI-170	.040	.030
T9	9TXI-170	.040	.035
T10	10TXI-170	.045	.040
T15	15TXI-170	.050	.045
T20	20TXI-170	.060	.050
T25	25TXI-170	.070	.065
T27	27TXI-170	.080	.065
T30	30TXI-170	.095	.070
T40	40TXI-170	.110	.095
T45	45TXI-170	.140	.120
T50	50TXI-170	.154	.135
T55	55TXI-170	.175	.150



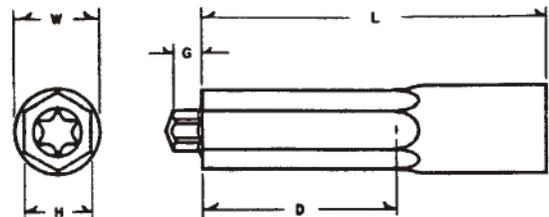
STRUCK SLOT TORX® PUNCHES TMP-51.1

DRIVE SIZE	PUNCH CODE	DIA.
T6	6TMI-175	.4375
T7	7TMI-175	.4375
T8	8TMI-175	.4375
T9	9TMI-175	.4375
T10	10TMI-175	.5625
T15	15TMI-175	.5625
T20	20TMI-175	.5625
T25	25TMI-175	.875
T27	27TMI-175	.875
T30	30TMI-175	.875
T40	40TMI-175	.875
T45	45TMI-175	1.250
T50	50TMI-175	1.250
T55	55TMI-175	1.250



TORX® HEX WASHER HEAD PUNCH PINS TMP-56

DRIVE SIZE	PUNCH CODE	D LENGTH	G REF.	H	L	W
T10	10TMI-200	.687	.045	.142	1.227	.307
T15	15TMI-200	.687	.050	.187	1.227	.307
T20	20TMI-200	.687	.065	.207	1.227	.307
T25	25TMI-200	.687	.070	.263	1.227	.371
T27	27TMI-200	.687	.080	.302	1.227	.371
T30	30TMI-200	1.250	.095	.381	1.602	.494
T40	40TMI-200	1.250	.115	.497	1.559	.619
T45	45TMI-200	1.250	.140	.575	1.559	.619



TORX® is a registered trademark of Acument Intellectual Properties, LLC

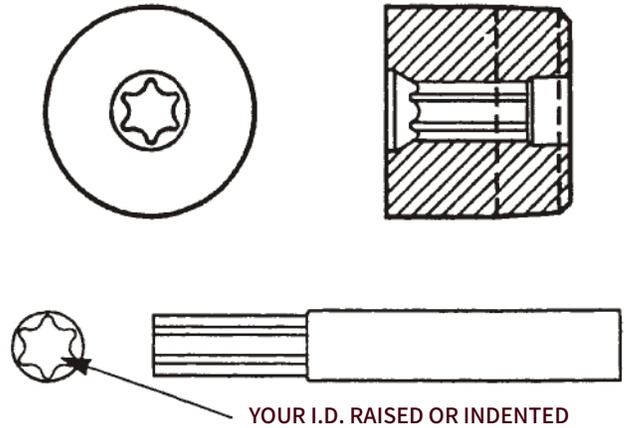
WARNING

Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

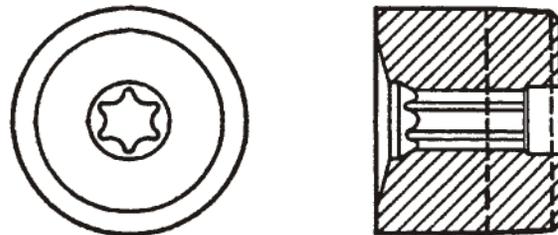
EXTERNAL TORX® PUNCHES

CARBIDE EXTRUSION PUNCH TXP-11, 12

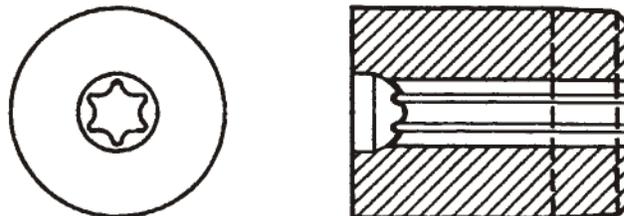
DRIVE SIZE	PUNCH CODE	DIA.	LEN.	PIN CODE
E4	4TXE-200	.500	.750	4TXE-100
E5	5TXE-200	.625	.750	5TXE-100
E6	6TXE-200	.625	.750	6TXE-100
E8	8TXE-200	.750	.750	8TXE-100
E10	10TXE-200	1.000	1.000	10TXE-100
E12	12TXE-200	1.250	1.000	12TXE-100
E14	14TXE-200	1.250	1.000	14TXE-100
E16	16TXE-200	1.250	1.000	16TXE-100
E18	18TXE-200	1.250	1.000	18TXE-100
E20	20TXE-200	1.500	1.500	20TXE-100
E24	24TXE-200	2.000	1.500	24TXE-100
E28	28TXE-200	2.000	1.500	28TXE-100
E32	32TXE-200	2.250	1.750	32TXE-100
E36	36TXE-200	2.000	1.750	36TXE-100
E40	40TXE-200	2.250	1.750	40TXE-100



AUDITORX® PUNCH TXP-40,41



TORXstem® DIE INSERT TXP-42



TORX® is a registered trademark of Acument Intellectual Properties, LLC

WARNING

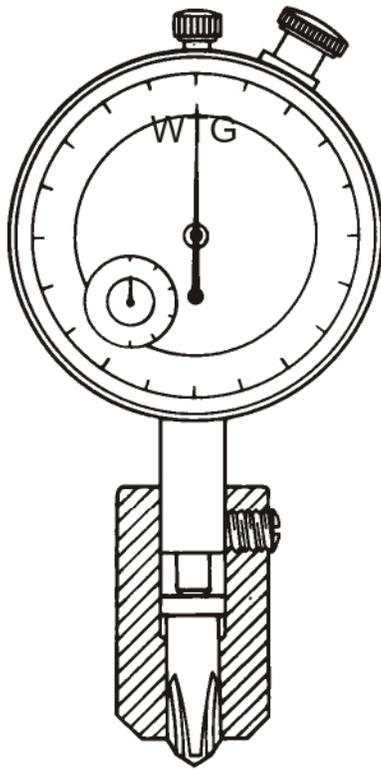
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

PENETRATION GAGES: These gages are used to determine whether recesses, in the heads of screws, are within the allowable tolerance specified in dimensional tables. They are available in Phillips®, POZIDRIV®, 1A QUADREX® and square recess type. Recess sizes available are 0, 1, 2, 3 & 4.

PLUG GAGES: Plug type gages are for checking driver fit in the screw recess. These are available in Phillips®, POZIDRIV®, 1A, QUADREX and square socket recesses.

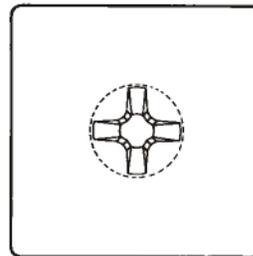
RING GAGES: Available in Phillips®, POZIDRIV® and square recess type, these are used in checking driver fit on a “GO - NO GO” basis.

TEST BLOCKS: These blocks are used in measuring the amount of torque exerted upon driver bits in inspection procedures. Available in Phillips®, POZIDRIV®, and square recess type.

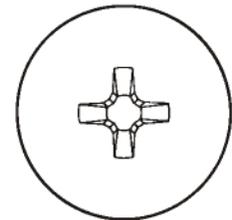


PENETRATION GAGES

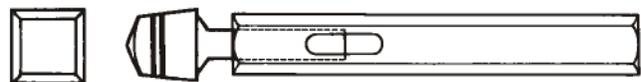
Prices furnished upon request.



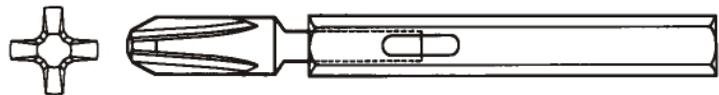
TEST BLOCKS



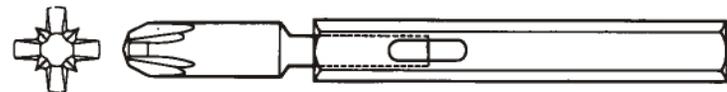
PHILLIPS RING GAGE



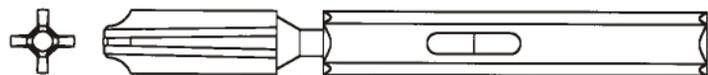
SQUARE SOCKET PLUG GAGE



PHILLIPS PLUG GAGE



POZIDRIV AND 1A PLUG GAGE



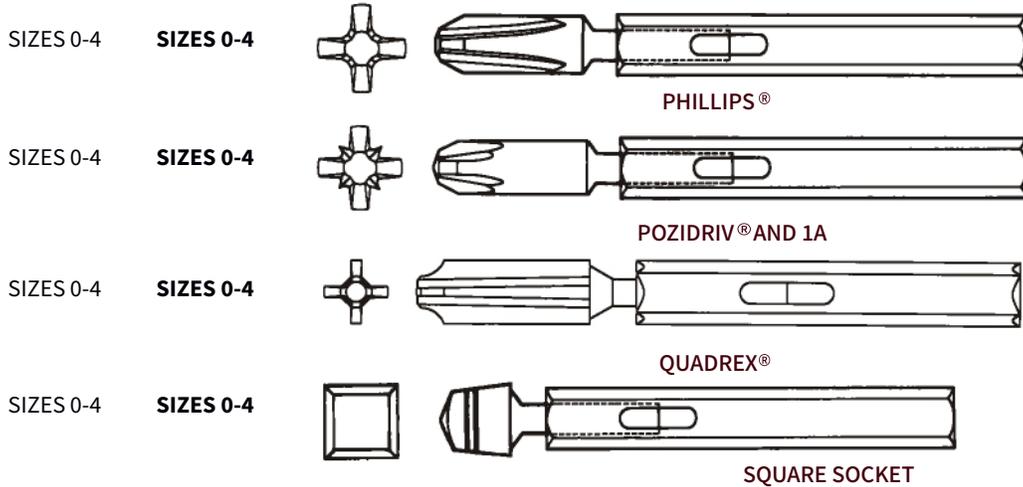
QUADREX PLUG GAGE

Gages also available in the following:

HEXLOBE®, B.N.A.E., HEX SOCKET, PHILLIPS SQUARE-DRIV®, TORQ-SET®, ACR®TORQ-SET®, TRI-WING®,
DIN/JISS PHILLIPS®ACR®, ACR®PHILLIPS II®, MORTORQ®Super, HEXSTIX®,
TORX®, TORX PLUS®, TORX PLUS® Autosert, and TTAP® gage available from Acument Global Technologies.

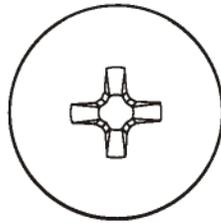
PHILLIPS®, POZIDRIV®, 1A, QUADREX® & SQUARE SOCKET.

PLUG GAGES

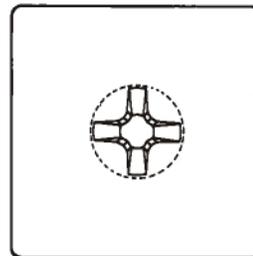


TO ORDER: SPECIFY RECESS TYPE & SIZE EXAMPLE -
#3 PHILLIPS® PLUG GAGE
EXAMPLE - #2 SQUARE SOCKET PLUG GAGE

RING GAGES & TEST BLOCKS



PHILLIPS® RECESS
SIZES 0, 1, 2, 3 & 4



PHILLIPS® RECESS
SIZES 0, 1, 2, 3 & 4

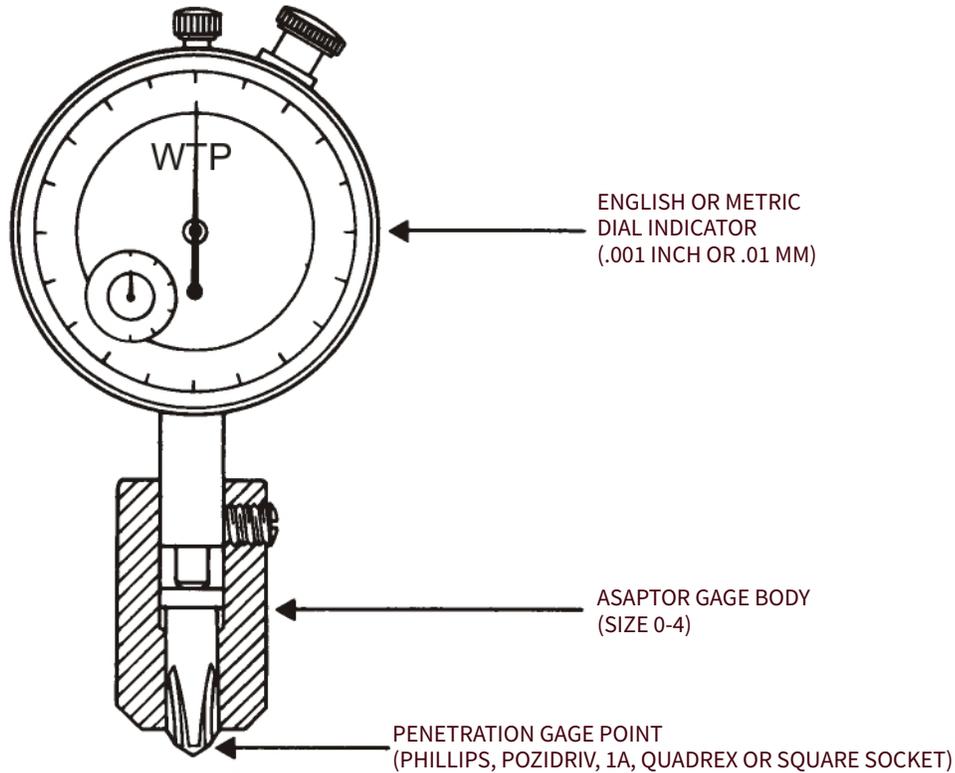
TO ORDER: SPECIFY SIZE & DESCRIPTION
EXAMPLE - #2 PHILLIPS® RING GAGE

Gages also available in the following:

HEXLOBE®, B.N.A.E., HEX SOCKET, PHILLIPS SQUARE-DRIV®, TORQ-SET®, ACR® TORQ-SET®, TRI-WING®,
DIN/JISS PHILLIPS® ACR®, ACR® PHILLIPS II®, MORTORQ® Super, HEXSTIX®,
TORX®, TORX PLUS®, TORX PLUS® Autosert, and TTAP® gage available from Acument Global Technologies.

PHILLIPS®, POZIDRIV®, QUADREX® AND SQUARE SOCKET.

PENETRATION GAGES *



COMPLETE GAGE PART NUMBERS

SIZE	PHILLIPS	POZIDRIV	1A	SQUARE SOCKET	QUADREX
0	0 PHPG	0 PZPG	0 1APG	0 SQPG	0 QXPG
1	1 PHPG	1 PZPG	1 1APG	1 SQPG	1 QXPG
2	2 PHPG	2 PZPG	2 1APG	2 SQPG	2 QXPG
3	3 PHPG	3 PZPG	3 1APG	3 SQPG	3 QXPG
4	4 PHPG	4 PZPG	4 1APG	4 SQPG	4 QXPG

* Please note that all components can be purchased individually or as a complete gage.

Gages also available in the following:

HEXLOBE®, B.N.A.E., HEX SOCKET, PHILLIPS SQUARE-DRIV®, TORQ-SET®, ACR®TORQ-SET®, TRI-WING®, DIN/JISS PHILLIPS®ACR®, ACR®PHILLIPS II®, MORTORQ®Super, HEXSTIX®, TORX®, TORX PLUS®, TORX PLUS®Autosert, and TTAP®gage available from Acument Global Technologies.

Code No.	Blank Diam.	Description
3P00-1	7/16	#0 Special Binding Head
3P00-3	7/16	#1 Special Binding Head
3P00-4	7/16	#0 Flat Head
3P00-5	7/16	#1 Flat Head
3P00-6	7/16	#0 Round Head
3P00-7	7/16	#1 Round Head
3P00-8	7/16	#0 Oval Head
3P00-9	7/16	#1 Oval Head
3P00-12	7/16	#0 Truss Head
3P00-13	7/16	#1 Truss Head
3P00-14	7/16	#0 Pan and Fillister Head
3P00-15	7/16	#1 Pan and Fillister Head
3P00-16	7/16	#0 Flat Top Truss Head
3P00-17	7/16	#1 Flat Top Truss Head
3P00-18	7/16	#1 Indented Hex Head
3P00-19	7/16	#0 100° Flat Head
3P00-20	7/16	#0 Finished Fillister Head
3P00-21	7/16	#1 Finished Fillister Head
3P00-24	7/16	#0 Binding Head
3P00-25	7/16	#1 Binding Head

Code No.	Blank Diam.	Description
3P10-1	7/16	#2 Flat Head Wood, Machine & Tapping #3 Undercut
3P10-2	7/16	#3 Flat Head Wood, Machine & Tapping
3P10-3	7/16	#4 Flat Head Wood, Machine & Tapping #5 Undercut
3P10-4	7/16	#2 Oval Head Wood, Machine & Tapping
3P10-5	7/16	#3 Oval Head Wood, Machine & Tapping #4 Trim
3P10-6	7/16	#4 Oval Head Wood, Machine & Tapping #5 & #6 with #4 Head Oval Trim
3P10-9	7/16	#2 Round Head Wood
3P10-10	7/16	#3 Round Head Wood
3P10-11	7/16	#4 Round Head Wood
3P10-12	7/16	#4 Old Style Fillister
3P10-13	7/16	#2 Fillister Head and Pan
3P10-14	7/16	#3 Pan Head Wood
3P10-15	7/16	#4 Pan Head Wood, Machine & Tapping
3P10-16	9/16	#6 low Round Head Machine
3P10-17	7/16	#4 Truss Head Machine & Tapping
3P10-18	7/16	#5 Truss Head Machine & Tapping
3P10-20	7/16	#2 Miniature Pan Head Machine
3P10-23	7/16	#2 Washer Head Wood, Machine & Tapping
3P10-24	7/16	#3 Washer Head Wood, Machine & Tapping
3P10-25	7/16	#4 Washer Head Wood, Machine & Tapping
3P10-26	7/16	#6 Flat Top Binding Head Machine
3P10-35	7/16	#2 Finished Fillister Head Machine
3P10-36	7/16	#4 Finished Fillister Head Machine & Tapping
3P10-37	7/16	#3 Finished Fillister Head Machine
3P10-41	7/16	#4 Indented Hex Head Tapping
3P10-42	7/16	#5 Indented Hex Head Tapping
3P10-44	7/16	#4 Round Head Machine & Tapping

Code No.	Blank Diam.	Description
3P10-45	7/16	#3 Round Head Machine & Tapping
3P10-46	7/16	#2 Round Head Machine & Tapping
3P10-54	7/16	#4-82° Flat Head Machine Undercut
3P10-61	7/16	#3 Truss Head Machine & Tapping (Obsolete)
3P10-62	7/16	#4 Electric Binding Head
3P10-63	7/16	#2 Electric Binding Head
3P10-64	7/16	#3 Electric Binding Head
3P10-66	7/16	#2 Binding Head Machine (Special)
3P10-80	7/16	#2-100° Flat Head Machine Undercut, Machine
3P10-82	7/16	#2-100° Oval Head Tapping
3P10-83	7/16	#3-100° Oval Head Tapping
3P10-84	7/16	#4-100° Oval Head Tapping
3P10-100	7/16	#2 Flat Top Truss Head Machine & Tapping
3P10-101	7/16	#3 Flat Top Truss Head Machine & Tapping
3P10-102	7/16	#4 Flat Top Truss Head Machine & Tapping
3P10-103	7/16	#5 Flat Top Truss Head Machine & Tapping
3P10-119	7/16	4-40 E.K. Miniature Pan Head
3P10-127	7/16	#2 Indented Hex Head
3P10-128	7/16	#3 Indented Hex Head
3P10-129	7/16	#2 Round Combination Slot
3P10-130	7/16	#3 Round Combination Slot
3P10-131	7/16	#4 Round Combination Slot
3P10-154	7/16	#2 Pan Combination
3P10-155	7/16	#3 Pan Combination
3P10-156	7/16	#4 Pan Combination
3P10-157	7/16	#4 Trimmed Hex
3P10-158	9/16	Flat Baseboard Screw
3P10-159	7/16	10-6 with "S"
3P10-163	7/16	10-3 with "S"
3P10-169	9/16	10-158 with "S"

Made to order punches, to customer specifications are available on a special basis. Punches made to metric, DIN, and other foreign standards are also available in the head and recess styles which we produce.

Code No.	Blank Diam.	Description
3P20-1	7/16	#5 Flat Head Wood, Machine & Tapping, #7 Undercut
3P20-2	7/16	#6 Flat Head Wood, Machine & Tapping, #8 Undercut
3P20-3	9/16	#7 Flat Head Wood, #8 Machine & Tapping, #10 Undercut
3P20-4	9/16	#8 Flat Head Wood, #10 Machine & Tapping
3P20-5	9/16	#9 Flat Head Wood
3P20-6	9/16	#7 Flat Head Tapping
3P20-7	7/16	#5 Oval Head Wood, Machine & Tapping, #6 & #8 with #5 Head Oval Trim
3P20-8	7/16	#6 Oval Head Wood, Machine & Tapping, #8 Trim with #6 Head
3P20-9	9/16	#7 Oval Head Wood
3P20-10	9/16	#8 Oval Head Wood
3P20-11	9/16	#9 Oval Head Wood
3P20-12	9/16	#8 Oval Head Machine & Tapping, #10 Oval Head Trim with #8 Head and #10 & #12 Oval Head Trim with #8 Head
3P20-13	9/16	#10 Oval Head Machine & Tapping, #12 & #14 Oval Trim with #10 Head
3P20-14	9/16	#7 Oval Head Tapping
3P20-15	7/16	#6 Round Head Wood & Machine & Tapping
3P20-16	9/16	#7 Round Head Wood & Tapping
3P20-17	9/16	#8 Round Head Wood, Machine & Tapping
3P20-18	9/16	#9 Round Head Wood
3P20-19	9/16	#10 Round Head Wood, Machine & Tapping
3P20-20	7/16	#5 Pan Head Machine & Tapping
3P20-21	7/16	#6 Pan Head Machine & Tapping
3P20-22	9/16	#7 Pan Head Tapping
3P20-23	9/16	#8 Pan Head Machine & Tapping
3P20-24	9/16	#9 Pan Head Machine & Tapping
3P20-25	9/16	#10 Pan Head Machine & Tapping
3P20-26	7/8	#10 Binding Head (Special)
3P20-28	9/16	#8 Oval Head Trim, #6 Head
3P20-29	9/16	#6 Low Round Head Wood
3P20-30	7/16	#5 Round Head Wood, Machine & Tapping
3P20-31	9/16	#10 Flat Head Wood
3P20-32	9/16	#10 Oval Head Wood (Special)

Code No.	Blank Diam.	Description
3P20-33	9/16	#8 Truss Head Machine & Tapping
3P20-34	7/8	#10 Truss Head Machine & Tapping
3P20-43	7/8	Special for Continental
3P20-44	9/16	Special for Continental
3P20-45	7/16	#5 Washer Head Wood, Machine & Tapping
3P20-46	7/16	#6 Washer Head Wood, Machine & Tapping
3P20-47	9/16	#7 Washer Head Wood, Machine & Tapping
3P20-48	9/16	#8 Washer Head Wood, Machine & Tapping
3P20-49	9/16	#10 Washer Head Wood, Machine & Tapping
3P20-60	7/8	1/4" Binding Head Machine (Special)
3P20-63	9/16	#6 Truss Head Machine & Tapping
3P20-64	7/8	#9 Truss Head Tapping
3P20-71	9/16	#7 Truss Head Tapping
3P20-91	7/8	1/4" Lentil Machine (Special)
3P20-92	7/8	1/4" Oval Head Machine (Special)
3P20-100	7/16	#6 Indented Hex Head Tapping
3P20-101	7/16	#7 Indented Hex Head Tapping
3P20-102	9/16	#8 Indented Hex Head Tapping
3P20-103	9/16	#10 Indented Hex Head Tapping
3P20-123	7/16	#5 100° Flat Head Tapping
3P20-131	9/16	#8 100° Flat Head Machine with X
3P20-132	9/16	#10 100° Flat Head Machine with X
3P20-133	9/16	#6 Binding Head Machine (Special)
3P20-134	7/16	#8 Flat Head Sheet Metal (Special)
3P20-135	9/16	#8 100° Flat Head Machine
3P20-136	9/16	#10 100° Flat Head Machine
3P20-137	7/16	#6 Trimmed Hex Head Machine
3P20-142	7/16	#6 Truss Head Machine & Tapping
3P20-143	9/16	#10 Electric Binding Head
3P20-144	9/16	#5 Electric Binding Head
3P20-145	9/16	#8 Electric Binding Head — Fisher #9718526
3P20-147	9/16	#10 Trimmed Hex Head Machine
3P20-148	9/16	#6 Truss Head Machine & Tapping
3P20-149	7/16	#6 Truss Head Machine & Tapping
3P20-150	9/16	#6 Flat Head Wood & Machine
3P20-153	3/4	#10 Truss Head Machine & Metal
3P20-156	9/16	#8 Washer Head Tapping (Special)
3P20-163	9/16	#8 Flat Head Machine with dash
3P20-164	9/16	#6 Pan Head Spinlock Machine & Tapping

Code No.	Blank Diam.	Description
3P20-176	7/16	#6 & #8 Oval Head Trim with #5 Head
3P20-203	9/16	#9 Oval 100° Machine
3P20-207	7/16	#6-100° Flat Head Machine with dash
3P20-210	7/8	#12 Oval Head Machine (Special)
3P20-212	5/8	#10 Truss Head same as 3P20-34 except No Pin Slot
3P20-219	9/16	#10 Truss Head same as 3P20-34 except No Pin Slot
3P20-223	9/16	#8 Undercut Binding Head Machine
3P20-229	9/16	#6 Flat Head Wood Fillister (Special)
3P20-231	9/16	#10 Flat Head Tapping wide Flat
3P20-239	9/16	#10-100° Flat Head NAS517
3P20-243	9/16	#8 Flat Head Tapping wide Flat
3P20-248	9/16	#8-100° Flat Head with X dash X
3P20-249	9/16	#10-100° Flat Head with X dash X
3P20-254	9/16	#12 Flat with #8 Head
3P20-255	9/16	#10 & #12 Oval Head Trim with #8 Head
3P20-256	9/16	#12 & #14 Oval Head Trim with #10 Head
3P20-257	7/16	#6 Finished Fillister Head Machine & Tapping
3P20-258	9/16	#10 Finished Fillister Head Machine & Tapping
3P20-265	7/16	#5 Finished Fillister Head Machine & Tapping
3P20-266	9/16	#8 Finished Fillister Head Machine & Tapping
3P20-278	9/16	#7 Finished Fillister Machine
3P20-285	7/16	#6 Flat Head Undercut Machine & Tapping
3P20-321	9/16	#6 Flat Top Truss Head Machine & Tapping
3P20-322	9/16	#7 Flat Top Truss Head Tapping
3P20-323	9/16	#8 Flat Top Truss Head Machine & Tapping
3P20-324	7/8	#10 Flat Top Truss Head Machine & Tapping
3P20-338	7/16	#6 Flat Top Truss Head Machine
3P20-339	3/4	#10 Flat Top Truss Head Machine
3P20-340	7/8	#9 Flat Top Truss Head Machine
3P20-346	7/16	#5 Shaved Fillister Head Type A Tapping
3P20-347	9/16	#10 Flat Top Truss Head No Pin Slot
3P20-348	5/8	#10 Flat Top Truss Head No Pin Slot
3P20-361	7/8	Special Fisher Body #8 Gimlet Screw
3P20-362	9/16	#6 Pyramid Head
3P20-385	9/16	Same as 3P20-323 No Pin Slot
3P20-387	7/16	Special Washer Head for Fisher Body #4765687
3P20-388	5/8	Special #10 Washer Head
3P20-389	7/16	3P20-15 with Struck Slot
3P20-390	9/16	3P20-17 with Struck Slot

Code No.	Blank Diam.	Description
3P20-391	9/16	3P20-19 with Struck Slot
3P20-395	7/8	Special Washer Head for Fisher Body
3P20-396	9/16	Oversize #10 100° Flat to shave
3P20-397	7/8	3P20-13 button with 3P30-13 recess
3P20-398	7/8	Same as 3P30-24 with 3P20-34 recess
3P20-435	9/16	#7 Pyramid Head
3P20-436	9/16	Nash Kelvinator #1146128
3P20-474	9/16	#8 Trimmed Hex Head
3P20-475	7/16	#5 Combination Round Head Phillips & Slotted
3P20-476	9/16	#7 Combination Round Head Phillips & Slotted
3P20-483	7/8	Same as 3P20-2 except blank diameter
3P20-486	7/8	Same as 3P20-4 except blank diameter
3P20-499	7/8	Part #4719582 Fisher Body
3P20-500	7/8	Chevrolet #3786100
3P20-510	7/8	Special
3P20-522	9/16	Ford Motor #376129
3P20-524	9/16	Westinghouse #NA-20A142-2
3P20-526	3/4	Delco-Remy #1957501
3P20-540	9/16	Special Flat Head Construction Screw
3P20-551	7/16	#5 Pan Combination
3P20-552	7/16	#6 Pan Combination
3P20-553	9/16	#7 Pan Combination
3P20-554	9/16	#8 Pan Combination
3P20-555	9/16	#10 Pan Combination
3P20-563	9/16	Same as 20-6 with "S" on head
3P20-564	7/16	Same as 20-7 with "S" on head
3P20-565	7/16	Same as 20-8 with "S" on head
3P20-566	9/16	Same as 20-12 with "S" on head
3P20-567	9/16	Same as 20-13 with "S" on head
3P20-568	7/16	Same as 20-2 with "S" on head
3P20-569	9/16	Same as 20-3 with "S" on head
3P20-570	9/16	Same as 20-4 with "S" on head
3P20-571	7/8	Same as 20-3 7/8 Blank
3P20-572	7/8	Same as 20-6 7/8 Blank 11/16 Flat
3P20-573	7/8	Same as 20-156 7/8 Blank 1/2 Flat
3P20-574	7/8	Same as 20-322 7/8 Blank 11/16 Flat
3P20-575	9/16	Binding POZIDRIV®
3P20-576	9/16	#6 Flat Top Washer, Chrysler, #6029069, #6028545

Code No.	Blank Diam.	Description
3P20-577	9/16	Same as 20-540 with "S" on head
3P20-583	7/8	#6023386 or #6023476
3P20-584	7/8	20-499 with "S"
3P20-585	7/16	20-387 Larger "N"
3P20-586	9/16	#10 Flat Top Washer Head, Chrysler, #6028439, #6029299
3P20-592	7/8	#10 Flat Top Washer
3P20-596	9/16	#8 Flat Top Washer — Ford 56919-5Z
3P20-597	9/16	#10 Flat Top Washer
3P20-598	7/8	20-34 Combination
3P20-599	7/8	20-499 except Head Height & Flat Top — Ford 381081
3P20-600	9/16	20-25 with "S"
3P20-601	9/16	Special #10 Flat
3PZ20-603	5/8	20-4 5/8" Blank POZIDRIV®
3P20-616	9/16	20-596 Full Flat
3P20-617	9/16	20-11 with "S" on head
3P20-619	9/16	20-540 3 Rings
3P20-624	9/16	Same as 20-540 with "B"
3P20-629	7/8	20-324 12 Radial Lines
3P20-630	9/16	Chrysler #6027604, #6028240, #6028097
3P20-631	7/16	Special 5 Oval Combination
3PZ20-632	9/16	#10 Flange Head
3P20-633	7/16	Special 6 Oval Combination
3P20-634	9/16	Special 8 Oval Combination
3P20-636	9/16	Olds 588546 Chev 6264140 Fisher 96162310
3PZ20-639	7/8	POZIDRIV®-20-499 except Head Diam.
3P20-640	3/4	20-324 12 Radial Lines — Frigidaire 0619229
3PZ20-641	9/16	Fisher 750P04735-22
3PZ20-642	9/16	Special Curved Top Combination — POZIDRIV®
3PZ20-643	7/8	Fisher 20016079
3PZ20-644	—	#8 Indented Hex Pin — Fisher 11503250
3PZ20-645	9/16	AMC 4004403
3PZ20-646	9/16	Fisher 20006694

Made to order punches, to customer specifications are available on a special basis. Punches made to metric, DIN, and other foreign standards are also available in the head and recess styles which we produce.

Code No.	Blank Diam.	Description
3P30-1	9/16	#10 Flat Head Wood
3P30-2	7/8	#11 Flat Head Wood, #12 Machine & Tapping, #16 Undercut machine & Tapping
3P30-3	7/8	#12 Flat Head Wood, 1/4" Machine, #14 Tapping
3P30-4	7/8	#14 Flat Head Wood, #16 Tapping
3P30-5	1	#16 Flat Head Wood
3P30-6	7/8	#10 Oval Head Wood
3P30-7	7/8	#11 Oval Head Wood
3P30-8	7/8	#12 Oval Head Wood
3P30-9	7/8	#14 Oval Head Wood
3P30-10	1	#16 Oval Head Wood & Tapping
3P30-11	7/8	#12 Oval Head Machine & Tapping, #14 Oval Trim with #12 Head
3P30-12	7/8	1/4" Oval Head Machine
3P30-13	7/8	#14 Oval Head Tapping
3P30-15	7/8	#11 Round Head Wood
3P30-16	7/8	#12 Round Head Wood, Machine & Tapping
3P30-17	7/8	#14 Round Head Wood & Tapping
3P30-18	1	#16 Round Head Wood & Tapping
3P30-19	7/8	1/4" Round Head Machine
3P30-20	1	5/16" Round Head Machine
3P30-21	7/8	#12 Pan Head Machine & Tapping
3P30-22	7/8	1/4" Pan Head Machine, #14 Tapping
3P30-24	7/8	#12 Truss Head Machine & Tapping
3P30-25	7/8	1/4" Truss Head Machine
3P30-26	7/8	5/16" Lentil Machine
3P30-30	7/8	5/16" Fillister Head Machine & Metal
3P30-39	7/8	#14 Washer Head Wood, Machine & Tapping
3P30-42	7/8	#12 Washer Head Wood, Machine & Tapping
3P30-43	7/8	1/4 Washer Head Wood, Machine & Tapping
3P30-44	1	5/16" Washer Head Wood, Machine & Tapping
3P30-46	7/8	#12 Flat Head Machine (Special)
3P30-58	1	1/4" Trimmed Hex Head Machine
3P30-59	7/8	#12 Indented Hex Head Tapping
3P30-67	7/8	1/4" Finisher Fillister Head machine & #14 Tapping
3P30-68	7/8	#12 Finished Fillister Machine & Tapping
3P30-69	7/8	5/16" Finished Fillister Machine
3P30-70	7/8	#14 Indented Hex Head Tapping
3P30-71	7/8	1/4 Indented Hex Head
3P30-85	7/8	#12-100° Flat Head Tapping 1/4" Undercut Machine #14 Tapping
3P30-87	7/8	1/4" Special Hex Head
3P30-92	7/8	1/4"-100° Flat Head Machine with X
3P30-93	7/8	1/4"-100° Flat Head Machine
3P30-94	1	#12 Trimmed Hex Head Machine

Code No.	Blank Diam.	Description
3P30-96	7/8	#12 Electric Binding Head
3P30-97	7/8	1/4" Electric Binding Head
3P30-115	1	1/4" Truss Machine
3P30-127	7/8	1/4" Flat Head Spinlock Machine
3P30-140	1	5/16" Truss Head Machine (Special)
3P30-142	1	#16-100° Oval Head Tapping
3P30-147	9/16	#10 Oval Head Wood
3P30-148	7/8	1/4"-100° Flat Head Machine with C
3P30-166	7/8	#12 Flat Head Undercut Machine & Tapping
3P30-167	7/8	#12 Flat Top Truss Head Machine & Tapping
3P30-168	7/8	1/4" Flat Top Truss Head Machine
3P30-169	7/8	1/4" Flat Top Washer Head
3P30-180	1	1/4" Flat Top Truss Head Machine & Tapping
3P30-184	1	#16 Flat Top Truss Head Tapping
3P30-185	7/8	#16 Fillister — Wood
3P30-206		#14 Trimmed Hex Head
3P30-207	7/8	#12 Round Head Combination
3P30-208	7/8	1/4" Round Head Combination
3P30-209	1	5/16" Round Head Combination
3P30-226	7/8	#14 Pan Head Tapping
3P30-227	7/8	#14 Flat Top Truss Head Type A
3P30-228	1	#14 Flat Top Truss Head Type A
3P30-231	7/8	West Germany
3P30-232	7/8	West Germany
3P30-235	1	30-3, 8 Rings
3P30-236	7/8	#12 Pan Combination
3P30-237	7/8	1/4" Pan Combination
3P30-238	7/8	30-6 with "S"
3P30-239	7/8	30-11 with "S"
3P30-241	7/8	30-2 with "S"
3P30-242	7/8	30-3 with "S"
3P30-244	7/8	30-12 with "S"
3P30-246	7/8	5/16" Miniature Pan
3PZ30-247	7/8	#16 Pan Combination POZIDRIV®
3PZ30-249	7/8	#14 Pan Combination POZIDRIV®
3P30-251	1-1/4	Special 1/4" Flat Top Truss
3P30-252	1	West Germany
3P30-253	7/8	30-19 with "S"
3P30-254	7/8	DIN 7893 5.5
3P30-256	1	1/4" Trimmed Hex
3P30-257	7/8	DIN 7995 6
3PZ30-274	7/8	Pozi 30-167 12 Lines
3P30-275	7/8	1/4" Flat Top Washer
3PZ30-277	7/8	1/4" Flat Top Truss POZIDRIV® — Fisher #1708768
3PZ30-278	7/8	Fisher #20006670 — POZIDRIV®

Made to order punches, to customer specifications are available on a special basis. Punches made to metric, DIN, and other foreign standards are also available in the head and recess styles which we produce.

Code No.	Blank Diam.	Description
3P40-1	1	#18 Flat Head Wood, #20 Tapping
3P40-2	1-1/4	#20 Flat Head Wood, 3/8 Machine, #24 Tapping, 7/16" Undercut Machine
3P40-3	1-1/4	#24 Flat Head Wood, 1/2" Machine
3P40-4	1	5/16" Flat Head Machine, #18 Tapping, 3/8" Undercut Machine, #24 Undercut Tapping
3P40-5	1-1/4	7/16" Flat Head Machine, 1/2" Undercut Flat
3P40-6	1	#18 Oval Head Wood & Tapping
3P40-7	1	#20 Oval Head Wood & Tapping
3P40-8	1-1/4	#24 Oval Head Wood & Tapping
3P40-9	1	5/16" Pan Head Machine
3P40-10	1-1/4	3/8" Oval Head Machine
3P40-11	1-1/4	7/16" Oval Head Machine
3P40-12	1-1/4	1/2" Oval Head Machine
3P40-13	1	5/16" Oval Head Machine
3P40-14	1	#18 Round Head Wood
3P40-15	1-1/4	#20 Round Head Wood
3P40-16	1-1/4	#24 Round Head Wood & Tapping, 3/8" Round Machine
3P40-17	1-1/4	7/16" Round Head Machine
3P40-18	1-1/4	1/2" Round Head Machine
3P40-20	1	5/16" Truss Head Machine
3P40-21	1-1/4	3/8" Truss Head Machine
3P40-22	1-1/4	7/16" Truss Head Machine
3P40-24	1-1/4	5/16" Flat Wafer Machine
3P40-26	1-1/4	3/8" Pan Head Machine & Fillister
3P40-27	1-1/4	7/16" Pan Head Machine & Fillister
3P40-28	1-1/2	1/2" Pan Head Machine & Fillister
3P40-31	1-1/2	1/2" Truss Head — Machine & Tapping
3P40-36	1-1/4	3/8" Washer Head Wood, Machine & Tapping
3P40-37	1-1/4	7/16" Washer Head Wood, Machine & Tapping
3P40-38	1-1/4	1/2" Washer Head Wood, Machine & Tapping
3P40-64	1	#20 Flat Head Undercut — Tapping
3P40-65	1	5/16" Trimmed Hex Head — Machine
3P40-66	1-1/4	3/8" Trimmed Hex Head — Machine
3P40-67	1-1/4	7/16" Trimmed Hex Head — Machine
3P40-68	1-1/4	1/2" Trimmed Hex Head — Machine
3P40-79	1	5/16"-100° Flat Head Machine & Undercut
3P40-94	1-1/4	5/16" Truss Head Machine (Special)
3P40-106	1	3/8"-100° Flat Head Machine
3P40-107	1	5/16" Electric Binding Head
3P40-108	1	3/8" Electric Binding Head
3P40-110	1	#18 Round Head Tapping
3P40-111	1	#20 Round Head Tapping
3P40-116	1	5/16" Truss Head Spinlock Machine
3P40-145	1	#18 Oval Head Tapping

Code No.	Blank Diam.	Description
3P40-162	1	3/8" Finished Fillister Head Machine
3P40-163	1-1/4	7/16" Finished Fillister Head Machine
3P40-164	1-1/4	1/2" Finished Fillister Head
3P40-172	1	5/16" Flat Top Truss Head Machine
3P40-173	1-1/4	3/8" Flat Top Truss Head Machine
3P40-174	1-1/4	7/16" Flat Top Truss Head Machine
3P40-175	1-1/2	1/2" Flat Top Truss Head Machine
3P40-189	1-1/4	5/16" Flat Top Truss Head Machine
3P40-198	1	5/16" Truss Flat Top
3P40-199	1	#18 Flat Top Truss Head Tapping
3P40-200	1	#20 Flat Top Truss Head Tapping
3P40-201	1	#18 Pan Head Machine & Tapping
3P40-242	1	5/16" Indented Hex Head
3P40-243	1	3/8" Indented Hex Head
3P40-244	1	#20 Indented Hex Head
3P40-245	1	#24 Indented Hex Head
3P40-254	1	5/16" Oval Undercut
3P40-255	1	3/8" Oval Undercut
3P40-256	1-1/4	7/16" Oval Undercut
3P40-257	1-1/4	1/2" Oval Undercut
3P40-261	1	West Germany
3P40-267	1	5/16" Pan Combination
3P40-268	1-1/2	40-2, "12" on head
3P40-269	1	Ford #380024-3
3P40-270	1-1/2	Special Truss National Lock
3PZ40-271	1-1/4	3/8" Special Pan POZIDRIV®
3PZ40-272	1-1/4	3/8" Special Truss Ford #379163-S8 POZIDRIV®
3PZ40-273	1	3/8" Miniature Pan POZIDRIV®
3PZ40-274	1	Special POZIDRIV® Continental
3P40-275		Special Townsend
3P40-276	1	#18 Combination Pan
3P40-277	1	#20 Combination Pan
3P40-278	1-1/4	#24 Combination Pan
3P40-279	1	40-79 #80S20551-FB on head
3PZ40-280	1-1/2	Special 7/16" Truss, Ford #381755, POZIDRIV®
3PZ40-281	1-1/2	9/16" Shaved Fillister, POZIDRIV®
3P40-282	1	Chrysler #6024972
3PZ40-283	1-1/4	American Motors #4001944, POZIDRIV®
3PZ40-284	1	5/16" Indented Hex, POZIDRIV®
3P40-285	1-1/4	Fisher Body #4463087
3P40-295	1-1/2	Nat. Lock 18-0-063-7934
3P40-296	1-1/2	Ford 378430-S40
3PZ40-298	1	Flange Head 5/16"
3PZ40-299	1	Flange Head 3/8"
3PZ40-300	1-1/4	Pozi Fisher 9887356
3P40-301	1-1/2	1/2" Special Flat Top Truss — Ford #80385-283-S40

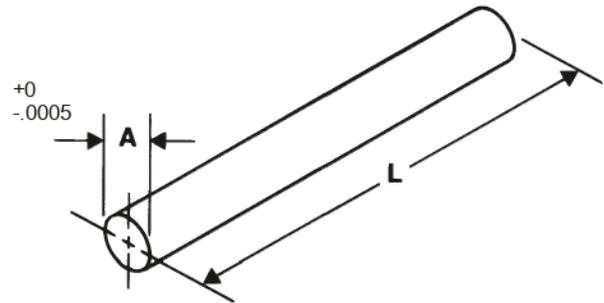
Code No.	Blank Diam.	Description
3P10-11A	7/16	#4 Round Head Wood — Aluminum
3P10-15A	7/16	#4 Pan & Fillister Head — Aluminum
3P10-44A	7/16	#4 Round Head Machine — Aluminum
3P10-45A	7/16	#3 Round Head Machine — Aluminum
3P20-15A	7/16	#6 Round Head — Aluminum
3P20-16A	9/16	#7 Round Head Wood — Aluminum
3P20-17A	9/16	#8 Round Head — Aluminum
3P20-18A	9/16	#9 Round Head Wood — Aluminum
3P20-19A	9/16	#10 Round Head — Aluminum
3P20-21A	9/16	#6 Pan Head — Aluminum
3P20-23A	9/16	#8 Pan Head — Aluminum
3P20-25A	9/16	#10 Pan Head — Aluminum
3P20-30A	7/16	#5 Round Head — Aluminum
3P20-30A	9/16	#5 Round Head — Aluminum
3P30-16A	7/8	#12 Round Head Wood — Aluminum
3P30-17A	7/8	#14 Round Head Wood — Aluminum
3P30-18A	1	#16 Round Head Wood — Aluminum
3P30-19A	7/8	1/4" Round Head — Aluminum
3P30-20A	1	5/16" Round Head — Aluminum
3P30-21A	1	#14 Pan Head — Aluminum
3P30-22A	7/8	1/4" Pan Head — Aluminum
3P30-22A	1	1/4" Pan Head — Aluminum
3P40-16A	1-1/4	3/8" Round Head — Aluminum

Made to order punches, to customer specifications are available on a special basis. Punches made to metric, DIN, and other foreign standards are also available in the head and recess styles which we produce.

STRAIGHT PIN

Material: A.I.S.I. M-2
Heat Treat: Triple drawn to RC 62-64
Diameter Range: .062-1.000

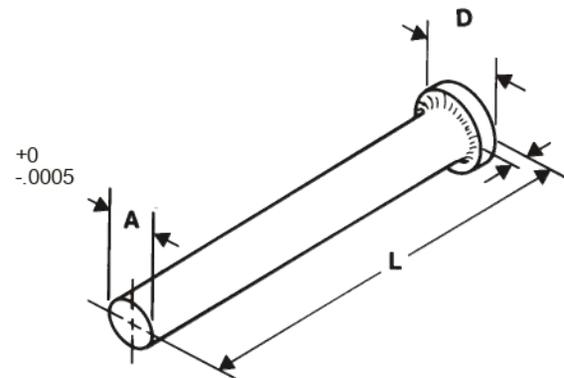
To order: Specify diameter A and length L



HEADED PIN

Material: A.I.S.I. M-2
Heat Treat: Triple drawn to RC 62-64
Diameter Range: .062-1.000

To order: Specify diameter A and length L

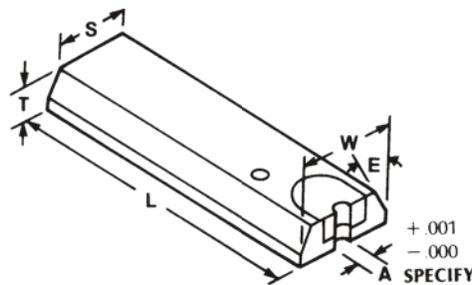


PRICES FURNISHED UPON REQUEST

NAKASHIMADA

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

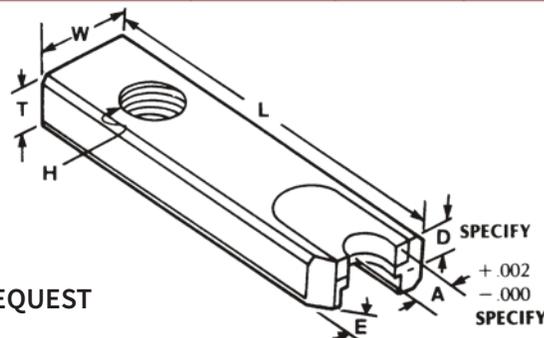
TOOL NO.	MACHINE TYPE	T	W	L	S	E
800	1/8" H10-10A	5 mm	16 mm	55 mm	12.24 mm	30°
900	5/32" PF-420	6 mm	20 mm	65 mm	15.08 mm	30°
900	3/16" H15/15A	6 mm	20 mm	65 mm	15.08 mm	30°
1000	1/4" H20/20A/20AU/20U/PF630	7 mm	28 mm	70 mm	21.92 mm	30°
1500	1/4" H20C/20E/20F/CS	12 mm	28 mm	70 mm	21.26 mm	20°
1600	1/4" DH20	10 mm	25 mm	75 mm		
1700	1/4" H25	30 mm	30 mm	87 mm		
1300	5/16" PF860	8.5 mm	35 mm	90 mm	27.33 mm	30°
1200	3/8" H30/30A	20 mm	35 mm	120 mm	30.94 mm	45°
1400	1/2" PF1280	19.8 mm	45 mm	130 mm	38.70 mm	45°



CARLO SALVI

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.
 Note! Standard Knives Furnished with Square Nose. For Short Blanks specify "D" Dimension.

TOOL NO.	MACHINE TYPE	T	W	L	H
7000	1/8" PSV-RF/SV	8 mm	12 mm	45 mm	M 5
7050	5/32" TP2/CL-RF/PL	8 mm	12 mm	65 mm	M 6
7100	3/16" 476/SV-RF/476/SV	10 mm	12 mm	65 mm	M 6
7200	1/4" 635/SV-RF 635/SV	12 mm	20 mm	90 mm	M 8
7250	1/4" INT/CL-RF/ML	11 mm	20 mm	90 mm	M 8
7300	5/16" RF/873/SV	13 mm	25 mm	115 mm	M 12
7350	5/16" TM/CL-RF/GL	—	—	—	—

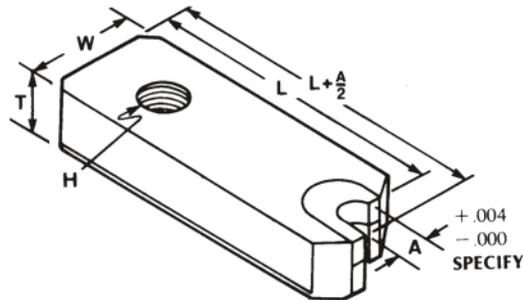


PRICES FURNISHED UPON REQUEST

SACMA

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

TOOL NO.	MACHINE TYPE	T	W	L	H
3000	SP-01	.390	.704	2.165	5/16-18
3100	SP-11	.452	.941	3.051	3/8-16
3200	SP-21	.547	1.098	3.543	9/16-12
3300	SP-31	.666	1.700	4.882	9/16-12



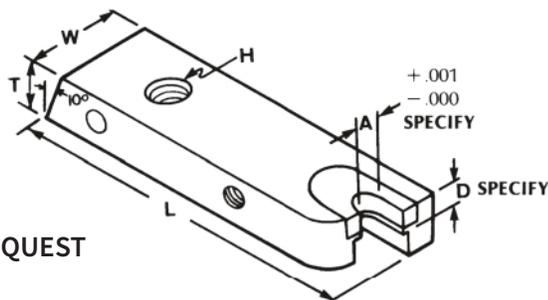
WATERBURY FARREL

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

Note! Standard Knives Furnished with Square Nose. For Short Blanks specify "D" Dimension.

"E" Dimension as shown or specify your needs.

TOOL NO.	MACHINE TYPE	T	W	L	H	E
4000	1/8" HEADMASTER	3/8	3/4	2-1/16	1/4-28	20°
4150	No. 0 TOGGLE	.341	11/16	2-1/4	5/16-18	20°
4150	No. 0 TUB RIVET	.341	11/16	2-1/4	5/16-18	20°
4150	3/16 HIPRO	.341	11/16	2-1/4	5/16-18	20°
4200	#10 HIPRO LONG WORK	.341	11/16	2-1/4	5/16-18	20°
4250	#10 HIPRO SHORT WORK	.341	11/16	2-1/4	5/16-18	20°
4300	No. 1 TOGGLE	.371	1-1/16	2-9/16	7/16-20	20°
4300	No. 1 TUB RIVET	.371	1-1/16	2-9/16	7/16-20	20°
4400	3/16 HEADMASTER	3/8	1-1/16	2-9/16	5/16-24	20°
4450	No. 2 TOGGLE	.371	1-3/8	3-1/16	7/16-20	20°
4500	5/16 HIPRO	1/2	1-7/16	3-11/16	5/8-11	20°
4550	No. 3 TOGGLE	1/2	1-11/16	4-13/16	5/8-11	20°

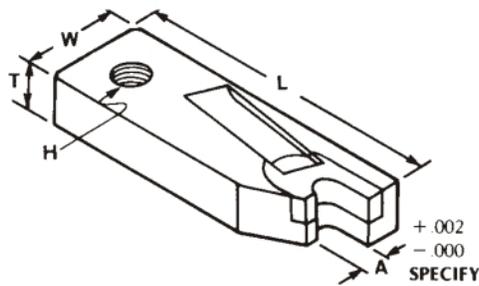


PRICES FURNISHED UPON REQUEST

HARTFORD

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

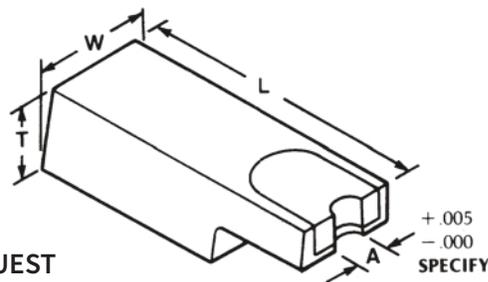
TOOL NO.	MACHINE TYPE	T	W	L	H
5000	1/8" HARTFORD #2-425	.392	.875	3.080	5/16-24
5100	1/8" HARTFORD #2-450	.392	.940	2.800	5/16-24
5200	3/16" HARTFORD #3-300 #3-350	.392	1.100	3.270	3/8-16
5300	5/16" HARTFORD #4-250 #5-250	.471	1.344	3.780	3/8-24



LEWIS

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

TOOL NO.	MACHINE TYPE	T	W	L
8000	OSC	1/2	11/16	2-1/2
8040	1C	9/16	7/8	2-1/4
8100	2C	3/4	1	2-7/8
8180	2CV	3/4	1	2-7/8
8200	2C SC	3/4	1.137	3
8320	7C1-254	9/16	3/4	2-3/4
8340	8C-9C	7/8	55/64	3-3/4
8380	9F	7/8	1-5/8	3-3/8
8400	10C	1-1/8	2.300	4-1/2
8440	3F	1/2	1	2-1/4
8480	4F	3/4	1-1/4	2-1/2

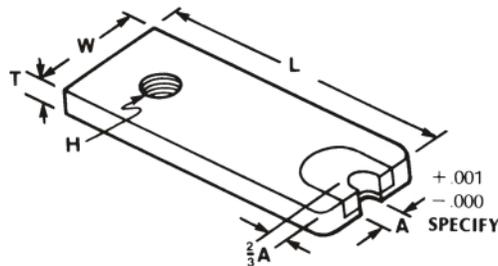


PRICES FURNISHED UPON REQUEST

NATIONAL

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

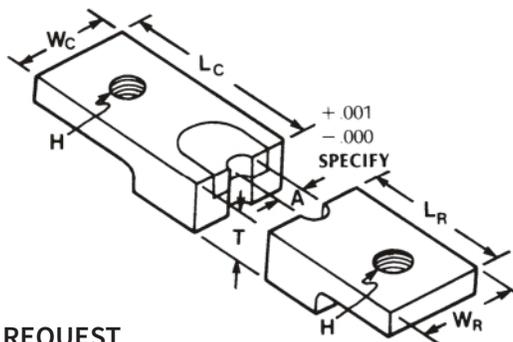
TOOL NO.	MACHINE TYPE	T	W	L	H
2000	1/8" DSSD	.250	3/4	1-13/16	3/8-16
2100	3/16" DSSD	.312	1-1/16	2-5/16	7/16-14
2200	1/4" DSSD	.375	1-3/8	3-1/2	1/2-13
2300	5/16" DSSD	.500	1-7/16	4	5/8-11
2400	3/8" DSSD	.437	1-1/2	4-1/4	5/8-11
2500	1/2" DSSD	.562	1-7/8	5	3/4-10



WATERBURY

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

TOOL NO.	MACHINE TYPE	T	WC	WR	LC	LR	H
6000	3/16" WTBY	5/8	13/16	—	1-11/16	—	5/16-24
6100	3/16" WTBY	5/8	—	7/8	—	1-3/16	5/16-24
6200	1/4" WTBY	3/4	1-1/16	—	2	—	3/8-24
6300	1/4" WTBY	3/4	—	1-1/8	—	1-7/16	3/8-24
6400	5/16" WTBY	7/8	1-3/16	—	2-3/8	—	7/16-20
6500	5/16" WTBY	7/8	—	1-1/4	—	1-11/16	7/16-20
6600	3/8" WTBY	1	1-5/16	—	2-11/16	—	1/2-20
6700	3/8" WTBY	1	—	1-3/8	—	1-15/16	1/2-20
6800	1/2" WTBY	1-1/4	1-9/16	—	3-1/2	—	5/8-18
6900	1/2" WTBY	1-1/4	—	1-1/2	—	3-1/4	5/8-18



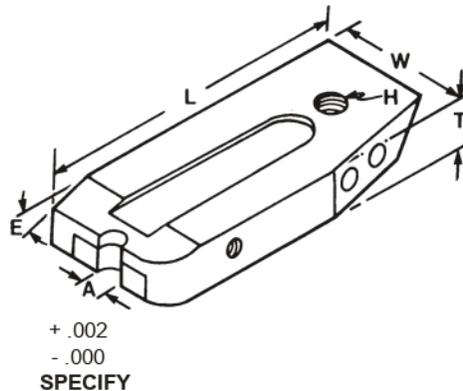
PRICES FURNISHED UPON REQUEST

CUT-OFF KNIVES

COLD HEADER MACHINE CORP

Material: Tool Steel Carbide Inserted. To order, specify Tool Number and "A" Dimension.

TOOL NO.	MACHINE MAKE	HEADER NO.	T	W	L	H
9000	TSUKIBOSHI	MS 200	1/4	7/8	1-15/16	1/4-20
9050		MT 200	1/4	7/8	1-15/16	1/4-20
9100		MT 300	.300	.995	2-3/16	3/8-16
9150		MT 350	.300	.995	2-3/16	3/8-16
9200	TOKYO JOODKI	HO Header Copper Cutter	9.5	25	57	M 8
9200		HO Header Silver Cutter	9	25	60	M 8
9300	AYASE SEIKI	MS 340	.275	5/8	2.480	5/16-18
9400		MTR 360	.315	.786	2-5/8	5/16-18
9500		MS 360	.275	.632	2-1/8	5/16-18
9600	KOSONO	MS 350	.300	.995	2-1/8	3/8-16
9650		MS 400	.375	1-1/4	2-1/2	
9700	SUKEGAWA	MS 500	.400	1-1/4	2-15/16	
9730		MS 500L	7/16	1-1/4	2.910	



PRICES FURNISHED UPON REQUEST

WARNING

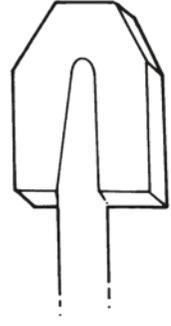
Any heading punch may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use.

CARBIDE REAMERS

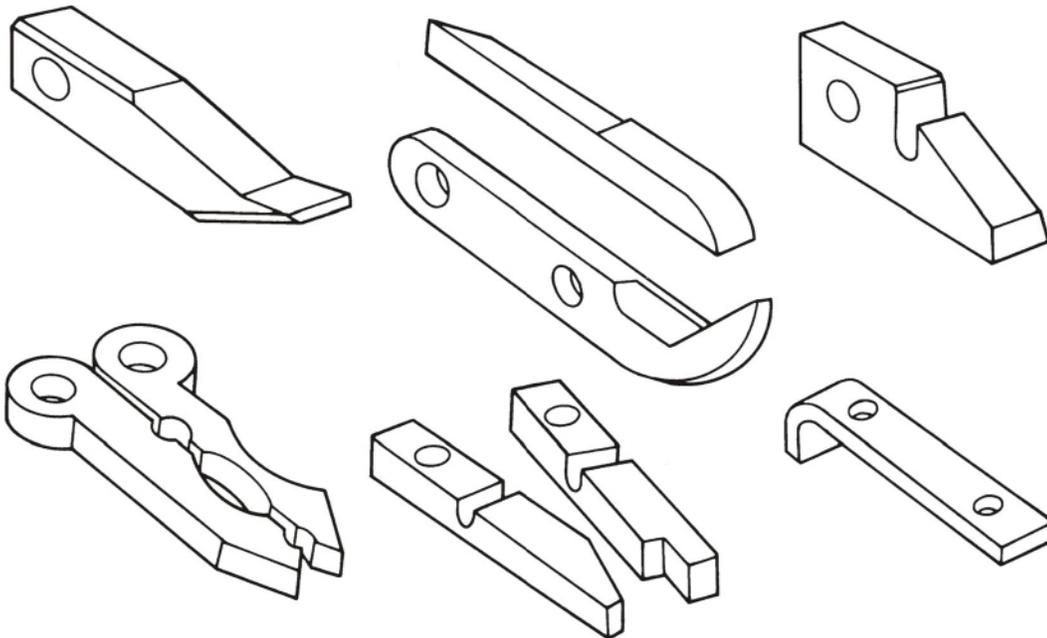
UN-GROUND	
1/8	.078 or 3/32 or .085
5/32	7/64
3/16	1/8 or 9/64
7/32	5/32
1/4	3/16
9/32	7/32
5/16	7/32
11/32	1/4
3/8	9/32
7/16	5/16
1/2	11/32
9/16	3/8
5/8	7/16
3/4	1/2



FINISHED READY TO USE		
Reaming Size Tolerance + .0003-.0003	SHANK	TIPS
.90-.127	3/32x4	1/32-1/4
.128-.155	7/64x4	3/64x1/4
.156-.190	1/8x4	1/16-5/16
.191-.250	3/16x5	.072-3/8
.251-.315	7/32x5	3/32-3/8
.316-.380	9/32-x5	1/8-7/16
.381-.440	5/16-x6	1-1/8-1/2
.441-.500	11/32x6	1/8-1/2



FINGERS



PRICES FURNISHED UPON REQUEST



Loma Adriana No. 1 Desp. 202
Fracc. La Loma de Cristy Naucalpan
53120. Edo de México



55 5343 8259



www.dafarza.com