

ISO / ASA insert designation

1 Shape

A	B	C	D
E	H	K	L
M	O	P	R
S	T	V	W

3 Tolerance Class

	Symbol			D(mm)			M(mm)			S(mm)		
	D	M	S	D	M	S	D	M	S	D	M	S
A	± 0.025	± 0.005	± 0.025	J	$a \pm 0.05$	$a \pm 0.15$	± 0.005	± 0.025	± 0.025	$a \pm 0.05$	$a \pm 0.15$	± 0.025
C	± 0.025	± 0.013	± 0.025	K	$a \pm 0.05$	$a \pm 0.15$	± 0.013	± 0.025	± 0.025	$a \pm 0.05$	$a \pm 0.15$	± 0.025
E	± 0.025	± 0.025	± 0.025	L	$a \pm 0.05$	$a \pm 0.15$	± 0.025	± 0.025	± 0.025	$a \pm 0.05$	$a \pm 0.20$	± 0.13
F	± 0.013	± 0.005	± 0.025	M	$a \pm 0.05$	$a \pm 0.15$	± 0.008	$a \pm 0.08$	± 0.08	$a \pm 0.20$	$a \pm 0.13$	± 0.025
G	± 0.025	± 0.025	± 0.013	N	$a \pm 0.05$	$a \pm 0.15$	± 0.025	$a \pm 0.08$	± 0.08	$a \pm 0.20$	$a \pm 0.13$	± 0.025
H	± 0.013	± 0.013	± 0.025	U	$a \pm 0.08$	$a \pm 0.25$	± 0.13	$a \pm 0.38$	± 0.13	$a \pm 0.38$	± 0.13	± 0.13

METRIC

S

E

K

T

1

2

3

4

INCH

S

E

K

T

2 Clearances

N		0°
B		5°
C		7°
P		11°
D		15°
E		20°

4 Type

Type	Symbol	Type	Symbol
N (E)		$70^\circ\text{--}90^\circ$	H
F		$70^\circ\text{--}90^\circ$	B
R		$40^\circ\text{--}60^\circ$	T
A		$40^\circ\text{--}60^\circ$	
G		$40^\circ\text{--}60^\circ$	
M		$40^\circ\text{--}60^\circ$	W
Special design	X		

5 Cutting Edge Length

Inscribed Circle (inch)	Inch	C	D	R	S	T	V	W	Metric
1/4"	2	06	07		06	11	11	04	
3/8"	3	09	11		09	16	16	06	
1/2"	4	12	15		12	22	22	08	
5/8"	5	16	19		15	27	27	10	
3/4"	6	19	23		19	33	33	13	
1"	8	25	31		25	44	44	17	

12

5

04

6

AF

7

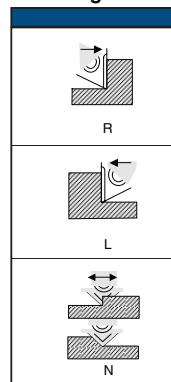
T

8

N

9

9 Cutting direction



6 Thickness

Thickness S(inch)	Inch	Metric
3/32"	1.5	.02
1/8"	2	.03
5/32"	2.5	.T3
3/16"	3	.04
1/4"	4	.06
5/16"	5	.07
3/8"	6	.09
1/2"	8	.12

7 Nose Radius / Corner configuration

Corner Radius	Inch	Metric	Corner Configuration			
			A	F	T	S
R	1/64"	1	04			
	1/32"	2	08	45°	A A	3°
				60°	D B	5°
	3/64"	3	12	75°	E C	7°
				85°	F D	15°
	1/16"	4	16	90°	P E	20°
				Other angle	Z F	25°
	5/64"	5	20		G	30°
					N	0°
	3/32"	6	24		P	11°
					Z	Other angle
	1/8"	8	32			

8 Edge preparation

	F
	E
	T
	S