

Inserts for general turning

C	N	M	G	12	04	08	-			-	PF
1	2	3	4	5	6	7		8	9		12

C	N	M	G	12	04	08	-	T	010	20
1	2	3	4	5	6	7		8	10	11

1 Insert shape	
C	D
K	R
S	T
V	W

2 Insert clearance angle	
B	C
E	N
P	O Specific description

4 Insert type	
A	Q
G	R
M	T
N	W
P	X Special design

3 Tolerances ± on <i>s</i> and <i>iC</i> / <i>iW</i>		
Class	<i>s</i>	<i>iC</i> / <i>iW</i>
G	±0.13	±0.025
M	±0.13	±0.05 – ±0.15 ¹⁾
U	±0.13	±0.08 – ±0.025 ¹⁾
E	±0.025	±0.025
¹⁾ Varies depending on the size of <i>iC</i> . See below.		
Inscribed circle <i>iC</i> mm	Tolerance class M U	
3.97		
5.0		
5.56	±0.05	±0.08
6.0		
6.35		
8.0		
9.525		
10.0		
12.0	±0.08	±0.13
12.7		
15.875		
16.0	±0.10	±0.18
19.05		
20.0		
25.0	±0.13	±0.25
25.4		
31.75	±0.15	±0.25
32.0		

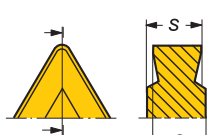
5 Insert size = cutting edge length, /mm		C	D	R	S	T	V	W	K
<i>iC</i> mm	<i>iC</i> inch								
3.97	5/32"			05		06			
5.0									
5.56	7/32"					09			
6.0									
6.35	1/4"	06	07			11	11		
8.0				08					
9.525	3/8"	09	11	09	09	16	16	06	16 ¹⁾
10.0				10					
12.0				12					
12.7	1/2"	12	15	12	12	22	22	08	
15.875	5/8"	16		15	15	27			
16.0				16					
19.05	3/4"	19		19	19	33			
20.0				20					
25.0				25					
25.4	1"	25		25	25				
31.75				31					
32				32					

¹⁾ For insert shape K (KNMX, KNUX) only the theoretical cutting edge length is indicated.

Inserts for general turning


A Introduction
B External machining
C Internal machining
D Milling
E Drilling
F Cutting data
G Grades
H General information

6 Insert thickness, s mm








01	$s = 1.59$
T1	$s = 1.98$
02	$s = 2.38$
03	$s = 3.18$
T3	$s = 3.97$
04	$s = 4.76$
05	$s = 5.56$
06	$s = 6.35$
07	$s = 7.94$
09	$s = 9.52$
10	$s = 10.00$
12	$s = 12.00$

7 Nose radius, r_e mm

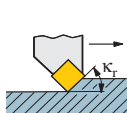
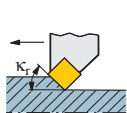
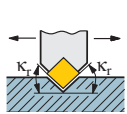


M0, 02	$r_e = 0.2$
04	$r_e = 0.4$
08	$r_e = 0.8$
12	$r_e = 1.2$
16	$r_e = 1.6$
24	$r_e = 2.4$

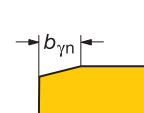
8 Cutting edge condition

F	Sharp cutting edge	
E	ER treated cutting edge	
T	Negative land	
K	Double negative lands	
S	Negative land and ER treated cutting edge	

9 Hand of tool

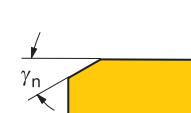
R	
L	
N	

10 Chamfer width, mm



010	$b_{\gamma n} = 0.10$
025	$b_{\gamma n} = 0.25$
070	$b_{\gamma n} = 0.70$
150	$b_{\gamma n} = 1.50$
200	$b_{\gamma n} = 2.00$

11 Chamfer angle



15	$\gamma_n = 15^\circ$
20	$\gamma_n = 20^\circ$

12 Manufacturer's option

The ISO code consists of nine symbols including 8 and 9 which are used only when required. In addition the manufacturer may add further two symbols e. g.

- WF = Wiper – finishing
- PF = ISO P – finishing
- PR = ISO P – roughing