

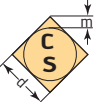
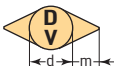
Designation key in accordance with ISO 1832 for indexable inserts for turning

Example 1:

C	N	M	G	12	04	08	—	M	P	5
1	2	3	4	5	6	7		12	13	14

1			
Insert shape			
A		M	
B		O	
C		P	
D		R	
E		S	
H		T	
K		V	
L		W	

2			
Clearance angle			
A		F	
B		G	
C		N	
D		P	
E			

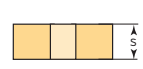
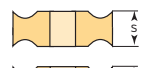
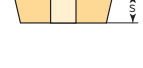
3				
Clearance angle				
	Permissible deviation in mm for			
	d	m	s	
	A	± 0,025	± 0,005	± 0,025
	C	± 0,025	± 0,013	± 0,025
	E	± 0,025	± 0,025	± 0,025
	F	± 0,013	± 0,005	± 0,025
	G	± 0,025	± 0,025	± 0,130
	H	± 0,013	± 0,013	± 0,025
	J ¹	± 0,05–0,15 ²	± 0,005	± 0,025
	K ¹	± 0,05–0,15 ²	± 0,013	± 0,025
	L ¹	± 0,05–0,15 ²	± 0,025	± 0,025
	M	± 0,05–0,15 ²	± 0,08–0,20 ²	± 0,130
	N	± 0,05–0,15 ²	± 0,08–0,20 ²	± 0,025
	U	± 0,08–0,25 ²	± 0,13–0,38 ²	± 0,130

¹ Inserts with ground planar cutting edges

² Depending on the insert size (see ISO standard 1832)

5														
Cutting edge length l [mm]														
Inner circle diameter d		C		D		R	S		T		V		W	
		Size	l	Size	l	Size	Size	l	Size	l	Size	l	Size	l
mm	Inches													
3,97	5/32								06	6,9				
5	0,197					05							03	3,8
5,56	7/32								09	9				
6	0,236					06								
6,35	2/8	06	6,4	07	7,7	06 ¹			11	11	11	11	04	4,3
8	0,315					08							05	5,2
9,525	3/8	09	9,6	11	11,6	09 ¹	09	9,5	16	16,5	16	16,5	06	6,5
10	0,394					10								
12	0,472					12								
12,7	4/8	12	12,9	15	15,5	12 ¹	12	12,7	22	22	22	22,1	08	8,7
15,875	5/8	16	16,1				15	15,8	27	27			10	10,8
16	0,63					16								
17,46	11/16												12	11,6
19,05	6/8	19	19,3			19 ¹	19	19,0						
20	0,787					20								
25	0,984					25								
25,4	8/8	25	25,8			25 ¹	25	25,4						
32	1,26					32								

6	
Insert thickness s [mm]	
	01 s = 1,59
	T1 s = 1,98
	02 s = 2,38
	T2 s = 2,78
	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

6	
Insert thickness s [mm]	
	01 s = 1,59
	T1 s = 1,98
	02 s = 2,38
	T2 s = 2,78
	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

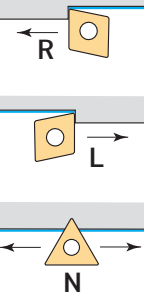
¹ Inch version (00)

Designation key in accordance with ISO 1832 for indexable inserts for turning (continued)

Example 2:

T	N	M	A	16	04	08	T	020	20
1	2	3	4	5	6	7	8	10	11

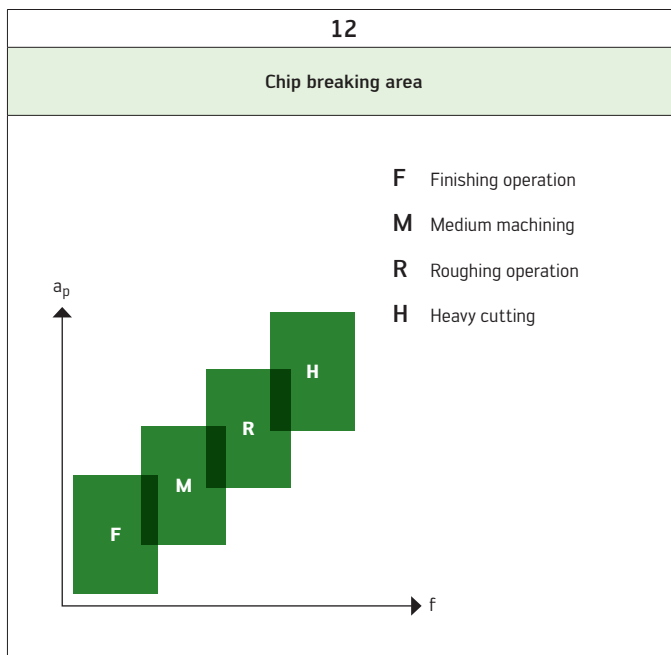
4				
Machining and fastening features				
A 	H  $\beta = 70-90^\circ$	R 	X Drawing or precise description of the indexable insert is required	
B  $\beta = 70-90^\circ$	J  $\beta = 70-90^\circ$	T  $\beta = 40-60^\circ$		
C  $\beta = 70-90^\circ$	M 	U  $\beta = 40-60^\circ$		
F 	N 	W  $\beta = 40-60^\circ$		
G 	Q  $\beta = 40-60^\circ$			

7	8	9	10	11
Corner radius r [mm]	Edge formation	Cutting direction	Chamfer width	Chamfer angle
 005M $r = 0,03$ 01M $r = 0,07$ 01 $r = 0,1$ 02M $r = 0,17$ 02 $r = 0,2$ 04M $r = 0,37$ 04 $r = 0,4$ 08M $r = 0,77$ 08 $r = 0,8$ 12 $r = 1,2$ 16 $r = 1,6$ 24 $r = 2,4$  M0 Metric version (diameter in [mm]) 00 Inch version (diameter with inch units in [mm])	F  E  T  S 		 010 = 0,10 mm 020 = 0,20 mm 025 = 0,25 mm 070 = 0,70 mm 150 = 1,50 mm 200 = 2,00 mm	 15 = 15° 20 = 20°

Geometry designation key for indexable inserts for turning

Geometry index

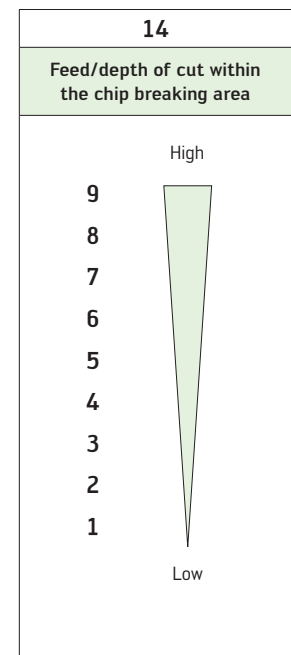
C	N	M	G	12	04	08	—	M	P	5
1	2	3	4	5	6	7		12	13	14



13

Material

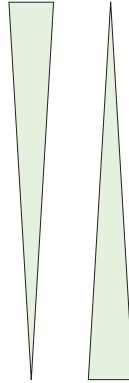
P	Steel
M	Stainless steel
K	Cast iron
N	NF metals
S	Materials with difficult cutting properties
H	Hard materials
U	Universal
L	Long-chipping materials
w	Wiper
X	Ground chip former



Designation key for carbide cutting tool materials – Turning

Example:

W	P	P	20	G
Walter	1	2	3	4

1	2	3	4
1. Primary application or coating type	2. Primary application	ISO range of applications	Generation
P Steel M Stainless steel K Cast iron N NF metals S Materials with difficult cutting properties H Hard materials X PVD coating	P Steel M Stainless steel K Cast iron N NF metals S Materials with difficult cutting properties H Hard materials	Wear resistance 01 05 10 20 21 23 30 32 33 43  Cutting tool materials for: 0 ISO turning 1 ISO turning 5 ISO turning 2 Thread turning 3 Grooving	G Tiger-tec® Gold S Tiger-tec® Silver