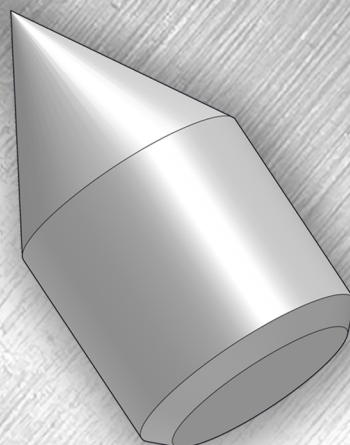
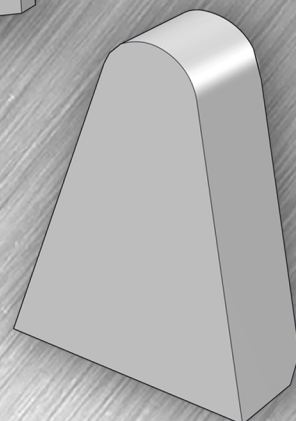
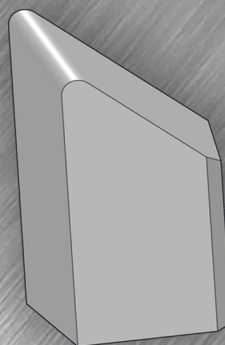
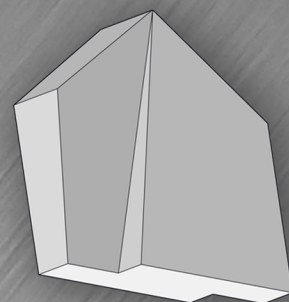
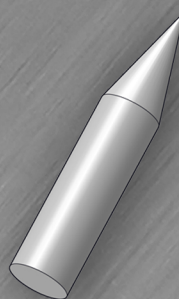
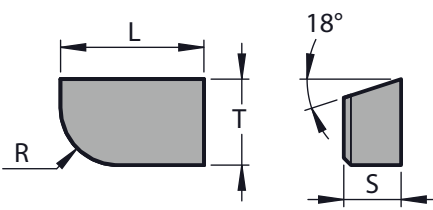
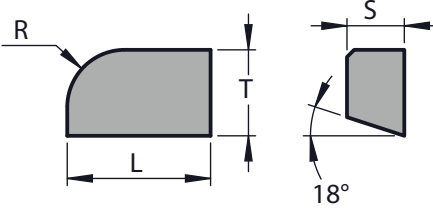
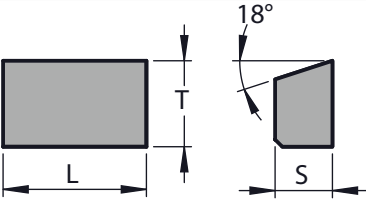




BRAZED TIPS
CATALOG



ISO 242-1975 (DIN 4950-1962)

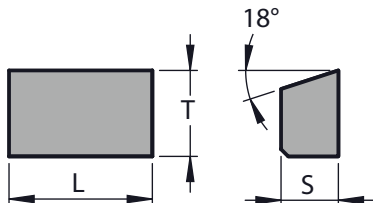
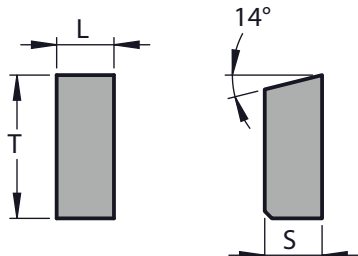
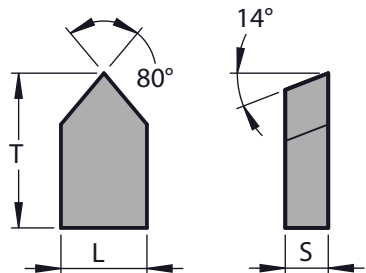
Technical Image			Grades							
	(1) Geometry Code	(2) Grade Code	P		K		Dimensions (mm)			
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
	ISO Ref.						L	T	S	R
	1170424	ISO A5	○	○	○	○	5	3	2	2
	1170425	ISO A6	○	○	○	○	6	4	2,5	2,5
	1170426	ISO A8	○	○	○	○	8	5	3	3
	1170124	ISO A10	○	○	○	○	10	6	4	4
	1170125	ISO A12	○	○	○	○	12	8	5	5
	1170126	ISO A16	○	○	○	○	16	10	6	6
	1170127	ISO A20	○	○	○	○	20	12	7	7
	1170128	ISO A25	○	○	○	○	25	14	8	8
	1170129	ISO A32	○	○	○	○	32	18	10	10
	1170130	ISO A40	○	○	○	○	40	22	12	12
	1170131	ISO A50	○	○	○	○	50	25	14	14
	1170427	ISO B5	○	○	○	○	5	3	2	2
	1170428	ISO B6	○	○	○	○	6	4	2,5	2,5
	1170429	ISO B8	○	○	○	○	8	5	3	3
	1170135	ISO B10	○	○	○	○	10	6	4	4
	1170136	ISO B12	○	○	○	○	12	8	5	5
	1170137	ISO B16	○	○	○	○	16	10	6	6
	1170138	ISO B20	○	○	○	○	20	12	7	7
	1170139	ISO B25	○	○	○	○	25	14	8	8
	1170140	ISO B32	○	○	○	○	32	18	10	10
	1170141	ISO B40	○	○	○	○	40	22	12	12
	1170142	ISO B50	○	○	○	○	50	25	14	14
	1170150	ISO C5	○	○	○	○	5	3	2	-
	1170152	ISO C6	○	○	○	○	6	4	2,5	-
	1170153	ISO C8	○	○	○	○	8	5	3	-
	1170143	ISO C10	○	○	○	○	10	6	4	-

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

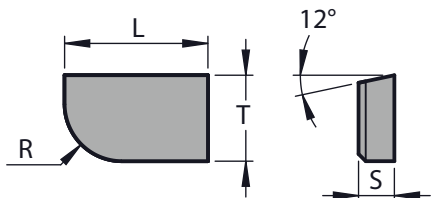
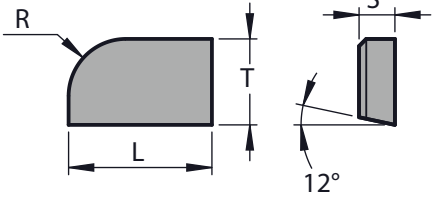
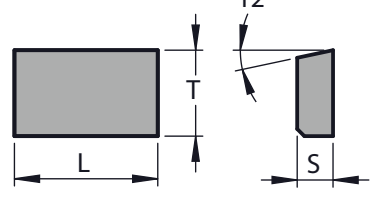
Min. Order Qty: 300 pieces

ISO 242-1975 (DIN 4950-1962)

Technical Image			Grades				Dimensions (mm)			
	(1) Geometry Code	(2) Grade Code	J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
ISO Ref.						L	T	S	R	
	1170144	ISO C12	○	○	○	○	12	8	5	-
	1170145	ISO C16	○	○	○	○	16	10	6	-
	1170146	ISO C20	○	○	○	○	20	12	7	-
	1170147	ISO C25	○	○	○	○	25	14	8	-
	1170148	ISO C32	○	○	○	○	32	18	10	-
	1170149	ISO C40	○	○	○	○	40	22	12	-
	1170151	ISO C50	○	○	○	○	50	25	14	-
	1170156	ISO D3	○	○	○	○	3	8	3	-
	1170157	ISO D4	○	○	○	○	4	10	4	-
	1170158	ISO D5	○	○	○	○	5	12	5	-
	1170159	ISO D6	○	○	○	○	6	14	6	-
	1170160	ISO D8	○	○	○	○	8	16	8	-
	1170154	ISO D10	○	○	○	○	10	18	10	-
	1170155	ISO D12	○	○	○	○	12	20	12	-
	1170167	ISO E4	○	○	○	○	4	10	2,5	-
	1170168	ISO E5	○	○	○	○	5	12	3	-
	1170169	ISO E6	○	○	○	○	6	14	3,5	-
	1170170	ISO E8	○	○	○	○	8	16	4	-
	1170161	ISO E10	○	○	○	○	10	18	5	-
	1170162	ISO E12	○	○	○	○	12	20	6	-
	1170163	ISO E16	○	○	○	○	16	22	7	-
	1170164	ISO E20	○	○	○	○	20	25	8	-
	1170165	ISO E25	○	○	○	○	25	28	9	-
	1170166	ISO E32	○	○	○	○	32	32	10	-

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

DIN 4966-1961

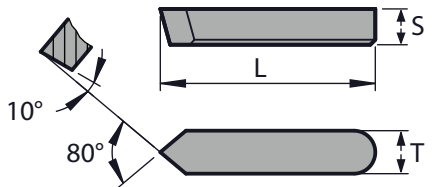
Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
							L	T	S	R
	1170442	DIN 4966-1961 G6	○	○	○	○	6	4	2	2
	1170443	DIN 4966-1961 G8	○	○	○	○	8	5	2	3
	1170444	DIN 4966-1961 G10	○	○	○	○	10	6	2,5	4
	1170445	DIN 4966-1961 G12	○	○	○	○	12	8	3	5
	1170446	DIN 4966-1961 G16	○	○	○	○	16	10	4	6
	1170447	DIN 4966-1961 H6	○	○	○	○	6	4	2	2
	1170448	DIN 4966-1961 H8	○	○	○	○	8	5	2	3
	1170449	DIN 4966-1961 H10	○	○	○	○	10	6	2,5	4
	1170450	DIN 4966-1961 H12	○	○	○	○	12	8	3	5
	1170451	DIN 4966-1961 H16	○	○	○	○	16	10	4	6
	1170452	DIN 4966-1961 J6	○	○	○	○	6	4	2	-
	1170453	DIN 4966-1961 J8	○	○	○	○	8	5	2	-
	1170454	DIN 4966-1961 J10	○	○	○	○	10	6	2,5	-
	1170455	DIN 4966-1961 J12	○	○	○	○	12	8	3	-
	1170456	DIN 4966-1961 J16	○	○	○	○	16	10	4	-

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

Style Q

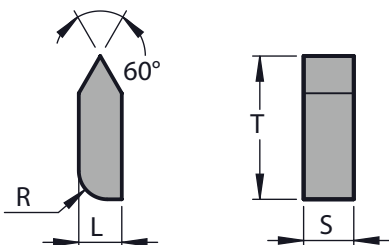
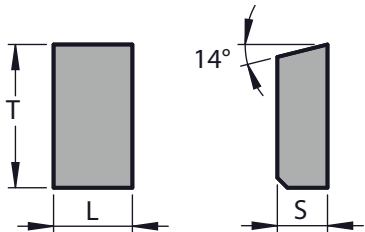
Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
							L	T	S	R
	1170189	Q30	○	○	○	○	30	6	5	-
	1170190	Q35	○	○	○	○	35	8	5	-
	1170191	Q40	○	○	○	○	40	8	5	-
	1170192	Q50	○	○	○	○	50	8	5	-

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

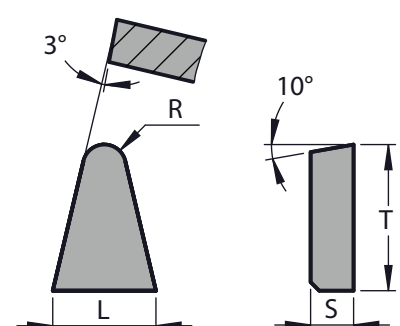
Min. Order Qty: 300 pieces

AFNOR

Technical Image	(1) Geometry Code	ISO Ref.	Grades				Dimensions (mm)			
			P		K					
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
	1170301	AFNOR FIL 2,5	○	○	○	○	2,5	8	2,5	2
	1170101	AFNOR FIL 3	○	○	○	○	3	10	3	2
	1170102	AFNOR FIL 3,5	○	○	○	○	3,5	12	3,5	2
	1170103	AFNOR FIL 4	○	○	○	○	4	14	4	2,5
	1170104	AFNOR FIL 5	○	○	○	○	5	16	5	3
	1170105	AFNOR FIL 6	○	○	○	○	6	20	6	4
1170106	AFNOR FIL 7	○	○	○	○	7	25	7	4	
	1170107	AFNOR GOR 3	○	○	○	○	3,5	6	2,5	-
	1170108	AFNOR GOR 4	○	○	○	○	4,5	8	3	-
	1170109	AFNOR GOR 5	○	○	○	○	5,5	10	3,5	-
	1170110	AFNOR GOR 6	○	○	○	○	6,5	12	4	-
	1170111	AFNOR GOR 8	○	○	○	○	8,5	14	5	-

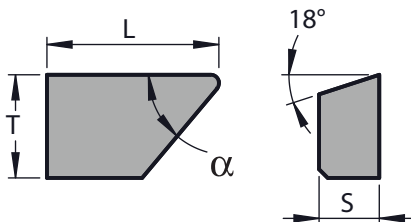
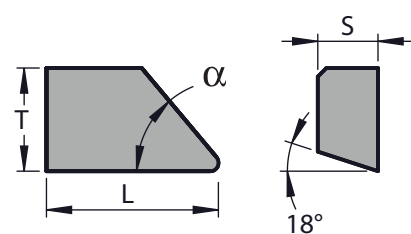
Ⓢ Stock itens / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

SMS GB

Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
							L	T	S	R
	1170215	SMS GB8	○	○	○	○	8	12	4	1
	1170209	SMS GB10	○	○	○	○	10	14	4	1,5
	1170210	SMS GB12	○	○	○	○	12	17	5	2,5
	1170211	SMS GB16	○	○	○	○	16	20	6	3,5
	1170212	SMS GB20	○	○	○	○	20	24	6	4,5
	1170213	SMS GB25	○	○	○	○	25	28	8	6
	1170214	SMS GB30	○	○	○	○	30	34	10	8

Ⓢ Stock itens / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

Style KA & KB

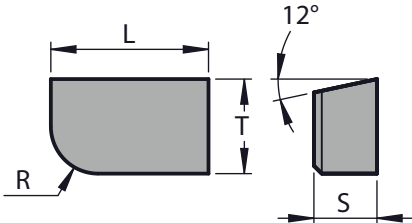
Technical Image	Grades				Dimensions (mm)					
	(1) Geometry Code	(2) Grade Code	P	K						
			J5	J6	23	24				
	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	T	S	α	
	1170171	KA16 50°	○	○	○	○	16	10	6	50
	1170172	KA16 58°	○	○	○	○	16	10	6	58
	1170173	KA20 50°	○	○	○	○	20	12	7	50
	1170174	KA20 58°	○	○	○	○	20	12	7	58
	1170175	KA25 50°	○	○	○	○	25	14	8	50
	1170439	KA25 58°	○	○	○	○	25	14	10	58
	1170176	KB16 50°	○	○	○	○	16	10	6	50
	1170177	KB16 58°	○	○	○	○	16	10	6	58
	1170178	KB20 50°	○	○	○	○	20	12	7	50
	1170440	KB20 58°	○	○	○	○	20	12	7	58
	1170179	KB25 50°	○	○	○	○	25	14	8	50
	1170441	KB25 58°	○	○	○	○	25	14	10	58

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 4966-1940

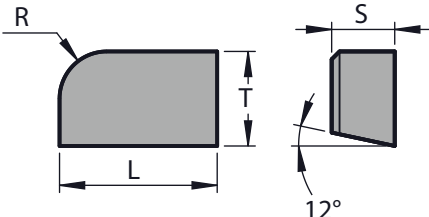
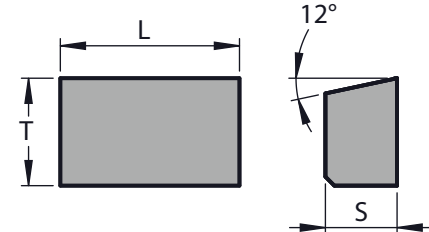
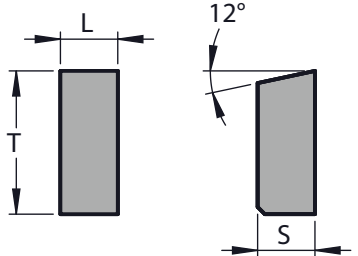
Technical Image			Grades				Dimensions (mm)			
			P	K						
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341				
	1170457	DIN 4966-1940 A8	○	○	○	○	8	5	3	3
	1170458	DIN 4966-1940 A10	○	○	○	○	10	6	4	3
	1170459	DIN 4966-1940 A12	○	○	○	○	12	8	4	4
	1170460	DIN 4966-1940 A16	○	○	○	○	16	10	5	4
	1170461	DIN 4966-1940 A20	○	○	○	○	20	12	6	8
	1170462	DIN 4966-1940 A25	○	○	○	○	25	16	8	8
	1170463	DIN 4966-1940 A32	○	○	○	○	32	20	10	10
	1170464	DIN 4966-1940 A40	○	○	○	○	40	25	12	10
	1170465	DIN 4966-1940 A50	○	○	○	○	50	32	16	12

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 4966-1940

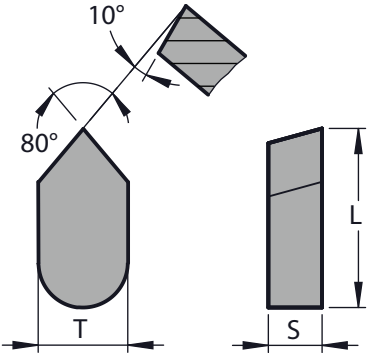
Technical Image			Grades				Dimensions (mm)			
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	T	S	R
	1170466	DIN 4966-1940 B8	○	○	○	○	8	5	3	3
	1170467	DIN 4966-1940 B10	○	○	○	○	10	6	4	3
	1170468	DIN 4966-1940 B12	○	○	○	○	12	8	4	4
	1170469	DIN 4966-1940 B16	○	○	○	○	16	10	5	4
	1170470	DIN 4966-1940 B20	○	○	○	○	20	12	6	8
	1170471	DIN 4966-1940 B25	○	○	○	○	25	16	8	8
	1170472	DIN 4966-1940 B32	○	○	○	○	32	20	10	10
	1170473	DIN 4966-1940 B40	○	○	○	○	40	25	12	10
	1170474	DIN 4966-1940 B50	○	○	○	○	50	32	16	12
	1170475	DIN 4966-1940 C8	○	○	○	○	8	5	3	-
	1170476	DIN 4966-1940 C10	○	○	○	○	10	6	4	-
	1170477	DIN 4966-1940 C12	○	○	○	○	12	8	4	-
	1170478	DIN 4966-1940 C16	○	○	○	○	16	10	5	-
	1170479	DIN 4966-1940 C20	○	○	○	○	20	12	6	-
	1170480	DIN 4966-1940 C25	○	○	○	○	25	16	8	-
	1170481	DIN 4966-1940 C32	○	○	○	○	32	20	10	-
	1170482	DIN 4966-1940 C40	○	○	○	○	40	25	12	-
	1170483	DIN 4966-1940 C50	○	○	○	○	50	32	16	-
	1170484	DIN 4966-1940 D4	○	○	○	○	4	6	3	-
	1170485	DIN 4966-1940 D5	○	○	○	○	5	8	4	-
	1170486	DIN 4966-1940 D6	○	○	○	○	6	10	5	-
	1170487	DIN 4966-1940 D8	○	○	○	○	8	12	6	-
	1170488	DIN 4966-1940 D10	○	○	○	○	10	16	8	-
	1170489	DIN 4966-1940 D12	○	○	○	○	12	20	10	-
	1170490	DIN 4966-1940 D16	○	○	○	○	16	25	12	-

📦 Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

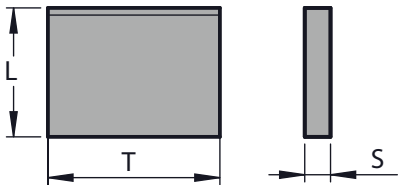
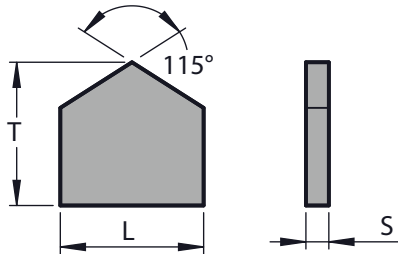
Min. Order Qty: 300 pieces

DIN 4966-1940

Technical Image			Grades							
			P	K						
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	T	S	R
	1170491	DIN 4966-1940 E8	☐	☐	☐	☐	8	4	3	-
	1170492	DIN 4966-1940 E10	☐	☐	☐	☐	10	5	3	-
	1170493	DIN 4966-1940 E12	☐	☐	☐	☐	12	6	3	-
	1170494	DIN 4966-1940 E16	☐	☐	☐	☐	16	8	4	-
	1170495	DIN 4966-1940 E20	☐	☐	☐	☐	20	10	5	-
	1170496	DIN 4966-1940 E25	☐	☐	☐	☐	25	12	6	-
	1170497	DIN 4966-1940 E32	☐	☐	☐	☐	32	16	8	-

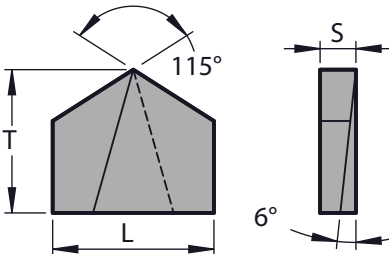
 Stock items / Itens de stock ☐ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code Min. Order Qty: 300 pieces

DIN 8010

Technical Image		(2) Grade Code	Grades				Dimensions (mm)					
			P	K	J5	J6					23	24
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	T	S	R		
	1170351	DIN 8010 BA1.5	☐	☐	☐	☐	2	3	0,3	-		
	1170352	DIN 8010 BA2	☐	☐	☐	☐	2,5	3,5	0,4	-		
	1170353	DIN 8010 BA2.5	☐	☐	☐	☐	3	4	0,5	-		
	1170058	DIN 8010 BA3	☐	☐	☐	☐	3,5	4,5	0,6	-		
	1170059	DIN 8010 BA3.5	☐	☐	☐	☐	4	4,5	0,6	-		
	1170354	DIN 8010 BB4	☐	☐	☐	☐	4,5	5	0,8	-		
	1170355	DIN 8010 BB4.5	☐	☐	☐	☐	5	5	0,8	-		
	1170060	DIN 8010 BB5	☐	☐	☐	☐	5,5	5,6	0,8	-		
	1170161	DIN 8010 BB5.5	☐	☐	☐	☐	6	6	1	-		
	1170356	DIN 8010 BB6	☐	☐	☐	☐	6,5	6	1	-		
	1170062	DIN 8010 BB6.5	☐	☐	☐	☐	7	6,3	1,2	-		
	1170063	DIN 8010 BB7	☐	☐	☐	☐	7,5	6,3	1,2	-		
	1170357	DIN 8010 BB7.5	☐	☐	☐	☐	8	7,1	1,6	-		

 Stock items / Itens de stock ☐ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code Min. Order Qty: 300 pieces

DIN 8010

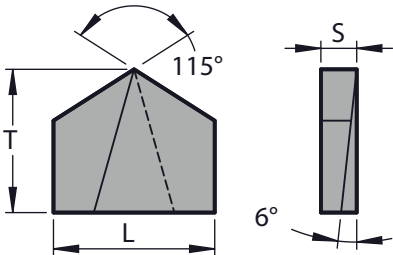
Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
						L	T	S	R	
	1170074	DIN 8010 BC8	○	○	○	○	8,5	7,1	1,6	-
	1170358	DIN 8010 BC8.5	○	○	○	○	9	8	2	-
	1170359	DIN 8010 BC9	○	○	○	○	9,5	8	2	-
	1170360	DIN 8010 BC9.5	○	○	○	○	10	8,5	2	-
	1170064	DIN 8010 BC10	○	○	○	○	10	8,5	2,2	-
	1170361	DIN 8010 BC10.5	○	○	○	○	11,3	9,5	2,2	-
	1170362	DIN 8010 BC11	○	○	○	○	11,8	9,5	2,2	-
	1170363	DIN 8010 BC11.5	○	○	○	○	12,3	10,6	2,5	-
	1170065	DIN 8010 BC12	○	○	○	○	12,8	10,6	2,5	-
	1170066	DIN 8010 BC13	○	○	○	○	13,8	12,5	2,5	-
	1170067	DIN 8010 BC14	○	○	○	○	14,8	12,5	2,5	-
	1170364	DIN 8010 BC15	○	○	○	○	15,8	14	2,8	-
	1170068	DIN 8010 BC16	○	○	○	○	16,8	14	2,8	-
	1170365	DIN 8010 BC17	○	○	○	○	17,8	16	3	-
	1170366	DIN 8010 BC18	○	○	○	○	18,8	16	3	-
	1170367	DIN 8010 BC19	○	○	○	○	19,8	18	3,5	-
	1170069	DIN 8010 BC20	○	○	○	○	20,8	18	3,5	-
	1170070	DIN 8010 BC21	○	○	○	○	22	18	3,5	-
	1170071	DIN 8010 BC22	○	○	○	○	23	19	4	-
	1170368	DIN 8010 BC23	○	○	○	○	24	19	4	-
	1170072	DIN 8010 BC24	○	○	○	○	25	20	4,5	-
	1170369	DIN 8010 BC25	○	○	○	○	26	20	4,5	-
	1170370	DIN 8010 BC26	○	○	○	○	27	21,2	4,5	-
	1170371	DIN 8010 BC27	○	○	○	○	28	21,2	4,5	-
	1170073	DIN 8010 BC28	○	○	○	○	29	22,4	5	-
	1170372	DIN 8010 BC29	○	○	○	○	30	22,4	5	-
	1170373	DIN 8010 BC30	○	○	○	○	31	22,4	5	-
	1170374	DIN 8010 BC31	○	○	○	○	32,5	24	5,5	-

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 8010

Technical Image			Grades				Dimensions (mm)			
	(1) Geometry Code	(2) Grade Code	P		K					
		ISO Ref.	J5	J6	23	24				
	1170375	DIN 8010 BC32	○	○	○	○	33,5	24	5,5	-
	1170376	DIN 8010 BC33	○	○	○	○	34,5	24	5,5	-
	1170377	DIN 8010 BC34	○	○	○	○	35,5	25	5,5	-
	1170378	DIN 8010 BC35	○	○	○	○	36,5	25	6	-
	1170379	DIN 8010 BC36	○	○	○	○	37,5	25	6	-
	1170380	DIN 8010 BC37	○	○	○	○	38,5	25	6	-
	1170381	DIN 8010 BC38	○	○	○	○	39,5	26	6	-
	1170382	DIN 8010 BC39	○	○	○	○	40,5	26	7	-
	1170383	DIN 8010 BC40	○	○	○	○	41,5	26	7	-
	1170384	DIN 8010 BC41	○	○	○	○	42,5	26	7	-
	1170385	DIN 8010 BC42	○	○	○	○	43,5	28	7	-
	1170386	DIN 8010 BC43	○	○	○	○	44,5	28	8	-
	1170387	DIN 8010 BC44	○	○	○	○	45,5	28	8	-
	1170388	DIN 8010 BC45	○	○	○	○	46,5	28	8	-
	1170389	DIN 8010 BC46	○	○	○	○	47,5	28	8	-
	1170390	DIN 8010 BC47	○	○	○	○	48,5	29	9	-
	1170391	DIN 8010 BC48	○	○	○	○	49,5	29	9	-
	1170392	DIN 8010 BC49	○	○	○	○	50,5	29	9	-
	1170393	DIN 8010 BC50	○	○	○	○	51,5	29	9	-

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 8013

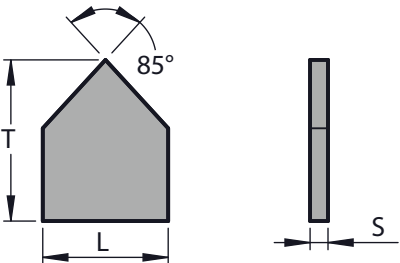
Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
							L	T	S	R
	1170394	DIN 8013 BD1.5	○	○	○	○	2	4	0,3	-
	1170395	DIN 8013 BD2	○	○	○	○	2,5	4,5	0,3	-
	1170396	DIN 8013 BD2.5	○	○	○	○	3	5	0,4	-
	1170397	DIN 8013 BD3	○	○	○	○	3,5	5,5	0,5	-
	1170398	DIN 8013 BD3.5	○	○	○	○	4	6	0,6	-
	1170096	DIN 8013 BE4	○	○	○	○	4,5	7	0,6	-
	1170399	DIN 8013 BE4,5	○	○	○	○	5	7	0,8	-
	1170400	DIN 8013 BE5	○	○	○	○	5,5	8	0,8	-
	1170401	DIN 8013 BE5,5	○	○	○	○	6	8	0,8	-
	1170097	DIN 8013 BE6	○	○	○	○	6,5	9	1	-
	1170098	DIN 8013 BE6,5	○	○	○	○	7	9	1	-
	1170402	DIN 8013 BE7	○	○	○	○	7,5	9	1	-
	1170099	DIN 8013 BE7,5	○	○	○	○	8	10	1,2	-
	1170286	DIN 8013 BE8	○	○	○	○	8,5	10	1,2	-
	1170403	DIN 8013 BE8,5	○	○	○	○	9	10	1,2	-
	1170404	DIN 8013 BE9	○	○	○	○	9,5	11,5	1,4	-
	1170100	DIN 8013 BE9,5	○	○	○	○	10	11,5	1,4	-
	1170123	DIN 8013 BE10	○	○	○	○	10,5	11,5	1,4	-
	1170405	DIN 8013 BE10,5	○	○	○	○	11,3	12,5	1,6	-
	1170406	DIN 8013 BE11	○	○	○	○	11,8	12,5	1,6	-
	1170407	DIN 8013 BE11,5	○	○	○	○	12,3	12,5	1,9	-
	1170090	DIN 8013 BE12	○	○	○	○	12,8	14	1,9	-
	1170091	DIN 8013 BE13	○	○	○	○	13,8	14	1,9	-
	1170408	DIN 8013 BE14	○	○	○	○	14,8	14	2,2	-
	1170409	DIN 8013 BE15	○	○	○	○	15,8	17	2,2	-
	1170410	DIN 8013 BE16	○	○	○	○	16,8	17	2,2	-
	1170411	DIN 8013 BE17	○	○	○	○	17,8	20	2,2	-
	1170092	DIN 8013 BE18	○	○	○	○	18,8	20	2,2	-

Stock items / Itens de stock Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

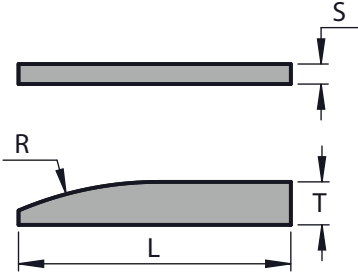
Min. Order Qty: 300 pieces

DIN 8013

Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
			L	T	S	R				
	1170412	DIN 8013 BE19	○	○	○	○	19,8	23	2,5	-
	1170093	DIN 8013 BE20	○	○	○	○	20,8	23	2,5	-
	1170413	DIN 8013 BE21	○	○	○	○	22	26	2,5	-
	1170094	DIN 8013 BE22	○	○	○	○	23	26	2,5	-
	1170414	DIN 8013 BE23	○	○	○	○	24	26	2,8	-
	1170415	DIN 8013 BE24	○	○	○	○	25	26	2,8	-
	1170416	DIN 8013 BE25	○	○	○	○	26	26	3	-
	1170095	DIN 8013 BE26	○	○	○	○	27	26	3	-
	1170417	DIN 8013 BE27	○	○	○	○	28	29	3	-
	1170418	DIN 8013 BE28	○	○	○	○	29	29	3,5	-
	1170419	DIN 8013 BE29	○	○	○	○	30	29	3,5	-
	1170420	DIN 8013 BE30	○	○	○	○	31	29	3,5	-

Ⓢ Stock itens / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

DIN 8011

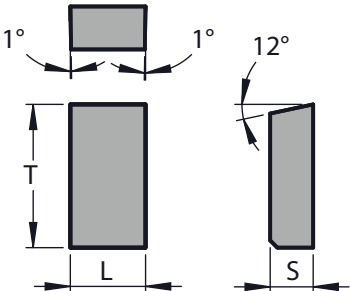
Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
			L	T	S	R				
	1170075	DIN 8011 R12	○	○	○	○	12	2	0,8	25
	1170076	DIN 8011 R16	○	○	○	○	16	2,5	1,2	25
	1170177	DIN 8011 R19	○	○	○	○	19	3	1,4	25
	1170078	DIN 8011 R22	○	○	○	○	22	3,5	1,8	25
	1170079	DIN 8011 R25	○	○	○	○	25	4	2,2	25
	1170080	DIN 8011 R30	○	○	○	○	30	5	2,8	25

Ⓢ Stock itens / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

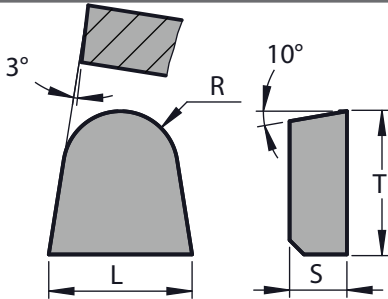
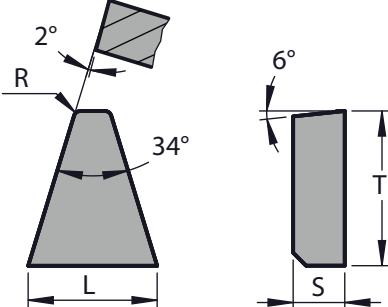
DIN 8011

Technical Image			Grades								
			P		K						
		(2) Grade Code	J5	J6	23	24					
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341					

SMS 956

		Grades								
Technical Image		P		K		Dimensions (mm)				
	(2) Grade Code	J5	J6	23	24					
	(1) Geometry Code	PH0127	PH0137	PH0321	PH0341					
	ISO Ref.									
	1170218	SMS 956 K2					2,5	15	4	-
	1170219	SMS 956 K3					3,5	15	4	-
	1170220	SMS 956 K4					4,5	15	4	-
	1170221	SMS 956 K5					5,5	15	4	-
	1170222	SMS 956 K6					6,5	15	4	-
	1170223	SMS 956 K7					7,5	15	4	-
	1170498	SMS 956 K8					8,5	20	6	-

SMS 956

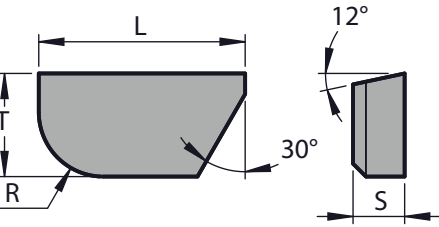
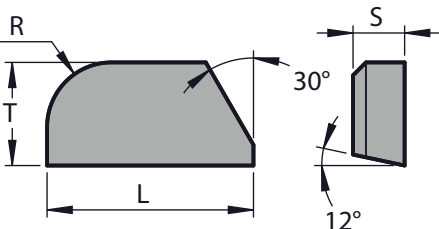
Technical Image		(2) Grade Code	Grades				Dimensions (mm)				
			P		K						
			J5	J6	23	24					
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	T	S	R	
image on the previous page	1170499	SMS 956 K9					9,5	20	6	-	
	1170216	SMS 956 K10					10,5	20	6	-	
	1170217	SMS 956 K12					12,8	20	6	-	
	1170224	SMS 956 L10					10	10	4	4	
	1170225	SMS 956 L13					13	13	4	5	
	1170226	SMS 956 L16					16	16	5	6	
	1170227	SMS 956 L20					20	20	7	8	
	1170228	SMS 956 L25					25	25	8	10	
	1170229	SMS 956 L30					30	30	9	12	
	1170500	SMS 956 CR7					7	8	3	0,2	
	1170205	SMS 956 CR8					8	9	3	0,5	
	1170197	SMS 956 CR10					10	12	4	0,5	
	1170198	SMS 956 CR12					12	15	5	0,5	
	1170199	SMS 956 CR16					16	18	5	1	
	1170200	SMS 956 CR20					20	22	6	1	
	1170201	SMS 956 CR25					25	27	6	1,5	
	1170202	SMS 956 CR28					28	30	8	1,5	
	1170203	SMS 956 CR32					32	33	8	1,5	
	1170204	SMS 956 CR40					40	40	10	2	

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 2

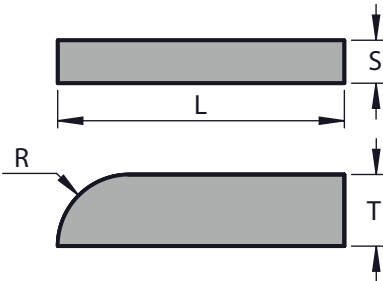
Technical Image	(1) Geometry Code	(2) Grade Code	Grades				Dimensions (mm)			
			P		K					
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341	L	T	S	R
	1170430	DIN 2 K8					8	4	2	3
	1170431	DIN 2 K10					10	5	2,5	3
	1170051	DIN 2 K12					12	6	3	4
	1170120	DIN 2 K16					16	8	4	5
	1170053	DIN 2 K20					20	10	5	6
	1170432	DIN 2 L8					8	4	2	3
	1170433	DIN 2 L10					10	5	2,5	3
	1170434	DIN 2 L12					12	6	3	4
	1170056	DIN 2 L16					16	8	4	5
	1170057	DIN 2 L20					20	10	5	6

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

Style TA 20

Technical Image			Grades							
	(1) Geometry Code	(2) Grade Code	P		K		Dimensions (mm)			
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
ISO Ref.						L	T	S	R	
	1170230	TA 20-1	○	○	○	○	20	2,5	1,5	2,5
	1170231	TA 20-2	○	○	○	○	20	2,5	2	2,5
	1170232	TA 20-3	○	○	○	○	20	3	2	3
	1170233	TA 20-4	○	○	○	○	20	3	2,5	3
	1170234	TA 20-5	○	○	○	○	20	4	2	4
	1170235	TA 20-6	○	○	○	○	20	4	2,5	4
	1170236	TA 20-7	○	○	○	○	20	5	3	5
	1170237	TA 20-8	○	○	○	○	20	6	3	6

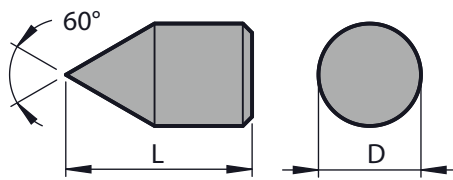
Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

DIN 8012

				Grades					
Technical Image			P	K					
		(2) Grade Code	J5	J6	23	24			
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	L	D	
	1290078	DIN 8012 PT5	○	○	○	○	12	5	
	1290079	DIN 8012 PT7	○	○	○	○	14	7	
1290075	DIN 8012 PT11	○	○	○	○	20	11		
1290076	DIN 8012 PT14	○	○	○	○	22	14		
1290077	DIN 8012 PT18	○	○	○	○	30	18		

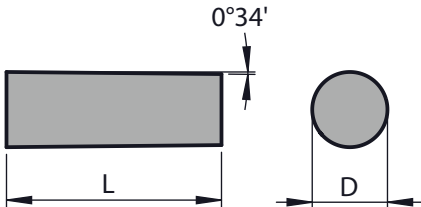
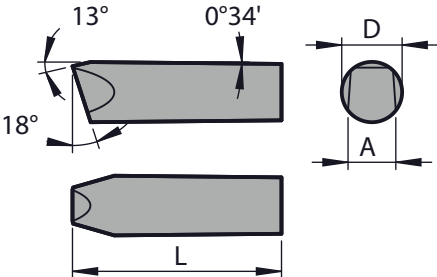


Ⓜ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

Style NC

Technical Image			Grades						
		(2) Grade Code	P		K				
	(1) Geometry Code	ISO Ref.	J5	J6	23	24	L	D	A
	1170182	NC2.5					20	2,5	-
	1170183	NC3.5					20	3,5	-
	1170184	NC4					20	4	-
	1170185	NC5					20	5	-
	1170186	NC6					20	6	-
	1170187	NC7					20	7	-
	1170188	NC8					30	8	6
	1170180	NC10					35	10	7
	1170181	NC12					35	12	9

Ⓜ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

Style P & C

Technical Image		(1) Geometry Code		(2) Grade Code		Grades				Dimensions (mm)		
						P		K				
						J5	J6	23	24			
		ISO Ref.		PH0127	PH0137	PH0321	PH0341	L	D	α		
	1170435	P3	☐	☐	☐	☐	20	3	45			
	1170436	P4	☐	☐	☐	☐	20	4	30			
	1170437	C3	☐	☐	☐	☐	20	3	-			
	1170438	C4	☐	☐	☐	☐	20	4	-			

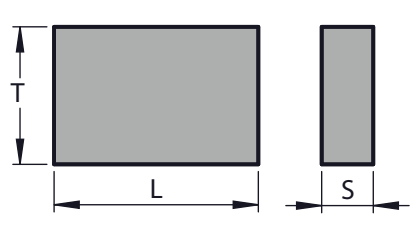
 Stock itens / Itens de stock

☐ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Min. Order Qty: 300 pieces

ASA

Technical Image			Grades							
			P		K					
		(2) Grade Code	J5	J6	23	24				
	(1) Geometry Code	ISO Ref.	PH0127	PH0137	PH0321	PH0341	Dimensions (mm)			
							L	T	S	R
	1170239	ASA 1010	☐	☐	☐	☐	15,9	3,2	1,6	-
	1170296	ASA 1020	☐	☐	☐	☐	6,4	4,8	1,6	-
	1170240	ASA 1030	☐	☐	☐	☐	7,9	6,4	1,6	-
	1170241	ASA 1040	☐	☐	☐	☐	7,9	4,8	2,4	-
	1170242	ASA 1050	☐	☐	☐	☐	12,7	4,8	2,4	-
	1170243	ASA 1060	☐	☐	☐	☐	9,5	6,4	2,4	-
	1170244	ASA 1070	☐	☐	☐	☐	12,7	6,4	2,4	-
	1170245	ASA 1080	☐	☐	☐	☐	9,5	7,9	2,4	-
	1170298	ASA 1090	☐	☐	☐	☐	9,5	9,5	2,4	-
	1170246	ASA 1100	☐	☐	☐	☐	12,7	9,5	2,4	-
	1170247	ASA 1105	☐	☐	☐	☐	12,7	11,1	2,4	-
	1170248	ASA 1110	☐	☐	☐	☐	19,1	4,8	3,2	-
	1170249	ASA 1120	☐	☐	☐	☐	12,7	6,4	3,2	-
	1170250	ASA 1130	☐	☐	☐	☐	15,9	6,4	3,2	-
	1170251	ASA 1140	☐	☐	☐	☐	19,1	6,4	3,2	-
	1170252	ASA 1150	☐	☐	☐	☐	11,1	7,9	3,2	-

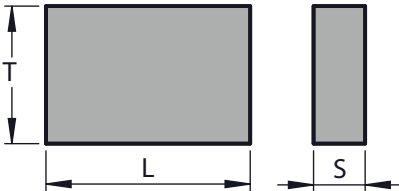
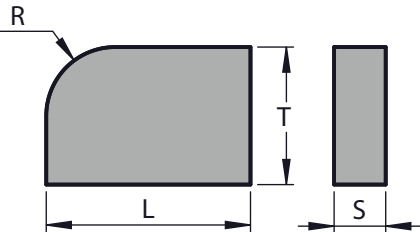
 Stock items / Itens de stock

☐ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

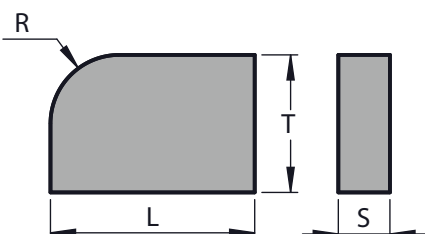
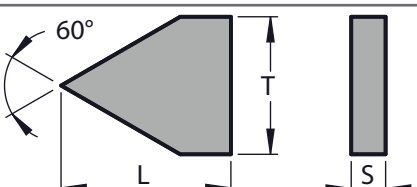
Min. Order Qty: 300 pieces

ASA

Technical Image			Grades							
	(1) Geometry Code	(2) Grade Code	P		K		Dimensions (mm)			
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
		ISO Ref.					L	T	S	R
	1170253	ASA 1160	○	○	○	○	12,7	7,9	3,2	-
	1170254	ASA 1170	○	○	○	○	15,9	7,9	3,2	-
	1170255	ASA 1180	○	○	○	○	12,7	9,5	3,2	-
	1170256	ASA 1190	○	○	○	○	19,1	9,5	3,2	-
	1170257	ASA 1200	○	○	○	○	12,7	12,7	3,2	-
	1170258	ASA 1210	○	○	○	○	19,1	12,7	3,2	-
	1170259	ASA 1215	○	○	○	○	19,1	19,1	3,2	-
	1170334	ASA 1220	○	○	○	○	14,3	9,5	4	-
	1170335	ASA 1230	○	○	○	○	19,1	9,5	4	-
	1170260	ASA 1240	○	○	○	○	15,9	15,9	4	-
	1170261	ASA 1250	○	○	○	○	11,1	7,9	4,8	-
	1170262	ASA 1260	○	○	○	○	15,9	7,9	4,8	-
	1170263	ASA 1270	○	○	○	○	12,7	9,5	4,8	-
	1170264	ASA 1280	○	○	○	○	15,9	9,5	4,8	-
	1170265	ASA 1290	○	○	○	○	19,1	9,5	4,8	-
	1170336	ASA 1300	○	○	○	○	15,9	11,1	4,8	-
	1170337	ASA 1320	○	○	○	○	12,7	12,7	4,8	-
	1170266	ASA 1330	○	○	○	○	19,1	12,7	4,8	-
	1170338	ASA 1340	○	○	○	○	19,1	19,1	4,8	-
	1170339	ASA 2010	○	○	○	○	15,9	3,2	1,6	3,2
	1170340	ASA 2020	○	○	○	○	6,4	4,8	1,6	3,2
	1170267	ASA 2030	○	○	○	○	7,9	6,4	1,6	3,2
	1170268	ASA 2040	○	○	○	○	7,9	4,8	2,4	3,2
	1170341	ASA 2060	○	○	○	○	9,5	6,4	2,4	3,2
	1170342	ASA 2070	○	○	○	○	12,7	6,4	2,4	3,2
	1170343	ASA 2090	○	○	○	○	9,5	9,5	2,4	4,8
	1170344	ASA 2100	○	○	○	○	12,7	9,5	2,4	4,8
1170345	ASA 2105	○	○	○	○	12,7	11,1	2,4	6,4	

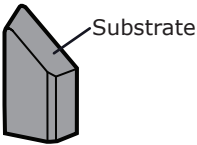
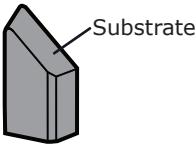
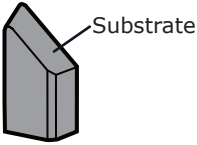
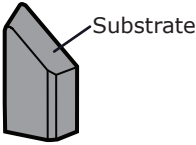
Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

ASA

Technical Image			Grades							
	(1) Geometry Code	(2) Grade Code	P		K		Dimensions (mm)			
			J5	J6	23	24				
			PH0127	PH0137	PH0321	PH0341				
	ISO Ref.						L	T	S	R
	1170303	ASA 2110	○	○	○	○	19,1	4,8	3,2	3,2
	1170269	ASA 2120	○	○	○	○	12,7	6,4	3,2	3,2
	1170346	ASA 2130	○	○	○	○	15,9	6,4	3,2	3,2
	1170270	ASA 2140	○	○	○	○	19,1	6,4	3,2	3,2
	1170271	ASA 2170	○	○	○	○	15,9	7,9	3,2	4,8
	1170272	ASA 2180	○	○	○	○	12,7	9,6	3,2	4,8
	1170273	ASA 2190	○	○	○	○	19,1	9,5	3,2	4,8
	1170274	ASA 2200	○	○	○	○	12,7	12,7	3,2	6,4
	1170275	ASA 2210	○	○	○	○	19,1	12,7	3,2	6,4
	1170276	ASA 2230	○	○	○	○	19,1	9,5	4	4,8
	1170277	ASA 2250	○	○	○	○	11,1	7,9	4,8	4,8
	1170278	ASA 2260	○	○	○	○	15,9	7,9	4,8	4,8
	1170280	ASA 2330	○	○	○	○	19,1	12,7	4,8	6,4
	1170347	ASA 2340	○	○	○	○	19,1	19,1	4,8	6,4
	1170348	ASA 6030	○	○	○	○	7,9	6,4	1,6	-
	1170349	ASA 6080	○	○	○	○	9,5	7,9	2,4	-
	1170350	ASA 6100	○	○	○	○	12,7	9,5	2,4	-

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta
Insert Order Code = (1) Geometry Code + (2) Grade Code
Min. Order Qty: 300 pieces

Grades

PH0127 (P10-P30)  Uncoated carbide grade for turning carbon steel and alloyed steel, in finishing and medium roughing operations, under moderate advances till relatively high speeds.	PH0137 (P30-P40)  Uncoated grade for carbon steels and alloyed steels, cast irons, nonferrous alloys at medium feed rates and moderate speeds with a good balance of toughness and tenacity.
PH0321 (K10-K20)  Uncoated carbide grade for machining of gray cast irons (less than 280 HB), wood, abrasives, lightweight alloys and alloys based on copper. Used in applications with low-impact forces.	PH0341 (K30-K40)  Uncoated grade suitable for the machining of gray cast irons of low hardness, wood, light alloys and alloys based on copper. Used in applications with moderate forces of impact.

Brazed Tools

Brazed tools continue to retain their role in tooling programmes because of the easy with which they can be adapted to particular requirements.

Brazing

The brazed joint has two functions:

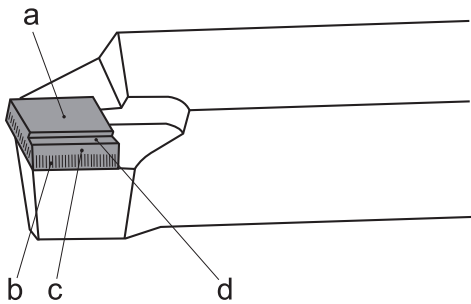
- To hold the carbide tip in position — despite heavy forces and high temperatures.
- Must be capable of minimizing the stress which occurs during the heating and cooling of the tool material.

Grinding

A stable grinding table or holder which can be set to the required angle by means of graduated scale and non-vibration small spindles.

Rough grinding is normally carried out using silicone carbide grinding wheel. The finish grind or lapping must always be made using a diamond wheel.

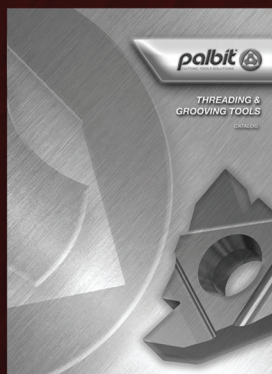
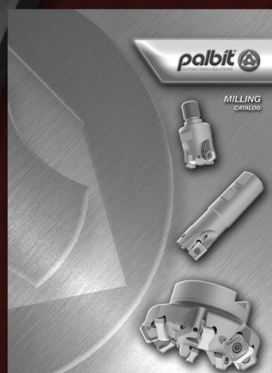
Longer life of the cutting edge and less breakage justify the increased cost of correct grinding. The grinding wheel must be kept clean to ensure that cutting capacity is maintained. Whenever possible, always grind perpendicular to the cutting edge.



- a.- Top face
- b.- Secondary clearances
- c.- Lapped primary clearances
- d.- Chipbreaker groove



SEE ALSO:



Palbit Portugal (Headquarters)

P.O. Box N° 4, Palhal
3854-908 Branca - Alb. Portugal
T (+351) 234 540 300 | F (+351) 234 540 301/2
palbit@palbit.pt | www.palbit.pt



Palbit Brasil (Branch Office)

Av. JoãoXXIII, N°20, Salas 41, 42, Vila Gilda,
Sto André, SP, CEP 09190-500 - SP Brasil
T (+55) 1125343648 | F (+55) 1125343648
palbit@palbit.com.br | www.palbit.com.br



Palbit México (Branch Office)

Emerson 150, Int.803-804, Colonia Chapultepec
Morales Delegación Miguel Hidalgo
C.P. 11570 México DF
T (+52) 5555454543 | F (+52) 5552509190
info@palbit.com.mx | www.palbit.com.mx



Palbit India (Branch Office)

Plot No.2, Gat No.626, Opp. Gabriel India Ltd.,
Chakan, At Post Kuruli, Taluka Khed
Pune - 410501 Maharashtra, India
T (+91) 02135 309180/182/184/185
F (+91) 02135 309184
palbit@palbit.co.in | www.palbit.co.in



MKT13 ED01 REV00_11