
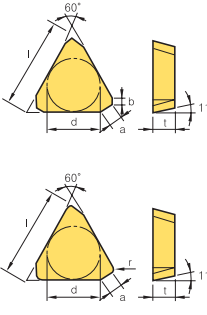

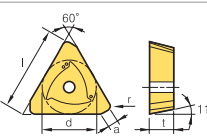

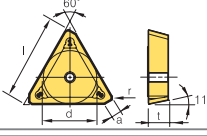

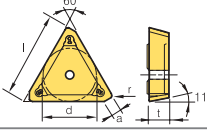

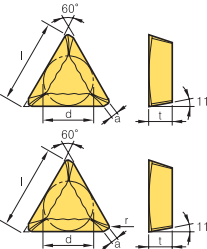
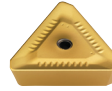
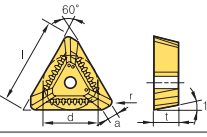

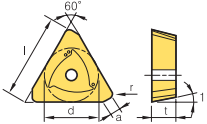


Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types	● Continuous cutting ● General cutting ● Interrupted cutting										
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
Inserts	Designation	Coated												Cermet	Uncoated		Dimensions (mm)				Geometries	Available tools						
		NCM325	NCM335	NC5330	PC3500	PC3600	PC5300	PC3545	PC9530	PC6510	PC8110	PD2000	CN20	CN30	H01	G10	ST30A	ST20	l	d			t	r	d <sub>1</sub>	a	b	
<b>TPCN</b> 	<b>1103PPN</b>																●	●	11.0	6.35	3.18	-	-	0.7	0.7		E40 E255 E256	
	<b>1103PPTN</b>																●	●	11.0	6.35	3.18	-	-	0.7	0.7			
	<b>1603PDR</b>	●																	16.5	9.525	3.18	-	-	1.2	0.7			
	<b>1603PPN</b>	●								●							●	●	16.5	9.525	3.18	-	-	1.2	1.2			
	<b>1603PPR</b>	●															●	●	16.5	9.525	3.18	-	-	1.2	1.0			
	<b>1603PPR-RH</b>																		16.5	9.525	3.18	-	-	1.2	1.0			
	<b>1603PPR-G</b>																	●		16.5	9.525	3.18	-	-	1.2			1.0
	<b>1603PPSR</b>	●																		16.5	9.525	3.18	-	-	1.2			1.0
	<b>1603PPTN</b>																			16.5	9.525	3.18	-	-	1.2			1.2
	<b>1603PPTR</b>																			16.5	9.525	3.18	-	-	1.2			1.0
	<b>1603PPR-RH</b>																			16.5	9.525	3.18	-	-	1.2			1.0
	<b>1603PDER-RH</b>						●				●									16.5	9.525	3.18	0.8	-	1.5			-
	<b>1603PDSR-RH</b>																			16.5	9.525	3.18	0.8	-	1.5			-
	<b>1603PDR-S20</b>																			16.5	9.525	3.18	-	-	1.2			0.7
	<b>1603PDR-RN</b>																			16.5	9.525	3.18	-	-	1.5			1.1
	<b>2204PDR</b>	●																●	●	22.0	12.7	4.76	-	-	1.4			0.7
	<b>2204PDR-RH</b>																			22.0	12.7	4.76	-	-	1.4			0.7
	<b>2204PDR-RN</b>																			22.0	12.7	4.76	-	-	1.42			0.52
	<b>2204PDR-G</b>																	●		22.0	12.7	4.76	-	-	1.4			0.7
	<b>2204PDL</b>																			22.0	12.7	4.76	-	-	1.4			0.7
<b>2204PDSR</b>	●																		22.0	12.7	4.76	-	-	1.4	0.7			
<b>2204PDTR</b>																			22.0	12.7	4.76	-	-	1.4	0.7			
<b>2204PPN</b>																			22.0	12.7	4.76	-	-	1.2	1.2			
<b>2204PPTN</b>																			22.0	12.7	4.76	-	-	1.2	1.2			
<b>2204PDR-RH</b>																			22.0	12.7	4.76	0.8	-	1.8	-			
<b>2204PDER-RH</b>																			22.0	12.7	4.76	0.8	-	1.8	-			
<b>2204PDSR-RH</b>							●			●	●								22.0	12.7	4.76	0.8	-	1.8	-			
<b>2204PDR-S20</b>																			22.0	12.7	4.76	-	-	1.4	0.7			
<b>TPKN-SM</b> 	<b>1603PDSR-SM</b>																		16.5	9.525	3.18	1.0	-	1.70	-		E40	
	<b>1603PDER-SM</b>																		16.5	9.525	3.18	1.0	-	1.70	-			
	<b>2204PDSR-SM</b>																		22.0	12.7	4.76	1.0	-	1.91	-			
	<b>2204PDER-SM</b>																		22.0	12.7	4.76	1.0	-	1.91	-			
<b>TPKN-MU</b> 	<b>2204PDSR-MU</b>																		22.0	12.7	4.76	0.8	-	1.96	-		E40	
<b>TPKN-SU</b> 	<b>1603PDSL-SU</b>																		16.5	9.525	3.18	1.0	-	1.70	-		E40	
	<b>1603PDSR-SU</b>					●	●												16.5	9.525	3.18	1.0	-	1.70	-			
	<b>2204PDSL-SU</b>						●													22.0	12.7	4.76	1.0	-	1.91			-
	<b>2204PDSR-SU</b>						●	●												22.0	12.7	4.76	1.0	-	1.91			-
<b>TPKR-MX</b> 	<b>1603PDSN-MX</b>																		16.5	9.525	3.18	-	-	1.2	1.2		E40	
	<b>1603PDSR-MX</b>																		16.5	9.525	3.18	-	-	1.2	0.7			
	<b>1603PPR-MX</b>	●																	16.5	9.525	3.18	-	-	1.2	1.0			
	<b>1603PPSN-MX</b>	●																	16.5	9.525	3.18	-	-	1.2	1.2			
	<b>1603PPSR-MX</b>	●																	16.5	9.525	3.18	-	-	1.2	1.0			
	<b>2204PDR-MX</b>	●																		22.0	12.7	4.76	1.0	-	1.4			-
	<b>2204PDSR-MX</b>	●																		22.0	12.7	4.76	1.0	-	1.4			-
<b>2204PPR-MX</b>	●																		22.0	12.7	4.76	1.0	-	1.4	-			
<b>TPKR-SM</b> 	<b>1603PDSR-SM</b>																		16.5	9.525	3.18	1.0	-	1.70	-		E40	
	<b>2204PDSR-SM</b>																		22.0	12.7	4.76	1.0	-	1.91	-			
<b>TPXN-FM</b> 	<b>1603PDSR-FM</b>																		16.5	9.525	3.18	1.0	-	1.30	-		E40	
	<b>1603PDER-FM</b>																		16.5	9.525	3.18	1.0	-	1.30	-			
	<b>2204PDSR-FM</b>																		22.0	12.7	4.76	1.0	-	1.51	-			
	<b>2204PDER-FM</b>																		22.0	12.7	4.76	1.0	-	1.51	-			

\* TPC(K)N □□□□P~N → For FC-HC  
□□□□P~R → For Cutter(face)

● : Stock item