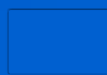




# *AKO* carbide CNC *insertion*

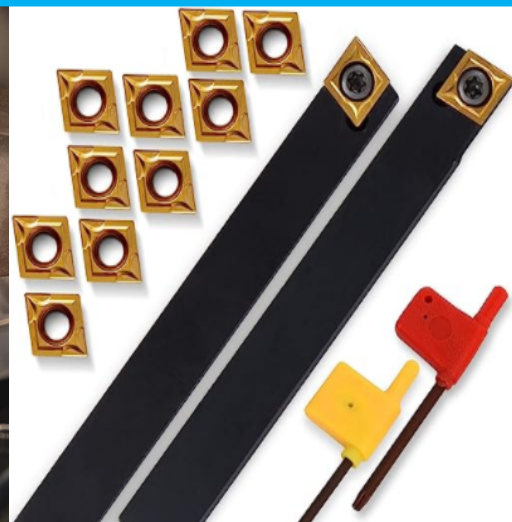
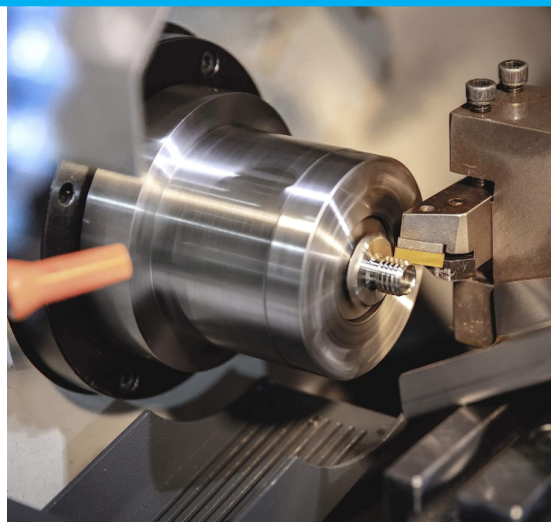
奥凯沃硬质合金工具有限公司  
AoKai Wo Carbide Tool Co.Lt



**铣削加工新涂层牌号 AK (PVD)102/202/  
203/204**  
**Milling processing new coating grade**  
**AK PVD 102/202/203/204**

新PVD涂层,可实现一般钢、模具钢、不锈钢,由低速粗加工到高速、高硬加工的各种需要  
The new PVD coating can meet various needs of general steel, mold steel, and stainless steel, from low-speed rough machining to high-speed and high hardness machining

牌号 Grade	涂层 Coating	特点 Characteristics	用途 purpose
AKO 102	TiAlN+TiN	超细颗粒的强韧性基体加超厚的涂层,采用先进的涂层工艺,使涂层在中、低速条件下具有良好的韧性和耐磨性。涂层表面光滑,有较低的摩擦系数,从而排屑顺畅及提高耐磨性。 The strong and tough matrix of ultrafine particles is coated with an ultra-thick coating, using advanced coating technology to ensure that the coating isIt has good toughness and wear resistance under speed conditions. The coating surface is smooth and has a low coefficient of friction, resulting inSmooth chip removal and improved wear resistance.	中低速通用加工 Medium and low speeduniversal machining
AKO 202	TiAlSiN	超细颗粒的良好韧性基体与添加 Si 涂层成分,采用先进的涂层工艺,充分地提高了高硬、高速加工中涂层的性能。涂层表面光滑,有较低的摩擦系数,从而排屑顺畅及提高耐磨性。 The excellent toughness matrix of ultrafine particles and the addition of Si coating components, using advanced coating technology, fully Improved the performance of coatings in high hardness and high-speed machining. The coating surface is smooth and has a low coefficient of friction, ranging from Smooth chip removal and improved wear resistance.	高硬、高速加工 High hardness and high-speed machining
AKW 203	AlTiN	超细颗粒的强韧性基体与特殊结构的高铝涂层,采用先进的涂层工艺,使涂层在中、高速条件下具有非常高的耐磨性,适合大多数加工场合。此外涂层表面光滑,有较低的摩擦系数,从而排屑顺畅及提高耐磨性。 The strong and ductile matrix of ultrafine particles and the high aluminum coating with special structure adopt advanced coating technology to make the coatingIt has very high wear resistance under medium to high speed conditions and is suitable for most machining situations. In addition, the coating surfaceSmooth, with low friction coefficient, resulting in smooth chip removal and improved wear resistance.	中高速通用加工 Medium and high speeduniversal machining
AKW 204	TiAlSiN	粗颗粒的高强韧性基体与添加 Si 涂层成分,采用先进的涂层工艺,充分地提高了有锋利刃口刀片的耐磨性能。涂层表面光滑,有较低的摩擦系数,从而排屑顺畅及提高耐磨性。 The high-strength and toughness matrix with coarse particles and the addition of Si coating components, using advanced coating technology, fully improves The wear resistance of blades with sharp edges is improved. The surface of the coating is smooth and has a low coefficient of friction, thereby eliminating Smooth chips and improved wear resistance.	不锈钢、耐热钢等粘性材料通用加工 Stainless steel, heat-resistantsteel, etc General processing of adhesive materials

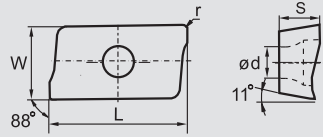


# 大进给.快进给铣刀片系列

## High feed and fast feed milling insertion series

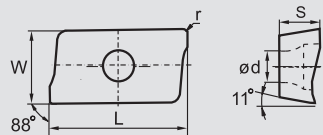
刀片图型 Insert picture	刀片型号 Insert model	内切圆/mm Inner garden	厚度mm thickness	内孔mm Inner pore	
	AKO 102	XNEX080608-MK	Ø12.47	7.9	Ø4.7
	AKW 204				
	AKW 203	XNEX080608-MP	Ø12.47	7.9	Ø4.7
	AKW 203	WNMU080608EN-GM	Ø14.02	6.65	Ø6.2
	AKW 204				
	AKO 102	LOGU030310ER-GM	11.9	3.96	Ø3.45
	AKW 204				
	AKW 203				
	AKW 203	SNMX120608QNN-MM	Ø12.7	6.45	Ø5.16
	AKW 204	SNMX120608ANN-MM	Ø12.7	6.35	Ø5.16
	AKO 102	SOMT120408PDER-JM	Ø12.7	4.76	Ø4.4
	AKW 204				
	AKW 203				
	AKO 102	OAKU060508SL-M50	Ø17.18	5.65	Ø5.88
	AKW 204				
	AKW 203				
	AKW 203	ONHU08T508-PM	Ø20.6	6.3	Ø5.80
	AKW 204				

# 铣刀片系列Milling blade series

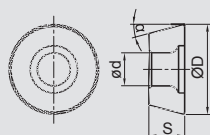


刀片图 insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	W	S	φd	r	
	APMT1135PDER-M		○	●		11.25	6.2	3.5	2.8	0.8	适合半精铣 Suitable for semi precision milling
	APMT1135PDER-H		●	●		11.25	6.2	3.5	2.8	0.8	适合粗、硬铣 uitable for rough and hard milling
	APMT1135PDR		○	●		11.25	6.2	3.5	2.8	0.8	通用 be current
	APMT1135PDTR		●	●		11.25	6.2	3.5	2.8	0.8	适合半精铣、粘软性材料 Suitable for semi precision milling and sticky soft materials
	APMT1135PDER-XM	●	●		○	11.25	6.2	3.5	2.8	0.8	通用性能较好 Good general performance
	APMT1135PDER-HR	●	●			11.3	6.25	3.5	2.8	0.8	通用性能较好 Good general performance
	APMT1604PDER-HR	●	●			17.42	9.33	5.3	4.5	0.8	通用性能较好 Good general performance
	APMT1604PDER-M		○	●		17.25	9.25	4.76	4.4	0.8	适合半精铣 Suitable for semi precision milling
	APMT1604PDER-H		●	●		17.25	9.25	4.76	4.4	0.8	适合粗、硬铣 Suitable for rough and hard milling
	APMT160408PDER		○	●		17.25	9.25	4.76	4.4	0.8	通用 be current
	APMT1604PDTR		○	●		17.25	9.25	4.76	4.4	0.8	适合粗、硬铣 Suitable for rough and hard milling
	APMT1605PEER-XM	●	●		○	17.45	9.33	5.2	4.4	0.8	通用性能较好 Good general performance
	AOMT180516-M		●	○	○	18.55	10.7	5.85	4.5	1.6	能适应大切深 Capable of adapting to large cutting depths
	AOMT113608-PM		●	○		11.705	6.89	3.6	2.8	0.8	通用性能较好 Good general performance
	APMT180612-JC		○	●	○	18.78	11.07	6.35	4.4	1.2	能适应大切深 Capable of adapting to large cutting depth

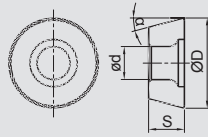
# 铣刀片系列Milling blade series



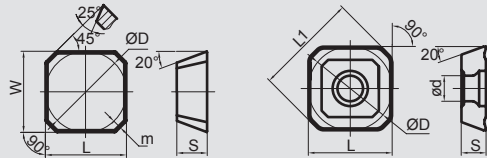
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	W	S	φd	r	
	APKT11T308-PM		○	●		12.24	6.5	3.6	2.8	0.8	通用 be current
	APKT160408-PM		○	●		17.877	9.33	5.76	4.4	0.8	通用 be current
	APKT150412-MM		○	●	○	15.875	12.7	4.76	5.4	1.2	更适合大切深、侧铣More suitable for large cutting depth and side milling



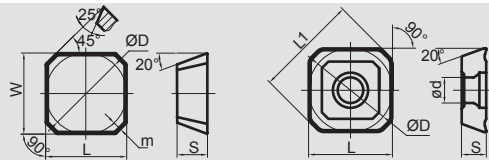
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	S	φd	α°	r	
	RCKT10T3MO-XM		○	○	●	10	3.97	4.4	7°	5	侧重不锈钢半精铣Stainless steel semiprecision milling
	RCKT1204MO-XM		○	○	●	12	4.76	4.2	7°	6	侧重不锈钢半精铣Stainless steel semiprecision milling
	RCKT1606MO-SG		○	○	●	16	6.35	5.6	7°	8	侧重不锈钢粗铣Stainless steel semiprecision milling
	RCKT2006MO-XM		○	○	●	20	6.735	5.6	7°	10	侧重不锈钢半精铣Stainless steel semiprecision milling
	RPMT1003MO-TT	●	●			10	3.18	4.4	11°	5	通用 be current
	RPMT1003MO-HR	●	●			10	3.18	4.4	11°	5	通用通用 be current
	RPEW1204MO		○	●		12	4.76	4.4	11°	6	通用通用 be current
	RPKT1204MOT23-XM		○	●		12	4.76	4.4	11°	6	通用通用 be current
	RPKT08T2MO-JS		○	●		8	2.78	3.4	11°	4	适合半精铣 Semi precision milling
	RPMT10T3MO-JS		○	●		10	3.97	4.4	11°	5	适合粗、半精铣 Semi precision milling
	RPMT1204MO-JS		○	●		12	4.76	4.4	11°	6	适合粗、半精铣 Semi precision milling
	RPMT1204MO-HR	●	●			12	4.76	4.4	11°	6	适合粗、半精铣 Semi precision milling
	RPMT1204MO-TT	●	●			12	4.76	4.4	11°	6	适合粗、半精铣 Semi precision milling



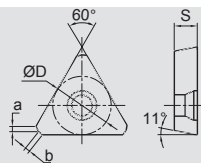
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	S	φd	α°	r	
	RPKT08T3MO-XF1		○		●	8	2.78	3.4	11°	4	不锈钢精、半精铣Stainless steel semiprecision milling
	RPKT10T3MO-XM1		○		●	10	3.97	4.4	11°	5	不锈钢粗、半精铣Stainless steel semiprecision milling
	RPHX10T3MO-D57		○		●	10	3.97	4.4	11°	5	粘性材料半精、精铣Stainless steel semiprecision milling
	RPHX1204MO-D57		○		●	12	4.76	4.4	11°	6	粘性材料粗、半精铣Stainless steel semiprecision milling
	RDKW10T3MOT22		○	●		10	3.97	4.4	15°	5	通用 be current
	RDKW1204MO		○	●		12	4.76	4.4	15°	6	通用 be current
	RDKW1604MOT22	○	○	●		16	4.76	5.4	15°	8	通用 be current
	RDEW1606MOS15		○		●	16	6.35	5.4	15°	8	通用 be current
	RDMT1204MO-MM	●	●			12	4.76	4.4	15°	6	通用 be current
	RDKT1204MOT22-XM		○	●		12	4.76	4.4	15°	6	通用，更适合粘、软性材料 Universal and suitable for sticky and soft materials



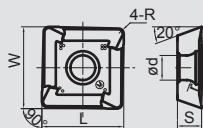
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	φD	S	φd	m	
	SEEN1203AZS30N	○	○	●	○	12.7	12.7	3.18			通用 be curren
	SEEN1504AFT31N	○	○	●	○	15.875	15.875	4.76		2.353	通用 be curren
	SEET12T3-GF		○	●		13.4	13.4	3.97	4.1	1.5	钢材精加工 Steel precision milling
	SEET12T3-GM		○	●		13.4	13.4	3.97	4.1	1.5	钢材半精加工 Semi precision milling of steel
	SEET12T3-GR		○	●		13.4	13.4	3.97	4.1	1.5	钢材粗加工 Rough milling of steel
	SEET12T3-ZF	●				13.4	13.4	3.97	4.1	1.5	铸铁精加工 Precision milling of cast iron



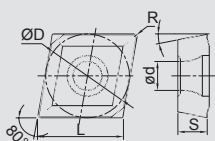
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	φD	S	φd	m	
	SEET12T3-ZM	●				13.4	13.4	3.97	4.1	1.5	铸铁半精加工 Precision milling of cast iron
	SEET12T3-ZR	●				13.4	13.4	3.97	4.1	1.5	铸铁粗加工 Precision milling of cast iron
	SEET12T3-MM		○	●		13.4	13.4	3.97	4.1	1.5	通用 be curren
	SEET12T3-PM		○	●		13.4	13.4	3.97	4.1	1.5	钢、不锈钢半精铣Steel and stainless steel semi precision milling
	SEET12T3M-PM		○	●		13.4	13.4	3.97	4.1	1.5	铸铁、钢半精铣Semi precision milling of cast iron and steel
	SEET12T3K-MM		●	○	○	13.4	13.4	3.97	4.1	1.5	不锈钢半精铣Stainless steel semiprecision milling
	SEKT12T3AFTN-TT		○	○		13.2	13.2	3.8	4.4		钢、不锈钢半精铣Steel and stainless steel semi precision milling
	SEKT1204AFTN-XM		○	○		12.7	12.7	4.76	5.5		钢、不锈钢半精铣Steel and stainless steel semi precision milling
	SEMT1706AFN-XM	○		●		17.94	17.94	6.1	5.8	2.5	钢粗、半精铣Steel roughmilling and semi precision milling
	ODMW040408ADS23		○	●	●	5.3	12.8	4.76	4.4		钢、不锈钢粗、半精铣Steel and stainless steel semi precision milling



刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	φD	S	a	b	
	TPCW2204PPR	○		●		22	12.7	4.76	1.4	0.7	钢普通铣 Steel ordinary milling
	TPCW2204PPL	○		●		22	12.7	4.76	1.4	0.7	钢普通铣 Steel ordinary milling
	TPKN1603PDQ21R	○		●		16.5	9.525	3.18	1.2	R0.8	刃口特殊处理Special treatment of cutting edge
	TPKN1603PDQ21R	○		●		16.5	9.525	3.18	1.2	R0.8	刃口特殊处理Special treatment of cutting edge
	TPKN2204PDQ32R	○		●	○	22	12.7	4.76	1.4	R0.8	刃口特殊处理Special treatment of cutting edge
	TPKN2204PDQ32L	○		●	○	22	12.7	4.76	1.4	R0.8	刃口特殊处理Special treatment of cutting edge



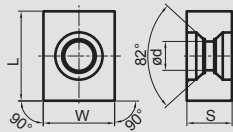
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	S	ϕd	α°	r	
	SEET09T308PER-PR	○	○	●		9.525	4.01	3.3	20°	0.8	粗加工Rough milling
	SEMT1203PER-EM	○	○	●		13.308	4.07	4.1	20°	0.8	通用be curren
	SEMT13T308-XM	○	○	●		13.56	3.97	5.8	20°	0.8	通用be curren
	SEMT13T320-XR	○	○	●	○	13.56	3.97	5.8	20°	2	粗、半精铣Steel roughmilling and semi precision milling
	SCKT09T308EN-41		○	○	●	9.525	3.97	4.4	7°	0.8	粗、半精铣Steel roughmilling and semi precision milling
	SPMT120408-XM7	○	○	●		12.7	4.76	5.5	11°	0.8	粗、半精铣Steel roughmilling and semi precision milling



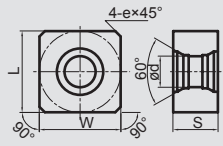
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	W	S	ϕd	r	
	CCMT060204			○		6.4	6.35	2.38	2.8	0.4	适合整刃切削Suitable for overall edge cutting
	CPMT080204Z			○		8.1	7.94	2.38	2.8	0.4	适合整刃切削Suitable for overall edge cutting
	CPMT090204Z			○		9.7	9.525	2.38	4.4	0.4	适合整刃切削Suitable for overall edge cutting
	CPMT090308			○		9.7	9.525	3.18	4.4	0.8	适合整刃切削Suitable for overall edge cutting
	CPMT120308Z			○		12.9	12.7	3.18	4.4	0.8	适合整刃切削Suitable for overall edge cutting
	CPMT120408			○		12.9	12.7	4.76	5.4	0.8	适合整刃切削Suitable for overall edge cutting
	CPMT160408Z			○		16.1	15.875	4.76	5.56	0.8	适合整刃切削Suitable for overall edge cutting



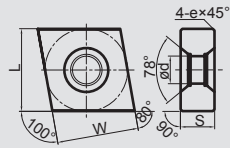
# 重力铣刀片系列 Gravity milling blade series



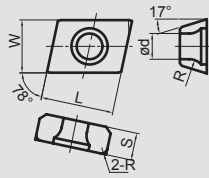
刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸 Overall dimensions					槽型说明 Slot Description
						L	W	S	φd	特征值	
	LNEJ150904-4R3.0H	○	○	●	○	15.875	9.525	4.76	4.4	4-R3.0H	通用 be curren
	LNED150904-4R04-H	○	○	●	○	15.875	9.525	4.76	4.4	4-R0.4	通用 be curren
	LNER151207	○	○	●	○	15.875	12.7	7.94	5.4		通用 be curren
	LNEN151206-4R50H	○	○	●	○	15.875	12.7	6.35	5.4	4-R5.0	通用 be curren
	LNER191406	○	○	●	○	19.05	14.29	6.35	5.4		通用 be curren
	LNED191405-2R25M23	○	○	●	○	19.05	14.29	5	5.4	2-R2.5M23	通用 be curren
	LNER191408-2R35A20	○	○	●	○	19.05	14.29	8.5	5.4	2-R35A20	通用 be curren
	LNEL281409-400	○	○	●	○	28.575	14.29	9.52	5.4		通用 be curren
	LNED150904-4A8R	○	○	●	○	15.875	9.525	4.76	4.4	4-A8R	通用 be curren
	LNED150904-4A8L	○	○	●	○	15.875	9.525	4.76	4.4	4-A8L	通用 be curren
	LNEN151207-4A5R	○	○	●	○	15.875	12.7	7.94	5.4	4-A5R	通用 be curren
	LNER191406-YCE	○	○	●	○	19.05	14.29	6.35	5.4		通用 be curren
	LNEH191406-4A8R	○	○	●	○	19.05	14.29	6.35	5.4	4-A8R	通用 be curren
	LNER1913A08-4A8R	○	○	●	○	19.05	13	8.5	5.4	4-A8R	通用 be curren
	LNEH281409-4A8R	○	○	●	○	28.575	14.29	9.52	5.4	4-A8R	通用 be curren
	LNER191408-4A8R-M	○	○	●	○	19.05	14.29	8.5	5.4	4-A8R-M	较适合粘、软性材料 More suitable for sticky and soft materials
	LNEH231409-4A8R-M	○	○	●	○	23.99	14.29	9.52	5.4	4-A8R-M	较适合粘、软性材料 More suitable for sticky and soft materials
	LNEN2816A09-4A8R-M	○	○	●	○	28.575	16	9.52	5.4	4-A8R-M	较适合粘、软性材料 More suitable for sticky and soft materials
	LNEN2815G09-4A8R-M	○	○	●	○	28.575	15.7	9.52	5.4	4-A8R-M	较适合粘、软性材料 More suitable for sticky and soft materials
	ZNEB191206-DQ	○	○	●	○	19.05	12.7	6.35	5.4	2-60°	通用 be curren



刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	W	S	φd	特征值	
	<b>SNEY090904</b>	○	○	●	○	9.525	9.525	4.76	4.4	4-R3.0H	通用 be curren
	<b>SNED121206</b>	○	○	●	○	12.7	12.7	6.35	5.4	4-C0.8	通用 be curren
	<b>SNEN151507-408</b>	○	○	●	○	15.875	15.875	7.94	5.4	4-C0.8	通用 be curren
	<b>SNEH151507-406-M</b>	○	○	●	○	15.875	15.875	7.94	5.4	4-C0.6-M	较适合粘、软性材料 More suitable for sticky and soft materials

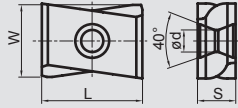


刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸Overall dimensions					槽型说明 Slot Description
						L	W	S	φd	特征值	
	<b>CNED120904-405</b>	●	○	○	○	12.7	9.525	4.76	5.4	4-C0.5	通用 be curren
	<b>CNEF121206-405</b>	○	○	●	○	12.7	12.7	6.35	5.4	4-C0.5	通用 be curren
	<b>CNEL1211A06-405</b>	○	○	●	○	12.7	11.11	6.35	5.4	4-C0.5	通用 be curren
	<b>CNEF161406-408</b>	○	○	●	○	16.3	14.29	6.35	5.4	4-C0.8	通用 be curren
	<b>CNER1212A06-4R05-M</b>	○	○	●	○	12.7	12	6.35	5.4	4-R0.5-M	较适合粘、软性材料 More suitable for sticky and soft materials
	<b>CNEF161406-2M</b>	○	○	●	○	16.3	14.29	6.35	5.4	2M	较适合粘、软性材料 More suitable for sticky and soft materials
	<b>CNER16A12A06-2M</b>	○	○	●	○	16	12	6.35	5.4	4-R0.8-2M	较适合粘、软性材料 More suitable for sticky and soft materials
	<b>CQEH141406-R02R</b>	○	○	●	○	14.29	14.29	6.35	5.4	R02R	通用 be curren



刀片图 Insert picture	刀片型号 Insert model	AKO102 AKO202 AKW 203 AKW 204				外形尺寸Overall dimensions					槽型说明 Slot Description
		L	W	S	φd	特征值					
	FQEU141206-R03R	○	○	●	○	14.29	12.7	6.35	5.4	R03R	通用 be curren
	FQEW221406-R04R	○	○	●	○	22.8	14.29	6.35	5.4	R04R	通用 be curren
	FQES190906-203R	○	○	●	○	19.05	9.525	6.35	4.4	2-C0.3	通用 be curren
	FQEP120904-210L	○	○	●	○	12.7	9.525	4.76	4.4	2-C1.0L	通用 be curren
	FQEP120904-210R	○	○	●	○	12.7	9.525	4.76	4.4	2-C1.0R	通用 be curren
	FQEP120904-2R05L	○	○	●	○	12.7	9.525	4.76	4.4	2-R0.5L	通用 be curren
	FQEP120904-2R11L	○	○	●	○	12.7	9.525	4.76	4.4	2-R1.1L	通用 be curren





刀片图 Insert picture	刀片型号 Insert model	AKO102	AKO202	AKW 203	AKW 204	外形尺寸 Overall dimensions					槽型说明 Slot Description	
						L	W	S	φd	特征值		
	XNKD131206-XR	○		○	●	○	13.5	12.7	6.35	4.4	2-R2.0	减小切削力 Reduce cutting force
	XNKJ121206-XR	○		○	●	○	12.7	12.7	6.35	4.4	4-R0.8	减小切削力 Reduce cutting force
	XNKR1514C06-XR	○		○	●	○	15.875	14.05	6.35	4.4	4-R1.2	减小切削力 Reduce cutting force
	XNKR15A1607E-XR	○		○	●	○	15	16.3	7.6	5.4	4-R0.8	减小切削力 Reduce cutting force
	XNKR18A17A07E-XR	○		○	●	○	18	17	7.6	5.4	4-R0.7	减小切削力 Reduce cutting force
	XNKY251809-XR2	○		○	●	○	25	18	9.52	5.4	4-X	减小切削力 Reduce cutting force
	XNMX16A12C07F-XR	○		○	●	○	16	12.8	7.5	4.4	2-R2.0	减小切削力 Reduce cutting force
	XNMX16A12C07F-XR2	○		○	●	○	16	12.8	7.5	4.4	2-R5.0	减小切削力 Reduce cutting force

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