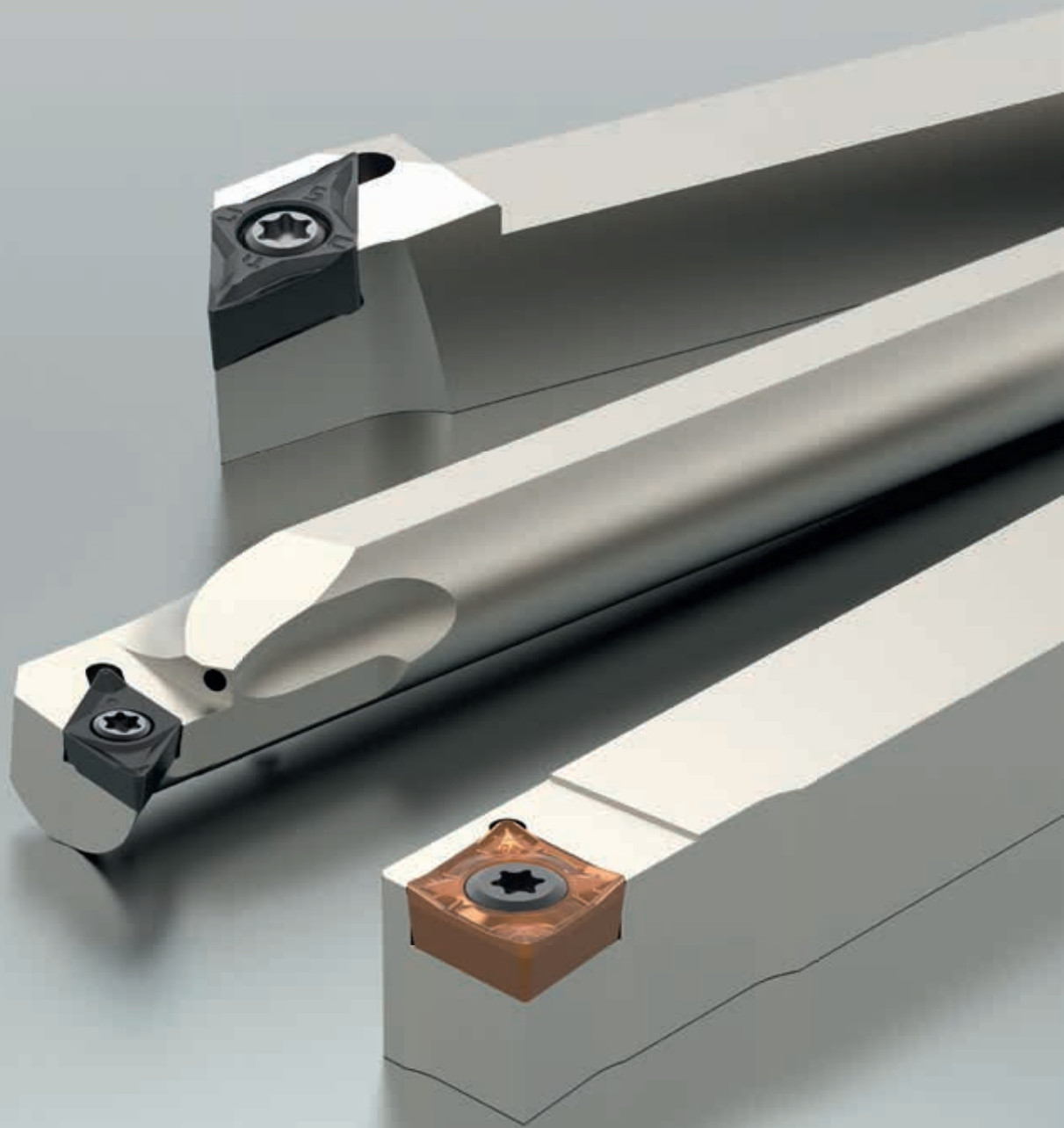


multidec[®] ISO

ENGLISH 

High precision ISO turning tools



future since **1915**

UTILIS[®]
Tooling for High Technology

With multidec®-ISO, UTILIS provides a wide range of ISO indexable inserts for turning. The multidec®-TOP product range is a further development of the rhombic 35° ISO insert with wiper edge, which is an excellent all-rounder on the lathe. The multidec®-ISO×4 product range includes the 4-edge negative insert with positive cutting characteristics.

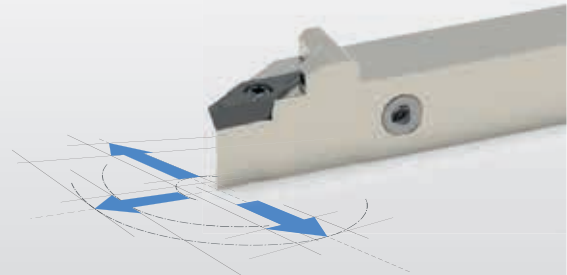
multidec® ISO

- Complete range of G-class inserts for the best super-finishing solution
- Many corner radii from $R=0.03$ mm
- Finely polished inserts
- High-performance M-class inserts for finishing
- Holder with "IC" internal coolant supply for optimising tool life



multidec® ISO top

- VP.. based indexable insert with 11° clearance angle
- Excellent all-rounder tool
- Enables large cutting depth with excellent chip control
- Perfect finishing using wiper edge
- Enables fast feed rate with small corner radius
- Many corner radii from $R = 0$ available



multidec® ISO×4

- Negative ISO inserts with positive cut
- Twice as many cutting edges as a positive ISO insert
- Stable screw clamping
- Optimized for the machining of stainless steel, titanium and exotic materials
- Excellent chip control allowing high feed rate and large cutting depth
- Holder with "IC" internal coolant supply for optimising tool life



General information

Symbol legend, grades, designation system and application recommendation

4

ISO Positive

multidec[®]
ISO

Overview

9

Description of
cutting geometries



10

CC... 80°



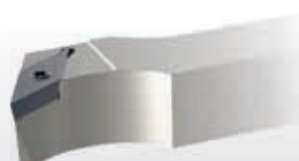
17

DC... 55°



39

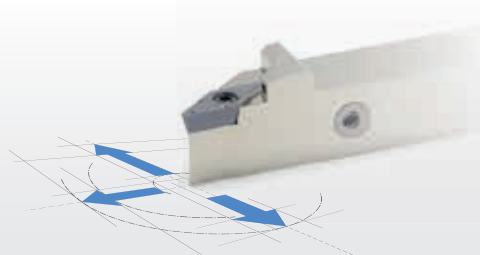
VC... 35°



71

ISO TOP – VP... (35°)

multidec[®]
ISO top



105

ISO Negative – DN... (55°)

multidec[®]
ISOx4



123

Page information

12... See page 12 and the following (example)

Recommended usage

- Preferred application
- Possible application
- Application not recommended

Availability

- 12345 Standard articles
- 12345 Standard articles, new in this catalog
- 12345 Discontinued articles

Symbols for tool characteristics and tool applications

	Tool material Carbide		Tolerance class Class E (ground circumference, high thickness accuracy)		Chip surface Polished
	CERMET		Class G (ground circumference)		Rake angle Example: 10°
	Diamond		Class M (sintered)		Example: 18° with protective chamfer
	Form of insert Example: 80°		Class X (precision sintered)		Cutting edges F = sharp cutting edge
	Form of holder Example: 95° (L)		Application Example: Turning and facing		E = rounded cutting edge
	Coolant Holder with "IC" integrated cooling				

Categorization of materials

The application data for multidec[®] tools is defined for specific material groups. All machinable materials are classified using a standardized color-coding system that is applied consistently throughout the entire catalog.

P	Steel
M	Stainless steel
K	Cast iron
N	Non-ferrous metals
S	High-alloy materials
H	Hard materials

Order designation

Order designation	Coated
 To the designation of the selected type of product, the desired grade code must be added.	○
	●
	○
	●
	1
	UHM10 HX
	Art. no.
CCGT 0602005 FN -PA7 ...	1 139778 2

Execution of holder/insert

The side on which the insert is located determines whether it is a "left-" or "right-hand" holder. For this purpose, the holder is viewed with the insert pointing towards the observer.



Left hand holder

Neutral holder

Right hand holder

Pictures

The right-hand version of the tools is usually shown. (Exceptions are possible). The tool colours illustrated here are not binding.

Dimensions

All dimensions are in millimeter (mm).

- 1 Order using order designation:
CCGT 0602005 FN -PA7 UHM10 HX
- 2 Order using art. no.: **139778**

Carbide grades for G-class inserts

	UHM10	– Highly wear-resistant micro-grain carbide
PVD	UHM10 HPX	– Highly wear-resistant micro-grain carbide – AlTiN-based universal high-performance coating
PVD	UHM10 TX+	– Highly wear-resistant micro-grain carbide – AlTiSiN-based coating for best performance with high-alloyed, exotic materials and hard materials – Outstanding temperature resistance
	UHM20	– Universal micro-grain carbide with best balance for toughness and wear resistance
PVD	UHM20 HPX	– Universal micro-grain carbide with best balance for toughness and wear resistance – AlTiN-based universal high-performance coating
PVD	UHM20 TX+	– Universal micro-grain carbide with best balance between toughness and wear resistance – AlTiSiN-based coating for best performance with high-alloyed and exotic materials – Outstanding temperature resistance

Carbide grades for M-class inserts

PVD	HMP710	– Highly wear-resistant carbide – AlTiN-based coating for best performance with steel, high-alloyed steel and exotic materials
PVD	HMP720	– Universal carbide with best balance for toughness and wear resistance – AlTiN-based coating for best performance with steel, high-alloyed steel and exotic materials
PVD	UHM30 HX	– High-performance carbide for difficult machining conditions – AlTiN-based universal high-performance coating
CVD	UHM20 MZ	– Wear-resistant carbide – Al ₂ O ₃ -based multi-layer coating for very high temperature resistance
CVD	HMC815	– Wear-resistant carbide – Al ₂ O ₃ -based multi-layer coating for very high temperature resistance

CERMET grades

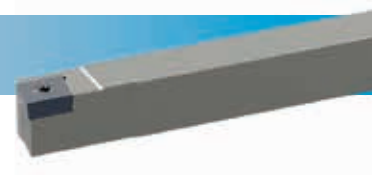
	UCM10	– Wear-resistant grade for the finishing and extremely fine machining with fast cutting speed
PVD	UCM10 HX	– Wear-resistant grade for the finishing and extremely fine machining in steel and stainless steel – AlTiN-based coating for best performance, even at slow cutting speeds
	CMB-15	– Grade with best wear resistance for high-speed finishing in steel
PVD	CMP120	– Coated CERMET grade for best wear resistance under difficult conditions – Makes interrupted cutting possible, and also low cutting speeds

Diamond grades Further information on [p. 15](#)

PCD	UPCD20	– Universal polycrystalline diamond, best performance for aluminum alloys with 13–20% silicon – Perfect balance between hardness and toughness for general machining of non-ferrous materials
PCD	UPCD15	– Universal polycrystalline diamond, best performance for aluminum with <13% silicon – Fine-grain structure for improving tool life
CVD Diamond	UCVD08	– Ultra-hard CVD thick layer with 99.9% diamond content, can exceed the tool life of PCD tools by up to 10 times – Best performance in aluminum and magnesium alloys, fiberglass and reinforced plastics

D C G T 07 02015 FN - A3 UHM20 HPX
S D J C R 1212 H 07 U

Square holder



Form of insert

Index	α	
C	80°	
D	55°	
V	35°	

Clearance angle

Index	α	
C	7°	
N	0°	
P	11°	

Edge length

Index	$\approx l$	d	
06	6	6.35	C = 80°
09	9	9.53	
07	7	6.35	D = 55°
11	11	9.53	
07	7	3.97	V = 35°
11	11	6.35	
16	16	9.53	
10*	10	6.35	V = 35°

* UTILIS standard

Inserts

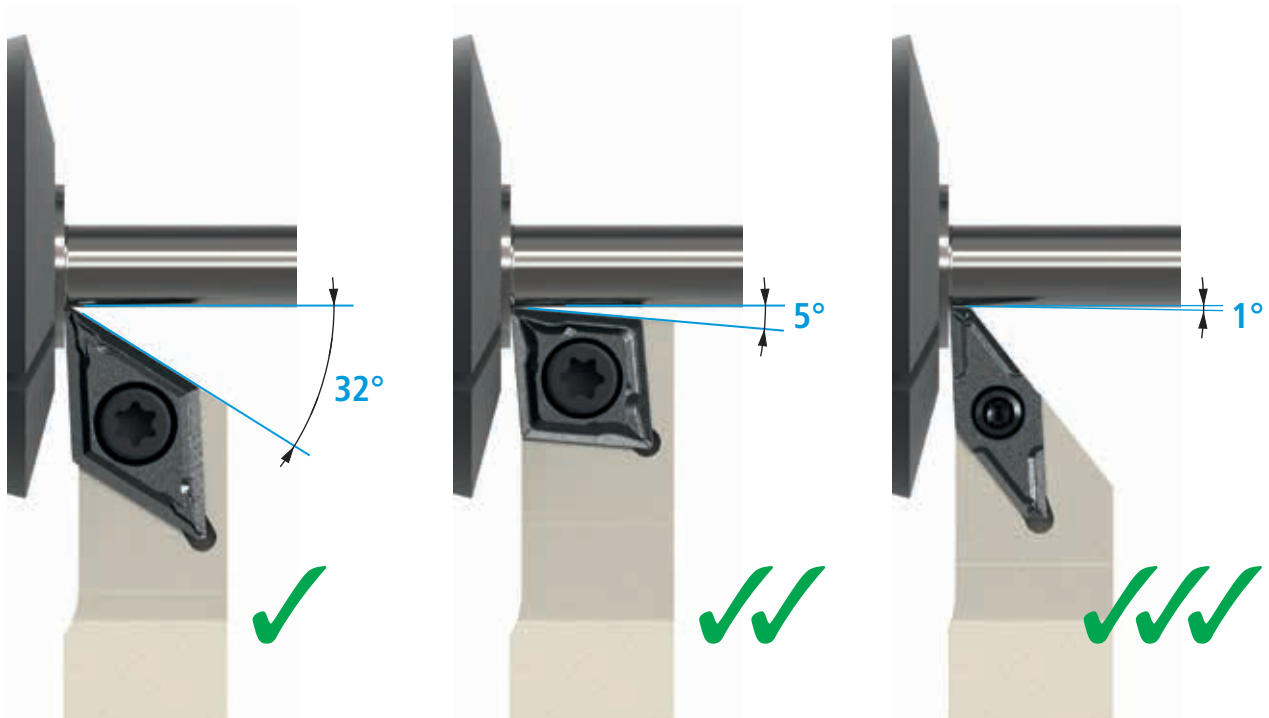
D C G T 07 02015 FN - A3 UHM20 HPX
A 12K S D U C L 07

Round shank holders, boring bars



Better surface quality with small corner radii

For better surface quality and optimum machining stability, the tool geometry with the smallest possible angle must be selected.



Good

Better

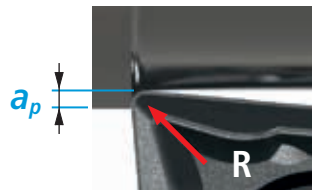
TOP!

A very fine surface can be reached with multidec[®]-TOP, even with a corner radius of $R=0\text{ mm}$

Recommended minimum cutting depth a_p

$$a_p \text{ min} = 0.7 \times R$$

$$R \text{ max} = 1.4 \times a_p$$



Minimal feed



$$f \text{ min} = 0.01 \quad f \text{ min} = \frac{a_p}{200}$$

Example: $\frac{a_p = 4}{200} = 0.02 f \text{ min}$

Explanation

$f \text{ min}$ Feed (mm)
 a_p Cutting depth (mm)



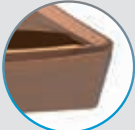
$$f \text{ min} = 0.025 \quad f \text{ min} = \frac{a_p}{100}$$

Example: $\frac{a_p = 4}{100} = 0.04 f \text{ min}$

- Complete range of G-class inserts for the best super-finishing solution
- Many corner radii from $R=0.03\text{ mm}$
- Finely polished inserts
- High-performance M-class inserts for finishing
- Holder with "IC" internal coolant supply for optimising tool life



Insert geometry selection and application

Carbide	CERMET	Diamond
		
10	13	14

ISO type CC... 80°

Inserts and holders		
		17

ISO type DC... 55°

Inserts and holders		
		39

ISO type VC... 35°

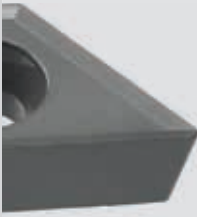
Inserts and holders		
		71

First choice for finishing and super-finishing

PF23					
		– Ideal for machining steel and hardening stainless steel – Highly versatile insert – Large cutting depth (a_p) possible – Ideal for machining very small parts	P		CC 80° 
			M		 18
			K		DC 55° 
			N		 40
			S		VC 35° 
			H		 72

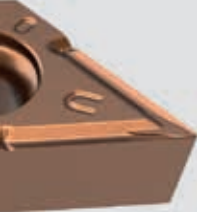
PF33					
		– Ideal for machining stainless steel and super alloys – Excellent chip control – Best chip control with high cutting feed – Ideal for large cutting depth $a_p > 1$ mm	P		CC 80° 
			M		 19
			K		DC 55° 
			N		 41
			S		VC 35° 
			H		 73

PA7					
		– Ideal for machining aluminum, stainless steel and super alloys – Good chip flow control – Avoids built-up edges – Large cutting depth (a_p) possible – Excellent solution in case of vibration problems	P		CC 80° 
			M		 20
			K		DC 55° 
			N		 44
			S		VC 35° 
			H		 75

A3					
		– Ideal for machining super alloys and stainless steel – Good chip flow control – Large cutting depth (a_p) possible – Highly positive insert for fine cutting and low cutting force – Less chip deformation, therefore low-vibration machining conditions	P		
			M		
			K		DC 55° 
			N		 46
			S		VC 35° 
			H		 77

Alternative solutions for chip control

PF					
 14°		– Chip breaker option for machining steel and heat-resistant stainless steel – Good all-round solution for steel and stainless steel – Very effective with high feed rate by a large range of cutting speed	P	■ ■ ■ ■ ■ ■	DC 55°  □ 42
			M	■ ■ ■ ■ ■ □	
			K	■ □ □ □ □ □	
			N	■ ■ ■ ■ ■ ■	
			S	■ ■ ■ ■ ■ □	
			H	□ □ □ □ □ □	

PF05					
 17°		– Ideal for machining stainless steel and super alloys – Very good chip control with minimal cutting depth (a_p) – Very effective in stainless steel with high feed rate – Very good tool life in titanium	P	■ ■ ■ ■ □ □	DC 55°  □ 43 VC 35°  □ 74
			M	■ ■ ■ ■ ■ ■	
			K	□ □ □ □ □ □	
			N	■ ■ ■ ■ ■ ■	
			S	■ ■ ■ ■ ■ ■	
			H	□ □ □ □ □ □	

PA6					
 20°		– Ideal for machining aluminum, stainless steel and super alloys – Excellent chip control, even with high cutting speed and high feed rate – Large cutting depth (a_p) possible – Fine cut provides good surface finish	P	■ ■ □ □ □ □	CC 80°  □ 21 DC 55°  □ 45 VC 35°  □ 76
			M	■ ■ ■ ■ ■ ■	
			K	□ □ □ □ □ □	
			N	■ ■ ■ ■ ■ ■	
			S	■ ■ ■ ■ ■ ■	
			H	□ □ □ □ □ □	

For roughing, semi-finishing and finishing

PF43

7°



- Ideal for machining steel and heat-resistant stainless steel
- Highly versatile insert
- Large cutting depth (a_p) possible

P	■ ■ ■ ■ ■ ■
M	■ ■ ■ ■ ■ ■
K	■ ■ ■ ■ ■ ■
N	■ ■ ■ ■ ■ ■
S	■ ■ ■ ■ ■ ■
H	■ ■ ■ ■ ■ ■

CC 80°



22

DC 55°



47

VC 35°



78

S12

12°



- Ideal for machining stainless steel and super alloys
- Very good chip control, even with minimal cutting depth (a_p)

P	■ ■ ■ ■ ■ ■
M	■ ■ ■ ■ ■ ■
K	■ ■ ■ ■ ■ ■
N	■ ■ ■ ■ ■ ■
S	■ ■ ■ ■ ■ ■
H	■ ■ ■ ■ ■ ■

CC 80°



23

DC 55°



48

M18R

0.1
18°


- Ideal for machining stainless steel and super alloys
- Reinforced cutting edge makes high cutting speeds and feeds possible
- Very good chip control, even with minimal cutting depth (a_p)

P	■ ■ ■ ■ ■ ■
M	■ ■ ■ ■ ■ ■
K	■ ■ ■ ■ ■ ■
N	■ ■ ■ ■ ■ ■
S	■ ■ ■ ■ ■ ■
H	■ ■ ■ ■ ■ ■

CC 80°



24

DC 55°



49

For machining steel and heat-resistant stainless steel

CERMET M-class

S07

 	– CERMET M-class insert for semi-finishing and finishing	P		CC 80°	
	– Operates within an extensive cutting speed range	M			25
	– Very good chip control, even with minimal cutting depth (a_p)	K		DC 55°	
	– Good for dry machining	N			50
		S			
		H			

CERMET G-class

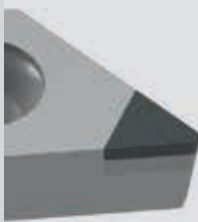
PF23

 	– CERMET G-class indexable insert for finishing and super-finishing	P		CC 80°	
	– Operates within an extensive cutting speed range	M			26
	– Large cutting depth (a_p) possible	K		DC 55°	
	– Excellent tool life with optimum cutting conditions	N			51
		S		VC 35°	
		H			79

For the machining of aluminum and non-ferrous materials

14

W flat cut

		– Best solution for super-finishing – Suitable for stable machining conditions – Large cutting depth (a_p) possible	P	☐ ☐ ☐ ☐ ☐ ☐	DC 55°  52 VC 35°  80
			M	☐ ☐ ☐ ☐ ☐ ☐	
			K	☐ ☐ ☐ ☐ ☐ ☐	
			N	☒ ☒ ☒ ☒ ☒ ☒	
			S	☐ ☐ ☐ ☐ ☐ ☐	
			H	☐ ☐ ☐ ☐ ☐ ☐	

T-positive front cut

		– For finishing and super-finishing – Very low cutting pressure – Particularly suitable for thin-walled workpieces and unstable processes – Large cutting depth (a_p) possible	P	☐ ☐ ☐ ☐ ☐ ☐	CC 80°  27 DC 55°  53 VC 35°  81
			M	☐ ☐ ☐ ☐ ☐ ☐	
			K	☐ ☐ ☐ ☐ ☐ ☐	
			N	☒ ☒ ☒ ☒ ☒ ☒	
			S	☐ ☐ ☐ ☐ ☐ ☐	
			H	☐ ☐ ☐ ☐ ☐ ☐	

UWS

		– For finishing and super-finishing – Low cutting pressure – Very good chip control, even with minimal cutting depth (a_p)	P	☐ ☐ ☐ ☐ ☐ ☐	CC 80°  28 DC 55°  54 VC 35°  82
			M	☐ ☐ ☐ ☐ ☐ ☐	
			K	☐ ☐ ☐ ☐ ☐ ☐	
			N	☒ ☒ ☒ ☒ ☒ ☒	
			S	☐ ☐ ☐ ☐ ☐ ☐	
			H	☐ ☐ ☐ ☐ ☐ ☐	

UWN

		– For semi-finishing and finishing – Slightly higher cutting pressure due to small negative reinforcement of the cutting edge – Excellent chip control at higher cutting speeds	P		CC 80°  29 DC 55°  55 VC 35°  83
			M		
			K		
			N		
			S		
			H		

PCD – Polycrystalline Diamond, hardness around 5000 HK

PCD is a synthetic, extremely hard cutting material consisting of selected diamond particles (approx. 90%) which are sintered together in a metal binding matrix at high pressure and high temperatures.

PCD is two to three times harder than carbide, but is more brittle and temperature sensitive (resistance temperature up to approx. 650 °C). For this reason, diamond tools cannot be used in steel alloys.

UPCD20

- Universal polycrystalline diamond, best performance for aluminum alloys with 13–20% silicon
- Perfect balance between hardness and toughness for general machining of non-ferrous materials

UPCD15

- Universal polycrystalline diamond, best performance for aluminum with <13% silicon
- Fine-grain structure for longer tool life and high finishing quality

CVD thick-film diamond, hardness around 9000 HK

This diamond is manufactured using the CVD process (Chemical Vapor Deposition) with a thickness of 0.8 mm. The ratio of 99.9% diamond and 0.1% binding material makes an ultra-hard cutting material with heat conductivity and a very fine structure for ultra-sharp cutting edges. The ultra-hard CVD cutting material is mainly used in the machining of aluminum and magnesium alloys and non-ferrous metals.

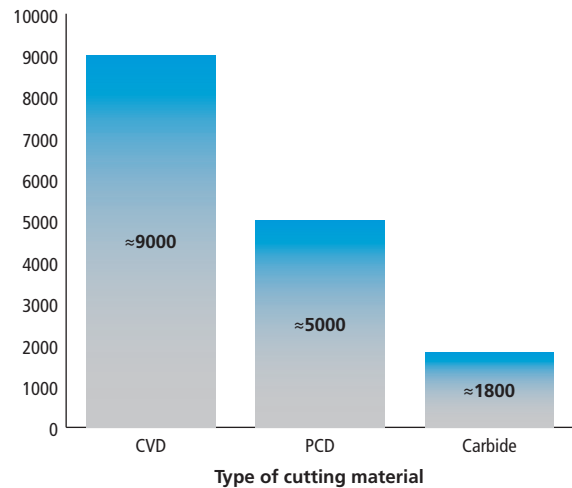
CVD diamond has higher heat resistance and oxidation resistance than PCD.

UCVD08

- Ultra-hard CVD thick-layer film with 99.9% diamond content, with possible tool life up to 10 times longer than PCD tools
- Best performance in aluminum and magnesium alloys, fiberglass and reinforced plastics

Application matrix

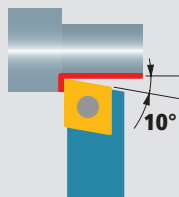
Material	PCD		CVD
	UPCD20	UPCD15	UCVD08
Aluminum < 13% Si	○	●	●
Aluminum > 13% Si	●	○	●
Magnesium alloys	●	●	●
Brass, copper, bronze, zinc	○	●	●
Platinum, silver, gold	○	●	●
Fiberglass compound materials	●	–	●
Carbon fiber compound materials	●	–	●
Plastics, PEEK	○	●	●
Pre-sintered ceramics and tungsten carbide	●	–	●

Hardness HK (Knoop)

Application OD turning

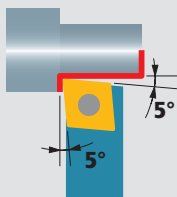
Front turning

SCAC... U (90°) □ 31



Turning and facing

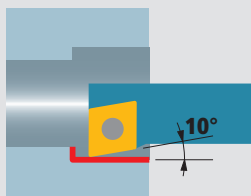
SCLC... U (95°) □ 32



Application ID turning

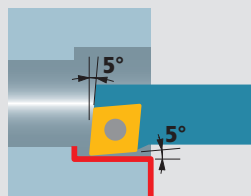
ID turning

A... SCFC... (90°) □ 34



Turning and facing

A... SCLC... (95°) □ 35



Indexable inserts

Carbide



CCGT

18–21

CCMT

22–24

CERMET



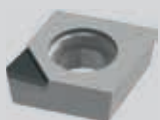
CCMT

25

CCGT

26

Diamond

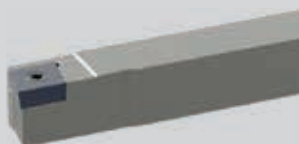


CCGT

27–29

Holders

Square holder



SCAC

31

SCLC

32

Round shank holders, boring bars



A... SCFC

34

A... SCLC

35

Replacement and spare parts



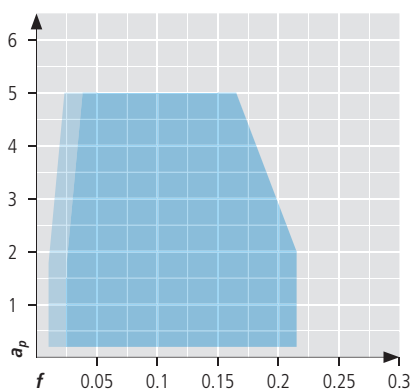
36



Coated				Uncoated	
●	○	●	○	○	-
●	●	●	●	○	-
○	○	○	○	○	-
○	○	○	-	●	○
○	○	○	●	-	-
-	○	-	○	-	-
UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20

Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
Art. no.										
		0.05	CCGT 0602005 FN -PF23 ...	280163	280164	044785	044786	280120	037996	SC...06...
		0.1	CCGT 060201 FN -PF23 ...	280165	280166	044787	044788	280121	037997	
		0.2	CCGT 060202 FN -PF23 ...	280167	280168	044789	044790	280122	037998	
		0.4	CCGT 060204 FN -PF23 ...	280225	280226	280227	280228	280151	280152	
		0.05	CCGT 09T3005 FN -PF23 ...	280169	280170	044791	044792	280123	037999	SC...09...
		0.1	CCGT 09T301 FN -PF23 ...	280171	280172	044793	044794	280124	039035	
		0.2	CCGT 09T302 FN -PF23 ...	280173	280174	044795	044796	280125	039036	
		0.4	CCGT 09T304 FN -PF23 ...	280229	280230	280231	280232	280153	280154	
		0.05	CCGT 0602005 EN -PF23 ...			044797	044798		039037	SC...06...
		0.1	CCGT 060201 EN -PF23 ...			044799	044800		039038	
		0.2	CCGT 060202 EN -PF23 ...			044801	044802		039044	
		0.4	CCGT 060204 EN -PF23 ...			554366	554367		554365	
		0.05	CCGT 09T3005 EN -PF23 ...			044803	044804		039087	SC...09...
		0.1	CCGT 09T301 EN -PF23 ...			044805	044806		039088	
		0.2	CCGT 09T302 EN -PF23 ...			044807	044808		039089	
		0.4	CCGT 09T304 EN -PF23 ...			554370	554371		554369	

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	70–150	60–140
N	150–300	140–280
S	40–90	30–80
H	20–50	—



Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
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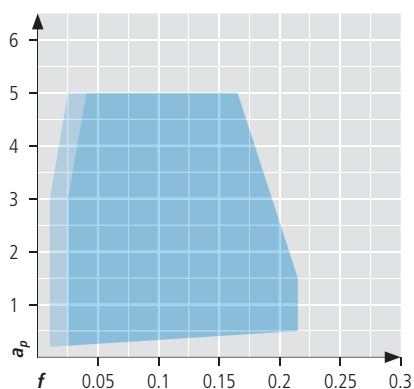
Coated				Uncoated	

Art. no.

		0.05	CCGT 0602005 FN -PF33 ...	554373	554374	554377	554378	554372	554375	SC...06...
		0.1	CCGT 060201 FN -PF33 ...	554380	554381	554383	554384	554379	554382	
		0.2	CCGT 060202 FN -PF33 ...	554386	554387	554389	554390	554385	554388	
		0.4	CCGT 060204 FN -PF33 ...	554392	554393	554395	554396	554391	554394	
		0.05	CCGT 09T3005 FN -PF33 ...	554398	554400	554402	554403	554397	554401	SC...09...
		0.1	CCGT 09T301 FN -PF33 ...	554405	554406	554408	554409	554404	554407	
		0.2	CCGT 09T302 FN -PF33 ...	554413	554414	554416	554417	554412	554415	
		0.4	CCGT 09T304 FN -PF33 ...	554419	554420	554423	554425	554418	554421	
		0.1	CCGT 060201 EN -PF33 ...			554435	554436		554434	SC...06...
		0.2	CCGT 060202 EN -PF33 ...			554438	554439		554437	
		0.4	CCGT 060204 EN -PF33 ...			554441	554442		554440	
		0.1	CCGT 09T301 EN -PF33 ...			554446	554447		554444	SC...09...
		0.2	CCGT 09T302 EN -PF33 ...			554450	554452		554449	
		0.4	CCGT 09T304 EN -PF33 ...			554454	554456		554453	

31...

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

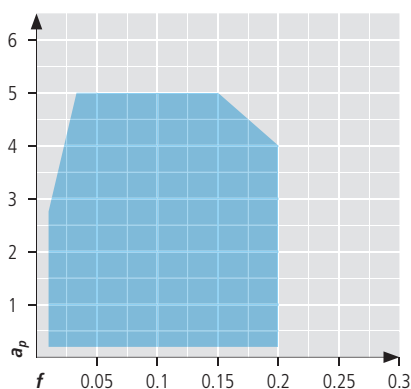
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



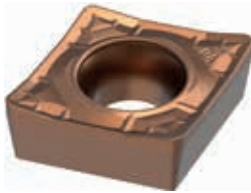
Coated		Uncoated
		
		
		
		
		

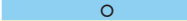
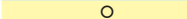
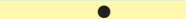
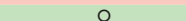
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
				Art. no.			
	CC 06 	0.05	CCGT 0602005 FN -PA7 ...	139778	216072	139777	SC...06...
		0.1	CCGT 060201 FN -PA7 ...	114376	216073	114375	
		0.2	CCGT 060202 FN -PA7 ...	123442	150415	123311	
		0.4	CCGT 060204 FN -PA7 ...	123444	150416	123464	
	CC 09 	0.05	CCGT 09T3005 FN -PA7 ...	114388	150370	114377	SC...09...
		0.1	CCGT 09T301 FN -PA7 ...	114379	150386	114378	
		0.2	CCGT 09T302 FN -PA7 ...	123572	150387	123469	
		0.4	CCGT 09T304 FN -PA7 ...	123446	150388	123251	
		0.8	CCGT 09T308 FN -PA7 ...	123260	044780	123259	

Application range

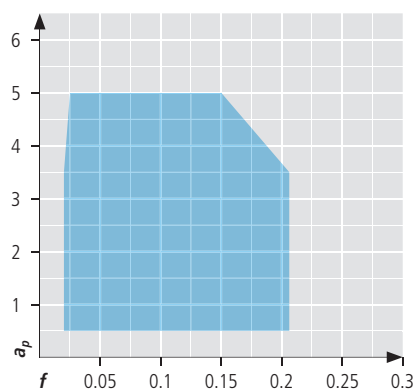
 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–85
H	—	—



				Coated		Uncoated
						
						
						
						
						
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10
Art. no.						
	CC 06 	0.2	CCGT 060202 FN -PA6 ...	555387	555388	555386
		0.4	CCGT 060204 FN -PA6 ...	555390	555391	555389
	CC 09 	0.2	CCGT 09T302 FN -PA6 ...	555393	555394	555392
		0.4	CCGT 09T304 FN -PA6 ...	555396	555397	555395
		0.8	CCGT 09T308 FN -PA6 ...	555399	555400	555398
SC...06... 31...						
SC...09... 31...						

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

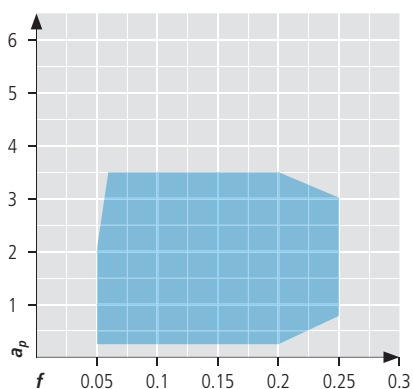
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



Figure 1 is a schematic representation of the cross-section of the coated and uncoated membranes. The diagram is divided into two main sections: 'Coated' and 'Uncoated'. The 'Coated' section is further divided into 'PVD' (Physical Vapor Deposition) and 'CVD' (Chemical Vapor Deposition). The 'Uncoated' section is labeled 'UHM30 HX' and 'UHM20 HZ'. The membranes are shown as horizontal layers with different colors representing different materials. The 'Coated' membranes have a thin layer of coating on top, while the 'Uncoated' membranes do not. The 'PVD' coating is shown as a thin layer, while the 'CVD' coating is shown as a thicker layer. The 'UHM30 HX' and 'UHM20 HZ' membranes are shown as thicker layers.

Cutting edge	Size	R	Order designation	UHM30 HX	UHM20 MZ		
	 CC 06	0.2	CCMT 060202 EN -PF43 ...	127742	216300	Art. no.	SC...06... 
		0.4	CCMT 060204 EN -PF43 ...	127743	216301		
	 CC 09	0.2	CCMT 09T302 EN -PF43 ...	127744	216302		SC...09... 
		0.4	CCMT 09T304 EN -PF43 ...	126995	216303		
		0.8	CCMT 09T308 EN -PF43 ...	126996			

Application range

 $a_p \text{ (mm)} / f \text{ (mm/U)}$  v_c (m/min)

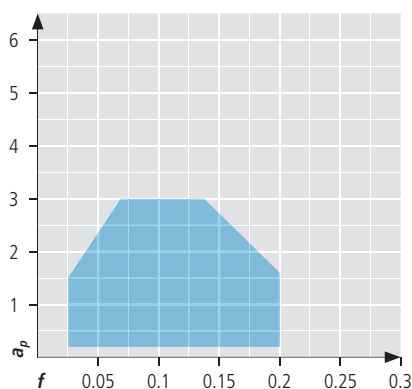
	Coated	
	PVD	CVD
P	60–180	80–220
M	50–120	70–180
K	60–150	80–200
N	—	—
S	30–80	—
H	—	—



Coated	PVD	CVD
		
		
		
		
		

Cutting edge	Size	R	Order designation	HMP710	HMP720	HMC815	
				Art. no.			
	CC 06 	0.2	CCMT 060202 EN -S12 ...	216522	216532	555588	SC...06...
		0.4	CCMT 060204 EN -S12 ...	216523	216533	555589	
	CC 09 	0.2	CCMT 09T302 EN -S12 ...	216524	216534	555590	SC...09... 31...
		0.4	CCMT 09T304 EN -S12 ...	216525	216535	555591	
		0.8	CCMT 09T308 EN -S12 ...	216526	216538	555592	

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	
	PVD	CVD
P	60–180	100–250
M	50–120	80–220
K	60–150	100–240
N	—	—
S	30–80	—
H	—	—



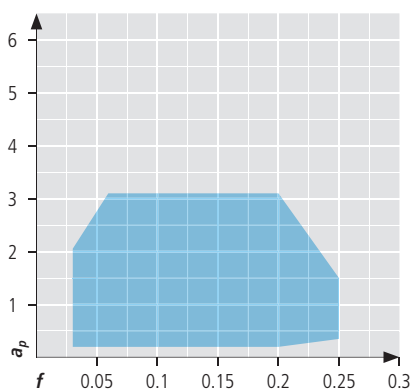
Coated		
	PVD	CVD
●	●	●
○	○	○
-	-	-
-	-	-
-	-	-

Cutting edge	Size	R	Order designation	HMP710	HMP720	HMC815	
				Art. no.			
	CC 06 	0.2	CCMT 060202 EN -M18R ...	216762	216772	555598	SC...06...
		0.4	CCMT 060204 EN -M18R ...	216763	216773	555599	
	CC 09 	0.2	CCMT 09T302 EN -M18R ...	216764	216774	555600	SC...09...
		0.4	CCMT 09T304 EN -M18R ...	216765	216775	555601	
		0.8	CCMT 09T308 EN -M18R ...	216766	216776	555602	

24

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Application range

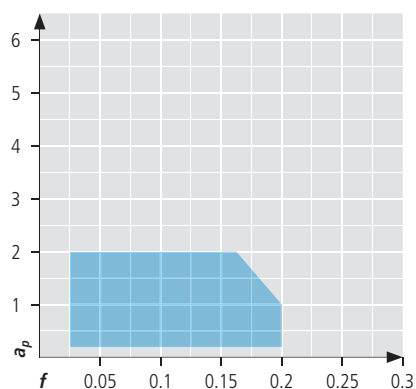
 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	
	PVD	CVD
P	60–180	100–250
M	50–120	80–220
K	60–150	100–240
N	—	—
S	30–80	—
H	—	—

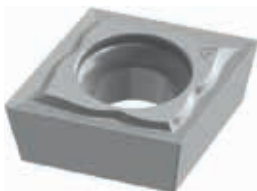


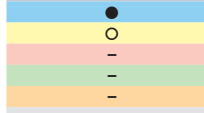
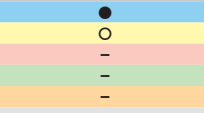
				Coated	Uncoated		
				●	●		
				○	○		
				-	-		
				-	-		
				-	-		
Cutting edge	Size	R	Order designation	CMP120	CMB-15		
				Art. no.			
	CC 06 	0.2	CCMT 060202 EN -S07 ...	216512	216500		SC...06...
		0.4	CCMT 060204 EN -S07 ...	216513	216501		
	CC 09 	0.2	CCMT 09T302 EN -S07 ...	216514	216502		SC...09... 31...
		0.4	CCMT 09T304 EN -S07 ...	216515	216503		
		0.8	CCMT 09T308 EN -S07 ...	216516	216504		

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

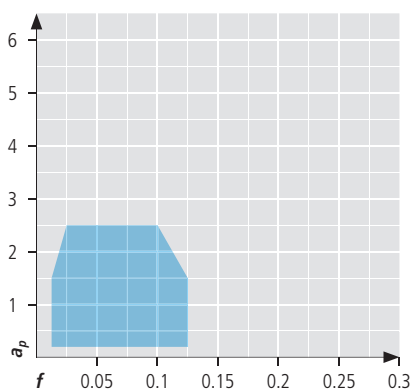
	Coated	Uncoated
P	70–250	80–230
M	70–230	80–210
K	—	—
N	—	—
S	—	—
H	—	—



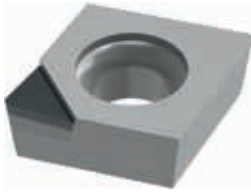
Coated	Uncoated
	
UCM10 HX	UCM10

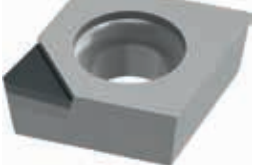
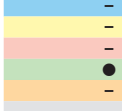
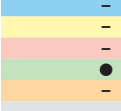
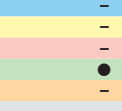
Cutting edge	Size	R	Order designation	Art. no.	
		0.05	CCGT 0602005 FN -PF23 ...	560442	560441
		0.1	CCGT 060201 FN -PF23 ...	560444	560443
		0.2	CCGT 060202 FN -PF23 ...	560446	560445
		0.05	CCGT 09T3005 FN -PF23 ...	560448	560447
		0.1	CCGT 09T301 FN -PF23 ...	560450	560449
		0.2	CCGT 09T302 FN -PF23 ...	560452	560451
		0.4	CCGT 09T304 FN -PF23 ...	560454	560453

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

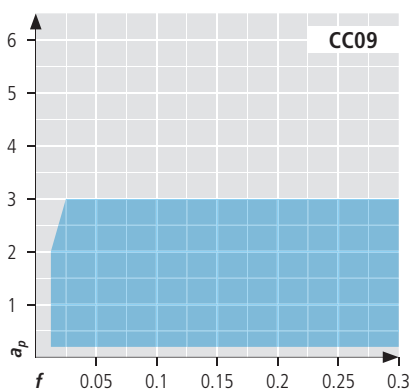
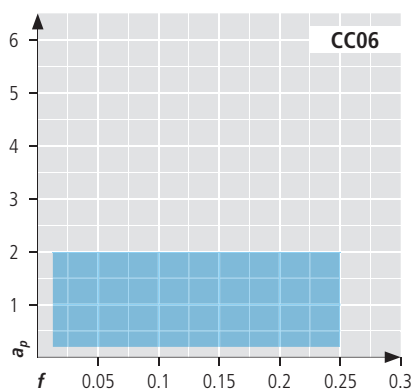
	Coated	Uncoated
P	70–250	70–230
M	70–230	60–210
K	—	—
N	—	—
S	—	—
H	—	—



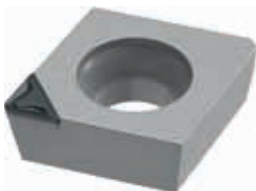
				PCD			
							
Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
	CC 06 	0.1	CCGT 060201 FN ...		Art. no. 129021	116078	SC...06... 31...
		0.2	CCGT 060202 FN ...		137707	116081	
		0.4	CCGT 060204 FN ...		137708		
	CC 09 	0.2	CCGT 09T302 FN ...		137710	116091	SC...09... 31...
		0.4	CCGT 09T304 FN ...		137711		

More inserts available by request.

Application range

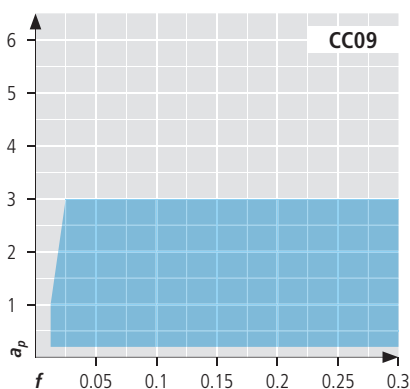
 a_p (mm) / f (mm/U)

 v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



More inserts available by request.

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 $a_p \text{ (mm)} / f \text{ (mm/U)}$ 

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400

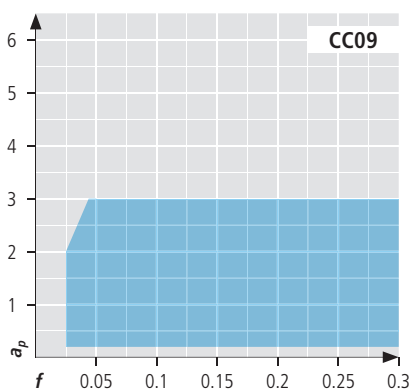
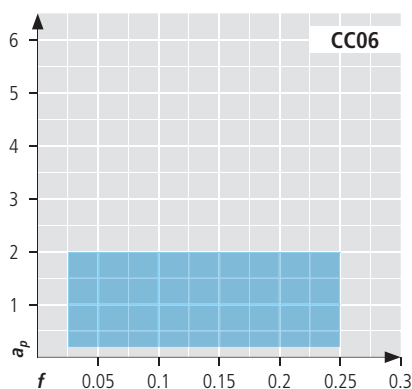


				PCD			
Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
	CC 06 	0.2	CCGT 060202 FN -UWN ...	116448		116252	SC...06...
		0.4	CCGT 060204 FN -UWN ...	116458	147288	116262	
	CC 09 	0.2	CCGT 09T302 FN -UWN ...	116478		116281	SC...09... 31...
		0.4	CCGT 09T304 FN -UWN ...	116488		116290	

More inserts available by request.

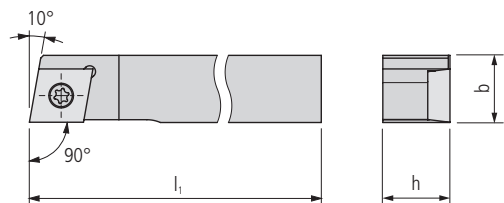
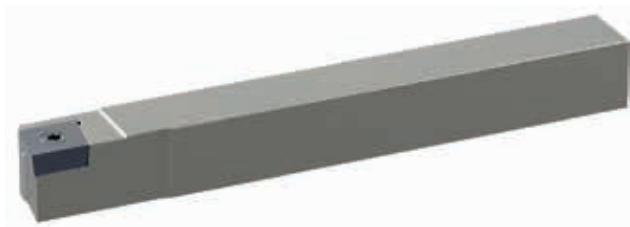
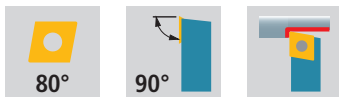
Application range

a_p (mm) / f (mm/U)



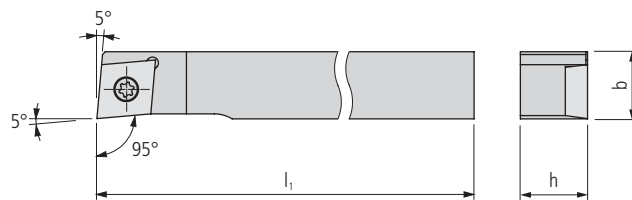
v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



SCAC... U

	Compatible cutting edges □ 18...	Order designation	Art. no.	Dimensions							
				b	h	l ₁					
L	CC 06	SCACL 0808 H06 U	045072	8	8	100					
	CC 09	SCACL 1212 H09 U	045074	12	12	100					
		SCACL 1616 K09 U	045076	16	16	125					
R	CC 06	SCACR 0808 H06 U	045078	8	8	100					
	CC 09	SCACR 1212 H09 U	045080	12	12	100					
		SCACR 1616 K09 U	045082	16	16	125					

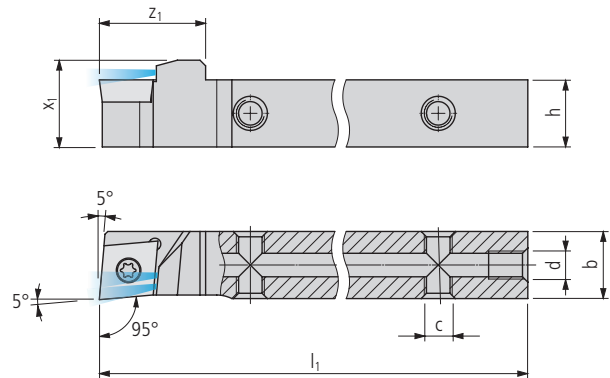


SCLC... U

	Compatible cutting edges 18...	Order designation	Art. no.	Dimensions						
				h	b	l ₁				
L	CC 06	SCLCL 0808 H06 U	045176	8	8	100				
		SCLCL 1010 H06 U	045177	10	10	100				
	CC 09	SCLCL 1212 H09 U	045178	12	12	100				
		SCLCL 1616 K09 U	144706	16	16	125				
R	CC 06	SCLCR 0808 H06 U	045179	8	8	100				
		SCLCR 1010 H06 U	045182	10	10	100				
	CC 09	SCLCR 1212 H09 U	045180	12	12	100				
		SCLCR 1616 K09 U	045201	16	16	125				

SCLC... U INCH

	Compatible cutting edges 18...	Order designation	Art. no.	Dimensions						
				h	b	l ₁				
L	CC 06	SCLCL 3/8" H06 U	144707	9.525	9.525	100				
		SCLCL 1/2" H09 U	144704	12.7	12.7	100				
	CC 09	SCLCL 5/8" K09 U	144709	15.875	15.875	125				
		SCLCR 3/8" H06 U	144713	9.525	9.525	100				
R	CC 06	SCLCR 1/2" H09 U	144711	12.7	12.7	100				
		SCLCR 5/8" K09 U	144715	15.875	15.875	125				
	CC 09									



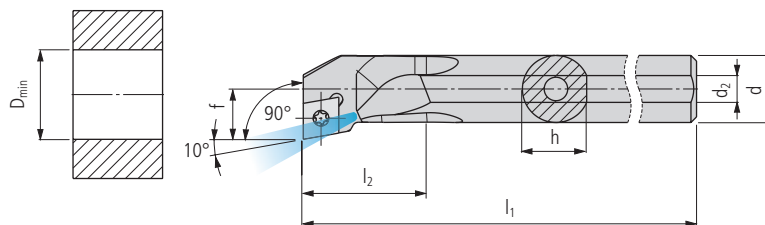
SCLC... U IC

	Compatible cutting edges 18...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	CC 06	SCLCL 0808 H06 U IC	146351	8	8	100	16	11.5	M5	M5
		SCLCL 1010 H06 U IC	146352	10	10	100	16	13.5	M5	M5
	CC 09	SCLCL 1212 H09 U IC	146353	12	12	100	19	15.5	M5	M5
		SCLCL 1616 K09 U IC	169189	16	16	125	19	19.5	M5	G ¹ / ₈ "
R	CC 06	SCLCR 0808 H06 U IC	146348	8	8	100	16	11.5	M5	M5
		SCLCR 1010 H06 U IC	146349	10	10	100	16	13.5	M5	M5
	CC 09	SCLCR 1212 H09 U IC	146350	12	12	100	19	15.5	M5	M5
		SCLCR 1616 K09 U IC	169188	16	16	125	19	19.5	M5	G ¹ / ₈ "

SCLC... U IC INCH

	Compatible cutting edges 18...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	CC 06	SCLCL 3/8" H06 U IC	144708	8	8	100	16	11.5	M5	M5
		SCLCL 1/2" H09 U IC	144705	10	10	100	16	13.5	M5	M5
	CC 09	SCLCL 5/8" K09 U IC	144710	12	12	100	19	15.5	M5	M5
		SCLCR 3/8" H06 U IC	144714	9.525	9.525	100	16	13	M5	M5
R	CC 06	SCLCR 1/2" H09 U IC	144712	12.7	12.7	100	19	16.2	M5	M5
		SCLCR 5/8" K09 U IC	144716	15.875	15.875	125	19	19.4	M5	G ¹ / ₈ "

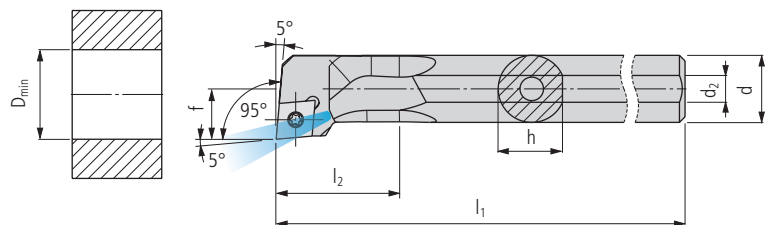
Scope of delivery: Holder without coolant connector



A... SCFC...

34

	Compatible cutting edges □ 18...	Order designation	Dimensions							
			d	h	l ₁	l ₂	f	D _{min}	d ₂	
L 	CC 06	A08F SCFCL 06	Art. no. 045209							
			8	7.6	80	17	5	11	M5	
R 	CC 06	A08F SCFCR 06	Art. no. 045213							
			8	7.6	80	17	5	11	M5	



A... SCLC...

	Compatible cutting edges 18...	Order designation	Art. no.	Dimensions							
				d	h	l ₁	l ₂	f	D _{min}	d ₂	
L	CC 06	A08F SCLCL 06	045216	8	7.5	80	17	5	11	M5	
		A10H SCLCL 06	045218	10	9.5	100	19	7	13	M5	
		A12K SCLCL 06	045220	12	11.5	125	22	9	16	M5	
	CC 09	A16M SCLCL 09	045222	16	15.5	150	29	11	20	G ¹ / ₈ "	
R	CC 06	A08F SCLCR 06	045217	8	7.5	80	17	5	11	M5	
		A10H SCLCR 06	045219	10	9.5	100	19	7	13	M5	
		A12K SCLCR 06	045221	12	11.5	125	22	9	16	M5	
	CC 09	A16M SCLCR 09	045223	16	15.5	150	29	11	20	G ¹ / ₈ "	

For holders (SC...) OD turning

Illustration	Description	Dimensions	Order designation	Art. no.	
					Holder
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	127518	SC... 06
		M3.5 × 11 T15	MSP 35110 T15	127527	SC... 09
		M4.5 × 12 T15	MSP 45120 T15	127528	SC... 12
	Screw plug	M5	MSP VSR M5 IB2.5	150262	SC... IC
		G1/8"	MSP VSR G1/8 IB5	153989	

For holders (... SC...) ID turning

Illustration	Description	Dimensions	Order designation	Art. no.	
					Holder
	TORX screw	M2.5 × 5 T08	MSP 25050 T08	127529	A... SC... 06
		M3.5 × 7.2 T15	MSP 35072 T15	127967	A16M SC... 09
		M3.5 × 8.6 T15	MSP 35086 T15	127519	A20Q SC... 09

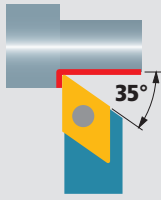
TORX screwdriver

Illustration	Description	Dimensions	Order designation	Art. no.	
					Screw
	TORX screwdriver	T08	MSP TX08	127520	M... T08
		T15	MSP TX15	127482	M... T15

Application OD turning

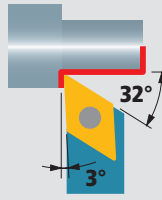
Front turning

SDAC... U (90°) □ 57



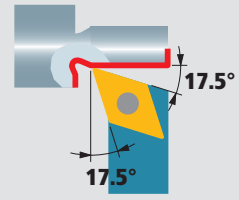
Turning and facing

SDJC... U (93°) □ 58



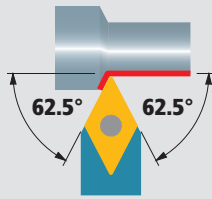
Turning and undercutting

SDHC... U (107.5°) □ 60



Turning

SDNC... U (62.5°) □ 62

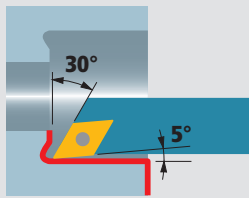


38

Application ID turning

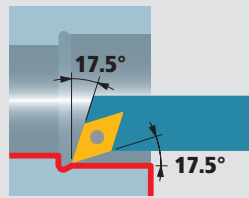
Turning and facing

A... SDOC... (95°) □ 66



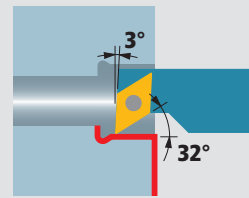
Turning and facing

A... SDQC... (107.5°) □ 67



Turning and facing

A... SDUC... (93°) □ 68



Indexable inserts

Carbide



DCGT

▢ 40–46

DCMT

▢ 47–49

CERMET



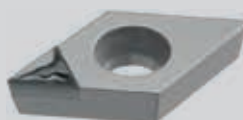
DCMT

▢ 50

DCGT

▢ 51

Diamond



DCGW

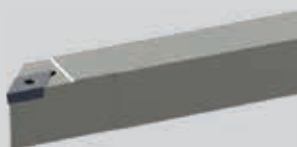
▢ 52

DCGT

▢ 53–55

Holders

Square holder



SDAC

▢ 57

SDJC

▢ 58

SDHC

▢ 60

SDNC

▢ 62

SDNCN

▢ 64

Round shank holders, boring bars



A... SDOC

▢ 66

A... SDQC

▢ 67

A... SDUC

▢ 68

Replacement and spare parts



▢ 69



Coated				Uncoated	
●	○	●	○	○	—
●	●	●	●	○	—
○	○	○	○	○	—
●	○	○	—	●	○
○	●	○	●	—	—
—	○	—	○	—	—
UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20

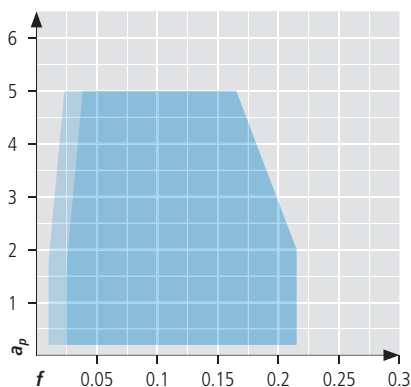
Art. no.

		0.05	DCGT 0702005 FN -PF23 ...	280175	280176	044838	044839	280126	039095	SD...07...
		0.08	DCGT 0702008 FN -PF23 ...	554469	554470	554472	554473	554468	554471	
		0.1	DCGT 070201 FN -PF23 ...	280177	280178	044840	044841	280127	154150	
		0.15	DCGT 0702015 FN -PF23 ...	554475	554476	554478	554479	554474	554477	
		0.2	DCGT 070202 FN -PF23 ...	280179	280180	044842	044843	280128	039097	
		0.4	DCGT 070204 FN -PF23 ...	280233	280234	280235	280236	280155	280156	
		0.05	DCGT 11T3005 FN -PF23 ...	280181	280182	044844	044845	280129	039098	SD...11...
		0.08	DCGT 11T3008 FN -PF23 ...	554481	554482	554484	554485	554480	554483	
		0.1	DCGT 11T301 FN -PF23 ...	280183	280184	044846	044847	280130	039099	
		0.15	DCGT 11T3015 FN -PF23 ...	554488	554489	554491	554492	554486	554490	
		0.2	DCGT 11T302 FN -PF23 ...	280185	280186	044848	044849	280131	039350	
		0.4	DCGT 11T304 FN -PF23 ...	280237	280238	280239	280240	280157	280158	
		0.05	DCGT 0702005 EN -PF23 ...			044850	044851		039351	SD...07... SD...11...
		0.08	DCGT 0702008 EN -PF23 ...			554494	554495		554493	
		0.1	DCGT 070201 EN -PF23 ...			044852	044853		039352	
		0.15	DCGT 0702015 EN -PF23 ...			554507	554508		554506	
		0.2	DCGT 070202 EN -PF23 ...			044854	044855		039353	
		0.4	DCGT 070204 EN -PF23 ...			554510	554511		554509	
		0.05	DCGT 11T3005 EN -PF23 ...			044856	044857		039354	
		0.08	DCGT 11T3008 EN -PF23 ...			554514	554516		554512	
		0.1	DCGT 11T301 EN -PF23 ...			044858	044859		039355	
		0.15	DCGT 11T3015 EN -PF23 ...			554520	554521		554519	
		0.2	DCGT 11T302 EN -PF23 ...			044860	044861		039356	
		0.4	DCGT 11T304 EN -PF23 ...			554099	145645		145644	

40

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Application range

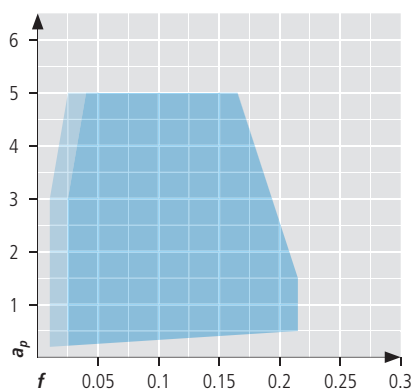
 a_p (mm) / f (mm/U) v_c (m/min)

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	70–150	60–140
N	150–300	140–280
S	40–90	30–80
H	20–50	—

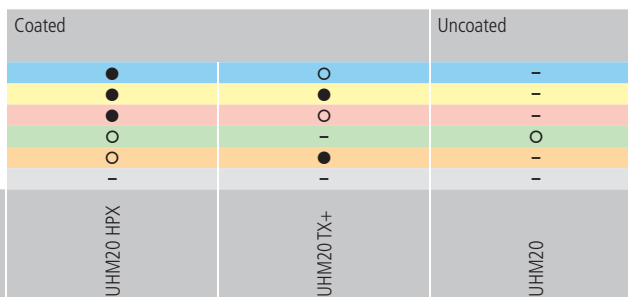


				Coated				Uncoated		
										
										
										
										
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
Art. no.										
		0.05	DCGT 0702005 FN -PF33 ...	280187	280188	044862	044863	280132	039357	SD...07...
		0.08	DCGT 0702008 FN -PF33 ...	554528	554529	554531	554532	554527	554530	
		0.1	DCGT 070201 FN -PF33 ...	280189	280190	044864	044865	280133	039358	
		0.15	DCGT 0702015 FN -PF33 ...	554534	554535	554538	554539	554533	554536	
		0.2	DCGT 070202 FN -PF33 ...	280191	280192	044866	044867	280134	039359	
		0.4	DCGT 070204 FN -PF33 ...	280193	280194	044868	044869	280135	039360	
		0.05	DCGT 11T3005 FN -PF33 ...	280195	280196	044870	044871	280136	039374	SD...11...
		0.08	DCGT 11T3008 FN -PF33 ...	554542	554543	554546	554547	554540	554544	
		0.1	DCGT 11T301 FN -PF33 ...	215045	215046	044872	044873	215044	039375	
		0.15	DCGT 11T3015 FN -PF33 ...	554550	554551	554553	554554	554549	554552	
		0.2	DCGT 11T302 FN -PF33 ...	280197	280198	044874	044875	280137	039382	
		0.4	DCGT 11T304 FN -PF33 ...	280199	280200	044876	044877	280138	039383	
		0.05	DCGT 0702005 EN -PF33 ...			044878	044879		039384	SD...07...
		0.08	DCGT 0702008 EN -PF33 ...			554559	554560		554558	
		0.1	DCGT 070201 EN -PF33 ...			044880	044881		039385	
		0.15	DCGT 0702015 EN -PF33 ...			554562	554563		554561	
		0.2	DCGT 070202 EN -PF33 ...			044882	044883		039386	
		0.4	DCGT 070204 EN -PF33 ...			044884	044885		039387	
		0.05	DCGT 11T3005 EN -PF33 ...			044886	044887		039388	SD...11...
		0.08	DCGT 11T3008 EN -PF33 ...			554566	554567		554564	
		0.1	DCGT 11T301 EN -PF33 ...			044888	044889		039389	
		0.15	DCGT 11T3015 EN -PF33 ...			554571	554573		554569	
		0.2	DCGT 11T302 EN -PF33 ...			044890	044891		039390	
		0.4	DCGT 11T304 EN -PF33 ...			044892	044893		039391	

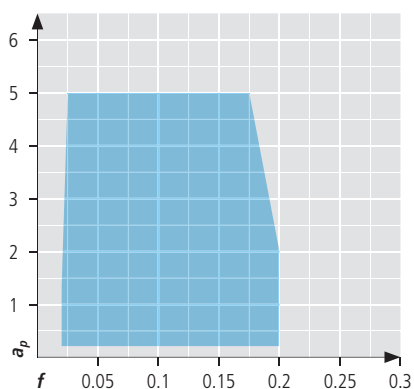
Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

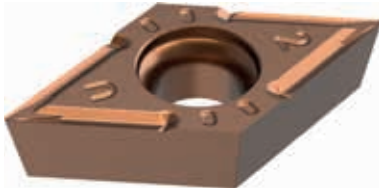
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



Cutting edge	Size	R	Order designation	UHM20 HPX	UHM20 TX+	UHM20	
	 DC 07	0.1	DCGT 070201 FN -PF ...	211005	Art. no. 211006	211004	SD...07... 
		0.2	DCGT 070202 FN -PF ...	116969	211007	116967	
	 DC 11	0.2	DCGT 11T302 FN -PF ...	211009	211010	211008	SD...11... 
		0.4	DCGT 11T304 FN -PF ...	211012	211013	211011	

 $a_p \text{ (mm)} / f \text{ (mm/U)}$ 

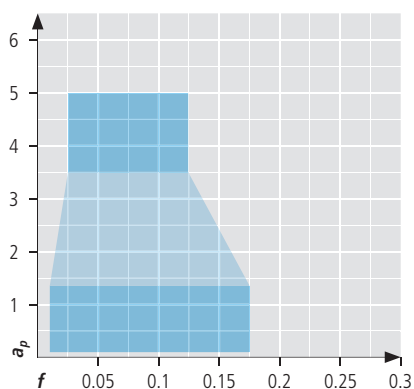
	Coated	Uncoated
P	80–160	—
M	70–140	—
K	90–150	—
N	150–300	120–230
S	50–90	—
H	—	—



Coated	Uncoated
	
	
	
	
	

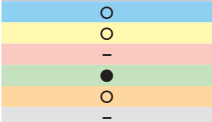
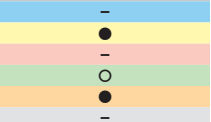
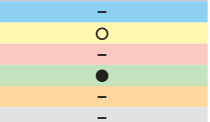
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
				Art. no.			
	DC 07 	0.05	DCGT 0702005 FN -PF05 ...	215014	211332	211331	SD...07... □ 57...
		0.1	DCGT 070201 FN -PF05 ...	215015	211334	211333	
		0.15	DCGT 0702015 FN -PF05 ...	215016	211336	211335	
		0.2	DCGT 070202 FN -PF05 ...	215017	211338	211337	
	DC 11 	0.05	DCGT 11T3005 FN -PF05 ...	215018	211340	211339	SD...11... □ 57...
		0.1	DCGT 11T301 FN -PF05 ...	215019	211307	211306	
		0.15	DCGT 11T3015 FN -PF05 ...	215021	211342	211341	
		0.2	DCGT 11T302 FN -PF05 ...	215022	152818	152817	
		0.4	DCGT 11T304 FN -PF05 ...	215023	211344	211343	

Application range

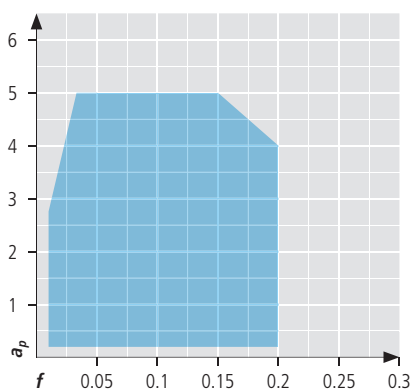
 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	60–120
M	70–140	—
K	—	—
N	150–300	120–230
S	50–90	—
H	—	—



				Coated		Uncoated		
Cutting edge	Size	R	Order designation					
				UHM10 HX	UHM10 TX+	UHM10		
				Art. no.				
		DC 07	0.05	DCGT 0702005 FN -PA7 ...	114381	044834	114380	SD...07... 57...
			0.1	DCGT 070201 FN -PA7 ...	113032	147413	113031	
			0.2	DCGT 070202 FN -PA7 ...	123451	192743	123500	
			0.4	DCGT 070204 FN -PA7 ...	012952	154407	123505	
		DC 11	0.05	DCGT 11T3005 FN -PA7 ...	114383	154830	114382	SD...11... 57...
			0.1	DCGT 11T301 FN -PA7 ...	114385	154831	114384	
			0.2	DCGT 11T302 FN -PA7 ...	013265	150752	123514	
			0.4	DCGT 11T304 FN -PA7 ...	123454	154961	123518	
			0.8	DCGT 11T308 FN -PA7 ...	123455	044835	123521	

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

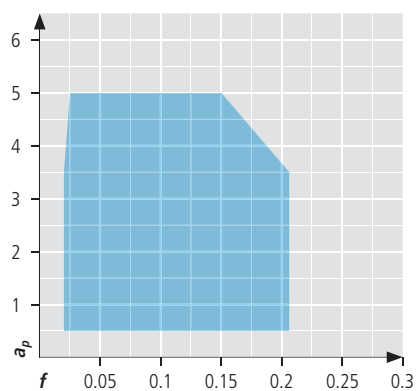
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–85
H	—	—



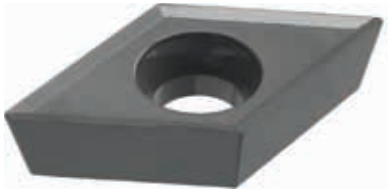
Coated		Uncoated
O	-	-
O	●	O
●	O	●
O	●	-
-	-	-
UHM10 HX	UHM10 TX+	UHM10

Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
	DC 07 	0.2	DCGT 070202 FN -PA6 ...	555402	555403	555401	SD...07... 
		0.4	DCGT 070204 FN -PA6 ...	555405	555407	555404	
	DC 11 	0.2	DCGT 11T302 FN -PA6 ...	555411	555412	555409	SD...11... 
		0.4	DCGT 11T304 FN -PA6 ...	555414	555415	555413	
		0.8	DCGT 11T308 FN -PA6 ...	555418	555419	555416	
	Art. no.						

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



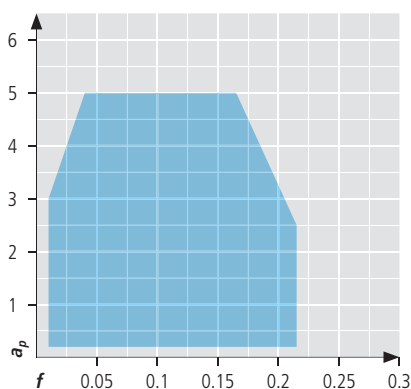
Coated				Uncoated	
○	○	○	○	○	○
●	●	●	●	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
Art. no.										
		0.06	DCGT 0702006 FN -A3 ...	123090	126105	116981	185273	123056	116980	SD...07...
		0.15	DCGT 0702015 FN -A3 ...	123092	126106	116983	154071	123057	116982	
		0.35	DCGT 0702035 FN -A3 ...			116985	192708		116984	
		0.08	DCGT 11T3008 FN -A3 ...	123094	126107	116987	044815	123058	116986	SD...11...
		0.15	DCGT 11T3015 FN -A3 ...	123096	125197	116976	169726	123059	116974	
		0.35	DCGT 11T3035 FN -A3 ...	123947	126108	116989	169674	123945	116988	
		0.06	DCGT 0702006 EN -A3 ...			044816	044817		211000	SD...07...
		0.15	DCGT 0702015 EN -A3 ...			044818	044819		039090	
		0.35	DCGT 0702035 EN -A3 ...			044820	044821		039091	
		0.08	DCGT 11T3008 EN -A3 ...			044822	044823		039092	SD...11...
		0.15	DCGT 11T3015 EN -A3 ...			044824	044825		039093	
		0.35	DCGT 11T3035 EN -A3 ...			044826	044827		039094	

46

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Application range


 v_c (m/min)

	Coated	Uncoated
P	80–160	60–120
M	70–140	—
K	—	—
N	150–300	140–280
S	40–80	—
H	20–50	—

Legend

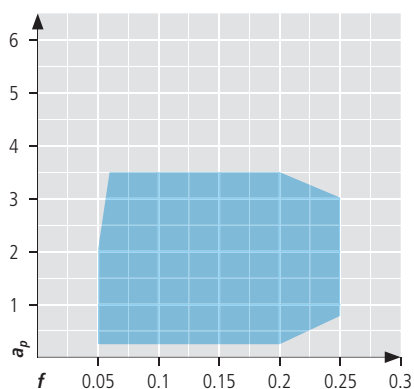
4



Coated	
PVD	CVD
●	●
○	○
○	○
○	○
○	○

Cutting edge	Size	R	Order designation	UHM30 HX	UHM20 MZ	Art. no.	
	DC 07 	0.2	DCMT 070202 EN -PF43 ...	127209	216305		SD...07...
		0.4	DCMT 070204 EN -PF43 ...	127210	216306		
	DC 11 	0.2	DCMT 11T302 EN -PF43 ...	127211	216307		SD...11... 57...
		0.4	DCMT 11T304 EN -PF43 ...	127212	216308		
		0.8	DCMT 11T308 EN -PF43 ...	127213			

Application range


 v_c (m/min)

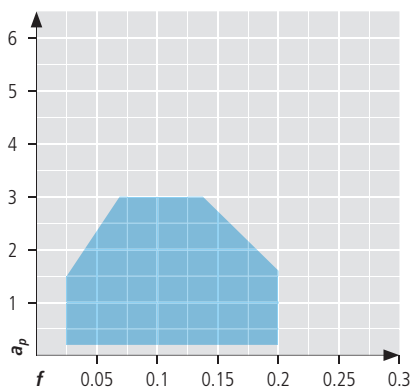
	Coated	
	PVD	CVD
P	60–180	80–220
M	50–120	70–180
K	60–150	80–200
N	—	—
S	30–80	—
H	—	—



Coated		
	PVD	CVD
○	●	●
●	●	○
○	○	●
-	-	-
●	●	-
-	-	-

Cutting edge	Size	R	Order designation	HMP710	HMP720	HMC815	
				Art. no.			
	DC 07 	0.2	DCMT 070202 EN -S12 ...	216527	216539	555593	SD...07...
		0.4	DCMT 070204 EN -S12 ...	216528	216540	555594	
	DC 11 	0.2	DCMT 11T302 EN -S12 ...	216529	216541	555595	
		0.4	DCMT 11T304 EN -S12 ...	216530	216542	555596	
		0.8	DCMT 11T308 EN -S12 ...	216531	216556	555597	
							SD...11... 57...

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

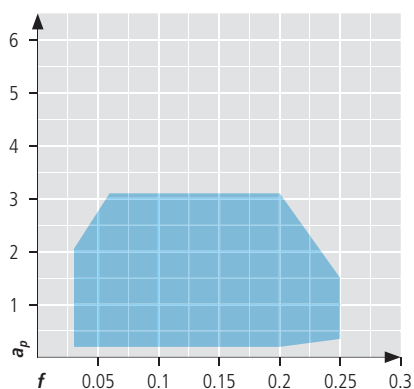
	Coated	
	PVD	CVD
P	60–180	100–250
M	50–120	80–220
K	60–150	100–240
N	—	—
S	30–80	—
H	—	—



Coated		
	PVD	CVD
●	●	●
○	○	○
●	●	●
●	●	●
●	●	●

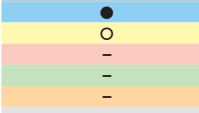
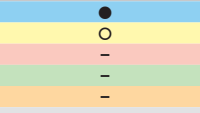
Cutting edge	Size	R	Order designation	HMP710	HMP720	HMC815	
				Art. no.			
	DC 07 	0.2	DCMT 070202 EN -M18R ...	216767	216777	555603	SD...07... SD...11... 57...
		0.4	DCMT 070204 EN -M18R ...	216768	216778	555604	
	DC 11 	0.2	DCMT 11T302 EN -M18R ...	216769	216779	555605	
		0.4	DCMT 11T304 EN -M18R ...	216770	216780	555606	
		0.8	DCMT 11T308 EN -M18R ...	216771	216781	555607	

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

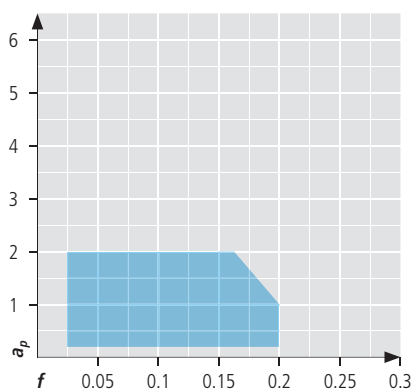
	Coated	
	PVD	CVD
P	60–180	100–250
M	50–120	80–220
K	60–150	100–240
N	—	—
S	30–80	—
H	—	—



Coated	Uncoated
	
CMP120	CMB-15

Cutting edge	Size	R	Order designation	Art. no.
	DC 07 	0.2	DCMT 070202 EN -S07 ...	216517
		0.4	DCMT 070204 EN -S07 ...	216518
	DC 11 	0.2	DCMT 11T302 EN -S07 ...	216519
		0.4	DCMT 11T304 EN -S07 ...	216520
		0.8	DCMT 11T308 EN -S07 ...	216521

Application range

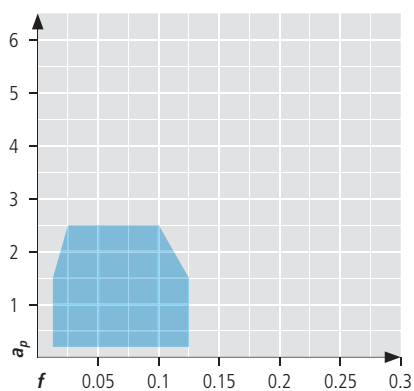
 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	70–250	80–230
M	70–230	80–210
K	—	—
N	—	—
S	—	—
H	—	—

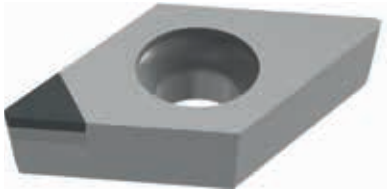


				Coated	Uncoated		
				●	●		
				○	○		
				-	-		
				-	-		
				-	-		
Cutting edge	Size	R	Order designation	UCM10 HX	UCM10		
				Art. no.			
	DC 07 	0.05	DCGT 0702005 FN -PF23 ...	560464	560463		SD...07...
		0.1	DCGT 070201 FN -PF23 ...	560466	560465		
		0.2	DCGT 070202 FN -PF23 ...	560502	560467		
	DC 11 	0.05	DCGT 11T3005 FN -PF23 ...	560504	560503		SD...11... 57...
		0.1	DCGT 11T301 FN -PF23 ...	560507	560505		
		0.2	DCGT 11T302 FN -PF23 ...	560509	560508		
		0.4	DCGT 11T304 FN -PF23 ...	560511	560510		

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	70–250	70–230
M	70–230	60–210
K	—	—
N	—	—
S	—	—
H	—	—



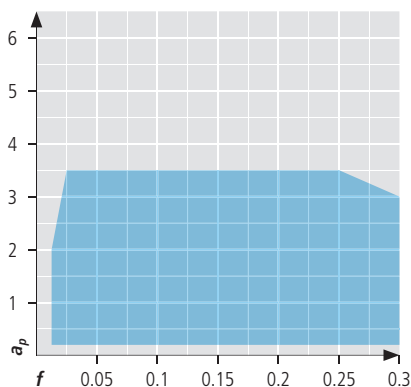
PCD		
-	-	-
-	-	-
-	-	-
●	●	●
-	-	-

Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
				Art. no.			
	DC 07 	0.05	DCGW 0702005 FN ...			154840	SD...07... 57...
		0.1	DCGW 070201 FN ...			129023	
		0.2	DCGW 070202 FN ...	138610	129022	116173	
		0.4	DCGW 070204 FN ...	116888	012747	116176	
		0.8	DCGW 070208 FN ...	116889	137723	116178	
	DC 11 	0.1	DCGW 11T301 FN ...			116183	SD...11... 57...
		0.2	DCGW 11T302 FN ...	116891	129057	116186	
		0.4	DCGW 11T304 FN ...	116892	129054	116188	
		0.8	DCGW 11T308 FN ...	116893	137724	116190	

More inserts available by request.

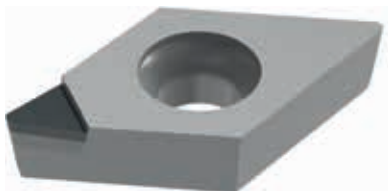
Application range

a_p (mm) / f (mm/U)



v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



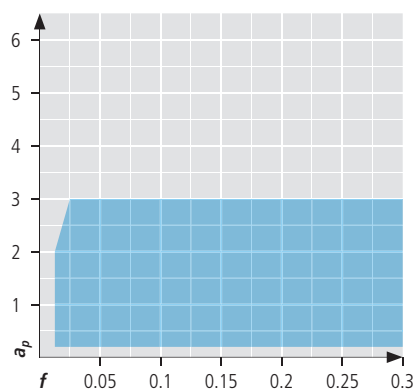
PCD		
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Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
				Art. no.			
	DC 07 	0.1	DCGT 070201 FN ...			116136	SD...07... 57...
		0.2	DCGT 070202 FN ...		137717	116139	
		0.4	DCGT 070204 FN ...		137718		
	DC 11 						
		0.2	DCGT 11T302 FN ...		129055	116155	
		0.4	DCGT 11T304 FN ...		137720		
		0.8	DCGT 11T308 FN ...		137721		
							SD...11... 57...

More inserts available by request.

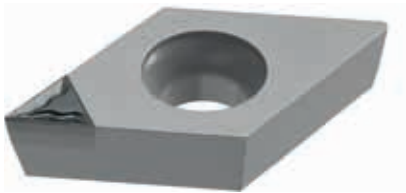
Application range

a_p (mm) / f (mm/U)



v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



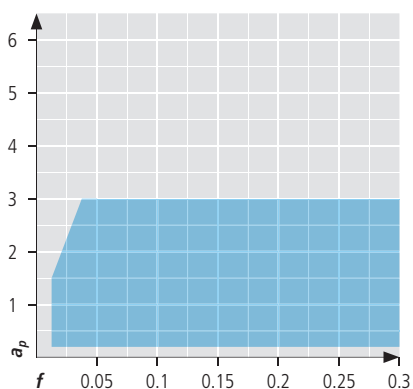
PCD		
-	-	-
-	-	-
-	-	-
●	●	●
-	-	-

Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
				Art. no.			
	DC 07 	0.1	DCGT 070201 FN -UWS ...		116334	147206	SD...07... 57...
		0.2	DCGT 070202 FN -UWS ...	116537	116341	169144	
		0.4	DCGT 070204 FN -UWS ...	116549	116352	169145	
	DC 11 	0.2	DCGT 11T302 FN -UWS ...	116568	116367	169148	SD...11... 57...
		0.4	DCGT 11T304 FN -UWS ...	116579	116380	169149	

More inserts available by request.

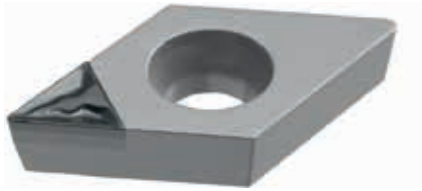
Application range

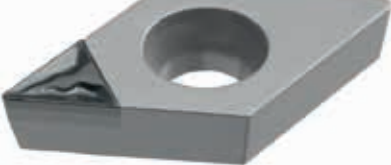
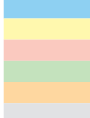
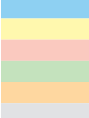
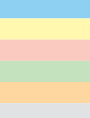
a_p (mm) / f (mm/U)



v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



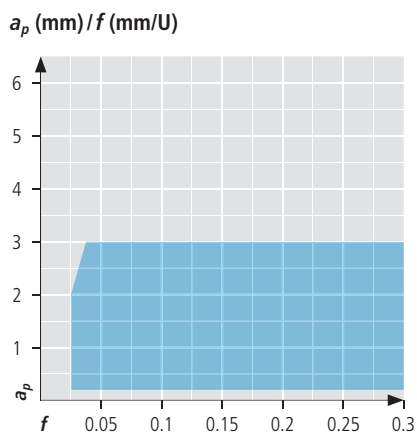
				PCD		
Cutting edge	Size	R	Order designation			
				UCVD08	UPCD15	UPCD20
				Art. no.		
				116536	116340	116340
				116548	116351	116351
	DC 07 	0.2	DCGT 070202 FN -UWN ...	116536		
		0.4	DCGT 070204 FN -UWN ...	116548		
	DC 11 	0.2	DCGT 11T302 FN -UWN ...	116567	116366	SD...07... 57...
		0.4	DCGT 11T304 FN -UWN ...	116578	116379	
		0.8	DCGT 11T308 FN -UWN ...	116586	116386	

More inserts available by request.

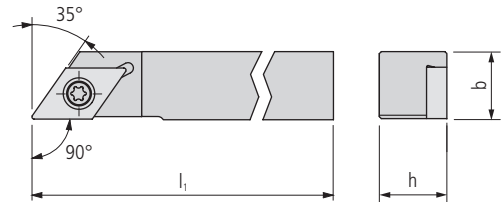
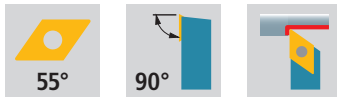
55

UTILIS
multidec[®]
swiss type tools

Application range

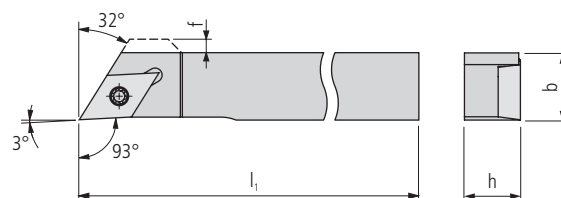


Material	v_c (m/min)
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



SDAC... U

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	DC 07 	SDACL 0808 H07 U	045104	8	8	100					
		SDACL 1010 H07 U	045105	10	10	100					
		SDACL 1212 H07 U	045106	12	12	100					
	DC 11 	SDACL 1212 H11 U	045107	12	12	100					
		SDACL 1616 K11 U	045181	16	16	125					
R	DC 07 	SDACR 0808 H07 U	045109	8	8	100					
		SDACR 1010 H07 U	045110	10	10	100					
		SDACR 1212 H07 U	045111	12	12	100					
	DC 11 	SDACR 1212 H11 U	045112	12	12	100					
		SDACR 1616 K11 U	043488	16	16	125					

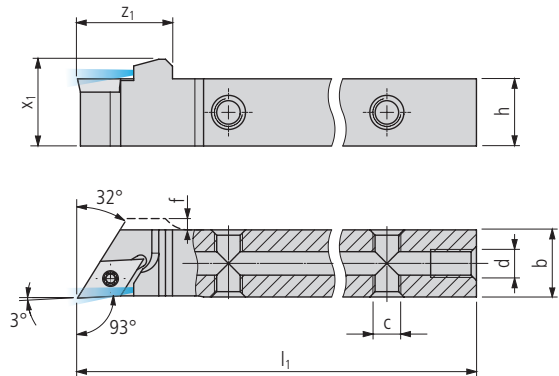


SDJC... U

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
		SDJCL 0808 H07 U	043320	8	8	100	—				
		SDJCL 1010 H07 U	043322	10	10	100	—				
		SDJCL 1212 H07 U	043324	12	12	100	—				
		SDJCL 1616 K07 U	043328	16	16	125	—				
		SDJCL 1010 H11 U	114824	10	10	100	2				
		SDJCL 1212 H11 U	044121	12	12	100	—				
		SDJCL 1616 K11 U	044148	16	16	125	—				
		SDJCR 0808 H07 U	043321	8	8	100	—				
		SDJCR 1010 H07 U	043323	10	10	100	—				
		SDJCR 1212 H07 U	043325	12	12	100	—				
		SDJCR 1616 K07 U	043329	16	16	125	—				
		SDJCR 1010 H11 U	114544	10	10	100	2				
		SDJCR 1212 H11 U	044110	12	12	100	—				
		SDJCR 1616 K11 U	044149	16	16	125	—				
		SDJCR 2020 K11 U	045199	20	20	125	—				

SDJC... U INCH

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
		SDJCL 3/8" H07 U	114043	9.525	9.525	100	—				
		SDJCL 1/2" H07 U	114045	12.7	12.7	100	—				
		SDJCL 3/8" H11 U	114044	9.525	9.525	100	2.5				
		SDJCL 1/2" H11 U	114046	12.7	12.7	100	—				
		SDJCL 5/8" K11 U	113714	15.875	15.875	125	—				
		SDJCL 3/4" K11 U	113716	19.05	19.05	125	—				
		SDJCR 3/8" H07 U	138658	9.525	9.525	100	—				
		SDJCR 1/2" H07 U	127411	12.7	12.7	100	—				
		SDJCR 3/8" H11 U	138417	9.525	9.525	100	2.5				
		SDJCR 1/2" H11 U	138419	12.7	12.7	100	—				
		SDJCR 5/8" K11 U	113715	15.875	15.875	125	—				
		SDJCR 3/4" K11 U	113717	19.05	19.05	125	—				



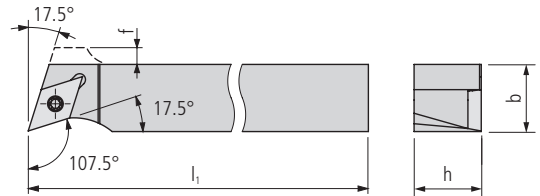
SDJC... U IC

	Compatible cutting edges □40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
L	DC 07 	SDJCL 0810 H07 U IC	146362	8	10	100	17	11.5	—	M5	M5
		SDJCL 1010 H07 U IC	146363	10	10	100	17	13.5	—	M5	M5
		SDJCL 1212 H07 U IC	146365	12	12	100	17	15.5	—	M5	M5
		SDJCL 1616 K07 U IC	146367	16	16	125	17	15.5	—	M5	G $\frac{1}{8}$ "
	DC 11 	SDJCL 1010 H11 U IC	146364	10	10	100	22	13.5	2	M5	M5
		SDJCL 1212 H11 U IC	146366	12	12	100	22	15.5	—	M5	M5
		SDJCL 1616 K11 U IC	146368	16	16	125	22	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCL 2020 K11 U IC	146369	20	20	125	22	23.5	—	M5	G $\frac{1}{8}$ "
R	DC 07 	SDJCR 0810 H07 U IC	146354	8	10	100	17	11.5	—	M5	M5
		SDJCR 1010 H07 U IC	146355	10	10	100	17	13.5	—	M5	M5
		SDJCR 1212 H07 U IC	146357	12	12	100	17	15.5	—	M5	M5
		SDJCR 1616 K07 U IC	146359	16	16	125	17	15.5	—	M5	G $\frac{1}{8}$ "
	DC 11 	SDJCR 1010 H11 U IC	146356	10	10	100	22	13.5	2	M5	M5
		SDJCR 1212 H11 U IC	146358	12	12	100	22	15.5	—	M5	M5
		SDJCR 1616 K11 U IC	146360	16	16	125	22	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCR 2020 K11 U IC	146361	20	20	125	22	23.5	—	M5	G $\frac{1}{8}$ "

SDJC... U IC INCH

	Compatible cutting edges □40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
L	DC 07 	SDJCL 3/8" H07 U IC	146379	9.525	9.525	100	17	13	—	M5	M5
		SDJCL 1/2" H07 U IC	146381	12.7	12.7	100	17	16.2	—	M5	M5
		SDJCL 5/8" K07 U IC	146383	15.875	15.875	125	17	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCL 3/8" H11 U IC	146380	9.525	9.525	100	22	13	2.5	M5	M5
	DC 11 	SDJCL 1/2" H11 U IC	146382	12.7	12.7	100	22	16.2	—	M5	M5
		SDJCL 5/8" K11 U IC	146384	15.875	15.875	125	22	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCL 3/4" K11 U IC	146385	19.05	19.05	125	22	22.6	—	M5	G $\frac{1}{8}$ "
		SDJCR 3/8" H07 U IC	146370	9.525	9.525	100	17	13	—	M5	M5
R	DC 07 	SDJCR 1/2" H07 U IC	146372	12.7	12.7	100	17	16.2	—	M5	M5
		SDJCR 5/8" K07 U IC	146374	15.875	15.875	125	17	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCR 3/8" H11 U IC	146371	9.525	9.525	100	22	13	2.5	M5	M5
		SDJCR 1/2" H11 U IC	146373	12.7	12.7	100	22	16.2	—	M5	M5
	DC 11 	SDJCR 5/8" K11 U IC	146377	15.875	15.875	125	22	19.5	—	M5	G $\frac{1}{8}$ "
		SDJCR 3/4" K11 U IC	146378	19.05	19.05	125	22	22.6	—	M5	G $\frac{1}{8}$ "
		SDJCR 3/8" H07 U IC	146370	9.525	9.525	100	17	13	—	M5	M5
		SDJCR 1/2" H07 U IC	146372	12.7	12.7	100	17	16.2	—	M5	M5

Scope of delivery: Holder without coolant connector

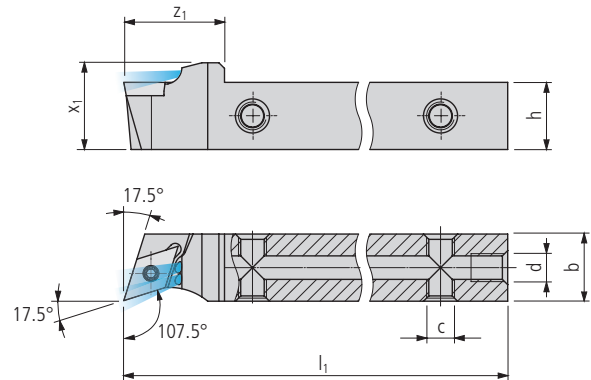


SDHC... U

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	DC 07 	SDHCL 0808 H07 U	144717	8	8	100	3				
		SDHCL 1010 H07 U	154044	10	10	100	1				
		SDHCL 1212 H07 U	114527	12	12	100	—				
	DC 11 	SDHCL 1616 K11 U	114528	16	16	125	—				
R	DC 07 	SDHCR 0808 H07 U	153821	8	8	100	3				
		SDHCR 1010 H07 U	154043	10	10	100	1				
		SDHCR 1212 H07 U	114529	12	12	100	—				
	DC 11 	SDHCR 1616 K11 U	114530	16	16	125	—				

SDHC... U INCH

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	DC 07 	SDHCL 3/8" H07 U	144724	9.525	9.525	100	1.5				
		SDHCL 1/2" H07 U	144719	12.7	12.7	100	—				
	DC 11 	SDHCL 5/8" K11 U	144726	15.875	15.875	125	—				
R	DC 07 	SDHCR 3/8" H07 U	144734	9.525	9.525	100	1.5				
		SDHCR 1/2" H07 U	144729	12.7	12.7	100	—				
	DC 11 	SDHCR 5/8" K11 U	144736	15.875	15.875	125	—				



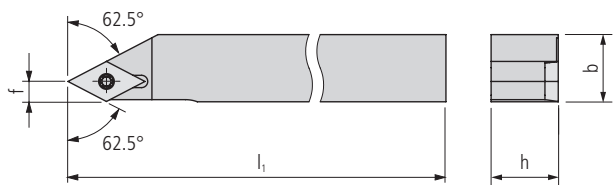
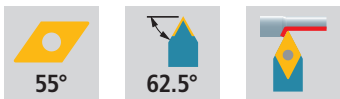
SDHC... U IC

	Compatible cutting edges □40...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	DC 07 	SDHCL 1212 H07 U IC	144722	12	12	100	18	15.5	M5	M5
	DC 11 	SDHCL 1616 K11 U IC	144723	16	16	125	21	19.5	M5	G ¹ / ₈ "
R	DC 07 	SDHCR 1212 H07 U IC	144732	12	12	100	18	15.5	M5	M5
	DC 11 	SDHCR 1616 K11 U IC	144733	16	16	125	21	19.5	M5	G ¹ / ₈ "

SDHC... U IC INCH

	Compatible cutting edges □40...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	DC 07 	SDHCL 1/2" H07 U IC	144720	12.7	12.7	100	18	16.2	M5	M5
	DC 11 	SDHCL 5/8" K11 U IC	144727	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "
R	DC 07 	SDHCR 1/2" H07 U IC	144730	12.7	12.7	100	18	16.2	M5	M5
	DC 11 	SDHCR 5/8" K11 U IC	144737	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "

Scope of delivery: Holder without coolant connector

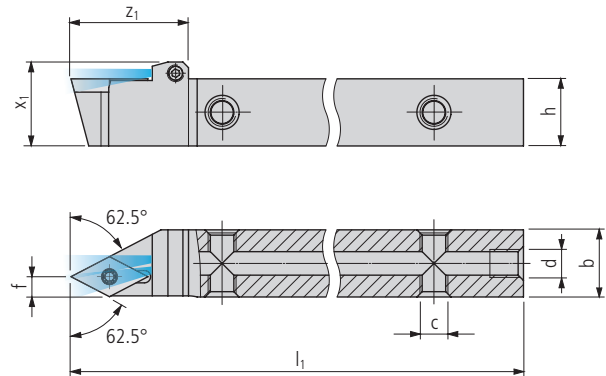


SDNC... U

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	DC 07	SDNCL 1010 H07 U	045183	10	10	100	3.65				
		SDNCL 1212 H07 U	045184	12	12	100	3.65				
	DC 11	SDNCL 1616 K11 U	045203	16	16	125	5.45				
R	DC 07	SDNCR 1010 H07 U	045186	10	10	100	3.65				
		SDNCR 1212 H07 U	045187	12	12	100	3.65				
	DC 11	SDNCR 1616 K11 U	045204	16	16	125	5.45				

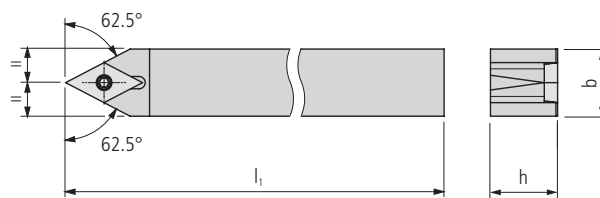


SDNC... U IC



	Compatible cutting edges □40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
L	DC 07 	SDNCL 1010 H07 U IC	144753	10	10	100	21	13	3.65	M5	M5
		SDNCL 1212 H07 U IC	144754	12	12	100	21	15	3.65	M5	M5
	DC 11 	SDNCL 1616 K11 U IC	144756	16	16	125	25	19.5	5.45	M5	G $\frac{1}{8}$ "
R	DC 07 	SDNCR 1010 H07 U IC	144777	10	10	100	21	13	3.65	M5	M5
		SDNCR 1212 H07 U IC	144778	12	12	100	21	15	3.65	M5	M5
	DC 11 	SDNCR 1616 K11 U IC	144780	16	16	125	25	19.5	5.45	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector

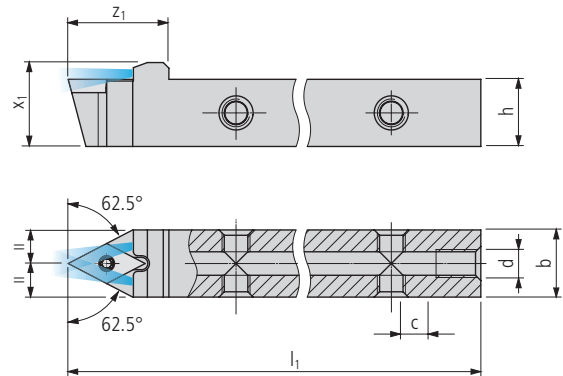


SDNCN ... U

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
	DC 07 	SDNCN 0808 H07 U	045136	8	8	100					
		SDNCN 1010 H07 U	045138	10	10	100					
		SDNCN 1212 H07 U	045140	12	12	100					
	DC 11 	SDNCN 1616 K11 U	045143	16	16	125					

SDNCN ... U INCH

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
	DC 07 	SDNCN 3/8" H07 U	144769	9.525	9.525	100					
		SDNCN 1/2" H07 U	144762	12.7	12.7	100					
	DC 11 	SDNCN 1/2" H11 U	144764	12.7	12.7	100					
		SDNCN 5/8" K11 U	144771	15.875	15.875	125					



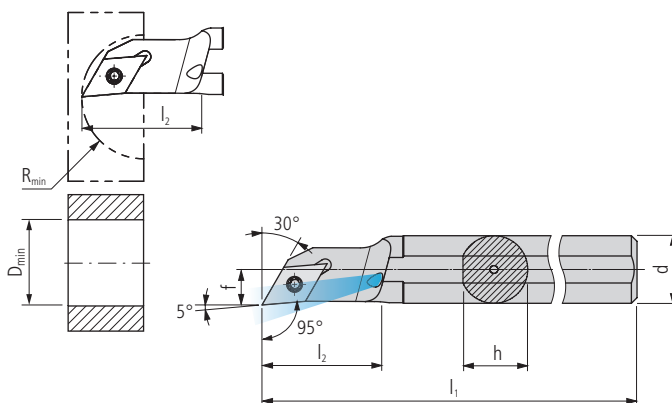
SDNCN ... U IC

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
	DC 07 	SDNCN 0808 H07 U IC	144761	8	8	100	18	11	M5	M5
		SDNCN 1010 H07 U IC	144766	10	10	100	18	13	M5	M5
		SDNCN 1212 H07 U IC	144767	12	12	100	18	15	M5	M5
	DC 11 	SDNCN 1212 H11 U IC	150436	12	12	100	24	15	M5	M5
		SDNCN 1616 K11 U IC	144768	16	16	125	24	19	M5	G $\frac{1}{8}$ "

SDNCN ... U IC INCH

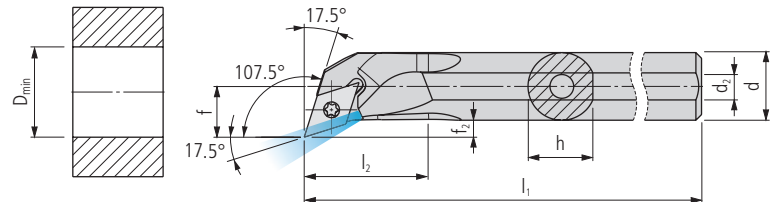
	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
	DC 07 	SDNCN 3/8" H07 U IC	144770	9.525	9.525	100	18	13	M5	M5
		SDNCN 1/2" H07 U IC	144763	12.7	12.7	100	18	15.7	M5	M5
	DC 11 	SDNCN 1/2" H11 U IC	144765	12.7	12.7	100	24	15.7	M5	M5
		SDNCN 5/8" K11 U IC	144772	15.875	15.875	125	24	18.9	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector



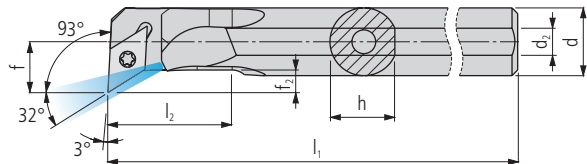
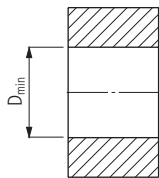
A... SDOC...

	Compatible cutting edges  40...	Order designation		Dimensions							
				d	h	l ₁	l ₂	f	R _{min}	D _{min}	
			Art. no.								
	DC 07 	A12K SDOCL 07	114039	12	11.5	125	21	7	11	14	
	DC 07 	A12K SDOCR 07	044339	12	11.5	125	21	7	11	14	



A... SDQC...

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				d	h	l_1	l_2	f	f_2	D_{min}	d_2
L	DC 07 	A12K SDQCL 07	045240	12	11.5	125	22	9	3	16	M5
		A16M SDQCL 07	045242	16	15	150	25	11	3	20	M5
		A20Q SDQCL 07	045244	20	18.5	180	32	13	3	25	G $\frac{1}{8}$ "
R	DC 07 	A12K SDQCR 07	045241	12	11.5	125	22	9	3	16	M5
		A16M SDQCR 07	045243	16	15	150	25	11	3	20	M5
		A20Q SDQCR 07	045245	20	18.5	180	32	13	3	25	G $\frac{1}{8}$ "



A... SDUC...

	Compatible cutting edges □ 40...	Order designation	Art. no.	Dimensions							
				d	h	l ₁	l ₂	f	f ₂	D _{min}	d ₂
L		A10H SDUCL 07	045293	10	9.5	100	—	7	1	14	M5
		A12K SDUCL 07	045248	12	11.5	125	22	9	3	16	M5
		A16M SDUCL 07	045250	16	15.5	150	29	11	3	20	G ¹ / ₈ "
		A20Q SDUCL 07	045252	20	19.5	180	32	13	3	25	G ¹ / ₈ "
		A20Q SDUCL 11	045254	20	19.5	180	32	13	3	25	G ¹ / ₈ "
R		A10H SDUCR 07	045292	10	9.5	100	—	7	1	14	M5
		A12K SDUCR 07	045249	12	11.5	125	22	9	3	16	M5
		A16M SDUCR 07	045251	16	15.5	150	29	11	3	20	G ¹ / ₈ "
		A20Q SDUCR 07	045253	20	19.5	180	32	13	3	25	G ¹ / ₈ "
		A20Q SDUCR 11	045255	20	19.5	180	32	13	3	25	G ¹ / ₈ "

For holders (SD...) OD turning

Illustration	Description	Dimensions	Order designation		Holders
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	Art. no. 127518	SD... 07
		M3.5 × 11 T15	MSP 35110 T15	127527	SD... 11
	Screw plug	M5	MSP VSR M5 IB2.5	150262	SD... IC
		G1/8"	MSP VSR G1/8 IB5	153989	

For holders (... SD...) ID turning

Illustration	Description	Dimensions	Order designation		Holders
	TORX screw	M2.5 × 5.0 T08	MSP 25050 T08	Art. no. 127529	A10H SD... 07
		M2.5 × 6 T08	MSP 25060 T08	127518	A12K SD... 07 A16M SD... 07 A20Q SD... 07
		M3.5 × 8.6 T15	MSP 35086 T15	127519	A20Q SD... 11

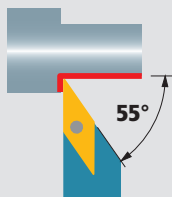
TORX screwdriver

Illustration	Description	Dimensions	Order designation		Screws
	TORX screwdriver	T08	MSP TX08	Art. no. 127520	M... T08
		T15	MSP TX15	127482	M... T15

Application OD turning

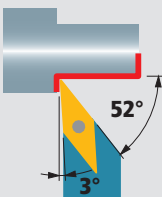
Front turning

SVAC... U (90°) □ 85



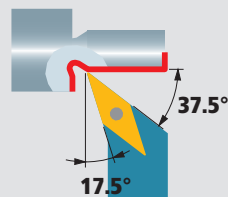
Turning and facing

SVJC... U (93°) □ 86



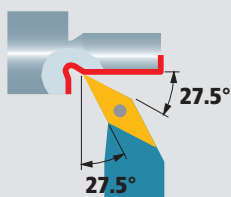
Turning and undercutting

SVHC... U (107.5°) □ 88



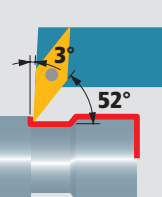
Turning and undercutting

SVPC... U (117.5°) □ 90



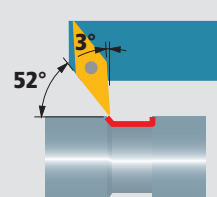
Turning and facing

SVUC... (93°) □ 92



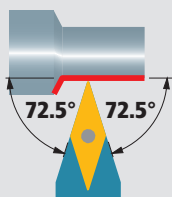
Back turning

SVQC... (93°) □ 93



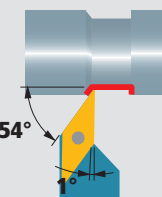
Turning

SVVCN... U (72.5°) □ 94



Back turning

SVXC... U (91°) □ 96

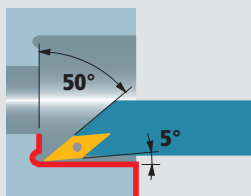


70

Application ID turning

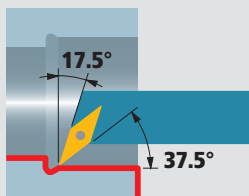
Turning and facing

A... SVOC... (95°) □ 98



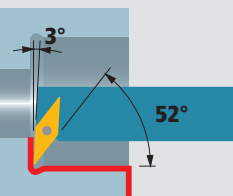
Turning and undercutting

A... SVQC... (107.5°) □ 99

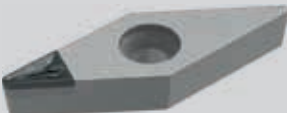


Turning and facing

A... SVUC... (93°) □ 100



Indexable inserts

Carbide		
	VC GT	 72–77
	VC MT	 78
CERMET		
	VC GT	 79
Diamond		
	VC GW	 80
	VC GT	 81–83

Holders

Square holder		
	SV AC ...	 85
	SV JC ...	 86
	SV HC ...	 88
	SV PC ...	 90
	SV UC ...	 92
	SV QC ...	 93
	SV VCN ...	 94
	SV XC ...	 96
Round shank holders, boring bars		
	A... SV OC	 98
	A... SV QC	 99
	A... SV UC	 100

Replacement and spare parts

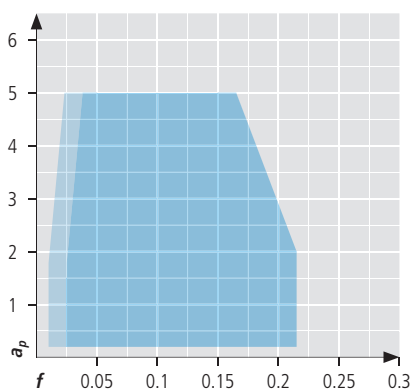
	 101
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Coated				Uncoated	
●	○	●	○	○	-
●	●	●	●	○	-
○	○	○	○	○	-
○	○	○	-	●	○
○	○	○	●	-	-
-	○	-	○	-	-
UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20

Cutting edge	Size	R	Order designation	Art. no.					
				UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20
	VC 11 	0.03	VCGT 1103003 FN -PF23 ...			211991	211992		211993
		0.05	VCGT 1103005 FN -PF23 ...	280201	280202	044914	044915	280139	039395
		0.08	VCGT 1103008 FN -PF23 ...	554579	554580	554584	554585	554577	554583
		0.1	VCGT 110301 FN -PF23 ...	280203	280204	044916	044917	280140	039396
		0.15	VCGT 1103015 FN -PF23 ...	554590	554591	554595	554598	554587	554593
	VC 16 	0.2	VCGT 110302 FN -PF23 ...	280205	280206	044918	044919	280141	039397
		0.4	VCGT 110304 FN -PF23 ...	280241	280242	280243	280244	280159	280160
		0.05	VCGT 1604005 FN -PF23 ...	554600	554601	554603	554605	554599	554602
		0.1	VCGT 160401 FN -PF23 ...	280207	280208	044920	044921	280142	039398
		0.2	VCGT 160402 FN -PF23 ...	280209	280210	044922	044923	280143	039399
	VC 11 	0.05	VCGT 1103005 EN -PF23 ...			044924	044925		039438
		0.08	VCGT 1103008 EN -PF23 ...			554608	554609		554606
		0.1	VCGT 110301 EN -PF23 ...			044926	044927		039455
		0.15	VCGT 1103015 EN -PF23 ...			554613	554614		554611
		0.2	VCGT 110302 EN -PF23 ...			044928	044929		039456
	VC 16 	0.4	VCGT 110304 EN -PF23 ...			557116	557117		557115
		0.1	VCGT 160401 EN -PF23 ...			044930	044931		039457
		0.2	VCGT 160402 EN -PF23 ...			044932	044933		039458
		0.4	VCGT 160404 EN -PF23 ...			554617	554618		554616

Application range

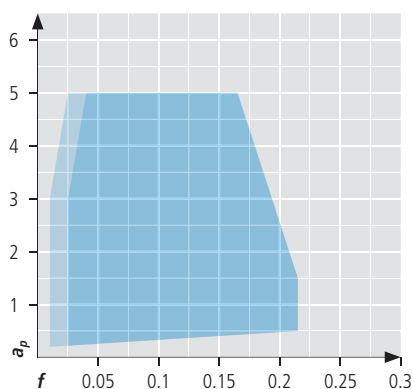
 $a_p \text{ (mm)} / f \text{ (mm/U)}$

 $v_c \text{ (m/min)}$

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	70–150	60–140
N	150–300	140–280
S	40–90	30–80
H	20–50	—

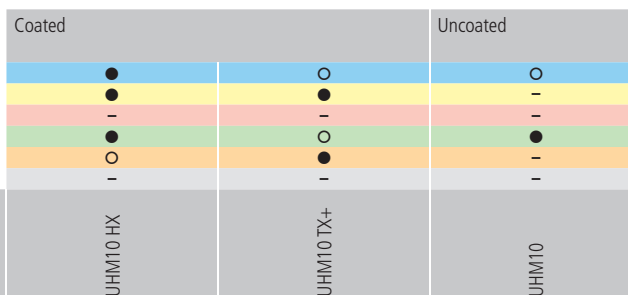


				Coated Uncoated				Art. no.		
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
		0.05	VCGT 0702005 FN -PF33 ...	559738	559740			559737		SV...07...
		0.1	VCGT 070201 FN -PF33 ...	559760	559762	559764	559765	559742	559763	
		0.2	VCGT 070202 FN -PF33 ...	559767	559768	559770	559773	559766	559769	
		0.4	VCGT 070204 FN -PF33 ...	559775	559776	559783	559784	559774	559782	
		0.05	VCGT 1103005 FN -PF33 ...	280211	280212	044934	044935	280144	039459	SV...11...
		0.08	VCGT 1103008 FN -PF33 ...	554620	554621	554624	554626	554619	554623	
		0.1	VCGT 110301 FN -PF33 ...	280213	280214	044936	044937	280145	039460	
		0.15	VCGT 1103015 FN -PF33 ...	554630	554631	554635	554636	554628	554633	
		0.2	VCGT 110302 FN -PF33 ...	280215	280216	044938	044939	280146	039461	SV...16...
		0.4	VCGT 110304 FN -PF33 ...	280217	280218	044940	044941	280147	039462	
		0.1	VCGT 160401 FN -PF33 ...	280219	280220	044942	044943	280148	039463	
		0.2	VCGT 160402 FN -PF33 ...	280221	280222	044944	044945	280149	039464	
		0.4	VCGT 160404 FN -PF33 ...	280223	280224	044946	044947	280150	039465	SV...16...
		0.8	VCGT 160408 FN -PF33 ...	554641	554642	554644	554645	554639	554643	
		0.05	VCGT 1103005 EN -PF33 ...			044948	044949		039466	SV...11...
		0.08	VCGT 1103008 EN -PF33 ...			554647	554648		554646	
		0.1	VCGT 110301 EN -PF33 ...			044950	044951		039467	
		0.15	VCGT 1103015 EN -PF33 ...			554651	554652		554650	
		0.2	VCGT 110302 EN -PF33 ...			044952	044953		039468	
		0.4	VCGT 110304 EN -PF33 ...			044954	044955		039469	
		0.1	VCGT 160401 EN -PF33 ...			044956	044957		039470	
		0.2	VCGT 160402 EN -PF33 ...			044958	044959		039471	
	0.4	VCGT 160404 EN -PF33 ...			044960	044961		039472	SV...16...	
	0.8	VCGT 160408 EN -PF33 ...			554656	554657		554655		

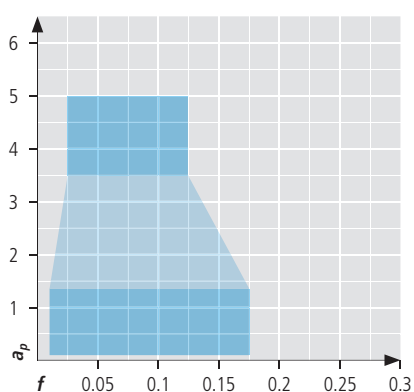
Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
					Art. no.		
		0.05	VCGT 1103005 FN -PF05 ...	215024	211346	211345	SV...11... 
		0.1	VCGT 110301 FN -PF05 ...	215025	211348	211347	
		0.15	VCGT 1103015 FN -PF05 ...	215026	211350	211349	
		0.2	VCGT 110302 FN -PF05 ...	215027	211352	211351	
		0.4	VCGT 110304 FN -PF05 ...	215028	211354	211353	

 $a_p \text{ (mm)} / f \text{ (mm/U)}$ 

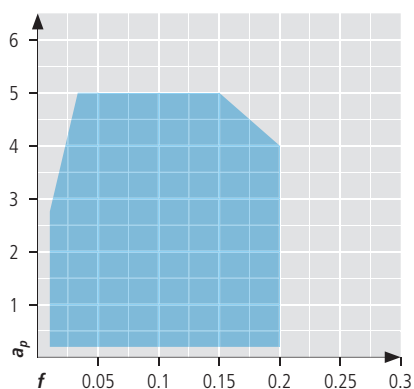
	Coated	Uncoated
P	80–160	60–120
M	70–140	—
K	—	—
N	150–300	120–230
S	50–90	—
H	—	—



Coated		Uncoated

Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
				Art. no.			
	VC 11 	0.05	VCGT 1103005 FN -PA7 ...	114387	114978	114386	SV...11... SV...16... 85...
		0.1	VCGT 110301 FN -PA7 ...	114390	114979	114389	
		0.2	VCGT 110302 FN -PA7 ...	123648	147826	123538	
		0.4	VCGT 110304 FN -PA7 ...	012984	123796	123540	
		0.8	VCGT 110308 FN -PA7 ...	123649	044910	123541	
	VC 16 	0.05	VCGT 1604005 FN -PA7 ...	114392	216074	114391	
		0.1	VCGT 160401 FN -PA7 ...	114394	216075	114393	
		0.2	VCGT 160402 FN -PA7 ...	114396	154406	114395	
		0.4	VCGT 160404 FN -PA7 ...	123316	123797	123544	
		0.8	VCGT 160408 FN -PA7 ...	123458	044911	123547	

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

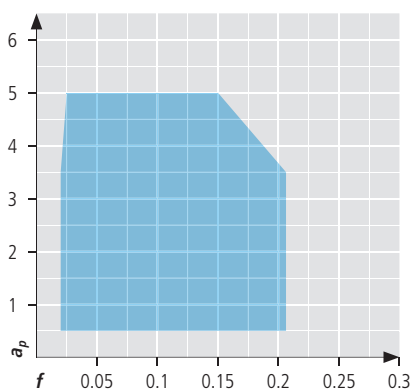
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–85
H	—	—



				Coated		Uncoated	
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM10	
	VC 11	0.2	VC GT 110302 FN -PA6 ...	555421	555422	555420	SV...11... 85...
		0.4	VC GT 110304 FN -PA6 ...	555424	555425	555423	
	VC 16	0.4	VC GT 160404 FN -PA6 ...	555427	555428	555426	
		0.8	VC GT 160408 FN -PA6 ...	555430	555431	555429	
		1.2	VC GT 160412 FN -PA6 ...	555433	555434	555432	

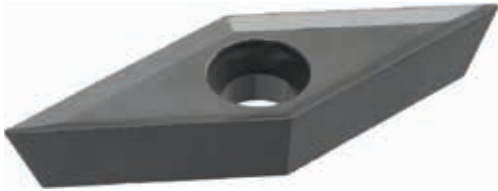
Application range

a_p (mm) / f (mm/U)



v_c (m/min)

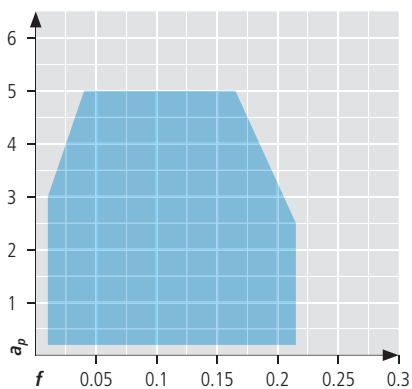
	Coated	Uncoated
P	80–160	70–150
M	70–140	40–70
K	—	—
N	150–300	140–280
S	40–90	30–80
H	—	—



Coated				Uncoated	
○	○	○	○	○	○
●	●	●	●	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

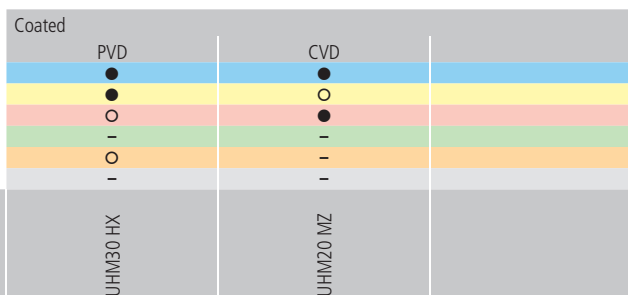
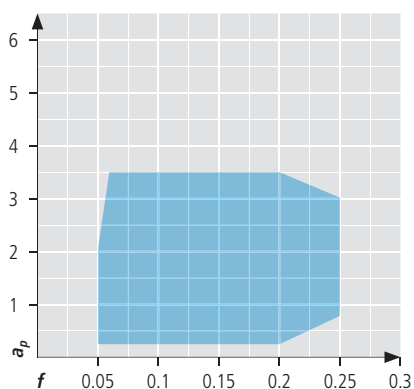
Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
Art. no.										
		0.06	VC GT 0702006 FN -A3 ...	153760	185272			153759		SV...07...
		0.1	VC GT 070201 FN -A3 ...	152810	152811			152809		
		0.15	VC GT 0702015 FN -A3 ...	152813	152814			152812		
		0.2	VC GT 070202 FN -A3 ...	302323	302282			302281		
		0.4	VC GT 070204 FN -A3 ...	302460	302461			302459		SV...11... 85...
		0.08	VC GT 1103008 FN -A3 ...	123088	126102	116991	192034	123055	116990	
		0.15	VC GT 1103015 FN -A3 ...	121880	126103	116993	117191	121876	116992	
		0.35	VC GT 1103035 FN -A3 ...	121881	126104	116995	044900	121877	116994	
		0.08	VC GT 1103008 EN -A3 ...			044901	044902		039392	SV...11... 85...
		0.15	VC GT 1103015 EN -A3 ...			044903	044904		039393	
		0.35	VC GT 1103035 EN -A3 ...			044905	044906		039394	

Application range



v_c (m/min)

	Coated	Uncoated
P	80–160	60–120
M	70–140	—
K	—	—
N	150–300	140–280
S	40–80	—
H	20–50	—

 $a_p \text{ (mm)} / f \text{ (mm/U)}$ 

	Coated	
	PVD	CVD
P	60–180	80–220
M	50–120	70–180
K	60–150	80–200
N	—	—
S	30–80	—
H	—	—

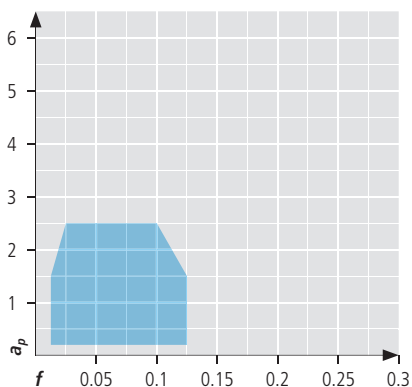


Coated	Uncoated	
●	●	
○	○	
-	-	
-	-	
-	-	
UCM10 HX	UCM10	

Cutting edge	Size	R	Order designation				
				UCM10 HX	UCM10		
						Art. no.	
	VC 11	0.05	VCGT 1103005 FN -PF23 ...	560519	560518		
		0.1	VCGT 110301 FN -PF23 ...	560521	560520		
		0.2	VCGT 110302 FN -PF23 ...	560523	560522		
		0.4	VCGT 110304 FN -PF23 ...	560525	560524		
						SV...11...	85...

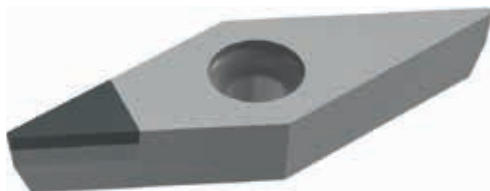
Application range

a_p (mm) / f (mm/U)



v_c (m/min)

	Coated	Uncoated
P	70–250	70–230
M	70–230	60–210
K	—	—
N	—	—
S	—	—
H	—	—

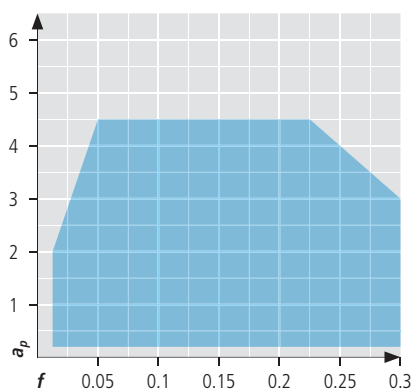


PCD		
-	-	-
-	-	-
-	-	-
•	•	•
-	-	-

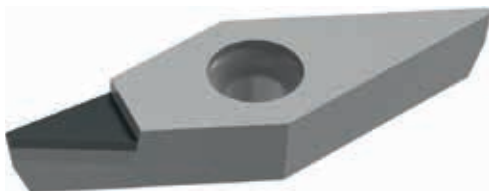
Cutting edge	Size	R	Order designation	UCVD08	UPCD15	UPCD20	
				Art. no.			
	VC 11 	0.1	VCGW 110301 FN ...			116235	SV...11... 85...
		0.2	VCGW 110302 FN ...	116910	129036	116236	
		0.4	VCGW 110304 FN ...	116911	129041	116237	
	VC 16 	0.4	VCGW 160404 FN ...	116914	137734	116244	SV...16... 85...
		0.8	VCGW 160408 FN ...	116915	137735	116245	

More inserts available by request.

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



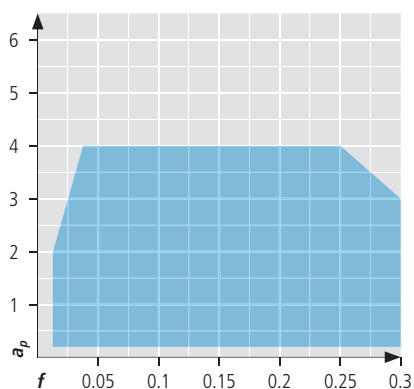
PCD		
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Cutting edge	Size	R	Order designation	UCVD08	UCPD15	UCPD20	
				Art. no.			
	VC 11 	0.1	VC GT 110301 FN ...		116198	116199	SV...11... 85...
		0.2	VC GT 110302 FN ...		137727	116201	
	VC 16 	0.2	VC GT 160402 FN ...		137729	116218	SV...16... 85...
		0.4	VC GT 160404 FN ...	116902	129039	116221	

More inserts available by request.

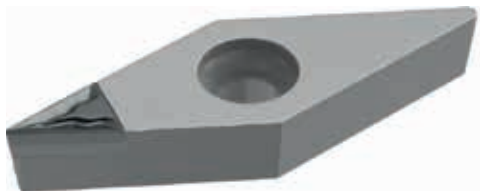
Application range

a_p (mm) / f (mm/U)



v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400

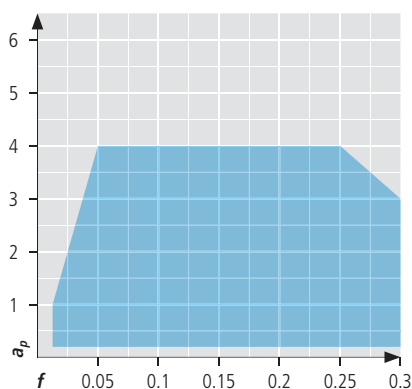


PCD		
-	-	-
-	-	-
-	-	-
●	●	●
-	-	-

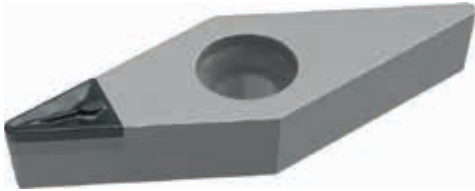
Cutting edge	Size	R	Order designation	UCVD08	UCVD15	UPCD20	
				Art. no.			
	VC 11 	0.1	VCGT 110301 FN -UWS ...	116672	116405		SV...11...
		0.2	VCGT 110302 FN -UWS ...	116676	116411	116412	
		0.4	VCGT 110304 FN -UWS ...	116677	116417	116418	
	VC 16 	0.2	VCGT 160402 FN -UWS ...	116692	116429		SV...16... 85...
		0.4	VCGT 160404 FN -UWS ...	116696	116433	116434	
		0.8	VCGT 160408 FN -UWS ...	116700	116437	116438	

More inserts available by request.

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



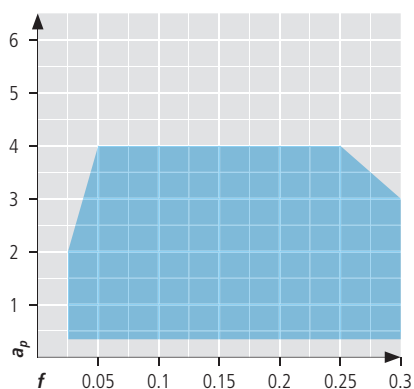
PCD		
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Cutting edge	Size	R	Order designation	UCVD08	UPCD20		
				Art. no.			
	VC 11 	0.2	VC GT 110302 FN -UWN ...	116675	116410		SV...11 ...
		0.4	VC GT 110304 FN -UWN ...	116679	116416		
	VC 16 	0.4	VC GT 160404 FN -UWN ...	116695			SV...16 ... 85...

More inserts available by request.

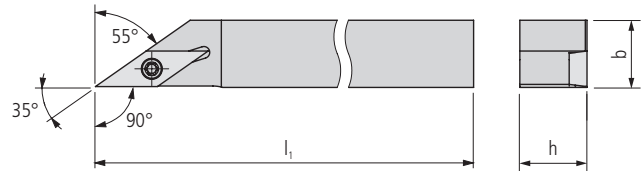
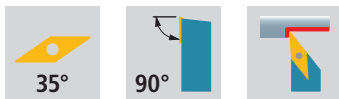
Application range

a_p (mm) / f (mm/U)



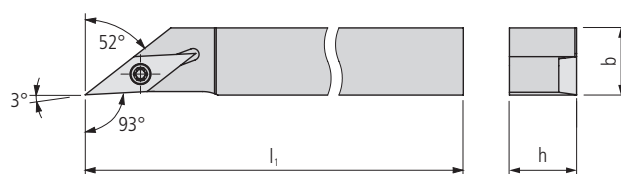
v_c (m/min)

Material	
Aluminum < 13% Si	200–2000
Aluminum > 13% Si	120–1200
Magnesium alloys	200–2000
Brass, copper, bronze, zinc	150–1500
Platinum, silver, gold	120–600
Fiberglass compound materials	100–1000
Carbon fiber compound materials	100–800
Plastics, PEEK	100–1000
Pre-sintered ceramics and tungsten carbide	80–400



SVAC... U

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
	VC 11 	SVACL 0808 H11 U	044039	8	8	100					
		SVACL 1010 H11 U	044041	10	10	100					
		SVACL 1212 H11 U	044043	12	12	100					
	VC 11 	SVACR 0808 H11 U	044040	8	8	100					
		SVACR 1010 H11 U	044042	10	10	100					
		SVACR 1212 H11 U	044044	12	12	100					

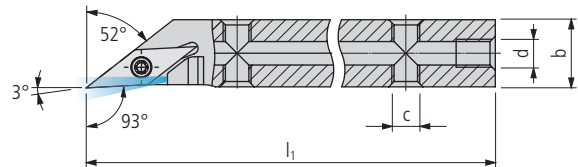
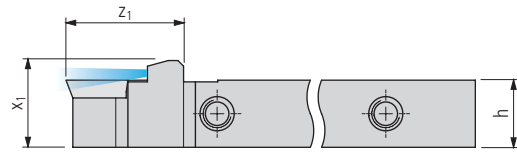


SVJC... U

Compatible cutting edges		Order designation		Dimensions							
72...				h	b	l ₁					
Art. no.											
L	VC 11		SVJCL 0808 H11 U	044031	8	8	100				
			SVJCL 1010 H11 U	044033	10	10	100				
			SVJCL 1212 H11 U	044035	12	12	100				
			SVJCL 1616 K11 U	044087	16	16	125				
			SVJCL 2020 K11 U	044089	20	20	125				
	VC 16		SVJCL 1616 K16 U	044234	16	16	125				
			SVJCL 2020 K16 U	044093	20	20	125				
R	VC 11		SVJCR 0808 H11 U	044032	8	8	100				
			SVJCR 1010 H11 U	044034	10	10	100				
			SVJCR 1212 H11 U	044036	12	12	100				
			SVJCR 1616 K11 U	044088	16	16	125				
			SVJCR 2020 K11 U	044090	20	20	125				
	VC 16		SVJCR 1616 K16 U	044233	16	16	125				
			SVJCR 2020 K16 U	044094	20	20	125				

SVJC... U INCH

Compatible cutting edges		Order designation		Dimensions							
72...				h	b	l ₁					
Art. no.											
L	VC 11		SVJCL 3/8" F11 U	148820	9.525	9.525	80				
			SVJCL 3/8" H11 U	114040	9.525	9.525	100				
			SVJCL 1/2" H11 U	114041	12.7	12.7	100				
			SVJCL 3/4" K11 U	113730	19.05	19.05	125				
			SVJCL 3/4" K16 U	114042	19.05	19.05	125				
	VC 16										
R	VC 11		SVJCR 3/8" F11 U	148819	9.525	9.525	80				
			SVJCR 3/8" H11 U	138418	9.525	9.525	100				
			SVJCR 1/2" H11 U	138420	12.7	12.7	100				
			SVJCR 3/4" K11 U	113731	19.05	19.05	125				
			SVJCR 3/4" K16 U	138421	19.05	19.05	125				
	VC 16										



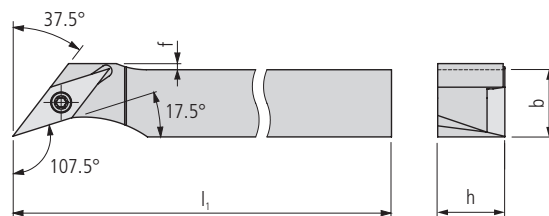
SVJC... U IC

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	VC 11	SVJCL 0810 H11 U IC	146418	8	10	100	21	11.5	M5	M5
		SVJCL 1010 H11 U IC	146419	10	10	100	21	13.5	M5	M5
		SVJCL 1212 H11 U IC	146420	12	12	100	21	15.5	M5	M5
		SVJCL 1616 K11 U IC	146421	16	16	125	21	19.5	M5	G $\frac{1}{8}$ "
		SVJCL 2020 K11 U IC	146423	20	20	125	21	23.5	M5	G $\frac{1}{8}$ "
	VC 16	SVJCL 1616 K16 U IC	146422	16	16	125	27	19.5	M5	G $\frac{1}{8}$ "
		SVJCL 2020 K16 U IC	146424	20	20	125	27	23.5	M5	G $\frac{1}{8}$ "
R	VC 11	SVJCR 0810 H11 U IC	146411	8	10	100	21	11.5	M5	M5
		SVJCR 1010 H11 U IC	146412	10	10	100	21	13.5	M5	M5
		SVJCR 1212 H11 U IC	146413	12	12	100	21	15.5	M5	M5
		SVJCR 1616 K11 U IC	146414	16	16	125	21	19.5	M5	G $\frac{1}{8}$ "
		SVJCR 2020 K11 U IC	146416	20	20	125	21	23.5	M5	G $\frac{1}{8}$ "
	VC 16	SVJCR 1616 K16 U IC	146415	16	16	125	27	19.5	M5	G $\frac{1}{8}$ "
		SVJCR 2020 K16 U IC	146417	20	20	125	27	23.5	M5	G $\frac{1}{8}$ "

SVJC... U INCH

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	VC 11	SVJCL 3/8" H11 U IC	146431	9.525	9.525	100	21	13	M5	M5
		SVJCL 1/2" H11 U IC	146432	12.7	12.7	100	21	16.2	M5	M5
		SVJCL 5/8" K11 U IC	146433	15.875	15.875	125	21	19.5	M5	G $\frac{1}{8}$ "
		SVJCL 3/4" K11 U IC	146435	19.05	19.05	125	21	22.6	M5	G $\frac{1}{8}$ "
	VC 16	SVJCL 5/8" K16 U IC	146434	15.875	15.875	125	27	19.5	M5	G $\frac{1}{8}$ "
		SVJCL 3/4" K16 U IC	146436	19.05	19.05	125	27	22.6	M5	G $\frac{1}{8}$ "
R	VC 11	SVJCR 3/8" H11 U IC	146425	9.525	9.525	100	21	13	M5	M5
		SVJCR 1/2" H11 U IC	146426	12.7	12.7	100	21	16.2	M5	M5
		SVJCR 5/8" K11 U IC	146427	15.875	15.875	125	21	19.5	M5	G $\frac{1}{8}$ "
		SVJCR 3/4" K11 U IC	146429	19.05	19.05	125	21	22.6	M5	G $\frac{1}{8}$ "
	VC 16	SVJCR 5/8" K16 U IC	146428	15.875	15.875	125	27	19.5	M5	G $\frac{1}{8}$ "
		SVJCR 3/4" K16 U IC	146430	19.05	19.05	125	27	22.6	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector

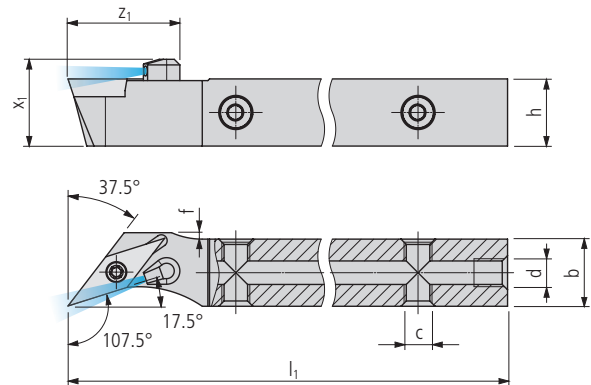


SVHC... U

	Compatible cutting edges D 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	VC 07 	SVHCL 0808 H07 U	144816	8	8	100	0.5				
		SVHCL 1010 H07 U	144822	10	10	100	—				
	VC 11 	SVHCL 1010 H11 U	154046	10	10	100	3.1				
		SVHCL 1212 H11 U	114531	12	12	100	1.1				
		SVHCL 1616 K11 U	114532	16	16	125	—				
R	VC 07 	SVHCR 0808 H07 U	144833	8	8	100	0.5				
		SVHCR 1010 H07 U	144839	10	10	100	—				
	VC 11 	SVHCR 1010 H11 U	154045	10	10	100	3.1				
		SVHCR 1212 H11 U	114533	12	12	100	1.1				
		SVHCR 1616 K11 U	114534	16	16	125	—				

SVHC... U INCH

	Compatible cutting edges D 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	VC 07 	SVHCL 3/8" H07 U	144828	9.525	9.525	100	—				
	VC 11 	SVHCL 3/8" H11 U	144830	9.525	9.525	100	3.6				
		SVHCL 1/2" H11 U	144820	12.7	12.7	100	0.4				
		SVHCL 5/8" K11 U	144831	15.875	15.875	125	—				
R	VC 07 	SVHCR 3/8" H07 U	144845	9.525	9.525	100	—				
	VC 11 	SVHCR 3/8" H11 U	144847	9.525	9.525	100	3.6				
		SVHCR 1/2" H11 U	144837	12.7	12.7	100	0.4				
		SVHCR 5/8" K11 U	144848	15.875	15.875	125	—				



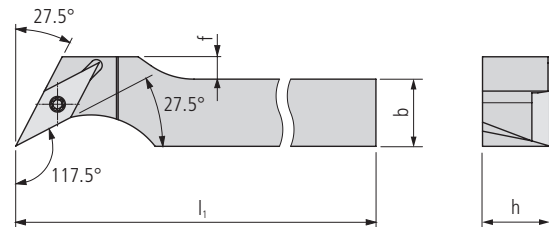
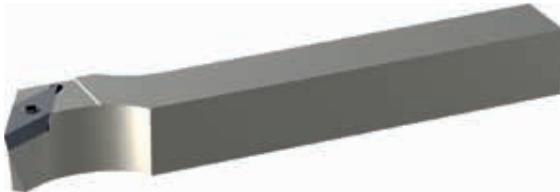
SVHC... U IC

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVHCL 1010 H11 U IC	212926	10	10	100	20	13.5	3.2	M5	M5
		SVHCL 1212 H11 U IC	144826	12	12	100	20	15.5	1.2	M5	M5
		SVHCL 1616 K11 U IC	144827	16	16	125	20	19.5	—	M5	G $\frac{1}{8}$ "
		SVHCR 1010 H11 U IC	144841	10	10	100	20	13.5	3.2	M5	M5
		SVHCR 1212 H11 U IC	212925	12	12	100	20	15.5	1.2	M5	M5
		SVHCR 1616 K11 U IC	144844	16	16	125	20	19.5	—	M5	G $\frac{1}{8}$ "

SVHC... U IC INCH

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVHCL 1/2" H11 U IC	144821	12.7	12.7	100	20	16.2	0.5	M5	M5
		SVHCL 5/8" K11 U IC	144832	15.875	15.875	125	20	19.4	—	M5	G $\frac{1}{8}$ "
		SVHCR 1/2" H11 U IC	144838	12.7	12.7	100	20	16.2	0.5	M5	M5
		SVHCR 5/8" K11 U IC	144849	15.875	15.875	125	20	19.4	—	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector



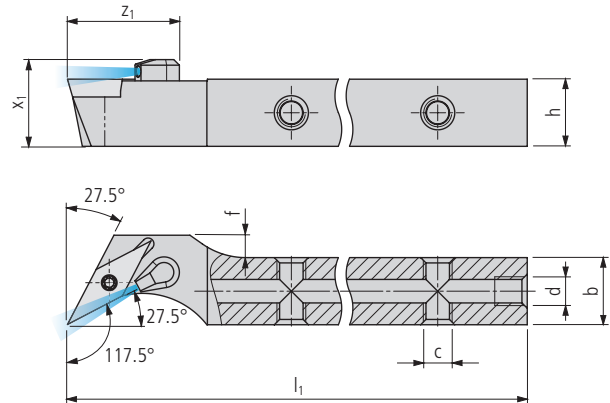
SVPC... U

	Compatible cutting edges D 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
		SVPCCL 0808 H07 U	144880	8	8	100	2				
		SVPCCL 1010 H07 U	144886	10	10	100	—				
		SVPCCL 1212 H07 U	144889	12	12	100	—				
		SVPCCL 1010 H11 U	154048	10	10	100	6				
		SVPCCL 1212 H11 U	114535	12	12	100	4				
		SVPCCL 1616 K11 U	114536	16	16	125	—				
		SVPCR 0808 H07 U	144899	8	8	100	2				
		SVPCR 1010 H07 U	144906	10	10	100	—				
		SVPCR 1212 H07 U	144908	12	12	100	—				
		SVPCR 1010 H11 U	154047	10	10	100	6				
		SVPCR 1212 H11 U	114537	12	12	100	4				
		SVPCR 1616 K11 U	114538	16	16	125	—				

90

SVPC... U INCH

	Compatible cutting edges D 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
		SVPCCL 3/8" H07 U	144893	9.525	9.525	100	0.5				
		SVPCCL 1/2" H07 U	144882	12.7	12.7	100	—				
		SVPCCL 3/8" H11 U	144895	9.525	9.525	100	6.5				
		SVPCCL 1/2" H11 U	144884	12.7	12.7	100	3.3				
		SVPCCL 5/8" K11 U	144897	15.875	15.875	125	—				
		SVPCR 3/8" H07 U	144912	9.525	9.525	100	0.5				
		SVPCR 1/2" H07 U	144901	12.7	12.7	100	—				
		SVPCR 3/8" H11 U	144914	9.525	9.525	100	6.5				
		SVPCR 1/2" H11 U	144903	12.7	12.7	100	3.3				
		SVPCR 5/8" K11 U	144916	15.875	15.875	125	—				



SVPC... U IC

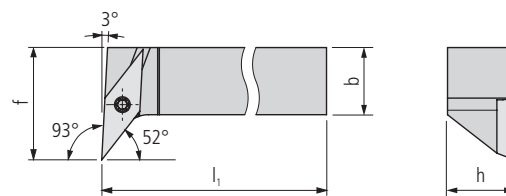
	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVPC L 0808 H07 U IC	144881	8	8	100	14	11.5	2	M5	M5
		SVPC L 1010 H07 U IC	144887	10	10	100	14	13.5	—	M5	M5
		SVPC L 1212 H07 U IC	144890	12	12	100	14	15.5	—	M5	M5
		SVPC L 1010 H11 U IC	144888	10	10	100	20	13.5	6	M5	M5
		SVPC L 1212 H11 U IC	144891	12	12	100	20	15.5	4	M5	M5
		SVPC L 1616 K11 U IC	144892	16	16	125	20	19.5	—	M5	G $\frac{1}{8}$ "
		SVPC R 0808 H07 U IC	144900	8	8	100	14	11.5	2	M5	M5
		SVPC R 1010 H07 U IC	144907	10	10	100	14	13.5	—	M5	M5
		SVPC R 1212 H07 U IC	144909	12	12	100	14	15.5	—	M5	M5
		SVPC R 1010 H11 U IC	144905	10	10	100	20	13.5	6	M5	M5
		SVPC R 1212 H11 U IC	144910	12	12	100	20	15.5	4	M5	M5
		SVPC R 1616 K11 U IC	144911	16	16	125	20	19.5	—	M5	G $\frac{1}{8}$ "

SVPC... U IC INCH

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVPC L 3/8" H07 U IC	144894	9.525	9.525	100	14	13	0.5	M5	M5
		SVPC L 1/2" H07 U IC	144883	12.7	12.7	100	14	16.2	—	M5	M5
		SVPC L 3/8" H11 U IC	144896	9.525	9.525	100	20	13	6.5	M5	M5
		SVPC L 1/2" H11 U IC	144885	12.7	12.7	100	20	16.2	3.3	M5	M5
		SVPC L 5/8" K11 U IC	144898	15.875	15.875	125	20	19.4	—	M5	G $\frac{1}{8}$ "
		SVPC L 1/2" H11 U IC	144885	12.7	12.7	100	20	16.2	3.3	M5	M5
		SVPC R 3/8" H07 U IC	144913	9.525	9.525	100	14	13	0.5	M5	M5
		SVPC R 1/2" H07 U IC	144902	12.7	12.7	100	14	16.2	—	M5	M5
		SVPC R 3/8" H11 U IC	144915	9.525	9.525	100	20	13	6.5	M5	M5
		SVPC R 1/2" H11 U IC	144904	12.7	12.7	100	20	16.2	3.3	M5	M5
		SVPC R 5/8" K11 U IC	144917	15.875	15.875	125	20	19.4	—	M5	G $\frac{1}{8}$ "
		SVPC R 1/2" H11 U IC	144904	12.7	12.7	100	20	16.2	3.3	M5	M5

Scope of delivery: Holder without coolant connector

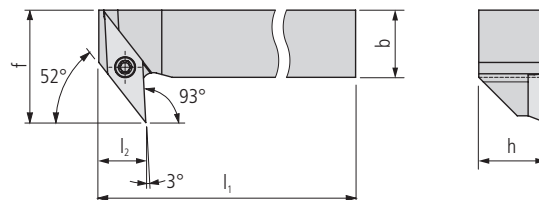
SVUC...

multidec[®]
ISO

SVUC...

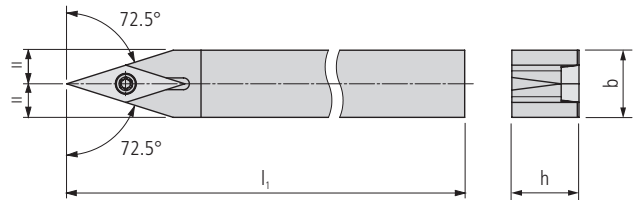
	Compatible cutting edges D 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f				
L	VC 11 	SVUCL 1212 H11	043542	12	12	100	20				
		SVUCL 1616 K11	043543	16	16	125	24				
		SVUCL 2020 K11	153231	20	20	125	28				
R	VC 11 	SVUCR 1212 H11	043544	12	12	100	20				
		SVUCR 1616 K11	043545	16	16	125	24				
		SVUCR 2020 K11	150911	20	20	125	28				

SVQC...

multidec[®]
 ISO


SVQC...

	Compatible cutting edges D72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f	l ₂			
L 	VC 11 	SVQCL 1212 H11	043538	12	12	100	20	8.5			
		SVQCL 1616 K11	043539	16	16	125	24	8.5			
R 	VC 11 	SVQCR 1212 H11	043540	12	12	100	20	8.5			
		SVQCR 1616 K11	043541	16	16	125	24	8.5			

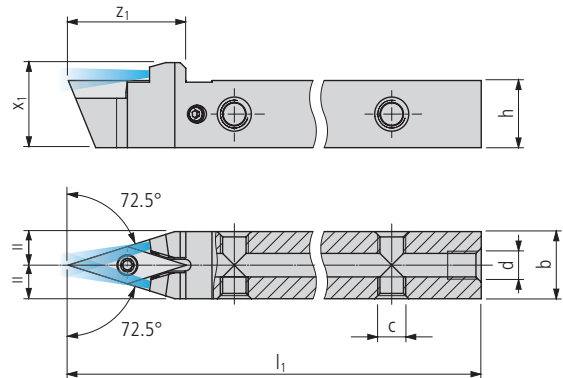


SVVCN ... U

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
	VC 07 	SVVCN 0808 H07 U	144930	8	8	100					
		SVVCN 0808 H11 U	044027	8	8	100					
	VC 11 	SVVCN 1010 H11 U	044028	10	10	100					
		SVVCN 1212 H11 U	044029	12	12	100					
		SVVCN 1616 K11 U	045171	16	16	125					
		SVVCN 2020 K11 U	045172	20	20	125					
	VC 16 	SVVCN 2020 K16 U	045173	20	20	125					

SVVCN ... U INCH

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
	VC 11 	SVVCN 3/8" H11 U	144951	9.525	9.525	100					
		SVVCN 1/2" H11 U	144935	12.7	12.7	100					
		SVVCN 5/8" K11 U	144953	15.875	15.875	125					
		SVVCN 3/4" K11 U	144945	19.05	19.05	125					
	VC 16 	SVVCN 3/4" K16 U	144947	19.05	19.05	125					



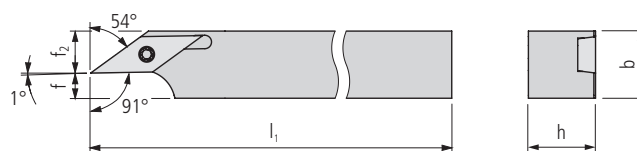
SVVCN ... U IC

	Compatible cutting edges 72...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
N	VC 07 	SVVCN 0808 H07 U IC	144931	8	8	100	20	11.5	M5	M5
	VC 11 	SVVCN 0810 H11 U IC	144932	8	10	100	21	13.2	M5	M5
		SVVCN 1010 H11 U IC	144939	10	10	100	21	13.2	M5	M5
		SVVCN 1212 H11 U IC	150927	12	12	100	21	15.2	M5	M5
		SVVCN 1616 K11 U IC	144942	16	16	125	21	19.2	M5	G $\frac{1}{8}$ "
		SVVCN 2020 K11 U IC	144943	20	20	125	21	23.2	M5	G $\frac{1}{8}$ "
		SVVCN 2020 K16 U IC	144944	20	20	125	27	24.2	M5	G $\frac{1}{8}$ "
	VC 16 									

SVVCN ... U IC INCH

	Compatible cutting edges 72...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
N	VC 11 	SVVCN 3/8" H11 U IC	144952	9.525	9.525	100	21	12.7	M5	M5
		SVVCN 1/2" H11 U IC	144936	12.7	12.7	100	21	15.9	M5	M5
		SVVCN 5/8" K11 U IC	144954	15.875	15.875	125	21	19.1	M5	G $\frac{1}{8}$ "
		SVVCN 3/4" K11 U IC	144946	19.05	19.05	125	21	22.3	M5	G $\frac{1}{8}$ "
	VC 16 	SVVCN 3/4" K16 U IC	144948	19.05	19.05	125	27	23.3	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector

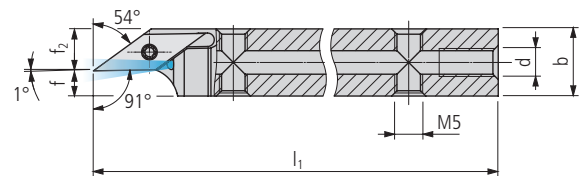
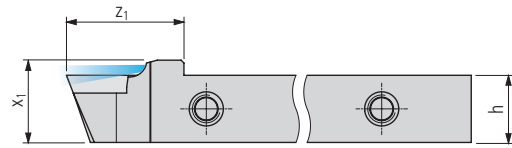


SVXC... U

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f	f ₂			
L	VC 07 	SVXCL 0808 H07 U	144955	8	8	100	2.5	5.5			
	VC 11 	SVXCL 1010 H11 U	044049	10	10	100	2.5	7.5			
		SVXCL 1212 H11 U	044051	12	12	100	4.5	7.5			
		SVXCL 1616 K11 U	043075	16	16	125	8.5	7.5			
R	VC 07 	SVXCR 0808 H07 U	144965	8	8	100	2.5	5.5			
	VC 11 	SVXCR 1010 H11 U	044050	10	10	100	2.5	7.5			
		SVXCR 1212 H11 U	044052	12	12	100	4.5	7.5			
		SVXCR 1616 K11 U	043076	16	16	125	8.5	7.5			
R	VC 16 	SVXCR 2020 K16 U	044056	20	20	125	8.5	11.5			
	VC 16 										

SVXC... U INCH

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	f	f ₂			
L	VC 11 	SVXCL 3/8" H11 U	153738	9.525	9.525	100	2	5.5			
		SVXCL 1/2" H11 U	153739	12.7	12.7	100	5.2	7.5			
		SVXCL 5/8" K11 U	153740	15.875	15.875	125	8.4	7.5			
	VC 16 	SVXCL 3/4" K16 U	153741	19.05	19.05	125	7.5	11.5			
R	VC 11 	SVXCR 3/8" H11 U	153733	9.525	9.525	100	2	5.5			
		SVXCR 1/2" H11 U	153734	12.7	12.7	100	5.2	7.5			
		SVXCR 5/8" K11 U	153735	15.875	15.875	125	8.4	7.5			
	VC 16 	SVXCR 3/4" K16 U	153736	19.05	19.05	125	7.5	11.5			



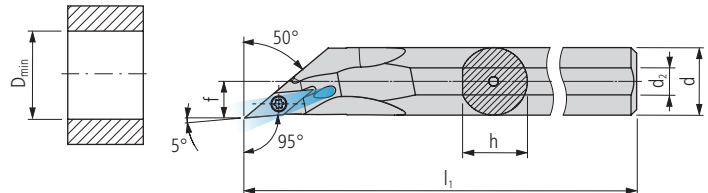
SVXC... U IC

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	f ₂	d
		SVXCL 0808 H07 U IC	144956	8	8	100	18	11.5	2.5	5.5	M5
		SVXCL 1010 H11 U IC	153746	10	10	100	21	12.7	2.5	7.5	M5
		SVXCL 1212 H11 U IC	169004	12	12	100	21	14.7	4.5	7.5	M5
		SVXCL 1616 K11 U IC	150765	16	16	125	21	18.7	8.5	7.5	G $\frac{1}{8}$ "
		SVXCL 2020 K16 U IC	153747	20	20	125	27	22	8.5	11.5	G $\frac{1}{8}$ "
		SVXCR 0808 H07 U IC	144966	8	8	100	18	11.5	2.5	5.5	M5
		SVXCR 1010 H11 U IC	169546	10	10	100	21	12.7	2.5	7.5	M5
		SVXCR 1212 H11 U IC	153742	12	12	100	21	14.7	4.5	7.5	M5
		SVXCR 1616 K11 U IC	153743	16	16	125	21	18.7	8.5	7.5	G $\frac{1}{8}$ "
		SVXCR 2020 K16 U IC	153744	20	20	125	27	22	8.5	11.5	G $\frac{1}{8}$ "

SVXC... U IC INCH

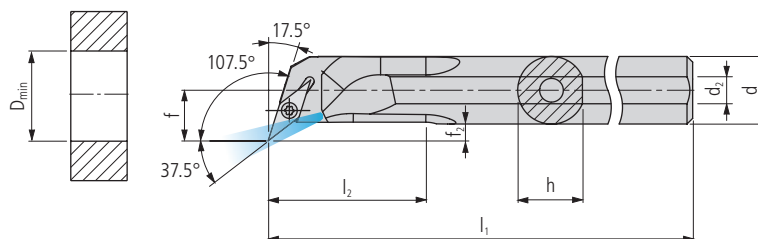
	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	f ₂	d
		SVXCL 3/8" H11 U IC	153754	9.525	9.525	100	21	12.2	2	5.5	M5
		SVXCL 1/2" H11 U IC	153755	12.7	12.7	100	21	15.4	5.2	7.5	M5
		SVXCL 5/8" K11 U IC	153756	15.875	15.875	125	21	18.6	8.4	7.5	G $\frac{1}{8}$ "
		SVXCL 3/4" K16 U IC	153757	19.05	19.05	125	27	22	7.5	11.5	G $\frac{1}{8}$ "
		SVXCR 3/8" H11 U IC	153749	9.525	9.525	100	21	12.2	2	5.5	M5
		SVXCR 1/2" H11 U IC	153750	12.7	12.7	100	21	15.4	5.2	7.5	M5
		SVXCR 5/8" K11 U IC	153751	15.875	15.875	125	21	18.6	8.4	7.5	G $\frac{1}{8}$ "
		SVXCR 3/4" K16 U IC	153752	19.05	19.05	125	27	22	7.5	11.5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector



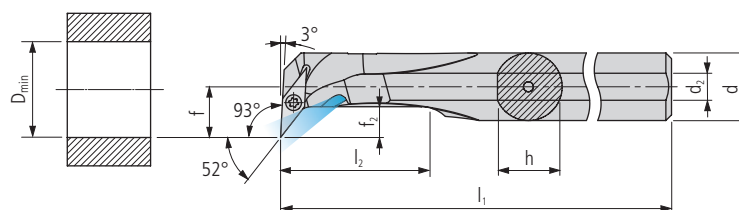
A... SVOC...

	Compatible cutting edges □72...	Order designation	Art. no.	Dimensions							
				d	h	l ₁	f	D _{min}	d ₂		
L	VC 07 	A10H SVOCL 07	144686	10	9.5	100	5.5	11	M5		
		A12K SVOCL 07	144692	12	11.5	125	6.5	13	M5		
	VC 11 	A12K SVOCL 11	114037	12	11.5	125	7	17	Ø3.3		
		A16M SVOCL 11	114038	16	15.5	150	9	20	Ø4		
R	VC 07 	A10H SVOCR 07	144687	10	9.5	100	5.5	11	M5		
		A12K SVOCR 07	144693	12	11.5	125	6.5	13	M5		
	VC 11 	A12K SVOCR 11	044340	12	11.5	125	7	17	Ø3.3		
		A16M SVOCR 11	044347	16	15.5	150	9	20	Ø4		



A... SVQC...

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				d	h	l ₁	l ₂	f	D _{min}	f ₂	d ₂
L	VC 07 	A10H SVQCL 07	144688	10	9.5	100	23	8	14	3	M5
		A12K SVQCL 07	144694	12	11.5	125	28	9	16	3	M5
	VC 11 	A16M SVQCL 11	045274	16	15.5	150	36	11	20	3	G ¹ / ₈ "
		A20Q SVQCL 11	045276	20	19.5	180	36	13	25	3	G ¹ / ₈ "
R	VC 07 	A10H SVQCR 07	144689	10	9.5	100	23	8	14	3	M5
		A12K SVQCR 07	144695	12	11.5	125	28	9	16	3	M5
	VC 11 	A16M SVQCR 11	045275	16	15.5	150	36	11	20	3	G ¹ / ₈ "
		A20Q SVQCR 11	045277	20	19.5	180	36	13	25	3	G ¹ / ₈ "



A... SVUC...

	Compatible cutting edges □ 72...	Order designation	Art. no.	Dimensions							
				d	h	l ₁	l ₂	f	D _{min}	f ₂	d ₂
L	VC 07	A10H SVUCL 07	144690	10	9.5	100	23	8.5	13.5	5	M5
		A12K SVUCL 07	144696	12	11.5	125	25	9	17	5.5	M5
		A16M SVUCL 07	144702	16	15.5	150	36	11	20	5.5	G $\frac{1}{8}$ "
	VC 11	A16M SVUCL 11	045280	16	15.5	150	36	13	21	8	G $\frac{1}{8}$ "
		A20Q SVUCL 11	045282	20	19.5	180	40	14	24	8	G $\frac{1}{8}$ "
R	VC 07	A10H SVUCR 07	144691	10	9.5	100	23	8.5	13.5	5	M5
		A12K SVUCR 07	144697	12	11.5	125	25	9	17	5.5	M5
		A16M SVUCR 07	144703	16	15.5	150	36	11	20	5.5	G $\frac{1}{8}$ "
	VC 11	A16M SVUCR 11	045281	16	15.5	150	36	13	21	8	G $\frac{1}{8}$ "
		A20Q SVUCR 11	045283	20	19.5	180	40	14	24	8	G $\frac{1}{8}$ "

For holders (SV...) OD turning

Illustration	Description	Dimensions	Order designation	Art. no.	Holders
	TORX screw	M2 × 5.5 T06	MSP 20055 T06	043490	SV... 07
		M2.5 × 6 T08	MSP 25060 T08	127518	SV... 11
		M3.5 × 11 T15	MSP 35110 T15	127527	SV... 16
	Screw plug	M5	MSP VSR M5 IB2.5	150262	SV... IC
		G1/8"	MSP VSR G1/8 IB5	153989	

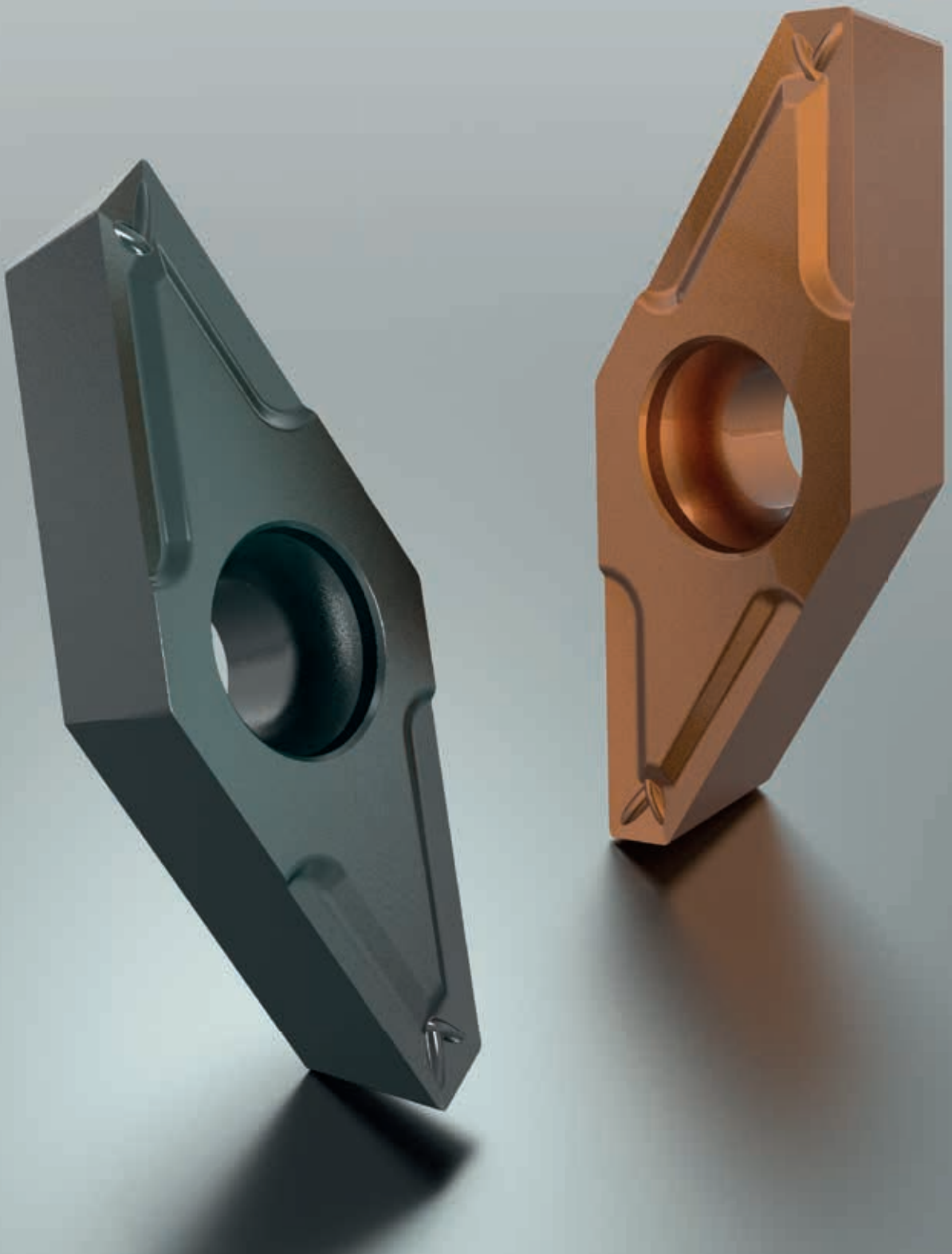
For holders (... SV...) ID turning

Illustration	Description	Dimensions	Order designation	Art. no.	Holders
	TORX screw	M2 × 4.3 TP06	MSP 20043 TP06	556100	A... SVO... 07 A... SVQ... 07
		M2 × 5.5 TP06	MSP 20055 T06	043490	A... SVU... 07
		M2.5 × 6 T08	MSP 25060 T08	127518	A... SV... 11

TORX screwdriver

Illustration	Description	Dimensions	Order designation	Art. no.	Screws
	TORX screwdriver	T06	MSP TX06	127535	M... T06 M... TP06
		T08	MSP TX08	127520	M... T08
		T15	MSP TX15	127482	M... T15

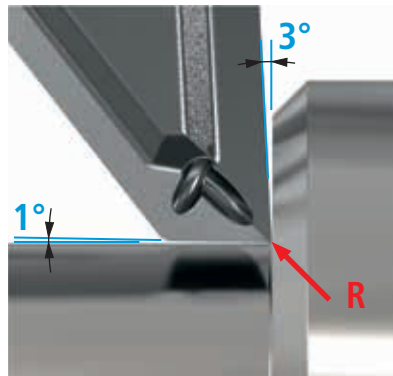
- *VP.. based indexable insert with 11° clearance angle*
- *Excellent all-rounder tool*
- *Enables large cutting depth with excellent chip control*
- *Perfect finishing using wiper edge*
- *Enables fast feed rate with small corner radius*
- *Many corner radii from $R = 0$ available*



The ideal insert for outstanding surface quality

The multidec®-TOP wiper edge allows a feed rate increase of up to 100% compared to conventional ISO inserts. It is an excellent all-rounder for Swiss-type lathes, and has been specially developed for machining small parts for which small corner radii are required. It also allows large cutting depth.

The geometries



1° wiper edge allows very high surface finish quality without or with very small corner radius.



Reinforced holder for excellent stability even with large cutting depth



Clearance angle of 11° for soft cutting and high feed rate.

The application



Turning and facing



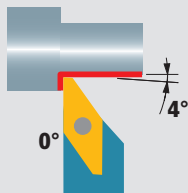
Back turning

- Finishing with high feed rate
- Very versatile geometries and grades
- Working in 3 directions is possible:
 - Forward turning
 - Facing
 - Back turning (reverse turning)

Application OD turning

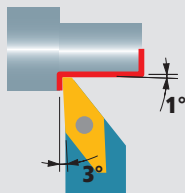
Front turning

SVAP... (90°) □ 109



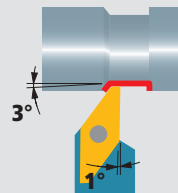
Turning and facing

SVJP... (93°) □ 110
SVJP... V (93°) □ 112



Back turning

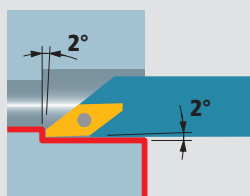
SVXP... (91°) □ 114



Application ID turning

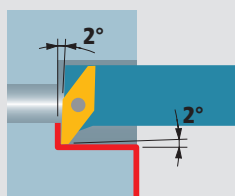
Turning and facing

SVJP... X (92°) □ 116
A... SVJP... (93°) □ 118



Turning and facing

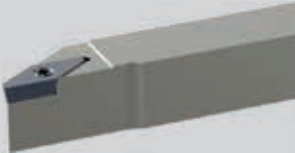
SVUP... X (92°) □ 117



Indexable inserts

Carbide		
	VPET	106
	VPGT	107
	VPXT	108

Holders

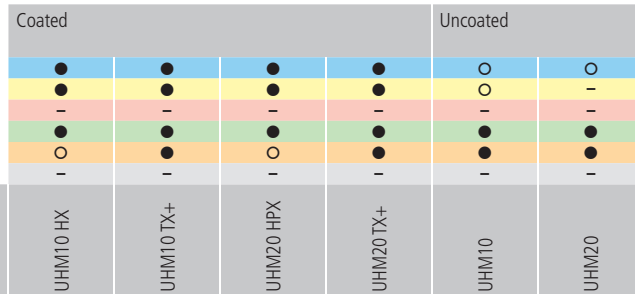
Square holder		
	SVAP	109
	SVJP	110
	SVJP... V	112
	SVXP	114
	SVJP... X (92°)	116
	SVUP... X	117

Round shank holders, boring bars

	A... SVJP	118
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Replacement and spare parts

		119
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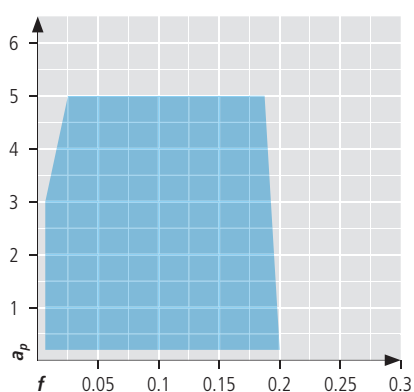
	Coated	Uncoated
P	80–160	60–120
M	60–120	—
K	90–150	70–120
N	150–300	140–280
S	50–90	—
H	—	—



Coated				Uncoated	
●	●	●	●	○	○
●	●	●	●	○	○
●	●	●	●	○	○
●	●	●	●	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

Cutting edge	Size	R	Order designation	UHM10 HX	UHM10 TX+	UHM20 HPX	UHM20 TX+	UHM10	UHM20	
Art. no.										
		0	VPGT 1003ZZ FL TOP ...	117094	150871	113207	044774	117093	113206	SV ... 109...
		0.08	VPGT 1003008 FL TOP ...	117096	192815	113209	044775	117095	113208	
		0.15	VPGT 1003015 FL TOP ...	117098	154260	113128	044776	117097	113127	
		0	VPGT 1003ZZ FR TOP ...	117088	192462	113203	169816	117087	113202	
		0.03	VPGT 1003003 FR TOP ...	559376	559377	559379	559380	559375	559378	
		0.05	VPGT 1003005 FR TOP ...	559382	559383	139732	559385	559381	553286	
		0.08	VPGT 1003008 FR TOP ...	117090	154795	113205	154431	117089	113204	
		0.1	VPGT 1003010 FR TOP ...	559392	559393	559395	559396	559391	559394	
		0.15	VPGT 1003015 FR TOP ...	117092	147792	113130	154719	117091	113129	
		0.2	VPGT 1003020 FR TOP ...	559398	559399	559401	559402	559397	559400	

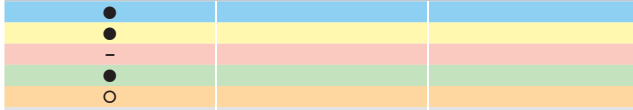
Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated	Uncoated
P	80–160	60–120
M	60–120	—
K	90–150	70–120
N	150–300	140–280
S	50–90	—
H	—	—

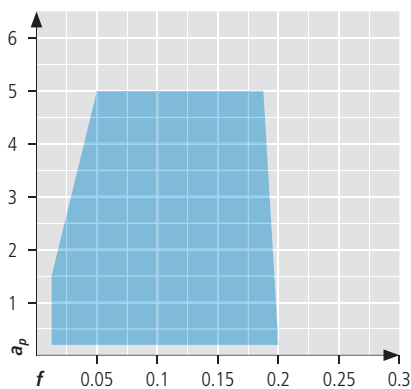


Coated

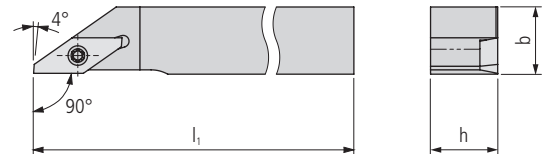
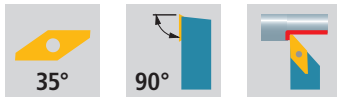


Cutting edge	Size	R	Order designation	UHM20 HPX	Art. no.	
	VP 10 	0.15	VPXT 1003015 EL TOP ...	138456		SV... 109...
		0.35	VPXT 1003035 EL TOP ...	138462		
	VP 10 	0.15	VPXT 1003015 ER TOP ...	138457		
		0.35	VPXT 1003035 ER TOP ...	138463		

Application range

 a_p (mm) / f (mm/U)

 v_c (m/min)

	Coated
P	80–160
M	60–120
K	90–150
N	150–300
S	50–90
H	—

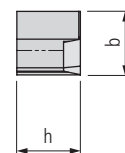
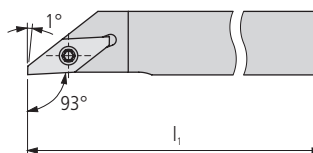


SVAP...

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁				
L	VP 10	SVAPL 0707 H10	044335	7	7	100				
		SVAPL 0708 H10	043208	7	8	100				
		SVAPL 0808 F10	148827	8	8	80				
		SVAPL 0808 H10	044071	8	8	100				
		SVAPL 1010 F10	148828	10	10	80				
		SVAPL 1010 H10	044073	10	10	100				
		SVAPL 1212 H10	044075	12	12	100				
R	VP 10	SVAPR 0707 H10	044334	7	7	100				
		SVAPR 0708 H10	043209	7	8	100				
		SVAPR 0808 F10	148825	8	8	80				
		SVAPR 0808 H10	044072	8	8	100				
		SVAPR 1010 F10	148826	10	10	80				
		SVAPR 1010 H10	044074	10	10	100				
		SVAPR 1212 H10	044076	12	12	100				

SVAP... INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁				
L	VP 10	SVAPL 3/8" F10	148830	9.525	9.525	80				
		SVAPL 3/8" H10	114029	9.525	9.525	100				
		SVAPL 1/2" H10	114030	12.7	12.7	100				
R	VP 10	SVAPR 3/8" F10	148829	9.525	9.525	80				
		SVAPR 3/8" H10	138415	9.525	9.525	100				
		SVAPR 1/2" H10	138416	12.7	12.7	100				

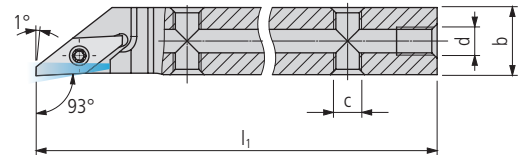
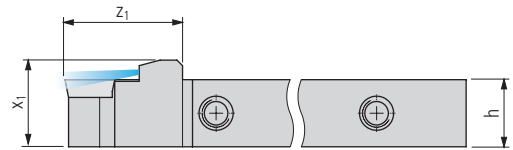


SVJP...

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	VP 10	SVJPL 0708 H10	043093	7	8	100					
		SVJPL 0808 F10	148833	8	8	80					
		SVJPL 0808 H10	043002	8	8	100					
		SVJPL 1010 F10	148834	10	10	80					
		SVJPL 1010 H10	043003	10	10	100					
		SVJPL 1212 H10	043004	12	12	100					
		SVJPL 1616 K10	043006	16	16	125					
R	VP 10	SVJPL 2020 K10	043007	20	20	125					
		SVJPR 0708 H10	043207	7	8	100					
		SVJPR 0808 F10	148831	8	8	80					
		SVJPR 0808 H10	043009	8	8	100					
		SVJPR 1010 F10	148832	10	10	80					
		SVJPR 1010 H10	043010	10	10	100					
		SVJPR 1212 H10	043011	12	12	100					
		SVJPR 1616 K10	043013	16	16	125					
		SVJPR 2020 K10	043014	20	20	125					

SVJP... INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	VP 10	SVJPL 3/8" H10	114031	9.525	9.525	100					
		SVJPL 1/2" H10	114032	12.7	12.7	100					
		SVJPL 5/8" K10	113733	15.875	15.875	125					
		SVJPL 3/4" K10	113735	19.05	19.05	125					
R	VP 10	SVJPR 3/8" H10	138414	9.525	9.525	100					
		SVJPR 1/2" H10	127412	12.7	12.7	100					
		SVJPR 5/8" K10	113732	15.875	15.875	125					
		SVJPR 3/4" K10	113734	19.05	19.05	125					



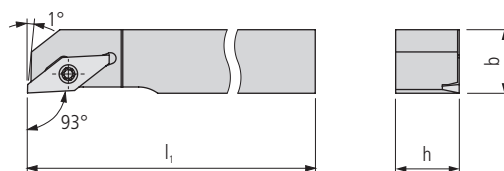
SVJP... IC

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
		SVJPL 0810 H10 IC	146309	8	10	100	21	11.5	M5	M5
		SVJPL 1010 H10 IC	146310	10	10	100	21	13.5	M5	M5
		SVJPL 1212 H10 IC	146311	12	12	100	21	15.5	M5	M5
		SVJPL 1616 K10 IC	146312	16	16	125	21	19.5	M5	G ¹ / ₈ "
		SVJPL 2020 K10 IC	146313	20	20	125	21	23.5	M5	G ¹ / ₈ "
		SVJPR 0810 H10 IC	146037	8	10	100	21	11.5	M5	M5
		SVJPR 1010 H10 IC	146042	10	10	100	21	13.5	M5	M5
		SVJPR 1212 H10 IC	146036	12	12	100	21	15.5	M5	M5
		SVJPR 1616 K10 IC	146047	16	16	125	21	19.5	M5	G ¹ / ₈ "
		SVJPR 2020 K10 IC	146048	20	20	125	21	23.5	M5	G ¹ / ₈ "

SVJP... IC INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
		SVJPL 3/8" H10 IC	146335	9.525	9.525	100	21	13	M5	M5
		SVJPL 1/2" H10 IC	146336	12.7	12.7	100	21	16.2	M5	M5
		SVJPL 5/8" K10 IC	146337	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "
		SVJPL 3/4" K10 IC	146338	19.05	19.05	125	21	22.6	M5	G ¹ / ₈ "
		SVJPR 3/8" H10 IC	146049	9.525	9.525	100	21	13	M5	M5
		SVJPR 1/2" H10 IC	146050	12.7	12.7	100	21	16.2	M5	M5
		SVJPR 5/8" K10 IC	146051	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "
		SVJPR 3/4" K10 IC	146334	19.05	19.05	125	21	22.6	M5	G ¹ / ₈ "

Scope of delivery: Holder without coolant connector

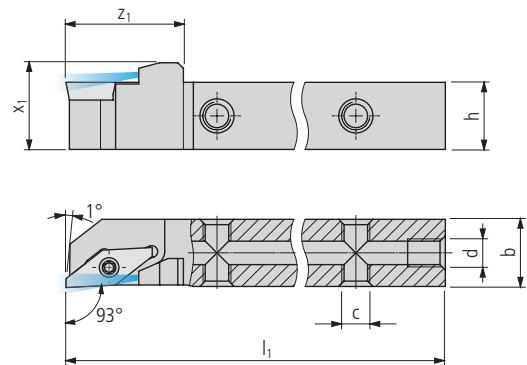


SVJP... V

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	VP 10	SVJPL 0810 H10 V	114945	8	10	100					
		SVJPL 1010 F10 V	148840	10	10	80					
		SVJPL 1010 H10 V	114019	10	10	100					
		SVJPL 1212 H10 V	045208	12	12	100					
		SVJPL 1616 K10 V	114020	16	16	125					
		SVJPL 2020 K10 V	114021	20	20	125					
R	VP 10	SVJPR 0810 H10 V	114944	8	10	100					
		SVJPR 1010 F10 V	148838	10	10	80					
		SVJPR 1010 H10 V	114022	10	10	100					
		SVJPR 1212 H10 V	045207	12	12	100					
		SVJPR 1616 K10 V	114023	16	16	125					
		SVJPR 2020 K10 V	114024	20	20	125					

SVJP... V INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	VP 10	SVJPL 3/8" H10 V	114027	9.525	9.525	100					
		SVJPL 1/2" H10 V	114028	12.7	12.7	100					
		SVJPL 5/8" K10 V	113737	15.875	15.875	125					
		SVJPL 3/4" K10 V	113739	19.05	19.05	125					
		SVJPR 3/8" H10 V	114025	9.525	9.525	100					
R	VP 10	SVJPR 1/2" H10 V	114026	12.7	12.7	100					
		SVJPR 5/8" K10 V	113736	15.875	15.875	125					
		SVJPR 3/4" K10 V	113738	19.05	19.05	125					



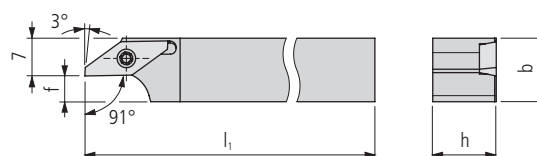
SVJP... V IC

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
		SVJPL 0810 H10 V IC	146456	8	10	100	21	11.5	M5	M5
		SVJPL 1010 H10 V IC	146457	10	10	100	21	13.5	M5	M5
		SVJPL 1212 H10 V IC	146458	12	12	100	21	15.5	M5	M5
		SVJPL 1616 K10 V IC	146459	16	16	125	21	19.5	M5	G ¹ / ₈ "
		SVJPL 2020 K10 V IC	146460	20	20	125	21	23.5	M5	G ¹ / ₈ "
		SVJPR 0810 H10 V IC	146451	8	10	100	21	11.5	M5	M5
		SVJPR 1010 H10 V IC	146452	10	10	100	21	13.5	M5	M5
		SVJPR 1212 H10 V IC	146453	12	12	100	21	15.5	M5	M5
		SVJPR 1616 K10 V IC	146454	16	16	125	21	19.5	M5	G ¹ / ₈ "
		SVJPR 2020 K10 V IC	146455	20	20	125	21	23.5	M5	G ¹ / ₈ "

SVJP... V IC INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
		SVJPL 3/8" H10 V IC	146465	9.525	9.525	100	21	13	M5	M5
		SVJPL 1/2" H10 V IC	146466	12.7	12.7	100	21	16.2	M5	M5
		SVJPL 5/8" K10 V IC	146467	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "
		SVJPL 3/4" K10 V IC	146468	19.05	19.05	125	21	22.6	M5	G ¹ / ₈ "
		SVJPR 3/8" H10 V IC	146461	9.525	9.525	100	21	13	M5	M5
		SVJPR 1/2" H10 V IC	146462	12.7	12.7	100	21	16.2	M5	M5
		SVJPR 5/8" K10 V IC	146463	15.875	15.875	125	21	19.4	M5	G ¹ / ₈ "
		SVJPR 3/4" K10 V IC	146464	19.05	19.05	125	21	22.6	M5	G ¹ / ₈ "

Scope of delivery: Holder without coolant connector



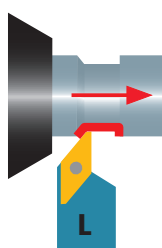
SVXP...

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	f			
		SVXPL 0808 H10	044079	8	8	100	1			
		SVXPL 1010 F10	148846	10	10	80	3			
		SVXPL 1010 H10	044081	10	10	100	3			
		SVXPL 1212 H10	044083	12	12	100	5			
		SVXPL 1616 K10	044097	16	16	125	9			
		SVXPL 2020 K10	044099	20	20	125	13			
		SVXPR 0808 H10	044080	8	8	100	1			
		SVXPR 1010 F10	148844	10	10	80	3			
		SVXPR 1010 H10	044082	10	10	100	3			
		SVXPR 1212 H10	044084	12	12	100	5			
		SVXPR 1616 K10	044098	16	16	125	9			
		SVXPR 2020 K10	044100	20	20	125	13			

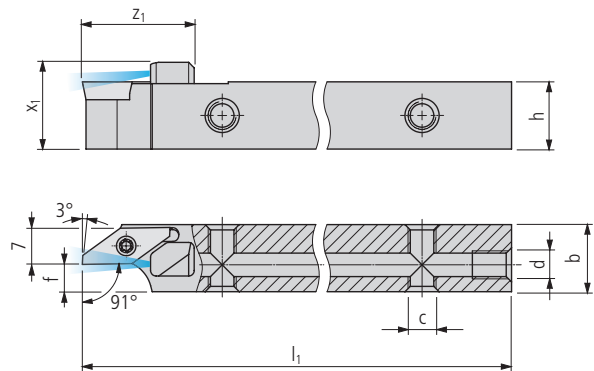
SVXP... INCH

	Compatible cutting edges 106...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	f			
		SVXPL 3/8" H10	114033	9.525	9.525	100	2.5			
		SVXPL 1/2" H10	114034	12.7	12.7	100	5.7			
		SVXPL 5/8" K10	113741	15.875	15.875	125	8.9			
		SVXPL 3/4" K10	113743	19.05	19.05	125	12			
		SVXPR 3/8" H10	114035	9.525	9.525	100	2.5			
		SVXPR 1/2" H10	114036	12.7	12.7	100	5.7			
		SVXPR 5/8" K10	113740	15.875	15.875	125	8.8			
		SVXPR 3/4" K10	113742	19.05	19.05	125	12			

Usage note:



A left-hand holder with a left-hand cutting edge is required for back turning on a right-hand-rotating Swiss-type automatic lathe.



SVXP... IC

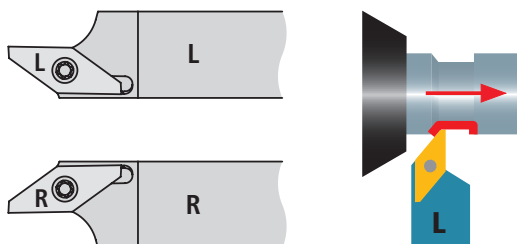
	Compatible cutting edges D 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVXPL 1010 H10 IC	146330	10	10	100	20	13.5	3	M5	M5
		SVXPL 1212 H10 IC	146331	12	12	100	20	15.5	5	M5	M5
		SVXPL 1616 K10 IC	146332	16	16	125	20	19.5	9	M5	G ¹ / ₈ "
		SVXPL 2020 K10 IC	146333	20	20	125	20	23.5	13	M5	G ¹ / ₈ "
		SVXPR 1010 H10 IC	146325	10	10	100	20	13.5	3	M5	M5
		SVXPR 1212 H10 IC	146326	12	12	100	20	15.5	5	M5	M5
		SVXPR 1616 K10 IC	146327	16	16	125	20	19.5	9	M5	G ¹ / ₈ "
		SVXPR 2020 K10 IC	146328	20	20	125	20	23.5	13	M5	G ¹ / ₈ "

SVXP... IC INCH

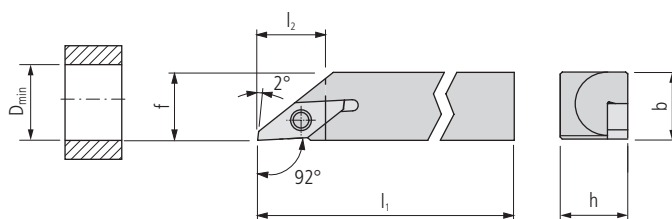
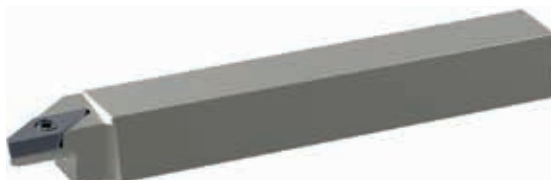
	Compatible cutting edges D 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	z ₁	x ₁	f	c	d
		SVXPL 3/8" H10 IC	146404	9.525	9.525	100	20	13	2.5	M5	M5
		SVXPL 1/2" H10 IC	146405	12.7	12.7	100	20	16.2	5.7	M5	M5
		SVXPL 5/8" K10 IC	146408	15.875	15.875	125	20	19.4	8.8	M5	G ¹ / ₈ "
		SVXPL 3/4" K10 IC	146406	19.05	19.05	125	20	22.6	12	M5	G ¹ / ₈ "
		SVXPR 3/8" H10 IC	146400	9.525	9.525	100	20	13	2.5	M5	M5
		SVXPR 1/2" H10 IC	146401	12.7	12.7	100	20	16.2	5.7	M5	M5
		SVXPR 5/8" K10 IC	146402	15.875	15.875	125	20	19.4	8.8	M5	G ¹ / ₈ "
		SVXPR 3/4" K10 IC	146403	19.05	19.05	125	20	22.6	12	M5	G ¹ / ₈ "

Scope of delivery: Holder without coolant connector

Usage note:

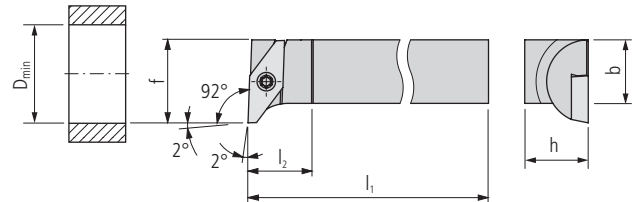


A left-hand holder with a left-hand cutting edge is required for back turning on a right-hand-rotating Swiss-type automatic lathe.



SVJP... X

	Compatible cutting edges	Order designation		Dimensions							
	 106...			h	b	l ₁	l ₂	f	D _{min}		
Art. no.											
L	VP 10 	SVJPL 1212 XH10	043108	12	12	100	12	12.2	16		
		SVJPL 1616 XK10	043210	16	16	125	12	16.2	16		
R	VP 10 	SVJPR 1212 XH10	043109	12	12	100	12	12.2	16		
		SVJPR 1616 XK10	043211	16	16	125	12	16.2	16		

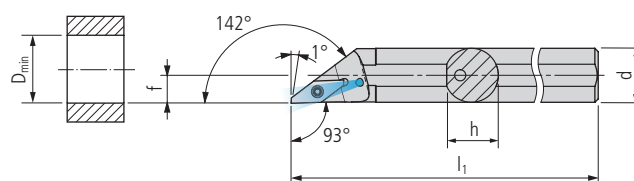


SVUP... X

	Compatible cutting edges D 106...	Order designation	Art. no.	Dimensions							
				h	b	l ₁	l ₂	f	D _{min}		
L 	VP 10 	SVUPL 1212 XH10	044057	12	12	100	12	15.7	17		
		SVUPL 1616 XK10	044059	16	16	125	12	15.7	17		
R 	VP 10 	SVUPR 1212 XH10	044058	12	12	100	12	15.7	17		
		SVUPR 1616 XK10	044060	16	16	125	12	15.7	17		

Attention

Right hand holder needs left hand insert!



A... SVJP

	Compatible cutting edges  106...	Order designation	Dimensions							
			d	h	l ₁	f	D _{min}			
		A16M SVJPL 10	Art. no.							
		044348	16	15.3	150	8.3	20			
		A16M SVJPR 10	Art. no.							
		044349	16	15.3	150	8.3	20			

For holders (SV.P...) OD turning

Illustration	Description	Dimensions	Order designation	Art. no.	Holders
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	127518	SV.P... 10
	Screw plug	M5	MSP VSR M5 IB2.5	150262	SV.P... IC
		G1/8"	MSP VSR G1/8 IB5	153989	

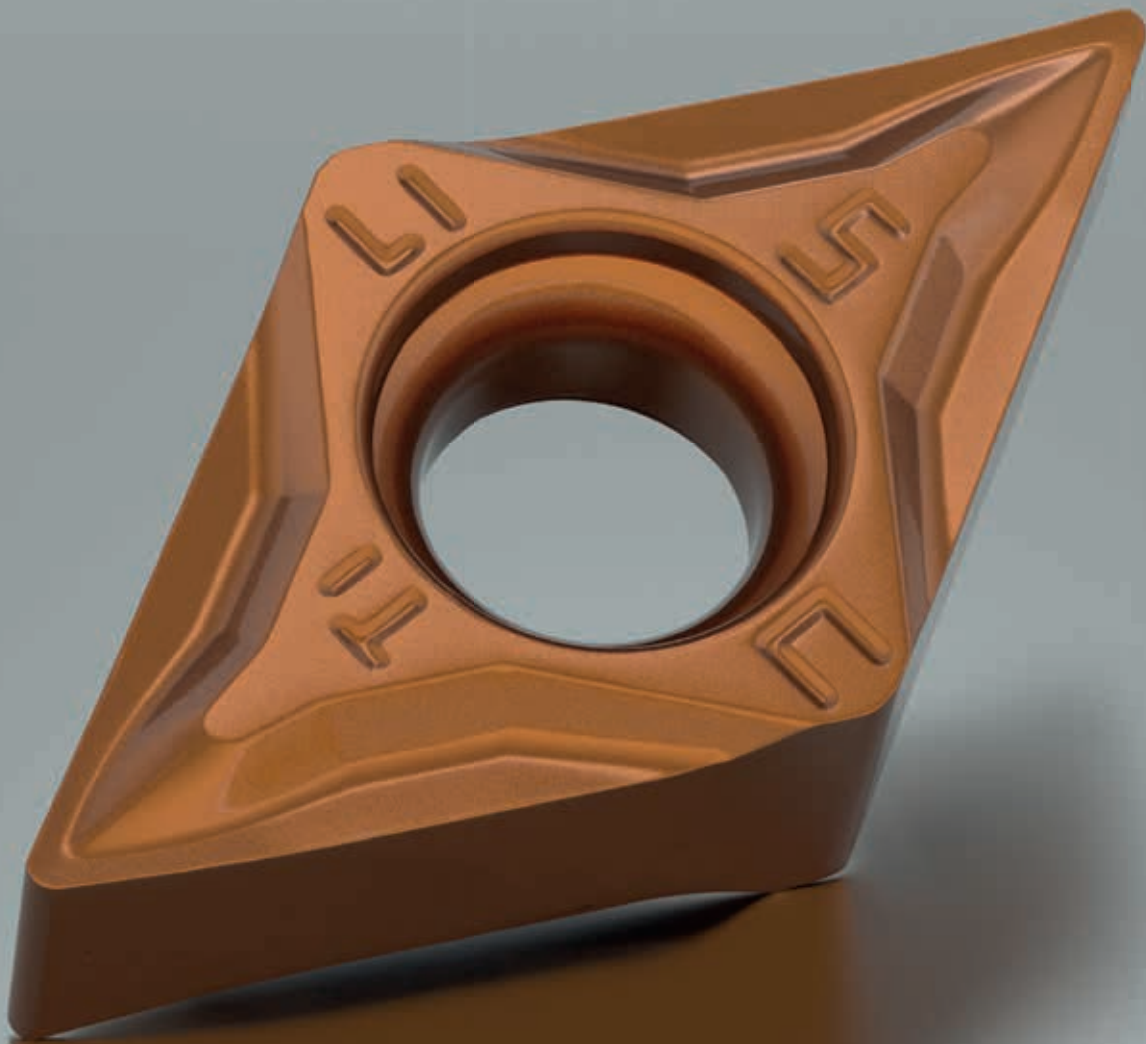
For holders (... SV.P...) ID turning

Illustration	Description	Dimensions	Order designation	Art. no.	Holders
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	127518	A... SV.P... 10

TORX screwdriver

Illustration	Description	Dimensions	Order designation	Art. no.	Schrauben
	TORX screwdriver	T08	MSP TX08	127520	M... T08

- Negative ISO inserts with positive cut
- Twice as many cutting edges as a positive ISO insert
- Stable screw clamping
- Optimized for the machining of stainless steel, titanium and exotic materials
- Excellent chip control allowing high feed rate and large cutting depth
- Holder with "IC" internal coolant supply for optimising tool life

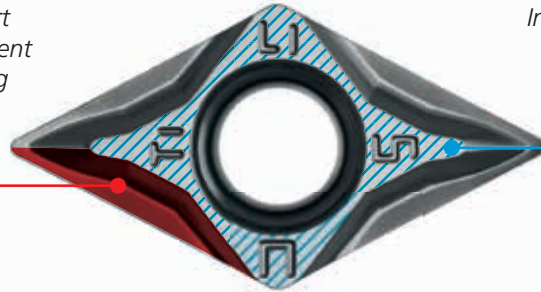


multidec®-ISO×4

Negative indexable inserts have several specific advantages over positive inserts, particularly in terms of stability and cost-effectiveness.

Advantages at a glance

The 7° positioning angle of insert clamping provides a highly efficient chip breaker even at high cutting depth.



Increased stability thanks to a large contact surface that extends very close to the cutting edge.

High clamping force thanks to direct screw connection.

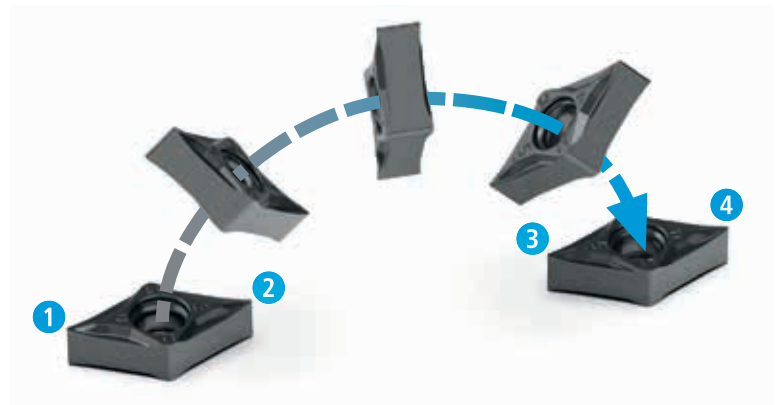


Countersunk screw head avoids conflict with chip outflow.

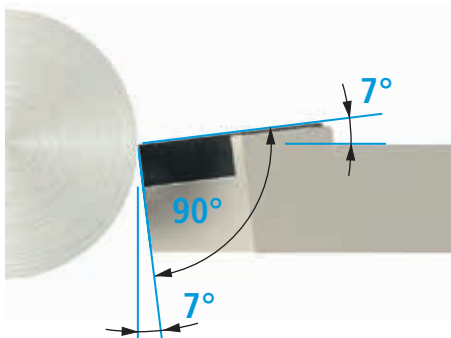


Can be used 4 times

The indexable insert has twice as many cutting edges as a positive ISO indexable insert.

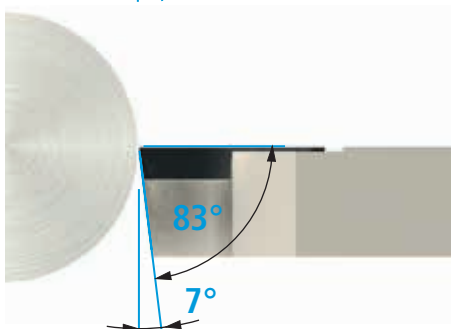


Characteristics of negative and positive indexable inserts



Negative indexable insert

- Double sided
- High cutting edge stability
- Increased stability thanks to the 7° positioning angle of the insert



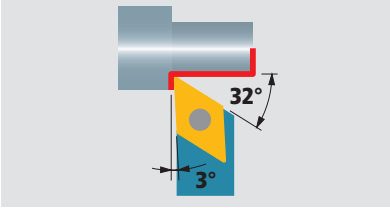
Positive indexable insert

- One sided
- Low cutting force
- Side clearance allows machining in all directions
- First choice for ID and OD turning of small parts

Application OD turning

Turning and facing

SDJN... (93°)  126



Indexable inserts

Carbide



DNGU

📄 124

Holders

Square holder



SDJN

📄 126

Replacement and spare parts

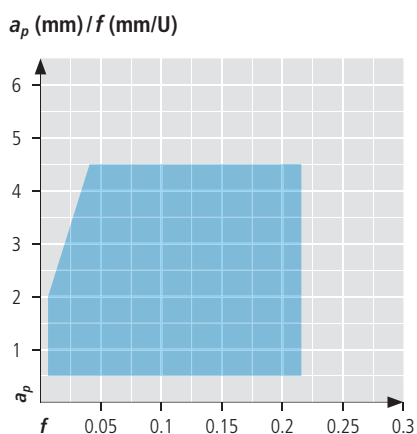


📄 128



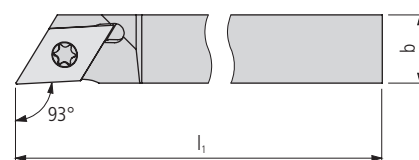
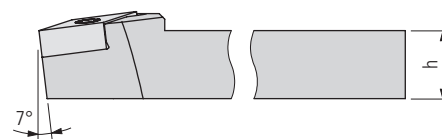
				Coated		Uncoated
				●	●	○
				●	●	○
				○	○	○
				●	○	○
				●	●	○
Cutting edge	Size	R	Order designation	UHM20 HPX	UHM20 TX+	UHM20
		0.08	DNGU 1104008 FN -A4 ...	191910	192487	191909
		0.15	DNGU 1104015 FN -A4 ...	191049	185274	191048
		0.35	DNGU 1104035 FN -A4 ...	126958	126957	126956
				Art. no.		
						SDIN... 11
						 126...

Application range



v_c (m/min)		
	Coated	Uncoated
P	80–160	70–150
M	70–140	—
K	90–150	80–140
N	150–300	140–280
S	50–90	—
H	40–60	—

SDJN...

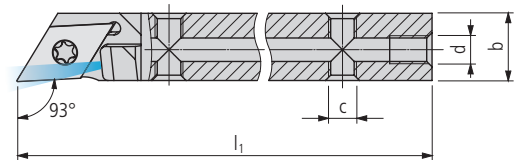
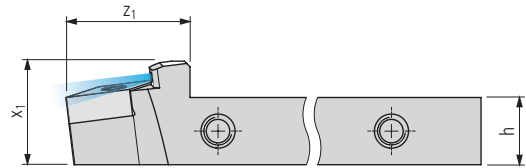
multidec®
 ISOx4


SDJN...

	Compatible cutting edges 124...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	DN 11	SDJNL 1012 F11	148808	10	12	80					
		SDJNL 1012 H11	127479	10	12	100					
		SDJNL 1212 H11	127418	12	12	100					
		SDJNL 1616 K11	127419	16	16	125					
		SDJNL 2020 K11	127480	20	20	125					
		SDJNL 2525 M11	138578	25	25	150					
R	DN 11	SDJNR 1012 F11	148807	10	12	80					
		SDJNR 1012 H11	127476	10	12	100					
		SDJNR 1212 H11	126959	12	12	100					
		SDJNR 1616 K11	126960	16	16	125					
		SDJNR 2020 K11	127477	20	20	125					
		SDJNR 2525 M11	138580	25	25	150					

SDJN... INCH

	Compatible cutting edges 124...	Order designation	Art. no.	Dimensions							
				h	b	l ₁					
L	DN 11	SDJNL 3/8" F11	148810	9.525	9.525	80					
		SDJNL 3/8" H11	113722	9.525	9.525	100					
		SDJNL 1/2" H11	113724	12.7	12.7	100					
		SDJNL 5/8" K11	113726	15.875	15.875	125					
		SDJNL 3/4" K11	113728	19.05	19.05	125					
		SDJNR 3/8" F11	148809	9.525	9.525	80					
R	DN 11	SDJNR 3/8" H11	113723	9.525	9.525	100					
		SDJNR 1/2" H11	113725	12.7	12.7	100					
		SDJNR 5/8" K11	113727	15.875	15.875	125					
		SDJNR 3/4" K11	113729	19.05	19.05	125					



SDJN... IC

	Compatible cutting edges D 124...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	DN 11	SDJNL 1012 H11 IC	146389	10	12	100	22	16.5	M5	M5
		SDJNL 1212 H11 IC	146390	12	12	100	22	18.5	M5	M5
		SDJNL 1616 K11 IC	146391	16	16	125	22	22.5	M5	G $\frac{1}{8}$ "
		SDJNL 2020 K11 IC	146392	20	20	125	22	26.5	M5	G $\frac{1}{8}$ "
		SDJNL 2525 K11 IC	146393	25	25	125	22	31.5	M5	G $\frac{1}{8}$ "
R	DN 11	SDJNR 1012 H11 IC	146386	10	12	100	22	16.5	M5	M5
		SDJNR 1212 H11 IC	146038	12	12	100	22	18.5	M5	M5
		SDJNR 1616 K11 IC	146064	16	16	125	22	22.5	M5	G $\frac{1}{8}$ "
		SDJNR 2020 K11 IC	146387	20	20	125	22	26.5	M5	G $\frac{1}{8}$ "
		SDJNR 2525 K11 IC	146388	25	25	125	22	31.5	M5	G $\frac{1}{8}$ "

SDJN... IC INCH

	Compatible cutting edges D 124...	Order designation	Art. no.	Dimensions						
				h	b	l ₁	z ₁	x ₁	c	d
L	DN 11	SDJNL 3/8" H11 IC	146398	9.525	12	100	22	16	M5	M5
		SDJNL 1/2" H11 IC	146399	12.7	12.7	100	22	19.2	M5	M5
		SDJNL 5/8" K11 IC	146409	15.875	15.875	125	22	22.4	M5	G $\frac{1}{8}$ "
		SDJNL 3/4" K11 IC	146410	19.05	19.05	125	22	25.5	M5	G $\frac{1}{8}$ "
R	DN 11	SDJNR 3/8" H11 IC	146394	9.525	12	100	22	16	M5	M5
		SDJNR 1/2" H11 IC	146395	12.7	12.7	100	22	19.2	M5	M5
		SDJNR 5/8" K11 IC	146396	15.875	15.875	125	22	22.4	M5	G $\frac{1}{8}$ "
		SDJNR 3/4" K11 IC	146397	19.05	19.05	125	22	25.5	M5	G $\frac{1}{8}$ "

Scope of delivery: Holder without coolant connector

For holders (SDJN...) OD turning

Illustration	Description	Dimensions	Order designation	Art. no.	Holders
	TORX screw	M4 × 11 TP15	MSP 40110 TP15	127481	SDJN... 11
	Screw plug	M5	MSP VSR M5 IB2.5	150262	SDJN... IC
		G1/8"	MSP VSR G1/8 IB5	153989	

TORX screwdriver

Illustration	Description	Dimensions	Order designation	Art. no.	Screws
	TORX screwdriver	T15	MSP TX15	127482	M... TP15
		TP15	MSP TXP15 Torx Plus	127904	M... TP15

Indexable inserts

Form of insert		
Index	α	
C	80°	
D	55°	
V	35°	

Clearance angle		
Index	α	
C	7°	
N	0°	
P	11°	

Tolerance			
Index	s ±	d ±	
E	0.025	0.025	
G	0.13	0.025	
M	0.13	0.05–0.15*	
X	0.1	0.04	

* Dependent on dimension of insert

Distinctive mark	
Index	
W	
T	
U	
X/Z	Special shape

DCGT 0702015 FN - A3 UHM20 HPX

Chip breaker
□ 10...

Grade
□ 5

Edge length			
Index	$\approx l$	d	
06	6	6.35	$C = 80^\circ$
09	9	9.53	
12	12	12.7	
07	7	6.35	$D = 55^\circ$
11	11	9.53	
07	7	3.97	$V = 35^\circ$
11	11	6.35	
16	16	9.53	
10*	10	6.35	$V = 35^\circ$

Insert thickness		
Index	s	
02	2.38	
03	3.18	
T3	3.97	
04	4.76	

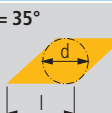
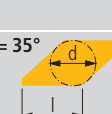
Corner radius	
Index	R
00/ZZ	0
003	0.03
006	0.06
008	0.08
01	0.1
015	0.15
02	0.2
035	0.35
04	0.4
075	0.75
08	0.8

Edge condition	
Index	
F	Sharp
E	Rounded

Cutting direction		
Index		
L	Left	
N	Neutral	
R	Right	

* UTILIS standard

Square holder

Shank height		Shank width		Holder length		Edge length				Special shape			
h_1/h_2		b		Index	l_1	Index	$\approx l$	d		Index			
				D	60		06	6	6.35	$C = 80^\circ$ 	U	For Swiss-type automatic lathes	
				E	70		09	9	9.53				
				F	80		12	12	12.7				
				H	100		07	7	6.35	$D = 55^\circ$ 			
				K	125		11	11	9.53				$V = 35^\circ$ 
				M	150		16	16	9.59				
				X	Special shape		10*	10	6.35	$V = 35^\circ$ 			

* UTILIS standard

S

D

J

C

R

1

2

1

2

H

0

7

U

* UTILIS standard

S D J C R 1 2 1 2 H 0 7 U

Clamping		
Index		
S	Screwed	

Form of insert		
Index	α	
C	80°	
D	55°	
V	35°	

Clearance angle		
Index	α	
C	7°	
N	0°	
P	11°	

Cutting direction		
Index		
L	Left	
N	Neutral	
R	Right	

Holder form											
Index	α		Index	α		Index	α		Index	α	
A	90°		J	93°		P	117.5°		V	72.5°	
D	45°		L	95°		Q*	93°		X	Special shape	
H	107.5°		N	62.5°		U	93°				

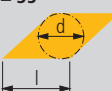
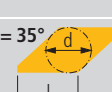
* UTILIS standard

Round shank holders, boring bars

Shank execution	
Index	
A	Steel shank with internal cooling

Shank diameter
d_1


Holder length		
Index	l_1	
F	80	
H	100	
K	125	
M	150	
Q	180	
R	200	
S	250	
T	300	
X...	Special shape	

Edge length			
Index	$\approx l$	d	
06	6	6.35	
09	9	9.53	
12	12	12.7	
07	7	6.35	
11	11	9.53	
07	7	3.97	
11	11	6.35	
16	16	9.53	
10*	10	6.35	

* UTILIS standard

A 12 K S D U C R 07

Clamping		
Index		
S	Screwed	

Form of insert		
Index	α	
C	80°	
D	55°	
V	35°	

Clearance angle		
Index	α	
C	7°	
N	0°	
P	11°	

Cutting direction		
Index		
L	Left	
N	Neutral	
R	Right	

Holder form							
Index	α		Index	α		Index	α
F	90°		L	95°		Q	107.5°
D	45°		O	95°		U	93°
J	93°		Q*	92°		X	Special shape

* UTILIS standard

A

A... SCFC...	34
A... SCLC...	35
A... SDOC...	66
A... SDQC...	67
A... SDUC...	68
A... SVJP	118
A... SVOC...	98
A... SVQC...	99
A... SVUC...	100

C

CCGT ... FN	27
CCGT ... -PA6	21
CCGT ... -PA7	20
CCGT ... -PF23	18
CCGT ... -PF23 – CERMET	26
CCGT ... -PF33	19
CCGT ... -UWN	29
CCGT ... -UWS	28
CCMT ... -M18R	24
CCMT ... -PF43	22
CCMT ... -S07	25
CCMT ... -S12	23

D

DCGT ... -A3	46
DCGT ... FN	53
DCGT ... -PA6	45
DCGT ... -PA7	44
DCGT ... -PF	42
DCGT ... -PF05	43

DCGT ... -PF23	40
DCGT ... -PF23 – CERMET	51
DCGT ... -PF33	41
DCGT ... -UWN	55
DCGT ... -UWS	54
DCGW ... FN	52
DCMT ... -M18R	49
DCMT ... -PF43	47
DCMT ... -S07	50
DCMT ... -S12	48
DNGU ... -A4	124

S

SCAC... U	31
SCLC... U	32
SCLC... U IC	33
SDAC... U	57
SDHC... U	60
SDHC... U IC	61
SDJC... U	58
SDJC... U IC	59
SDJN...	126
SDJN... IC	127
SDNCN ... U	64
SDNCN ... U IC	65
SDNC... U	62
SDNC... U IC	63
SVAC... U	85
SVAP...	109
SVHC... U	88
SVHC... U IC	89
SVJC... U	86
SVJC... U IC	87
SVJP...	110

SVJP... IC	111
SVJP... V	112
SVJP... V IC	113
SVJP... X	116
SVPC... U	90
SVPC... U IC	91
SVQC...	93
SVUC...	92
SVUP... X	117
SVVCN ... U	94
SVVCN ... U IC	95
SVXC... U	96
SVXC... U IC	97
SVXP...	114
SVXP... IC	115

V

VCGT ... -A3	77
VCGT ... FN	81
VCGT ... -PA6	76
VCGT ... -PA7	75
VCGT ... -PF05	74
VCGT ... -PF23	72
VCGT ... -PF23 – CERMET	79
VCGT ... -PF33	73
VCGT ... -UWN	83
VCGT ... -UWS	82
VCGW ... FN	80
VCMT ... -PF43	78
VPET ... TOP	106
VPGT ... TOP	107
VPXT ... TOP	108

multidec®-SAW – Solid carbide circular saw blades

multidec®-SAW is a large range of high-performance solid carbide circular saw blades that are very versatile and flexible in use.



NOVELTY

Article 400929

multidec®-5000 – High-performance parting-off tools

multidec®-5000 offers a comprehensive range of high-quality, high-performance parting-off tools, which have been specially developed for use on sliding headstock automatic lathes



INNOVATION

Article 400933

multidec®-CUT – G-LINE inserts

The performance boost in machining. New technology for creation of any three-dimensional chip-breaker shapes.

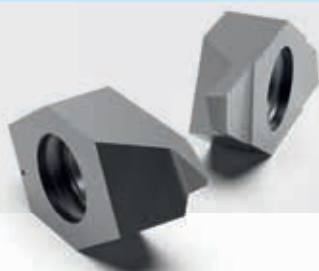


INNOVATION

Article 400870

multidec®-CUT – WATCH-LINE inserts

The WATCH-LINE range of turning inserts is designed for the efficient machining of very small parts in the watchmaking industry.



INNOVATION

Article 400918

More multidec® products from the company UTILIS

multidec®-LUB – Tool plates, complete

multidec®-LUB tool plate with an integrated coolant system and a tool stop system, which can be quickly and easily replaced with the existing one.

Increase the performance of your machine!

CITIZEN  TORNOS



Article 400882

multidec®-WHIRLING – The efficient way to make threads

multidec®-WHIRLING is the thread whirling tool system with multiple cutting edges; unlike the thread turning method, this enables the thread to be finished without burr in a single pass.



Article 300969

multidec®-MICRO TOOLS & -MILL – Solid carbide precision tools

multidec®-MICRO TOOLS contain various solid carbide micro tools for drilling, milling and TORX® milling. You will find a wide range of universal milling tools in the multidec®-MILL product range.



Article 400925

multidec®-CARE – From the idea to the machine

You have an order or an idea, and you want to know how to implement it? Together, we can realise a cost-effective solution for you.



Article 400885



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