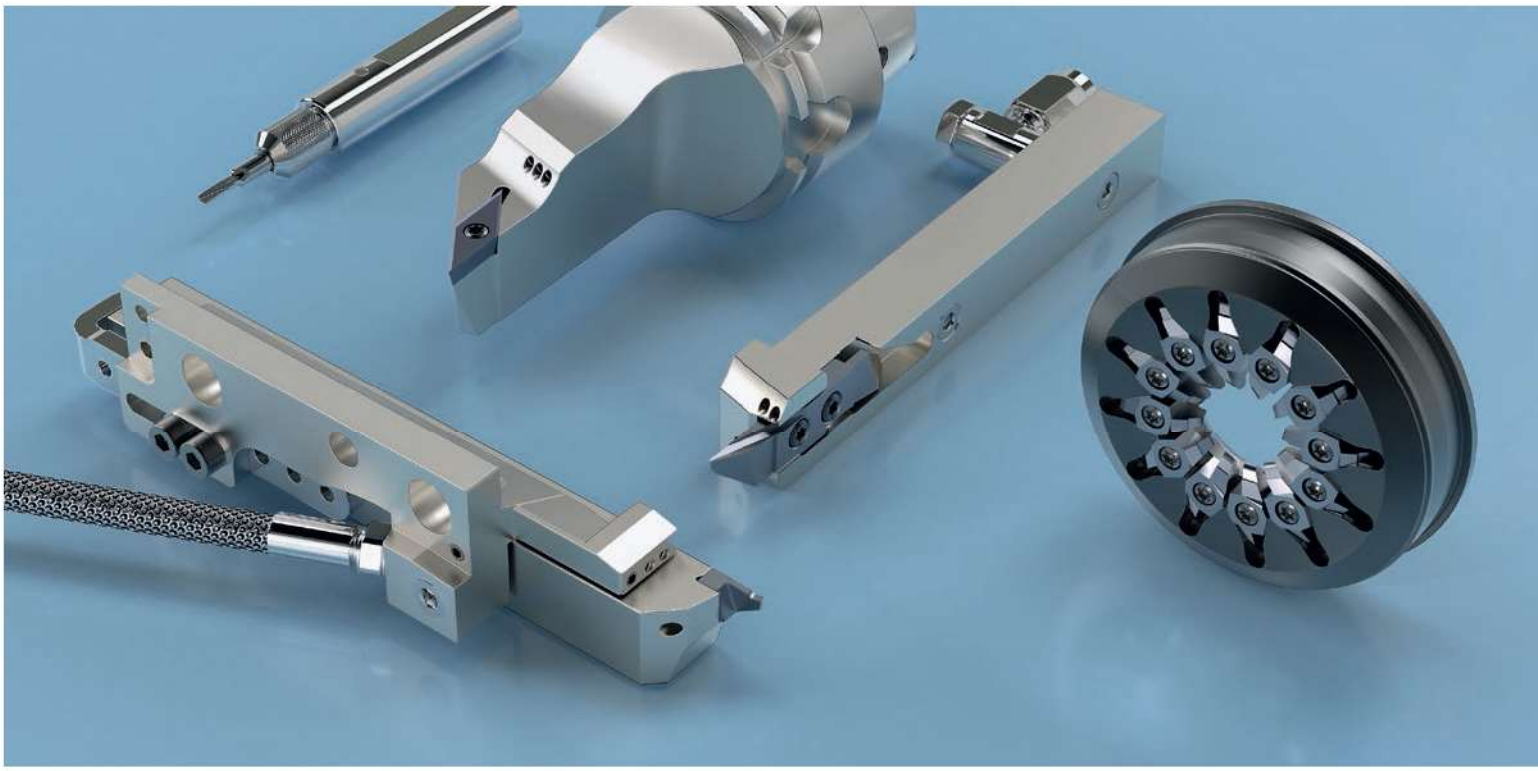
UTILIS
multidec®
swiss type tools

**GENERAL CATALOG 2020/21**



**PRECISION TOOLS**
**FOR SMALL PART MANUFACTURING AND MICRO-CUTTING**

future since 1915

UTILIS®
Tooling for High Technology

## multidec®-ISO

multidec®-ISO provides a very wide range of ISO standardized inserts for Swiss type machining and precision turning. All inserts consist of two or more edges and are easily indexed or changed.
All inserts have several cutting edges and are easily replaceable. At the same time, multidec®-ISO provides sharp and rounded cutting edges with radii between 0 and 0.8 mm. Innovative solutions involving coated and uncoated inserts made of carbide, cermets and diamond tips have been designed to cut very difficult materials. For all mechanical cutting conditions a large choice of sintered and ground inserts with a wide variety of chip grooves are available.
Even for the holders a wide range of possibilities with shank sizes between 8 and 25 mm are available. For Swiss type automatic lathes special holders have been designed and complete the wide range of choices.

**Advantages:**
– Large range of standard ISO inserts
– Sharp cutting edges "F"
– Rounded cutting edges "E"
– Small corner radius (0–0.8 mm)
– Especially designed holders for CNC Swiss type automatic lathes (sizes 8×8 to 25×25 mm)

INNOVATION

The versatility of the materials which are machined in a modern production facility requires suitable chip breakers and also a wider variety of cutting edge types, carbide grades and coatings.
Our range of ISO inserts has been supplemented with the introduction of the new "PF05" insert and the addition of cutting geometries "A3", "PF23" and "PF33".

## New chip breaker for materials with difficult chip breaking behaviour

**FN-PF05**

Precision grinding with ISO-E tolerance at the centre height and at the inner circle, together with an extremely wear-resistant substrate and modern coating, make this insert a real problem-solver for the machining of stainless steels and super-alloys.

**Advantages:**
– High insert change repeat accuracy
– Sharp cutting edge despite coating

## New versions of existing inserts

**EN-A3**
**FN-A3**

**EN-...** : With rounded cutting edge "E"
**FN-...** : With sharp cutting edge "F"

**EN-PF23**
**FN-PF23**

The proven chip breakers A3, PF23 and PF33 are now also available with a slightly rounded cutting edge. New carbide grades and a new high performance coating have also been introduced for all of these inserts.
This wide range of options will increase your flexibility in choosing the right cutting edge tremendously, and provide a suitable solution for all materials.

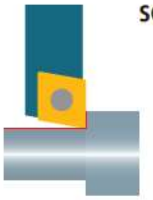
**EN-PF33**
**FN-PF33**

**Advantages:**
– A much wider range of workpieces can be processed.
– Bigger feeds and cutting depths are possible with rounded cutting edges
– Substrates that are both wear-resistant and extremely tough are available.
– Optimally coordinated coatings for high performance.

Front turning

Holders 195

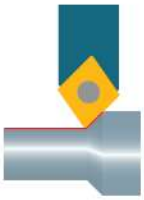
SCAC... U (90°)



Turning

Holders 195

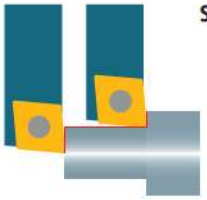
SCDC... U (45°)



Turning and facing

Holders 196

SCLC... U (95°)



Front turning

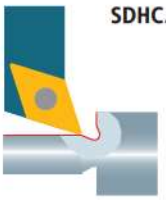
Holders 227

SDAC... U (90°)

Turning and undercutting

Holders 228

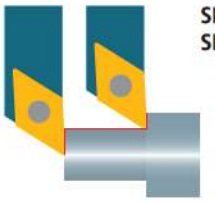
SDHC... U (107.5°)



Turning and facing

Holders 230/252

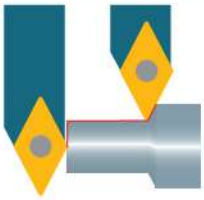
SDJC... U (93°)
SDJN... (93°)



Turning and facing

Holders 234

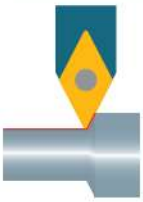
SDNC... U (62.5°)



Turning

Holders 236

SDNCN... U (62.5°)



Front turning

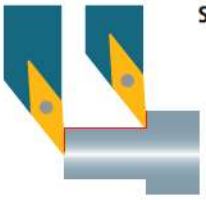
Holders 283

SVAC... U (90°)

Turning and facing

Holders 284

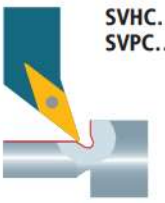
SVJC... U (93°)



Turning and undercutting

Holders 286

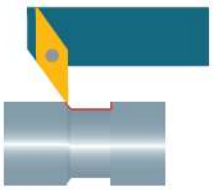
SVHC... U (107.5°)
SVPC... U (117.5°)



Back turning

Holders 290

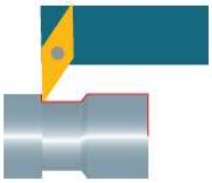
SVQC... (93°)



Turning and facing

Holders 291

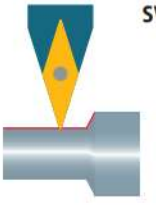
SVUC... (93°)



Turning

Holders 292

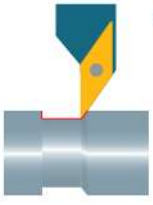
SVVCN... U (72.5°)



Back turning

Holders 294

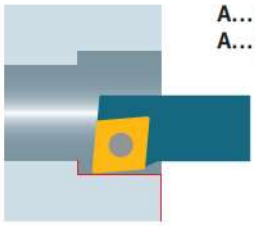
SVXC... (91°)



Turning and facing

Holders 198/199

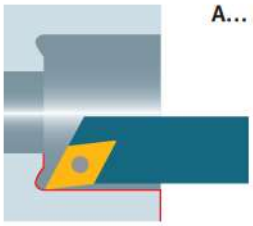
**A... SCFC... (90°)**
**A... SCLC... (95°)**



Turning and facing

Holders 242

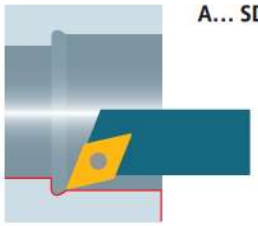
**A... SDOC... (95°)**



Turning and facing

Holders 243

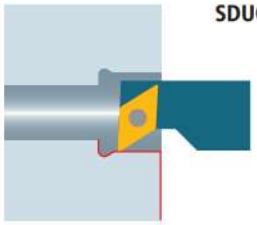
**A... SDQC... (107.5°)**



Turning and facing

Holders 244

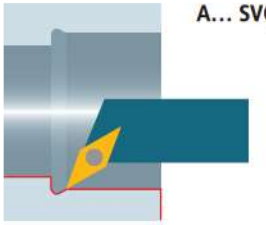
**SDUC... (93°)**



Turning and undercutting

Holders 298

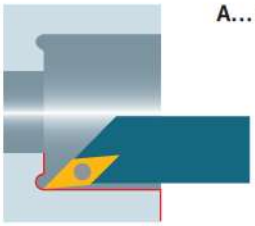
**A... SVQC... (107.5°)**



Turning and facing

Holders 299

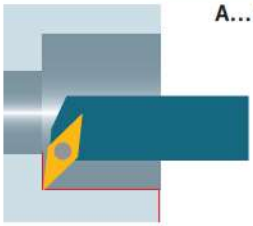
**A... SVOC... (95°)**



Turning and facing

Holders 300

**A... SVUC... (93°)**



Inserts 177/201/249/259

All illustrations show right hand design. Left hand design is also available.

multidec®-ISO provides a well balanced range of tools for turning with rhombic 80° inserts and holders. Positive inserts with rounded cutting edges for roughing and sharp cutting edges for finishing are available.
These include a wide range of ground holders with hardened and nickel-plated surfaces for Swiss type automatic lathes with shank sizes from 8 to 20 mm and boring bars with diameters from 8 to 20 mm.

**Advantages:**
– High cutting volume with high feed rates
– Carbide and Cermet grades with chip breaker and coatings for all common materials
– Diamond range with CVD and PCD inserts for machining non-ferrous metals
– Cutting edge radius from 0.03 to 0.8 mm as standard
– Boring bars with steel- and carbide shank

"IC" tool holder with integrated cooling

Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Conveying the coolant as close as possible to the cutting edge is often a difficult task in the machine rooms of Swiss type turning lathes.
The multidec®-IC program offers a wide range of holders with integrated cooling. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert. This means significantly longer tool life as well as very reliable serial production.

**Advantages:**
– All holders feature five possible connectors for the coolant supply
– Constant coolant discharge means low build-up at front near the holder
– With or without high pressure, the coolant medium always hits the cutting edge precisely

## Overview – multidec®-ISO, type CC... (80°)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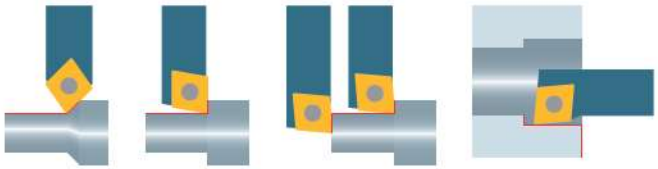
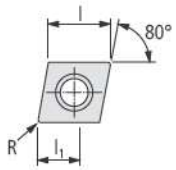
UTILIS multidec swiss type tools



CCGT … -PA3



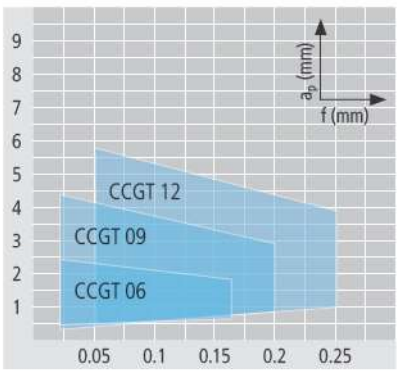


β: 30°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 195… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 060202 FN -PA3 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 6.4 | 0.2 | 4 | | SC…06… |
| CCGT 060204 FN -PA3 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 6.4 | 0.4 | 4 | | SC…06… |
| CCGT 09T304 FN -PA3 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 9.7 | 0.4 | 4 | | SC…09… |
| CCGT 09T308 FN -PA3 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 9.7 | 0.8 | 4 | | SC…09… |



**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- micrograin carbide, heat and wear resistent

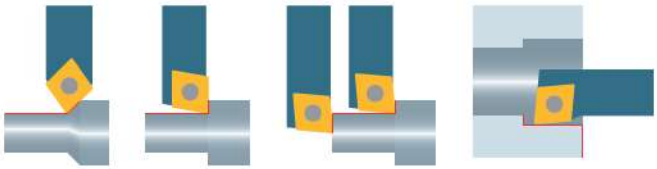


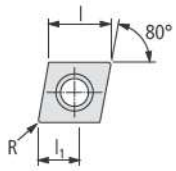

Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

Technical information ..... 11…

Legend ..... 8…







β: 25°
s: ±0.13
C: <0.002

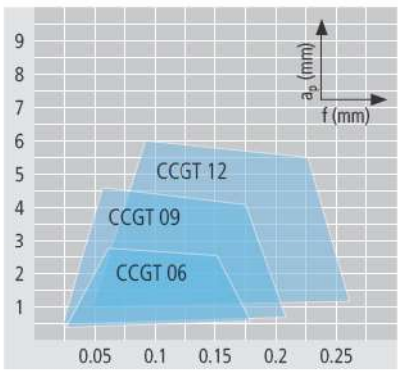
**CCGT … -PA5**

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | ▯ 195… |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | CCGT 060202 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 6.4 | 0.2 | 4 | | SC…06… |
| | CCGT 060204 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 6.4 | 0.4 | 4 | | SC…06… |
| | CCGT 09T302 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 9.7 | 0.2 | 6 | | SC…09… |
| | CCGT 09T304 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 9.7 | 0.4 | 6 | | SC…09… |
| | CCGT 09T308 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 9.7 | 0.8 | 6 | | SC…09… |
| | CCGT 120402 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 12.9 | 0.2 | 8 | | SC…12… |
| | CCGT 120404 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 12.9 | 0.4 | 8 | | SC…12… |
| | CCGT 120408 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | 12.9 | 0.8 | 8 | | SC…12… |

## Application range of chip breaker



**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent

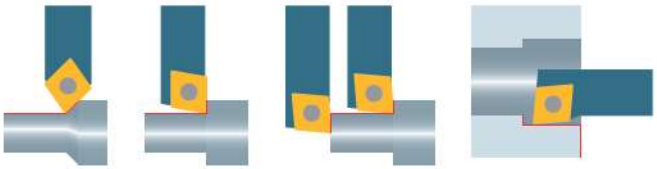



Optimal chip breaking

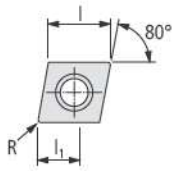
**Application:**
- finishing and micro finishing
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet)





**CCGT … -PA7**





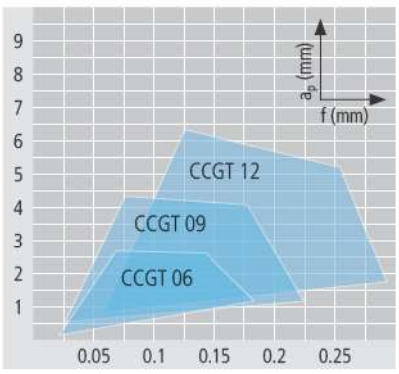
β: 27°
s: ±0.13
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | | ● | ● | ● | – | – | – | | | | | ▯195… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCGT 060202 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 6.4 | 0.2 | 4 | | SC…06… |
| CCGT 060204 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 6.4 | 0.4 | 4 | | SC…06… |
| CCGT 09T3005 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 9.7 | 0.05 | 6 | | SC…09… |
| CCGT 09T301 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 9.7 | 0.1 | 6 | | SC…09… |
| CCGT 09T302 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 9.7 | 0.2 | 6 | | SC…09… |
| CCGT 09T304 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 9.7 | 0.4 | 6 | | SC…09… |
| CCGT 09T308 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 9.7 | 0.8 | 6 | | SC…09… |
| CCGT 120402 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 12.9 | 0.2 | 8 | | SC…12… |
| CCGT 120404 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 12.9 | 0.4 | 8 | | SC…12… |
| CCGT 120408 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 12.9 | 0.8 | 8 | | SC…12… |

## Application range of chip breaker



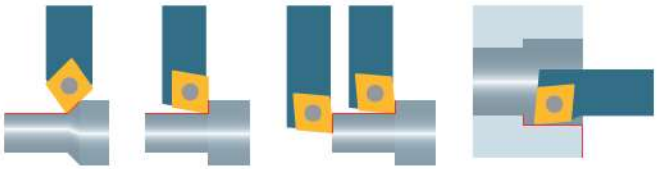
**Properties:**
– ground clearance
– sharp cutting edge "F"
– micrograin carbide, heat and wear resistent



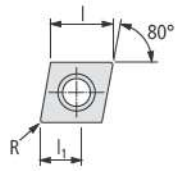

Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with good chip control
– stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet) — multidec®-ISO



CCXT … -PA9



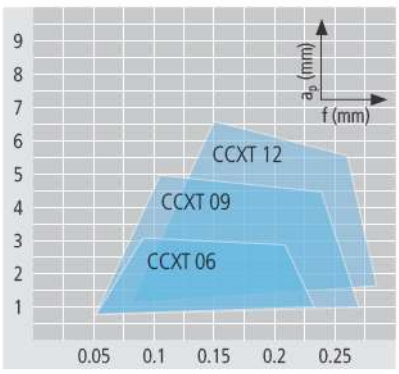


β: 25°
s: ±0.1
C: <0.01

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □195… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCXT 060204 EN -PA9 … | ■ | ■ | □ | | | | | | | | | | | | | | | | | 6.4 | 0.4 | 4 | | SC…06… |
| CCXT 09T304 EN -PA9 … | ■ | ■ | □ | | | | | | | | | | | | | | | | | 9.7 | 0.4 | 6 | | SC…09… |
| CCXT 09T308 EN -PA9 … | ■ | ■ | □ | | | | | | | | | | | | | | | | | 9.7 | 0.8 | 6 | | SC…09… |

## Application range of chip breaker — multidec®-ISO

**Properties:**
- high precision sintered insert
- rounded cutting edge "E"
- micrograin carbide, heat and wear resistent
- best performance-cost ratio

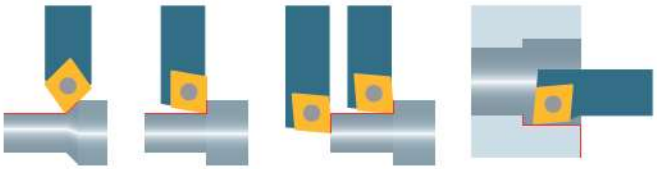



Optimal chip breaking

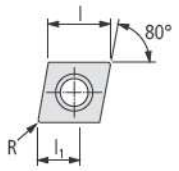
**Application:**
- finishing
- chip breaker for soft materials with good chip control
- alloyed steel, stainless steel, super alloy, titanium and aluminum

## Inserts (Carbide / Cermet)





**CCGT … -PF**





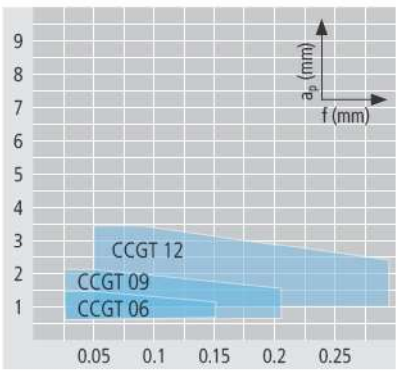
β: 8°
s: ±0.13
C: <0.01

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □ 195… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 060202 EN -PF … | | | | | | | | ■ | | | | ■ | | ■ | ■ | ■ | | | | 6.4 | 0.2 | 1.5 | | SC…06… |
| N CCGT 060204 EN -PF … | | | | | | | | | | | | | | ■ | ■ | ■ | | | | 6.4 | 0.4 | 1.5 | | SC…06… |
| N CCGT 09T302 EN -PF … | | | | | | | | | | | | | | ■ | ■ | ■ | | | | 9.7 | 0.2 | 2 | | SC…09… |
| N CCGT 09T304 EN -PF … | | | | | | | | | | | | | | ■ | ■ | ■ | | | | 9.7 | 0.4 | 2 | | SC…09… |
| N CCGT 09T308 EN -PF … | | | | | | | | | | | | | | | | ■ | | | | 9.7 | 0.8 | 2 | | SC…09… |
| N CCGT 120404 EN -PF … | | | | | | | | | | | | | | ■ | ■ | | | | | 12.9 | 0.4 | 3.2 | | SC…12… |

## Application range of chip breaker

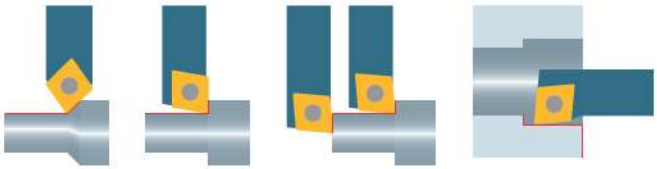


**Properties:**
– ground clearance
– little rounded cutting edge "E"
– carbide and cermet in different grades

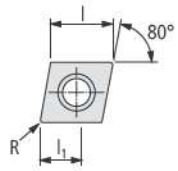



Optimal chip breaking

**Application:**
– finishing and micro finishing
– chip breaker for general application
– alloyed steel and stainless steel



CCGT … FN -PF23





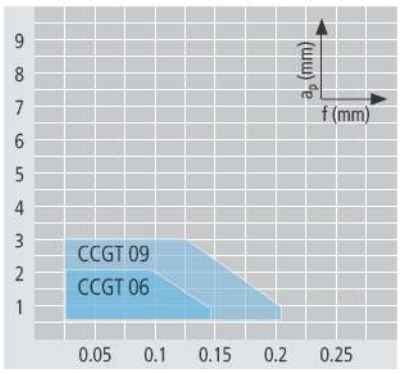
β: 12°
s: ±0.13
C: <0.002

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | □ 195… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 0602005 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 6.4 | 0.05 | 2 | | SC…06… |
| N CCGT 060201 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 6.4 | 0.1 | 2 | | SC…06… |
| N CCGT 060202 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 6.4 | 0.2 | 2 | | SC…06… |
| N CCGT 09T3005 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 9.7 | 0.05 | 3 | | SC…09… |
| N CCGT 09T301 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 9.7 | 0.1 | 3 | | SC…09… |
| N CCGT 09T302 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 9.7 | 0.2 | 3 | | SC…09… |

## Application range of chip breaker

multidec®-ISO

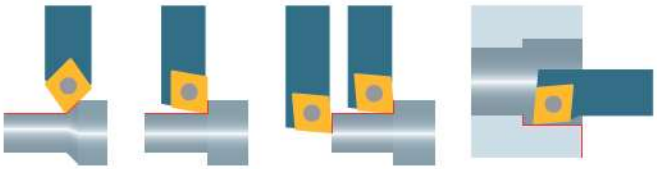
**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– micrograin carbide



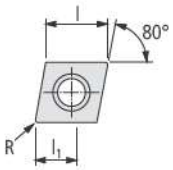

Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel

## Inserts (Carbide / Cermet) — multidec®-ISO



**CCGT … EN -PF23**



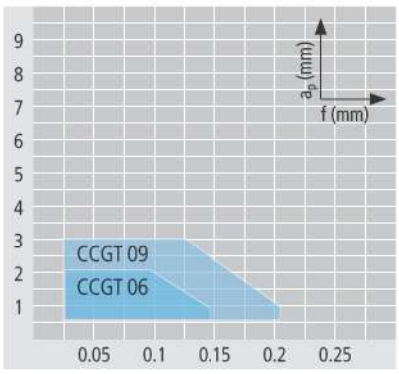


β: 12°
s: ±0.13
C: <0.03

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯195… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| CCGT 0602005 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 6.4 | 0.05 | 2 | | SC…06… |
| CCGT 060201 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 6.4 | 0.1 | 2 | | SC…06… |
| CCGT 060202 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 6.4 | 0.2 | 2 | | SC…06… |
| CCGT 09T3005 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 9.7 | 0.05 | 3 | | SC…09… |
| CCGT 09T301 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 9.7 | 0.1 | 3 | | SC…09… |
| CCGT 09T302 EN -PF23 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 9.7 | 0.2 | 3 | | SC…09… |

## Application range of chip breaker — multidec®-ISO

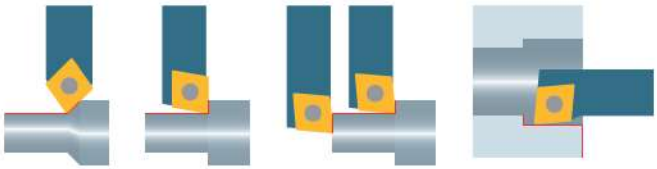
**Properties:**
– polished rake
– ground clearance
– little rounded cutting edge "E"
– micrograin carbide



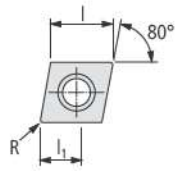

Optimal chip breaking

**Application:**
– finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel

## Inserts (Carbide / Cermet) — multidec®-ISO



**CCMT … -PF43**



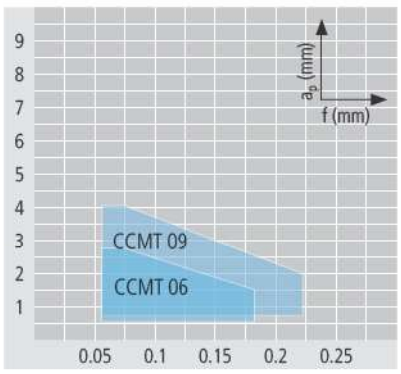


β: 12°
s: ±0.13
C: <0.02

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □195… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCMT 060202 EN -PF43 … | | | | | | | | | | ■ | | | | | | | | | | 6.4 | 0.2 | 2.6 | | SC…06… |
| N CCMT 060204 EN -PF43 … | | | | | | | | | | ■ | | | | | | | | | | 6.4 | 0.4 | 2.6 | | SC…06… |
| N CCMT 09T302 EN -PF43 … | | | | | | | | | | ■ | | | | | | | | | | 9.7 | 0.2 | 4 | | SC…09… |
| N CCMT 09T304 EN -PF43 … | | | | | | | | | | | | ■ | | | | | | | | 9.7 | 0.4 | 4 | | SC…09… |
| N CCMT 09T308 EN -PF43 … | | | | | | | | | | | | ■ | | | | | | | | 9.7 | 0.8 | 4 | | SC…09… |

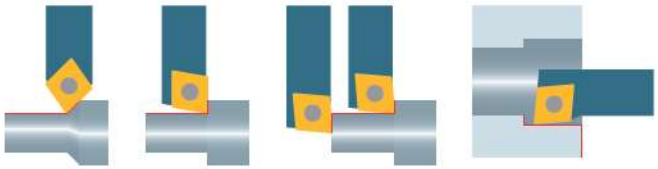
## Application range of chip breaker — multidec®-ISO

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

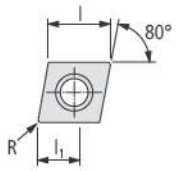



Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel



**CCMT … -PM**





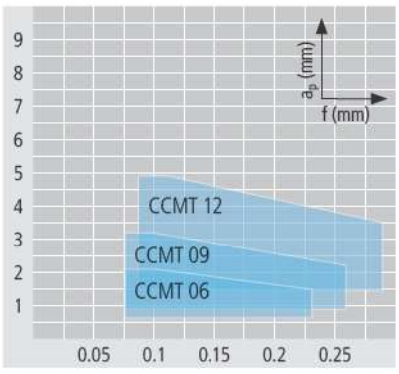
β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □ 195… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| CCMT 060204 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 6.4 | 0.4 | 2 | | SC…06… |
| CCMT 060208 EN -PM … | | | | ■ | | | | | | | | ■ | | | | | | | | 6.4 | 0.8 | 2 | | SC…06… |
| CCMT 09T304 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 9.7 | 0.4 | 3.2 | | SC…09… |
| CCMT 09T308 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 9.7 | 0.8 | 3.2 | | SC…09… |
| CCMT 120404 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 12.9 | 0.4 | 4.8 | | SC…12… |
| CCMT 120408 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 12.9 | 0.8 | 4.8 | | SC…12… |

## Application range of chip breaker

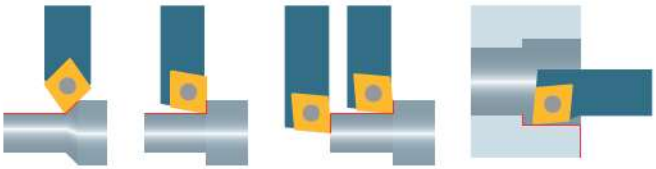


**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

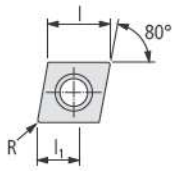



Optimal chip breaking

**Application:**
– roughing
– chip breaker for general application
– alloyed steel and stainless steel



**CCMT … -PMF**



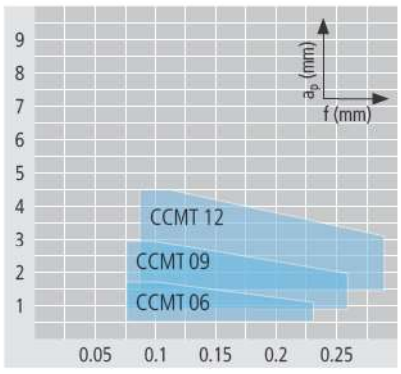


β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯195… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCMT 060204 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 6.4 | 0.4 | 2 | | SC…06… |
| CCMT 09T304 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 9.7 | 0.4 | 3.2 | | SC…09… |
| CCMT 09T308 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 9.7 | 0.8 | 3.2 | | SC…09… |
| CCMT 120404 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 12.9 | 0.4 | 4.8 | | SC…12… |



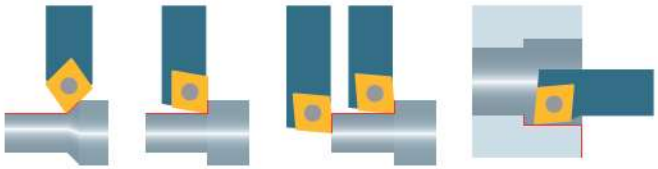
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide



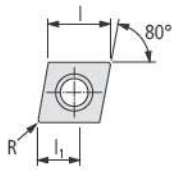

Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for general application
– alloyed steel and stainless steel

UTILIS multidec swiss type tools



CCMT … -PM25





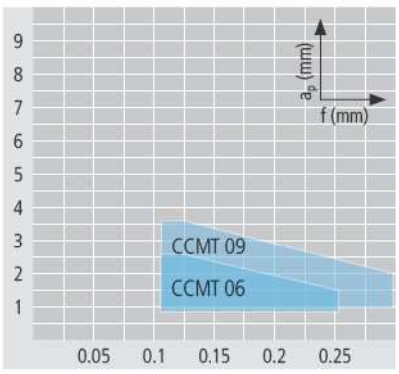
β: 18°
s: ±0.13
C: <0.02

| Order designation | Carbide (🗋20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 🗋195… |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCMT 060204 EN -PM25 … | | | | | | ■ | | | | | | | | | | | | | | 6.4 | 0.4 | 2 | | SC…06… |
| CCMT 09T304 EN -PM25 … | | | | | | ■ | | | | | | | | | | | | | | 9.7 | 0.4 | 2.2 | | SC…09… |
| CCMT 09T308 EN -PM25 … | | | | | | ■ | | | | | | | | | | | | | | 9.7 | 0.8 | 3.2 | | SC…09… |

## Application range of chip breaker

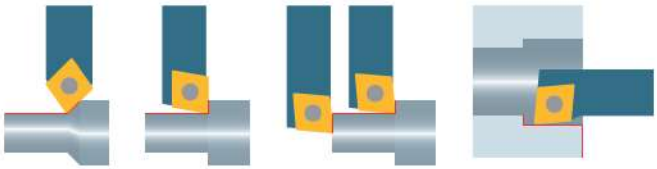


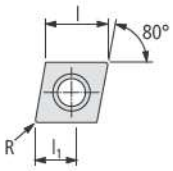
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide




Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for materials with difficult chip control
– stainless steel





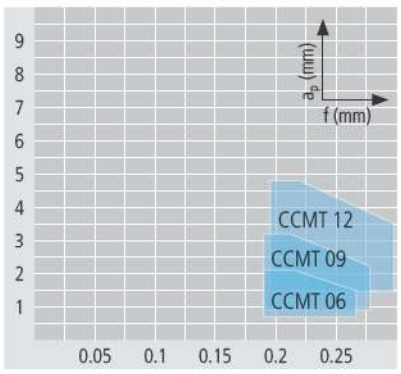

**CCMT … -PM55**


β: 16°
s: ±0.13
C: <0.02

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □195… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCMT 060204 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 6.4 | 0.4 | 2.6 | | SC…06… |
| N CCMT 09T304 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 9.7 | 0.4 | 3 | | SC…09… |
| N CCMT 09T308 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 9.7 | 0.8 | 4 | | SC…09… |
| N CCMT120404 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 12.9 | 0.4 | 4 | | SC…12… |
| N CCMT120408 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 12.9 | 0.8 | 4.8 | | SC…12… |



**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

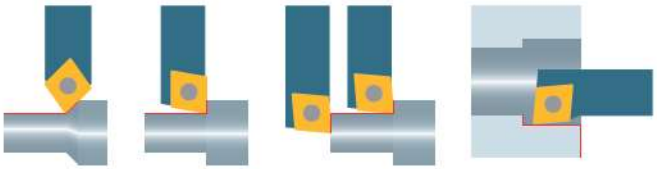



Optimal chip breaking

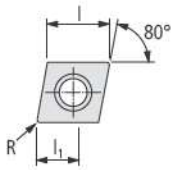
**Application:**
– roughing
– chip breaker for general application
– stainless steel

## Inserts (Carbide / Cermet)

multidec®-ISO



**CCET ... -U**





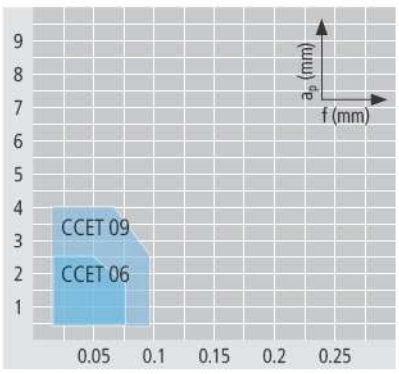
β: 12°
s: ±0.025
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | | ● | ● | ● | – | – | – | | | | | ▯195... |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | | l | R | $l_1$ | |
| **PREMIUM-LINE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| R CCET 0602003 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 6.4 | 0.03 | 2.5 | | SC...06... |
| R CCET 060201 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 6.4 | 0.1 | 2.5 | | SC...06... |
| R CCET 060202 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 6.4 | 0.2 | 2.5 | | SC...06... |
| R CCET 09T3003 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 9.7 | 0.03 | 4 | | SC...09... |
| R CCET 09T301 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 9.7 | 0.1 | 4 | | SC...09... |
| R CCET 09T302 FR -U ... | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | | | 9.7 | 0.2 | 4 | | SC...09... |

## Application range of chip breaker

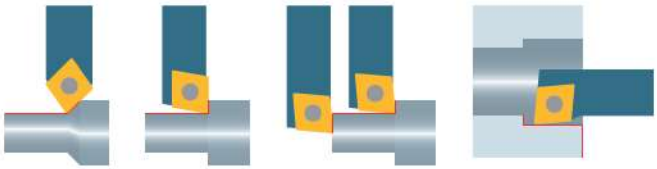
multidec®-ISO

**Properties:**
- ground rake and clearence
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent and cermet

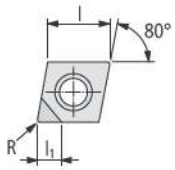



Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- alloyed steel and stainless steel



CCGT …



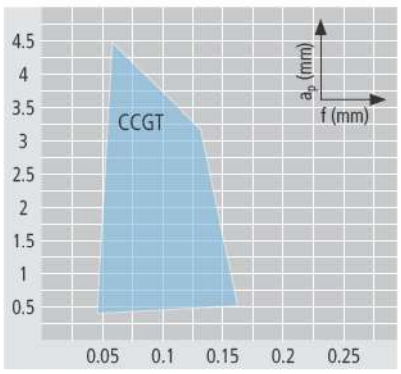


β: 7°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N | CCGT 060201 FN … | | | | | | | | | | | | | | | | ■ | ■ | | 6.4 | 0.1 | 3.5 | | SC…06… |
| | CCGT 060202 FN … | | | | | | | | | | | | | | | | ■ | ■ | | 6.4 | 0.2 | 3.5 | | SC…06… |
| | CCGT 060204 FN … | | | | | | | | | | | | | | | | ■ | | | 6.4 | 0.4 | 3.5 | | SC…06… |
| | CCGT 09T302 FN … | | | | | | | | | | | | | | | | ■ | ■ | | 9.7 | 0.2 | 4.5 | | SC…09… |
| | CCGT 09T304 FN … | | | | | | | | | | | | | | | | ■ | | | 9.7 | 0.4 | 4.3 | | SC…09… |



**Properties:**
– sharp cutting edge "F"
– less cutting force
– positive cut

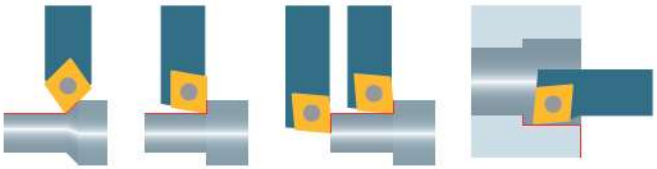



Optimal chip breaking

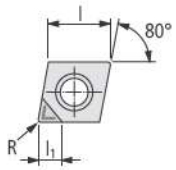
**Application:**
– finishing and micro finishing for unstable or thin-walled parts
– chip breaker for general application will generate continues chip
– aluminum, brass, copper, bronze, platinium, gold, synthetics and synthetics reinforced/composites
– Ideal for smallest tolerance and medium surface quality

## Inserts (Diamond)





**CCGT … -UWS**





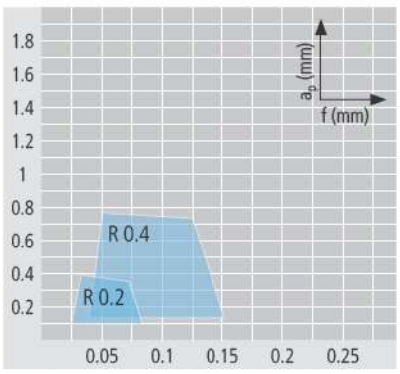
β: 15–20°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 🗋195… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 060202 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | | 6.4 | 0.2 | 3 | | SC…06… |
| N CCGT 060204 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | | 6.4 | 0.4 | 3 | | SC…06… |
| N CCGT 09T302 FN -UWS … | | | | | | | | | | | | | | | | | | ■ | | 9.7 | 0.2 | 3 | | SC…09… |
| N CCGT 09T304 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | | 9.7 | 0.4 | 3 | | SC…09… |

## Application range of chip breaker



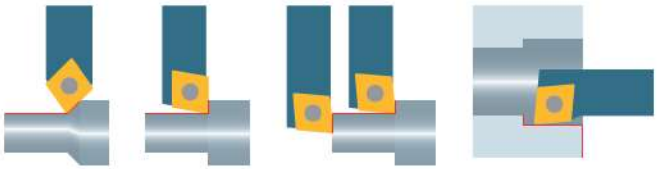
**Properties:**
- sharp cutting edge "F"
- almost any cutting force
- high positive narrow chip breaker made by laser



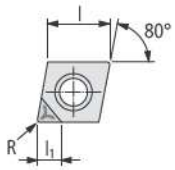

Optimal chip breaking

**Application:**
- micro finishing for unstable or thin-walled parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and medium surface quality

## Inserts (Diamond) — multidec®-ISO



CCGT … -UWN



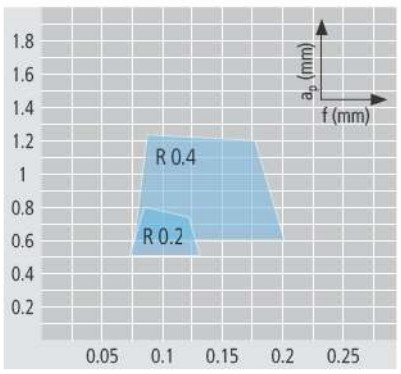


β: 15–20°
s: ±0.13
C: <0.005

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □195… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 060202 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 6.4 | 0.2 | 3 | | SC…06… |
| CCGT 060204 FN -UWN … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 6.4 | 0.4 | 3 | | SC…06… |
| CCGT 09T302 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 9.7 | 0.2 | 3 | | SC…09… |
| CCGT 09T304 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 9.7 | 0.4 | 3 | | SC…09… |

## Application range of chip breaker — multidec®-ISO

**Properties:**
- sharp cutting edge "F"
- higher cutting force
- high positive wide chip breaker made by laser

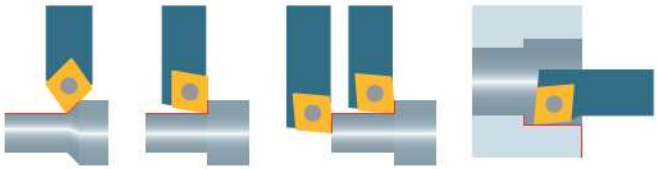


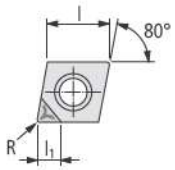

Optimal chip breaking

**Application:**
- finishing for stable or solid parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and best surface quality

## Inserts (Diamond)









β: 15–20°
s: ±0.13
C: <0.005

**CCGT … TOP* -UWN**

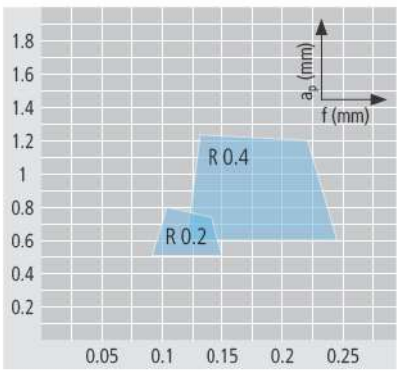
| Order designation | Carbide ⬚20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ⬚195… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N CCGT 060202 FN TOP -UWN … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 6.4 | 0.2 | 3 | | SC…06… |
| CCGT 060204 FN TOP -UWN … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 6.4 | 0.4 | 3 | | SC…06… |
| CCGT 09T302 FN TOP- UWN … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 9.7 | 0.2 | 3 | | SC…09… |
| CCGT 09T304 FN TOP -UWN … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 9.7 | 0.4 | 3 | | SC…09… |

* Description TOP ⬚13

## Application range of chip breaker

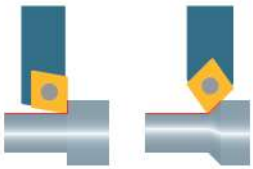


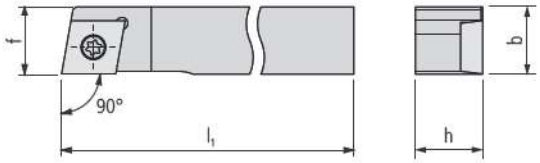
**Properties:**
- sharp cutting edge "F"
- higher cutting force
- high positive wide chip breaker made by laser
- TOP system, for a better surface finish




Optimal chip breaking

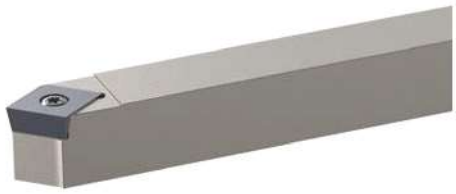
**Application:**
- finishing for stable or solid parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and best surface quality

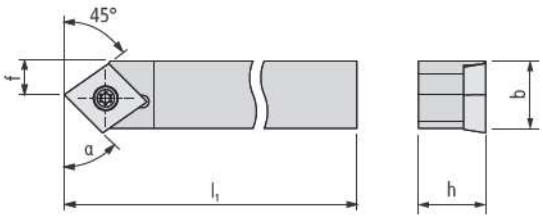





## SCAC… U (90°)

| Order designation L | | Order designation R | | b | h | $l_1$ | | f | | | | Inserts 178… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SCACL 0808 K06 U | ■ | SCACR 0808 K06 U | ■ | 8 | 8 | 125 | | 8 | | | | CC..0602.. |
| SCACL 1010 M06 U | ■ | SCACR 1010 M06 U | ■ | 10 | 10 | 150 | | 10 | | | | CC..0602.. |
| SCACL 1212 M09 U | ■ | SCACR 1212 M09 U | ■ | 12 | 12 | 150 | | 12 | | | | CC..09T3.. |
| SCACL 1616 H09 U | ■ | SCACR 1616 H09 U | ■ | 16 | 16 | 100 | | 16 | | | | CC..09T3.. |
| SCACL 2020 K12 U | ■ | SCACR 2020 K12 U | ■ | 20 | 20 | 125 | | 20 | | | | CC..1204.. |

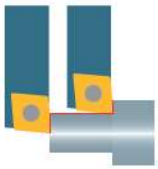


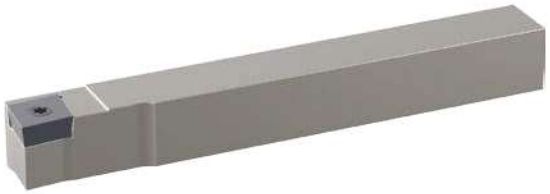


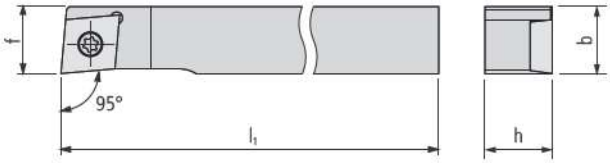

## SCDC… U (45°)

| Order designation L | | Order designation R | | b | h | $l_1$ | | f | | α | | Inserts 178… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SCDCL 0808 K06 U | ■ | | | 8 | 8 | 125 | | 4 | | 55° | | CC..0602.. |
| SCDCL 1010 M06 U | ■ | | | 10 | 10 | 150 | | 5 | | 55° | | CC..0602.. |
| SCDCL 1212 M09 U | ■ | | | 12 | 12 | 150 | | 6 | | 55° | | CC..09T3.. |

Legend ..... 8…








## SCLC... U (95°)

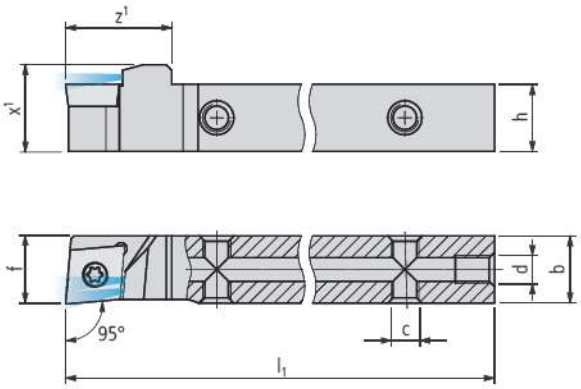
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 178... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SCLCL 0808 F06 U | ■ | SCLCR 0808 F06 U | ■ | 8 | 8 | 80 | | 7.95 | | | | CC..0602.. |
| SCLCL 0808 H06 U | ■ | SCLCR 0808 H06 U | ■ | 8 | 8 | 100 | | 7.95 | | | | CC..0602.. |
| SCLCL 1010 F06 U | ■ | SCLCR 1010 F06 U | ■ | 10 | 10 | 80 | | 9.95 | | | | CC..0602.. |
| SCLCL 1010 H06 U | ■ | SCLCR 1010 H06 U | ■ | 10 | 10 | 100 | | 9.95 | | | | CC..0602.. |
| SCLCL 1212 H09 U | ■ | SCLCR 1212 H09 U | ■ | 12 | 12 | 100 | | 11.95 | | | | CC..09T3.. |
| SCLCL 1616 K09 U | ■ | SCLCR 1616 K09 U | ■ | 16 | 16 | 125 | | 15.95 | | | | CC..09T3.. |

## SCLC... U (95°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 178... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SCLCL 3/8" H06 U | ■ | SCLCR 3/8" H06 U | ■ | 9.525 | 9.525 | 100 | | 9.475 | | | | CC..0602.. |
| SCLCL 1/2" H09 U | ■ | SCLCR 1/2" H09 U | ■ | 12.7 | 12.7 | 100 | | 12.65 | | | | CC..09T3.. |
| SCLCL 5/8" K09 U | ■ | SCLCR 5/8" K09 U | ■ | 15.875 | 15.875 | 125 | | 15.825 | | | | CC..09T3.. |

Legend ..... 8...

**With internal cooling**



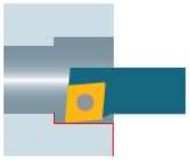

## SCLC… U IC (95°)

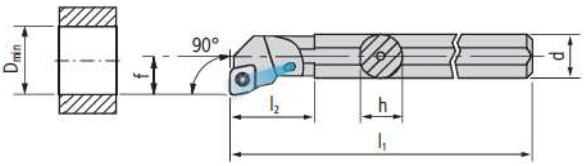
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 178… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SCLCL 0808 H06 U IC | ■ | SCLCR 0808 H06 U IC | ■ | 8 | 8 | 100 | 16 | 11.5 | M5 | M5 | 7.95 | CC.. 0602.. |
| SCLCL 1010 H06 U IC | ■ | SCLCR 1010 H06 U IC | ■ | 10 | 10 | 100 | 16 | 13.5 | M5 | M5 | 9.95 | CC.. 0602.. |
| SCLCL 1212 H09 U IC | ■ | SCLCR 1212 H09 U IC | ■ | 12 | 12 | 100 | 19 | 15.5 | M5 | M5 | 11.95 | CC.. 09T3.. |
| SCLCL 1616 K09 U IC | ■ | SCLCR 1616 K09 U IC | ■ | 16 | 16 | 125 | 19 | 19.5 | M5 | G⅛" | 15.95 | CC.. 09T3.. |

## SCLC… U IC (95°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 178… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SCLCL 3/8" H06 U IC | ■ | SCLCR 3/8" H06 U IC | ■ | 9.525 | 9.525 | 100 | 16 | 13 | M5 | M5 | 9.475 | CC..0602... |
| SCLCL 1/2" H09 U IC | ■ | SCLCR 1/2" H09 U IC | ■ | 12.7 | 12.7 | 100 | 19 | 16.2 | M5 | M5 | 12.65 | CC..09T3.. |
| SCLCL 5/8" K09 U IC | ■ | SCLCR 5/8" K09 U IC | ■ | 15.875 | 15.875 | 125 | 19 | 19.4 | M5 | G⅛" | 15.825 | CC..09T3.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…

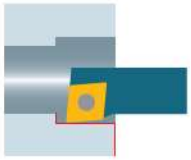


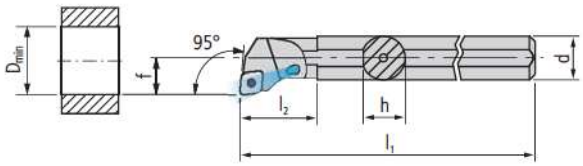



**A... SCFC... (90°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | | | 178... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A08F SCFCL 06 | ■ | A08F SCFCR 06 | ■ | 8 | 7.6 | 80 | 17 | 5 | 11 | | | CC..0602.. |
| A10H SCFCL 06 | ■ | A10H SCFCR 06 | ■ | 10 | 9.5 | 100 | 19 | 7 | 13 | | | CC..0602.. |
| A12K SCFCL 06 | ■ | A12K SCFCR 06 | ■ | 12 | 11.5 | 125 | 22 | 9 | 16 | | | CC..0602.. |

Legend ..... 8...






**A... SCLC... (95°)**

| Order designation L | | Order designation R | | Dimensions d | h | $l_1$ | $l_2$ | f | $D_{min}$ | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| A08F SCLCL 06 | ■ | A08F SCLCR 06 | ■ | 8 | 7.6 | 80 | 17 | 5 | 11 | | | CC..0602.. |
| A10H SCLCL 06 | ■ | A10H SCLCR 06 | ■ | 10 | 9.5 | 100 | 19 | 7 | 13 | | | CC..0602.. |
| A12K SCLCL 06 | ■ | A12K SCLCR 06 | ■ | 12 | 11.5 | 125 | 22 | 9 | 16 | | | CC..0602.. |
| A16M SCLCL 09 | ■ | A16M SCLCR 09 | ■ | 16 | 15 | 150 | 29 | 11 | 20 | | | CC..09T3.. |
| A20Q SCLCL 09 | ■ | A20Q SCLCR 09 | ■ | 20 | 18.5 | 180 | 32 | 13 | 25 | | | CC..09T3.. |

## Replacement and spare parts



### For holders (SC...) OD turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2.5×6 T08 | MSP 25060 T08 | ■ | SC... 06 |
| | | M3.5×11 T15 | MSP 35110 T15 | ■ | SC... 09 |
| | | M4.5×12 T15 | MSP 45120 T15 | ■ | SC... 12 |

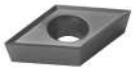
### For holders (... SC...) ID turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2.5×5 T08 | MSP 25050 T08 | ■ | A... SC... 06 |
| | | M3.5×7.2 T15 | MSP 35072 T15 | ■ | A16M SC...09 |
| | | M3.5×8.6 T15 | MSP 35086 T15 | ■ | A20Q SC... 09 |

TORX screwdriver ..... 651...

Legend ..... 8...

multidec®-ISO provides a well balanced range of tools for turning with rhombic 55° inserts and holders. Positive inserts with rounded cutting edges for roughing and sharp cutting edges for finishing are available.
These include a wide range of ground holders with hardened and nickel-plated surfaces for Swiss type automatic lathes with shank sizes from 8 to 20 mm and boring bars with diameters from 10 to 20 mm.



**Advantages:**
– Carbide and Cermet grades with chip breaker and coatings for all common materials
– Diamond range with CVD and PCD inserts for machining non-ferrous metals
– Cutting edge radius from 0.03 to 0.8 mm as standard
– Boring bars with steel- and carbide shanks

"IC" tool holder with integrated cooling

Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Conveying the coolant as close as possible to the cutting edge is often a difficult task in the machine rooms of Swiss type turning lathes.
The multidec®-IC program offers a wide range of holders with integrated cooling. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert. This means significantly longer tool life as well as very reliable serial production.

**Advantages:**
– All holders feature five possible connectors for the coolant supply
– Constant coolant discharge means low build-up at front near the holder
– With or without high pressure, the coolant medium always hits the cutting edge precisely

"TWIN" holder with and without integrated coolant supply

The "TWIN" range allows you to work with two inserts on the same holder.
Different combinations are possible, and provide the user with a high degree of flexibility. Holders are available with shank cross-sections of 8 to 20 mm, with and without internal cooling.

**Advantages:**
– Twice the number of tools on the machine
– Two different turning operations are possible with a single tool holder
– All holders with an integrated coolant supply have five connecting options

"FC" holder with quick cutting edge change system (fast change)

The cutting edge can be changed without unclamping the holder using the "FC" holder. The indexable insert is mounted using a specially developed knee lever which is operated using a clamping screw on the rear of the holder.

**Advantages:**
– Quick indexable insert change directly in the machine
– Holder with and without integrated coolant supply

## *Overview – multidec®-ISO, type DC... (55°)*

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Inserts (carbide / cermet)

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DCGT … -PA7 207
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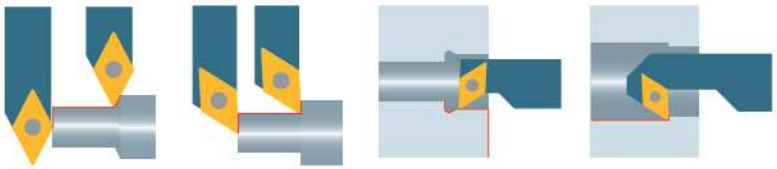
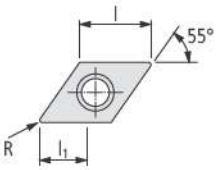
UTILIS multidec swiss type tools



DCGT ... FN -A3





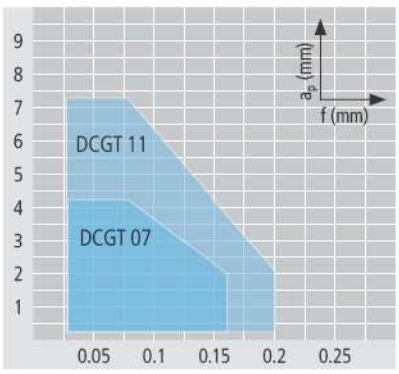
β: 30°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 0702006 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.06 | 4.1 | | SD...07... |
| DCGT 0702015 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.15 | 4.1 | | SD...07... |
| DCGT 0702035 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.35 | 4.1 | | SD...07... |
| DCGT 11T3008 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.08 | 7.2 | | SD...11... |
| DCGT 11T3015 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.15 | 7.2 | | SD...11... |
| DCGT 11T3035 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.35 | 7.2 | | SD...11... |

## Application range of chip breaker

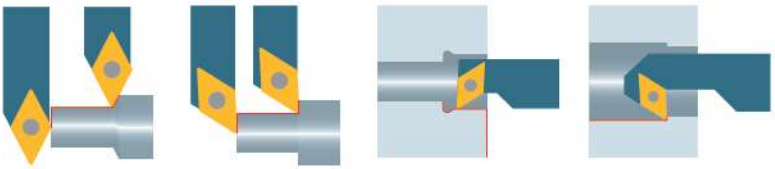
multidec®-ISO

**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent

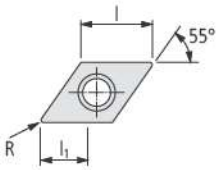



Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for general application
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites



DCGT … EN -A3





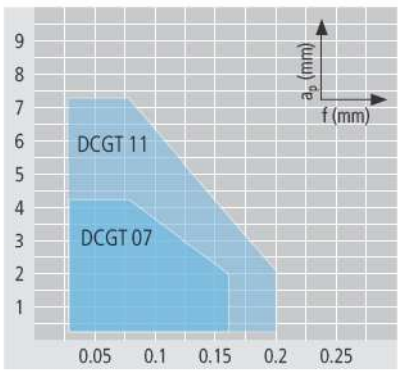
β: 30°
s: ±0.13
C: <0.03

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227… |
| – | – | ● | ● | O | ● | ● | ● | O | O | ● | ● | ● | O | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | O | ● | ● | O | O | ● | ● | ● | ● | ● | O | ● | O | – | – | – | | | | | |
| O | ● | ● | – | O | ● | ● | – | O | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | O | – | – | ● | O | – | – | O | – | O | – | – | O | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | O | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 0702006 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.06 | 4.1 | | SD…07… |
| N DCGT 0702015 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.15 | 4.1 | | SD…07… |
| N DCGT 0702035 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.35 | 4.1 | | SD…07… |
| N DCGT 11T3008 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.08 | 7.2 | | SD…11… |
| N DCGT 11T3015 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.15 | 7.2 | | SD…11… |
| N DCGT 11T3035 EN -A3 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.35 | 7.2 | | SD…11… |

## Application range of chip breaker



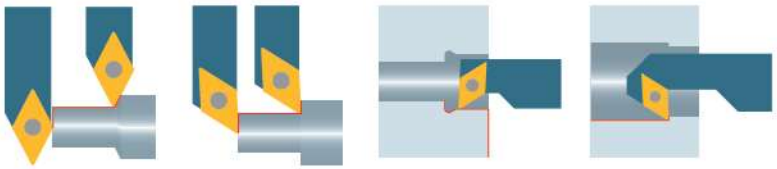
**Properties:**
- polished rake
- ground clearance
- little rounded cutting edge "E"
- submicrograin carbide, heat and wear resistent



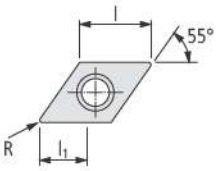

Optimal chip breaking

**Application:**
- finishing
- chip breaker for general application
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

UTILIS multidec swiss type tools



DCGT ... -PA3



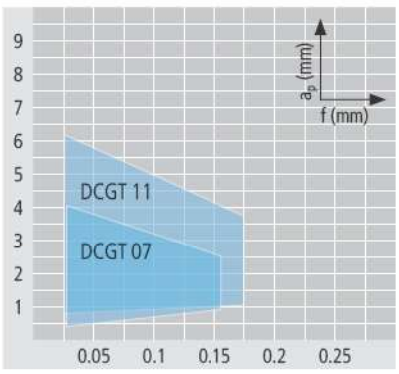


β: 30°
s: ±0.13
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 070204 FN -PA3 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.4 | 4 | | SD...07... |
| DCGT 11T304 FN -PA3 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 6.2 | | SD...11... |
| DCGT 11T308 FN -PA3 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 6.2 | | SD...11... |



**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- micrograin carbide, heat and wear resistent



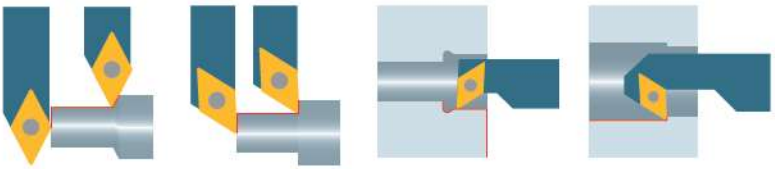

Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

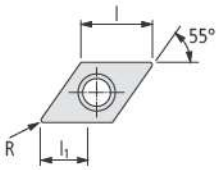
Technical information ▯11...

Legend ▯8...

## Inserts (Carbide / Cermet) — multidec®-ISO



DCGT … -PA5



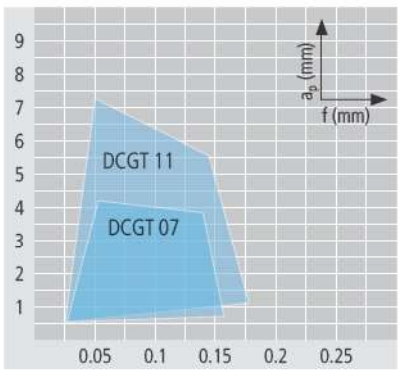


β: 25°
s: ±0.13
C: <0.002

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 070202 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.2 | 4.1 | | SD…07… |
| N DCGT 070204 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.4 | 4.1 | | SD…07… |
| N DCGT 11T302 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.2 | 7.2 | | SD…11… |
| N DCGT 11T304 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD…11… |
| N DCGT 11T308 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD…11… |

## Application range of chip breaker — multidec®-ISO

**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent

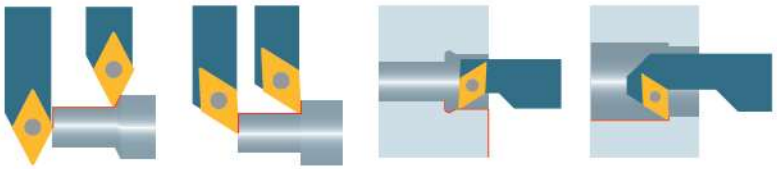



Optimal chip breaking

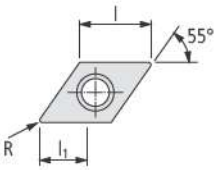
**Application:**
- finishing and micro finishing
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet)





**DCGT … -TOP5***





β: 25°
s: ±0.13
C: <0.002

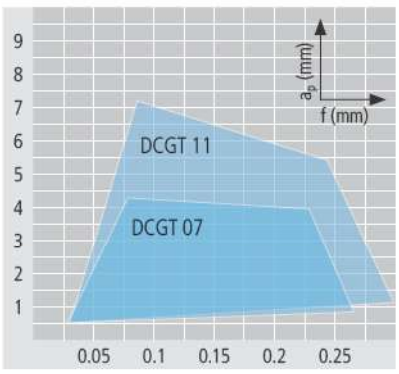
| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| L DCGT 11T304 FL -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD…11… |
| L DCGT 11T308 FL -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD…11… |
| N DCGT 11T304 FN -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD…11… |
| N DCGT 11T308 FN -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD…11… |
| R DCGT 11T304 FR -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD…11… |
| R DCGT 11T308 FR -TOP5 … | ■ | ■ | ▫ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD…11… |

* Description TOP ▯13

## Application range of chip breaker



**Properties:**
- polished rake and ground clearance
- sharp cutting edge "F"
- micrograin carbide, heat and wear resistent
- TOP system, for a better surface finish

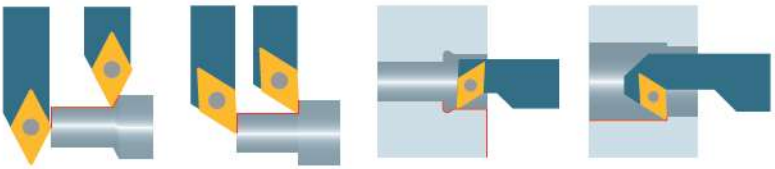



Optimal chip breaking

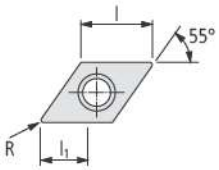
**Application:**
- finishing for 20–100 % higher feed rates compair to the standard
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

Technical information ▯11…

Legend ▯8…



DCGT … -PA7





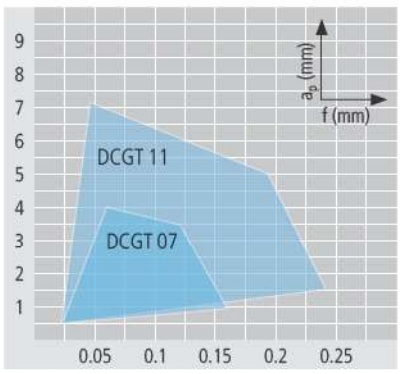
β: 27°
s: ±0.13
C: <0.002

| Order designation | Carbide (□20) | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 0702005 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.05 | 4 | | SD…07… |
| DCGT 070201 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.1 | 4 | | SD…07… |
| DCGT 070202 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.2 | 4 | | SD…07… |
| DCGT 070204 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 7.75 | 0.4 | 4 | | SD…07… |
| DCGT 11T3005 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.05 | 7.2 | | SD…11… |
| DCGT 11T301 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.1 | 7.2 | | SD…11… |
| DCGT 11T302 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.2 | 7.2 | | SD…11… |
| DCGT 11T304 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD…11… |
| DCGT 11T308 FN -PA7 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD…11… |

## Application range of chip breaker

multidec®-ISO

**Properties:**
– ground clearance
– sharp cutting edge "F"
– micrograin carbide, heat and wear resistent

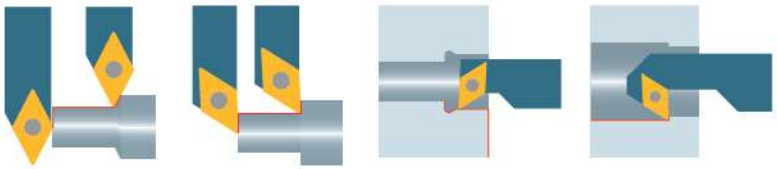



Optimal chip breaking

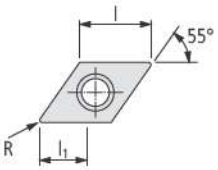
**Application:**
– micro finishing
– chip breaker for materials with good chip control
– stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet)





**DCXT ... -PA9**





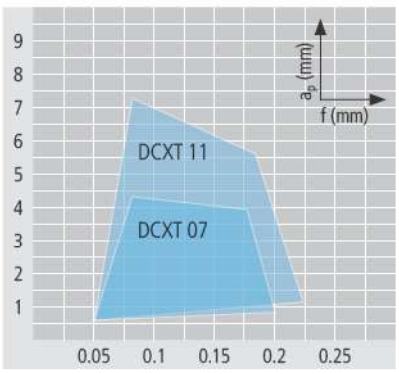
β: 25°
s: ±0.1
C: <0.01

| Order designation | Carbide (20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227... |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCXT 070204 EN -PA9 ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 7.75 | 0.4 | 4 | | SD...07... |
| DCXT 11T304 EN -PA9 ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 7.2 | | SD...11... |
| DCXT 11T308 EN -PA9 ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 11.6 | 0.8 | 7.2 | | SD...11... |

## Application range of chip breaker

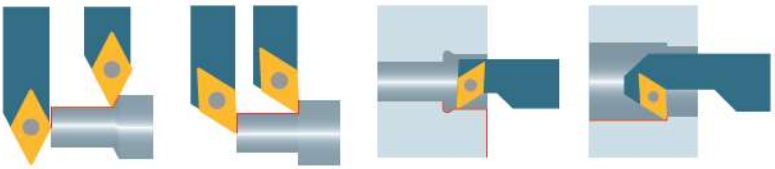


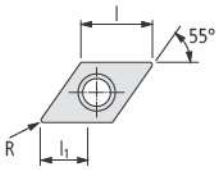
**Properties:**
- high precision sintered insert
- rounded cutting edge "E"
- micrograin carbide, heat and wear resistent
- best performance-cost ratio




Optimal chip breaking

**Application:**
- finishing
- chip breaker for soft materials with good chip control
- alloyed steel, stainless steel, super alloy, titanium and aluminum






**DCGT … FN -PF**

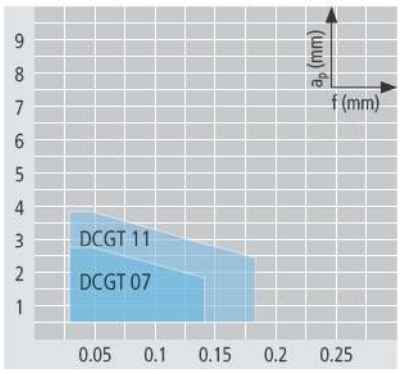

β: 8°
s: ±0.13
C: <0.002

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 070201 FN -PF … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 7.75 | 0.1 | 2.8 | | SD…07… |
| DCGT 070202 FN -PF … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 7.75 | 0.2 | 2.8 | | SD…07… |
| DCGT 11T302 FN -PF … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 11.6 | 0.2 | 3.9 | | SD…11… |
| DCGT 11T304 FN -PF … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 11.6 | 0.4 | 3.9 | | SD…11… |

## Application range of chip breaker

multidec®-ISO

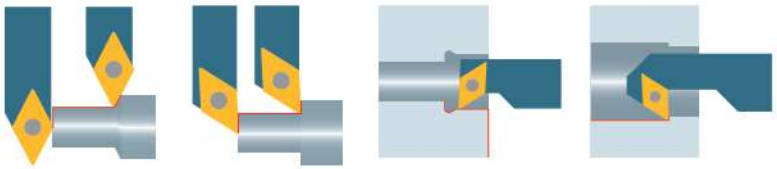
**Properties:**
– ground clearance
– sharp cutting edge "F"
– carbide and cermet in different grades



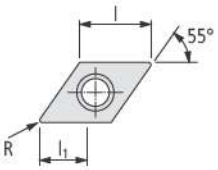

Optimal chip breaking

**Application:**
– finishing and micro finishing
– chip breaker for general application
– alloyed steel and stainless steel

UTILIS multidec swiss type tools



DCGT ... EN -PF





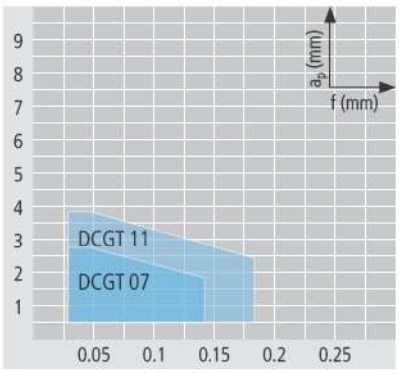
β: 8°
s: ±0.13
C: <0.03

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N | DCGT 070201 EN -PF ... | | | | | | | | | | | | | ■ | ■ | | | | | 7.75 | 0.1 | 2.8 | | SD...07... |
| | DCGT 070202 EN -PF ... | | | | | | | ■ | | | | ■ | | ■ | ■ | ■ | | | | 7.75 | 0.2 | 2.8 | | SD...07... |
| | DCGT 070204 EN -PF ... | | | | | | | | | | | | | ■ | ■ | ■ | | | | 7.75 | 0.4 | 2.8 | | SD...07... |
| | DCGT 11T302 EN -PF ... | | | | | | | | | | | | | ■ | ■ | ■ | | | | 11.6 | 0.2 | 3.9 | | SD...11... |
| | DCGT 11T304 EN -PF ... | | | | | | | | | | | | | ■ | ■ | ■ | | | | 11.6 | 0.4 | 3.9 | | SD...11... |
| | DCGT 11T308 EN -PF ... | | | | | | | | | | | | | ■ | ■ | ■ | | | | 11.6 | 0.8 | 3.9 | | SD...11... |

## Application range of chip breaker

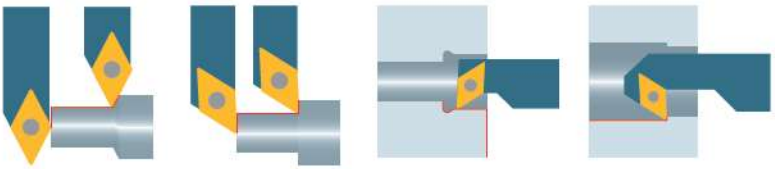


**Properties:**
– ground clearance
– little rounded cutting edge "E"
– carbide and cermet in different grades

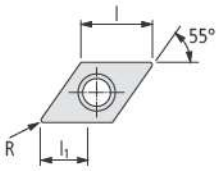



Optimal chip breaking

**Application:**
– finishing
– chip breaker for general application
– alloyed steel and stainless steel



**DCMT … -PF**



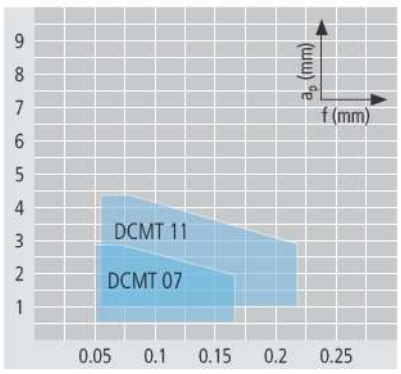


β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯227… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070204 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 7.75 | 0.4 | 2.9 | | SD…07… |
| DCMT 11T304 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 11.6 | 0.4 | 4.4 | | SD…11… |
| DCMT 11T308 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 11.6 | 0.8 | 4.4 | | SD…11… |

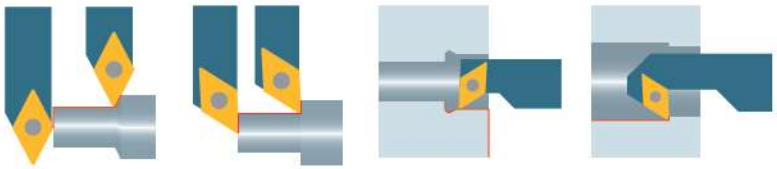
## *Application range of chip breaker* *multidec®-ISO*

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– carbide and cermet in different grades

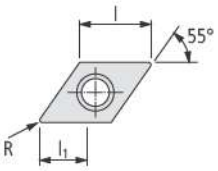



Optimal chip breaking

**Application:**
– roughing
– chip breaker for general application
– alloyed steel and stainless steel



DCET ... -PF05



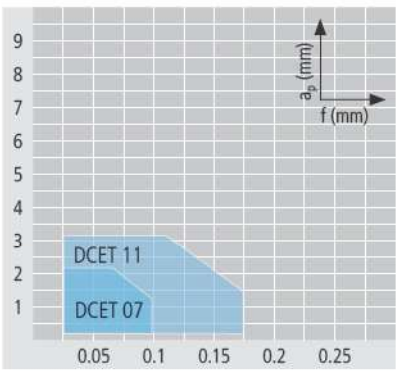


β: 18°
s: ±0.025
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227... |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **PREMIUM-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCET 0702005 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 7.75 | 0.05 | 2 | | SD...07... |
| DCET 070201 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 7.75 | 0.1 | 2 | | SD...07... |
| DCET 0702015 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 7.75 | 0.15 | 2 | | SD...07... |
| DCET 070202 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 7.75 | 0.2 | 2 | | SD...07... |
| DCET 11T3005 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.6 | 0.05 | 3 | | SD...11... |
| DCET 11T301 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.6 | 0.1 | 3 | | SD...11... |
| DCET 11T3015 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.6 | 0.15 | 3 | | SD...11... |
| DCET 11T302 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.6 | 0.2 | 3 | | SD...11... |
| DCET 11T304 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.6 | 0.4 | 3 | | SD...11... |

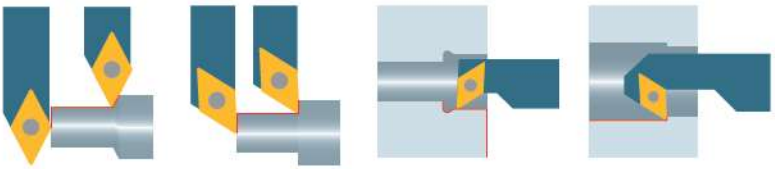


**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– submicrograin carbide, heat and wear resistent

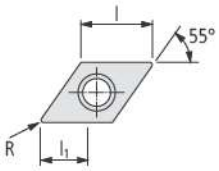



Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with difficult chip control
– stainless steels, titanium, super alloys, aluminium and GRP/CRP



DCGT … FN -PF23





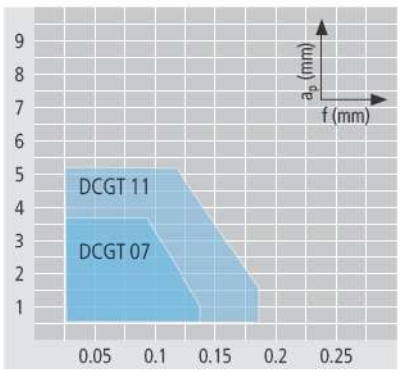
β: 12°
s: ±0.13
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯227… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 0702005 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.05 | 3.6 | | SD…07… |
| N DCGT 070201 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.1 | 3.6 | | SD…07… |
| N DCGT 070202 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.2 | 3.6 | | SD…07… |
| N DCGT 11T3005 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.05 | 5.2 | | SD…11… |
| N DCGT 11T301 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.1 | 5.2 | | SD…11… |
| N DCGT 11T302 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.2 | 5.2 | | SD…11… |

## Application range of chip breaker

multidec®-ISO

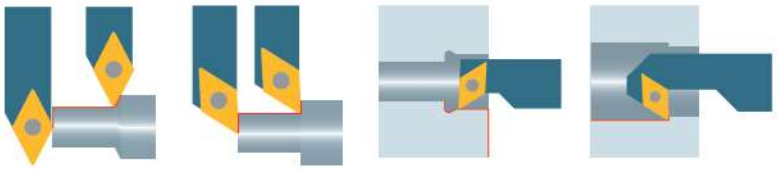
**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– micrograin carbide



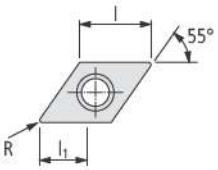

Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel

UTILIS multidec swiss type tools



DCGT ... EN -PF23





β: 12°
s: ±0.13
C: <0.03

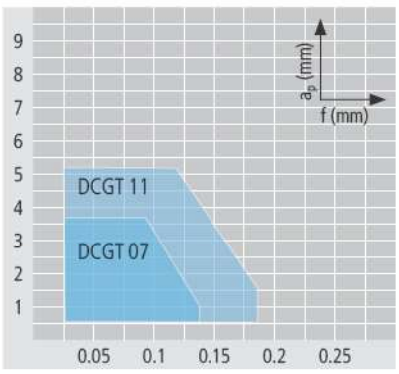
| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □227... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 0702003 EN -PF23 ... | | | | | | | | | ■ | | | | | | | | | | | 7.75 | 0.03 | 3.6 | | SD...07... |
| DCGT 0702005 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.05 | 3.6 | | SD...07... |
| DCGT 070201 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.1 | 3.6 | | SD...07... |
| DCGT 070202 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.2 | 3.6 | | SD...07... |
| DCGT 11T3005 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.05 | 5.2 | | SD...11... |
| DCGT 11T301 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.1 | 5.2 | | SD...11... |
| DCGT 11T302 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.2 | 5.2 | | SD...11... |

N

## Application range of chip breaker

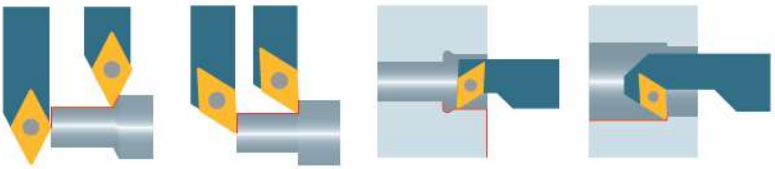


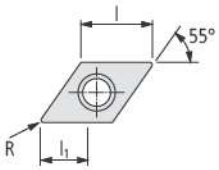
**Properties:**
- polished rake
- ground clearance
- little rounded cutting edge "E"
- micrograin carbide




Optimal chip breaking

**Application:**
- finishing
- chip breaker for materials with difficult chip control
- alloyed steel and stainless steel







β: 12°
s: ±0.13
C: <0.002

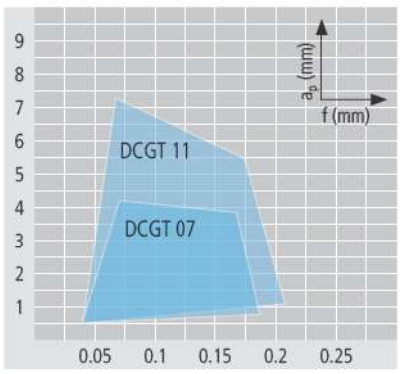
**DCGT … FN -PF33**

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | □227… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 0702005 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.05 | 3.6 | | SD…07… |
| DCGT 070201 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.1 | 3.6 | | SD…07… |
| DCGT 070202 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.2 | 3.6 | | SD…07… |
| DCGT 070204 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 7.75 | 0.4 | 3.6 | | SD…07… |
| DCGT 11T3005 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.05 | 5.2 | | SD…11… |
| DCGT 11T301 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.1 | 5.2 | | SD…11… |
| DCGT 11T302 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.2 | 5.2 | | SD…11… |
| DCGT 11T304 FN -PF33 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.6 | 0.4 | 5.2 | | SD…11… |

N

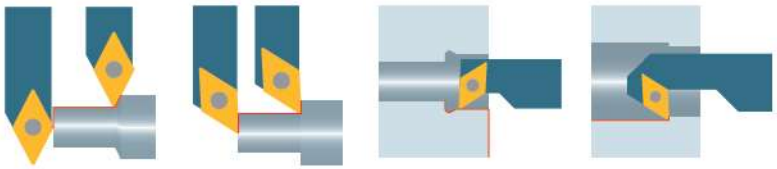


**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– micrograin carbide

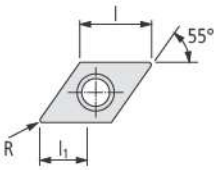



Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel



**DCGT … EN -PF33**





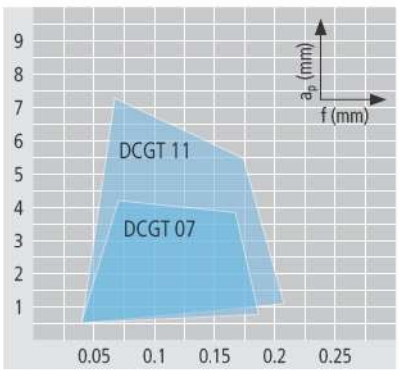
β: 12°
s: ±0.13
C: <0.03

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGT 0702005 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.05 | 3.6 | | SD…07… |
| DCGT 070201 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.1 | 3.6 | | SD…07… |
| DCGT 070202 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.2 | 3.6 | | SD…07… |
| DCGT 070204 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 7.75 | 0.4 | 3.6 | | SD…07… |
| DCGT 11T3005 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.05 | 5.2 | | SD…11… |
| DCGT 11T301 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.1 | 5.2 | | SD…11… |
| DCGT 11T302 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.2 | 5.2 | | SD…11… |
| DCGT 11T304 EN -PF33 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.4 | 5.2 | | SD…11… |

N

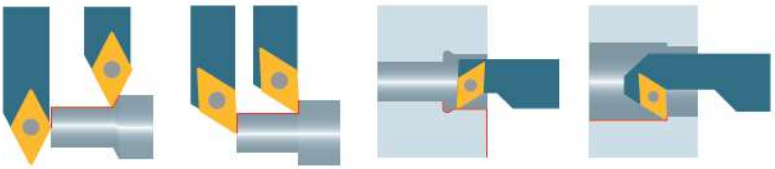


**Properties:**
– polished rake
– ground clearance
– little rounded cutting edge "E"
– micrograin carbide

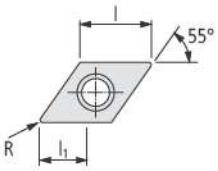



Optimal chip breaking

**Application:**
– finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel



**DCMT ... -PF43**



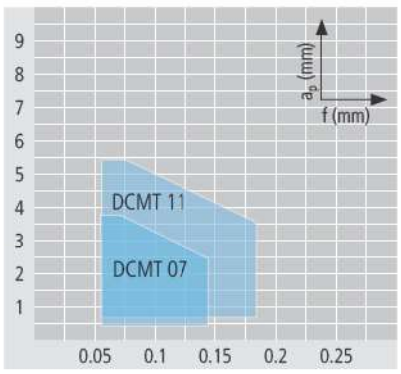


β: 12°
s: ±0.13
C: <0.02

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯227... |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070202 EN -PF43 ... | | | | | | | | ■ | | | | ■ | | | | | | | | 7.75 | 0.2 | 3.8 | | SD...07... |
| N DCMT 070204 EN -PF43 ... | | | | | | | | | | | | ■ | | | | | | | | 7.75 | 0.4 | 3.8 | | SD...07... |
| N DCMT 11T302 EN -PF43 ... | | | | | | | | | | | | ■ | | | | | | | | 11.6 | 0.2 | 5.5 | | SD...11... |
| N DCMT 11T304 EN -PF43 ... | | | | | | | | | | | | ■ | | | | | | | | 11.6 | 0.4 | 5.5 | | SD...11... |
| N DCMT 11T308 EN -PF43 ... | | | | | | | | | | | | ■ | | | | | | | | 11.6 | 0.8 | 5.5 | | SD...11... |

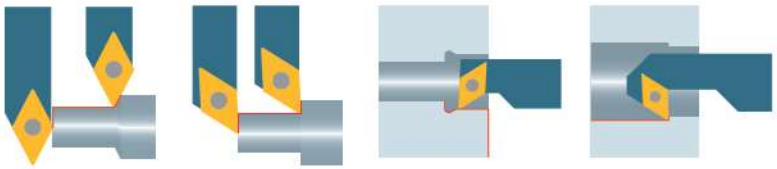
## *Application range of chip breaker* *multidec®-ISO*

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

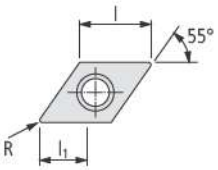



Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel



DCMT ... -PM





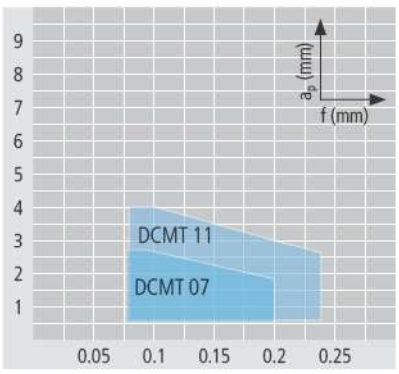
β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227... |
| VALUE-LINE | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070204 EN -PM ... | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 7.75 | 0.4 | 2.6 | | SD...07... |
| DCMT 070208 EN -PM ... | | | | | | | | | | | | ■ | | | | | | | | 7.75 | 0.8 | 2.6 | | SD...07... |
| DCMT 11T304 EN -PM ... | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 11.6 | 0.4 | 4.1 | | SD...11... |
| DCMT 11T308 EN -PM ... | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 11.6 | 0.8 | 4.1 | | SD...11... |

## Application range of chip breaker

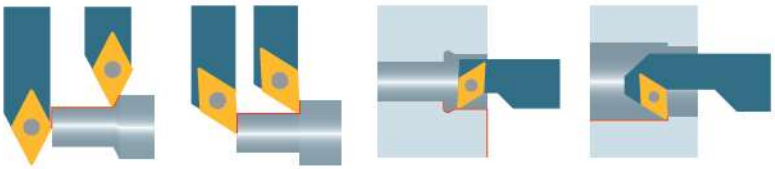
multidec®-ISO

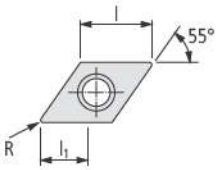
**Properties:**
- sintered insert based on ISO standard
- rounded cutting edge "E"
- micrograin carbide




Optimal chip breaking

**Application:**
- roughing
- chip breaker for general application
- alloyed steel and stainless steel





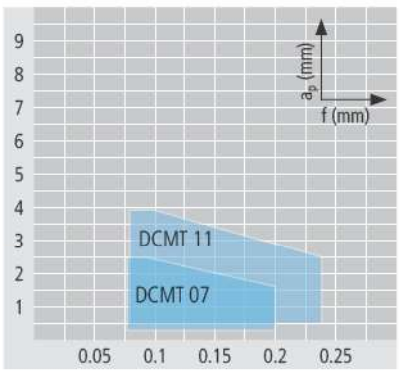

**DCMT … -PMF**


β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070202 EN -PMF | | | | | | | | | | | | | | | | ■ | | | | 7.75 | 0.2 | 2.6 | | SD…07… |
| DCMT 070204 EN -PMF | | | | | | | | | | | | | | | | ■ | | | | 7.75 | 0.4 | 2.6 | | SD…07… |
| DCMT 11T304 EN -PMF | | | | | | | | | | | | | | | | ■ | | | | 11.6 | 0.4 | 4.1 | | SD…11… |
| DCMT 11T308 EN -PMF | | | | | | | | | | | | | | | | ■ | | | | 11.6 | 0.8 | 4.1 | | SD…11… |

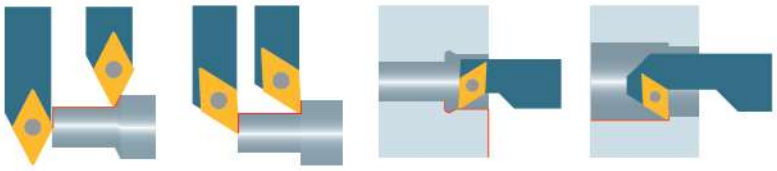


**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

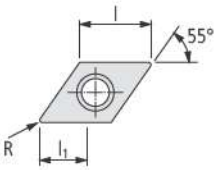



Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for general application
– alloyed steel and stainless steel



DCMT ... -PM25





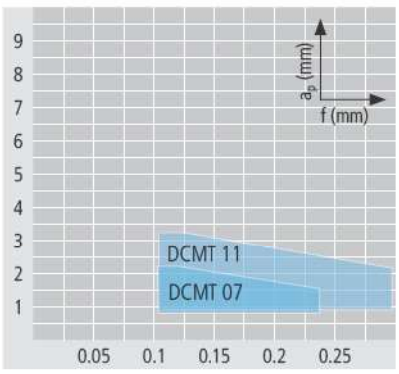
β: 18°
s: ±0.13
C: <0.02

| Order designation | Carbide ⬚20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | | ● | ● | ● | – | – | – | | | | | ⬚227... |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | | l | R | $l_1$ | |
| VALUE-LINE | | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070202 EN -PM25 ... | | | | | | ■ | | | | | | | | | | | | | | | | 7.75 | 0.2 | 1.6 | SD...07... |
| N DCMT 070204 EN -PM25 ... | | | | | | ■ | | | | | | | | | | | | | | | | 7.75 | 0.4 | 2 | SD...07... |
| N DCMT11T302 EN -PM25 ... | | | | | | ■ | | | | | | | | | | | | | | | | 11.6 | 0.2 | 2 | SD...11... |
| N DCMT11T304 EN -PM25 ... | | | | | | ■ | | | | | | | | | | | | | | | | 11.6 | 0.4 | 2.2 | SD...11... |
| N DCMT11T308 EN -PM25 ... | | | | | | ■ | | | | | | | | | | | | | | | | 11.6 | 0.8 | 3.2 | SD...11... |

## Application range of chip breaker



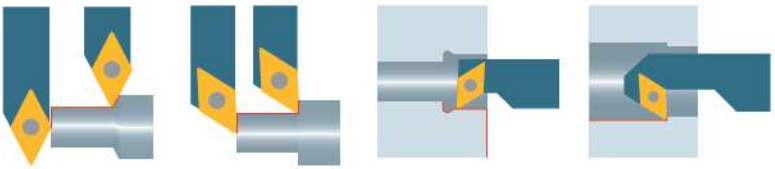
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide



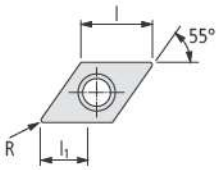

Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for materials with difficult chip control
– stainless steel

## Inserts (Carbide / Cermet) — multidec®-ISO



**DCMT … -PM55**



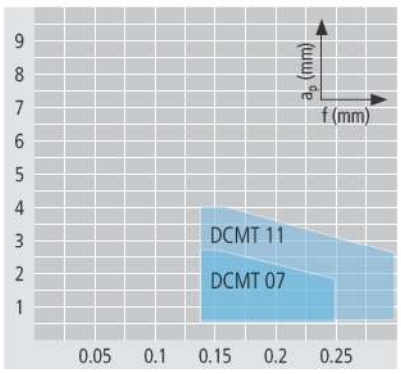


β: 16°
s: ±0.13
C: <0.02

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □227… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCMT 070204 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 7.75 | 0.4 | 2.2 | | SD…07… |
| DCMT 070208 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 7.75 | 0.8 | 2.4 | | SD…07… |
| DCMT11T304 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 11.6 | 0.4 | 3 | | SD…11… |
| DCMT11T308 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 11.6 | 0.8 | 4 | | SD…11… |

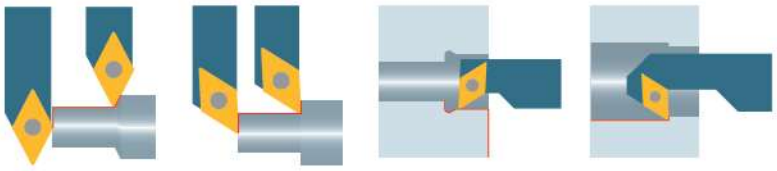
## Application range of chip breaker — multidec®-ISO

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

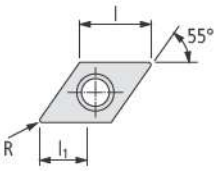



Optimal chip breaking

**Application:**
– roughing
– chip breaker for general application
– stainless steel



DCET ... -U





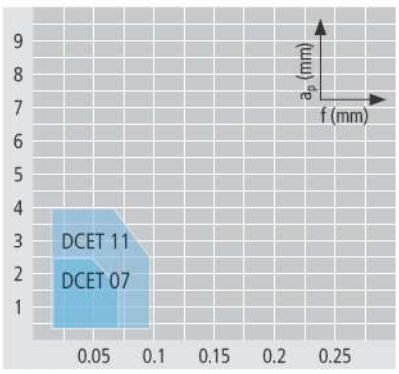
β: 12°
s: ±0.025
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227... |
| **PREMIUM-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCET 0702003 FR -U ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 7.75 | 0.03 | 2.5 | | SD...07... |
| DCET 070201 FR -U ... | ■ | ■ | □ | | | | | | | | | | | ■ | ■ | | | | | 7.75 | 0.1 | 2.5 | | SD...07... |
| DCET 070202 FR -U ... | ■ | ■ | □ | | | | | | | | | | | ■ | ■ | | | | | 7.75 | 0.2 | 2.5 | | SD...07... |
| DCET 11T301 FR -U ... | ■ | ■ | □ | | | | | | | | | | | ■ | ■ | | | | | 11.6 | 0.1 | 4 | | SD...11... |
| DCET 11T302 FR -U ... | ■ | ■ | □ | | | | | | | | | | | ■ | ■ | | | | | 11.6 | 0.2 | 4 | | SD...11... |
| DCET 11T304 FR -U ... | ■ | ■ | □ | | | | | | | | | | | ■ | ■ | | | | | 11.6 | 0.4 | 4 | | SD...11... |

## Application range of chip breaker



**Properties:**
- ground rake and clearence
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent and cermet

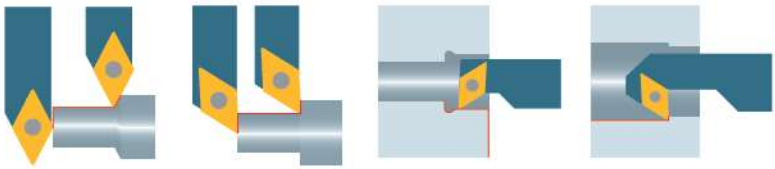


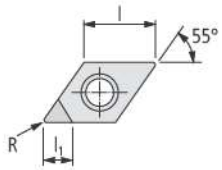

Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- alloyed steel and stainless steel

## Inserts (Diamond)









β: 5–7°
s: ±0.13
C: <0.002

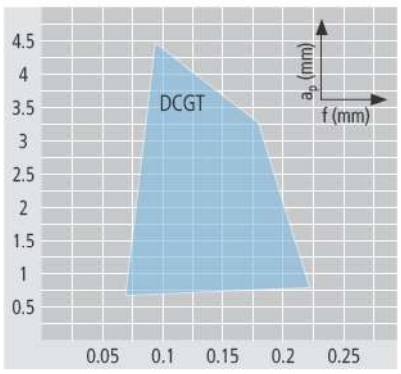
**DCGT …**

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯227… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 070201 FN … | | | | | | | | | | | | | | | | | | | ■ | 7.75 | 0.1 | 3.8 | | SD…07… |
| N DCGT 070202 FN … | | | | | | | | | | | | | | | | | | ■ | ■ | 7.75 | 0.2 | 3.7 | | SD…07… |
| N DCGT 070204 FN … | | | | | | | | | | | | | | | | | | ■ | | 7.75 | 0.4 | 3.4 | | SD…07… |
| N DCGT 11T302 FN … | | | | | | | | | | | | | | | | | | ■ | ■ | 11.6 | 0.2 | 4.7 | | SD…11… |
| N DCGT 11T304 FN … | | | | | | | | | | | | | | | | | | ■ | | 11.6 | 0.4 | 4.3 | | SD…11… |
| N DCGT 11T308 FN … | | | | | | | | | | | | | | | | | | ■ | | 11.6 | 0.8 | 4 | | SD…11… |

## Application range of chip breaker

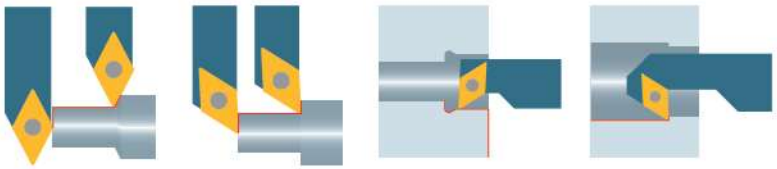


**Properties:**
– sharp cutting edge "F"
– less cutting force
– positive cut

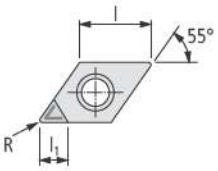



Optimal chip breaking

**Application:**
– finishing and micro finishing for unstable or thin-walled parts
– chip breaker for general application will generate continues chip
– aluminum, brass, copper, bronze, platinium, gold, synthetics and synthetics reinforced/composites
– ideal for smallest tolerance and medium surface quality



DCGT … -UWS





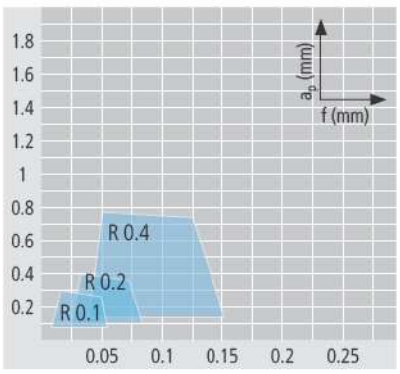
β: 15–20°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 227… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 070201 FN -UWS … | | | | | | | | | | | | | | | | | | ■ | ■ | 7.75 | 0.1 | 3 | | SD…07… |
| N DCGT 070202 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 7.75 | 0.2 | 3 | | SD…07… |
| N DCGT 070204 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 7.75 | 0.4 | 3 | | SD…07… |
| N DCGT 11T302 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.6 | 0.2 | 3 | | SD…11… |
| N DCGT 11T304 FN -UWS … | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.6 | 0.4 | 3 | | SD…11… |

## Application range of chip breaker



**Properties:**
- sharp cutting edge "F"
- almost any cutting force
- high positive narrow chip breaker made by laser

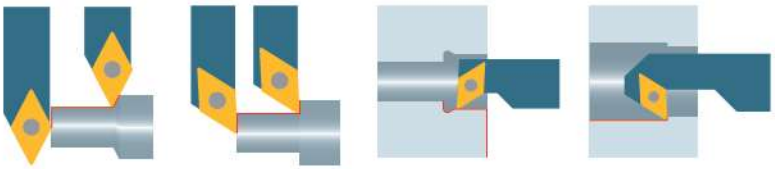



Optimal chip breaking

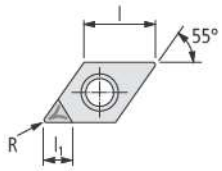
**Application:**
- micro finishing for unstable or thin-walled parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and medium surface quality

## Inserts (Diamond)





DCGT … -UWN





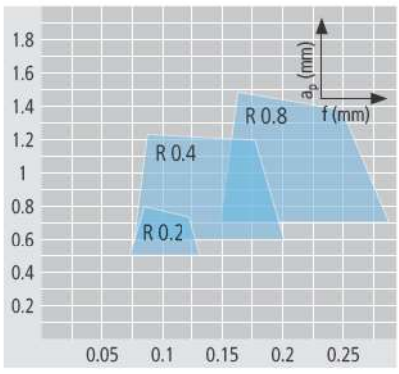
β: 15–20°
s: ±0.13
C: <0.005

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | □ 227… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DCGT 070202 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 7.75 | 0.2 | 3 | | SD…07… |
| N DCGT 070204 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 7.75 | 0.4 | 3 | | SD…07… |
| N DCGT 11T302 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 11.6 | 0.2 | 3 | | SD…11… |
| N DCGT 11T304 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 11.6 | 0.4 | 3 | | SD…11… |
| N DCGT 11T308 FN -UWN … | | | | | | | | | | | | | | | | | ■ | | ■ | 11.6 | 0.8 | 3 | | SD…11… |

## Application range of chip breaker



**Properties:**
– sharp cutting edge "F"
– higher cutting force
– high positive wide chip breaker made by laser

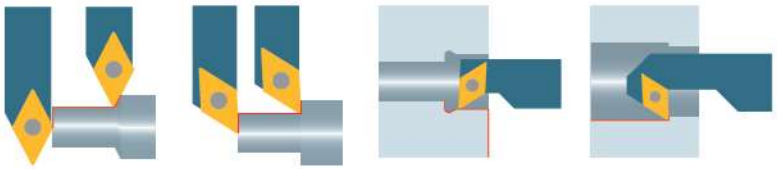



Optimal chip breaking

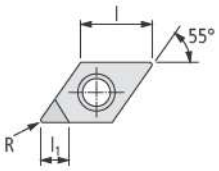
**Application:**
– finishing for stable or solid parts
– chip breaker for materials with difficult chip control
– synthetics reinforced/composites, aluminum, platinium, gold and synthetics
– ideal for smallest tolerance and best surface quality

## Inserts (Diamond)





DCGW ...





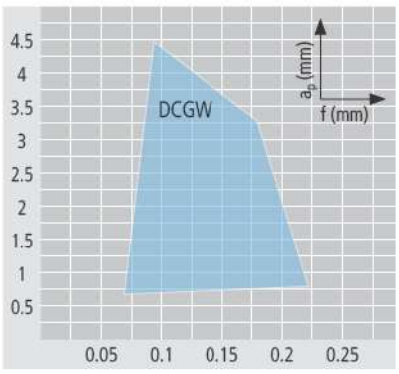
β: 0°
s: ±0.13
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯227... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| DCGW 0702005 FN ... | | | | | | | | | | | | | | | | | | | ■ | 7.75 | 0.05 | 3.5 | | SD...07... |
| DCGW 070201 FN ... | | | | | | | | | | | | | | | | | | | ■ | 7.75 | 0.1 | 3.8 | | SD...07... |
| DCGW 070202 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 7.75 | 0.2 | 3.7 | | SD...07... |
| DCGW 070204 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 7.75 | 0.4 | 3.4 | | SD...07... |
| DCGW 070208 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 7.75 | 0.8 | 3 | | SD...07... |
| DCGW 11T301 FN ... | | | | | | | | | | | | | | | | | | | ■ | 11.6 | 0.1 | 4.8 | | SD...11... |
| DCGW 11T302 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.6 | 0.2 | 4.7 | | SD...11... |
| DCGW 11T304 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.6 | 0.4 | 4.3 | | SD...11... |
| DCGW 11T308 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.6 | 0.8 | 4 | | SD...11... |

## Application range of chip breaker

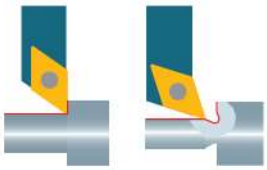


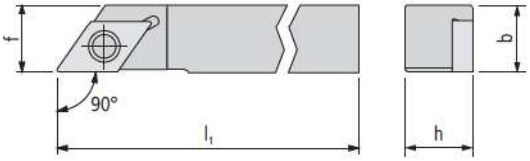
**Properties:**
- sharp cutting edge "F"
- medium cutting force
- neutral cut




Optimal chip breaking

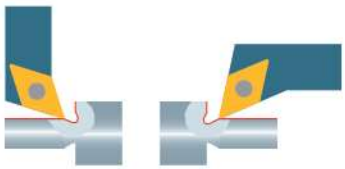
**Application:**
- finishing and micro finishing for stable or solid parts
- chip breaker for general application will generate continues chip
- aluminum, brass, copper, bronze, platinium, gold, synthetics and synthetics reinforced/composites
- ideal for smallest tolerance and high surface quality

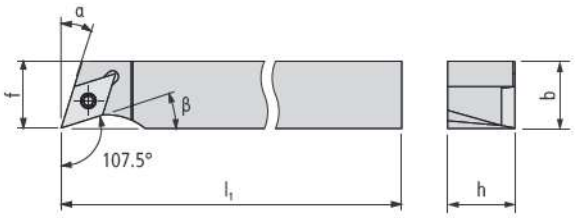





**SDAC… U (90°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | | f | | | | 201… |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDACL 0808 K07 U | ■ | SDACR 0808 K07 U | ■ | 8 | 8 | 125 | | 8 | | | | DC..0702.. |
| SDACL 1010 M07 U | ■ | SDACR 1010 M07 U | ■ | 10 | 10 | 150 | | 10 | | | | DC..0702.. |
| SDACL 1212 M07 U | ■ | SDACR 1212 M07 U | ■ | 12 | 12 | 150 | | 12 | | | | DC..0702.. |
| SDACL 1212 M11 U | ■ | SDACR 1212 M11 U | ■ | 12 | 12 | 150 | | 12 | | | | DC..11T3.. |
| SDACL 1616 K11 U | ■ | SDACR 1616 K11 U | ■ | 16 | 16 | 125 | | 16 | | | | DC..11T3.. |



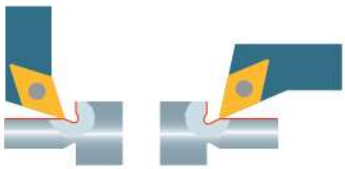



## SDHC... U (107.5°)

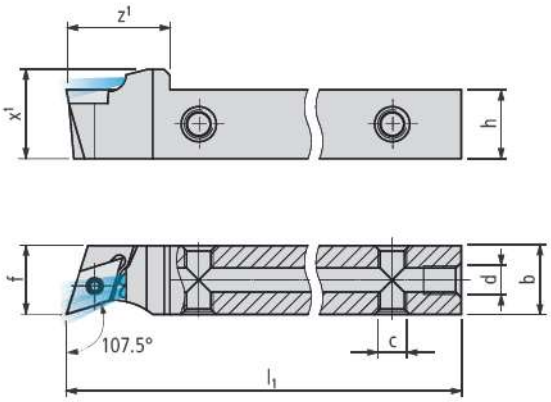
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | α | β | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDHCL 0808 H07 U | ■ | SDHCR 0808 H07 U | ■ | 8 | 8 | 100 | | 11 | | 17.5° | 17.5° | DC..0702.. |
| SDHCL 1010 H07 U | ■ | SDHCR 1010 H07 U | ■ | 10 | 10 | 100 | | 11 | | 17.5° | 17.5° | DC..0702.. |
| SDHCL 1212 H07 U | ■ | SDHCR 1212 H07 U | ■ | 12 | 12 | 100 | | 12 | | 17.5° | 17.5° | DC..0702.. |
| SDHCL 1616 K11 U | ■ | SDHCR 1616 K11 U | ■ | 16 | 16 | 125 | | 16 | | 17.5° | 17.5° | DC..11T3.. |

## SDHC... U (107.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | α | β | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDHCL 3/8" H07 U | ■ | SDHCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | | 11 | | 17.5° | 17.5° | DC..0702.. |
| SDHCL 1/2" H07 U | ■ | SDHCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | | 12.7 | | 17.5° | 17.5° | DC..0702.. |
| SDHCL 5/8" K11 U | ■ | SDHCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | | 15.875 | | 17.5° | 17.5° | DC..11T3.. |



With internal cooling



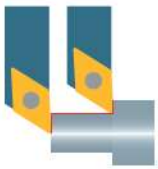

## SDHC... U IC (107.5°)

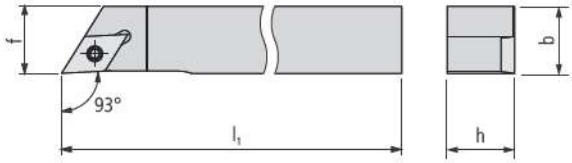
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDHCL 0808 H07 U IC | ■ | SDHCR 0808 H07 U IC | ■ | 8 | 8 | 100 | 18 | 11.5 | M5 | M5 | 11 | DC..0702.. |
| SDHCL 1010 H07 U IC | ■ | SDHCR 1010 H07 U IC | ■ | 10 | 10 | 100 | 18 | 13.5 | M5 | M5 | 12 | DC..0702.. |
| SDHCL 1212 H07 U IC | ■ | SDHCR 1212 H07 U IC | ■ | 12 | 12 | 100 | 18 | 15.5 | M5 | M5 | 12 | DC..0702.. |
| SDHCL 1616 K11 U IC | ■ | SDHCR 1616 K11 U IC | ■ | 16 | 16 | 125 | 21 | 19.5 | M5 | G⅛" | 16 | DC..11T3.. |

## SDHC... U IC (107.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDHCL 3/8" H07 U IC | ■ | SDHCR 3/8" H07 U IC | ■ | 9.525 | 9.525 | 100 | 18 | 13 | M5 | M5 | 12 | DC..0702.. |
| SDHCL 1/2" H07 U IC | ■ | SDHCR 1/2" H07 U IC | ■ | 12.7 | 12.7 | 100 | 18 | 16.2 | M5 | M5 | 12.7 | DC..0702.. |
| SDHCL 5/8" K11 U IC | ■ | SDHCR 5/8" K11 U IC | ■ | 15.875 | 15.875 | 125 | 21 | 19.4 | M5 | G⅛" | 15.875 | DC..11T3.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... ▯619...






## SDJC... U (93°)

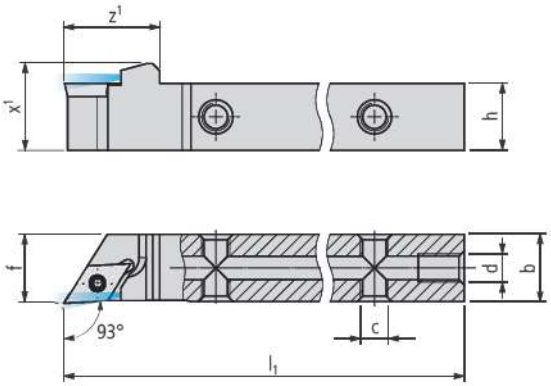
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | Inserts 201... |
|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | |
| SDJCL 0808 F07 U | ■ | SDJCR 0808 F07 U | ■ | 8 | 8 | 80 | 7.95 | DC..0702.. |
| SDJCL 0808 H07 U | ■ | SDJCR 0808 H07 U | ■ | 8 | 8 | 100 | 7.95 | DC..0702.. |
| SDJCL 1010 F07 U | ■ | SDJCR 1010 F07 U | ■ | 10 | 10 | 80 | 9.95 | DC..0702.. |
| SDJCL 1010 H07 U | ■ | SDJCR 1010 H07 U | ■ | 10 | 10 | 100 | 9.95 | DC..0702.. |
| SDJCL 1010 H11 U | ■ | SDJCR 1010 H11 U | ■ | 10 | 10 | 100 | 11.95 | DC..11T3.. |
| SDJCL 1212 H07 U | ■ | SDJCR 1212 H07 U | ■ | 12 | 12 | 100 | 11.95 | DC..0702.. |
| SDJCL 1212 H11 U | ■ | SDJCR 1212 H11 U | ■ | 12 | 12 | 100 | 11.95 | DC..11T3.. |
| SDJCL 1616 K07 U | ■ | SDJCR 1616 K07 U | ■ | 16 | 16 | 125 | 15.95 | DC..0702.. |
| SDJCL 1616 K11 U | ■ | SDJCR 1616 K11 U | ■ | 16 | 16 | 125 | 15.95 | DC..11T3.. |
| SDJCL 2020 K11 U | ■ | SDJCR 2020 K11 U | ■ | 20 | 20 | 125 | 19.95 | DC..11T3.. |

## SDJC... U (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | Inserts 201... |
|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | |
| SDJCL 3/8" F07 U | ■ | SDJCR 3/8" F07 U | ■ | 9.525 | 9.525 | 80 | 9.475 | DC..0702.. |
| SDJCL 3/8" H07 U | ■ | SDJCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | 9.475 | DC..0702.. |
| SDJCL 3/8" F11 U | ■ | SDJCR 3/8" F11 U | ■ | 9.525 | 9.525 | 80 | 11.95 | DC..11T3.. |
| SDJCL 3/8" H11 U | ■ | SDJCR 3/8" H11 U | ■ | 9.525 | 9.525 | 100 | 11.95 | DC..11T3.. |
| SDJCL 1/2" H07 U | ■ | SDJCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | 12.65 | DC..0702.. |
| SDJCL 1/2" H11 U | ■ | SDJCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | 12.65 | DC..11T3.. |
| SDJCL 5/8" K11 U | ■ | SDJCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | 15.825 | DC..11T3.. |
| SDJCL 3/4" K11 U | ■ | SDJCR 3/4" K11 U | ■ | 19.05 | 19.05 | 125 | 19 | DC..11T3.. |

Legend ..... 8...

**With internal cooling**




## SDJC… U IC (93°)

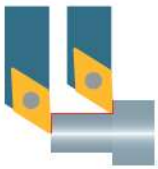
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 201… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDJCL 0810 H07 U IC | ■ | SDJCR 0810 H07 U IC | ■ | 8 | 10 | 100 | 17 | 11.5 | M5 | M5 | 8 | DC.. 0702.. |
| SDJCL 1010 H07 U IC | ■ | SDJCR 1010 H07 U IC | ■ | 10 | 10 | 100 | 17 | 13.5 | M5 | M5 | 10 | DC.. 0702.. |
| SDJCL 1010 H11 U IC | ■ | SDJCR 1010 H11 U IC | ■ | 10 | 10 | 100 | 22 | 13.5 | M5 | M5 | 10 | DC.. 11T3.. |
| SDJCL 1212 H07 U IC | ■ | SDJCR 1212 H07 U IC | ■ | 12 | 12 | 100 | 17 | 15.5 | M5 | M5 | 12 | DC.. 0702.. |
| SDJCL 1212 H11 U IC | ■ | SDJCR 1212 H11 U IC | ■ | 12 | 12 | 100 | 22 | 15.5 | M5 | M5 | 12 | DC.. 11T3.. |
| SDJCL 1616 K07 U IC | ■ | SDJCR 1616 K07 U IC | ■ | 16 | 16 | 125 | 17 | 15.5 | M5 | G⅛" | 16 | DC.. 0702.. |
| SDJCL 1616 K11 U IC | ■ | SDJCR 1616 K11 U IC | ■ | 16 | 16 | 125 | 22 | 19.5 | M5 | G⅛" | 16 | DC.. 11T3.. |
| SDJCL 2020 K11 U IC | ■ | SDJCR 2020 K11 U IC | ■ | 20 | 20 | 125 | 22 | 23.5 | M5 | G⅛" | 20 | DC.. 11T3.. |

## SDJC… U IC (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 201… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDJCL 3/8" H07 U IC | ■ | SDJCR 3/8" H07 U IC | ■ | 9.525 | 9.525 | 100 | 17 | 13 | M5 | M5 | 9.525 | DC.. 0702.. |
| SDJCL 3/8" H11 U IC | ■ | SDJCR 3/8" H11 U IC | ■ | 9.525 | 9.525 | 100 | 22 | 13 | M5 | M5 | 9.525 | DC.. 11T3.. |
| SDJCL 1/2" H07 U IC | ■ | SDJCR 1/2" H07 U IC | ■ | 12.7 | 12.7 | 100 | 17 | 16.2 | M5 | M5 | 12.7 | DC.. 0702.. |
| SDJCL 1/2" H11 U IC | ■ | SDJCR 1/2" H11 U IC | ■ | 12.7 | 12.7 | 100 | 22 | 16.2 | M5 | M5 | 12.7 | DC.. 11T3.. |
| SDJCL 5/8" K07 U IC | ■ | SDJCR 5/8" K07 U IC | ■ | 15.875 | 15.875 | 125 | 17 | 19.5 | M5 | G⅛" | 15.875 | DC.. 0702.. |
| SDJCL 5/8" K11 U IC | ■ | SDJCR 5/8" K11 U IC | ■ | 15.875 | 15.875 | 125 | 22 | 19.5 | M5 | G⅛" | 15.875 | DC.. 11T3.. |
| SDJCL 3/4" K11 U IC | ■ | SDJCR 3/4" K11 U IC | ■ | 19.05 | 19.05 | 125 | 22 | 22.6 | M5 | G⅛" | 19.05 | DC.. 11T3.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…

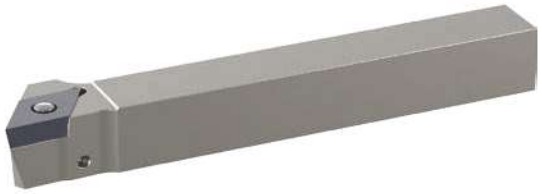
Legend ..... 8…

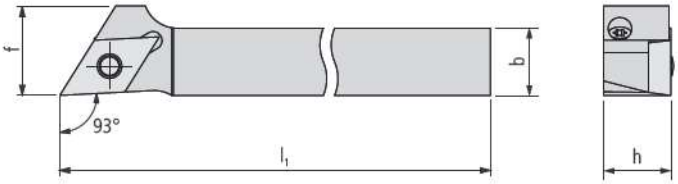


"FC" version (fast change)



UTILIS multidec swiss type tools






## SDJC... U FC* (93°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDJCL 1012 H11 U FC | ■ | SDJCR 1012 H11 U FC | ■ | 10 | 12 | 100 | | 16 | | | | DC..11T3.. |
| SDJCL 1212 H11 U FC | ■ | SDJCR 1212 H11 U FC | ■ | 12 | 12 | 100 | | 16 | | | | DC..11T3.. |
| SDJCL 1616 K11 U FC | ■ | SDJCR 1616 K11 U FC | ■ | 16 | 16 | 125 | | 16 | | | | DC..11T3.. |

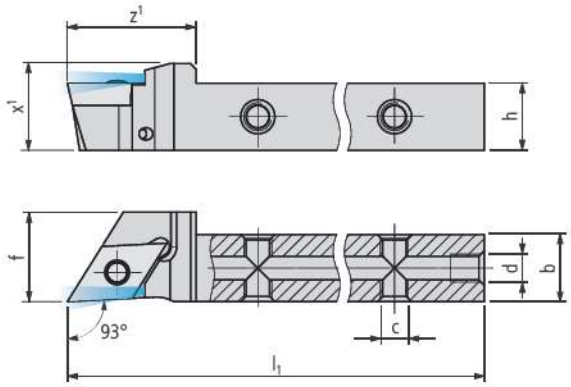
## SDJC... U FC* (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDJCL 1/2" H11 U FC | ■ | SDJCR 1/2" H11 U FC | ■ | 12.7 | 12.7 | 100 | | 16 | | | | DC..11T3.. |
| SDJCL 5/8" K11 U FC | ■ | SDJCR 5/8" K11 U FC | ■ | 15.875 | 15.875 | 125 | | 15.875 | | | | DC..11T3.. |

Spare parts (clamping bolts/screws) ..... 247

*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.

"FC" version (fast change) with internal cooling




## SDJC… U FC* IC (93°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | Inserts 201… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDJCL 1012 H11 U FC IC | ■ | SDJCR 1012 H11 U FC IC | ■ | 10 | 12 | 100 | 23 | 13.5 | M5 | M5 | 16 | DC..11T3.. |
| SDJCL 1212 H11 U FC IC | ■ | SDJCR 1212 H11 U FC IC | ■ | 12 | 12 | 100 | 23 | 15.5 | M5 | M5 | 16 | DC..11T3.. |
| SDJCL 1616 K11 U FC IC | ■ | SDJCR 1616 K11 U FC IC | ■ | 16 | 16 | 125 | 23 | 19.5 | M5 | G⅛" | 16 | DC..11T3.. |

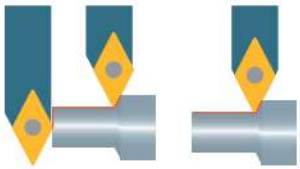
## SDJC… U FC* IC (93°) INCH

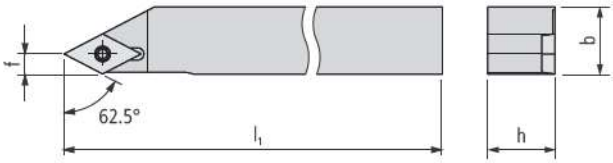
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | Inserts 201… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDJCL 1/2" H11 U FC IC | ■ | SDJCR 1/2" H11 U FC IC | ■ | 12.7 | 12.7 | 100 | 23 | 16.2 | M5 | M5 | 16 | DC..11T3.. |
| SDJCL 5/8" K11 U FC IC | ■ | SDJCR 5/8" K11 U FC IC | ■ | 15.875 | 15.875 | 125 | 23 | 19.4 | M5 | G⅛" | 15.875 | DC..11T3.. |

Spare parts (clamping bolts/screws) ..... 247

*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…





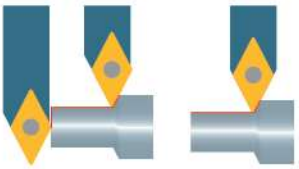

## SDNC... U (62.5°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDNCL 0808 F07 U | ■ | SDNCR 0808 F07 U | ■ | 8 | 8 | 80 | | 3.63 | | | | DC..0702.. |
| SDNCL 0808 H07 U | ■ | SDNCR 0808 H07 U | ■ | 8 | 8 | 100 | | 3.63 | | | | DC..0702.. |
| SDNCL 1010 F07 U | ■ | SDNCR 1010 F07 U | ■ | 10 | 10 | 80 | | 3.63 | | | | DC..0702.. |
| SDNCL 1010 H07 U | ■ | SDNCR 1010 H07 U | ■ | 10 | 10 | 100 | | 3.63 | | | | DC..0702.. |
| SDNCL 1212 H07 U | ■ | SDNCR 1212 H07 U | ■ | 12 | 12 | 100 | | 3.63 | | | | DC..0702.. |
| SDNCL 1212 H11 U | ■ | SDNCR 1212 H11 U | ■ | 12 | 12 | 100 | | 5.42 | | | | DC..11T3.. |
| SDNCL 1616 K11 U | ■ | SDNCR 1616 K11 U | ■ | 16 | 16 | 125 | | 5.42 | | | | DC..11T3.. |
| SDNCL 2020 K11 U | ■ | SDNCR 2020 K11 U | ■ | 20 | 20 | 125 | | 5.42 | | | | DC..11T3.. |

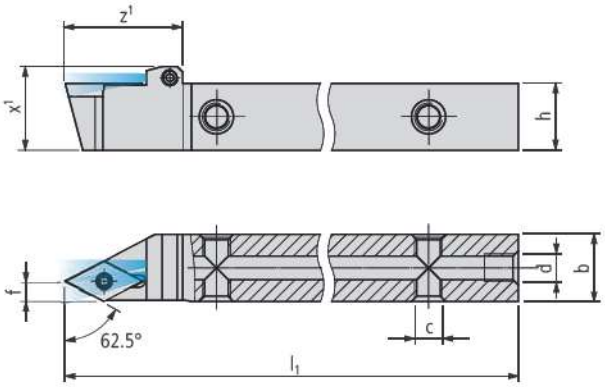
## SDNC... U (62.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDNCL 3/8" H07 U | ■ | SDNCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | | 3.63 | | | | DC..0702.. |
| SDNCL 1/2" H07 U | ■ | SDNCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | | 3.63 | | | | DC..0702.. |
| SDNCL 1/2" H11 U | ■ | SDNCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | | 5.42 | | | | DC..11T3.. |
| SDNCL 5/8" K11 U | ■ | SDNCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | | 5.42 | | | | DC..11T3.. |

Legend ..... 8...



**With internal cooling**



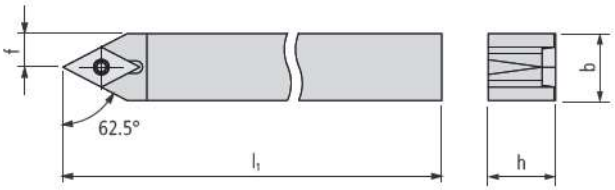

## SDNC... U IC (62.5°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDNCL 1010 H07 U IC | ■ | SDNCR 1010 H07 U IC | ■ | 10 | 10 | 100 | 21 | 13 | M5 | M5 | 3.63 | DC..0702.. |
| SDNCL 1212 H07 U IC | ■ | SDNCR 1212 H07 U IC | ■ | 12 | 12 | 100 | 21 | 15 | M5 | M5 | 3.63 | DC..0702.. |
| SDNCL 1212 H11 U IC | ■ | SDNCR 1212 H11 U IC | ■ | 12 | 12 | 100 | 25 | 15.5 | M5 | M5 | 5.42 | DC..11T3.. |
| SDNCL 1616 K11 U IC | ■ | SDNCR 1616 K11 U IC | ■ | 16 | 16 | 125 | 25 | 19.5 | M5 | G⅛" | 5.42 | DC..11T3.. |

## SDNC... U IC (62.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | Inserts 201... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PREMIUM-LINE | | | | | | | | | | | | |
| SDNCL 3/8" H07 U IC | ■ | SDNCR 3/8" H07 U IC | ■ | 9.525 | 9.525 | 100 | 21 | 12.5 | M5 | M5 | 3.63 | DC..0702.. |
| SDNCL 1/2" H07 U IC | ■ | SDNCR 1/2" H07 U IC | ■ | 12.7 | 12.7 | 100 | 21 | 15.7 | M5 | M5 | 3.63 | DC..0702.. |
| SDNCL 1/2" H11 U IC | ■ | SDNCR 1/2" H11 U IC | ■ | 12.7 | 12.7 | 100 | 25 | 16.2 | M5 | M5 | 5.42 | DC..11T3.. |
| SDNCL 5/8" K11 U IC | ■ | SDNCR 5/8" K11 U IC | ■ | 15.875 | 15.875 | 125 | 25 | 19.4 | M5 | G⅛" | 5.42 | DC..11T3.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619...




## SDNCN … U (62.5°)

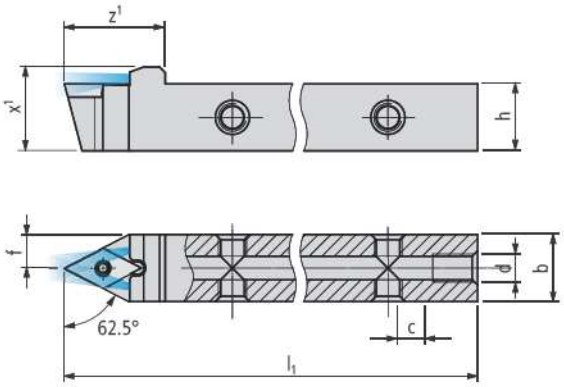
| Order designation | N | Dimensions h | b | $l_1$ | f | Inserts 201… |
|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | |
| SDNCN 0808 F07 U | ■ | 8 | 8 | 80 | 4 | DC..0702.. |
| SDNCN 0808 K07 U | ■ | 8 | 8 | 125 | 4 | DC..0702.. |
| SDNCN 1010 E07 U | ■ | 10 | 10 | 70 | 5 | DC..0702.. |
| SDNCN 1010 M07 U | ■ | 10 | 10 | 150 | 5 | DC..0702.. |
| SDNCN 1212 F07 U | ■ | 12 | 12 | 80 | 6 | DC..0702.. |
| SDNCN 1212 M07 U | ■ | 12 | 12 | 150 | 6 | DC..0702.. |
| SDNCN 1212 M11 U | ■ | 12 | 12 | 150 | 6 | DC..11T3.. |
| SDNCN 1616 H11 U | ■ | 16 | 16 | 100 | 8 | DC..11T3.. |
| SDNCN 2020 K11 U | ■ | 20 | 20 | 125 | 10 | DC..11T3.. |

## SDNCN … U (62.5°) INCH

| Order designation | N | Dimensions h | b | $l_1$ | f | Inserts 201… |
|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | |
| SDNCN 3/8"H07 U | ■ | 9.525 | 9.525 | 100 | 4.76 | DC..0702.. |
| SDNCN 1/2"H07 U | ■ | 12.7 | 12.7 | 100 | 6.35 | DC..0702.. |
| SDNCN 1/2"H11 U | ■ | 12.7 | 12.7 | 100 | 6.35 | DC..11T3.. |
| SDNCN 5/8"K11 U | ■ | 15.875 | 15.875 | 125 | 7.94 | DC..11T3.. |

Legend ..... 8…

**With internal cooling**



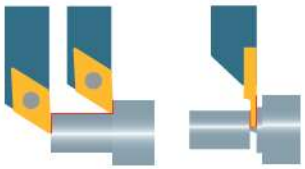

## SDNCN … U IC (62.5°)

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | | | | h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | 201… |
| PREMIUM-LINE | | | | | | | | | | | | |
| SDNCN 0808 H07 U IC | ■ | | | 8 | 8 | 100 | 18 | 11 | M5 | M5 | 4 | DC..0702.. |
| SDNCN 1010 H07 U IC | ■ | | | 10 | 10 | 100 | 18 | 13 | M5 | M5 | 5 | DC..0702.. |
| SDNCN 1212 H07 U IC | ■ | | | 12 | 12 | 100 | 18 | 15 | M5 | M5 | 6 | DC..0702.. |
| SDNCN 1616 K11 U IC | ■ | | | 16 | 16 | 125 | 22 | 19 | M5 | G⅛" | 8 | DC..11T3.. |

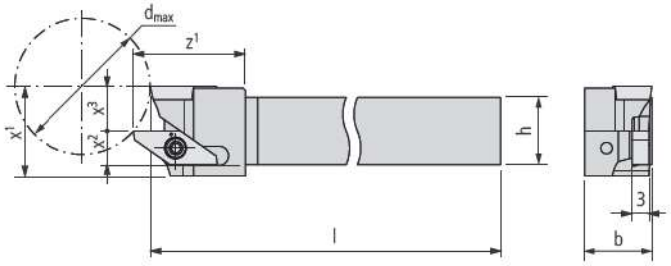
## SDNCN … U IC (62.5°) INCH

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | | | | h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | 201… |
| PREMIUM-LINE | | | | | | | | | | | | |
| SDNCN 3/8"H07 U IC | ■ | | | 9.525 | 9.525 | 100 | 18 | 13 | M5 | M5 | 4.76 | DC..0702.. |
| SDNCN 1/2"H07 U IC | ■ | | | 12.7 | 12.7 | 100 | 18 | 15.7 | M5 | M5 | 6.35 | DC..0702.. |
| SDNCN 1/2"H11 U IC | ■ | | | 12.7 | 12.7 | 100 | 24 | 15.7 | M5 | M5 | 6.35 | DC..11T3.. |
| SDNCN 5/8"K11 U IC | ■ | | | 15.875 | 15.875 | 125 | 24 | 18.9 | M5 | G⅛" | 7.94 | DC..11T3.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…



"TWIN" version

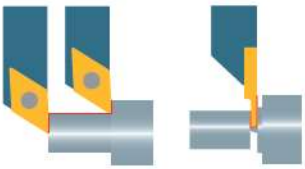



## SDJC. (93°)/1600… TWIN

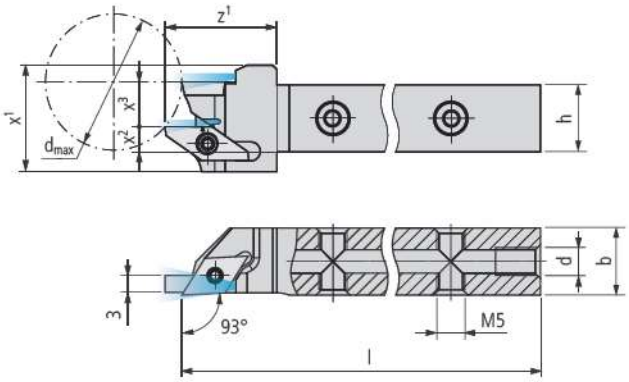
| Order designation | | Dimensions | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | $d_{max}$ | 201… | 49… |
| **STANDARD-LINE** | | | | | | | | | | | |
| SDJCR/1600R-0810 H07 Twin | ■ | 8 | 10 | 100 | 20 | 16 | 4 | 8 | 23 | DC..0702.. | 16… |
| SDJCR/1600R-1010 H07 Twin | ■ | 10 | 10 | 100 | 20 | 16 | 5 | 8 | 23 | DC..0702.. | 16… |
| SDJCR/1600R-1212 H07 Twin | ■ | 12 | 12 | 100 | 20 | 16 | 6 | 8 | 23 | DC..0702.. | 16… |
| SDJCR/1600R-1616 K11 Twin | ■ | 16 | 16 | 125 | 20 | 20 | 8 | 10 | 35 | DC..11T3.. | 16… |
| SDJCR/1600R-2020 K11 Twin | ■ | 20 | 20 | 125 | 20 | 24 | 8 | 14 | 68 | DC..11T3.. | 16… |

## SDJC. (93°)/1600… TWIN INCH

| Order designation | | Dimensions | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | $d_{max}$ | 201… | 49… |
| **STANDARD-LINE** | | | | | | | | | | | |
| SDJCR/1600R-3/8" H07 Twin | ■ | 9.525 | 9.525 | 100 | 20 | 16 | 4.76 | 8 | 23 | DC..0702.. | 16… |
| SDJCR/1600R-1/2" H07 Twin | ■ | 12.7 | 12.7 | 100 | 20 | 16 | 6.35 | 8 | 23 | DC..0702.. | 16… |
| SDJCR/1600R-5/8" K11 Twin | ■ | 15.875 | 15.875 | 125 | 20 | 20 | 7.94 | 10 | 35 | DC..11T3.. | 16… |
| SDJCR/1600R-3/4" K11 Twin | ■ | 19.05 | 19.05 | 125 | 20 | 24 | 7.53 | 14 | 68 | DC..11T3.. | 16… |



"TWIN" version with internal cooling



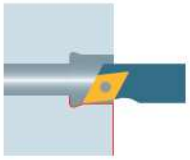

## SDJC. (93°)/1600… TWIN IC

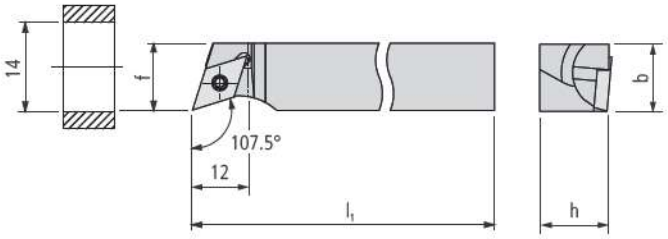
| Order designation | | Dimensions | | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | d | $d_{max}$ | 201… | 49… |
| PREMIUM-LINE | | | | | | | | | | | | |
| | SDJCR/1600R-0810 H07 Twin IC ■ | 8 | 10 | 100 | 20 | 19 | 2.5 | 8 | M5 | 23 | DC..0702.. | 16… |
| | SDJCR/1600R-1010 H07 Twin IC ■ | 10 | 10 | 100 | 20 | 19 | 3.5 | 8 | M5 | 23 | DC..0702.. | 16… |
| | SDJCR/1600R-1212 H07 Twin IC ■ | 12 | 12 | 100 | 20 | 19 | 4.5 | 8 | M5 | 23 | DC..0702.. | 16… |
| | SDJCR/1600R-1616 K11 Twin IC ■ | 16 | 16 | 125 | 26 | 23 | 6.5 | 10 | G⅛" | 35 | DC..11T3.. | 16… |
| | SDJCR/1600R-2020 K11 Twin IC ■ | 20 | 20 | 125 | 26 | 27 | 6.5 | 14 | G⅛" | 68 | DC..11T3.. | 16… |

## SDJC. (93°)/1600… TWIN IC INCH

| Order designation | | Dimensions | | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | d | $d_{max}$ | 201… | 49… |
| PREMIUM-LINE | | | | | | | | | | | | |
| | SDJCR/1600R-3/8" H07 Twin IC ■ | 9.525 | 9.525 | 100 | 20 | 19 | 3.26 | 8 | M5 | 23 | DC..0702.. | 16… |
| | SDJCR/1600R-1/2" H07 Twin IC ■ | 12.7 | 12.7 | 100 | 20 | 19 | 4.85 | 8 | M5 | 23 | DC..0702.. | 16… |
| | SDJCR/1600R-5/8" K11 Twin IC ■ | 15.875 | 15.875 | 125 | 26 | 23 | 6.44 | 10 | G⅛" | 35 | DC..11T3.. | 16… |
| | SDJCR/1600R-3/4" K11 Twin IC ■ | 19.05 | 19.05 | 125 | 26 | 27 | 5.53 | 14 | G⅛" | 68 | DC..11T3.. | 16… |

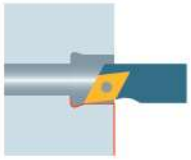
**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…



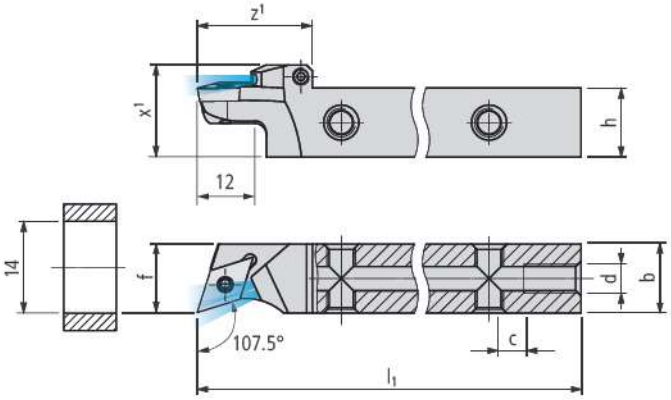



**SDHC... (107.5°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | f | | | | | 201... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDHCL 1010 XH07 | ■ | SDHCR 1010 XH07 | ■ | 10 | 10 | 100 | 11 | | | | | DC..0702.. |
| SDHCL 1212 XH07 | ■ | SDHCR 1212 XH07 | ■ | 12 | 12 | 100 | 12 | | | | | DC..0702.. |
| SDHCL 1616 XK07 | ■ | SDHCR 1616 XK07 | ■ | 16 | 16 | 125 | 13.5 | | | | | DC..0702.. |



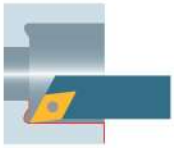
**With internal cooling**




**SDHC… IC (107.5°)**

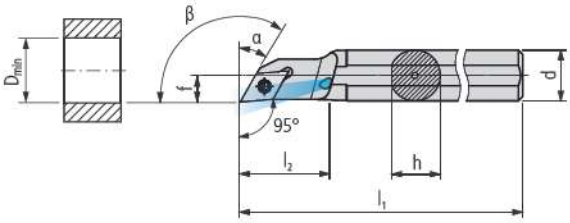
| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | $z_1$ | $x_1$ | c | d | f | 201… |
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDHCL 1010 XH07 IC | ■ | SDHCR 1010 XH07 IC | ■ | 10 | 10 | 100 | 20 | 14 | M5 | M5 | 11 | DC..0702.. |
| SDHCL 1212 XH07 IC | ■ | SDHCR 1212 XH07 IC | ■ | 12 | 12 | 100 | 20 | 16 | M5 | M5 | 12 | DC..0702.. |
| SDHCL 1616 XK07 IC | ■ | SDHCR 1616 XK07 IC | ■ | 16 | 16 | 125 | 20 | 20 | M5 | G⅛" | 13.5 | DC..0702.. |

Legend ..... 8…





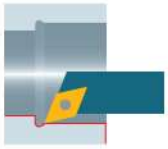


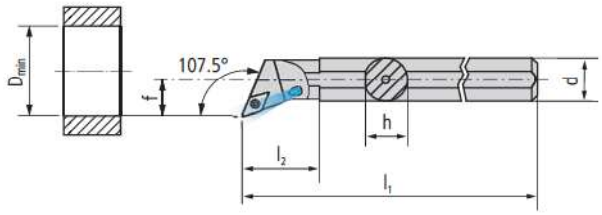



**A... SDOC... (95°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | α | β | 201... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A12K SDOCL 07 | ■ | A12K SDOCR 07 | ■ | 12 | 11.5 | 125 | 21 | 7 | 14 | 30° | 120° | DC..0702.. |

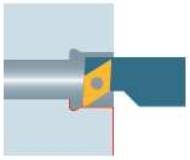
Legend ..... 8...





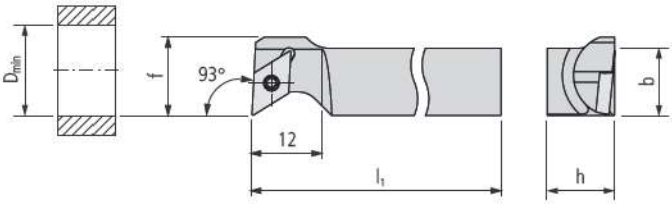

**A... SDQC... (107.5°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | | | 201... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A12K SDQCL 07 | ■ | A12K SDQCR 07 | ■ | 12 | 11.5 | 125 | 22 | 9 | 16 | | | DC..0702.. |
| A16M SDQCL 07 | ■ | A16M SDQCR 07 | ■ | 16 | 15 | 150 | 29 | 11 | 20 | | | DC..0702.. |
| A20Q SDQCL 07 | ■ | A20Q SDQCR 07 | ■ | 20 | 18.5 | 180 | 32 | 13 | 25 | | | DC..0702.. |





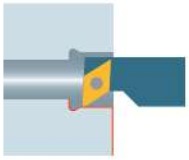




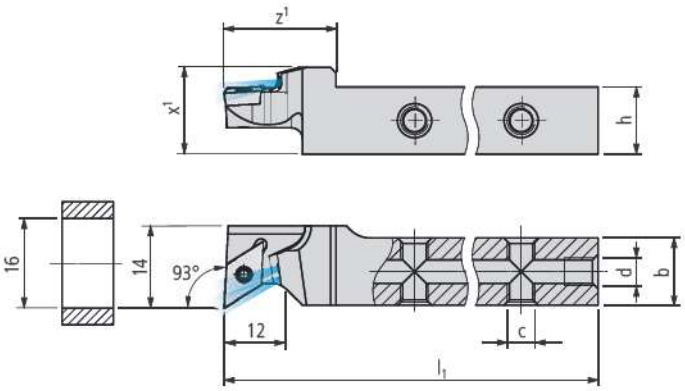

**SDUC... (93°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | | f | $D_{min}$ | | | 201... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDUCL 1010 XH07 | □ | SDUCR 1010 XH07 | □ | 10 | 10 | 100 | | 14 | 16 | | | DC..0702.. |
| SDUCL 1212 XH07 | ■ | SDUCR 1212 XH07 | ■ | 12 | 12 | 100 | | 14 | 16 | | | DC..0702.. |
| SDUCL 1616 XK07 | ■ | SDUCR 1616 XK07 | ■ | 16 | 16 | 125 | | 14 | 16 | | | DC..0702.. |

Legend ..... 8...



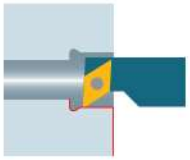
**With internal cooling**




**SDUC… IC (93°)**

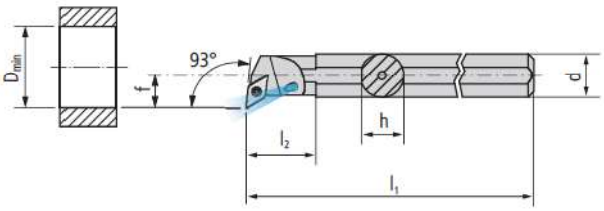
| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | $z^1$ | $x^1$ | c | d | | 201… |
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDUCL 1010 XH07 IC | ◘ | SDUCR 1010 XH07 IC | ◘ | 10 | 10 | 100 | 20 | 13.5 | M5 | M5 | | DC.. 0702.. |
| SDUCL 1212 XH07 IC | ■ | SDUCR 1212 XH07 IC | ■ | 12 | 12 | 100 | 20 | 15.5 | M5 | M5 | | DC.. 0702.. |
| SDUCL 1616 XH07 IC | ◘ | SDUCR 1616 XH07 IC | ◘ | 16 | 16 | 100 | 20 | 19.5 | M5 | G⅛" | | DC.. 0702.. |
| SDUCL 1616 XK07 IC | ■ | SDUCR 1616 XK07 IC | ■ | 16 | 16 | 125 | 20 | 19.5 | M5 | G⅛" | | DC.. 0702.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…










**A... SDUC... (93°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | | | 201... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A10H SDUCL 07 | ■ | A10H SDUCR 07 | ■ | 10 | 9 | 100 | – | 7 | 14 | | | DC..0702.. |
| A12K SDUCL 07 | ■ | A12K SDUCR 07 | ■ | 12 | 11.5 | 125 | 22 | 9 | 16 | | | DC..0702.. |
| A16M SDUCL 07 | ■ | A16M SDUCR 07 | ■ | 16 | 15 | 150 | 29 | 11 | 20 | | | DC..0702.. |
| A20Q SDUCL 07 | ■ | A20Q SDUCR 07 | ■ | 20 | 18.5 | 180 | 32 | 13 | 25 | | | DC..0702.. |
| A20Q SDUCL 11 | ■ | A20Q SDUCR 11 | ■ | 20 | 18.5 | 180 | 32 | 13 | 25 | | | DC..11T3.. |

### For holders (SS…) OD turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2.5 × 6 T08 | MSP 25060 T08 | ■ | SD… 07 |
| | | M3.5 × 8.6 T15 | MSP 35086 T15 | ■ | SD… 11… Twin |
| | | M3.5 × 11 T15 | MSP 35110 T15 | ■ | SD… 11 |

### For holders (SD.C… FC) OD turning

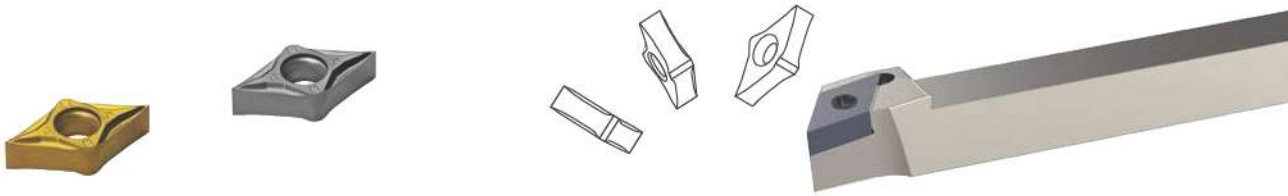
| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | Clamping bolts | 4 × 11 | MSP SB 40110 FC | ■ | SD.C… 11 FC |
|  | Clamping screw | M4 × 11 | MSP KS 40110 FC T08 | ■ | SD.C… 11 FC |

### For holders (… SD…) ID turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2.5 × 5.5 T07 | MSP 25055 T07 | ■ | A10H SD… 07 |
| | | M2.5 × 6 T08 | MSP 25060 T08 | ■ | A12K SD… 07<br>A16M SD… 07<br>A20Q SD… 07 |
| | | M3.5 × 8.6 T15 | MSP 35086 T15 | ■ | A20Q SD… 11 |

TORX screwdriver ..... 🗋651…

This further development of multidec®-ISO provides a tool system with 4 cutting edges and the finest performance-cost ratio for Swiss type machining and precision turning.
The insert consist of 4 sharp cutting edges with radius 0.08 and 0.15 mm and is easily indexed or changed. Innovative chip breakers have been designed for cutting of very difficult materials on finishing and micro-finishing applications using coated and uncoated submicrograin carbide.
Even for the hardened and nickel-plated holders a wide range of possibilities with shank sizes between 10 and 25 mm are available. For Swiss type automatic lathes special holders have been designed and complete the range of choices.



**Specific features of insert DNGU:**
– Negative holder fixed with screw
– 4 positive cutting edges for the price of 2
– Sharp edges with 7° clearance angle
– Small corner radius (0.08 and 0.15 mm)
– Fine grain grade carbide
– Insert DNGU also usable on holders with toggle setting device

"IC" tool holder with integrated cooling

Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Conveying the coolant as close as possible to the cutting edge is often a difficult task in the machine rooms of Swiss type turning lathes.
The multidec®-IC program offers a wide range of holders with integrated cooling. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert. This means significantly longer tool life as well as very reliable serial production.

**Advantages:**
– All holders feature five possible connectors for the coolant supply
– Constant coolant discharge means low build-up at front near the holder
– With or without high pressure, the coolant medium always hits the cutting edge precisely

## *Overview – multidec®-ISO, type DN... (55°)*


Technical information 11

Inserts (carbide / cermet)

DNGU … 250

Holders (OD turning)

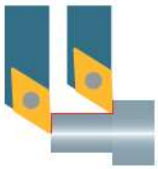
SDJN… (93°), SDJN… IC (93°) 252

SDNNN … (62.5°), SDNNN … IC (62.5°) 254

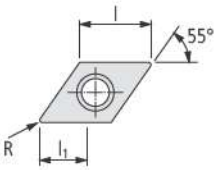
Replacement and spare parts 256

Coolant system and accessories 619

UTILIS multidec swiss type tools



DNGU … -A4



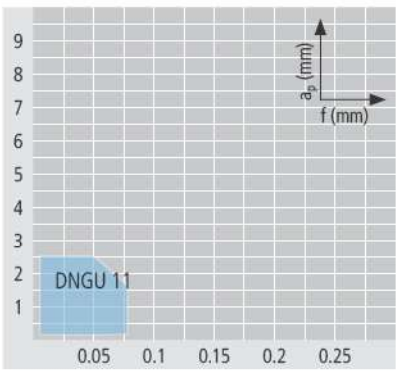


β: 8°
s: ±0.13
C: <0.002

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □252… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N DNGU 1104008 FN -A4 … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 11.6 | 0.08 | 2.9 | | SDJN…11 |
| DNGU 1104015 FN -A4 … | | | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | | | | | | | 11.6 | 0.15 | 2.9 | | SDJN…11 |
| DNGU 1104035 FN -A4 … | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.6 | 0.35 | 2.9 | | SDJN…11 |

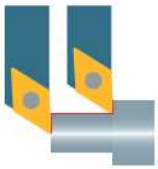


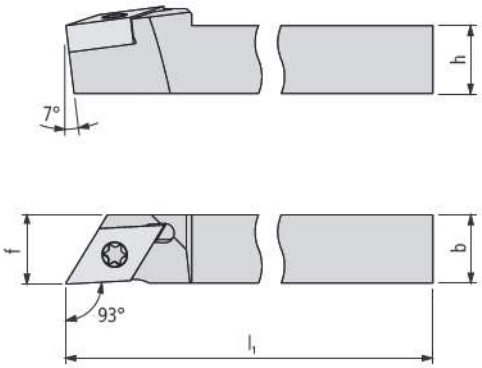
**Properties:**
– polished rake and ground clearance
– 4 sharp cutting edge "F"
– submicrograin carbide, high toughness
– best performance-cost ratio




Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for general application
– alloyed steel and stainless steel





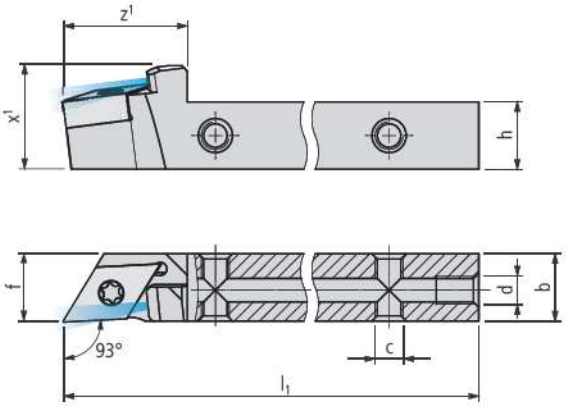

## SDJN... (93°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 250... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDJNL 1012 F11 | ■ | SDJNR 1012 F11 | ■ | 10 | 12 | 80 | | 12 | | | | DN... 11... |
| SDJNL 1012 H11 | ■ | SDJNR 1012 H11 | ■ | 10 | 12 | 100 | | 12 | | | | DN... 11... |
| SDJNL 1212 H11 | ■ | SDJNR 1212 H11 | ■ | 12 | 12 | 100 | | 12 | | | | DN... 11... |
| SDJNL 1616 K11 | ■ | SDJNR 1616 K11 | ■ | 16 | 16 | 125 | | 16 | | | | DN... 11... |
| SDJNL 2020 K11 | ■ | SDJNR 2020 K11 | ■ | 20 | 20 | 125 | | 20 | | | | DN... 11... |
| SDJNL 2525 M11 | ■ | SDJNR 2525 M11 | ■ | 25 | 25 | 150 | | 25 | | | | DN... 11... |

## SDJN... (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 250... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SDJNL 3/8" F11 | ■ | SDJNR 3/8" F11 | ■ | 9.525 | 9.525 | 80 | | 9.525 | | | | DN... 11... |
| SDJNL 3/8" H11 | ■ | SDJNR 3/8" H11 | ■ | 9.525 | 9.525 | 100 | | 9.525 | | | | DN... 11... |
| SDJNL 1/2" H11 | ■ | SDJNR 1/2" H11 | ■ | 12.7 | 12.7 | 100 | | 12.7 | | | | DN... 11... |
| SDJNL 5/8" K11 | ■ | SDJNR 5/8" K11 | ■ | 15.875 | 15.875 | 125 | | 15.875 | | | | DN... 11... |
| SDJNL 3/4" K11 | ■ | SDJNR 3/4" K11 | ■ | 19.05 | 19.05 | 125 | | 19.05 | | | | DN... 11... |

**With internal cooling**




## SDJN… IC (93°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 250… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDJNL 0808 H11 IC | ■ | SDJNR 0808 H11 IC | ■ | 8 | 8 | 100 | 22 | 16.5 | M5 | M5 | 8 | DN.. 11… |
| SDJNL 1012 H11 IC | ■ | SDJNR 1012 H11 IC | ■ | 10 | 12 | 100 | 22 | 16.5 | M5 | M5 | 12 | DN.. 11… |
| SDJNL 1212 H11 IC | ■ | SDJNR 1212 H11 IC | ■ | 12 | 12 | 100 | 22 | 18.5 | M5 | M5 | 12 | DN.. 11… |
| SDJNL 1616 K11 IC | ■ | SDJNR 1616 K11 IC | ■ | 16 | 16 | 125 | 22 | 22.5 | M5 | G⅛" | 16 | DN.. 11… |
| SDJNL 2020 K11 IC | ■ | SDJNR 2020 K11 IC | ■ | 20 | 20 | 125 | 22 | 26.5 | M5 | G⅛" | 20 | DN.. 11… |
| SDJNL 2525 K11 IC | ■ | SDJNR 2525 K11 IC | ■ | 25 | 25 | 125 | 22 | 31.5 | M5 | G⅛" | 25 | DN.. 11… |

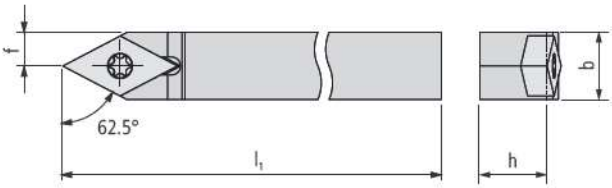
## SDJN… IC (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 250… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDJNL 3/8" H11 IC | ■ | SDJNR 3/8" H11 IC | ■ | 9.525 | 12 | 100 | 22 | 16 | M5 | M5 | 12 | DN.. 11… |
| SDJNL 1/2" H11 IC | ■ | SDJNR 1/2" H11 IC | ■ | 12.7 | 12.7 | 100 | 22 | 19.2 | M5 | M5 | 12.7 | DN.. 11… |
| SDJNL 5/8" K11 IC | ■ | SDJNR 5/8" K11 IC | ■ | 15.875 | 15.875 | 125 | 22 | 22.4 | M5 | G⅛" | 15.875 | DN.. 11… |
| SDJNL 3/4" K11 IC | ■ | SDJNR 3/4" K11 IC | ■ | 19.05 | 19.05 | 125 | 22 | 25.5 | M5 | G⅛" | 19.05 | DN.. 11… |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…



UTILIS multidec swiss type tools




## SDNNN … (62.5°)

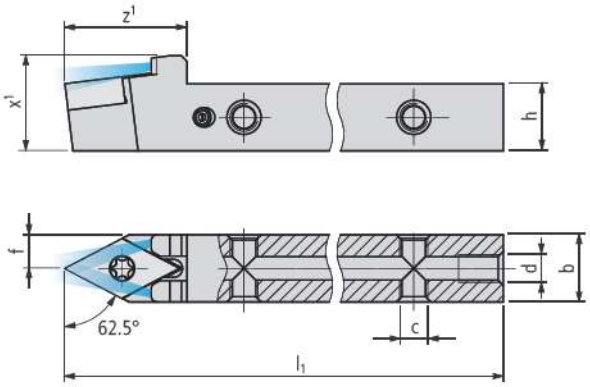
| Order designation | N | Dimensions h | b | $l_1$ | f | Inserts 250… |
|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | |
| SDNNN 1012 H11 | ■ | 10 | 12 | 100 | 6 | DN..11.. |
| SDNNN 1212 H11 | ■ | 12 | 12 | 100 | 6 | DN..11.. |
| SDNNN 1616 K11 | ■ | 16 | 16 | 125 | 8 | DN..11.. |
| SDNNN 2020 K11 | ■ | 20 | 20 | 125 | 10 | DN..11.. |
| SDNNN 2525 K11 | ■ | 25 | 25 | 125 | 12.5 | DN..11.. |

## SDNNN … (62.5°) INCH

| Order designation | N | Dimensions h | b | $l_1$ | f | Inserts 250… |
|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | |
| SDNNN 3/8" H11 | ■ | 9.525 | 9.525 | 100 | 4.76 | DN..11.. |
| SDNNN 1/2" H11 | ■ | 12.7 | 12.7 | 100 | 6.35 | DN..11.. |
| SDNNN 5/8" K11 | ■ | 15.875 | 15.875 | 125 | 7.94 | DN..11.. |
| SDNNN 3/4" K11 | ■ | 19.05 | 19.05 | 125 | 9.525 | DN..11.. |

Legend ..... 8…

**With internal cooling**




## SDNNN … IC (62.5°)

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | | | | h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | 🗋250… |
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDNNN 1012 H11 IC | ■ | | | 10 | 12 | 100 | 22 | 15 | M5 | M5 | 6 | DN..11.. |
| SDNNN 1212 H11 IC | ■ | | | 12 | 12 | 100 | 22 | 17 | M5 | M5 | 6 | DN..11.. |
| SDNNN 1616 K11 IC | ■ | | | 16 | 16 | 125 | 22 | 21 | M5 | G⅛" | 8 | DN..11.. |
| SDNNN 2020 K11 IC | ■ | | | 20 | 20 | 125 | 22 | 25 | M5 | G⅛" | 10 | DN..11.. |
| SDNNN 2525 K11 IC | ■ | | | 25 | 25 | 125 | 25 | 30.5 | M5 | G⅛" | 12.5 | DN..11.. |

## SDNNN … IC (62.5°) INCH

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | | | | h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | 🗋250… |
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SDNNN 3/8" H11 IC | ■ | | | 9.525 | 9.525 | 100 | 22 | 14.525 | M5 | M5 | 4.76 | DN..11.. |
| SDNNN 1/2" H11 IC | ■ | | | 12.7 | 12.7 | 100 | 22 | 17.7 | M5 | M5 | 6.35 | DN..11.. |
| SDNNN 5/8" K11 IC | ■ | | | 15.875 | 15.875 | 125 | 22 | 20.875 | M5 | G⅛" | 7.94 | DN..11.. |
| SDNNN 3/4" K11 IC | ■ | | | 19.05 | 19.05 | 125 | 22 | 24.05 | M5 | G⅛" | 9.525 | DN..11.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 🗋619…

### For holders (SD.N…) OD turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M4 × 11 TP15 | MSP 40110 TP15 | ■ | SDJN. 11 |

TORX screwdriver ..... 651…

Legend ..... 8…

multidec®-ISO provides a well balanced range of tools for turning with rhombic 35° inserts and holders. Positive inserts with rounded cutting edges for roughing and sharp cutting edges for finishing are available.
These include a wide range of ground holders with hardened and nickel-plated surfaces for Swiss type automatic lathes with shank sizes from 8 to 20 mm and boring bars with diameters from 12 to 20 mm.

**Advantages:**
– Carbide and Cermet grades with chip breaker and coatings for all common materials
– Diamond range with CVD and PCD inserts for machining non-ferrous metals
– Cutting edge radius from 0.05 to 0.8 mm as standard
– Boring bars with steel- and carbide shanks

"IC" tool holder with integrated cooling

Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Conveying the coolant as close as possible to the cutting edge is often a difficult task in the machine rooms of Swiss type turning lathes.
The multidec®-IC program offers a wide range of holders with integrated cooling. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert. This means significantly longer tool life as well as very reliable serial production.

**Advantages:**
– All holders feature five possible connectors for the coolant supply
– Constant coolant discharge means low build-up at front near the holder
– With or without high pressure, the coolant medium always hits the cutting edge precisely

"TWIN" holder with and without integrated coolant supply

The "TWIN" range allows you to work with two inserts on the same holder.
Different combinations are possible, and provide the user with a high degree of flexibility. Holders are available with shank cross-sections of 8 to 20 mm, with and without internal cooling.

**Advantages:**
– Twice the number of tools on the machine
– Two different turning operations are possible with a single tool holder
– All holders with an integrated coolant supply have five connecting options

## *Overview – multidec®-ISO, type VC... (35°)*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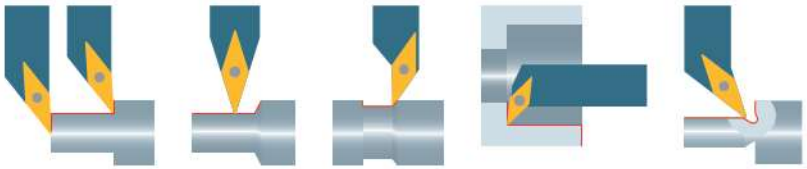
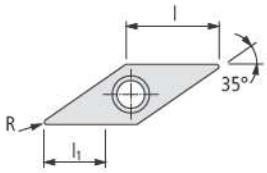
## Inserts (Carbide / Cermet)





VCGT ... FN -A3





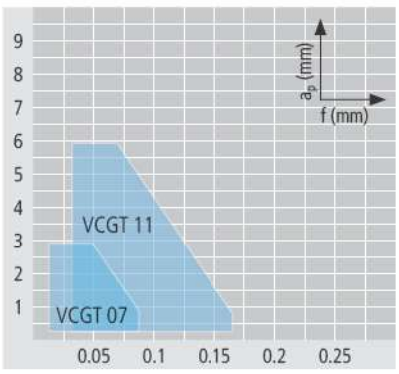
β: 30°
s: ±0.13
C: <0.002

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □ 283... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 0702006 FN -A3 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 6.8 | 0.06 | 3 | | SV...07... |
| N VCGT 070201 FN-A3 | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 6.8 | 0.1 | 3 | | SV...07... |
| N VCGT 0702015 FN-A3 | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 6.8 | 0.15 | 3 | | SV...07... |
| N VCGT 1103008 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.08 | 6 | | SV...11... |
| N VCGT 1103015 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.15 | 6 | | SV...11... |
| N VCGT 1103035 FN -A3 ... | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.35 | 6 | | SV...11... |

## Application range of chip breaker

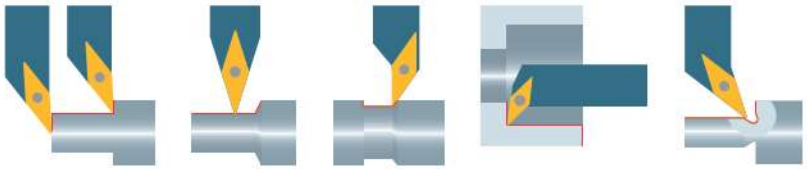


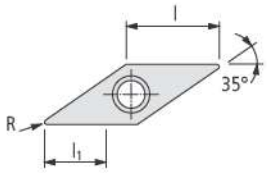
**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent




Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for general application
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites







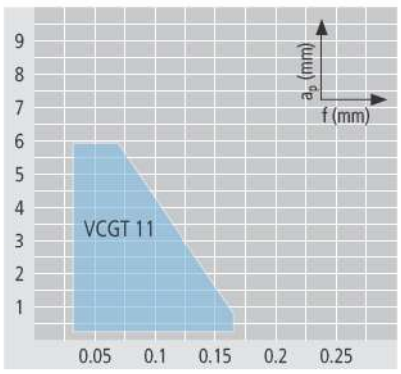
β: 30°
s: ±0.13
C: <0.03

**VCGT ... EN -A3**

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 1103008 EN -A3 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.08 | 6 | | SV...11... |
| VCGT 1103015 EN -A3 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.15 | 6 | | SV...11... |
| VCGT 1103035 EN -A3 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.35 | 6 | | SV...11... |



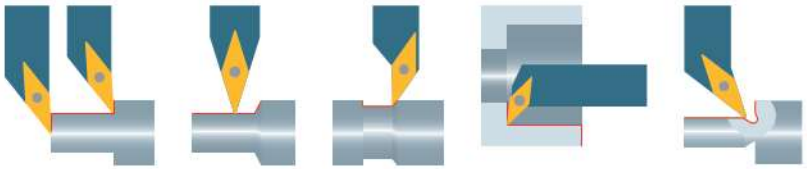
**Properties:**
– polished rake
– ground clearance
– little rounded cutting edge "E"
– submicrograin carbide, heat and wear resistent



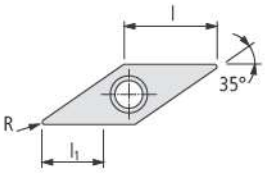

Optimal chip breaking

**Application:**
– finishing
– chip breaker for general application
– stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet) — multidec®-ISO



VCGT … -PA5



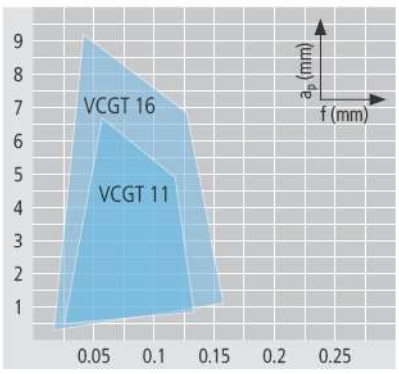


β: 25°
s: ±0.13
C: <0.002

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | ▯283… |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 110302 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.1 | 0.2 | 6.8 | | SV…11… |
| VCGT 110304 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 11.1 | 0.4 | 6.8 | | SV…11… |
| VCGT 160404 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 16.6 | 0.4 | 8.9 | | SV…16… |
| VCGT 160408 FN -PA5 … | ■ | ■ | ■ | | | | | | | | | | | | | | | | | 16.6 | 0.8 | 8.9 | | SV…16… |

## Application range of chip breaker — multidec®-ISO

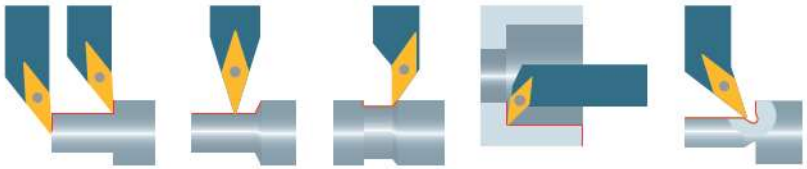
**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– submicrograin carbide, heat and wear resistent

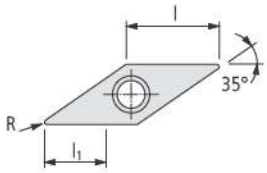



Optimal chip breaking

**Application:**
– finishing and micro finishing
– chip breaker for materials with difficult chip control
– stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites

## Inserts (Carbide / Cermet) — multidec®-ISO







β: 25°
s: ±0.13
C: <0.002

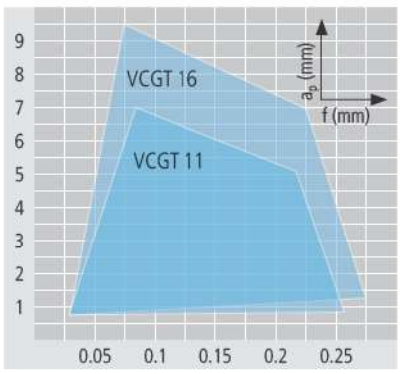
**VCGT … -TOP5***

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □283… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| L VCGT 110304 FL -TOP5 … | ■ | ■ | ▣ | | | | | | | | | | | | | | | | | 11.1 | 0.4 | 7 | | SV…11… |
| R VCGT 110304 FR -TOP5 … | ■ | ■ | ▣ | | | | | | | | | | | | | | | | | 11.1 | 0.4 | 7 | | SV…11… |

* Description TOP ..... □13

## Application range of chip breaker — multidec®-ISO

**Properties:**
- polished rake and ground clearance
- sharp cutting edge "F"
- micrograin carbide, heat and wear resistent
- TOP system, for a better surface finish

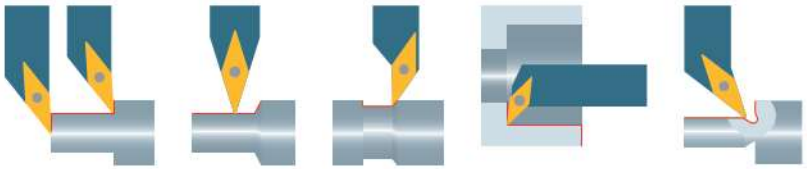


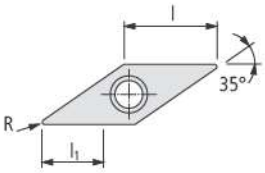

Optimal chip breaking

**Application:**
- finishing for 20–100 % higher feed rates compair to the standard
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/composites

Technical information ..... □11…

Legend ..... □8…







β: 27°
s: ±0.13
C: <0.002

**VCGT ... -PA7**

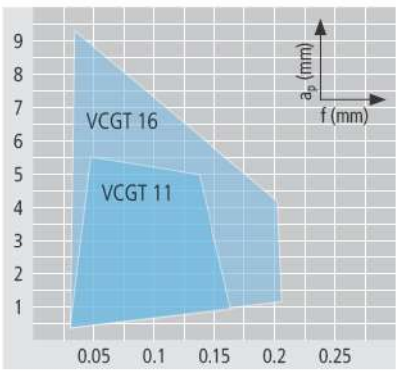
| Order designation | Carbide ▯20 | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | | ● | ● | ● | – | – | – | | | | | ▯283... |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | | – | – | – | – | – | – | | | | | |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| VCGT 1103005 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.05 | 5.5 | | SV...11... |
| VCGT 110301 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.1 | 5.5 | | SV...11... |
| VCGT 110302 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.2 | 5.5 | | SV...11... |
| VCGT 110304 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.4 | 5.5 | | SV...11... |
| VCGT 110308 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.8 | 5.5 | | SV...11... |
| VCGT 160402 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 16.6 | 0.2 | 8.9 | | SV...16... |
| VCGT 160404 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 16.6 | 0.4 | 8.9 | | SV...16... |
| VCGT 160408 FN -PA7 ... | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | 16.6 | 0.8 | 8.9 | | SV...16... |

N

## Application range of chip breaker

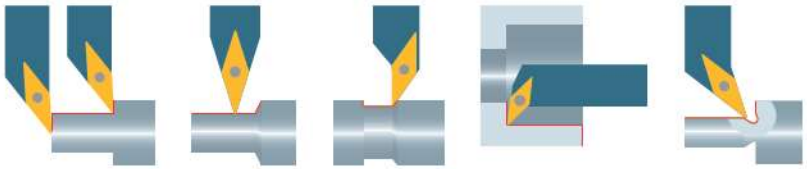
multidec®-ISO

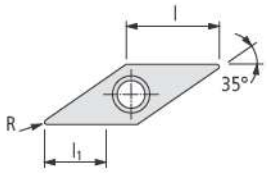
**Properties:**
– ground clearance
– sharp cutting edge "F"
– micrograin carbide, heat and wear resistent




Optimal chip breaking

**Application:**
– micro finishing
– chip breaker for materials with good chip control
– stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites





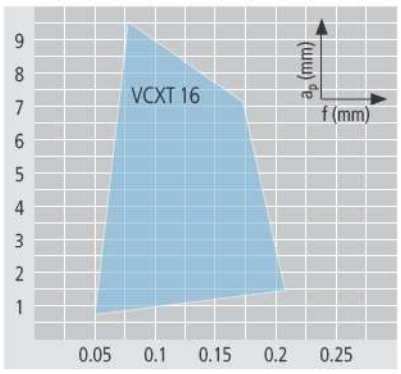

VCXT ... -PA9


β: 25°
s: ±0.1
C: <0.01

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCXT 160404 EN -PA9 ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 16.6 | 0.4 | 8.9 | | SV...16... |
| VCXT 160408 EN -PA9 ... | ■ | ■ | □ | | | | | | | | | | | | | | | | | 16.6 | 0.8 | 8.9 | | SV...16... |

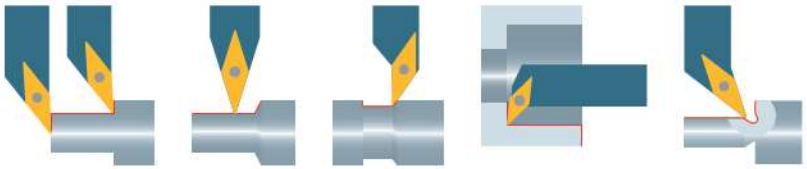


**Properties:**
- high precision sintered insert
- rounded cutting edge "E"
- micrograin carbide, heat and wear resistent
- best performance-cost ratio



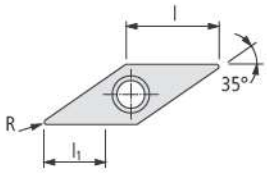

Optimal chip breaking

**Application:**
- finishing
- chip breaker for soft materials with good chip control
- alloyed steel, stainless steel, super alloy, titanium and aluminum




VCGT 11


VCGT 16





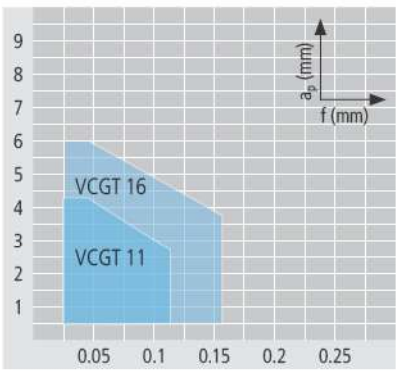
β: 8°
s: ±0.13
C: <0.01

**VCGT … -PF**

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯283… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 110302 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | ■ | ■ | ■ | | | | 11.1 | 0.2 | 4.8 | | SV…11… |
| N VCGT 110304 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | ■ | ■ | ■ | | | | 11.1 | 0.4 | 4.8 | | SV…11… |
| N VCGT 110308 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 11.1 | 0.8 | 4.8 | | SV…11… |
| N VCGT 160404 EN -PF … | | | | | | | | | | | | | | ■ | ■ | ■ | | | | 16.6 | 0.4 | 6 | | SV…16… |
| N VCGT 160408 EN -PF … | | | | | | | | | | | | | | ■ | ■ | ■ | | | | 16.6 | 0.8 | 6 | | SV…16… |



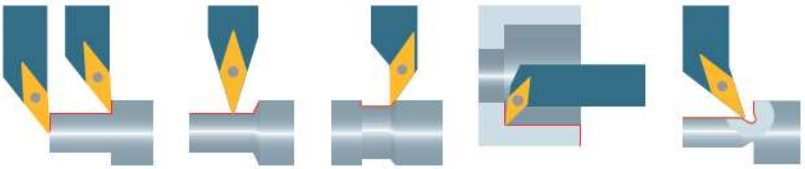
**Properties:**
– ground clearance
– little rounded cutting edge "E"
– carbide and cermet in different grades

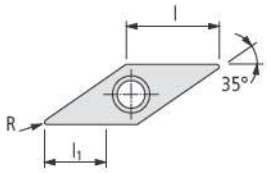



Optimal chip breaking

**Application:**
– finishing and micro finishing
– chip breaker for general application
– alloyed steel and stainless steel

## Inserts (Carbide / Cermet) — multidec®-ISO





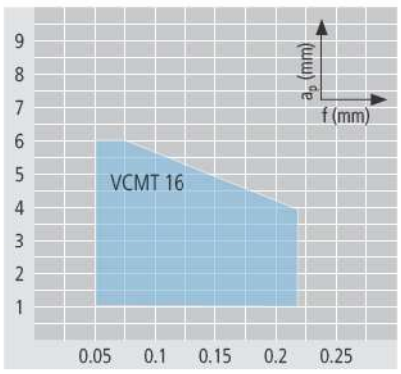

VCMT … -PF


β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCMT 160404 EN -PF … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 16.6 | 0.4 | 6 | | SV…16… |
| VCMT 160408 EN -PF … | | | | ■ | | | | ■ | | | | | | | | | | | | 16.6 | 0.8 | 6 | | SV…16… |

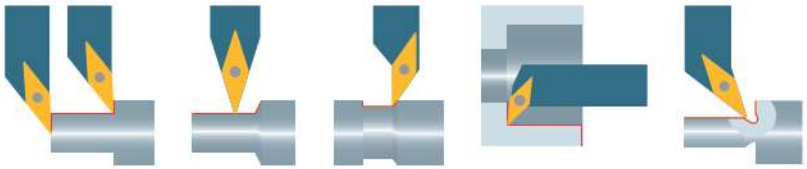
## Application range of chip breaker — multidec®-ISO

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– carbide and cermet in different grades

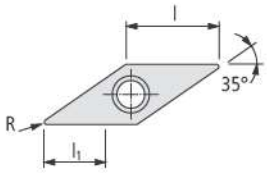



Optimal chip breaking

**Application:**
– roughing
– chip breaker for general application
– alloyed steel and stainless steel



**VCET ... -PF05**





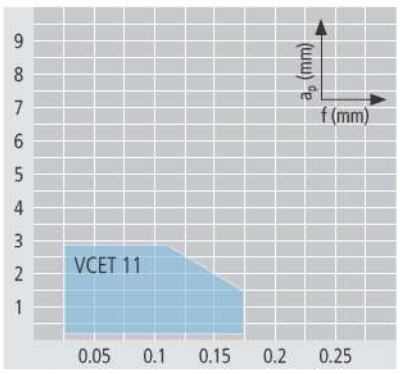
β: 18°
s: ±0.025
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □283... |
| **PREMIUM-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| VCET 1103005 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.05 | 3 | | SD...11... |
| VCET 110301 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.1 | 3 | | SD...11... |
| VCET 1103015 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.15 | 3 | | SD...11... |
| VCET 110302 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.2 | 3 | | SD...11... |
| VCET 110304 FN -PF05 | | ■ | | | | | | | | | | | | | | | | | | 11.1 | 0.4 | 3 | | SD...11... |

## *Application range of chip breaker*

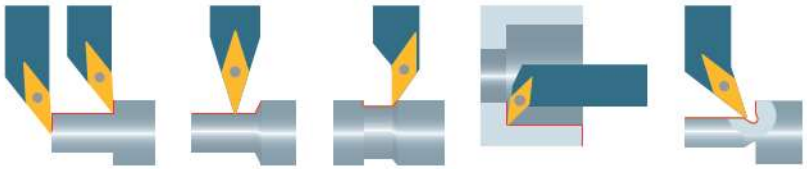


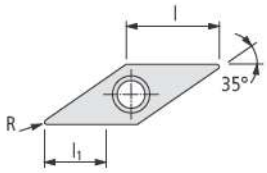
**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- submicrograin carbide, heat and wear resistent




Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- stainless steel, alloyed steel, titanium, super alloy, aluminum and synthetics reinforced/ composites







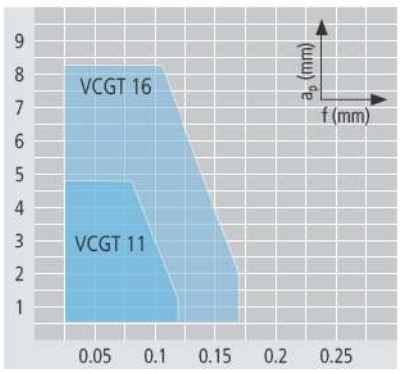
β: 12°
s: ±0.13
C: <0.002

**VCGT … FN -PF23**

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □ 283… |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 1103005 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.05 | 4.8 | | SV…11… |
| N VCGT 110301 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.1 | 4.8 | | SV…11… |
| N VCGT 110302 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.2 | 4.8 | | SV…11… |
| N VCGT 160401 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 16.6 | 0.1 | 8.4 | | SV…16… |
| N VCGT 160402 FN -PF23 … | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 16.6 | 0.2 | 8.4 | | SV…16… |



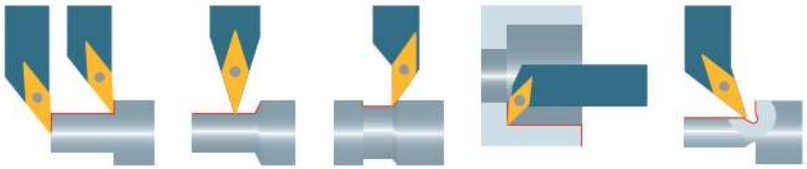
**Properties:**
– polished rake
– ground clearance
– sharp cutting edge "F"
– micrograin carbide



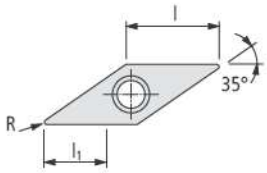

Optimal chip breaking

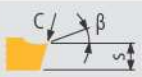
**Application:**
– micro finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel

UTILIS multidec swiss type tools



VCGT ... EN -PF23



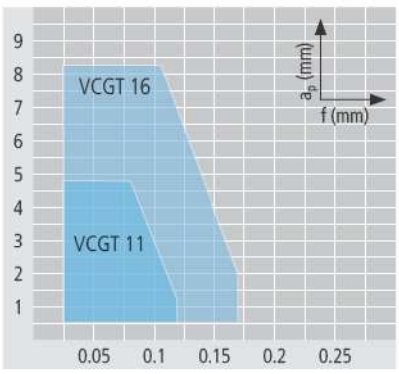

β: 12°
s: ±0.13
C: <0.03

| Order designation | Carbide ▯20 | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | ▯283... |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 1103005 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.05 | 4.8 | | SV...11... |
| N VCGT 110301 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.1 | 4.8 | | SV...11... |
| N VCGT 110302 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.2 | 4.8 | | SV...11... |
| N VCGT 160401 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 16.6 | 0.1 | 8.4 | | SV...16... |
| N VCGT 160402 EN -PF23 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 16.6 | 0.2 | 8.4 | | SV...16... |

## Application range of chip breaker

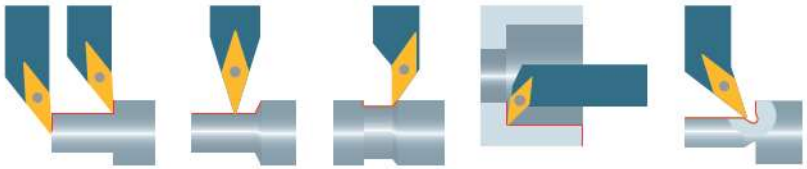


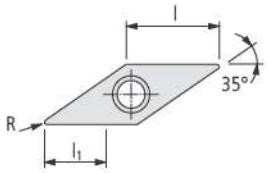
**Properties:**
– polished rake
– ground clearance
– little rounded cutting edge "E"
– micrograin carbide




Optimal chip breaking

**Application:**
– finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel





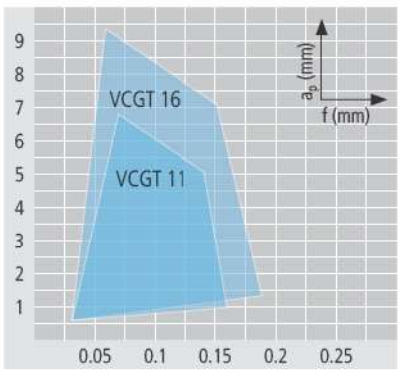

VCGT ... FN -PF33


β: 12°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 1103005 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.05 | 4.8 | | SV...11... |
| N VCGT 110301 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.1 | 4.8 | | SV...11... |
| N VCGT 110302 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.2 | 4.8 | | SV...11... |
| N VCGT 110304 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 11.1 | 0.4 | 4.8 | | SV...11... |
| N VCGT 160401 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 16.6 | 0.1 | 8.4 | | SV...16... |
| N VCGT 160402 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 16.6 | 0.2 | 8.4 | | SV...16... |
| N VCGT 160404 FN -PF33 ... | | | | | ■ | ■ | ■ | | | ■ | | | | | | | | | | 16.6 | 0.4 | 8.4 | | SV...16... |



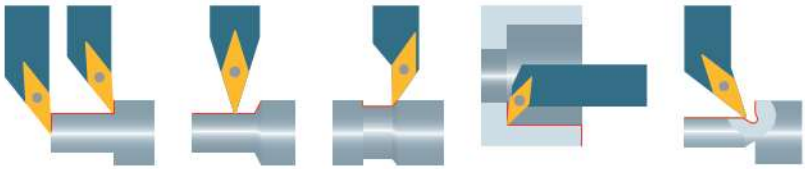
**Properties:**
- polished rake
- ground clearance
- sharp cutting edge "F"
- micrograin carbide



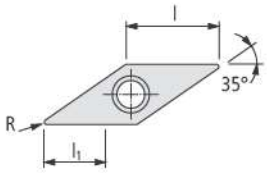

Optimal chip breaking

**Application:**
- micro finishing
- chip breaker for materials with difficult chip control
- alloyed steel and stainless steel

UTILIS multidec swiss type tools



VCGT ... EN -PF33



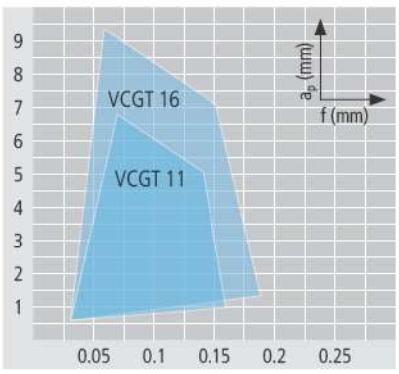


β: 12°
s: ±0.13
C: <0.03

| Order designation | Carbide (□20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □283... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| VCGT 1103005 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.05 | 4.8 | | SV...11... |
| VCGT 110301 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.1 | 4.8 | | SV...11... |
| VCGT 110302 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.2 | 4.8 | | SV...11... |
| VCGT 110304 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 11.1 | 0.4 | 4.8 | | SV...11... |
| VCGT 160401 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 16.6 | 0.1 | 8.4 | | SV...16... |
| VCGT 160402 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 16.6 | 0.2 | 8.4 | | SV...16... |
| VCGT 160404 EN -PF33 ... | | | | | ■ | ■ | ■ | | | | | | | | | | | | | 16.6 | 0.4 | 8.4 | | SV...16... |

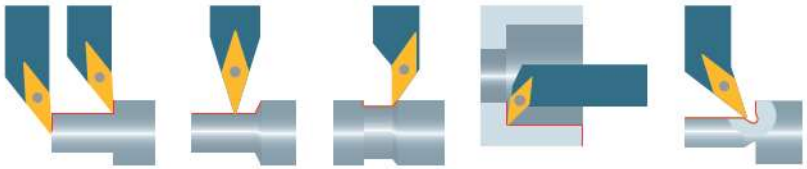


**Properties:**
- polished rake
- ground clearance
- little rounded cutting edge "E"
- micrograin carbide

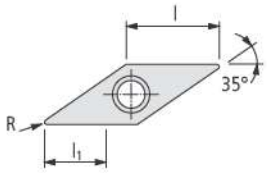



Optimal chip breaking

**Application:**
- finishing
- chip breaker for materials with difficult chip control
- alloyed steel and stainless steel



**VCMT ... -PF43**



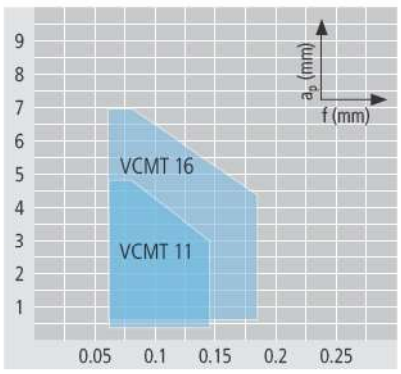


β: 12°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| | – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| | – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| | ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| | ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| | – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCMT 110302 EN -PF43 ... | | | | | | | | | | ■ | | | | | | | | | | 11.1 | 0.2 | 4.8 | | SV...11... |
| VCMT 110304 EN -PF43 ... | | | | | | | | | | ■ | | | | | | | | | | 11.1 | 0.4 | 4.8 | | SV...11... |
| VCMT 160404 EN -PF43 ... | | | | | | | | | | ■ | | | | | | | | | | 16.6 | 0.4 | 7 | | SV...16... |

## *Application range of chip breaker* *multidec®-ISO*

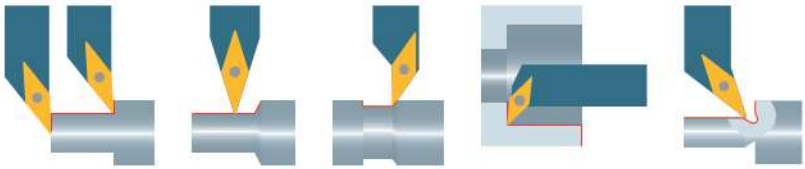
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide

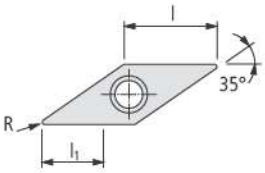



Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for materials with difficult chip control
– alloyed steel and stainless steel

UTILIS multidec swiss type tools







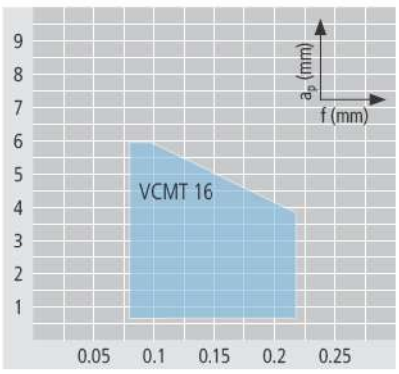
β: 8°
s: ±0.13
C: <0.02

**VCMT … -PM**

| Order designation | Carbide (□ 20) | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | □ 283… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCMT 160404 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 16.6 | 0.4 | 6 | | SV…16… |
| VCMT 160408 EN -PM … | | | | ■ | | | | ■ | | | | ■ | | | | | | | | 16.6 | 0.8 | 6 | | SV…16… |

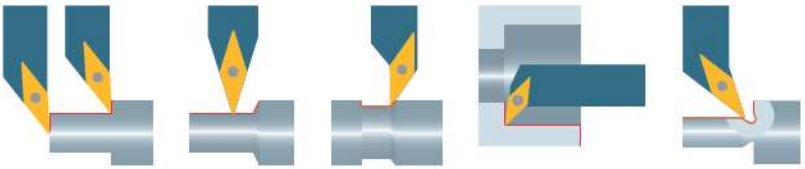


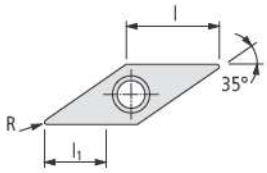
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide




Optimal chip breaking

**Application:**
– roughing
– chip breaker for general application
– alloyed steel and stainless steel





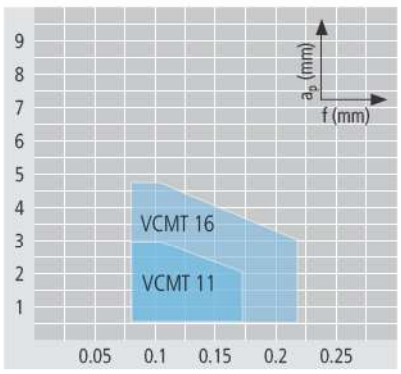

**VCMT … -PMF**


β: 8°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCMT 110304 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 11.1 | 0.4 | 4.1 | | SV…11… |
| VCMT 160404 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 16.6 | 0.4 | 6 | | SV…16… |
| VCMT 160408 EN -PMF … | | | | | | | | | | | | | | | | ■ | | | | 16.6 | 0.8 | 6 | | SV…16… |



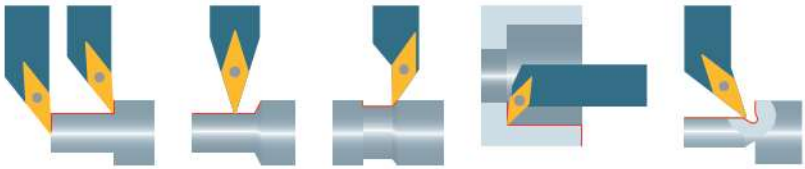
**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– micrograin carbide



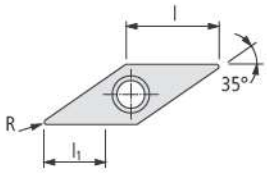

Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for general application
– alloyed steel and stainless steel

UTILIS multidec swiss type tools



VCMT … -PM25





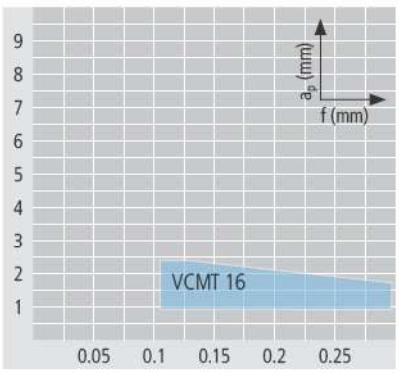
β: 18°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283… |
| VALUE-LINE | | | | | | | | | | | | | | | | | | | | | | | | |
| VCMT 160404 EN -PM25 … | | | | | | ■ | | | | | | | | | | | | | | 16.6 | 0.4 | 2.2 | | SV…16… |

## Application range of chip breaker

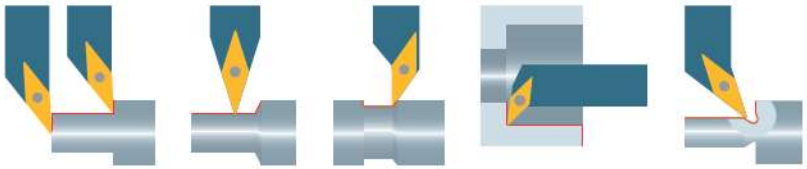
multidec®-ISO

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– carbide and cermet in different grades

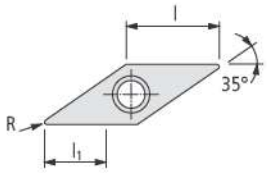



Optimal chip breaking

**Application:**
– roughing and finishing
– chip breaker for general application
– stainless steel



**VCMT … -PM55**



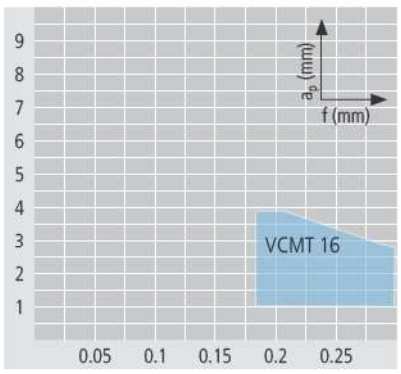


β: 16°
s: ±0.13
C: <0.02

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283… |
| – | – | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ○ | ● | ● | ● | – | – | – | | | | | |
| – | ● | ● | – | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ● | ○ | – | – | – | | | | | |
| ○ | ● | ● | – | ○ | ● | ● | – | ○ | ● | ● | – | – | – | – | – | – | – | – | | | | | |
| ● | ○ | – | – | ● | ○ | – | – | ○ | ○ | – | – | – | ○ | – | – | – | ● | ● | ● | | | | | |
| – | – | ● | – | – | – | ○ | – | – | – | – | – | – | – | – | – | – | – | – | – | | | | | |
| **VALUE-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCMT 160404 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 16.6 | 0.4 | 3 | | SV…16… |
| VCMT 160408 EN -PM55 … | | | | | | ■ | | | | | | | | | | | | | | 16.6 | 0.8 | 3.4 | | SV…16… |

## *Application range of chip breaker* *multidec®-ISO*

**Properties:**
– sintered insert based on ISO standard
– rounded cutting edge "E"
– carbide and cermet in different grades

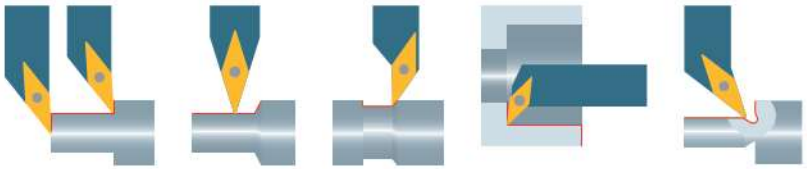



Optimal chip breaking

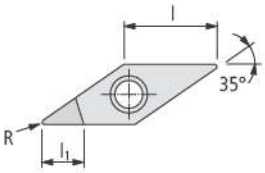
**Application:**
– roughing
– chip breaker for general application
– stainless steel

## Inserts (Diamond)





VCGT …





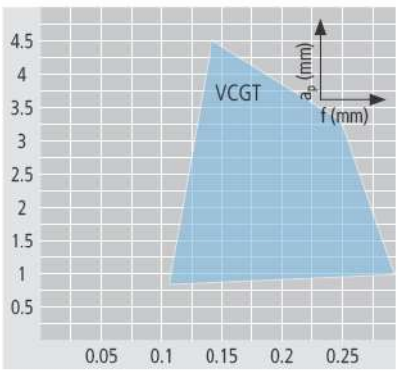
β: 7°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283… |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 110301 FN … | | | | | | | | | | | | | | | | | ■ | ■ | | 11.1 | 0.1 | 5.4 | | SV…11… |
| VCGT 110302 FN … | | | | | | | | | | | | | | | | | ■ | ■ | | 11.1 | 0.2 | 4.6 | | SV…11… |
| VCGT 160402 FN … | | | | | | | | | | | | | | | | | ■ | ■ | | 16.6 | 0.2 | 5.9 | | SV…16… |
| VCGT 160404 FN … | | | | | | | | | | | | | | | | | ■ | ■ | | 16.6 | 0.4 | 5.5 | | SV…16… |

## Application range of chip breaker

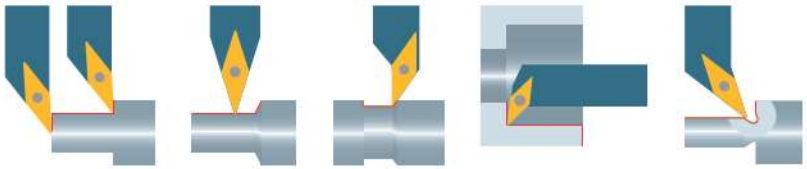


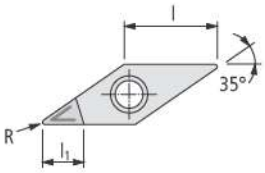
**Properties:**
- sharp cutting edge "F"
- less cutting force
- positive cut




Optimal chip breaking

**Application:**
- finishing and micro finishing for unstable or thin-walled parts
- chip breaker for general application will generate continues chip
- aluminum, brass, copper, bronze, platinium, gold, synthetics and synthetics reinforced/composites
- ideal for smallest tolerance and medium surface quality






VCGT ... -UWS

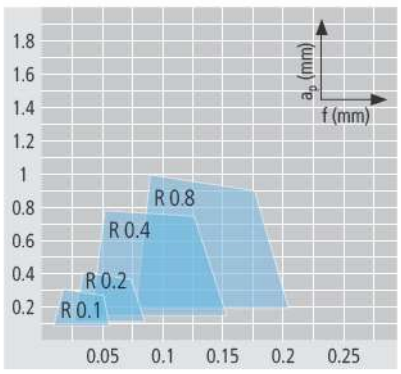

β: 15–20°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | l | R | $l_1$ | | □283... |
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | | | | | |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 110301 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | | 11.1 | 0.1 | 4.6 | | SV...11... |
| N VCGT 110302 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.1 | 0.2 | 4.6 | | SV...11... |
| N VCGT 110304 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.1 | 0.4 | 3.9 | | SV...11... |
| N VCGT 160402 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | | 16.6 | 0.2 | 5.9 | | SV...16... |
| N VCGT 160404 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 16.6 | 0.4 | 5.5 | | SV...16... |
| N VCGT 160408 FN -UWS ... | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 16.6 | 0.8 | 5 | | SV...16... |

## Application range of chip breaker

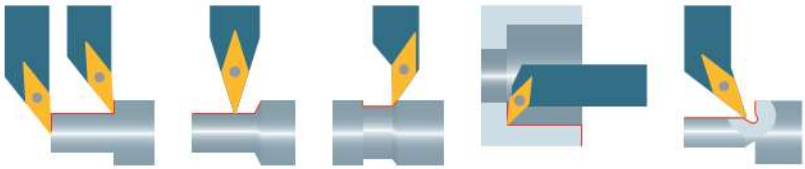


**Properties:**
- sharp cutting edge "F"
- almost any cutting force
- high positive narrow chip breaker made by laser

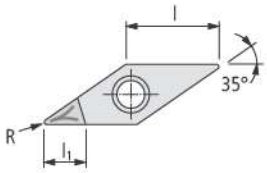



Optimal chip breaking

**Application:**
- micro finishing for unstable or thin-walled parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and medium surface quality



VCGT ... -UWN



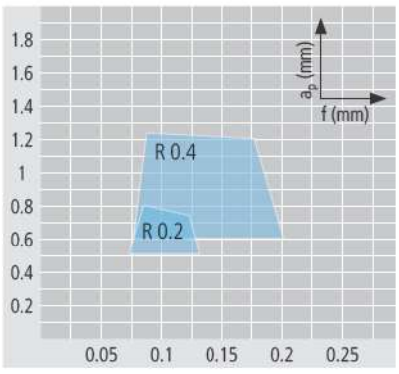


β: 15–20°
s: ±0.13
C: <0.005

| Order designation | Carbide | | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGT 110302 FN -UWN ... | | | | | | | | | | | | | | | | | ■ | | ■ | 11.1 | 0.2 | 4.6 | | SV...11... |
| VCGT 110304 FN -UWN ... | | | | | | | | | | | | | | | | | ■ | | ■ | 11.1 | 0.4 | 3.9 | | SV...11... |
| VCGT 160404 FN -UWN ... | | | | | | | | | | | | | | | | | ■ | | ■ | 16.6 | 0.4 | 5.5 | | SV...16... |

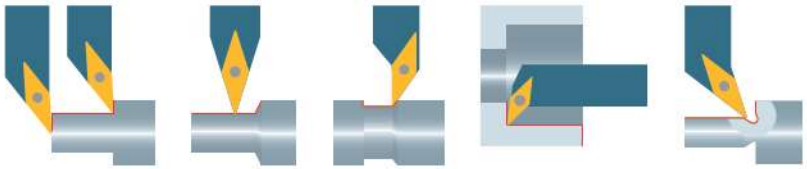


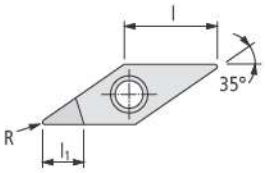
**Properties:**
- sharp cutting edge "F"
- higher cutting force
- high positive wide chip breaker made by laser




Optimal chip breaking

**Application:**
- finishing for stable or solid parts
- chip breaker for materials with difficult chip control
- synthetics reinforced/composites, aluminum, platinium, gold and synthetics
- ideal for smallest tolerance and best surface quality





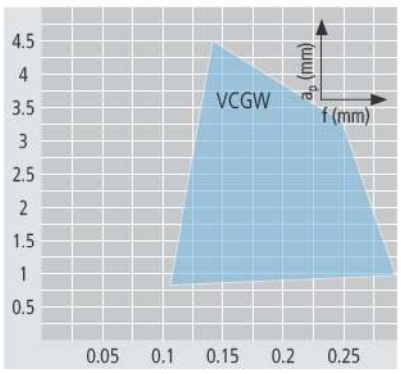

VCGW ...


β: 0°
s: ±0.13
C: <0.002

| Order designation | Carbide | | | | | | | | | | | | | Cermet | | | Diamond | | | Dimensions | | | | Holder |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UHM 10 | UHM 10 HX | UHM 10 TX+ | UHM 10 MZ | UHM 20 | UHM 20 HPX | UHM 20 TX+ | UHM 20 MZ | UHM 30 | UHM 30 HX | UHM 30 TX+ | UHM 30 MZ | UHM 30 SX | UCM 10 | UCM 10 HX | UCM 10 MZ | UCVD 08 | UPCD 15 | UPCD 20 | l | R | $l_1$ | | 283... |
| **STANDARD-LINE** | | | | | | | | | | | | | | | | | | | | | | | | |
| N VCGW 110301 FN ... | | | | | | | | | | | | | | | | | | | ■ | 11.1 | 0.1 | 4.6 | | SV...11... |
| N VCGW 110302 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.1 | 0.2 | 4.6 | | SV...11... |
| N VCGW 110304 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 11.1 | 0.4 | 3.9 | | SV...11... |
| N VCGW 160404 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 16.6 | 0.4 | 5.5 | | SV...16... |
| N VCGW 160408 FN ... | | | | | | | | | | | | | | | | | ■ | ■ | ■ | 16.6 | 0.8 | 5 | | SV...16... |

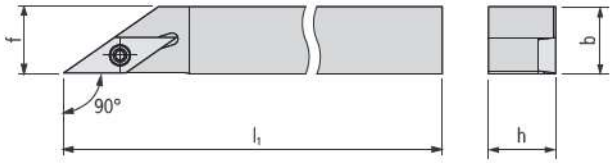


**Properties:**
- sharp cutting edge "F"
- medium cutting force
- neutral cut




Optimal chip breaking

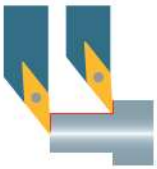
**Application:**
- finishing and micro finishing for stable or solid parts
- chip breaker for general application will generate continues chip
- aluminum, brass, copper, bronze, platinium, gold, synthetics and synthetics reinforced/composites
- ideal for smallest tolerance and high surface quality

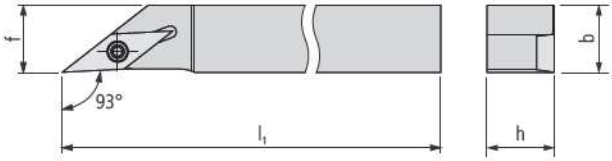



**SVAC… U (90°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | | f | | | | 259… |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVACL 0808 F11 U | ■ | SVACR 0808 F11 U | ■ | 8 | 8 | 80 | | 7.85 | | | | VC..1103.. |
| SVACL 0808 H07 U | ■ | SVACR 0808 H07 U | ■ | 8 | 8 | 100 | | 7.85 | | | | VC..0702.. |
| SVACL 0808 H11 U | ■ | SVACR 0808 H11 U | ■ | 8 | 8 | 100 | | 7.85 | | | | VC..1103.. |
| SVACL 1010 F11 U | ■ | SVACR 1010 F11 U | ■ | 10 | 10 | 80 | | 9.85 | | | | VC..1103.. |
| SVACL 1010 H07 U | ■ | SVACR 1010 H07 U | ■ | 10 | 10 | 100 | | 9.85 | | | | VC..0702.. |
| SVACL 1010 H11 U | ■ | SVACR 1010 H11 U | ■ | 10 | 10 | 100 | | 9.85 | | | | VC..1103.. |
| SVACL 1212 H07 U | ■ | SVACR 1212 H07 U | ■ | 12 | 12 | 100 | | 11.85 | | | | VC..0702.. |
| SVACL 1212 H11 U | ■ | SVACR 1212 H11 U | ■ | 12 | 12 | 100 | | 11.85 | | | | VC..1103.. |

Legend ..... 8…






## SVJC... U (93°)

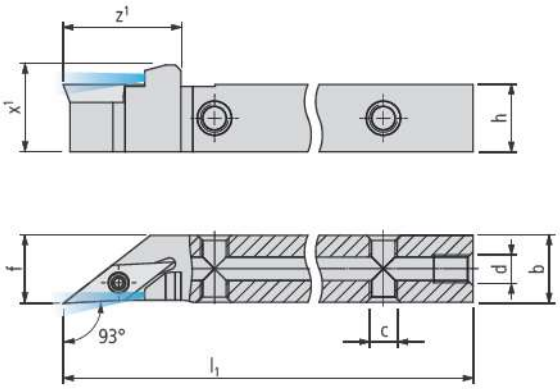
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVJCL 0808 F11 U | ■ | SVJCR 0808 F11 U | ■ | 8 | 8 | 80 | | 7.95 | | | | VC..1103.. |
| SVJCL 0808 H07 U | ■ | SVJCR 0808 H07 U | ■ | 8 | 8 | 100 | | 7.95 | | | | VC..0702.. |
| SVJCL 0808 H11 U | ■ | SVJCR 0808 H11 U | ■ | 8 | 8 | 100 | | 7.95 | | | | VC..1103.. |
| SVJCL 1010 F11 U | ■ | SVJCR 1010 F11 U | ■ | 10 | 10 | 80 | | 9.95 | | | | VC..1103.. |
| SVJCL 1010 H07 U | ■ | SVJCR 1010 H07 U | ■ | 10 | 10 | 100 | | 9.95 | | | | VC..0702.. |
| SVJCL 1010 H11 U | ■ | SVJCR 1010 H11 U | ■ | 10 | 10 | 100 | | 9.95 | | | | VC..1103.. |
| SVJCL 1212 H07 U | ■ | SVJCR 1212 H07 U | ■ | 12 | 12 | 100 | | 11.95 | | | | VC..0702.. |
| SVJCL 1212 H11 U | ■ | SVJCR 1212 H11 U | ■ | 12 | 12 | 100 | | 11.95 | | | | VC..1103.. |
| SVJCL 1216 H16 U | ■ | SVJCR 1216 H16 U | ■ | 12 | 16 | 100 | | 15.95 | | | | VC..1604.. |
| SVJCL 1616 K11 U | ■ | SVJCR 1616 K11 U | ■ | 16 | 16 | 125 | | 15.95 | | | | VC..1103.. |
| SVJCL 1616 K16 U | ■ | SVJCR 1616 K16 U | ■ | 16 | 16 | 125 | | 15.95 | | | | VC..1604.. |
| SVJCL 2020 K11 U | ■ | SVJCR 2020 K11 U | ■ | 20 | 20 | 125 | | 19.95 | | | | VC..1103.. |
| SVJCL 2020 K16 U | ■ | SVJCR 2020 K16 U | ■ | 20 | 20 | 125 | | 19.95 | | | | VC..1604.. |

## SVJC... U (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVJCL 3/8" F11 U | ■ | SVJCR 3/8" F11 U | ■ | 9.525 | 9.525 | 80 | | 9.475 | | | | VC..1103.. |
| SVJCL 3/8" H07 U | ■ | SVJCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | | 9.475 | | | | VC..0702.. |
| SVJCL 3/8" H11 U | ■ | SVJCR 3/8" H11 U | ■ | 9.525 | 9.525 | 100 | | 9.475 | | | | VC..1103.. |
| SVJCL 1/2" H07 U | ■ | SVJCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | | 12.65 | | | | VC..0702.. |
| SVJCL 1/2" H11 U | ■ | SVJCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | | 12.65 | | | | VC..1103.. |
| SVJCL 1/2"-5/8" H16 U | ■ | SVJCR 1/2"-5/8" H16 U | ■ | 12.7 | 15.875 | 100 | | 15.825 | | | | VC..1604.. |
| SVJCL 3/4" K11 U | ■ | SVJCR 3/4" K11 U | ■ | 19.05 | 19.05 | 125 | | 19 | | | | VC..1103.. |
| SVJCL 3/4" K16 U | ■ | SVJCR 3/4" K16 U | ■ | 19.05 | 19.05 | 125 | | 19 | | | | VC..1604.. |

Legend ..... 8...

**With internal cooling**



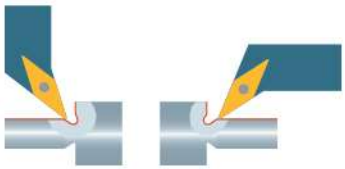

## SVJC... U IC (93°)

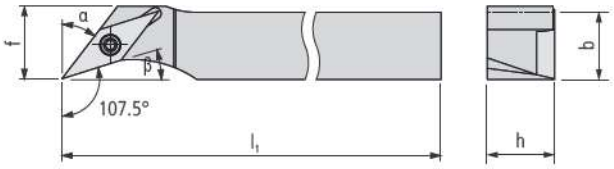
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SVJCL 0808 H07 U IC | ■ | SVJCR 0808 H07 U IC | ■ | 8 | 8 | 100 | 20 | 11.5 | M5 | M5 | 8 | VC.. 0702.. |
| SVJCL 0810 H11 U IC | ■ | SVJCR 0810 H11 U IC | ■ | 8 | 10 | 100 | 21 | 11.5 | M5 | M5 | 10 | VC.. 1103.. |
| SVJCL 1010 H07 U IC | ■ | SVJCR 1010 H07 U IC | ■ | 10 | 10 | 100 | 20 | 13.5 | M5 | M5 | 10 | VC.. 0702.. |
| SVJCL 1010 H11 U IC | ■ | SVJCR 1010 H11 U IC | ■ | 10 | 10 | 100 | 21 | 13.5 | M5 | M5 | 10 | VC.. 1103.. |
| SVJCL 1212 H07 U IC | ■ | SVJCR 1212 H07 U IC | ■ | 12 | 12 | 100 | 20 | 15.5 | M5 | M5 | 12 | VC.. 0702.. |
| SVJCL 1212 H11 U IC | ■ | SVJCR 1212 H11 U IC | ■ | 12 | 12 | 100 | 21 | 15.5 | M5 | M5 | 12 | VC.. 1103.. |
| SVJCL 1216 H16 U IC | ■ | SVJCR 1216 H16 U IC | ■ | 12 | 16 | 100 | 27 | 15.5 | M5 | M5 | 12 | VC.. 1604.. |
| SVJCL 1616 K11 U IC | ■ | SVJCR 1616 K11 U IC | ■ | 16 | 16 | 125 | 21 | 19.5 | M5 | G⅛" | 16 | VC.. 1103.. |
| SVJCL 1616 K16 U IC | ■ | SVJCR 1616 K16 U IC | ■ | 16 | 16 | 125 | 27 | 19.5 | M5 | G⅛" | 16 | VC.. 1604.. |
| SVJCL 2020 K11 U IC | ■ | SVJCR 2020 K11 U IC | ■ | 20 | 20 | 125 | 21 | 23.5 | M5 | G⅛" | 20 | VC.. 1103.. |
| SVJCL 2020 K16 U IC | ■ | SVJCR 2020 K16 U IC | ■ | 20 | 20 | 125 | 27 | 23.5 | M5 | G⅛" | 20 | VC.. 1604.. |

## SVJC... U IC (93°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SVJCL 3/8" H07 U IC | ■ | SVJCR 3/8" H07 U IC | ■ | 9.525 | 9.525 | 100 | 20 | 13 | M5 | M5 | 9.525 | VC.. 0702.. |
| SVJCL 3/8" H11 U IC | ■ | SVJCR 3/8" H11 U IC | ■ | 9.525 | 9.525 | 100 | 21 | 13 | M5 | M5 | 9.525 | VC.. 1103.. |
| SVJCL 1/2" H07 U IC | ■ | SVJCR 1/2" H07 U IC | ■ | 12.7 | 12.7 | 100 | 20 | 16.2 | M5 | M5 | 12.7 | VC.. 0702.. |
| SVJCL 1/2" H11 U IC | ■ | SVJCR 1/2" H11 U IC | ■ | 12.7 | 12.7 | 100 | 21 | 16.2 | M5 | M5 | 12.7 | VC.. 1103.. |
| SVJCL 1/2"-5/8" H16 U IC | ■ | SVJCR 1/2"-5/8" H16 U IC | ■ | 12.7 | 15.875 | 100 | 27 | 16.2 | M5 | M5 | 12.7 | VC.. 1604.. |
| SVJCL 5/8" K11 U IC | ■ | SVJCR 5/8" K11 U IC | ■ | 15.875 | 15.875 | 125 | 21 | 19.5 | M5 | G⅛" | 15.875 | VC.. 1103.. |
| SVJCL 5/8" K16 U IC | ■ | SVJCR 5/8" K16 U IC | ■ | 15.875 | 15.875 | 125 | 27 | 19.5 | M5 | G⅛" | 15.875 | VC.. 1604.. |
| SVJCL 3/4" K11 U IC | ■ | SVJCR 3/4" K11 U IC | ■ | 19.05 | 19.05 | 125 | 21 | 22.6 | M5 | G⅛" | 19.05 | VC.. 1103.. |
| SVJCL 3/4" K16 U IC | ■ | SVJCR 3/4" K16 U IC | ■ | 19.05 | 19.05 | 125 | 27 | 22.6 | M5 | G⅛" | 19.05 | VC.. 1604.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619...





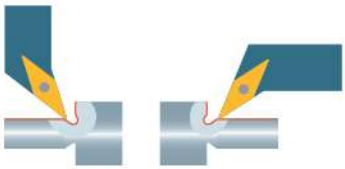

## SVHC... U (107.5°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | α | β | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | |
| SVHCL 0808 H07 U | ■ | SVHCR 0808 H07 U | ■ | 8 | 8 | 100 | 8.5 | 37.5° | 17.5° | VC..0702.. |
| SVHCL 1010 H07 U | ■ | SVHCR 1010 H07 U | ■ | 10 | 10 | 100 | 10 | 37.5° | 17.5° | VC..0702.. |
| SVHCL 1010 H11 U | ■ | SVHCR 1010 H11 U | ■ | 10 | 10 | 100 | 13 | 37.5° | 17.5° | VC..1103.. |
| SVHCL 1212 H07 U | ■ | SVHCR 1212 H07 U | ■ | 12 | 12 | 100 | 12 | 37.5° | 17.5° | VC..0702.. |
| SVHCL 1212 H11 U | ■ | SVHCR 1212 H11 U | ■ | 12 | 12 | 100 | 13 | 37.5° | 17.5° | VC..1103.. |
| SVHCL 1616 K11 U | ■ | SVHCR 1616 K11 U | ■ | 16 | 16 | 125 | 16 | 37.5° | 17.5° | VC..1103.. |

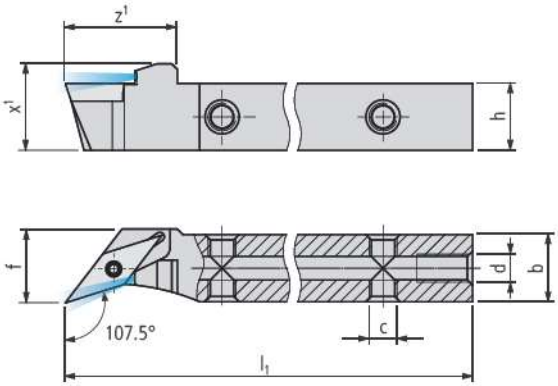
## SVHC... U (107.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | α | β | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | |
| SVHCL 3/8" H07 U | ■ | SVHCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | 9.525 | 37.5° | 17.5° | VC..0702.. |
| SVHCL 3/8" H11 U | ■ | SVHCR 3/8" H11 U | ■ | 9.525 | 9.525 | 100 | 13 | 37.5° | 17.5° | VC..1103.. |
| SVHCL 1/2" H07 U | ■ | SVHCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | 12.7 | 37.5° | 17.5° | VC..0702.. |
| SVHCL 1/2" H11 U | ■ | SVHCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | 13 | 37.5° | 17.5° | VC..1103.. |
| SVHCL 5/8" K11 U | ■ | SVHCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | 16 | 37.5° | 17.5° | VC..1103.. |

Legend ..... 8...



**With internal cooling**



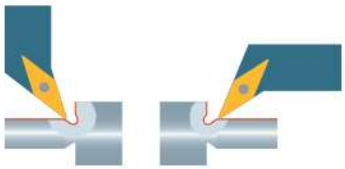

## SVHC... U IC (107.5°)

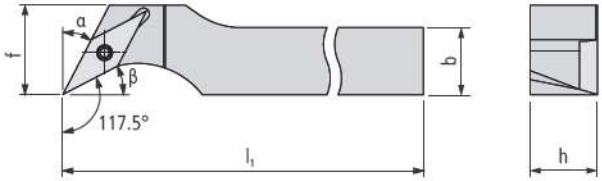
| Order designation L | Order designation R | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVHCL 0808 H07 U IC ■ | SVHCR 0808 H07 U IC ■ | 8 | 8 | 100 | 18 | 11.5 | M5 | M5 | 8.5 | VC..0702.. |
| SVHCL 1010 H07 U IC ■ | SVHCR 1010 H07 U IC ■ | 10 | 10 | 100 | 18 | 13.5 | M5 | M5 | 10 | VC..0702.. |
| SVHCL 1212 H07 U IC ■ | SVHCR 1212 H07 U IC ■ | 12 | 12 | 100 | 18 | 15.5 | M5 | M5 | 12 | VC..0702.. |
| SVHCL 1212 H11 U IC ■ | SVHCR 1212 H11 U IC ■ | 12 | 12 | 100 | 22 | 15.5 | M5 | M5 | 13 | VC..1103.. |
| SVHCL 1616 K11 U IC ■ | SVHCR 1616 K11 U IC ■ | 16 | 16 | 125 | 22 | 19.5 | M5 | G⅛" | 16 | VC..1103.. |

## SVHC... U IC (107.5°) INCH

| Order designation L | Order designation R | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVHCL 3/8" H07 U IC ■ | SVHCR 3/8" H07 U IC ■ | 9.525 | 9.525 | 100 | 18 | 13 | M5 | M5 | 9.525 | VC..0702.. |
| SVHCL 1/2" H07 U IC ■ | SVHCR 1/2" H07 U IC ■ | 12.7 | 12.7 | 100 | 18 | 16.2 | M5 | M5 | 12.7 | VC..0702.. |
| SVHCL 1/2" H11 U IC ■ | SVHCR 1/2" H11 U IC ■ | 12.7 | 12.7 | 100 | 22 | 16.2 | M5 | M5 | 12.7 | VC..1103.. |
| SVHCL 5/8" K11 U IC ■ | SVHCR 5/8" K11 U IC ■ | 15.875 | 15.875 | 125 | 22 | 19.4 | M5 | G⅛" | 15.875 | VC..1103.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... ▯619...





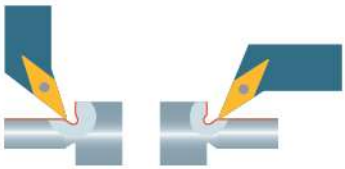

## SVPC... U (117.5°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | α | β | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | |
| SVPCL 0808 H07 U | ■ | SVPCR 0808 H07 U | ■ | 8 | 8 | 100 | 10 | 27.5° | 27.5° | VC..0702.. |
| SVPCL 1010 H07 U | ■ | SVPCR 1010 H07 U | ■ | 10 | 10 | 100 | 10 | 27.5° | 27.5° | VC..0702.. |
| SVPCL 1010 H11 U | ■ | SVPCR 1010 H11 U | ■ | 10 | 10 | 100 | 16 | 27.5° | 27.5° | VC..1103.. |
| SVPCL 1212 H07 U | ■ | SVPCR 1212 H07 U | ■ | 12 | 12 | 100 | 12 | 27.5° | 27.5° | VC..0702.. |
| SVPCL 1212 H11 U | ■ | SVPCR 1212 H11 U | ■ | 12 | 12 | 100 | 16 | 27.5° | 27.5° | VC..1103.. |
| SVPCL 1616 K11 U | ■ | SVPCR 1616 K11 U | ■ | 16 | 16 | 125 | 16 | 27.5° | 27.5° | VC..1103.. |

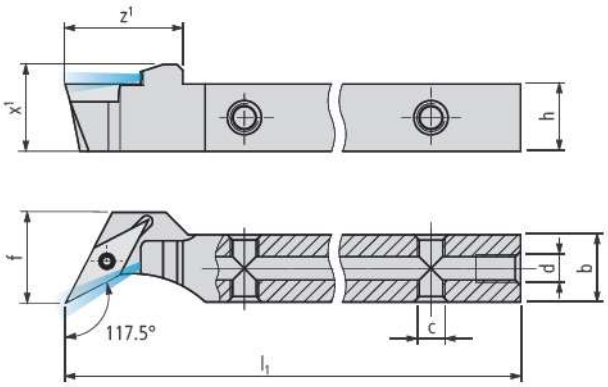
## SVPC... U (117.5°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | f | α | β | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | |
| SVPCL 3/8" H07 U | ■ | SVPCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | 10 | 27.5° | 27.5° | VC..0702.. |
| SVPCL 3/8" H11 U | ■ | SVPCR 3/8" H11 U | ■ | 9.525 | 9.525 | 100 | 16 | 27.5° | 27.5° | VC..1103.. |
| SVPCL 1/2" H07 U | ■ | SVPCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | 12.7 | 27.5° | 27.5° | VC..0702.. |
| SVPCL 1/2" H11 U | ■ | SVPCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | 16 | 27.5° | 27.5° | VC..1103.. |
| SVPCL 5/8" K11 U | ■ | SVPCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | 16 | 27.5° | 27.5° | VC..1103.. |

Legend ..... 8...



**With internal cooling**



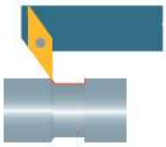

## SVPC... U IC (117.5°)

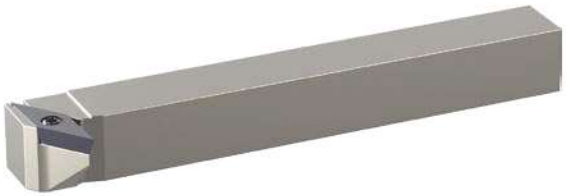
| Order designation L | Order designation R | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVPCL 0808 H07 U IC ■ | SVPCR 0808 H07 U IC ■ | 8 | 8 | 100 | 18 | 11.5 | M5 | M5 | 10 | VC..0702.. |
| SVPCL 1010 H07 U IC ■ | SVPCR 1010 H07 U IC ■ | 10 | 10 | 100 | 18 | 13.5 | M5 | M5 | 10 | VC..0702.. |
| SVPCL 1010 H11 U IC ■ | SVPCR 1010 H11 U IC ■ | 10 | 10 | 100 | 22 | 13.5 | M5 | M5 | 16 | VC..1103.. |
| SVPCL 1212 H07 U IC ■ | SVPCR 1212 H07 U IC ■ | 12 | 12 | 100 | 18 | 15.5 | M5 | M5 | 12 | VC..0702.. |
| SVPCL 1212 H11 U IC ■ | SVPCR 1212 H11 U IC ■ | 12 | 12 | 100 | 22 | 15.5 | M5 | M5 | 16 | VC..1103.. |
| SVPCL 1616 K11 U IC ■ | SVPCR 1616 K11 U IC ■ | 16 | 16 | 125 | 22 | 19.5 | M5 | G⅛" | 16 | VC..1103.. |

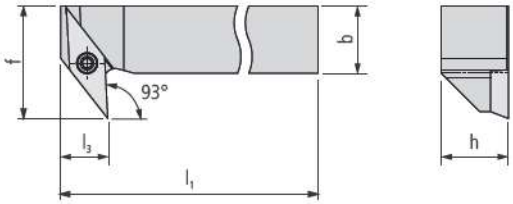
## SVPC... U IC (117.5°) INCH

| Order designation L | Order designation R | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259... |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVPCL 3/8" H07 U IC ■ | SVPCR 3/8" H07 U IC ■ | 9.525 | 9.525 | 100 | 18 | 13 | M5 | M5 | 10 | VC..0702.. |
| SVPCL 3/8" H11 U IC ■ | SVPCR 3/8" H11 U IC ■ | 9.525 | 9.525 | 100 | 22 | 13 | M5 | M5 | 16 | VC..1103.. |
| SVPCL 1/2" H07 U IC ■ | SVPCR 1/2" H07 U IC ■ | 12.7 | 12.7 | 100 | 18 | 16.2 | M5 | M5 | 12.9 | VC..0702.. |
| SVPCL 1/2" H11 U IC ■ | SVPCR 1/2" H11 U IC ■ | 12.7 | 12.7 | 100 | 22 | 16.2 | M5 | M5 | 16 | VC..1103.. |
| SVPCL 5/8" K11 U IC ■ | SVPCR 5/8" K11 U IC ■ | 15.875 | 15.875 | 125 | 22 | 19.4 | M5 | G⅛" | 15.875 | VC..1103.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... ▯619...



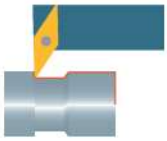


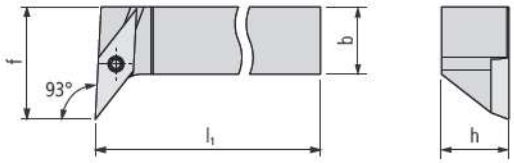



**SVQC... (93°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | | f | | $l_3$ | | 259... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVQCL 0808 H07 | ■ | SVQCR 0808 H07 | ■ | 8 | 8 | 100 | | 13.5 | | 6 | | VC..0702.. |
| SVQCL 1010 H07 | ■ | SVQCR 1010 H07 | ■ | 10 | 10 | 100 | | 15.5 | | 6 | | VC..0702.. |
| SVQCL 1212 H07 | ■ | SVQCR 1212 H07 | ■ | 12 | 12 | 100 | | 17.5 | | 6 | | VC..0702.. |
| SVQCL 1212 H11 | ■ | SVQCR 1212 H11 | ■ | 12 | 12 | 100 | | 20 | | 8.5 | | VC..1103.. |
| SVQCL 1616 K11 | ■ | SVQCR 1616 K11 | ■ | 16 | 16 | 125 | | 24 | | 8.5 | | VC..1103.. |

Legend ..... 8...



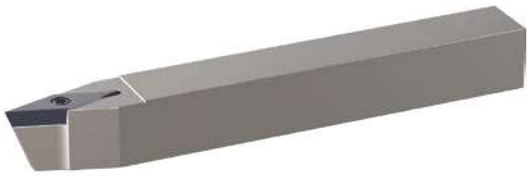


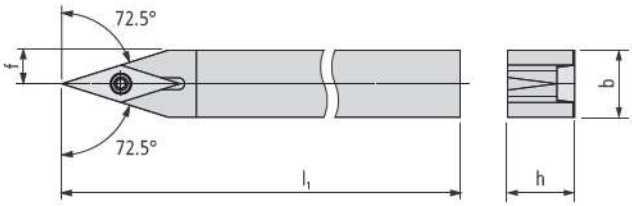

**SVUC... (93°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | h | b | $l_1$ | | f | | | | 259... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVUCL 0808 H07 | ■ | SVUCR 0808 H07 | ■ | 8 | 8 | 100 | | 13.5 | | | | VC..0702.. |
| SVUCL 1010 H07 | ■ | SVUCR 1010 H07 | ■ | 10 | 10 | 100 | | 15.5 | | | | VC..0702.. |
| SVUCL 1212 H07 | ■ | SVUCR 1212 H07 | ■ | 12 | 12 | 100 | | 17.5 | | | | VC..0702.. |
| SVUCL 1212 H11 | ■ | SVUCR 1212 H11 | ■ | 12 | 12 | 100 | | 20 | | | | VC..1103.. |
| SVUCL 1616 K11 | ■ | SVUCR 1616 K11 | ■ | 16 | 16 | 125 | | 24 | | | | VC..1103.. |
| SVUCL 2020 K11 | ■ | SVUCR 2020 K11 | ■ | 20 | 20 | 125 | | 28 | | | | VC..1103.. |









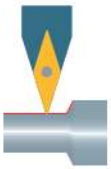

## SVVCN ... U (72.5°)

| Order designation | N | Dimensions h | b | $l_1$ | f | Inserts 259... |
|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | |
| SVVCN 0808 F11 U | ■ | 8 | 8 | 80 | 4 | VC..1103.. |
| SVVCN 0808 H07 U | ■ | 8 | 8 | 100 | 4 | VC..0702.. |
| SVVCN 0808 H11 U | ■ | 8 | 8 | 100 | 4 | VC..1103.. |
| SVVCN 1010 F11 U | ■ | 10 | 10 | 80 | 5 | VC..1103.. |
| SVVCN 1010 H07 U | ■ | 10 | 10 | 100 | 5 | VC..0702.. |
| SVVCN 1010 H11 U | ■ | 10 | 10 | 100 | 5 | VC..1103.. |
| SVVCN 1212 F11 U | ■ | 12 | 12 | 80 | 6 | VC..1103.. |
| SVVCN 1212 H07 U | ■ | 12 | 12 | 100 | 6 | VC..0702.. |
| SVVCN 1212 H11 U | ■ | 12 | 12 | 100 | 6 | VC..1103.. |
| SVVCN 1616 K11 U | ■ | 16 | 16 | 125 | 8 | VC..1103.. |
| SVVCN 2020 K11 U | ■ | 20 | 20 | 125 | 10 | VC..1103.. |
| SVVCN 2020 K16 U | ■ | 20 | 20 | 125 | 10 | VC..1604.. |

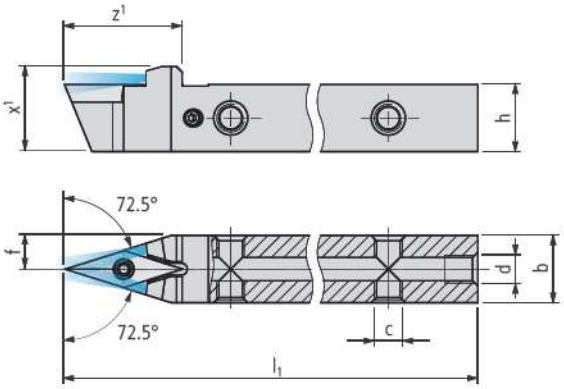
## SVVCN ... U (72.5°) INCH

| Order designation | L | R | Dimensions h | b | $l_1$ | f | Inserts 259... |
|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | |
| SVVCN 3/8" H07 U | ■ | | 9.525 | 9.525 | 100 | 4.76 | VC..0702.. |
| SVVCN 3/8" H11 U | ■ | | 9.525 | 9.525 | 100 | 4.76 | VC..1103.. |
| SVVCN 1/2" H07 U | ■ | | 12.7 | 12.7 | 100 | 6.35 | VC..0702.. |
| SVVCN 1/2" H11 U | ■ | | 12.7 | 12.7 | 100 | 6.35 | VC..1103.. |
| SVVCN 5/8" K11 U | ■ | | 15.875 | 15.875 | 125 | 7.93 | VC..1103.. |
| SVVCN 3/4" K11 U | ■ | | 19.05 | 19.05 | 125 | 9.525 | VC..1103.. |
| SVVCN 3/4" K16 U | ■ | | 19.05 | 19.05 | 125 | 9.525 | VC..1604.. |

Legend ..... 8...



**With internal cooling**



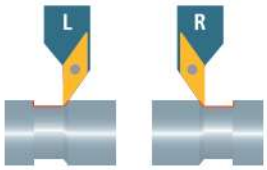

## SVVCN … U IC (72.5°)

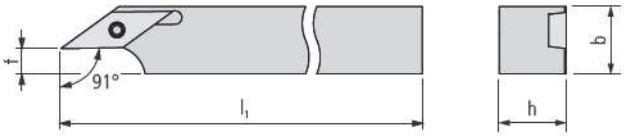
| Order designation L | Order designation R | h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 259… |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVVCN 0808 H07 U IC ■ | | 8 | 8 | 100 | 20 | 11.5 | M5 | M5 | 4 | VC..0702.. |
| SVVCN 0810 H11 U IC ■ | | 8 | 10 | 100 | 21 | 13.2 | M5 | M5 | 5 | VC..1103.. |
| SVVCN 1010 H07 U IC ■ | | 10 | 10 | 100 | 20 | 13.5 | M5 | M5 | 5 | VC..0702.. |
| SVVCN 1010 H11 U IC ■ | | 10 | 10 | 100 | 21 | 13.2 | M5 | M5 | 5 | VC..1103.. |
| SVVCN 1212 H07 U IC ■ | | 12 | 12 | 100 | 20 | 15.5 | M5 | M5 | 6 | VC..0702.. |
| SVVCN 1212 H11 U IC ■ | | 12 | 12 | 100 | 21 | 15.2 | M5 | M5 | 6 | VC..1103.. |
| SVVCN 1616 K11 U IC ■ | | 16 | 16 | 125 | 21 | 19.2 | M5 | G⅛" | 8 | VC..1103.. |
| SVVCN 2020 K11 U IC ■ | | 20 | 20 | 125 | 21 | 23.2 | M5 | G⅛" | 10 | VC..1103.. |
| SVVCN 2020 K16 U IC ■ | | 20 | 20 | 125 | 27 | 24.2 | M5 | G⅛" | 10 | VC..1604.. |

## SVVCN … U IC (72.5°) INCH

| Order designation L | Order designation R | h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts 259… |
|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | |
| SVVCN 3/8" H07 U IC ■ | | 9.525 | 9.525 | 100 | 20 | 13 | M5 | M5 | 4.76 | VC..0702.. |
| SVVCN 3/8" H11 U IC ■ | | 9.525 | 9.525 | 100 | 21 | 12.7 | M5 | M5 | 4.76 | VC..1103.. |
| SVVCN 1/2" H07 U IC ■ | | 12.7 | 12.7 | 100 | 20 | 16.2 | M5 | M5 | 6.35 | VC..0702.. |
| SVVCN 1/2" H11 U IC ■ | | 12.7 | 12.7 | 100 | 21 | 15.9 | M5 | M5 | 6.35 | VC..1103.. |
| SVVCN 5/8" K11 U IC ■ | | 15.875 | 15.875 | 125 | 21 | 19.1 | M5 | G⅛" | 7.94 | VC..1103.. |
| SVVCN 3/4" K11 U IC ■ | | 19.05 | 19.05 | 125 | 21 | 22.3 | M5 | G⅛" | 9.52 | VC..1103.. |
| SVVCN 3/4" K16 U IC ■ | | 19.05 | 19.05 | 125 | 27 | 23.3 | M5 | G⅛" | 9.52 | VC..1604.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…



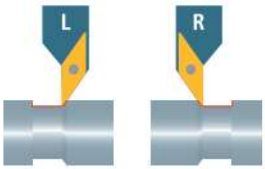




## SVXC... U (91°)

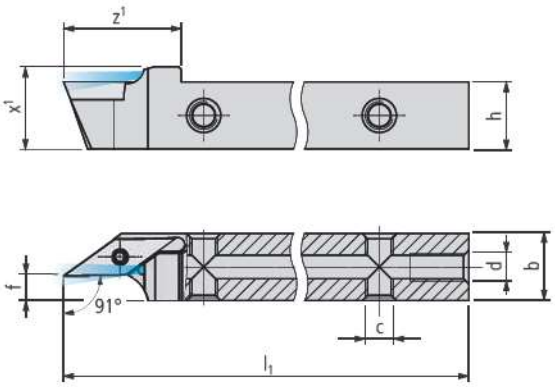
| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVXCL 0808 H07 U | ■ | SVXCR 0808 H07 U | ■ | 8 | 8 | 100 | | 2.5 | | | | VC..0702.. |
| SVXCL 1010 F11 U | ■ | SVXCR 1010 F11 U | ■ | 10 | 10 | 80 | | 2.5 | | | | VC..1103.. |
| SVXCL 1010 H07 U | ■ | SVXCR 1010 H07 U | ■ | 10 | 10 | 100 | | 4.5 | | | | VC..0702.. |
| SVXCL 1010 H11 U | ■ | SVXCR 1010 H11 U | ■ | 10 | 10 | 100 | | 2.5 | | | | VC..1103.. |
| SVXCL 1212 H07 U | ■ | SVXCR 1212 H07 U | ■ | 12 | 12 | 100 | | 6.5 | | | | VC..0702.. |
| SVXCL 1212 H11 U | ■ | SVXCR 1212 H11 U | ■ | 12 | 12 | 100 | | 4.5 | | | | VC..1103.. |
| SVXCL 1616 K11 U | ■ | SVXCR 1616 K11 U | ■ | 16 | 16 | 125 | | 8.5 | | | | VC..1103.. |
| SVXCL 2020 K16 U | ■ | SVXCR 2020 K16 U | ■ | 20 | 20 | 125 | | 8.5 | | | | VC..1604.. |

## SVXC... U (91°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | | f | | | | Inserts 259... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STANDARD-LINE** | | | | | | | | | | | | |
| SVXCL 3/8" F11 U | ■ | SVXCR 3/8" F11 U | ■ | 9.525 | 9.525 | 80 | | 2 | | | | VC..1103.. |
| SVXCL 3/8" H07 U | ■ | SVXCR 3/8" H07 U | ■ | 9.525 | 9.525 | 100 | | 4 | | | | VC..0702.. |
| SVXCL 3/8" H11 U | ■ | SVXCR 3/8" H11 U | ■ | 9.525 | 9.525 | 100 | | 2 | | | | VC..1103.. |
| SVXCL 1/2" H07 U | ■ | SVXCR 1/2" H07 U | ■ | 12.7 | 12.7 | 100 | | 7.2 | | | | VC..0702.. |
| SVXCL 1/2" H11 U | ■ | SVXCR 1/2" H11 U | ■ | 12.7 | 12.7 | 100 | | 5.2 | | | | VC..1103.. |
| SVXCL 5/8" K11 U | ■ | SVXCR 5/8" K11 U | ■ | 15.875 | 15.875 | 125 | | 8.3 | | | | VC..1103.. |
| SVXCL 3/4" K16 U | ■ | SVXCR 3/4" K16 U | ■ | 19.05 | 19.05 | 125 | | 7.5 | | | | VC..1604.. |




**With internal cooling**



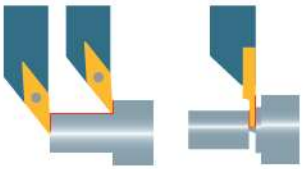

## SVXC… U IC (91°)

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SVXCL 0808 H07 U IC | ■ | SVXCR 0808 H07 U IC | ■ | 8 | 8 | 100 | 18 | 11.5 | M5 | M5 | 2.5 | VC..0702.. |
| SVXCL 1010 F11 U IC | ■ | SVXCR 1010 F11 U IC | ■ | 10 | 10 | 80 | 21 | 12.7 | M5 | M5 | 3 | VC..1103.. |
| SVXCL 1010 H07 U IC | ■ | SVXCR 1010 H07 U IC | ■ | 10 | 10 | 100 | 18 | 13.5 | M5 | M5 | 4.5 | VC..0702.. |
| SVXCL 1010 H11 U IC | ■ | SVXCR 1010 H11 U IC | ■ | 10 | 10 | 100 | 21 | 12.7 | M5 | M5 | 3 | VC..1103.. |
| SVXCL 1212 H07 U IC | ■ | SVXCR 1212 H07 U IC | ■ | 12 | 12 | 100 | 18 | 15.5 | M5 | M5 | 6.5 | VC..0702.. |
| SVXCL 1212 H11 U IC | ■ | SVXCR 1212 H11 U IC | ■ | 12 | 12 | 100 | 21 | 14.7 | M5 | M5 | 5 | VC..1103.. |
| SVXCL 1616 K11 U IC | ■ | SVXCR 1616 K11 U IC | ■ | 16 | 16 | 125 | 21 | 18.7 | M5 | G⅛" | 9 | VC..1103.. |
| SVXCL 2020 K16 U IC | ■ | SVXCR 2020 K16 U IC | ■ | 20 | 20 | 125 | 27 | 22 | M5 | G⅛" | 9 | VC..1604.. |

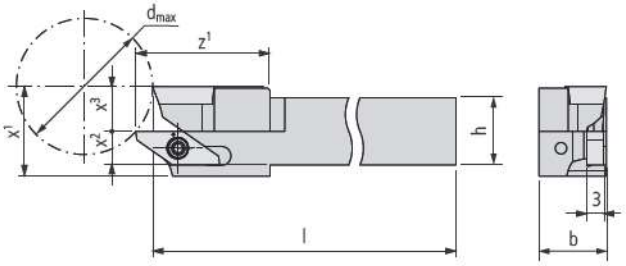
## SVXC… U IC (91°) INCH

| Order designation L | | Order designation R | | Dimensions h | b | $l_1$ | $z^1$ | $x^1$ | c | d | f | Inserts ▯259… |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PREMIUM-LINE** | | | | | | | | | | | | |
| SVXCL 3/8" F11 U IC | ■ | SVXCR 3/8" F11 U IC | ■ | 9.525 | 9.525 | 80 | 21 | 12.2 | M5 | M5 | 2 | VC..1103.. |
| SVXCL 3/8" H07 U IC | ■ | SVXCR 3/8" H07 U IC | ■ | 9.525 | 9.525 | 100 | 18 | 13 | M5 | M5 | 4.02 | VC..0702.. |
| SVXCL 3/8" H11 U IC | ■ | SVXCR 3/8" H11 U IC | ■ | 9.525 | 9.525 | 100 | 21 | 12.2 | M5 | M5 | 2 | VC..1103.. |
| SVXCL 1/2" H07 U IC | ■ | SVXCR 1/2" H07 U IC | ■ | 12.7 | 12.7 | 100 | 18 | 16.2 | M5 | M5 | 7.19 | VC..0702.. |
| SVXCL 1/2" H11 U IC | ■ | SVXCR 1/2" H11 U IC | ■ | 12.7 | 12.7 | 100 | 21 | 15.4 | M5 | M5 | 5 | VC..1103.. |
| SVXCL 5/8" K11 U IC | ■ | SVXCR 5/8" K11 U IC | ■ | 15.875 | 15.875 | 125 | 21 | 18.6 | M5 | G⅛" | 8 | VC..1103.. |
| SVXCL 3/4" K16 U IC | ■ | SVXCR 3/4" K16 U IC | ■ | 19.05 | 19.05 | 125 | 27 | 22 | M5 | G⅛" | 8 | VC..1604.. |

**Scope of delivery:** Holder without coolant connector
Coolant system ▯619…



"TWIN" version



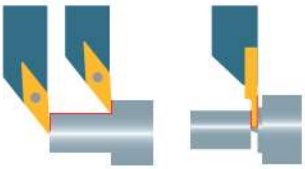

## SVJC. (93°)/1600… TWIN

| Order designation | | Dimensions | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | $d_{max}$ | 259… | 49… |
| **STANDARD-LINE** | | | | | | | | | | | |
| SVJCR/1600R-0810 H07 Twin | ■ | 8 | 10 | 100 | 24 | 16 | 4 | 8 | 24 | VC..0702.. | 16… |
| SVJCR/1600R-1010 H07 Twin | ■ | 10 | 10 | 100 | 24 | 16 | 5 | 8 | 24 | VC..0702.. | 16… |
| SVJCR/1600R-1212 H07 Twin | ■ | 12 | 12 | 100 | 24 | 16 | 6 | 8 | 24 | VC..0702.. | 16… |
| SVJCR/1600R-0810 H11 Twin | ■ | 8 | 10 | 100 | 24 | 16 | 4 | 8 | 24 | VC..1103.. | 16… |
| SVJCR/1600R-1010 H11 Twin | ■ | 10 | 10 | 100 | 24 | 16 | 5 | 8 | 24 | VC..1103.. | 16… |
| SVJCR/1600R-1212 H11 Twin | ■ | 12 | 12 | 100 | 24 | 16 | 6 | 8 | 24 | VC..1103.. | 16… |
| SVJCR/1600R-1616 K11 Twin | ■ | 16 | 16 | 125 | 24 | 20 | 8 | 10 | 36 | VC..1103.. | 16… |
| SVJCR/1600R-2020 K11 Twin | ■ | 20 | 20 | 125 | 24 | 24 | 8 | 14 | 68 | VC..1103.. | 16… |

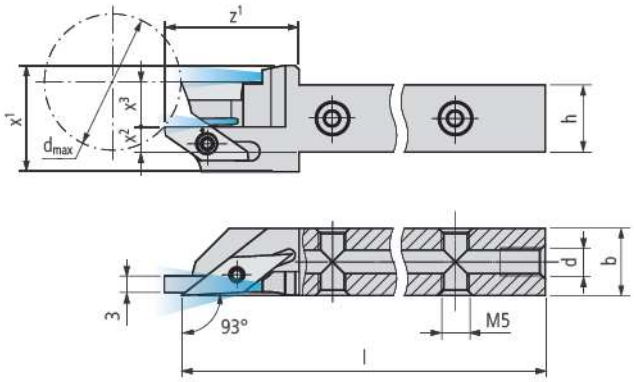
## SVJC. (93°)/1600… TWIN INCH

| Order designation | | Dimensions | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | $d_{max}$ | 259… | 49… |
| **STANDARD-LINE** | | | | | | | | | | | |
| SVJCR/1600R-3/8" H07 Twin | ■ | 9.525 | 9.525 | 100 | 24 | 16 | 4.76 | 8 | 24 | VC..0702.. | 16… |
| SVJCR/1600R-1/2" H07 Twin | ■ | 12.7 | 12.7 | 100 | 24 | 16 | 6.35 | 8 | 24 | VC..0702.. | 16… |
| SVJCR/1600R-3/8" H11 Twin | ■ | 9.525 | 9.525 | 100 | 24 | 16 | 4.76 | 8 | 24 | VC..1103.. | 16… |
| SVJCR/1600R-1/2" H11 Twin | ■ | 12.7 | 12.7 | 100 | 24 | 16 | 6.35 | 8 | 24 | VC..1103.. | 16… |
| SVJCR/1600R-5/8" K11 Twin | ■ | 15.875 | 15.875 | 125 | 24 | 20 | 7.94 | 10 | 36 | VC..1103.. | 16… |
| SVJCR/1600R-3/4" K11 Twin | ■ | 19.05 | 19.05 | 125 | 24 | 24 | 7.53 | 14 | 68 | VC..1103.. | 16… |

Legend ..... 8…



**"TWIN" version with internal cooling**



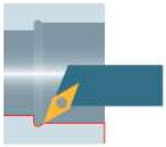

## SVJC. (93°)/1600… TWIN IC

| Order designation | | | Dimensions | | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R R | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | d | $d_{max}$ | 259… | 49… |
| **PREMIUM-LINE** | | | | | | | | | | | | | |
| | SVJCR/1600R-0810 H07 Twin IC | ■ | 8 | 10 | 100 | 24 | 19 | 2.5 | 8 | M5 | 24 | VC..0702.. | 16… |
| | SVJCR/1600R-1010 H07 Twin IC | ■ | 10 | 10 | 100 | 24 | 19 | 3.5 | 8 | M5 | 24 | VC..0702.. | 16… |
| | SVJCR/1600R-1212 H07 Twin IC | ■ | 12 | 12 | 100 | 24 | 19 | 4.5 | 8 | M5 | 24 | VC..0702.. | 16… |
| | SVJCR/1600R-0810 H11 Twin IC | ■ | 8 | 10 | 100 | 24 | 19 | 2.5 | 8 | M5 | 24 | VC..1103.. | 16… |
| | SVJCR/1600R-1010 H11 Twin IC | ■ | 10 | 10 | 100 | 24 | 19 | 3.5 | 8 | M5 | 24 | VC..1103.. | 16… |
| | SVJCR/1600R-1212 H11 Twin IC | ■ | 12 | 12 | 100 | 24 | 19 | 4.5 | 8 | M5 | 24 | VC..1103.. | 16… |
| | SVJCR/1600R-1616 K11 Twin IC | ■ | 16 | 16 | 125 | 24 | 23 | 6.5 | 10 | G⅛" | 36 | VC..1103.. | 16… |
| | SVJCR/1600R-2020 K11 Twin IC | ■ | 20 | 20 | 125 | 24 | 27 | 6.5 | 14 | G⅛" | 68 | VC..1103.. | 16… |

## SVJC. (93°)/1600… TWIN IC INCH

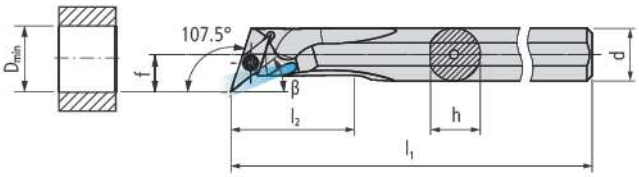
| Order designation | | | Dimensions | | | | | | | | | Inserts | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R R | | h | b | l | $z^1$ | $x^1$ | $x^2$ | $x^3$ | d | $d_{max}$ | 259… | 49… |
| **PREMIUM-LINE** | | | | | | | | | | | | | |
| | SVJCR/1600R-3/8" H07 Twin IC | ■ | 9.525 | 9.525 | 100 | 24 | 19 | 3.26 | 8 | M5 | 24 | VC..0702.. | 16… |
| | SVJCR/1600R-1/2" H07 Twin IC | ■ | 12.7 | 12.7 | 100 | 24 | 19 | 4.85 | 8 | M5 | 24 | VC..0702.. | 16… |
| | SVJCR/1600R-3/8" H11 Twin IC | ■ | 9.525 | 9.525 | 100 | 24 | 19 | 3.26 | 8 | M5 | 24 | VC..1103.. | 16… |
| | SVJCR/1600R-1/2" H11 Twin IC | ■ | 12.7 | 12.7 | 100 | 24 | 19 | 4.85 | 8 | M5 | 24 | VC..1103.. | 16… |
| | SVJCR/1600R-5/8" K11 Twin IC | ■ | 15.875 | 15.875 | 125 | 24 | 23 | 6.44 | 10 | G⅛" | 36 | VC..1103.. | 16… |
| | SVJCR/1600R-3/4" K11 Twin IC | ■ | 19.05 | 19.05 | 125 | 24 | 27 | 6.03 | 14 | G⅛" | 68 | VC..1103.. | 16… |

**Scope of delivery:** Holder without coolant connector
Coolant system ..... 619…





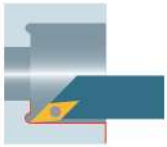


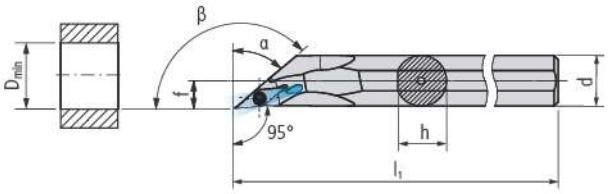



**A... SVQC... (107.5°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | β | | 259... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A10 H SVQCL 07 | ■ | A10 H SVQCR 07 | ■ | 10 | 9.5 | 100 | 23 | 8 | 16 | 37.5° | | VC..0702.. |
| A12 K SVQCL 07 | ■ | A12 K SVQCR 07 | ■ | 12 | 11.5 | 125 | 25 | 9 | 17 | 37.5° | | VC..0702.. |
| A16 M SVQCL 07 | ■ | A16 M SVQCR 07 | ■ | 16 | 15 | 150 | 29 | 11 | 20 | 37.5° | | VC..0702.. |
| A16M SVQCL 11 | ■ | A16M SVQCR 11 | ■ | 16 | 15 | 150 | 29 | 11 | 20 | 37.5° | | VC..1103.. |
| A20Q SVQCL 11 | ■ | A20Q SVQCR 11 | ■ | 20 | 18.5 | 180 | 32 | 13 | 25 | 37.5° | | VC..1103.. |

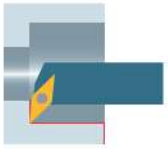
Legend ..... 8...





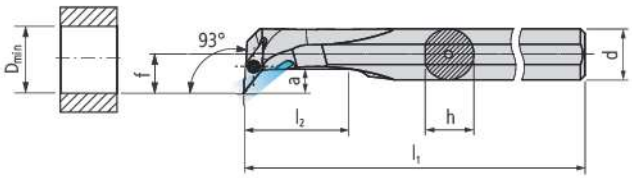

**A... SVOC... (95°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | | f | $D_{min}$ | α | β | 259... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A10 H SVOCL 07 | ■ | A10 H SVOCR 07 | ■ | 10 | 9.5 | 100 | | 5.5 | 11 | 50° | 140° | VC..07.. |
| A12 K SVOCL 07 | ■ | A12 K SVOCR 07 | ■ | 12 | 11.5 | 125 | | 6.5 | 13 | 50° | 140° | VC..07.. |
| A12K SVOCL 11 | ■ | A12K SVOCR 11 | ■ | 12 | 11.5 | 125 | | 7 | 17 | 50° | 140° | VC..11.. |
| A16 M SVOCL 07 | ■ | A16 M SVOCR 07 | ■ | 16 | 15.5 | 150 | | 8.5 | 17 | 50° | 140° | VC..07.. |
| A16M SVOCL 11 | ■ | A16M SVOCR 11 | ■ | 16 | 15.5 | 150 | | 9 | 20 | 50° | 140° | VC..11.. |










**A... SVUC... (93°)**

| Order designation | | | | Dimensions | | | | | | | | Inserts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | | R | | d | h | $l_1$ | $l_2$ | f | $D_{min}$ | a | | 259... |
| **STANDARD-LINE** | | | | | | | | | | | | |
| A10 H SVUCL 07 | ■ | A10 H SVUCR 07 | ■ | 10 | 9.5 | 100 | 23 | 8.5 | 13.5 | 5 | | VC..0702.. |
| A12 K SVUCL 07 | ■ | A12 K SVUCR 07 | ■ | 12 | 11.5 | 125 | 25 | 9 | 17 | 5.5 | | VC..0702.. |
| A16 M SVUCL 07 | ■ | A16 M SVUCR 07 | ■ | 16 | 15.5 | 150 | 36 | 11 | 20 | 5.5 | | VC..0702.. |
| A16 M SVUCL 11 | ■ | A16 M SVUCR 11 | ■ | 16 | 15.5 | 150 | 36 | 13 | 21 | 8 | | VC..1103.. |
| A20 Q SVUCL 11 | ■ | A20 Q SVUCR 11 | ■ | 20 | 19.5 | 180 | 40 | 14 | 24 | 8 | | VC..1103.. |

Legend ..... 8...

### For holders (SV…) OD turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2 × 5.5 T06 | MSP 20055 T06 | ■ | SV… 07 |
| | | M2.5 × 6 T08 | MSP 25060 T08 | ■ | SV… 11 |
| | | M3.5 × 11 T15 | MSP 35110 T15 | ■ | SV… 16 |

### For holders (… SV…) ID turning

| Illustration | Description | Dimensions | Order designation | | Holder |
|---|---|---|---|---|---|
|  | TORX screw | M2 × 5.5 T06 | MSP 20055 T06 | ■ | A… SV… 07 |
| | | M2.5 × 6 T08 | MSP 25060 T08 | ■ | A… SV… 11 |

TORX screwdriver ..... 🗋651…

## Cutting specification



| | Steel unalloyed | | | Steel low alloyed | | | Steel high alloyed | | |
|---|---|---|---|---|---|---|---|---|---|
| Hardness value (HB) / (HRC) | 125–300 HB | | | 180–250 HB | | | 200–350 HB | | |
| Category | I | | | II | | | III | | |
| Machining method | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ |
| Cutting speeds | $v_c$ (m/min) | | | | | | | | |
| Cutting material carbide | | | | | | | | | |
| UHM 10 | 40–110 | 60–120 | 60–140 | 60–100 | 60–120 | 60–130 | 40–90 | 60–110 | 60–120 |
| UHM 10 HX | 60–180 | 60–220 | 60–260 | 60–170 | 60–200 | 60–240 | 50–160 | 60–180 | 60–220 |
| UHM 10 TX+ | – | – | – | 80–150 | 100–180 | 160–220 | 70–100 | 90–150 | 120–180 |
| UHM 10 MZ | 180–300 | 220–400 | 250–500 | 150–280 | 200–320 | 250–400 | 120–280 | 180–320 | 180–320 |
| UHM 20 HPX | 150–200 | 180–220 | 200–260 | 80–150 | 100–180 | 160–220 | 70–100 | 90–150 | 120–180 |
| UHM 20 TX+ | – | – | – | 80–130 | 100–150 | 160–190 | 70–90 | 90–130 | 130–150 |
| UHM 20 MZ | 130–180 | 160–220 | 180–260 | 100–160 | 110–180 | 130–220 | 70–150 | 110–160 | 130–190 |
| UHM 30 | 30–70 | 50–80 | 50–100 | 30–60 | 40–80 | 40–90 | 30–50 | 30–70 | 30–80 |
| UHM 30 HX | 50–140 | 50–180 | 50–220 | 50–130 | 50–160 | 50–200 | 40–120 | 50–140 | 50–180 |
| UHM 30 TX+ | 50–120 | 50–140 | 50–150 | 50–100 | 50–120 | 50–140 | 40–80 | 50–100 | 50–110 |
| UHM 30 MZ | 120–160 | 150–200 | 170–240 | 90–140 | 100–160 | 120–200 | 60–130 | 90–140 | 110–160 |
| UHM 30 SX | 50–120 | 50–180 | 50–200 | 50–100 | 50–140 | 50–180 | 40–90 | 50–120 | 50–160 |
| Cutting material cermet | | | | | | | | | |
| UCM 10 | – | 180–300 | 220–350 | – | 140–250 | 180–300 | – | 140–180 | 160–200 |
| UCM 10 HX | – | 250–350 | 300–450 | – | 200–300 | 220–380 | – | 240–300 | 260–350 |
| Cutting material diamond | | | | | | | | | |
| UCVD 08 | – | – | – | – | – | – | – | – | – |
| UPCD 15 | – | – | – | – | – | – | – | – | – |
| UPCD 20 | – | – | – | – | – | – | – | – | – |

| | Stainless steel | | | Stainless steel | | | Titanium | | |
|---|---|---|---|---|---|---|---|---|---|
| Hardness value (HB) / (HRC) | 180–220 HB | | | 220 –330 HB | | | – | | |
| Category | V | | | VI | | | IV | | |
| Machining method | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ |
| Cutting speeds | $v_c$ (m/min) | | | | | | | | |
| Cutting material carbide | | | | | | | | | |
| UHM 10 | 40–100 | 40–110 | 40–120 | 30–70 | 30–80 | 30–80 | 40–60 | 50–70 | 60–80 |
| UHM 10 HX | 50–140 | 50–180 | 50–220 | 40–100 | 50–110 | 50–130 | 40–120 | 50–130 | 50–150 |
| UHM 10 TX+ | 90–150 | 110–180 | 160–200 | 70–90 | 90–120 | 110–150 | 50–100 | 60–120 | 60–140 |
| UHM 10 MZ | 100–180 | 180–250 | 220–300 | – | – | – | – | – | – |
| UHM 20 HPX | 90–150 | 110–180 | 160–200 | 70–90 | 90–120 | 110–150 | 50–100 | 60–120 | 60–140 |
| UHM 20 TX+ | 90–130 | 110–160 | 160–180 | 70–90 | 90–120 | 110–150 | 50–100 | 60–120 | 60–140 |
| UHM 20 MZ | 90–150 | 110–160 | 130–180 | 50–80 | 30–50 | 40–70 | – | – | – |
| UHM 30 | 30–60 | 30–70 | 30–80 | 20–30 | 20–40 | 20–40 | 40–50 | 25–60 | 30–70 |
| UHM 30 HX | 40–100 | 40–140 | 40–180 | 30–60 | 40–70 | 40–90 | 30–90 | 40–100 | 40–120 |
| UHM 30 TX+ | – | – | – | – | – | – | – | – | – |
| UHM 30 MZ | 80–130 | 100–140 | 110–160 | 40–80 | 50–90 | 90–110 | – | – | – |
| UHM 30 SX | 30–90 | 40–120 | 40–160 | 20–50 | 30–60 | 30–80 | – | – | – |
| Cutting material cermet | | | | | | | | | |
| UCM 10 | – | 140–180 | 150–220 | – | 70–90 | 70–110 | – | – | – |
| UCM 10 HX | – | 170–230 | 220–280 | – | 80–110 | 110–140 | – | – | – |
| Cutting material diamond | | | | | | | | | |
| UCVD 08 | – | – | – | – | – | – | – | – | – |
| UPCD 15 | – | – | – | – | – | – | – | – | – |
| UPCD 20 | – | – | – | – | – | – | – | – | – |

| | Aluminum | | | Brass | | | Hard materials | | |
|---|---|---|---|---|---|---|---|---|---|
| Hardness value (HB) / (HRC) | 60–130 HB | | | – | | | 45–70 HRC | | |
| Category | VII | | | VIII | | | X | | |
| Machining method | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ | ▼ | ▼▼ | ▼▼▼ |
| Cutting speeds | $v_c$ (m/min) | | | | | | | | |
| Cutting material carbide | | | | | | | | | |
| UHM 10 | 100–1500 | 120–2000 | 160–2500 | 80–300 | 100–400 | 120–500 | – | – | – |
| UHM 10 HX | 140–2500 | 160–3000 | 200–3000 | 100–450 | 100–600 | 100–750 | – | – | – |
| UHM 10 TX+ | – | – | – | – | – | – | 15–30 | 15–40 | 20–60 |
| UHM 10 MZ | – | – | – | – | – | – | – | – | – |
| UHM 20 HPX | – | – | – | – | – | – | – | – | – |
| UHM 20 TX+ | – | – | – | – | – | – | – | – | – |
| UHM 20 MZ | – | – | – | – | – | – | – | – | – |
| UHM 30 | 50–1000 | 60–1200 | 80–1500 | 40–100 | 50–140 | 50–160 | – | – | – |
| UHM 30 HX | 70–1500 | 80–2000 | 100–3000 | 50–150 | 50–200 | 50–250 | – | – | – |
| UHM 30 TX+ | | | | | | | – | – | – |
| UHM 30 MZ | – | – | – | – | – | – | – | – | – |
| UHM 30 SX | 60–1200 | 80–2000 | 100–3000 | 50–120 | 50–180 | 50–200 | – | – | – |
| Cutting material cermet | | | | | | | | | |
| UCM 10 | – | – | – | – | – | – | – | – | – |
| UCM 10 HX | – | – | – | – | – | – | – | – | – |
| Cutting material diamond | | | | | | | | | |
| UCVD 08 | – | 300–2000 | 300–3000 | – | 250–1000 | 300–1500 | – | – | – |
| UPCD 15 | – | 300–2000 | 300–3000 | – | 250–1000 | 300–1500 | – | – | – |
| UPCD 20 | – | 300–2000 | 300–3000 | – | 250–1000 | 300–1500 | – | – | – |

Feed (f) and depths of cut ($a_p$) ..... 178…

Legend ..... 8…