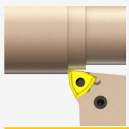




SWISS  TOOLS<sup>®</sup>

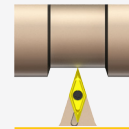
*S w i s s*  
**FLEX**  
**2403**



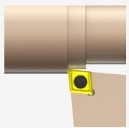
**PWLN**  
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**SVJB SVJC**  
Seite/page 12+13



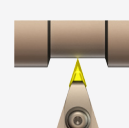
**SVVB SVVC**  
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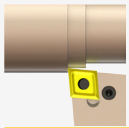
**SCLC**  
Seite/page 7



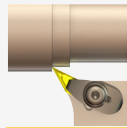
**SVPB SVPC**  
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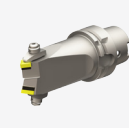
**DVNN**  
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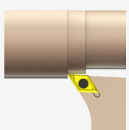
**PCLN**  
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**DVPN**  
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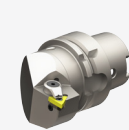
**Multitask Werkzeuge**  
Multitask tools  
Outils multitâches  
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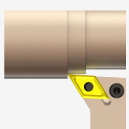
**SDUC**  
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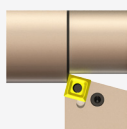
**SSBC**  
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**Aussengewinde**  
External thread  
Filet extérieur  
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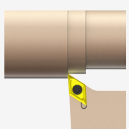
**PDUN**  
Seite/page 9



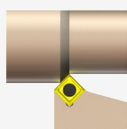
**PSBN**  
Seite/page 15



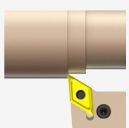
**Innengewinde**  
Internal thread  
Filet intérieur  
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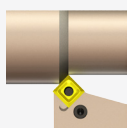
**SDJC**  
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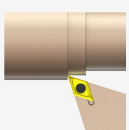
**SSSC**  
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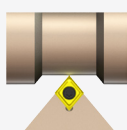
**PDJN**  
Seite/page 10



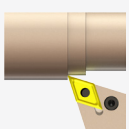
**PSSN**  
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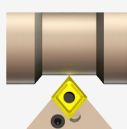
**SDHC**  
Seite/page 10



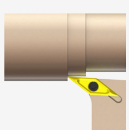
**SCMC**  
Seite/page 16



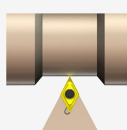
**PDHN**  
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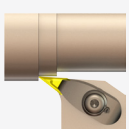
**PCMN PWMN**  
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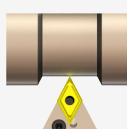
**SVUB SVUC**  
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**SDNC**  
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**DVUN**  
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**PDNN**  
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**Modulare Bohrstangen**  
**Modular boring bars**  
**Barres d'alésage modulables**  
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**Bohrstangenhalter**  
**Boring bar holder**  
**Porte-outils d'alésage**  
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**Verlängerung**  
**Extension**  
**Extension**  
 Seite/page 40



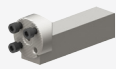
**Schwingungs. Bohrstangen**  
**Damped boring bar shanks**  
**Damped barres d'alésage**  
 Seite/page 24



**Wendeplattenbohrerhalter**  
**Holder index. drill**  
**Porte-outils à plaq index.**  
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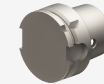
**Reduktion**  
**Reduction**  
**Reduction**  
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**Werkzeughalter vierkant**  
**Tool holder square**  
**Supports carrés**  
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**Abstechhalter radial**  
**Cut-off block radial**  
**Bloc de tronçonnage radial**  
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**Trennstellenverschluss**  
**Blanking plug**  
**Bouchon d'ébauche**  
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**Wechselschneidköpfe**  
**Exchangeable cutting heads**  
**Têtes de coupe interchangeable.**  
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**Abstechhalter axial**  
**Cut-off block axial**  
**Bloc de tronçonnage axial**  
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**Verlängerung**  
**Extension**  
**Extension**  
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**SCLC**  
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**Werkzeughalter radial**  
**Tool holder radial**  
**Porte-outil radial**  
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**Schrumpffutter**  
**Shrink chucks**  
**Porte outils à frettage**  
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**PCLN**  
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**Werkzeughalter axial**  
**Tool holder axial**  
**Porte-outil axial**  
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**Kühlmittelrohr**  
**Coolant tube**  
**tube d'arrosage**  
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**SDQC**  
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**Werkzeughalter axial 2-fach**  
**Tool holder axial double**  
**Porte-outil axial double**  
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**Quick change Halter**  
**Quick change holder**  
**Porte-outils à quick change**  
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**PDQN**  
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**Werkzeughalter axial 3-fach**  
**Tool holder axial triple**  
**Porte-outil axial triple**  
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**Ersatzteile**  
**Spare parts**  
**Pièces de rechange**  
 Seite/page 49



**Werkzeughalter 45°**  
**Tool holder 45°**  
**Porte-outil 45°**  
 Seite/page 39

## Bohrstangen mit Wechselschneidköpfen

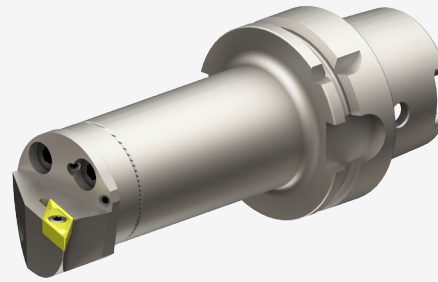
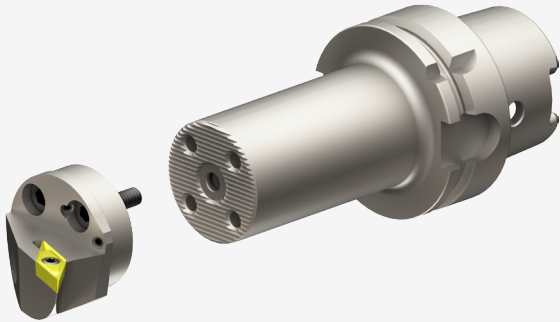
- alle Wechselschneidköpfe sind mit Hochleistungskühlung ausgestattet.
- Werkzeugverschleiss tritt hauptsächlich am auswechselbaren Schneidkopf auf, der Adapter hält somit länger.
- In Kombination mit den SDT Bohrstangen ist das Konzept perfekt für Operationen mit langen Überhängen und bei Vibrationsneigung.

## Boring bars with exchangeable cutting heads

- all exchangeable cutting heads are equipped with high performance coolant.
- Tool wear appears mainly at the changeable head, the life time of the tool adapter is therefore longer.
- In combination with SDT the tool concept is perfect for long cantilever extensions and while fighting with vibrations.

## Barres d'alésage avec têtes de coupe interchangeables

- Toutes les têtes de coupe interchangeables sont équipées d'un arrosage haute performance.
- L'usure de l'outil apparaît principalement au niveau de la tête interchangeable, la durée de vie de l'adaptateur d'outil est donc plus longue.
- En combinaison avec SDT, le concept d'outil est parfait pour les longues extensions en porte-à-faux et tout en luttant contre les vibrations.



**HP**  
inside

## SWISS DAMPENING TECHNOLOGY

### Schwingungsgedämpfte Bohrstangenschäfte

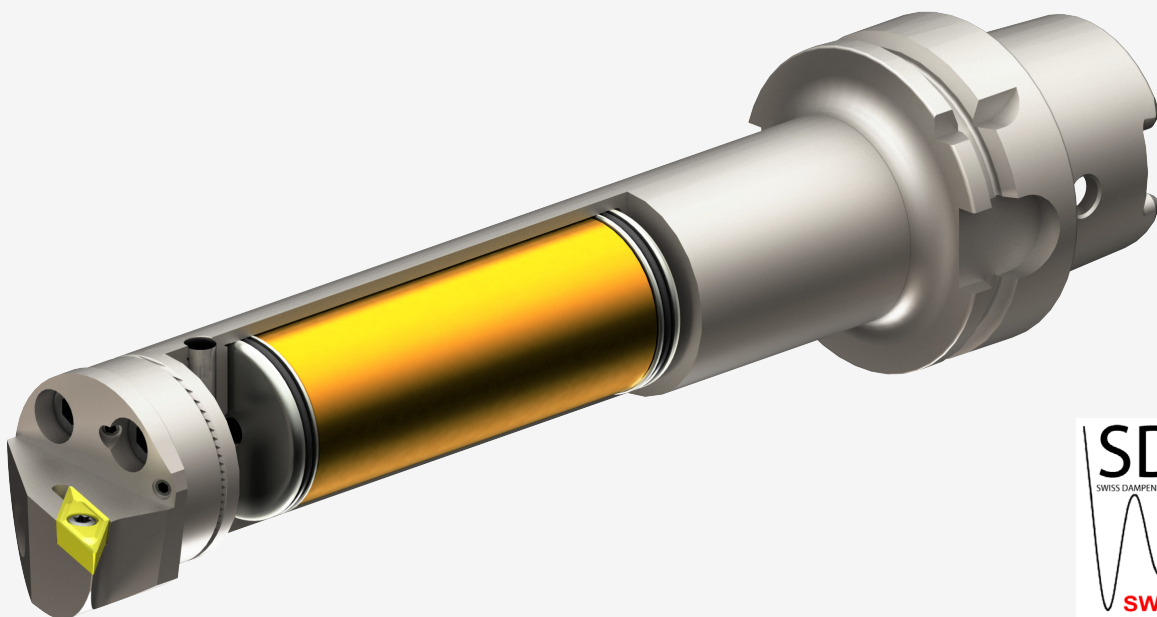
- Produktivitätsgewinn dank der unterdrückten Schwingungen können die Schnittdaten beträchtlich erhöht werden
- Verbesserte Oberflächengüte
- Verbesserte Prozesssicherheit
- Verbesserte Spanabfuhr
- Reduzierte Kosten pro Bauteil

### Damped boring bar shanks

- Productivity improvement: thanks to reduced vibrations, the cutting conditions can be improved remarkable
- Better surface quality
- Improved process stability
- Better chip evacuation
- Reduced cost per part

### Tiges de barres d'alésage anti-vibrations

- Amélioration de la productivité : grâce à la réduction des vibrations, les conditions de coupe peuvent être améliorées de façon remarquable.
- Meilleure qualité de surface
- Meilleure stabilité du processus
- Meilleure évacuation des copeaux
- Réduction du coût par pièce



## Hochleistungskühlung

- für effiziente Drehbearbeitung
- optimale Kühlung durch fest ausgerichtete **High Pressure** Kühldüsen
- verbesserte Spankontrolle
- höhere Bearbeitungssicherheit
- mehr Zerspanvolumen
- kürzere Bearbeitungszeiten

## High performance coolant

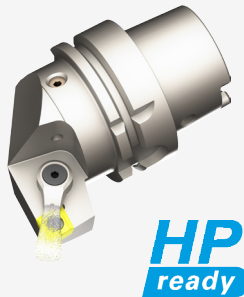
- to turn efficiently
- optimal cooling by fix orientated **High Pressure** coolant nozzles
- improved chip control
- higher manufacturing security
- higher chip removal rate
- shorter machining time

## Arrosage haute performance

- pour des opérations de tournage efficaces
- arrosage optimal par des buses d'arrosage fixes High Pressure
- contrôle amélioré des copeaux
- plus grande sécurité d'usinage
- plus haut volume d'extraction de copeaux
- temps d'usinage plus courts

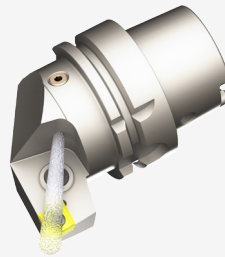
## Klemmhalter

- alle Klemmhalter die mit dem **HP ready** Symbol markiert sind, können auf Hochleistungskühlung aufgerüstet werden.



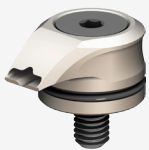
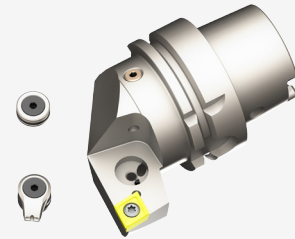
## Turning tool

- all turning tools which are marked with the **HP ready** symbol, can be set up with the high performance coolant.



## Outil de tournage

- Tous les outils de tournage, qui sont marqués avec ce symbole **HP ready**, peuvent être équipés avec le arrosage haute performance.



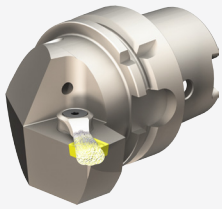
Bestell-Nr. /  
Order number/  
Code

CHP.PCX.000.022

- Hochleistungskühlmittel Set beinhaltet:
  - HP Düse
  - O-Ring

- High performance coolant set included:
  - HP coolant nozzle
  - O-Ring

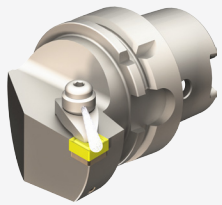
- Kit d'arrosage haute performance comprend
  - Buse HP
  - O-Ring



- Spannsystem: Die Wendeplatte wird mittels Schraubenklemmung Typ S gespannt.
- Kühlsystem: Klemmhalter für positive Wendeplatten besitzen eine ausgerichtete Kühlmitteldüse.

- Clamping system: The insert is tightened via screw clamping Type S.
- Cooling system: Turning tools for positive inserts feature an adjusted coolant nozzle.

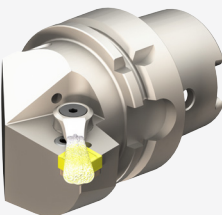
- Système de serrage : La plaquette est serrée par un serrage à vis de type S.
- Système d'arrosage : Les outils de tournage pour plaquettes positives sont équipés d'une buse d'arrosage dirigée.



- Spannsystem: Die Wendeplatte wird mittels Doppelklemmung Typ D gespannt.
- Kühlsystem: Klemmhalter mit Doppelklemmung verfügen über eine ausrichtbare Hochdruckkühldüse.

- Clamping system: The insert is tightened via double-clamping Type D.
- Cooling system: Turning tools with double-clamping feature an adjustable high-pressure coolant nozzle.

- Système de serrage : La plaquette est serrée par un double serrage à vis de type D.
- Système d'arrosage : Les outils de tournage avec double serrage sont équipés d'une buse d'arrosage dirigée.



- Spannsystem: Die Wendeplatte wird mittels Kniehebelspannung Typ P gespannt.
- Kühlsystem: Klemmhalter mit Kniehebelspannung besitzen eine ausgerichtete Kühlmitteldüse.

- Clamping system: The insert is tightened via knuckle joint Type P.
- Cooling system: Turning tools with knuckle joint-clamping feature an adjusted coolant nozzle.

- Système de serrage : La plaquette est serrée par un joint articulé Type P.
- Système d'arrosage : Les outils de tournage avec joint articulé sont équipés d'une buse d'arrosage dirigée.

## Klemhalter

- für effiziente Drehbearbeitung
- optimale Kühlung durch ausgerichtete Kühldüse und Hochdruckkühldüse
- Klemhalter für Aussenbearbeitung können auch für die Innenbearbeitung verwendet werden unter Berücksichtigung des D1 min.

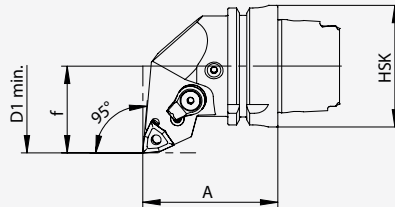
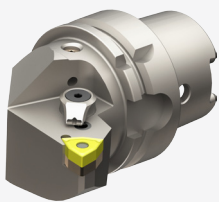
## Turning tool

- to turn efficiently
- optimal cooling by adjusted cooling nozzle and high pressure cooling nozzle
- Turning tools for exterior machining may also be used for interior machining, in consideration of D1 min.

## Outil de tournage

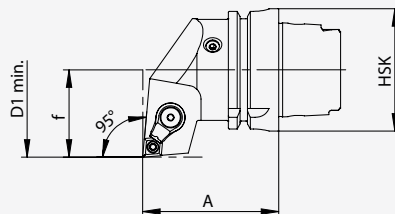
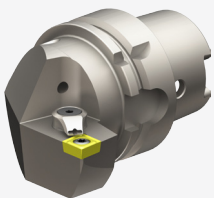
- pour des opérations de tournage efficaces
- arrosage optimal par buse d'arrosage dirigée et à haute pression
- Les outils de tournage destinés à l'usinage extérieur peuvent aussi être utilisés pour l'usinage intérieur, en tenant compte de D1 min.

### PWLN R/L 95°/80°



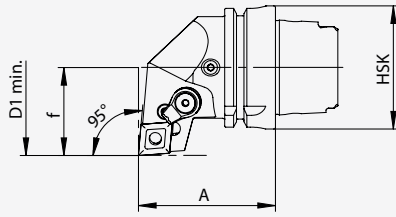
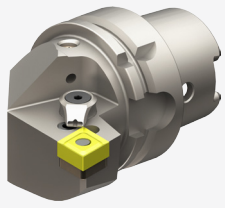
Bestell-Nr. / Order number / Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg					
HA4.PWD.RLA.055-HP HA4.PWD.LLA.055-HP	T40	27	50	55	WN .. 06 04 ..	035	WWE.ER2.102.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000	CHPPCX.000.022
HA4.PWE.RLA.055-HP HA4.PWE.LLA.055-HP	T40	27	50	55	WN .. 08 04 ..	035	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PWE.RLA.070-HP HA6.PWE.LLA.070-HP	T63	45	80	70	WN .. 08 04 ..	1.15	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PWE.RLA.100-HP HA6.PWE.LLA.100-HP	T63	45	80	100	WN .. 08 04 ..	1.15	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PWE.RLA.100-HP HA0.PWE.LLA.100-HP	T100	63	120	100	WN .. 08 04 ..	4.22	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

### SCLC R/L 95°/80°



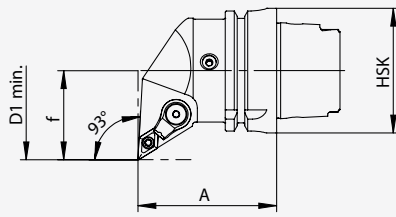
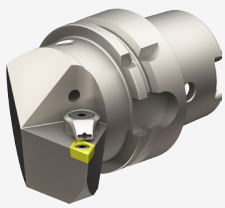
Bestell-Nr. / Order number / Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg			
HA4.KCB.RLA.055-HP HA4.KCB.LLA.055-HP	T40	27	50	55	CC .. 09 T3 ..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA4.KCC.RLA.055-HP HA4.KCC.LLA.055-HP	T40	27	50	55	CC .. 12 04 ..	0.40	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022
HA6.KCB.RLA.070-HP HA6.KCB.LLA.070-HP	T63	45	80	70	CC .. 09 T3 ..	1.15	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KCC.RLA.070-HP HA6.KCC.LLA.070-HP	T63	45	80	70	CC .. 12 04 ..	1.15	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022
HA0.KCC.RLA.100-HP HA0.KCC.LLA.100-HP	T100	63	120	100	CC .. 12 04 ..	4.23	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022

**PCLN R/L 95°/80°**



Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.PCD.RLA.055-HP HA4.PCD.LLA.055-HP	T40	27	50	55	CN...12 04...	0.40	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PCD.RLA.070-HP HA6.PCD.LLA.070-HP	T63	45	80	70	CN...12 04...	1.15	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PCE.RLA.070-HP HA6.PCE.LLA.070-HP	T63	45	80	70	CN...16 06...	1.10	WCE.ER2.101.004	WCE.ER4.101.004 (5.0 Nm)	WCE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA0.PCD.RLA.100-HP HA0.PCD.LLA.100-HP	T100	63	120	100	CN...12 04...	4.40	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PCE.RLA.100-HP HA0.PCE.LLA.100-HP	T100	63	120	100	CN...16 06...	4.40	WCE.ER2.101.004	WCE.ER4.101.004 (5.0 Nm)	WCE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA0.PCF.RLA.100-HP HA0.PCF.LLA.100-HP	T100	63	120	100	CN...19 06...	4.40	WCFER2.101.000	WCFER4.101.027 (8.0 Nm)	WCFER3.101.000	WCFER1.101.000	CHPPCX.000.022

**SDUC R/L 93°/55°**



Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KDB.RUA.055-HP HA4.KDB.LUA.055-HP	T40	27	50	55	DC...11 T3...	0.35	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KDB.RUA.070-HP HA6.KDB.LUA.070-HP	T63	45	80	70	DC...11 T3...	1.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KDB.RUA.100-HP HA0.KDB.LUA.100-HP	T100	63	120	100	DC...11 T3...	4.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022



Bestell-Nr. /  
Order number/  
Code

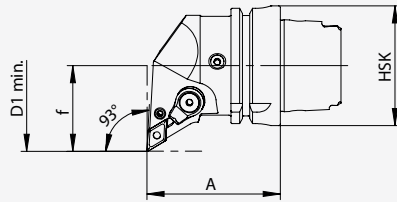
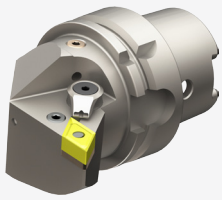
CHP.PCX.000.022

- Hochleistungskühlmittel Set beinhaltet:
  - HP Düse
  - O-Ring

- High performance coolant set included:
  - HP coolant nozzle
  - O-ring

- Kit d'arrosage haute performance comprend:
  - Buse HP
  - O-Ring



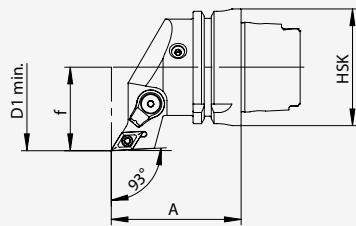
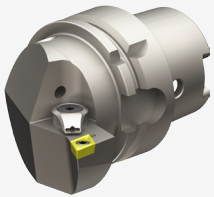


Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg					
HA4.PDF.RUA.055-HP HA4.PDF.LUA.055-HP	T40	27	50	55	DN . . 15 06 . . *	0.35	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PDE.RUA.070-HP HA6.PDE.LUA.070-HP	T63	45	80	70	DN . . 11 04 . .	1.20	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000	CHPPCX.000.022
HA6.PDF.RUA.070-HP HA6.PDF.LUA.070-HP	T63	45	80	70	DN . . 15 06 . . *	1.20	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PDF.RUA.100-HP HA0.PDF.LUA.100-HP	T100	63	120	100	DN . . 15 06 . . *	1.30	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

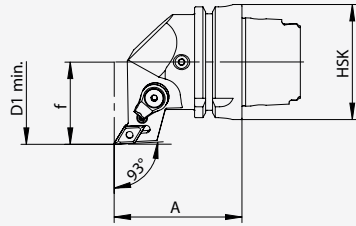
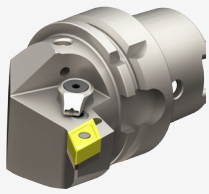
\* DN . . 15 04 . . möglich mit Unterlegplatte  
WDF.ER2.101.004

\* DN . . 15 04 . . possible with tip pad  
WDF.ER2.101.004

\* DN . . 15 04 . . possible avec plateau de  
support WDF.ER2.101.004



Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg			
HA4.KDB.RJA.055-HP HA4.KDB.LJA.055-HP	T40	27	50	55	DC . . 11 T3 . .	0.35	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KDB.RJA.070-HP HA6.KDB.LJA.070-HP	T63	45	80	70	DC . . 11 T3 . .	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KDB.RJA.100-HP HA0.KDB.LJA.100-HP	T100	63	120	100	DC . . 11 T3 . .	3.90	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

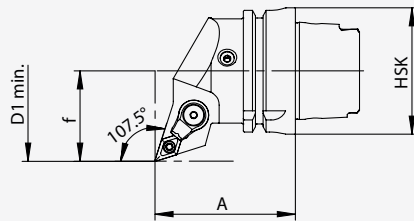
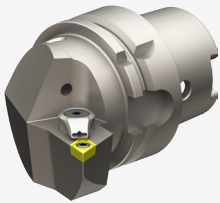


Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.PDE.RJA.055-HP HA4.PDE.LJA.055-HP	T40	27	-	57	DN .. 15 06 .. *	0.35	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000	CHPPCX.000.022
HA4.PDF.RJA.055-HP HA4.PDF.LJA.055-HP	T40	27	-	57	DN .. 15 06 .. *	0.35	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PDE.RJA.070-HP HA6.PDE.LJA.070-HP	T63	45	-	70	DN .. 11 04 ..	1.15	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000	CHPPCX.000.022
HA6.PDF.RJA.070-HP HA6.PDF.LJA.070-HP	T63	45	-	70	DN .. 15 06 .. *	1.15	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PDF.RJA.100-HP HA0.PDF.LJA.100-HP	T100	63	-	100	DN .. 15 06 .. *	4.00	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

\* DN .. 15 04 .. möglich mit Unterlegplatte  
WDF.ER2.101.004

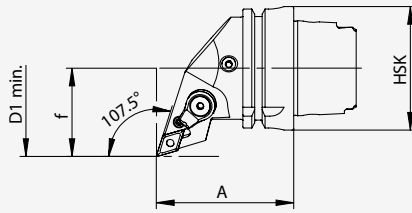
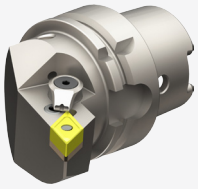
\* DN .. 15 04 .. possible with tip pad  
WDF.ER2.101.004

\* DN .. 15 04 .. possible avec plateau de  
support WDF.ER2.101.004



Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KDA.RHA.055-HP HA4.KDA.LHA.055-HP	T40	27	50	55	DC .. 07 02 ..	0.35	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	CHPPCX.000.022
HA4.KDB.RHA.055-HP HA4.KDB.LHA.055-HP	T40	27	50	55	DC .. 11 T3 ..	0.35	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KDB.RHA.070-HP HA6.KDB.LHA.070-HP	T63	45	80	70	DC .. 11 T3 ..	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KDB.RHA.100 HA0.KDB.LHA.100	T100	63	120	100	DC .. 11 T3 ..	3.90	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	

## PDHN R/L 107.5°/55°



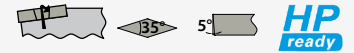
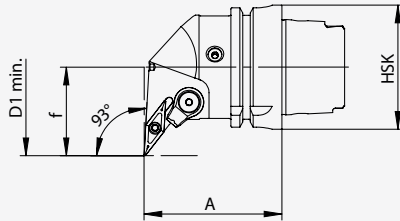
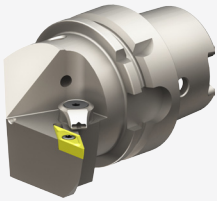
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.PDF.RHA.055-HP HA4.PDF.LHA.055-HP	T40	27	50	55	DN . . 15 06 . . *	0.35	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PDE.RHA.070-HP HA6.PDE.LHA.070-HP	T63	45	80	70	DN . . 11 04 . .	1.05	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA6.PDF.RHA.070-HP HA6.PDF.LHA.070-HP	T63	45	80	70	DN . . 15 06 . . *	1.05	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PDF.RHA.100-HP HA0.PDF.LHA.100-HP	T100	63	120	100	DN . . 15 06 . . *	4.10	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

\* DN . . 15 04 . . möglich mit Unterlegplatte  
WDF.ER2.101.004

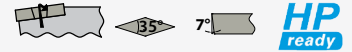
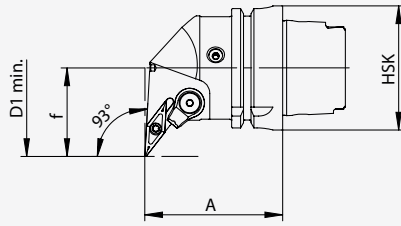
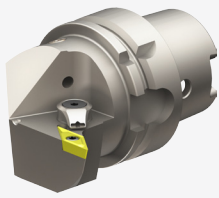
\* DN . . 15 04 . . possible with tip pad  
WDF.ER2.101.004

\* DN . . 15 04 . . possible avec plateau de  
support WDF.ER2.101.004

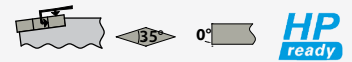
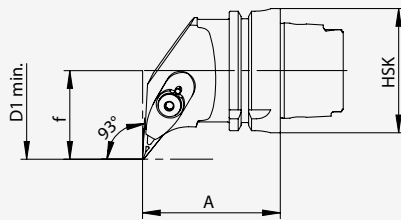
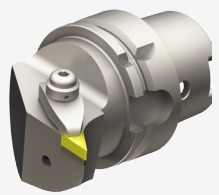
## SVUB R/L 93°/35°



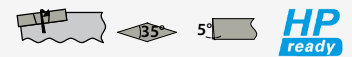
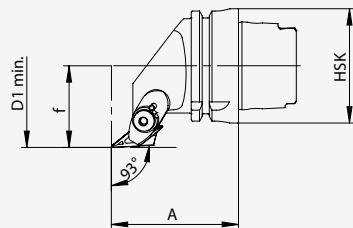
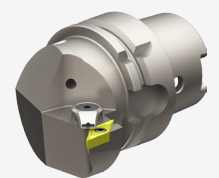
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg				
HA4.KVE.RUA.055 HA4.KVE.LUA.055	T40	27	50	55	VB . . 11 03 . .	0.35	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)		
HA4.KVF.RUA.055 HA4.KVF.LUA.055	T40	27	50	55	VB . . 16 04 . .	0.35	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		
HA6.KVF.RUA.070-HP HA6.KVF.LUA.070-HP	T63	45	80	70	VB . . 16 04 . .	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	
HA0.KVF.RUA.100 HA0.KVF.LUA.100	T100	63	120	100	VB . . 16 04 . .	4.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		

**SVUC R/L 93°/35°**


Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVA.RUA.055-HP HA4.KVA.LUA.055-HP	T40	27	50	55	VC...11 03...	0.35	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	CHPPCX.000.022
HA4.KVB.RUA.055-HP HA4.KVB.LUA.055-HP	T40	27	50	55	VC...16 04...	0.35	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVB.RUA.070-HP HA6.KVB.LUA.070-HP	T63	45	80	70	VC...16 04...	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVB.RUA.100 HA0.KVB.LUA.100	T100	63	120	100	VC...16 04...	4.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	

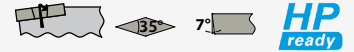
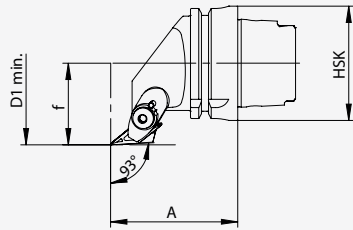
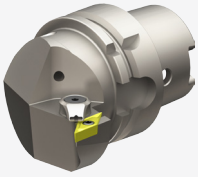
**DVUN R/L 93°/35°**


Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.KVD.RUA.055 HA4.KVD.LUA.055	T40	27	-	55	VN...16 04...	0.35	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024
HA6.KVD.RUA.070 HA6.KVD.LUA.070	T63	45	80	70	VN...16 04...	1.15	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024
HA0.KVD.RUA.100 HA0.KVD.LUA.100	T100	63	120	100	VN...16 04...	4.20	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024

**SVJB R/L 35°/93°**


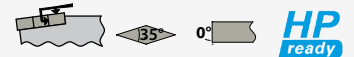
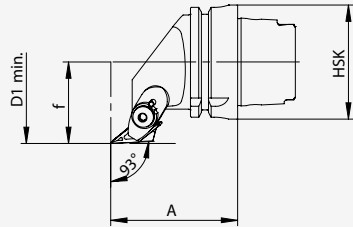
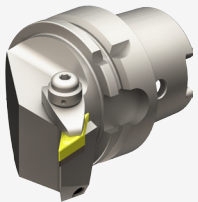
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVE.RJA.055 HA4.KVE.LJA.055	T40	27	50	55	VB...11 03...	0.40	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	
HA4.KVF.RJA.060-HP HA4.KVF.LJA.060-HP	T40	27	50	60	VB...16 04...	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVF.RJA.070-HP HA6.KVF.LJA.070-HP	T63	45	80	71.5	VB...16 04...	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVF.RJA.100-HP HA0.KVF.LJA.100-HP	T100	63	120	100	VB...16 04...	3.70	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

**SVJC R/L 35°/93°**



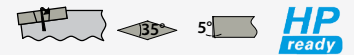
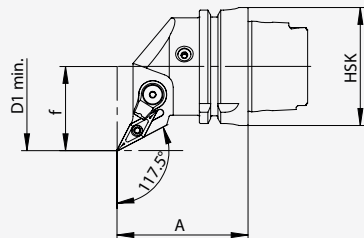
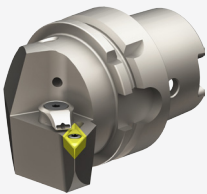
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVA.RJA.055 HA4.KVA.LJA.055	T40	27	50	55	VC...11 03 ..	0.40	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	
HA4.KVB.RJA.060-HP HA4.KVB.LJA.060-HP	T40	27	50	60	VC...16 04 ..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVB.RJA.070-HP HA6.KVB.LJA.070-HP	T63	45	80	71.5	VC...16 04 ..	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVB.RJA.100 HA0.KVB.LJA.100	T100	63	120	100	VC...16 04 ..	3.70	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	

**DVJN R/L 35°/93°**



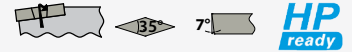
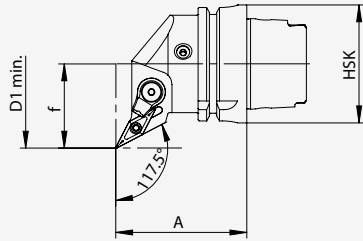
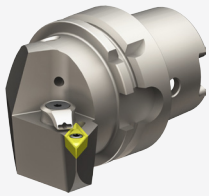
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.KVD.RJA.070 HA6.KVD.LJA.070	T63	45	-	70	VN...16 04 ..	1.00	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024
HA0.KVD.RJA.100 HA0.KVD.LJA.100	T100	63	-	100	VN...16 04 ..	3.80	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024

**SVPB R/L 117.5°/35°**



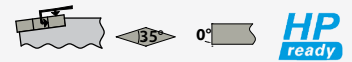
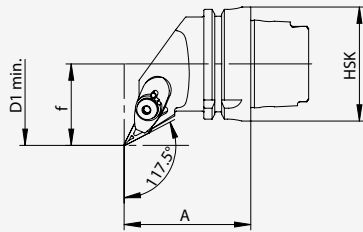
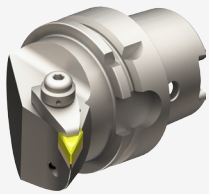
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVF.RPA.055-HP HA4.KVF.LPA.055-HP	T40	27	50	55	VB...16 04 ..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVF.RPA.070-HP HA6.KVF.LPA.070-HP	T63	45	80	70	VB...16 04 ..	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVF.RPA.100-HP HA0.KVF.LPA.100-HP	T100	63	120	100	VB...16 04 ..	4.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

## SVPC R/L 117.5°/35°



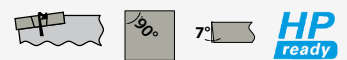
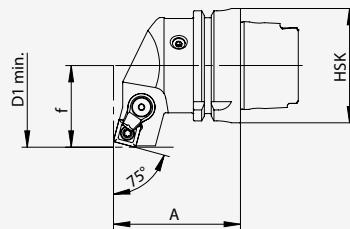
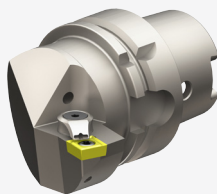
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVA.RPA.055 HA4.KVA.LPA.055	T40	27	50	55	VC...11 03 ..	0.40	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	
HA4.KVB.RPA.055 HA4.KVB.LPA.055	T40	27	50	55	VC...16 04 ..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	
HA6.KVB.RPA.070-HP HA6.KVB.LPA.070-HP	T63	45	80	70	VC...16 04 ..	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVB.RPA.100-HP HA0.KVB.LPA.100-HP	T100	63	120	100	VC...16 04 ..	4.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

## DVPN R/L 117.5°/35°



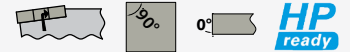
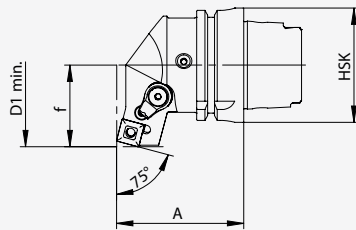
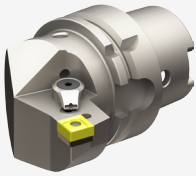
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.KVD.RPA.055 HA4.KVD.LPA.055	T40	27	-	55	VN...16 04 ..	0.40	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024
HA6.KVD.RPA.070 HA6.KVD.LPA.070	T63	45	80	70	VN...16 04 ..	1.00	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024
HA0.KVD.RPA.100 HA0.KVD.LPA.100	T100	63	120	100	VN...16 04 ..	4.00	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024

## SSBC R/L 90°/75°



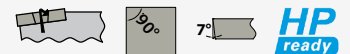
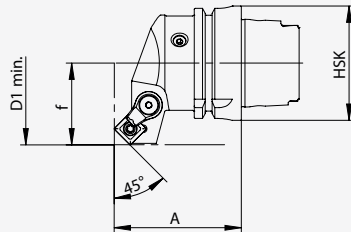
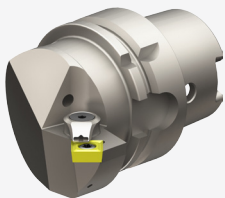
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KSB.RBA.055-HP HA4.KSB.LBA.055-HP	T40	27	-	55	SC...12 04 ..	0.35	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	
HA6.KSB.RBA.070 HA6.KSB.LBA.070	T63	45	-	70	SC...12 04 ..	1.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	
HA0.KSB.RBA.100 HA0.KSB.LBA.100	T100	63	-	100	SC...12 04 ..	4.15	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	

**PSBN R/L**     **90°/75°**



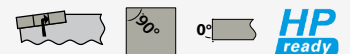
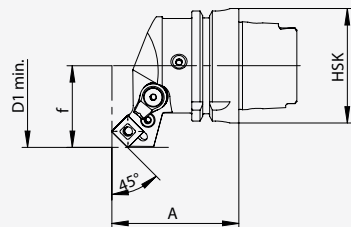
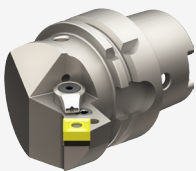
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg					
HA4.PSD.RBA.055 HA4.PSD.LBA.055	T40	27	-	55	SN .. 12 04 ..	0.35	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	
HA6.PSD.RBA.070 HA6.PSD.LBA.070	T63	45	-	70	SN .. 12 04 ..	1.00	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	
HA0.PSD.RBA.100-HP HA0.PSD.LBA.100-HP	T100	63	-	100	SN .. 12 04 ..	4.15	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

**SSSC R/L**     **90°/45°**



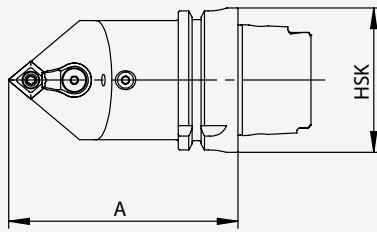
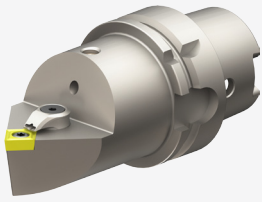
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg					
HA4.KSB.RSA.055 HA4.KSB.LSA.055	T40	27	-	55	SC .. 12 04 ..	0.40	WCC.ER1.001.000		WCC.ER2.001.010 (5.0 Nm)		
HA6.KSB.RSA.070 HA6.KSB.LSA.070	T63	45	-	70	SC .. 12 04 ..	1.00	WCB.ER1.001.000		WCB.ER2.001.009 (3.0 Nm)		
HA0.KSB.RSA.100 HA0.KSB.LSA.100	T100	63	-	100	SC .. 12 04 ..	4.00	WCC.ER1.001.000		WCC.ER2.001.010 (5.0 Nm)		




**PSSN R/L**     **90°/45°**



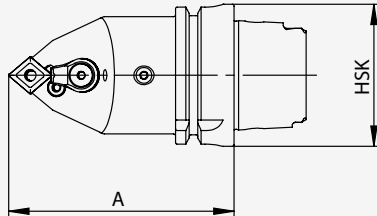
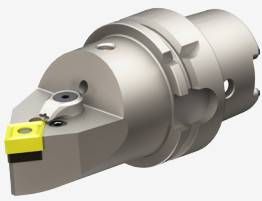
Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	Wendepatte/ Insert/ Plaquette	kg					
HA4.PSD.RSA.055 HA4.PSD.LSA.055	T40	27	-	55	SN .. 12 04 ..	0.40	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	
HA6.PSD.RSA.070-HP HA6.PSD.LSA.070-HP	T63	45	-	70	SN .. 12 04 ..	1.00	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PSD.RSA.100-HP HA0.PSD.LSA.100-HP	T100	63	-	100	SN .. 12 04 ..	4.00	WSD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

## SCMC N 50°/80°/50°



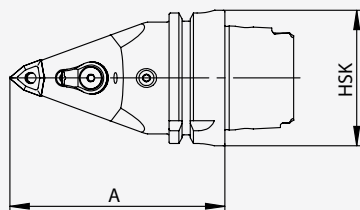
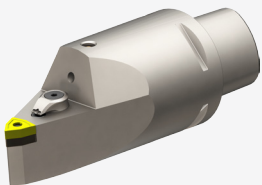
Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KCB.NMA.080-HP	T40	80	CC...09 T3 ..	0.46	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA4.KCC.NMA.080-HP	T40	80	CC...12 04 ..	0.46	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022
HA6.KCC.NMA.100-HP	T63	100	CC...12 04 ..	1.35	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022
HA6.KCC.NMA.130-HP	T63	130	CC...12 04 ..	1.84	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022
HA0.KCC.NMA.125-HP	T100	125	CC...12 04 ..	4.60	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)	CHPPCX.000.022





## PCMN N 50°/80°/50°



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.PCD.NMA.080-HP	T40	80	CN...12 04 ..	0.46	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PCD.NMA.100-HP	T63	100	CN...12 04 ..	1.35	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PCD.NMA.130-HP	T63	130	CN...12 04 ..	1.84	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PCE.NMA.100-HP	T63	100	CN...16 06 ..	1.35	WCE.ER2.101.004	WCE.ER4.101.004 (5.0 Nm)	WCE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA6.PCE.NMA.130-HP	T63	130	CN...16 06 ..	1.84	WCE.ER2.101.004	WCE.ER4.101.004 (5.0 Nm)	WCE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA0.PCD.NMA.125-HP	T100	125	CN...12 04 ..	4.60	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PCE.NMA.125-HP	T100	125	CN...16 06 ..	4.60	WCE.ER2.101.004	WCE.ER4.101.004 (5.0 Nm)	WCE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022

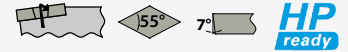
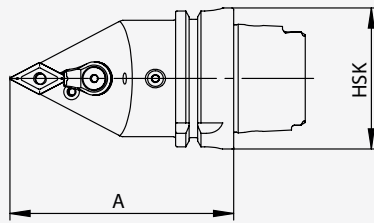
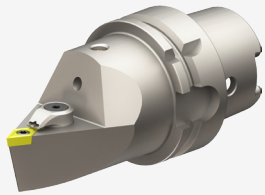
## PWMC N 50°/80°/50°



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.PWE.NMA.100-HP	T63	100	WN...08 04 ..	1.40	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA6.PWE.NMA.130-HP	T63	130	WN...08 04 ..	1.80	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022

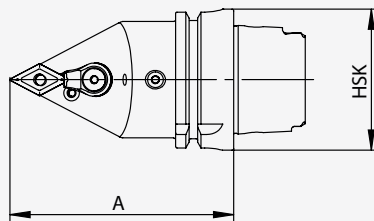
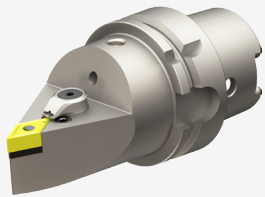


## SDNC N 62.5°/55°/62.5°



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg				
HA4.KDA.NNA.055	T40	55	DC..07 02..	0.40	WCa.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)		
HA4.KDB.NNA.055	T40	55	DC..11 T3..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		
HA4.KDB.NNA.080-HP	T40	80	DC..11 T3..	0.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	
HA6.KDB.NNA.100-HP	T63	100	DC..11 T3..	1.40	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	
HA6.KDB.NNA.130-HP	T63	130	DC..11 T3..	1.80	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	
HA6.KDB.NNA.150	T63	150	DC..11 T3..	1.80	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		
HA0.KDB.NNA.125-HP	T100	125	DC..11 T3..	4.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	

## PDNN N 62.5°/55°/62.5°



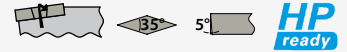
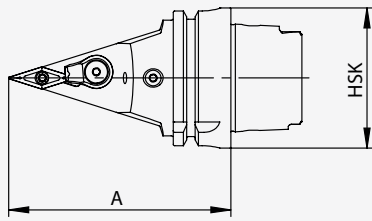
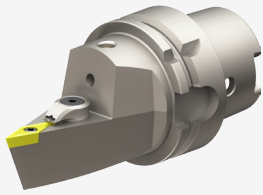
Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.PDE.NNA.080-HP	T40	80	DN..11 04..*	0.40	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA4.PDF.NNA.080-HP	T40	80	DN..15 06..*	0.40	WDF.ER2.101.003	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024	CHPPCX.000.022
HA6.PDE.NNA.100-HP	T63	100	DN..11 04..*	1.40	WDE.ER2.101.003	WDE.ER4.101.017 (3.0 Nm)	WDE.ER3.101.000	WCE.ER1.101.000	CHPPCX.000.022
HA6.PDF.NNA.100-HP	T63	100	DN..15 06..*	1.40	WDF.ER2.101.003	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024	CHPPCX.000.022
HA6.PDF.NNA.130-HP	T63	130	DN..15 06..*	1.80	WDF.ER2.101.003	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024	CHPPCX.000.022
HA0.PDF.NNA.125-HP	T100	125	DN..15 06..*	4.30	WDF.ER2.101.003	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.024	CHPPCX.000.022

\* DN..15 04.. möglich mit Unterlegplatte  
WDF.ER2.101.004

\* DN..15 04.. possible with tip pad  
WDF.ER2.101.004

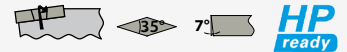
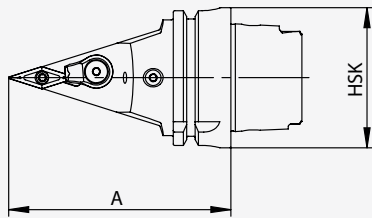
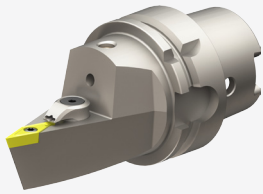
\* DN..15 04.. possible avec plateau de  
support WDF.ER2.101.004

## SVVB N 72.5°/35°/72.5°



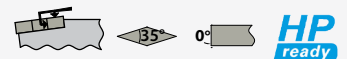
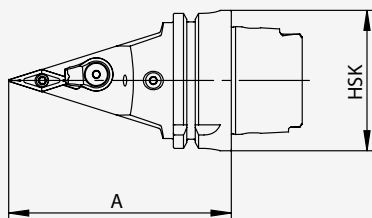
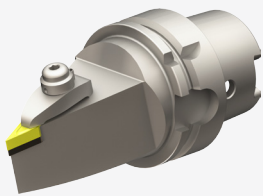
Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVF.NVA.080-HP	T40	80	VB..16 04..	0.45	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	
HA6.KVF.NVA.100-HP	T63	100	VB..16 04..	1.62	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	
HA6.KVE.NVA.130-HP	T63	130	VB..11 03..	1.52	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	CHPPCX.000.022
HA6.KVF.NVA.130-HP	T63	130	VB..16 04..	1.52	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVF.NVA.125-HP	T100	125	VB..16 04..	4.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

## SVVC N 72.5°/35°/72.5°



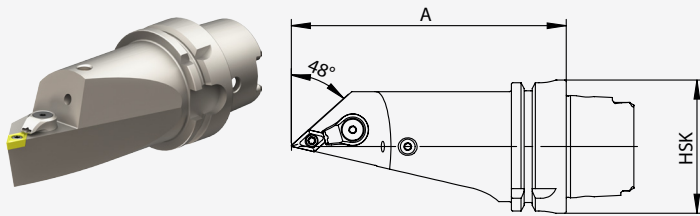
Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg			
HA4.KVA.NVA.055	T40	55	VC..11 03..	0.40	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	CHPPCX.000.022
HA4.KVB.NVA.080-HP	T40	80	VC..16 04..	0.45	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVA.NVA.100-HP	T63	100	VC..11 03..	1.24	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)	CHPPCX.000.022
HA6.KVB.NVA.100-HP	T63	100	VC..16 04..	1.24	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA6.KVB.NVA.130-HP	T63	130	VC..16 04..	1.85	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVB.NVA.125-HP	T100	125	VC..16 04..	4.00	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

## DVVN N 72.5°/35°/72.5°



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA4.KVD.NVA.080	T40	80	VN..16 04..	0.45	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024
HA6.KVD.NVA.100	T63	100	VN..16 04..	2.22	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024
HA6.KVD.NVA.130	T63	130	VN..16 04..	1.50	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024
HA0.KVD.NVA.125	T100	125	VN..16 04..	4.00	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024
HA0.KVD.NVA.180	T100	180	VN..16 04..	6.10	WVD.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024

**PDMN L 48° (93°)/55°**



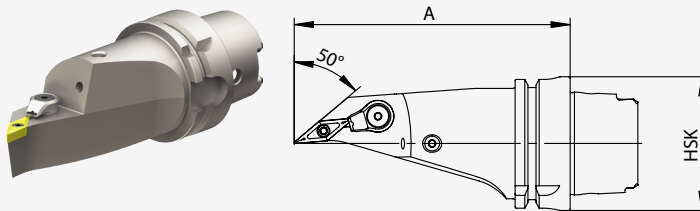
Bestell-Nr. / Order number / Code	HSK	A	Wendepatte/ Insert/ Plaquette	kg					
HA6.KDB.NXA.130	T63	130	DC...11 T3...	1.59	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	WCD.ER1.101.000	
HA6.KDB.NXA.150	T63	150	DC...11 T3...	1.96	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022	WCD.ER1.101.000	
HA6.PDF.NXA.130-HP	T63	130	DN...15 06...*	1.62	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022
HA0.PDF.NXA.125-HP	T100	125	DN...15 06...*	4.30	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000	CHPPCX.000.022




\* DN...15 04... möglich mit Unterlegplatte WDF.ER2.101.004

\* DN...15 04... possible with tip pad WDF.ER2.101.004

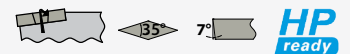
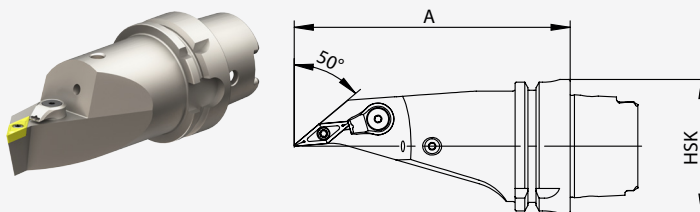
\* DN...15 04... possible avec plateau de support WDF.ER2.101.004




**SVMB L 50° (95°)/35°**



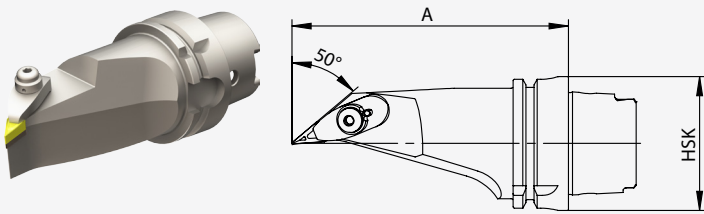
Bestell-Nr. / Order number / Code	HSK	A	Wendepatte/ Insert/ Plaquette	kg			
HA6.KVF.NMA.130-HP	T63	130	VB...16 04...	1.46	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022
HA0.KVF.NMA.125-HP	T100	125	VB...16 04...	3.77	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

**SVMC L 50° (95°)/35°**



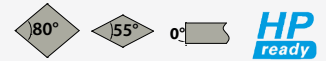
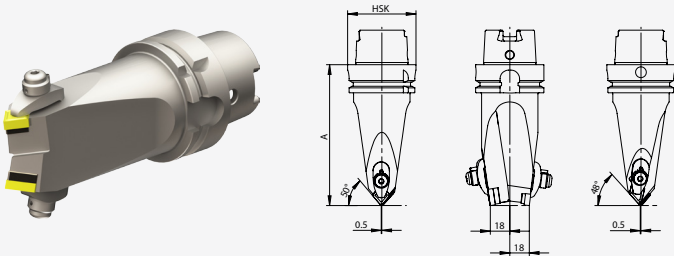
Bestell-Nr. / Order number / Code	HSK	A	Wendepatte/ Insert/ Plaquette	kg			
HA6.KVB.NMA.130-HP	T63	130	VC...16 04...	1.46	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)	CHPPCX.000.022

**DVMN L 50° (95°)/35°**



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.KVD.NMA.130	T63	130	VN .. 16 04 ..	1.48	WDF.ER2.101.003	WCB.ER2.001.009 (3.0 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024

**T DCM 50° (95°) / DDM 48° (93°)**



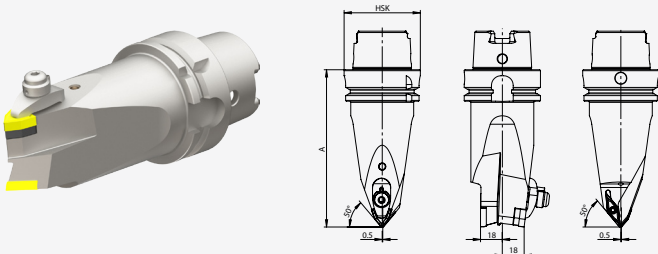
Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.KCD.NXD.130	T63	130	DN .. 15 06 .. * CN .. 12 04 ..	1.75	WDF.ER2.101.003 WCD.ER2.101.003	WCC.ER4.103.032 (10 Nm)	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024

\* DN .. 15 04 .. möglich mit Unterlegplatte WDF.ER2.101.004

\* DN .. 15 04 .. possible with tip pad WDF.ER2.101.004

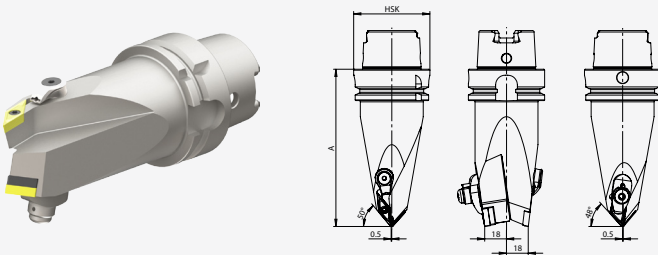
\* DN .. 15 04 .. possible avec plateau de support WDF.ER2.101.004

**T SVM 50° (95°) / DWM 50° (95°)**



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.KWE.NXD.130	T63	100	WN .. 08 04 .. VB .. 16 04 ..	1.82	WDF.ER2.101.003	WCC.ER4.103.032 WCB.ER2.001.009	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024

**T DDM 48° (93°) / SVM 50° (95°)**



Bestell-Nr. / Order number/ Code	HSK	A	Wendeplatte/ Insert/ Plaquette	kg					
HA6.KDF.NXD.130	T63	100	DN .. 15 06 .. * VB .. 16 04 ..	1.82	WDF.ER2.101.003	WCC.ER4.103.032 WCB.ER2.001.009	WCC.ER5.102.012	WCC.ER3.102.029	WCC.ER3.102.024

\* DN .. 15 04 .. möglich mit Unterlegplatte WDF.ER2.101.004

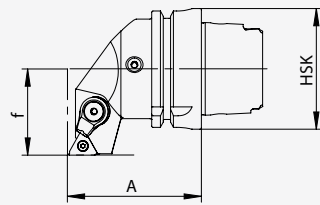
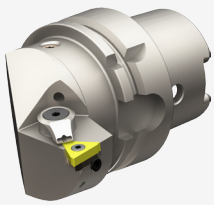
\* DN .. 15 04 .. possible with tip pad WDF.ER2.101.004

\* DN .. 15 04 .. possible avec plateau de support WDF.ER2.101.004

## Aussengewinde radial

## External thread radial

## Filet extérieur radial

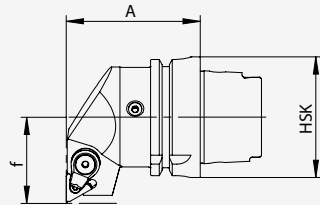
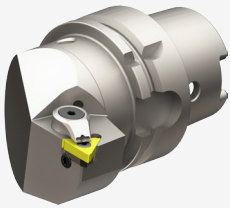


Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	R/L	Wendeplatte/ Insert/ Plaquette	kg				
HA4.KGB.RGR.055-HP	T40	27	-	55	R	16 ER	0.34	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA4.KGB.LGR.055-HP	T40	27	-	55	L	16 EL	0.34	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA6.KGB.RGR.070-HP	T63	45	-	70	R	16 ER	1.08	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA6.KGB.LGR.070-HP	T63	45	-	70	L	16 EL	1.08	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA6.KGC.RGR.070-HP	T63	45	-	70	R	22 ER	4.29	WGC.ER1.001.000	WGC.ER2.001.015 (3.0 Nm)	WGC.ER2.102.004	WGC.ER3.001.009 (2.0 Nm)
HA6.KGC.LGR.070-HP	T63	45	-	70	L	22 EL	4.29	WGC.ER1.001.000	WGC.ER2.001.015 (3.0 Nm)	WGC.ER2.102.004	WGC.ER3.001.009 (2.0 Nm)
HA0.KGB.RGR.100	T100	63	-	100	R	16 ER	4.29	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA0.KGB.LGR.100	T100	63	-	100	L	16 EL	4.29	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA0.KGC.RGR.100	T100	63	-	100	R	22 ER	4.29	WGC.ER1.001.000	WGC.ER2.001.015 (3.0 Nm)	WGC.ER2.102.004	WGC.ER3.001.009 (2.0 Nm)
HA0.KGC.LGR.100	T100	63	-	100	L	22 EL	4.29	WGC.ER1.001.000	WGC.ER2.001.015 (3.0 Nm)	WGC.ER2.102.004	WGC.ER3.001.009 (2.0 Nm)

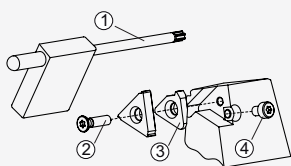
## Aussengewinde axial

## External thread axial

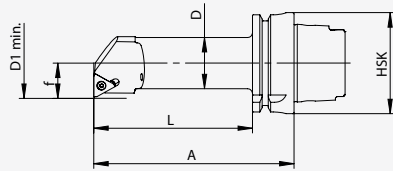
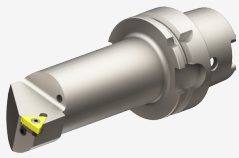
## Filet extérieur axial



Bestell-Nr. / Order number/ Code	HSK	f	D1 min.	A	R/L	Wendeplatte/ Insert/ Plaquette	kg				
HA4.KGB.RGA.055-HP	T40	27	-	55	R	16 EL	0.36	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA4.KGB.LGA.055-HP	T40	27	-	55	L	16 ER	0.36	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA6.KGB.RGA.070-HP	T63	45	-	70	R	16 EL	1.14	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA6.KGB.LGA.070-HP	T63	45	-	70	L	16 ER	1.14	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA0.KGB.RGA.100-HP	T100	63	-	100	R	16 EL	4.46	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA0.KGB.LGA.100-HP	T100	63	-	100	L	16 ER	4.46	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)



Für Gewindehalter For thread tool	Typ/ Type	Bestell-Nr. / Order number <sup>①</sup>	Bestell-Nr. / Order number <sup>②</sup>	Bestell-Nr. / Order number <sup>③</sup>	Bestell-Nr. / Order number <sup>④</sup>
		Torx-Schlüssel/ Torx driver	Torx-Schraube Torx screw	Zwischenlage/ Tip pad	Schraube/ Screw
xxx.KGB.RGR.xxx	G01	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
xxx.KGB.LGR.xxx	G02	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
xxx.xGB.RGA.xxx	G03	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
xxx.xGB.LGA.xxx	G04	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)

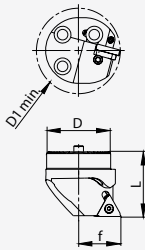






Bestell-Nr. / Order number/ Code	HSK	f	D	D1 min.	A	L	Wendeplatte/ Insert/ Plaquette	kg				
HA4.BGB.RGA.110	T40	17	25	32	110	90	16 IR	0.49	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA4.BGB.LGA.110	T40	17	25	32	110	90	16 IL	0.49	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA6.BGB.RGA.125	T63	22	32	40	125	99	16 IR	1.17	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA6.BGB.LGA.125	T63	22	32	40	125	99	16 IL	1.17	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA6.BGB.RGA.140	T63	27	40	50	140	114	16 IR	1.60	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA6.BGB.LGA.140	T63	27	40	50	140	114	16 IL	1.60	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
HA0.BGB.RGA.150	T100	27	40	50	150	121	16 IR	2.98	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
HA0.BGB.LGA.150	T100	27	40	50	150	121	16 IL	2.98	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)

Wechselschneidköpfe für  
Innengewinde

Exchangeable cutting heads for  
Internal thread

Têtes de coupe interchangeables  
pour le filetage interne



Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg				
WK5.BGB.RGY.020	16	22	12	20	11 IR	0.05	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)		
WK5.BGB.LGY.020	16	22	12	20	11 IL	0.05	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)		
WK4.BGB.RGZ.025	20	25	14	25	16 IR	0.08	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)		
WK4.BGB.LGZ.025	20	25	14	25	16 IL	0.08	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)		
WK3.BGB.RGA.035	25	32	17	35	16 IR	0.10	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
WK3.BGB.LGA.035	25	32	17	35	16 IL	0.10	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
WK2.BGB.RGB.035	32	40	22	40	16 IR	0.18	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
WK2.BGB.LGB.035	32	40	22	40	16 IL	0.18	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)
WK1.BGB.RGC.040	40	50	27	40	16 IR	0.30	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.102.003	WGB.ER3.001.007 (2.0 Nm)
WK1.BGB.LGC.040	40	50	27	40	16 IL	0.30	WGB.ER1.001.000	WGB.ER2.001.012 (2.0 Nm)	WGB.ER2.101.003	WGB.ER3.001.007 (2.0 Nm)

## Bohrstangen mit Wechselschneidköpfen

- für effiziente Drehbearbeitung
- optimale Kühlung durch ausgerichtete Kühl-düse und Hochdruckkühldüse

## Boring bars with exchangeable cutting heads

- to turn efficiently
- optimal cooling by adjusted cooling nozzle and high pressure cooling nozzle

## Barres d'alésage avec têtes de coupe interchangeables

- pour des opérations de tournage efficaces
- arrosage optimal par des buses d'arrosage fixes High Pressure

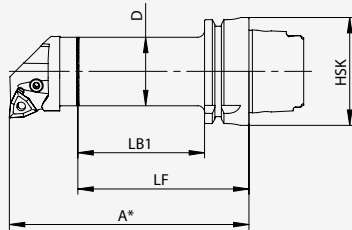


HP  
inside

## Bohrstangenschäfte

## Boring bar shanks

## Barres d'alésage



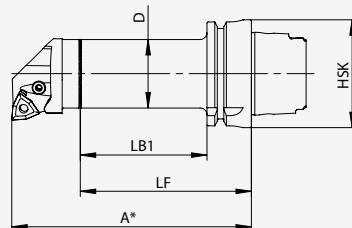
HP  
inside

Bestell-Nr. / Order number/ Code	HSK	D	A*	LF	LB1	kg	
HA4.WK3.025.090	T40	25	90	55	35	0.32	Ni4.762.004.012
HA4.WK3.025.110	T40	25	110	75	55	0.39	Ni4.762.004.012
HA4.WK2.032.115	T40	32	115	80	60	0.55	Ni4.762.004.012
HA4.WK1.040.120	T40	40	120	80	-	0.71	Ni4.762.005.014
HA6.WK5.016.076	T63	16	76	56	36	0.80	Ni4.762.003.010
HA6.WK4.020.100	T63	20	100	80	60	0.80	Ni4.762.035.012
HA6.WK3.025.105	T63	25	105	80	44	0.80	Ni4.762.004.012
HA6.WK2.032.125	T63	32	125	100	64	1.05	Ni4.762.005.014
HA6.WK2.032.160	T63	32	160	125	99	1.23	Ni4.762.005.014
HA6.WK1.040.140	T63	40	140	100	74	1.34	Ni4.762.006.016
HA6.WK1.040.180	T63	40	180	140	114	1.71	Ni4.762.006.016
HA0.WK2.032.160	T100	32	160	125	95	2.55	Ni4.762.005.014
HA0.WK1.040.110	T100	40	110	70	41	2.38	Ni4.762.006.016
HA0.WK1.040.180	T100	40	180	140	111	3.05	Ni4.762.006.016

## Schwingungsgedämpfte Bohrstangenschäfte (HM-Kern)

## Damped boring bar shanks (carbide core)

## Tiges de barres d'alésage anti-vibrations



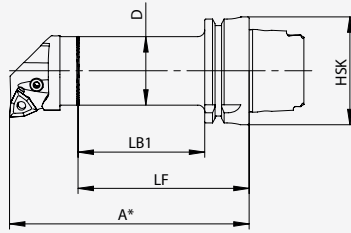
SDT+  
SWISS TOOLS  
HP  
inside


Bestell-Nr. / Order number/ Code	HSK	D	A*	LF	LB1	kg	
HA6.WK3.025.150	T63	25	150	115	89	0.98	Ni4.762.004.012
HA6.WK2.032.185	T63	32	185	150	124	1.76	Ni4.762.005.014
HA6.WK1.040.225	T63	40	225	185	159	2.20	Ni4.762.006.016

**Schwingungsgedämpfte  
Bohrstangenschäfte  
Tilgersystem / Massendämpfer**

**Damped  
boring bar shanks  
Tilger system / Mass damper**

**Tiges de barres  
d'alésage anti-vibrations  
Système Tilger / Amortisseur masse**



Bestell-Nr. / Order number/ Code	HSK	D	A*	LF	LB1	kg	
HA6.WK5.WD0.110	T63	16	110	90	64	1.01	NI4.762.003.010
HA6.WK4.WD1.126	T63	20	126	106	80	1.00	NI4.762.035.012
HA6.WK3.WD2.161	T63	25	161	126	100	1.50	NI4.762.004.012
HA6.WK3.WD2.186	T63	25	186	151	125	1.60	NI4.762.004.012
HA6.WK2.WD3.189	T63	32	189	154	128	1.80	NI4.762.005.014
HA6.WK2.WD3.221	T63	32	221	186	160	2.22	NI4.762.005.014
HA6.WK1.WD4.226	T63	40	226	186	160	2.60	NI4.762.006.016
HA6.WK1.WD4.266	T63	40	266	226	200	3.95	NI4.762.006.016

- Verwendung von SDUCR/L Köpfen wird empfohlen
- weitere Dimensionen auf Anfrage

- use of SDUCR/L heads is recommended
- other dimensions on request

- L'utilisation de têtes SDUCR/L est recommandée
- autres dimensions sur demande

**Schwingungsgedämpfte  
zyl. Bohrstangenschäfte  
Tilgersystem / Massendämpfer**

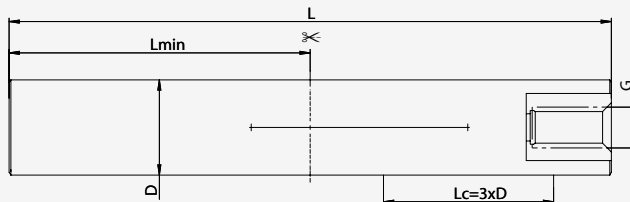
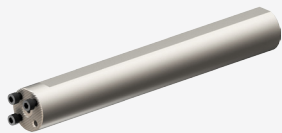
**Damped cylindrical  
boring bar shanks  
Tilger system / Mass damper**


**Tiges de barres  
d'alésage anti-vibrations  
Système Tilger / Amortisseur masse**

- Anschlussgewinde für Innenkühlung
- Verwendung von SDUCR/L Köpfen wird empfohlen

- with thread for inner coolant supply
- use of SDUCR/L heads is recommended

- Filet pour l'arrosage interne
- L'utilisation de têtes SDUCR/L est recommandée



Bestell-Nr. / Order number/ Code	D	L	Lmin	Lc	G	kg	
U16.WK5.WD0.170	16	170	117	48	G1/4	0.25	NI4.762.003.010
U20.WK4.WD1.200	20	200	137	60	G1/4	0.5	NI4.762.035.012
U25.WK3.WD2.255	25	255	180	75	G1/4	1.10	NI4.762.004.012
U32.WK2.WD3.320	32	320	213	96	G1/2	2.10	NI4.762.005.014
U40.WK1.WD4.408	40	408	260	120	G1/2	3.90	NI4.762.006.016

- weitere Dimensionen auf Anfrage

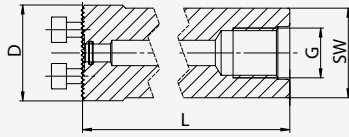
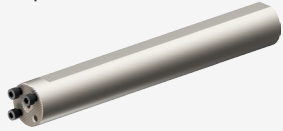
- other dimensions on request

- autres dimensions sur demande



## Bohrstangenschäfte mit Zylinderschaft

- Anschlussgewinde für Innenkühlung
- 3 Spannflächen




## Boring bar shanks with cylindrical shank

- with thread for inner coolant supply
- 3 clamping flats

## Barres d'alésage avec tige cylindrique

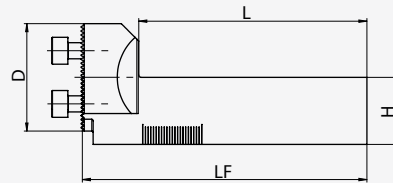
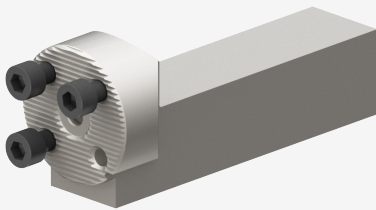
- Filet pour l'arrosage interne
- 3 surfaces de serrage



Bestell-Nr. / Order number/ Code	D	L	SW	G	kg	
U25.WK3.025.100	25	100	23	M8x1	0.35	Ni4.762.004.012
U25.WK3.025.200	25	200	23	G1/4	0.65	Ni4.762.004.012
U32.WK2.032.120	32	120	30	M8x1	0.72	Ni4.762.005.014
U32.WK2.032.218	32	218	30	G3/8	1.22	Ni4.762.005.014
U40.WK1.040.120	40	120	37	M8x1	1.15	Ni4.762.006.016
U40.WK1.040.283	40	283	37	G1/2	2.46	Ni4.762.006.016

## Werkzeughalter vierkant

- für effiziente Drehbearbeitung
- mit Kühlmitteldirektanschluss




## Tool holder square

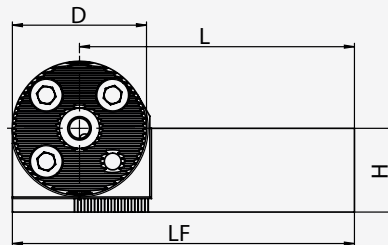
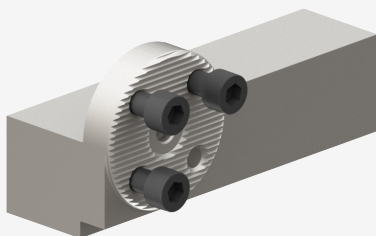
- to turn efficiently
- with direct coolant connection


## Supports carrés

- pour un tournage efficace
- avec raccord direct de liquide de refroidissement



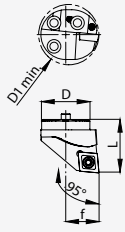
Bestell-Nr. / Order number/ Code	D	L	LF	H	kg	
V20.WK3.N00.141	25	85	106	20	0.36	Ni4.762.004.012
V20.WK2.N00.141	32	85	106	20	0.39	Ni4.762.005.014
V25.WK2.N00.141	32	85	106	25	0.57	Ni4.762.005.014
V25.WK1.N00.146	40	85	106	25	0.62	Ni4.762.006.016



Bestell-Nr. / Order number/ Code	D	L	LF	H	kg	
V20.WK3.R90.090	25	90	102	20	0.35	Ni4.762.004.012
V20.WK2.R90.086	32	86	102	20	0.39	Ni4.762.005.014
V25.WK2.R90.086	32	86	102	25	0.57	Ni4.762.005.014
V25.WK1.R90.082	40	82	102	25	0.59	Ni4.762.006.016

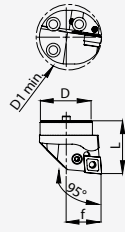
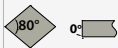
**SCLC R/L**


K<sub>r</sub> 95° (-5°)



**PCLN R/L**

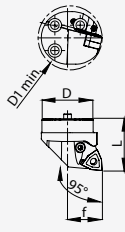
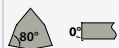
K<sub>r</sub> 95° (-5°)



Typ/ Type/ Type	Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg				
SCLCR/L	WK5.BCA.RLY.020 WK5.BCA.LLY.020	16	20	11	20	CC..06.02..	0.05	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)		
SCLCR/L	WK4.BCB.RLZ.020 WK4.BCB.LLZ.020	20	25	13	20	CC..09.T3..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		
SCLCR/L	WK3.BCB.RLA.035 WK3.BCB.LLA.035	25	32	17	35	CC..09.T3..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)		
SCLCR/L	WK3.BCC.RLA.035 WK3.BCC.LLA.035	25	32	17	35	CC..12.04..	0.10	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)		
SCLCR/L	WK2.BCC.RLB.035 WK2.BCC.LLB.035	32	40	22	35	CC..12.04..	0.20	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)		
SCLCR/L	WK1.BCC.RLC.040 WK1.BCC.LLC.040	40	50	27	40	CC..12.04..	0.30	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)		
											
PCLN R/L	WK3.PCD.RLA.035 WK3.PCD.LLA.035	25	32	17	35	CN..12.04..	0.10	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
PCLN R/L	WK2.PCD.RLB.035 WK2.PCD.LLB.035	32	40	22	35	CN..12.04..	0.20	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
PCLN R/L	WK1.PCD.RLC.040 WK1.PCD.LLC.040	40	50	27	40	CN..12.04..	0.30	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000

**PWLN R/L**

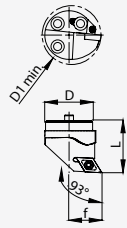
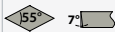
K<sub>r</sub> 95° (-5°)



Typ/ Type/ Type	Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg				
PWLN R/L	WK2.PWE.RLB.035 WK2.PWE.LLB.035	32	40	22	35	WN..08.04..	0.20	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
PWLN R/L	WK1.PWE.RLC.040 WK1.PWE.LLC.040	40	50	27	40	WN..08.04..	0.30	WWE.ER2.101.004	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000

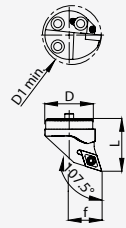
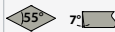
**SDUC R/L**

$K_r 93^\circ (-3^\circ)$



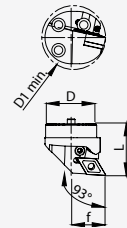
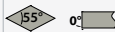
**SDQC R/L**

$K_r 107.5^\circ (-17.5^\circ)$



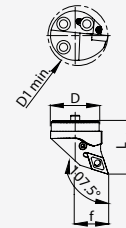
**PDUN R/L**

$K_r 93^\circ (-3^\circ)$



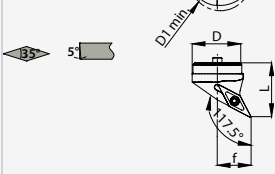
**PDQN R/L**

$K_r 107.5^\circ (-17.5^\circ)$

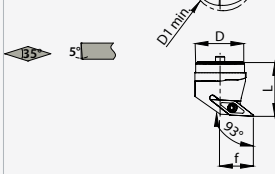


Typ/ Type/ Type	Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg							
SDUC R/L	WK5.BDA.RUY.020 WK5.BDA.LUY.020	16	20	11	20	DC..07.02..	0.05	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)					
SDUC R/L	WK4.BDB.RUZ.020 WK4.BDB.LUZ.020	20	25	13	20	DC..11.T3..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDUC R/L	WK3.BDB.RUA.035 WK3.BDB.LUA.035	25	32	17	35	DC..11.T3..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDUC R/L	WK2.BDB.RUB.035 WK2.BDB.LUB.035	32	40	22	35	DC..11.T3..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDUC R/L	WK1.BDB.RUC.040 WK1.BDB.LUC.040	40	50	27	40	DC..11.T3..	0.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDQC R/L	WK5.BDA.RQY.020 WK5.BDA.LQY.020	16	20	11	20	DC..07.02..	0.05	WCA.ER1.001.000	WCA.ER2.001.006 (0.9 Nm)					
SDQC R/L	WK4.BDB.RQZ.020 WK4.BDB.LQZ.020	20	25	13	20	DC..11.T3..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDQC R/L	WK3.BDB.RQA.035 WK3.BDB.LQA.035	25	32	17	35	DC..11.T3..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDQC R/L	WK2.BDB.RQB.035 WK2.BDB.LQB.035	32	40	22	35	DC..11.T3..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
SDQC R/L	WK1.BDB.RQC.040 WK1.BDB.LQC.040	40	50	27	40	DC..11.T3..	0.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)					
														
PDUN R/L	WK3.PDE.RUA.035 WK3.PDE.LUA.035	25	32	17	35	DN..11.04..	0.10	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			
PDUN R/L	WK2.PDE.RUB.035 WK2.PDE.LUB.035	32	40	22	35	DN..11.04..	0.20	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			
PDUN R/L	WK1.PDE.RUC.040 WK1.PDE.LUC.040	40	50	27	40	DN..11.04..	0.30	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			
PDUN R/L	WK2.PDF.RUB.035 WK2.PDF.LUB.035	32	40	22	35	DN..15.06..	0.20	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000			
PDUN R/L	WK1.PDF.RUC.040 WK1.PDF.LUC.040	40	50	27	40	DN..15.06..	0.30	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000			
PDQN R/L	WK3.PDE.RQA.035 WK3.PDE.LQA.035	25	32	17	35	DN..11.04..	0.10	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			
PDQN R/L	WK2.PDE.RQB.035 WK2.PDE.LQB.035	32	40	22	35	DN..11.04..	0.20	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			
PDQN R/L	WK1.PDE.RQC.040 WK1.PDE.LQC.040	40	50	27	40	DN..11.04..	0.30	WDE.ER2.101.003	WDE.ER4.101.017 (5.0 Nm)	WDE.ER3.101.000	WDE.ER1.101.000			

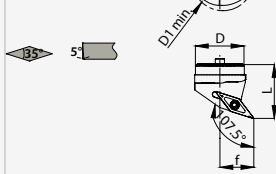
**SVPB R/L**  
K<sub>r</sub> 117.5° (-27.5°)





**SVUB R/L**  
K<sub>r</sub> 93° (-3°)

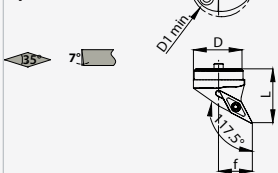


**SVQB R/L**  
K<sub>r</sub> 107.5° (-17.5°)

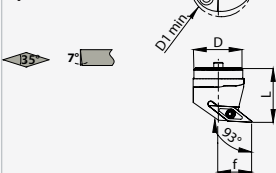


Typ/ Type/ Type	Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg		
SVPB R/L	WK3.BVE.RPA.035 WK3.BVE.LPA.035	25	32	17	35	VB..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVPB R/L	WK2.BVF.RPB.035 WK2.BVF.LPB.035	32	40	22	35	VB..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVPB R/L	WK1.BVF.RPC.040 WK1.BVF.LPC.040	40	50	27	40	VB..16 04..	0.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUB R/L	WK4.BVE.RUZ.020 WK4.BVE.LUZ.020	20	27	16	20	VB..11 03..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUB R/L	WK3.BVE.RUA.035 WK3.BVE.LUA.035	25	32	17	35	VB..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUB R/L	WK2.BVF.RUB.035 WK2.BVF.LUB.035	32	40	22	35	VB..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUB R/L	WK1.BVF.RUC.040 WK1.BVF.LUC.040	40	50	27	40	VB..16 04..	0.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQB R/L	WK4.BVE.RQZ.020 WK4.BVE.LQZ.020	20	27	15	20	VB..11 03..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQB R/L	WK3.BVE.RQA.035 WK3.BVE.LQA.035	25	32	17	35	VB..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQB R/L	WK2.BVF.RQB.035 WK2.BVF.LQB.035	32	40	22	35	VB..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQB R/L	WK1.BVF.RQC.040 WK1.BVF.LQC.040	40	50	27	40	VB..16 04..	0.30	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)

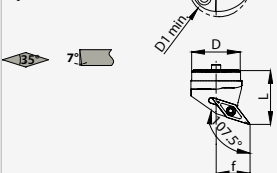
**SVPC R/L**  
K<sub>r</sub> 117.5° (-27.5°)





**SVUC R/L**  
K<sub>r</sub> 93° (-3°)



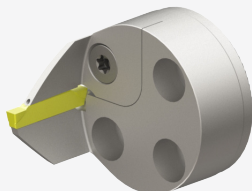
**SVQC R/L**  
K<sub>r</sub> 107.5° (-17.5°)



Typ/ Type/ Type	Bestell-Nr. / Order number/ Code	D	D1 min.	f	L	Wendeplatte/ Insert/ Plaquette	kg		
SVPC R/L	WK3.BVA.RPA.035 WK3.BVA.LPA.035	25	32	17	35	VC..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVPC R/L	WK2.BVB.RPB.035 WK2.BVB.LPB.035	32	40	22	35	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVPC R/L	WK1.BVB.RPC.040 WK1.BVB.LPC.040	40	50	27	40	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUC R/L	WK4.BVA.RUZ.020 WK4.BVA.LUZ.020	20	27	16	20	VC..11 03..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUC R/L	WK3.BVA.RUA.035 WK3.BVA.LUA.035	25	32	17	35	VC..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUC R/L	WK2.BVB.RUB.035 WK2.BVB.LUB.035	32	40	22	35	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVUC R/L	WK1.BVB.RUC.040 WK1.BVB.LUC.040	40	50	27	40	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQC R/L	WK4.BVE.RQZ.020 WK4.BVE.LQZ.020	20	27	15	20	VB..11 03..	0.08	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQC R/L	WK3.BVA.RQA.035 WK3.BVA.LQA.035	25	32	17	35	VC..11 03..	0.10	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQC R/L	WK2.BVB.RQB.035 WK2.BVB.LQB.035	32	40	22	35	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
SVQC R/L	WK1.BVB.RQC.040 WK1.BVB.LQC.040	40	50	27	40	VC..16 04..	0.20	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)

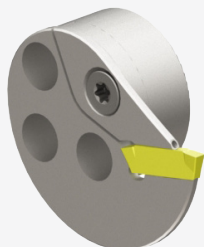
**Schneidkopf zum Einstechen**

• auf Anfrage



**Head for grooving**

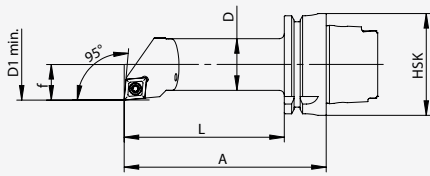
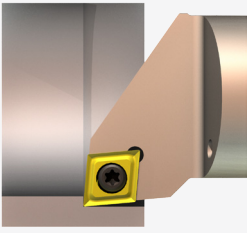
• on request



**Tête pour les gorges**

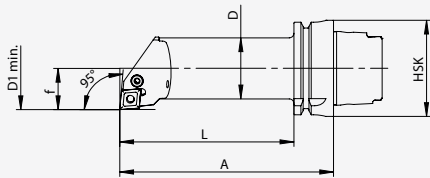
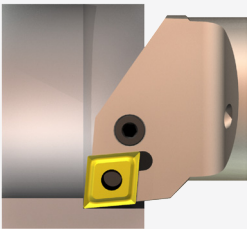
• sur demande

**SCLC R/L 95°/80°**



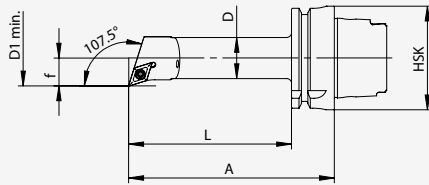
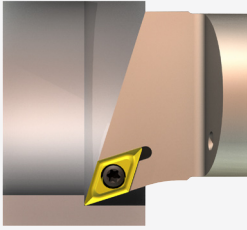
Bestell-Nr. / Order number/ Code	HSK	f	D	D1 min.	A	L	Wendeplatte/ Insert/ Plaquette	kg		
HA4.BCC.RLA.110 HA4.BCC.LLA.110	T40	17	25	32	110	90	CC...12 04...	0.45	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)
HA4.BCC.RLA.140 HA4.BCC.LLA.140	T40	17	25	32	140	120	CC...12 04...	1.54	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)
HA6.BCC.RLB.125 HA6.BCC.LLB.125	T63	22	32	40	125	99	CC...12 04...	1.12	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)
HA6.BCC.RLB.160 HA6.BCC.LLB.160	T63	22	32	40	160	134	CC...12 04...	1.33	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)
HA6.BCC.RLC.140 HA6.BCC.LLC.140	T63	27	40	50	140	114	CC...12 04...	1.54	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)
HA6.BCC.RLC.180 HA6.BCC.LLC.180	T63	27	40	50	180	154	CC...12 04...	1.90	WCC.ER1.001.000	WCC.ER2.001.010 (5.0 Nm)

**PCLN R/L 95°/80°**



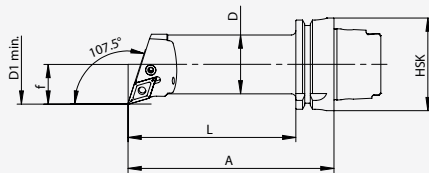
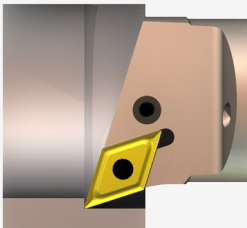
Bestell-Nr. / Order number/ Code	HSK	f	D	D1 min.	A	L	Wendeplatte/ Insert/ Plaquette	kg				
HA6.PCD.RLC.140 HA6.PCD.LLC.140	T63	27	40	50	140	114	CN...12 04...	1.56	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
HA6.PCD.RLC.180 HA6.PCD.LLC.180	T63	27	40	50	180	154	CN...12 04...	1.94	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
HA0.PCD.RLC.150 HA0.PCD.LLC.150	T100	27	40	50	150	121	CN...12 04...	2.94	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
HA0.PCD.RLC.200 HA0.PCD.LLC.200	T100	27	40	50	200	171	CN...12 04...	3.39	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
HA0.PCD.RLD.150 HA0.PCD.LLD.150	T100	35	50	63	150	121	CN...12 04...	3.52	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000
HA0.PCD.RLD.200 HA0.PCD.LLD.200	T100	35	50	63	200	171	CN...12 04...	4.24	WCD.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WCD.ER3.101.000	WCD.ER1.101.000

## SDQC R/L 107.5°/55°



Bestell-Nr. / Order number/ Code	HSK	f	D	D1 min.	A	L	Wendeplatte/ Insert/ Plaquette	kg		
HA4.BDB.RLA.110 HA4.BDB.LLA.110	T40	17	25	32	110	90	DC...11T3..	0.46	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
HA4.BDB.RLA.140 HA4.BDB.LLA.140	T40	17	25	32	140	120	DC...11T3..	0.48	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
HA6.BDB.RQB.125 HA6.BDB.LQB.125	T63	22	32	40	125	99	DC...11T3..	1.12	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
HA6.BDB.RQB.160 HA6.BDB.LQB.160	T63	22	32	40	160	134	DC...11T3..	1.32	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
HA6.BDB.RQC.140 HA6.BDB.LQC.140	T63	27	40	50	140	114	DC...11T3..	1.54	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)
HA6.BDB.RQC.180 HA6.BDB.LQC.180	T63	27	40	50	180	154	DC...11T3..	1.92	WCB.ER1.001.000	WCB.ER2.001.009 (3.0 Nm)

## PDQN R/L 107.5°/55°

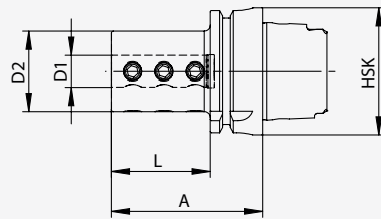
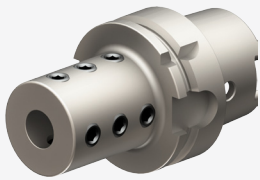



Bestell-Nr. / Order number/ Code	HSK	f	D	D1 min.	A	L	Wendeplatte/ Insert/ Plaquette	kg				
HA6.PDF.RQC.140 HA6.PDF.LQC.140	T63	27	40	50	140	114	DN...15 06...*	1.56	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
HA6.PDF.RQC.180 HA6.PDF.LQC.180	T63	27	40	50	180	154	DN...15 06...*	1.94	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
HA0.PDF.RQC.150 HA0.PDF.LQC.150	T100	27	40	50	150	121	DN...15 06...*	2.94	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
HA0.PDF.RQC.200 HA0.PDF.LQC.200	T100	27	40	50	200	171	DN...15 06...*	3.40	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
HA0.PDF.RQD.150 HA0.PDF.LQD.150	T100	35	50	63	150	121	DN...15 06...*	3.50	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000
HA0.PDF.RQD.200 HA0.PDF.LQD.200	T100	35	50	63	200	171	DN...15 06...*	4.23	WDF.ER2.101.003	WCD.ER4.101.017 (5.0 Nm)	WDF.ER3.101.000	WCD.ER1.101.000

\* DN...15 04... möglich mit Unterlegplatte  
WDF.ER2.101.004

\* DN...15 04... possible with tip pad  
WDF.ER2.101.004

\* DN...15 04... possible avec plateau de  
support WDF.ER2.101.004



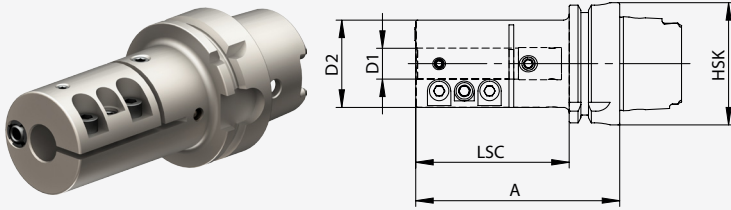
Bestell-Nr. / Order number/ Code	HSK	D1	D2	A	L	kg	
HA4.B06.K01.055	T40	6	34	55	35	0.4	ERU.GS4.001.010 (5.0 Nm) M 6 x 10
HA4.B08.K01.055	T40	8	34	55	35	0.38	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA4.B10.K01.055	T40	10	34	55	35	0.37	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA4.B12.K01.055	T40	12	36	55	35	0.36	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA4.B16.K01.070	T40	16	40	70	50	0.4	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA4.B20.K01.085	T40	20	44	85	65	0.71	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA4.B25.So1.070	T40	25	50	85	-	0.60	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA6.B06.K01.060	T63	6	34	60	34	0.86	ERU.GS4.001.010 (5.0 Nm) M 6 x 10
HA6.B08.K01.060	T63	8	34	60	34	0.86	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA6.B10.K01.060	T63	10	34	60	34	0.86	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA6.B12.K01.060	T63	12	36	60	34	0.85	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA6.B16.K01.075	T63	16	40	75	49	0.99	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA6.B20.K01.075	T63	20	44	75	49	1.05	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA6.B25.K01.075	T63	25	50	75	49	1.2	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA6.B32.K01.090	T63	32	56	90	64	1.36	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA6.B40.K01.090	T63	40	63	90	64	1.37	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B06.K01.070	T100	6	34	70	41	2.26	ERU.GS4.001.010 (5.0 Nm) M 6 x 10
HA0.B08.K01.070	T100	8	34	70	41	2.24	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA0.B10.K01.070	T100	10	34	70	41	2.36	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA0.B12.K01.070	T100	12	36	70	41	2.38	ERU.GS5.001.010 (10.0 Nm) M 8 x 10
HA0.B16.K01.085	T100	16	40	85	56	2.41	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B20.K01.085	T100	20	44	85	56	2.49	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B25.K01.085	T100	25	50	85	56	2.6	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B32.K01.100	T100	32	56	100	71	2.89	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B40.K01.100	T100	40	63	100	71	3.02	ERU.GS6.001.012 (15.0 Nm) M10 x 12
HA0.B50.K01.125	T100	50	82	125	96	4.51	ERU.GS6.001.012 (15.0 Nm) M10 x 12



**Schwingungsgedämpfte  
Bohrstangenhalter**

**Damped  
Boring bar holder**

**Tiges de porte-outils  
d'alésage anti-vibrations**



Bestell-Nr. / Order number/ Code	HSK	D1	D2	A	LSC	kg					
HA6.B10.K21.105	T63	10	45	105	65	1.48	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA6.B12.K21.105	T63	12	45	105	65	1.46	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA6.B16.K21.105	T63	16	45	105	75	1.41	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA6.B20.K21.105	T63	20	55	105	80	1.76	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA6.B25.K21.105	T63	25	55	105	80	1.66	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA6.B32.K21.105	T63	32	65	105	80	1.66	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA0.B20.K21.115	T100	20	55	115	80	2.49	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA0.B25.K21.120	T100	25	55	120	80	3.23	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010
HA0.B32.K21.125	T100	32	65	100	80	3.75	Ni4.027.006.016	Ni4.028.008.016	Ni4.028.010.016	Ni4.762.006.016	KU1.U12.002.010

• mehr Stabilität und schwingungsdämpfende Wirkung durch Umschlingung der Bohrstange

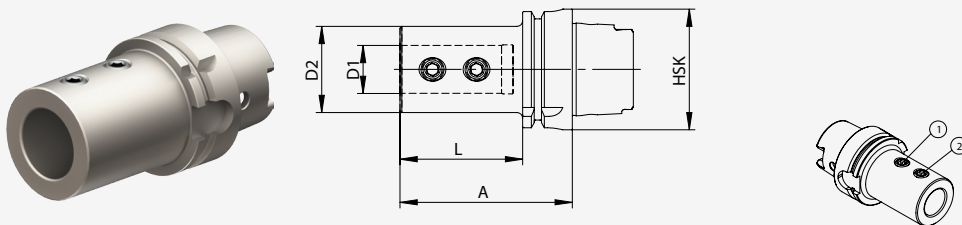
• more stability and vibration dampening effect by wrapping around the boring bar

\* plus de stabilité et un effet d'amortissement des vibrations en s'enroulant autour de la barre d'alésage

**Werkzeughalter für  
Wendeplattenbohrer**

**Toolholder for  
indexable insert drills**

**Porte-outils pour fraises  
à plaquettes indexables**



Bestell-Nr. / Order number/ Code	HSK	D1	D2	A	L	kg	①	②
HA6.K16.K01.080	T63	16	36	80	48	1.01	K16.ER1.010.010	K16.ER1.010.010
HA6.K20.K01.080	T63	20	40	80	48	1.03	K20.ER1.010.012	K20.ER2.010.014
HA6.K25.K01.090	T63	25	45	90	50	1.2	K20.ER1.010.012	K20.ER2.010.014
HA6.K32.K01.090	T63	32	52	90	53	1.3	K32.ER1.012.012	K32.ER2.012.014
HA6.K40.K01.105	T63	40	60	105	-	1.54	K40ER1.016.012	K40.ER2.016.014
HA0.K20.K01.090	T100	20	40	90	48	2.60	K20.ER1.010.012	K20.ER2.010.014
HA0.K25.K01.095	T100	25	45	95	50	2.70	K20.ER1.010.012	K20.ER2.010.014
HA0.K32.K01.100	T100	32	52	100	53	2.80	K32.ER1.012.012	K32.ER2.012.014
HA0.K40.K01.110	T100	40	60	110	-	3.00	K40ER1.016.012	K40.ER2.016.014

• zum Spannen von Zylinderschäften nach DIN 6595-1 / ISO 9766

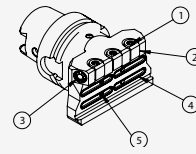
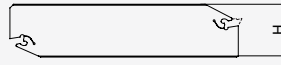
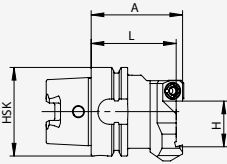
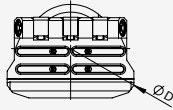
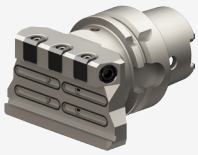
• to clamp cylindrical shanks DIN 6595-1 / ISO 9766

\* pour le serrage de tiges cylindriques selon DIN 6595-1 / ISO 9766

## Abstechhalter radial mit ECO / Direct Coolant

## Cut-off block radial with ECO / direct coolant

## Bloc de tronçonnage radial ECO / direct coolant



Bestell-Nr. / Order number/ Code	HSK	A	H	L	ØD	rechts/links right/left droite/gauche	kg	1	2	3	4	5
HA4.AE2.N11.065-HP	T40	65	26	60.5	90	R/L	0.95	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.023.001	NI4.026.004.004
HA6.AE3.N11.065-HP	T63	65	32	60.5	100	R/L	1.50	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.025.001	NI4.026.004.004

- zur Aufnahme von Stechschwertern
- mit Innenkühlung
- mit ECO / direct coolant

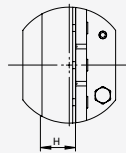
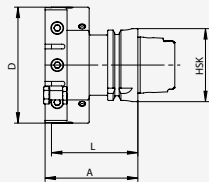
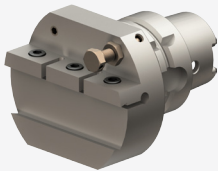
- to hold cut-off blades
- with inner coolant supply
- with ECO / direct coolant

- pour tenir les lames de coupe
- avec arrosage interne
- ECO / direct coolant

## Abstechhalter radial

## Cut-off block radial

## Bloc de tronçonnage radial



Bestell-Nr. / Order number/ Code	HSK	A	H	L	ØD	rechts/links right/left droite/gauche	kg	
HA4.AM2.K11.075	T40	75	26	70	100	R/L	1.33	NI4.762.006.016
HA6.AM3.K11.080	T63	80	32	75	100	R/L	3.25	NI4.762.006.016
HA0.AM3.K11.085	T100	85	32	80	100	R/L	4.50	NI4.762.006.016

- zur Aufnahme von Stechschwertern
- mit Innenkühlung

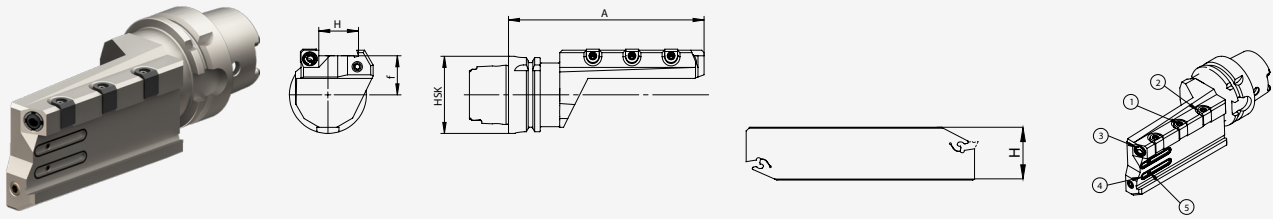
- to hold cut-off blades
- with inner coolant supply t

- pour tenir les lames de coupe
- avec arrosage interne

**Abstechhalter axial  
mit ECO / Direct Coolant**

**Cut-off block axial  
with ECO / direct coolant**

**Bloc de tronçonnage axial  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	f	A	H	ØD	rechts/links right/left droite/gauche	kg	1	2	3	4	5
HA4.AE2.R11.122-HP	T40	21	122	26	80	R	0.95	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.023.001	NI4.026.004.004
HA4.AE2.L11.122-HP	T40	21	122	26	80	L	0.95	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.023.001	NI4.026.004.004
HA6.AE3.R11.160-HP	T63	22	160	32	105	R	2.10	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.025.001	NI4.026.004.004
HA6.AE3.L11.160-HP	T63	22	160	32	105	L	2.1	AE3.ER1.006.028	AE3.ER1.011.014	KU1.U12.002.010	ND3.771.025.001	NI4.026.004.004

- zur Aufnahme von Stechschwertern
- mit Innenkühlung
- mit ECO / direct coolant

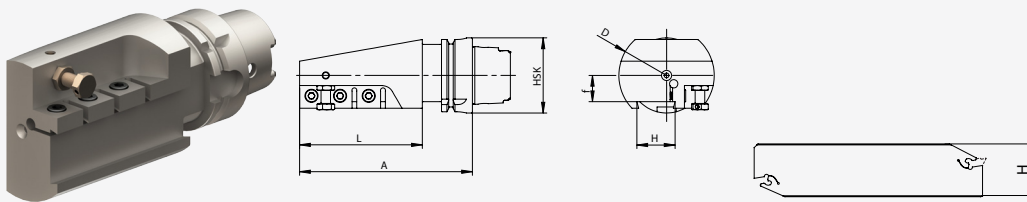
- to hold cut-off blades
- with inner coolant supply
- with ECO / direct coolant

- pour tenir les lames de coupe
- avec arrosage interne
- ECO / direct coolant

**Abstechhalter axial  
mit ECO / Direct Coolant**

**Cut-off block axial  
with ECO / direct coolant**

**Bloc de tronçonnage axial  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	f	A	H	L	ØD	rechts/links right/left droite/gauche	kg	1
HA6.AM3.K11.145	T63	22	145	32	105	80	R	3.30	NI4.762.006.016
HA6.AM3.K12.145	T63	22	145	32	105	80	L	3.30	NI4.762.006.016
HA0.AM3.K11.150	T100	30	150	32	105	90	R	6.90	NI4.762.006.016
HA0.AM3.K12.150	T100	30	150	32	105	90	L	6.90	NI4.762.006.016

- zur Aufnahme von Stechschwertern
- mit Innenkühlung
- mit ECO / direct coolant

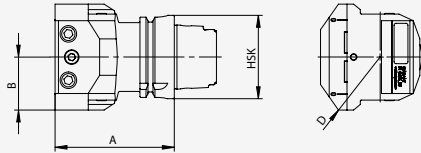
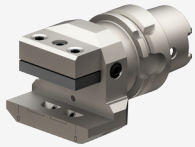
- to hold cut-off blades
- with inner coolant supply
- with ECO / direct coolant






- pour tenir les lames de coupe
- avec arrosage interne
- ECO / direct coolant

**Werkzeughalter radial  
mit ECO / Direct Coolant**

**Tool holder radial  
with ECO / direct coolant**

**Porte-outil radial  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	D	kg					
HA6.V2X.N11.090-HP	T63	40	25x25 20x20*	90	102	2.60	NI4.026.012.016	KU1.U12.002.010	V2X.ER1.025.055	V2X.ER1.025.080	NI4.762.006.016

- für effiziente Drehbearbeitung
- optimale Kühlung durch einstellbare Hochdruck Kugelspritzdüsen
- mit ECO / direct coolant
- Kühlmittelübergabe zum Werkzeugschaft
- \* Unterlegplatte für Schaft 20x20 nicht im Lieferumfang enthalten

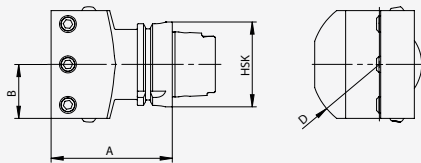
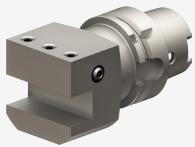
- to turn efficiently
- optimal cooling through adjustable high pressure ball spray nozzles
- with ECO / direct coolant
- coolant transfer into tool shank
- \* shim for shaft 20x20 not included in delivery



- pour un tournage efficace
- refroidissement optimal grâce à des buses de pulvérisation à bille haute pression réglables
- avec ECO / direct coolant
- Transfert de liquide de refroidissement vers la queue de l'outil
- \* Plaque de rondelle pour arbre 20x20 non comprise dans la livraison

**Werkzeughalter radial**

**Tool holder radial**

**Porte-outil radial**

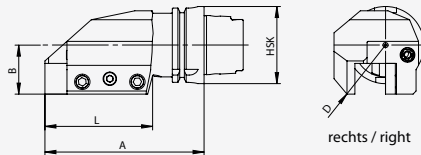
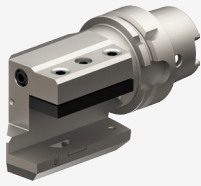


Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	D	kg		
HA4.V20.N11.075	T40	30	20x20	75	80	0.87	NI4.026.010.020	KU1.U12.001.010
HA6.V20.N11.090	T63	30	20x20	90	80	1.16	NI4.026.010.020	KU1.U12.001.010
HA6.V25.N11.090	T63	40	25x25	90	102	1.16	NI4.026.012.020	KU1.U12.001.010
HA0.V25.N11.100	T100	50	25x25	100	122	1.55	NI4.026.010.020	KU1.U12.001.010
HA0.V32.N11.100	T100	50	32x32	100	122	2.31	NI4.026.012.025	KU1.U12.001.010

**Werkzeughalter axial  
mit ECO / Direct Coolant**

**Tool holder axial  
with ECO / direct coolant**

**Porte-outil axial  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	L	ØD	kg					
HA6.V2X.R11.130-HP HA6.V2X.L11.130-HP	T63	40	25x25 20x20*	130	88	100	2.60	Ni4.026.012.016	KU1.U12.002.010	V2X.ER1.025.066	V2X.ER2.025.082(R) V2X.ER1.025.082(L)	Ni4.762.006.016

- für effiziente Drehbearbeitung
- optimale Kühlung durch einstellbare Hochdruck Kugelspritzdüsen
- mit ECO / direct coolant
- Kühlmittelübergabe zum Werkzeugchaft
- \* Unterlegplatte für Schaft 20x20 nicht im Lieferumfang enthalten

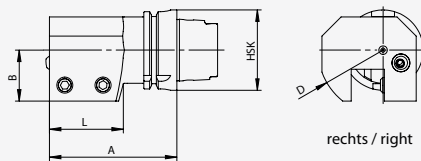
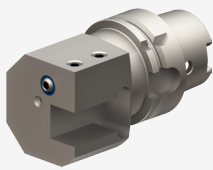
- to turn efficiently
- optimal cooling through adjustable high pressure ball spray nozzles
- with ECO / direct coolant
- coolant transfer into tool shank
- \* shim for shaft 20x20 not included in delivery

- pour un tournage efficace
- refroidissement optimal grâce à des buses de pulvérisation à bille haute pression réglables
- avec ECO / direct coolant
- Transfert de liquide de refroidissement vers la queue de l'outil
- \* Plaque de rondelle pour arbre 20x20 non comprise dans la livraison

**Werkzeughalter axial**

**Tool holder axial**

**Porte-outil axial**

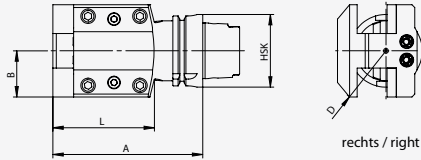
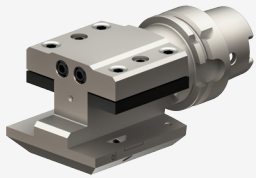






Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	L	ØD	kg		
HA4.V16.R11.080 HA4.V16.L11.080	T40	30	16x16	80	40	80	1.04	Ni4.026.010.020	KU1.U12.001.010
HA4.V20.R11.080 HA4.V20.L11.080	T40	30	20x20	80	45	80	1.04	Ni4.026.012.025	KU1.U12.001.010
HA6.V20.R11.090 HA6.V20.L11.090	T63	30	20x20	90	45	80	1.68	Ni4.026.010.020	KU1.U12.001.010
HA6.V25.R11.100 HA6.V25.L11.100	T63	40	25x25	100	58	102	1.68	Ni4.026.010.020	KU1.U12.001.010
HA0.V25.R11.125 HA0.V25.L11.125	T100	50	25x25	125	80	122	2.20	Ni4.026.010.020	KU1.U12.001.010
HA0.V32.R11.125 HA0.V32.L11.125	T100	50	32x32	125	80	122	3.47	Ni4.026.012.030	KU1.U12.001.010

**Werkzeughalter axial doppelt  
mit ECO / Direct Coolant**

**Tool holder axial double  
with ECO / direct coolant**

**Porte-outil axial double  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	L	ØD	kg					
HA6.V2X.R21.130-HP	T63	40	25x25 20x20*	130	88	100	2.90	KU1.U12.002.010	V2X.ER1.025.066	V2X.ER2.025.082(R) V2X.ER1.025.082(L)	NI4.762.006.016	NI4.762.006.016

- für effiziente Drehbearbeitung
- optimale Kühlung durch einstellbare Hochdruck Kugelspritzdüsen
- mit ECO / direct coolant
- Kühlmittelübergabe zum Werkzeugschaft
- \* Unterlegplatte für Schaft 20x20 nicht im Lieferumfang enthalten

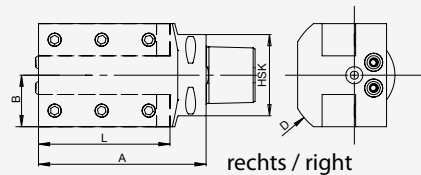
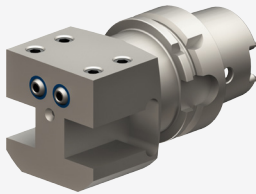
- to turn efficiently
- optimal cooling through adjustable high pressure ball spray nozzles
- with ECO / direct coolant
- coolant transfer into tool shank
- \* shim for shaft 20x20 not included in delivery



- pour un tournage efficace
- refroidissement optimal grâce à des buses de pulvérisation à bille haute pression réglables
- avec ECO / direct coolant
- Transfert de liquide de refroidissement vers la queue de l'outil
- \* Plaque de rondelle pour arbre 20x20 non comprise dans la livraison

**Werkzeughalter axial doppelt**

**Tool holder axial double**

**Porte-outil axial double**

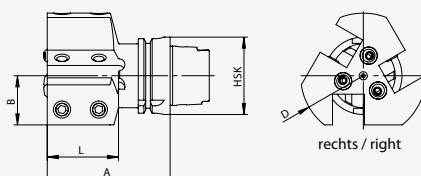
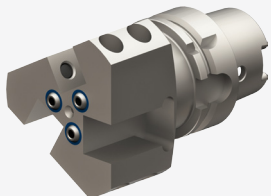




Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	L	ØD	kg		
HA4.V20.R21.080	T40	30	20x20	80	45	80	1.14	NI4.026.010.020	KU1.U12.001.010
HA6.V20.R21.090	T63	30	20x20	90	45	80	1.95	NI4.026.010.020	KU1.U12.001.010
HA6.V25.R21.100	T63	40	25x25	100	58	102	3.22	NI4.026.010.025	KU1.U12.001.010
HA0.V25.R21.125	T100	50	25x25	125	80	122	6.78	NI4.026.012.025	KU1.U12.001.010
HA0.V32.R21.125	T100	50	32x32	125	80	122	6.45	NI4.026.012.025	KU1.U12.001.010

**Werkzeughalter axial dreifach**

**Tool holder axial triple**

**Porte-outil axial triple**

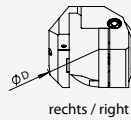
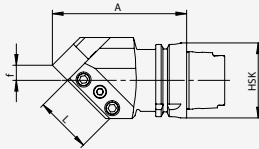
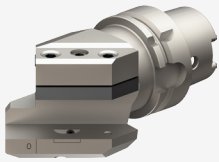







Bestell-Nr. / Order number/ Code	HSK	B	Vier- kant Square	A	L	ØD	kg		
HA6.V20.R31.090	T63	30	20x20	90	45	90	1.90	NI4.026.010.025	KU1.U12.001.010
HA6.V25.R31.100	T63	40	25x25	100	58	102	2.85	NI4.026.012.020	KU1.U12.001.010
HA0.V25.R31.125	T100	50	25x25	125	80	122	7.30	NI4.026.012.020	KU1.U12.001.010

**Werkzeughalter diagonal 45°  
mit ECO / Direct Coolant**

**Tool holder diagonal 45°  
with ECO / direct coolant**

**Porte-outil diagonal 45°  
ECO / direct coolant**



Bestell-Nr. / Order number/ Code	HSK	f	Vier- kant Square	A	ØD	R/L	kg					
HA6.V2X.R12.100-HP	T63	15	25x25 20x20*	110	94	R	1.87	NI4.026.012.016	KU1.U12.002.010	V2X.ER1.025.061	V2X.ER2.025.079	NI4.762.006.016
HA6.V2X.L12.100-HP	T63	15	25x25 20x20*	110	94	L	1.87	NI4.026.012.016	KU1.U12.002.010	V2X.ER1.025.061	V2X.ER2.025.079	NI4.762.006.016

- für effiziente Drehbearbeitung
- optimale Kühlung durch einstellbare Hochdruck Kugelspritzdüsen
- mit ECO / direct coolant
- Kühlmittelübergabe zum Werkzeugschaft
- \* Unterlegplatte für Schaft 20x20 nicht im Lieferumfang enthalten

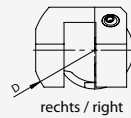
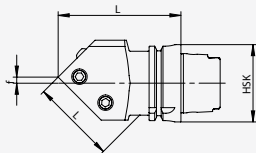
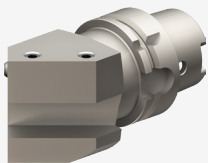
- to turn efficiently
- optimal cooling through adjustable high pressure ball spray nozzles
- with ECO / direct coolant
- coolant transfer into tool shank
- \* shim for shaft 20x20 not included in delivery



- pour un tournage efficace
- refroidissement optimal grâce à des buses de pulvérisation à bille haute pression réglables
- avec ECO / direct coolant
- Transfert de liquide de refroidissement vers la queue de l'outil
- \* Plaque de rondelle pour arbre 20x20 non comprise dans la livraison

**Werkzeughalter diagonal 45°**

**Tool holder diagonal 45°**

**Porte-outil diagonal 45°**

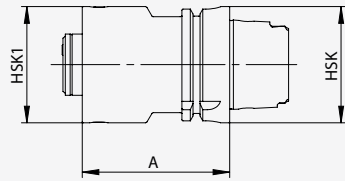


Bestell-Nr. / Order number/ Code	HSK	f	Vier- kant Square	A	ØD	R/L	kg		
HA4.V20.R12.080	T40	5	20x20	80	80	R	0.84	NI4.026.010.025	KU1.U12.001.010
HA4.V20.L12.080	T40	5	20x20	80	80	L	0.84	NI4.026.010.025	KU1.U12.001.010
HA6.V20.R12.100	T63	5	20x20	100	80	R	1.80	NI4.026.010.025	KU1.U12.001.010
HA6.V20.L12.100	T63	5	20x20	100	80	L	1.80	NI4.026.010.025	KU1.U12.001.010
HA6.V25.R12.100	T63	5	25x25	100	102	R	2.10	NI4.026.010.025	KU1.U12.001.010
HA6.V25.L12.100	T63	5	25x25	100	102	L	2.10	NI4.026.010.025	KU1.U12.001.010
HA0.V25.R12.125	T100	5	25x25	125	122	R	5.60	NI4.026.010.025	KU1.U12.001.010
HA0.V25.L12.125	T100	5	25x25	125	122	L	5.60	NI4.026.010.025	KU1.U12.001.010

## Verlängerung

## Extension

## Extension

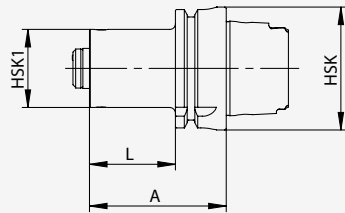
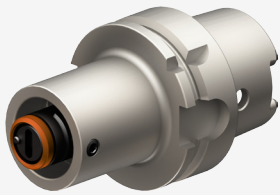


Bestell-Nr. / Order number/ Code	HSK	HSK 1	A	kg	Dichtring / Sealing ring	Spannpatrone / Clamping cartridge	Verschlusschraube / Drive bolt
HA4.HA4.K01.060	T40	T40	60	0.50	HA4.ER4.004.006	HA4.ER1.001.000	HA4.ER2.001.005
HA4.HA4.K01.080	T40	T40	80	0.70	HA4.ER4.004.006	HA4.ER1.001.000	HA4.ER2.001.005
HA6.HA6.K01.080	T63	T63	80	1.70	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA6.HA6.K01.120	T63	T63	120	2.65	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA6.HA6.K01.240	T63	T63	240	5.20	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA6.HA6.K01.280	T63	T63	280	6.20	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA6.HA6.K01.350	T63	T63	350	7.80	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA0.HA0.K01.125	T100	T100	125	6.90	HA0.ER4.004.010	HA0.ER1.001.000	HA0.ER2.001.000
HA0.HA0.K01.160	T100	T100	160	9.00	HA0.ER4.004.010	HA0.ER1.001.000	HA0.ER2.001.000
HA0.HA0.K01.200	T100	T100	200	10.30	HA0.ER4.004.010	HA0.ER1.001.000	HA0.ER2.001.000

## Reduktion

## Reduction

## Réduction

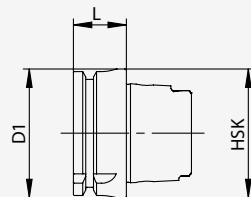
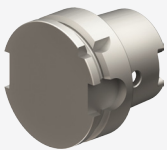


Bestell-Nr. / Order number/ Code	HSK	HSK 1	L	A	kg	Dichtring / Sealing ring	Spannpatrone / Clamping cartridge	Verschlusschraube / Drive bolt
HA6.HA4.K01.070	T63	T40	44	70	1.20	HA4.ER4.004.006	HA4.ER1.001.000	HA4.ER2.001.005
HA0.HA4.K01.080	T100	T40	51	80	2.60	HA4.ER4.004.006	HA4.ER1.001.000	HA4.ER2.001.005
HA0.HA6.K01.100	T100	T63	71	100	3.60	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
HA0.HA6.K01.150	T100	T63	121	150	4.30	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007

## Trennstellenverschluss

## Blanking plug

## Bouchon d'ébauche



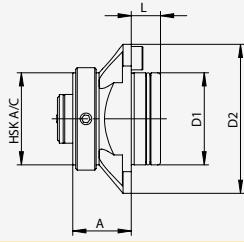
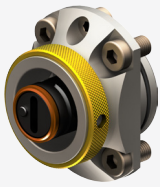
Bestell-Nr. / Order number/ Code	HSK	D1	L	kg
HA4.000.001.020	T40	40	20	0.19
HA6.000.001.026	T63	63	26	0.64
HA0.000.001.029	T100	100	29	2.04



## Spanneinheit HSK

## Clamping unit HSK

## Unité de serrage HSK

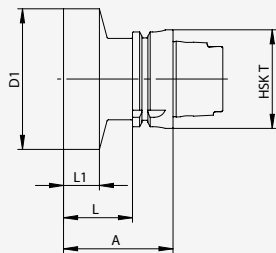
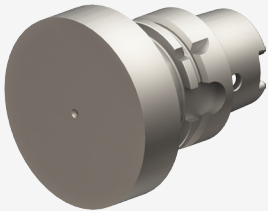


Bestell-Nr. / Order number/ Code	HSK-8	D1	D2	A	L	kg	Dichtring / Sealing ring	Spannpatrone / Clamping cartridge	Verschlusschraube / Drive bolt
U40.HA4.001.025	40	40	68	25	17	0.50	HA4.ER4.004.006	HA4.ER1.001.000	HA4.ER2.001.005
U63.HA6.001.040	63	63	102	40	20	1.75	HA6.ER4.004.008	HA6.ER1.001.000	HA6.ER2.001.007
U10.HA0.001.060	100	100	165	60	30	4.65	HA0.ER4.004.010	HA0.ER1.001.000	HA0.ER2.001.000

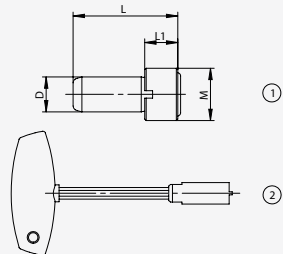
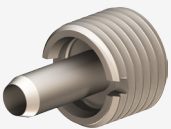
## Rohling

## Blank

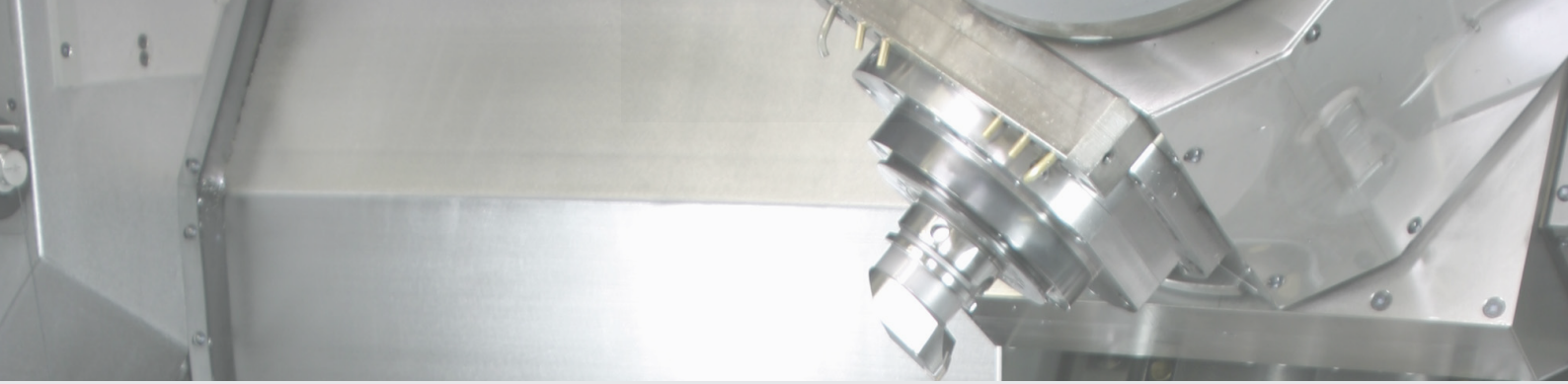
## Ébauche



Bestell-Nr. / Order number/ Code	HSK	D1	A	L	L1	kg
HA4.Ro4.001.055	T40	54	55	35	20	0.70
HA6.Ro5.001.100	T63	52	100	-	58	4.75
HA6.Ro9.001.070	T63	90	70	44	28	0.53
HA6.Ro6.001.200	T63	63	200	174	158	4.93
HA0.Ro8.001.125	T100	87	125	-	80	6.47
HA0.Ro0.001.090	T100	130	90	61	45	7.25
HA0.Ro0.001.250	T100	100	250	221	205	15.5

Kühlmittelrohr  
MontageschlüsselCoolant tube  
assembling keyClé de montage  
du tube d'arrosage

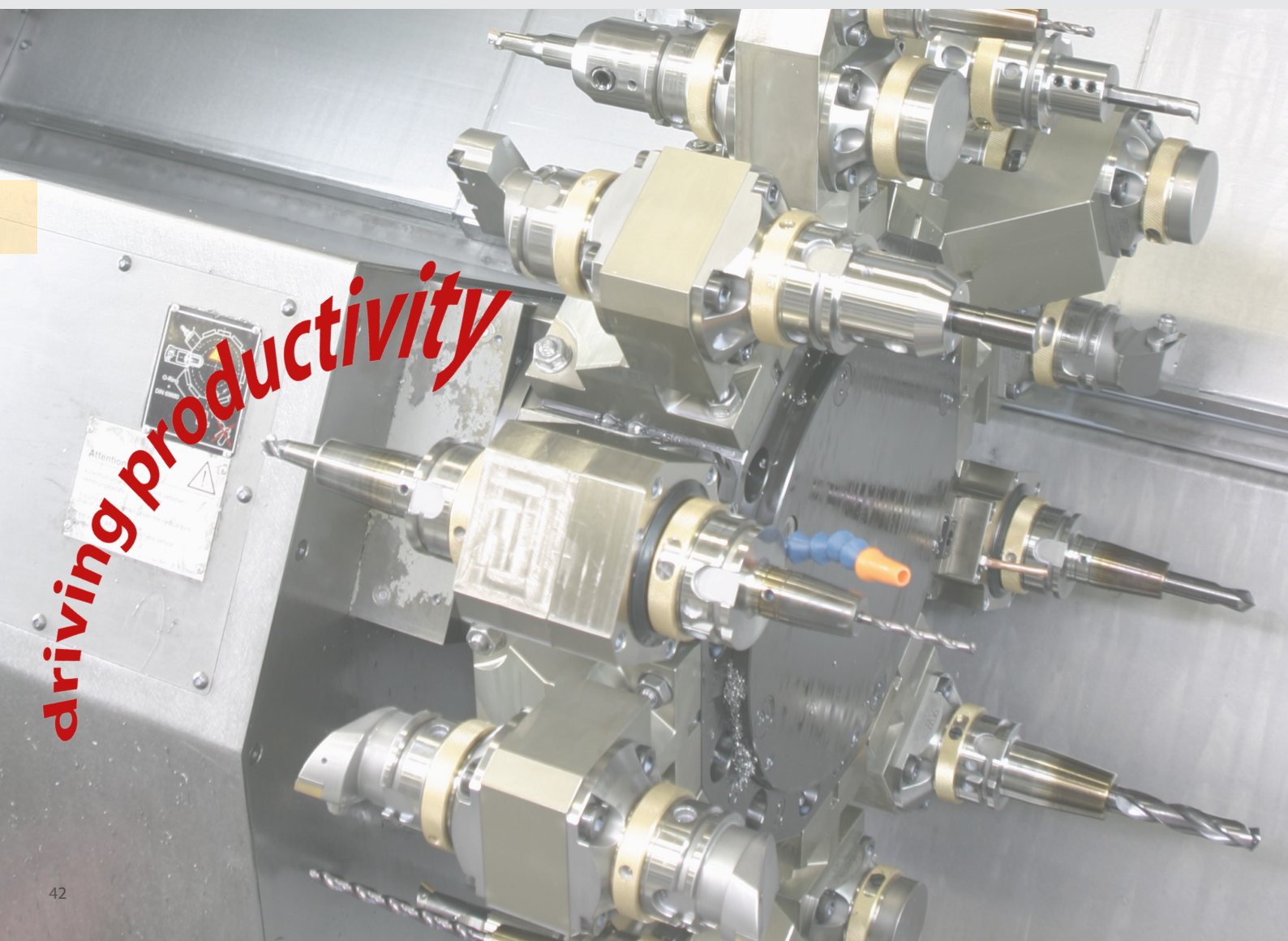
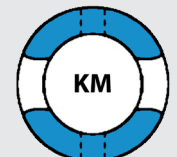
Bestell-Nr. / Order number/ Code	HSK	M	Typ
HA4.ER4.001.030	40	12x1	1
HA4.ER4.002.115	40		2
HA6.ER4.001.036	63	18x1	1
HA6.ER4.002.136	63		2
HA0.ER4.001.044	100	24x1.5	1
HA0.ER4.002.136	100		2



**QUICK-CHANGE** Werkzeugsysteme  
für Multi-Task und Drehmaschinen

**QUICK-CHANGE** tool system for  
multi-tasking and turning lathes

**QUICK-CHANGE** système pour tours  
et pour centre de tournage/fraisage

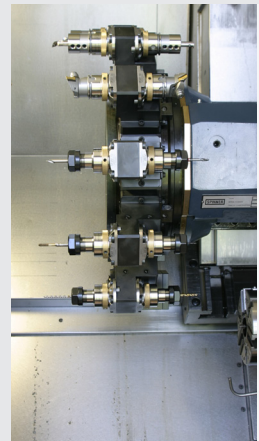
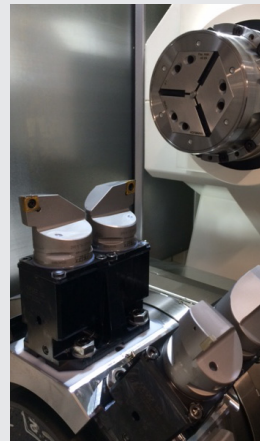
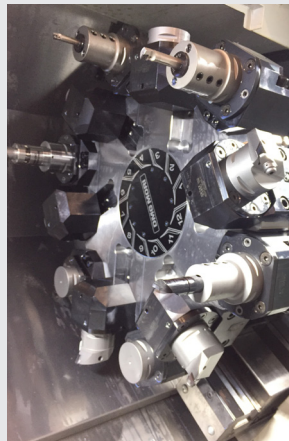
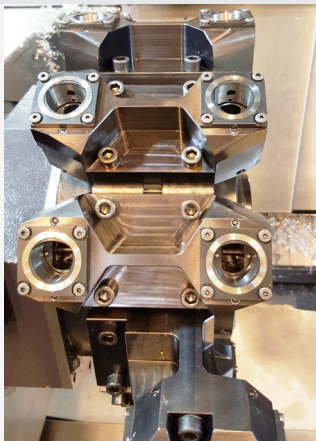
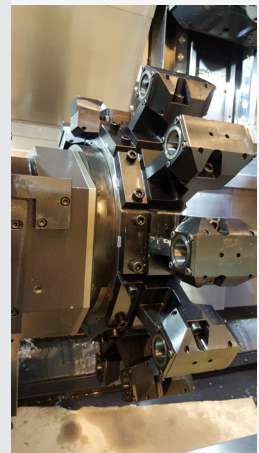
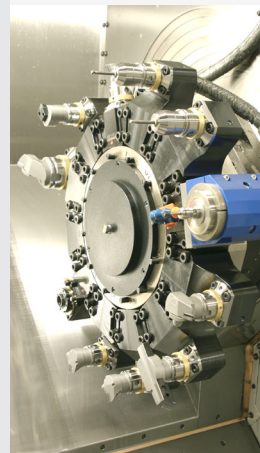
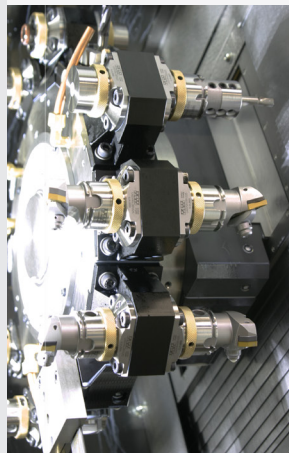
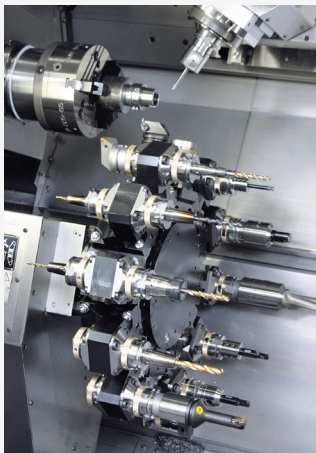


# Systemlösungen / System solution / Solution de système

- Produktivitätssteigerung durch Reduktion der Nebenzeiten.
- Werkzeugwechsel in kürzester Zeit
- Beste Wiederholgenauigkeit mit definierten, gleichbleibenden Werkzeugkonturen
- Für alle Maschinentypen geeignet.
- Flexibel für HSK, PSC und KM Werkzeuge
- Kosteneffizient System

- Increase productivity by reducing non-productive time
- Very quick tool changing time
- Perfect repeatability with fixed tool geometry
- Useable for all machine brands
- Flexible with HSK, PSC and KM tools
- Cost efficient

- Augmenter la productivité en réduisant le temps de non-production.
- Temps de changement d'outil très rapide
- Répétabilité parfaite avec une géométrie d'outil fixe
- Convient à tous les types de machines
- Flexible avec les outils HSK, PSC et KM
- Système rentable



- Online Konfigurator
- Angetriebene- und statische Werkzeuge für Drehmaschinen
- [www.swisstools.org](http://www.swisstools.org)

- Online configurator
- for static and rotating tools
- [www.swisstools.org](http://www.swisstools.org)

- Configurateur online
- pour les outils statiques et tournants
- [www.swisstools.org](http://www.swisstools.org)

# Adaptionsmöglichkeiten Drehrevolverscheiben / Adaptation to turrets / Adaptation à la tourelle

## Werkzeughalter mit Schnellwechselsystem

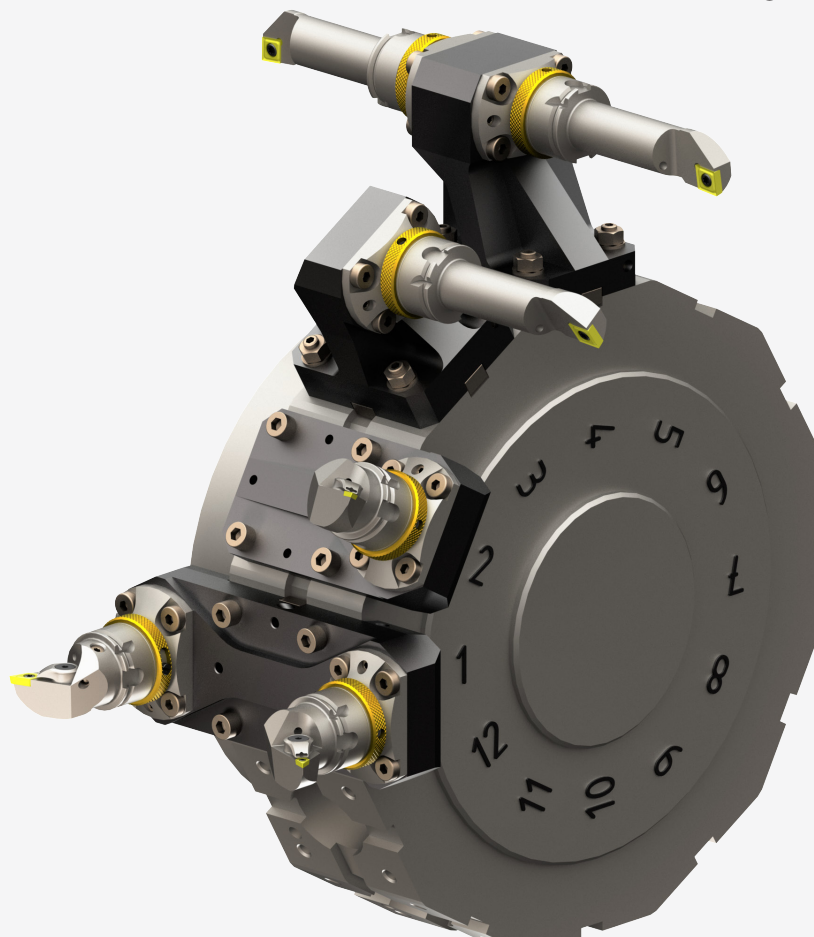
Das Werkzeughalterprogramm umfasst innovative und technisch ausgereifte Lösungen für alle gängigen CNC-Drehzentren. Wir bieten Ihnen Lösungen, die optimal auf das Maschinenfabrikat abgestimmt sind, ob mit BMT/ VDI oder anderen Anbindungen. Die Schnittstelle des Schnellwechselsystems ist DIN/ISO normiert, und für die Größen HSK 40/63/100, PSC40/50/63 und KM 40/50/63 vorhanden. Der Werkzeugwechsel ist einfach und schnell durchführbar. Die Nebenzeiten werden minimiert und damit die Produktivität gesteigert.

## Tool holder with QUICK-CHANGE system

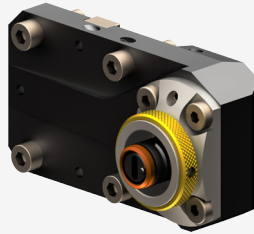
The whole range of the system contains solutions for the most CNC lathes centres. Complementary on the machine tool with BMT / VDI or other connections. The tool connection is based on DIN/ISO standards with HSK 40/63/100, PSC40/50/63 and KM 40/50/63. The tool change is very simple and quick. Non-productive times are minimized and the productivity will increase.

## Porte-outil avec système de changement rapide

Le programme de porte-outils comprend des solutions innovantes et techniquement sophistiquées pour tous les centres de tournage CNC courants. Nous vous proposons des solutions, adaptées de manière optimale à la marque de la machine, que ce soit avec des connexions BMT/ VDI ou autres. L'interface du système de changement rapide est normalisée DIN/ISO et disponible pour les tailles HSK 40/63/100, PSC40/50/63 et KM 40/50/63. Le changement d'outil peut être effectué facilement et rapidement. Le temps de non-productivité sera minimisé et la productivité est ainsi augmentée.



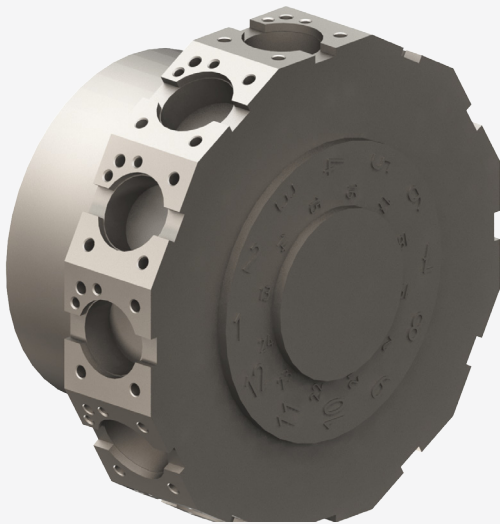
# Werkzeughalter / Tool holders / Porte-outils



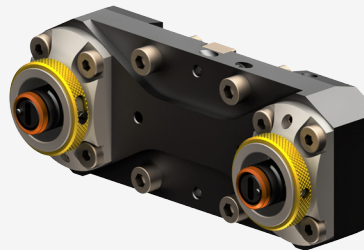
Werkzeughalter  
einfach gerade

Tool holder  
single straight

Porte-outils  
single droit



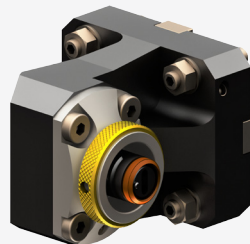
Revolverscheibe /  
Turret/ Tourelle  
BMT/VDI/...



Werkzeughalter  
doppelt gerade

Tool holder  
double straight

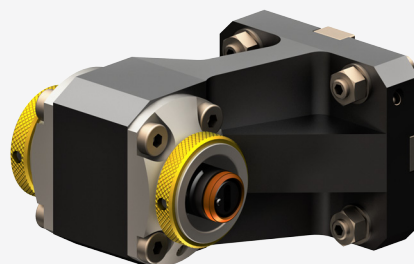
Porte-outils  
double droit



Werkzeughalter  
einfach abgewinkelt

Tool holder  
single angular

Porte-outils  
single angulaire



Werkzeughalter  
doppelt abgewinkelt

Tool holder  
double angular

Porte-outils  
double angulaire

# HSK / PSC / KM Spanneinheiten / HSK / PSC / KM clamping unit / HSK / PSC / KM unités de serrage

Die Werkzeughalter werden entweder mit einer HSK oder einer PSC Spanneinheit ausgerüstet.

Die Werkzeughalter sind somit flexibel auf die Kundenbedürfnisse anpassbar.

Spanneinheiten sind in den Größen HSK 40/63/100, PSC40/50/63 und KM 40/50/63 erhältlich

Tool holders are equipped with HSK or PSC clamping units.

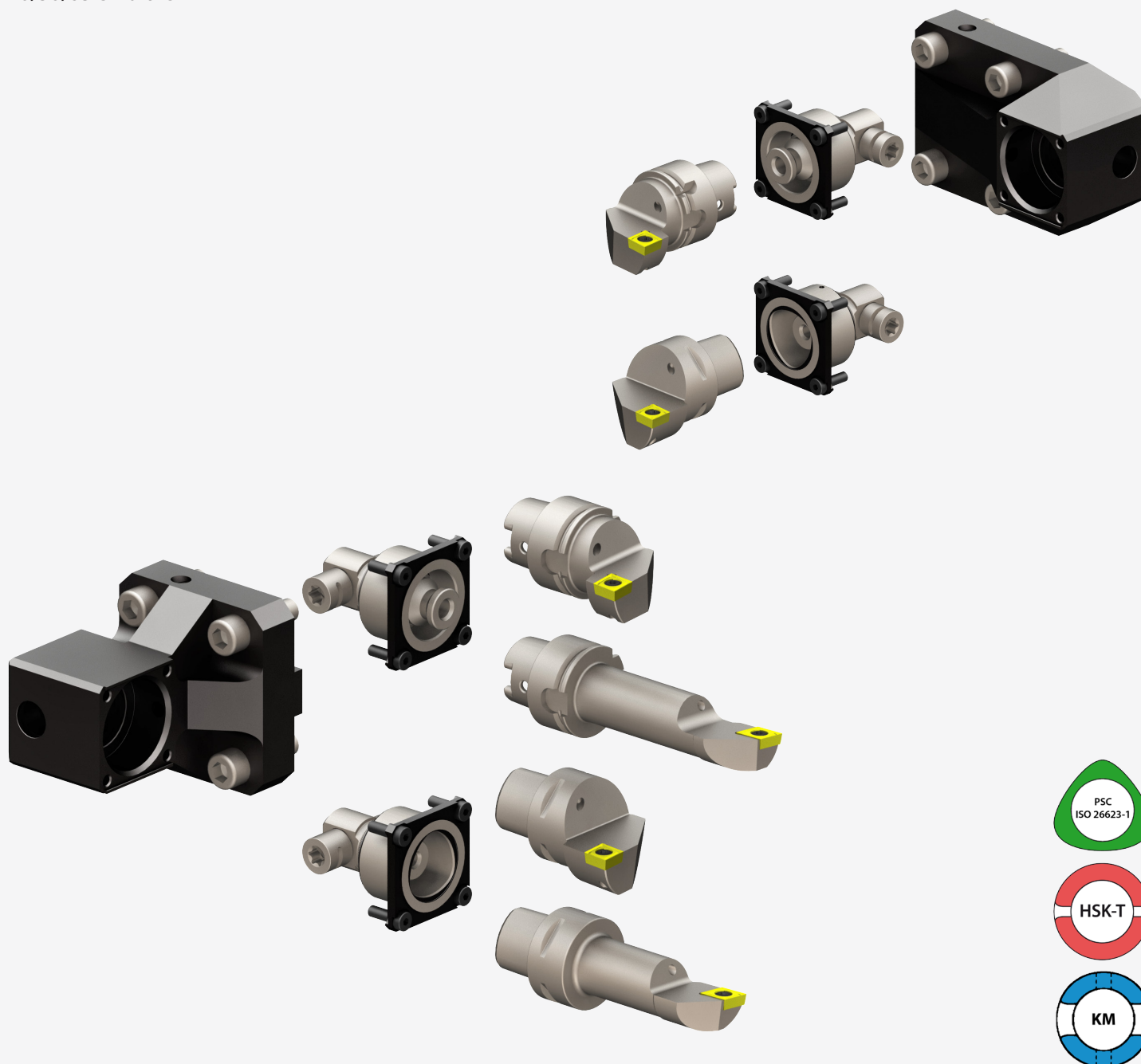
Very flexible for customer needs.

Clamping units are available in HSK 40/63/100, PSC40/50/63 and KM 40/50/63.

Les porte-outils sont soit équipés d'unités de serrage HSK ou PSC.

Les porte-outils sont par conséquent très flexible pour le besoin du client.

Les unités de serrage sont disponibles en HSK 40/63/100, PSC40/50/63 et KM 40/50/63.



## Quick-Change Werkzeughalter und Spanneinheiten

## Quick-Change Toolholders and clamping units

## Porte-outils et unités de serrage à changement rapide

### Werkzeughalter mit VDI Schaft abgewinkelt / DIN 69880

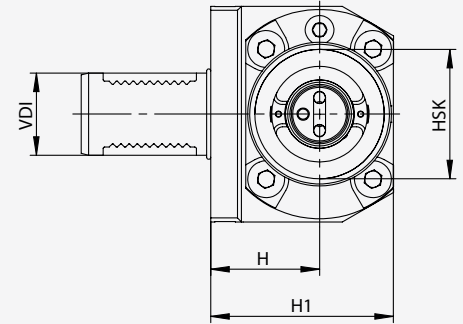
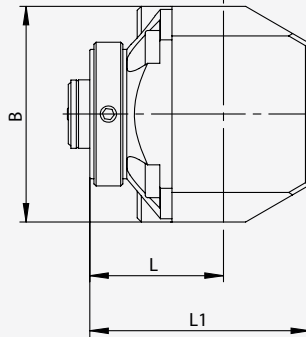
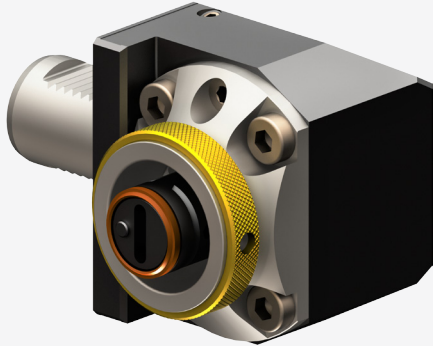
### Toolholder with VDI shank angular / DIN 69880

### Porte-outils avec tige VDI angulaire / DIN 69880

- Schaft mit Doppelverzahnung R/L Einsatz möglich
- für Innenkühlung

- shank with double serration profile R/L usage possible
- for inner coolant supply

- tige avec double denture, utilisation G/D possible
- pour le arrosage interne



Bestell-Nr. / Order number/ Code	HSK	H	H1	VDI	L	L1	B	kg
REA.HA4.VD3.041-11	T40	41	63	30	32	62	68	
REA.HA4.VD4.051	T40	51	75	40	34	90	75	
REA.HA6.VD4.053	T63	53	95	40	45	85	105	
REA.HA6.VD5.055	T63	55	97	50	45	85	105	

### Werkzeughalter mit VDI Schaft gerade / DIN 69880

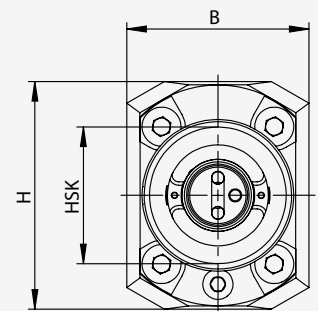
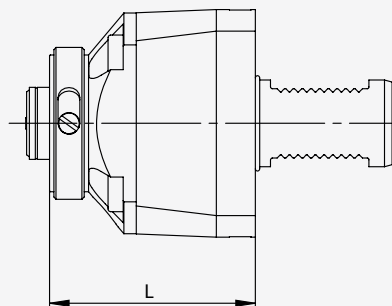
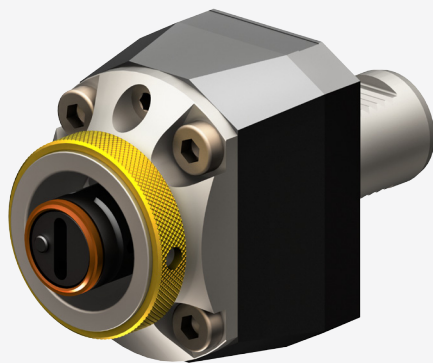
### Toolholder with VDI shank straight / DIN 69880

### Porte-outils avec tige VDI droite / DIN 69880

- Schaft mit Doppelverzahnung R/L Einsatz möglich
- für Innenkühlung

- shank with double serration profile R/L usage possible
- for inner coolant supply

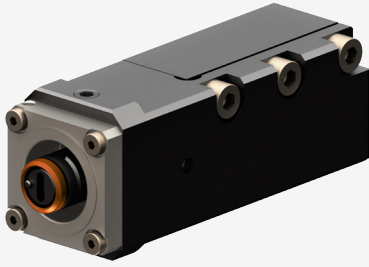
- tige avec double denture, utilisation G/D possible
- pour le arrosage interne



Bestell-Nr. / Order number/ Code	HSK	L	H	VDI	B	kg
RER.HA4.VD3.065-11	T40	65	68	30	52	
RER.HA4.VD3.074	T40	74	60	30	52	
RER.HA4.VD4.079	T40	79	75	40	75	
RER.HA6.VD4.095-11	T63	95	105	40	84	
RER.HA6.VD5.105-11	T63	105	105	50	84	
RER.HA6.VD6.105-11	T63	105	105	60	84	

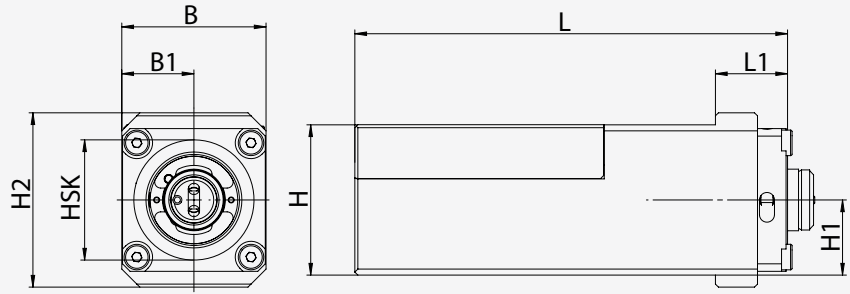
## Quadratischer Schaft

- Anschluss für Innenkühlung



## Rectangular shank

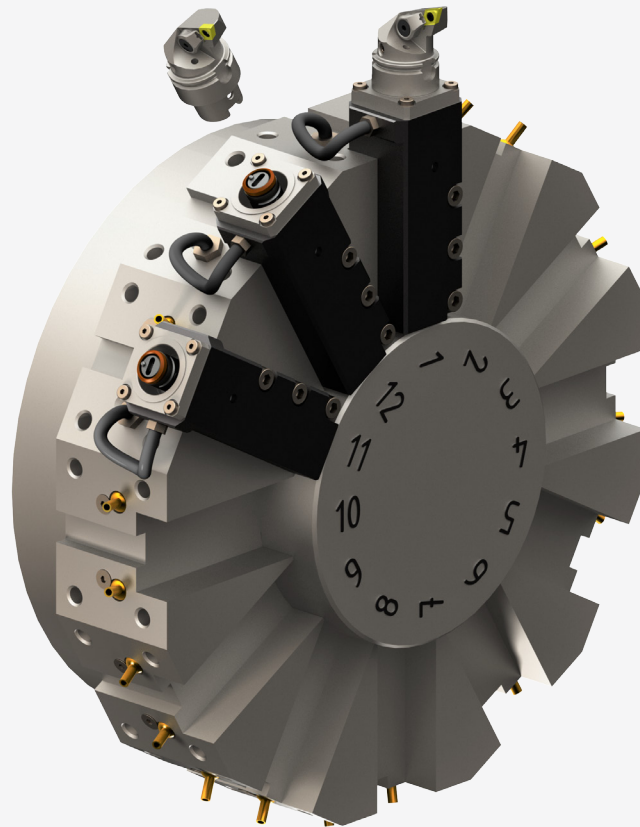
- Coupling for inner coolant supply



## Porte-outils rectangulaire

- Raccordement pour l'arrosage interne

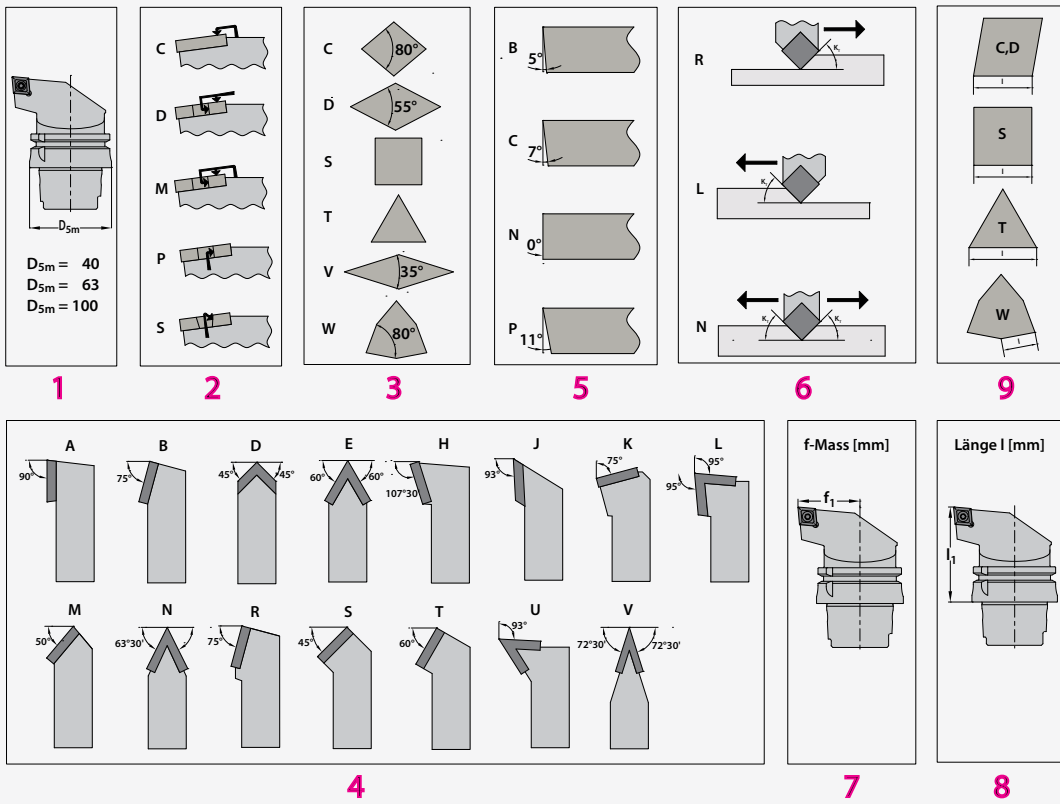
Bestell-Nr. / Order number / Code	HSK	B	B1	H	H1	H2	L	L1	kg
RER.HA4.V20.144	T40	48	24	40	20	58	144	54	
RER.HA4.V25.144	T40	48	24	50	25	58	144	61	
RER.HA4.V32.139	T40	48	24	64	32	64	139	56	





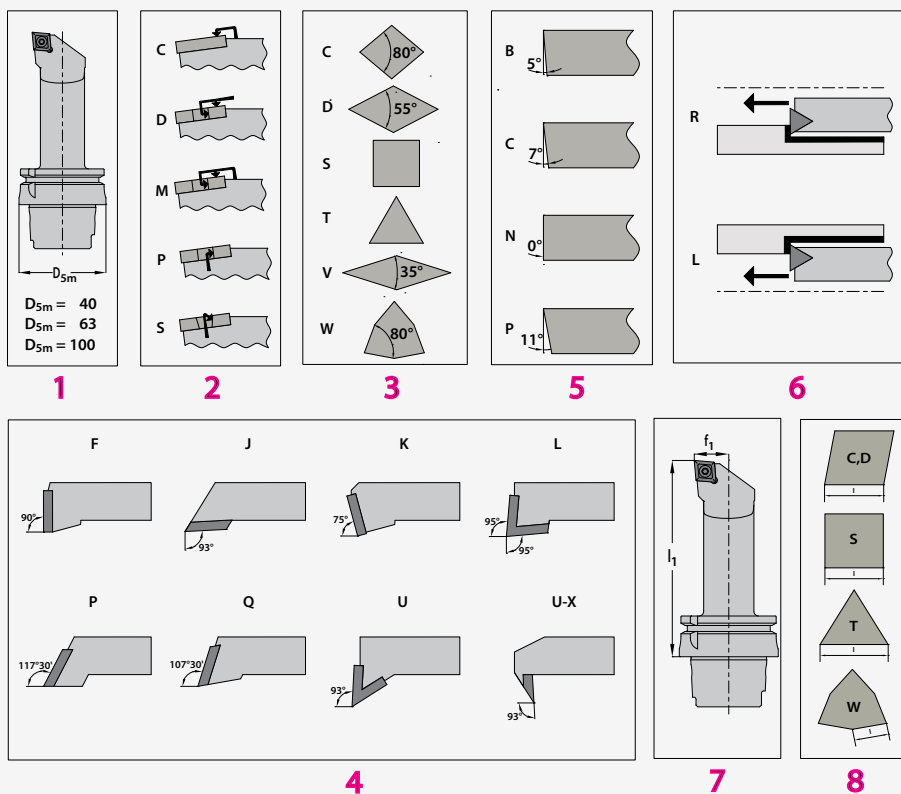
Bezeichnung von HSK Klemmhalter für Aussenbearbeitung Identification of external HSK turning tool holder

**HSK-T63** | **D** | **C** | **L** | **N** | **R** | **45** | **070** | **12**  
 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9



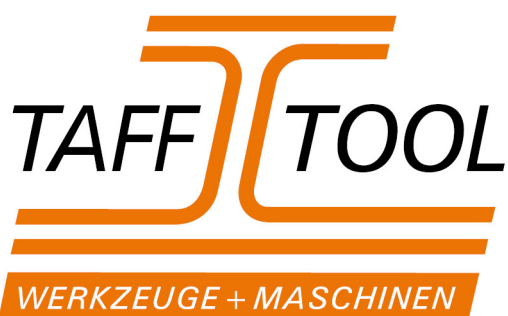
Bezeichnung von HSK Klemmhalter für Innenbearbeitung Identification of external HSK turning tool holder

**HSK-T63** | **S** | **C** | **L** | **C** | **R** | **-** | **27180** | **-** | **09**  
 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8









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**[www.taff-tool.com](http://www.taff-tool.com)**