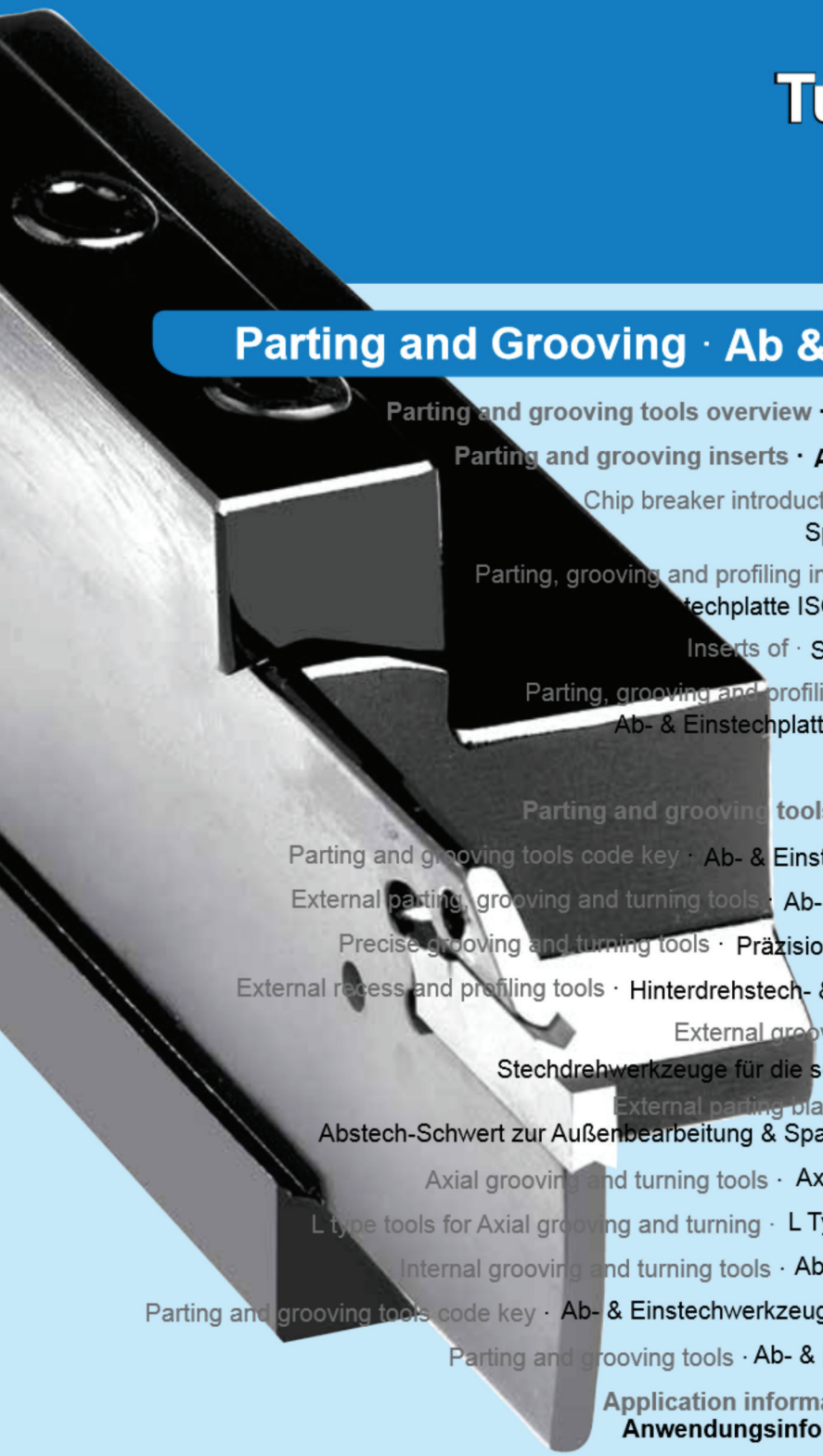
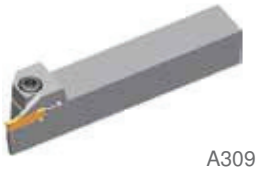
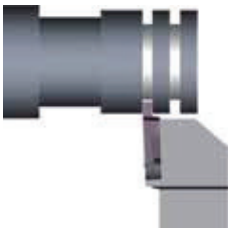
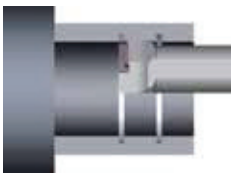
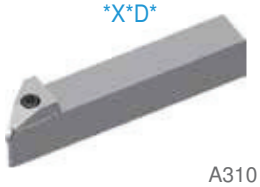
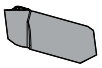
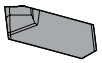
Turning · Drehen



Parting and Grooving · Ab & Einstechen

Machining application	Machining Bearbeitung		Toolholder Klemmhalter	Inserts Stechplatten	Tool's feature and parameters Werkzeug Eigenschaften & Parameter
External machining Außenbearbeitung	Parting Abstechen		QZ**+QE**  A312	ZP*S** 	• Assemble structure of parting blade and holder, good rigidity and parting range is adjustable. • The max. parting Ø = 120mm. • Die Auskragung des Abstech-Schwertes ist bei hoher Stabilität einstellbar • Der max. Abstech Ø = 120mm
			QE**R/L  A309	ZP**D*  ZP*S* 	• Inserts have 3d chip breaker, small cutting force, good performance on chip breaking • maximum parting Ø = 60mm • Schneideinsatz mit 3 versch. Spanleitstufen für geringe Schnittkräfte & gute Spankontrolle. • max. Abstech Ø = 120 mm
	Grooving and turning Stechen und Drehen		QE*R/L  A311	Double Doppelseitig ZT*D**  Pro¿le turning Pro¿ldrehen ZR*D*  Single cutting edge for deep Grooving Einseitig ZT*S* 	• Various applications can be realised by one single tool, installed with different inserts for grooving, pro¿ling and parting, It reduces the tool category. • Installed with grooving inserts, the tool realises grooving and transverse cutting. This tool is multifunctional. • The max. slot depth = 30mm. • Bei Anwendung dieses Universal WZ-System und Verwendung der unterschiedlichen Schneideinsätze können die Bearbeitungen wie; Ab-, Stechen, Pro¿l-, Drehen druchgeführt werden • Die max. Nutentiefe = 30mm
	Precise grooving Präzisionsstechdrehen		QECD  A310	Precise grooving Präzisionsstechen ZT*D**-EG  Edge width1.2~2.4mm Stechbreite	• Grinded insert, used for precise grooving. • Edge width can be any size between 1.0 6.5mm according to customers requirement. • ZT*D*- EG inserts: When edge width is between 1.2-2.4mm, the maximum cutting depth is 2.5mm; When edge width is >2.4~6.5mm, the maximum cutting depth is 22mm • geschliffene Einsätze für das Präzisionsstechen • Die Schneidenbreite kann auf Wunsch zwischen 1.0-6.5mm geschliffen werden. • ZT*D*-EG Stechplatte: bei S.-Breiten von 1.2-2.4mm, und max. Schnitttiefe von 2.5mm; bei S.-Breiten von >2.4~6.5mm, beträgt die max Schnitttiefe 22mm
			QE*R/L  A309	Precise grooving Präzisionsstechen ZT*D**-EG  Edge width1.2~2.4mm Stechbreite	

Machining application	Machining Bearbeitung		Toolholder Klemmhalter	Inserts Stechplatten	Tool's feature and parameters Werkzeug Eigenschaften & Parameter
External Machining Außenbearbeitung	Grooving Stechen		QC Series GQCR/L  A323	QC16/22□□□□ 	● Finish grinding with high tolerance. ● Sharp cutting edge with accarate machining. ● Good economy with 3-lips grinding edge. ● For the light grooving, slot width 0.5-4.8 mm. ● Max cutting depth 5 mm. ● Präzisionsgeschlifften mit hohen Toleranze. ● Scharfe Schneide für präzise Bearbeitung. ● Hohe Wirtschaftlichkeit durch 3-schneidige Platte. ● Schlichtbearbeitung mit Stechbreiten von 0.5-4.8 mm. ● Maximale Stechtiefe 5 mm.
Internal machining Innenbearbeitung	Grooving and turning Stechen und		C*-Q*R/L*  A321	Grooving, Turning Stechen, Drehen ZT*D**  Pro¿le turning Pro¿ldrehen ZR*D** 	● By installing different inserts for grooving & pro¿ling, one single tool realizes various applications, it reduce the tool category. ● The max. slot depth can be machined = 13mm ● The min Ø can be machined = 27 mm ● Ein System für Stech- & Pro¿ldrehen. Die Anzahl der Stechsysteme wird reduziert. ● Die max. Nutentiefe = 13 mm ● Der min. Ø = 27 mm
			QC Series S□□□-QC□□R/L□  A323	QC11/16/22□□□□ 	● Fine grinded inserts, high precision ● Slot width can be machined is 0.5-4.8mm ● The min. Ø can be machined = 16mm ● The max. slot depth can be machined = 4 mm ● Fein geschliffener Einsatz für hohe Präzision ● Stechbreite beträgt 0,5-4,8 mm ● Der min. Ø = 16 mm ● Die max Nutentiefe = 4 mm

	Machining Bearbeitung		Toolholder Klemmhalter	Inserts Stechplatten	Tool's feature and parameters Werkzeug Eigenschaften & Parameter
Axial Grooving Axial stechen	Grooving and turning Stechen und Drehen		QF**H  A315-A318	Grooving, Turning Stechen, Drehen ZT*D**  Pro¿le turning Pro¿ldrehen ZR*D** 	• By installing different inserts as for grooving and profiling, one single tool realises various applications, it reduces the tool category. • Grooving · Stech Ø 48-400mm • Grooving depth · Nutentiefe 10-30mm • Ein W-System für Stech- & Pro¿ldrehen. Die Anzahl der Stechsysteme wird reduziert.
			 A319-A320	Grooving, Turning Stechen, Drehen ZT*D**  Pro¿le turning Pro¿ldrehen ZR*D** 	• 90° toolholder, top clamping • By installing different inserts as for grooving and profiling, one single tool realizes various applications, it reduce the tool category. • Grooving · Stech Ø 48-400mm • Grooving depth · Nutentiefe 10-30mm • Ein W-System für Stech- & Pro¿ldrehen. Die Anzahl der Stech-systeme wird reduziert. • 90° Klemmhalter, Pratzenklemmung
Recess Machining Hinterstechen	Recess and turning Hinterstech. und Drehen		*X*D*  A310	Grooving, Turning Stechen, Drehen ZT*D**  Pro¿le turning Pro¿ldrehen ZR*D** 	• The unique tool for recess machining • Variing recess machining can be realized, inserts programm is complete • Ein W-System für Hinterstechdrehen • Unterschiedliche Hinterdrehoperationen können durchgeführt werden. Das Einsatzprogramm ist komplett.
Alu pro¿ling Aluminium Pro¿ldrehen	External mach. Außenbearbeit.		QE**R/L  A309	ZR**-LH 	• The unique chip breaker for pro¿ling Al material • Cutting edge is designed as combination of sharpness and stability, and it's suitable for continuous to intermittent cut. • Used for for external, surface and inner wall machining of Al wheelboss. • Spezielle Spanbrecher für die Alu Bearbeitung. • Schneidkante besitzt Schärfe und Stabilität für kontinuierlichen bis unterbrochenem Schnitt. • Pro¿ldrehen, von Alu. Felgen
	Inner wall and surface Plan & Längspro¿ldrehen		C40X*  A321		
Tools for aviation and aerospace industries Werkzeuge für die Raum- & Luftfahrt	External machining Außenbearbeitung		QE*S*N  A311	ZIGQ**  ZIMF** 	• V type locating, top clamping, precisely locating, safely clamping • Inserts are suitable for dif¿cult to machine materials like: Ni-base, Ti alloy, Stainless steel and Exotic material. • V Form Aufnahme, Top Klemmung für Präzisions-Einsatz, Fixierung & sichere Klemmung • Stechplatte für schwierig zu zerspanende Werkstoffen wie: Ni-basiertes Material, Ti-Legierungen, rostfreien Stahl und exotisches Material.
	Non-standard Tools Sonderwerkzeug		Non-Standard tools Sonderwerkzeug	Select and manufacture according to requirement. Auswahl nach Anwendung	• Instantly supply solutions for machining various parts to satisfy your machining requirement. • Sonderwerkzeuglösungen für die Bearbeitung unterschiedlicher Werkstücke.

-MG Chip breaker Spanbrecher

■ Universal -MG chip breaker series

Suitable for parting, grooving, profiling and turning etc; good chip control, surface quality and low cutting force

■ Universelle -MG Spanbrecherserie

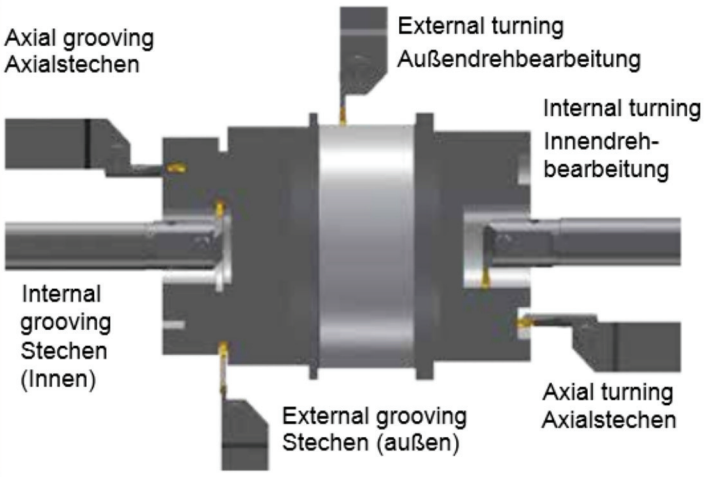
Einsetzbar zum Stechen, Abstechen, für die Profil- und Drehbearbeitung, gute Spankontrolle.
Gute Oberflächengüten und niedrige Schnittkräfte.

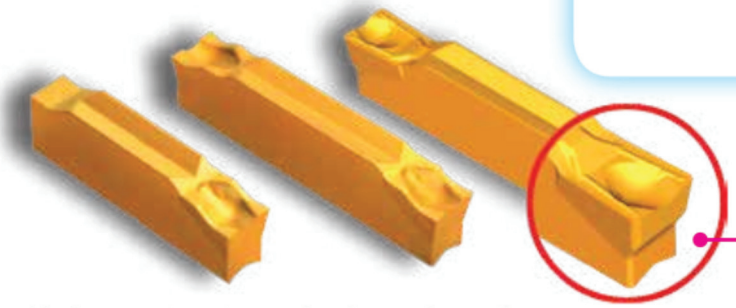
■ Reduction of tool cost by using one special design insert in various.

- One insert fits several tool holders
- One insert suitable for serveral applications
- Reduction of tool cost and warehouse charges

■ Reduzierung der Werkzeugkosten mit dem Einsatz nur einer Stechgeometrie für viele Anwendungsbereiche.

- Stechplatte paßt auf versch. Haltersysteme
- Stechpl. geignet für versch. Bearbeitungen
- Reduzierung der Werkzeug-und Lagerkosten





Special design reduce vibration and cutting force by 20%

Spezielles Spanbrecherdesign reduziert Vibrationen und Schnittkräfte um 20%

■ Unique structure design of parting inserts

- A special flank structure is designed to reduce cutting force by 20% and diminish vibration, which improve the surface quality
- A special edge design requires less rigidity of machine, it can be used on machine with low power

■ Einzigartiges Schneidkantendesign für Ab- / Stechplatte

- Spezielle Flankenstruktur reduziert die Schnittkräfte um 20%, verhindert Vibrationen und verbessert die Oberflächenqualität
- Eine neu entwickelte Schneidkantenausführung ermöglicht auch den Einsatz auf leistungsschwachen Maschinen.

-EG

Precise grooving, profiling & turning inserts

Special chip breaker design, suitable for precision machining of low-carbon steel, stainless steel, sticky materials and nonferrous metal.

Präzisions-Platten für die Stech-, Profil- & Drehbearbeitung

Spezielles Spanbrecherdesign für die Präzisionsbearbeitung von niedriglegiertem Stahl, rostfreiem Stahl, abrasiven Materialien und Ne-Metallen.

The edge width between 1.0-6.5mm according to your requirement.

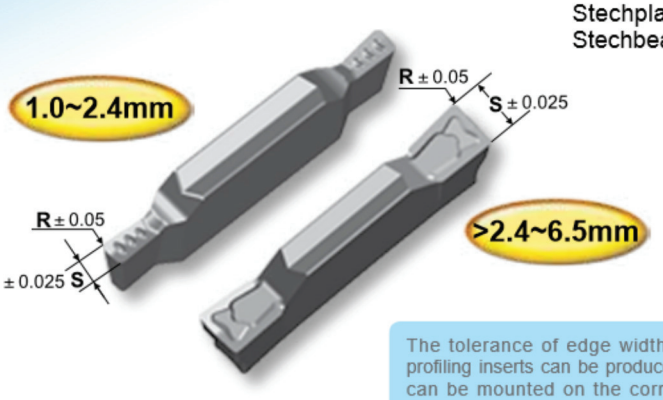
Stechbreiten von 1.0-6.5 mm je nach Anforderung.

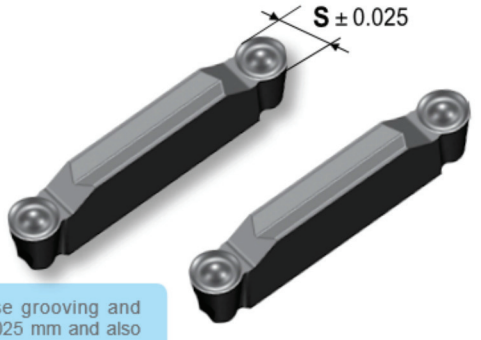
-EG Precision profiling and turning inserts

Round inserts for precision, turning and grooving

-EG Präzisions, Profil- & DrehStechplatte

Stechplatte mit Rundprofil für die Profil, Drehstech- und Stechbearbeitung





The tolerance of edge width S of precise grooving and profiling inserts can be produced up to ±0.025 mm and also can be mounted on the corresponding specifications of original toolholder series.

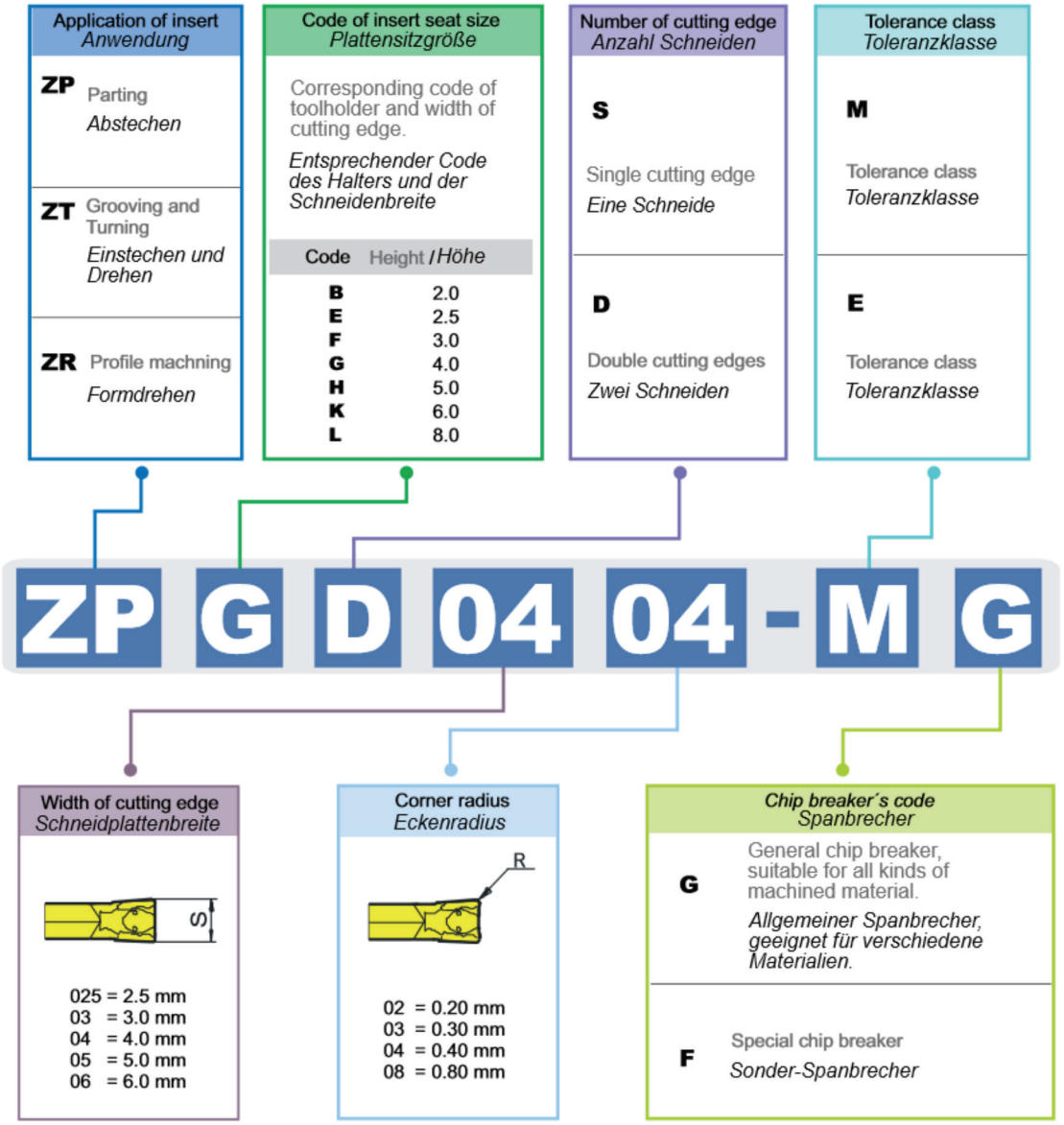
Die Stechbreite S kann mit einer Toleranz bis ±0,025 mm produziert werden und auf der Standard Halterserie eingesetzt werden.

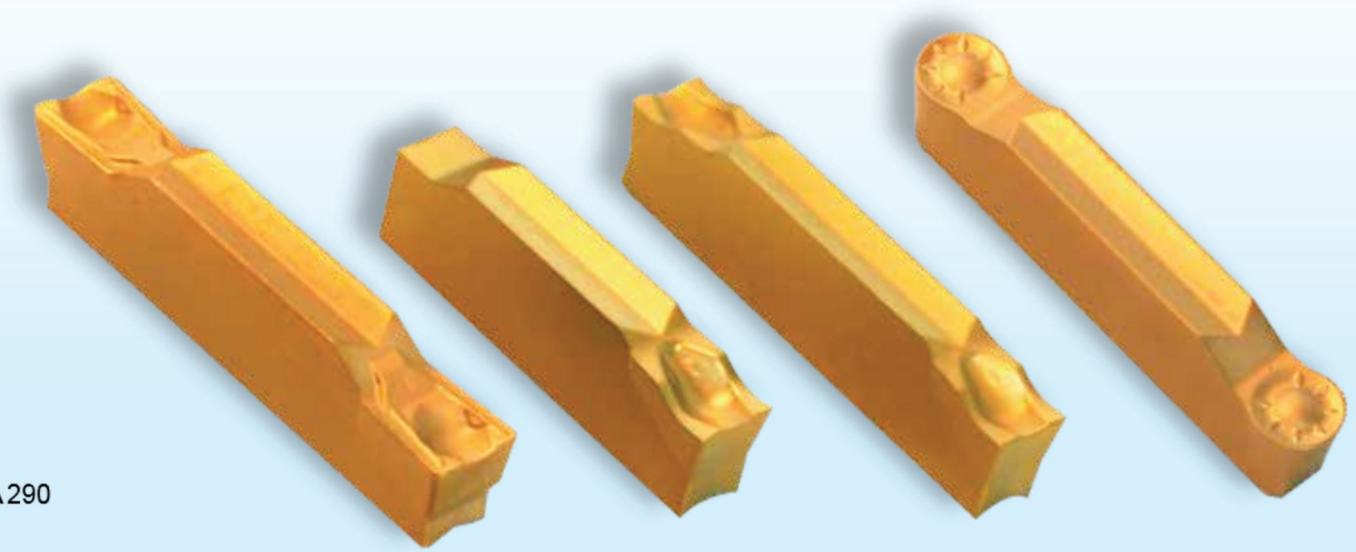
Profiling turning inserts for AL
Profilstechdrehplatten für Alu

The unique chip breaker for aluminum profiling machining. Cutting edge is designed by combining sharpness and intensity, The special chip breaker structure which effectively reduces the frictional coefficient between chips and rake face, enable the inserts suitable for continuous and intermittent profiling Al alloy machining.

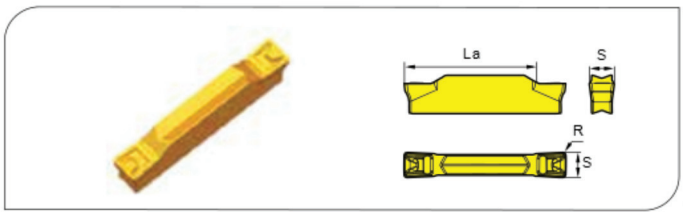
Das einzigartige Spanbrecherdesign für die Profilbearbeitung von Aluminium verbindet eine scharfe Schneidkantenausführung und gleichzeitige Stabilität. Die spezielle Form verhindert die Aufbauschneidenbildung und ist für die Bearbeitung im glatten und leicht unterbrochenem Schnitt einsetzbar.

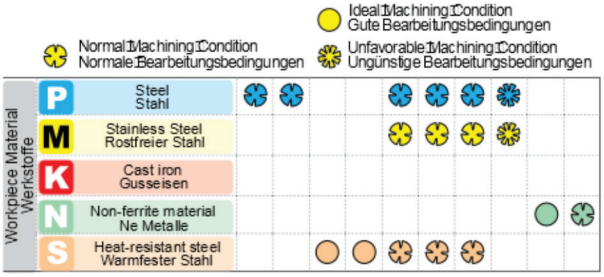
Parting, Grooving, Profiling and Turning Code Key
Kennzeichnung für Ab- und Einstechen, Profildrehen und Drehen





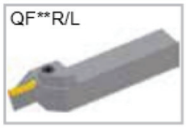
ZTBD-MM Series

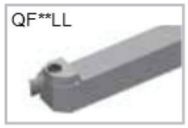




Type Typ		Dimension (mm) Abmessung			CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
		S	R±0.1	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
Double cutting edge 2 Schneiden	ZTBD02002-MM	2.0	0.2	13					●	●	○	●		
	ZTED02503-MM	2.5	0.3	17					●					
	ZTFD0303-MM	3.0	0.3	17					●					
	ZTGD0404-MM	4.0	0.4	22					●					
	ZTHD0504-MM	5.0	0.4	22					●					
	ZTKD0608-MM	6.0	0.8	22					●					
	ZTLD0808-MM	8.0	0.8	28					●	○				

Tool holder / Klemmhalter





Page / Seite A313-314 A315-316 A317-318 A319-320

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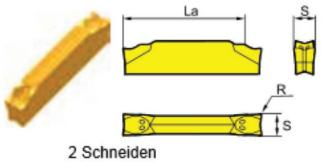
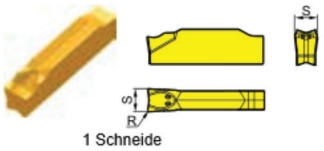
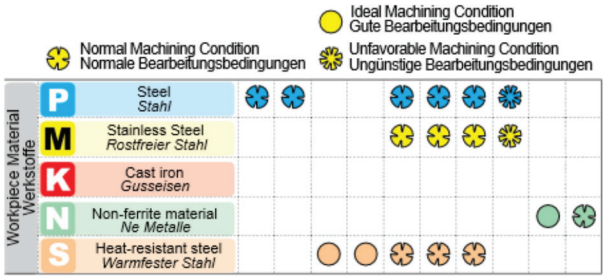
Parting inserts · Stechplatte



2 Schneiden



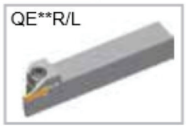
1 Schneide



Type Typ		Dimension (mm) Abmessung			CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
		$S_0^{+0.1}$	R±0.1	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
Double cutting edge 2 Schneiden	ZPED02502-MG	2.5	0.2	17		●			●		●	●		
	ZPFD0302-MG	3.0	0.2	17		●			●		●	●		○
	ZPGD0402-MG	4.0	0.2	22		●			●		●	●		○
	ZPHD0503-MG	5.0	0.3	22					●		●	●		
	ZPKD0604-MG	6.0	0.4	22	○				●		●	●		
Single cutting edge 1 Schneide	ZPES02502-MG	2.5	0.2	-							●	●		
	ZPFS0302-MG	3.0	0.2	-		●					●	●		
	ZPGS0402-MG	4.0	0.2	-		○					●	●		○
	ZPHS0503-MG	5.0	0.3	-							○	●		
	ZPKS0604-MG	6.0	0.4	-							●	●		

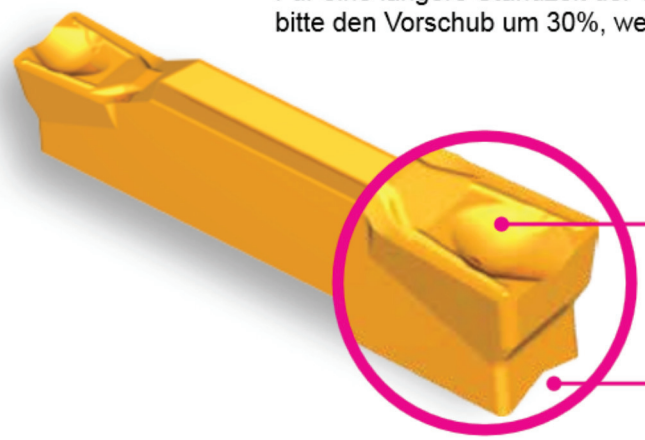
Insert with single cutting edge only be used to parting blad
Einschneidige Platten ausschließlich für den Einsatz auf Stechschwertern

Tool holder / Klemmhalter



Page / Seite A312 A309

Please reduce the feed rate by 30% when the insert is approaching the centre of workpiece.
Für eine längere Standzeit der Wendeschneidplatten, reduzieren Sie bitte den Vorschub um 30%, wenn die Platte sich dem Zentrum nähert.



Optimal chip breaker design for good chip control.
Optimaler Spanbrecher für eine gute Spankontrolle.

Cutting force is reduced by 20% less vibration.
Reduziert die Vibrationen und die Schnittkraft um 20%

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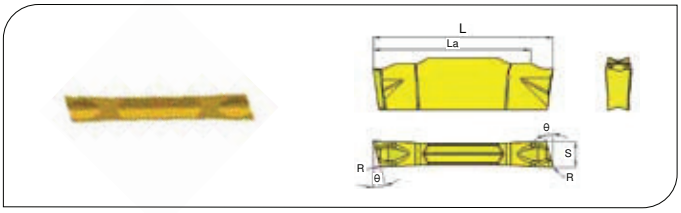
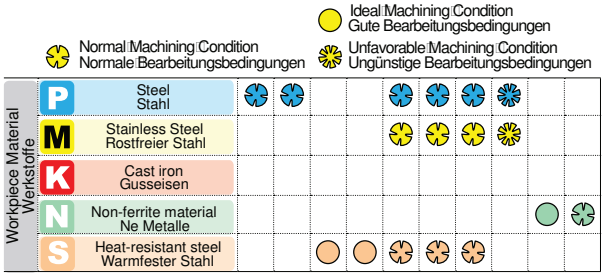
ZP*D-MG Series

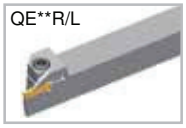




Type Typ	Dimension (mm) Abmessung					CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
	L	S	θ	R	La_{max}	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
ZPED02502-MG-6L	20	2.35	6	0.2	17							○	●	○	
ZPED02502-MG-6R	20	2.35	6	0.2	17					●		○	●	○	
ZPED02502-MG-15L	20	2.35	15	0.2	17							○	○	○	
ZPED02502-MG-15R	20	2.35	15	0.2	17							○	○	○	
ZPFD0302-MG-6L	20	2.85	6	0.2	17					●		●	●	○	
ZPFD0302-MG-6R	20	2.85	6	0.2	17							●	○	○	
ZPFD0302-MG-15L	20	2.85	15	0.2	17							○	○	○	
ZPFD0302-MG-15R	20	2.85	15	0.3	17							●	○	○	

Tool holder / Klemmhalter

QE**R/L



Page / Seite A309

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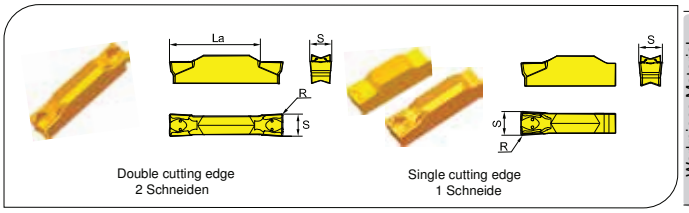
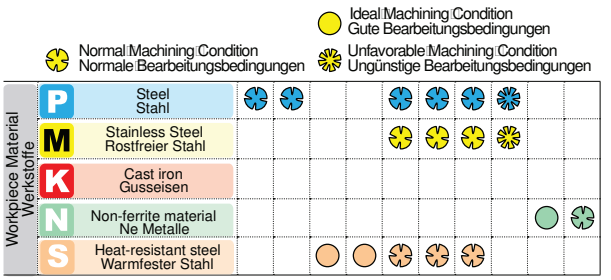
Grooving and turning inserts
Einstech- & Drehplatten





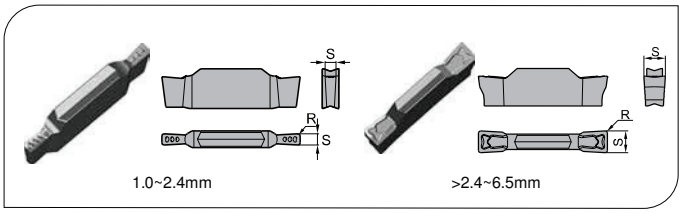
Type Typ		Dimension (mm) Abmessung			CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
		$S^{+0.1}_{0}$	R±0.1	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
Double cutting edge 2 Schneiden	ZTED02503-MG	2.5	0.3	17						○	●	●		
	ZTFD0303-MG	3.0	0.3	17				○		●	●	●		
	ZTGD0404-MG	4.0	0.4	22		●				●	●	●		●
	ZTHD0504-MG	5.0	0.4	22						●	●	●		
	ZTKD0608-MG	6.0	0.8	22						○	●	●		
Single cutting edge 1 Schneide	ZTHS0504-MG	5.0	0.4	-						○	●	●		
	ZTKS0608-MG	6.0	0.8	-						○	○	●		

Tool holder / Klemmhalter

Page / Seite A309 A321 A319

● ex stock · ab Lager ○ on demand · auf Anfrage

Precise grooving and turning inserts
Präzisions-Stech- & Drehplatten



Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

Workpiece Material
Werkstoffe

P	Steel Stahl	◐	◐			◐	◐	◐	◐		
M	Stainless Steel Rostfreier Stahl					◐	◐	◐	◐		
K	Cast iron Gusseisen										
N	Non-ferrite material Ne Metalle									●	◐
S	Heat-resistant steel Warmfester Stahl			○	○	◐	◐	◐			

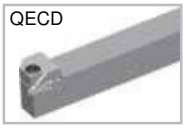
Type Typ		Dimension (mm) Abmessung			CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
		S±0.025	R(2)±0.05	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
Double cutting edge 2 Schneiden	ZTC****-EG	1.0~1.6	(2)	2.6		○				○	○	○		
		1.6~2.4		3.4		○				○	○	○		
	ZTE****-EG	2.4~3.0		17		○				○	○	○		
	ZTFD****-EG	3.0~3.8		17		○				○	○	○		
	ZTGD****-EG	3.8~4.8		22		○				○	○	○		
	ZTHD****-EG	4.8~5.8		22		○				○	○	○		
	ZTKD****-EG	5.8~6.5		22		○				○	○	○		

Note: (1) The code indicated with * is to be designated based on the edge width and edge radius. The code will be ZTFD03503-EG if the ordered insert is with an edge width of 3.5mm and an edge radius of 3.0mm.
(2) Edge radius R is based on customers' requirements

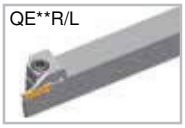
Der Bestellnummernschlüssel:
(1) z.B. ZTFD03503-EG legt eine Schneidbreite 3.5mm und einen Schneideckenradius 0.3mm fest.
(2) Eckenradius nach Kundenwunsch

Tool holder / Klemmhalter

QECD



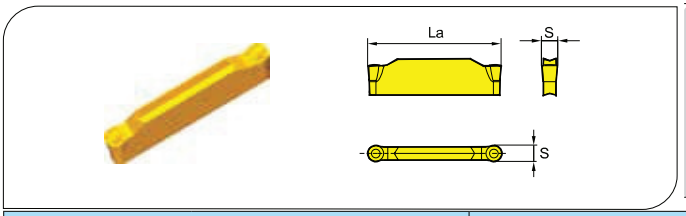
QE**R/L

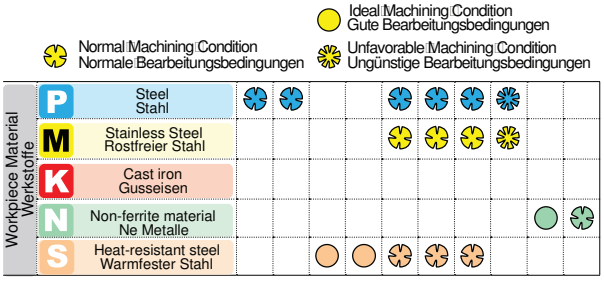


Page / Seite A310 A309

● ex stock · ab Lager ○ on demand · auf Anfrage

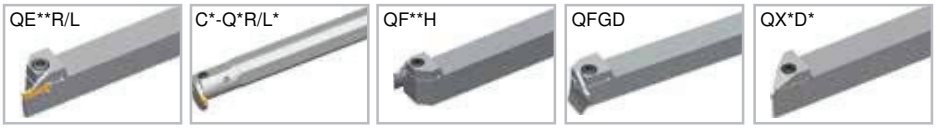
Pro¿ling and turing inserts
Pro¿l- & Stechdrehplatten





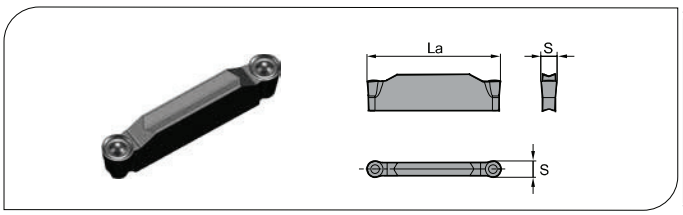
Type Typ		Dimension (mm) Abmessung S +0.1 0	La max	CVD YBC252	CVD YBC251	PVD YBG105	PVD YBG102	PVD YB9320	PVD YBG205	PVD YBG202	PVD YBG302	Uncoated Carbide unbeschicht. Hartmetall YD101	Uncoated Carbide unbeschicht. Hartmetall YD201
Double cutting edge 2 Schneiden	ZRED025-MG	2.5	20							●	●		
	ZRFD03-MG	3.0	20							●	●		
	ZRGD04-MG	4.0	25		○					●	●		
	ZRHD05-MG	5.0	25							●	●		
	ZRKD06-MG	6.0	25							●	●		

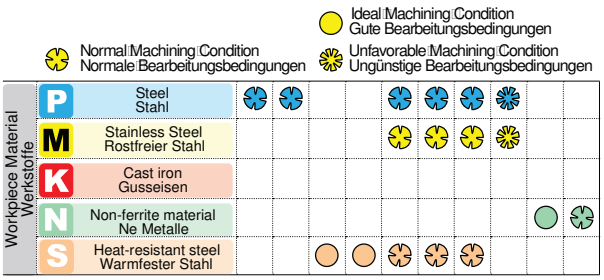
Tool holder / Klemmhalter



Page / Seite A309 A321 A317-318 A319 A310

Precise pro¿ling and turning inserts
Präzisions-, Pro¿l- & Stechdrehplatten





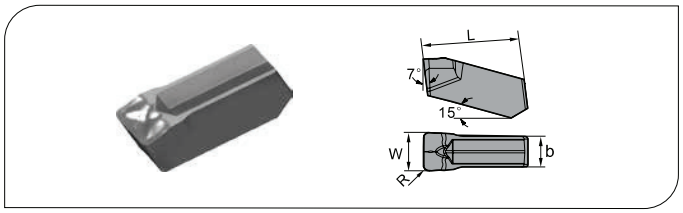
Type Typ		Dimension (mm) Abmessung S +0.1 0	La max	CVD YBC252	CVD YBC251	PVD YBG105	PVD YBG102	PVD YB9320	PVD YBG205	PVD YBG202	PVD YBG302	Uncoated Carbide unbeschicht. Hartmetall YD101	Uncoated Carbide unbeschicht. Hartmetall YD201
Double cutting edge 2 Schneiden	ZRFD03-EG	3.0	20					●			○		
	ZRGD04-EG	4.0	25					●			○		
	ZRHD05-EG	5.0	25					●			○		
	ZRKD06-EG	6.0	25					●			○		

Tool holder / Klemmhalter

Page / Seite A309 A321 A310

● ex stock · ab Lager ○ on demand · auf Anfrage

Single-cutting edge grooving and turning inserts for machining of heatresistance super alloy
Einseitige Stech- & Drehplatten für die Bearbeitung von warmfesten Superlegierungen



Ideal Machining Condition / Gute Bearbeitungsbedingungen
Normal Machining Condition / Normale Bearbeitungsbedingungen
Unfavorable Machining Condition / Ungünstige Bearbeitungsbedingungen

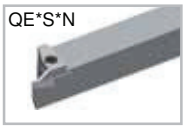
Workpiece Material / Werkstoffe

P	Steel / Stahl	✱	✱			✱	✱	✱	✱		
M	Stainless Steel / Rostfreier Stahl					✱	✱	✱	✱		
K	Cast iron / Gusseisen										
N	Non-ferrite material / Ne Metalle									●	✱
S	Heat-resistant steel / Warmfester Stahl			●	●	✱	✱	✱			

Type / Typ	Dimension (mm) / Abmessung				CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
	W±0.05	R±0.1	b	L	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
ZIMF304N-NM	3	0.4	2.4	15.3			●	○						
ZIMF406N-NM	4	0.6	3.2	15.3			●	○						
ZIMF506N-NM	5	0.6	4	15.3			●	○						
ZIMF608N-NM	6	0.8	4	15.3			●	○						

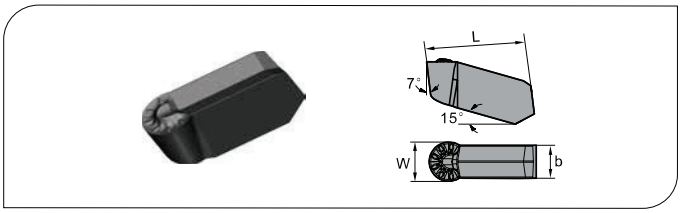
Tool holder / Klemmhalter

QE*S*N



Page / Seite A312

Single-cutting edge grooving and turning inserts for machining of heatresistance super alloy
Einseitige Stech- & Drehplatten für die Bearbeitung von warmfesten Superlegierungen



Ideal Machining Condition / Gute Bearbeitungsbedingungen
Normal Machining Condition / Normale Bearbeitungsbedingungen
Unfavorable Machining Condition / Ungünstige Bearbeitungsbedingungen

Workpiece Material / Werkstoffe

P	Steel / Stahl	✱	✱			✱	✱	✱	✱		
M	Stainless Steel / Rostfreier Stahl					✱	✱	✱	✱		
K	Cast iron / Gusseisen										
N	Non-ferrite material / Ne Metalle									●	✱
S	Heat-resistant steel / Warmfester Stahl			●	●	✱	✱	✱			

Type / Typ	Dimension (mm) / Abmessung			CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
	W±0.05	b	L	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
ZIGQ3N-NM	3	2.4	15.3			●	○						
ZIGQ4N-NM	4	3.2	15.3			●	○						
ZIGQ5N-NM	5	4	15.3			●	○						
ZIGQ6N-NM	6	5	15.3			●	○						

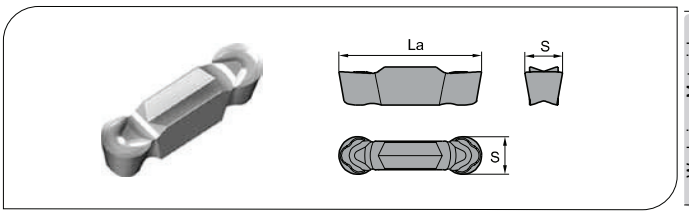
Tool holder / Klemmhalter

QE*S*N

Page / Seite A312

● ex stock · ab Lager ○ on demand · auf Anfrage

Pro¿ling Inserts for Al
Pro¿lstechdrehplatten zur Aluminiumbearbeitung



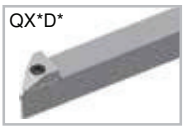
Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

Workpiece Material
Werkstoffe

P	Steel Stahl	◐	◐			◐	◐	◐	◐		
M	Stainless Steel Rostfreier Stahl					◐	◐	◐	◐		
K	Cast iron Gusseisen										
N	Non-ferrite material Ne Metalle									●	◐
S	Heat-resistant steel Warmfester Stahl			○	○	◐	◐	◐			

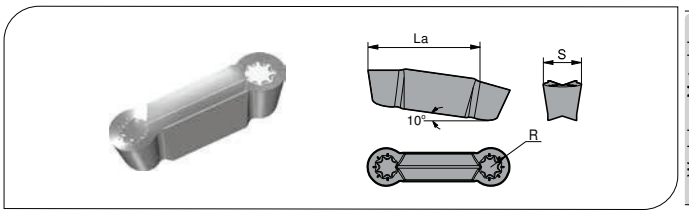
Type Typ	Dimension (mm) Abmessung		CVD		PVD					Uncoated Carbide unbeschicht. Hartmetall	
	S±0.025	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
ZRKD06-LH	6.0	25									○	
ZRLD08-LH	8.0	30									●	

Tool holder / Klemmhalter



Page / Seite A317-318 A319 A310

Pro¿ling Inserts for Al
Pro¿lstechdrehplatten zur Aluminiumbearbeitung



Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

Workpiece Material
Werkstoffe

P	Steel Stahl	◐	◐			◐	◐	◐	◐		
M	Stainless Steel Rostfreier Stahl					◐	◐	◐	◐		
K	Cast iron Gusseisen										
N	Non-ferrite material Ne Metalle									●	◐
S	Heat-resistant steel Warmfester Stahl			○	○	◐	◐	◐			

Type Typ	Dimension (mm) Abmessung		CVD		PVD					Uncoated Carbide unbeschicht. Hartmetall	
	S±0.025	La max	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
ZILD08-LC	8.0	22									○	○

● ex stock · ab Lager ○ on demand · auf Anfrage

QC seriers grooving insert / QC-Serie Stechplatten

QC series grooving insert code key / QC-Serie Kennzeichnung

- Triangular straight grooving insert / Dreieckige Stechplatten mit gerader Kante

Series
Serie

Cutting edge length code Schneid-kantenlänge	Ø IC (mm)
11	6.35
16	9.525
22	12.70

Slot Stechbreite (mm)	
code	width Breite
050	0.50
100	1.00
...	...
480	4.80

Radius or Chamfer Radius (mm)	
code	size Groß
005	0.05
02	0.2
03	0.3
04	0.4

Direction Schneidrichtung		
code	mode	
R	right Rechts	
L	left Links	

Nose shape Kantenform		
code	mode	
R	radius Radius	
C	chamfer Fase	

- Triangular round grooving insert / Dreieckige Stechplatten mit runder Kante

Series
Serie

Cutting edge length code Schneid-kantenlänge	Ø IC (mm)
11	6.35
16	9.525
22	12.70

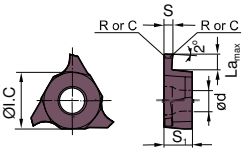
Direction Schneidrichtung		
R	right Rechts	
L	left Links	

Slot Stechbreite (mm)	
code	width Breite
050	0.50
100	1.00
...	...
480	4.80

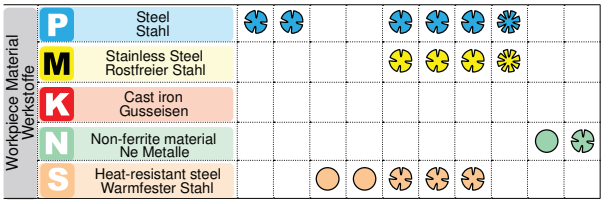
Round
Rund

QC seriers grooving insert / QC-Serie Stechplatten

right hand style
Rechtsausführung



Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen



Type Typ	Dimension (mm) Abmessung						CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
	$S_{\pm 0.025}$	La_{max}	R/C	ØI.C	S_1	ød	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
QC11R120-R02	1.20	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11L120-R02	1.20	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11R125-R02	1.25	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11L125-R02	1.25	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11R145-R02	1.45	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11L145-R02	1.45	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11R150-R02	1.50	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11L150-R02	1.50	1.50	R0.2	6.35	3.18	2.8						●	○			
QC11R200-R02	2.00	2.00	R0.2	6.35	3.18	2.8						●	○			
QC11L200-R02	2.00	2.00	R0.2	6.35	3.18	2.8						●	○			
QC11R225-R02	2.25	2.00	R0.2	6.35	3.18	2.8						●	○			
QC11L225-R02	2.25	2.00	R0.2	6.35	3.18	2.8						●	○			
QC16L075-R01	0.75	2.00	R0.1	9.525	3.18	4.4						○				
QC16R075-R01	0.75	2.00	R0.1	9.525	3.18	4.4						○				
QC16R080-R01	0.80	2.00	R0.1	9.525	3.18	4.4						○				
QC16L095-R01	0.95	2.00	R0.1	9.525	3.18	4.4						○				
QC16R095-R01	0.95	2.00	R0.1	9.525	3.18	4.4						○				
QC16L100-R01	1.00	2.00	R0.1	9.525	3.18	4.4						○				
QC16R110-R01	1.10	2.00	R0.1	9.525	3.18	4.4						○	●			
QC16L110-R01	1.10	2.00	R0.1	9.525	3.18	4.4						●	●			
QC16R115-R04	1.15	2.00	R0.4	9.525	3.18	4.4						○	○			
QC16L120-R01	1.20	2.00	R0.1	9.525	3.18	4.4						○	○			
QC16R120-R01	1.20	2.00	R0.1	9.525	3.18	4.4						○	○			
QC16R125-R02	1.25	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L125-R02	1.25	2.00	R0.2	9.525	3.18	4.4						●	○			

The code of other size for your order, for example: QC22R160-R03 if S±0.025=1.60mm, ØI.C=12.70mm and cutting edge with R=0.3mm
Der Bestellnummernschlüssel: z.B.QC22R160-R03 liegt eine S±0.025=1.60mm, ØI.C=12.70mm und einen Schneideckradius R=0.3mm fest.

Tool holder / Klemmhalter

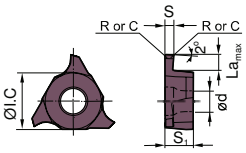
QC Serie
S***-QC**R/L*

Page / Seite A323

● ex stock · ab Lager ○ on demand · auf Anfrage

QC seriers grooving insert / QC-Serie Stechplatten

right hand style
Rechtsausführung



Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

Workpiece Material Werkstoffe

P	Steel Stahl	◔	◔			◔	◔	◔	◔									
M	Stainless Steel Rostfreier Stahl					◔	◔	◔	◔									
K	Cast iron Gusseisen																	
N	Non-ferrite material Ne Metalle															○	◔	
S	Heat-resistant steel Warmfester Stahl			○	○	◔	◔	◔										

Type Typ	Dimension (mm) Abmessung						CVD		PVD						Uncoated Carbide unbeschicht. Hartmetall	
	$S_{\pm 0.025}$	La_{max}	R/C	ØI.C	S_1	ød	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
QC16R130-R02	1.30	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L130-R02	1.30	2.00	R0.2	9.525	3.18	4.4						○	○			
QC16R140-R02	1.40	2.00	R0.2	9.525	3.18	4.4						○	○			
QC16R145-R02	1.45	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L145-R02	1.45	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16R150-R02	1.50	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L150-R02	1.50	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16R160-R02	1.60	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L160-R02	1.60	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16R165-R02	1.65	2.00	R0.2	9.525	3.18	4.4						○				
QC16L165-R02	1.65	2.00	R0.2	9.525	3.18	4.4						○				
QC16L170-R02	1.70	2.00	R0.2	9.525	3.18	4.4						○				
QC16R170-R02	1.70	2.00	R0.2	9.525	3.18	4.4						○				
QC16R175-R02	1.75	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16L175-R02	1.75	2.00	R0.2	9.525	3.18	4.4						●	○			
QC16R180-R02	1.80	2.00	R0.2	9.525	3.18	4.4						○				
QC16R185-R02	1.85	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16L185-R02	1.85	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16R200-R02	2.00	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16L200-R02	2.00	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16L210-R02	2.1	2.50	R0.2	9.525	3.18	4.4						○				
QC16L210-R05	2.1	2.50	R0.2	9.525	3.18	4.4						○				
QC16L220-R02	2.2	2.50	R0.2	9.525	3.18	4.4						○				
QC16R220-R02	2.2	2.50	R0.2	9.525	3.18	4.4						○				
QC16R225-R02	2.25	2.50	R0.2	9.525	3.18	4.4						○				
QC16R250-R02	2.50	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16L250-R02	2.50	2.50	R0.2	9.525	3.18	4.4						●	○			
QC16R300-R02	3.00	3.00	R0.2	9.525	3.18	4.4						●	○			
QC16L300-R02	3.00	3.00	R0.2	9.525	3.18	4.4						●	○			

The code of other size for your order, for example: QC22R160-R03 if S±0.025=1.60mm, ØI.C=12.70mm and cutting edge with R=0.3mm
Der Bestellnummernschlüssel: z.B.QC22R160-R03 liegt eine S±0.025=1.60mm, ØI.C=12.70mm und einen Schneideckradius R=0.3mm fest.

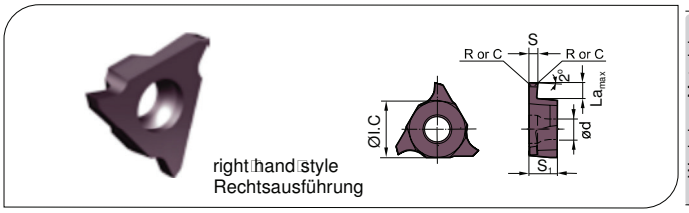
Tool holder / Klemmhalter

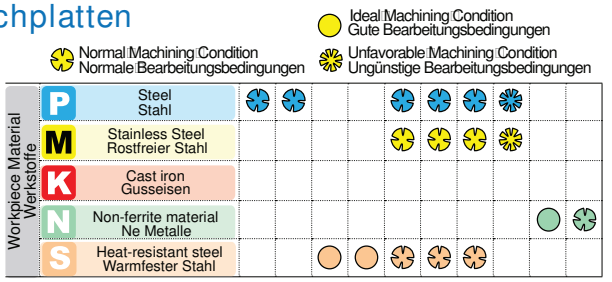
QC Serie
S***-QC**R/L*

Page / Seite A323

● ex stock · ab Lager ○ on demand · auf Anfrage

QC seriers grooving insert / QC-Serie Stechplatten





Type Typ	Dimension (mm) Abmessung															
	$S_{\pm 0.025}$	La_{max}	R/C	ØI.C	S_1	ød	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
QC22L100-R02	1.00	2.00	R0.2	12.70	4.76	5.5						○				
QC22R125-R02	1.25	2.00	R0.2	12.70	4.76	5.5						●	○			
QC22L125-R02	1.25	2.00	R0.2	12.70	4.76	5.5						○	○			
QC22R145-R02	1.45	2.00	R0.2	12.70	4.76	5.5						○	○			
QC22L145-R02	1.45	2.00	R0.2	12.70	4.76	5.5						○	○			
QC22R150-R02	1.50	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22L150-R02	1.50	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22R163-R02	1.63	3.50	R0.2	12.70	4.76	5.5						○				
QC22R163-R03	1.63	3.50	R0.2	12.70	4.76	5.5						○				
QC22R175-R02	1.75	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22L175-R02	1.75	3.50	R0.2	12.70	4.76	5.5						○	○			
QC22R185-R02	1.85	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22L185-R02	1.85	3.50	R0.2	12.70	4.76	5.5						○	○			
QC22R195-R02	1.95	3.50	R0.2	12.70	4.76	5.5						○				
QC22R200-R02	2.00	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22L200-R02	2.00	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22R225-R02	2.25	3.50	R0.2	12.70	4.76	5.5						○				
QC22R230-R02	2.30	3.50	R0.2	12.70	4.76	5.5						●	○			
QC22L230-R02	2.30	3.50	R0.2	12.70	4.76	5.5						○	○			
QC22R250-R03	2.50	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L250-R03	2.50	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22R265-R03	2.65	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L265-R03	2.65	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22R280-R03	2.80	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L280-R03	2.80	4.00	R0.3	12.70	4.76	5.5						●	○			

The code of other size for your order, for example: QC22R160-R03 if S±0.025=1.60mm, ØI.C=12.70mm and cutting edge with R=0.3mm
Der Bestellnummernschlüssel: z.B.QC22R160-R03 liegt eine S±0.025=1.60mm, ØI.C=12.70mm und einen Schneideckradius R=0.3mm fest.

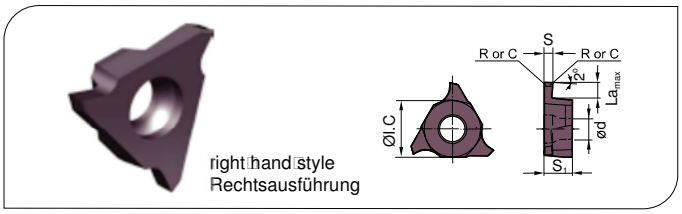
Tool holder / Klemmhalter

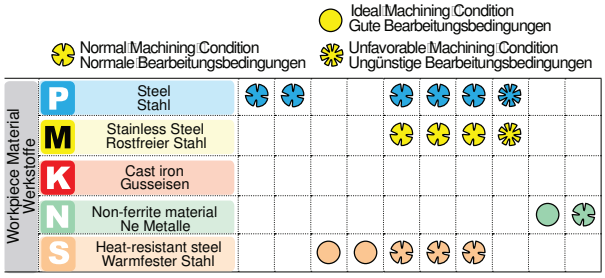
QC Serie
S***-QC**R/L*

Page / Seite A323

● ex stock · ab Lager ○ on demand · auf Anfrage

Triangular straight grooving insert / Dreieckige Stechplatten mit gerader Kante





Type Typ	Dimension (mm) Abmessung															
	$S^{\pm 0.025}$	La_{max}	R/C	ØI.C	S_1	ød	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
QC22R300-R03	3.00	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L300-R03	3.00	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22R320-R03	3.20	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L320-R03	3.20	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22R330-R03	3.30	4.00	R0.3	12.70	4.76	5.5						●	○			
QC22L330-R03	3.30	4.00	R0.3	12.70	4.76	5.5						○	○			
QC22R350-R03	3.50	5.00	R0.3	12.70	4.76	5.5						○	○			
QC22L350-R03	3.50	5.00	R0.3	12.70	4.76	5.5						●	○			
QC22R400-R04	4.00	5.00	R0.4	12.70	4.76	5.5						●	○			
QC22L400-R04	4.00	5.00	R0.4	12.70	4.76	5.5						●	○			
QC22R430-R04	4.30	5.00	R0.4	12.70	4.76	5.5						○	○			
QC22L430-R04	4.30	5.00	R0.4	12.70	4.76	5.5						●	●			
QC22R450-R04	4.50	5.00	R0.4	12.70	4.76	5.5						●	○			
QC22L450-R04	4.50	5.00	R0.4	12.70	4.76	5.5						○	○			
QC22R480-R04	4.80	5.00	R0.4	12.70	5.06	5.5						●	○			
QC22L480-R04	4.80	5.00	R0.4	12.70	5.06	5.5						○	○			

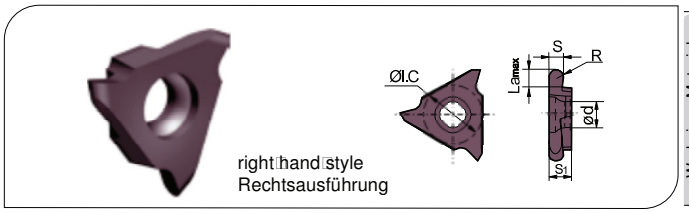
The code of other size for your order, for example: QC22R160-R03 if S±0.025=1.60mm, ØI.C=12.70mm and cutting edge with R=0.3mm

Tool holder / Klemmhalter

Page / Seite A323

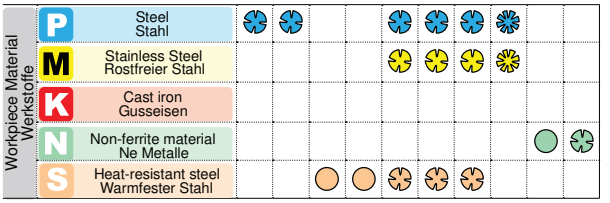
● ex stock · ab Lager ○ on demand · auf Anfrage

Triangular round grooving insert / Dreieckige Stechplatten mit runder Kante



right hand style
Rechtsausführung

Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen



Type Typ	Dimension (mm) Abmessung						Grade Sorte									
	$S^{\pm 0.025}$	La_{max}	R/C	ØI.C	S_1	ød	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
QC16R100R	1.00	2.0	0.50	12.70	3.18	4.4						○				
QC16R120R	1.20	2.0	0.60	12.70	3.18	4.4						○				
QC16R150R	1.50	2.0	0.75	12.70	3.18	4.4						○				
QC16R200R	2.00	2.50	1.00	12.70	3.18	4.4						●	○			
QC16L200R	2.00	2.50	1.00	12.70	3.18	4.4						○	○			
QC16L222R	2.22	2.50	1.11	12.70	3.18	4.4						○				
QC16R222R	2.22	2.50	1.11	12.70	3.18	4.4						○				
QC16R250R	2.50	2.50	1.25	12.70	3.18	4.4						○				
QC16L280R	2.80	2.50	1.40	12.70	3.18	4.4						○				
QC16R280R	2.80	2.50	1.40	12.70	3.18	4.4						○				
QC16R300R	3.00	2.50	1.50	12.70	3.18	4.4						●	○			
QC16L300R	3.00	2.50	1.50	12.70	3.18	4.4						●	○			
QC22R100R	1.00	2.00	0.50	12.70	4.76	5.5						●	○			
QC22L100R	1.00	2.00	0.50	12.70	4.76	5.5						●	●			
QC22R150R	1.50	3.50	0.75	12.70	4.76	5.5						●	○			
QC22L150R	1.50	3.50	0.75	12.70	4.76	5.5						●	●			
QC22R170R	1.70	3.50	0.85	12.70	4.76	5.5						○				
QC22R200R	2.00	3.50	1.00	12.70	4.76	5.5						●	○			
QC22L200R	2.00	3.50	1.00	12.70	4.76	5.5						●	○			
QC22R250R	2.50	4.00	1.25	12.70	4.76	5.5						●	○			
QC22L250R	2.50	4.00	1.25	12.70	4.76	5.5						●	○			
QC22R300R	3.00	4.00	1.50	12.70	4.76	5.5						●	○			
QC22L300R	3.00	4.00	1.50	12.70	4.76	5.5						●	○			
QC22R320R	3.20	4.00	1.60	12.70	4.76	5.5						○				
QC22R400R	4.00	5.00	2.00	12.70	4.76	5.5						●	○			
QC22L400R	4.00	5.00	2.00	12.70	4.76	5.5						●	○			

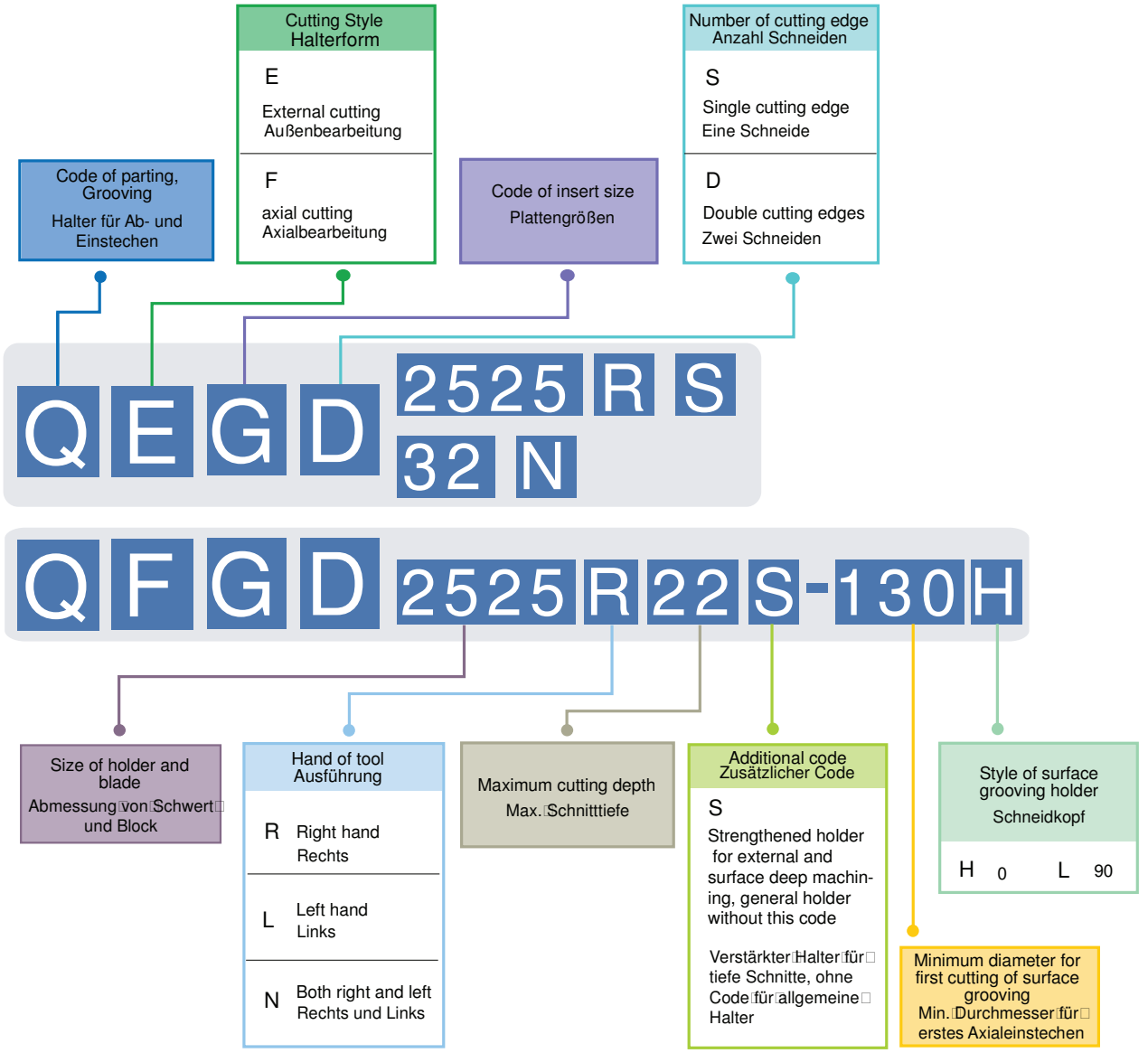
Tool holder / Klemmhalter

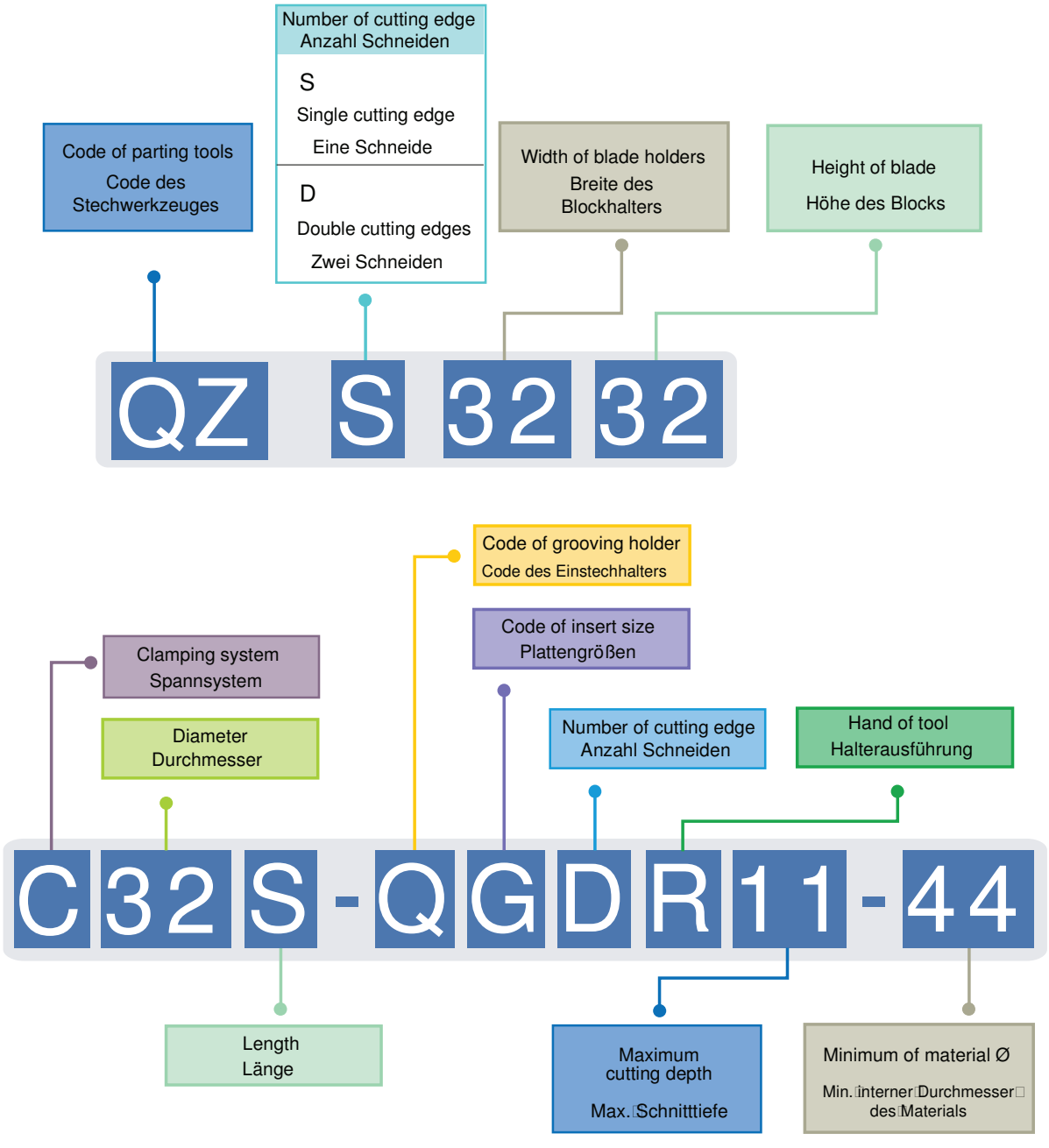
QE Serie GQCR/L

Page / Seite A323

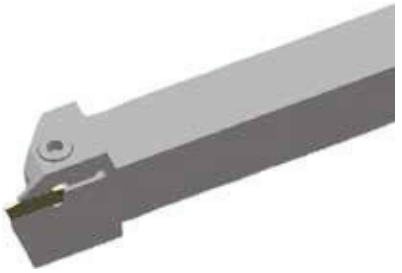
● ex stock · ab Lager ○ on demand · auf Anfrage

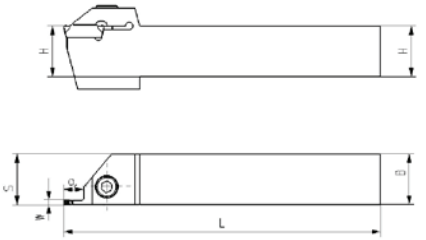
NOTES / NOTIZEN:


Cutting Style
Halterform
E
External cutting
Außenbearbeitung
F
axial cutting
Axialbearbeitung
Number of cutting edge
Anzahl Schneiden
S
Single cutting edge
Eine Schneide
D
Double cutting edges
Zwei Schneiden
Code of parting, Grooving
Halter für Ab- und Einstechen
Code of insert size
Plattengrößen
Q E G D 2525 R S
32 N
Q F G D 2525 R 22 S - 130 H
Size of holder and blade
Abmessung von Schwert und Block
Hand of tool
Ausführung
R Right hand
Rechts
L Left hand
Links
N Both right and left
Rechts und Links
Maximum cutting depth
Max. Schnitttiefe
Additional code
Zusätzlicher Code
S
Strengthened holder for external and surface deep machining, general holder without this code
Verstärkter Halter für tiefe Schnitte, ohne Code für allgemeine Halter
Minimum diameter for first cutting of surface grooving
Min. Durchmesser für erstes Axialeinstechen
Style of surface grooving holder
Schneidkopf
H 0 L 90


Number of cutting edge
Anzahl Schneiden
S
Single cutting edge
Eine Schneide
D
Double cutting edges
Zwei Schneiden
Code of parting tools
Code des Stechwerkzeuges
Width of blade holders
Breite des Blockhalters
Height of blade
Höhe des Blocks
QZ S 32 32
Code of grooving holder
Code des Einstechhalters
Code of insert size
Plattengrößen
Clamping system
Spannsystem
Diameter
Durchmesser
Number of cutting edge
Anzahl Schneiden
Hand of tool
Halterausführung
C 32 S - Q G D R 1 1 - 4 4
Length
Länge
Maximum
cutting depth
Max. Schnitttiefe
Minimum of material Ø
Min. interner Durchmesser
des Materials

External parting, grooving and turning tools · Einstech- & Drehwerkzeuge (Außen)





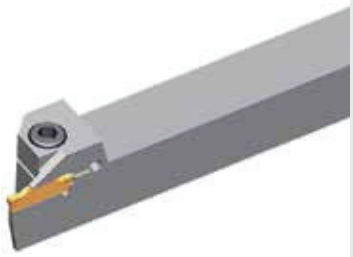
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	Inserts Stechplatte	Screw Schraube	Wrench Schlüssel
QEBD	1616R/L04	○	○	16×16	150	16.17	2	4	ZTBD02002-MM	M5×16	WH40L
	2020R/L07	●	●	20×20	150	20.17	2	7	ZTBD02002-MM		

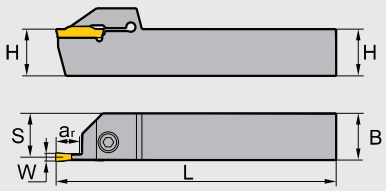
Internal parting, grooving and turning tools · Einstech- & Drehwerkzeuge (Innen)

Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung d	L	S	W	ar max	Inserts Stechplatte	Screw Schraube	Wrench Schlüssel
C16M-QBDR/L04-20		●	○	16	150	12	2	4	ZTBD02002-MM	M5×10	WH40L

● ex stock · ab Lager ○ on demand · auf Anfrage

External parting, grooving and turning tools · Einstech- & Drehwerkzeuge (Außen)

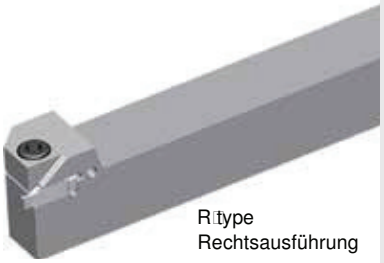




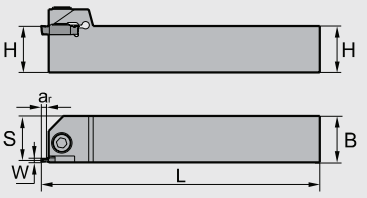
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	$a_{r\,max}$	Inserts Stechplatte	Screw Schraube	Wrench Schlüssel
QEED	1616R/L10	●	●	16×16	125	15	2.5	10	Z*ED025**	GB70-85-M5×20	WH40L
	1616R/L17	●	●	16×16	125	15	2.5	17	Z*ED025**		
	2020R/L10	●	●	20×20	150	10	2.5	10	Z*ED025**	GB70-85-M6×20	WH50L
	2020R/L17	●	●	20×20	125	19	2.5	17	Z*ED025**		
	2525R/L10	●	●	25×25	150	19	2.5	10	Z*ED025**		
	2525R/L17	●	●	25×25	150	19	2.5	17	Z*ED025**		
QEFD	1616R/L10	●	●	16×16	125	14.8	3	10	Z*FD03**	GB70-85-M5×20	WH40L
	1616R/L17	●	●	16×16	125	14.8	3	17	Z*FD03**		
	2020R/L10	●	●	20×20	125	18.8	3	10	Z*FD03**	GB70-85-M6×20	WH50L
	2020R/L17	●	●	20×20	125	18.8	3	17	Z*FD03**		
	2525R/L10	●	●	25×25	150	23.8	3	10	Z*FD03**		
	2525R/L17	●	●	25×25	150	23.8	3	17	Z*FD03**		
QEGD	2020R/L13	●	●	20×20	140	18.5	4	13	Z*FD04**	GB70-85-M6×20	WH50L
	2020R/L22	●	●	20×20	140	18.5	4	22	Z*GD04**		
	2525R/L13	●	●	25×25	150	23.5	4	13	Z*GD04**		
	2525R/L22	●	●	25×25	150	23.5	4	22	Z*GD04**		
	3232R/L13	●	●	32×32	170	30.5	4	13	Z*GD04**		
	3232R/L22	●	●	32×32	170	30.5	4	22	Z*GD04**		
QEHD	2525R/L13	●	●	25×25	150	23	5	13	Z*HD05**	GB70-85-M6×20	WH50L
	2525R/L22	●	●	25×25	150	23	5	22	Z*HD05**		
QEHS	2525N30	●		25×25	150	12.5	5	30	Z*HS05**		
QEHD	3232R/L13	●	●	32×32	170	30	5	13	Z*HD05**		
	3232R/L22	●	●	32×32	170	30	5	22	Z*HD05**		
QEHS	3232N30	●		32×32	170	16	5	30	Z*HS05**		
QEKD	2525R/L13	●	●	25×25	150	22.6	6	13	Z*KD06**	GB70-85-M6×20	WH50L
	2525R/L22	●	●	25×25	150	22.6	6	22	Z*KD06**		
QEKS	2525N30	○		25×25	150	12.5	6	30	Z*KS06**		
QEKD	3232R/L13	●	●	32×32	170	29.6	6	13	Z*KD06**		
	3232R/L22	●	●	32×32	170	29.6	6	22	Z*KD06**		
QEKS	3232N30	○		32×32	170	16	6	30	Z*KS06**		

● ex stock · ab Lager ○ on demand · auf Anfrage

Precise grooving and turning tools · Präzisions Einstech- & Drehwerkzeuge

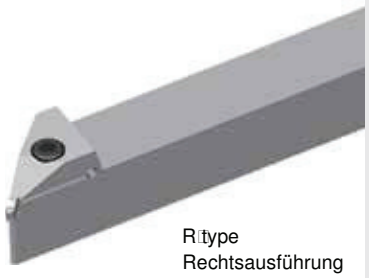


R type
Rechtsausführung

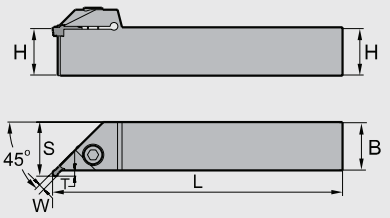


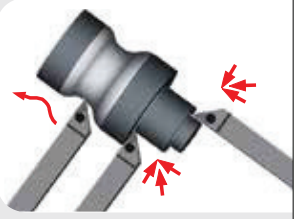
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	Dimension (mm) Abmessung L	Dimension (mm) Abmessung S	Dimension (mm) Abmessung W	Dimension (mm) Abmessung a_r max	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QECD	1616R/L025	○	○	16×16	125	14.75		2.5	ZT**D***-EG	GB70-85-M5×20	WH40L
	2020R/L025	○	○	20×20	125	18.75				GB70-85-M6×20	WH50L
	2525R/L025	○	○	25×25	150	23.75					

External recess and pro¿ling turning tools · Hinterdrehstech- & Pro¿ldrehwerkzeuge (Außen)



R type
Rechtsausführung

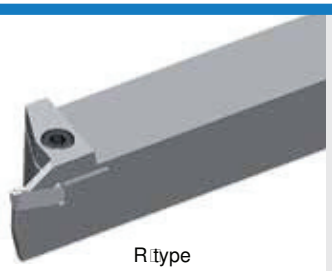




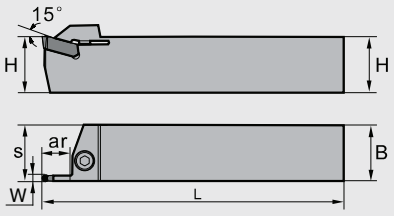
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	Dimension (mm) Abmessung L	Dimension (mm) Abmessung S	Dimension (mm) Abmessung W	Dimension (mm) Abmessung a_r max	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QXFD	2020R/L03-45	○	○	20×20	125	23	3.0	3.0	ZR(T)FD03-EG ZR(T)FD03-MG	GB70-85-M6×20	WH50L
	2525R/L03-45	●	●	25×25	150	28					
	3232R/L03-45	○	○	32×32	170	35					
QXGD	2020R/L03-45	○	○	20×20	125	23	4.0	3.0	ZR(T)GD04-EG ZR(T)GD04-MG		
	2525R/L03-45	○	○	25×25	150	28					
	3232R/L03-45	○	○	32×32	170	35					
QXHD	2020R/L04-45	○	○	20×20	125	24	5.0	4.0	ZR(T)HD05-EG ZR(T)HD05-MG		
	2525R/L04-45	○	○	25×25	150	29					
	3232R/L04-45	○	○	32×32	170	36					
QXKD	2020R/L04-45	○	○	20×20	125	24	6.0	4.0	ZR(T)KD06-EG ZR(T)KD06-MG		
	2525R/L04-45	○	○	25×25	150	29					
	3232R/L04-45	○	○	32×32	170	36					

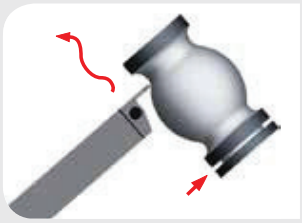
● ex stock · ab Lager ○ on demand · auf Anfrage

External grooving tools for dif¿cult machining
Stechdrehwerkzeug für die schwierige Bearbeitung (Außen)



R type
Rechtsausführung

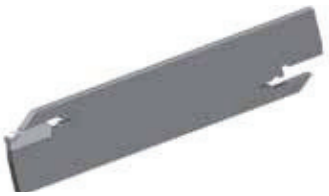


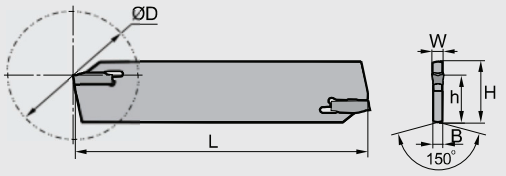


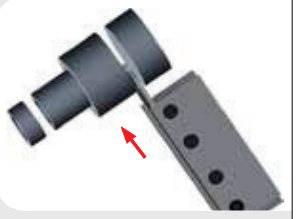
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QEFS	2525R/L12-3N	○	○	25×25	150	25.3	3	12	ZIGQ3N-NM ZIMF304N-NM	GB70-85-M6×20	WH50L
	3232R/L22-3N	○	○	32×32	170	32.3	3	22			
QEGS	2525R/L12-4N	○	○	25×25	150	25.3	4	12	ZIGQ4N-NM ZIMF406N-NM		
	3232R/L22-4N	○	○	32×32	170	32.3	4	22			
QEHS	2525R/L12-5N	○	○	25×25	150	25.4	5	12	ZIGQ5N-NM ZIMF506N-NM		
	3232R/L22-5N	○	○	32×32	170	32.4	5	22			
QEKS	2525R/L12-6N	○	○	25×25	150	25.4	6	12	ZIGQ6N-NM ZIMF608N-NM		
	3232R/L22-6N	○	○	32×32	170	32.4	6	22			

● ex stock · ab Lager ○ on demand · auf Anfrage

Blade for external parting · Abstechschwert zur Außenbearbeitung

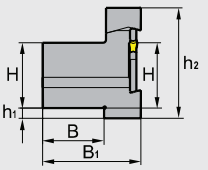


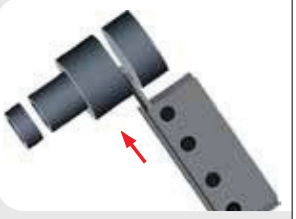




Type Typ	Stock Lager	Dimension (mm) Abmessung						Inserts Stechplatten	Wrench Schlüssel
		L	H	h	B	W	ØD max		
QEES26N	●	110	26	19	2	2.5	60	ZPES02502-MG	W50RL
QEFS26N	●	110	26	19	2.4	3	60	ZPFS0302-MG	
QEGS26N	●	110	26	19	3.2	4	70	ZPGS0402-MG	
QEHS26N	●	110	26	19	4	5	70	ZPHS0503-MG	
QEKS26N	●	110	26	19	5	6	70	ZPKS0604-MG	
QEES32N	●	150	32	24.6	2	2.5	100	ZPES02502-MG	
QEFS32N	●	150	32	24.6	2.4	3	100	ZPFS0302-MG	
QEGS32N	●	150	32	24.6	3.2	4	120	ZPGS0402-MG	
QEHS32N	●	150	32	24.6	4	5	120	ZPHS0503-MG	
QEKS32N	●	150	32	24.6	5	6	120	ZPKS0604-MG	

Holder for external parting · Spannblock zur Außenbearbeitung

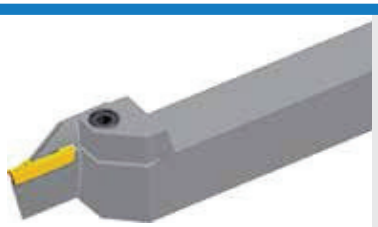




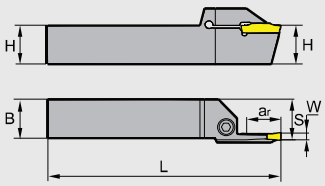
Type Typ	Stock Lager	Dimension (mm) Abmessung						Clamp Klemme	Screw Schraube	Wrench Schlüssel
		L	H	h_1	h_2	B	B_1			
QZS2026	●	86	20	10	46.6	19	38	QZC26	GB70-85-M6×20	WH50L
QZS2526	●	86	25	5	46.6	23	42	QZC26		
QZS3226	○	86	32	3	51.6	30	48	QZC26		
QZS2032	●	110	20	13	50	19	38	QZC32		
QZS2532	●	110	25	8	50	23	42	QZC32		
QZS3232	●	110	32	5	54	30	48	QZC32		

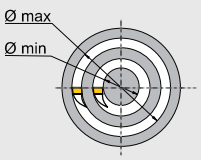
● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug



L type
Linksausführung



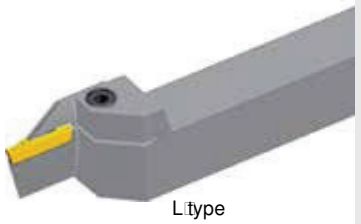


ØD= Range of entering
ØD= Bereich

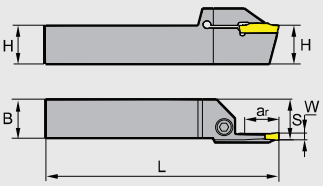
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFFD	2020R/L7-48H	○	○	20×20	150	21	3	7	48-66	ZTFD0303-MG ZTFD0303-MM	GB70-85-M6×20	WH50L
	2020R/L10-48H	○	○	20×20	150	21	3	10	48-66			
	2525R/L10-48H	●	●	25×25	150	26	3	10	48-66			
	2525R/L17-48H	●	●	25×25	150	26	3	17	48-66			
	2020R/L7-60H	○	○	20×20	150	21	3	7	60-80			
	2020R/L10-60H	○	○	20×20	150	21	3	10	60-80			
	2525R/L10-60H	●	●	25×25	150	26	3	10	60-80			
	2525R/L17-60H	●	●	25×25	150	26	3	17	60-80			
	2020R/L7-74H	○	○	20×20	150	21	3	7	74-110			
	2020R/L10-74H	○	○	20×20	150	21	3	10	74-110			
	2525R/L10-74H	●	●	25×25	150	26	3	10	74-110			
	2525R/L17-74H	●	●	25×25	150	26	3	17	74-110			
	2020R/L7-100H	○	○	20×20	150	21	3	7	100-150			
	2020R/L10-100H	○	○	20×20	150	21	3	10	100-150			
	2525R/L10-100H	●	●	25×25	150	26	3	10	100-150			
	2525R/L17-100H	●	●	25×25	150	26	3	17	100-150			
QFGD	2020R/L10-52H	○	○	20×20	150	21	4	10	52-72	ZTGD0404-MG ZTGD0404-MM		
	2525R/L13-52H	●	●	25×25	150	26	4	13	52-72			
	2020R/L15-52H	○	○	20×20	150	21	4	15	52-72			
	2525R/L22-52H	●	●	25×25	150	26	4	22	52-72			
	2020R/L10-64H	○	○	20×20	150	21	4	10	64-100			
	2525R/L13-64H	●	●	25×25	150	26	4	13	64-100			
	2020R/L15-64H	○	○	20×20	150	21	4	15	64-100			
	2525R/L22-64H	●	●	25×25	150	26	4	22	64-100			
	2020R/L10-90H	○	○	20×20	150	21	4	10	90-140			
	2525R/L13-90H	●	●	25×25	150	26	4	13	90-140			
	2020R/L15-90H	○	○	20×20	150	21	4	15	90-140			
	2525R/L22-90H	●	●	25×25	150	26	4	22	90-140			
	2020R/L10-130H	○	○	20×20	150	21	4	10	130-230			
	2525R/L13-130H	●	●	25×25	150	26	4	13	130-230			
	2020R/L15-130H	○	○	20×20	150	21	4	15	130-230			
	2525R/L22-130H	●	○	25×25	150	26	4	22	130-230			

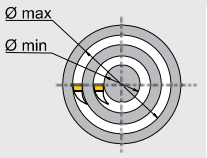
● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug



L type
Linksausführung



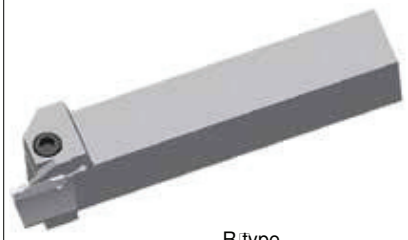


ØD= Range of entering
ØD= Bereich

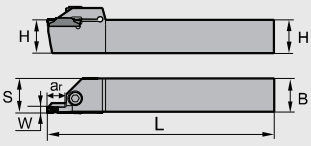
Type Typ		Stock Lager		Dimension (mm) Abmessung						Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
		R	L	H×B	L	S	W	$a_{r\,max}$	ØD (min-max)			
QFHD	2525R/L13-58H	●	●	25×25	150	26	5	13	58-96	ZTHD0504-MG ZTHD0504-MM	GB70-85-M6×20	WH50L
	2525R/L22-58H	●	●	25×25	150	26	5	22	58-96			
	2525R/L13-86H	●	●	25×25	150	26	5	13	86-140			
	2525R/L22-86H	●	●	25×25	150	26	5	22	86-140			
	2525R/L13-130H	●	●	25×25	150	26	5	13	130-200			
	2525R/L22-130H	●	●	25×25	150	26	5	22	130-200			
	2525R/L13-185H	●	●	25×25	150	26	5	13	185-400			
	2525R/L22-185H	●	●	25×25	150	26	5	22	185-400			
QFHS	2525R/L30-185H	●	●	25×25	150	26	5	30	185-400	ZTHS0504-MG		
QFKD	2525R/L13-60H	●	●	25×25	150	26	6	13	60-100	ZTKD0608-MG ZTKD0608-MM ZRKD06-MG	GB70-85-M6×20	WH50L
	2525R/L22-60H	●	●	25×25	150	26	6	22	60-100			
	2525R/L13-88H	○	●	25×25	150	26	6	13	88-180			
	2525R/L22-88H	●	●	25×25	150	26	6	22	88-180			
	2525R/L13-160H	●	●	25×25	150	26	6	13	160-400			
	2525R/L22-160H	●	●	25×25	150	26	6	22	160-400			
QFKS	2525R/L30-160H	●	●	25×25	150	26	6	30	160-400	ZTKS0608-MG		

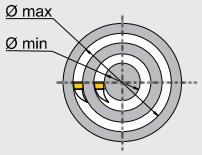
● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug



R type
Rechtsausführung



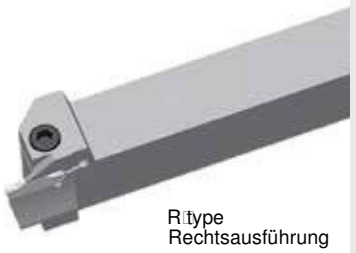


ØD= Range of entering
ØD= Bereich

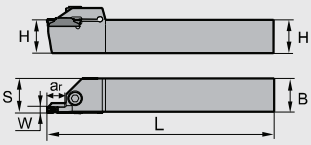
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFFD	2020RR7-48H	○	○	20×20	150	21	3	7	48-66	ZTFD0303-MG ZTFD0303-MM	GB70-85-M6×20	WH50L
	2020RR10-48H	○	○	20×20	150	21	3	10	48-66			
	2525RR10-48H	○	○	25×25	150	26	3	10	48-66			
	2525RR17-48H	○	○	25×25	150	26	3	17	48-66			
	2020RR7-60H	○	○	20×20	150	21	3	7	60-80			
	2020RR10-60H	○	○	20×20	150	21	3	10	60-80			
	2525RR10-60H	○	○	25×25	150	26	3	10	60-80			
	2525RR17-60H	○	○	25×25	150	26	3	17	60-80			
	2020RR7-74H	○	○	20×20	150	21	3	7	74-110			
	2020RR10-74H	○	○	20×20	150	21	3	10	74-110			
	2525RR10-74H	○	○	25×25	150	26	3	10	74-110			
	2525RR17-74H	○	○	25×25	150	26	3	17	74-110			
	2020RR7-100H	○	○	20×20	150	21	3	7	100-150			
	2020RR10-100H	○	○	20×20	150	21	3	10	100-150			
	2525RR10-100H	○	○	25×25	150	26	3	10	100-150			
	2525RR17-100H	○	○	25×25	150	26	3	17	100-150			
QFGD	2020RR10-52H	○	○	20×20	150	21	4	10	52-72	ZTGD0404-MG ZTGD0404-MM		
	2020RR15-52H	○	○	20×20	150	26	4	15	52-72			
	2525RR13-52H	●	○	25×25	150	21	4	13	52-72			
	2525RR22-52H	○	○	25×25	150	26	4	22	52-72			
	2020RR10-64H	○	○	20×20	150	21	4	10	64-100			
	2020RR15-64H	○	○	20×20	150	26	4	15	64-100			
	2525RR13-64H	○	○	25×25	150	21	4	13	64-100			
	2525RR22-64H	○	○	25×25	150	26	4	22	64-100			
	2020RR10-90H	○	○	20×20	150	21	4	10	90-140			
	2020RR15-90H	○	○	20×20	150	26	4	15	90-140			
	2525RR13-90H	○	○	25×25	150	21	4	13	90-140			
	2525RR22-90H	○	○	25×25	150	26	4	22	90-140			
	2020RR10-130H	○	○	20×20	150	21	4	10	130-230			
	2020RR15-130H	●	○	20×20	150	26	4	15	130-230			
	2525RR13-130H	○	○	25×25	150	21	4	13	130-230			
	2525RR22-130H	●	○	25×25	150	26	4	22	130-230			

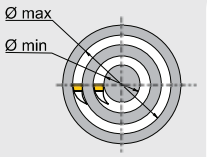
● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug



R type
Rechtsausführung



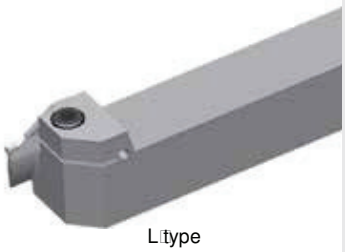


ØD= Range of entering
ØD= Bereich

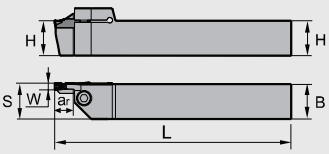
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFHD	2525RR13-58H	○	○	25×25	150	26	5	13	58-96	ZTHD0504-MG ZTHD0504-MM	GB70-85-M6×20	WH50L
	2525RR22-58H	●	○	25×25	150	26	5	22	58-96			
	2525RR13-86H	○	○	25×25	150	26	5	13	86-140			
	2525RR22-86H	○	○	25×25	150	26	5	22	86-140			
	2525RR13-130H	○	○	25×25	150	26	5	13	130-200			
	2525RR22-130H	●	○	25×25	150	26	5	22	130-200			
	2525RR13-185H	○	○	25×25	150	26	5	13	185-400			
	2525RR22-185H	○	○	25×25	150	26	5	22	185-400			
QFHS	2525RR30-185H	○	○	25×25	150	26	5	30	185-400	ZTHS0504-MG		
QFKD	2525RR13-60H	○	○	25×25	150	26	6	13	60-100	ZTKD0608-MG ZTKD0608-MM ZRKD06-MG	GB70-85-M6×20	WH50L
	2525RR22-60H	○	○	25×25	150	26	6	22	60-100			
	2525RR13-88H	○	○	25×25	150	26	6	13	88-180			
	2525RR22-88H	○	○	25×25	150	26	6	22	88-180			
	2525RR13-160H	○	○	25×25	150	26	6	13	160-400			
	2525RR22-160H	○	○	25×25	150	26	6	22	160-400			
QFKS	2525RR30-160H	○	○	25×25	150	26	6	30	160-400	ZTKS0608-MG		

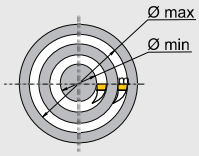
● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug



L type
Rechtsausführung





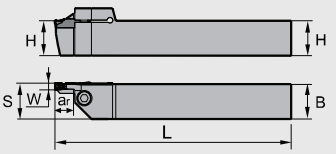
ØD= Range of entering
ØD= Bereich

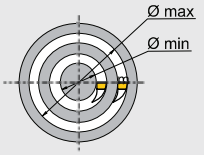
Type Typ		Stock Lager		Dimension (mm) Abmessung						Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
		R	L	H×B	L	S	W	ar max	ØD (min-max)			
QFFD	2020LL7-48H	○	○	20×20	150	21	3	7	48-66	ZTFD0303-MG ZTFD0303-MM	GB70-85-M6×20	WH50L
	2020LL10-48H	○	○	20×20	150	21	3	10	48-66			
	2525LL10-48H	○	●	25×25	150	26	3	10	48-66			
	2525LL17-48H	○	●	25×25	150	26	3	17	48-66			
	2020LL7-60H	○	○	20×20	150	21	3	7	60-80			
	2020LL10-60H	○	○	20×20	150	21	3	10	60-80			
	2525LL10-60H	○	○	25×25	150	26	3	10	60-80			
	2525LL17-60H	○	○	25×25	150	26	3	17	60-80			
	2020LL7-74H	○	○	20×20	150	21	3	7	74-110			
	2020LL10-74H	○	○	20×20	150	21	3	10	74-110			
	2525LL10-74H	○	○	25×25	150	26	3	10	74-110			
	2525LL17-74H	○	○	25×25	150	26	3	17	74-110			
	2020LL7-100H	○	○	20×20	150	21	3	7	100-150			
	2020LL10-100H	○	○	20×20	150	21	3	10	100-150			
	2525LL10-100H	○	○	25×25	150	26	3	10	100-150			
	2525LL17-100H	○	○	25×25	150	26	3	17	100-150			
QFGD	2020LL10-52H	○	○	20×20	150	21	4	10	52-72	ZTGD0404-MG ZTGD0404-MM		
	2020LL15-52H	○	○	20×20	150	26	4	15	52-72			
	2525LL13-52H	○	○	25×25	150	21	4	13	52-72			
	2525LL22-52H	○	○	25×25	150	26	4	22	52-72			
	2020LL10-64H	○	○	20×20	150	21	4	10	64-100			
	2020LL15-64H	○	○	20×20	150	26	4	15	64-100			
	2525LL13-64H	○	●	25×25	150	21	4	13	64-100			
	2525LL22-64H	○	○	25×25	150	26	4	22	64-100			
	2020LL10-90H	○	○	20×20	150	21	4	10	90-140			
	2020LL15-90H	○	○	20×20	150	26	4	15	90-140			
	2525LL13-90H	○	○	25×25	150	21	4	13	90-140			
	2525LL22-90H	○	○	25×25	150	26	4	22	90-140			
	2020LL10-130H	○	○	20×20	150	21	4	10	130-230			
	2020LL15-130H	○	○	20×20	150	26	4	15	130-230			
	2525LL13-130H	○	○	25×25	150	21	4	13	130-230			
	2525LL22-130H	○	●	25×25	150	26	4	22	130-230			

● ex stock · ab Lager ○ on demand · auf Anfrage

Axial grooving and turning tools · Axialstech- & Drehwerkzeug

L type
Linksausführung



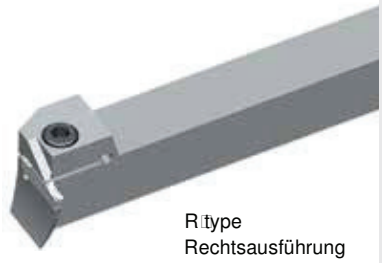


ØD= Range of entering
ØD= Bereich

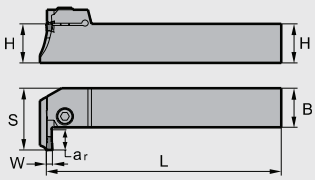
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFHD	2525LL13-58H	○	○	25×25	150	26	5	13	58-96	ZTHD0504-MG ZTHD0504-MM	GB70-85-M6×20	WH50L
	2525LL22-58H	○	●	25×25	150	26	5	22	58-96			
	2525LL13-86H	○	○	25×25	150	26	5	13	86-140			
	2525LL22-86H	○	○	25×25	150	26	5	22	86-140			
	2525LL13-130H	○	○	25×25	150	26	5	13	130-200			
	2525LL22-130H	○	○	25×25	150	26	5	22	130-200			
	2525LL13-185H	○	○	25×25	150	26	5	13	185-400			
	2525LL22-185H	○	○	25×25	150	26	5	22	185-400			
QFHS	2525LL30-185H	○	●	25×25	150	26	5	30	185-400	ZTHS0504-MG		
QFKD	2525LL13-60H	○	○	25×25	150	26	6	13	60-100	ZTKD0608-MG ZTKD0608-MM ZRKD06-MG	GB70-85-M6×20	WH50L
	2525LL22-60H	○	○	25×25	150	26	6	22	60-100			
	2525LL13-88H	○	○	25×25	150	26	6	13	88-180			
	2525LL22-88H	○	○	25×25	150	26	6	22	88-180			
	2525LL13-160H	○	○	25×25	150	26	6	13	160-400			
	2525LL22-160H	○	●	25×25	150	26	6	22	160-400			
QFKS	2525LL30-160H	○	○	25×25	150	26	6	30	160-400	ZTKS0608-MG		

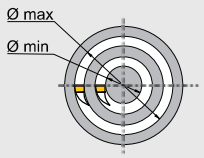
● ex stock · ab Lager ○ on demand · auf Anfrage

L type tools for Axial grooving and turning · L-Typ Axialstech- & Drehwerkzeug



R type
Rechtsausführung



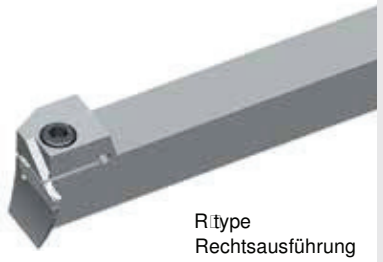


ØD= Range of entering
ØD= Bereich

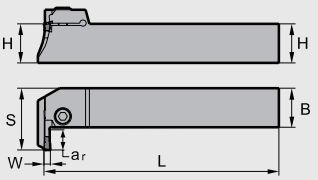
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFFD	2020R/L7-48L	○	○	20×20	150	28.5	3	7	48-66	ZTFD0303-MG ZTFD0303-MM	GB70-85-M6×20	WH50L
	2020R/L10-48L	●	●	20×20	150	31.5	3	10	48-66			
	2525R/L10-48L	●	●	25×25	150	36.5	3	10	48-66			
	2525R/L17-48L	○	○	25×25	150	43.5	3	17	48-66			
	2020R/L7-60L	○	○	20×20	150	28.5	3	7	60-80			
	2020R/L10-60L	●	●	20×20	150	31.5	3	10	60-80			
	2525R/L10-60L	●	○	25×25	150	36.5	3	10	60-80			
	2525R/L17-60L	○	○	25×25	150	43.5	3	17	60-80			
	2020R/L7-74L	○	○	20×20	150	28.5	3	7	74-110			
	2020R/L10-74L	●	○	20×20	150	31.5	3	10	74-110			
	2525R/L10-74L	○	○	25×25	150	36.5	3	10	74-110			
	2525R/L17-74L	○	○	25×25	150	43.5	3	17	74-110			
	2020R/L7-100L	○	○	20×20	150	28.5	3	7	100-150			
	2020R/L10-100L	○	●	20×20	150	31.5	3	10	100-150			
	2525R/L10-100L	○	○	25×25	150	36.5	3	10	100-150			
	2525R/L17-100L	●	○	25×25	150	43.5	3	17	100-150			
QFGD	2020R/L10-52L	○	●	20×20	150	31.5	4	10	52-72	ZTGD0404-MG ZTGD0404-MM		
	2525R/L13-52L	○	○	25×25	150	39.5	4	13	52-72			
	2020R/L15-52L	○	○	20×20	150	36.5	4	15	52-72			
	2525R/L22-52L	○	○	25×25	150	48.5	4	22	52-72			
	2020R/L10-64L	○	○	20×20	150	31.5	4	10	64-100			
	2525R/L13-64L	○	●	25×25	150	39.5	4	13	64-100			
	2020R/L15-64L	○	○	20×20	150	36.5	4	15	64-100			
	2525R/L22-64L	●	○	25×25	150	48.5	4	22	64-100			
	2020R/L10-90L	●	●	20×20	150	31.5	4	10	90-140			
	2525R/L13-90L	○	○	25×25	150	39.5	4	13	90-140			
	2020R/L15-90L	○	○	20×20	150	36.5	4	15	90-140			
	2525R/L22-90L	○	○	25×25	150	48.5	4	22	90-140			
	2020R/L10-130L	●	○	20×20	150	31.5	4	10	130-230			
	2525R/L13-130L	○	○	25×25	150	39.5	4	13	130-230			
	2020R/L15-130L	○	○	20×20	150	36.5	4	15	130-230			
	2525R/L22-130L	●	●	25×25	150	48.5	4	22	130-230			

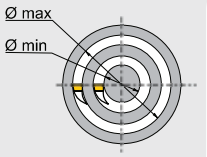
● ex stock · ab Lager ○ on demand · auf Anfrage

L type tools for Axial grooving and turning · L-Typ Axialstech- & Drehwerkzeug



R type
Rechtsausführung



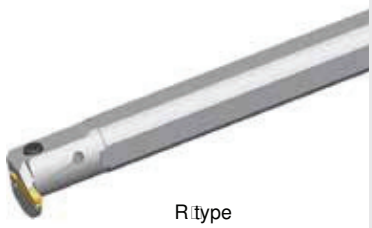


ØD= Range of entering
ØD= Bereich

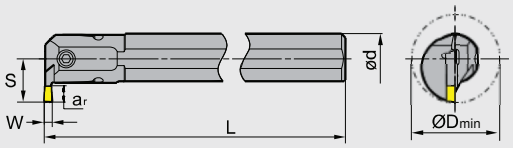
Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H×B	L	S	W	ar max	ØD (min-max)	Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
QFHD	2525R/L13-58L	○	○	25×25	150	39.5	5	13	58-96	ZTHD0504-MG ZTHD0504-MM	GB70-85-M6×20	WH50L
	2525R/L22-58L	○	○	25×25	150	48.5	5	22	58-96			
	2525R/L13-86L	●	○	25×25	150	39.5	5	13	86-140			
	2525R/L22-86L	○	○	25×25	150	48.5	5	22	86-140			
	2525R/L13-130L	○	○	25×25	150	39.5	5	13	130-200			
	2525R/L22-130L	○	○	25×25	150	48.5	5	22	130-200			
	2525R/L13-185L	○	○	25×25	150	39.5	5	13	185-400			
	2525R/L22-185L	○	○	25×25	150	48.5	5	22	185-400			
QFHS	2525R/L30-185L	○	○	25×25	150	56.5	5	30	185-400	ZTHS0504-MG		
QFKD	2525R/L13-60L	○	○	25×25	150	39.5	6	13	60-100	ZTKD0608-MG ZTKD0608-MM	GB70-85-M6×20	WH50L
	2525R/L22-60L	○	●	25×25	150	48.5	6	22	60-100			
	2525R/L13-88L	○	○	25×25	150	39.5	6	13	88-180			
	2525R/L22-88L	○	●	25×25	150	48.5	6	22	88-180			

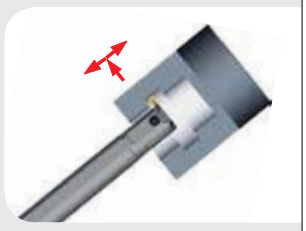
● ex stock · ab Lager ○ on demand · auf Anfrage

Internal grooving and turning tools · Einstech- & Drehwerkzeuge (Innen)



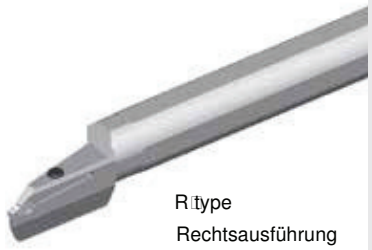
R type
Rechtsausführung



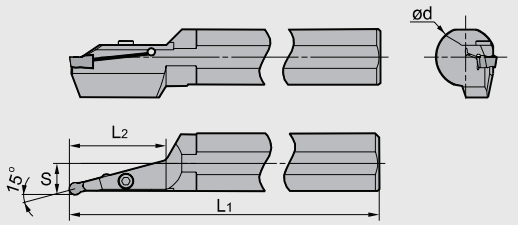


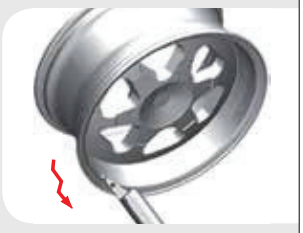
Type Typ	Stock Lager		Dimension (mm) Abmessung						Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
	R	L	ød	L	S	W	a_{rmax}	ØDmin			
C20Q-QEDR/L05-27	●	●	20	180	15.2	2.5	5	27	ZTED02* ZRED025*	GB70-85-M4×12	WH30L
C25R-QEDR/L07-33	●	●	25	200	20.3	2.5	7	33		GB70-85-M5×16	WH40L
C32S-QEDR/L09-42	○	●	32	250	25.3	2.5	9	42		GB70-85-M5×20	
C20Q-QFDR/L05-27	●	●	20	0	15.2	3	5	27	ZTFD03* ZRFD03*	GB70-85-M4×12	WH30L
C25R-QFDR/L07-33	●	●	25	200	20.3	3	7	33		GB70-85-M5×16	WH40L
C32S-QFDR/L09-42	●	●	32	250	25.3	3	9	42		GB70-85-M5×20	
C25R-QGDR/L08-35	●	●	25	200	21.5	4	8	35	ZTGD04* ZRGD04*	GB70-85-M5×16	WH40L
C32S-QGDR/L11-44	●	●	32	250	27.5	4	11	44		GB70-85-M6×20	WH50L
C40T-QGDR/L13-54	●	●	40	300	33.5	4	13	5		GB70-85-M6×20	
C25R-QHDR/L08-35	●	●	25	200	21.5	5	8	35	ZTHD05* ZRHD05*	GB70-85-M5×16	WH40L
C32S-QHDR/L11-44	●	●	32	250	27.5	5	11	44		GB70-85-M6×20	WH50L
C40T-QHDR/L13-54	●	●	40	300	33.5	5	13	54		GB70-85-M6×20	
C25R-QKDR/L08-35	○	●	25	200	21.5	6	8	35	ZTKD06* ZRKD06*	GB70-85-M5×16	WH40L
C32S-QKDR/L11-44	●	●	32	250	27.5	6	11	44		GB70-85-M6×20	WH50L
C40T-QKDR/L13-54	●	●	40	300	33.5	6	13	54		GB70-85-M6×20	

Pro¿ling and turning tools for Al · Pro¿ldreh- & Einstechwerkzeuge für Alu (Innen)



R type
Rechtsausführung



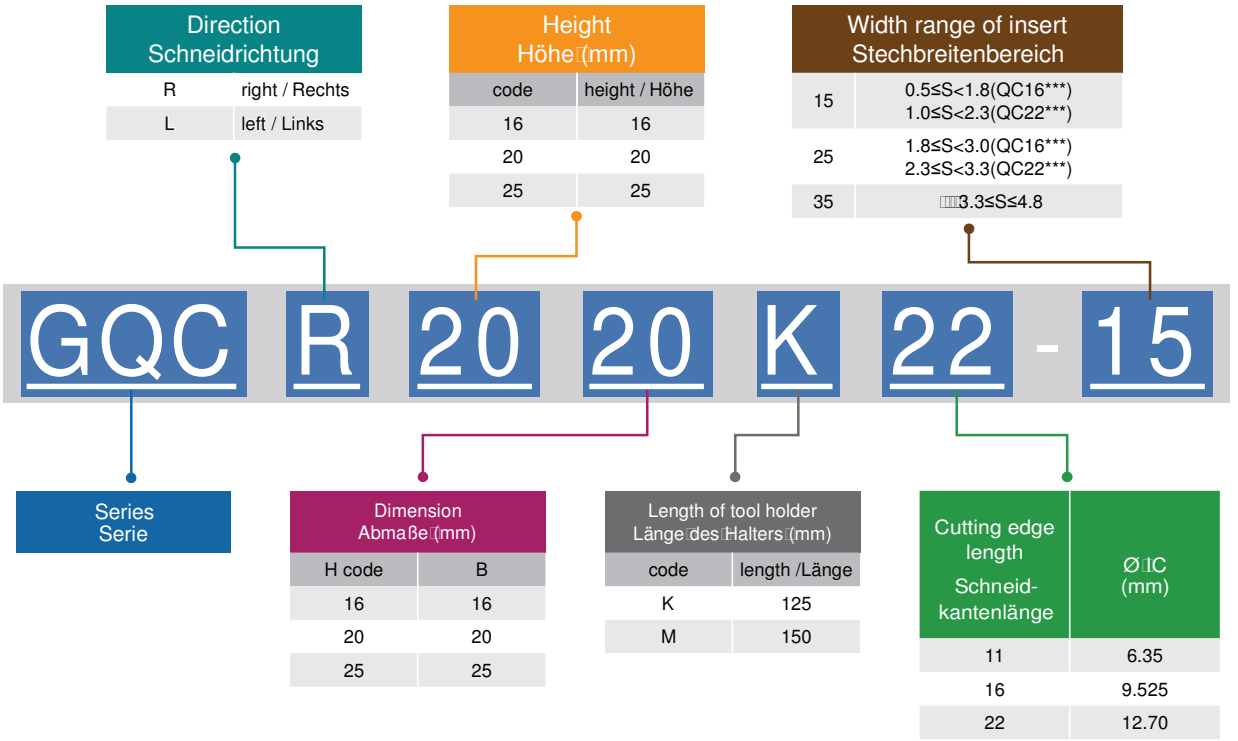


Type Typ	Stock Lager		Dimension (mm) Abmessung					Inserts Stechplatten	Screw Schraube	Wrench Schlüssel
	R	L	ØD ()	ød	S	L_1	L_2			
C40X-QLDR/L65-15A	○	○	160	40	21	320	65	ZRLD08-LH	GB70-85-M6×20	WH50L
C40X-QLDR/L80-15A	○	○	160	40	21	320	80	ZRLD08-LH		
C40X-QKDR/L60-15A	○	○	160	40	20	320	60	ZRKD06-LH		
C40X-QKDR/L75-15A	●	○	160	40	20	320	75	ZRKD06-LH		

● ex stock · ab Lager ○ on demand · auf Anfrage

QC series tools holder code key / QC-Serie Kennzeichnung für Halter

• External grooving / Außen Ein- und Abstechen



Direction Schneidrichtung	
R	right / Rechts
L	left / Links

Height Höhe (mm)	
code	height / Höhe
16	16
20	20
25	25

Width range of insert Stechbreitenbereich	
15	0.5≤S<1.8(QC16***) 1.0≤S<2.3(QC22***)
25	1.8≤S<3.0(QC16***) 2.3≤S<3.3(QC22***)
35	3.3≤S≤4.8

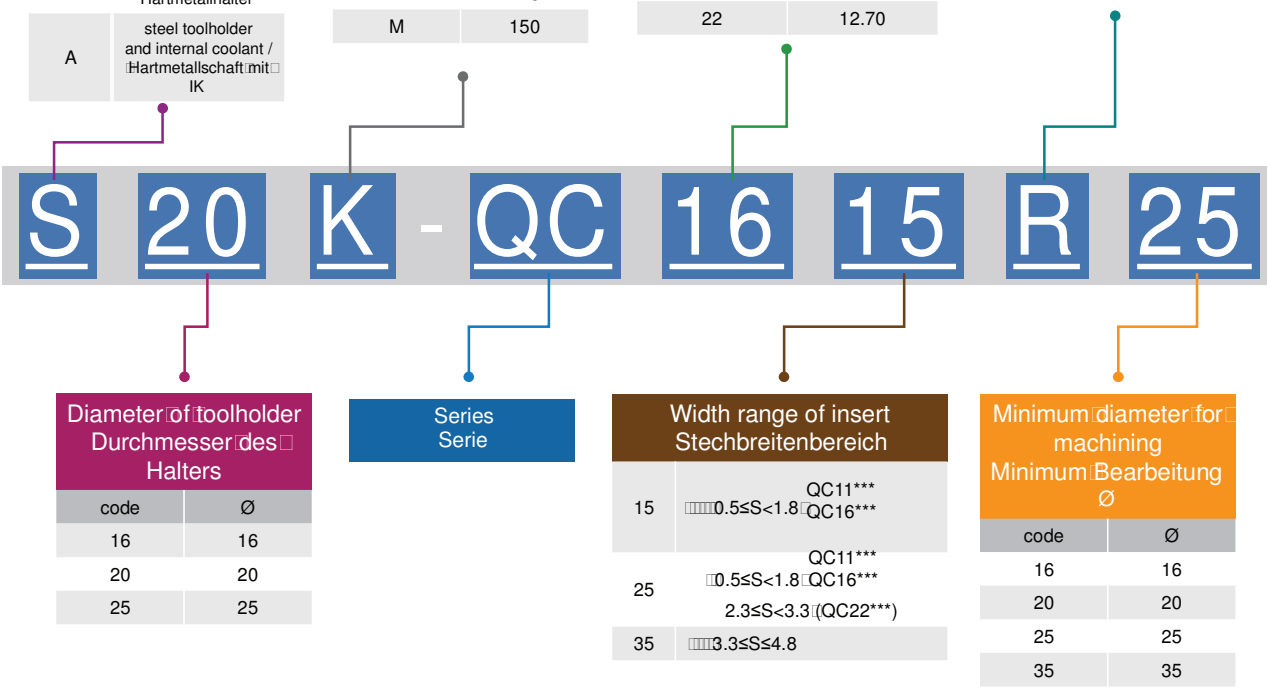
Series Serie

Dimension Abmaße (mm)	
H code	B
16	16
20	20
25	25

Length of tool holder Länge des Halters (mm)	
code	length /Länge
K	125
M	150

Cutting edge length Schneid-kantenlänge	Ø IC (mm)
11	6.35
16	9.525
22	12.70

• Internal grooving / Innen Ein- und Abstechen



Mode of toolholder Ausführung	
code	mode
S	steel / Stahl
C	cemented carbide toolholder / Hartmetallhalter
A	steel toolholder and internal coolant / Hartmetallschaft mit IK

Length of tool holder Länge des Halters (mm)	
code	length / Länge
H	100
K	125
M	150

Cutting edge length Schneid-kantenlänge	Ø IC (mm)
11	6.35
16	9.525
22	12.70

Direction Schneidrichtung	
R	right / Rechts
L	left / Links

Diameter of toolholder Durchmesser des Halters	
code	Ø
16	16
20	20
25	25

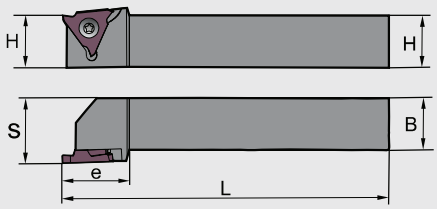
Series Serie

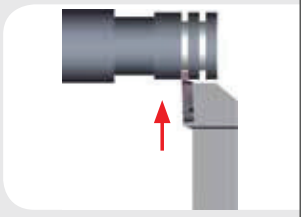
Width range of insert Stechbreitenbereich	
15	0.5≤S<1.8 QC11*** QC16***
25	0.5≤S<1.8 QC11*** QC16*** 2.3≤S<3.3 (QC22***)
35	3.3≤S≤4.8

Minimum diameter for machining Minimum Bearbeitung Ø	
code	Ø
16	16
20	20
25	25
35	35

External grooving / Außen Ein- und Abstechen

Right hand style
Rechtsausführung

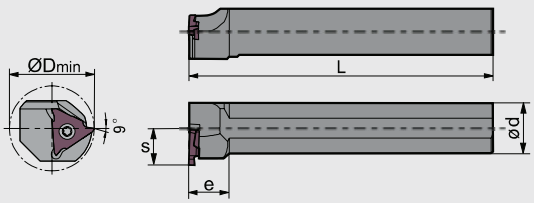


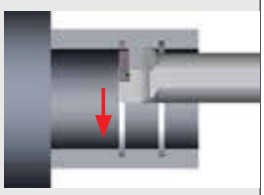


Type Typ		Stock Lager R	Stock Lager L	Dimension (mm) Abmessung H	B	S	e	L	Width Breite (mm)	Inserts Stechplatte	Screw Schraube	Wrench Schlüssel
GQCR/L	1616K16-15	●	●	16	16	21	25.5	125	0.5-1.80	QC16R/L050~180	I60M3.5×10	WT15IP
	2020K16-15	●	●	20	20	25		125				
	2525M16-15	●	●	25	25	30		150				
	1616K16-25	●	●	16	16	21		125	1.8-3.0	QC16R/L180~300		
	2020K16-25	●	●	20	20	25		125				
	2525M16-25	●	●	25	25	30		150				
	2020K22-15	●	●	20	20	25		125	1.0-2.3	QC22R/L100~230	I60M5×13	WT20IP
	2525M22-15	●	●	25	25	30		150				
	2020K22-25	●	●	20	20	25		125	2.3-3.3	QC22R/L230~330		
	2525M22-25	●	●	25	25	30		150				
	2020K22-35	●	●	20	20	25		125	3.3-4.8	QC22R/L330~480		
	2525M22-35	●	●	25	25	30		150				

Internal grooving / Innen Ein- und Abstechen

Right hand style
Rechtsausführung



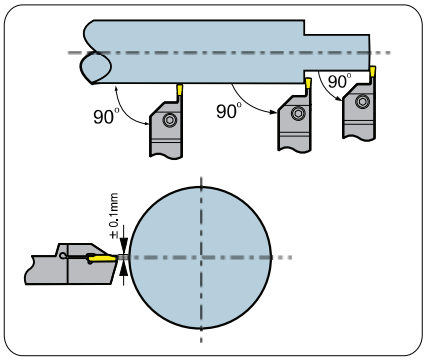


*Right holder with left insert. Left holder with right insert.
Rechter Halter mit linker Wendeschneidplatte. Linker Halter mit rechter Wendeschneidplatte.

Type Typ	Stock Lager R	Stock Lager L	Dimension (mm) Abmessung ØDmin	ød	S	e	L	Width Breite (mm)	Inserts Stechplatte	Screw Schraube	Wrench Schlüssel
S20K-QC1115R/L16	●	●	16	20	11.1	40	125	0.5-1.80	QC11R/L050~180	I60M2.5×6.5	WT07IP
S20K-QC1125R/L16	○	○	16	20	11.1	40	125	1.8-3.0	QC11R/L180~300		
S16H-QC1115R/L20	●	●	21	16	11.5	12	100	0.5-1.80	QC11R/L050~180		
S16H-QC1125R/L20	●	●	21	16	11.5	12	100	1.8-3.0	QC11R/L180~300		
S20M-QC1615R/L25	●	●	26	20	12.5	15	150	0.5-1.80	QC16R/L050~180	I60M3.5×10	WT15IP
S20M-QC1625R/L25	●	●			12.5			1.8-3.0	QC16R/L180~300		
S25M-QC2215R/L35	●	●	35	25	18.2			1.0-2.3	QC22R/L100~230	I60M5×13	WT20IP
S25M-QC2225R/L35	●	●			18.2	20		2.3-3.3	QC22R/L230~330		
S25M-QC2235R/L35	○	●			18.2	20		3.3-4.8	QC22R/L330~480		

● ex stock · ab Lager ○ on demand · auf Anfrage

Center height controlling of parting and grooving tools
Einstellung der Schneidenhöhe beim Ab- & Einstechen



● No matter what kind of parting and grooving cutting tools you choose, you should keep 90° between the insert and the center line of the work-piece material to get perfect machined surface, and to reduce liberation during machining.

● Bitte montieren Sie den Werkzeughalter so, dass er im 90° Winkel zur Mittelachse des Werkstücks steht. Dadurch erhalten Sie eine bessere Oberflächengüte und verringern das Risiko von Schwingungen.

● Height tolerance between the cutting edge of an insert and the center of work piece should be kept ± 0.1mm, especially for the parting of rods and grooving of materials with a small diameter. You achieve a longer tool lifetime and reduce cutting resistance and burrs.

● Bitte montieren Sie Ihren Werkzeughalter so, dass er beim Abstechen oder Einstechen speziell bei Werkstücken mit kleineren Durchmessern im Toleranzbereich von ± 0,1 mm zur Mittelachse steht. Sie erreichen dadurch eine längere Standzeit, reduzieren die Schnittkräfte und Butzenbildung.

Parting · Abstechen

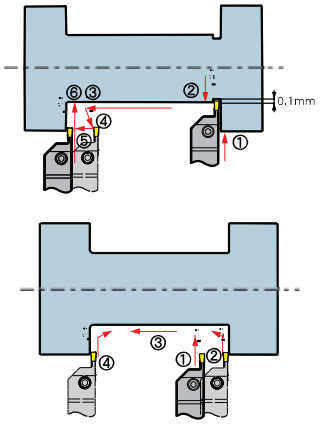
● A reduction of the feedrate by 30% is preferred when the inserts approach the centre of workpiece, prolonging the life-time of the inserts.

● Eine Reduzierung des Vorschubs um 30% bei der Annäherung der Schneide an die Mittelachse des Werkstücks verlängert die Standzeit der Stechplatte.

● A tool holder overhang with as little as possible to insure good stability.

● Werkzeughalter mit kleinstmöglichem Überhang wählen, um Vibrationen und Werkzeugablenkung zu vermeiden.

External grooving, turning and pro¿le turning
Längsdrehen,Pro¿ldrehen



● Cutting sequences: As the cutting depth is bigger than 0.5mm, radial cutting (biggest cutting depth 0.75 x edge width of insert) radial backing 0.1mm axial feed oblique back axial cutting radial cutting to the depth require.

● Bearbeitungsfolge 0,5mm: Radialer Vorschub auf erforderliche Schnitttiefe(ap max. 0.75 x Schneidplattenbreite), radiales Zurücksetzen um 0.1 mm, Längsdrehen zur gegenüberliegenden Schulter, diagonales Zurücksetzen um 0.5mm nach außen axial Vorschub bis zum Startpunkt, radialer Vorschub auf erforderliche Schnitttiefe usw.

● When cutting bottom border or chamfering, do what the sketch show, reducing liberation by the friction of cutting tools with chippings.

● Beim Drehen des Nutgrundes oder der Fase befolgen Sie die nebenstehenden Arbeitsschritte. Dies reduziert die Auslenkung des Werkzeuges und verhindert Schneidkantenausbrüche.

Surface grooving and turning · Axialeinstechen

Roughing · Schruppen

● Infeed from largest Ø inwards insert offset slightly from inner side of groove when retracting as shown in sketch (1).

● Bearbeitung vom größten Ø zur Achse hin. Beim Zurückfahren des Werkzeugs emp¿ehlt es sich, diese leicht abzuwinkeln.

Flute turning · Nutendrehen

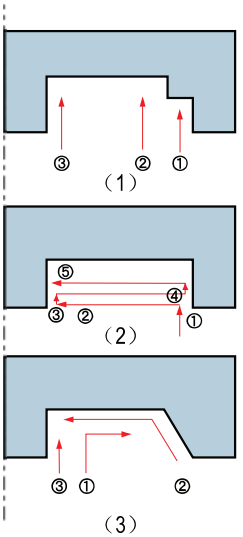
● Depth of axial turning less than 0.75 x S (Width of insert)
width > depth of breaker, suggest to do as shown in sketch (2)
depth > width of breaker, suggest to cut with a lot breaker.

● Spantiefe bei axialem Vorschub kleiner als 0.75 x S (Breite des Schneideinsatzes)
Wenn die Kammerbreite größer ist als die Tiefe, folgen Sie den abgebildeten Arbeitsschritten. Wenn die Kammertiefe größer ist als die Breite, empfehlen wir in einzelnen Schritten auf den geforderten Ø zu stechen (2).

Finishing · Schlichten

● Finish machining external Ø and bottom ¿rstly, then machining the internal Ø to the size reqired as shown in sketch (3).

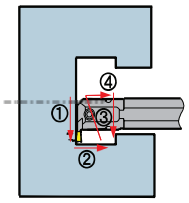
● Zum Schlichten bearbeiten Sie zuerst den äußeren Ø und den Grund. Anschließend bearbeiten Sie den inneren Ø bis zur erforderlichen Größe Skizze (3).



Internal grooving · Innenbearbeitung

● Follow the machining sequence as shown in the picture.
Good for chip flow, always feed along the direction of moving from the deepest in the hole to outside.

● Bearbeitungsfolge gemäß Skizze. Bei der Bearbeitung von Sackbohrungen, sollte zur besseren Spanabfuhr von innen nach außen gearbeitet werden.



Recommended cutting parameters · Empfohlene Schnittparameter

Inserts Size Stechplatte Größe	Recommended feed rate (mm/rev) Empfohlener Vorschub (mm/U)			
Inserts width(mm) Stechplatte Breite	Parting Abstechen	Grooving Einstechen	Turning Drehen	Pro¿ling Pro¿ldrehen
2.5	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15
3	0.05-0.15	0.05-0.15	0.07-0.15	0.1-0.2
4	0.05-0.2	0.05-0.2	0.07-0.25	0.1-0.2
5	0.07-0.2	0.07-0.22	0.1-0.25	0.15-0.3
6	0.1-0.3	0.07-0.25	0.1-0.3	0.15-0.3

Workpiece Material Werkstück Material		Hardness Härte	YBG302	YBG202	YBC151	YBC251	YD101	YD201	YBG102	YC10	YC40
P	Carbon steel Kohlenstoffstahl	125≤HB≤170	120-260	150-280	140-280	150-280				130-280	110-260
	Low alloy steel Niedrig legierter Stahl	180≤HB≤275	80-175	110-200	100-240	110-200				90-200	70-175
	High alloy steel Hoch legierter Stahl	180≤HB≤325	80-160	110-190	100-220	110-190				90-190	70-160
	Cast steel Stahlguss	180≤HB≤250	75-140	100-170	80-160	100-170				80-170	60-140
M	Ferrite Martensite	200≤HB≤300	70-170	100-200		100-200				80-200	60-170
	Austenitic Austenite	180≤HB≤300	80-200	110-220		110-220				90-220	70-200
K	Malleable cast iron Temperguss	130≤HB≤230	100-200	130-220				90-160			
	Grey cast iron Grauguss	180≤HB≤220	90-170	120-200				80-140			
	Nodular cast iron Kugelgra¿tguss	160≤HB≤250	80-150	110-180				60-140			
N	Al alloy Alu-Legierung	--					200-400				
S	Heat resistant alloy Hitzebeständigen Legierungen	≤400					20-50		30-60		

The cutting parameters recommended are suitable for wet machining.
Die angegebenen Schnittparameter werden für die Bearbeitung mit KühlÀussigkeit empfohlen.
Advice: internal machining and Axial machining, The cutting speed should be reduced by 30%-40%.
Hinweis: Bei Innen- und Axialstechen, sollte die Schnittgeschwindigkeit um 30%-40% reduziert werden.