



SWISS  TOOLS[®]

S W I S S
V A R I A
2201



Grundmodule / Master shanks / Modules de base



DIN 69 871-AD/B

12



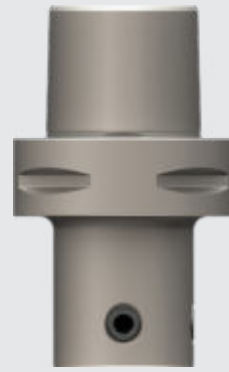
MAS BT JIS B 6339

13



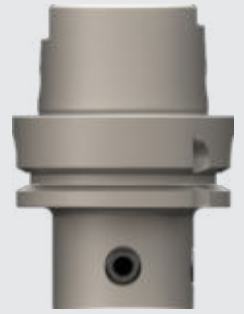
DIN 2080

15



ISO 26623-1 PSC

14



DIN 69 893 HSK

14

Zwischenmodule / Intermediate modules / Modules intermédiaires



16



17

ø 0.3-19.1 mm



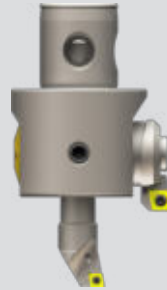
18-20

ø 3-88 mm



21-22

ø 3-101 mm

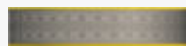


23-24

ø 3-320 mm



25



33



29



27



28



30



31-32



25



▣4



▣5



▣6-10



▣60-63

∅ 23-153 mm



▣46-48



▣49-50

∅ 14.7-203 mm

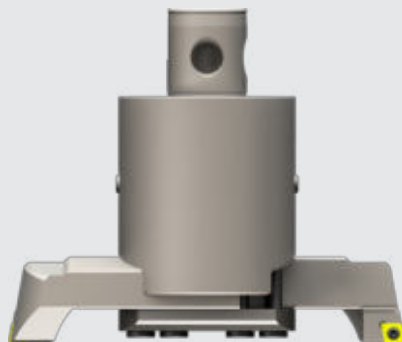


▣35-40



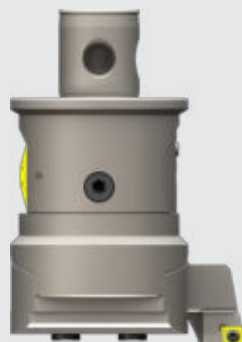
▣41-43

∅ 86-402 mm



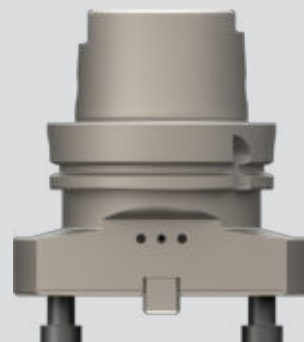
▣52

∅ 86-402 mm

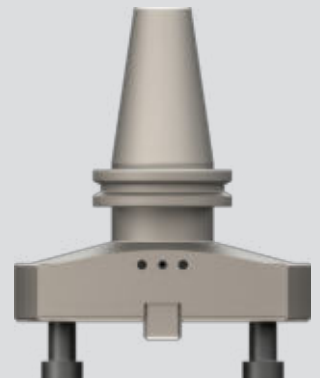


▣44-45

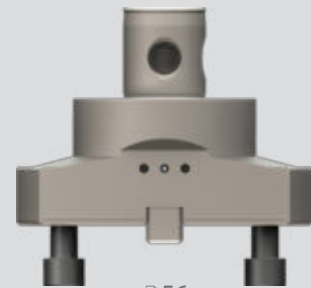
∅ 150-2205 mm



▣56



▣56



▣56



▣55-56



▣58

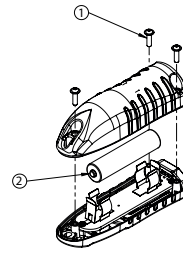


▣59

C09
Anzeigeeinheit
DIGITAL

Display unit
DIGITAL

Unité d'affichage
DIGITAL



Bestell-Nr. /
 Order number/
 Code

C09.028.024.077

①

②

J00.309.022.008

J00.308.011.045

- ein Display für alle Feinbohrköpfe Ø 0.3 mm - 2205.0 mm
- Anzeige umkehrbar (Links-/ Rechtshänder)
- mm/inch umschaltbar
- Standard AAA Batterie zur Stromversorgung
- Display wird über Magnetkraft am Werkzeug gehalten
- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar

- one display for all fine boring heads diameter 0.3 mm – 2205 mm
- display reversible (LH/RH)
- mm/inch switchable
- standard AAA battery required
- display unit will docked with magnetic forces at the tool
- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use

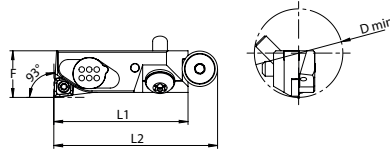
- un seul display pour toutes les têtes d'alésage fin Ø 0.3 mm - 2205.0 mm
- display réversible (gaucher/droitier)
- mm/pouce commutable
- Pile AAA standard pour l'alimentation
- Le display est maintenu sur l'outil par force magnétique
- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique



KKH
Feinbohr-Kurzklemmhalter
DIGITAL

fine boring module
DIGITAL

Module d'alésage fin à réglage
DIGITAL



Bestell-Nr. / Order number/ Code	F	D MIN	L1	L2	Wendepatte / Insert / Plaquette	kg
KKH.WCA.016.045	16	25	45	55	CC .. 06 02 ..	0.2

- Einfaches Handling
- Präzise Masskorrektur
- Direktes Weg-Messsystem
- Wartungsfrei

- Easy handling
- Precise adjustment
- No backlash
- Maintenance-free

- Manipulation facile
- Réglage précis
- Sans jeu
- Sans entretien

- Feinverstellung digitale Anzeige 0.001mm
- Radialer Verstellweg: min. 0,4 mm
- Axiale Längenverstellung: 1.5 mm über Keilelement
- Drehzahl: max.10.000 U/min
- Innenkühlung direkt auf die Werkzeugschneide

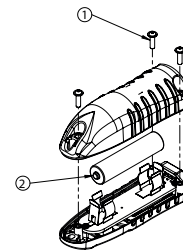
- Fine adjustment digital display 0.001mm
- Radial adjustment: min. 0.4 mm
- Axial length adjustment: 1.5 mm
- Speed: max.10.000 rpm
- Internal cooling directly on the tool cutting edge

- Affichage numérique du réglage fin 0.001mm
- Ajustement radial: min. 0.4 mm
- Ajustement longueur axiale : 1.5 mm
- Vitesse: max.10.000 rpm
- Arrosage interne directement sur l'arête de coupe de l'outil

GH1
Anzeigeeinheit
Feinbohr-Kurzklemmhalter

Display unit
fine boring module

Unité d'affichage
Module d'alésage fin à réglage



Bestell-Nr. / Order number/ Code	1	2
GH1.DA4.BGK.077	J00.309.022.008	J00.308.011.045

- ein Display für alle Feinbohrköpfe Ø 0.3 mm - 2205.0 mm
- Anzeige umkehrbar (Links-/ Rechtshänder)
- mm/inch umschaltbar
- Standard AAA Batterie zur Stromversorgung
- Display wird über Magnetkraft am Werkzeug gehalten
- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar

- one display for all fine boring heads diameter 0.3 mm – 2205 mm
- display reversible (LH/RH)
- mm/inch switchable
- standard AAA battery required
- display unit will docked with magnetic forces at the tool
- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use

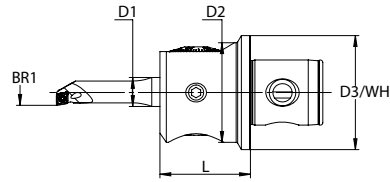
- un seul display pour toutes les têtes d'alésage fin Ø 0.3 mm - 2205.0 mm
- display réversible (gaucher/droitier)
- mm/pouce commutable
- Pile AAA standard pour l'alimentation
- Le display est maintenu sur l'outil par force magnétique
- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique

G85

Feinbohr-Set Ø 9.75-30.1mm

Fine boring set Ø 9.75-30.1mm

Jeux d'outils Ø 9.75-30.1mm



Bestell-Nr. / Order number/ Code	D3/WH System	D2	BR1 min.	BR1 max.	L (A)	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G85.050.010.030	WH5	55	3	88.1	50	16	1.1	B04.050.025.050
G85.063.010.030	WH6	55	3	88.1	50	16	1.1	B04.063.025.050
DIN 69893 HSK 63 A								
G85.163.010.030	HSK 63 A	55	3	88.1	95	16	1.7	B08.806.055.095
DIN 69871 AD 40								
G85.415.010.030	ISO 40	55	3	88.1	90	16	2.1	B08.440.055.090
MAS BT 40								
G85.412.010.030	BT40	55	3	88.1	90	16	2.2	B08.540.055.090

bestehend aus / consisting on / comprenant

Ausdrehstähle / Boring bars / Barres d'alésage	Ø9.75-15.1	B54.010.006.075
	Ø14.75-20.1	B54.015.006.090
	Ø19.75-25.1	B54.020.006.105
	Ø24.75-30.1	B54.025.006.115
Bedienschlüssel / Service keys / Clôs de service	SW5 / T7	
Kunststoffkoffer / Plastic case / Coffret		

G89

DIGITAL

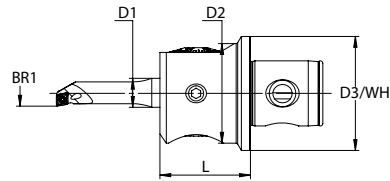
Feinbohr-Set Ø 9.75-30.1mm

DIGITAL

Fine boring set Ø 9.75-30.1mm

DIGITAL

Jeux d'outils Ø 9.75-30.1mm



Bestell-Nr. / Order number/ Code	D3/WH System	D2	BR1 min.	BR1 max.	L (A)	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G89.050.010.030	WH5	55	3	88.1	50	16	1.1	B06.050.025.050
G89.063.010.030	WH6	55	3	88.1	50	16	1.1	B06.063.025.050
DIN 69893 HSK 63 A								
G89.163.010.030	HSK 63 A	55	3	88.1	95	16	1.7	B09.806.055.095
DIN 69871 AD 40								
G89.415.010.030	ISO 40	55	3	88.1	90	16	2.1	B09.440.055.090
MAS BT 40								
G89.412.010.030	BT40	55	3	88.1	90	16	2.2	B09.540.055.090

bestehend aus / consisting on / comprenant

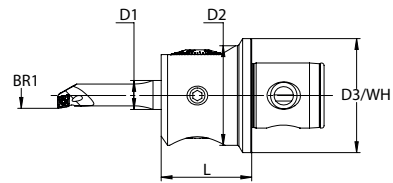
Ausdrehstähle / Boring bars / Barres d'alésage	Ø9.75-15.1	B54.010.006.075
	Ø14.75-20.1	B54.015.006.090
	Ø19.75-25.1	B54.020.006.105
	Ø24.75-30.1	B54.025.006.115
Bedienschlüssel / Service keys / Clôs de service	SW5 / T7	
Kunststoffkoffer / Plastic case / Coffret		
Anzeigeeinheit / Display unit / Unité d'affichage		C09.028.024.077

G86

Feinbohr-Set Ø 9.75-88.1mm

Fine boring set Ø 9.75-88.1mm

Jeux d'outils Ø 9.75-88.1mm



Bestell-Nr. / Order number / Code	D3/WH System	D2	BR1 min.	BR1 max.	L (A)	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G86.050.010.088	WH5	55	3	88.1	50	16	1.1	B04.050.025.050
G86.063.010.088	WH6	55	3	88.1	50	16	1.1	B04.063.025.050
DIN 69893 HSK 63 A								
G86.163.010.088	HSK 63 A	55	3	88.1	95	16	1.7	B08.806.055.095
DIN 69871 AD 40								
G86.415.010.088	ISO 40	55	3	88.1	90	16	2.1	B08.440.055.090
MAS BT 40								
G86.412.010.088	BT40	55	3	88.1	90	16	2.2	B08.540.055.090

bestehend aus / consisting on / comprenant

Ausdrehstäbe / Boring bars / Barres d'alésage	Ø9.75-15.1	B54.010.006.075	Ø14.75-20.1	B54.015.006.090
	Ø19.75-25.1	B54.020.006.105	Ø24.75-30.1	B54.025.006.115
Schaft / Shank / Corps d'acier	Ø29.75-48.1	B56.030.048.115	Ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	Ø29.75-48.1	B56.030.006.012	Ø47.75-88.1	B56.048.006.014
Bedienschlüssel / Service keys / Clôs de service	SW4 / SW5 / T7			
Kunststoffkoffer / Plastic case / Coffret				

G89

DIGITAL

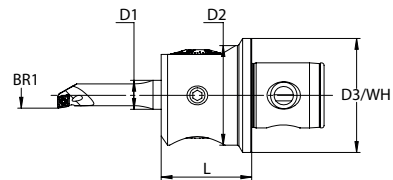
Feinbohr-Set Ø 9.75-88.1mm

DIGITAL

Fine boring set Ø 9.75-88.1mm

DIGITAL

Jeux d'outils Ø 9.75-88.1mm



Bestell-Nr. / Order number / Code	D3/WH System	D2	BR1 min.	BR1 max.	L (A)	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G89.050.010.088	WH5	55	3	88.1	50	16	1.1	B06.050.025.050
G89.063.010.088	WH6	55	3	88.1	50	16	1.1	B06.063.025.050
DIN 69893 HSK 63 A								
G89.163.010.088	HSK 63 A	55	3	88.1	95	16	1.7	B09.806.055.095
DIN 69871 AD 40								
G89.415.010.088	ISO 40	55	3	88.1	90	16	2.1	B09.440.055.090
MAS BT 40								
G89.412.010.088	BT40	55	3	88.1	90	16	2.2	B09.540.055.090

bestehend aus / consisting on / comprenant

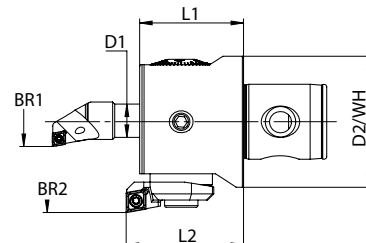
Ausdrehstäbe / Boring bars / Barres d'alésage	Ø9.75-15.1	B54.010.006.075	Ø14.75-20.1	B54.015.006.090
	Ø19.75-25.1	B54.020.006.105	Ø24.75-30.1	B54.025.006.115
Schaft / Shank / Corps d'acier	Ø29.75-48.1	B56.030.048.115	Ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	Ø29.75-48.1	B56.030.006.012	Ø47.75-88.1	B56.048.006.014
Bedienschlüssel / Service keys / Clôs de service	SW4 / SW5 / T7			
Kunststoffkoffer / Plastic case / Coffret				
Anzeigeeinheit / Display unit / Unité d'affichage	C09.028.024.077			

G83

Feinbohr-Set Ø 9.75-101(152)mm

Fine boring set Ø 9.75-101(152)mm

Jeux d'outils Ø 9.75-101(152)mm



Bestell-Nr. / Order number/ Code	D2/WH	BR1 min. - max.	BR2 min. - max.	L1	L2	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G83.063.010.101	WH6	3 - 88.1	87.75 - 152.1	501	57	16	1.5	B05.063.025.050
VARIO ER40								
G83.001.010.101	63 /ER40	3 - 88.1	87.75 - 152.1	501	57	16	1.5	B05.040.003.152

ECO LINE

bestehend aus / consisting on / comprenant

Ausdrehstäbe / Boring bars / Barres d'alésage	ø9.75-20.1	B54.010.006.075		
	ø19.75-30.1	B54.020.006.105		
Schaft / Shank / Corps d'acier	ø29.75-48.1	B56.030.048.115	ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	ø29.75-48.1	B56.030.006.012	ø47.75-88.1	B56.048.006.014
	ø 87.75 - 101.1	C14.726.001.009		
Kühlmitteleinsatz / Coolant plug		J00.805.000.032		
Bedienschlüssel / Service keys / Clös de service	SW2.5/4/5/8/T7/ T15			
Kunststoffkoffer / Plastic case / Coffret				

G89

DIGITAL

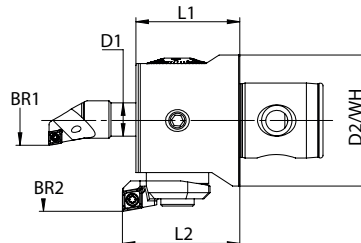
Feinbohr-Set Ø 9.75-101(152)mm

DIGITAL

Fine boring set Ø 9.75-101(152)mm

DIGITAL

Jeux d'outils Ø 9.75-101(152)mm

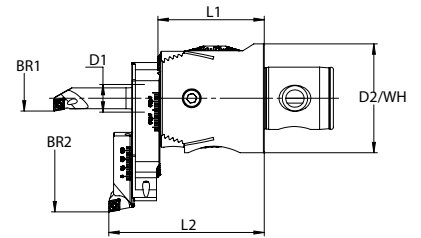


Bestell-Nr. / Order number/ Code	D2/WH	BR1 min. - max.	BR2 min. - max.	L1	L2	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular								
G89.063.010.101	WH6	3 - 88.1	87.75 - 152.1	501	57	16	1.5	B07.063.025.050

bestehend aus / consisting on / comprenant

Ausdrehstäbe / Boring bars / Barres d'alésage	ø9.75-20.1	B54.010.006.075		
	ø19.75-30.1	B54.020.006.105		
Schaft / Shank / Corps d'acier	ø29.75-48.1	B56.030.048.115	ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	ø29.75-48.1	B56.030.006.012	ø47.75-88.1	B56.048.006.014
	ø 87.75 - 101.1	C14.726.001.009		
Kühlmitteleinsatz / Coolant plug		J00.805.000.032		
Bedienschlüssel / Service keys / Clös de service	SW2.5/4/5/8/T7/ T15			
Kunststoffkoffer / Plastic case / Coffret				
Anzeigeeinheit / Display unit / Unité d'affichage		C09.028.024.077		

G88
Feinbohr-Set Ø 9.75-164(320)mm **Fine boring set Ø 9.75-164(320)mm** **Jeux d'outils Ø 9.75-164(320)mm**

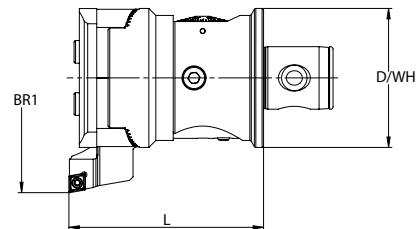


Bestell-Nr. / Order number / Code	WH CSMS	D2	BR1 min.- max.	BR2 min.- max.	L1	L2	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH6 modular									
G88.063.010.164	WH6	63	3 - 88.1	86 - 320	60	89	16	1.5	B10.063.025.060
DIN 69893 HSK 63 A									
G88.163.010.164	HSK 63 A	63	3 - 88.1	86 - 320	96	125	16	2.0	B10.806.063.095
DIN 69871 AD 40									
G88.415.010.164	ISO 40	63	3 - 88.1	86 - 320	91	120	16	2.2	B10.440.063.090
MAS BT 40									
G88.412.010.164	BT40	63	3 - 88.1	86 - 320	91	120	16	2.2	B10.540.063.090

bestehend aus / consisting on / comprenant

Ausdrehstäble / Boring bars / Barres d'alésage	ø9.75-15.1	B54.010.006.075	ø14.75-20.1	B54.015.006.090
	ø19.75-25.1	B54.020.006.105	ø24.75-30.1	B54.025.006.115
Schaft / Shank / Corps d'acier	ø29.75-48.1	B56.030.048.115	ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	ø29.75-48.1	B56.030.006.012	ø47.75-88.1	B56.048.006.014
Brücke / Bridge Traverse	ø80	B12.086.164.080		
Bedienschlüssel / Service keys / Clés de service	SW4 / SW5 / T7			
Kunststoffkoffer / Plastic case / Coffret				

G90
Feinbohr-Set Ø 86-302 mm **Fine boring set Ø 86-302 mm** **Jeux d'outils Ø 86-302 mm**



Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	WH	L	D	kg	Feinbohrkopf Fine boring head Tête d'alésage fin
WH modular							
G90.080.086.302	86	402	WH6/8	112	80	2.8	C44.080.086.112

bestehend aus / consisting on / comprenant

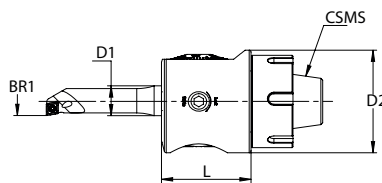
Wendeplattenhalter / Insert holder / Porte plaq.	ø86-138	J00.354.086.009
	ø136-220	J00.354.136.009
	ø188-302	J00.354.188.009
Abstützung / Support block		J00.354.020.086
		J00.354.020.136
Druckplatte / Clamp plate		J00.354.010.086
		J00.354.010.136
Bedienschlüssel / Service keys / Clés de service	SW5 / T15	
Kunststoffkoffer / Plastic case / Coffret		

G85

Feinbohr-Set Ø 9.75-30.1mm

Fine boring set Ø 9.75-30.1mm

Jeux d'outils Ø 9.75-30.1mm



Bestell-Nr. / Order number/ Code	CSMS	D2	BR1 min.	BR1 max.	L	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin	ECO LINE
SMART ER32									
G85.032.010.030	ER32	55	3	88.1	60	16	1.0	B11.032.055.060	

bestehend aus / consisting on / comprenant

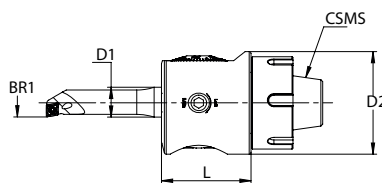
Ausdrehstähle / Boring bars / Barres d'alésage	ø9.75-15.1	B54.010.006.075
	ø14.75-20.1	B54.015.006.090
	ø19.75-25.1	B54.020.006.105
	ø24.75-30.1	B54.025.006.115
Bedienschlüssel / Service keys / Clös de service	SW5 / T7	
Kunststoffkoffer / Plastic case / Coffret		

G85

Feinbohr-Set Ø 9.75-88.1mm

Fine boring set Ø 9.75-88.1mm

Jeux d'outils Ø 9.75-88.1mm



Bestell-Nr. / Order number/ Code	CSMS	D2	BR1 min.	BR1 max.	L	D1	kg	Feinbohrkopf Fine boring head Tête d'alésage fin	ECO LINE
SMART ER32									
G85.032.010.088	ER32	55	3	88.1	60	16	1.0	B11.032.055.060	

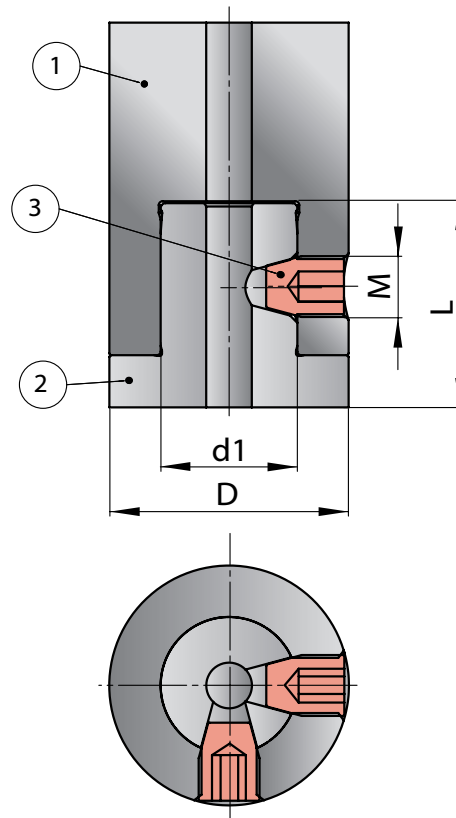
bestehend aus / consisting on / comprenant

Ausdrehstähle / Boring bars / Barres d'alésage	ø9.75-15.1	B54.010.006.075	ø14.75-20.1	B54.015.006.090
	ø19.75-25.1	B54.020.006.105	ø24.75-30.1	B54.025.006.115
Schaft / Shank / Corps d'acier	ø29.75-48.1	B56.030.048.115	ø47.75-88.1	B56.048.088.115
Wendeplattenhalter / Insert holder / Porte plaq.	ø29.75-48.1	B56.030.006.012	ø47.75-88.1	B56.048.006.014
Bedienschlüssel / Service keys / Clös de service	SW4 / SW5 / T7			
Kunststoffkoffer / Plastic case / Coffret				

Durch die seitlichen Spannschrauben (3) wird der Zapfen (2) in die Aufnahme (1) gezogen. Dank grosser Auflageflächen und hoher Vorspannung wird eine sehr grosse Steifigkeit erzielt.

The male pilot (2) will be clamped into the female receptacle (1) by using radial clamping screws (3). A very high rigidity is achieved by a big contact surface and high prestress.

Le pilote mâle (2) sera serré dans la pièce femelle (1) à l'aide de vis de serrage radiales (3). Une très grande rigidité est obtenue par une grande surface de contact et une forte pré-charge.

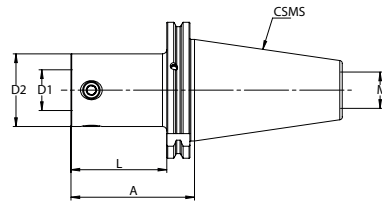



Während die Dimensionen WH1 und WH2 jeweils nur eine Spannschraube aufweisen, kommen ab WH3 zwei um 90° versetzte Spannschrauben zum Einsatz.

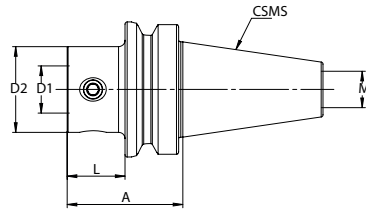
Meanwhile dimensions WH1 and WH2 are each containing just one clamping screw, WH3 and following dimensions are featuring two of these, shifted at 90°.


Alors que les dimensions WH1 et WH2 ne contiennent chacune qu'une seule vis de serrage, les dimensions WH3 et suivantes en comportent deux, décalées de 90°.

Dimensionen		Dimensions			③
WH	D	d1	L	M	Anzugsdrehmoment / Torque
WH1	20	11	13	M5x0.5	3.5Nm
WH2	25	14	18	M8x1	12Nm
WH3	32	18	22	M8x1	12Nm
WH4	40	22	28	M10x1	22Nm
WH5	50	28	28	M12x1	25Nm
WH6	63	36	40	M16x1.5	30Nm
WH8	80	36	40	M16x1.5	30Nm



Bestell-Nr. / Order number/ Code	CSMS ISO	WH	D2	D1	A	L	M	kg	
A14.430.050.048	30	WH5	50	28	48	28.9	M12	0.60	J00.100.012.017 (25 Nm)
A14.440.020.046	40	WH1	20	11	46	26.9	M16	0.87	J00.100.005.008 (3.5 Nm)
A14.440.020.085	40	WH1	20	11	85	65.9	M16	0.97	J00.100.005.008 (3.5 Nm)
A14.440.025.046	40	WH2	25	14	46	26.9	M16	0.90	J00.100.008.008 (12 Nm)
A14.440.025.085	40	WH2	25	14	85	65.9	M16	1.04	J00.100.008.008 (12 Nm)
A14.440.025.120	40	WH2	25	14	120	100.9	M16	1.17	J00.100.008.008 (12 Nm)
A14.440.032.046	40	WH3	32	18	46	26.9	M16	0.93	J00.100.008.010 (12 Nm)
A14.440.032.085	40	WH3	32	18	85	65.9	M16	1.17	J00.100.008.010 (12 Nm)
A14.440.032.120	40	WH3	32	18	120	100.9	M16	1.38	J00.100.008.010 (12 Nm)
A14.440.040.046	40	WH4	40	22	46	26.9	M16	0.99	J00.100.010.015 (22 Nm)
A14.440.040.100	40	WH4	40	22	100	80.9	M16	1.50	J00.100.010.015 (22 Nm)
A14.440.050.046	40	WH5	50	28	46	26.9	M16	1.07	J00.100.012.017 (25 Nm)
A14.440.050.100	40	WH5	50	28	100	80.9	M16	1.87	J00.100.012.017 (25 Nm)
A14.440.063.066	40	WH6	63	36	66	46.9	M16	1.42	J00.100.016.021 (30 Nm)
A14.450.025.085	50	WH2	25	14	85	65.9	M24	2.82	J00.100.008.008 (12 Nm)
A14.450.032.046	50	WH3	32	18	46	26.9	M24	2.76	J00.100.008.010 (12 Nm)
A14.450.032.100	50	WH3	32	18	100	80.9	M24	3.05	J00.100.008.010 (12 Nm)
A14.450.040.046	50	WH4	40	22	46	26.9	M24	2.81	J00.100.010.015 (22 Nm)
A14.450.040.100	50	WH4	40	22	100	80.9	M24	3.31	J00.100.010.015 (22 Nm)
A14.450.050.046	50	WH5	50	28	46	26.9	M24	2.89	J00.100.012.017 (25 Nm)
A14.450.050.085	50	WH5	50	28	85	65.9	M24	3.48	J00.100.012.017 (25 Nm)
A14.450.050.120	50	WH5	50	28	120	100.9	M24	3.98	J00.100.012.017 (25 Nm)
A14.450.063.066	50	WH6	63	36	66	46.9	M24	3.39	J00.100.016.021 (30 Nm)
A14.450.063.100	50	WH6	63	36	100	80.9	M24	4.19	J00.100.016.021 (30 Nm)
A14.450.080.046	50	WH8	80	36	46	26.9	M24	3.29	J00.100.016.029 (30 Nm)
A14.450.080.085	50	WH8	80	36	85	65.9	M24	4.79	J00.100.016.029 (30 Nm)



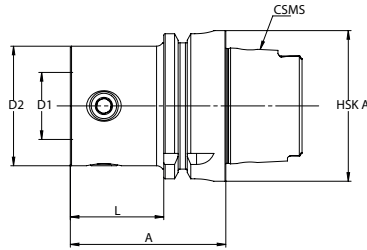
Bestell-Nr. / Order number / Code	CSMS BT	WH	D2	D1	A	L	M	kg	
A34.530.050.049	30	WH5	50	28	49	27	M12	0.6	J00.100.012.017 (25 Nm)
A34.540.020.054	40	WH1	20	11	54	27	M16	1.0	J00.100.005.008 (3.5 Nm)
A34.540.020.093	40	WH1	20	11	93	66	M16	1.1	J00.100.005.008 (3.5 Nm)
A34.540.025.054	40	WH2	25	14	54	27	M16	1.1	J00.100.008.008 (12 Nm)
A34.540.025.093	40	WH2	25	14	93	66	M16	1.3	J00.100.008.008 (12 Nm)
A34.540.025.127	40	WH2	25	14	127	100	M16	1.2	J00.100.008.008 (12 Nm)
A34.540.032.054	40	WH3	32	18	54	27	M16	1.1	J00.100.008.010 (12 Nm)
A34.540.032.093	40	WH3	32	18	93	66	M16	1.3	J00.100.008.010 (12 Nm)
A34.540.032.127	40	WH3	32	18	127	100	M16	1.5	J00.100.008.010 (12 Nm)
A34.540.040.054	40	WH4	40	22	54	27	M16	1.2	J00.100.010.015 (22 Nm)
A34.540.040.107	40	WH4	40	22	107	80	M16	1.7	J00.100.010.015 (22 Nm)
A34.540.050.054	40	WH5	50	28	54	27	M16	1.2	J00.100.012.017 (25 Nm)
A34.540.050.107	40	WH5	50	28	107	80	M16	2.0	J00.100.012.017 (25 Nm)
A34.540.063.064	40	WH6	63	36	64	37	M16	1.5	J00.100.016.021 (30 Nm)
A34.550.025.104	50	WH2	25	14	104	66	M24	3.9	J00.100.008.008 (12 Nm)
A34.550.032.065	50	WH3	32	18	65	27	M24	4.1	J00.100.008.010 (12 Nm)
A34.550.032.118	50	WH3	32	18	118	80	M24	4.1	J00.100.008.010 (12 Nm)
A34.550.040.065	50	WH4	40	22	65	27	M24	3.8	J00.100.010.015 (22 Nm)
A34.550.040.118	50	WH4	40	22	118	80	M24	4.3	J00.100.010.015 (22 Nm)
A34.550.050.065	50	WH5	50	28	65	27	M24	3.9	J00.100.012.017 (25 Nm)
A34.550.050.104	50	WH5	50	28	104	66	M24	4.5	J00.100.012.017 (25 Nm)
A34.550.050.138	50	WH5	50	28	138	100	M24	5.0	J00.100.012.017 (25 Nm)
A34.550.063.075	50	WH6	63	36	75	37	M24	4.8	J00.100.016.021 (30 Nm)
A34.550.063.104	50	WH6	63	36	104	66	M24	4.2	J00.100.016.021 (30 Nm)
A34.550.080.075	50	WH8	80	36	75	37	M24	4.7	J00.100.016.029 (30 Nm)
A34.550.080.104	50	WH8	80	36	104	66	M24	5.8	J00.100.016.029 (30 Nm)


A44

Aufnahmen HSK A DIN 69893

Master shanks to HSK A DIN 69893

Mandrin de base HSK A DIN 69893



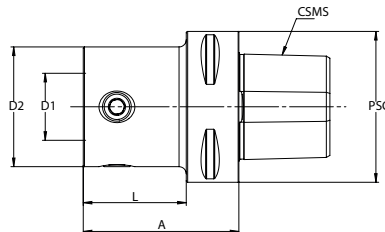
Bestell-Nr. / Order number/ Code	CSMS HSK A	WH	D2	D1	A	L	kg	
A44.806.020.042	63	WH1	20	11	42	16	0.7	J00.100.005.008 (3.5 Nm)
A44.806.020.086	63	WH1	20	11	86	60	0.8	J00.100.005.008 (3.5 Nm)
A44.806.025.042	63	WH2	25	14	42	16	0.7	J00.100.008.008 (12 Nm)
A44.806.025.086	63	WH2	25	14	86	60	0.9	J00.100.008.008 (12 Nm)
A44.806.025.126	63	WH2	25	14	126	100	1.0	J00.100.008.008 (12 Nm)
A44.806.032.048	63	WH3	32	18	48	22	0.7	J00.100.008.010 (12 Nm)
A44.806.032.100	63	WH3	32	18	100	74	1.1	J00.100.008.010 (12 Nm)
A44.806.040.055	63	WH4	40	22	55	29	0.8	J00.100.010.015 (22 Nm)
A44.806.040.100	63	WH4	40	22	100	74	1.3	J00.100.010.015 (22 Nm)
A44.806.050.065	63	WH5	50	28	65	39	1.1	J00.100.012.017 (25 Nm)
A44.806.050.100	63	WH5	50	28	100	74	1.6	J00.100.012.017 (25 Nm)
A44.806.063.080	63	WH6	63	36	80	54	1.2	J00.100.016.021 (30 Nm)
A44.810.050.065	100	WH5	50	28	65	36	2.4	J00.100.012.017 (25 Nm)
A44.810.063.080	100	WH6	63	36	80	51	2.9	J00.100.016.021 (30 Nm)
A44.810.080.080	100	WH8	80	36	80	51	3.7	J00.100.016.029 (30 Nm)


A51

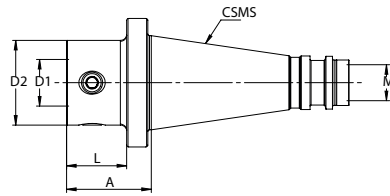
Aufnahmen PSC ISO 26623-1


Master shanks to PSC ISO 26623-1

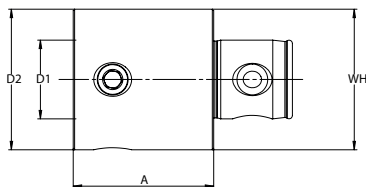
Mandrin de base PSC ISO 26623-1




Bestell-Nr. / Order number/ Code	CSMS PSC	WH	D2	D1	A	L	kg	
A51.806.020.054	63	WH1	20	11	54	32	0.8	J00.100.005.008 (3.5 Nm)
A51.806.025.054	63	WH2	25	14	54	32	0.8	J00.100.008.008 (12 Nm)
A51.806.032.054	63	WH3	32	18	54	32	0.9	J00.100.008.010 (12 Nm)
A51.806.040.065	63	WH4	42	22	65	43	1.1	J00.100.010.015 (22 Nm)
A51.806.050.065	63	WH5	50	28	65	43	1.3	J00.100.012.017 (25 Nm)
A51.806.063.080	63	WH6	63	36	80	-	1.8	J00.100.016.021 (30 Nm)
A51.806.080.080	63	WH8	80	36	80	-	2.5	J00.100.016.029 (30 Nm)



Bestell-Nr. / Order number / Code	CSMS ISO	WH	D2	D1	A	L	M	kg	
A54.300.050.040	30	WH5	50	28	40	-	M12	0.6	J00.100.012.017 (25 Nm)
A54.400.040.040	40	WH4	40	22	40	28.4	M16	0.9	J00.100.010.015 (22 Nm)
A54.400.050.040	40	WH5	50	28	40	28.4	M16	1.0	J00.100.012.017 (25 Nm)
A54.400.063.063	40	WH6	63	36	63	-	M16	1.6	J00.100.016.021 (30 Nm)
A54.500.050.042	50	WH5	50	28	42	26.8	M24	2.8	J00.100.012.017 (25 Nm)
A54.500.063.052	50	WH6	63	36	52	36.8	M24	3.1	J00.100.016.021 (30 Nm)
A54.500.080.052	50	WH8	80	36	52	36.8	M24	3.6	J00.100.016.029 (30 Nm)

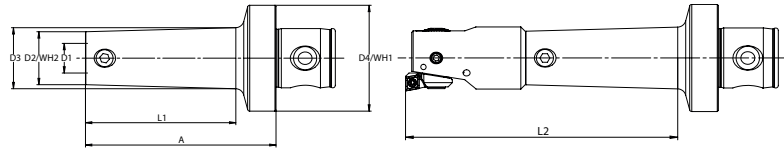



Bestell-Nr. / Order number / Code	WH	D2	D1	A	kg	
A64.020.020.025	WH1	20	11	25	0.1	J00.100.005.008 (3.5 Nm)
A64.020.020.035	WH1	20	11	35	0.1	J00.100.005.008 (3.5 Nm)
A64.025.025.030	WH2	25	14	30	0.1	J00.100.008.008 (12 Nm)
A64.025.025.045	WH2	25	14	45	0.2	J00.100.008.008 (12 Nm)
A64.032.032.040	WH3	32	18	40	0.2	J00.100.008.010 (12 Nm)
A64.032.032.060	WH3	32	18	60	0.4	J00.100.008.010 (12 Nm)
A64.039.039.050	WH4	40	22	50	0.5	J00.100.010.015 (22 Nm)
A64.039.039.080	WH4	40	22	80	0.8	J00.100.010.015 (22 Nm)
A64.050.050.050	WH5	50	28	50	0.7	J00.100.012.017 (25 Nm)
A64.050.050.070	WH5	50	28	70	1.0	J00.100.012.017 (25 Nm)
A64.050.050.100	WH5	50	28	100	1.5	J00.100.012.017 (25 Nm)
A64.063.063.075	WH6	63	36	75	1.7	J00.100.016.021 (30 Nm)
A64.063.063.135	WH6	63	36	135	3.1	J00.100.016.021 (30 Nm)
A64.080.080.100	WH8	80	36	100	3.8	J00.100.016.029 (30 Nm)
A64.080.080.180	WH8	80	36	180	6.9	J00.100.016.029 (30 Nm)

A84
Reduktionen

Reductions

Réductions

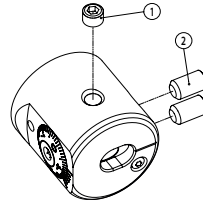
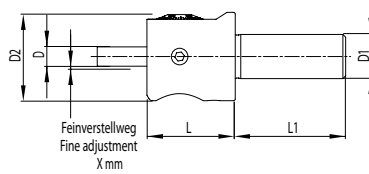




Bestell-Nr. / Order number / Code	WH1	D4	WH2	D2	D3	A	L1	L2	kg	
A84.025.020.036	WH2	25	WH1	20	23	36	26	69	0.1	J00.100.005.008 (3.5 Nm)
A84.032.020.038	WH3	32	WH1	20	23	38	26	69	0.2	J00.100.005.008 (3.5 Nm)
A84.032.025.038	WH3	32	WH2	25	29	38	26	82	0.2	J00.100.008.008 (12 Nm)
A84.040.020.040	WH4	40	WH1	20	23	40	26	69	0.3	J00.100.005.008 (3.5 Nm)
A84.040.025.040	WH4	40	WH2	25	29	40	26	82	0.3	J00.100.008.008 (12 Nm)
A84.040.032.040	WH4	40	WH3	32	38	40	26	92	0.4	J00.100.008.010 (12 Nm)
A84.050.020.044	WH5	50	WH1	20	23	44	28	73	0.4	J00.100.005.008 (3.5 Nm)
A84.050.020.080	WH5	50	WH1	20	23	80	64	107	0.5	J00.100.005.008 (3.5 Nm)
A84.050.025.044	WH5	50	WH2	25	29	44	28	84	0.4	J00.100.008.008 (12 Nm)
A84.050.025.090	WH5	50	WH2	25	29	90	74	128	0.6	J00.100.008.008 (12 Nm)
A84.050.032.044	WH5	50	WH3	32	38	44	28	94	0.5	J00.100.008.010 (12 Nm)
A84.050.032.100	WH5	50	WH3	32	38	100	84	148	0.9	J00.100.008.010 (12 Nm)
A84.050.040.044	WH5	50	WH4	40	48	44	28	103	0.6	J00.100.010.015 (22 Nm)
A84.050.040.115	WH5	50	WH4	40	48	115	99	172	1.4	J00.100.010.015 (22 Nm)
A84.063.020.050	WH6	63	WH1	20	23	50	32	77	0.7	J00.100.005.008 (3.5 Nm)
A84.063.020.100	WH6	63	WH1	20	23	100	82	125	0.8	J00.100.005.008 (3.5 Nm)
A84.063.025.050	WH6	63	WH2	25	29	50	32	88	0.8	J00.100.008.008 (12 Nm)
A84.063.025.110	WH6	63	WH2	25	29	110	92	146	1.0	J00.100.008.008 (12 Nm)
A84.063.032.050	WH6	63	WH3	32	38	50	32	98	0.9	J00.100.008.010 (12 Nm)
A84.063.032.120	WH6	63	WH3	32	38	120	102	166	1.4	J00.100.008.010 (12 Nm)
A84.063.040.050	WH6	63	WH4	40	48	50	32	122	1.0	J00.100.010.015 (22 Nm)
A84.063.040.140	WH6	63	WH4	40	48	140	122	195	2.0	J00.100.010.015 (22 Nm)
A84.063.050.050	WH6	63	WH5	50	60	50	32	142	1.1	J00.100.012.017 (25 Nm)
A84.063.050.160	WH6	63	WH5	50	60	160	142	230	3.1	J00.100.012.017 (25 Nm)
A84.080.063.060	WH8	80	WH6	63	75	60	40	180	1.8	J00.100.016.021 (30 Nm)

B04
Micro Ausdrehköpfe ø 0.3-19.1

Micro fine boring heads ø 0.3-19.1

Micro Tête d'alésage fin ø 0.3-19.1



Bestell-Nr. / Order number/ Code	D	D1	D2	X	L	L1	kg		
B04.010.025.025	4	10	25	1.5	25	25	0.1	J00.204.005.004	J00.204.004.008
B04.016.032.032	7	16	32	2.5	32	40	0.2	J00.204.006.005	J00.204.006.010

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.002mm über Nonius im Durchmesser
- mit Innenkühlung

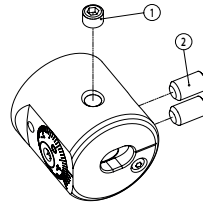
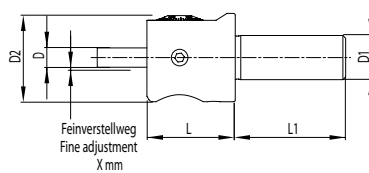
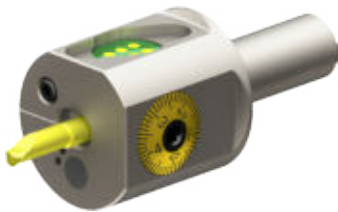
- diametrical adjustment with maximal reduced reversal backlash
- 0.002mm diametrical adjustment by nonius
- with inner coolant supply



- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne

B06
Micro Ausdrehköpfe ø 0.3-19.1
DIGITAL

Micro fine boring heads ø 0.3-19.1
DIGITAL

Micro Tête d'alésage fin ø 0.3-19.1
DIGITAL



Bestell-Nr. / Order number/ Code	D	D1	D2	X	L	L1	kg		
B06.010.025.025	4	10	25	1.5	25	25	0.1	J00.204.005.004	J00.204.004.008
B06.016.032.032	7	16	32	2.5	32	40	0.2	J00.204.006.005	J00.204.006.010

- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)

- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- Display unit must be ordered separately (C09.028.024.077)

- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Unité d'affichage doit être commandé séparément (C09.028.024.077)


B24

Reduktionshülsen

Reduction sleeves

Réduction



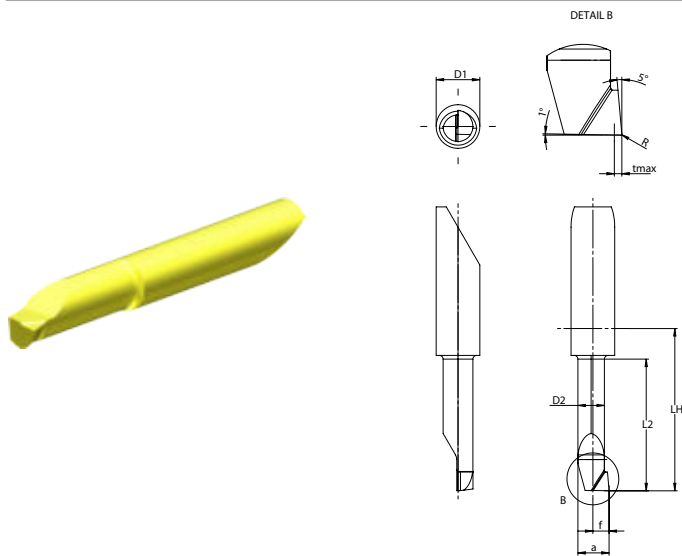
Bestell-Nr. / Order number/ Code	D2	D1	L	kg	
B24.007.004.030	7	4	(30)	0.1	
B24.016.004.090	16	4	90	0.2	ISO4026-M4x6
B24.016.007.090	16	7	90	0.2	ISO4026-M6x6

B55

Schneideinsätze

Boring bars

Barres d'alésage



Bestell-Nr. / Order number/ Code	D1	L2	Ød min	Ød max	R	a	D2	f	LH	t max	kg
B55.004.003.013	4.0	1.2	0.3	0.7	-	0.25	0.15	0.15	11.0	0.03	0.05
B55.004.006.013	4.0	2.5	0.6	1.1	-	0.55	0.46	0.30	11.0	0.05	0.05
B55.004.010.013	4.0	4.0	1.0	2.3	0.05	0.95	0.65	0.50	11.0	0.1	0.05
B55.004.022.013	4.0	6.0	2.2	3.3	0.05	2.00	1.55	1.10	11.0	0.2	0.05
B55.004.032.013	4.0	10.2	3.2	4.3	0.05	3.00	2.55	1.60	11.0	0.2	0.05
B55.004.039.018	4.0	15.2	3.9	(7.1)	0.05	3.70	3.45	1.95	16.0	0.3	0.05
B55.007.052.023	7.0	20.3	5.2	6.3	0.05	5.00	4.25	2.60	21.0	0.5	0.05
B55.007.062.023	7.0	20.3	6.2	7.3	0.05	6.00	5.25	3.10	21.0	0.5	0.05
B55.007.069.028	7.0	25.4	6.9	(12.1)	0.20	6.70	6.25	3.45	26.0	0.5	0.05

• Schnittwerte (Start) f 0.02 mm/U

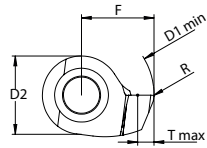
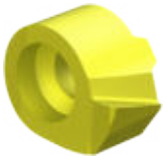
• Cutting parameters (Start) f 0.02 mm/rev

• Valeurs de coupe (départ) f 0,02 mm/tr

B83
Schneidplatten

inserts

Inserts



Bestell-Nr. / Order number / Code	ØD1 min	ØD1 max	R	F	D2	tmax	Code	kg
B83.007.069.004	6.9	8.1	0.2	3.45	4.8	1.0	D07	0.05
B83.007.079.004	7.9	9.1	0.2	3.95	4.8	1.0	D07	0.05
B83.007.089.004	8.9	10.1	0.2	4.45	4.8	1.0	D07	0.05
B83.010.099.004	9.9	12.1	0.2	4.95	7	1.0	D10	0.05
B83.010.119.004	11.9	14.1	0.2	5.95	7	1.0	D10	0.05
B83.010.139.004	13.9	19.1	0.2	6.95	7	1.0	D10	0.05

• Schnittwerte (Start) f 0.02 mm/U

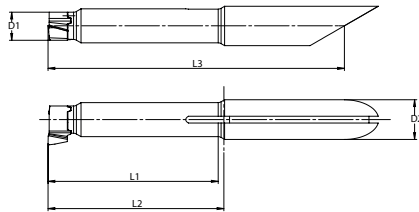
• Cutting parameters (Start) f 0.02 mm/rev


• Valeurs de coupe (départ) f 0,02 mm/tr

B82
Adapter
für Schneidplatten

Adapter
for inserts

Adaptateur
pour inserts



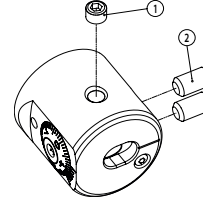
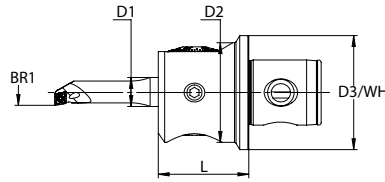
Bestell-Nr. / Order number / Code	D2 h6	L1	D1	L3	L2	Torx	Code	kg	
B82.007.007.033	7.0	30	4.8	56	31	T7	D07	0.1	M2x7.5 (1.0 Nm) (J00.254.020.007)
B82.007.010.038	7.0	35	7.0	61	36	T9	D10	0.1	M3x9.0 (3.0 Nm) (J00.254.030.009)



B04/B08

Ausdrehkopf ø 3-88.1

Fine boring heads ø 3-88.1

Tête d'alésage fin ø 3-88.1



Bestell-Nr. / Order number / Code	D3/WH System	D2	BR1 min.	BR1 max.	L (A)	D1	kg		
WH modular ANALOG									
B04.050.025.050	WH5	55	3	88.1	50	16	1.1	J00.204.010.008	J00.204.010.016
B04.063.025.050	WH6	55	3	88.1	50	16	1.1	J00.204.010.008	J00.204.010.016
DIN 69893 HSK 63 A									
B08.806.055.095	HSK 63 A	55	3	88.1	95	16	1.7	J00.204.010.008	J00.204.010.016
DIN 69871 AD 40									
B08.440.055.090	ISO 40	55	3	88.1	90	16	2.1	J00.204.010.008	J00.204.010.016
MAS BT 40									
B08.540.055.090	BT40	55	3	88.1	90	16	2.2	J00.204.010.008	J00.204.010.016

- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar

- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- boring bars go through head

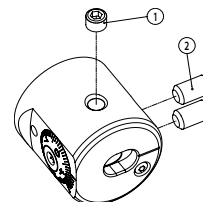
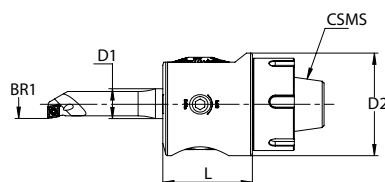
- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête



ECOLINE B11

Ausdrehkopf ø 3-88.1

Fine boring heads ø 3-88.1

Tête d'alésage fin ø 3-88.1



Bestell-Nr. / Order number / Code	CSMS	D2	BR1 min.	BR1 max.	L	D1	kg		
SMART ER32									
B11.032.055.060	ER32	55	3	88.1	60	16	1.0	J00.204.010.008	J00.204.010.016

- Schnittstelle ER32 DIN6499
- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar
- Werkzeug in einem Spannzangenfutter spannen.

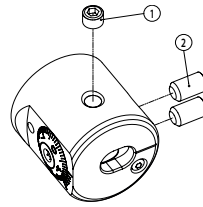
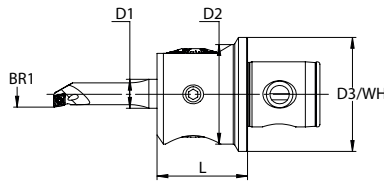
- connection ER32 DIN 6499
- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- boring bars go through head
- Clamp tool in a collet chuck.



- connexion ER25 DIN 6499
- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête
- Serrer l'outil dans un porte-pince

B06/B09/PSC
Ausdrehkopf ø 3-88.1
DIGITAL

Fine boring heads ø 3-88.1
DIGITAL

Tête d'alésage fin ø 3-88.1
DIGITAL



Bestell-Nr. / Order number/ Code	System	D1	ø A min.	ø A max.	L (A)	L1	kg		
WH modular DIGITAL									
B06.050.025.050	WH5	55	3	88.1	50	-	1.0	J00.204.010.008	J00.204.010.016
B06.063.025.050	WH6	55	3	88.1	50	-	1.0	J00.204.010.008	J00.204.010.016
DIN 69893 HSK 63 A									
B09.806.055.095	HSK 63 A	55	3	88.1	95	69	1.4	J00.204.010.008	J00.204.010.016
DIN 69871 AD 40									
B09.440.055.090	ISO 40	55	3	88.1	90	70	1.9	J00.204.010.008	J00.204.010.016
MAS BT 40									
B09.540.055.090	BT40	55	3	88.1	90	63	1.9	J00.204.010.008	J00.204.010.016
PSC DIGITAL									
PSC40-FBHO-DE-1665	PSC40	55	3	88.1	65	-	1.9	J00.204.010.008	J00.204.010.016
PSC50-FBHO-DE-1670	PSC50	55	3	88.1	70	-	1.9	J00.204.010.008	J00.204.010.016
PSC63-FBHO-DE-1690	PSC63	55	3	88.1	90	-	1.9	J00.204.010.008	J00.204.010.016

- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- mit Innenkühlung
- Ausdrehstähle durchschiebbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)

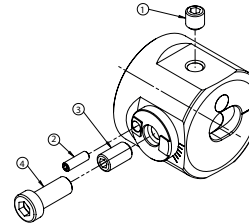
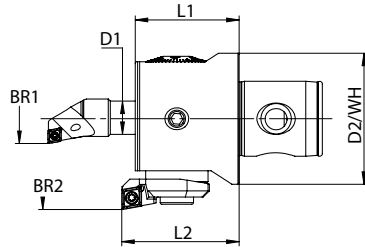
- for boring bars with a shank diameter of 16mm
- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- with inner coolant supply
- boring bars go through head
- Display unit must be ordered separately (C09.028.024.077)









- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête
- Unité d'affichage doit être commandé séparément (C09.028.024.077)

B05 VARIO HEAD
Ausdrehkopf ø 3-152.1

Fine boring heads ø 3-152.1

Tête d'alésage fin ø 3-152.1



Bestell-Nr. / Order number / Code	D2/WH	BR1 min. - max.	BR2 min. - max.	L1	L2	D1	kg				
B05.063.025.050	WH6	3 - 88.1	87.75 - 152.1	501	57	16	1.5				

- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar
- erweiterbar von ø3 bis ø152.1

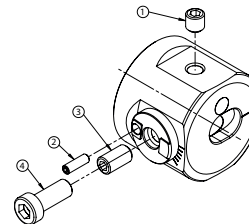
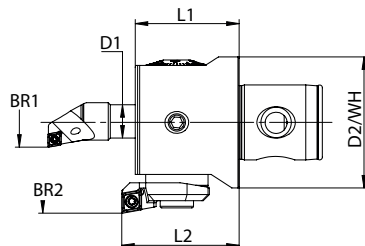
- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- boring bars go through head
- can be upgraded from ø3 up to ø152.1









- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête
- extensible de ø3 à ø152.1

B07 VARIO HEAD
Ausdrehkopf ø 3-152.1
DIGITAL

Fine boring heads ø 3-152.1
DIGITAL

Tête d'alésage fin ø 3-152.1
DIGITAL



Bestell-Nr. / Order number / Code	System	Ø A min. - max.	Ø A1 min. - max.	L1	L2	kg				
B07.063.025.050	WH6	3 - 88.1	87.75 - 152.1	501	57	1.5				

- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.001mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar
- erweiterbar von ø3 bis ø152.1
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)

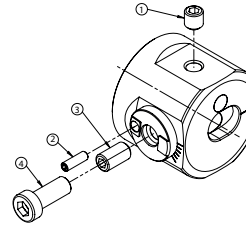
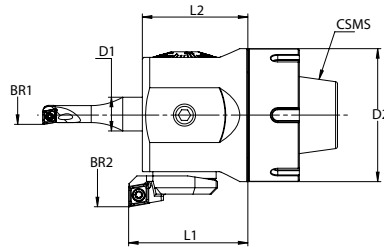
- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.001mm diametrical adjustment
- with inner coolant supply
- boring bars go through head
- can be upgraded from ø3 up to ø152.1
- Display unit must be ordered separately (C09.028.024.077)

- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,001mm
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête
- extensible de ø3 à ø152.1
- Unité d'affichage doit être commandé séparément (C09.028.024.077)





ECOLINE B05 VARIO HEAD
Ausdrehkopf ø 3-152.1

Fine boring heads ø 3-152.1

Tête d'alésage fin ø 3-152.1



ECO LINE

Bestell-Nr. / Order number/ Code	D2/ CSMS	BR1 min. - max.	BR2 min. - max.	L1	L2	D1	kg				
VARIO ER40											
B05.040.003.152	63 / ER40	3 - 88.1	87.75 - 152.1	51.1	57	16	1.5	J00.204.010.010	J00.205.003.014	J00.205.010.018	J00.205.010.025

- Schnittstelle ER40 DIN6499
- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar
- Werkzeug in einem Spannzangenfutter spannen.
- erweiterbar von ø3 bis ø152.1

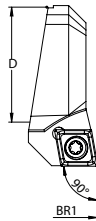
- connection ER32 DIN 6499
- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- boring bars go through head
- Clamp tool in a collet chuck.
- can be upgraded from ø3 up to ø152.1


- connexion ER25 DIN 6499
- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête
- Serrer l'outil dans un porte-pince
- extensible de ø3 à ø152.1

Zubehör

Accessory part

pièce accessoire

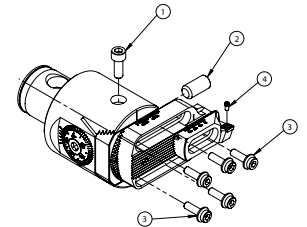
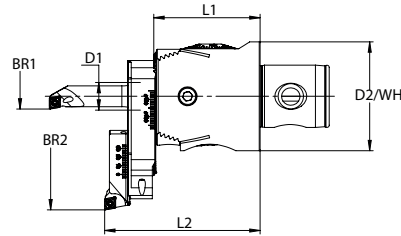





Bestell-Nr. / Order number/ Code		BR1 min. - max.	kg	
Wendeplattenhalter / Insert holder / porte-plaquette				
C14.726.001.009	CC.. 09 T3 ..	ø 87.75 - 101.1 (ø 114.1)*	0.1	J00.254.040.009
C14.726.002.009	CC.. 09 T3 ..	ø 105.75 - 119.0 (ø 132.0)*	0.1	J00.254.040.009
C14.726.003.009	CC.. 09 T3 ..	ø 125.75 - 139.0 (ø 152.0)*	0.1	J00.254.040.009
Adapter		* mit Adapter * Adapter required * Espaceur requis		
J00.803.001.006	f = 6.5mm	ø 114.0 / ø 132.0 / ø 152.0	0.1	

B10 MULTI HEAD
Ausdrehkopf ø 3-320

Fine boring heads ø 3-320

Tête d'alésage fin ø 3-320



Bestell-Nr. / Order number / Code	WH CSMS	D2	BR1 min.- max.	BR2 min.- max.	L1	L2	D1	kg			
WH6 modular											
B10.063.025.060	WH6	63	3 - 88.1	86 - 320	60	89	16	1.5	J00.210.006.016	J00.210.010.020	J00.256.005.016
DIN 69893 HSK 63 A											
B10.806.063.095	HSK 63 A	63	3 - 88.1	86 - 320	96	125	16	2.0	J00.210.006.016	J00.210.010.020	J00.256.005.016
DIN 69871 AD 40											
B10.440.063.090	ISO 40	63	3 - 88.1	86 - 320	91	120	16	2.2	J00.210.006.016	J00.210.010.020	J00.256.005.016
MAS BT 40											
B10.540.063.090	BT40	63	3 - 88.1	86 - 320	91	120	16	2.2	J00.210.006.016	J00.210.010.020	J00.256.005.016

- für Ausdrehstähle mit Schaftdurchmesser 16mm
- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Ausdrehstähle durchschiebbar

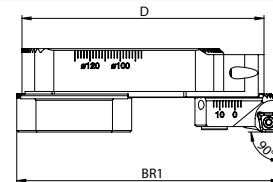
- for boring bars with a shank diameter of 16mm
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- boring bars go through head



- pour barres d'alésage avec un diamètre de corps de 16mm
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Passage libre des barres d'alésage à travers la tête

Zubehör

Accessory part

pièce accessoire

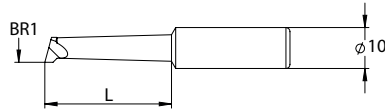
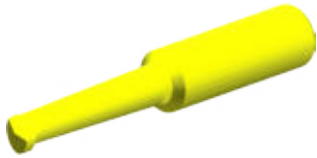


Bestell-Nr. / Order number / Code	D	BR1 min.	BR1 max.	kg		
Aluminium-Brücken / Aluminium bridges / Traverses d'aluminium						
B12.086.164.080	80	86	164	0.1	J00.256.005.016	
B12.162.320.158	158	162	320	0.2	J00.256.005.016	
Wendeplattenhalter / Insert holders / Porte-plaquettes	Wendeplatte / Insert / Plaquette	ø A min.	ø A max.			
B56.048.006.014	CC . . 06 02 . .	86	320	0.05	J00.256.005.016	J00.254.025.006
B56.048.009.014	CC . . 09 T3 . .	86	320	0.05	J00.256.005.016	J00.254.040.009
Gegengewicht / Counter weight / Contre-poids						
B12.038.045.012				0.1	J00.256.005.016	

B64
Ausdrehstähle
mit Hartmetallschneide

Boring bars
with carbide tips

Barres d'alésage avec
arête de coupe en carbure



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	L	HM Sorte / Carbide quality / Qualité du carbure	kg
B64.003.010.020	3.0	8.0	20	K10	0.05
B64.003.020.020	3.0	8.0	20	P20	0.05
B64.004.010.023	4.0	9.0	23	K10	0.05
B64.004.020.023	4.0	9.0	23	P20	0.05
B64.005.010.025	5.0	10.0	25	K10	0.05
B64.005.020.025	5.0	10.0	25	P20	0.05
B64.006.010.028	6.0	11.0	28	K10	0.05
B64.006.020.028	6.0	11.0	28	P20	0.05
B64.007.010.031	7.0	12.0	31	K10	0.05
B64.007.020.031	7.0	12.0	31	P20	0.05
B64.009.010.034	9.0	14.0	34	K10	0.05
B64.009.020.034	9.0	14.0	34	P20	0.05
B64.010.010.037	10.0	15.0	37	K10	0.05
B64.010.020.037	10.0	15.0	37	P20	0.05
B64.012.010.040	12.0	17.0	40	K10	0.05
B64.012.020.040	12.0	17.0	40	P20	0.05
B64.014.010.043	14.0	19.0	43	K10	0.05
B64.014.020.043	14.0	19.0	43	P20	0.05

- Hartmetall Sorte K10 für Guss, Aluminium usw.
- Hartmetall Sorte P20 für Stahl, Chromnickelstahl usw.

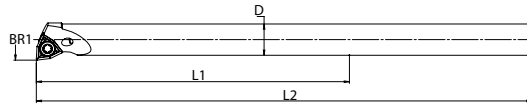
- carbide quality K10 for cast iron, aluminium etc.
- carbide quality P20 for steel, chrome nickel steel etc.


- qualité du carbure K10 pour la fonte, l'aluminium, etc.
- qualité du carbure P20 pour l'acier, l'acier nickel-chrome, etc.

B74
Ausdrehstähle
mit Hartmetallschneide

Boring bars
with carbide tips

Barres d'alésage avec
arête de coupe en carbure



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L	L1	Wendeplatte / Insert / Plaquette	kg	
B74.006.002.080	5.8	11.2	5	50	85	WC .. 02 01 ..	0.1	J00.254.020.004
B74.008.002.100	7.8	13.2	6	60	95	WC .. 02 01 ..	0.1	J00.254.020.004
B74.010.006.120	9.8	15.0	8	80	120	CC .. 06 02 ..	0.1	J00.254.025.005
B74.014.006.140	13.8	19.0	10	100	140	CC .. 06 02 ..	0.1	J00.254.025.006
B74.018.009.170	17.8	23.0	12	120	170	CC .. 09 T3 ..	0.3	J00.254.040.009
B74.022.009.210	21.8	27.0	16	160	210	CC .. 09 T3 ..	0.5	J00.254.040.009

• Länge L bezeichnet die maximale Ausdrehlänge

• length L stands for the maximal boring depth

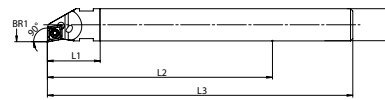
• Longueur L désigne la profondeur maximum d'alésage


B94

Hartmetall Ausdrehstähle
mit Schraubverbindung

Solid carbide boring bars
with thread connection

Barres d'alésage en
carbure avec raccord à vis



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L2 max.	L1	Wendeplatte / Insert / Plaque	für Schaft / for shank / pour arbre	kg	
B94.009.006.018	8.75	14.1	8	56	18	CC..06 02..	B84.008.005.073	0,05	J00.254.025.005
B94.010.006.018	9.75	15.1	9	63	18	CC..06 02..	B84.009.005.080	0,05	J00.254.025.005
B94.011.006.023	10.75	16.1	10	70	23	CC..06 02..	B84.010.006.082	0,05	J00.254.025.005
B94.012.006.023	11.75	17.1	11	77	23	CC..06 02..	B84.011.006.089	0,05	J00.254.025.005
B94.013.006.023	12.75	18.1	12	84	23	CC..06 02..	B84.012.006.096	0,05	J00.254.025.006
B94.014.006.023	13.75	19.1	13	91	23	CC..06 02..	B84.013.006.103	0,05	J00.254.025.006
B94.015.006.023	14.75	20.1	14	98	23	CC..06 02..	B84.014.006.110	0,05	J00.254.025.006
B94.016.006.023	15.75	21.1	14	98	23	CC..06 02..	B84.014.006.110	0,05	J00.254.025.006
B94.017.006.027	16.75	22.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.018.006.027	17.75	23.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.020.006.027	19.75	25.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.022.006.027	21.75	27.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.025.006.027	24.75	30.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.028.006.027	27.75	33.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.032.006.027	31.75	37.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006
B94.035.006.027	34.75	40.1	16	112	27	CC..06 02..	B84.016.010.120	0,05	J00.254.025.006

- zum Ausdrehen von langen Bohrungen
- sehr gute Dämpfungseigenschaften durch Hartmetallschaft
- mit Innenkühlung

- to machine long holes
- high end absorbability by solid carbide shank
- with inner coolant supply

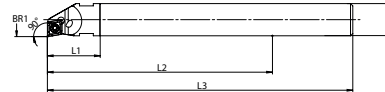
- pour l'alésage de longs trous
- très bonnes propriétés d'amortissement grâce au corps en carbure
- avec arrosage interne

B84

Hartmetallschaft

Solid carbide shank

Corps en carbure



Bestell-Nr. / Order number/ Code	D	L3	M	für Kopf / for head / pour la tête	kg
B84.008.005.073	8	91	M5	B94.009.006.018	0,1
B84.009.005.080	9	98	M5	B94.010.006.018	0,1
B84.010.006.082	10	105	M6	B94.011.006.023	0,1
B84.011.006.089	11	112	M6	B94.012.006.023	0,1
B84.012.006.096	12	119	M6	B94.013.006.023	0,1
B84.013.006.103	13	126	M6	B94.014.006.023	0,2
B84.014.006.110	14	133	M6	B94.015/016.006.023	0,2
B84.016.010.120	16	147	M10	B94.017/018/020/022/025//028/032/035.006.027	0,3

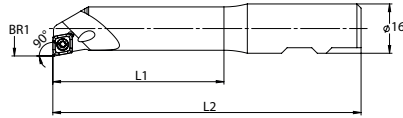



Bestell-Nr. / Order number / Code	D2	D1	L	kg
B24.016.004.037	16	4	37	0.1
B24.016.005.037	16	5	37	0.1
B24.016.006.037	16	6	37	0.1
B24.016.008.037	16	8	37	0.1
B24.016.009.037	16	9	37	0.1
B24.016.010.037	16	10	37	0.1
B24.016.011.037	16	11	37	0.1
B24.016.012.037	16	12	37	0.1
B24.016.013.037	16	13	37	0.1
B24.016.014.037	16	14	37	0.1

B54
Ausdrehstähle ø9.75-30.1

Boring bars ø9.75-30.1

Barres d'alésage ø9.75-30.1



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	L1 max.	L2	Wendeplatte / Insert / Plaquette	kg	
B54.010.006.075	9.75	15.1	30	75	CC..06 02..	0.1	J00.254.025.006
B54.012.006.080	11.75	17.1	37	80	CC..06 02..	0.1	J00.254.025.006
B54.014.006.085	13.75	19.1	43	85	CC..06 02..	0.1	J00.254.025.006
B54.015.006.090	14.75	20.1	51	90	CC..06 02..	0.1	J00.254.025.006
B54.016.006.095	15.75	21.1	57	95	CC..06 02..	0.1	J00.254.025.006
B54.018.006.100	17.75	23.1	67	100	CC..06 02..	0.1	J00.254.025.006
B54.020.006.105	19.75	25.1	72	105	CC..06 02..	0.2	J00.254.025.006
B54.020.009.105	19.75	25.1	72	105	CC..09 T3..	0.2	J00.254.040.009
B54.022.009.110	21.75	27.1	77	110	CC..09 T3..	0.2	J00.254.040.009
B54.025.006.115	24.75	30.1	82	115	CC..06 02..	0.2	J00.254.025.006
B54.025.009.115	24.75	30.1	82	115	CC..09 T3..	0.2	J00.254.040.009

• mit Innenkühlung

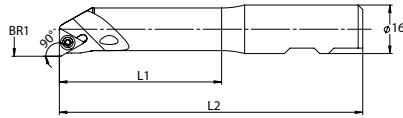
• with inner coolant supply


• avec arrosage interne

B54
Ausdrehstähle ø9.75-30.1

Boring bars ø9.75-30.1

Barres d'alésage ø9.75-30.1



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	L1 max.	L2	Wendeplatte / Insert / Plaquette	kg	
B54.010.T06.075	9.75	15.1	30	75	TB..06 01..	0.1	J00.254.025.006
B54.012.T06.080	11.75	17.1	37	80	TB..06 01..	0.1	J00.254.025.006
B54.014.T09.085	13.75	19.1	43	85	TP..09 02..	0.1	J00.254.040.009
B54.015.T09.090	14.75	20.1	51	90	TP..09 02..	0.1	J00.254.040.009
B54.016.T09.095	15.75	21.1	57	95	TP..09 02..	0.1	J00.254.040.009
B54.018.T09.100	17.75	23.1	67	100	TP..09 02..	0.1	J00.254.040.009
B54.020.T11.105	19.75	25.1	72	105	TP..11 03..	0.2	J00.254.040.009
B54.025.T11.115	24.75	30.1	82	115	TP..11 03..	0.2	J00.254.040.009

• mit Innenkühlung

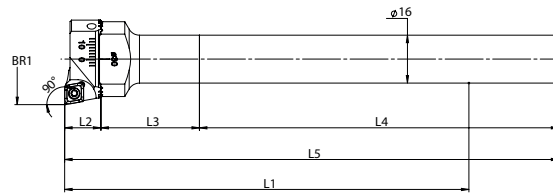
• with inner coolant supply

• avec arrosage interne

B84
Hartmetallschaft

Solid carbide shank

Corps en carbure



Bestell-Nr. / Order number / Code	D	L4	M	für Kopf / for head / pour la tête	kg
B84.016.010.120	16	120	M10	B56.030.048.033 B56.048.088.031	0.3

- sehr gute Dämpfungseigenschaften
- mit Innenkühlung

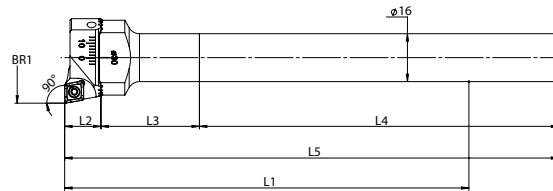
- high end absorbability
- with inner coolant supply


- très bonnes propriétés d'amortissement
- avec arrosage interne

B56
Kopf

Head

Tête



Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	L1	L5	L3	für Wendeplattenhalter / for insert holder / pour porte-inserts	kg	
B56.030.048.033	29.75	48.1	135	165	33	B56.030.006.012	0.1	J00.256.005.016
B56.048.088.031	47.75	88.1	135	165	31	B56.048.xxx.014	0.1	J00.256.005.016

- mit Innenkühlung

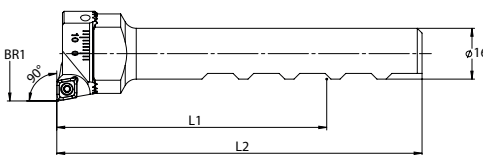
- with inner coolant supply


- avec arrosage interne

B56
Stahlschaft

Steel shanks

Corps d'acier



Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	L1	L2	für Wendeplattenhalter / for insert holder / pour porte-inserts	kg	
B56.030.048.115	29.75	48.1	85	115	B56.030.006.012	0.1	J00.256.005.016
B56.048.088.115	47.75	88.1	85	115	B56.048.xxx.014	0.1	J00.256.005.016

- mit Innenkühlung

- with inner coolant supply

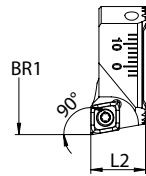
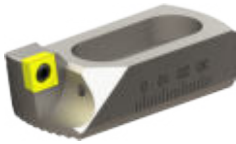
- avec arrosage interne


B56

Wendeplattenhalter

Insert holders

Porte -plaquettes



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	L2	Wendeplatte / Insert / Plaquette	kg	
B56.030.006.012	29.75	48.1	12	CC .. 06 02 ..	0.05	J00.254.025.006
B56.048.006.014	47.75	88.1	14	CC .. 06 02 ..	0.05	J00.254.025.006
B56.048.009.014	47.75	88.1	14	CC .. 09 T3 ..	0.05	J00.254.040.009

- mit Innenkühlung
- Schäfte und Wendeplattenhalter müssen separat bestellt werden

- with inner coolant supply
- shanks and insert holder must be ordered separately

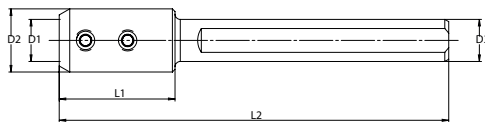
- avec arrosage interne
- Corps et porte-plaquettes doivent être commandés séparément


B34

Ausdrehstahl-Verlängerungen

Boring bar extensions

Extensions de barres d'alésage



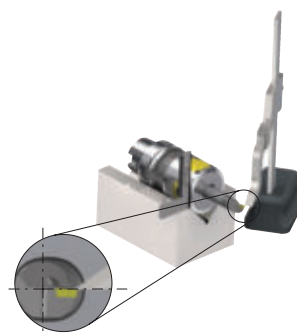
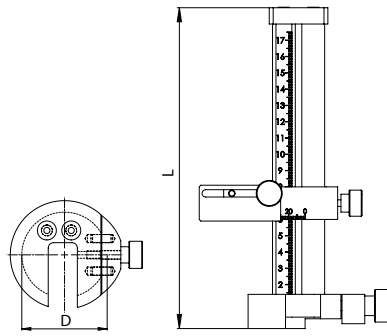
Bestell-Nr. / Order number/ Code	D3	D1	D2	L2	L1	kg	
B34.016.010.128	16	10	16	128	–	0.2	J00.234.006.003
B34.016.016.148	16	16	24	148	44	0.2	J00.234.008.005

B00

Einstellvorrichtung

Setting Jig

Dispositif de réglage



Bestell-Nr. / Order number/ Code	L	L1	für Ausdrehkopf / for fine boring head / pour têtes d'alésage fin	kg
B00.055.055.197	55	197	B04 / B08	0.9
B00.063.063.197	63	197	B06	0.9
B00.163.063.207	63	207	B10	0.9

- Orientierung der Werkzeugschneide
- Einstellung der Auskraglänge der Bohrstange
- Grobeinstellung des Ausdrehdurchmessers

- alignment of the cutting edge
- adjustment of the boring bar projection length
- coarse diameter adjustment

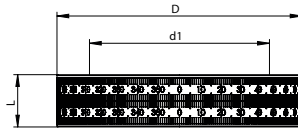
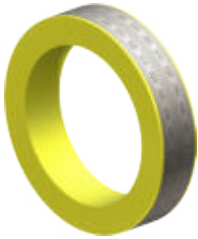
- alignement de l'arête de coupe
- réglage de la longueur de projection de la barre d'alésage
- réglage grossier du diamètre


B16

Universal-Auswuchtringe

Universal balancing rings

Anneaux d'équilibrage universels



Bestell-Nr. / Order number/ Code	D	d1	L	kg	
B16.055.075.016	75	55	16	0.2	J00.216.004.008
B16.063.084.016	84	63	16	0.2	J00.216.004.008

- zum Auswuchten verstellbarer Werkzeuge, z.B. Ausdrehköpfe der Serien B04 - B06
- für die Ausdrehköpfe der Serie B04 und B06 (mit den Ausdrehstäben der Serie B54, B74, B84, B94) sind Einstelltabellen verfügbar, womit die Unwucht über 90% reduziert wird

- to balance adjustable tools, e.g. fine boring heads from series B04-B06
- balancing charts for fine boring heads from serie B04 and B06 (with boring bars from serie B54, B74, B84, B94) are available in order to reduce unbalance by 90%

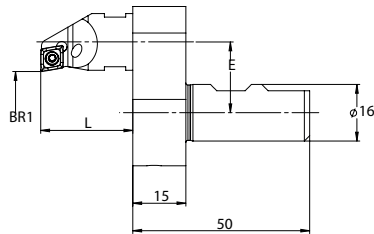
- pour l'équilibrage des outils réglables, par exemple les têtes d'alésage de la série B04 - B06
- pour les têtes d'alésage des séries B04 et B06 (avec les barres d'alésage des séries B54, B74, B84, B94) des tables de réglage sont disponibles, qui réduisent le balourd de plus de 90%.


B85

Überdrehhalter ø5.3-48.6

Pin turning adapter ø5.3-48.6

Support de tournage ø5.3-48.6



Bestell-Nr. / Order number/ Code	für Kopf / for head / pour la tête	BR1 min.	BR1 max.	E	L	Wendeplatte / Insert / Plaque	kg	
B85.020.010.050	B94.035.006.027	5.3	10.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.032.006.027	8.3	13.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.028.006.027	12.3	17.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.025.006.027	15.3	20.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.022.006.027	18.3	23.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.020.006.027	20.3	25.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.018.006.027	22.3	27.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.020.010.050	B94.017.006.027	23.3	28.6	20	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.035.006.027	25.3	30.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.032.006.027	28.3	33.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.028.006.027	32.3	37.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.025.006.027	35.3	40.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.022.006.027	38.3	43.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.020.006.027	40.3	45.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.018.006.027	42.3	47.6	30	27	CC..06 02..	0.2	J00.285.010.016
B85.030.010.050	B94.017.006.027	43.3	48.6	30	27	CC..06 02..	0.2	J00.285.010.016

- für die Verwendung in Ausdrehköpfen der Serien B04 bis B10
- mit Innenkühlung die maximale Überdrehlänge L kann mit der Verlängerung B86.016.016.032 oder B86.016.016.064 verlängert werden
- Überdrehhalter und Kopf müssen separat bestellt werden
- Achtung: Linkslauf

- for use in fine boring heads from series B04 to B10
- with inner coolant supply the maximal turning length L can be increased by extension B86.016.016.032 or B86.016.016.064
- pin turning adapter and head must be ordered separately
- Caution: anticlockwise rotation

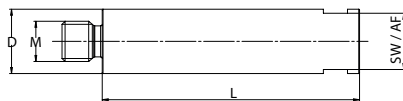
- pour utilisation dans les têtes d'alésage fin des séries B04 à B10
- La longueur maximale de tournage L peut être augmentée par l'extension B86.016.016.032 ou B86.016.016.064
- Support de tournage et tête doivent être commandés séparément
- Attention : rotation dans le sens contraire des aiguilles d'une montre

B86

Schaft-Verlängerungen

Shank extensions

Extensions de barres d'alésage



Bestell-Nr. / Order number/ Code	D	L	M	SW / AF	kg
B86.016.016.032	16	32	M10	14	0.05
B86.016.016.064	16	64	M10	14	0.1

- zur Verlängerung von den Schäften und Überdrehhaltern
- mit Innenkühlung
- aus gehärtetem Stahl

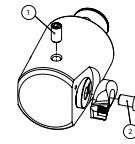
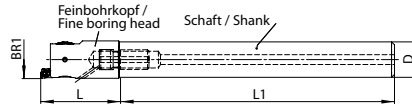
- to extend shanks and pin turning adapters
- with inner coolant supply
- made of hardened steel



- pour prolonger les corps et supports de tournage
- avec arrosage interne
- en acier trempé

C00
High-Speed Feinbohrköpfe

High-Speed fine boring heads

Corps d'acier



Bestell-Nr. / Order number/ Code	D	BR1 min.	BR1 max.	L	für Wendeplattenhalter / for insert holder / pour porte-inserts	Wendeplatte / Insert / Plaqueette	kg		
C00.014.015.040	14	14.7	17.1	40	C02.005.017.002	WC . . 02 01 . .	0.1	J00.881.280.140	J00.882.280.140
C00.016.017.040	16	16.7	20.1	40	C02.005.017.002	WC . . 02 01 . .	0.1	J00.881.280.160	J00.882.280.160
C00.019.020.040	18	19.7	24.1	40	C02.005.017.002	WC . . 02 01 . .	0.1	J00.881.280.180	J00.288.280.180

- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.002mm über Nonius im Durchmesser
- mit Innenkühlung
- Feinbohrkopf, Schaft und Wendeplattenhalter müssen separat bestellt werden

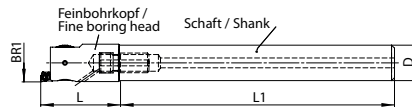
- diametrical adjustment with maximal reduced reversal backlash
- 0.002mm diametrical adjustment by nonius
- with inner coolant supply
- **fine boring head, shank and insert holder must be ordered separately**

- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- avec arrosage interne
- **Corps et porte-plaquettes doivent être commandés séparément**

B84
Hartmetallschaft

Solid carbide shank

Corps en carbure

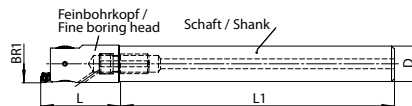


Bestell-Nr. / Order number/ Code	D	L1	M	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg
B84.014.006.110	14	110	M6	C00.014.015.040	0.2
B84.016.010.120	16	120	M10	C00.016.017.040	0.3
B84.018.010.100	18	100	M10	C00.019.020.040	0.4
B84.018.010.140	18	140	M10	C00.019.020.040	0.5

B82
Stahlschaft

Steel shank

Corps d'acier



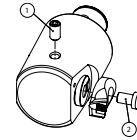
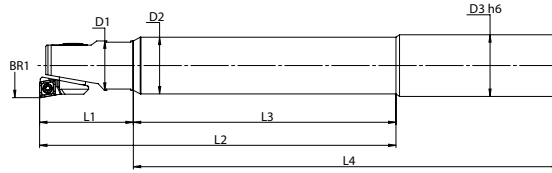
Bestell-Nr. / Order number/ Code	D	L1	M	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg
B82.014.006.060	14	60	M6	C00.014.015.040	0.1
B82.016.010.070	16	70	M10	C00.016.017.040	0.1
B82.018.010.080	18	80	M10	C00.019.020.040	0.2




C00/C01

Feinbohrköpfe zum Einschrauben

Fine boring heads with thread connection

Têtes d'alésage fin avec connexion fileté



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1	L1	für Wendeplattenhalter / for insert holder / pour porte-inserts	kg			
C00/C01.020.024.041	23.9	31.1	22.5	41	C14.011.024.006	0.1	J00.304.004.003	J00.314.004.006	J00.254.025.006
C00/C01.025.031.045	30.9	40.1	29	45	C14.013.031.006	0.1	J00.304.005.004	J00.314.005.008	J00.254.025.006
C00/C01.032.040.051	39.9	51.1	37	51	C14.017.040.006	0.2	J00.304.006.005	J00.314.006.010	J00.254.025.006

- Typ C00 (analog) Zustellgenauigkeit von 0.002mm über Nonius im Durchmesser
- Typ C01 (digital) Einstellgenauigkeit 0.001mm im Durchmesser direktes Wegmeßsystem (kein Umkehrspiel)
- mit Innenkühlung
- Feinbohrkopf, Schaft und Wendeplattenhalter müssen separat bestellt werden

- Type C00 (analog) 0.002mm diametrical adjustment by nonius
- Type C01 (digital) 0.001 accuracy in diameter
- direct measurement system (no backlash)
- with inner coolant supply
- fine boring head, shank and insert holder must be ordered separately

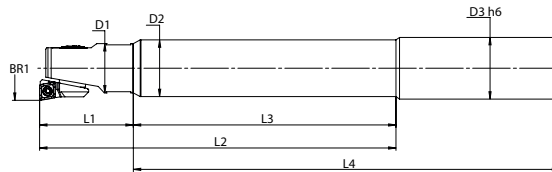
- Type C00 (analog) 0.002mm diametrical adjustment by nonius
- Type C01 (digital) 0.001 accuracy in diameter
- direct measurement system (no backlash)
- avec arrosage interne
- Corps et porte-plaquettes doivent être commandés séparément

B84

Vollhartmetallschäfte

solid carbide shanks

Corps en carbure



Bestell-Nr. / Order number/ Code	D3	D2	L2 max	L1+L4	L4	L3	M	für Einschraubkopf / for screwable head / pour tête vissable	kg
B84.025.023.170	25	23	146	211	170	105	M12	C00/D00.020.024.041	0.7
B84.025.023.220	25	23	196	261	220	155	M12	C00/D00.020.024.041	1.2
B84.025.023.265	25	23	241	306	265	200	M12	C00/D00.020.024.041	1.5
B84.032.029.220	32	29	200	265	220	155	M16	C00/D00.025.031.045	2.0
B84.032.029.260	32	29	240	305	260	195	M16	C00/D00.025.031.045	2.3
B84.032.029.310	32	29	290	355	310	245	M16	C00/D00.025.031.045	2.8
B84.032.032.217	32	32	203	268	217	152	M16	C00/D00.032.040.051	2.3
B84.032.032.287	32	32	273	338	287	222	M16	C00/D00.032.040.051	3.0
B84.032.032.357	32	32	343	408	357	292	M16	C00/D00.032.040.051	3.8

- Produktivitätsgewinn dank der unterdrückten Schwingungen können die Schnittdaten beträchtlich erhöht werden
- Verbesserte Oberflächengüte
- Verbesserte Prozesssicherheit
- Verbesserte Spanabfuhr
- Reduzierte Kosten pro Bauteil
- Für Bohrungstiefen bis 12xD

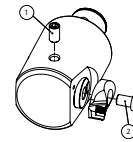
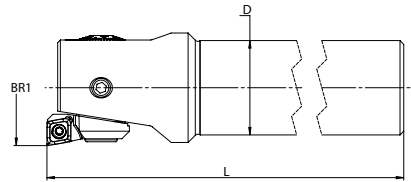
- productivity improvement: thanks to reduced vibrations, the cutting conditions can be improved remarkable
- better surface quality
- improved process stability
- better chip evacuation
- reduced cost per part
- for boring length up to 12xD

- 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
- pour longueur d'alésage jusqu'à 12xD



ECO LINE Uxx_F
Feinbohrköpfe Ø23.9-40.1

Fine boring heads Ø23.9-40.1

Têtes d'alésage fin Ø23.9-40.1



ECO LINE

Bestell-Nr. / Order number / Code	D	BR1 min.	BR1 max.	L	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaquette	kg		
U20_F20.K21.150	20	23.9	31.1	150	C14.011.024.006	CC.. 06 02 ..	0.3	J00.304.004.003	J00.314.004.006
U25_F25.K21.170	25	30.9	40.1	170	C14.013.031.006	CC.. 06 02 ..	0.6	J00.304.005.004	J00.314.005.008

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Werkzeug in einem Spannzangenfutter spannen.
- inklusiv Wendeplattenhalter

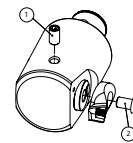
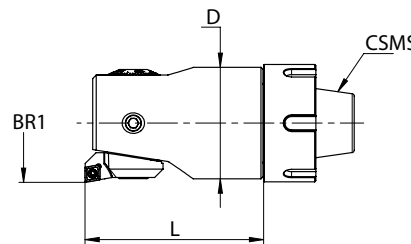
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- Clamp tool in a collet chuck.
- insert holder included

- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Serrer l'outil dans un porte-pince.
- Porte-plaquette inclus



ECO LINE Exx_F
Feinbohrköpfe Ø39.9-87.1

Fine boring heads Ø39.9-87.1

Têtes d'alésage fin Ø39.9-87.1



ECO LINE

Bestell-Nr. / Order number / Code	D / CSMS	BR1 min.	BR1 max.	L	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaquette	kg		
E25_F32.K21.065	37 / ER25	39.9	51.1	65	C14.017.040.006	CC.. 06 02 ..	0.6	J00.304.006.005	J00.314.006.010
E32_F42.K21.075	47 / ER32	50.9	67.1	75	C14.022.051.006	CC.. 06 02 ..	1.1	J00.304.008.006	J00.314.008.012
E40_F55.K21.085	59 / ER40	66.9	87.1	85	C14.030.067.009	CC.. 09 T3 ..	2.0	J00.304.010.010	J00.314.010.016

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Werkzeug in einem Spannzangenfutter spannen.
- inklusiv Wendeplattenhalter

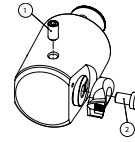
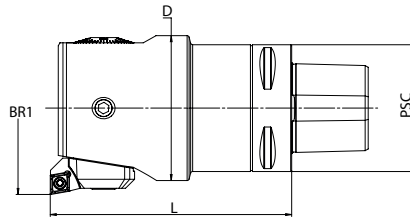
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- Clamp tool in a collet chuck.
- insert holder included



- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- Serrer l'outil dans un porte-pince.
- Porte-plaquette inclus

PSC FBHS
Feinbohrköpfe Ø23.9-153.1
DIGITAL

Fine boring heads Ø23.9-153.1
DIGITAL

Têtes d'alésage fin Ø23.9-153.1
DIGITAL

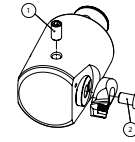
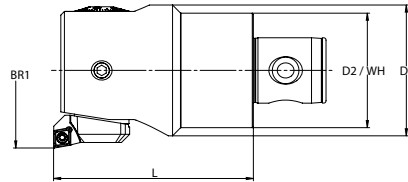




Bestell-Nr. / Order number/ Code	PSC	BR1 min.	BR1 max.	L	D	Wendeplattenhalter / insert holder / porte-inserts	kg		
PSC32-FBHS-DE-24	PSC 32 / 22.5	23.9	31.1	80	22.5	C14.011.024.006	0.3	J00.304.004.003	J00.314.004.006
PSC32-FBHS-DE-31	PSC 32 / 29	30.9	40.1	90	29	C14.013.031.006	0.4	J00.304.005.004	J00.314.005.008
PSC40-FBHS-DE-40	PSC 40 / 37	39.9	51.1	90	37	C14.017.040.006	0.6	J00.304.006.005	J00.314.006.010
PSC50-FBHS-DE-51	PSC 50 / 47	50.9	67.1	90	47	C14.022.051.006	1.1	J00.304.008.006	J00.314.008.012
PSC50-FBHS-DE-67	PSC 50 / 59	65.9	87.1	100	59	C14.30.067.009	1.7	J00.304.010.010	J00.314.010.016
PSC63-FBHS-DE-87	PSC 63 / 72	86.9	116.1	120	72	C14.30.067.009	3.4	J00.304.010.018	J00.314.010.016
PSC63-FBHS-DE-116	PSC 63 / 94	114.9	153.1	150	94	C14.30.067.009	4.8	J00.304.010.030	J00.314.010.016

- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)
- Wendeplattenhalter müssen separat bestellt werden

- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- Display unit must be ordered separately (C09.028.024.077)
- insert holder must be ordered separately

- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Unité d'affichage doit être commandé séparément (C09.028.024.077)
- porte-plaquettes doivent être commandés séparément



Bestell-Nr. / Order number / Code	WH	BR1 min.	BR1 max.	L	D1	Wendeplattenhalter / insert holder / porte-inserts	kg		
C04.020.024.045	WH1	23.9 29.9	31.1 37.1	45	22.5	C14.011.024.006 C14.011.030.006	0.1	J00.304.004.003	J00.314.004.006
C04.025.031.056	WH2	30.9 37.9	40.1 47.1	56	29	C14.013.031.006 C14.013.038.006	0.2	J00.304.005.004	J00.314.005.008
C04.032.040.066	WH3	39.9 47.9	51.1 59.1	66	37	C14.017.040.006 C14.017.048.006	0.4	J00.304.006.005	J00.314.006.010
C04.040.051.075	WH4	50.9 64.9	67.1 81.1	75	47	C14.022.051.006 C14.022.065.006	0.7	J00.304.008.006	J00.314.008.012
C04.050.067.090	WH5	66.9 84.9	87.1 105.1	90	59	C14.030.067.009 C14.030.067.006 C14.030.085.006/9	1.3	J00.304.010.010	J00.314.010.016
C04.063.087.110	WH6	86.9 104.9	116.1 134.1	110	72	C14.030.067.009 C14.030.067.006 C14.030.085.006/9	3.2	J00.304.010.018	J00.314.010.016
C04.080.116.140	WH8	115.9 133.9 153.9 165.9*	153.1 171.1 191.1 203.1*	140	94	C14.030.067.009 C14.030.067.006 C14.030.085.006/9 C14.726.003.009	5.8	J00.304.010.030	J00.314.010.016

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm resp. über Nonius 0.002mm im Durchmesser
- mit Innenkühlung
- Wendeplattenhalter müssen separat bestellt werden
- * Hinweis: Dieser Ausdrehbereich wird erreicht mit dem Wendeplattenhalter C14.726.003.009 in Kombination mit dem Distanzstück J00.803.001.006

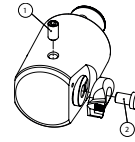
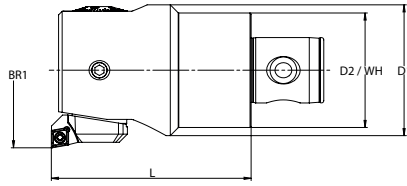
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment resp. 0.002mm by nonius
- with inner coolant supply
- insert holder must be ordered separately
- * Note: For this diameter range the insert holder C14.726.003.009 and the adapter J00.803.001.006 is required



- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm resp. 0,002mm par vernier
- Avec arrosage interne
- porte-plaquettes doivent être commandés séparément
- * Remarque : Pour obtenir cette plage de diamètres, le porte-plaquette C14.726.003.009 et l'adaptateur J00.803.001.006 sont nécessaires

C05
Feinbohrköpfe Ø23.9-203.1
DIGITAL

Fine boring heads Ø23.9-203.1
DIGITAL

Têtes d'alésage fin Ø23.9-203.1
DIGITAL



Bestell-Nr. / Order number/ Code	WH	BR1 min.	BR1 max.	L	D1	Wendeplattenhalter / insert holder / porte-inserts	kg		
C05.020.024.045	WH1	23.9 29.9	31.1 37.1	45	22.5	C14.011.024.006 C14.011.030.006	0.1	J00.304.004.003	J00.314.004.006
C05.025.031.056	WH2	30.9 37.9	40.1 47.1	56	29	C14.013.031.006 C14.013.038.006	0.2	J00.304.005.004	J00.314.005.008
C05.032.040.066	WH3	39.9 47.9	51.1 59.1	66	37	C14.017.040.006 C14.017.048.006	0.4	J00.304.006.005	J00.314.006.010
C05.040.051.075	WH4	50.9 64.9	67.1 81.1	75	47	C14.022.051.006 C14.022.065.006	0.7	J00.304.008.006	J00.314.008.012
C05.050.067.090	WH5	66.9 84.9	87.1 105.1	90	59	C14.030.067.009 C14.030.067.006 C14.030.085.006/9	1.3	J00.304.010.010	J00.314.010.016
C05.063.087.110	WH6	86.9 104.9	116.1 134.1	110	72	C14.030.067.009 C14.030.067.006 C14.030.085.006/9	3.2	J00.304.010.018	J00.314.010.016
C05.080.116.140	WH8	115.9 133.9 153.9 165.9*	153.1 171.1 191.1 203.1*	140	94	C14.030.067.009 C14.030.067.006 C14.030.085.006/9 C14.726.003.009	5.8	J00.304.010.030	J00.314.010.016

- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)
- Wendeplattenhalter müssen separat bestellt werden
- * Hinweis: Dieser Ausdrehbereich wird erreicht mit dem Wendeplattenhalter C14.726.003.009 in Kombination mit dem Distanzstück J00.803.001.006

- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- Display unit must be ordered separately (C09.028.024.077)
- insert holder must be ordered separately
- * Note: For this diameter range the insert holder C14.726.003.009 and the adapter J00.803.001.006 is required

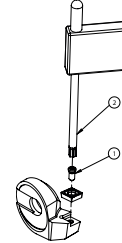
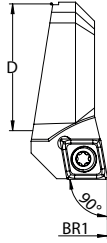
- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Unité d'affichage doit être commandé séparément (C09.028.024.077)
- porte-plaquettes doivent être commandés séparément
- * Remarque : Pour obtenir cette plage de diamètres, le porte-plaquette C14.726.003.009 et l'adaptateur J00.803.001.006 sont nécessaires



C14

Wendeplattenhalter 90°

Insert holders 90°

Porte-plaquettes 90°



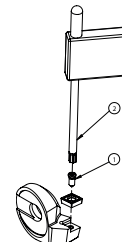
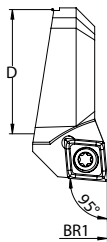
Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	D	Wendeplatte / Insert / Plaquette	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg	 1	 2
C14.011.024.006	23.9	31.1	11	CC .. 06 02 ..	C04/C05.020.024.045	0.05	J00.254.025.006	J00.254.007.000
C14.011.030.006	29.9	37.1	11	CC .. 06 02 ..	C04/C05.020.024.045	0.05	J00.254.025.006	J00.254.007.000
C14.013.031.006	30.9	40.1	13	CC .. 06 02 ..	C04/C05.025.031.056	0.05	J00.254.025.006	J00.254.007.000
C14.013.038.006	37.9	47.1	13	CC .. 06 02 ..	C04/C05.025.031.056	0.05	J00.254.025.006	J00.254.007.000
C14.017.040.006	39.9	51.1	17	CC .. 06 02 ..	C04/C05.032.040.066	0.05	J00.254.025.006	J00.254.007.000
C14.017.048.006	47.9	59.1	17	CC .. 06 02 ..	C04/C05.032.040.066	0.05	J00.254.025.006	J00.254.007.000
C14.022.051.006	50.9	67.1	22	CC .. 06 02 ..	C04/C05.040.051.075	0.05	J00.254.025.006	J00.254.007.000
C14.022.065.006	64.9	81.1	22	CC .. 06 02 ..	C04/C05.040.051.075	0.05	J00.254.025.006	J00.254.007.000
C14.030.067.006	66.9	87.1	30	CC .. 06 02 ..	C04/C05.050.067.090	0.1	J00.254.025.006	J00.254.007.000
C14.030.067.009	66.9	87.1	30	CC .. 09 T3 ..	C04/C05.050.067.090	0.1	J00.254.040.009	J00.254.009.000
C14.030.085.006	84.9	105.1	30	CC .. 06 02 ..	C04/C05.050.067.090	0.1	J00.254.025.006	J00.254.007.000
C14.030.085.009	84.9	105.1	30	CC .. 09 T3 ..	C04/C05.050.067.090	0.1	J00.254.040.009	J00.254.009.000
C14.030.067.006	86.9	116.1	30	CC .. 06 02 ..	C04/C05.063.087.110	0.1	J00.254.025.006	J00.254.007.000
C14.030.067.009	86.9	116.1	30	CC .. 09 T3 ..	C04/C05.063.087.110	0.1	J00.254.040.009	J00.254.009.000
C14.030.085.006	104.9	134.1	30	CC .. 06 02 ..	C04/C05.063.087.110	0.1	J00.254.025.006	J00.254.007.000
C14.030.085.009	104.9	134.1	30	CC .. 09 T3 ..	C04/C05.063.087.110	0.1	J00.254.040.009	J00.254.009.000
C14.030.067.006	115.9	153.1	30	CC .. 06 02 ..	C04/C05.080.116.140	0.1	J00.254.025.006	J00.254.007.000
C14.030.067.009	115.9	153.1	30	CC .. 09 T3 ..	C04/C05.080.116.140	0.1	J00.254.040.009	J00.254.009.000
C14.030.085.006	133.9	171.1	30	CC .. 06 02 ..	C04/C05.080.116.140	0.1	J00.254.025.006	J00.254.007.000
C14.030.085.009	133.9	171.1	30	CC .. 09 T3 ..	C04/C05.080.116.140	0.1	J00.254.040.009	J00.254.009.000
C14.726.003.009	153.9	191.1	30	CC .. 09 T3 ..	C04/C05.080.116.140	0.1	J00.254.040.009	J00.254.009.000



C15

Wendeplattenhalter 95°

Insert holders 95°

Porte-plaquettes 95°



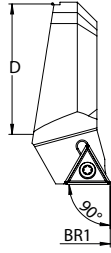
Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	D	Wendeplatte / Insert / Plaquette	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg	 1	 2
C15.011.024.006	23.9	31.1	11	CC .. 06 02 ..	C04/C05.020.024.045	0.05	J00.254.025.006	J00.254.007.000
C15.013.031.006	30.9	40.1	13	CC .. 06 02 ..	C04/C05.025.031.056	0.05	J00.254.025.006	J00.254.007.000
C15.017.040.006	39.9	51.1	17	CC .. 06 02 ..	C04/C05.032.040.066	0.05	J00.254.025.006	J00.254.007.000
C15.022.051.006	50.9	67.1	22	CC .. 06 02 ..	C04/C05.040.051.075	0.05	J00.254.025.006	J00.254.007.000
C15.030.067.009	66.9	87.1	30	CC .. 09 T3 ..	C04/C05.050.067.090	0.1	J00.254.040.009	J00.254.009.000
C15.030.067.009	86.9	116.1	30	CC .. 09 T3 ..	C04/C05.063.087.110	0.1	J00.254.040.009	J00.254.009.000
C15.030.067.009	115.9	153.1	30	CC .. 09 T3 ..	C04/C05.080.116.140	0.1	J00.254.040.009	J00.254.009.000

C17

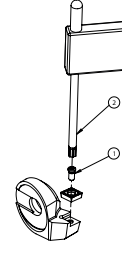
Wendeplattenhalter 90°





Insert holders 90°



Porte-plaquettes 90°



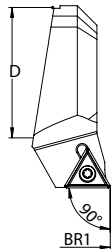
Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	Wendeplatte / Insert / Plaquette	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg	 1	 2
C17.011.024.T07	23.9	31.1	11	TP .. 07 01 ..	C04/C05.020.024.045	0.05	WTL.ER2.001.004	J00.254.007.000
C17.011.030.T07	29.9	37.1	11	TP .. 07 01 ..	C04/C05.020.024.045	0.05	WTL.ER2.001.004	J00.254.007.000
C17.013.031.T07	30.9	40.1	13	TP .. 07 01 ..	C04/C05.025.031.056	0.05	WTL.ER2.001.004	J00.254.007.000
C17.013.038.T07	37.9	47.1	13	TP .. 07 01 ..	C04/C05.025.031.056	0.05	WTL.ER2.001.004	J00.254.007.000
C17.017.040.T07	39.9	51.1	17	TP .. 07 01 ..	C04/C05.032.040.066	0.05	WTL.ER2.001.004	J00.254.007.000
C17.017.048.T07	47.9	59.1	17	TP .. 07 01 ..	C04/C05.032.040.066	0.05	WTL.ER2.001.004	J00.254.007.000
C17.022.051.T07	50.9	67.1	22	TP .. 07 01 ..	C04/C05.040.051.075	0.05	WTL.ER2.001.004	J00.254.007.000
C17.022.065.T07	64.9	81.1	22	TP .. 07 01 ..	C04/C05.040.051.075	0.05	WTL.ER2.001.004	J00.254.007.000
C17.030.067.T11	66.9	87.1	30	TP .. 11 02 ..	C04/C05.050.067.090	0.1	WTM.ER2.001.005	J00.254.007.000
C17.030.085.T11	84.9	105.1	30	TP .. 11 02 ..	C04/C05.050.067.090	0.1	WTM.ER2.001.005	J00.254.007.000
C17.030.067.T11	86.9	116.1	30	TP .. 11 02 ..	C04/C05.063.087.110	0.1	WTM.ER2.001.005	J00.254.007.000
C17.030.085.T11	104.9	134.1	30	TP .. 11 02 ..	C04/C05.063.087.110	0.1	WTM.ER2.001.005	J00.254.007.000
C17.030.067.T11	115.9	153.1	30	TP .. 11 02 ..	C04/C05.080.116.140	0.1	WTM.ER2.001.005	J00.254.007.000
C17.030.085.T11	133.9	171.1	30	TP .. 11 02 ..	C04/C05.080.116.140	0.1	WTM.ER2.001.005	J00.254.007.000
C17.726.003.T11	153.9	191.1	30	TP .. 11 02 ..	C04/C05.080.116.140	0.1	WTM.ER2.001.005	J00.254.007.000

C16

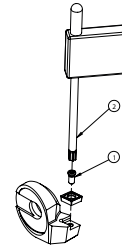
Wendeplattenhalter 93°



Insert holders 93°



Porte-plaquettes 93°

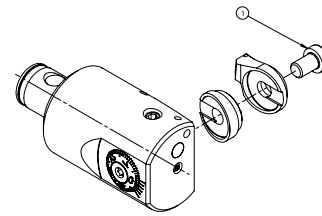
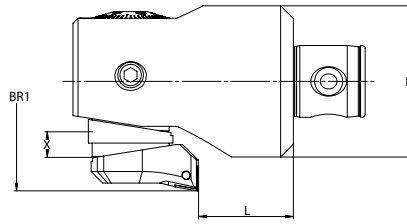



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	Wendeplatte / Insert / Plaquette	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg	 1	 2
C16.011.024.T06	23.9	31.1	11	TB .. 06 01 ..	C04/C05.020.024.045	0.05	WWA.ER2.001.004	WWA.ER1.001.000
C16.013.031.T09	30.9	40.1	13	TP .. 09 02 ..	C04/C05.025.031.056	0.05	WCA.ER2.001.006	J00.254.007.000
C16.017.040.T09	39.9	51.1	17	TP .. 09 02 ..	C04/C05.032.040.066	0.05	WCA.ER2.001.006	J00.254.007.000
C16.022.051.T11	50.9	67.1	22	TP .. 11 03 ..	C04/C05.040.051.075	0.05	WCA.ER2.001.006	J00.254.007.000
C16.030.067.T11	66.9	87.1	30	TP .. 11 03 ..	C04/C05.050.067.090	0.1	WCA.ER2.001.006	J00.254.007.000
C16.030.085.T11	84.9	105.1	30	TP .. 11 03 ..	C04/C5.050.067.080	0.1	WCA.ER2.001.006	J00.254.007.000
C16.030.067.T11	86.9	116.1	30	TP .. 11 03 ..	C04/C05.063.087.110	0.1	WCA.ER2.001.006	J00.254.007.000
C16.030.085.T11	104.9	134.1	30	TP .. 11 03 ..	C04/C05.063.087.110	0.1	WCA.ER2.001.006	J00.254.007.000
C16.030.067.T11	115.9	153.1	30	TP .. 11 03 ..	C04/C05.080.116.140	0.1	WCA.ER2.001.006	J00.254.007.000
C16.030.085.T11	133.9	171.1	30	TP .. 11 03 ..	C04/C05.080.116.140	0.1	WCA.ER2.001.006	J00.254.007.000

C24
Umkehradapter
für Rückwärtsbearbeitung

Reversal adapter
for reverse machining

Adaptateur pour
alésér en sens opposé

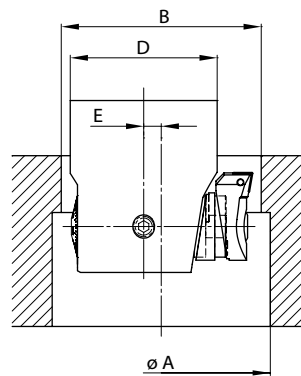


Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L	X	für Feinbohrkopf / for fine boring head / pour Têtes d'alésage fin	kg	
C24.011.065.008	37	44	22.5	8.5	6.5	C04.020.024.045	0.05	J00.324.004.012
C24.011.080.008	40	51	22.5	8.5	8.0	C04.020.024.045	0.05	J00.324.004.013
C24.013.065.007	44	53	29	7.6	6.5	C04.025.031.056	0.05	J00.324.005.014
C24.013.100.007	51	60	29	7.6	10.0	C04.025.031.056	0.05	J00.324.005.016
C24.017.065.013	53	64	37	13.3	6.5	C04.032.040.066	0.05	J00.324.006.015
C24.017.100.013	60	71	37	13.3	10.0	C04.032.040.066	0.05	J00.324.006.020
C24.022.065.016	64	80	47	16.2	6.5	C04.040.051.075	0.05	J00.324.008.020
C24.022.120.016	75	91	47	16.2	12.0	C04.040.051.075	0.05	J00.324.008.025
C24.030.100.027	87	107	59	27.0	10.0	C04.050.067.090	0.05	J00.324.010.030
C24.030.100.027	107	136	72	47.0	10.0	C04.063.087.110	0.05	J00.324.010.030
C24.030.100.027	136	173	90	77.0	10.0	C04.080.116.140	0.05	J00.324.010.030

- für die Verwendung in Feinbohrköpfen der Serie C04 und C05
- damit können die Wendeplattenhalter der Serie C14 und C15 rückwärts montiert werden
- Befestigungsschrauben werden mitgeliefert
- **Achtung: Linkslauf**

- for use in fine boring heads from serie C04 and C05
- the insert holders from serie C14 and C15 will be fitted backwards on the adapter
- fastening screws will be delivered with adapters
- **Caution: counterclockwise rotation**

- Les porte-plaquettes des series C14 et C15 seront montés en sens opposé sur l'adaptateur
- Des vis de fixation seront livrées avec les adaptateurs
- **Attention : rotation dans le sens contraire des aiguilles d'une montre**



- Minstdurchmesser der Eintrittsbohrung

$$B = \frac{D+A}{2} + 1^*$$
- Mindestversatz zum Einfahren

$$E = \frac{A-B}{2} + 0.5^*$$

*Sicherheitsabstand

- minimum entry bore diameter

$$B = \frac{D+A}{2} + 1^*$$
- minimum off centre to enter into the bore

$$E = \frac{A-B}{2} + 0.5^*$$

*safety distance

- diamètre minimal de l'alésage d'entrée

$$B = \frac{D+A}{2} + 1^*$$
- décentrage minimum pour entrer dans l'alésage

$$E = \frac{A-B}{2} + 0.5^*$$

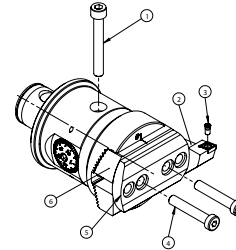
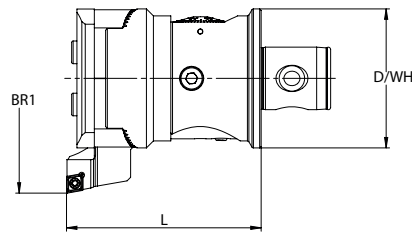
*Distance de sécurité

C44

Feinbohrköpfe ø86-402

Fine boring heads ø86-402

Têtes d'alésage fin ø86-402



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	WH	L	D	kg	①	④
C44.080.086.112	86	402	WH6/8	112	80	2.8	J00.344.008.065	J00.344.008.044

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm im Durchmesser
- mit Innenkühlung
- Wendeplattenhalter müssen separat bestellt werden

- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment
- with inner coolant supply
- insert holder must be ordered separately

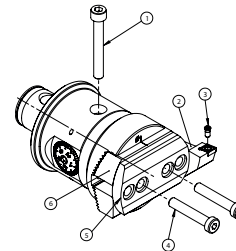
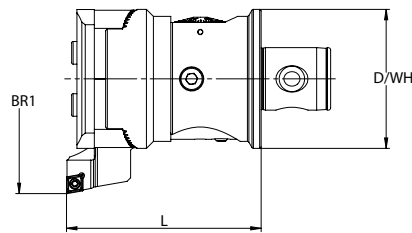
- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm
- Avec arrosage interne
- porte-plaquettes doivent être commandés séparément

C45

Feinbohrköpfe ø86-402 DIGITAL

Fine boring heads ø86-402 DIGITAL

Têtes d'alésage fin ø86-402 DIGITAL



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	WH	L	D	kg	①	④
C45.080.086.112	86	402	WH6/8	112	80	2.8	J00.344.008.065	J00.344.008.044

- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswerteelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)
- Wendeplattenhalter müssen separat bestellt werden

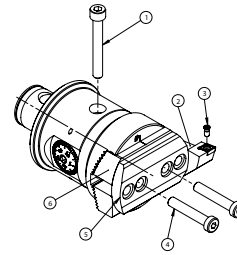
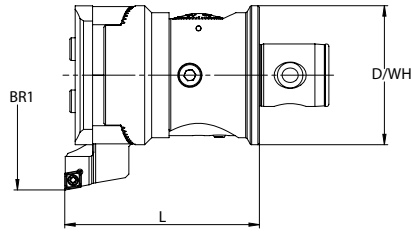
- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- Display unit must be ordered separately (C09.028.024.077)

- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Unité d'affichage doit être commandé séparément (C09.028.024.077)
- porte-plaquettes doivent être commandés séparément

C54
Wendeplattenhalter inkl.
Druckplatte und Abstützung

Insert holders incl.
clamp plate and support block

Porte-plaquettes incl.
plaque de serrage et support



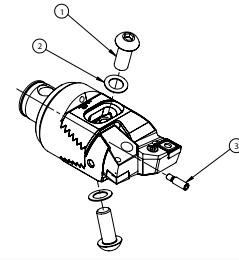
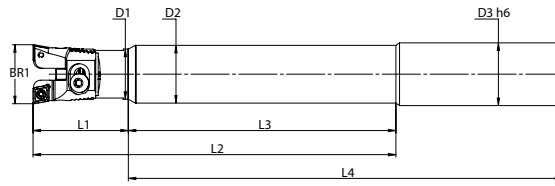
Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	Wendeplatte / Insert / Plaquette	kg	②	③	⑤	⑥
C54.086.138.009	86	138	CC .. 09 T3 ..	0,5	J00.354.086.009	J00.254.040.009	J00.345.010.086	J00.345.020.086
C54.086.138.012	86	138	CC .. 12 04 ..	0,5	J00.354.086.012	J00.254.050.010	J00.345.010.086	J00.345.020.086
C54.136.220.009	136	220	CC .. 09 T3 ..	0,9	J00.354.136.009	J00.254.040.009	J00.345.010.136	J00.345.020.136
C54.136.220.012	136	220	CC .. 12 04 ..	0,9	J00.354.136.012	J00.254.050.010	J00.345.010.136	J00.345.020.136
C54.188.302.009	188	302	CC .. 09 T3 ..	1,0	J00.354.188.009	J00.254.040.009	J00.345.010.136	J00.345.020.136
C54.242.402.009	242	402	CC .. 09 T3 ..	1,3	J00.354.242.009	J00.254.040.009	J00.345.010.136	J00.345.020.136

D04

Zweischneiderköpfe zum Einschrauben

Twin cutter heads with thread connection

Tête à double tranchant avec connexion fileté



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1	L1	für Wendeplattenhalter / for insert holder / pour porte-inserts	kg	①	②	③
D00.020.024.041	23.5	31.1	20	41	D14.020.024.006 D24.020.024.006 D34.020.024.006 D37.020.024.006	0.1	J00.404.004.008	J00.405.004.000	J00.406.030.012
D00.025.031.045	29.5	40.1	25	45	D14.025.031.006 D24.025.031.006 D34.025.031.006 D37.025.031.006	0.1	J00.404.005.012	J00.405.005.000	J00.406.030.012
D00.032.040.051	39.5	51.1	32	51	D14.032.040.009 D24.032.040.009 D34.032.040.009 D37.032.040.009	0.2	J00.404.006.016	J00.405.006.000	J00.406.030.012

- mit Innenkühlung
- Zweischneiderköpfe, Schaft und Wendeplattenhalter müssen separat bestellt werden

- with inner coolant supply
- twin cutter heads, shank and insert holder must be ordered separately

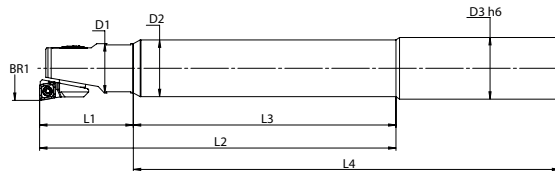
- avec arrosage interne
- Corps et porte-plaquettes doivent être commandés séparément

B84

Vollhartmetallschäfte

solid carbide shanks

Corps en carbure



Bestell-Nr. / Order number/ Code	D3	D2	L2 max	L1+L4	L4	L3	M	für Einschraubkopf / for screwable head / pour tête vissable	kg
B84.025.023.170	25	23	146	211	170	105	M12	C00/D00.020.024.041	0.7
B84.025.023.220	25	23	196	261	220	155	M12	C00/D00.020.024.041	1.2
B84.025.023.265	25	23	241	306	265	200	M12	C00/D00.020.024.041	1.5
B84.032.029.220	32	29	200	265	220	155	M16	C00/D00.025.031.045	2.0
B84.032.029.260	32	29	240	305	260	195	M16	C00/D00.025.031.045	2.3
B84.032.029.310	32	29	290	355	310	245	M16	C00/D00.025.031.045	2.8
B84.032.032.217	32	32	203	268	217	152	M16	C00/D00.032.040.051	2.3
B84.032.032.287	32	32	273	338	287	222	M16	C00/D00.032.040.051	3.0
B84.032.032.357	32	32	343	408	357	292	M16	C00/D00.032.040.051	3.8

- Produktivitätsgewinn dank der unterdrückten Schwingungen können die Schnittdaten beträchtlich erhöht werden
- Verbesserte Oberflächengüte
- Verbesserte Prozesssicherheit
- Verbesserte Spanabfuhr
- Reduzierte Kosten pro Bauteil
- Für Bohrungstiefen bis 12xD

- 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
- for boring length up to 12xD

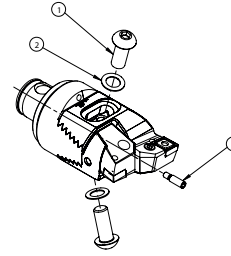
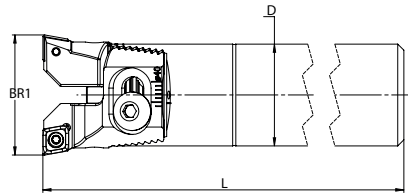
- Amélioration de la productivité : grâce à la réduction des vibrations, les conditions de coupe peuvent être améliorées de façon remarquable.
- Meilleure qualité de surface
- Meilleure stabilité du processus
- Meilleure évacuation des copeaux
- Réduction du coût par pièce
- pour longueur d'alésage jusqu'à 12xD

ECO LINE Uxx_Z

Zweischneiderköpfe Ø23.5-40.1

Twin cutter heads with Ø23.5-40.1

Tête à double tranchant Ø23.5-40.1



ECO LINE

Bestell-Nr. / Order number / Code	D	BR1 min.	BR1 max.	L	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaquette	kg	①	②	③
U20_Z20.K23.150	20	23.5	31.1	150	D14.020.024.006	CC.. 06 02 ..	0.3	J00.404.004.008	J00.405.004.000	J00.406.030.012
U25_Z25.K23.170	25	29.5	40.1	170	D14.025.031.006	CC.. 06 02 ..	0.6	J00.404.005.012	J00.405.005.000	J00.406.030.012

- mit Innenkühlung
- Werkzeug in einem Spannzangenfutter spannen.
- inklusiv Wendeplattenhalter

- with inner coolant supply
- Clamp tool in a collet chuck.
- insert holder included

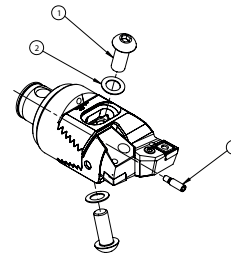
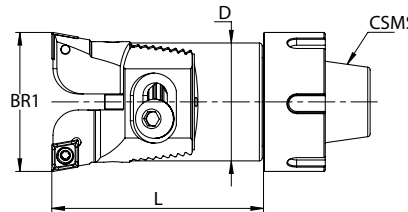
- Avec arrosage interne
- Serrer l'outil dans un porte-pince.
- Porte-plaquette inclus

ECO LINE Exx_Z

Zweischneiderköpfe Ø39.9-87.1

Twin cutter heads with Ø39.9-87.1

Tête à double tranchant Ø39.9-87.1



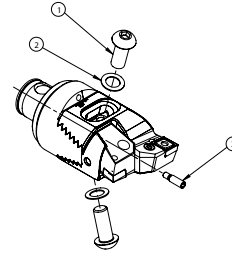
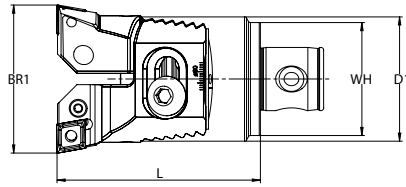
ECO LINE

Bestell-Nr. / Order number / Code	D / CSMS	BR1 min.	BR1 max.	L	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaquette	kg	①	②	③
E25_Z32.K23.065	32 / ER25	39.5	50.1	65	D14.032.040.009	CC.. 09 T3 ..	0.5	J00.404.006.016	J00.405.006.000	J00.406.030.012
E32_Z42.K23.075	42 / ER32	49.5	67.1	75	D14.039.051.009	CC.. 09 T3 ..	0.9	J00.404.008.020	J00.405.008.000	J00.406.040.020
E40_Z55.K23.085	55 / ER40	65.5	87.1	85	D14.050.067.012	CC.. 12 04 ..	1.7	J00.404.010.025	J00.405.010.000	J00.406.040.020

- mit Innenkühlung
- Werkzeug in einem Spannzangenfutter spannen.
- inklusiv Wendeplattenhalter

- with inner coolant supply
- Clamp tool in a collet chuck.
- insert holder included

- Avec arrosage interne
- Serrer l'outil dans un porte-pince.
- Porte-plaquette inclus



Bestell-Nr. / Order number / Code	WH	BR1 min.	BR1 max.	L	D1	Wendeplattenhalter / insert holder / porte-inserts	kg	①	②	③
D04.020.024.045	WH1	23.5	31.1	45	20	D14.020.024.006 D24.020.024.006 D34.020.024.006 D37.020.024.006	0.1	J00.404.004.008	J00.405.004.000	J00.406.030.012
D04.025.031.056	WH2	29.5	40.1	56	25	D14.025.031.006 D24.025.031.006 D34.025.031.006 D37.025.031.006	0.1	J00.404.005.012	J00.405.005.000	J00.406.030.012
D04.032.040.066	WH3	39.5	51.1	66	32	D14.032.040.009 D24.032.040.009 D34.032.040.009 D37.032.040.009	0.3	J00.404.006.016	J00.405.006.000	J00.406.030.012
D04.040.051.075	WH4	49.5	67.1	75	42	D14.039.051.009 D24.039.051.009 D34.039.051.009 D37.039.051.009	0.4	J00.404.008.020	J00.405.008.000	J00.406.040.020
D04.050.067.090	WH5	65.5	87.5	90	55	D14.050.067.012/112 D24.050.067.012/112 D34.050.067.012 D37.050.067.012	0.8	J00.404.010.025	J00.405.010.000	J00.406.040.020
D04.063.087.110	WH6	86.5	116.1	110	72	D14.064.087.012/116 D24.064.087.012/116 D34.064.087.012 D37.064.087.012	1.4	J00.404.012.025	J00.405.012.000	J00.406.040.020
D04.080.115.140	WH8	114.5	153.1	140	94	D14.090.115.012/116 D24.090.115.116 D34.090.115.012 D37.090.115.012	2.6	J00.404.016.035	J00.405.016.000	J00.406.040.020

- mit Innenkühlung
- Wendeplattenhalter müssen separat bestellt werden

- with inner coolant supply
- insert holder must be ordered separately

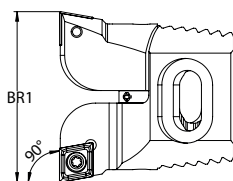
- Avec arrosage interne
- porte-plaquettes doivent être commandés séparément

D14

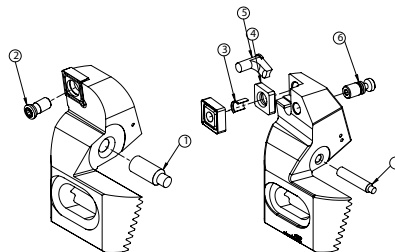
Wendeplattenhalter 90°



Insert holders 90°



Porte-inserts 90°



Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	D1 Kopf / D1 head / D1 Tête	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥
D14.020.024.006	23.5	31.1	20	CC ..06 02 ..	0.05	J00.414.004.007	J00.254.025.006				
D14.025.031.006	29.5	40.1	25	CC ..06 02 ..	0.05	J00.414.004.010	J00.254.025.006				
D14.032.040.009	39.5	51.1	32	CC ..09 T3 ..	0.1	J00.414.004.013	J00.254.040.009				
D14.039.051.009	49.5	67.1	42	CC ..09 T3 ..	0.2	J00.414.006.014	J00.254.040.009				
D14.050.067.012	65.5	87.5	55	CC ..12 04 ..	0.5	J00.415.006.020	J00.254.050.010				
D14.050.067.112	65.5	87.5	55	CN ..12 04 ..	0.5	J00.415.006.020	J00.416.012.000	J00.417.012.000	J00.418.012.000	J00.419.012.000	
D14.064.087.012	86.5	116.1	72	CC ..12 04 ..	1.2	J00.415.006.030	J00.254.050.010				
D14.064.087.116	86.5	116.1	72	CN ..16 06 ..	1.2	J00.415.006.030	J00.416.016.000	J00.417.016.000	J00.418.016.000	J00.419.016.000	
D14.090.115.012	114.5	153.1	94	CC ..12 04 ..	2.6	J00.415.006.040	J00.254.050.010				
D14.090.115.116	114.5	153.1	94	CN ..16 06 ..	2.6	J00.415.006.040	J00.416.016.000	J00.417.016.000	J00.418.016.000	J00.419.016.000	

- für die Verwendung in Zweischniderköpfen der Serie D04
- Wendeplattenhalter werden paarweise geliefert

- for use in twin cutter boring heads from serie D04
- insert holders will be supplied in pairs

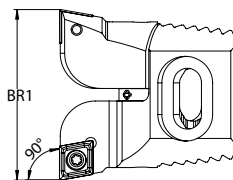
- Pour utilisation dans tête à double tranchant de la série D04
- Porte-plaquettes seront livrés par paire

D34

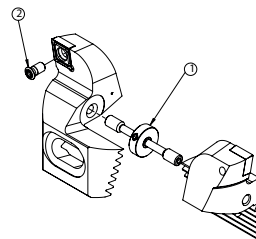
Synchro-Wendeplattenhalter 90°



Synchro-Insert holders 90°



Synchro-porte-inserts 90°



Bestell-Nr. / Order number / Code	BR1 min.	BR1 max.	D1 Kopf / D1 head / D1 Tête	Wendeplatte / Insert / Plaquette	kg	①	②
D34.020.024.006	23.5	31.1	20	CC ..06 02 ..	0.05	J00.434.004.018	J00.254.025.006
D34.025.031.006	29.5	40.1	25	CC ..06 02 ..	0.05	J00.434.004.023	J00.254.025.006
D34.032.040.009	39.5	51.1	32	CC ..09 T3 ..	0.1	J00.434.004.030	J00.254.040.009
D34.039.051.009	49.5	67.1	42	CC ..09 T3 ..	0.2	J00.434.006.040	J00.254.040.009
D34.050.067.012	65.5	87.5	55	CC ..12 04 ..	0.5	J00.434.006.052	J00.254.050.010
D34.064.087.012	86.5	116.1	72	CC ..12 04 ..	1.2	J00.434.006.068	J00.254.050.010
D34.090.115.012	114.5	153.1	94	CC ..12 04 ..	2.6	J00.434.006.090	J00.254.050.010

- für die Verwendung in Zweischniderköpfen der Serie D04
- mit der Synchrospindel können beide Wendeplattenhalter gleichzeitig symmetrisch eingestellt werden
- Wendeplattenhalter werden paarweise geliefert

- for use in twin cutter boring heads from serie D04
- with synchro spindle both insert holders can be adjusted synchronously and symmetrically
- insert holders will be supplied in pairs

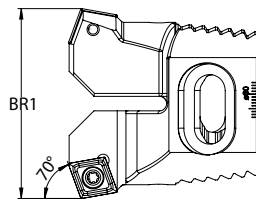
- Pour utilisation dans tête à double tranchant de la série D04
- avec la vis de réglage synchro, les deux porte-plaquettes peuvent être réglés de façon synchronisée et symétrique
- Porte-plaquettes seront livrés par paire

D24

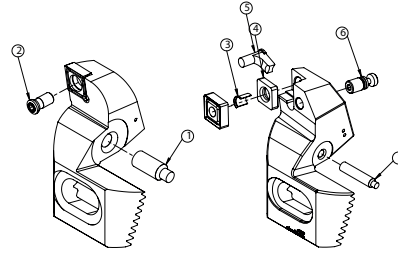
Wendeplattenhalter 70°



Insert holders 70°



Porte-inserts 70°



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1 Kopf / D1 head / D1 Tête	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥
D24.020.024.006	23.5	31.1	20	CC . .06 02 . .	0.05	J00.414.004.007			J00.254.025.006		
D24.025.031.006	29.5	40.1	25	CC . .06 02 . .	0.05	J00.414.004.010			J00.254.025.006		
D24.032.040.009	39.5	51.1	32	CC . .09 T3 . .	0.1	J00.414.004.013			J00.254.040.009		
D24.039.051.009	49.5	67.1	42	CC . .09 T3 . .	0.2	J00.414.006.014			J00.254.040.009		
D24.050.067.012	65.5	87.5	55	CC . .12 04 . .	0.5	J00.415.006.020			J00.254.050.010		
D24.050.067.112	65.5	87.5	55	CN . .12 04 . .	0.5	J00.415.006.020			J00.416.012.000	J00.417.012.000	J00.418.012.000
D24.064.087.012	86.5	116.1	72	CC . .12 04 . .	1.2	J00.415.006.030			J00.254.050.010		
D24.064.087.116	86.5	116.1	72	CN . .16 06 . .	1.2	J00.415.006.030			J00.416.016.000	J00.417.016.000	J00.418.016.000
D24.090.115.116	114.5	153.1	94	CN . .16 06 . .	2.6	J00.415.006.030			J00.416.016.000	J00.417.016.000	J00.418.016.000

- für die Verwendung in Zweisechneiderköpfen der Serie D04
- Wendeplattenhalter werden paarweise geliefert

- for use in twin cutter boring heads from serie D04
- insert holders will be supplied in pairs

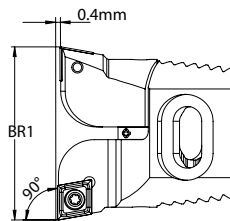
- Pour utilisation dans tête à double tranchant de la série D04
- Porte-plaquettes seront livrés par paire

D37

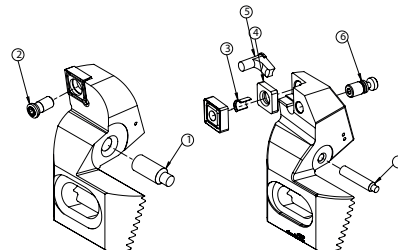
Wendeplattenhalter 90° axial 0.4mm zurückgesetzt



Insert holders 90° axial 0.4mm staggered



Porte-inserts 90° 0.4mm de décalage axial



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1 Kopf / D1 head / D1 Tête	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥
D37.020.024.006	23.5	31.1	20	CC . .06 02 . .	0.05	J00.414.004.007			J00.254.025.006		
D37.025.031.006	29.5	40.1	25	CC . .06 02 . .	0.05	J00.414.004.010			J00.254.025.006		
D37.032.040.009	39.5	51.1	32	CC . .09 T3 . .	0.1	J00.414.004.013			J00.254.040.009		
D37.039.051.009	49.5	67.1	42	CC . .09 T3 . .	0.2	J00.414.006.014			J00.254.040.009		
D37.050.067.012	65.5	87.5	55	CC . .12 04 . .	0.5	J00.415.006.020			J00.254.050.010		
D37.064.087.012	86.5	116.1	72	CC . .12 04 . .	1.2	J00.415.006.030			J00.254.050.010		
D37.090.115.012	114.5	153.1	94	CC . .12 04 . .	2.6	J00.415.006.040			J00.254.050.010		

- für die Verwendung in Zweisechneiderköpfen der Serie D04
- zur Schnittaufteilung bei grosser Spantiefe
- Wendeplattenhalter werden paarweise geliefert

- for use in twin cutter boring heads from serie D04
- for divided cut
- insert holders will be supplied in pairs

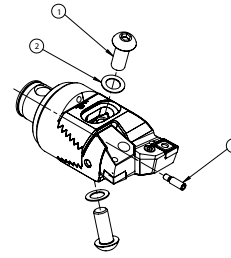
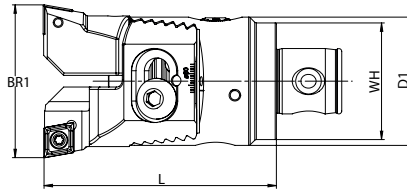
- Pour utilisation dans tête à double tranchant de la série D04
- pour coupe sur deux niveaux
- Porte-plaquettes seront livrés par paire

D64

Schrupp-/ Schlicht Zweischneiderkopf Ø29.5-116.1

Roughing-/Finishing Twin cutter heads with Ø29.5-116.1

Dégrossissage-/Finition Tête à double tranchant Ø29.5-116.1



Bestell-Nr. / Order number/ Code	WH	BR1 min.	BR1 max.	L	D1	Wendeplattenhalter / insert holder / porte-inserts	kg	①	②	③
D64.025.031.056	WH2	29.5	40.1	56	25	D74.025.031.006	0.1	J00.404.005.012	J00.405.005.000	J00.406.030.012
D64.032.040.066	WH3	39.5	51.1	66	32	D74.032.040.009	0.3	J00.404.006.016	J00.405.006.000	J00.406.030.012
D64.040.051.082	WH4	49.5	67.1	82	42	D74.039.051.009	0.4	J00.404.008.020	J00.405.008.000	J00.406.040.020
D64.050.067.100	WH5	65.5	87.5	100	55	D74.050.067.012	0.8	J00.404.010.025	J00.405.010.000	J00.406.040.020
D64.063.087.125	WH6	86.5	116.1	125	72	D74.064.087.012	1.4	J00.404.012.025	J00.405.012.000	J00.406.040.020

- Schruppen und Schlichten in einem Arbeitsgang
- Zustellgenauigkeit von 0.01mm im Durchmesser
- Schlichtschneide axial 0.4mm zurückgesetzt
- höchste Stabilität durch Kerbverzahnung
- mit Innenkühlung
- Wendeplattenhalter müssen separat bestellt werden

- Roughing and finishing in one step
- Setting accuracy 0.01mm in diameter
- Fine boring cutting edge axial 0.4mm staggered
- highest stability because of the tooth profile
- with inner coolant supply
- insert holder must be ordered separately

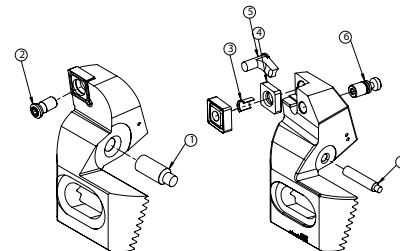
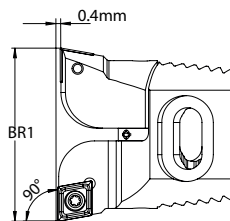
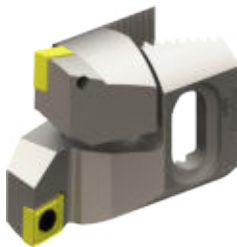
- Dégrossissage et finition en une étape
- Réglage diamétral de 0,01mm
- Arête de coupe décalé axialement de 0.4mm
- stabilité maximale grâce au profil moleté
- Avec arrosage interne
- porte-plaquettes doivent être commandés séparément

D74

Wendeplattenhalter 90° Schrupp-/ Schlicht

Insert holders 90° Roughing-/Finishing

Porte-inserts 90° Dégrossissage-/Finition



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1 Kopf / D1 head / D1 Tête	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥
D74.025.031.006	29.5	40.1	25	CC .06 02 ..	0.05	J00.414.004.010	J00.254.025.006				
D74.032.040.009	39.5	51.1	32	CC .09 T3 ..	0.1	J00.414.004.013	J00.254.040.009				
D74.039.051.009	49.5	67.1	42	CC .09 T3 ..	0.2	J00.414.006.014	J00.254.040.009				
D74.050.067.012	65.5	87.5	55	CC .12 04 ..	0.5	J00.415.006.020	J00.254.050.010				
D74.064.087.012	86.5	116.1	72	CC .12 04 ..	1.2	J00.415.006.030	J00.254.050.010				

- für die Verwendung in Zweischneiderköpfen der Serie D64
- Wendeplattenhalter werden paarweise geliefert

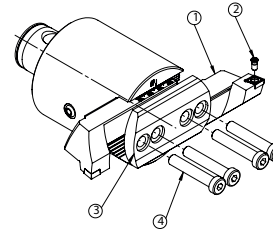
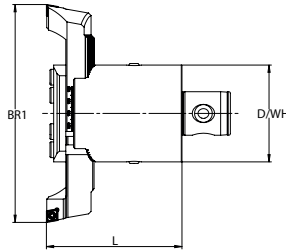
- for use in twin cutter boring heads from serie D64
- insert holders will be supplied in pairs

- Pour utilisation dans tête à double tranchant de la série D64
- Porte-plaquettes seront livrés par paire

D44
Zweischneiderkopf ø86-402

Twin cutter boring head ø86-402

Tête à double tranchant ø86-402



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	WH	L	D	kg	④
D44.080.086.112	86	402	WH6/8	112	80	3.3	J00.344.008.044

- mit Innenkühlung
- Wendeplattenhalter müssen separat bestellt werden

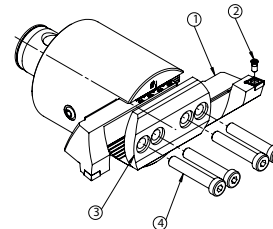
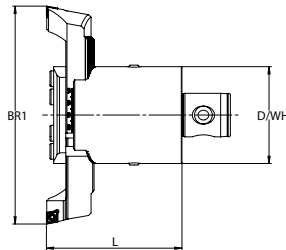
- with inner coolant supply
- insert holder must be ordered separately

- Avec arrosage interne
- porte-plaquettes doivent être commandés séparément

D54
Wendeplattenhalter inkl.
Druckplatte

**Insert holders incl.
clamp plate**

**Porte-plaquettes incl.
plaque de serrage**



Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	Wendeplatte / Insert / Plaquette	kg	①	②	③
D54.086.138.009	86	138	CC .. 09 T3 ..	0,7	J00.354.086.009	J00.354.086.009	J00.345.010.086
D54.086.138.012	86	138	CC .. 12 04 ..	0,7	J00.354.086.012	J00.354.086.012	J00.345.010.086
D54.136.220.009	136	220	CC .. 09 T3 ..	1,1	J00.354.136.009	J00.354.136.009	J00.345.010.136
D54.136.220.012	136	220	CC .. 12 04 ..	1,1	J00.354.136.012	J00.354.136.012	J00.345.010.136
D54.188.302.009	188	302	CC .. 09 T3 ..	1,4	J00.354.188.009	J00.354.188.009	J00.345.010.136
D54.242.402.009	242	402	CC .. 09 T3 ..	1,9	J00.354.242.009	J00.354.242.009	J00.345.010.136

- für die Verwendung in Zweischneiderköpfen der Serie D44
- Wendeplattenhalter werden paarweise geliefert

- for use in twin cutter boring heads from serie D44
- insert holders will be supplied in pairs

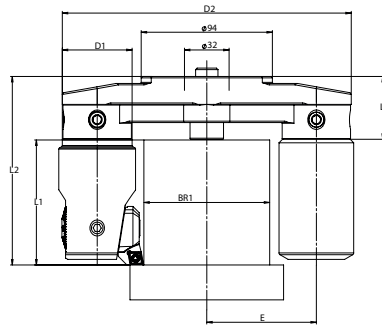
- Pour utilisation dans tête à double tranchant de la série D44
- Porte-plaquettes seront livrés par paire

E61

Werkzeughalter zum Zapfendrehen

Tool holders for pin turning

Porte-outils pour adaptateur pour le tournage

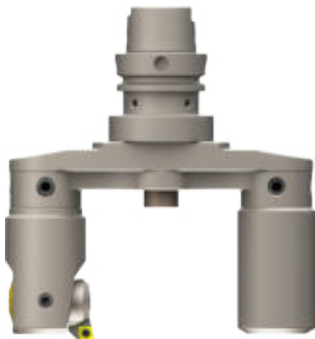


Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D1	E	D2	L3	L1	L2	kg	Feinbohrkopf / Boring head/ Têtes d'alésage fin	Schruppkopf / Roughing head/ Tête à double tranchant
E61.032.032.099	15.9	27.1	32	33.5	99	40	65.5	105.5	1.0	C04.032.040.066	D04.032.040.066
E61.032.032.110	26.9	38.1	32	39.0	110	40	65.5	105.5	1.3	C04.032.040.066	D04.032.040.066
E61.040.032.145	37.9	54.1	40	52.5	145	40	74.5	114.5	1.6	C04.040.051.075	D04.040.051.075
E61.040.032.161	53.9	70.1	40	60.5	161	40	74.5	114.5	1.8	C04.040.051.075	D04.040.051.075
E61.050.032.207	69.9	90.1	50	78.5	207	45	89.5	134.5	2.2	C04.050.067.090	D04.050.067.090
E61.050.032.227	89.9	110.1	50	88.5	227	45	89.5	134.5	2.4	C04.050.067.090	D04.050.067.090

- Einfache, kostengünstige Ausführung
- Brücke wird auf einen Fräsdorn Ø32 gespannt
- Modular aufgebaut und verlängerbar für grosse Zapfenlängen
- mit innerer Kühlmittelzuführung
- Gegengewicht und Spannschraube im Lieferumfang enthalten. Feinbohrkopf oder Zweischnneiderkopf muss separat bestellt werden

- simple and cost effective solution
- bridge is assembled on a milling arbor Ø32
- modular construction, extendable for long work pieces
- with inner coolant supply
- Counter weight and clamping screw included. Fine boring head or twin cutter must be ordered separately.

- solution simple et rentable
- la traverse est assemblé sur un mandrin porte-fraise Ø32
- construction modulaire, extensible pour les longues pièces à usiner
- Avec arrosage interne



• **Achtung:** Spindel linksdrehend
Vc max. 450 m/min

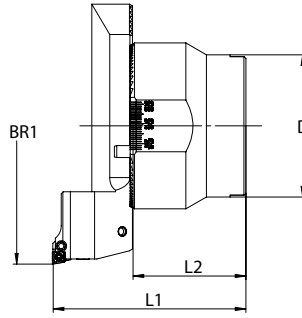
• **Attention:** Counter clockwise spindle rotation
Vc max. 450 m/min

• **Attention:** Rotation de la broche dans le sens inverse des aiguilles d'une montre
Vc max. 450 m/min

ECO LINE Dxx_F
Feinbohrbrückenwerkzeuge
Ø85.5-650.1

Fine boring brigdes tools
Ø85.5-650.1

Traverses d'alésage fin
Ø85.5-650.1



ECO LINE

Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L1	L2	Feinbohraufsatz / Fine bore adapter/ Têtes d'alésage fin	Wendeplatte / Insert / Plaquette	kg
D32_F01.085.098	85.5	140.1	78 / D32	98	50	F01_WCA.B11.050	CC.. 06 02 ..	2.3
D32_F02.139.098	139.5	220.1	78 / D32	98	50	F02_WCA.B11.050	CC.. 06 02 ..	2.5
D32_F02.219.098	219.5	310.1	78 / D32	98	50	F02_WCA.B11.050	CC.. 06 02 ..	3.3
D40_F02.309.108	309.5	395.1	88 / D40	108	50	F02_WCA.B11.050	CC.. 06 02 ..	4.4
D40_F02.394.108	394.5	480.1	88 / D40	108	50	F02_WCA.B11.050	CC.. 06 02 ..	5.0
D60_F02.479.118	479.5	565.1	128 / D60	118	50	F02_WCA.B11.050	CC.. 06 02 ..	10.0
D60_F02.564.118	564.5	650.1	128 / D60	118	50	F02_WCA.B11.050	CC.. 06 02 ..	11.9

- DurchmesserEinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm im Durchmesser
- mit Innenkühlung
- Werkzeug in einer Fräsdorn- oder Messerkopfaufnahme spannen.
- **inklusive Feinbohraufsatz (F01/F02)**

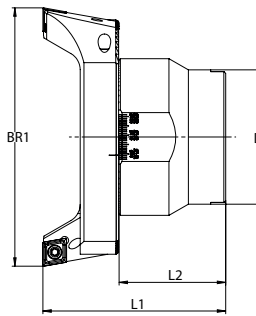
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment
- with inner coolant supply
- Clamp tool in a shell mill holder.
- **Fine boring adapter included (F01/F02)**

- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01mm
- Avec arrosage interne
- Serrer l'outil dans un porte-fraise
- **Adaptateur pour alésage fin inclus (F01/F02)**

ECO LINE Dxx_Z
Zwischneiderbrückenwerk-
Ø85.5-650.1

Twin cutter brigde tools
Ø85.5-650.1

Traverses à double tranchant
Ø85.5-650.1



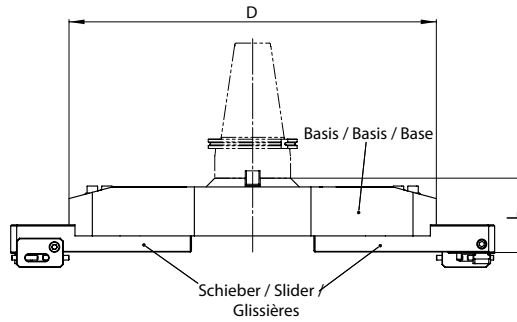
ECO LINE

Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L1	L2	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaquette	kg
D32_Z01.085.098	85.5	140.1	78 / D32	98	50	Z01_WCC.B11.050	CC.. 12 04 ..	2.5
D32_Z02.139.098	139.5	220.1	78 / D32	98	50	Z02_WCC.B11.050	CC.. 12 04 ..	2.7
D32_Z02.219.098	219.5	310.1	78 / D32	98	50	Z02_WCC.B11.050	CC.. 12 04 ..	3.4
D40_Z02.309.108	309.5	395.1	88 / D40	108	50	Z02_WCC.B11.050	CC.. 12 04 ..	4.8
D40_Z02.394.108	394.5	480.1	88 / D40	108	50	Z02_WCC.B11.050	CC.. 12 04 ..	5.4
D60_Z02.479.118	479.5	565.1	128 / D60	118	50	Z02_WCC.B11.050	CC.. 12 04 ..	10.4
D60_Z02.564.118	564.5	650.1	128 / D60	118	50	Z02_WCC.B11.050	CC.. 12 04 ..	12.3

- mit Innenkühlung
- Werkzeug in einer Fräsdorn- oder Messerkopfaufnahme spannen.
- **inklusive Wendeplattenhalter (Z01/Z02)**

- with inner coolant supply
- Clamp tool in a shell mill holder.
- **Insert holder are included (Z01/ZF02)**

- Avec arrosage interne
- Serrer l'outil dans un porte-fraise
- **Porte inserts inclus (Z01/ Z02)**



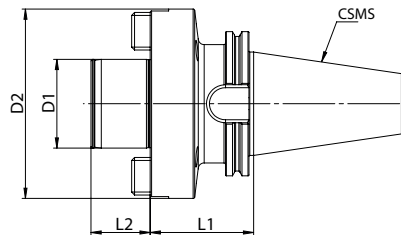
Bestell-Nr. Basis/ Order number Basis/ Code Base	BR1 min.	BR1 max.	D	L	kg	Bestell-Nr. Schieber/ Order number Slider/ Code Glissières	kg
E62.060.063.080	650	1105	630	128	16.3	E64.000.310.048	13.7
E62.060.108.080	1100	1655	1080	128	27.3	E64.000.360.048	15.7
E62.060.163.080	1650	2205	1630	128	42.2	E64.000.360.048	15.7

- für die Verwendung auf Aufnahmedorn ø60 / ø129 DIN 6357
- Basis aus Aluminium
- fragen Sie uns an für optimierte Komplettlösungen
- Schieber müssen separat bestellt werden und werden paarweise geliefert

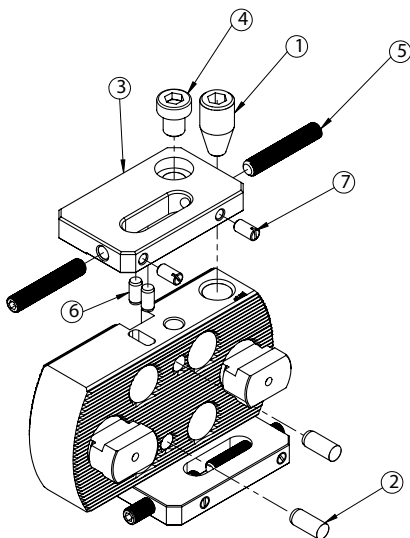
- for use on holding arbor ø60 / ø129
- basis made of aluminium
- please get in touch with us for customized solutions
- sliders must be ordered separately and will be supplied in pairs

- pour utilisation sur le mandrin de base ø60 / ø129 DIN 6357
- base en aluminium
- veuillez nous contacter pour des solutions personnalisées
- Glissières doivent être commandés séparément et sont livrés par paire

E58

Aufnahmedorn für
Verlängerungskonsolen ø650-2205Holding arbor for
Extension bridges ø650-2205Mandrin de base pour
Extensions de traverses ø650-2205

Bestell-Nr. / Order number/ Code	CSMS	D1	L1	L2	D	kg
E58.450.060.070	SK 50	60	70	40	128	7.5
E58.550.060.080	BT 50	60	80	40	128	8.1
E58.810.060.070	HSK-A 100	60	70	40	128	6.2

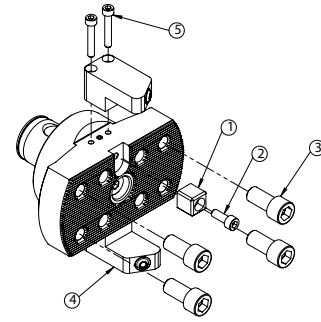
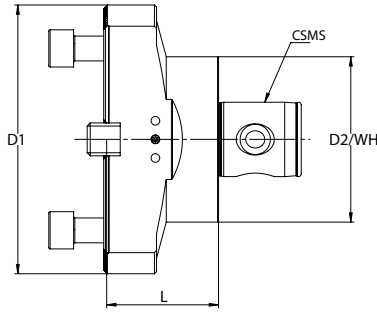


1	2	3	4	5	6	7
J00.560.016.030	J00.560.008.028	J00.560.080.012	J00.560.110.018	J00.560.008.045	J00.560.006.014	J00.560.006.012

E04 / E14 / E34 / E44 / E54
Aufnahmen mit Konsole
Ø150-655

Master shanks with bridge adapter
Ø150-655

base avec adaptateur de traverses
Ø150-655



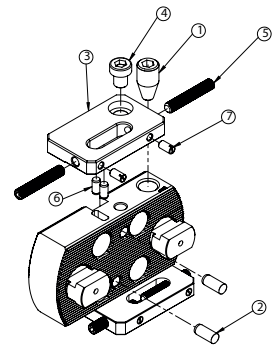
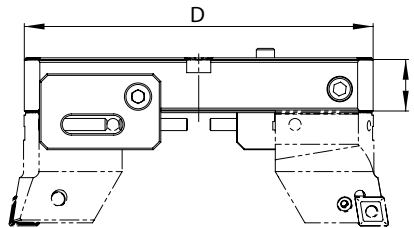
Bestell-Nr. / Order number/ Code	CSMS / WH	D1	L	D2	kg	①	②	③	④	⑤
E04.340.130.069	CAT 40	130	69.1		3.3	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E04.350.130.069	CAT 50	130	69.1		5.6	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E14.440.130.069	ISO 40	130	69.1		3.3	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E14.450.130.069	ISO 50	130	69.1		5.6	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E34.540.130.077	BT 40	130	77		3.4	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E34.550.130.088	BT 50	130	88		6.5	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E44.806.130.075	HSK A63	130	77		2.8	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E44.810.130.075	HSK A100	130	88		4.4	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025
E54.090.130.055	WH8	130	55	90	3.0	J00.514.016.016	J00.515.006.015	J00.516.012.025	J00.500.028.015	J00.500.005.025

E60

Verlängerungskonsolen Ø150-655

Extension bridges Ø150-655

Extensions de traverses Ø150-655



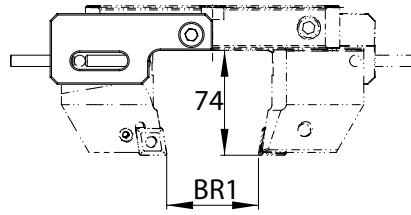
Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	D	L	kg
E60.130.130.030	150	205	130	30	1.9
E60.130.180.030	200	255	180	30	2.8
E60.130.230.035	250	305	230	35	4.0
E60.130.280.035	300	355	280	35	5.1
E60.130.330.040	350	405	330	40	6.9
E60.130.380.040	400	455	380	40	8.0
E60.130.430.040	450	505	430	40	9.2
E60.130.480.040	500	555	480	40	10.2
E60.130.530.050	550	605	530	50	13.9
E60.130.580.050	600	655	580	50	15.3

• für die Verwendung zu E04/E14/E34/E44/E54

• for use with E04/E14/E34/E44/E54

• Pour utilisation E04/E14/E34/E44/54

①	②	③	④	⑤	⑥	⑦
J00.560.016.030	J00.560.008.028	J00.560.080.012	J00.560.110.018	J00.560.008.045	J00.560.006.014	J00.560.006.012



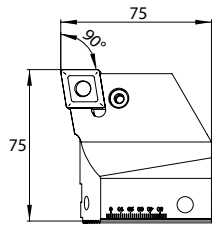
Bestell-Nr. / Order number/ Code	BR1 min.	BR1 max.	Für Verlängerungskonsole / For extensions bridge / pour Extensions de traverses	kg
E00.561.080.012	10	65	E60.130.180.030	0.9
E00.561.080.012	60	115	E60.130.230.035	0.9
E00.561.080.012	110	165	E60.130.280.035	0.9
E00.561.080.012	160	215	E60.130.330.040	0.9
E00.561.080.012	210	265	E60.130.380.040	0.9
E00.561.080.012	260	315	E60.130.430.040	0.9
E00.561.080.012	310	365	E60.130.480.040	0.9
E00.561.080.012	360	415	E60.130.530.050	0.9
E00.561.080.012	410	465	E60.130.580.050	0.9

E70

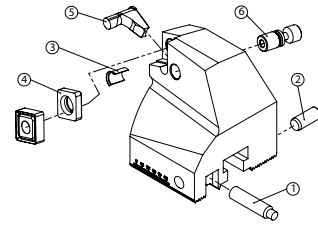
Wendeplattenhalter 90°




Insert holders 90°



Porte-plaquettes 90°



Bestell-Nr. / Order number/ Code	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥	
E70.070.009.075	CC .. 09 T3 ..	3.2	J00.570.008.035	J00.570.008.024					J00.254.040.009
E70.070.012.075	CN .. 12 04 ..	3.2	J00.570.008.035	J00.570.008.024	J00.416.012.000	J00.417.012.000	J00.418.012.000	J00.419.012.000	
E70.070.019.075	CN .. 19 06 ..	3.2	J00.570.008.035	J00.570.008.024	J00.416.019.000	J00.417.019.000	J00.418.019.000	J00.419.019.000	

• Wendeplattenhalter werden paarweise geliefert

• insert holders will be supplied in pairs

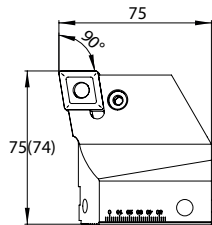
• Porte-plaquettes seront livrés par paire

E75

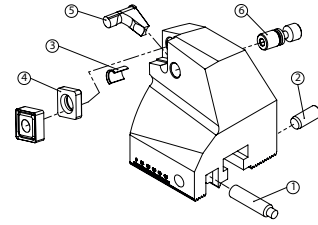
Wendeplattenhalter 90° axial 1.0mm zurückgesetzt




Insert holders 90° axial 1.0mm staggered



Porte-plaquettes 90° en retrait axial de 1,0 mm



Bestell-Nr. / Order number/ Code	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥	
E75.070.009.074	CC .. 09 T3 ..	3.2	J00.570.008.035	J00.570.008.024					J00.254.040.009
E75.070.012.074	CN .. 12 04 ..	3.2	J00.570.008.035	J00.570.008.024	J00.416.012.000	J00.417.012.000	J00.418.012.000	J00.419.012.000	
E75.070.019.074	CN .. 19 06 ..	3.2	J00.570.008.035	J00.570.008.024	J00.416.019.000	J00.417.019.000	J00.418.019.000	J00.419.019.000	

• Wendeplattenhalter werden paarweise geliefert

• insert holders will be supplied in pairs

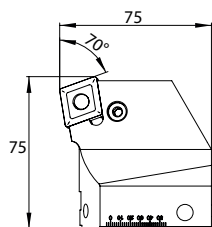
• Porte-plaquettes seront livrés par paire

E80

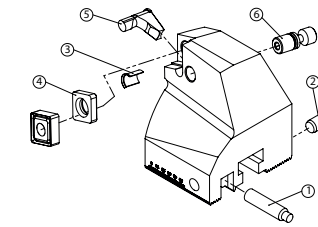
Wendeplattenhalter 70°




Insert holders 70°



Porte-plaquettes 70°



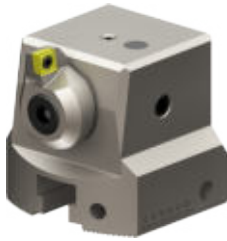
Bestell-Nr. / Order number/ Code	Wendeplatte / Insert / Plaquette	kg	①	②	③	④	⑤	⑥	
E80.070.019.075	CN .. 19 06 ..	3.2	J00.570.008.035	J00.570.008.024	J00.416.019.000	J00.417.019.000	J00.418.019.000	J00.419.019.000	

• Wendeplattenhalter werden paarweise geliefert

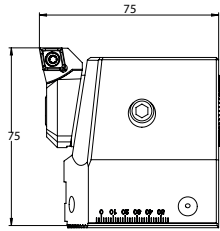
• insert holders will be supplied in pairs

• Porte-plaquettes seront livrés par paire

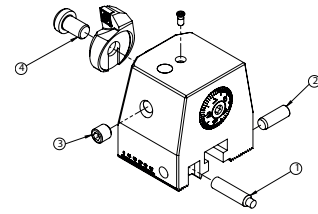
E90
Feinbohrkopf



Fine boring head



Tête d'alésage fin



Bestell-Nr. / Order number/ Code	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaque	kg	①	②	③	④	
E90.070.030.075	C14.030.067.006 C14.030.067.009	CC .. 06 02 .. CC .. 09 T3 ..	2.1	J00.570.008.035	J00.570.008.024	J00.590.010.020	J00.314.010.016	J00.254.025.006 J00.254.040.009

- Durchmessereinstellung mit geringstem Umkehrspiel
- Zustellgenauigkeit von 0.01mm im Durchmesser
- Wendeplattenhalter müssen separat bestellt werden

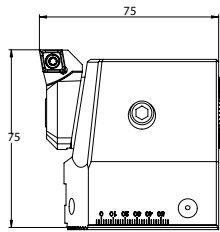
- diametrical adjustment with maximal reduced reversal backlash
- 0.01mm diametrical adjustment
- insert holder must be ordered separately

- réglage du diamètre avec un jeu réduit au minimum
- Réglage diamétral de 0,01 mm
- porte-plaquettes doivent être commandés séparément

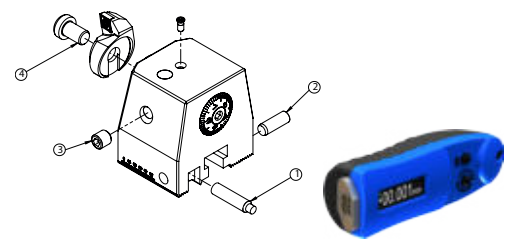
E91
Feinbohrkopf
DIGITAL



Fine boring head
DIGITAL



Tête d'alésage fin
DIGITAL



Bestell-Nr. / Order number/ Code	Wendeplattenhalter / insert holder / porte-inserts	Wendeplatte / Insert / Plaque	kg	①	②	③	④	
E91.070.030.075	C14.030.067.006 C14.030.067.009	CC .. 06 02 .. CC .. 09 T3 ..	2.1	J00.570.008.035	J00.570.008.024	J00.590.010.020	J00.314.010.016	J00.254.025.006 J00.254.040.009

- Einstellgenauigkeit 0.001mm im Durchmesser
- direktes Wegmeßsystem (kein Umkehrspiel)
- keine Batterie und Auswertelektronik im Werkzeug verbaut
- sehr einfache Bedienung
- digital und analog einsetzbar
- Anzeigeeinheit muss separat bestellt werden (C09.028.024.077)
- Wendeplattenhalter müssen separat bestellt werden

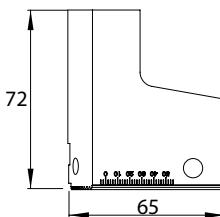
- 0.001 accuracy in diameter
- direct measurement system (no backlash)
- no battery and electronic evaluation unit inside the tool
- very easy operation
- for digital and analog use
- Display unit must be ordered separately (C09.028.024.077)

- Précision de réglage de 0,001 mm sur le diamètre
- système de mesure directe (sans jeu)
- pas de batterie ni de dispositif électronique d'évaluation installé dans l'outil
- fonctionnement très simple
- pour une utilisation numérique et analogique
- Unité d'affichage doit être commandé séparément (C09.028.024.077)
- porte-plaquettes doivent être commandés séparément

E94
Gegengewicht










Counterweight



Contre-poids

Bestell-Nr. / Order number/ Code	kg
E94.070.065.072	2.2












Bestell-Nummer	Wendeplatte	Schneidstoff	Technische Informationen	Materialien	v [m/min]	f [mm/Z]
Order number	Insert	Cutting mat.	Technical information	Materials	v [m/min]	f [mm/r]
Code	Plaquette	Matière de coupe	Informations techniques	Matières	v [m/min]	f [mm/r]
H00.600.050.022	WCMT 020102	 CTU 	Cermet-Wendeplatte (Titan-Carbid / Titan-Nitrid) für Feinbohrarbeiten mit hoher Schnittgeschwindigkeit und gleichmässigem Aufmass.	Stahl Grauguss Aluminium	50–300 50–300 bis 800	0.04 bis 0.10
			Titanium carbide / titanium nitride (Cermet) for fine bore machining with high cutting speed and regular cutting depth.	Steel Cast Iron Aluminium	50–300 50–300 to 800	0.04 to 0.10
			Plaquette de Cermet (carbure de titane / nitrure de titane) pour travaux d'alésage fin avec haute vitesse de coupe et profondeur de coupe régulière.	Acier Fonte Aluminium	50–300 50–300 à 800	0.04 à 0.10
H00.600.060.022	WCGT 020102	 HUP 	Unbeschichtete Hartmetall-Wendeplatte , allseitig geschliffen mit grossem Spanwinkel für Feinbohrarbeiten. Die Wendeplatte eignet sich insbesondere bei kleinem Aufmass und langen Bohrungen.	Stahl Stahl rostfrei Grauguss Aluminium	50–250 30–200 50–300 bis 800	0.04 bis 0.10
			Uncoated Carbide insert, ground all around with large rake angle for fine bore cutting. The insert is particularly good for small cutting depth in deep bores.	Steel Stainless steel Cast iron Aluminium	50–250 30–200 50–300 to 800	0.04 to 0.10
			Plaquette en carbure non revêtue, rectifiée sur tous les côtés avec un grand angle de coupe pour les travaux d'alésage fin. La plaquette est particulièrement adaptée aux petites profondeurs de coupe et aux longs alésages.	Acier Acier inox Fonte Aluminium	50–250 30–200 50–300 à 800	0.04 à 0.10
H00.600.070.022	WCGT 020102	 SFH	 Mehrfach beschichtete superfeinstkorn Hartmetall-Wendeplatte zur Bearbeitung von harten und gehärteten Werkstoffen bis 62 HRC. Die Wendeplatte eignet sich hervorragend für Feinbohrarbeiten in gehärtetem Stahl als Alternative zum K-Schleifen.	Stahl weich	bis 300	0.04
H00.600.070.024	WCGT 020104			Stahl HRC 45 Stahl HRC 50 Stahl HRC 55 Stahl HRC 60 Stahl HRC 62	80–250 80–200 50–150 30–100 20– 60	bis 0.20
			Repeat coated extremely fine grain carbide insert for machining of hard and hardened steels up to 62 HRC. Very suitable for fine boring of precision bores in hardened steel as an alternative to Jig-grinding.	Steel soft Steel HRC 45 Steel HRC 50 Steel HRC 55 Steel HRC 60 Steel HRC 62	bis 300 80–250 80–200 50–150 30–100 20– 60	0.04 to 0.20
			Plaquette en carbure à grains super fins multicouches pour l'usinage de matériaux durs et trempés jusqu'à 62 HRC. Cette plaquette convient parfaitement aux travaux d'alésage fin dans l'acier trempé, comme alternative à la rectification par coordonnée.	Acier soft Acier HRC 45 Acier HRC 50 Acier HRC 55 Acier HRC 60 Acier HRC 62	à 300 80–250 80–200 50–150 30–100 20– 60	0.04 à 0.20



HIT
HRC+

H00 Wendeplatten

Inserts

Plaquettes















Bestell-Nummer	Wendeplatte	Schneidstoff	Technische Informationen	Materialen	v [m/min]	f [mm/Z]
Order number	Insert	Cutting mat.	Technical information	Materials	v [m/min]	f [mm/r]
Code	Plaquette	Matière de coupe	Informations techniques	Matières	v [m/min]	f [mm/r]
H00.600.200.062	CCMT 060202	 CTU	 <p>Cermet-Wendeplatte (Titan-Carbid / Titan-Nitrid) für niedrige bis hohe Schnittgeschwindigkeiten beim Schlichten mit gleichbleibendem Aufmass. Auch für leichte Schrupparbeiten einsetzbar. Bester Widerstand gegen Verschleiss und Schneidekantendeformation. Geeignet für Feinbohrarbeiten mit normalem Aufmass von 0.25 mm im Durchmesser.</p> <p>Titanium carbide / titanium nitride (Cermet) for finishing with low to high cutting speeds with regular cutting depth. Also for light roughing. High resistance to wear and tip deformation. Suitable for fine boring with normal cutting depths from 0.25 mm in bored diameter.</p>	Stahl	50–300	0.08
H00.600.200.064	CCMT 060204			Stahl rostfrei	30–250	bis
H00.600.200.092	CCMT 09T302			Grauguss	50–300	0.15
H00.600.200.094	CCMT 09T304			Aluminium	bis 800	
H00.600.200.098	CCMT 09T308			Buntmetall	bis 500	
H00.600.200.128	CCMT 120408					
			<p>Acier</p> <p>Acier inox</p> <p>Fonte</p> <p>Aluminium</p> <p>Alliage de cuivre</p>	<p>50–300</p> <p>30–250</p> <p>50–300</p> <p>à 800</p> <p>à 500</p>	<p>0.08</p> <p>à</p> <p>0.15</p>	
H00.600.850.062	CCGT 060202L	 ICH	 <p>Hochwiderstandsfähig gegen Brüche durch die besondere Zusammensetzung des Basismaterial plus der speziellen TiCN-Beschichtung. Sehr hohe mechanische Stabilität und Verschleissbeständigkeit. Sehr gut geeignet für unterbrochenen Schnitt.</p> <p>Excellent toughness and wear resistance due to the special composition of the base material plus the special TiCN coating. Very suitable for interrupted cuts</p>	Stahl weich	bis 300	0.04
H00.600.850.064	CCGT 060204L			Stahl HRC 45	80–250	bis
H00.600.850.094	CCGT 09T304L			Stahl HRC 50	80–200	0.20
			<p>Stahl HRC 55</p> <p>Stahl rostfrei</p> <p>Grauguss</p>	<p>50–150</p> <p>30–200</p> <p>50–300</p>	<p>0.20</p>	
			<p>Haute résistance et tenacité à l'usure grâce à la composition spéciale de la matière de base et au revêtement spécial TiCN. Stabilité mécanique et résistance à l'usure très élevées. Très bien adapté à la coupe interrompue.</p>	<p>Acier soft</p> <p>Acier HRC 45</p> <p>Acier HRC 50</p> <p>Acier HRC 55</p> <p>Acier inox</p> <p>Fonte</p>	<p>à 300</p> <p>80–250</p> <p>80–200</p> <p>50–150</p> <p>30–200</p> <p>50–300</p>	<p>0.04</p> <p>à</p> <p>0.20</p>

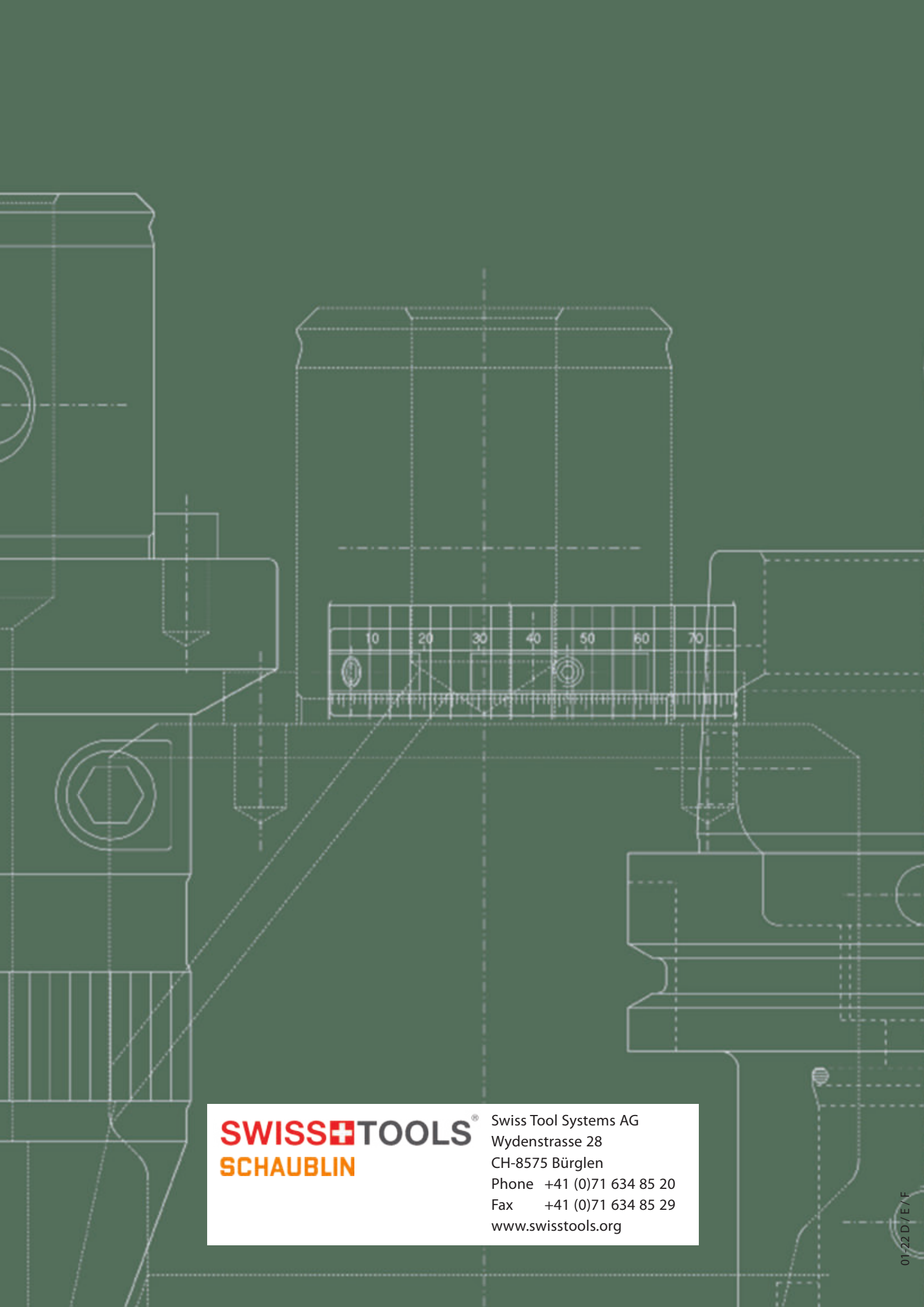
Bestell-Nummer	Wendeplatte	Schneidstoff	Technische Informationen	Materialien	v [m/min]	f [mm/Z]
Order number	Insert	Cutting mat.	Technical information	Materials	v [m/min]	f [mm/r]
Code	Plaquette	Matière de coupe	Informations techniques	Matières	v [m/min]	f [mm/r]
H00.600.300.062	CCGT 060202L ○	CTG 	Allseitig geschliffene, hochpositive Cermet-Wendeplatte (Titan-Carbid / Titan-Nitrid), für alle Feinbohrarbeiten. Die Wendeplatte eignet sich insbesondere bei kleinem Aufmass und langen Bohrungen. Durch den grossen Spanwinkel sind die Druck- und Schnittkräfte sehr gering.	Stahl Stahl rostfrei Grauguss Aluminium Buntmetall	50–300 30–250 50–250 bis 800 bis 500	0.06 bis 0.12
H00.600.300.064	CCGT 060204L ○					
H00.600.300.092	CCGT 09T302L ○					
H00.600.300.094	CCGT 09T304L ○					
HIT			All ground, Cermet insert with highly positive rake angle for all fine bore machining. Very suitable for deep bores with small cutting depth. Low cutting and pressing forces due to large rake angle.	Steel Stainless steel Cast iron Aluminium Copper alloys	50–300 30–250 50–250 to 800 to 500	0.06 to 0.12
			Plaquette en cermet (carbure de titane/nitride de titane) entièrement rectifiée et avec une géométrie hautement positive de coupe, pour tous les travaux d'alésage fin. La plaquette est particulièrement adaptée aux petites profondeurs d'alésage et aux longs alésages. En raison du grand angle de coupe, la pression et les forces de coupe sont très faibles.	Acier Acier inox Fonte Aluminium Alliage de cuivre	50–300 30–250 50–250 à 800 à 500	0.06 à 0.12
H00.600.800.062	CCGT 060202L ○	SFH 	Mehrfach beschichtete superfeinstkorn Hartmetall-Wendeplatte zur Bearbeitung von harten und gehärteten Werkstoffen bis 62 HRC . Die Wendeplatte eignet sich hervorragend für Feinbohrarbeiten in gehärtetem Stahl als Alternative zum K-Schleifen.	Stahl weich Stahl HRC 45 Stahl HRC 50 Stahl HRC 55 Stahl HRC 60 Stahl HRC 62	bis 300 80–250 80–200 50–150 30–100 20– 60	0.04 bis 0.20
H00.600.800.064	CCGT 060204L ○					
H00.600.800.092	CCGT 09T302L ○					
H00.600.800.094	CCGT 09T304L ○					
HIT HRC+			Repeat coated extremely fine grain carbide insert for machining of hard and hardened steels up to 62 HRC . Very suitable for fine boring of precision bores in hardened steel as an alternative to Jig-grinding.	Steel soft Steel HRC 45 Steel HRC 50 Steel HRC 55 Steel HRC 60 Steel HRC 62	bis 300 80–250 80–200 50–150 30–100 20– 60	0.04 to 0.20
			Plaquette en carbure à grains super fins multicouches pour l'usinage de matériaux durs et trempés jusqu'à 62 HRC . Cette plaquette convient parfaitement aux travaux d'alésage fin dans l'acier trempé, comme alternative à la réctification par coordonnée.	Acier soft Acier HRC 45 Acier HRC 50 Acier HRC 55 Acier HRC 60 Acier HRC 62	à 300 80–250 80–200 50–150 30–100 20– 60	0.04 à 0.20

H00 Wendeplatten

Inserts

Plaquettes

Bestell-Nummer	Wendeplatte	Schneidstoff	Technische Informationen	Materialen	v [m/min]	f [mm/Z]
Order number	Insert	Cutting mat.	Technical information	Materials	v [m/min]	f [mm/r]
Code	Plaquette	Matière de coupe	Informations techniques	Matières	v [m/min]	f [mm/r]
H00.600.400.064	CCMT 060204	 HBH	<p>Mehrfach beschichtete Hartmetall-Wendeplatte mit hoher Verschleissfestigkeit und grossem Widerstand gegen plastische Verformung. Generell geeignet für die Stahlbearbeitung mit mittleren bis hohen Schnittgeschwindigkeiten.</p> <p>Repeat coated carbide insert with high wear and plastic deformation resistance. Generally used for machining of ferrous steels with middle to high cutting speeds.</p>	Stahl	20–280	0.10
H00.600.400.094	CCMT 09T304			Stahl rostfrei	30–250	bis
H00.600.400.098	CCMT 09T308			Grauguss	50–250	0.40
H00.600.401.128	CCMT 1204.08			Sphäroguss	50–180	
H00.600.400.128	CNMG 120408			Aluminium	bis 800	
H00.600.400.168	CNMG 160608			Buntmetall	bis 500	
H00.600.400.169	CNMG 160612					
H00.600.400.198	CNMG 190612					
H00.600.400.199	CNMG 190616					
				Steel	20–280	0.10
				Stainless steel	30–250	to
				Cast iron	50–250	0.40
				Spheroidal cast iron	50–180	
				Aluminium	to 800	
				Copper alloys	to 500	
			<p>Plaquette en carbure multicouche avec une grande résistance à l'usure et à la déformation plastique. Généralement utilisée pour l'usinage de l'acier avec des vitesses de coupe de moyennes à élevées.</p>	Acier	20–280	0.10
				Acier inox	30–250	à
				Fonte	50–250	0.40
				Fonte sphéroïdale	50–180	
				Aluminium	à 800	
				Alliage de cuivre	à 500	
H00.600.500.128	CNMM 120408	 HBZ	<p>Mehrfach beschichtete Hartmetall-Wendeplatte mit höchster Zähigkeit und Stabilität der Schneidekante. Geeignet für Stahlbearbeitung durch die positive Schneidegeometrie auch bei unterbrochenem Schnitt.</p> <p>Repeat coated carbide insert, very tough with high stability cutting edge. Suitable for machining of ferrous steels also with interrupted cut due to its positive cutting geometry.</p>	Stahl	50–300	0.10
H00.600.500.168	CNMM 160608			Stahl rostfrei	30–250	bis
H00.600.500.169	CNMM 160612			Grauguss	50–300	0.60
H00.600.500.198	CNMM 190612			Sphäroguss	50–200	
H00.600.500.199	CNMM 190616			Aluminium	bis 800	
				Buntmetall	bis 500	
				Steel	50–300	0.10
				Stainless steel	30–250	to
				Cast iron	50–300	0.60
				Spheroidal cast iron	50–200	
				Aluminium	to 800	
				Copper alloys	to 500	
			<p>Plaquette en carbure multicouche avec une ténacité et une stabilité maximales de l'arête de coupe. Convient à l'usinage de l'acier grâce à la géométrie positive de coupe, aussi en cas de coupe interrompue.</p>	Acier	50–300	0.10
				Acier inox	30–250	à
				Fonte	50–300	0.60
				Fonte sphéroïdale	50–200	
				Aluminium	à 800	
				Alliage de cuivre	à 500	



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