

ToolLine





Tooling System

F002

ToolLine - Tooling System



TUNGCAP

Quick change system with polygon PSC coupling tooling

F004



SPINJET

Coolant-driven high-speed spindles for small-diameter tools

F040



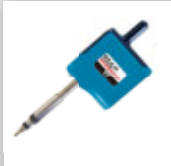
TUNGHOLD

Tooling system for holders with unique functions in wide varieties

DIN69871 - F046

HSK A/E - F062

F046



BEAMWRENCH

Easy operation with correct clamping torque

F134

Other Tooling System

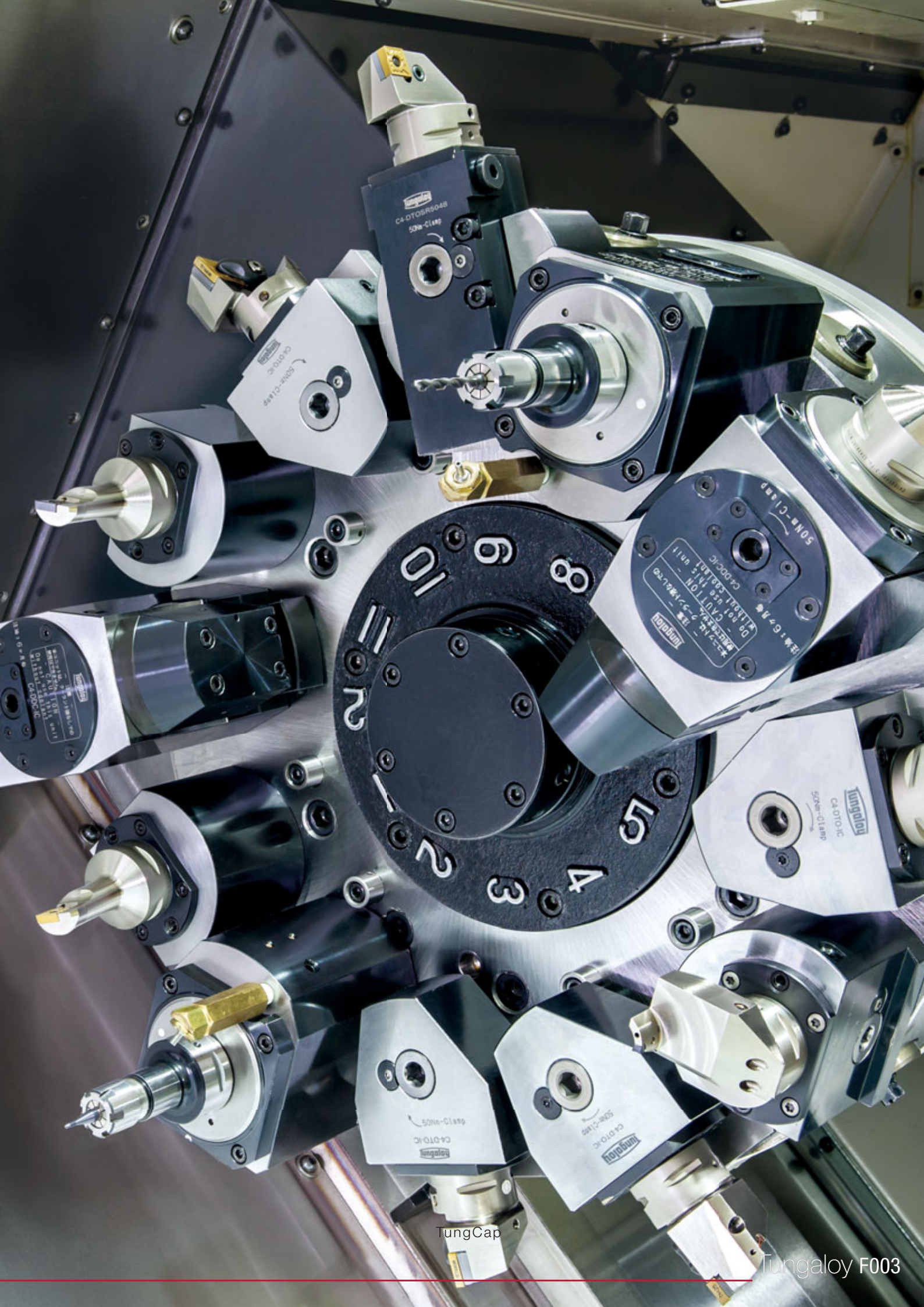
F136

Boring System - F136

Top Borer Tool - F173

Boring Bar Tool - F170

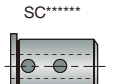
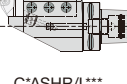
Cartridge - F152



TungCap

Tungaloy F003

Turning tool

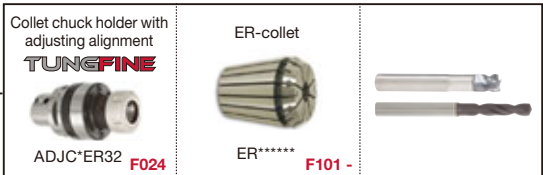
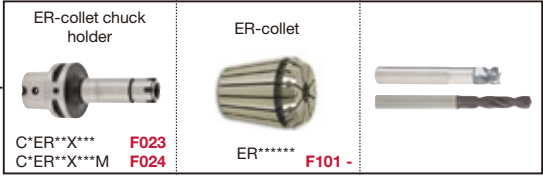
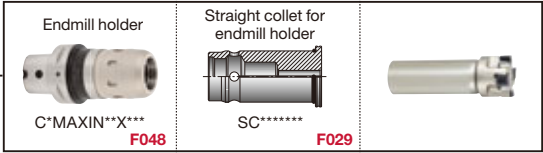
CN**1204 CN**0904  B050 -	 C*PCLNR/L*****-CHP F007	 C*PCLNR/L*****-12N F006	 C*ACLNR/L*****-N F006	 C6PCMNN*-CHP B216	 C*ACLNN00***-N F007 C*ACLNN00***-V*-N	Cutting head for external turning & facing
DN**1504** (DN**1506**)  B061 -	 C*PDJNR/L*****-CHP F008	 C*PDJNR/L*****-15N F010	 C*ADJNR/L*****-N F008	 C6PDMNL*-CHP B217	 C*ADNN00***-15N F010	
WN**0804 WN**0604  B095 -	 C*PWLNR/L*****-CHP F012	 C*AWLNR/L*****-N F009	VN**1604**  B091 -	 C*PVJNR/L*****-16-CHP B213	 C*AVJNR/L*****-16N F009	
			VC**1604**  B147 -	 C*SVJCR/L*****-16N F011	 C*SVVCN00***-16N F011	
DN**1104  B061 -	 C4PDUNR/L-11 F013	DN**1504  B061 -	 C*ADUNR/L*****-15 F013	CN**1204 CN**0904  B050 -	 C4PCLNR/L***** F013	Cutting head for internal turning
DRILLMEISTER E006 - TUNGDRILL E080 - TUNGSIK-DRILL E072 -	Side-lock holder (For weldon-shank) C*EM**X** F021 Side-lock holder (For whistle-notch shank) C*EM**X**E F022	 	Boring bar  B188 -	Sleeve SC*****  F019	Adaptor for boring bar C*ABB*** F019 C*ADI** F020	
					TungDrill Twisted  C*TDX***L***-3 E080	
		16ER/L***  B384 -	 C*CER/L*****-16ERN F012			Cutting head for threading
DGS, SGS, DGM, SGM, DTX, DTE, DGG, DTR, SGN  C077 -	 C069	 F077	 C*CHSR/L*****N F014	 C*CHFVR/L*****N F014		Cutting head for grooving
Toolholder for external turning  B188 -	 C*ADES-20 F018	 C*ASHR/L*-45 F018	 C*ASHR/L*** F017	 C*ASHA20 F017	 C*ADE**-R/L F017	Adaptor for toolholder with square shank

The page number for the product details is shown in red.

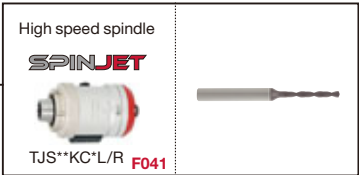
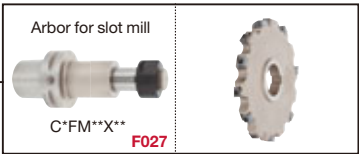
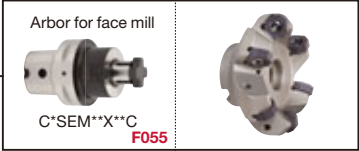
System for Multi-Tasking Machine

TOOLING SYSTEM

Tool spindle



Tool spindle



Tool clamp



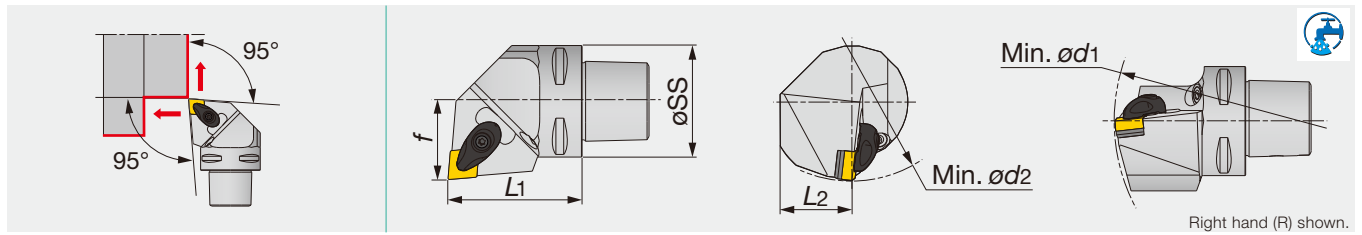
MULTICLAMPC* F034

The page number for the product details is shown in red.

TUNGCAP

C-ACLNR/L

TurningA double-clamping toolholder with 95° approach angle, for negative 80° rhombic inserts



Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C4ACLNR/L27050-12N	40	50	25	27	140	110	0.8	CN**1204...
C5ACLNR/L35060-12N	50	60	32	35	165	110	0.8	CN**1204...
C6ACLNR/L45065-12N	63	65	41	45	190	125	0.8	CN**1204...
C6ACLNR/L45065-16N	63	65	41	45	190	125	1.2	CN**1604...

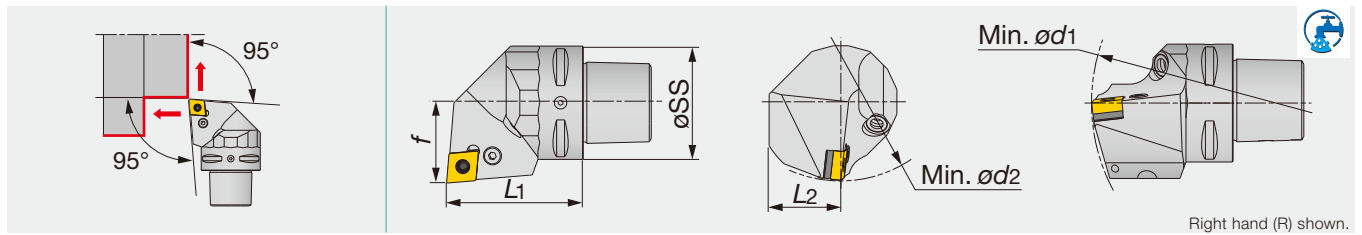
• Applicable for 7 MPa pressure coolant

SPARE PARTS

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring 1	Wrench	Wrench 1
C4ACLNR*27050-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C5ACLNR*35060-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C6ACLNR*45065-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C6ACLNR*45065-16N	ACP5S	ACS-6W	SATZ-M8X1-M3	ASC533	CSTB-5	BP-8.8	SP-2.5	KEYV-T20	-

C-PCLNR/L

Lever lock type toolholder with 95° approach angle, for negative 80° rhombic inserts



Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C5PCLNR/L35060-12 ⁽¹⁾	50	60	32	35	-	-	0.8	CN**1204...
C5PCLNR/L35060-12N ⁽²⁾	50	60	32	35	165	110	0.8	CN**1204...
C6PCLNR/L45065-12N ⁽²⁾	63	65	41	45	190	125	0.8	CN**1204...

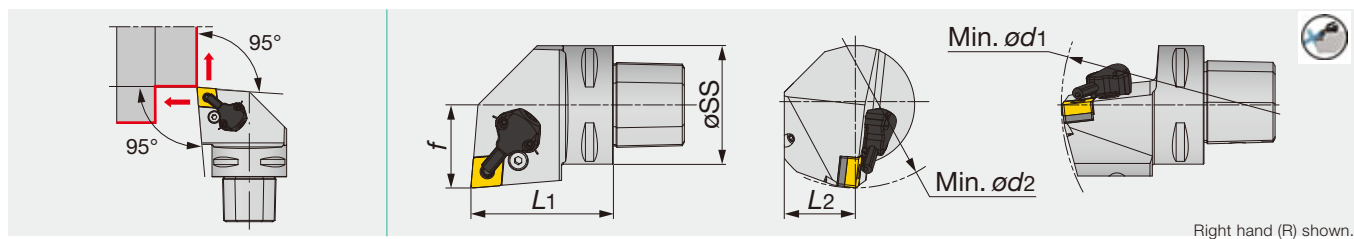
(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

SPARE PARTS

Designation	Coolant parts	Lever	Clamping screw	Shim	Spring	Wrench
C5PCLNR*35060-12	EZ104	LCL4	LCS4	LSC42	LSP4	P-3
C*PCLNR**506*-12N	SATZ-M10X1-M5	LCL4	LCS4	LSC42	LSP4	P-3

Reference pages

C-ACLNR/L, C-PCLNR/L: Inserts → **B050 -**, CBN → **B163 -**, PCD → **B176**



Designation	øSS	L1	L2	f	Min ød1	Min ød2	re	Insert
C4PCLNR/L27050-0904-CHP	40	50	25	27	140	110	0.8	CN**0904...
C4PCLNR/L27050-12-CHP	40	50	25	27	140	110	0.8	CN**1204...
C5PCLNR/L35060-12-CHP	50	60	32	35	165	110	0.8	CN**1204...
C6PCLNR/L45065-0904-CHP	63	65	41	45	190	125	0.8	CN**0904...
C6PCLNR/L45065-12-CHP	63	65	41	45	190	125	0.8	CN**1204...

• Applicable for 14 MPa pressure coolant

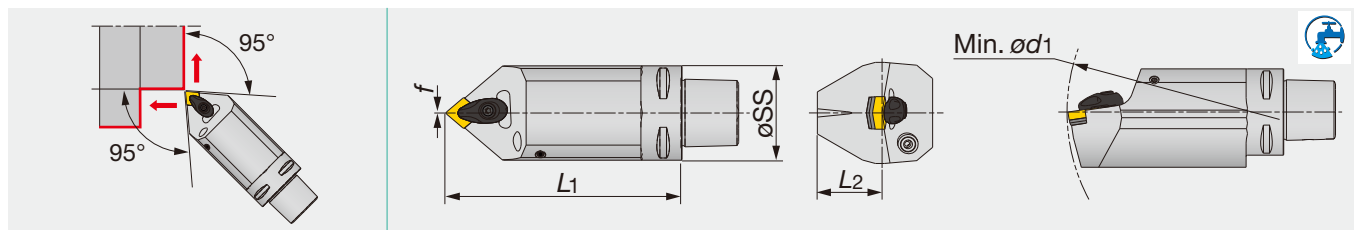
SPARE PARTS FOR P-TYPE

Designation	Shim	Clamping screw	Spring pin	Lever	Wrench 1	Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PCLNR/L*-12-CHP	LSC42	LCS4	LSP4	LCL4	P-3	C*PCLNR/L*-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N
C*PCLNR/L**0904-CHP	LSC317	LCS3	LSP3	LCL33	P-2.5					

COOLANT SET

C-ACLNN

TurningA double-clamping toolholder with 95° approach angle, for negative 80° rhombic inserts



Designation	øSS	L1	L2	f	Min ød1	re	Insert
C5ACLNN00090-12 ⁽¹⁾	50	90	32	0	-	0.8	CN**1204...
C5ACLNN00090-12N ⁽²⁾	50	90	32	0	165	0.8	CN**1204...
C5ACLNN00125-12 ⁽¹⁾	50	125	32	0	-	0.8	CN**1204...
C5ACLNN00125-12N ⁽²⁾	50	125	32	0	165	0.8	CN**1204...
C6ACLNN00100-12N ⁽²⁾	63	100	37.5	0	190	0.8	CN**1204...
C6ACLNN00140-12N ⁽²⁾	63	140	37.5	0	190	0.8	CN**1204...

• "-" in Min ød1: not suitable for internal boring

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring 1	Wrench
C5ACLNN00090-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ACLNN00090-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ACLNN00125-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	T-15F
C*ACLNN001*-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	T-15F

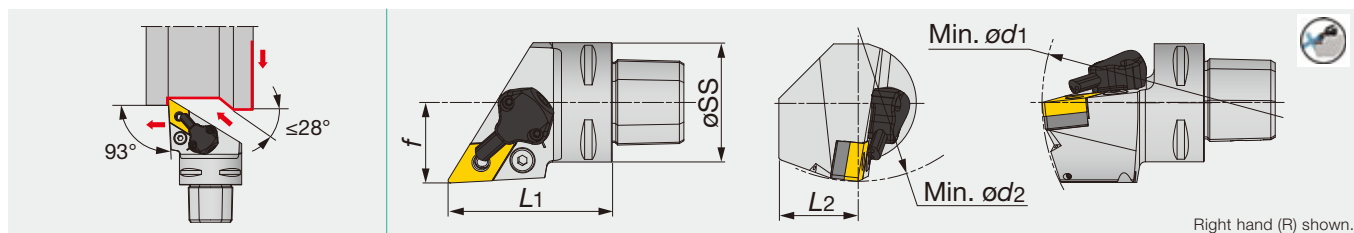
Reference pages

C-PCLNR/L-CHP, C-ACLNN: Inserts → B050 -, CBN → B163 -, PCD → B176

TUNGCAP

C-PDJNR/L-CHP

Lever lock type toolholder with TungCap connection, for negative inserts, 55° rhombic with channels for high pressure coolant



Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C4PDJNR/L27050-1104-CHP	40	50	25	27	140	110	0.8	DN**1104...
C4PDJNR/L27050-15-CHP	40	50	25	27	140	110	0.8	DN**1504(06)...
C5PDJNR/L35060-15-CHP	50	60	32	35	165	110	0.8	DN**1504(06)...
C6PDJNR/L45065-1104-CHP	63	65	41	45	190	110	0.8	DN**1104...
C6PDJNR/L45065-15-CHP	63	65	41	45	190	110	0.8	DN**1504(06)...

• Applicable for 14 MPa pressure coolant

SPARE PARTS FOR P-TYPE

Designation	Shim	Clamping screw	Spring pin	Lever	Wrench 1
C*PDJNR/L*-15-CHP	LSD43A	LCS4	LSP4	LCL4	P-3
C*PDJNR/L**1104-CHP	ELSD32	LCS3	LSP3	LCL33L	P-2.5

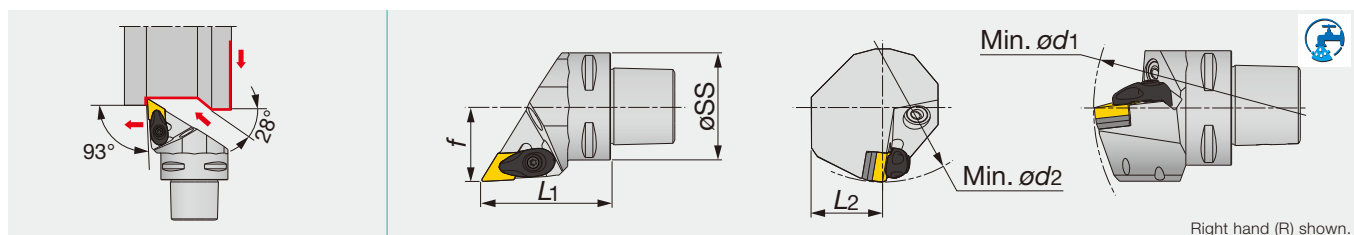
Option: LSD42A (Shim for DN**1506...), LSP4S (Spring pin for DN**1506...)

COOLANT SET

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PDJLNR/L*-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N

C-ADJNR/L

TurningA double-clamping toolholder with 93° approach angle, for negative 55° rhombic inserts



Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C4ADJNR/L27050-15N ⁽²⁾	40	50	25	27	145	110	0.8	DN**15...
C5ADJNR/L35060-15N ⁽²⁾	50	60	32	35	165	110	0.8	DN**15...
C6ADJNR/L45065-15 ⁽¹⁾	63	65	41	45	-	-	0.8	DN**15...
C6ADJNR/L45065-15N ⁽²⁾	63	65	41	45	190	110	0.8	DN**15...
C6ADJNR/L45135-15N ⁽²⁾	63	135	41	45	190	110	0.8	DN**15...

• "-" in Min ød1 and ød2: not suitable for internal boring

(1) Applicable for 3 MPa pressure coolant (2) Applicable for 7 MPa pressure coolant

SPARE PARTS

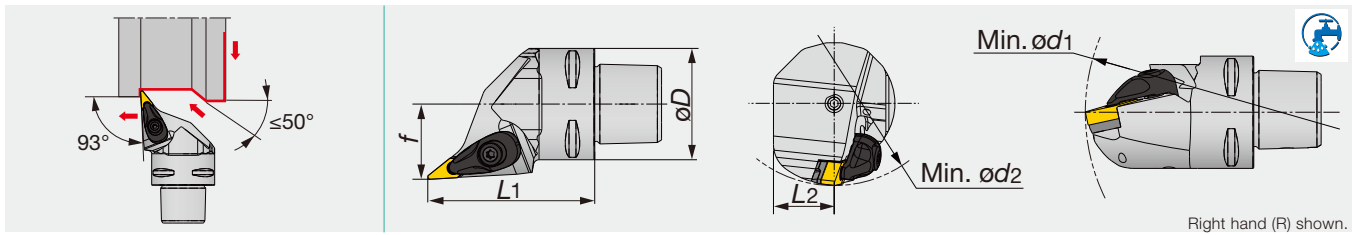
Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring 1	Wrench
C4ADJN*27050-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADJN*35060-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADJNL45065-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADJN*45065-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADJN*45135-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

Reference pages

C-ADJNR/L, C-PDJNR/L-CHP: Inserts → **B061** -, CBN → **B163** -, PCD → **B176**

Turning A double-clamp toolholder with 93° approach angle. For negative 35° rhombic insert.

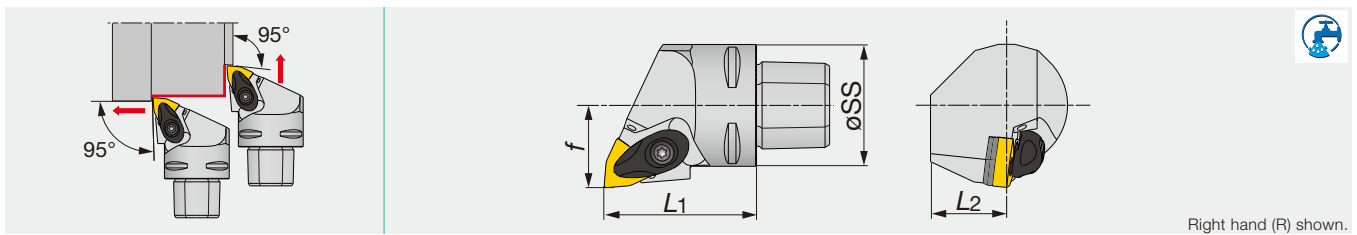


Designation	øD	L1	L2	f	ød1	ød2	rε**	Insert
C4AVJNR/L27060-1204N	40	60	20	27	140	55	0.8	VN**1204...
C4AVJNR/L27060-16N	40	60	25	27	140	110	0.8	VN**1604...
C6AVJNR/L45065-1204N	63	65	31.5	45	190	81	0.8	VN**1204...
C6AVJNR/L45065-16N	63	65	35	45	190	81	0.8	VN**1604...

• Applicable for 7 MPa pressure coolant.

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring 1	Wrench	Wrench 1
C4AVJNR/L...	ACP3L-E	ACS-5W	-	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F
C6AVJNR/L...	ACP3L-E	ACS-5W	SATZ-M10X1-M5	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F

Turning A double-clamping toolholder with 95° approach angle, for negative trigon inserts



Designation	øSS	L1	L2	f	rε	Insert
C4AWLNR/L27050-08N	40	50	25	27	0.8	WN**0804...

• Applicable for 7 MPa pressure coolant.

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
C4AWLNR/L27050-08N	ACP4S	ACS-5W	ASW422	CSTB-3.5	BP-7	SP-2.5	T-15F

Reference pages

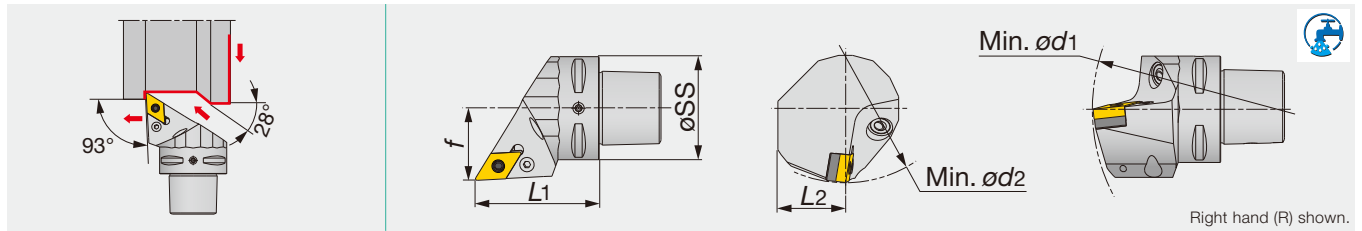
C-AVJNR/L: Inserts → B091 -, CBN → B165 -, PCD → B176

C-AWLNR/L: Inserts → B095 -, CBN → B165

TUNGCAP

C-PDJNR/L

Lever lock type toolholder with 93° approach angle, for negative 55° rhombic inserts



Right hand (R) shown.

Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C5PDJNR/L35060-15N	50	60	32	35	165	110	0.8	DN**1504(06)
C6PDJNR/L45065-15N	63	65	41	45	195	95	0.8	DN**1504(06)

• Applicable for 7 MPa pressure coolant.

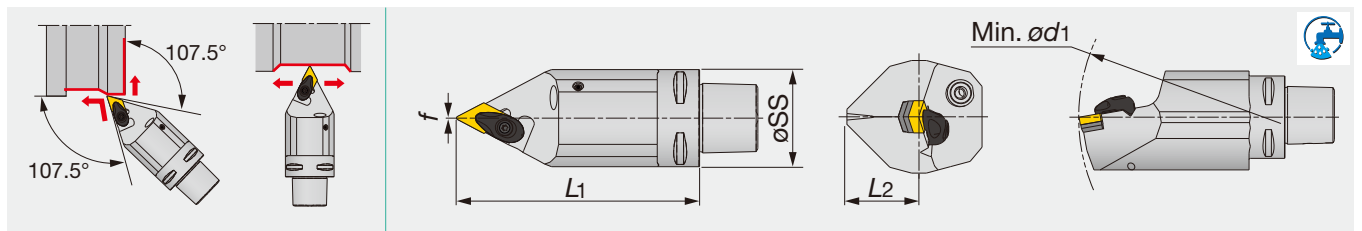
SPARE PARTS

Designation	Coolant parts	Shim	Lever	Clamping screw	Spring	Wrench
C5PDJN*35060-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4	P-3
C6PDJN*45065-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4S	P-3

Option: LSD42A (Shim for DN**1506...), LSP4S (Spring pin for DN**1506...)

C-ADNNN

TurningA double-clamping toolholder with 63° approach angle, for negative 55° rhombic inserts



Designation	øSS	L1	L2	f	Min ød1	rε	Insert
C5ADNNN00090-15 ⁽¹⁾	50	90	32	0	-	0.8	DN**1504(06)
C5ADNNN00090-15N ⁽²⁾	50	90	32	0	165	0.8	DN**1504(06)
C5ADNNN00125-15 ⁽¹⁾	50	125	32	0	-	0.8	DN**1504(06)
C5ADNNN00125-15N ⁽²⁾	50	125	32	0	165	0.8	DN**1504(06)
C6ADNNN00100-15 ⁽¹⁾	63	100	37.5	0	-	0.8	DN**1504(06)
C6ADNNN00100-15N ⁽²⁾	63	100	37.5	0	190	0.8	DN**1504(06)
C6ADNNN00140-15 ⁽¹⁾	63	140	37.5	0	-	0.8	DN**1504(06)
C6ADNNN00140-15N ⁽²⁾	63	140	37.5	0	190	0.8	DN**1504(06)

• "-" in Min ød1: not suitable for internal boring

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

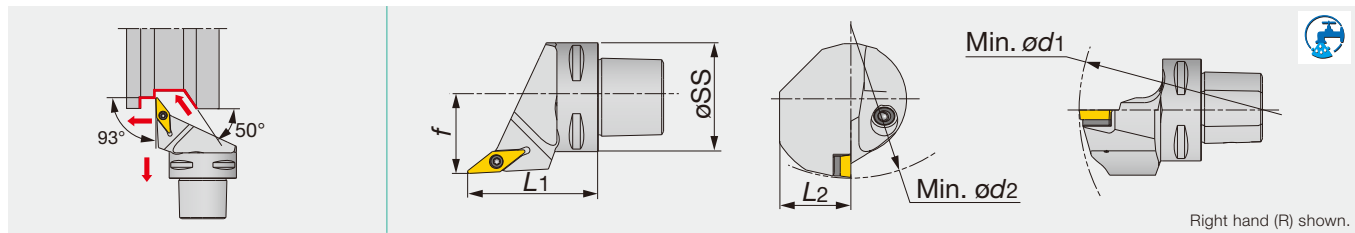
SPARE PARTS

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring 1	Wrench
C5ADNNN00090-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00090-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00100-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00100-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00140-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00140-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

Reference pages

C-PDJNR/L, C-ADNNN: Inserts → **B061** -, CBN → **B163** -, PCD → **B176**



Designation	øSS	L1	L2	f	Min ød1	Min ød2	r _e	Insert
C5SVJCR/L35060-16 ⁽¹⁾	50	60	32	35	-	-	0.8	VC**1604...
C5SVJCR/L35060-16N ⁽²⁾	50	60	32	35	170	160	0.8	VC**1604...
C6SVJCR/L45065-16 ⁽¹⁾	63	65	41	45	-	-	0.8	VC**1604...
C6SVJCR/L45065-16N ⁽²⁾	63	65	41	45	170	190	0.8	VC**1604...

• "-" in Min ød1: not suitable for internal boring

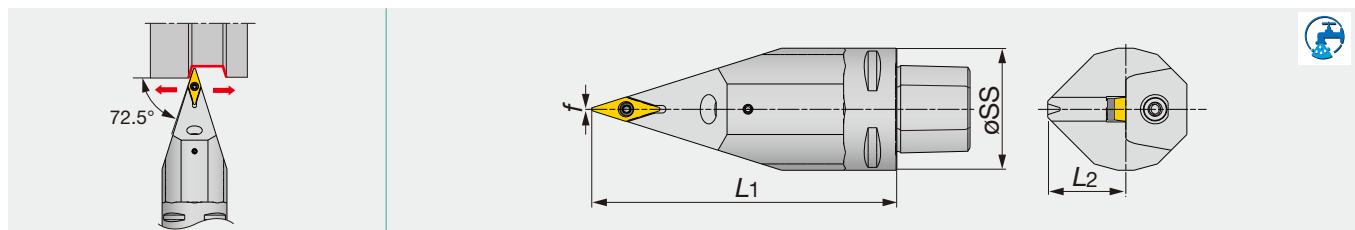
(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

SPARE PARTS

Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench	Wrench 1
C5SVJC*35060-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVJC*35060-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

C-SVVCN

Screw-on clamp toolholder with 72.5° approach angle, for positive 35° rhombic inserts



Designation	øSS	L1	L2	f	r _e	Insert
C5SVVCN00090-16 ⁽¹⁾	50	90	32	0	0.8	VC**1604...
C5SVVCN00090-16N ⁽²⁾	50	90	32	0	0.8	VC**1604...
C5SVVCN00125-16 ⁽¹⁾	50	125	32	0	0.8	VC**1604...
C5SVVCN00125-16N ⁽²⁾	50	125	32	0	0.8	VC**1604...
C6SVVCN00100-16 ⁽¹⁾	63	100	37.5	0	0.8	VC**1604...
C6SVVCN00100-16N ⁽²⁾	63	100	37.5	0	0.8	VC**1604...
C6SVVCN00140-16 ⁽¹⁾	63	140	37.5	0	0.8	VC**1604...
C6SVVCN00140-16N ⁽²⁾	63	140	37.5	0	0.8	VC**1604...

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

SPARE PARTS

Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench	Wrench 1
C5SVVCN00090-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00090-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00100-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00100-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00140-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00140-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

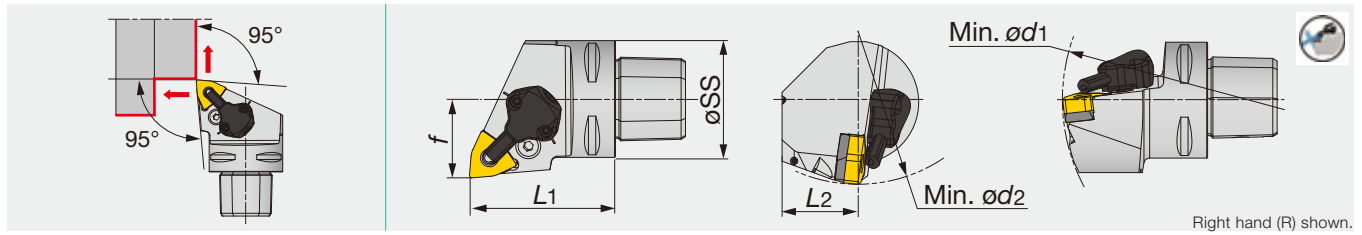
Reference pages

C-SVJCR/L, C-SVVCN: Inserts → **B147 -**, CBN → **B169 -**, PCD → **B177 -**

TUNGCAP

C-PWLNR/L-CHP

Lever lock type toolholder with TungCap connection, for negative inserts, W 80° trigon with channels for high pressure coolant



Designation	øSS	L1	L2	f	Min ød1	Min ød2	rε	Insert
C4PWLNR/L27050-0604-CHP	40	50	25	27	140	110	0.8	WN**0604...
C4PWLNR/L27050-08-CHP	40	50	25	27	140	110	0.8	WN**0804...
C6PWLNR/L45065-08-CHP	63	65	41	45	190	110	0.8	WN**0804...

• Applicable for 14 MPa pressure coolant

SPARE PARTS FOR P-TYPE

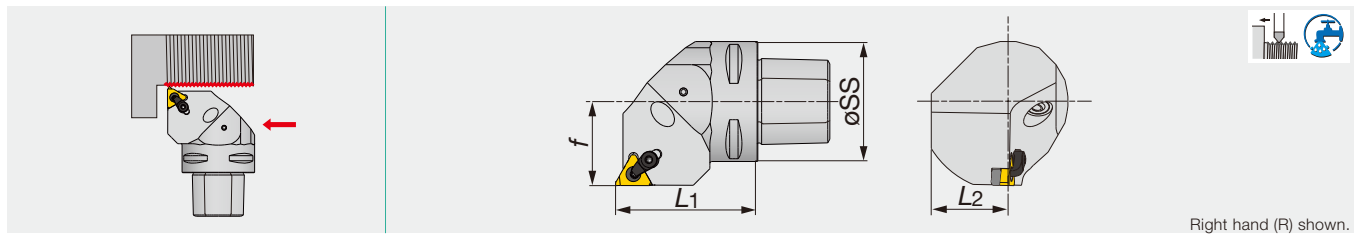
Designation	Shim	Clamping screw	Spring pin	Lever	Wrench 1
C*PWLNR/L*-08-CHP	LSW42BL	LCS4	LSP4	LCL4	P-3
C*PWLNR/L**0604-CHP	LSW312	LCS3	LSP3	LCL3	P-2.5

COOLANT SET

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PWLNR/L*-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

C-CER/L

TungThread external threading toolholders, alternative clamping of screw-on or clamp-on



Designation	øSS	L1	L2	f	rε	Insert
C4CER/L27050-16ERN ⁽²⁾	40	50	25	27	0.8	16ER/L...
C5CER/L35060-16ER ⁽¹⁾	50	60	32	35	0.8	16ER/L...
C5CER/L35060-16ERN ⁽²⁾	50	60	32	35	0.8	16ER/L...
C6CER/L45065-16ER ⁽¹⁾	63	65	41	45	0.8	16ER/L...
C6CER/L45065-16ERN ⁽²⁾	63	65	41	45	0.8	16ER/L...

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

SPARE PARTS

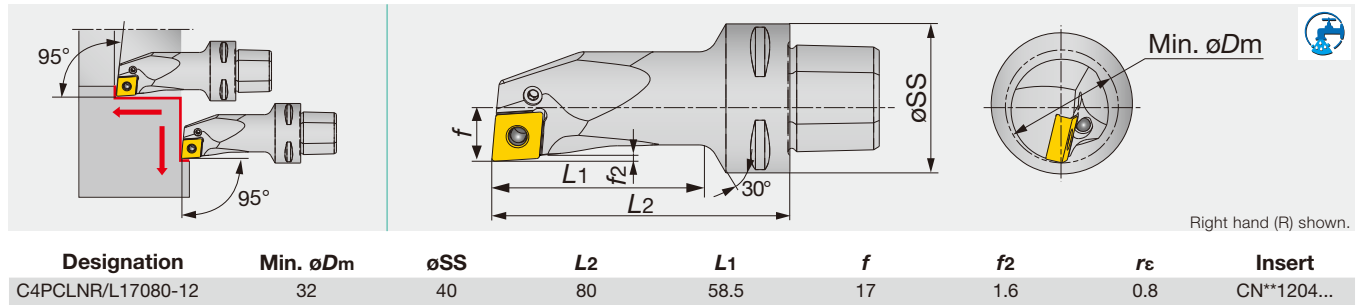
Designation	Clamp set	Clamping screw	Coolant parts	Shim screw	Shim	Wrench	Wrench 1
C5CE*35060-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	P-3.5	T-15F
C5CE*35060-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	P-3.5	T-15F
C6CE*45065-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	P-3.5	T-15F
C6CE*45065-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	P-3.5	T-15F

Reference pages

C-PWLNR/L-CHP: Inserts → **B095 -**, CBN → **B165**

C-CER/L: Inserts → **B384 -**

Lever lock type boring bar, for negative 80° rhombic inserts



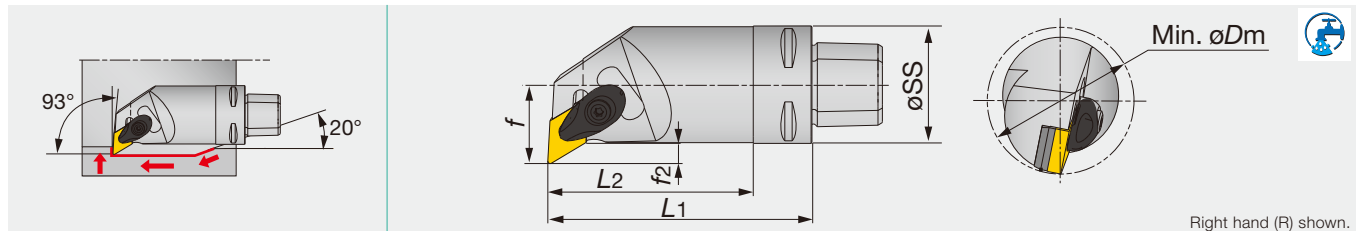
• Applicable for 10 MPa pressure coolant

SPARE PARTS

Designation	Lever	Clamping screw	Wrench
C-PCLNR/L-IN	LCL43N	LCS43	P-2.5

C-ADUNR/L

Turning A double-clamp boring bar, for negative 55° rhombic inserts



• Applicable for 10 MPa pressure coolant

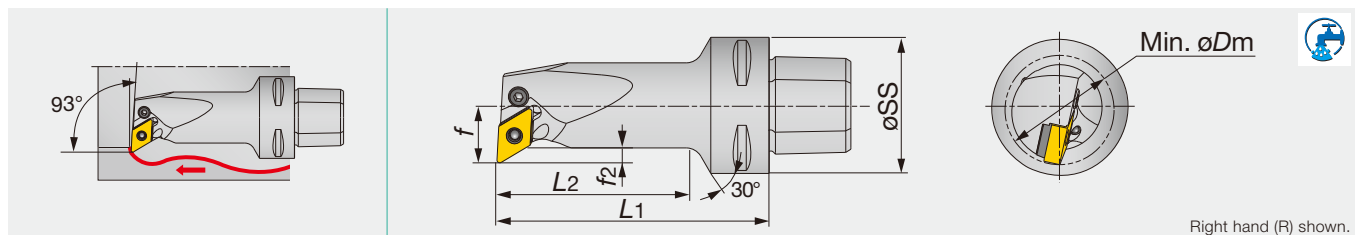
SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
C-ADUNR/L	ACP4S	ACS-5W	ASD423(04)	CSTB-3.5	BP-7	SP-2.5	T-15F

Option : ASD423 (Shim for DN**1506**)

C-PDUNR/L

Lever lock type boring bar, for negative 55° rhombic inserts



• Applicable for 10 MPa pressure coolant

SPARE PARTS

Designation	Lever	Clamping screw	Shim	Spring	Wrench
C4PDUNR17080-11	LCL33L	LCS3	ELSD317BR	LSP3	P-2.5
C4PDUNL17080-11	LCL33L	LCS3	ELSD317BL	LSP3	P-2.5

Reference pages

C-PCLNR/L-IN: Inserts → B050 -, CBN → B163 -, PCD → B176

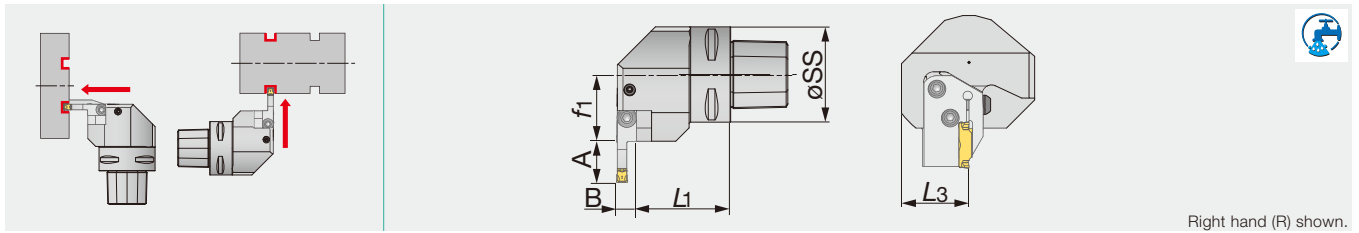
C-ADUNR/L: Inserts → B061 -, CBN → B163 -, PCD → B176

C-PDUNR/L: Inserts → B061 -

TUNGCAP

C-CHFVR/L

TungCut shank for perpendicular toolholders for CAER/L & CAFR/L blades



Designation	øSS	L1	L3	f1	A	B
C4CHFVR/L27050N ⁽²⁾	40	42.5	36	27	Table*	Table*
C5CHFVR/L35060N ⁽²⁾	50	49.5	36	35	Table*	Table*
C6CHFVR/L45065 ⁽¹⁾	63	54.5	41	45	Table*	Table*
C6CHFVR/L45065N ⁽²⁾	63	54.5	41	45	Table*	Table*

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

*See the table below for offset dimensions

SPARE PARTS

Designation	Coolant parts	Coolant parts 1	Clamping screw	Wrench
C5CHFV*35060N	SATZ-M10X1-M5	-	CSHB-6-A	P-4
C6CHFV*45065	CNZ125	PNZ5	CSHB-6-A	P-4
C6CHFV*45065N	SATZ-M10X1-M5	-	CSHB-6-A	P-4

Combination of blade and toolholder

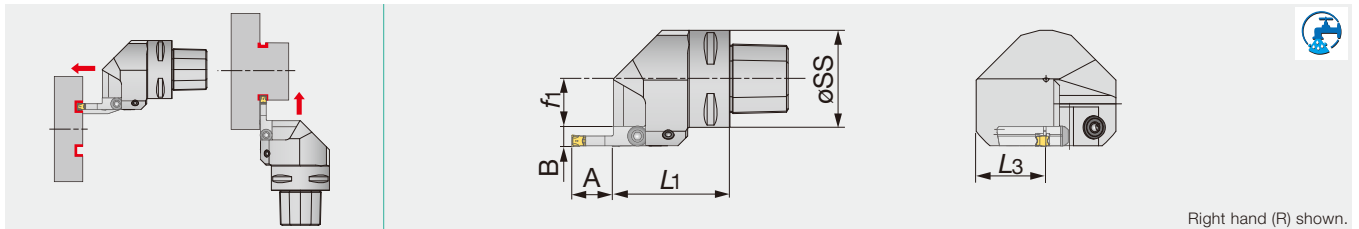
Toolholder	Blade			
	CAER...	CAEL...	CAFR...	CAFL...
CHFVR...		●	●	
CHFVL...	●			●

● : Correspondence

TUNGCAP

C-CHSR/L

TungCut shank for toolholders for CAER/L & CAFR/L blades



Designation	øSS	L1	L3	f1	A	B
C4CHSR/L27050N ⁽²⁾	40	50	36	16.5	Table*	Table*
C5CHSR/L35060 ⁽¹⁾	50	60	36	24.5	Table*	Table*
C5CHSR/L35060N ⁽²⁾	50	60	36	24.5	Table*	Table*
C6CHSR/L45065N ⁽²⁾	63	65	41	34.5	Table*	Table*

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

*See the table below for offset dimensions

SPARE PARTS

Designation	Coolant parts	Coolant parts 1	Clamping screw	Wrench
C4CHS*27050N	SATZ-M8X1-M3	-	CSHB-6-A	P-4
C5CHS*35060	CNZ125	PNZ5	CSHB-6-A	P-4
C*CHS**506*N	SATZ-M10X1-M5	-	CSHB-6-A	P-4

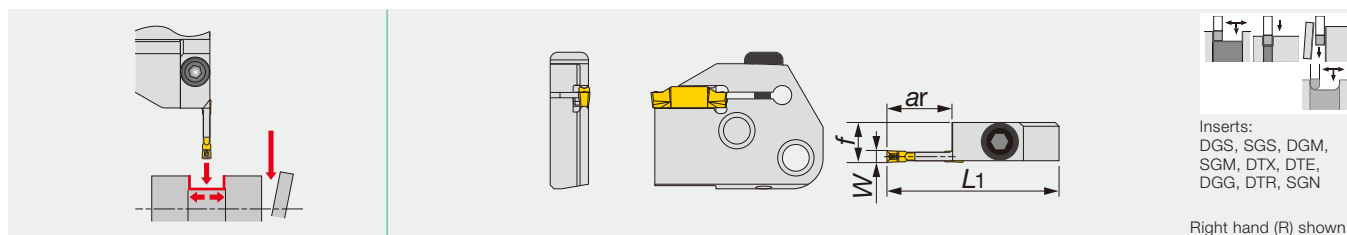
Combination of blade and toolholder

Toolholder	Blade			
	CAER...	CAEL...	CAFR...	CAFL...
CHSR...	●		●	●
CHSL...		●	●	

● : Correspondence

*Table: Offset dimensions for blade

Application	Blade	A	B
For external grooving	CAER/L-3T16	16	10.4
	CAER/L-4T16	16	10.5
	CAER/L-5T20	20	10.5
	CAER/L-6T20	20	10.5
For face grooving	CAFR/L-3T12-*	12	10.4
	CAFR/L-4T16-*	16	10.5
	CAFR/L-5T20-*	20	10.5
	CAFR/L-6T20-*	25	10.5



Inserts:
DGS, SGS, DGM,
SGM, DTX, DTE,
DGG, DTR, SGN

Right hand (R) shown.

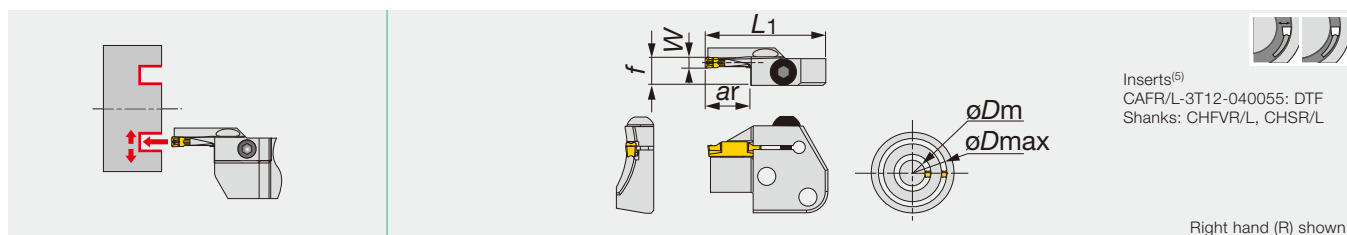
Designation	Seat size	ar	W	L1	f	Shank
CAER/L-3T16	3	16	3	45	10.4	CHSR/L, CHRVL/R
CAER/L-4T16	4	16	4	45	10.5	CHSR/L, CHRVL/R
CAER/L-5T20	5	20	5	49	10.5	CHSR/L, CHRVL/R
CAER/L-6T20	6	20	6	49	10.5	CHSR/L, CHRVL/R

SPARE PARTS

Designation	Screw	Wrench
CAER/L	BHM6-20-A	P-4

CAFR/L

Blades for face grooving & turning



Inserts⁽⁵⁾
CAFR/L-3T12-040055: DTF
Shanks: CHFVR/L, CHSR/L

Right hand (R) shown.

Designation	Seat size	øDm	øDmax	ar	W	L1	f
CAFR/L-3T12-040055	3	40	55	12	3	45	10.4
CAFR/L-3T12-055075	3	55	75	12	3	45	10.4
CAFR/L-3T12-075100	3	75	100	12	3	45	10.4
CAFR/L-3T12-100140	3	100	140	12	3	45	10.4
CAFR/L-3T12-140200	3	140	200	12	3	45	10.4
CAFR/L-4T16-050070	4	50	70	16	4	45	10.5
CAFR/L-4T16-070100	4	70	100	16	4	45	10.5
CAFR/L-4T16-100150	4	100	150	16	4	45	10.5
CAFR/L-4T16-150250	4	150	250	16	4	45	10.5
CAFR/L-5T20-055080	5	55	80	20	5	49	10.5
CAFR/L-5T20-080120	5	80	120	20	5	49	10.5
CAFR/L-5T20-120180	5	120	180	20	5	49	10.5
CAFR/L-5T20-180300	5	180	300	20	5	49	10.5
CAFR/L-5T20-300000	5	300	∞	20	5	49	10.5
CAFR/L-6T25-060090	6	60	90	25 ⁽¹⁾	6	55	10.5
CAFR/L-6T25-090150	6	90	150	25 ⁽¹⁾	6	55	10.5
CAFR/L-6T25-150250	6	150	250	25 ⁽¹⁾	6	55	10.5
CAFR/L-6T25-250400	6	250	400	25 ⁽¹⁾	6	55	10.5

(1) When groove depth is beyond the value of insert full length -1.5 mm, single sided insert is recommended.

(2) The value "f" is the dimension when the insert with groove width (W) in the above table is attached.

(3) Not applicable for CAFR/L-3T12-040055.

(4) Seat sizes of DTF are only 3 and 4.

(5) Min. diameter øDm of DTE, DGS and DGM insert.

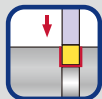
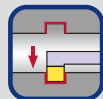
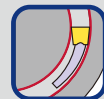
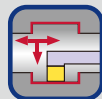
SPARE PARTS

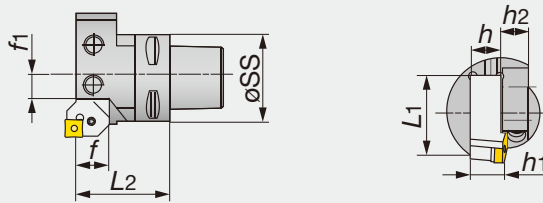
Designation	Screw	Wrench
CAFR/L	BHM6-20-A	P-4

Reference pages

CAER/L, CAFR/L: Inserts → C077 -

INSERT APPLICATION

Insert	Application						
	Grooving			Parting	Turning		
	External	Internal	Face		External	Internal	Face
							
DGM / SGM	●		●	●			
DGS / SGS	●		●	●			
DTE	●		●		●		●
DGG	●		●				
DGE	●						
DTX	●	●	●	●	●	●	●
DTI		●				●	
DGIM / DGIS		●					
DTF			●				●
DTR	●		●		●		●
DTIU	● Undercutting	● Undercutting					
DTA					● AI wheel machining	● AI wheel machining	
SGN	●						



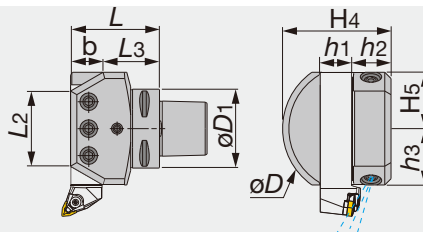
Left hand (L) shown.

Designation	øSS	f ₁	L ₂	f	h ₁	h ₂	h	L ₁
C3ADE-16R/L	32	17	45	16	16	26	16	45
C4ADE-20R/L	40	8	49.2	20	20	26	20	57
C5ADE-20R/L	50	8	55.2	20	20	20	20	57

- Regular shank should be shortened.
- Applicable for 10 MPa pressure coolant

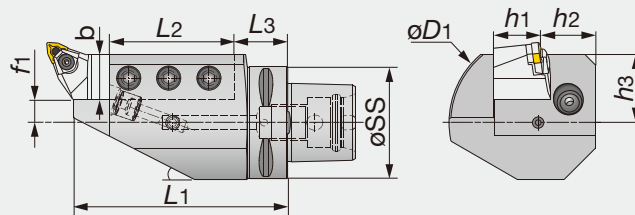
C-ASHA

Adapters for square shank toolholders



Designation	øD ₁	h ₁	b	L	L ₂	L ₃	h ₃	H ₅	h ₂	H ₄	øD
C5ASHA20	50	20	20	58	46	38	38	38	31.5	76.5	90
C6ASHA20	63	20	20	60	46	40	38	38	31.5	76.5	90
C6ASHA25	63	25	25	71	61	46	45	45	31.6	86.5	110

- Applicable for 10 MPa pressure coolant



Left hand (L) shown.

Designation	øSS	L ₁	L ₂	L ₃	f ₁	h ₁	b	h ₂	h ₃	øD ₁
C5ASHR/L201	50	98	63.5	24.5	10	20	20	33	30	90
C6ASHR251-J	63	120	82	38	4.5	25	25	31.5	29.5	90
C6ASHL251	63	120	70	30	13	25	25	32	38	100
C8ASHR/L32-1	80	140	95	35	8	32	32	32	40	110

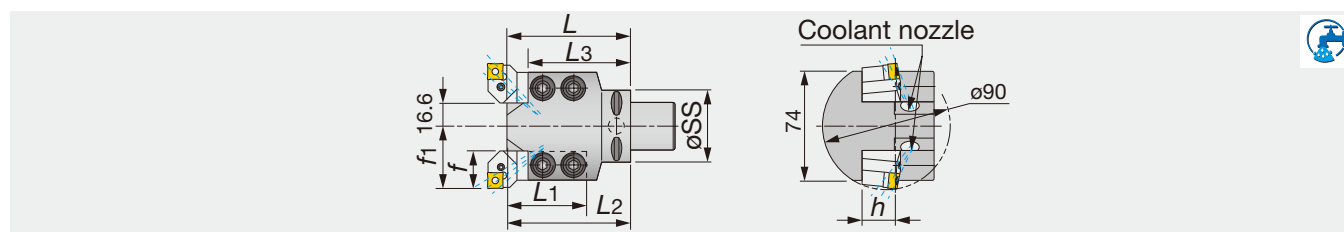
- Regular shank should be shortened.
- Applicable for 10 MPa pressure coolant



TUNGCAP

C-ADES

Adapters for square shank toolholders

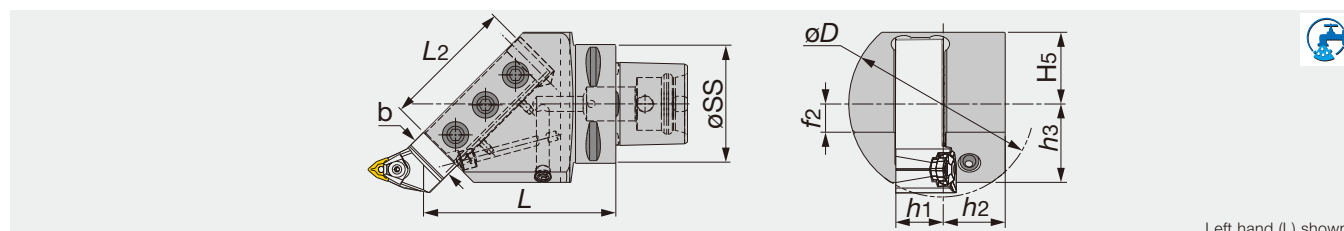


Designation	øSS	f ₁	L ₂	L	L ₃	h	f	L ₁
C4ADES-20	40	41.6	98	85	71	20	25	67
C5ADES-20	50	41.6	98	85	71	20	25	67

- Regular shank should be shortened.
- Applicable for 10 MPa pressure coolant

C-ASHR/L-45

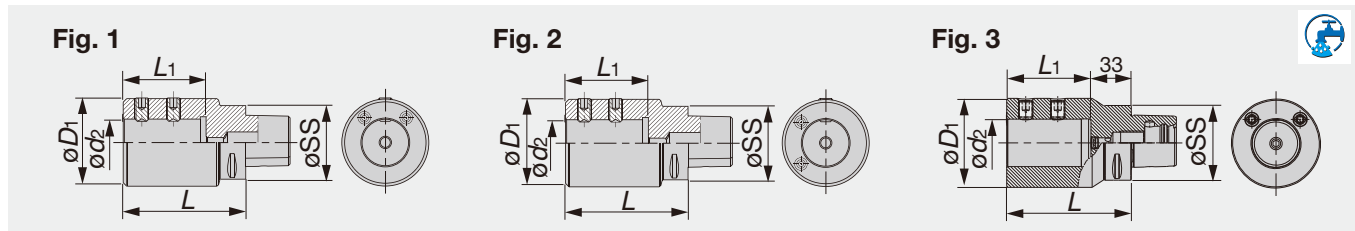
Adapters for square shank toolholder with 45° angle



Left hand (L) shown.

Designation	øSS	h ₁	b	L ₂	L	h ₂	h ₃	H ₅	f ₂	øD
C5ASHR/L20-45	50	20	20	-	127	26	36	31.5	15	72
C6ASHR/L20-45	63	20	20	70	102	33	41.6	38	15	72
C6ASHR/L25-45	63	25	25	70	102	33	41.6	38	15	100

- Regular shank should be shortened.
- Applicable for 10 MPa pressure coolant



Designation	øSS	øD2	øD1	L	L1	Fig.
C5ABB-25-60	50	25	63	100	60	2
C6ABB-25-60C*	63	25	63	95	60	1
C6ABB-40-70C*	63	40	75	105	71	3
C8ABB25-60	80	25	63	100	60	2
C8ABB40-72	80	40	75	105	71	2

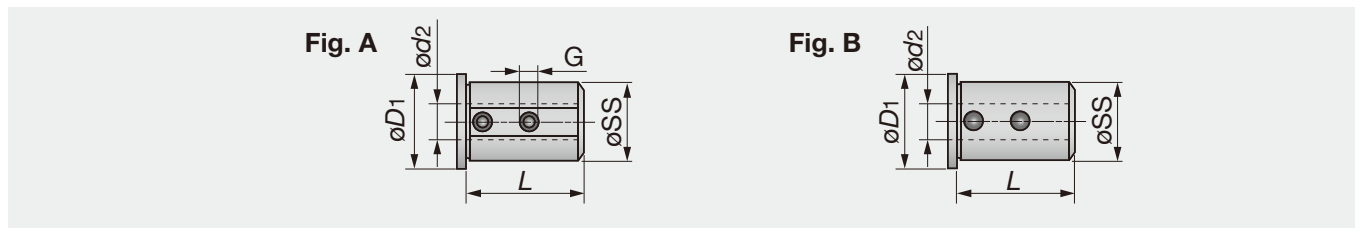
* Use the appropriate outlet screw according to the tool setup.
• Applicable for 7 MPa pressure coolant

SPARE PARTS

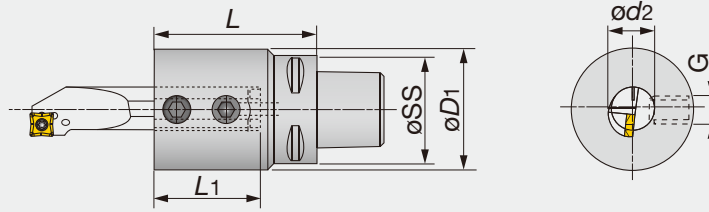
Designation	Clamp screw		Coolant outlet screw for internal supply	Coolant outlet screw for external supply
	Used on A-type sleeves	Used on B-type sleeves		
C...ABB-25-60/C	SRM10X20DIN915	SRM10X12DIN1835-B	SRM10X6DIN913	SRM6X8DIN913
C6ABB-40-70/C	SRM12X20DIN915	SRM12X16DIN1835-B	SRM10X6DIN913	SRM6X8DIN913
C8ABB25-60	SRM10X20DIN915	SRM10X12DIN1835-B	SRM10X6DIN913	-
C8ABB40-72	SRM12X20DIN915	SRM12X16DIN1835-B	SRM10X6DIN913	-

SC

Sleeves for C-ABB adaptors



Designation	øSS	øD2	øD1	L	G	Fig.
SC25T6A	25	6	31	56	M6	A
SC25T8A	25	8	31	56	M8	A
SC25T10A	25	10	31	56	M8	A
SC25T12A	25	12	31	56	M8	A
SC25T16B	25	16	31	56	-	B
SC25T20B	25	20	31	56	-	B
SC40T6A	40	6	46	58	M6	A
SC40T8A	40	8	46	58	M6	A
SC40T10A	40	10	46	58	M8	A
SC40T12A	40	12	46	58	M8	A
SC40T16B	40	16	46	58	-	B
SC40T20B	40	20	46	58	-	B
SC40T25B	40	25	46	58	-	B
SC40T32B	40	32	46	58	-	B

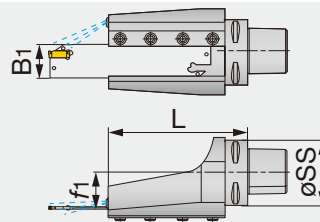


Designation	øSS	L	L1	ød2	øD1	G
C4ADI10	40	50	20	10	36	M6
C4ADI12	40	50	24	12	36	M8
C4ADI16	40	50	32	16	36	M8
C4ADI20	40	60	35	20	36	M10
C4ADI25	40	70	45	25	54	M12
C5ADI10	50	60	26	10	36	M6
C5ADI12	50	60	26	12	36	M8
C5ADI16	50	60	32	16	36	M8
C5ADI20	50	60	40	20	36	M10
C5ADI25	50	70	50	25	54	M12
C5ADI32	50	100	76	32	68	M12
C6ADI12	60	65	36	12	36	M8
C6ADI16	60	65	36	16	36	M8
C6ADI20	60	65	40	20	36	M10
C6ADI25	60	76	51	25	54	M12
C6ADI32	60	100	76	32	68	M12
C6ADI40	60	100	76	40	98	M12
C6ADI50	60	115	76	50	98	M12
C8ADI12	80	70	36	12	36	M8
C8ADI16	80	70	36	16	36	M8
C8ADI20	80	70	40	20	36	M10
C8ADI25	80	80	51	25	54	M12
C8ADI32	80	110	86	32	68	M12
C8ADI40	80	115	86	40	98	M12
C8ADI50	80	115	86	50	98	M12

- Applicable for 7 MPa pressure coolant

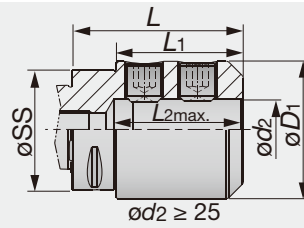
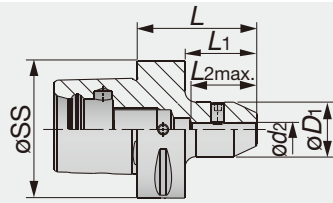
C-TBK-R/L

Adaptors for parting and grooving blades



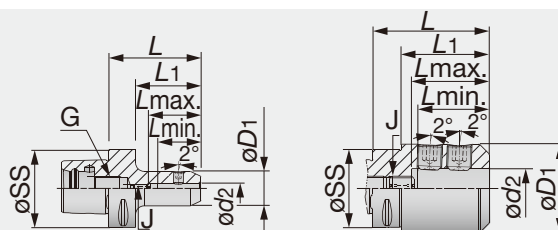
Designation	øSS	f1	L	B1
C6TBK-32R/L	63	32	138	32
C8TBK-32R	80	40.5	147	32
C8TBK-52R	80	40.5	161	52

- Applicable for 3 MPa pressure coolant



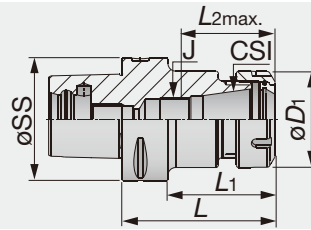
Designation	øSS	ød2	øD1	L	L1	L2max.	Designation	øSS	ød2	øD1	L	L1	L2max.
C3EM6X45	32	6	25	45	25	29	C6EM10X60	63	10	35	60	38	39
C3EM8X45	32	8	28	45	25	35	C6EM12X60	63	12	42	60	38	43
C3EM10X50	32	10	35	50	30	39	C6EM14X60	63	14	44	60	38	43
C3EM12X55	32	12	42	55	35	43	C6EM16X65	63	16	48	65	43	47
C4EM06X50	40	6	25	50	30	29	C6EM18X65	63	18	50	65	43	47
C4EM08X50	40	8	28	50	30	35	C6EM20X65	63	20	52	65	43	49
C4EM10X50	40	10	35	50	30	39	C6EM25X80	63	25	65	80	58	68
C4EM12X55	40	12	42	55	35	43	C6EM32X90	63	32	72	90	68	68
C4EM14X55	40	14	44	55	35	43	C6EM40X100	63	40	90	100	78	78
C4EM16X60	40	16	48	60	40	47	C8EM06X70	80	6	25	70	40	30
C5EM06X50	50	6	25	50	30	29	C8EM08X70	80	8	28	70	40	35
C5EM08X50	50	8	28	50	30	35	C8EM10X70	80	10	35	70	40	39
C5EM10X55	50	10	35	55	35	39	C8EM12X70	80	12	42	70	40	43
C5EM12X60	50	12	42	60	40	43	C8EM14X70	80	14	44	70	40	43
C5EM14X60	50	14	44	60	40	43	C8EM16X70	80	16	48	70	40	47
C5EM16X60	50	16	48	60	40	47	C8EM18X70	80	18	50	70	40	47
C5EM18X60	50	18	50	60	40	47	C8EM20X70	80	20	52	70	40	49
C5EM20X60	50	20	52	60	40	49	C8EM25X90	80	25	65	90	60	68
C5EM25X85	50	25	65	85	65	64	C8EM32X95	80	32	72	95	65	68
C6EM6X55	63	6	25	55	33	29	C8EM40X110	80	40	90	110	80	68
C6EM8X55	63	8	28	55	33	35	C8EM50X120	80	50	98	120	90	90

• Applicable for 7 MPa pressure coolant



Designation	SS	D2	D1	L	Lmin	Lmax	L1	J	G
C4EM06X70E	40	6	25	70	30	35	50	M5	M14
C4EM08X70E	40	8	28	70	35	43	50	M6	M14
C4EM10X70E	40	10	35	70	39	45	50	M8	M14
C4EM12X75E	40	12	42	75	44	49	55	M10	M14
C4EM14X75E	40	14	44	75	44	49	55	M10	M14
C5EM06X70E	50	6	25	70	30	35	50	M5	M16
C5EM08X70E	50	8	28	70	35	43	50	M6	M16
C5EM10X70E	50	10	35	70	39	45	50	M8	M16
C5EM12X75E	50	12	42	75	44	49	55	M10	M16
C5EM14X75E	50	14	44	75	44	49	55	M10	M16
C5EM16X80E	50	16	48	80	47	52	60	M12	M16
C5EM18X80E	50	18	50	80	47	52	60	M12	M16
C5EM20X85E	50	20	52	85	49	55	65	M16	M16
C6EM06X75E	63	6	25	75	30	36	53	M5	M20
C6EM08X75E	63	8	28	75	35	43	53	M6	M20
C6EM10X75E	63	10	35	75	39	46	53	M8	M20
C6EM12X80E	63	12	42	80	44	49	58	M10	M20
C6EM14X80E	63	14	44	80	44	49	58	M10	M20
C6EM16X85E	63	16	48	85	47	52	63	M12	M20
C6EM18X85E	63	18	50	85	47	52	63	M12	M20
C6EM20X85E	63	20	52	85	49	55	63	M16	M20
C6EM25X90E	63	25	65	90	54	60	68	M20	M20
C6EM32X95E	63	32	72	95	58	63	73	M20	M20
C8EM06X65E	80	6	25	65	30	36	35	M5	M20
C8EM08X65E	80	8	28	65	35	43	35	M6	M20
C8EM10X65E	80	10	35	65	39	46	35	M8	M20
C8EM12X70E	80	12	42	70	44	49	40	M10	M20
C8EM14X70E	80	14	44	70	44	49	40	M10	M20
C8EM16X75E	80	16	48	75	47	52	45	M12	M20
C8EM18X75E	80	18	50	75	47	52	45	M12	M20
C8EM20X80E	80	20	52	80	49	57	50	M16	M20
C8EM25X90E	80	25	65	90	54	60	60	M20	M20
C8EM32X95E	80	32	72	95	58	64	65	M20	M20

• Applicable for 7 MPa pressure coolant



Designation	Range min.	Range max.	øSS	CSI	øD1	L	L1	J	L2max.	Designation	Range min.	Range max.	øSS	CSI	øD1	L	L1	J	L2max.
C3 ER16X45	1	10	32	ER16	28	45	25	-	39	C6ER20X100	1	13	63	ER20	34	100	78	M12	52.5
C3 ER20X45	1	13	32	ER20	34	45	30	-	39.8	C6ER20X130	1	13	63	ER20	34	130	108	M12	52.5
C4ER16X70	1	10	40	ER16	28	70	50	M10	41.6	C6ER20X160	1	13	63	ER20	34	160	138	M12	52.5
C4ER20X35*	1	13	40	ER20	34	35	27	-	39.8	C6ER25X060	1	16	63	ER25	42	60	38	-	40.4
C4ER20X52	1	13	40	ER20	34	52	32	-	39.1	C6ER25X100	1	16	63	ER25	42	100	78	M16	65
C4ER25X38*	1	16	40	ER25	42	38	30	-	43.3	C6ER25X130	1	16	63	ER25	42	130	108	M16	73
C4ER25X52	1	16	40	ER25	42	52	32	-	40.8	C6ER25X160	1	16	63	ER25	42	160	138	M16	73
C4ER32X54	2	20	40	ER32	50	54	34	-	46.7	C6ER32X060	2	20	63	ER32	50	60	36	-	47.8
C5ER16X100	1	10	50	ER16	28	100	80	M10	61.6	C6ER32X100	2	20	63	ER32	50	100	78	M22X1.5	59.4
C5ER16X130	1	10	50	ER16	28	130	110	M10	71.6	C6ER32X130	2	20	63	ER32	50	130	108	M22X1.5	69.4
C5ER20X055	1	13	50	ER20	34	55	35	-	39.3	C6ER32X160	2	20	63	ER32	50	160	138	M22X1.5	69.4
C5ER20X100	1	13	50	ER20	34	100	80	M12	52.5	C6ER40X065	3	26	63	ER40	63	65	37	-	55
C5ER20X130	1	13	50	ER20	34	130	110	M12	52.5	C6ER40X100	3	26	63	ER40	63	100	78	M28X1.5	60
C5ER25X055	1	16	50	ER25	42	55	35	-	40.5	C6ER40X130	3	26	63	ER40	63	130	108	M28X1.5	70
C5ER25X100	1	16	50	ER25	42	100	80	M16	65	C8ER32X70	2	20	80	ER32	50	70	40	-	47.8
C5ER32X057	2	20	50	ER32	50	57	36	-	47.2	C8ER32X100	2	20	80	ER32	50	100	70	M22x1.5	60.4
C5ER32X100	2	20	50	ER32	50	100	36	M22X1.5	59.4	C8ER32X160	2	20	80	ER32	50	160	130	M22x1.5	65.4
C6ER16X100	1	10	63	ER16	28	100	78	M10	61.6	C8ER40X70	3	26	80	ER40	63	70	40	-	54.8
C6ER16X130	1	10	63	ER16	28	130	108	M10	71.6	C8ER40X100	3	26	80	ER40	63	100	70	M28x1.5	60
C6ER16X160	1	10	63	ER16	28	160	138	M10	71.6	C8ER40X160	3	26	80	ER40	63	160	130	M28x1.5	71
C6ER20X060	1	13	63	ER20	34	60	38	-	39.5										

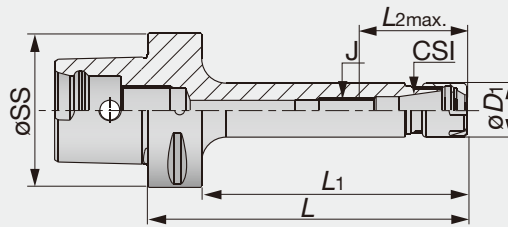
*Without V grooves, for manual use only.
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGCAP

C-ER-M

Mini ER collet chucks holders (DIN 6499)



Designation	Range min.	Range max.	øSS	CSI	øD1	L	L1	J	L2max.
C4ER16X70M	0.5	10	40	ER16	22	70	50	M10	41
C5ER16X100M	0.5	10	50	ER16	22	100	80	M10	46
C5ER16X130M	0.5	10	50	ER16	22	130	110	M10	46
C6ER16X100M	0.5	10	63	ER16	22	100	78	M10	46
C6ER16X130M	0.5	10	63	ER16	22	130	108	M10	46
C6ER16X160M	0.5	10	63	ER16	22	160	138	M10	46

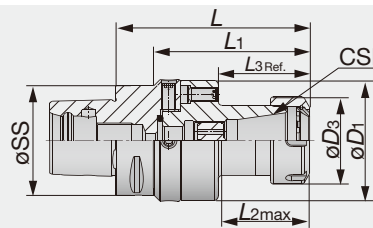
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGCAP

ADJ C-ER

ER collet chucks with center alignment

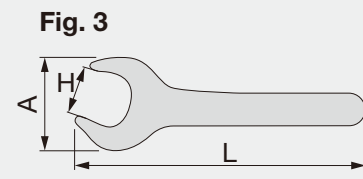
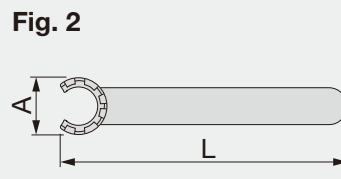
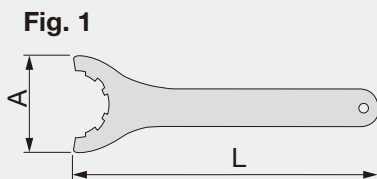


Designation	øSS	CSI	Range min.	Range max.	øD1	øD3	L	L1	L3	L2max.
ADJC5ER32	50	ER32	2	20	70	50	115	95	52.5	57
ADJC6ER32	63	ER32	2	20	70	50	111.5	89.5	52.5	57

• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

WRENCH-ER / ER DIN 6499



Designation	A	H	L	Fig.
WRENCHER11MINI	16.8	-	95	2
WRENCHER11	32	17	95	3
WRENCHER16MINI	22.5	-	117	2
WRENCHER16	42.8	25	143	3
WRENCHER20MINI	28	-	128	2
WRENCHER20	53.5	30	172	3
WRENCHER25MINI	29	-	120	2
WRENCHER25	70	-	207	1
WRENCHER32	78	-	255	1
WRENCHER40	95	-	285	1
WRENCHER50	110	-	350	1
WRENCHER20SHORTRING22	48	22	260	3
WRENCHER32SHORT	75	36	303	3
WRENCHER40SHORT	94	46	378	3

PRESET ER-JET (Preset screws)

Fig. 1

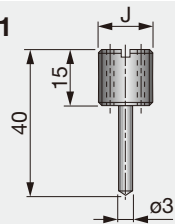
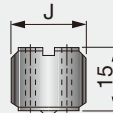
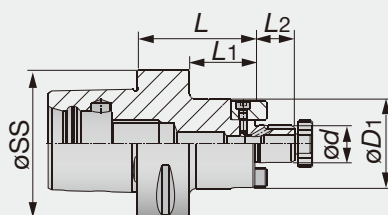


Fig. 2



Designation	J	Fig.
PRESETER-JET8X1	M8X1.0	2
PRESETER-JET8X1.25	M8X1.25	2
PRESETER-JET10X1.5	M10X1.5	2
PRESETER-JET12X1	M12X1.0	2
PRESETER-JET12X1.75L	M12X1.75	1
PRESETER-JET12X1.75	M12X1.75	2
PRESETER-JET14X1	M14X1.0	2
PRESETER-JET16X2	M16X2	2
PRESETER-JET16X2L	M16X2	1
PRESETER-JET18X1	M18X1.0	2
PRESETER-JET18X1.5	M18X1.5	2
PRESETER-JET18X1.5L	M18X1.5	1
PRESETER-JET22X1.5	M22X1.5	2
PRESETER-JET22X1.5L	M22X1.5	1
PRESETER-JET28X1.5	M28X1.5	2

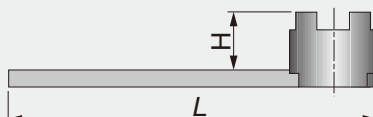


Designation	øSS	ød	øD1	L	L2	L1	Width of key	Height of key	Designation	øSS	ød	øD1	L	L2	L1	Width of key	Height of key
C4SEM16X32C	40	16	38	32	12	17	8	5	C6SEM27X100C	63	27	58	100	21	78	12	6.3
C4SEM16X55C	40	16	38	55	35	17	8	5	C6SEM31.75X60C	63	31.75	64	60	30	-	12.7	6
C4SEM22X40C	40	22	47	40	20	19	10	5.4	C6SEM32X60C	63	32	66	60	24	38	14	7
C4SEM22X55C	40	22	47	55	35	19	10	5.4	C6SEM38.1X60C	63	38.1	78	60	34	-	15.875	8
C5SEM16X35C	50	16	38	35	17	15	8	5	C6SEM40X60C	63	40	82	60	27	38	16	8
C5SEM16X70C	50	16	38	70	17	50	8	5	C8SEM16X50C	80	16	38	50	20	17	8	5
C5SEM22X35C	50	22	47	35	19	15	10	5.4	C8SEM16X100C	80	16	38	100	70	17	8	5
C5SEM22X70C	50	22	47	70	19	50	10	5.4	C8SEM22X50C	80	22	47	50	20	19	10	5.4
C5SEM25.4X37C	50	25.4	55	37	22	-	9.525	4.6	C8SEM22X100C	80	22	47	100	70	19	10	5.4
C5SEM27X40C	50	27	58	40	21	20	12	6.3	C8SEM25.4X50C	80	25.4	50	50	22	20	9.525	4.6
C5SEM31.75X60C	50	31.75	64	60	30	-	12.7	6	C8SEM27X50C	80	27	58	50	20	21	12	6.3
C5SEM32X40C	50	32	63	40	24	20	14	7	C8SEM27X100C	80	27	58	100	70	21	12	6.3
C6SEM16X50C	63	16	38	50	17	28	8	5	C8SEM31.75X50C	80	31.75	64	50	30	20	12.7	6
C6SEM16X100C	63	16	38	100	17	78	8	5	C8SEM32X50C	80	32	66	50	20	24	14	7
C6SEM22X50C	63	22	47	50	19	28	10	5.4	C8SEM32X100C	80	32	66	100	70	24	14	7
C6SEM22X100C	63	22	47	100	19	78	10	5.4	C8SEM38.1X50C	80	38.1	80	50	34	-	15.875	8
C6SEM25.4X37C	63	25.4	55	37	22	15	9.525	4.6	C8SEM40X60C	80	40	82	60	30	27	16	8
C6SEM27X60C	63	27	58	60	21	38	12	6.3									

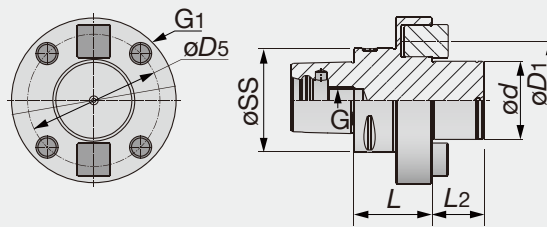
• Applicable for 7 MPa pressure coolant

(Option: Wrench for lock Screw)

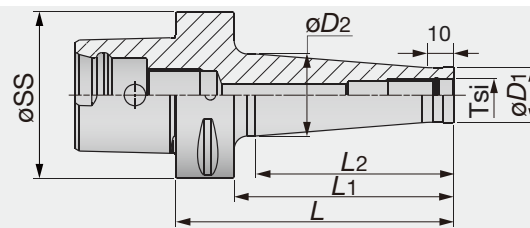
WRENCH SEMC / DIN6368



Designation	Inner diameter of cutter body ø	Screw size	H	L
WRENCHM8SEMC16	16	M8	20	180
WRENCHM10SEMC22	22	M10	25	200
WRENCHM12SEMC27	25.4 / 27	M12	32	225
WRENCHM16SEMC32	31.75 / 32	M16	36	250
WRENCHM20SEMC40	38.1 / 40	M20	40	280
WRENCHM24SEMC50	50	M24	50	315

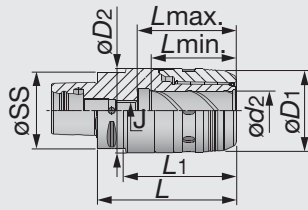


Designation	øSS	ød	L ₂	L	øD ₁	øD ₅	G ₁	G	Width of key	Hight of key
C8FM60X60	80	60	20	40	128	101.6	M16	M20	25.4	12.4



Designation	Tsi	øSS	øD ₁	øD ₂	L	L ₁	L ₂
C4ODP10X53	M10	40	18	23	53	33	23
C4ODP12X53	M12	40	21	26	53	33	23
C4ODP16X53	M16	40	29	34	53	33	23
C5ODP10X53	M10	50	18	19.5	53	33	25
C5ODP10X103	M10	50	18	28	103	83	75
C5ODP12X53	M12	50	21	23.5	53	33	25
C5ODP12X103	M12	50	21	31	103	83	75
C5ODP16X53	M16	50	29	34	53	33	25
C5ODP16X103	M16	50	29	36	103	83	75
C6ODP10X55	M10	63	18	19.5	55	33	25
C6ODP10X105	M10	63	18	28	105	83	75
C6ODP10X130	M10	63	18	32	130	108	100
C6ODP12X55	M12	63	21	23.5	55	33	25
C6ODP12X105	M12	63	21	31	105	83	75
C6ODP12X130	M12	63	21	36	130	108	100
C6ODP16X55	M16	63	29	34	55	33	25
C6ODP16X105	M16	63	29	34	105	83	75
C6ODP16X130	M16	63	29	41	130	108	100

• Applicable for 10 MPa pressure coolant



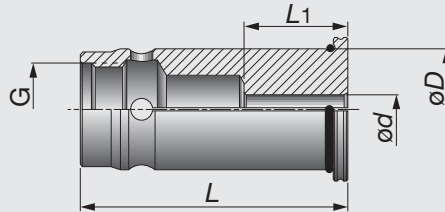
Designation	øSS	Range	ød2	øD1	øD2	L	L1	Lmin	Lmax	J
C5MAXIN20X100	50	6-20	20	51	53	95.5	75	55	67	M16
C6MAXIN20X95	63	6-20	20	51	53	95	73	55	67	M16
C6MAXIN32X115	63	6-32	32	69	70	115	93	70	82	M16
C8MAXIN20X95	80	6-20	20	51	53	95	65	55	67	M16
C8MAXIN32X115	80	6-32	32	69	70	115	85	70	82	M16

• Applicable for 10 MPa pressure coolant

(Option : Wrench for TungMax collet)

SC-SEAL

SC sealed straight collets - metric

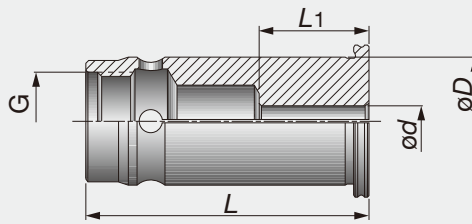


Designation	ød	øD	L	L1	G
SC20SEAL6	6	20	60	28	M16
SC20SEAL8	8	20	60	28	M16
SC20SEAL10	10	20	60	35	M16
SC20SEAL12	12	20	60	40	M16
SC20SEAL14	14	20	60	40	M16
SC20SEAL15	15	20	60	40	M16
SC20SEAL16	16	20	60	39	M16
SC32SEAL6	6	32	72	28	M24x1.5
SC32SEAL8	8	32	72	28	M24x1.5
SC32SEAL10	10	32	72	35	M24x1.5
SC32SEAL12	12	32	72	40	M24x1.5
SC32SEAL14	14	32	72	40	M24x1.5
SC32SEAL15	15	32	72	40	M24x1.5
SC32SEAL16	16	32	72	44	M24x1.5
SC32SEAL18	18	32	72	44	M24x1.5
SC32SEAL19	19	32	72	44	M24x1.5
SC32SEAL20	20	32	72	46	M24x1.5
SC32SEAL24	24	32	72	46	M24x1.5
SC32SEAL25	25	32	72	51	M24x1.5

• Applicable for 10 MPa pressure coolant

SC-SPR

SC straight collets - metric



Designation	ød	øD	L	L1	G
SC20SPR6	6	20	60	28	M16
SC20SPR8	8	20	60	28	M16
SC20SPR10	10	20	60	35	M16
SC20SPR12	12	20	60	40	M16
SC20SPR14	14	20	60	40	M16
SC20SPR15	15	20	60	40	M16
SC20SPR16	16	20	60	39	M16
SC32SPR6	6	32	72	28	M24x1.5
SC32SPR8	8	32	72	28	M24x1.5
SC32SPR10	10	32	72	35	M24x1.5
SC32SPR12	12	32	72	40	M24x1.5
SC32SPR14	14	32	72	40	M24x1.5
SC32SPR15	15	32	72	40	M24x1.5
SC32SPR16	16	32	72	44	M24x1.5
SC32SPR18	18	32	72	44	M24x1.5
SC32SPR19	19	32	72	44	M24x1.5
SC32SPR20	20	32	72	46	M24x1.5
SC32SPR24	24	32	72	45	M24x1.5
SC32SPR25	25	32	72	51	M24x1.5

PRESET SC CAP

Preset screw for SC collets

Fig. 1

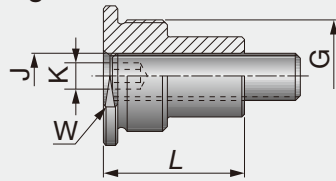
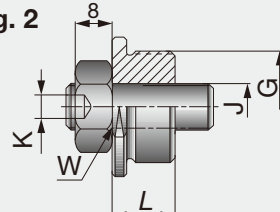
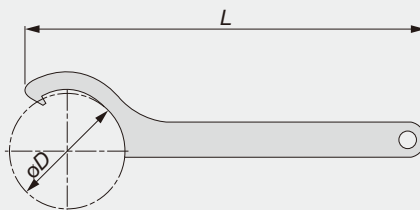


Fig. 2



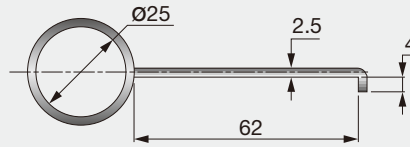
Designation	L	W	J	G	Range	Key	CSI	Fig
PRESETSCCAP8x1.25L	28	16	M8X25	M16	6-8	4	SC20	1
PRESETSCCAP8x1.25	15	16	M8X25	M16	10-16	4	SC20	2
PRESETSCCAP10x1.5L	30	27	M10X30	M24X1.5	6-14	5	SC32	1
PRESETSCCAP10x1.5	13.5	27	M10X30	M24X1.5	16-25	5	SC32	2

Wrench



Designation	øD	L
WRENCHMAXIN20HOOK	26	205
WRENCHMAXIN32HOOK	68	240

SC collet extracting hook



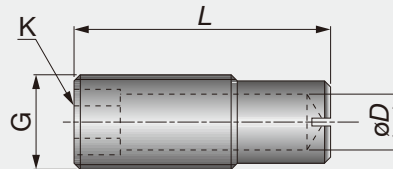
Designation

EXTRACTORSCCOLLETS

Collet

SC straight collets

Preset screws

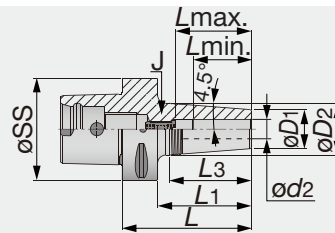


Designation	G	L	øD	K
PRESETMAXIN16X30	M16	30	8	8
PRESETMAXIN16X44	M16	44	8	8
PRESETMAXIN20X55	M20	55	12	12

TUNGSHRINK

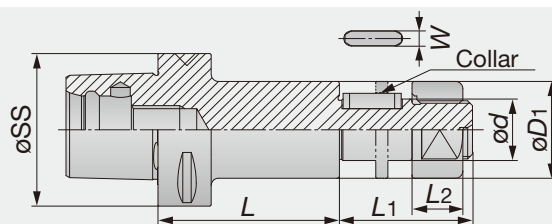
C-SRKIN

Thermal shrinking holders



Designation	øSS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J
C4SRKIN6X75	40	6	21	27	75	55	38.1	25	36	M5
C4SRKIN8X75	40	8	21	27	75	55	38.1	25	36	M6
C4SRKIN10X75	40	10	24	32	75	55	50.8	31	42	M8
C4SRKIN12X75	40	12	24	32	75	55	50.8	36	47	M10
C4SRKIN14X80	40	14	27	34	80	60	44.5	36	47	M10
C4SRKIN16X80	40	16	27	34	80	60	44.5	39	50	M12
C4SRKIN18X80	40	18	33	42	80	60	57.2	39	50	M12
C4SRKIN20X85	40	20	33	42	85	65	57.2	41	52	M16
C5SRKIN6X75	50	6	21	27	75	55	38.1	25	36	M5
C5SRKIN8X75	50	8	21	27	75	55	38.1	25	36	M6
C5SRKIN10X75	50	10	24	32	75	55	51.3	31	42	M8
C5SRKIN12X75	50	12	24	32	75	55	51.3	36	47	M10
C5SRKIN14X80	50	14	27	34	80	60	44.5	36	47	M10
C5SRKIN16X80	50	16	27	34	80	60	44.5	39	50	M12
C5SRKIN18X80	50	18	33	42	80	60	57.2	39	50	M12
C5SRKIN20X85	50	20	33	42	85	65	57.2	41	52	M16
C5SRKIN25X90	50	25	44	53	90	70	57.2	47	58	M16
C6SRKIN6X80	63	6	21	27	80	58	38.1	25	36	M5
C6SRKIN8X80	63	8	21	27	80	58	38.1	25	36	M6
C6SRKIN10X80	63	10	24	32	80	58	50.8	31	42	M8
C6SRKIN12X80	63	12	24	32	80	58	50.8	36	47	M10
C6SRKIN14X85	63	14	27	34	85	63	44.5	36	47	M10
C6SRKIN16X85	63	16	27	34	85	63	44.5	39	50	M12
C6SRKIN18X85	63	18	33	42	85	63	57.2	39	50	M12
C6SRKIN20X85	63	20	33	42	85	63	57.2	41	52	M16
C6SRKIN25X90	63	25	44	53	90	68	57.2	47	58	M16
C6SRKIN32X95	63	32	44	53	95	73	57.2	47	58	M16

• Applicable for 10 MPa pressure coolant

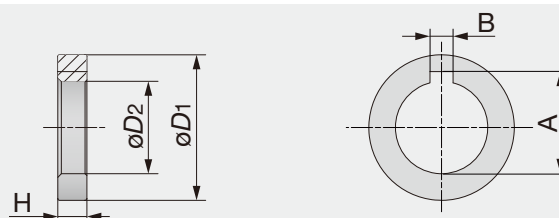


Designation	øSS	ød	L	øD1	L1	L2	Width of key W	Height of key
C6SCA25.4-075	63	25.4	75	40	55	21	6.35	2.38
C6SCA31.75-075	63	31.75	75	46	60	26	7.92	3.17
C8SCA25.4-090	80	25.4	90	40	55	21	6.35	2.38
C8SCA31.75-090	80	31.75	90	46	60	26	7.92	3.17

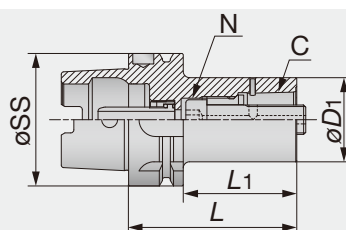
• Collars for slot mills are not included.

SCA

Collar for slot milling holder



Designation	øD1	øD2	A	B	H
SCA25.4-02	40	25.4	28.1	6.35	3, 5, 7, 8, 10, 12, 14
SCA31.75-02	46	31.75	35.2	7.92	3, 5, 7, 8, 10, 12, 14



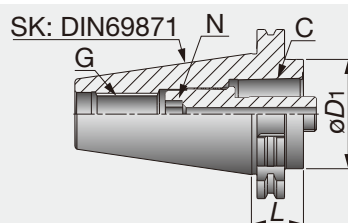
Designation	$\varnothing SS$	C	$\varnothing D1$	L	L ₁	N*	Key
HSK63A-C4-080T	63	C4	40	80	54	55	8
HSK63A-C5-090T	63	C5	50	90	64	95	10
HSK63A-C6-110T	63	C6	63	110	74	170	14
HSK100A-C6-110	100	C6	63	110	81	170	14
HSK100A-C8-120	100	C8	80	120	91	170	14

- Applicable for 7 MPa pressure coolant
- Option: Cooling tube wrench

*Recommended torque (N-m) for clamping

C-ADSKA

Basic holders for DIN 69871 form AD / ADB tapered shanks



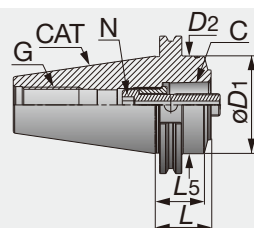
Designation	C	SK	$\varnothing D1$	L	G	N*	Key
C4ADSKA40X30	C4	40	40	30	M16	55	8
C5ADSKA40X30	C5	40	50	30	M16	95	10
C5ADSKA50X30ADB	C5	50	50	30	M24	95	10
C6ADSKA50X30	C6	50	63	30	M24	170	14
C8ADSKA50X70ADB	C8	50	80	70	M24	170	14

- Applicable for 7 MPa pressure coolant

*Recommended torque (N-m) for clamping

C-ADCAT

Basic holders for caterpillar AD / ADB tapered shanks



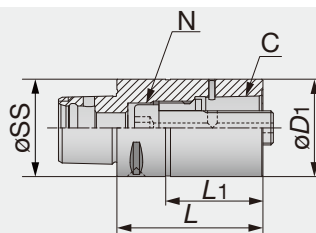
Designation	C	CAT	$\varnothing D1$	D ₂	L	L ₅	G	N*	Key
C4ADCATI40X40ADB	C4	40	40	44.5	40	35	5/8X11	55	8
C5ADCATI40X90ADB	C5	40	50	45.2	90	35	5/8X11	95	10
C5ADCATI50X40ADB	C5	50	50	69.9	40	35	1-8	95	10
C6ADCATI50X50	C6	50	63	69.85	50	37	1-8	170	14
C8ADCATI50X100ADB	C8	50	80	70.1	100	35	1-8	170	14

- Applicable for 7 MPa pressure coolant

*Recommended torque (N-m) for clamping

C-EX

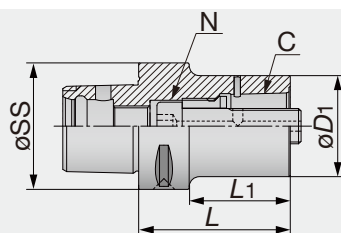
Extension adapters



Designation	C	øSS	øD1	L	L1	N*	Key
C4EX-060	C4	40	40	60	80	65	8
C4EX-080	C4	40	40	80	60	65	8
C5EX-080	C5	50	50	80	60	95	10
C5EX-100	C5	50	50	100	80	95	10
C6EX-100	C6	63	63	100	78	170	14
C6EX-140	C6	63	63	140	118	170	14
C8EX-100	C8	80	80	100	70	170	14
C8EX-160	C8	80	80	160	130	170	14

• Applicable for 7 MPa pressure coolant

*Recommended torque (N·m) for clamping



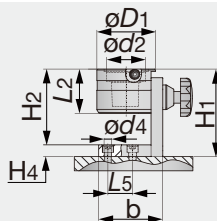
Designation	C	SS	D1	L	L1	N*	Key
C5-C4RE-060	C4	50	40	60	40	55	8
C5-C4RE-080	C4	50	40	80	60	55	8
C6-C4RE-080	C4	63	40	80	58	55	8
C6-C5RE-080	C5	63	50	80	58	95	10
C6-C5RE-120	C5	63	50	120	98	95	10
C8-C4RE-070	C4	80	40	70	40	55	8
C8-C5RE-080	C5	80	50	80	50	95	10
C8-C6RE-080	C6	80	63	80	50	170	14
C8-C6RE-120	C6	80	63	120	90	170	14

• Applicable for 7 MPa pressure coolant

*Recommended torque (N-m) for clamping

MULTI CLAMP (TungCap)

Multi-clamp fixture for TungCap



Designation	CSI	D2	D1	L2	H1	H2	H4	b	L5	D4
MULTICLAMP4	40	40.4	78	67	137.5	118.5	19	104	40	12.5
MULTICLAMP5	50	50	85	72	142	123	19	104	40	12.5
MULTICLAMP6	60	63	95	72	142	123	19	104	40	12.5
MULTICLAMP8	80	80	130	90	178	159	19	144	85	12.5





Designation for clamping units

Fixed-type clamping unit

	For external (Tool setting direction cross X)	For internal (Tool setting direction straight Z)
Turning Unit	C□-DTO-□C-***-R/L	C□-DTI-□C-***-R/L
		
Driving Unit	C□-DDC-□C-***	C□-DDS-□C-***
		

Description of clamping unit for turning

C3

-

D

T

I

-

IC

-

-

R

1

2

3

4

5

6

7

1 PSC size

C*

2 Device

D

3 Turning

T

4 Application

O External

I Internal

S Other

5 Coolant

IC Internal

OC External

6 Unit number

Manufacturer's optional symbol

7 Hand

R Right

L Left

Description of clamping unit for driving

C6

-

D

D

C

-

1

2

3

4

5

6

1 PSC size

C*

2 Device

D

3 For rotating tools

D

4 Tool setting direction

S Straight: Z

C Cross: X

X Other

5 Coolant

IC Internal

OC External

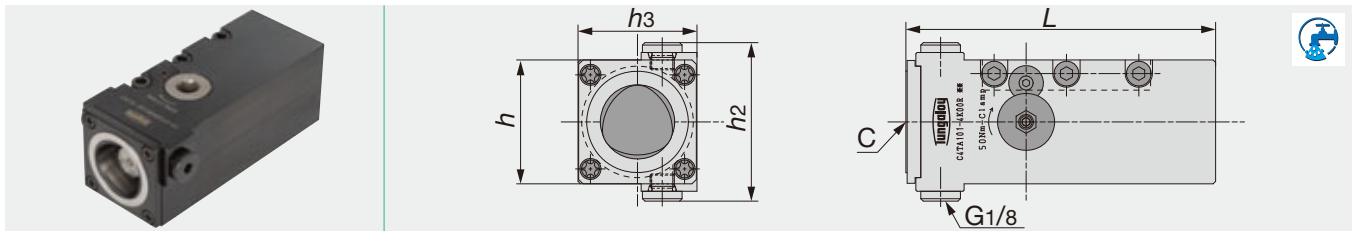
WC Double

6 Unit number

Manufacturer's optional symbol

C-DTOSR/L

Manual clamping unit; Square shank



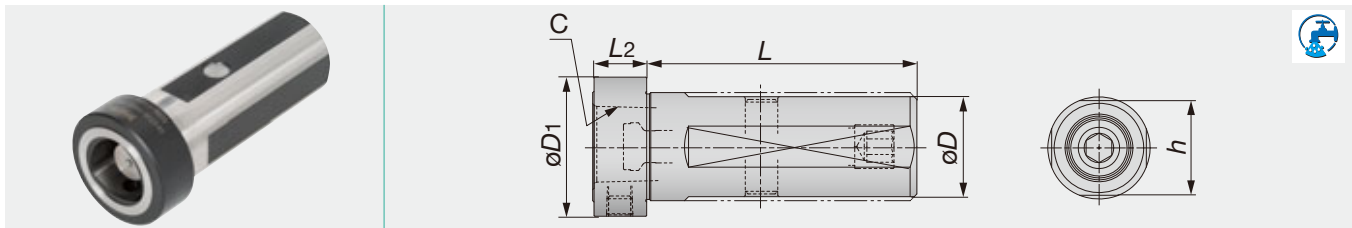
Designation	C	Turret size h	h3	h2	L	N*(N.m)
C3-DTOS4038R/L	C3	40	38	62	95	35
C4-DTOS5048R/L	C4	50	48	64	125	50
C5-DTOS6464R/L	C5	60	64	68	145	70

• Applicable for 7 MPa pressure coolant

* Recommend clamping torque.

C-DTIR

Manual clamping unit; Round shank



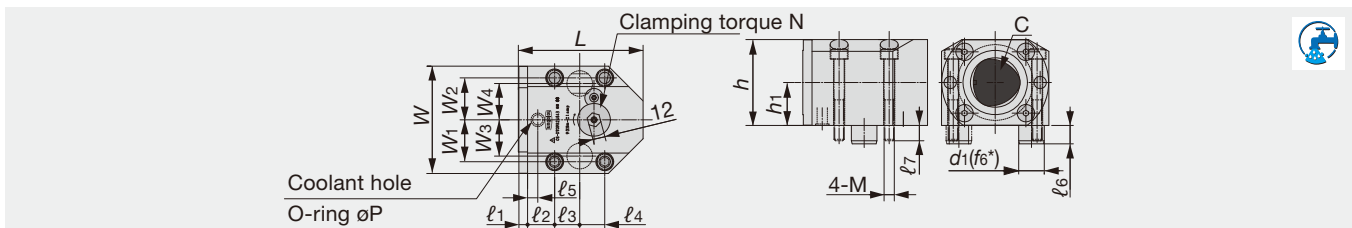
Designation	C	ØD	ØD1	h	L	L2	N*(N.m)
C3-DTIR-08018-D32	C3	32	46	30	80	18	35
C4-DTIR-10020-D40	C4	40	52	38	100	20	50
C4-DTIR-12020-D50	C4	50	52	48	120	20	50
C5-DTIR-12024-D50	C5	50	62	48	120	24	70

• Applicable for 7 MPa pressure coolant

* Recommend clamping torque.

C-DTOFR/L

Manual clamping unit; Fixed type



Designation	C	h	h1	L	W	W1	W2	W3	W4	ℓ1	ℓ2	ℓ3	ℓ4	ℓ5	ℓ6	ℓ7	d1(f6*)	P	M	N*
C5-DTOFR/L32048	C5	64	32	100	92	35		31		8	19	21		7	11	15	20	P8	M10	70
C6-DTOFR/L42060	C6	84	42	122	105	41		35.5		9	26.5	24.5		10	18	15	25	P10	M10	90
C8-DTOFR/L50088	C8	100	50	146	133	55		46		12	33	43		13	19	20	32	P11	M12	130

• Applicable for 7 MPa pressure coolant

* f6 tolerance: d20 & 25 = -0.022 / -0.033, d32 = -0.025 / -0.041

*Recommended torque (N.m) for clamping



Clamping units & tools for CNC lathes

Selection for External turning

Fig. 1



Fig. 2

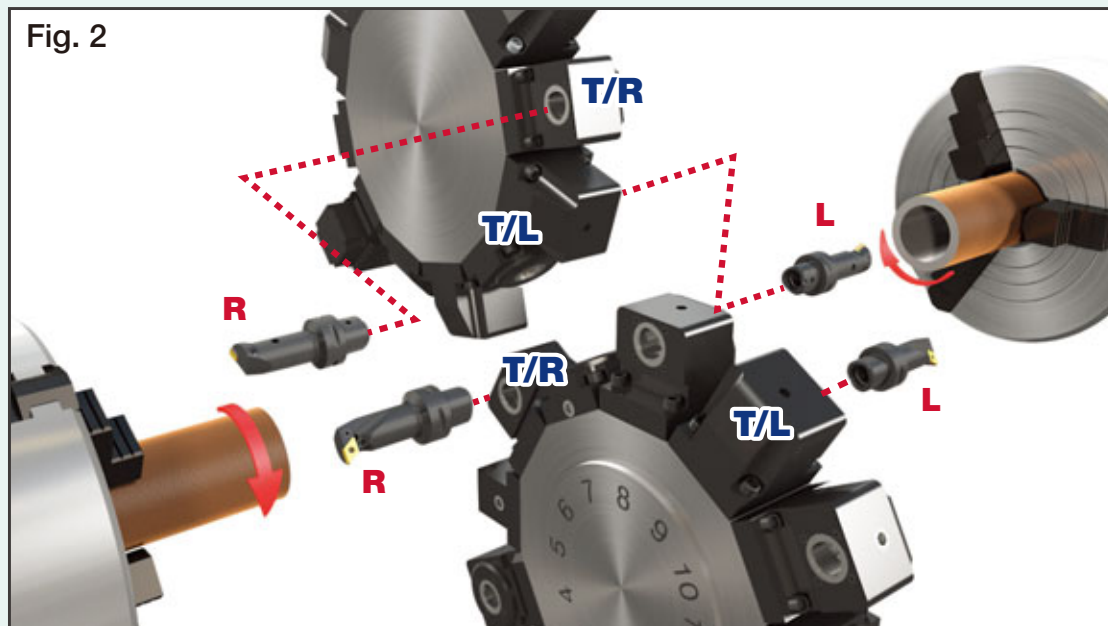
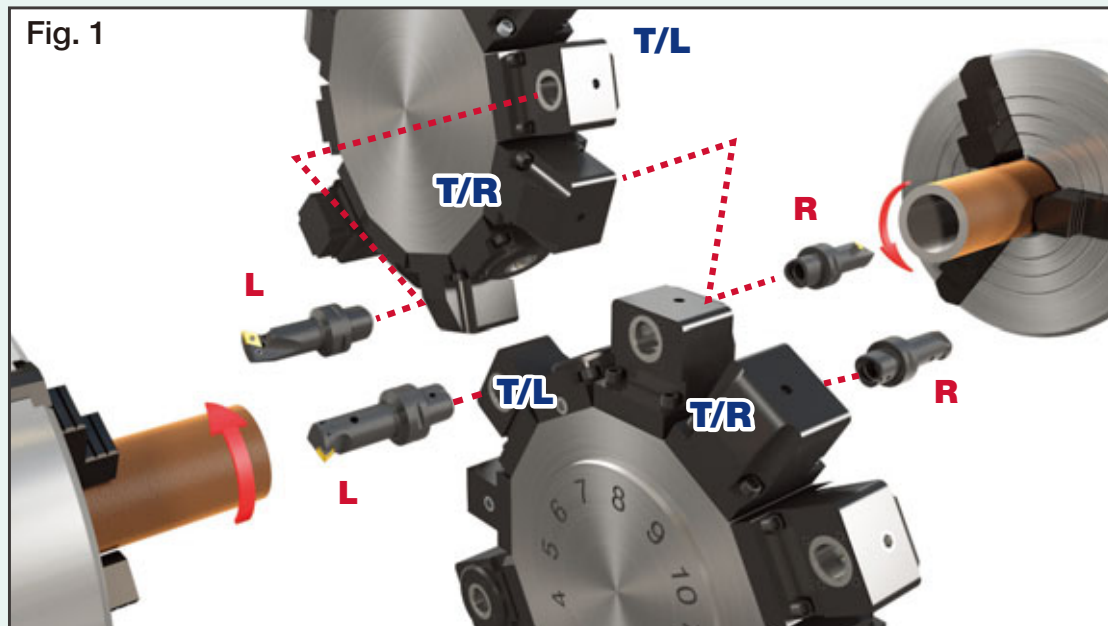


R: Right hand cutting tool, **L:** Left hand cutting tool

T/R: Right hand clamping unit, **T/L:** Left hand clamping unit

Clamping units & tools for CNC lathes

Selection for Internal turning



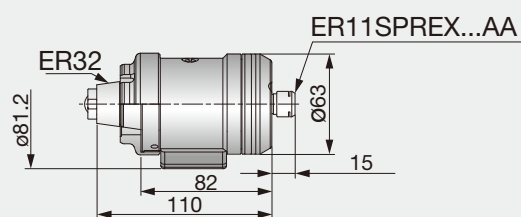
R: Right hand cutting tool, **L:** Left hand cutting tool

T/R: Right hand clamping unit, **T/L:** Left hand clamping unit



Tooling System

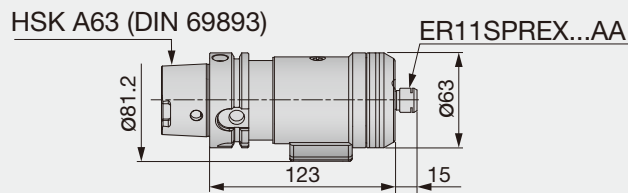
TUNGALOY



Description	Designation
Display (Optional parts)	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

Designation	Max. tool diameter	Weight (kg)	Direction of tool rotation
TJS20KER32L	3.5	1.1	L
TJS20KER32R	3.5	1.1	R
TJS30KER32L	2.5	1.1	L
TJS30KER32R	2.5	1.1	R
TJS40KER32L	1.5	1.1	L
TJS40KER32R	1.5	1.1	R

- Max. tool shank diameter: Ø6 mm
- Coolant pressure through machine spindle: Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min



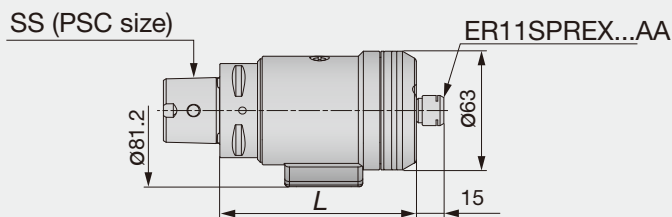
Description	Designation
Display (Optional parts)	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

Designation	Max. tool diameter	Weight (kg)	Direction of tool rotation
TJS20KHSKA63L	3.5	1.6	L
TJS20KHSKA63R	3.5	1.6	R
TJS30KHSKA63L	2.5	1.6	L
TJS30KHSKA63R	2.5	1.6	R
TJS40KHSKA63L	1.5	1.6	L
TJS40KHSKA63R	1.5	1.6	R

- Max. tool shank diameter: ø6.0 mm
- Coolant pressure through machine spindle: Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-C

Coolant driven high speed compact spindles with TungCap PSC ISO 26623-1 shanks



Description	Designation
Display (Optional parts)	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

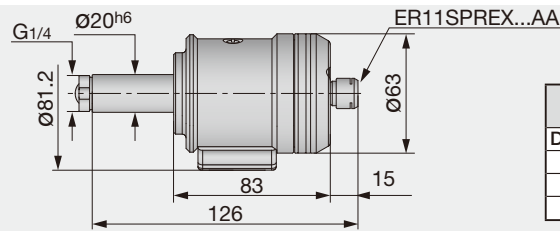
Designation	SS	L	Max. tool diameter	Weight (kg)	Direction of tool rotation
TJS20KC5L	C5	104	3.5	1.5	L
TJS20KC5R	C5	104	3.5	1.5	R
TJS30KC5L	C5	104	2.5	1.5	L
TJS30KC5R	C5	104	2.5	1.5	R
TJS40KC5L	C5	104	1.5	1.5	L
TJS40KC5R	C5	104	1.5	1.5	R
TJS20KC6L	C6	106	3.5	1.65	L
TJS20KC6R	C6	106	3.5	1.65	R
TJS30KC6L	C6	106	2.5	1.65	L
TJS30KC6R	C6	106	2.5	1.65	R
TJS40KC6L	C6	106	1.5	1.65	L
TJS40KC6R	C6	106	1.5	1.65	R

- Max. tool shank diameter: ø6 mm
- Coolant pressure through machine spindle: Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

SPINJET

TJS-ST

Coolant driven high speed compact spindles with straight (Cylindrical) shanks



Description	Designation
Display (Optional parts)	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

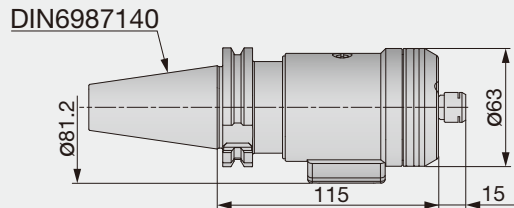
Designation	Max. tool diameter	Weight (kg)	Direction of tool rotation
TJS20KST20L	3.5	1.1	L
TJS20KST20R	3.5	1.1	R
TJS30KST20L	2.5	1.1	L
TJS30KST20R	2.5	1.1	R
TJS40KST20L	1.5	1.1	L
TJS40KST20R	1.5	1.1	R

- Max. tool shank diameter: ø6 mm
- Coolant pressure through machine spindle: Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

SPINJET

TJS-DIN69871

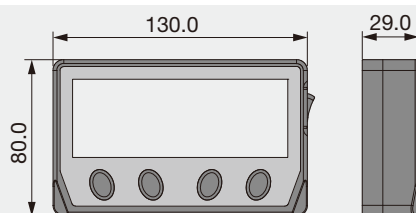
Coolant driven high speed compact spindles with DIN69871 shanks



Description	Designation
Display (Optional parts)	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

Designation	Max. tool diameter	Weight (kg)	Direction of tool rotation
TJS20KDIN6987140L	ø3.5	1.6	L
TJS20KDIN6987140R	ø3.5	1.6	R
TJS30KDIN6987140L	ø2.5	1.6	L
TJS30KDIN6987140R	ø2.5	1.6	R
TJS40KDIN6987140L	ø1.5	1.6	L
TJS40KDIN6987140R	ø1.5	1.6	R

- Max. tool shank diameter: ø6 mm
- Coolant pressure through machine spindle: Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

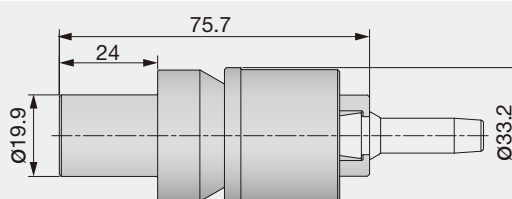


Designation
TJSTSDDISPLAY

Machine
TJS spindles

ER-SRK Shrink collet adapter

ER 11 shrink collet adapter for induction heating device



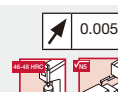
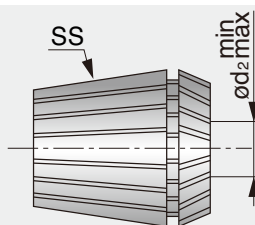
Designation
INDER11TOOLADAPTER

Machine
TJS spindles

SPINJET

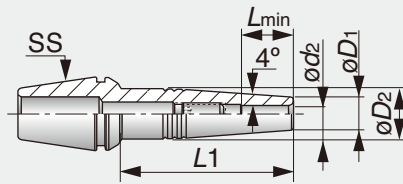
ER-SPR-AA

ER 11 AA collet



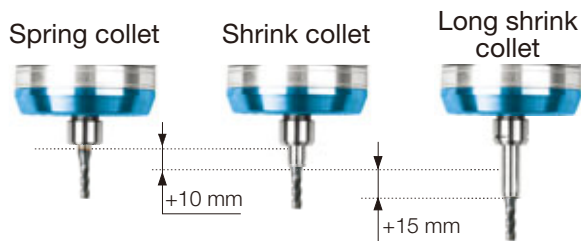
Designation	SS	ød2 min	ød2 max
ER11SPR0.5-1AA	ER11	0.5	1
ER11SPR1-2AA	ER11	1	2
ER11SPR2-3AA	ER11	2	3
ER11SPR3-4AA	ER11	3	4
ER11SPR4-5AA	ER11	4	5
ER11SPR5-6AA	ER11	5	6
ER11SPR6-7AA	ER11	6	7

AA collet run-out: 0.005 mm

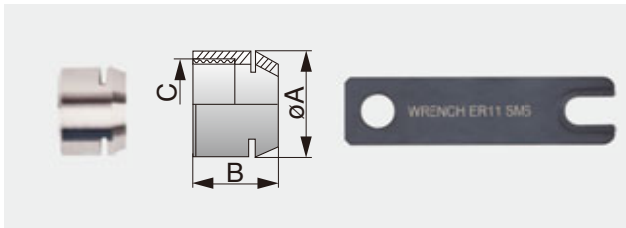


Designation	SS	ød2	L1	Lmin	øD2	øD1
ER11SRK3X10	ER11	3	10	9.5	8.5	7.6
ER11SRK3X25	ER11	3	25	11.5	8.5	7.6
ER11SRK4X10	ER11	4	10	9.5	8.5	7.6
ER11SRK4X25	ER11	4	25	11.5	8.5	7.6

• For carbide tools only

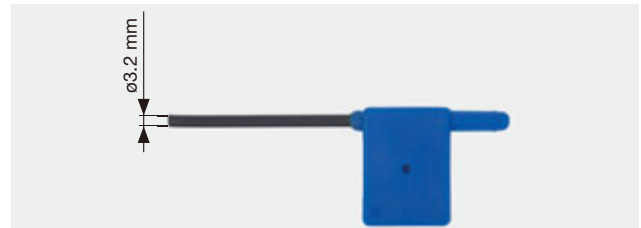


Nut and wrench for collets



Designation	øA	B	C	Wrench
NUTER11GHS	16	11.5	M13X0.75	WRENCHER11SMS

Wrench for setting



Designation
WRENCHDIA3.2x45

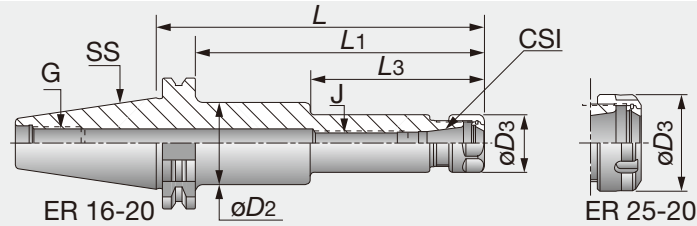
Ring color	Blue	Red	Yellow
Shape			
No. of revolutions: n (min ⁻¹)	40,000	30,000	20,000
Designation	TJS40K...	TJS30K	TJS20K
Coolant pressure: (MPa)	2	2	2
Min. flow rate: (l/min)	12	12	12
Max. shank dia: øDs (mm)	6	6	6
Tool dia: øDc (mm)	0.2 - 1.5	1.6 - 2.5	2.6 - 3.5

Speed vs. pressure

Jet spindle type / n (min ⁻¹)	Coolant pressure		
	2 MPa	3 MPa	4 MPa
TJS20K-ER32	20000	30000	40000
TJS30K-ER32	30000	40000	50000
TJS40K-ER32	40000	50000	60000

These are approximate RPM values, and they depend on coolant pressure, flow rate, and type.





Designation	SS	CSI	Range	L	L1	L3	øD3	øD2	J	G
DIN6987130ER16X63 ⁽¹⁾	30	ER16	0.5-10	63	43.9	28	28	-	M10	M12
DIN6987140ER16X63	40	ER16	0.5-10	63	43.9	-	28	-	M12	M16
DIN6987140ER16X63B	40	ER16	0.5-10	63	43.9	-	28	-	M12	M16
DIN6987140ER16X100	40	ER16	0.5-10	100	80.9	-	28	-	M12	M16
DIN6987140ER16X100B	40	ER16	0.5-10	100	80.9	-	28	-	M12	M16
DIN6987140ER16X160	40	ER16	0.5-10	160	140.9	85	28	40	M12	M16
DIN6987140ER16X160B	40	ER16	0.5-10	160	140.9	85	28	40	M12	M16
DIN6987140ER20X63	40	ER20	1-13	63	43.9	-	34	-	M12	M16
DIN6987140ER20X63B	40	ER20	1-13	63	43.9	-	34	-	M12	M16
DIN6987140ER20X100	40	ER20	1-13	100	80.9	-	34	-	M12	M16
DIN6987140ER20X100B	40	ER20	1-13	100	80.9	-	34	-	M12	M16
DIN6987140ER20X160	40	ER20	1-13	160	140.9	91	34	44	M12	M16
DIN6987150ER16X100 ⁽¹⁾	50	ER16	0.5-10	100	80.9	-	28	-	M12	M24
DIN6987150ER16X100B	50	ER16	0.5-10	100	80.9	-	28	-	M12	M24
DIN6987150ER16X160 ⁽¹⁾	50	ER16	0.5-10	160	140.9	85	28	40	M12	M24
DIN6987150ER16X160B	50	ER16	0.5-10	160	140.9	85	28	40	M12	M24
DIN6987150ER16X200 ⁽¹⁾	50	ER16	0.5-10	200	180.9	110	28	40	M10	M24
DIN6987150ER16X200B	50	ER16	0.5-10	200	180.9	110	28	40	M10	M24
DIN6987150ER20X100 ⁽¹⁾	50	ER20	1-13	100	80.9	-	34	-	M12	M24
DIN6987150ER20X100B	50	ER20	1-13	100	80.9	-	34	-	M12	M24
DIN6987150ER20X160 ⁽¹⁾	50	ER20	1-13	160	140.9	86	34	45	M12	M24
DIN6987150ER20X160B	50	ER20	1-13	160	140.9	86	34	45	M12	M24
DIN6987130ER32X65 ⁽¹⁾	30	ER32	2-20	65	45.9	32	50	40.4	M18x1.5	M12
DIN6987140ER25X65	40	ER25	1-16	65	45.9	28	42	32.4	M16x2	M16
DIN6987140ER25X65B	40	ER25	1-16	65	45.9	28	42	32.4	M16x2	M16
DIN6987140ER25X100	40	ER25	1-16	100	80.9	-	42	-	M16x2	M16
DIN6987140ER25X100B	40	ER25	1-16	100	80.9	-	42	-	M16x2	M16
DIN6987140ER25X150	40	ER25	1-16	150	130.9	-	42	-	M16x2	M16
DIN6987140ER25X150B	40	ER25	1-16	150	130.9	-	42	-	M16x2	M16
DIN6987140ER32X65	40	ER32	2-20	65	45.9	32	50	40.4	M22x1.5	M16
DIN6987140ER32X65B	40	ER32	2-20	65	45.9	32	50	40.4	M22x1.5	M16
DIN6987140ER32X100	40	ER32	2-20	100	80.9	35	50	49	M22x1.5	M16
DIN6987140ER32X100B	40	ER32	2-20	100	80.9	35	50	49	M22x1.5	M16
DIN6987140ER32X150	40	ER32	2-20	150	130.9	35	50	49	M22x1.5	M16
DIN6987140ER32X150B	40	ER32	2-20	150	130.9	35	50	49	M22x1.5	M16
DIN6987140ER40X70	40	ER40	3-26	70	50.9	32	63	50.4	M28x1.5	M16
DIN6987140ER40X70B	40	ER40	3-26	70	50.9	32	63	50.4	M28x1.5	M16
DIN6987140ER40X100	40	ER40	3-26	100	80.9	32	63	50.4	M28x1.5	M16
DIN6987140ER40X100B	40	ER40	3-26	100	80.9	32	63	50.4	M28x1.5	M16
DIN6987150ER25X100 ⁽¹⁾	50	ER25	1-16	100	80.9	-	42	-	M16x2	M24
DIN6987150ER25X100B	50	ER25	1-16	100	80.9	-	42	-	M16x2	M24
DIN6987150ER25X150 ⁽¹⁾	50	ER25	1-16	150	130.9	80.9	42	50	M16x2	M24
DIN6987150ER25X150B	50	ER25	1-16	150	130.9	80.9	42	50	M16x2	M24
DIN6987150ER25X200 ⁽¹⁾	50	ER25	1-16	200	180.9	85	42	55	M16x2	M24
DIN6987150ER25X200B	50	ER25	1-16	200	180.9	85	42	55	M16x2	M24
DIN6987150ER32X100 ⁽¹⁾	50	ER32	2-20	100	80.9	-	50	-	M22x1.5	M24
DIN6987150ER32X100B	50	ER32	2-20	100	80.9	-	50	-	M22x1.5	M24
DIN6987150ER32X150 ⁽¹⁾	50	ER32	2-20	150	130.9	-	50	-	M22x1.5	M24
DIN6987150ER32X150B	50	ER32	2-20	150	130.9	-	50	-	M22x1.5	M24
DIN6987150ER32X200 ⁽¹⁾	50	ER32	2-20	200	180.9	-	50	-	M22x1.5	M24
DIN6987150ER32X200B	50	ER32	2-20	200	180.9	-	50	-	M22x1.5	M24
DIN6987150ER40X100 ⁽¹⁾	50	ER40	3-26	100	80.9	-	63	-	M28x1.5	M24
DIN6987150ER40X100B	50	ER40	3-26	100	80.9	-	63	-	M28x1.5	M24
DIN6987150ER40X150 ⁽¹⁾	50	ER40	3-26	150	130.9	-	63	-	M28x1.5	M24
DIN6987150ER40X200 ⁽¹⁾	50	ER40	3-26	200	180.9	-	63	-	M28x1.5	M24
DIN6987150ER40X200B	50	ER40	3-26	200	180.9	-	63	-	M28x1.5	M24
DIN6987150ER50X100 ⁽¹⁾	50	ER50	10-34	100	80.9	-	78	-	M36x1.5	M24
DIN6987150ER50X100B	50	ER50	10-34	100	80.9	-	78	-	M36x1.5	M24
DIN6987150ER50X150 ⁽¹⁾	50	ER50	10-34	150	130.9	-	78	-	M36x1.5	M24

• Applicable for 10 MPa pressure coolant. • Add B for coolant through the flange.
 (1) Balanced to G6.3 12,000 min⁻¹.

(Option: Wrench for ER collet)

Reference pages



ER Collet
F101



Nut
F125



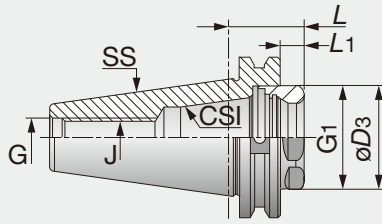
Wrench
F127



Preset screws
F128



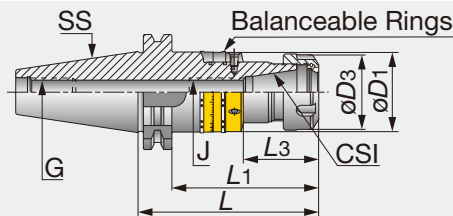
Pull stud
F124



Designation	SS	CSI	Range	L	L1	øD3	J	G	G1
DIN6987140ER32SHORT	40	ER32	2-20	25.1	6	40	M16	M16	M40x1.5
DIN6987150ER32SHORT	50	ER32	2-20	28.6	9.5	40	M22x1.5	M24	M40x1.5
DIN6987150ER40SHORT	50	ER40	3-26	28.6	9.5	50	M28x1.5	M24	M50x1.5

- Applicable for 10 MPa pressure coolant
- Add B for coolant through the flange.

(Option: Wrench for ER collet)

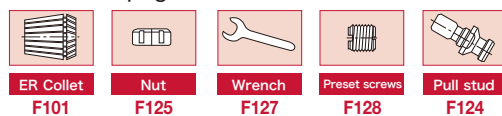


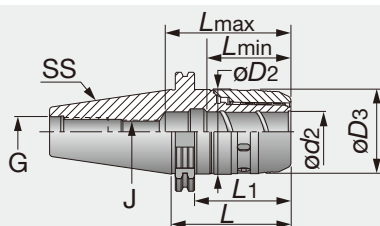
Designation	SS	CSI	Range	L	L1	L3	øD3	øD1	J	G
DIN6987140ER16X100BIN	40	ER16	0.5-10	100	80.9	44	28	44	M10	M16
DIN6987140ER20X100BIN	40	ER20	1.0-13	100	80.9	51	34	44	M12	M16
DIN6987140ER20X160BIN	40	ER20	1.0-13	160	140.9	87	34	44	M12	M16
DIN6987140ER25X100BIN	40	ER25	1.0-16	100	80.9	51	42	44	M16x1.5	M16
DIN6987140ER25X160BIN	40	ER25	1.0-16	160	140.9	88	42	44	M16x1.5	M16
DIN6987140ER32X100BIN	40	ER32	2.0-20	100	80.9	36	50	60	M22x1.5	M16
DIN6987140ER40X100BIN	40	ER40	3.0-26	100	80.9	36	63	60	M28x1.5	M16

- Applicable for 10 MPa pressure coolant
- Balanced to G2.5 20,000 min⁻¹.

(Option: Wrench for ER collet)

Reference pages





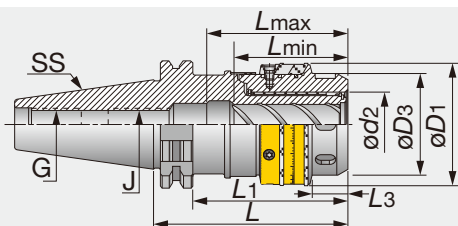
Designation	SS	ød2	Range	L	L1	Lmin	Lmax	øD3	øD2	J	G
DIN6987140MAXIN20X95	40	20	6-20	95	76	56	69	51	53	M16	M16
DIN6987140MAXIN32X106	40	32	6-32	106	87	70	83	69	70	M16	M16
DIN6987150MAXIN20X105 ⁽¹⁾	50	20	6-20	105	86	56	69	51	53	M16	M24
DIN6987150MAXIN20X105B	50	20	6-20	105	86	56	69	51	53	M16	M24
DIN6987150MAXIN32X100 ⁽¹⁾	50	32	6-32	100	81	70	84	69	70	M20x2	M24
DIN6987150MAXIN32X100B	50	32	6-32	100	81	70	84	69	70	M20X2	M24
DIN6987150MAXIN32X135 ⁽¹⁾	50	32	6-32	135	116	71	85	69	70	M20x2	M24

• Applicable for 10 MPa pressure coolant

• Add B for coolant through the flange.

(1) Balanced to G6.3 8,000 min⁻¹.

(Option:Wrench for TungMax collet)



Designation	SS	ød2	Range	øD3	øD1	L	L1	L3	Lmin	Lmax	J	G
DIN6987140MAXIN20X95BIN ⁽¹⁾	40	20	6-20	50.5	60.8	95	76	17.5	56	69	M16	M16
DIN6987140MAXI32X106BIN ⁽¹⁾	40	32	6-32	68.5	79.8	106	87	24.9	70	83	M16	M16
DIN6987150MAXIN20X105BIN ⁽¹⁾	50	20	6-20	50.5	60.8	105	86	17.5	56	69	M16	M24
DIN6987150MAXIN32X100BIN ⁽²⁾	50	32	6-32	68.5	79.8	100	81	24.9	70	84	M20X2	M24

• Applicable for 10 MPa pressure coolant

(1) Chucks with taper size 40 can be balanced by the balancing ring up to G2.5 at 20,000 min⁻¹.

(2) Chucks with taper size 50 can be balanced by the balancing ring up to G2.5 at 18,000 min⁻¹.

(Option:Wrench for TungMax collet)

Reference pages



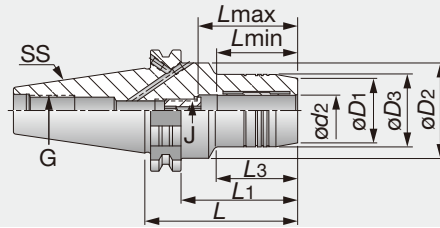
Straight collet

F111



Pull stud

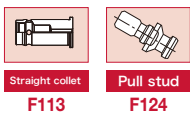
F124



Designation	SS	ød2	øD1	øD3	øD2	L	L1	L3	Lmin	Lmax	J	G
DIN6987130HYDRO6X60	30	6	23	26	45	60	41	25	27	37	M5	M12
DIN6987130HYDRO16X90	30	16	34	38	45	90	71	43	42	52	M12x1	M12
DIN6987130HYDRO20X90	30	20	38	42	42	90	71	-	42	52	M12x1	M12
DIN6987140HYDRO6X68	40	6	23	26	50	68	49	33	27	37	M5	M16
DIN6987140HYDRO8X68	40	8	25	28	50	68	49	33	27	37	M6	M16
DIN6987140HYDRO10X72	40	10	27	30	50	72	53	37	32	42	M8x1	M16
DIN6987140HYDRO12X77	40	12	29	32	50	77	58	42	37	47	M10x1	M16
DIN6987140HYDRO14X77	40	14	30	34	50	77	58	42	37	47	M10x1	M16
DIN6987140HYDRO16X80	40	16	34	38	50	80	61	43	42	52	M12x1	M16
DIN6987140HYDRO18X80	40	18	36	40	50	80	61	43	42	52	M12x1	M16
DIN6987140HYDRO20X82	40	20	38	42	50	82	63	47	42	52	M12x1	M16
DIN6987140HYDRO25X117	40	25	46	50	63	117	98	51	48	58	M16x1	M16
DIN6987140HYDRO32X117	40	32	56	60	63	117	98	56	52	62	M16x1	M16
DIN6987150HYDRO6X68	50	6	23	26	80	68	49	33	27	37	M5	M24
DIN6987150HYDRO8X68	50	8	25	28	80	68	49	33	27	37	M6	M24
DIN6987150HYDRO10X72	50	10	27	30	80	72	53	37	32	42	M8x1	M24
DIN6987150HYDRO12X77	50	12	29	32	80	77	58	42	37	47	M10x1	M24
DIN6987150HYDRO14X77	50	14	30	34	80	77	58	42	37	47	M10x1	M24
DIN6987150HYDRO16X80	50	16	34	38	80	80	61	45	42	52	M12x1	M24
DIN6987150HYDRO18X80	50	18	36	40	80	80	61	45	42	52	M12x1	M24
DIN6987150HYDRO20X82	50	20	38	42	80	82	63	47	42	52	M16x1	M24
DIN6987150HYDRO25X87	50	25	46	50	80	87	68	52	48	58	M16x1	M24
DIN6987150HYDRO32X91	50	32	56	60	80	91	72	56	54	64	M16x1	M24
DIN6987140HYDRO20X64.5 ⁽¹⁾	40	20	40	49.5	-	64.5	45	-	42	52	M16x1	M16
DIN6987150HYDRO32X81 ⁽¹⁾	50	32	56	72	-	81	62	-	54	64	M16x1	M24

- Applicable for 10 MPa pressure coolant
 - Clamping wrench (WRENCH HYDRO HEX 4) should be ordered separately.
 - Available are reduction sleeves for 12, 20, 25 and 32 mm bore diameters.
 - Chucking forces will significantly reduce if reduction sleeves are used (ordered separately).
- (1) Holders for heavy duty.

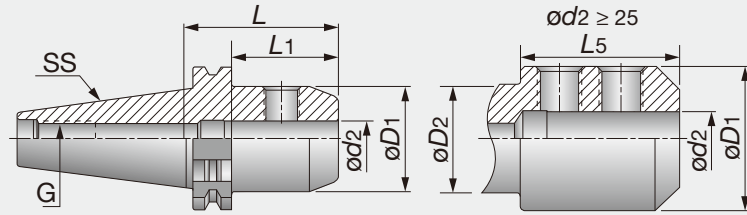
Reference pages



TUNGHOLD

DIN69871-EM (Endmill holder)

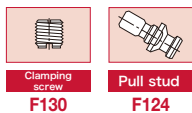
Screw locking endmill holders with DIN69871 shank

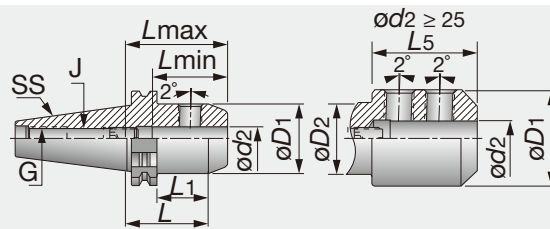


Designation	SS	ød2	øD1	øD2	L	L1	L5	G
DIN6987130EM6X50	30	6	26	-	50	30.9	-	M12
DIN6987130EM8X50	30	8	28	-	50	30.9	-	M12
DIN6987130EM10X50	30	10	35	-	50	30.9	-	M12
DIN6987130EM14X63	30	14	44	-	63	43.9	-	M12
DIN6987130EM16X63	30	16	48	44.9	63	43.9	28	M12
DIN6987130EM18X72	30	18	50	44.9	72	52.9	37	M12
DIN6987130EM20X72	30	20	52	44	72	52.9	37	M12
DIN6987140EM6X50	40	6	25	-	50	30.9	-	M16
DIN6987140EM6X50B	40	6	25	-	50	30.9	-	M16
DIN6987140EM8X50	40	8	28	-	50	30.9	-	M16
DIN6987140EM8X50B	40	8	28	-	50	30.9	-	M16
DIN6987140EM10X50	40	10	35	-	50	30.9	-	M16
DIN6987140EM12X50	40	12	42	-	50	30.9	-	M16
DIN6987140EM12X50B	40	12	42	-	50	30.9	-	M16
DIN6987140EM14X63	40	14	44	-	63	43.9	-	M16
DIN6987140EM16X63	40	16	48	-	63	43.9	-	M16
DIN6987140EM16X63B	40	16	48	-	63	43.9	-	M16
DIN6987140EM18X63	40	18	50	49	63	43.9	28.5	M16
DIN6987140EM18X63B	40	18	50	49	63	43.9	28.5	M16
DIN6987140EM20X63	40	20	52	49	63	43.9	28.5	M16
DIN6987140EM20X63B	40	20	52	49	63	43.9	28.5	M16
DIN6987140EM25X100	40	25	65	49	100	80.9	65	M16
DIN6987140EM25X100B	40	25	65	49	100	80.9	65	M16
DIN6987140EM32X100	40	32	71	49	100	80.9	65	M16
DIN6987140EM32X100B	40	32	71	49	100	80.9	65	M16
DIN6987150EM6X63	50	6	25	-	63	43.9	-	M24
DIN6987150EM8X63	50	8	28	-	63	43.9	-	M24
DIN6987150EM8X63B	50	8	28	-	63	43.9	-	M24
DIN6987150EM10X63	50	10	35	-	63	43.9	-	M24
DIN6987150EM10X63B	50	10	35	-	63	43.9	-	M24
DIN6987150EM12X63	50	12	42	-	63	43.9	-	M24
DIN6987150EM12X63B	50	12	42	-	63	43.9	-	M24
DIN6987150EM14X63	50	14	44	-	63	43.9	-	M24
DIN6987150EM14X63B	50	14	44	-	63	43.9	-	M24
DIN6987150EM16X63	50	16	48	-	63	43.9	-	M24
DIN6987150EM16X63B	50	16	48	-	63	43.9	-	M24
DIN6987150EM18X63	50	18	50	-	63	43.9	-	M24
DIN6987150EM18X63B	50	18	50	-	63	43.9	-	M24
DIN6987150EM20X63	50	20	52	-	63	43.9	-	M24
DIN6987150EM20X63B	50	20	52	-	63	43.9	-	M24
DIN6987150EM25X80	50	25	65	-	80	60.9	-	M24
DIN6987150EM25X80B	50	25	65	-	80	60.9	-	M24
DIN6987150EM32X100	50	32	72	-	100	80.9	-	M24
DIN6987150EM32X100B	50	32	72	-	100	80.9	-	M24
DIN6987150EM40X100	50	40	90	79.9	100	80.9	43	M24
DIN6987150EM40X100B	50	40	90	79.9	100	80.9	43	M24
DIN6987150EM50X125	50	50	98	79.9	125	105.9	90	M24
DIN6987150EM50X125B	50	50	98	79.9	125	105.9	90	M24
DIN6987140EM10X45 ⁽¹⁾	40	10	35	-	45	25.9	-	M16
DIN6987140EM12X45 ⁽¹⁾	40	12	42	-	45	25.9	-	M16
DIN6987140EM14X45 ⁽¹⁾	40	14	44	-	45	25.9	-	M16
DIN6987140EM14X45B ⁽¹⁾	40	14	44	-	45	25.9	-	M16
DIN6987140EM16X45 ⁽¹⁾	40	16	48	-	45	25.9	-	M16
DIN6987140EM18X45 ⁽¹⁾	40	18	49	-	45	25.9	-	M16
DIN6987140EM20X45 ⁽¹⁾	40	20	49	-	45	25.9	-	M16
DIN6987140EM25X45 ⁽¹⁾	40	25	49	-	45	25.9	-	M16

- Applicable for 10 MPa pressure coolant
- Add B for coolant through the flange.
- (1) Short endmill holder.

Reference pages





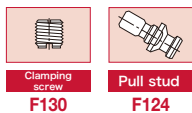
Designation	SS	ød2	øD1	øD2	L	L1	L5	Lmin	Lmax	J ⁽¹⁾	G	Key
DIN6987140EM8X50E	40	8	28	-	50	30.9	-	35	45	M6	M16	3
DIN6987140EM10X50E	40	10	35	-	50	30.9	-	39	49	M8	M16	4
DIN6987140EM12X50E	40	12	42	-	50	30.9	-	44	54	M10	M16	5
DIN6987140EM14X63E	40	14	44	-	63	43.9	-	44	54	M10	M16	5
DIN6987140EM16X63E	40	16	48	-	63	43.9	-	47	57	M12	M16	6
DIN6987140EM18X63E	40	18	50	49	63	43.9	28.5	47	57	M12	M16	6
DIN6987140EM20X63E	40	20	52	49	63	43.9	29	49	59	M16	M16	8
DIN6987140EM20X63EB	40	20	52	49	63	43.9	29	49	59	M16	M16	8
DIN6987140EM25X100E	40	25	65	49	100	80.9	65	54	64	M20X1.5	M16	10
DIN6987140EM25X100EB	40	25	65	49	100	80.9	65	54	64	M20X1.5	M16	10
DIN6987140EM32X100E	40	32	72	49	100	80.9	65	58	68	M20X1.5	M16	10
DIN6987150EM8X63E	50	8	28	-	63	43.9	-	35	45	M6	M24	3
DIN6987150EM10X63E	50	10	35	-	63	43.9	-	39	49	M8	M24	4
DIN6987150EM12X63E	50	12	42	-	63	43.9	-	44	54	M10	M24	5
DIN6987150EM14X63E	50	14	44	-	63	43.9	-	44	54	M10	M24	5
DIN6987150EM16X63E	50	16	48	-	63	43.9	-	47	57	M12	M24	6
DIN6987150EM18X63E	50	18	50	-	63	43.9	-	47	57	M12	M24	6
DIN6987150EM20X63E	50	20	52	-	63	43.9	-	49	49	M16	M24	8
DIN6987150EM20X63EB	50	20	52	-	63	43.9	-	49	49	M16	M24	8
DIN6987150EM25X80E	50	25	65	-	80	60.9	-	54	64	M20X1.5	M24	10
DIN6987150EM25X80EB	50	25	65	-	80	60.9	-	54	64	M20X1.5	M24	10
DIN6987150EM32X100E	50	32	72	-	100	80.9	-	58	68	M20X1.5	M24	10
DIN6987150EM32X100EB	50	32	72	-	100	80.9	-	58	68	M20X1.5	M24	10
DIN6987150EM40X100E	50	40	90	79.9	100	80.9	43	68	78	M20X1.5	M24	10
DIN6987150EM40X100EB	50	40	90	79.9	100	80.9	43	68	78	M20X1.5	M24	10
DIN6987150EM50X125EB	50	50	98	79.9	125	105.9	68	78	88	M20X1.5	M24	10

• Applicable for 10 MPa pressure coolant

• Add B for coolant through the flange.

(1) The adjustment screw has an internal coolant hole.

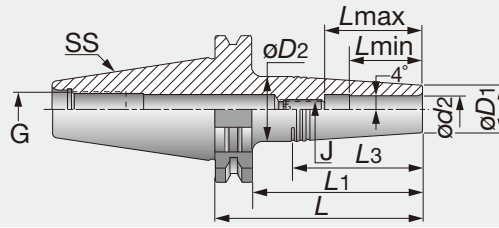
Reference pages



TUNGSHRINK

DIN69871-SRK (Shrink holder)

TungShrink thermal shrinking holder for carbide shank with DIN69871 shank



Designation	SS	øD2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	G	Key
DIN6987140SRK3X50	40	3	10	15	69.1	50	35.55	10	16	M6	M16	3
DIN6987140SRK3X85	40	3	10	19	104.1	85	64.15	10	16	M6	M16	3
DIN6987140SRK4X50	40	4	10	15	69.1	50	35.55	12	18	M6	M16	3
DIN6987140SRK4X85	40	4	10	19	104.1	85	64.15	12	18	M6	M16	3
DIN6987140SRK5X50	40	5	10	15	69.1	50	35.55	15	21	M6	M16	3
DIN6987140SRK5X85	40	5	10	19	104.1	85	64.15	12	18	M6	M16	3
DIN6987140SRK6X50	40	6	11	16	69.1	50	35.55	18	24	M8	M16	4
DIN6987140SRK6X85	40	6	11	20	104.1	85	64.1	18	24	M8	M16	4
DIN6987140SRK8X50	40	8	14	20	69.1	50	42.5	25	31	M10	M16	5
DIN6987140SRK8X85	40	8	14	23	104.1	85	63.95	25	31	M10	M16	5
DIN6987140SRK10X50	40	10	16	22	69.1	50	42.4	30	36	M12	M16	6
DIN6987140SRK10X85	40	10	16	24.5	104.1	85	60.28	30	36	M12	M16	6
DIN6987140SRK12X50	40	12	20	26	69.1	50	42.3	32	42	M10	M16	5
DIN6987140SRK12X85	40	12	20	28	104.1	85	56.6	32	42	M10	M16	5

• Applicable for 10 MPa pressure coolant

Reference pages



Pull stud
F124



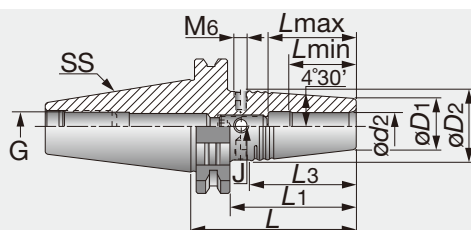
Induction heating unit
F119



Heating unit
F119



Preset screws
F130



Designation	SS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	G	Key
DIN6987140SRKIN6X80	40	6	21	27	80	60.9	38	25	36	M5	M16	2.5
DIN6987140SRKIN8X80	40	8	21	27	80	60.9	38	25	36	M6	M16	3
DIN6987140SRKIN10X80	40	10	24	32	80	60.9	50.5	31	42	M8	M16	4
DIN6987140SRKIN12X80	40	12	24	32	80	60.9	50.5	31	47	M10	M16	5
DIN6987140SRKIN14X80	40	14	27	34	80	60.9	44.2	36	47	M10	M16	5
DIN6987140SRKIN16X80	40	16	27	34	80	60.9	44.2	39	50	M12	M16	6
DIN6987140SRKIN18X80	40	18	33	42	80	60.9	57	39	50	M12	M16	6
DIN6987140SRKIN20X80	40	20	33	42	80	60.9	57	41	52	M16	M16	8
DIN6987140SRKIN25X100	40	25	44	53	100	80.9	57	47	58	M16	M16	8
DIN6987150SRKIN6X80 ⁽¹⁾	50	6	21	27	80	60.9	38	25	36	M5	M24	2.5
DIN6987150SRKIN8X80 ⁽¹⁾	50	8	21	27	80	60.9	38	25	36	M6	M24	3
DIN6987150SRKIN10X80 ⁽¹⁾	50	10	24	32	80	60.9	51	31	42	M8	M24	4
DIN6987150SRKIN12X80 ⁽¹⁾	50	12	24	32	80	60.9	51	36	47	M10	M24	5
DIN6987150SRKIN14X80 ⁽¹⁾	50	14	27	34	80	60.9	44.5	36	47	M10	M24	5
DIN6987150SRKIN16X80 ⁽¹⁾	50	16	27	34	80	60.9	44.5	39	50	M12	M24	6
DIN6987150SRKIN18X80 ⁽¹⁾	50	18	33	42	80	60.9	57	39	50	M12	M24	6
DIN6987150SRKIN20X80 ⁽¹⁾	50	20	33	42	80	60.9	57	41	52	M16	M24	8
DIN6987150SRKIN25X100 ⁽¹⁾	50	25	44	53	100	80.9	57	47	58	M16	M24	8
DIN6987150SRKIN32X100 ⁽¹⁾	50	32	44	53	100	80.9	57	47	58	M16	M24	8

- Applicable for 10 MPa pressure coolant
 - Use only inductive heating device for SRKIN holders.
- (1) Balanced to G2.5 20,000 min⁻¹

Reference pages



Pull stud
F124



Induction heating unit
F119



Heating unit
F119

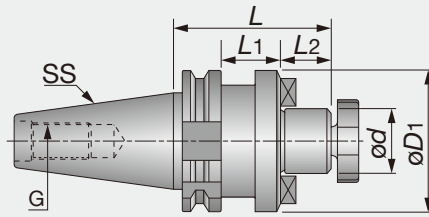


Preset screws
F130

TUNGHOLD

DIN69871-SEM (Shell mill holder)

Shell mill holder with DIN69871 shank



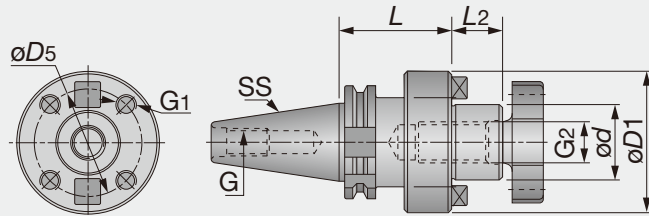
Designation	SS	ød	L2	øD1	L	L1	G
DIN6987130SEM16X35	30	16	17	38	35	15.9	M12
DIN6987130SEM22X50	30	22	19	47	50	30.9	M12
DIN6987130SEM27X50	30	27	21	58	50	30.9	M12
DIN6987140SEM16X35	40	16	17	38	35	15.9	M16
DIN6987140SEM22X35	40	22	19	47	35	15.9	M16
DIN6987140SEM27X60	40	27	21	58	60	40.9	M16
DIN6987140SEM32X60	40	32	24	66	60	40.9	M16
DIN6987140SEM40X60	40	40	27	82	60	40.9	M16
DIN6987150SEM16X35	50	16	17	38	35	15.9	M24
DIN6987150SEM22X35	50	22	19	47	35	15.9	M24
DIN6987150SEM22X50X200	50	22	19	50	200	180.9	M24
DIN6987150SEM27X35	50	27	21	58	35	15.9	M24
DIN6987150SEM32X35	50	32	24	66	35	15.9	M24
DIN6987150SEM32X78X370	50	32	24	78	370	350.9	M24
DIN6987150SEM40X50	50	40	27	82	50	30.9	M24
DIN6987150SEM50X60	50	50	30	95	60	40.9	M24

(Option: Wrench for lock screw)

TUNGHOLD

DIN69871-FM (Face mill holder)

Face mill holder with DIN69871 shank



Designation	SS	ød	L2	øD1	L	G2	øD5	G1	G
DIN6987140FM40	40	40	27	88	60	M20	66.7	M12	M16
DIN6987150FM40	50	40	27	88	70	M20	66.7	M12	M24
DIN6987150FM60	50	60	40	128	70	-	101.6	M16	M24

Reference pages



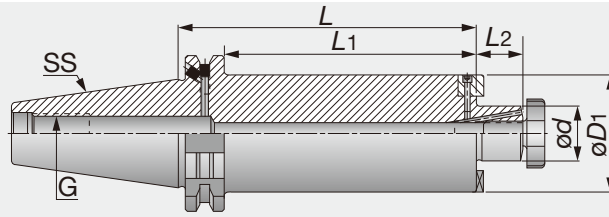
Pull stud
F124



Clamping
screw
F129



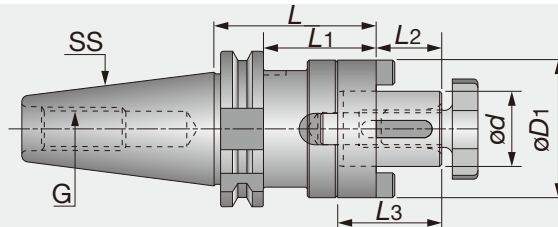
Wrench
F131



Designation	SS	ød	L2	øD1	L	L1	G
DIN6987150SEM22X48X200C	50	22	19	48	200	181	M24
DIN6987150SEM22X61X300C	50	22	19	61	300	281	M24
DIN6987150SEM27X61X300C	50	27	21	61	300	281	M24
DIN6987150SEM32X78X370C	50	32	24	78	370	351	M24

- Applicable for 10 MPa pressure coolant
- If the "B type" option is required, the plug screw must be removed from the flange cooling hole. (use a 2 mm hex key.)

(Option: Wrench for lock screw)



Designation	SS	ød	L2	øD1	L	L1	L3	G
DIN6987130SEMC16X50	30	16	17	32	50	30.9	27	M12
DIN6987130SEMC22X50	30	22	19	40	50	30.9	31	M12
DIN6987130SEMC32X60	30	32	24	58	60	40.9	38	M12
DIN6987140SEMC16X55	40	16	17	32	55	35.9	27	M16
DIN6987140SEMC16X100	40	16	17	32	100	80.9	27	M16
DIN6987140SEMC22X55	40	22	19	40	55	35.9	31	M16
DIN6987140SEMC22X100	40	22	19	40	100	80.9	31	M16
DIN6987140SEMC27X55	40	27	21	48	55	35.9	33	M16
DIN6987140SEMC27X100	40	27	21	48	100	80.9	33	M16
DIN6987140SEMC32X60	40	32	24	58	60	45.9	38	M16
DIN6987140SEMC32X100	40	32	24	58	100	80.9	38	M16
DIN6987140SEMC40X60	40	40	27	70	60	40.9	41	M16
DIN6987150SEMC16X55	50	16	17	32	55	35.9	27	M24
DIN6987150SEMC16X100	50	16	17	32	100	80.9	27	M24
DIN6987150SEMC22X55	50	22	19	40	55	35.9	31	M24
DIN6987150SEMC22X100	50	22	19	40	100	80.9	31	M24
DIN6987150SEMC27X55	50	27	21	48	55	35.9	33	M24
DIN6987150SEMC27X100	50	27	21	48	100	80.9	33	M24
DIN6987150SEMC32X55	50	32	24	58	55	35.9	38	M24
DIN6987150SEMC32X100	50	32	24	58	100	80.9	38	M24
DIN6987150SEMC40X55	50	40	27	70	55	35.9	41	M24
DIN6987150SEMC40X100	50	40	27	70	100	80.9	41	M24
DIN6987150SEMC50X70	50	50	30	90	70	50.9	46	M24

- If the "B type" option is required, the plug screw must be removed from the flange cooling hole. (use a 2 mm hex key.)

(Option: Wrench for lock screw)

Reference pages



Pull stud
F124



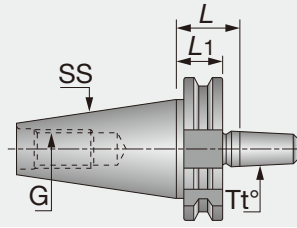
Clamping
screw
F129



Wrench
F131

TUNGHOLD**DIN69871-DC (Jacobs taper holder)**

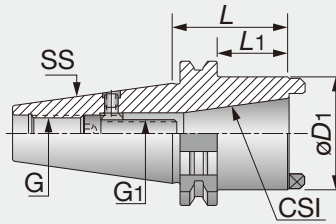
Jacobs taper holder with DIN69871 shank



Designation	SS	Tt°	L	L1	G
DIN6987130DCB12X26	30	B12	26	19.1	M12
DIN6987140DCB12X26	40	B12	26	19.1	M16
DIN6987140DCB16X26	40	B16	26	19.1	M16
DIN6987140DCB18X26	40	B18	26	19.1	M16
DIN6987150DCB12X26	50	B12	26	19.1	M24
DIN6987150DCB16X26	50	B16	26	19.1	M24
DIN6987150DCB18X26	50	B18	26	19.1	M24

TUNGHOLD**DIN69871 AD(Conversion adaptor)**

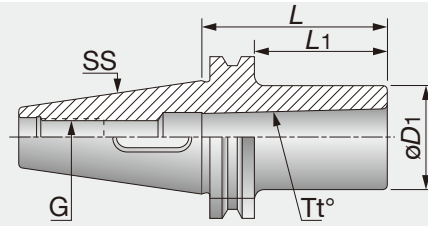
Conversion adaptor for DIN69871 system



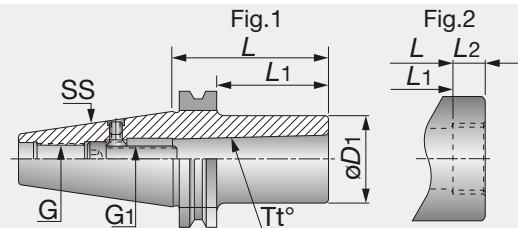
Designation	SS	CSI	L	øD1	L1	G1	G
DIN6987140ADDIN208030	40	DIN2080 30	50	50	30.9	M12	M16
DIN6987150ADBT/SK40	50	BT/SK 40	70	66	50.9	M16	M24

Reference pages

Pull stud
F124



Designation	SS	Tt°	L	øD1	L1	G
DIN6987130MT3X75	30	MT3	75	40	55.9	M12
DIN6987140MT1X50	40	MT1	50	25	30.9	M16
DIN6987140MT2X50	40	MT2	50	32	30.9	M16
DIN6987140MT3X70	40	MT3	70	40	50.9	M16
DIN6987140MT4X95	40	MT4	95	48	75.9	M16
DIN6987150MT1X45	50	MT1	45	25	25.9	M24
DIN6987150MT2X60	50	MT2	60	32	40.9	M24
DIN6987150MT3X65	50	MT3	65	40	45.9	M24
DIN6987150MT4X95	50	MT4	95	48	75.9	M24
DIN6987150MT5X105	50	MT5	105	63	85.9	M24



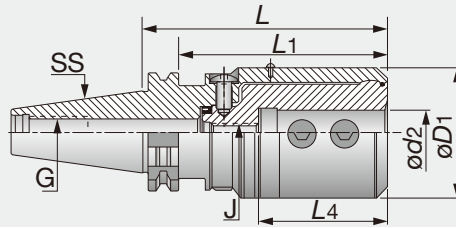
Designation	SS	Tt°	L	øD1	L1	L2	G1	G	Fig.
DIN6987140MT1DRW	40	MT1	50	25	30.9	-	M6	M16	1
DIN6987140MT2DRW	40	MT2	50	32	30.9	-	M10	M16	1
DIN6987140MT3DRW	40	MT3	70	40	50.9	-	M12	M16	1
DIN6987140MT4DRW ⁽¹⁾	40	MT4	95	63	75.9	15	M16	M16	2
DIN6987150MT1DRW	50	MT1	45	25	25.9	-	M6	M24	1
DIN6987150MT2DRW	50	MT2	60	32	40.9	-	M10	M24	1
DIN6987150MT3DRW	50	MT3	65	40	45.9	-	M12	M24	1
DIN6987150MT4DRW ⁽¹⁾	50	MT4	70	63	50.9	15	M16	M24	2
DIN6987150MT5DRW ⁽¹⁾	50	MT5	100	78	80.9	18	M20	M24	2

(1) DIN 2201.

Reference pages

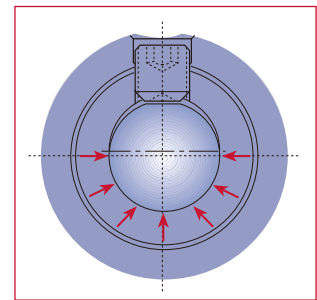
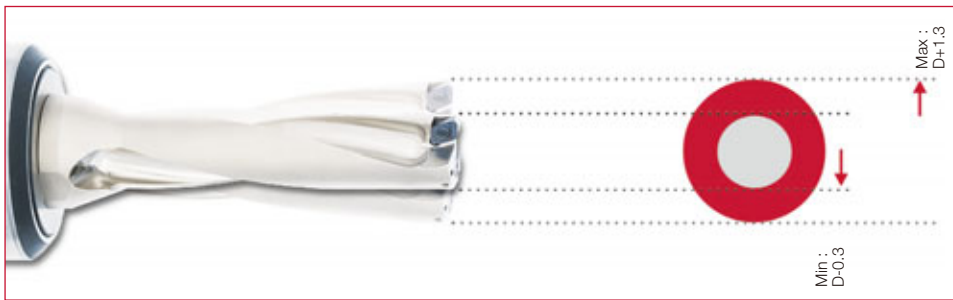


Pull stud
F124



Designation	SS	ød2	øD1	L	L1	L4	J	G
TUNGBORE-SKA40EM16ADB	40	16	72	135.6	116.5	71	M10	M16
TUNGBORE-SKA40EM20ADB	40	20	72	135.6	116.5	71	M10	M16
TUNGBORE-SKA40EM25ADB	40	25	72	135.6	116.5	71	M10	M16
TUNGBORE-SKA40EM32ADB	40	32	72	135.6	116.5	71	M10	M16
TUNGBORE-SKA40EM40ADB	40	40	72	135.6	116.5	71	M10	M16
TUNGBORE-SKA50EM16ADB	50	16	72	115.6	96.5	71	M10	M24
TUNGBORE-SKA50EM20ADB	50	20	72	115.6	96.5	71	M10	M24
TUNGBORE-SKA50EM25ADB	50	25	72	115.6	96.5	71	M10	M24
TUNGBORE-SKA50EM32ADB	50	32	72	115.6	96.5	71	M10	M24
TUNGBORE-SKA50EM40ADB	50	40	72	115.6	96.5	71	M10	M24

- Applicable for 10 MPa pressure coolant
- Compatible with internal coolant supply

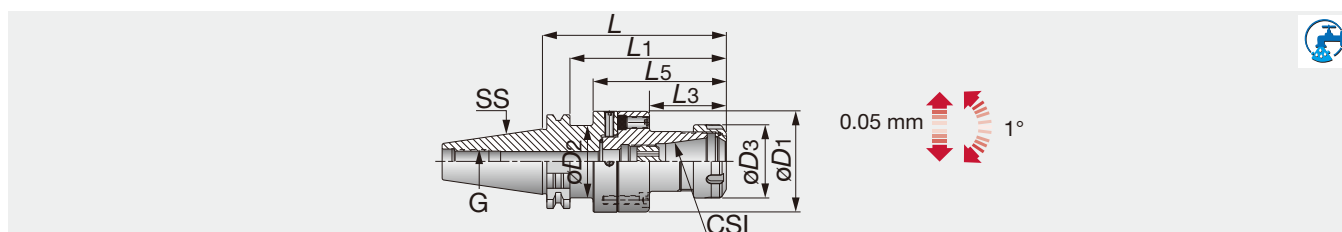


The bore's section is actually made from two shifted circular sections. The clamping screw pushes the drill shank through a narrowed opening, forcing elastic deformation of the holder. Contact is made around more than 180°, providing a high clamping force.

Reference pages



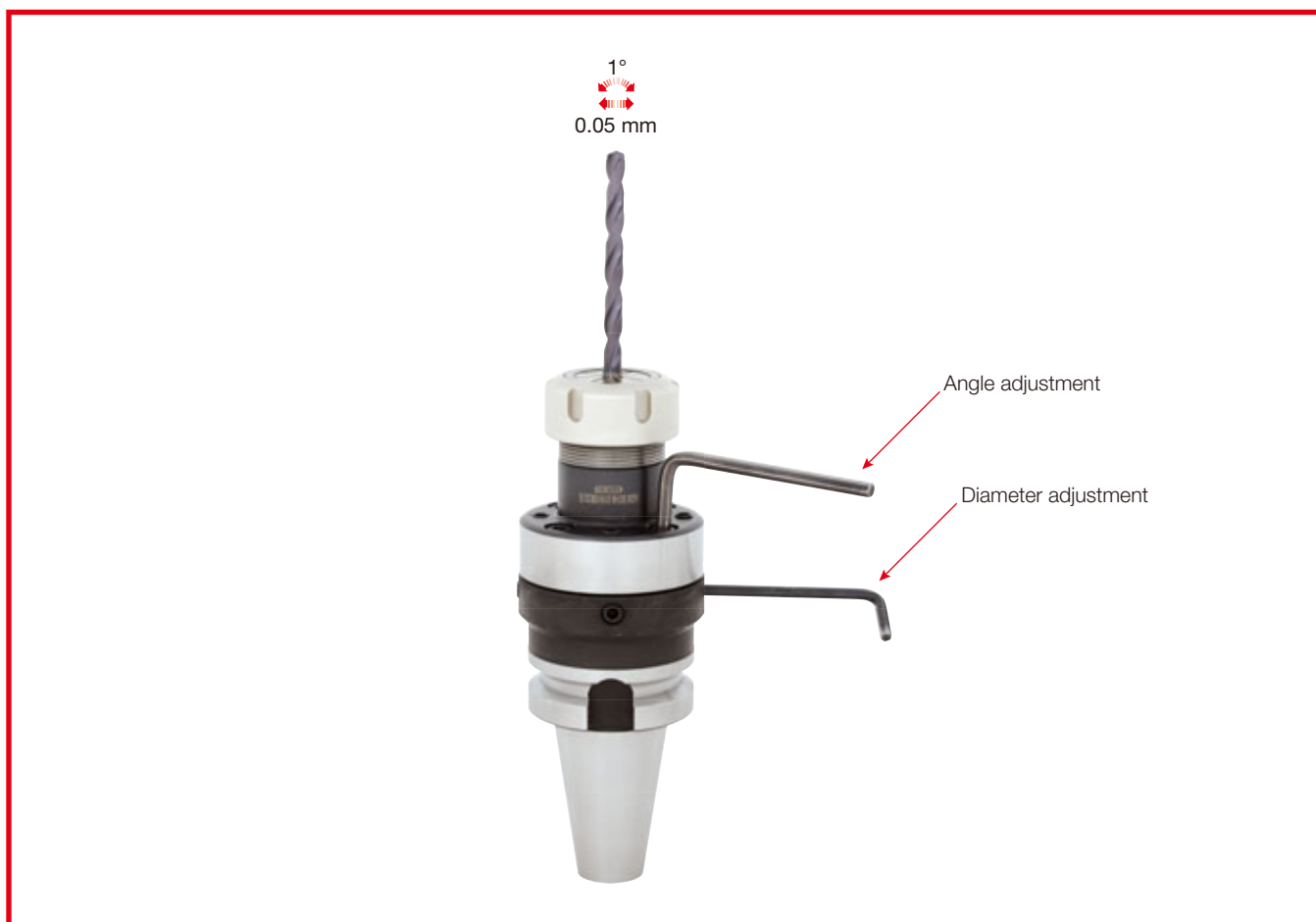
Pull stud
F124



Designation	SS	CSI	Range	L	L1	L5	L3	øD3	øD1	øD2	G
ADJDIN6987140D70ER32	40	ER32	2-20	124.5	105.4	89.5	52.5	50	70	46	M16
ADJDIN6987150D70ER32	50	ER32	2-20	124.5	105.4	-	52.5	50	70	-	M24

• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)



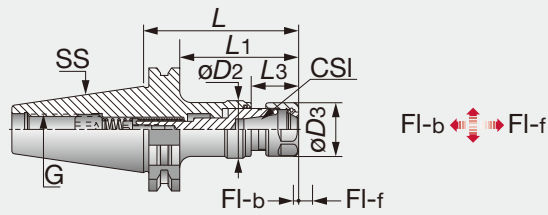
Reference pages

ER Collet F111	Nut F125	Wrench F127	Preset screws F128	Pull stud F124

TUNG^{GTI}

GTI-DIN69871-ER tapping (Tapping holder)

TungGTI tapping attachment with DIN69871 shank



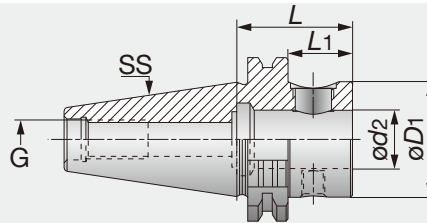
Designation	SS	CSI	Tap min	Tap max	Range	L	L1	L3	øD3	øD2	FI-f	FI-b	G
GTIDIN6987140ER16	40	ER16	M3	M10	0.5-10	81.2	62.1	24.6	28	29.5	8	3	M16
GTIDIN6987150ER16	50	ER16	M3	M10	0.5-10	106.8	87.7	24.6	28	29.5	8	3	M24
GTIDIN6987140ER32	40	ER32	M6	M20	2-20	112.6	93.5	33	50	56.5	9	4	M16
GTIDIN6987150ER32	50	ER32	M6	M20	2-20	115.3	96.2	33	50	56.5	9	4	M24
GTIDIN6987140ER40	40	ER40	M6	M28	3-26	130.6	111.5	51	63	56.5	9	4	M16
GTIDIN6987150ER40	50	ER40	M6	M28	3-26	133.3	114.2	51	63	56.5	9	4	M24

(Option : Wrench for ER Collet)

TUNG^{FIT}

DIN69871-CF (Quick change holder)

TungFit quick change style modular tooling system with DIN69871 shank



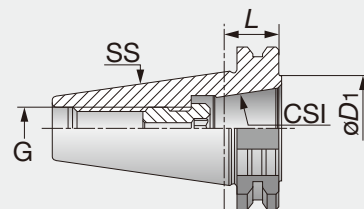
Designation	SS	ød2	øD1	L	L1	G
DIN6987140CF4-S	40	25	44.5	44.1	25	M16
DIN6987140CF4-SB	40	25	44.5	44.1	25	M16
DIN6987140CF4-L	40	25	44.5	100	80.9	M16
DIN6987150CF4-S	50	25	44.5	44.1	25	M24
DIN6987150CF4-SB	50	25	44.5	44.1	25	M24
DIN6987150CF4-L	50	25	44.5	100	80.9	M24
DIN6987150CF4-LB	50	25	44.5	100	80.9	M24

• Applicable for 10 MPa pressure coolant • Tightening torque: 58.8 N·m. • Add B for coolant through the flange.

TUNG^{CLICK}

DIN69871-ER-CLICK (Quick change holder)

TungClick quick change tooling system with DIN69871 shank



Designation	SS	CSI	øD1	L	G
DIN6987140ER32CLICK-IN	40	ER32	41	20.1	M16
DIN6987150ER32CLICK-IN	50	ER32	41	20.1	M24

• Applicable for 10 MPa pressure coolant • Tightening torque: 235 N·m

Reference pages



ER Collet
F111



Nut
F125



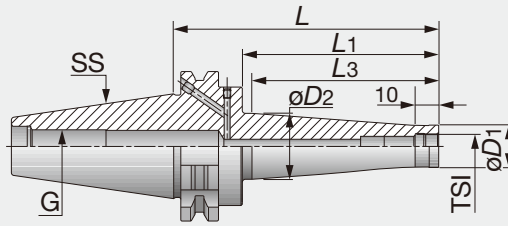
Wrench
F127



Preset screws
F128



Pull stud
F124



Designation	SS	TSI	ϕD_1	ϕD_2	L	L1	L3	G
DIN6987140ODP6X58	40	M6	9.8	13	58	38.9	32	M16
DIN6987140ODP6X98	40	M6	9.8	23	98	78.9	74	M16
DIN6987140ODP8X58	40	M8	13.1	15	58	38.9	32	M16
DIN6987140ODP8X98	40	M8	13.1	23	98	78.9	74	M16
DIN6987140ODP10X58	40	M10	18	20	58	38.9	32	M16
DIN6987140ODP10X98	40	M10	18	28	98	78.9	74	M16
DIN6987140ODP12X58	40	M12	21	24	58	38.9	34	M16
DIN6987140ODP12X98	40	M12	21	31	98	78.9	75	M16
DIN6987140ODP16X58	40	M16	29	28.6	58	38.9	33	M16
DIN6987140ODP16X98	40	M16	29	34	98	78.9	75	M16
DIN6987150ODP12X78 ⁽¹⁾	50	M12	23	30	78	58.9	50	M24
DIN6987150ODP12X128 ⁽¹⁾	50	M12	23	40	128	108.9	100	M24
DIN6987150ODP12X178 ⁽¹⁾	50	M12	23	40	178	158.9	150	M24
DIN6987150ODP12X228 ⁽¹⁾	50	M12	23	46	228	208.9	200	M24
DIN6987150ODP16X78 ⁽¹⁾	50	M16	29	34	78	58.9	50	M24
DIN6987150ODP16X128 ⁽¹⁾	50	M16	29	40	128	108.9	100	M24
DIN6987150ODP16X178 ⁽¹⁾	50	M16	29	55	178	158.9	150	M24
DIN6987150ODP16X228 ⁽¹⁾	50	M16	29	55	228	208.9	200	M24

• Applicable for 10 MPa pressure coolant
 (1) Balanced to G6.3 12,000 min⁻¹.

Reference pages

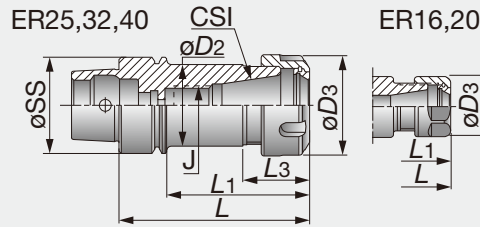


Pull stud
F124

TUNGHOLD

HSK E-ER (Collet chuck holder)

ER collet chucks with HSK-E shank



Designation	øSS	CSI	Range	L	L1	L3	øD3	øD2	J
HSKE32ER16X60	32	ER16	0.5-10	60	40	21.5	28	22.4	-
HSKE32ER20X60	32	ER20	1-13	6	40	26	34	25.4	-
HSKE32ER25X65	32	ER25	1-16	65	45	30	42	25.8	-
HSKE40ER16X60	40	ER16	0.5-10	60	40	-	28	-	-
HSKE40ER16X80	40	ER16	0.5-10	80	60	-	28	-	M10
HSKE40ER20X80	40	ER20	1-13	80	60	-	34	-	M12
HSKE40ER25X80	40	ER25	1-16	80	60	28	42	34	M18X1.5
HSKE40ER32X80	40	ER32	2-20	80	60	31	50	40.1	M22X1.5
HSKE50ER16X100 ⁽¹⁾	50	ER16	0.5-10	100	74	-	28	-	M10
HSKE50ER16X100M ⁽¹⁾⁽³⁾	50	ER16	0.5-10	100	74	-	22	-	M10
HSKE50ER16X80 ⁽¹⁾	50	ER16	0.5-10	80	54	-	28	-	M10
HSKE50ER20X80 ⁽¹⁾	50	ER20	1-13	80	54	-	34	-	M10
HSKE50ER25X80 ⁽¹⁾	50	ER25	1-16	80	54	28	42	32.4	-
HSKE50ER32X80 ⁽¹⁾	50	ER32	2-20	80	54	31	50	40.4	-
HSKE50ER32X100 ⁽¹⁾	50	ER32	2-20	100	74	31	50	40.4	M22X1.5
HSKE63ER16X80 ⁽²⁾	63	ER16	0.5-10	80	54	-	28	-	M10
HSKE63ER16X100 ⁽²⁾	63	ER16	0.5-10	100	74	-	28	-	M10
HSKE63ER20X75 ⁽²⁾	63	ER20	1-13	75	49	-	34	-	-
HSKE63ER32X80 ⁽²⁾	63	ER32	2-20	80	54	31	50	40.4	-
HSKE63ER32X100 ⁽²⁾	63	ER32	2-20	100	75	-	50	-	M22X1.5
HSKE63ER40X80 ⁽²⁾	63	ER40	3-26	80	54	34	63	-	-

- Applicable for 10 MPa pressure coolant
- Equipped with nut ER 16 MINI.

(1) Balanced to G2.5 35,000 min⁻¹.

(2) Balanced to G2.5 35,000 min⁻¹.

(3) Balanced to G2.5 30,000 min⁻¹.

(Option: Wrench for ER collet)

Reference pages



ER Collet
F101



Nut
F125



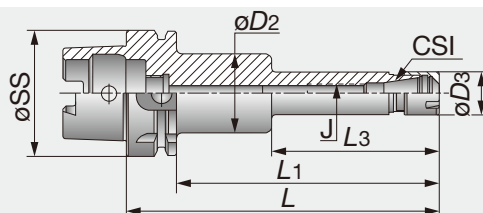
Preset screws
F128



Wrench
F127, F132



Cooling tube
F131



Designation	øSS	CSI	Range	L	L1	L3	øD3	øD2	J
HSKA50ER16X100M	50	ER16	0.5-10	100	74	-	22	-	M10
HSKA50ER16X120M	50	ER16	0.5-10	120	94	-	22	-	M10
HSKA50ER20X100M	50	ER20	1-13	100	74	-	28	-	M12
HSKA50ER20X120M	50	ER20	1-13	120	94	-	28	-	M12
HSKA63ER16X100M	63	ER16	0.5-10	100	74	-	22	-	M10
HSKA63ER16X120M	63	ER16	0.5-10	120	94	78	22	40	M10
HSKA63ER16X160M	63	ER16	0.5-10	160	134	85	22	40	M10
HSKA63ER20X100M	63	ER20	1-13	100	74	-	28	-	M12
HSKA63ER20X120M	63	ER20	1-13	120	94	-	28	-	M12
HSKA63ER20X160M	63	ER20	1-13	160	134	85	28	45	M12
HSKA100ER16X100M ⁽¹⁾	100	ER16	0.5-10	100	71	-	22	-	M10
HSKA100ER16X160M ⁽¹⁾	100	ER16	0.5-10	160	131	85	22	40	M10
HSKA100ER20X100M ⁽¹⁾	100	ER20	1-13	100	71	-	28	-	M12
HSKA100ER20X160M ⁽¹⁾	100	ER20	1-13	160	131	85	28	45	M12

• Applicable for 10 MPa pressure coolant.
(1) Balance to G6.3 12,000 min⁻¹.

(Option: Wrench for ER collet)

Reference pages



ER Collet
F101



Nut
F125



Preset screws
F128



Wrench
F127, F132

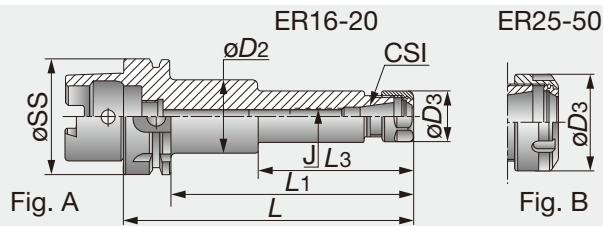


Cooling tube
F131

TUNGHOLD

HSK A-ER (Collet chuck holder)

ER collet chucks with HSK-A shank



Designation	øSS	CSI	Range	L	L1	L3	øD3	øD2	J	Fig.
HSKA40ER16X60	40	ER16	0.5-10	60	40	-	28	-	M10	A
HSKA40ER16X80	40	ER16	0.5-10	80	60	-	28	-	M10	A
HSKA40ER16X100	40	ER16	0.5-10	100	80	-	28	-	M10	A
HSKA50ER16X100	50	ER16	0.5-10	100	74	-	28	-	M10	A
HSKA50ER16X120	50	ER16	0.5-10	120	94	-	28	-	M10	A
HSKA50ER20X100	50	ER20	1-13	100	74	-	34	-	M12	A
HSKA50ER20X120	50	ER20	1-13	120	94	-	34	-	M12	A
HSKA63ER16X100	63	ER16	0.5-10	100	74	-	28	-	M10	A
HSKA63ER16X120	63	ER16	0.5-10	120	94	-	28	-	M10	A
HSKA63ER16X160	63	ER16	0.5-10	160	134	85.6	28	40	M10	A
HSKA63ER20X100	63	ER20	1-13	100	74	-	34	-	M12	A
HSKA63ER20X120	63	ER20	1-13	120	94	-	34	-	M12	A
HSKA63ER20X160	63	ER20	1-13	160	134	85.0	34	45	M12	A
HSKA100ER16X100 ⁽¹⁾	100	ER16	0.5-10	100	71	-	28	-	M10	A
HSKA100ER16X160 ⁽¹⁾	100	ER16	0.5-10	160	131	85	28	40	M10	A
HSKA100ER20X100 ⁽¹⁾	100	ER20	1-13	100	71	-	34	-	M12	A
HSKA100ER20X160 ⁽¹⁾	100	ER20	1-13	160	131	85	34	45	M12	A
HSKA40ER25X80	40	ER25	1-16	80	60	28	42	32.4	M18x1.5	B
HSKA40ER25X100	40	ER25	1-16	100	80	28	42	32.4	M16	B
HSKA40ER32X100	40	ER32	2-20	100	80	31	50	40.4	M22x1.5	B
HSKA50ER25X80	50	ER25	1-16	80	54	28	42	32.4	M16	B
HSKA50ER25X100	50	ER25	1-16	100	74	28.5	42	41.8	M16	B
HSKA50ER32X100	50	ER32	2-20	100	74	31	50	40.4	M22x1.5	B
HSKA50ER32X120	50	ER32	2-20	120	94	35	50	41.8	M22x1.5	B
HSKA63ER25X80	63	ER25	1-16	80	54	-	42	-	M16	B
HSKA63ER25X100	63	ER25	1-16	100	74	-	42	-	M16	B
HSKA63ER25X120	63	ER25	1-16	120	94	-	42	-	M16	B
HSKA63ER25X160	63	ER25	1-16	160	134	-	42	-	M16	B
HSKA63ER32X80	63	ER32	2-20	80	54	31	50	40.4	M22x1.5	B
HSKA63ER32X100	63	ER32	2-20	100	74	-	50	-	M22x1.5	B
HSKA63ER32X120	63	ER32	2-20	120	94	-	50	-	M22x1.5	B
HSKA63ER32X140	63	ER32	2-20	140	114	-	50	-	M22x1.5	B
HSKA63ER32X160	63	ER32	2-20	160	134	-	50	-	M22x1.5	B
HSKA63ER40X80	63	ER40	3-26	80	54	34	63	50.4	-	B
HSKA63ER40X100	63	ER40	3-26	100	74	34	63	50.4	M28x1.5	B
HSKA63ER40X120	63	ER40	3-26	120	94	34	63	50.4	M28x1.5	B
HSKA100ER25X100	100	ER25	1-16	100	71	-	42	-	M16	B
HSKA100ER25X120	100	ER25	1-16	120	91	-	42	-	M16	B
HSKA100ER25X160	100	ER25	1-16	160	134	-	42	-	M16	B
HSKA100ER32X100	100	ER32	2-20	100	71	-	50	-	M22x1.5	B
HSKA100ER32X120	100	ER32	2-20	120	91	-	50	-	M22x1.5	B
HSKA100ER32X160	100	ER32	2-20	160	131	-	50	-	M22x1.5	B
HSKA100ER40X100	100	ER40	3-26	100	71	-	63	-	M28x1.5	B
HSKA100ER40X120	100	ER40	3-26	120	91	-	63	-	M28x1.5	B
HSKA100ER40X160	100	ER40	3-26	160	131	-	63	-	M28x1.5	B
HSKA100ER50X100	100	ER50	10-34	100	71	-	78	-	-	B

• Applicable for 10 MPa pressure coolant

(1) Balanced to G6.3 12,000 min⁻¹.

(Option: Wrench for ER collet)

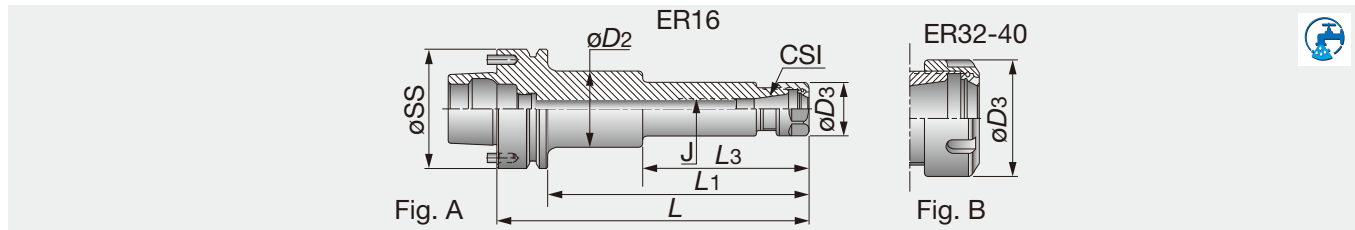
Reference pages

ER Collet
F101Nut
F125Preset screws
F128Wrench
F127, F132Cooling tube
F131

TUNG HOLD

HSK FM-ER (Collet chuck holder)

ER collet chucks with HSK-FM shank



Designation	øSS	CSI	Range	L	L1	L3	øD3	øD2	J	Fig.
HSKFM63ER16X80	63	ER16	0.5-10	80	54	-	28	-	M10	A
HSKFM63ER16X100	63	ER16	0.5-10	100	74	-	28	-	M10	A
HSKFM63ER16X120	63	ER16	0.5-10	120	94	-	28	-	M10	A
HSKFM63ER16X160	63	ER16	0.5-10	160	134	85.6	28	40	M10	A
HSKFM63ER32X80	63	ER32	2-20	80	54	-	50	-	-	B
HSKFM63ER32X100	63	ER32	2-20	100	74	-	50	-	M22x1.5	B
HSKFM63ER40X80	63	ER40	3-26	80	54	32	63	50	-	B
HSKFM63ER40X100	63	ER40	3-26	100	74	32	63	50	M28x1.5	B

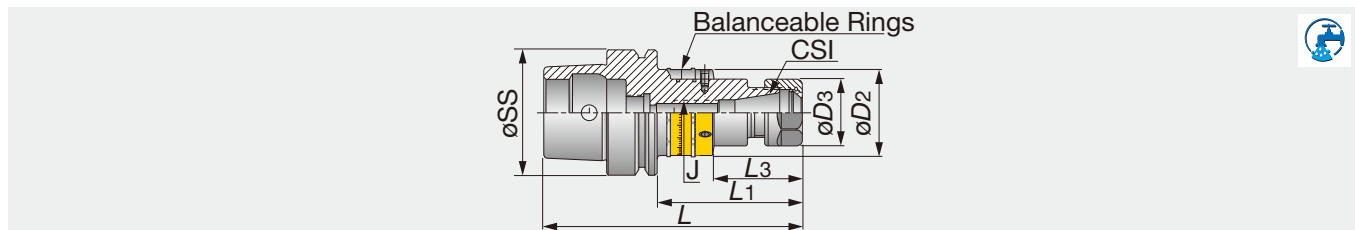
- Applicable for 10 MPa pressure coolant.
- The driving pins can be removed, turning the toolholder into a standard HSK "F63" type.

(Option: Wrench for ER collet)

TUNGBALANCE

HSK E-ER BIN (Collet chuck holder)

TungBalance adjustable dynamic balance collet chuck holder with HSK-E shank

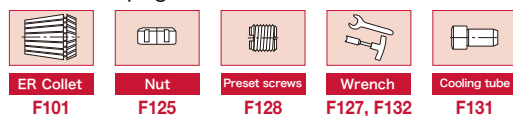


Designation	øSS	CSI	Range	L	L1	L3	øD3	øD2	J
HSKE63ER16X100BIN	63	ER16	0.5-10	100	74	45	28	44	M10
HSKE63ER20X100BIN	63	ER20	1-13	100	74	45.1	34	44	M12
HSKE63ER25X100BIN	63	ER25	1-16	100	74	45.2	42	44	M16
HSKE63ER32X120BIN	63	ER32	2-20	120	94	48	50	60	M22x1.5

- Applicable for 10 MPa pressure coolant
- Balanced to G2.5 20,000 min⁻¹.

(Option: Wrench for ER collet)

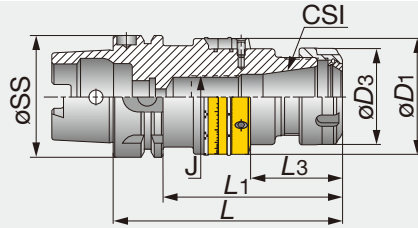
Reference pages



TUNGBALANCE

HSK A-ER BIN (Collet chuck holder)

TungBalance adjustable dynamic balance collet chuck holder with HSK-A shank



Designation	øSS	CSI	Range	L	L1	L3	øD3	øD1	J
HSKA63ER16X100BIN	63	ER16	0.5-10	100	74	45	28	44	M10
HSKA63ER16X160BIN	63	ER16	0.5-10	160	134	75	28	44	M10
HSKA63ER20X100BIN	63	ER20	1-13	100	74	45.1	34	44	M12
HSKA63ER20X160BIN	63	ER20	1-13	160	134	86.1	34	44	M12
HSKA63ER25X100BIN	63	ER25	1-16	100	74	45.2	42	44	M16
HSKA63ER25X160BIN	63	ER25	1-16	160	134	86.2	42	44	M16
HSKA63ER32X120BIN	63	ER32	2-20	120	94	48	50	60	M22x1.5
HSKA63ER32X160BIN	63	ER32	2-20	160	134	85	50	60	M22x1.5

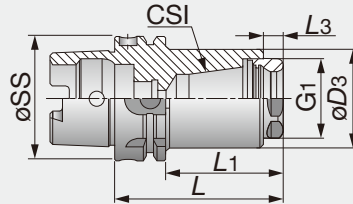
• Applicable for 10 MPa pressure coolant • Balanced to G2.5 20,000 min⁻¹.

(Option: Wrench for ER collet)

TUNGSHORT

HSK A-SHORT (Collet chuck holder for short overhang)

TungShort collet chucks with HSK-A shank



Designation	øSS	CSI	Range	L	L1	L3	øD3	G1
HSKA63ER32SHORT	63	ER32	2-20	84.5	56.1	9.5	50	M40x1.5
HSKA100ER32SHORT	100	ER32	2-20	89.5	60.5	9.5	50	M40x1.5
HSKA100ER40SHORT	100	ER40	3-26	104.5	75.5	9.5	70	M50x1.5

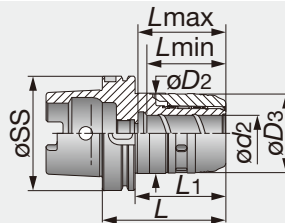
• Applicable for 10 MPa pressure coolant • Balanced to G6.3 8,000 min⁻¹.

(Option: Wrench for ER collet)

TUNGMAX

HSK A-TUNGMAX (Power chuck holder)

TungMax endmill chuck holders with HSK-A shank



Designation	øSS	ød2	Range	L	L1	Lmin	Lmax	øD3	ød2
HSKA63MAXIN20X95	63	20	6-20	95	69	56	66	51	53
HSKA63MAXIN32X113	63	32	6-32	113	87	70	85	69	70
HSKA100MAXIN20X115 ⁽¹⁾	100	20	6-20	115	86	56	69	51	53
HSKA100MAXIN32X135 ⁽¹⁾	100	32	6-32	135	106	71	87	69	70

• Applicable for 10 MPa pressure coolant . (1) Balanced to G6.3 8,000 min⁻¹.

(Option: Wrench for TungMax collet)

Reference pages



ER Collet
F101



Nut
F125



Preset screws
F128



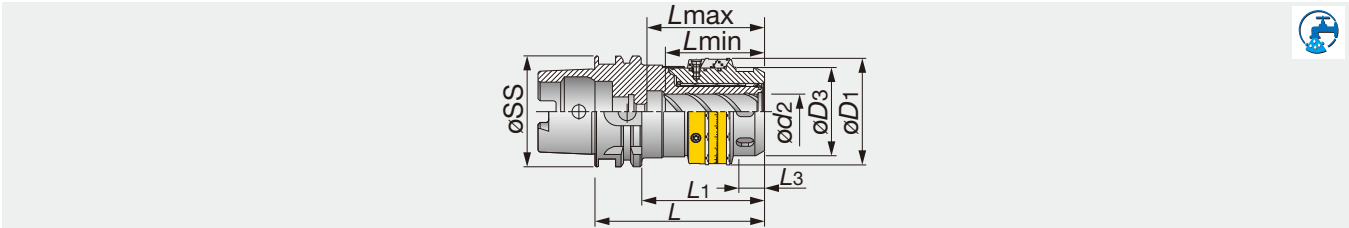
Wrench
F127, F132



Cooling tube
F131



Straight collet
F111



Designation	SS	D2	Range	L	L1	L3	Lmin	Lmax	D3	D1
HSKA63MAXIN20X95BIN ⁽¹⁾	63	20	6-20	95	69	17.5	56	66	51	61
HSKA63MAXIN32X113BIN ⁽¹⁾	63	32	6-32	113	87	24.9	70	85	69	80
HSKA100MAXIN20X115BIN ⁽²⁾	100	20	6-20	115	86	17.5	56	69	51	61
HSKA100MAXIN32X110BIN ⁽²⁾	100	32	6-32	110	81	24.9	70	78	69	80

• Applicable for 10 MPa pressure coolant
 (1) Chucks with taper size HSK A63 can be balanced by the balancing ring up to G2.5 at 20,000 min⁻¹.
 (2) Chucks with taper size HSK A100 can be balanced by the balancing ring up to G2.5 at 18,000 min⁻¹.

(Option:Wrench for TungMax collet)

Reference pages



Straight collet
 F111



Cooling tube
 F131

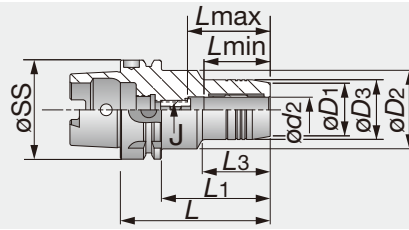


Wrench
 F127, F132

TUNGHYDRO

HSK A-HYDRO (Hydro chuck holder)

TungHydro hydraulic endmill chuck holders with HSK-A shank



Designation	SS	d2	d3	d1	d2	L	L1	L3	Lmin	Lmax	J
HSKA50HYDRO6X80	50	6	26	23	42	80	54	35	27	37	M5
HSKA50HYDRO8X80	50	8	28	25	42	80	54	36	27	37	M6
HSKA50HYDRO16X95	50	16	38	34	42	95	69	52	42	52	M12x1
HSKA50HYDRO20X100	50	20	42	38	42	100	74	74	42	52	M16x1
HSKA63HYDRO6X80	63	6	26	23	50	80	54	33	27	37	M5
HSKA63HYDRO8X80	63	8	28	25	50	80	54	33	27	37	M6
HSKA63HYDRO10X85	63	10	30	27	50	85	59	39	32	42	M8x1
HSKA63HYDRO12X90	63	12	32	29	50	90	64	44	37	47	M10x1
HSKA63HYDRO14X90	63	14	34	30	50	90	64	46	37	47	M10x1
HSKA63HYDRO16X95	63	16	38	34	50	95	69	52	42	52	M12x1
HSKA63HYDRO18X95	63	18	40	36	50	95	69	52	42	52	M12x1
HSKA63HYDRO20X100	63	20	42	38	50	100	74	58	42	52	M16x1
HSKA63HYDRO25X120	63	25	50	46	50	120	94	94	48	58	M16x1
HSKA63HYDRO32X125	63	32	60	56	50	125	99	83	52	62	M16x1
HSKA80HYDRO6X85	80	6	26	23	50	85	59	37	27	37	M5
HSKA80HYDRO10X90	80	10	30	27	50	90	64	42	32	42	M8x1
HSKA80HYDRO14X95	80	14	34	30	50	95	69	47	37	47	M10x1
HSKA80HYDRO16X100	80	16	38	34	50	100	74	52	42	52	M12x1
HSKA80HYDRO18X100	80	18	40	36	50	100	74	52	42	52	M12x1
HSKA80HYDRO20X105	80	20	42	38	50	105	79	52	42	52	M16x1
HSKA80HYDRO25X115	80	25	50	46	50	115	89	58	48	58	M16x1
HSKA100HYDRO6X85	100	6	26	23	63	85	56	29	27	37	M5
HSKA100HYDRO8X85	100	8	28	25	63	85	56	29	27	37	M6
HSKA100HYDRO10X90	100	10	30	27	63	90	61	35	32	42	M8x1
HSKA100HYDRO12X95	100	12	32	29	63	95	66	40	37	47	M10x1
HSKA100HYDRO14X95	100	14	34	30	63	95	66	42	37	47	M10x1
HSKA100HYDRO16X100	100	16	38	34	63	100	71	47	42	52	M12x1
HSKA100HYDRO18X100	100	18	40	36	63	100	71	48	42	52	M12x1
HSKA100HYDRO20X105	100	20	42	38	63	105	76	54	42	52	M16x1
HSKA100HYDRO25X115	100	25	50	46	63	115	86	51	48	58	M16x1
HSKA100HYDRO32X120	100	32	60	56	63	120	91	59	52	62	M16x1

- Applicable for 7 MPa pressure coolant
- Reduction sleeves are available for 12, 20, 25 and 32 mm bore diameters.
- Chucking forces will significantly reduce if reduction sleeves are used (ordered separately).

(Option: Wrench for TungHydro collet)

Reference pages



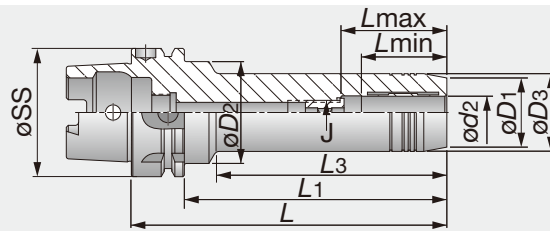
Straight collet
F113



Cooling tube
F127



Wrench
F132



Designation	øSS	øD2	øD3	øD1	øD2	L	L1	L3	Lmin	Lmax	J
HSKA63HYDRO6X150	63	6	26	23	50	150	124	103	27	37	M5
HSKA63HYDRO6X200	63	6	26	23	50	200	174	153	27	37	M5
HSKA63HYDRO8X150	63	8	28	25	50	150	124	104	27	37	M6
HSKA63HYDRO10X150	63	10	30	27	50	150	124	104	32	42	M8x1
HSKA63HYDRO10X200	63	10	30	27	50	200	174	154	32	42	M8x1
HSKA63HYDRO12X150	63	12	32	29	50	150	124	105	37	47	M10x1
HSKA63HYDRO12X200	63	12	32	29	50	200	174	155	37	47	M10x1
HSKA63HYDRO14X150	63	14	34	30	50	150	124	105	37	47	M10x1
HSKA63HYDRO16X150	63	16	38	34	50	150	124	106.5	42	52	M12x1
HSKA63HYDRO16X200	63	16	38	34	50	200	174	156.5	42	52	M12x1
HSKA63HYDRO20X150	63	20	42	38	50	150	124	108	42	52	M12x1
HSKA63HYDRO20X200	63	20	42	38	50	200	174	158	42	52	M12x1
HSKA63HYDRO25X150	63	25	50	46	50	150	124	-	48	58	M16x1
HSKA63HYDRO25X200	63	25	50	46	50	200	174	-	48	58	M16x1
HSKA100HYDRO6X150	100	6	26	23	50	150	124	94	27	37	M6
HSKA100HYDRO6X200	100	6	26	23	50	200	174	144	27	37	M6
HSKA100HYDRO8X150	100	8	28	25	50	150	124	94.5	27	37	M6
HSKA100HYDRO8X200	100	8	28	25	50	200	174	144.5	27	37	M6
HSKA100HYDRO10X150	100	10	30	27	50	150	124	95	32	42	M8x1
HSKA100HYDRO10X200	100	10	30	27	50	200	174	145	32	42	M8x1
HSKA100HYDRO12X150	100	12	32	29	50	150	124	95.5	37	47	M10x1
HSKA100HYDRO12X200	100	12	32	29	50	200	174	145.5	37	47	M10x1
HSKA100HYDRO14X150	100	14	34	30	50	150	124	97	37	47	M10x1
HSKA100HYDRO14X200	100	14	34	30	50	200	174	147	37	47	M10x1
HSKA100HYDRO16X150	100	16	38	34	50	150	124	97.5	42	52	M12x1
HSKA100HYDRO16X200	100	16	38	34	50	200	174	147.5	42	52	M12x1
HSKA100HYDRO18X150	100	18	40	36	50	150	124	98	42	52	M12x1
HSKA100HYDRO18X200	100	18	40	36	50	200	174	148	42	52	M12x1
HSKA100HYDRO20X150	100	20	42	38	50	150	124	99	42	52	M12x1
HSKA100HYDRO20X200	100	20	42	38	50	200	174	149	42	52	M12x1
HSKA100HYDRO25X200	100	25	50	46	50	200	174	-	48	58	M16x1
HSKA100HYDRO32X200	100	32	60	56	60	200	174	-	52	62	M16x1

- Applicable for 7 MPa pressure coolant
- Reduction sleeves are available for 12, 20, 25 and 32 mm bore diameters.
- Chucking forces will significantly reduce if reduction sleeves are used (ordered separately).

(Option: Wrench for TungHydro collet)

Reference pages



Straight collet

F113



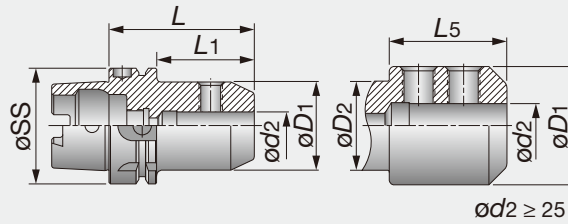
Cooling tube

F127



Wrench

F132



Designation	ϕSS	ϕd_2	ϕD_1	ϕD_2	L	L_1	L_5
HSKA50EM6X65	50	6	25	-	65	39	-
HSKA50EM8X65	50	8	28	-	65	39	-
HSKA50EM10X65	50	10	35	-	65	39	-
HSKA50EM14X80	50	14	44	41.8	80	54	38
HSKA50EM16X80	50	16	48	41.8	80	54	38
HSKA50EM18X80	50	18	50	41.8	80	54	38
HSKA50EM20X80	50	20	52	41.8	80	54	38
HSKA63EM6X65	63	6	25	-	65	39	-
HSKA63EM8X65	63	8	28	-	65	39	-
HSKA63EM10X65	63	10	35	-	65	39	-
HSKA63EM12X80	63	12	42	-	80	54	-
HSKA63EM14X80	63	14	44	-	80	54	-
HSKA63EM16X80	63	16	48	-	80	54	-
HSKA63EM18X80	63	18	50	-	80	54	-
HSKA63EM20X80	63	20	52	-	80	54	-
HSKA63EM25X110	63	25	65	52	110	84	65.5
HSKA63EM32X110	63	32	72	52	110	84	65.5
HSKA100EM6X80	100	6	25	-	80	51	-
HSKA100EM8X80	100	8	28	-	80	51	-
HSKA100EM10X80	100	10	35	-	80	51	-
HSKA100EM12X80	100	12	42	-	80	51	-
HSKA100EM14X80	100	14	44	-	80	51	-
HSKA100EM16X100	100	16	48	-	100	71	-
HSKA100EM18X100	100	18	50	-	100	71	-
HSKA100EM20X100	100	20	52	-	100	71	-
HSKA100EM25X100	100	25	65	-	100	71	-
HSKA100EM32X100	100	32	72	-	100	71	-

• Applicable for 7 MPa pressure coolant

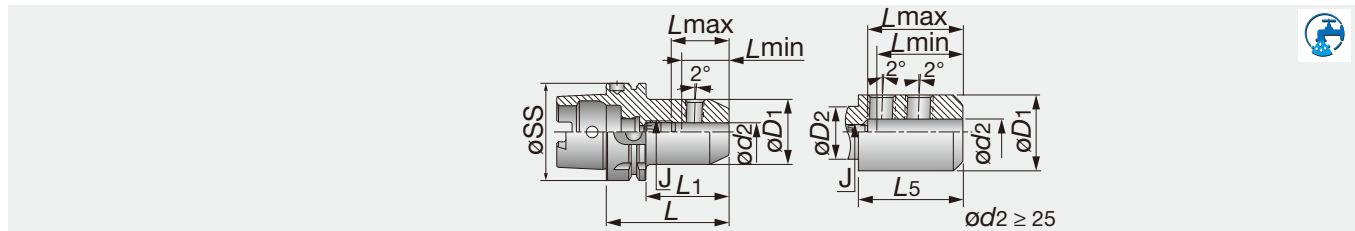
Reference pages



Wrench
F132



Cooling tube
F127



Designation	øSS	øD2	øD1	øD2	L	L1	L5	Lmin	Lmax	J	Key
HSKA50EM6X80E	50	6	25	-	80	54	-	30	38	M5	2.5
HSKA50EM8X80E	50	8	28	-	80	54	-	35	40	M6	3
HSKA50EM10X80E	50	10	35	-	80	54	-	39	44	M8	4
HSKA50EM12X90E	50	12	42	41.8	90	64	48	44	49	M10	5
HSKA50EM14X90E	50	14	44	41.8	90	64	48	44	49	M10	5
HSKA50EM16X90E	50	16	48	41.8	90	64	48	47	52	M12	6
HSKA50EM18X90E	50	18	50	41.8	90	64	48	47	52	M12	6
HSKA50EM20X100E	50	20	52	41.8	100	74	58	49	54	M16	8
HSKA63EM6X80E	63	6	25	-	80	54	-	32	40	M5	2
HSKA63EM8X80E	63	8	28	-	80	54	-	35	40	M6	3
HSKA63EM10X80E	63	10	35	-	80	54	-	39	44	M8	4
HSKA63EM12X90E	63	12	42	-	90	64	-	44	49	M10	5
HSKA63EM14X90E	63	14	44	-	90	64	-	44	49	M10	5
HSKA63EM16X100E	63	16	48	-	100	74	-	47	52	M12	6
HSKA63EM18X100E	63	18	50	-	100	74	-	47	55	M12	6
HSKA63EM20X100E	63	20	52	-	100	74	-	49	54	M16	8
HSKA63EM25X110E	63	25	65	52	110	84	65.5	54	61	M16	8
HSKA63EM32X110E	63	32	72	52	110	84	65.5	58	63	M20X1.5	10
HSKA100EM6X90E	100	6	25	-	90	61	-	35	40	M5	2.5
HSKA100EM8X90E	100	8	28	-	90	61	-	35	40	M6	3
HSKA100EM10X90E	100	10	35	-	90	61	-	39	44	M8	4
HSKA100EM12X100E	100	12	42	-	100	71	-	44	54	M10	5
HSKA100EM14X100E	100	14	44	-	100	71	-	44	54	M10	5
HSKA100EM16X100E	100	16	48	-	100	71	-	47	52	M12	6
HSKA100EM18X100E	100	18	50	-	100	71	-	47	52	M12	6
HSKA100EM20X110E	100	20	52	-	110	81	-	49	54	M16	8
HSKA100EM25X120E	100	25	65	-	120	91	-	54	61	M20X1.5	10
HSKA100EM32X120E	100	32	72	-	120	91	-	58	63	M20X1.5	10

• Applicable for 7 MPa pressure coolant

(1) The adjustment screw has an internal coolant hole.

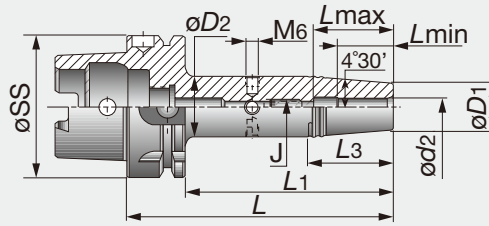
Reference pages

Wrench	Cooling tube
F132	F127

TUNGSHRINK

HSK A-SRKIN (Shrink holder)

TungShrink thermal shrinking holder for carbide and HSS with HSK-A shank



Designation	øSS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	Key*
HSKA63SRKIN6X80	63	6	21	27	80	54	38	25	36	M5	2.5
HSKA63SRKIN6X120	63	6	21	27	120	94	38	25	36	M5	2.5
HSKA63SRKIN6X160	63	6	21	27	160	134	38	25	36	M5	2.5
HSKA63SRKIN8X80	63	8	21	27	80	54	38	25	36	M6	3
HSKA63SRKIN8X120	63	8	21	27	120	94	38	25	36	M6	3
HSKA63SRKIN8X160	63	8	21	27	160	134	38	25	36	M6	3
HSKA63SRKIN10X85	63	10	24	32	85	59	51	31	42	M8	4
HSKA63SRKIN10X120	63	10	24	32	120	94	51	31	42	M8	4
HSKA63SRKIN10X160	63	10	24	32	160	134	51	31	42	M8	4
HSKA63SRKIN12X90	63	12	24	32	90	64	51	36	42	M8	4
HSKA63SRKIN12X120	63	12	24	32	120	94	51	36	47	M10	5
HSKA63SRKIN12X160	63	12	24	32	160	134	51	36	47	M10	5
HSKA63SRKIN14X90	63	14	27	34	90	64	45	36	47	M10	5
HSKA63SRKIN14X120	63	14	27	34	120	94	45	36	47	M10	5
HSKA63SRKIN14X160	63	14	27	34	160	134	45	36	47	M10	5
HSKA63SRKIN16X75	63	16	27	34	75	49	-	39	50	-	-
HSKA63SRKIN16X95	63	16	27	34	95	69	44	39	50	M12	6
HSKA63SRKIN16X120	63	16	27	34	120	94	44	39	50	M12	6
HSKA63SRKIN16X160	63	16	27	34	160	134	44	39	50	M12	6
HSKA63SRKIN18X95	63	18	33	42	95	69	57	39	50	M12	6
HSKA63SRKIN18X120	63	18	33	42	120	94	57	39	50	M12	6
HSKA63SRKIN18X160	63	18	33	42	160	134	57	39	50	M12	6
HSKA63SRKIN20X75	63	20	33	41	75	49	-	41	50	-	-
HSKA63SRKIN20X100	63	20	33	42	100	74	57	41	52	M16	8
HSKA63SRKIN20X120	63	20	33	42	120	94	57	41	52	M16	8
HSKA63SRKIN20X160	63	20	33	42	160	134	57	41	52	M16	8
HSKA63SRKIN25X85	63	25	44	53	85	59	-	47	58	-	-
HSKA63SRKIN25X115	63	25	44	53	115	89	55	47	58	M16	8
HSKA63SRKIN32X85	63	32	44	53	85	59	-	47	58	-	-
HSKA63SRKIN32X120	63	32	44	53	120	94	55	47	58	M16	8
HSKA100SRKIN6X85	100	6	21	27	85	56	38	25	36	M5	2.5
HSKA100SRKIN6X120	100	6	21	27	120	91	38	25	36	M5	2.5
HSKA100SRKIN6X160	100	6	21	27	160	131	38	25	36	M6	3
HSKA100SRKIN8X85	100	8	21	27	85	56	38	25	36	M6	3
HSKA100SRKIN8X120	100	8	21	27	120	91	38	25	36	M6	3
HSKA100SRKIN8X160	100	8	21	27	160	131	38	25	36	M6	3
HSKA100SRKIN10X90	100	10	24	32	90	61	51	31	42	M8	4
HSKA100SRKIN10X120	100	10	24	32	120	91	51	31	42	M8	4
HSKA100SRKIN10X160	100	10	24	32	160	131	51	31	42	M8	4
HSKA100SRKIN12X95	100	12	24	32	95	66	51	36	47	M10	5
HSKA100SRKIN12X120	100	12	24	32	120	91	51	36	47	M10	5
HSKA100SRKIN12X160	100	12	24	32	160	131	51	36	47	M10	5
HSKA100SRKIN14X95	100	14	27	34	95	66	45	36	47	M10	5
HSKA100SRKIN14X120	100	14	27	34	120	91	45	36	47	M10	5
HSKA100SRKIN14X160	100	14	27	34	160	131	45	36	47	M10	5
HSKA100SRKIN16X100	100	16	27	34	100	71	45	39	50	M12	6
HSKA100SRKIN16X120	100	16	27	34	120	91	45	39	50	M12	6
HSKA100SRKIN16X160	100	16	27	34	160	131	45	39	50	M12	6
HSKA100SRKIN18X100	100	18	33	42	100	71	57	39	50	M12	6
HSKA100SRKIN18X160	100	18	33	42	160	131	57	39	50	M12	6
HSKA100SRKIN20X105	100	20	33	42	105	76	57	41	52	M16	8
HSKA100SRKIN20X160	100	20	33	42	160	131	57	41	52	M16	8
HSKA100SRKIN25X115	100	25	44	53	115	86	57	47	58	M16	8
HSKA100SRKIN32X120	100	32	44	53	120	91	57	47	58	M16	8

* Hex key (metric size) for the rear stopper screw. • A cooling tube must be used with all coolant through HSK spindles (should be ordered separately). • Use only inductive heating device for SRKIN holders. • For solid carbide, HSS and steel tools. • Tungaloy cannot guarantee an unbalance value less than 1 gr x mm. • Applicable for 10 MPa pressure coolant.

Reference pages



Induction heating unit
F119



Heating unit
F119



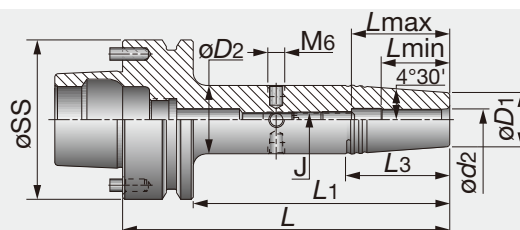
Preset screws
F130



Wrench
F132



Cooling tube
F131



Designation	øSS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	Key*
HSKFM63SRKIN6X80	63	6	21	27	80	54	38	25	36	M5	2.5
HSKFM63SRKIN8X80	63	8	21	27	80	54	38	25	36	M6	3
HSKFM63SRKIN10X85	63	10	24	32	85	59	50.5	31	42	M8	4
HSKFM63SRKIN12X90	63	12	24	32	90	64	50.5	36	47	M10	5
HSKFM63SRKIN14X90	63	14	27	34	90	64	44.5	36	47	M10	5
HSKFM63SRKIN16X95	63	16	27	34	95	69	44.5	39	50	M12	6
HSKFM63SRKIN18X95	63	18	33	42	95	69	57	39	50	M12	6
HSKFM63SRKIN20X100	63	20	33	42	100	74	57	41	52	M16	8
HSKFM63SRKIN25X115	63	25	44	52.7	115	89	55	47	58	M16	8
HSKFM63SRKIN32X120	63	32	44	52.7	120	94	55	47	58	M16	8

- * Hex key (metric size) for the rear stopper screw.
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For solid carbide, HSS and steel tools.
- Use only inductive heating device for SRKIN holders.
- The orientation pins can be removed, turning the toolholder into a standard HSK F 63 type.
- Applicable for 10 MPa pressure coolant.

Reference pages



Induction heating unit
F119



Heating unit
F119



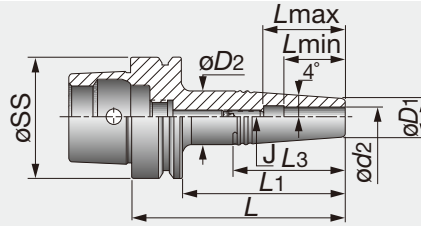
Preset screws
F130



Wrench
F132



Cooling tube
F131



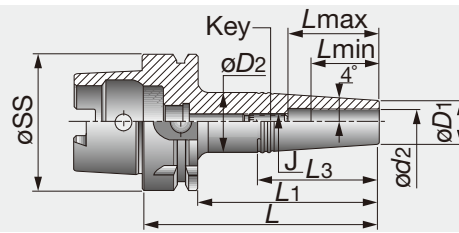
Designation	øSS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	Key*
HSKE32SRK3X45	32	3	10	13	65	45	30	10	16	M4	2
HSKE32SRK4X45	32	4	10	15	65	45	35	12	18	M4	2
HSKE32SRK5X45	32	5	10	15	65	45	35	15	25	M4	2
HSKE32SRK6X45	32	6	11	16	65	45	35	18	28	M4	2
HSKE32SRK8X45	32	8	14	20	65	45	42	25	35	M4	2
HSKE32SRK10X45	32	10	16	22	65	45	42	30	40	M4	2
HSKE32SRK12X45	32	12	20	25	65	45	35.6	32	40	M4	2
HSKE40SRK3X45	40	3	10	13	65	45	30	10	16	M5	2.5
HSKE40SRK3X80	40	3	10	19	100	80	64	10	16	M5	2.5
HSKE40SRK4X45	40	4	10	15	65	45	35	12	18	M5	2.5
HSKE40SRK4X80	40	4	10	19	100	80	64	12	18	M5	2.5
HSKE40SRK5X45	40	5	10	15	65	45	35	15	25	M4	2
HSKE40SRK5X80	40	5	10	19	100	80	64	15	25	M4	2
HSKE40SRK6X45	40	6	11	16	65	45	35	18	28	M5	2.5
HSKE40SRK6X80	40	6	11	20	100	80	64	18	28	M5	2.5
HSKE40SRK8X45	40	8	14	20	65	45	42	25	35	M5	2.5
HSKE40SRK8X80	40	8	14	23	100	80	64	25	35	M6	3
HSKE40SRK10X45	40	10	16	22	65	45	42	30	40	M5	2.5
HSKE40SRK10X80	40	10	16	24.5	100	80	60	30	40	M8	4
HSKE40SRK12X45	40	12	20	26	65	45	42	32	42	M5	2.5
HSKE40SRK12X80	40	12	20	28	100	80	56	32	42	M10	5
HSKE50SRK3X45 ⁽¹⁾	50	3	10	15	71	45	36	10	16	M5	2.5
HSKE50SRK3X80 ⁽¹⁾	50	3	10	19	106	80	64	10	16	M5	2.5
HSKE50SRK4X45 ⁽¹⁾	50	4	10	15	71	45	36	12	18	M5	2.5
HSKE50SRK4X80 ⁽¹⁾	50	4	10	19	106	80	64	12	18	M5	2.5
HSKE50SRK5X45 ⁽¹⁾	50	5	10	15	71	45	36	15	21	M6	3
HSKE50SRK5X80	50	5	10	19	106	80	64	15	21	M6	3
HSKE50SRK6X45 ⁽¹⁾	50	6	11	16	71	45	36	18	28	M5	2.5
HSKE50SRK6X80 ⁽¹⁾	50	6	11	20	106	80	64	18	28	M5	2.5
HSKE50SRK8X45 ⁽¹⁾	50	8	14	20	71	45	43	25	35	M6	3
HSKE50SRK8X80 ⁽¹⁾	50	8	14	23	106	80	64	25	35	M6	3
HSKE50SRK10X45 ⁽¹⁾	50	10	16	22	71	45	42	30	37	M6	3
HSKE50SRK10X80 ⁽¹⁾	50	10	16	24.5	106	80	60	30	40	M8	4
HSKE50SRK12X45 ⁽¹⁾	50	12	20	26	71	45	42	32	39	M6	3
HSKE50SRK12X80 ⁽¹⁾	50	12	20	28	106	80	57	32	42	M10	5
HSKE63SRK3X50	63	3	10	17	76	50	48	10	16	M6	3
HSKE63SRK3X80	63	3	10	19	106	80	64	10	16	M6	3
HSKE63SRK4X50	63	4	10	17	76	50	48	12	18	M6	3
HSKE63SRK4X80	63	4	10	19	106	80	64	12	18	M6	3
HSKE63SRK5X45	63	5	10	15	71	45	36	15	21	M6	3
HSKE63SRK5X80	63	5	10	19	106	80	64	15	21	M6	3
HSKE63SRK6X50	63	6	11	18	76	50	48	18	24	M8	4
HSKE63SRK6X80	63	6	11	20	106	80	64	18	24	M8	4
HSKE63SRK8X50	63	8	14	21	76	50	48	25	35	M6	3
HSKE63SRK8X80	63	8	14	23	106	80	64	25	35	M6	3
HSKE63SRK10X50	63	10	16	23	76	50	48	30	40	M8	4
HSKE63SRK10X80	63	10	16	24.5	106	80	60	30	40	M8	4
HSKE63SRK12X50	63	12	20	27	76	50	48	32	42	M8	4
HSKE63SRK12X80	63	12	20	28	106	80	57	32	42	M10	5
HSKE63SRK12X90	63	12	20	28	116	90	57	32	43	M10	5

(1) Balanced to G2.5 35,000 min⁻¹. * Hex key (metric size) for the rear stopper screw.

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately). • Applicable for 10 MPa pressure coolant.

Reference pages

Induction heating unit
F119Heating unit
F119Preset screws
F130Wrench
F132Cooling tube
F131



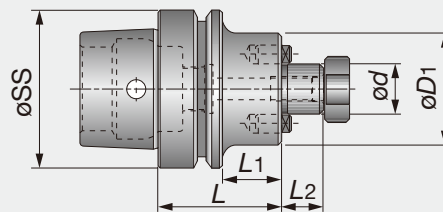
Designation	øSS	ød2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	Key*
HSKA63SRK3X50	63	3	10	17	76	50	-	10	16	M6	3
HSKA63SRK3X85	63	3	10	21	111	85	79	10	16	M6	3
HSKA63SRK4X50	63	4	10	17	76	50	-	12	18	M6	3
HSKA63SRK4X85	63	4	10	21	111	85	79	12	18	M6	3
HSKA63SRK5X50	63	5	10	17	76	50	-	15	21	M6	3
HSKA63SRK5X85	63	5	10	21	111	85	79	15	21	M6	3
HSKA63SRK6X50	63	6	11	18	76	50	-	18	24	M8	4
HSKA63SRK6X85	63	6	11	22	111	85	79	18	24	M8	4
HSKA63SRK8X50	63	8	14	20	76	50	43	25	36	M6	3
HSKA63SRK8X85	63	8	14	23	111	85	64	25	36	M6	3
HSKA63SRK10X50	63	10	16	23	76	50	-	30	41	M8	4
HSKA63SRK10X85	63	10	16	26	111	85	72	30	41	M8	4
HSKA63SRK12X50	63	12	20	27	76	50	-	32	43	M8	4
HSKA63SRK12X85	63	12	20	30	111	85	72	32	43	M8	4

- * Hex key (metric size) for the rear stopper screw.
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- Applicable for 10 MPa pressure coolant.

TUNGHOLD

HSK E-SEM (Shell mill holder)

Shell mill holder with HSK-E shank

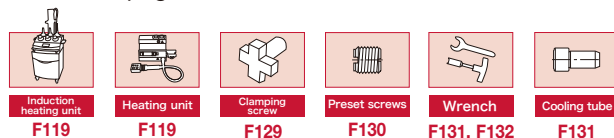


Designation	øSS	ød	L2	øD1	L	L1
HSKE40SEM16X50	40	16	17	38	50	30
HSKE40SEM22X50	40	22	19	47	50	30
HSKE50SEM22X60	50	22	19	47	60	34
HSKE63SEM16X50	63	16	17	38	50	24
HSKE63SEM22X50	63	22	19	47	50	24
HSKE32SEM3/4X2	32	19.05	17	44.5	50.8	30.8
HSKE40SEM3/4X2.000	40	19.05	17	45	50.8	30.8
HSKE50SEM3/4X2.375	50	19.05	17	45	60.3	34.3
HSKE63SEM3/4X2.375	63	19.05	17	45	60.3	34.3
HSKE63SEM1X2.375	63	25.4	17	52.8	60.3	34.3

- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- Applicable for 7 MPa pressure coolant.

(Option: Wrench for lock screw)

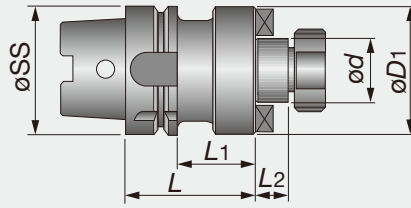
Reference pages



TUNGHOLD

HSK A-SEM (Shell mill holder)

Shell mill holder with HSK-A shank



Designation	øSS	ød	L2	øD1	L	L1
HSKA40SEM22	40	22	30	47	50	19
HSKA40SEM27	40	27	35	58	55	21
HSKA50SEM16X50	50	16	24	50	38	17
HSKA50SEM22X60	50	22	34	60	47	19
HSKA50SEM27X60	50	27	34	60	58	21
HSKA63SEM16X50	63	16	24	50	38	17
HSKA63SEM22X50	63	22	24	50	47	19
HSKA63SEM27X60	63	27	34	60	58	21
HSKA63SEM32X60	63	32	34	60	66	24
HSKA63SEM40X60	63	40	34	60	82	27
HSKA100SEM22X50 ⁽¹⁾	100	22	21	50	47	19
HSKA100SEM27X50 ⁽¹⁾	100	27	21	50	58	21
HSKA100SEM32X50 ⁽¹⁾	100	32	21	50	66	24
HSKA100SEM40X60 ⁽¹⁾	100	40	31	60	82	27
HSKA100SEM50X70 ⁽¹⁾	100	50	41	70	95	30

(1) Balanced to G6.3 12,000 min⁻¹.

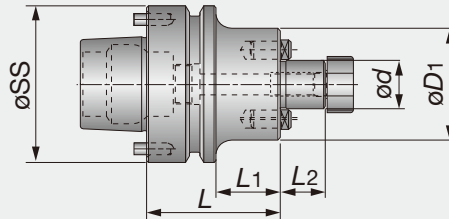
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- Applicable for 7 MPa pressure coolant.

(Option: Wrench for lock screw)

TUNGHOLD

HSK FM-SEM (Shell mill holder)

Shell mill holder with HSK-FM shank



Designation	øSS	ød	L2	øD1	L	L1
HSKFM63SEM22X60	63	22	19	47	60	34
HSKFM63SEM27X60	63	27	21	58	60	34
HSKFM63SEM32X60	63	32	24	66	60	34
HSKFM63SEM3/4X3.00	63	19.05	17	45	76.2	50.2
HSKFM63SEM3/4X4.50	63	19.05	17	45	114.3	88.3
HSKFM63SEM1X2.375	63	25.4	17	52.8	60.3	34.3

- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- The orientation pins can be removed, turning the toolholder into a standard HSK F63 type.
- Applicable for 7 MPa pressure coolant.

(Option: Wrench for lock screw)

Reference pages



Clamping screw

F129



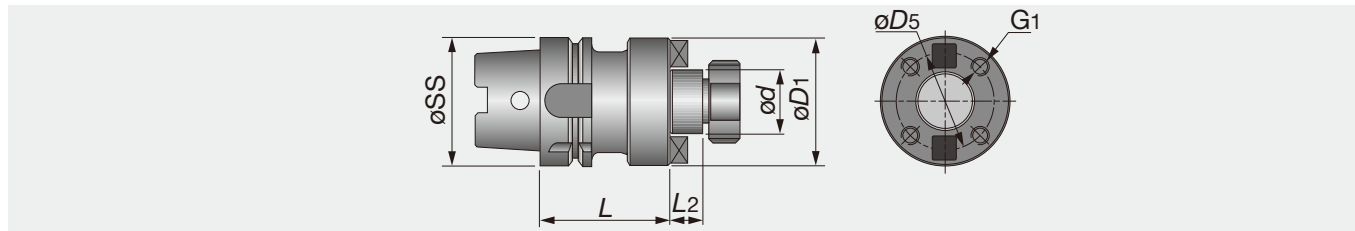
Wrench

F131, F132



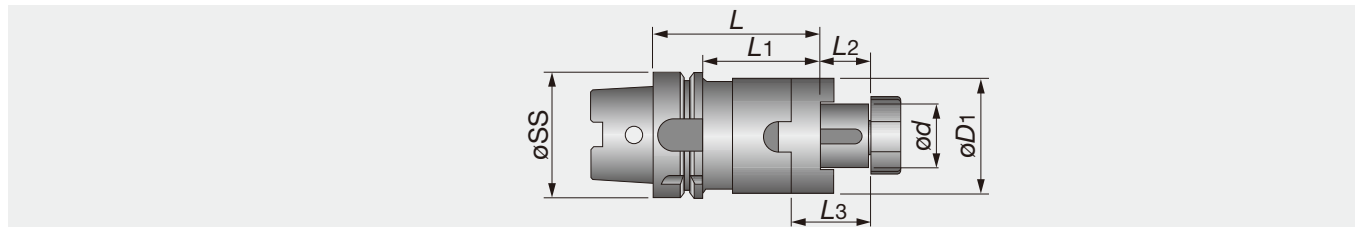
Cooling tube

F131



Designation	øSS	ød	L2	øD1	L	øD5	G1
HSKA100FM60X70	100	60	40	128	70	101.6	M16

(Option: Wrench for lock Screw)

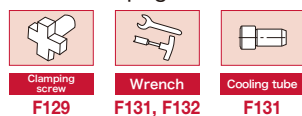


Designation	øSS	ød	L2	øD1	L	L1	L3
HSKA50SEMC16X50	50	16	17	32	50	24	27
HSKA50SEMC27X65	50	27	21	48	65	39	33
HSKA63SEMC16X60	63	16	17	32	60	34	21
HSKA63SEMC22X60	63	22	19	40	60	34	31
HSKA63SEMC27X60	63	27	21	48	60	34	33
HSKA63SEMC32X60	63	32	24	58	60	34	38
HSKA63SEMC40X70	63	40	27	70	70	44	41
HSKA100SEMC16X60	100	16	17	32	60	31	27
HSKA100SEMC22X60	100	22	19	40	60	31	31
HSKA100SEMC27X60	100	27	21	48	60	31	33
HSKA100SEMC32X60	100	32	24	58	60	31	38
HSKA100SEMC40X70	100	40	27	70	70	41	41
HSKA100SEMC50X80	100	50	30	90	80	51	46

• Applicable for 7 MPa pressure coolant.

(Option: Wrench for lock Screw)

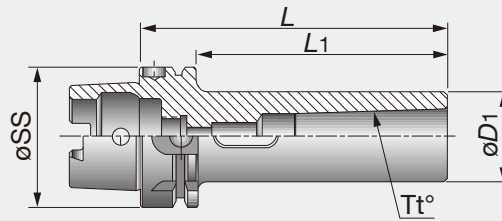
Reference pages



TUNGHOLD

HSK A-MT (Holder for morse taper)

Morse taper holder with HSK-A shank

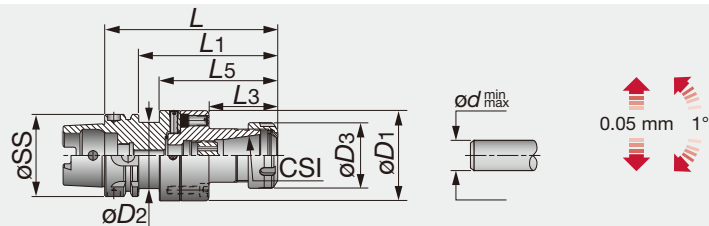


Designation	SS	Tt°	L	D1	L1
HSKA50MT1X100	50	MT1	100	25	74
HSKA50MT2X120	50	MT2	120	32	94
HSKA50MT3X140	50	MT3	140	40	114
HSKA63MT1X110	63	MT1	110	25	84
HSKA63MT2X120	63	MT2	120	32	94
HSKA63MT3X140	63	MT3	140	40	114
HSKA63MT4X160	63	MT4	160	48	134
HSKA100MT1X110	100	MT1	110	25	81
HSKA100MT2X120	100	MT2	120	32	91
HSKA100MT3X150	100	MT3	150	40	121
HSKA100MT4X170	100	MT4	170	48	141
HSKA100MT5X200	100	MT5	200	63	171

TUNGHOLD

ADJ HSK A-ER (Collet chuck holder)

ER Collet Chucks with Center Alignment for HSK-A Shanks



Designation	SS	CSI	Range	L	L1	L5	L3	D3	D1	D2
ADJHSKA63D70ER32	63	ER32	2-20	134.5	108.5	92.5	52.5	50	70	46
ADJHSKA100D70ER32	100	ER32	2-20	129.5	100.5	82.5	52.5	50	70	-

• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER Collet)

Reference pages



ER Collet
F101



Nut
F125



Preset screws
F128



Wrench
F127, F132

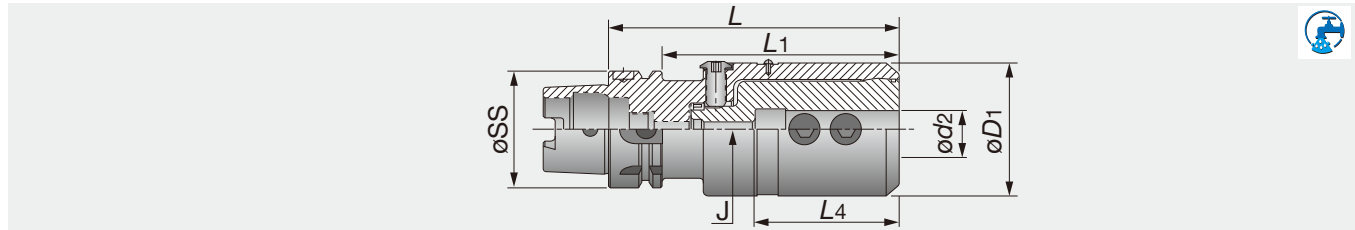


Cooling tube
F131

TUNGBORE

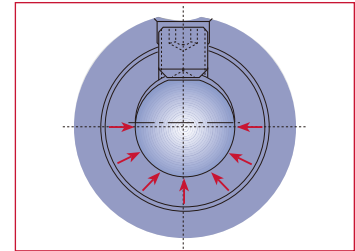
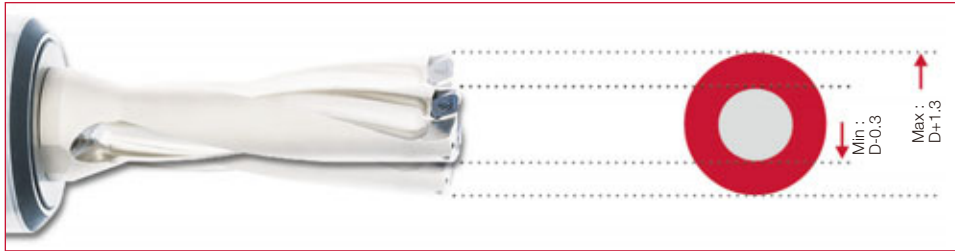
TUNGBORE-HSK A (Adjustable holder for indexable drill)

TungBore adjustable drilling dia. holder with HSK-A shank



Designation	øSS	ød2	øD1	L	L1	L4	J
TUNGBOREHKA63EM25	63	25	72	142	116	71	M10
TUNGBOREHKA63EM32	63	32	72	142	116	71	M10
TUNGBOREHKA63EM40	63	40	72	142	116	71	M10

- Applicable for 7 MPa pressure coolant

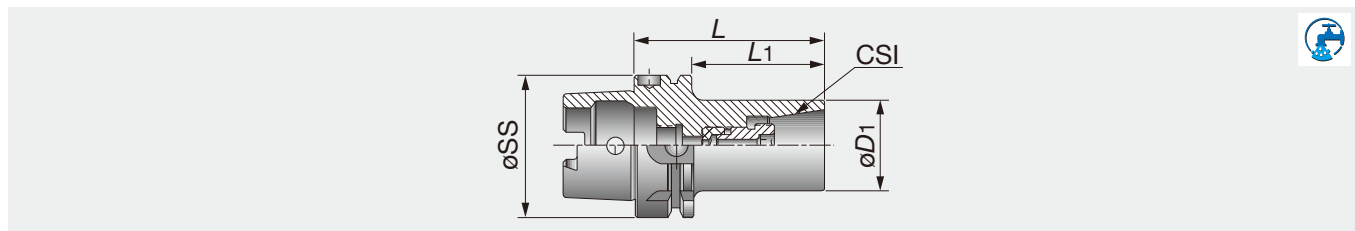


The bore's section is actually made from two shifted circular sections. The clamping screw pushes the drill shank through a narrowed opening, forcing elastic deformation of the holder. Contact is made around more than 180°, providing a high clamping force.

TUNGCLICK

HSK A-CLICKIN (Quick change holder)

TungClick quick change tooling system with HSK-A shank



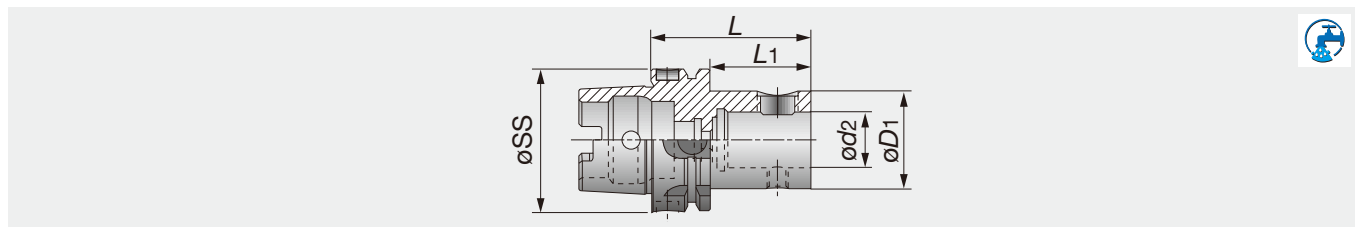
Designation	øSS	CSI	øD1	L	L1
HSKA63ER32CLICK-IN	63	32SRF	41	85	59
HSKA100ER32CLICK-IN	100	32SRF	41	90	61

- Applicable for 10 MPa pressure coolant • Tightening torque: 235 N·m

TUNGFIT

HSK A-CF (Quick change holder)

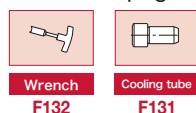
TungFit quick change style modular tooling system with HSK-A shank

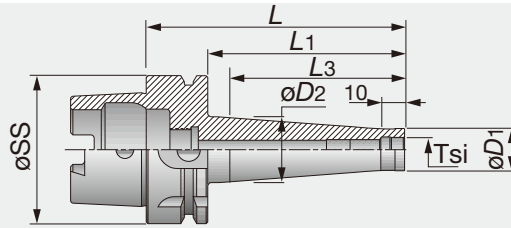


Designation	øSS	ød2	øD1	L	L1
HSKA63CF4-S	63	25	44.5	70	44
HSKA80CF4-S	80	25	44.5	73	47
HSKA100CF4-S	100	25	44.5	76	47

- Applicable for 7 MPa pressure coolant • Tightening torque: 58.8 N·m

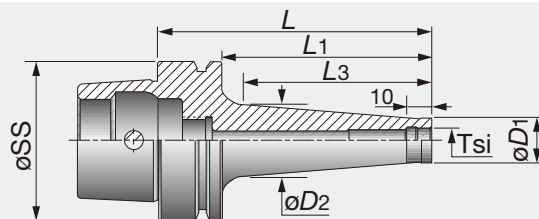
Reference pages





Designation	øSS	Tsi	øD1	øD2	L	L1	L3
HSKA63ODP6X59	63	M6	9.7	10	59	33	25
HSKA63ODP6X109	63	M6	9.8	23	109	83	75
HSKA63ODP8X59	63	M8	13.1	15	59	33	25
HSKA63ODP8X109	63	M8	13.1	23	109	83	75
HSKA63ODP10X59	63	M10	18	20	59	33	25
HSKA63ODP10X109	63	M10	18	28	109	83	75
HSKA63ODP12X59	63	M12	21	24	59	33	25
HSKA63ODP12X109	63	M12	21	31	109	83	75
HSKA63ODP16X59	63	M16	29	34	59	33	25
HSKA63ODP16X109	63	M16	29	34	109	83	75
HSKA100ODP12X87 ⁽¹⁾	100	M12	23	30	87	58	50
HSKA100ODP12X137 ⁽¹⁾	100	M12	23	30	137	108	100
HSKA100ODP12X187 ⁽¹⁾	100	M12	23	40	187	158	150
HSKA100ODP12X237 ⁽¹⁾	100	M12	23	46	237	208	200
HSKA100ODP16X87 ⁽¹⁾	100	M12	29	31.5	87	58	50
HSKA100ODP16X137 ⁽¹⁾	100	M12	29	41.5	137	108	100
HSKA100ODP16X187 ⁽¹⁾	100	M12	29	55	187	158	150
HSKA100ODP16X237 ⁽¹⁾	100	M12	29	55	237	208	200

• Applicable for 10 MPa pressure coolant ⁽¹⁾ Balanced to G6.5 12,000 min⁻¹.



Designation	øSS	Tsi	øD1	øD2	L	L1	L3
HSKE40ODP10X53	40	M10	18	20	53	33	25
HSKE40ODP10X103	40	M10	18	28	103	83	75
HSKE40ODP12X53	40	M12	21	24	53	33	25
HSKE40ODP12X103	40	M12	21	31	103	83	75
HSKE50ODP10X59 ⁽¹⁾	50	M10	18	20	59	33	25
HSKE50ODP10X109 ⁽¹⁾	50	M10	18	28	109	83	75
HSKE50ODP12X59 ⁽¹⁾	50	M12	21	24	59	33	25
HSKE50ODP12X109 ⁽¹⁾	50	M12	21	31	109	83	75
HSKE50ODP16X59 ⁽¹⁾	50	M16	29	34	59	33	25
HSKE50ODP16X109 ⁽¹⁾	50	M16	29	34	109	83	75
HSKE63ODP10X59 ⁽²⁾	63	M10	18	20	59	33	25
HSKE63ODP10X109 ⁽²⁾	63	M10	18	28	109	83	75
HSKE63ODP12X59 ⁽²⁾	63	M12	21	24	59	33	25
HSKE63ODP12X109 ⁽²⁾	63	M12	21	31	109	83	75
HSKE63ODP16X109 ⁽²⁾	63	M16	29	34	109	83	75

• Applicable for 10 MPa pressure coolant ⁽¹⁾ Balanced to G2.5 35,000 min⁻¹. ⁽²⁾ Balanced to G2.5 30,000 min⁻¹.

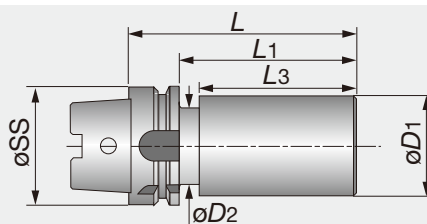
Reference pages



Wrench
F132



Cooling tube
F131



Designation	SS	D1	D2	L	L1	L3
HSKA50B16MN100	50	53	41.8	100	74	58
HSKA50B16MN200	50	53	41.8	200	174	158
HSKA63B16MN100	63	63	52.8	100	74	55.5
HSKA63B16MN200	63	63	52.8	200	174	155.5
HSKA100B16MN100	100	102	85	100	71	54.8
HSKA100B16MN200	100	102	85	200	171	154.8

- Material: Case hardened alloy steel.
- Shank hardness 58 HRC minimum.
- Nose hardness 35-37 HRC.

Reference pages



Wrench
F132

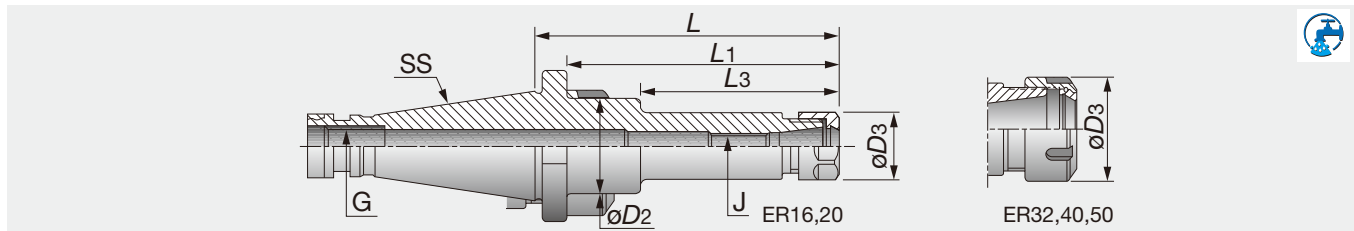


Cooling tube
F131

TUNGHOLD

DIN2080-ER (Collet chuck holder)

ER collet chucks with DIN2080 shank



Designation	SS	CSI	Range	L	L1	L3	øD3	øD2	J	G
DIN208030ER16X75	30	ER16	0.5-10	75	65.4	-	28	-	M10	M12
DIN208030ER32X55	30	ER32	2-20	55	45.4	-	50	-	M18X1.5	M12
DIN208030ER40X83	30	ER40	3-26	83	69.4	-	63	-	M22X1.5	M12
DIN208040ER16X63	40	ER16	0.5-10	63	51.4	-	28	-	M12	M16
DIN208040ER16X100	40	ER16	0.5-10	100	88.4	-	28	-	M12	M16
DIN208040ER25X50	40	ER25	1-16	50	38.4	-	42	-	M16X1.5	M16
DIN208040ER32X50	40	ER32	2-20	50	38.4	-	50	-	M22X1.5	M16
DIN208040ER40X55	40	ER40	3-26	55	43.4	-	63	-	M22X1.5	M16
DIN208040ER20X63	40	ER20	1-13	63	51.4	-	34	-	M12	M16
DIN208040ER20X100	40	ER20	1-13	100	88.4	-	34	-	M12	M16
DIN208050ER16X100	50	ER16	0.5-10	100	84.8	-	28	-	M12	M24
DIN208050ER16X160	50	ER16	0.5-10	160	144.8	95	28	40	M12	M24
DIN208050ER20X100	50	ER20	1-13	100	84.8	-	34	-	M16	M24
DIN208050ER20X160	50	ER20	1-13	160	144.8	-	34	-	M12	M24
DIN208050ER40X58	50	ER40	3-26	58	42.8	-	63	-	M28X1.5	M24
DIN208050ER50X63	50	ER50	10-34	63	47.8	-	78	-	M36X1.5	M24

• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

Reference pages



ER Collet
F101



Nut
F125



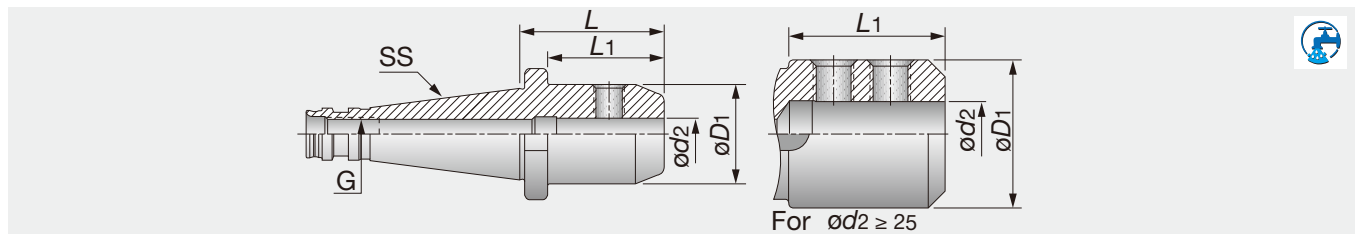
Wrench
F127



Pull stud
F128



Wrench
F124



Designation	SS	$\varnothing d2$	$\varnothing D1$	L	L1	G
DIN208030EM6X40	30	6	25	40	30.4	M12
DIN208030EM8X40	30	8	28	40	30.4	M12
DIN208030EM10X40	30	10	35	40	30.4	M12
DIN208030EM20X63	30	20	52	63	53.4	M12
DIN208040EM6X50	40	6	25	50	38.4	M16
DIN208040EM8X50	40	8	28	50	38.4	M16
DIN208040EM10X50	40	10	35	50	38.4	M16
DIN208040EM12X50	40	12	42	50	38.4	M16
DIN208040EM16X63	40	16	48	63	51.4	M16
DIN208040EM20X63	40	20	52	63	51.4	M16
DIN208040EM25X80	40	25	65	80	68.4	M16
DIN208040EM32X80	40	32	71	80	68.4	M16
DIN208050EM6X63	50	6	25	63	47.8	M24
DIN208050EM8X63	50	8	28	63	47.8	M24
DIN208050EM10X63	50	10	35	63	47.8	M24
DIN208050EM12X63	50	12	42	63	47.8	M24
DIN208050EM16X63	50	16	48	63	47.8	M24
DIN208050EM20X63	50	20	52	63	47.8	M24
DIN208050EM25X80	50	25	65	80	64.8	M24
DIN208050EM32X80	50	32	72	80	64.8	M24
DIN208050EM40X90	50	40	90	90	74.8	M24
DIN208050EM50X100	50	50	100	100	84.8	M24

- Applicable for 10 MPa pressure coolant

Reference pages

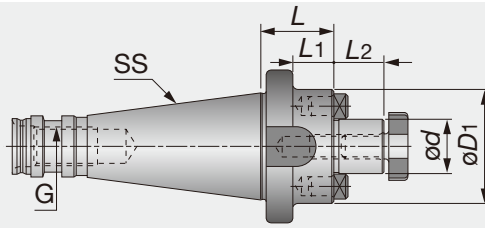


Pull stud
F124

TUNGHOLD

DIN2080-SEM (Shell mill holder)

Shell mill holder with DIN2080 shank



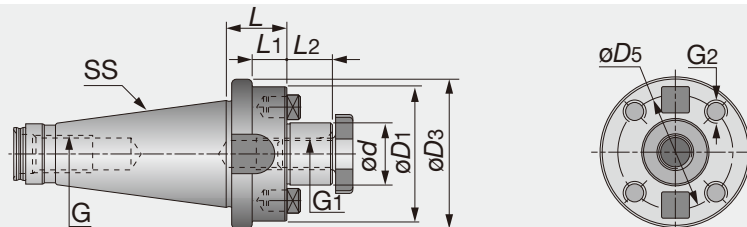
Designation	SS	ød	L2	øD1	L	L1	G
DIN208030SEM16X28	30	16	17	38	28	18.4	M12
DIN208030SEM22X28	30	22	19	47	28	18.4	M12
DIN208030SEM27X32	30	27	21	58	32	22.4	M12
DIN208030SEM32X32	30	32	24	66	32	22.4	M12
DIN208040SEM16X28	40	16	17	38	28	16.4	M16
DIN208040SEM22X27	40	22	19	47	27	15.4	M16
DIN208040SEM27X26	40	27	21	58	26	14.4	M16
DIN208040SEM32X23	40	32	24	66	23	11.4	M16
DIN208040SEM40X34	40	40	27	82	34	22.4	M16
DIN208050SEM16X38	50	16	17	38	38	22.8	M24
DIN208050SEM22X38	50	22	19	47	38	22.8	M24
DIN208050SEM27X38	50	27	21	58	38	22.8	M24
DIN208050SEM32X36	50	32	24	66	36	20.8	M24
DIN208050SEM40X40	50	40	27	82	40	24.8	M24

(Option: Wrench for lock Screw)

TUNGHOLD

DIN2080-FM (Face mill holder)

Face mill holder with DIN2080 shank



Designation	SS	ød	L2	øD1	øD3	L1	L	G2	øD5	G1	G
DIN208040FM40	40	40	27	88	-	-	20	M12	66.7	M20	M16
DIN208050FM40	50	40	27	97.5	88	20.8	36	M12	66.7	M20	M24
DIN208050FM60	50	60	40	128	-	-	35.8	M16	101.6	-	M24

(Option: Wrench for lock Screw)

Reference pages



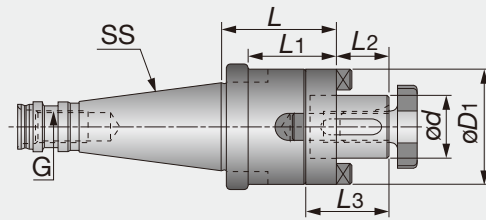
Pull stud
F124



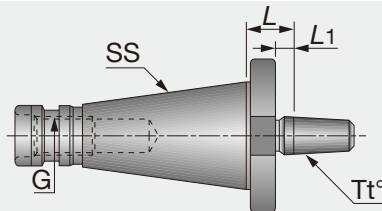
Clamping screw
F129



Wrench
F131



Designation	SS	ød	L2	øD1	L	L1	L3	G
DIN208030SEMC16X35	30	16	17	32	35	25.4	27	M12
DIN208030SEMC22X35	30	22	19	40	35	25.4	31	M12
DIN208030SEMC27X35	30	27	21	48	35	25.4	33	M12
DIN208030SEMC32X50	30	32	24	58	50	40.4	38	M12
DIN208040SEMC22X52	40	22	19	40	52	40.4	31	M16
DIN208040SEMC27X52	40	27	21	48	52	40.4	33	M16
DIN208040SEMC32X52	40	32	24	58	52	40.4	38	M16
DIN208040SEMC40X52	40	40	27	70	52	40.4	41	M16
DIN208050SEMC16X55	50	16	17	32	55	39.8	27	M24
DIN208050SEMC22X55	50	22	19	40	55	39.8	31	M24
DIN208050SEMC27X55	50	27	21	48	55	39.8	33	M24
DIN208050SEMC32X55	50	32	24	58	55	39.8	38	M24
DIN208050SEMC40X55	50	40	27	70	55	39.8	41	M24
DIN208050SEMC50X55	50	50	30	90	55	39.8	46	M24



Designation	SS	Tt°	L	L1	G
DIN208030DCB16X20	30	B16	20	5.4	M12
DIN208040DCB16X22	40	B16	22	10.4	M16
DIN208040DCB18X25	40	B18	25	13.4	M16
DIN208050DCB16X25	50	B16	25	9.8	M24
DIN208050DCB18X25	50	B18	25	9.8	M24

Reference pages



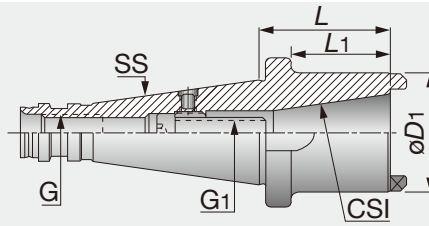
Pull stud
F124



Clamping screw
F129

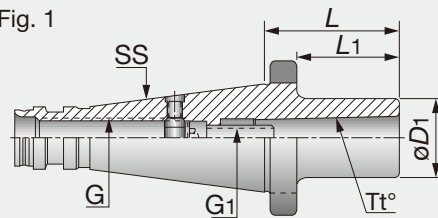
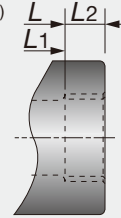


Wrench
F131



Designation	SS	CSI	L	øD1	L1	G1	G
DIN208050AD40	50	DIN2080	50	63	34.8	M16	M24

Fig. 1

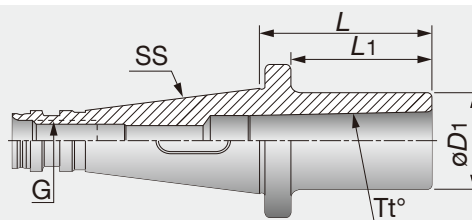
Fig. 2⁽¹⁾

Designation	SS	Tt°	L	øD1	L1	L2	G1	G	Fig.
DIN208040MT1DRW	40	MT1	50	25	38.4	-	M6	M16	1
DIN208040MT2DRW	40	MT2	50	32	38.4	-	M10	M16	1
DIN208040MT3DRW	40	MT3	65	40	53.4	-	M12	M16	1
DIN208040MT4DRW	40	MT4	95	63	-	15	M16	M16	2
DIN208050MT1DRW	50	MT1	60	25	44.8	-	M6	M24	1
DIN208050MT2DRW	50	MT2	60	32	44.8	-	M10	M24	1
DIN208050MT3DRW	50	MT3	65	40	49.8	-	M12	M24	1
DIN208050MT4DRW	50	MT4	65	63	49.8	15	M16	M24	2
DIN208050MT5DRW	50	MT5	100	78	84.4	18	M20	M24	2

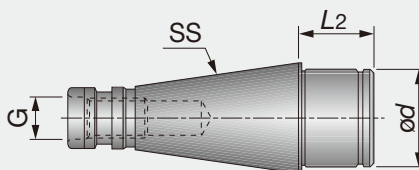
(1) DIN2201.

Reference pages

Pull stud
F124



Designation	SS	Tt°	L	øD1	L1	G
DIN208030MT2X50	30	MT2	50	32	40.4	M12
DIN208030MT3X70	30	MT3	70	40	60.4	M12
DIN208040MT1X50	40	MT1	50	25	38.4	M16
DIN208040MT2X50	40	MT2	50	32	38.4	M16
DIN208040MT3X65	40	MT3	65	40	53.4	M16
DIN208040MT4X95	40	MT4	95	48	83.4	M16
DIN208050MT1X45	50	MT1	45	25	29.8	M24
DIN208050MT2X60	50	MT2	60	32	44.8	M24
DIN208050MT3X65	50	MT3	65	40	49.8	M24
DIN208050MT4X70	50	MT4	70	48	54.8	M24
DIN208050MT5X105	50	MT5	105	63.5	89.2	M24



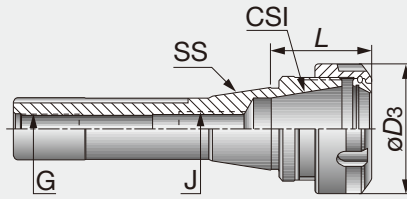
Designation	SS	ød	L2	G
DIN208040CP40	40	40	29	M16
DIN208050CP60	50	60	39	M24



TUNGHOLD

R-8 ER (Collet chuck)

ER collet chucks with R-8 Bridgeport shank



Designation	SS	CSI	Range	L	øD3	J	G
R-8ER16X38	R-8	ER16	0.5-10	38	28	M10	7/16-20
R-8ER32X40	R-8	ER32	2-20	40	50	M12	7/16-20
R-8ER40X72	R-8	ER40	3-26	72	63	M12	7/16-20

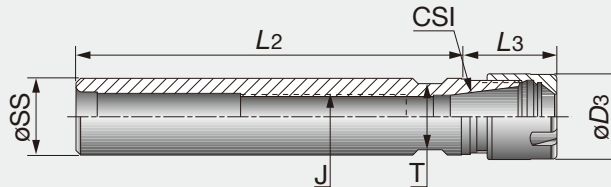
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGHOLD

ST-ER-M (Mini collet)

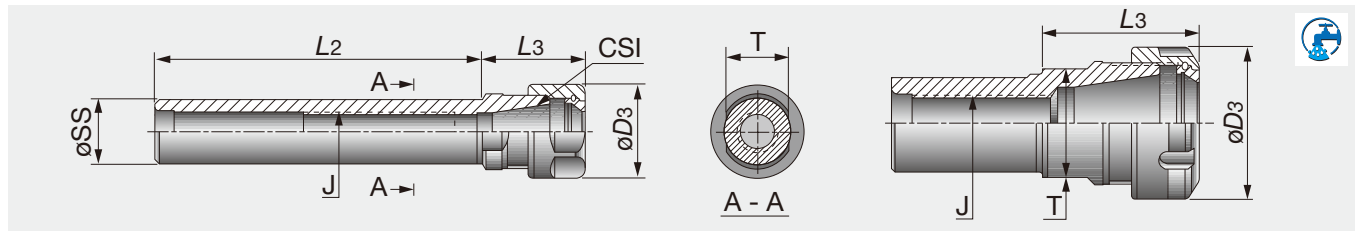
ER Mini-collet chucks with Straight shank



Designation	øSS	CSI	Range	L2	L3	J	øD3	T
ST12X80ER11M	12	ER11	0.5-7	80	26.5	-	16	11
ST16X50ER11MF	16	ER11	0.5-7	50	18.5	M8	16	13
ST16X100ER11M	16	ER11	0.5-7	100	18.5	M8	16	13
ST16X150ER11M	16	ER11	0.5-7	150	18.5	M8	16	13
ST12X80ER16M	12	ER16	0.5-10	80	36.5	-	22	17
ST20X100ER16M	20	ER16	0.5-10	100	25	M12	22	17
ST20X150ER16M	20	ER16	0.5-10	150	25	M12	22	17
ST20X100ER20M	20	ER20	1-13	100	40	M12	28	21
ST20X150ER20M	20	ER20	1-13	150	40	M12	28	21

• Applicable for 10 MPa pressure coolant
• F indicates a flat on the shank.

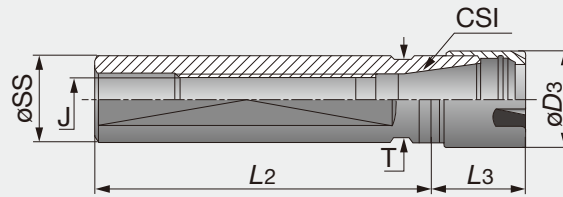
(Option: Wrench for ER collet)



Designation	øSS	CSI	Range	L2	L3	J	øD3	T
ST16X50ER11F	16	ER11	0.5-7	50	18.5	M8	19	13
ST20X50ER11F	20	ER11	0.5-7	50	18.5	M10	19	17
ST20X100ER11	20	ER11	0.5-7	100	18.5	M10	19	17
ST20X150ER11	20	ER11	0.5-7	150	18.5	M10	19	17
ST20X50ER16F	20	ER16	0.5-10	50	32.3	M12	28	19
ST20X100ER16	20	ER16	0.5-10	100	30	M12	28	19
ST20X150ER16	20	ER16	0.5-10	150	30	M12	28	19
ST20X50ER20F	20	ER20	1-13	50	42.5	M12	34	22
ST25X100ER20	25	ER20	1-13	100	36	M16	34	22
ST25X150ER20	25	ER20	1-13	150	36	M16	34	22
ST20X50ER25F	20	ER25	1-16	50	46	M12	42	28
ST20X100ER25	20	ER25	1-16	100	46	M12	42	28
ST20X50ER32F	20	ER32	2-20	50	54	M12	50	36
ST20X100ER32	20	ER32	2-20	100	54	M12	50	36
ST25X50ER25F	25	ER25	1-16	50	46	M16	42	28
ST25X100ER25	25	ER25	1-16	100	46	M16	42	28
ST25X50ER32F	25	ER32	2-20	50	52	M16x2	50	36
ST25X50ER40F	25	ER40	3-26	50	60	M16x2	63	45
ST30X50ER32F	30	ER32	2-20	50	52	M18x1.5	50	36
ST30X50ER40F	30	ER40	3-26	50	60	M18x1.5	63	45
ST32X50ER32F	32	ER32	2-20	50	52	M18x1.5	50	36
ST32X150ER32	32	ER32	2-20	150	52	M18x1.5	50	36
ST32X50ER40F	32	ER40	3-26	50	60	M18x1.5	63	45
ST40X75ER32F	40	ER32	2-20	75	46	M22x1.5	50	44
ST40X75ER40F	40	ER40	3-26	75	55	M22x1.5	63	45
ST50X80ER40F	50	ER40	3-26	80	60	M28x1.5	63	54
ST50X80ER50F	50	ER50	10-34	80	77	M36x1.5	78	58

- Applicable for 10 MPa pressure coolant
- F indicates a flat on the shank.

(Option: Wrench for ER collet)



Designation	ϕSS	CSI	Range	L_2	L_3	J	ϕD_3	T	Machine
ST16X35ER16MF	16	ER16	0.5-10	35	36	M8X1	22	17	Star
ST16X38ER11MF	16	ER11	0.5-7	38	18.5	M8X1	16	14	Star
ST16X140ER11MF	16	ER11	0.5-7	140	18.5	M8X1	16	14	-
ST20X70ER16MF	20	ER16	0.5-10	70	26	M12X1	22	17	Citizen
ST20X120ER16MF	20	ER16	0.5-10	120	26	M12X1	22	17	Citizen
ST20X140ER16MF	20	ER16	0.5-10	140	26	M12X1	22	17	Citizen
ST22X38ER16MF	22	ER16	0.5-10	38	26	M12X1	22	19	Citizen
ST22X70ER16MF	22	ER16	0.5-10	70	26	M12X1	22	19	Star
ST22X70ER25MF	22	ER25	1-16	70	47	M12X1	35	27	Star
ST22X80ER20MF	22	ER20	1-13	80	39	M12X1	28	21	Star
ST22X100ER16MF	22	ER16	0.5-10	100	28	M12X1	22	19	Star
ST25X65ER16MF	25	ER16	0.5-10	65	28	M12X1	22	22	-
ST25X75ER25MF	25	ER25	1-16	75	48	M14X1	35	27	Manurhin
ST25X100ER20MF	25	ER20	1-13	100	28	M14X1	28	22	Tornos
ST25X145ER25MF	25	ER25	1-16	145	36	M14X1	35	27	Tornos
ST25X154ER20MF	25	ER20	1-13	154	28	M14X1	28	22	Tornos
ST32X70ER25MF	32	ER25	1-16	70	30	M18X1	35	27	Schuette

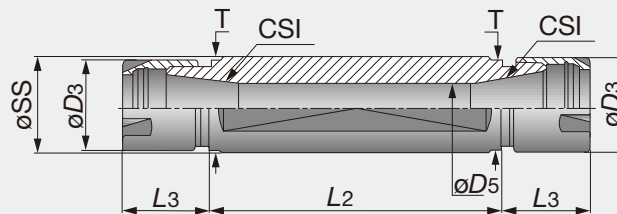
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGHOLD

ST-ER-MF-D

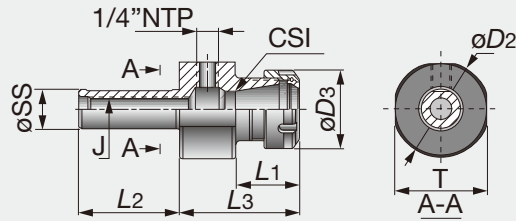
Double ended Mini-collet chucks with flat



Designation	ϕSS	CSI	Range	L_2	L_3	ϕD_3	ϕD_5	T	Machine
ST16X50ER11MFD	16	ER11	0.5-7	50	18.5	16	7.5	14	-
ST20X30ER11MFD	20	ER11	0.5-7	30	18.5	16	7.5	17	Citizen
ST20X50ER11MFD	20	ER11	0.5-7	50	18.5	16	7.5	17	Citizen
ST20X55ER16MFD	20	ER16	0.5-10	55	25	22	10.5	17	Citizen
ST22X55ER16MFD	22	ER16	0.5-10	55	28	22	10.5	19	Star
ST22X75ER16MFD	22	ER16	0.5-10	75	28	22	10.5	19	Star
ST25X62ER16MFD	25	ER16	0.5-10	62	28	22	10.5	22	-
ST32X55ER20MFD	32	ER20	1-13	55	28	28	13.5	27	Star
ST32X75ER20MFD	32	ER20	1-13	75	28	28	13.5	27	Star

• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)



Designation	øSS	CSI	Range	L ₂	L ₃	L ₁	J	øD ₃	øD ₂	T
ST20X65ER16S	20	ER16	0.5-10	65	54	29.6	M12	28	40	34
ST20X65ER20S	20	ER20	1-13	65	63	31	M12	34	40	34
ST20X65ER25S	20	ER25	1-16	65	72	32	M12	42	54	51
ST20X65ER32S	20	ER32	2-20	65	77	41	M12	50	63	59
ST25X65ER25S	25	ER25	1-16	65	72	32	M12	42	54	50
ST25X65ER32S	25	ER32	2-20	65	77	41	M16	50	63	59
ST32X65ER32S	32	ER32	2-20	65	77	41	M18x1.5	50	63	59
ST40X75ER32S	40	ER32	2-20	75	77	41	M22x1.5	50	63	59

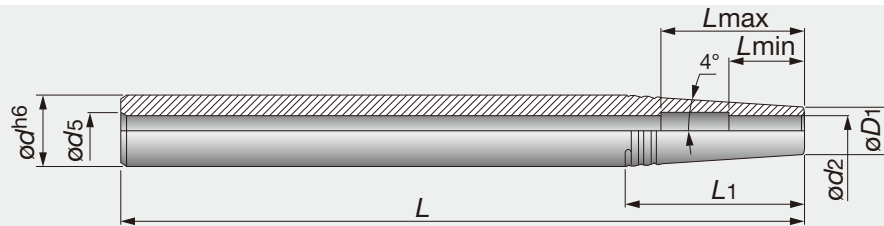
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGSHRINK

ST-SRK

TungShrink thermal shrinking holder for carbide shank with Straight shank



Designation	ød	øD ₂	øD ₁	ød ₅	L	L ₁	L _{min}	L _{max}
ST12X160SRK3	12	3	10	4	160	14.3	10	-
ST12X160SRK4	12	4	10	4	160	14.3	12	27
ST16X160SRK3	16	3	10	6	160	43	10	-
ST16X160SRK4	16	4	10	6	160	43	12	-
ST16X160SRK5	16	5	10	6	160	43	15	-
ST16X160SRK6	16	6	11	6	160	35.5	18	35
ST20X200SRK5	20	5	10	6	200	71.5	15	-
ST20X200SRK6	20	6	11	6	200	64.5	18	40
ST20X200SRK8	20	8	14	6	200	43	25	40
ST25X200SRK6	25	6	11	8	200	100	18	35
ST25X200SRK8	25	8	14	8	200	78.6	25	40
ST25X200SRK10	25	10	16	8	200	64.3	30	50
ST25X200SRK12	25	12	20	8	200	35.7	32	52

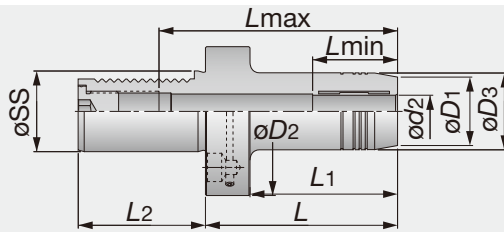
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGHYDRO

DIN69880-HYDRO

Hydraulic chuck holders with DIN698880 shank



Designation	øSS	øD1	øD3	øD2	ød2	L2	L	L1	Lmin	Lmax
DIN69880 30 HYDRO 20X89	20	38	42	68	30	55	89	73	48	85
DIN69880 30 HYDRO 25X100	25	46	50	68	30	55	100	78	54	85
DIN69880 30 HYDRO 32X100	32	56	60	68	30	55	100	78	58	90
DIN69880 40 HYDRO 20X95	20	38	42	83	40	63	95	73	48	130
DIN69880 40 HYDRO 25X95	25	46	50	83	40	63	95	73	54	130
DIN69880 40 HYDRO 32X95	32	56	60	83	40	63	95	78	58	90

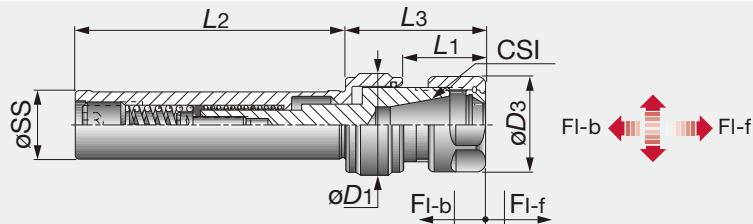
- Applicable for 10 MPa pressure coolant
- Available are reduction sleeves for 12, 20, 25 and 32 mm bore diameters.
- Chucking forces will significantly reduce if reduction sleeves are used (ordered separately).

(Option: Wrench for TungHydro collet)

TUNGGTI

GTI-ER-ST

TungGTI tapping attachment with straight shank

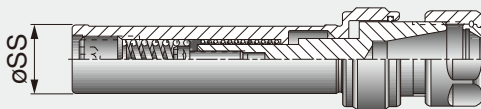


Designation	øSS	CSI	Tap min	Tap max	Range	øD3	øD1	L1	L3	L2	FI-f	FI-b
GTIER11ST16X150M	16	ER11	M2	M7	0.5-7	16	-	19	-	150	6	3
GTIER16ST20X80	20	ER16	M3	M10	0.5-10	28	29.5	24.6	41.6	80	8	3
GTIER20ST20X80	20	ER20	M4	M14	1-13	34	33.5	28	49	80	8	3
GTIER25ST25X80	25	ER25	M5	M16	1-16	42	40.5	32	53	80	9	4
GTIER32ST25X80	25	ER32	M6	M20	1-16	50	56.5	32	77.2	80	9	4
GTIER40ST32X80	32	ER40	M6	M27	2-20	63	56.5	51	95.2	80	9	4

(Option: Wrench for ER collet)

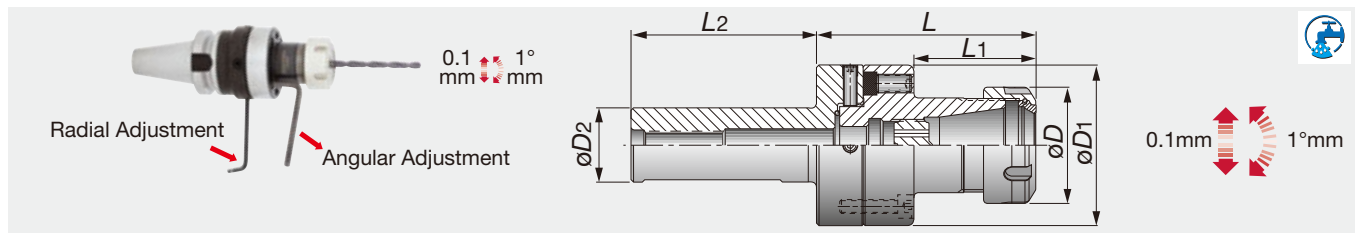
KIT GTI-ER-ST

The Kit contains a DIN 6499 ER tapping attachment with straight shank and a set of spring collets in various bore sizes



Designation	Collet size	øSS	Qty	Range
KITGTIER11ST16X1504M	ER11	16	4	3,4,5,6
KITGTIER16ST20X804	ER16	20	4	4,5,6,7
KITGTIER20ST20X804	ER20	20	4	5,6,7,8
KITGTIER25ST25X805	ER25	25	5	6,7,9,11,12
KITGTIER32ST25X806	ER32	25	6	6,7,9,11,12,16
KITGTIER40ST32X806	ER40	32	6	9,11,14,16,18,20

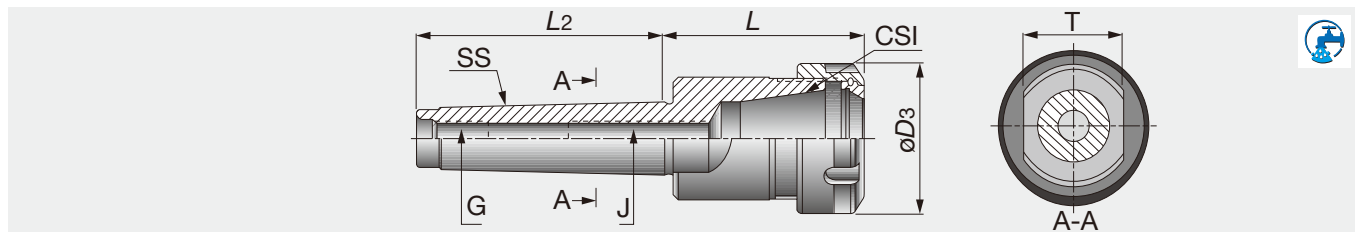
- Includes GTI, collets & wrench



Designation	Range	L	L1	L2	øD	øD1	øD2
ADJST25D70ER32	2-20	94.5	52.5	80	50	70	25
ADJST32D70ER32	2-20	94.5	52.5	80	50	70	32

• Applicable for 10 MPa pressure coolant

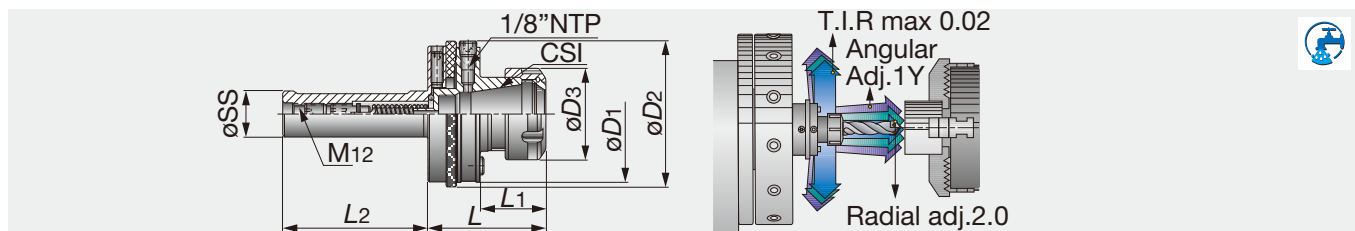
(Option: Wrench for ER collet)



Designation	SS	CSI	Range	L	L2	øD3	J	G	T
MT2ER20X48.5	MT 2	ER20	1-13	48.5	64	34	M10	M10	22
MT2ER25X52	MT 2	ER25	1-16	52	64	42	M10	M10	28
MT3ER32X69	MT 3	ER32	2-20	69	81	50	M12	M12	24
MT3ER40X79	MT 3	ER40	3-26	79	81	63	M12	M12	24
MT4ER32X61	MT 4	ER32	2-20	60.5	102.5	50	M16	M16	32
MT4ER40X82	MT 4	ER40	3-26	81.5	102.5	63	M16	M16	32
MT4ER50X108	MT 4	ER50	10-34	107.5	102.5	78	M16	M16	32
MT5ER40X82	MT 5	ER40	3-26	82	129.5	63	M28x1.5	M20	45
MT5ER50X85	MT 5	ER50	10-34	85	129.5	78	M28x1.5	M20	45

• Applicable for 3 MPa pressure coolant

(Option: Wrench for ER collet)



Designation	øSS	CSI	Range	L	L1	L2	øD3	øD1	øD2
GYROST20ER20	20	ER20	1-13	58.8	28.5	80	34	57	63
GYROST20ER25	20	ER25	1-16	58.8	28.5	80	34	57	63
GYROST25ER25	25	ER25	1-16	65.65	35.5	80	42	74	79
GYROST25ER32	25	ER32	2-20	66.65	36.5	80	50	74	79
GYROST32ER32	32	ER32	2-20	66.65	36.5	80	50	74	79
GYROST40ER32	40	ER32	2-20	66.65	36.5	80	50	74	79

• Applicable for 3 MPa pressure coolant

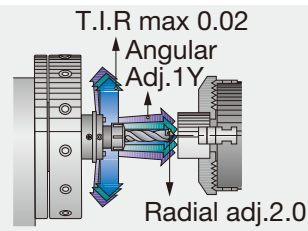
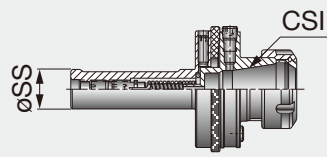
• First-time users should buy a GYRO kit which includes a test bar and a bushing for performing the alignment procedure.

(Option: Wrench for ER collet)

TUNGGYRO

KIT GYRO-ST-ER

The Kit contains 1 center alignment collet chuck and a centering bushing



Designation	ϕSS	CSI	Range
KITGYROST20ER20	20	ER20	1-13
KITGYROST20ER25	20	ER25	1-16
KITGYROST25ER25	25	ER25	1-16
KITGYROST25ER32	25	ER32	2-20
KITGYROST32ER32	32	ER32	2-20
KITGYROST40ER32	40	ER32	2-20

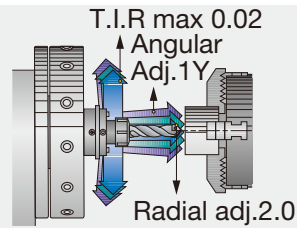
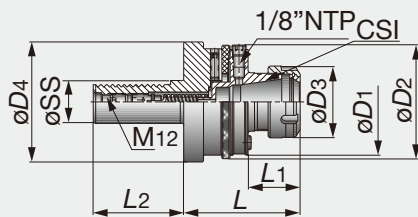
- Applicable for 3 MPa pressure coolant
- Kit includes: GYRO, test bar and bushing.

(Option: Wrench for ER collet)

TUNGGYRO

GYRO DIN69880-ER

Center alignment collet chuck holder for lathe



Designation	ϕSS	CSI	Range	L	L1	L2	$\phi D3$	$\phi D1$	$\phi D2$	$\phi D4$
GYRODIN6988030ER25	30	ER25	1-16	80.65	35.5	55	42	74	79	68
GYRODIN6988030ER32	30	ER32	2-20	81.65	36.5	55	50	74	79	68
GYRODIN6988040ER32	40	ER32	2-20	81.65	36.5	63	50	74	79	83.2
GYRODIN6988050ER32	50	ER32	2-20	81.65	36.5	78	50	74	79	98

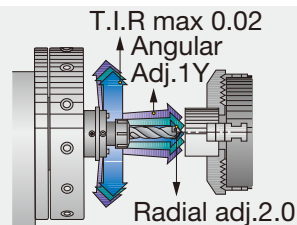
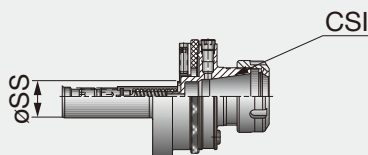
- Applicable for 3 MPa pressure coolant
- First-time users should buy a GYRO kit which includes a test bar and a bushing for performing the alignment procedure.

(Option: Wrench for ER collet)

TUNGGYRO

KIT GYRO-DIN69880-ER

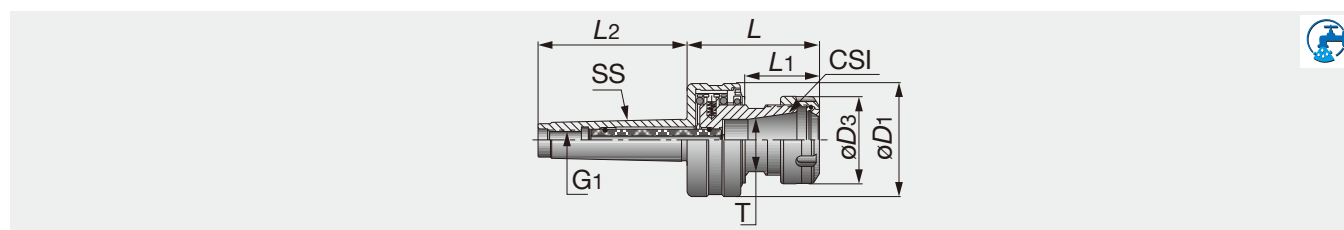
The Kit contains 1 center alignment ER collet chuck with VDI DIN69880 shank and a centering bushing



Designation	ϕSS	CSI	Range
KITGYRO30D69880ER25	30	ER25	1-16
KITGYRO30D69880ER32	30	ER32	2-20
KITGYRO40D69880ER32	40	ER32	2-20
KITGYRO50D69880ER32	50	ER32	2-20

- Applicable for 3 MPa pressure coolant
- Kit includes: GYRO, test bar and bushing.

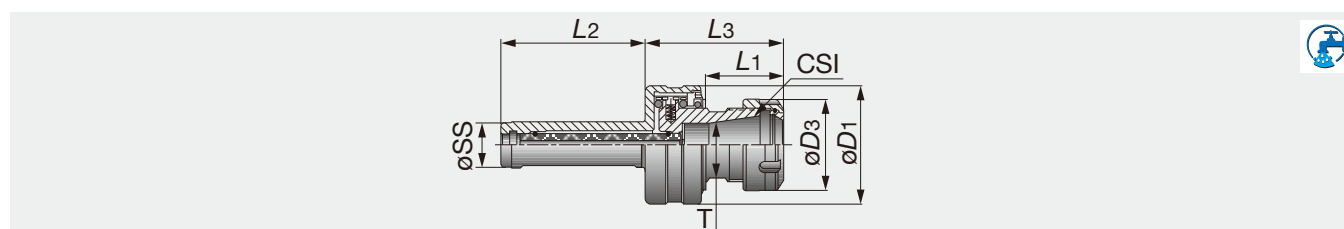
(Option: Wrench for ER collet)



Designation	SS	CSI	Range	L2	L	L1	øD3	øD1	Radial Float	T	G1
GFIMT2ER20	MT 2	ER20	1-13	64	60.5	34.5	34	50	1	22	M10
GFIMT3ER32	MT 3	ER32	2-20	81	81.9	45.9	50	65	1.6	36	M12

- Applicable for 3 MPa pressure coolant
- Maximum 2000 min⁻¹.

(Option: Wrench for ER collet)



Designation	øSS	CSI	Range	L2	L3	L1	øD3	øD1	Radial Float	T
GFIST20ER20	20	ER20	1-13	65	55.5	34.5	34	50	1	22
GFIST25ER32	25	ER32	2-20	80	76.9	45.9	50	65	1.6	36

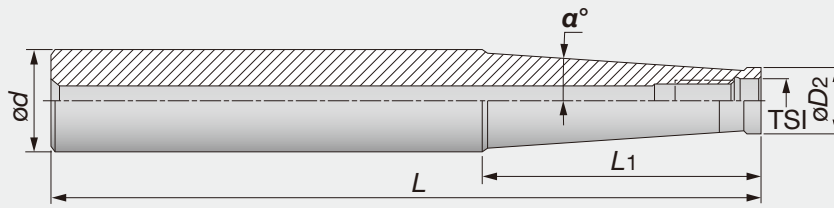
- Applicable for 3 MPa pressure coolant
- Maximum 2000 min⁻¹.

(Option: Wrench for ER collet)

TUNGFLEX

S M TungFlex-straight shank

TungFlex modular tooling system with straight shank (Screw clamp holder for modular cutting heads)



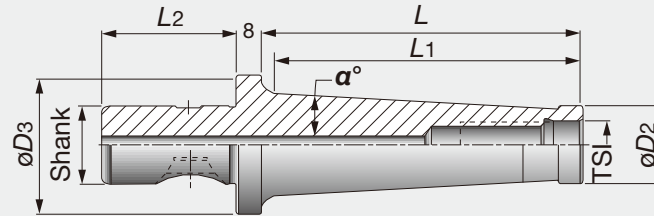
Designation	ød	øD2	L	L1	α°	TSI
SM06-L60C10	10	9.7	60	20	0	M6
SM06-L105-C12	12	9.7	105	60	1.2	M6
SM06-L125-C16	16	9.7	125	60	3.3	M6
SM08-L73C16	16	13	73	25	0	M8
SM08-L128-C16	16	13	128	80	0.9	M8
SM08-L170-C20	20	13	170	66.8	3.3	M8
SM10-L80C20	20	18	80	30	0	M10
SM10-L130-C20	20	18	130	80	0.6	M10
SM10-L200-C25	25	19	200	57.2	3.3	M10
SM12-L86-C25	25	21	86	30	5.1	M12
SM12-L200-C32	32	21	200	78	4.4	M12
SM16-L95-C32	32	29	95	35	1.7	M16
SM16-L230-C32	32	29	230	50	1.8	M16

- Applicable for 10 MPa pressure coolant
- All of the shanks have a coolant holes.

TUNGFIT TUNGFLEX

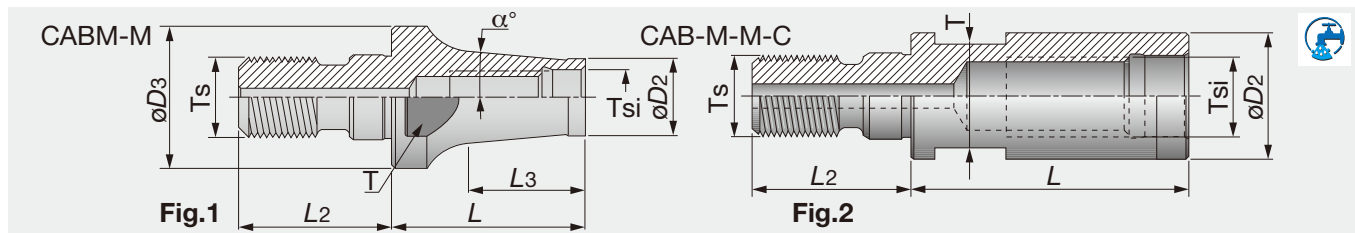
S M-CF4 TungFit adaptor

TungFlex conversion adaptor with TungFit



Designation	øD2	L	L1	α°	shank	øD3	L2	TSI
SM12-L85/3.30-CF4	21	93	81.3	4.4	CF4	44	42	M12
SM16-L130/5.11-CF4	29	138	126.8	2.6	CF4	44	42	M16
SM12-L140/5.50-CF4	21	148	139.1	4.4	CF4	44	42	M12
SM16-L170/6.70-CF4	29	178	168.6	2	CF4	44	42	M16

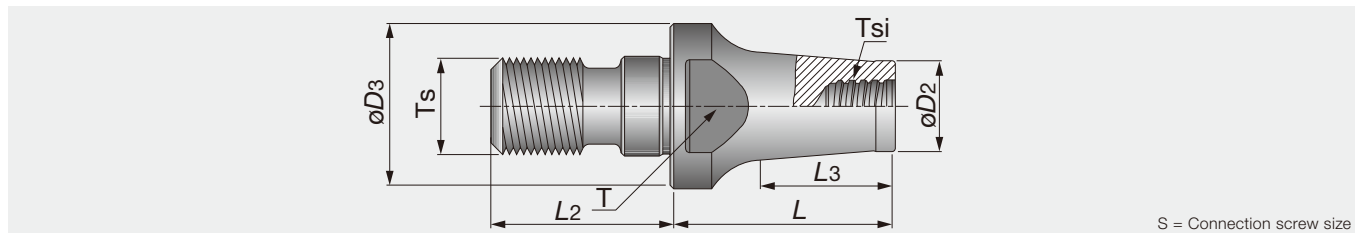
- Applicable for 10 MPa pressure coolant



Designation	Ts	α°	ϕD_2	L	L3	ϕD_3	L2	T	Tsi
CABM06M08	M8	5.7	9.7	30	24.8	13	17.5	9.5	M6
CABM08M08-C ⁽¹⁾	M8	0	13	30	-	-	17.5	9.6	M8
CABM08M10	M10	5.2	13	40	33.4	18	20	15	M8
CABM10M10-C ⁽¹⁾	M10	0	18	35	-	-	20	15	M10
CABM10M12	M12	2.5	18	45	36.4	21	22	17	M10
CABM12M12-C ⁽¹⁾	M12	0	21	40	-	-	22	17	M12
CABM12M16	M16	6.3	21	50	42.5	29	25	25	M12
CABM16M16-C ⁽¹⁾	M16	0	29	40	-	-	25	25	M16

• Applicable for 10 MPa pressure coolant

(1) With coolant holes



Designation	ϕD_2	ϕD_3	L	L2	L3	Tsi	Ts	T
VAD130L016S08-S-M8	11.7	13	16	17.5	6	S08	M8	11
VAD130L025S08-S-M8	11.7	13	25	17.5	20	S08	M8	11
VAD180L020S08-S-M10	11.7	18	20	20	12	S08	M10	13
VAD180L025S08-S-M10	11.7	18	25	20	15	S08	M10	11
VAD210L020S08-S-M12	11.7	21	20	20	10	S08	M12	12.75
VAD210L025S08-S-M12	11.7	21	25	20	13	S08	M12	12.75

• Applicable for 10 MPa pressure coolant

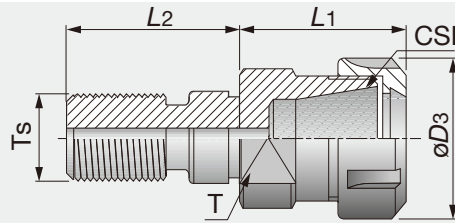
• Wrench size, used on flats for tightening (sold separately).

• Do not apply lubricant to the threaded connection.

TUNGFLEX

CDP-ER-M

TungFlex adaptor with ER collet chucks



Designation	Ts	CSI	Range	L1	L2	øD3	T
CDPER11M10M	M10	ER11	0.5-7	27	20	16	15
CDPER16M10M	M10	ER16	0.5-10	38.1	20	22	17
CDPER11M12M	M12	ER11	0.5-7	27	22	16	17
CDPER16M12M	M12	ER16	0.5-10	37.1	22	22	17
CDPER16M16	M16	ER16	0.5-10	36.6	25	28	25
CDPER20M16	M16	ER20	1-13	45.5	25	34	25
CDPER25M16	M16	ER25	1-16	44.5	25	42	28

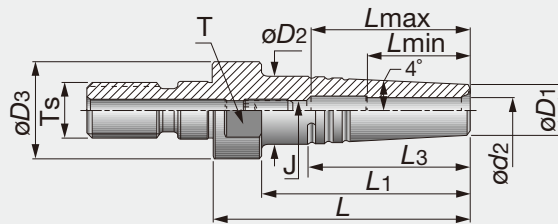
• Applicable for 10 MPa pressure coolant

(Option: Wrench for ER collet)

TUNGFLEX

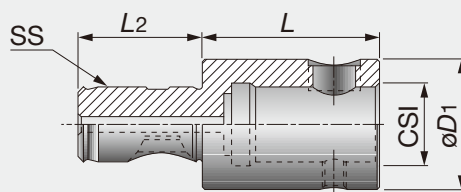
CDP-M-SRK

TungFlex adaptor with shrinking holder for carbide shank



Designation	Ts	øD3	øD2	øD1	øD2	L	L1	L3	Lmin	Lmax	J	T	Key
CDPM10SRK3X40	M10	18	3	10	14	40	31.5	28.4	10	16	M4	15	2
CDPM10SRK4X40	M10	18	4	10	14	40	31.5	28.4	12	19	M4	15	2
CDPM10SRK5X40	M10	18	5	10	14	40	31.5	28.4	15	25	M4	15	2
CDPM12SRK3X45	M12	21	3	10	14	45	36.5	28.8	10	16	M5	18	2.5
CDPM12SRK4X45	M12	21	4	10	14	45	36.5	28.8	12	18	M5	18	2.5
CDPM12SRK5X45	M12	21	5	10	14	45	36.5	28.8	15	25	M5	18	2.5
CDPM12SRK6X45	M12	21	6	11	15	45	36.5	28.4	18	28	M5	18	2.5
CDPM12SRK8X45	M12	21	8	14	18	45	36.5	28.8	25	35	M5	18	2.5
CDPM12SRK10X45	M12	21	10	16	21	45	-	35.6	30	40	M5	18	2.5
CDPM12SRK12X45	M12	21	12	20	25	45	-	36.0	32	42	M5	18	2.5

• Applicable for 10 MPa pressure coolant



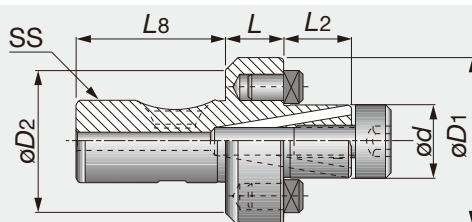
Designation	SS	L2	L	CSI	øD1
EXCF4-S	CF4	42	60	CF4	44
EXCF4-L	CF4	42	100	CF4	44

- Applicable for 10 MPa pressure coolant
- Tightening torque: 58.8 N·m.

TUNGFIT

SEM-CF

TungFit shell mill adaptor



Designation	SS	ød	øD2	øD1	L	L2	L8
SEM22CF4C	CF4	22	44	47	16	19	42

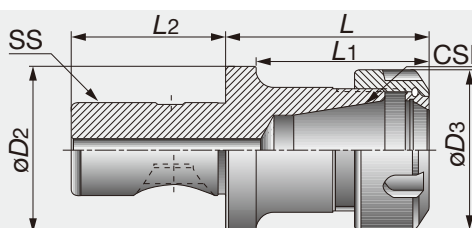
- Applicable for 10 MPa pressure coolant
- Tightening torque: 58.8 N·m.

(Option: Wrench for Lock Screw)

TUNGFIT

ER-CF

TungFit collet chuck adaptor



Designation	SS	CSI	Range	L	L1	L2	øD3	øD2
ER11CF4-S	CF4	ER11	0.5-7	55	47	42	19	44
ER16CF4-L	CF4	ER16	0.5-10	100	92	42	28	44
ER16CF4-S	CF4	ER16	0.5-10	55	47	42	28	44
ER20CF4-S	CF4	ER20	1-13	55	92	42	34	44
ER25CF4-S	CF4	ER25	1-16	55	47	42	42	44
ER32CF4-L	CF4	ER32	2-20	100	92	42	50	44
ER32CF4-S	CF4	ER32	2-20	55	47	42	50	44

- Applicable for 10 MPa pressure coolant
- Tightening torque: 58.8 N·m.

(Option: Wrench for ER collet)

TUNGHOLD ER Collet Chucking System

Shanks

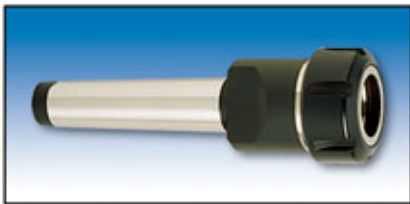
DIN69871



ST Straight Shank



MT Morse Taper



Collet Options

ER-SPR (ER Spring Collet)



ER-SEAL (ER SEAL Collet for Internal coolant)



ER-SEAL JET2 (ER SEAL Collet for External coolant)



ER-SRK (ER Collet with SHRINK Holder)



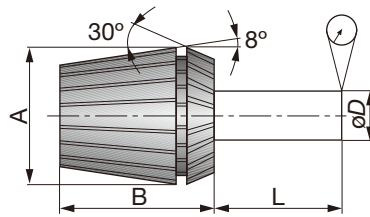
ER32 GTIN (ER Collet with Tapping Holder)



ER32 ODP (ER Collet with Indexable Modular System)



ER Collet standard DIN6499



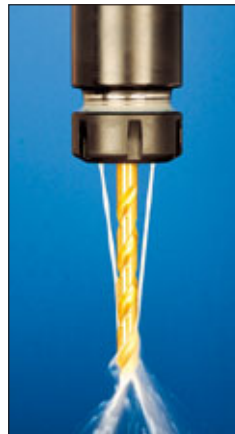
Collet type	A	B	L	ϕD	T.I.R Precision Standard type	T.I.R Precision "AA" Ultra Precision type	DIN6499
ER-11	11.5	18	6	1-1.6	0.01	0.005	-
ER-16	17	27	10	1.6-3	0.01	0.005	0.015
ER-20	21	31	16	3-6	0.01	0.005	0.015
ER-25	26	35	25	6-10	0.01	0.005	0.015
ER-32	33	40	40	10-18	0.01	0.005	0.020
ER-40	41	46	50	18-26	0.01	0.005	0.020
ER-50	52	60	60	26-34	0.01	-	0.025

ER - Coolit Sealed Collet



Sealed Collet Jet

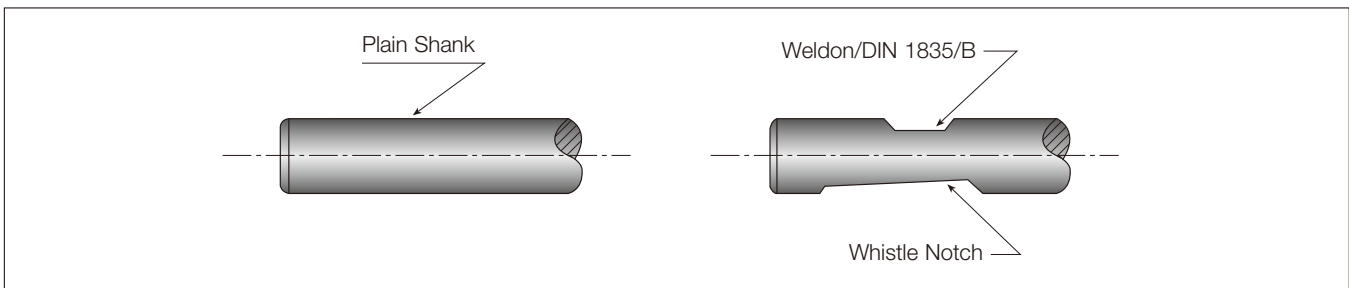
For straight shank cutting tools with internal coolant supply.



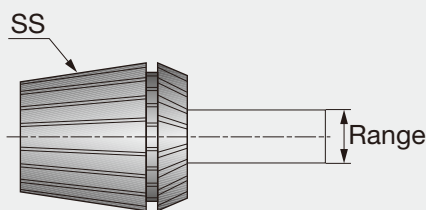
Sealed Collet JET2

With angular double nozzles. Coolant flow is direct to the cutting edge - for use with standard straight shank cutting tools (without coolant hole).

Standard Shank which can be used in Sealed Collets



Note: The front end of the sealed collet should be located beyond weldon or the whistle notch.

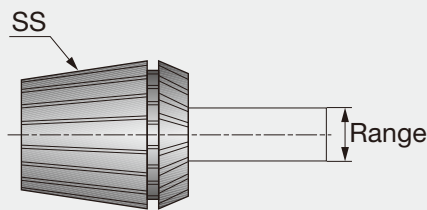


Designation	SS	Range
ER11SPR0.5-1	ER11	0.5-1
ER11SPR1-2	ER11	1-2
ER11SPR2-3	ER11	2-3
ER11SPR3-4	ER11	3-4
ER11SPR4-5	ER11	4-5
ER11SPR5-6	ER11	5-6
ER11SPR6-7	ER11	6-7
ER16SPR0.5-1	ER16	0.5-1
ER16SPR1-2	ER16	1-2
ER16SPR2-3	ER16	2-3
ER16SPR3-4	ER16	3
ER16SPR4-5	ER16	4-5
ER16SPR5-6	ER16	5-6
ER16SPR6-7	ER16	6-7
ER16SPR7-8	ER16	7-8
ER16SPR8-9	ER16	8-9
ER16SPR9-10	ER16	9-10
ER20SPR1-2	ER20	1-2
ER20SPR2-3	ER20	2-3
ER20SPR3-4	ER20	3-4
ER20SPR4-5	ER20	4-5
ER20SPR5-6	ER20	5-6
ER20SPR6-7	ER20	6-7
ER20SPR7-8	ER20	7-8
ER20SPR8-9	ER20	8-9
ER20SPR9-10	ER20	9-10
ER20SPR10-11	ER20	10-11
ER20SPR11-12	ER20	11-12
ER20SPR12-13	ER20	12-13
ER25SPR1-2	ER25	1-2
ER25SPR2-3	ER25	2-3
ER25SPR3-4	ER25	3-4
ER25SPR4-5	ER25	4-5
ER25SPR5-6	ER25	5-6
ER25SPR6-7	ER25	6-7
ER25SPR7-8	ER25	7-8
ER25SPR8-9	ER25	8-9
ER25SPR9-10	ER25	9-10
ER25SPR10-11	ER25	10-11
ER25SPR11-12	ER25	11-12
ER25SPR12-13	ER25	12-13
ER25SPR13-14	ER25	13-14
ER25SPR14-15	ER25	14-15
ER25SPR15-16	ER25	15-16
ER32SPR2-3	ER32	2-3
ER32SPR3-4	ER32	3-4
ER32SPR4-5	ER32	4-5
ER32SPR5-6	ER32	5-6
ER32SPR6-7	ER32	6-7
ER32SPR7-8	ER32	7-8
ER32SPR8-9	ER32	8-9
ER32SPR9-10	ER32	9-10
ER32SPR10-11	ER32	10-11

Designation	SS	Range
ER32SPR11-12	ER32	11-12
ER32SPR12-13	ER32	12-13
ER32SPR13-14	ER32	13-14
ER32SPR14-15	ER32	14-15
ER32SPR15-16	ER32	15-16
ER32SPR16-17	ER32	16-17
ER32SPR17-18	ER32	17-18
ER32SPR18-19	ER32	18-19
ER32SPR19-20	ER32	19-20
ER40SPR3-4	ER40	3-4
ER40SPR4-5	ER40	4-5
ER40SPR5-6	ER40	5-6
ER40SPR6-7	ER40	6-7
ER40SPR7-8	ER40	7-8
ER40SPR8-9	ER40	8-9
ER40SPR9-10	ER40	9-10
ER40SPR10-11	ER40	10-11
ER40SPR11-12	ER40	11-12
ER40SPR12-13	ER40	12-13
ER40SPR13-14	ER40	13-14
ER40SPR14-15	ER40	14-15
ER40SPR15-16	ER40	15-16
ER40SPR16-17	ER40	16-17
ER40SPR17-18	ER40	17-18
ER40SPR18-19	ER40	18-19
ER40SPR19-20	ER40	19-20
ER40SPR20-21	ER40	20-21
ER40SPR21-22	ER40	21-22
ER40SPR22-23	ER40	22-23
ER40SPR23-24	ER40	23-24
ER40SPR24-25	ER40	24-25
ER40SPR25-26	ER40	25-26
ER50SPR10-12	ER50	10-12
ER50SPR12-14	ER50	12-14
ER50SPR14-16	ER50	14-16
ER50SPR16-18	ER50	16-18
ER50SPR18-20	ER50	18-20
ER50SPR20-22	ER50	20-22
ER50SPR22-24	ER50	22-24
ER50SPR24-26	ER50	24-26
ER50SPR26-28	ER50	26-28
ER50SPR28-30	ER50	28-30
ER50SPR30-32	ER50	30-32
ER50SPR32-34	ER50	32-34

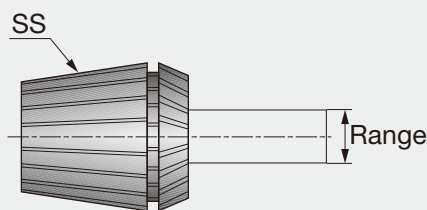


ULTRA PRECISION AA



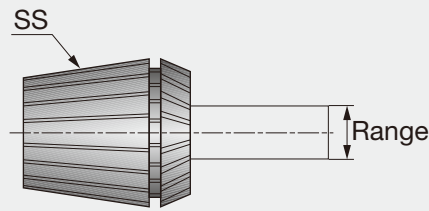
Designation	SS	Range
ER11SPR0.5-1AA	ER11	0.5-1
ER11SPR1-2AA	ER11	1-2
ER11SPR2-3AA	ER11	2-3
ER11SPR3-4AA	ER11	3-4
ER11SPR4-5AA	ER11	4-5
ER11SPR5-6AA	ER11	5-6
ER11SPR6-7AA	ER11	6-7
ER16SPR0.5-1AA	ER16	0.5-1
ER16SPR1-2AA	ER16	1-2
ER16SPR2-3AA	ER16	2-3
ER16SPR3-4AA	ER16	3-4
ER16SPR4-5AA	ER16	4-5
ER16SPR5-6AA	ER16	5-6
ER16SPR6-7AA	ER16	6-7
ER16SPR7-8AA	ER16	7-8
ER16SPR8-9AA	ER16	8-9
ER16SPR9-10AA	ER16	9-10
ER20SPR12-13AA	ER20	12-13
ER20SPR2-3AA	ER20	2-3
ER20SPR3-4AA	ER20	3-4
ER20SPR4-5AA	ER20	4-5
ER20SPR5-6AA	ER20	5-6
ER20SPR6-7AA	ER20	6-7
ER20SPR7-8AA	ER20	7-8
ER20SPR8-9AA	ER20	8-9
ER20SPR9-10AA	ER20	9-10
ER20SPR1-2AA	ER20	1-2
ER20SPR10-11AA	ER20	10-11
ER20SPR11-12AA	ER20	11-12
ER25SPR12-13AA	ER25	12-13
ER25SPR2-3AA	ER25	2-3
ER25SPR3-4AA	ER25	3-4
ER25SPR4-5AA	ER25	4-5
ER25SPR5-6AA	ER25	5-6
ER25SPR6-7AA	ER25	6-7
ER25SPR7-8AA	ER25	7-8
ER25SPR8-9AA	ER25	8-9
ER25SPR9-10AA	ER25	9-10
ER25SPR1-2AA	ER25	1-2
ER25SPR10-11AA	ER25	10-11
ER25SPR11-12AA	ER25	11-12
ER25SPR13-14AA	ER25	13-14
ER25SPR14-15AA	ER25	14-15
ER25SPR15-16AA	ER25	15-16
ER32SPR2-3AA	ER32	2-3
ER32SPR3-4AA	ER32	3-4
ER32SPR4-5AA	ER32	4-5
ER32SPR5-6AA	ER32	5-6
ER32SPR6-7AA	ER32	6-7
ER32SPR7-8AA	ER32	7-8
ER32SPR8-9AA	ER32	8-9
ER32SPR9-10AA	ER32	9-10
ER32SPR10-11AA	ER32	10-11

Designation	SS	Range
ER32SPR11-12AA	ER32	11-12
ER32SPR12-13AA	ER32	12-13
ER32SPR13-14AA	ER32	13-14
ER32SPR14-15AA	ER32	14-15
ER32SPR15-16AA	ER32	15-16
ER32SPR16-17AA	ER32	16-17
ER32SPR17-18AA	ER32	17-18
ER32SPR18-19AA	ER32	18-19
ER32SPR19-20AA	ER32	19-20
ER40SPR3-4AA	ER40	3-4
ER40SPR4-5AA	ER40	4-5
ER40SPR5-6AA	ER40	5-6
ER40SPR6-7AA	ER40	6-7
ER40SPR7-8AA	ER40	7-8
ER40SPR8-9AA	ER40	8-9
ER40SPR9-10AA	ER40	9-10
ER40SPR10-11AA	ER40	10-11
ER40SPR11-12AA	ER40	11-12
ER40SPR12-13AA	ER40	12-13
ER40SPR13-14AA	ER40	13-14
ER40SPR14-15AA	ER40	14-15
ER40SPR15-16AA	ER40	15-16
ER40SPR16-17AA	ER40	16-17
ER40SPR17-18AA	ER40	17-18
ER40SPR18-19AA	ER40	18-19
ER40SPR19-20AA	ER40	19-20
ER40SPR20-21AA	ER40	20-21
ER40SPR21-22AA	ER40	21-22
ER40SPR22-23AA	ER40	22-23
ER40SPR23-24AA	ER40	23-24
ER40SPR24-25AA	ER40	24-25
ER40SPR25-26AA	ER40	25-26



Designation	SS	Range
ER16SEAL3-4	ER16	3-4
ER16SEAL4-5	ER16	4-5
ER16SEAL5-6	ER16	5-6
ER16SEAL6-7	ER16	6-7
ER16SEAL7-8	ER16	7-8
ER16SEAL8-9	ER16	8-9
ER16SEAL9-10	ER16	9-10
ER20SEAL3-4	ER20	3-4
ER20SEAL4-5	ER20	4-5
ER20SEAL5-6	ER20	5-6
ER20SEAL6-7	ER20	6-7
ER20SEAL7-8	ER20	7-8
ER20SEAL8-9	ER20	8-9
ER20SEAL9-10	ER20	9-10
ER20SEAL10-11	ER20	10-11
ER20SEAL11-12	ER20	11-12
ER20SEAL12-13	ER20	12-13
ER25SEAL3-4	ER25	3-4
ER25SEAL4-5	ER25	4-5
ER25SEAL5-6	ER25	5-6
ER25SEAL6-7	ER25	6-7
ER25SEAL7-8	ER25	7-8
ER25SEAL8-9	ER25	8-9
ER25SEAL9-10	ER25	9-10
ER25SEAL10-11	ER25	10-11
ER25SEAL11-12	ER25	11-12
ER25SEAL12-13	ER25	12-13
ER25SEAL13-14	ER25	13-14
ER25SEAL14-15	ER25	14-15
ER25SEAL15-16	ER25	15-16
ER32SEAL3-4	ER32	3-4
ER32SEAL4-5	ER32	4-5
ER32SEAL5-6	ER32	5-6
ER32SEAL6-7	ER32	6-7
ER32SEAL7-8	ER32	7-8
ER32SEAL8-9	ER32	8-9
ER32SEAL9-10	ER32	9-10
ER32SEAL10-11	ER32	10-11
ER32SEAL11-12	ER32	11-12
ER32SEAL12-13	ER32	12-13
ER32SEAL13-14	ER32	13-14
ER32SEAL14-15	ER32	14-15
ER32SEAL15-16	ER32	15-16
ER32SEAL16-17	ER32	16-17
ER32SEAL17-18	ER32	17-18
ER32SEAL18-19	ER32	18-19
ER32SEAL19-20	ER32	19-20
ER40SEAL3-4	ER40	3-4
ER40SEAL4-5	ER40	4-5
ER40SEAL5-6	ER40	5-6
ER40SEAL6-7	ER40	6-7
ER40SEAL7-8	ER40	7-8
ER40SEAL8-9	ER40	8-9

Designation	SS	Range
ER40SEAL9-10	ER40	9-10
ER40SEAL10-11	ER40	10-11
ER40SEAL11-12	ER40	11-12
ER40SEAL12-13	ER40	12-13
ER40SEAL13-14	ER40	13-14
ER40SEAL14-15	ER40	14-15
ER40SEAL15-16	ER40	15-16
ER40SEAL16-17	ER40	16-17
ER40SEAL17-18	ER40	17-18
ER40SEAL18-19	ER40	18-19
ER40SEAL19-20	ER40	19-20
ER40SEAL20-21	ER40	20-21
ER40SEAL21-22	ER40	21-22
ER40SEAL22-23	ER40	22-23
ER40SEAL23-24	ER40	23-24
ER40SEAL24-25	ER40	24-25
ER40SEAL25-26	ER40	25-26



Designation	SS	Range
ER16SEAL3-4JET2	ER16	3-4
ER16SEAL4-5JET2	ER16	4-5
ER16SEAL5-6JET2	ER16	5-6
ER16SEAL6-7JET2	ER16	6-7
ER16SEAL7-8JET2	ER16	7-8
ER16SEAL8-9JET2	ER16	8-9
ER16SEAL9-10JET2	ER16	9-10
ER20SEAL3-4JET2	ER20	3-4
ER20SEAL4-5JET2	ER20	4-5
ER20SEAL5-6JET2	ER20	5-6
ER20SEAL6-7JET2	ER20	6-7
ER20SEAL7-8JET2	ER20	7-8
ER20SEAL8-9JET2	ER20	8-9
ER20SEAL9-10JET2	ER20	9-10
ER20SEAL10-11JET2	ER20	10-11
ER20SEAL11-12JET2	ER20	11-12
ER20SEAL12-13JET2	ER20	12-13
ER25SEAL3-4JET2	ER25	3-4
ER25SEAL4-5JET2	ER25	4-5
ER25SEAL5-6JET2	ER25	5-6
ER25SEAL6-7JET2	ER25	6-7
ER25SEAL7-8JET2	ER25	7-8
ER25SEAL8-9JET2	ER25	8-9
ER25SEAL9-10JET2	ER25	9-10
ER25SEAL10-11JET2	ER25	10-11
ER25SEAL11-12JET2	ER25	11-12
ER25SEAL12-13JET2	ER25	12-13
ER25SEAL13-14JET2	ER25	13-14
ER25SEAL14-15JET2	ER25	14-15
ER25SEAL15-16JET2	ER25	15-16
ER32SEAL3-4JET2	ER32	3-4
ER32SEAL4-5JET2	ER32	4-5
ER32SEAL5-6JET2	ER32	5-6
ER32SEAL6-7JET2	ER32	6-7
ER32SEAL7-8JET2	ER32	7-8
ER32SEAL8-9JET2	ER32	8-9
ER32SEAL9-10JET2	ER32	9-10
ER32SEAL10-11JET2	ER32	10-11
ER32SEAL11-12JET2	ER32	11-12
ER32SEAL12-13JET2	ER32	12-13
ER32SEAL13-14JET2	ER32	13-14
ER32SEAL14-15JET2	ER32	14-15
ER32SEAL15-16JET2	ER32	15-16
ER32SEAL16-17JET2	ER32	16-17
ER32SEAL17-18JET2	ER32	17-18
ER32SEAL18-19JET2	ER32	18-19
ER32SEAL19-20JET2	ER32	19-20
ER40SEAL3-4JET2	ER40	3-4
ER40SEAL4-5JET2	ER40	4-5
ER40SEAL5-6JET2	ER40	5-6
ER40SEAL6-7JET2	ER40	6-7
ER40SEAL7-8JET2	ER40	7-8
ER40SEAL8-9JET2	ER40	8-9

Designation	SS	Range
ER40SEAL9-10JET2	ER40	9-10
ER40SEAL10-11JET2	ER40	10-11
ER40SEAL11-12JET2	ER40	11-12
ER40SEAL12-13JET2	ER40	12-13
ER40SEAL13-14JET2	ER40	13-14
ER40SEAL14-15JET2	ER40	14-15
ER40SEAL15-16JET2	ER40	15-16
ER40SEAL16-17JET2	ER40	16-17
ER40SEAL17-18JET2	ER40	17-18
ER40SEAL18-19JET2	ER40	18-19
ER40SEAL19-20JET2	ER40	19-20
ER40SEAL20-21JET2	ER40	20-21
ER40SEAL21-22JET2	ER40	21-22
ER40SEAL22-23JET2	ER40	22-23
ER40SEAL23-24JET2	ER40	23-24
ER40SEAL24-25JET2	ER40	24-25
ER40SEAL25-26JET2	ER40	25-26

TUNGHOLD

SET ER-SPR

Sets of DIN 6499 ER spring collets with hard touch coating



Designation	Collet size	Qty	Range
SETER11SPR7	ER11	7	0.5-7
SETER16SPR10	ER16	10	0.5-10
SETER20SPR12	ER20	12	1-13
SETER25SPR15	ER25	15	1-16
SETER32SPR18	ER32	18	2-20
SETER40SPR23	ER40	23	3-26
SETER50SPR12	ER50	12	10-34

TUNGHOLD

SET ER-SPR-AA

Sets of DIN 6499 ER 'AA' ultra precise spring collets with hard touch coating



Designation	Collet size	Qty	Range
SETER11SPR7AA	ER11	7	0.5-7
SETER16SPR10AA	ER16	10	0.5-10
SETER20SPR12AA	ER20	12	1-13
SETER25SPR15AA	ER25	15	1-16
SETER32SPR18AA	ER32	18	2-20
SETER40SPR23AA	ER40	23	3-26

TUNGHOLD

SET ER-SEAL

Sets of DIN 6499 ER coolant collets with hard touch coating, sealed for 100 bar



Designation	Collet size	Qty	Range
SETER16SEAL7	ER16	7	3-10
SETER20SEAL10	ER20	10	3-13
SETER25SEAL13	ER25	13	3-16
SETER32SEAL17	ER32	17	3-20
SETER40SEAL23	ER40	23	3-26

TUNGHOLD

SET ER-SEAL-JET2

Sets of ER collet, sealed for 1450 PSI collets with hard touch coating. sealed for 100 bar



Designation	Collet size	Qty	Range
SETER16SEAL7JET2	ER16	7	3-13
SETER25SEAL13JET2	ER25	13	3-20
SETER32SEAL17JET2	ER32	17	3-26
SETER40SEAL23JET2	ER40	23	3-26

TUNGHOLD

SET ER SPR-EM⁽¹⁾

Sets of ER spring collets DIN 6499 with hard touch coating



Designation	Collet size	Qty	Range
SETER16SPR8EM	ER16	8	3,4,5,6,7,8,9,10
SETER20SPR5EM	ER20	5	4,6,8,10,12
SETER25SPR6EM	ER25	6	4,6,8,10,12,16
SETER32SPR6EM	ER32	6	6,8,10,12,16,20
SETER40SPR7EM	ER40	7	6,8,10,12,16,20,25

(1) Contains popular endmill sizes only.

TUNGHOLD

SET-ER SEAL-EM⁽¹⁾

A Set of ER collet, JET collets, sealed for up to 100 bar.the hard touch coating, sealed for 100 bar

Designation	Collet size	Qty	Range
SETER16SEAL5EM	ER16	5	4,5,6,8,10
SETER20SEAL5EM	ER20	5	4,6,8,10,12
SETER25SEAL6EM	ER25	6	4,6,8,10,12,16
SETER32SEAL6EM	ER32	6	6,8,10,12,16,20
SETER40SEAL7EM	ER40	7	6,8,10,12,16,20,25

(1) Contains popular endmill sizes only.

TUNGHOLD

SET ER-SEAL-EM JET2⁽¹⁾

A set of ER collet, JET2 collets, sealed for up to 100 bar

Designation	Collet size	Qty	Range
SETER25SEAL6EMJET2	ER25	6	4,6,8,10,12,16
SETER32SEAL6EMJET2	ER32	6	6,8,10,12,16,20
SETER40SEAL7EMJET2	ER40	7	6,8,10,12,16,20,25

(1) Contains popular endmill sizes only.

TUNGHOLD

KIT R-8-ER

The Kit contains ER collet chuck with a bridgeport shank and a set of collets in various bore sizes



Designation	Collet size	Qty	Range
KITR-810ER16	ER16	10	0.5-10
KITR-818ER32	ER32	18	2-20

• Each kit contains one collet chuck, a full set of ER collets and a Wrench.

TUNGHOLD

KIT DIN2080-ER

The Kit contains 1 DIN 2080 taper shank with ER collet chuck and a set of ER spring collets



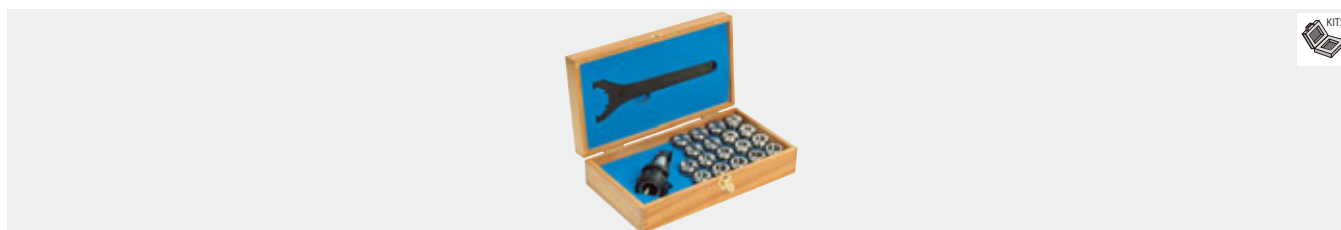
Designation	Collet size	Qty	Range
KITDIN20803018ER32	ER32	18	2-20
KITDIN20804018ER32	ER32	18	2-20
KITDIN20804023ER40	ER40	23	3-26
KITDIN20805023ER40	ER40	23	3-26

• Each kit contains one collet chuck, a full set of ER collets and a Wrench.

TUNGHOLD

KIT MT-ER

The Kits contain ER collet chuck with a morse taper shank and a set of collets in various bore sizes



Designation	Collet size	Qty	Range
KITMT318ER32	ER32	18	2-20
KITMT423ER40	ER40	23	3-26

- Each kit contains one collet chuck, a full set of ER collets and a Wrench.

TUNGHOLD

KIT ST-ER-Mini

The Kits contain ER Mini collet chuck with a cylindrical shank and a set of collets in various bore sizes



Designation	Collet size	Qty	Range
KITST12X807ER11M	ER11	7	0.5-7
KITST12X8010ER16M	ER16	10	0.5-10
KITST16X507ER11MF	ER11	7	0.5-7
KITST16X1007ER11M	ER11	7	0.5-7
KITST16X1507ER11M	ER11	7	0.5-7
KITST20X10010ER16M	ER16	10	0.5-10
KITST20X15010ER16M	ER16	10	0.5-10
KITST20X10012ER20M	ER20	12	1-12
KITST20X15012ER20M	ER20	12	1-12

- Each kit contains one collet chuck, a full set of ER collets and a Wrench. • F indicates a flat on the shank.

TUNG HOLD

KIT ST-ER

Contains 1 ER collet chuck with a cylindrical shank and a set of collets in various bore sizes



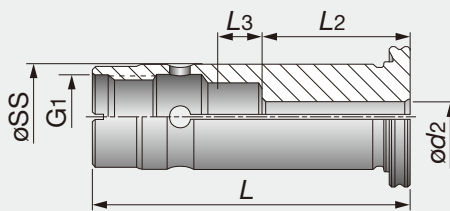
Designation	Collet size	Qty	Range
KITST16X507ER11F	ER11	7	0.5-7
KITST20X1007ER11	ER11	7	0.5-7
KITST20X1507ER11	ER11	7	0.5-7
KITST20X5010ER16F	ER16	10	0.5-10
KITST20X10010ER16	ER16	10	0.5-10
KITST20X15010ER16	ER16	10	0.5-10
KITST20X5012ER20F	ER20	12	1-12
KITST25X10012ER20	ER20	12	1-12

• Each kit contains one collet chuck, a full set of ER collets and a Wrench. • F indicates a flat on the shank.

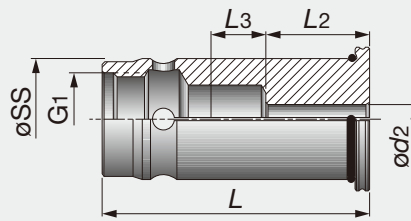
TUNG MAX

SC-SPR

SC straight collets for TungMax power chucks



Designation	ød2	øSS	L	L2	L3	G1
SC20SPR6	6	20	60	28	7	M16
SC20SPR8	8	20	60	28	7	M16
SC20SPR10	10	20	60	35	13	M16
SC20SPR12	12	20	60	40	8	M16
SC20SPR14	14	20	60	40	8	M16
SC20SPR15	15	20	60	40	8	M16
SC20SPR16	16	20	60	39	9	M16
SC32SPR6	6	32	72	28	17	M24X1.5
SC32SPR8	8	32	72	28	17	M24X1.5
SC32SPR10	10	32	72	35	13	M24X1.5
SC32SPR12	12	32	72	40	5	M24X1.5
SC32SPR14	14	32	72	40	5	M24X1.5
SC32SPR15	15	32	72	40	19.5	M24X1.5
SC32SPR16	16	32	72	44	17.5	M24X1.5
SC32SPR18	18	32	72	44	17.5	M24X1.5
SC32SPR19	19	32	72	44	17.5	M24X1.5
SC32SPR20	20	32	72	46	15.5	M24X1.5
SC32SPR24	24	32	72	45	10.5	M24X1.5
SC32SPR25	25	32	72	51	10.5	M24X1.5

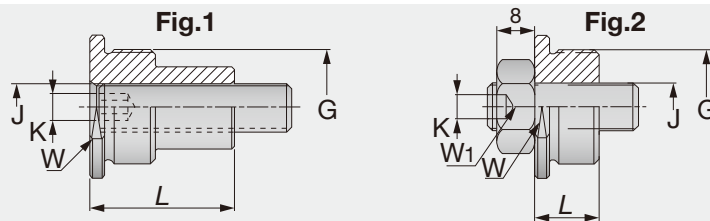


Designation	Ød2	ØSS	L	L2	L3	G1
SC20SEAL6	6	20	60	28	7	M16
SC20SEAL8	8	20	60	28	7	M16
SC20SEAL10	10	20	60	35	13	M16
SC20SEAL12	12	20	60	40	8	M16
SC20SEAL14	14	20	60	40	8	M16
SC20SEAL15	15	20	60	40	8	M16
SC20SEAL16	16	20	60	39	9	M16
SC32SEAL6	6	32	72	28	17	M24X1.5
SC32SEAL8	8	32	72	28	17	M24X1.5
SC32SEAL10	10	32	72	35	13	M24X1.5
SC32SEAL12	12	32	72	40	5	M24X1.5
SC32SEAL14	14	32	72	40	5	M24X1.5
SC32SEAL15	15	32	72	40	5	M24X1.5
SC32SEAL16	16	32	72	44	17.5	M24X1.5
SC32SEAL18	18	32	72	44	17.5	M24X1.5
SC32SEAL19	19	32	72	44	17.5	M24X1.5
SC32SEAL20	20	32	72	46	15.5	M24X1.5
SC32SEAL24	24	32	72	46	15.5	M24X1.5
SC32SEAL25	25	32	72	51	10.5	M24X1.5

TUNGMAX

PRESET SC-CAP

Preset screw housing for SC-SPR TungMax collets



Designation	L	W	J	G	Fig	Range	Key	CSI
PRESETSCCAP8x1.25L	28	16	M8X25	M16	1	6-8	4	SC20
PRESETSCCAP8x1.25	15	16	M8X25	M16	2	10-16	4	SC20
PRESETSCCAP10x1.5L	30	27	M10X30	M24X1.5	1	6-14	5	SC32
PRESETSCCAP10x1.5	13.5	27	M10X30	M24X1.5	2	16-25	5	SC32

TUNGHYDRO

KIT BT-HYDRO

Hydraulic chuck kits with MAS-BT Form A/B Shanks



Designation	BT size	ød2	Qty	Range
KITBT40HYDRO20X73	40	20	5	8,10,12,14,16
KITBT40HYDRO32X110	40	32	7	6,8,10,12,16,20,25

- Each kit contains one HYDROFIT chuck, a set of SC...HYDRO sealed reducers and a clamping wrench.

TUNGHYDRO

KIT DIN69871-HYDRO

Contains a hydraulic chuck with a DIN69781 tapered shank and a set of collets in various bore sizes



Designation	SK size	ød2	Qty	Range
KITDIN6987140HYDRO20X65	40	20	5	8,10,12,14,16
KITDIN6987140HYDRO32X117	40	32	7	6,8,10,12,16,20,25

- Each kit contains one HYDROFIT chuck, a set of SC...HYDRO sealed reducers and a clamping wrench.

TUNGHYDRO

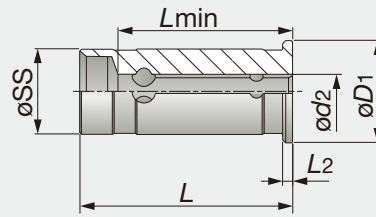
KIT HSK A-HYDRO

Contains a hydraulic chuck with HSK tapered shank and a set of collets in various bore sizes



Designation	HSK size	ød2	Qty	Range
KITHSKA63HYDRO20X100	63	20	5	8,10,12,14,16
KITHSKA63HYDRO32X125	63	32	7	6,8,10,12,16,20,25

- Each kit contains one HYDROFIT chuck, a set of SC...HYDRO sealed reducers and a clamping wrench.

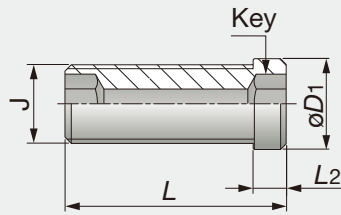


Designation	øSS	ød2	Lmin	L	øD1	L2
SC12SHYDRO3	12	3	19	46.5	16	2
SC12SHYDRO4	12	4	24	46.5	16	2
SC12SHYDRO5	12	5	28	46.5	16	2
SC12SHYDRO6	12	6	33	46.5	16	2
SC12SHYDRO8	12	8	39	46.5	16	2
SC20SHYDRO3	20	3	20	53	24	2
SC20SHYDRO4	20	4	25	53	24	2
SC20SHYDRO5	20	5	27	53	24	2
SC20SHYDRO6	20	6	34	53	24	2
SC20SHYDRO8	20	8	39	53	24	2
SC20SHYDRO10	20	10	40	53	24	2
SC20SHYDRO12	20	12	41	53	24	2
SC20SHYDRO14	20	14	44	53	24	2
SC20SHYDRO16	20	16	44	53	24	2
SC25SHYDRO6	25	6	37	60	30	4
SC25SHYDRO8	25	8	37	60	30	4
SC25SHYDRO10	25	10	40	60	30	4
SC25SHYDRO12	25	12	44	60	30	4
SC25SHYDRO14	25	14	46	60	30	4
SC25SHYDRO16	25	16	48	60	30	4
SC25SHYDRO18	25	18	50	60	30	4
SC25SHYDRO20	25	20	50	60	30	4
SC32SHYDRO6	32	6	33	66	40	4
SC32SHYDRO8	32	8	38	66	40	4
SC32SHYDRO10	32	10	39	66	40	4
SC32SHYDRO12	32	12	42	66	40	4
SC32SHYDRO14	32	14	44	66	40	4
SC32SHYDRO16	32	16	44	66	40	4
SC32SHYDRO18	32	18	44	66	40	4
SC32SHYDRO20	32	20	49	66	40	4
SC32SHYDRO25	32	25	66	66	40	4

TUNGHYDRO

PRESET SCREW HYDRO

Tool stopper preset screws for the HYDRO collet chucks

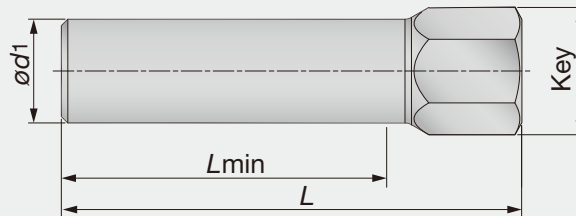


Designation	øD1	J	L	L2	Key
PRESETSCREWHYDROM5	5	M5	14	1	2.5
PRESETSCREWHYDROM6	6	M6	14	1.5	3
PRESETSCREWHYDROM8	8	M8X1	14	2	4
PRESETSCREWHYDROM10	10	M10X1	17	2	5
PRESETSCREWHYDROM16	14	M16X1	20	2	8

TUNGHYDRO

TEST BAR HYDRO

Torque test bars for hydraulic chucks



Designation	ød1	L	Key	Lmin ⁽¹⁾	Torque*
TESTBARHYDRO6	6	53	10	27	15
TESTBARHYDRO8	8	53	10	27	25
TESTBARHYDRO10	10	56	10	32	50
TESTBARHYDRO12	12	62	10	37	110
TESTBARHYDRO14	14	62	10	37	120
TESTBARHYDRO16	16	71	17	37	180
TESTBARHYDRO18	18	71	17	42	230
TESTBARHYDRO20	20	71	17	42	250
TESTBARHYDRO25	25	79	17	48	310
TESTBARHYDRO32	32	87	17	52	450

*Torque: Recommended torque (N-m) for clamping. (1) Minimum holding length.

TUNGMAX

KIT SK-TUNGMAX

Contains a DIN 69871 holder with TUNGMAX power chuck and a set of collets with various bore sizes



Designation	SK size	ød2	Qty	Range
KITSK40MAXIN20X956	40	20	6	6,8,10,12,14,16
KITSK40MAXIN32X1067	40	32	7	6,8,10,12,16,20,25
KITSK50MAXIN32X1007	50	32	7	6,8,10,12,16,20,25

• Each kit contains one power chuck, a set of SC-SPR collets, extraction hook and wrench.

TUNGMAX

KIT HSK A-TUNGMAX

Contains a power chuck with an HSK taper shank and a set of collets in various bore sizes



Designation	HSK size	ød2	Qty	Range
KITHSKA100MAXIN20X1156	40	20	6	6,8,10,12,14,16
KITHSKA63MAXIN20X956	50	20	6	6,8,10,12,14,16
KITHSKA63MAXIN32X1137	50	32	7	6,8,10,12,16,20,25

- Each kit contains one power chuck, a set of SC-SPR collets, extraction hook and wrench.

TUNGMAX

KIT BT-TUNGMAX

Contains a power chuck with a BT tapered shank and a set of collets in various bore sizes



Designation	BT size	ød2	Qty	Range
KITBT40MAXIN20X856	40	20	6	6,8,10,12,14,16
KITBT40MAXIN32X1087	40	32	7	6,8,10,12,16,20,25
KITBT50MAXIN20X1056	50	20	6	6,8,10,12,14,16
KITBT50MAXIN32X1067	50	32	7	6,8,10,12,16,20,25

- Each kit contains one power chuck, a set of SC-SPR collets, extraction hook and wrench.

TUNGMAX

SET SC-SPR

Sets of SC straight collets for TUNGMAX power chucks



Designation	Collet size	Qty	Range
SETSC20SPR6	20	6	6,8,10,12,14,16
SETSC32SPR9	32	9	6,8,10,12,14,16,18,20,25

TUNGMAX

SET SC-SEAL

Sets of SC straight collets with coolant holes for TUNGMAX power chuck

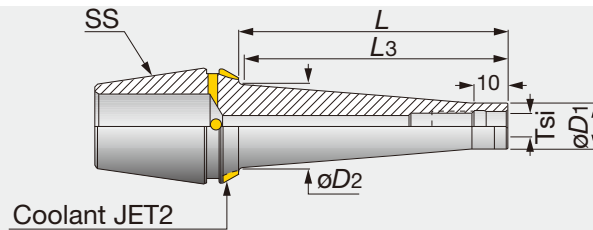


Designation	Collet size	Qty	Range
SETSC20SEAL6	20	6	6,8,10,12,14,16
SETSC32SEAL9	32	9	6,8,10,12,14,16,18,20,25

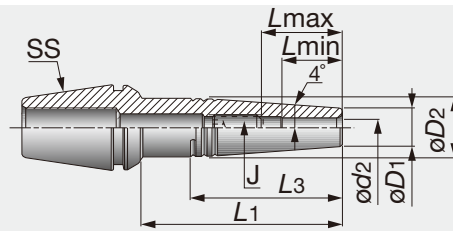
TUNGFLEX

ER-ODP

TungFlex threaded connector with integral ER collet for ER collet chucks

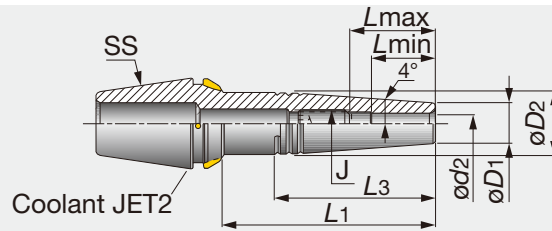


Designation	Tsi	SS	øD1	øD2	L	L3
ER32ODPM6X25	M6	ER32	9.8	14	25	22
ER32ODPM6X50	M6	ER32	9.8	20	50	48
ER32ODPM6X75	M6	ER32	9.8	23	75	74
ER32ODPM8X25	M8	ER32	13.1	15	25	22
ER32ODPM8X50	M8	ER32	13.1	23	50	49
ER32ODPM8X75	M8	ER32	13.1	23	75	74
ER32ODPM10X25	M10	ER32	18	20	25	23
ER32ODPM10X50	M10	ER32	18	24	50	49
ER32ODPM12X25	M12	ER32	21	24	25	24
ER32ODPM12X50	M12	ER32	21	24	50	49



Designation	SS	ød2	øD1	øD2	L1	L3	Lmin	Lmax	J	Key
ER11SRK3X10 ⁽¹⁾	ER11	3	7.6	8.5	10	-	9.5	-	-	-
ER11SRK3X25 ⁽¹⁾	ER11	3	7.6	8.5	25	-	11.5	-	-	-
ER11SRK4X10 ⁽¹⁾	ER11	4	7.6	8.5	10	-	9.5	-	-	-
ER11SRK4X25 ⁽¹⁾	ER11	4	7.6	8.5	25	-	11.5	-	-	-
ER20SRK3X35	ER20	3	10	13.5	35	24	10	16	M6	3
ER20SRK3X60	ER20	3	10	13.5	60	24	10	16	M6	3
ER20SRK4X35	ER20	4	10	13.5	35	24	12	18	M6	3
ER20SRK4X60	ER20	4	10	13.5	60	24	12	18	M6	3
ER20SRK5X35	ER20	5	10	13.5	35	24	15	21	M6	3
ER20SRK5X60	ER20	5	10	13.5	60	24	15	21	M6	3
ER20SRK6X35	ER20	6	11	14.7	35	25	18	24	M8	4
ER20SRK6X60	ER20	6	11	15.2	60	29	18	24	M8	4
ER25SRK3X35	ER25	3	10	13.5	35	24	10	16	M6	3
ER25SRK3X60	ER25	3	10	16.3	60	44	10	16	M6	3
ER25SRK4X35	ER25	4	10	13.5	35	24	12	18	M6	3
ER25SRK4X60	ER25	4	10	16.3	60	44	12	18	M6	3
ER25SRK5X35	ER25	5	10	13.5	35	24	15	21	M6	3
ER25SRK5X60	ER25	5	10	16.3	60	44	15	21	M6	3
ER25SRK6X35	ER25	6	11	14.7	35	26	18	24	M8	4
ER25SRK6X60	ER25	6	11	17.3	60	44	18	24	M8	4
ER25SRK8X35	ER25	8	14	17.8	35	26	25	30	M10	5
ER25SRK8X60	ER25	8	14	19.7	60	39	25	31	M10	5
ER32SRK3X35	ER32	3	10	13.2	35	22	10	16	M6	3
ER32SRK3X60	ER32	3	10	16.3	60	44	10	16	M6	3
ER32SRK3X85	ER32	3	10	19.8	85	70	10	16	M6	3
ER32SRK4X35	ER32	4	10	13.4	35	23	12	18	M6	3
ER32SRK4X60	ER32	4	10	16.3	60	44	12	18	M6	3
ER32SRK4X85	ER32	4	10	19.8	85	70	12	18	M6	3
ER32SRK5X35	ER32	5	10	13.5	35	24	15	21	M6	3
ER32SRK5X60	ER32	5	10	16.3	60	44	15	21	M6	3
ER32SRK5X85	ER32	5	10	19.8	85	70	15	21	M6	3
ER32SRK6X35	ER32	6	11	14.7	35	25	18	24	M8	4
ER32SRK6X60	ER32	6	11	17.3	60	45	18	24	M8	4
ER32SRK6X85	ER32	6	11	20.8	85	69	18	26	M8	4
ER32SRK8X35	ER32	8	14	18.8	35	33	25	31	M10	5
ER32SRK8X60	ER32	8	14	20.4	60	45	25	31	M10	5
ER32SRK8X85	ER32	8	14	23.2	85	65	25	31	M10	5
ER32SRK10X35	ER32	10	16	20.8	35	34	30	35	M12	6
ER32SRK10X60	ER32	10	16	22.4	60	44	30	36	M12	6
ER32SRK10X85	ER32	10	16	23	85	49	30	36	M12	6
ER32SRK12X35	ER32	12	20	24	35	28	32	-	-	-
ER32SRK12X60	ER32	12	20	24	60	28	32	38	M14	6
ER32SRK12X85	ER32	12	20	24	85	28	32	38	M14	6

(1) To be used only for SpinJet spindles



Designation	SS	ød2	øD1	øD2	L1	L3	Lmin	Lmax	J	Key
ER20SRK3X35JET2	ER20	3	10	13.5	35	24.5	10	16	M6	3
ER20SRK5X35JET2	ER20	5	10	13.5	35	24.5	15	21	M6	3
ER20SRK6X35JET2	ER20	6	11	14.7	35	25.5	18	24	M8	4
ER20SRK6X60JET2	ER20	6	11	15.2	60	29.5	18	24	M8	4
ER25SRK3X35JET2	ER25	3	10	13.5	35	24.5	10	16	M6	3
ER25SRK3X60JET2	ER25	3	10	16.3	60	44.5	10	16	M6	3
ER25SRK4X35JET2	ER25	4	10	13.5	35	24.5	12	18	M6	3
ER25SRK4X60JET2	ER25	4	10	16.3	60	44.5	12	18	M6	3
ER25SRK5X35JET2	ER25	5	10	13.5	35	24.5	15	21	M6	3
ER25SRK5X60JET2	ER25	5	10	16.3	60	44.5	15	21	M6	3
ER25SRK6X35JET2	ER25	6	11	14.7	35	26	18	24	M8	4
ER25SRK6X60JET2	ER25	6	11	17.3	60	44.5	18	24	M8	4
ER25SRK8X35JET2	ER25	8	14	17.8	35	26.5	25	30	M10	5
ER25SRK8X60JET2	ER25	8	14	19.7	60	39.5	25	31	M10	5
ER32SRK3X35JET2	ER32	3	10	13.2	35	22.5	10	16	M6	3
ER32SRK3X60JET2	ER32	3	10	16.3	60	44.5	10	16	M6	3
ER32SRK3X85JET2	ER32	3	10	19.8	85	70	10	16	M6	3
ER32SRK4X35JET2	ER32	4	10	13.4	35	23.5	12	18	M6	3
ER32SRK4X60JET2	ER32	4	10	16.3	60	44.5	12	18	M6	3
ER32SRK4X85JET2	ER32	4	10	19.8	85	70	12	18	M6	3
ER32SRK5X35JET2	ER32	5	10	13.5	35	24.5	15	21	M6	3
ER32SRK5X60JET2	ER32	5	10	16.3	60	44.5	15	21	M6	3
ER32SRK5X85JET2	ER32	5	10	19.8	85	70	15	21	M6	3
ER32SRK6X35JET2	ER32	6	11	14.7	35	25.5	18	24	M8	4
ER32SRK6X60JET2	ER32	6	11	17.3	60	45	18	24	M8	4
ER32SRK6X85JET2	ER32	6	11	20.8	85	69.5	18	26	M8	4
ER32SRK8X35JET2	ER32	8	14	18.8	35	33	25	31	M10	5
ER32SRK8X60JET2	ER32	8	14	20.4	60	45	25	31	M10	5
ER32SRK8X85JET2	ER32	8	14	23.2	85	65	25	31	M10	5
ER32SRK10X35JET2	ER32	10	16	20.8	35	34	30	35	M12	6
ER32SRK10X60JET2	ER32	10	16	22.4	60	44.5	30	36	M12	6
ER32SRK10X85JET2	ER32	10	16	23	85	49.5	30	36	M12	6
ER32SRK12X35JET2	ER32	12	20	24	35	28	32	-	-	-
ER32SRK12X60JET2	ER32	12	20	24	60	28	32	38	M14	6
ER32SRK12X85JET2	ER32	12	20	24	85	28	32	38	M14	6

TUNGSHRINK

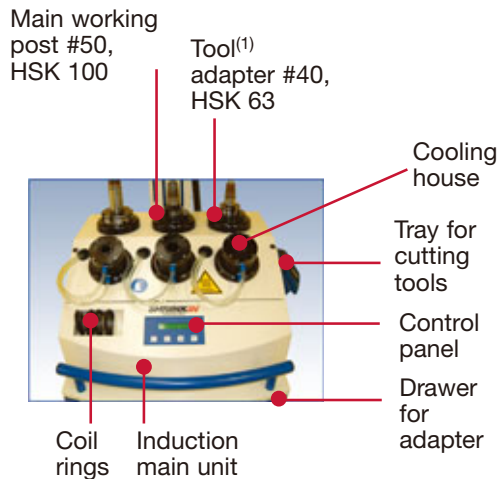
IND SHRINKIN UNIT

SHRINKIN Induction heating unit for shrink tool chucking



Designation

IND SHRINK IN UNIT EUR



Machine

3-380-500V 50/60HZ

TUNGSHRINK

IND SHRINK START UNIT

SHRINKIN Induction heating unit for shrink tool chucking



Designation

IND SHRINK START UNIT EUR

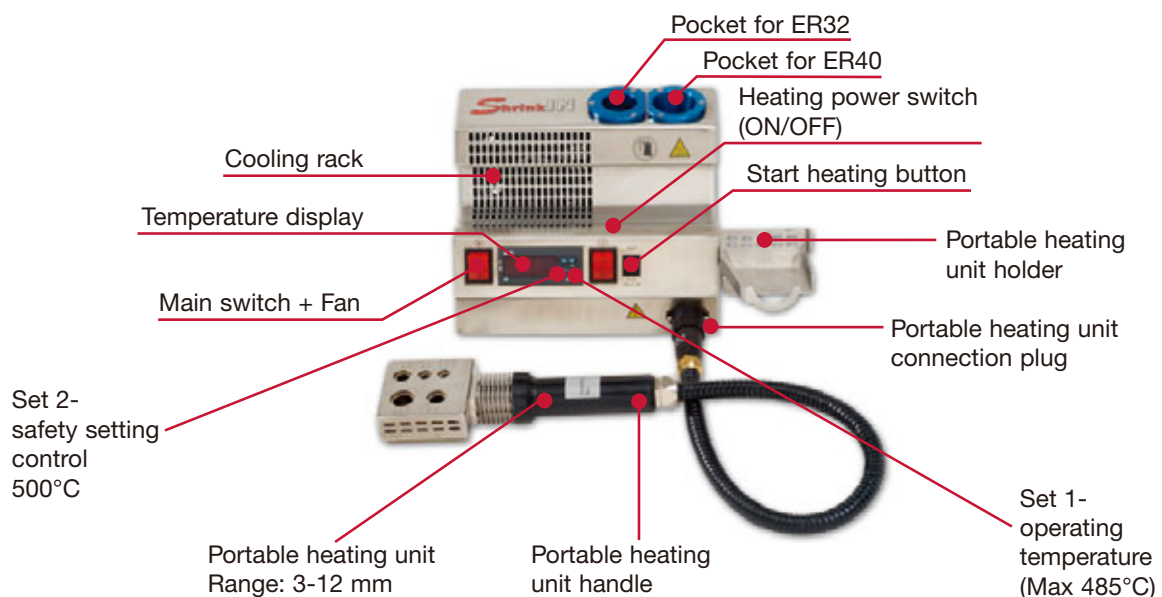
Machine

3-380-500V 50/60HZ

TUNGSHRINK

SHRINKIN UNIT V2

SHRINKIN Thermal shrink heating unit for shrink tool chucking



Designation

SHRINKIN UNIT V2 EUR

Machine

220V 50/60HZ



TUNGSHRINK

SET ER-SRK

A set of ER collets with thermal shrink chucks and various bore sizes



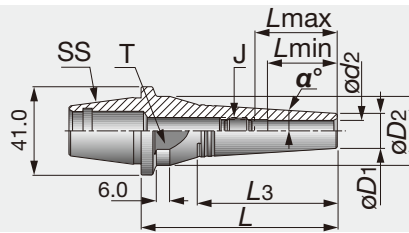
Designation	Collet size	Qty	Range
SETER32SRKL6EUR	32	6	4,5,6,8,10,12
SETER32SRKM6EUR	32	6	4,5,6,8,10,12
SETER32SRKS6EUR	32	6	4,5,6,8,10,12

KIT SHRINKIN-V2 EUR

The KIT includes a thermal shrink heating unit and 6 ER32 SRK thermal collets

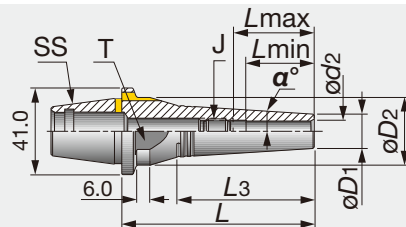


Designation	Unit	Set of collet	Qty	Range
KITSHRINKINMV2EUR	SHRINKIN UNIT V2	SET ER32 SRK M 6EUR	6	4,5,6,8,10,12
KITSHRINKINSV2EUR	SHRINKIN UNIT V2	SET ER32 SRK S 6EUR	6	4,5,6,8,10,12



Designation	SS	ød2	øD1	ød2	L	L3	J	Key	α°	T	Lmin	Lmax
ER32SRF3X50	32 SRF	3	10	32	50	31	M6	3	4	27	10	16
ER32SRF3X85	32 SRF	3	10	32	85	60.5	M6	3	4	27	10	16
ER32SRF4X50	32 SRF	4	10	32	50	31	M6	3	4	27	12	18
ER32SRF4X85	32 SRF	4	10	32	85	60.5	M6	3	4	27	12	18
ER32SRF5X50	32 SRF	5	10	32	50	31	M6	3	4	27	15	21
ER32SRF5X85	32 SRF	5	10	32	85	60.5	M6	3	4	27	15	21
ER32SRF6X50	32 SRF	6	11	32	50	31	M8	4	4	27	18	24
ER32SRF6X85	32 SRF	6	11	32	85	60.5	M8	4	4	27	18	24
ER32SRF8X50	32 SRF	8	14	32	50	33	M10	5	4	27	25	31
ER32SRF8X85	32 SRF	8	14	32	85	60.5	M10	5	4	27	25	31
ER32SRF10X50	32 SRF	10	16	32	50	35	M12	6	4	27	30	35
ER32SRF10X85	32 SRF	10	16	32	85	60.5	M12	6	4	27	30	36
ER32SRF12X50	32 SRF	12	20	32	50	35	M14	6	4	27	32	37
ER32SRF12X85	32 SRF	12	20	32	85	50	M14	6	4	27	32	38

• Tightening torque: 235 N-m.



Designation	SS	ød2	øD1	ød2	L	L3	J	Key	α°	T	Lmin	Lmax
ER32SRF3X50JET2	32 SRF	3	10	32	50	31	M6	3	4	27	10	16
ER32SRF3X85JET2	32 SRF	3	10	32	85	60	M6	3	4	27	10	16
ER32SRF4X50JET2	32 SRF	4	10	32	50	31	M6	3	4	27	12	18
ER32SRF4X85JET2	32 SRF	4	10	32	85	60	M6	3	4	27	12	18
ER32SRF5X85JET2	32 SRF	5	10	32	85	60	M6	3	4	27	15	21
ER32SRF6X50JET2	32 SRF	6	11	32	50	31	M8	4	4	27	18	24
ER32SRF6X85JET2	32 SRF	6	11	32	85	60	M8	4	4	27	18	24
ER32SRF8X50JET2	32 SRF	8	14	32	50	33	M10	5	4	27	25	31
ER32SRF8X85JET2	32 SRF	8	14	32	85	60	M10	5	4	27	25	31
ER32SRF10X50JET2	32 SRF	10	16	32	50	35	M12	6	4	27	30	35
ER32SRF10X85JET2	32 SRF	10	16	32	85	60	M12	6	4	27	30	36
ER32SRF12X50JET2	32 SRF	12	20	32	50	35	M14	6	4	27	32	37
ER32SRF12X85JET2	32 SRF	12	20	32	85	50	M14	6	4	27	32	38

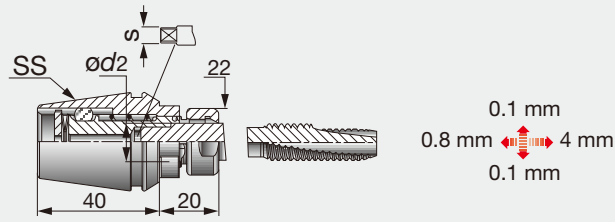
• Tightening torque : 235 N-m.

TUNG

GTI

GTIN ER-ISO

ER collet tapping attachments, tension and compression ISO type used for CNC milling and turret lathe machines.



Designation	SS	ød2	S	Tap min	Tap max	T
GTINER32ISO2.24X1.80	ER32	2.24	1.8	M3	M3	20
GTINER32ISO2.50X2.00	ER32	2.5	2	M3.5	M3.5	20
GTINER32ISO2.80X2.24	ER32	2.80	2.24	M2.2	M2.5	20
GTINER32ISO3.15X2.50	ER32	3.15	2.5	M3	M4	20
GTINER32ISO3.55X2.80	ER32	3.55	2.8	M3.5	M4.5	20
GTINER32ISO4.00X3.15	ER32	4	3.15	M4	M5	20
GTINER32ISO4.50X3.55	ER32	4.5	3.55	M6	M6	20
GTINER32ISO5.00X4.00	ER32	5	4	M5	M5	20
GTINER32ISO5.60X4.50	ER32	5.6	4.5	UNC#12-24	UNC#12-24	20
GTINER32ISO6.30X5.00	ER32	6.3	5	M6	M8	20
GTINER32ISO7.10X5.60	ER32	7.1	5.6	UNC#-3/8-16	UNC#-3/8-16	20
GTINER32ISO8.00X6.30	ER32	8	6.3	M8	M10	20
GTINER32ISO9.00X7.10	ER32	9	7.1	M12	M12	20
GTINER32ISO10.00X8.00	ER32	10	8	M10	M10	20
GTINER32ISO11.20X9.00	ER32	11.2	9	M14	M14	20
GTINER32ISO12.50X10.00	ER32	12.5	10	M16	M16	20

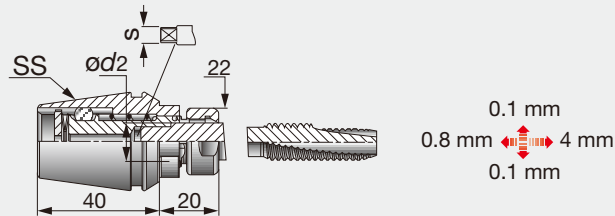
• No coolant should be induced through the tapping collet, as it will cause malfunctioning of the mechanism.

TUNG

GTI

GTIN ER-DIN

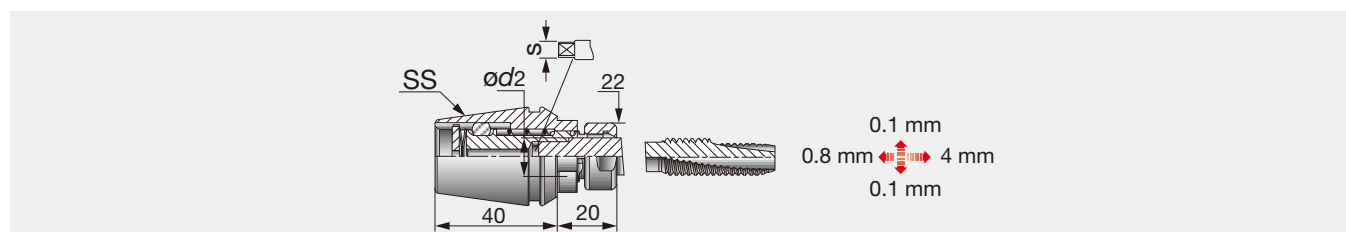
ER collet tapping attachments, tension and compression DIN type used for CNC milling and turret lathe machines.



Designation	SS	ød2	S	Tap min	Tap max	T
GTINER32DIN2.50X2.10	ER32	2.5	2.1	M1	M1.8	20
GTINER32DIN2.80X2.10	ER32	2.8	2.1	M2	M4	20
GTINER32DIN3.50X2.70	ER32	3.5	2.7	M3	M5	20
GTINER32DIN4.00X3.00	ER32	4	3	M3	M5	20
GTINER32DIN4.50X3.40	ER32	4.5	3.4	M4	M6	20
GTINER32DIN6.00X4.90	ER32	6	4.9	M5	M8	20
GTINER32DIN7.00X5.50	ER32	7	5.5	M10	M10	20
GTINER32DIN8.00X6.20	ER32	8	6.2	M8	M8	20
GTINER32DIN9.00X7.00	ER32	9	7	M12	M12	20
GTINER32DIN10.00X8.00	ER32	10	8	M10	M10	20
GTINER32DIN11.00X9.00	ER32	11	9	M14	M14	20
GTINER32DIN12.00X9.00	ER32	12	9	M16	M16	20

• No coolant should be induced through the tapping collet, as it will cause malfunctioning of the mechanism.

ER collet tapping attachments, tension and compression JIS type used for CNC milling and turret lathe machines.



Designation	SS	ød2	S	Tap min	Tap max	T
GTINER32JIS3.00X2.50	ER32	3	2.5	M1	M2.6	20
GTINER32JIS4.00X3.20	ER32	4	3.2	M3	M3.5	20
GTINER32JIS5.00X4.00	ER32	5	4	M4	M4	20
GTINER32JIS6.00X4.50	ER32	6	4.5	M6	M6	20
GTINER32JIS6.20X5.00	ER32	6.2	5	M8	M8	20
GTINER32JIS7.00X5.50	ER32	7	5.5	M10	M10	20
GTINER32JIS8.50X6.50	ER32	8.5	6.5	M12	M12	20
GTINER32JIS10.50X8.00	ER32	10.5	8	M14	M14	20
GTINER32JIS12.50X10.00	ER32	12.5	10	M16	M16	20

- No coolant should be induced through the tapping collet, as it will cause malfunctioning of the mechanism.

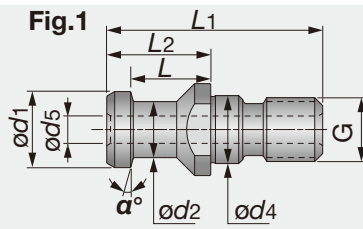


Fig.2

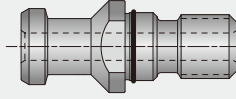
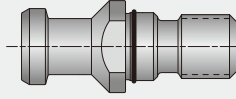
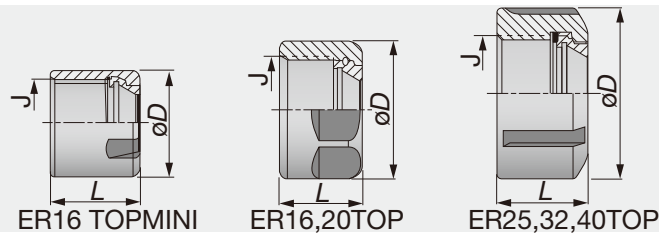


Fig.3



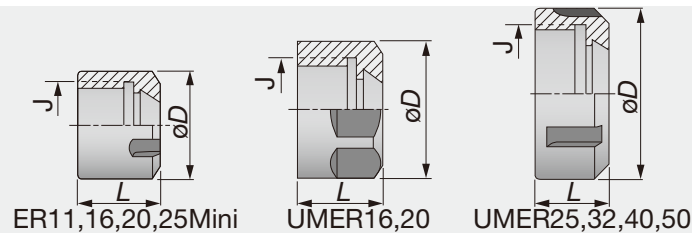
• Fig.1: Coolant holes only in items with a B suffix. • Fig.2: Without or with coolant holes and external O-ring.

Designation	SK size	G	ϕd_1	ϕd_2	ϕd_4	ϕd_5	L	L ₁	L ₂	α°	Fig.
PSSK3015M12DIN	30	M12	13	9	13	-	19	44	24	15	1
PSSK4015M16DIN	40	M16	19	14	17	-	20	54	26	15	1
PSSK4015M16DINO	40	M16	19	14	17	-	20	54	26	15	3
PSSK4015M16DINB	40	M16	19	14	17	7	20	54	26	15	1
PSSK4015M16DINO B	40	M16	19	14	17	7	20	54	26	15	2
PSSK5015M24DIN	50	M24	28	21	25	-	25	74	34	15	1
PSSK5015M24DINO	50	M24	28	21	25	-	25	74	34	15	3
PSSK5015M24DINB	50	M24	28	21	25	11.5	25	74	34	15	1



Designation	øD	L	J	Torque*
NUTER16TOP	28	17	M22X1.5	68.7
NUTER20TOP	34	19	M25X1.5	117.7
NUTER25TOP	42	20	M32X1.5	196.1
NUTER32TOP	50	22	M40X1.5	215.7
NUTER40TOP	63	25	M50X1.5	245.1

*Torque: Recommended torque (N·m) for clamping



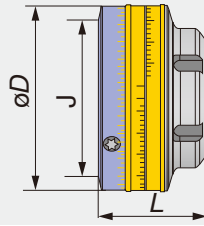
Designation	øD	L	J	Torque*
NUTER11GHS ⁽¹⁾	16	11.5	M13X0.75	-
NUTER11MINI	16	10.8	M13X0.75	29.4
NUTER11UM	19	11.3	M14X0.75	49
NUTER16MINI	22	18	M19X1.0	39.2
NUTER16UM	28	17	M22X1.5	68.7
NUTER20MINI	28	19	M24X1.0	78.5
NUTER20UM	34	19	M25X1.5	117.7
NUTER25MINI	35	20	M30X1.0	98
NUTER25UM	42	20	M32X1.5	196.1
NUTER32UM	50	22	M40X1.5	215.7
NUTER40UM	63	25	M50X1.5	245.1
NUTER50UM	78	35	M64X2.0	343.2

*Torque: Recommended torque (N·m) for clamping (1) To be used only for SpinJet spindles

TUNGBALANCE

NUT ER-BALANCE

BALANCIN Balanceable ER TOP DIN 6499 Nuts



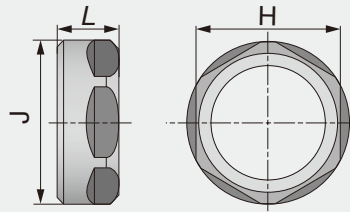
Designation	ϕD	L	J	Torque*
NUTER16TOPBIN	36	44	M22X1.5	68.7
NUTER25TOPBIN	37.5	58	M32X1.5	196.1
NUTER32TOPBIN	38	66	M40X1.5	215.7

*Torque: Recommended torque (N-m) for clamping

TUNGSHORT

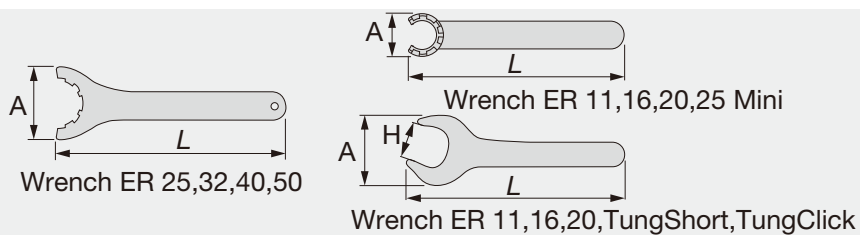
NUT ER-SHORT

Nuts for TungShort ER Collet Chucks



Designation	H	L	J	Torque*
NUTER20SHORT	22	10.7	M25X1.5	117.7
NUTER32SHORT	36	15	M40X1.5	215.7
NUTER40SHORT	46	16	M50X1.5	245.1

*Torque: Recommended torque (N-m) for clamping



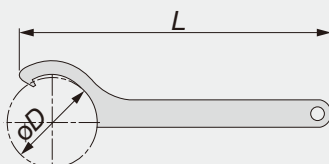
Designation	A	H	L
WRENCHER11SMS ⁽¹⁾	16	-	95
WRENCHER11MINI	16.8	-	95
WRENCHER11	32	17	95
WRENCHER16MINI	22.5	-	117
WRENCHER16	42.5	25	143
WRENCHER20MINI	28	-	128
WRENCHER20	53.5	30	172
WRENCHER25MINI	29	-	120
WRENCHER25	70	-	207
WRENCHER32	78	-	255
WRENCHER40	95	-	285
WRENCHER50	110	-	350
WRENCHER20SHORTRING22	48	22	260
WRENCHER32SHORT	75	36	303
WRENCHER40SHORT	94	46	378
WRENCHER32CLICKIN27	57	27	239
WRENCHER32CLICKIN32	67	32	273

(1) To be used only for SpinJet spindles

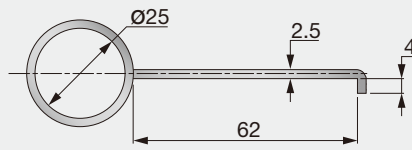
TUNG MAX

WRENCH

Wrench for TungMax collets



Designation	øD	L
WRENCHMAXIN20HOOK	26	205
WRENCHMAXIN32HOOK	68	240

**Designation**

EXTRACTOR SC COLLETS

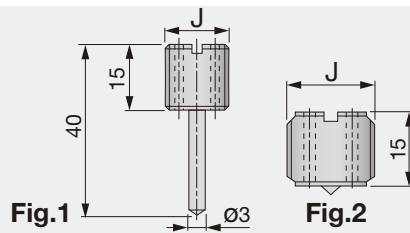
Collet

SC straight collets

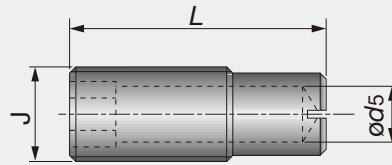
TUNGHOLD

PRESET ER-JET

Preset Screws with Oil Holes for ER Sealed Collets

**Designation****J****Fig**

PRESETER-JET8X1	M8X1.0	2
PRESETER-JET8X1.25	M8X1.25	2
PRESETER-JET10X1.5	M10X1.5	2
PRESETER-JET12X1	M12X1.0	2
PRESETER-JET12X1.75L	M12X1.75	1
PRESETER-JET12X1.75	M12X1.75	2
PRESETER-JET14X1	M14X1.0	2
PRESETER-JET16X2	M16X2	2
PRESETER-JET16X2L	M16X2	1
PRESETER-JET18X1	M18X1.0	2
PRESETER-JET18X1.5	M18X1.5	2
PRESETER-JET18X1.5L	M18X1.5	1
PRESETER-JET22X1.5	M22X1.5	2
PRESETER-JET22X1.5L	M22X1.5	1
PRESETER-JET28X1.5	M28X1.5	2

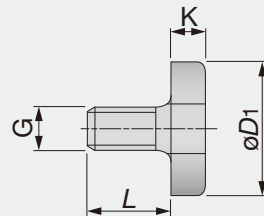


Designation	J	L	ød5	Key
PRESETMAXIN16X30	M16	30	8	8
PRESETMAXIN16X44	M16	44	8	8
PRESETMAXIN20X55	M20	55	12	12

TUNGHOLD

SCREW-SEM

Lock Screw for Shell Mill Holder

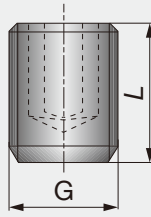


Designation	G	øD1	K	L
M8CLAMPSCREWSEM16	M8	20	6	16
M10CLAMPSCREWSEM22	M10	28	7	18
M12CLAMPSCREWSEM27	M12	35	8	22
M16CLAMPSCREWSEM32	M16	42	9	26
M20CLAMPSCREWSEM40	M20	52	10	30
M24CLAMPSCREWSEM50	M24	63	12	36

TUNG HOLD

SCREW-EM

Lock Screw for Endmill Holder

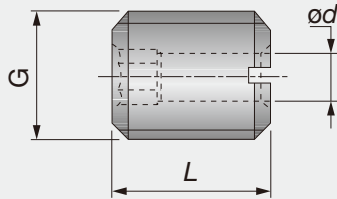


Designation	G	L	For dia
SRM6X10DIN1835B	M6	10	6
SRM8X10DIN1835-B	M8	10	8
SRM10X12DIN1835-B	M10	12	10
SRM12X16DIN1835-B	M12	16	12,14
SRM14X16DIN1835-B	M14	16	14,16
SRM16X16DIN1835-B	M16	16	20
SRM18X2X20DIN1835-B	M18X2	20	25,32
SRM20X2X20DIN1835-B	M20X2	20	40
SRM24X2X25DIN1835-B	M24X2	25	50
SRM16X10.3EMSHORT	M16	10.3	20
SRM18X2X10EMSHORT	M18X2	10	2

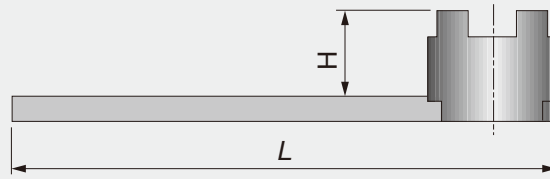
TUNG HOLD

PRESET SCREW

Preset Screw for EME/SRKIN Holder with coolant hole



Designation	G	L	ød	For Shanks	Key
PRESETSCREWM6X20B	M6X1	20	2.5	EME/SRKIN	3
PRESETSCREWM8X20B	M8X1.25	20	3.5	EME/SRKIN	4
PRESETSCREWM10X18B	M10X1.5	18	4.5	EME/SRKIN	5
PRESETSCREWM12X18B	M12X1.75	18	5.5	EME/SRKIN	6
PRESETSCREWM16X20B	M16X2	20	7.5	EME/SRKIN	6
PRESETSCREWM16X25B	M16X2	25	7.5	SRKIN	6

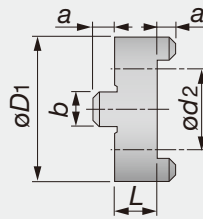


Designation	Clamping bore dia.	G	H	L
WRENCHM8SEMC16	16	M8	20	180
WRENCHM10SEMC22	22	M10	25	200
WRENCHM12SEMC27	25,4,27	M12	32	225
WRENCHM16SEMC32	31,75,32	M16	36	250
WRENCHM20SEMC40	38,1,40	M20	40	280
WRENCHM24SEMC50	50,50,8	M24	50	315

TUNGHOLD

DRIVING RING SEMC

Driving Ring DIN 6366/1 for COMBI Shell and Mill Holder



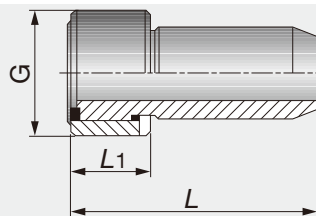
Designation	øD2	øD1	L	a	b
16D.RINGSEMC	16	32	10	8	5
22D.RINGSEMC	22	40	12	10	6
27D.RINGSEMC	27	48	12	12	6,3
32D.RINGSEMC	32	58	14	14	7
40D.RINGSEMC	40	70	14	16	8
50D.RINGSEMC	50	90	16	18	9

• Use's with "WRENCH SEMC"

TUNGHOLD

COOLING TUBE-HSK

Cooling Tube for HSK

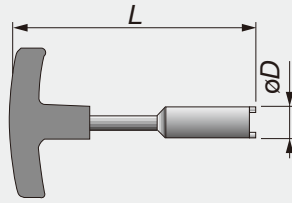


Designation	HSK size	L	L1	G
COOLINGTUBEHСКА40	40	29.1	7.5	M12X1
COOLINGTUBEHСКА50	50	32.7	9.5	M16X1
COOLINGTUBEHСКА63	63	36	11.5	M18X1
COOLINGTUBEHСКА80	80	36.6	13.5	M20X1.5
COOLINGTUBEHСКА100	100	43.6	15.5	M24X1.5

TUNGHOLD

WRENCH

Wrench for HSK cooling tube

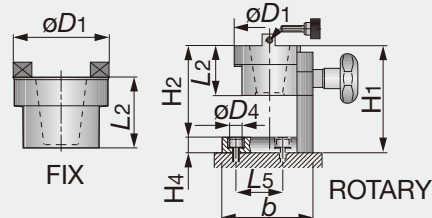


Designation	HSK size	øD	L
WRENCHCOOLTUBEHSK40	40	11	120
WRENCHCOOLTUBEHSK50	50	15	120
WRENCHCOOLTUBEHSK63	63	17	122
WRENCHCOOLTUBEHSK80	80	18.5	186
WRENCHCOOLTUBEHSK100	100	22	141

TUNGHOLD

TOOL CLAMP

Tool clamp fixture for ISO, DIN 69871 and BT MAS-403 tool shanks

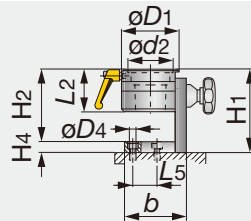


Designation	CSI	øD1	L2	H1	H2	H4	b	L5	øD4
TOOLCLAMP30ROTARY	ROTARY	70	56	128	109	19	104	40	12.5
TOOLCLAMP40ROTARY	ROTARY	82	56	128	109	19	104	40	12.5
TOOLCLAMP50ROTARY	ROTARY	103	71	170	151	19	144	85	12.5
TOOLCLAMP30FIX	FIX	82	58	-	-	-	-	-	-
TOOLCLAMP40FIX	FIX	82	58	-	-	-	-	-	-
TOOLCLAMP50FIX	FIX	103	71	-	-	-	-	-	-

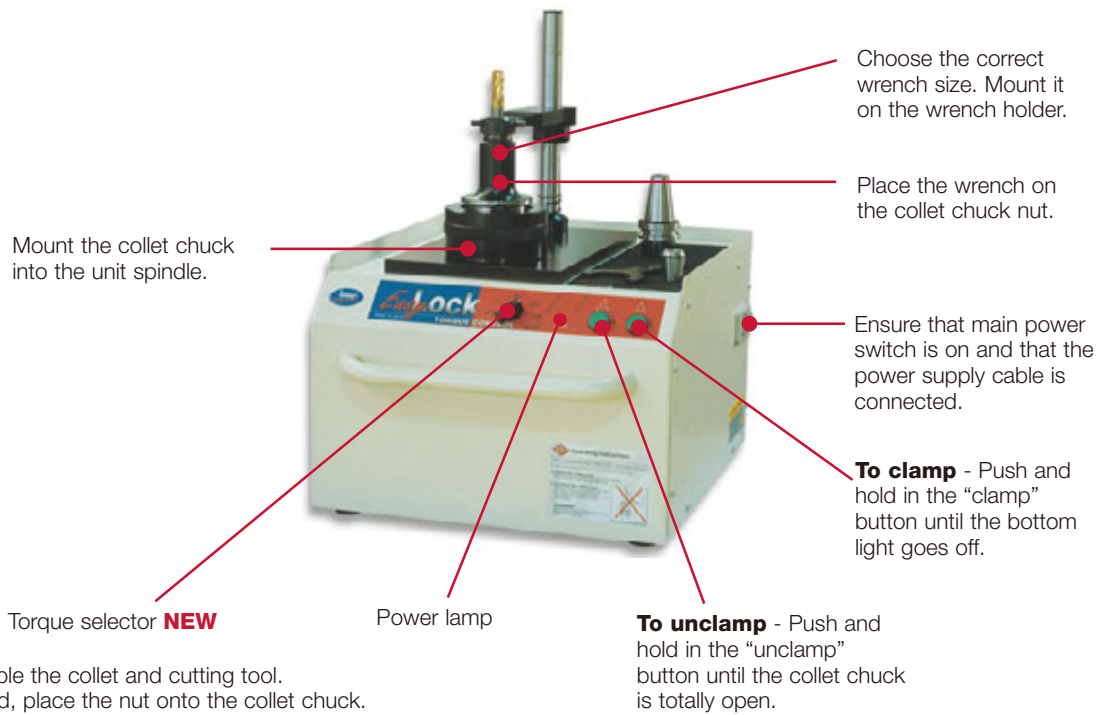
TUNGHOLD

MULTI CLAMP (HSK)

Multi-clamp rotary fixture for HSK shanks



Designation	CSI	ød2	øD1	L2	H1	H2	H4	b	L5	øD4
MULTICLAMP32E/F	HSK A/C50	32	113.2	70	133	114	19	144	40	12.5
MULTICLAMP40E/F	HSK A/C63	40	113.2	70	133	114	19	144	40	12.5
MULTICLAMP50E/F	HSK A/C100	50	113.2	70	133	114	19	144	40	12.5
MULTICLAMP63E/F	HSK E/F32	63	113.2	70	133	114	19	144	40	12.5
MULTICLAMP50A/C	HSK E/F40	50	82	72	142	123	19	104	40	12.5
MULTICLAMP63A/C	HSK E/F50	63	95	72	142	123	19	104	40	12.5
MULTICLAMP100A/C	HSK E/F63	100	130	90	178	159	19	144	85	12.5



Designation
EASYLOCKT.CEU

Machine
200/240V 50/60 HZ

Complete Tightening & Rigid Clamping

Features

● LED illuminates at correct torque!

- When reaching the required clamping force, the LED will be activated.
- Enables the operator to set the insert correctly.
- Provides stable and correct clamping forces in any position.

● Available in various torque sizes!

- 5 Torx sizes are available.
- Hardened steel enhances the life of bit.



Easy grip surface
LED light

Color size identification
Interchangeable torx bit



How to exchange a bit.

Unlock the used bit

- Pull the sleeve to loosen the bit



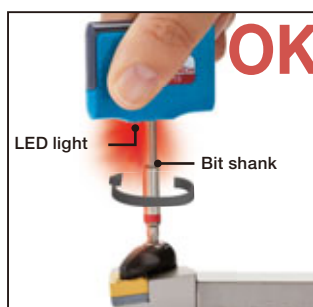
Lock the new bit

- After placing the bit in the correct position, push the sleeve to lock the bit.



Attention when tightening:

- Hold the grip in a position, so the LED can be seen on the left side of bit shank. (See the picture below) Tighten the screw clockwise.

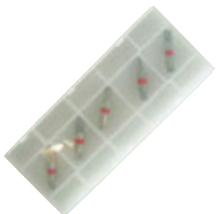


BEAMWRENCH set

	Shape	Designation	Torx Size	Torque (N·m)	Color
	Single flag	BW-SF6	T 6	0.6	White
		BW-SF7	T 7	0.9	Black
		BW-SF8	T 8	1.2	Green
		BW-SF9	T 9	1.4	Blue

	Shape	Designation	Torx Size	Torque (N·m)	Color
	Double flag	BW-DF8	T 8	1.2	Green
		BW-DF9	T 9	1.4	Blue
		BW-DF15	T 15	3.0	Red

BEAMWRENCH torx bits set

	Bit Designation	Torx Size	Torque (N·m)	Color
	BW-TX6SET5	T 6	0.6	White
	BW-TX7SET5	T 7	0.9	Black
	BW-TX8SET5	T 8	1.2	Green
	BW-TX9SET5	T 9	1.4	Blue
	BW-TX15SET5	T 15	3.0	Red

Purchase the Torx bit set with same color of your BeamWrench. Torx bits set: Packing Quantity = 5 pcs.

MEMO



Tooling System

BEAMWRENCH

Features

● Highly economical modular tool system

Tools are functionally classified and combined with arbor heads available in a wide variety of shapes and sizes to make up various boring tools. When used in diversified machining processes, this will help reduce the tooling costs considerably.

● Applicable to a wide range of bore diameters from minimum $\varnothing 5.5$ to maximum $\varnothing 500$ mm

The head, for small diameter finish and applicable down to $\varnothing 5.5$ mm. The heads for roughing and finishing can cope with wide-ranging diameters from $\varnothing 24 \sim \varnothing 500$ mm when the head is changed and combined with fine adjustment function.

● High rigidity and accuracy

The head and arbor are connected firmly with two tapered threads and drive key, ensuring high rigidity and superior repetition accuracy.

● One action adjustment

The heads for rough boring can be adjusted in terms of two edge dimensions quickly in one action. The adjusting screw is protected with the damage prevention function.

● Abundant insert variation

The inserts used are standard products complying with ISO. Insert grades and chipbreakers applied to various work materials and machining conditions are available in a wide range of shapes and sizes.

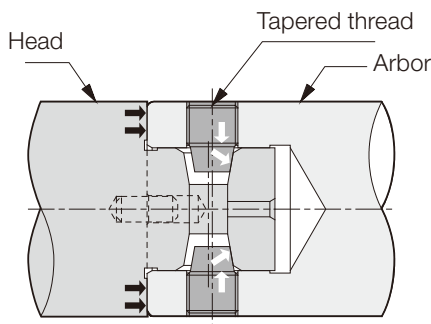
● Variety of cartridges

The rough boring heads of $\varnothing 80$ mm or more in diameter are available with various inserts and step machining cartridges.



Part assembly

■ Coupling System



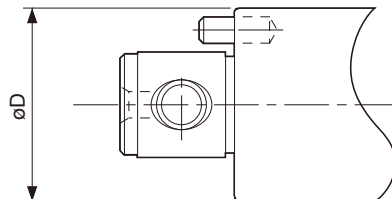
Strong rigid connection between Boring Head and Arbor.

■ Connection diameter

Arbor Designation

Ex) BT35042160

— $\varnothing D$



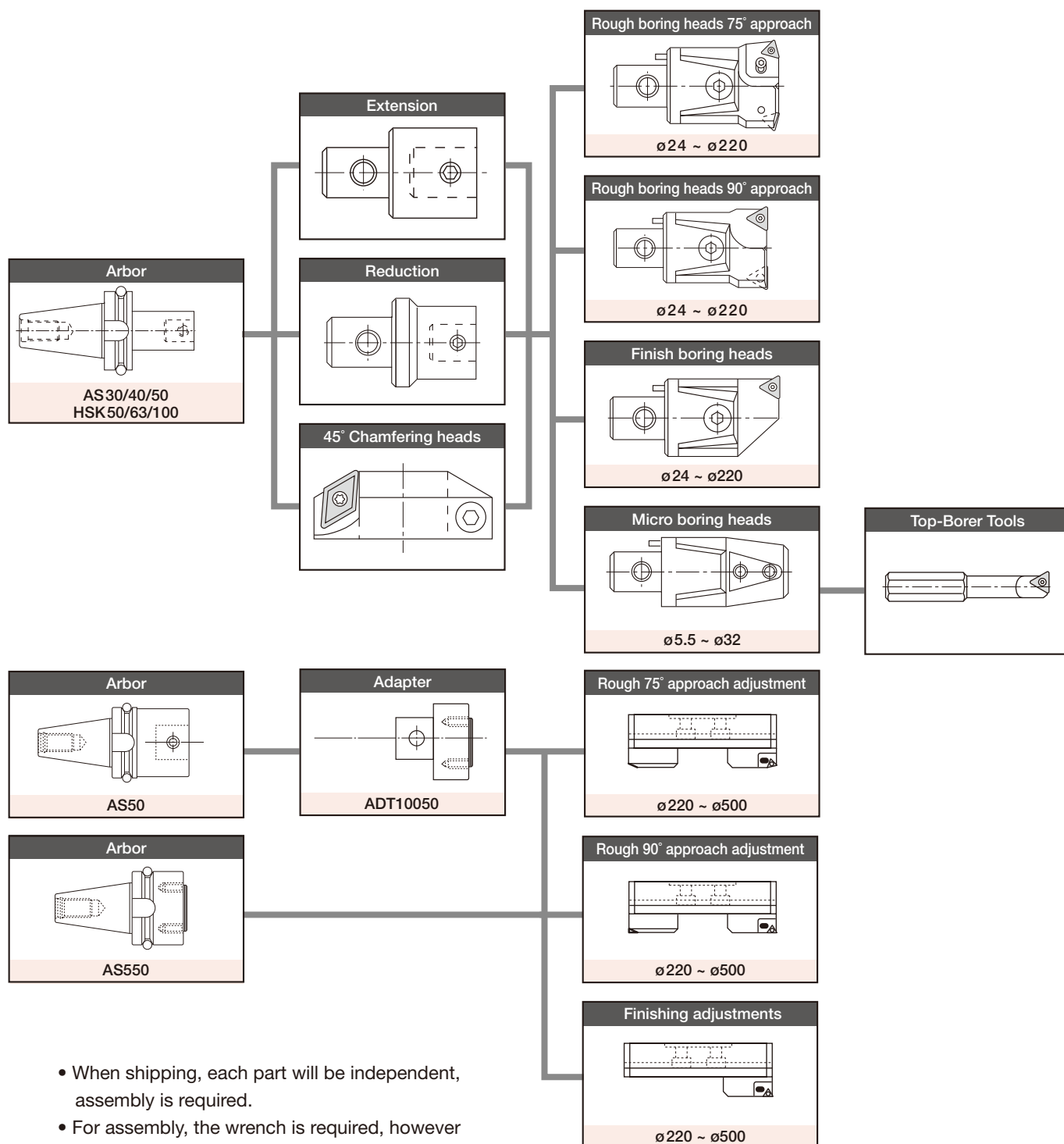
PINZBOHR® Boring System is a tie-up product with MYFHE, S. A.

■ Adjusting of Finishing Heads



Adjusting Accuracy $\varnothing 0.002$ mm

System



- When shipping, each part will be independent, assembly is required.
- For assembly, the wrench is required, however not included.
- Pull-stud bolt is not included.
- The insert is not included and should be purchased separately.

PINZBOHR® Boring System is a tie-up product with MYFHE, S. A.

Designation System for PINZBOHR®

Boring Heads

A	Finish boring heads
D	Rough boring heads
1	For use

75° / 90°
3 Approach angle

2CT / 3CT
4 Cartridge Size

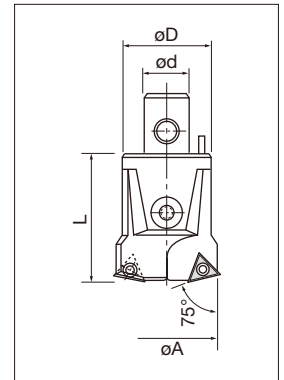
(When cartridge required)

Example

1	2	3	4	5
A	85	90	3CT	300

2 Head Size (øD)			
øD	Dia. øA	øD	Dia. øA
22	ø24 ~ 30	85	ø100 ~ 125
27	ø29 ~ 40	100	ø125 ~ 160
32	ø39 ~ 50	200	ø160 ~ 220
42	ø49 ~ 65	300	ø220 ~ 320
54	ø63 ~ 82	400	ø290 ~ 400
68	ø80 ~ 102	500	ø370 ~ 500

5 Insert Size	
300	TC□□16T3□□
400	CC□□0602□□
402N	CN□□1204□□
409	CC□□09T3□□



Micro Boring Heads

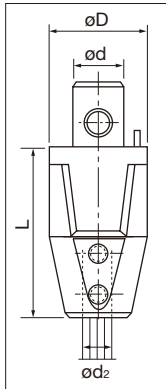
Example

1	2	3
A	32	010

1 For use
A Finish boring heads

2 Head Size
øD

3 Diameter of setting Boring Bars
ød ₂



Arbors

Example

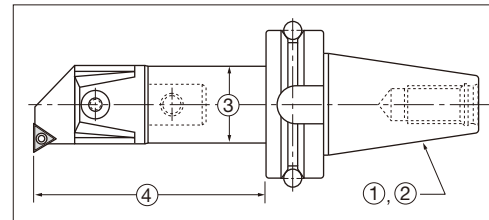
1	2	3	4
AS	340	22	50

1 Shank type
DIN69871 taper

2 Taper size
340 #40
350 #50
550 #50 (For large boring head)

3 Shank
øD

4 Effective boring depth
50 130
55 160
60 200
75 260
80 320
100 -



Extensions

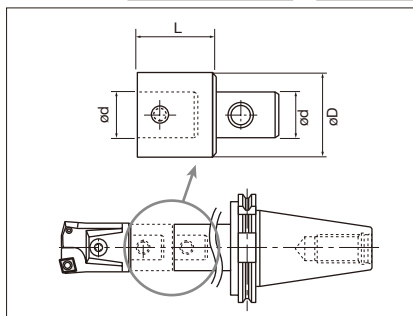
Example

1	2	3
P	22	20

1 Extension

2 Shank ø
øD

3 Extension length
L



Reductions

Example

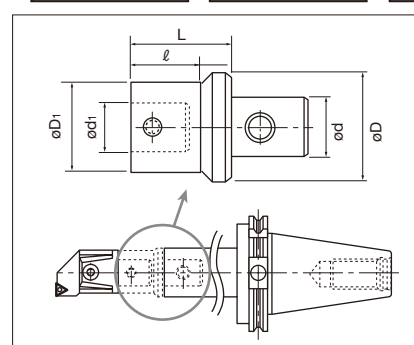
1	2	3	4
R	27	22	36

1 Reduction

2 Shank ø
Connection øD

3 Shank ø
Reduction øD ₁

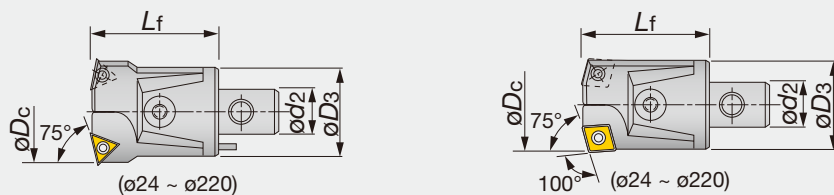
4 Reduction length
L



PINZBOHR® Boring System is a tie-up product with MYFHE, S. A.

D##75

Roughing-Head with 75° approach for dia 24 - 82mm

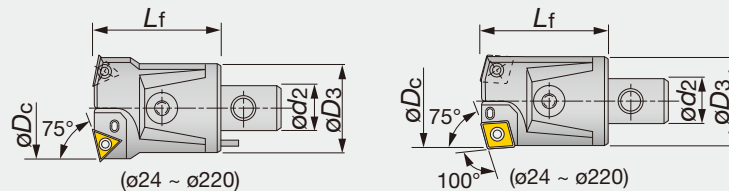


Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D2275400	24	30	22	12	34	0.1	CC**0602...
D2775409	29	40	27	15	42	0.18	CC**09T3...
D3275409	39	50	32	20	45	0.26	CC**09T3...
D4275300	49	65	42	24	56	0.6	TC**16T3...
D4275402N	53	65	42	24	56	0.6	TC**16T3...
D5475300	63	82	54	28	66	1.1	TC**16T3...
D5475402N	63	82	54	28	66	1.1	CN**1204...

• 100° corner of CC**0602, CC**09T3 and CN**1204 are used.

D##75_CT

Roughing-Head with 75° approach for dia 80 - 220mm, with cartridge

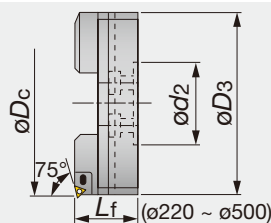


Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D68752CT300	80	102	68	36	86	2.3	TC**16T3...
D68752CT402N	80	102	68	36	86	2.3	CN**1204...
D85753CT300	100	125	85	50	100	4.3	TC**16T3...
D85753CT402N	100	125	85	50	100	4.3	CN**1204...
D100753CT300	125	160	110	60	100	6.8	TC**16T3...
D100753CT402N	125	160	110	60	100	6.8	CN**1204...
D200753CT300	160	220	145	60	100	9	TC**16T3...
D200753CT402N	160	220	145	60	100	9	CN**1204...

• 100° corner of CN**1204 is used.

D##75_CT-Large

Roughing-Head with 75° approach for dia 220 - 320mm, with cartridge



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D300753CT300	220	320	202	60	90	10.1	TC**16T3...
D300753CT402N	220	320	202	60	90	10.1	CN**1204...

Reference pages

D##75: Inserts → **B104 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

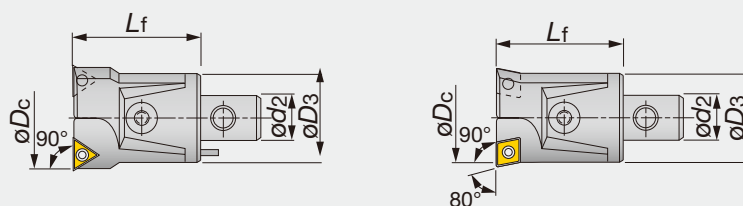
D##75_CT: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

D##75_CT-Large: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

PINZBORE® Boring System is a product of MYFHE, S. A.

D##90

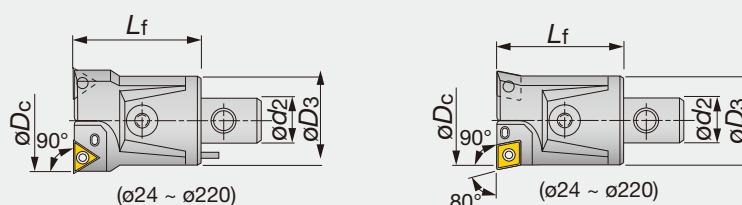
Roughing-Head with 90° approach for dia 24 - 82mm



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D2290400	24	30	22	12	34	0.1	CC**0602...
D2790409	29	40	27	15	42	0.18	CC**09T3...
D3290409	39	50	32	20	45	0.26	CC**09T3...
D4290300	49	65	42	24	56	0.6	TC**16T3...
D4290402N	53	65	42	24	56	0.6	CN**1204...
D5490300	63	82	54	28	66	1.1	TC**16T3...
D5490402N	63	82	54	28	66	1.1	CN**1204...

D##90_CT

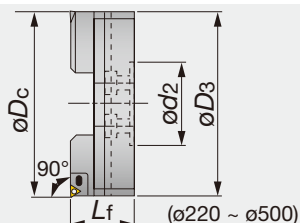
Roughing-Head with 90° approach for dia 80 - 220mm, with cartridge



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D68902CT300	80	102	68	36	86	2.3	TC**16T3...
D68902CT402N	80	102	68	36	86	2.3	CN**1204...
D85903CT300	100	125	85	50	100	4.3	TC**16T3...
D85903CT402N	100	125	85	50	100	4.3	CN**1204...
D100903CT300	125	160	110	60	100	6.8	TC**16T3...
D100903CT402N	125	160	110	60	100	6.8	CN**1204...
D200903CT300	160	220	145	60	100	9	TC**16T3...
D200903CT402N	160	220	145	60	100	9	CN**1204...

D##90_CT-Large

Roughing-Head with 90° approach for dia 220 - 320mm, with cartridge



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
D300903CT300	220	320	202	60	90	10.1	TC**16T3...
D300903CT402N	220	320	202	60	90	10.1	CN**1204...

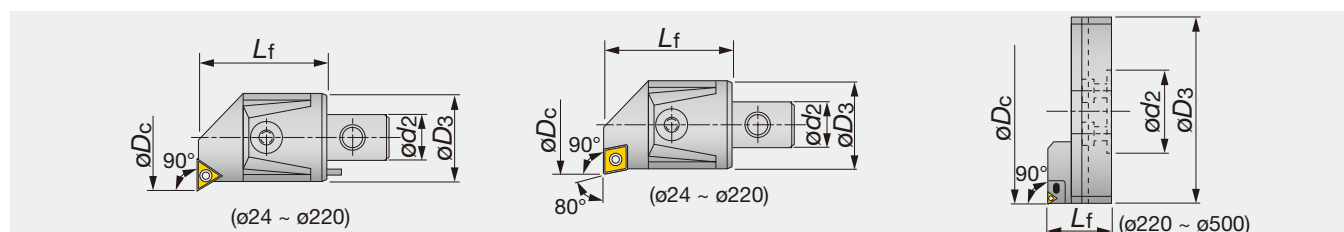
Reference pages

D##90: Inserts → **B104 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**D##90_CT: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**D##90_CT-Large: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

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A##90

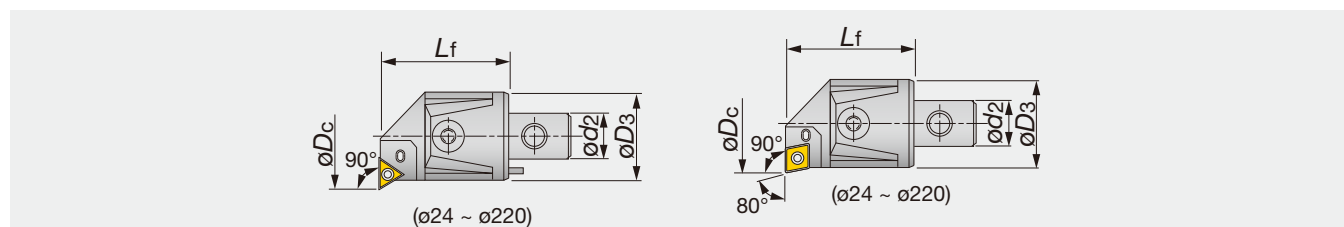
Finishing-Head with 90° approach for dia 24 - 82mm



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
A2290400	24	30	22	12	34	0.08	CC**0602...
A2790409	29	40	27	15	42	0.18	CC**09T3...
A3290409	39	50	32	20	45	0.25	CC**09T3...
A4290300	49	65	42	24	56	0.58	TC**16T3...
A4290402N	53	65	42	24	56	0.58	CN**1204...
A5490300	63	82	54	28	66	1.05	TC**16T3...
A5490402N	63	82	54	28	66	1.05	CN**1204...

A##90_CT

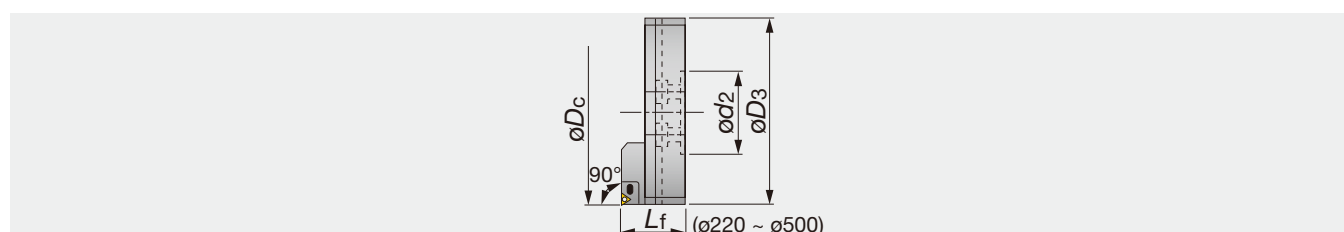
Finishing-Head with 90° approach for dia 80 - 220mm, with cartridge



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
A68902CT300	80	102	68	36	86	2.18	TC**16T3...
A68902CT402N	80	102	68	36	86	2.18	CN**1204...
A85903CT300	100	125	85	50	100	4.2	TC**16T3...
A85903CT402N	100	125	85	50	100	4.2	CN**1204...
A100903CT300	125	160	110	60	100	6.6	TC**16T3...
A100903CT402N	125	160	110	60	100	6.6	CN**1204...
A200903CT300	160	220	145	60	100	8.96	TC**16T3...
A200903CT402N	160	220	145	60	100	8.96	CN**1204...

A##90_CT-Large

Finishing-Head with 90° approach for dia 220 - 320mm, with cartridge



Designation	øDc min	øDc max	øD3	ød2	Lf	Weight (kg)	Insert
A300903CT300	220	320	202	60	90	9.3	TC**16T3...
A300903CT402N	220	320	202	60	90	9.3	CN**1204...

Reference pages

A##90: Inserts → **B104 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

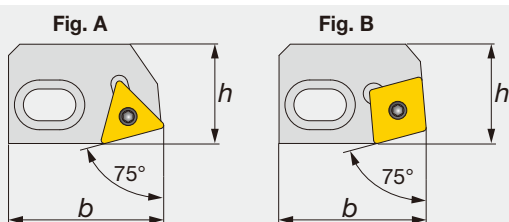
A##90_CT: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

A##90_CT-Large: Inserts → **B050 -**, **B131 -**, CBN → **B163 -**, PCD → **B176 -**

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#CT75

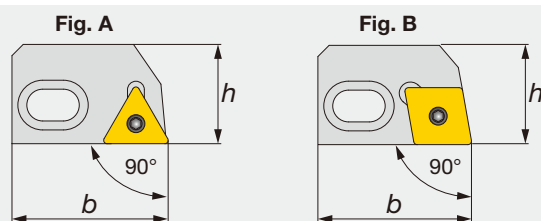
Cartridges with 75° approach



Designation	b	h	Insert	Fig
2CT75300	35	22.5	TC**16T3...	A
2CT75402N	35	22.5	CN**1204...	B
3CT75300	39	28	TC**16T3...	A
3CT75402N	39	28	CN**1204...	B

#CT90

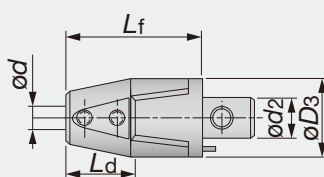
Cartridges with 90° approach



Designation	b	h	Insert	Fig
2CT90300	35	22.5	TC**16T3...	A
2CT90402N	35	22.5	CN**1204...	B
3CT90300	39	28	TC**16T3...	A
3CT90402N	39	28	CN**1204...	B

A##_Small

Finishing-Head for dia 5.5 - 38mm, with Top-Borer boring bars



Designation	øDc min	øDc max	ød	Ld	øD3	ød2	Lf	Weight (kg)
A27008	5.5	21	8	24	27	15	50	0.18
A32010	5.5	24	10	29	32	20	58	0.37
A42012	5.5	32	12	37	42	24	70	0.69
A42016	5.5	38	16	37	42	24	70	0.69

Reference pages

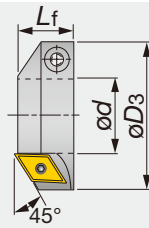
#CT75: Inserts → B050 -, B131 -, CBN → B163 -, PCD → B176 -

#CT90: Inserts → B050 -, B131 -, CBN → B163 -, PCD → B176 -

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CH##

Chamfering tools



Designation	ϕD_3	ϕd	L_f	Weight (kg)	Parts				Insert
					Screw for inserts	Driver	Wrench	Clamping Screw	
CH22	43	22	24	0.1	CSTB-4	T15	P-4	M5×20	DC**11T3...
CH27	48	27	24	0.18	CSTB-4	T15	P-4	M5×20	DC**11T3...
CH32	62	32	30	0.26	CSTB-4	T15	P-5	M6×30	DC**11T3...
CH42	72	42	30	0.33	CSTB-4	T15	P-5	M6×35	DC**11T3...
CH54	94	54	40	0.77	CSTB-5	T20	P-6	M8×45	DC**1504...
CH68	110	68	40	1.02	CSTB-5	T20	P-8	M10×50	DC**1504...
CH85	145	85	55	2.34	CSTB-5	T20	P-10	M12×70	DC**1504...

Reference pages

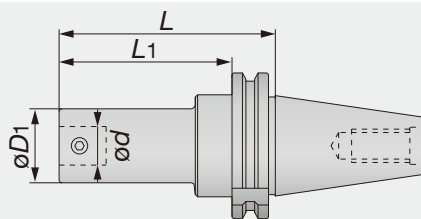
CH##: Inserts → **B114 -**, CBN → **B168 -**, PCD → **B177**

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AS30

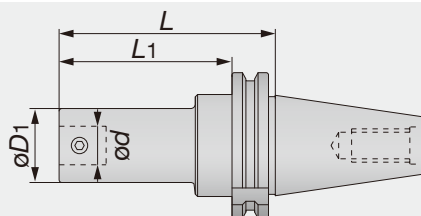
Arbor with DIN69871 taper



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
AS 330 022 100	22	12	104	66	0.7	2268
AS 330 027 055	27	15	48	13	0.6	27610
AS 330 027 100	27	15	96	58	0.7	27610
AS 330 032 060	32	20	51	15	0.6	32810
AS 330 032 100	32	20	93	55	0.8	32810

AS40

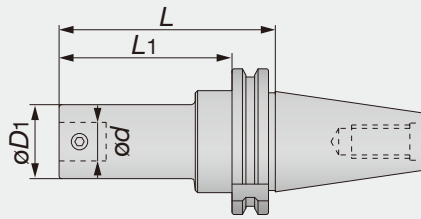
Arbor with DIN69871 taper



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
AS 340 022 080	22	12	84	46	1.23	2268
AS 340 022 100	22	12	104	66	1.3	2268
AS 340 027 055	27	15	48	13	1.13	27610
AS 340 027 100	27	15	96	58	1.35	27610
AS 340 027 130	27	15	126	88	1.49	27610
AS 340 032 060	32	20	51	15	1.14	32810
AS 340 032 100	32	20	93	55	1.4	32810
AS 340 032 130	32	20	123	85	1.59	32810
AS 340 042 075	42	24	56	19	1.2	421014
AS 340 042 160	42	24	126	104	1.98	421014
AS 340 042 200	42	24	166	144	2.46	421014
AS 340 054 120	54	28	76	54	1.63	541220
AS 340 054 160	54	28	116	94	2.36	541220
AS 340 054 200	54	28	156	134	3.11	541220
AS 340 068 160	68	36	97	74	2.48	681624
AS 340 068 200	68	36	137	114	3.63	681624
AS 340 085 200	85	50	124	100	4.24	851630
AS 340 100 200	100	60	124	100	5.16	1002035

AS50

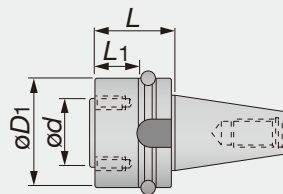
Arbor with DIN69871 taper



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
AS 350 022 080	22	12	84	46	3.45	2268
AS 350 022 100	22	12	104	66	3.5	2268
AS 350 027 055	27	15	48	13	3.3	27610
AS 350 027 100	27	15	96	58	3.55	27610
AS 350 027 130	27	15	126	88	3.68	27610
AS 350 032 060	32	20	51	15	3.31	32810
AS 350 032 130	32	20	123	85	3.79	32810
AS 350 032 160	32	20	153	115	3.98	32810
AS 350 042 075	42	24	56	19	3.39	421014
AS 350 042 160	42	24	142	104	4.36	421014
AS 350 042 200	42	24	182	144	4.86	421014
AS 350 054 090	54	28	62	24	3.57	541220
AS 350 054 160	54	28	132	94	4.85	541220
AS 350 054 200	54	28	172	134	5.57	541220
AS 350 068 115	68	36	65	29	3.74	681624
AS 350 068 200	68	36	137	114	5.8	681624
AS 350 068 260	68	36	197	174	7.6	681624
AS 350 085 200	85	50	124	100	6.3	851630
AS 350 085 260	85	50	184	160	9.04	851630
AS 350 085 320	85	50	244	220	11.7	851630
AS 350 100 190	100	60	114	90	6.6	1002035
AS 350 100 260	100	60	184	160	11	1002035
AS 350 100 320	100	60	244	220	14.66	1002035

AS550

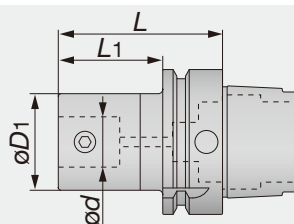
Arbor with DIN69871 for large diameter



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
AS 550 160	100	60	70	35	5.65	M12×40

HSK50

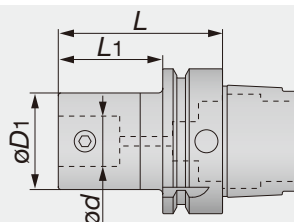
Arbor with HSK A taper



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
HSK 050A 022 055	22	12	47	21	0.49	2268
HSK 050A 027 065	27	15	49	23	0.57	27610
HSK 050A 032 075	32	20	56	30	0.66	32810
HSK 050A 042 090	42	24	60	34	0.73	421014

HSK63

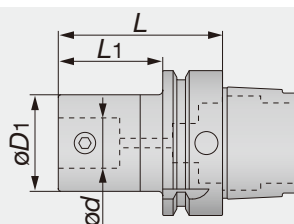
Arbor with HSK A taper



Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
HSK 063A 022 055	22	12	47	21	0.75	2268
HSK 063A 027 065	27	15	49	23	0.78	27610
HSK 063A 032 075	32	20	56	30	0.84	32810
HSK 063A 042 090	42	24	60	34	0.98	421014
HSK 063A 054 110	54	28	70	44	1.3	541220
HSK 063A 068 145	68	36	85	59	1.85	681624

HSK100

Arbor with HSK A taper

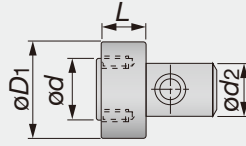


Designation	$\varnothing D_1$	$\varnothing d$	L	L_1	Weight (kg)	Parts Taper Screw
HSK 100A 022 055	22	12	55	21	2.28	2268
HSK 100A 027 065	27	15	57	23	2.35	27610
HSK 100A 032 075	32	20	59	30	2.33	32810
HSK 100A 042 090	42	24	63	34	2.47	421014
HSK 100A 054 110	54	28	73	44	2.8	541220
HSK 100A 068 145	68	36	88	59	3.51	681624
HSK 100A 085 165	85	50	94	65	4.15	851630
HSK 100A 100 185	100	60	114	85	5.67	1002035
HSK 550 160	100	60	80	50	5.24	M12x40

PINZBORE® Boring System is a product of MYFHE, S. A.

ADT

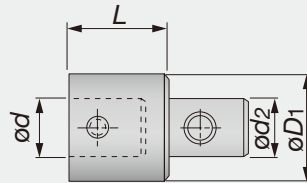
Adaptors for Large dia head



Designation	$\varnothing D_1$	$\varnothing d$	$\varnothing d_2$	L	Weight (kg)
ADT10050	100	60	60	50	4.6

P##

Adaptors / Extension For extending overhang length

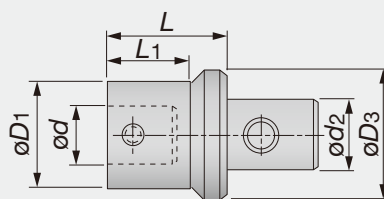


Designation	$\varnothing D_1$	$\varnothing d$	$\varnothing d_2$	L	Weight (kg)	Parts Taper Screw
P2220	22	12	12	20	0.1	22 68
P2230	22	12	12	30	0.14	22 68
P2730	27	15	15	30	0.18	27 610
P2745	27	15	15	45	0.25	27 610
P3235	32	20	20	35	0.26	32 810
P3252	32	20	20	52	0.38	32 810
P4240	42	24	24	40	0.48	42 1014
P4260	42	24	24	60	0.7	42 1014
P5450	54	28	28	50	0.95	54 1220
P5475	54	28	28	75	1.4	54 1220
P6860	68	36	36	60	1.8	68 1624
P6890	68	36	36	90	2.6	68 1624
P8570	85	50	50	70	3.05	85 1630
P85105	85	50	50	105	4.45	85 1630
P10080	100	60	60	80	4.6	100 2035
P100120	100	60	60	120	7.1	100 2035



R##

Adaptors / Reducer For using small dia head on large size arbor.



Designation	ϕD_1	ϕd	ϕd_2	L	L_1	ϕD_3	Weight (kg)	Parts Taper Screw
R272236	22	12	15	36	26	27	0.2	22 68
R322240	22	12	20	40	30	32	0.25	22 68
R422258	22	12	24	58	48	42	0.35	22 68
R542286	22	12	28	86	76	54	0.65	22 68
R6822102	22	12	36	102	90	68	1.05	22 68
R322734	27	15	20	34	24	32	0.25	27 610
R422750	27	15	24	50	40	42	0.4	27 610
R542780	27	15	28	80	70	54	0.7	27 610
R682795	27	15	36	95	83	68	1.05	27 610
R423246	32	20	24	46	36	42	0.45	32 810
R543276	32	20	28	76	66	54	0.75	32 810
R683290	32	20	36	90	78	68	1.2	32 810
R544270	42	24	28	70	60	54	0.95	42 1014
R684282	42	24	36	82	70	68	1.4	42 1014
R854295	42	24	50	95	83	85	2.05	42 1014
R685472	54	28	36	72	60	68	1.65	54 1220
R855490	54	28	50	90	78	85	2.5	54 1220
R8568100	68	36	50	100	88	85	3.35	68 1624

SPARE PARTS

Roughing boring heads 75° approach

(Designation is written with spaces.)

Shape	Designation	Screw for insert	Driver	Wrench	Clamping screw		Cartridge		
							Adjusting screw	Clamping screw	Washer
	D22 75 400	CSTB-2.5	T8	P-3, P-2	D22 21	–	–	–	–
	D27 75 409	CSTB-4M	T15	P-4, P-2	D27 21	–			
	D32 75 409	CSTB-4M	T15	P-4, P-2.5	D32 21	–			
	D42 75 300	CSTB-4M	T15	P-5, P-3	D42 21	–			
	D42 75 402N	MLP44	P-2.5	P-5, P-3	D42 21	–			
	D54 75 300	CSTB-4M	T15	P-6, P-3	D54 21	–			
	D54 75 402N	MLP44	P-2.5	P-6, P-3	D54 21	–			
	D68 75 2CT 300	CSTB-4M	T15	P-8, P-5, 4, 2	D68 21	2CT 75 300	D68 29	D68 27	D68 28
	D68 75 2CT 402N	MLP44	P-2.5	P-8, P-5, 4, 2	D68 21	2CT 75 402N			
	D85 75 3CT 300	CSTB-4	T15	P-8, P-5, 3	D85 21	3CT 75 300	D85 29	D68 27	D85 28
	D85 75 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D85 21	3CT 75 402N			
	D100 75 3CT 300	CSTB-4	T15	P-8, P-5, 3	D100 21	3CT 75 300			
	D100 75 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D100 21	3CT 75 402N			
	D200 75 3CT 300	CSTB-4	T15	P-8, P-5, 3	D100 21	3CT 75 300			
	D200 75 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D100 21	3CT 75 402N			
	D300 75 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 75 300			
	D300 75 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 75 402N			
	D400 75 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 75 300			
	D400 75 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 75 402N			
	D500 75 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 75 300			
	D500 75 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 75 402N			

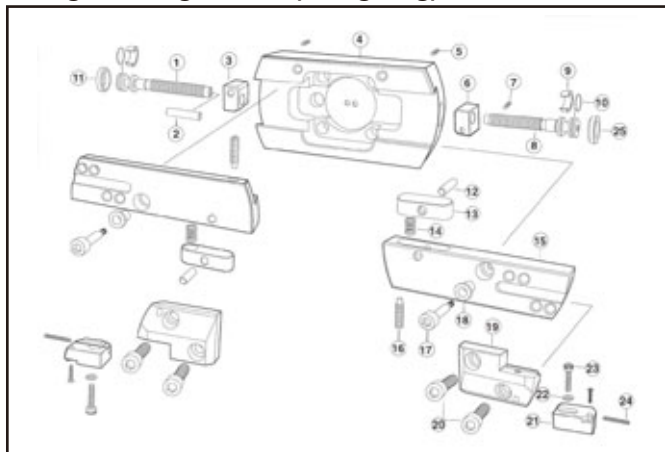
Roughing boring heads 90° approach

(Designation is written with spaces.)

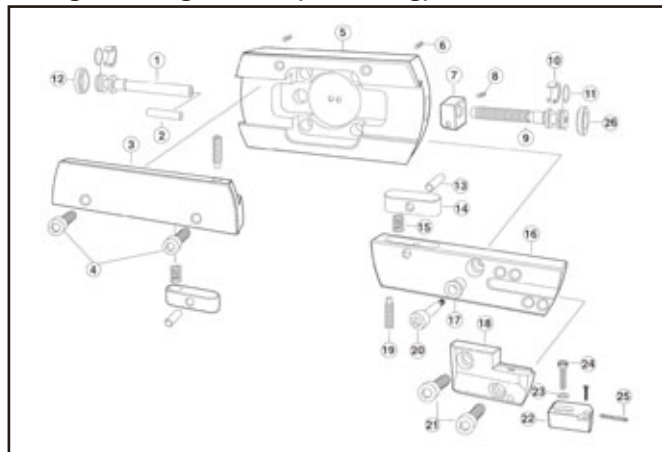
Shape	Designation	Screw for insert	Driver	Wrench	Clamping screw		Cartridge		
							Adjusting screw	Clamping screw	Washer
	D22 90 400	CSTB-2.5	T8	P-3, P-2	D22 21	–	–	–	–
	D27 90 409	CSTB-4M	T15	P-4, P-2	D27 21	–			
	D32 90 409	CSTB-4M	T15	P-4, P-2.5	D32 21	–			
	D42 90 300	CSTB-4M	T15	P-5, P-3	D42 21	–			
	D42 90 402N	MLP44	P-2.5	P-5, P-3	D42 21	–			
	D54 90 300	CSTB-4M	T15	P-6, P-3	D54 21	–			
	D54 90 402N	MLP44	P-2.5	P-6, P-3	D54 21	–			
	D68 90 2CT 300	CSTB-4M	T15	P-8, P-5, 4, 2	D68 21	2CT 90 300	D68 29	D68 27	D68 28
	D68 90 2CT 402N	MLP44	P-2.5	P-8, P-5, 4, 2	D68 21	2CT 90 402N			
	D85 90 3CT 300	CSTB-4	T15	P-8, P-5, 3	D85 21	3CT 90 300	D85 29	D68 27	D85 28
	D85 90 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D85 21	3CT 90 402N			
	D100 90 3CT 300	CSTB-4	T15	P-8, P-5, 3	D100 21	3CT 90 300			
	D100 90 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D100 21	3CT 90 402N			
	D200 90 3CT 300	CSTB-4	T15	P-8, P-5, 3	D100 21	3CT 90 300			
	D200 90 3CT 402N	MLP44	P-2.5	P-8, P-5, 3	D100 21	3CT 90 402N			
	D300 90 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 90 300			
	D300 90 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 90 402N			
	D400 90 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 90 300			
	D400 90 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 90 402N			
	D500 90 3CT 300	CSTB-4	T15	P-5, P-4, 3	D300 58	3CT 90 300			
	D500 90 3CT 402N	MLP44	P-2.5	P-5, P-4, 3	D300 58	3CT 90 402N			

SPARE PARTS

Large boring heads (Roughing)

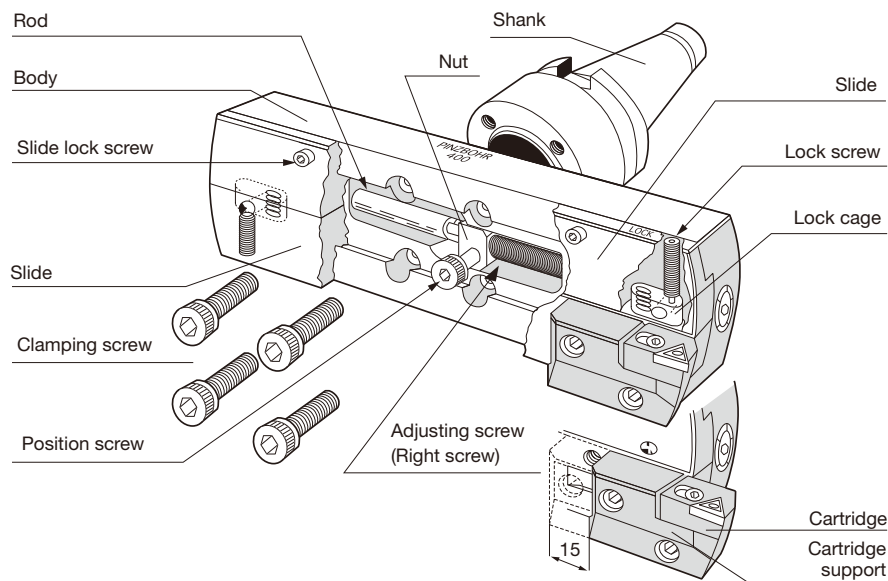
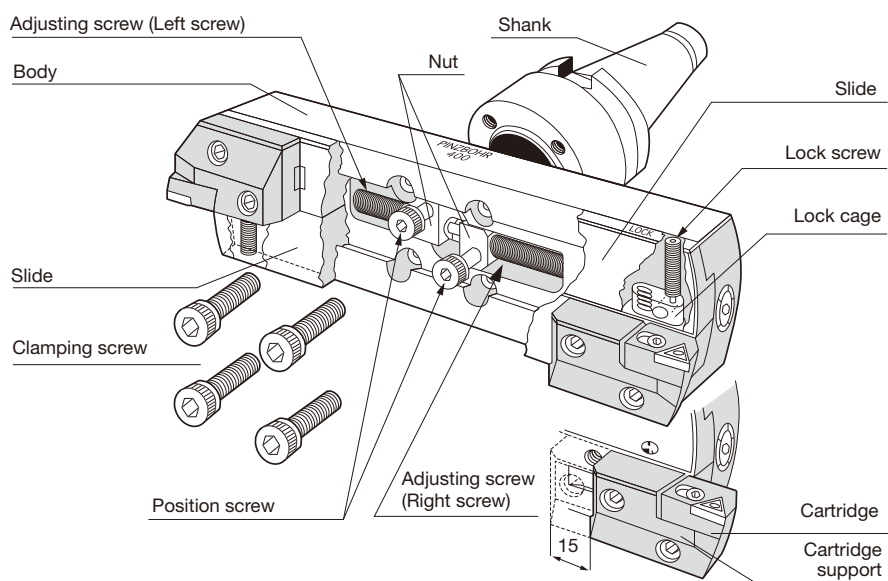


Large boring heads (Finishing)



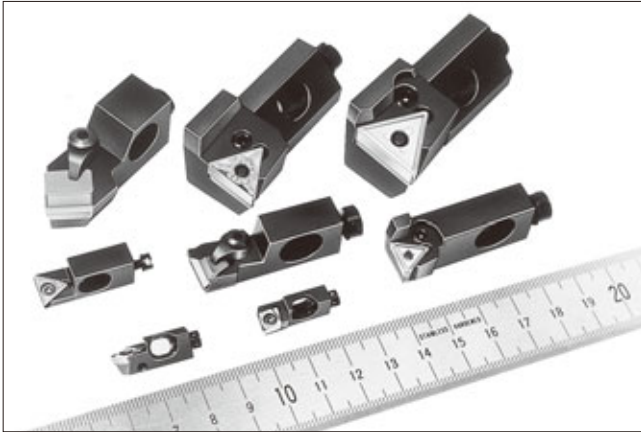
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①	D300 51	D400 51	D500 51
②	D300 66	D300 66	D300 66
③	D300 55	D300 55	D300 55
④	D300 03	D400 03	D500 03
⑤	D68 23	D68 23	D68 23
⑥	D300 54	D300 54	D300 54
⑦	D300 65	D300 65	D300 65
⑧	D300 50	D400 50	D500 50
⑨	A68 16	A68 16	A68 16
⑩	A68 25	A68 25	A68 25
⑪	A68 15	A68 15	A68 15
⑫	D300 60	D300 60	D300 60
⑬	D300 56	D300 56	D300 56
⑭	D300 59	D300 59	D300 59
⑮	D300 01	D400 01	D500 01
⑯	D300 58	D300 58	D300 58
⑰	D300 57	D300 57	D300 57
⑱	D300 62	D300 62	D300 62
⑲	D300 49	D300 49	D300 49
⑳	D300 61	D300 61	D300 61
㉑	3CT□□ □□□	3CT□□ □□□	3CT□□ □□□
㉒	D68 28	D68 28	D68 28
㉓	D85 27	D85 27	D85 27
㉔	D85 29	D85 29	D85 29
㉕	D300 15	D300 15	D300 15

size	D300□□ □□□ □□□	D400□□ □□□ □□□	D500□□ □□□ □□□
①	A300 52	A400 52	A500 52
②	D300 66	D300 66	D300 66
③	A300 02	A400 02	A500 02
④	A300 63	A300 63	A300 63
⑤	D300 03	D400 03	D500 03
⑥	D68 23	D68 23	D68 23
⑦	D300 54	D300 54	D300 54
⑧	D300 65	D300 65	D300 65
⑨	D300 50	D400 50	D500 50
⑩	A68 16	A68 16	A68 16
⑪	A68 25	A68 25	A68 25
⑫	A68 15	A68 15	A68 15
⑬	D300 60	D300 60	D300 60
⑭	D300 56	D300 56	D300 56
⑮	D300 59	D300 59	D300 59
⑯	D300 01	D400 01	D500 01
⑰	D300 62	D300 62	D300 62
⑱	D300 49	D300 49	D300 49
⑲	D300 58	D300 58	D300 58
⑳	D300 57	D300 57	D300 57
㉑	D300 61	D300 61	D300 61
㉒	3CT□□ □□□	3CT□□ □□□	3CT□□ □□□
㉓	D68 28	D68 28	D68 28
㉔	D85 27	D85 27	D85 27
㉕	D85 29	D85 29	D85 29
㉖	D300 15	D300 15	D300 15



Cartridge

Features of Cartridges



- Available in a wide range of shank sizes. (06CA ~ 20CA)
- Variety of types and sizes for a wide range of boring operations.

PN Pin-lock type, negative rake cartridges excel in tooling economy.

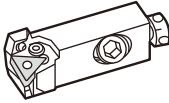
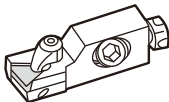
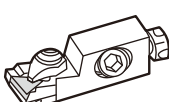
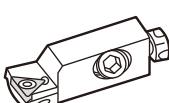
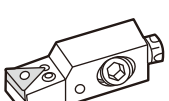
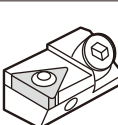
SP Screw-on type, positive rake cartridges featuring more free cutting action and machining accuracy.

CP Clamp-on type, positive rake cartridges featuring a variety of styles and sizes.

CE Clamp-on type, highly positive rake cartridges provide free cutting action and used for machining non-ferrous metals.

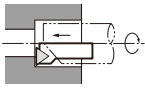
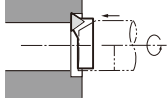
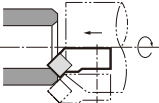
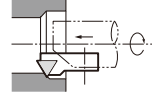
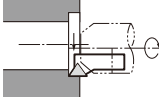
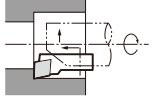
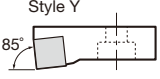
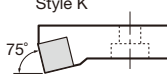
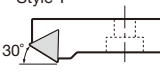
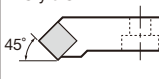
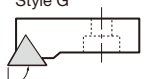
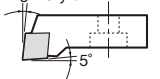
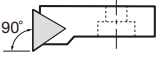
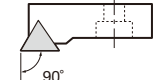
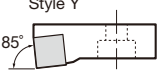
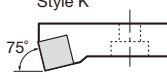
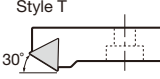
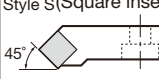
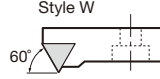
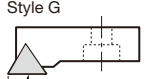
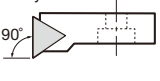
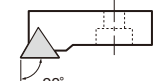
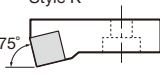
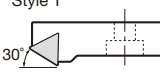
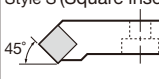
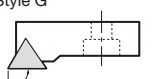
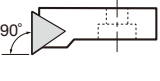
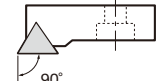
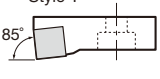
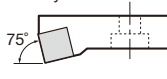
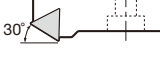
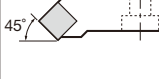
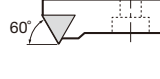
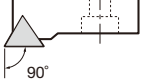
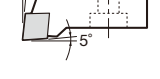
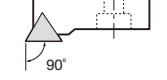
PNE Pin-lock type, negative rake cartridges used only for external machining.

List of Cartridges

Type	Appearance	Size	Min. bore dia ø (mm)	Cutting edge height (mm)	Rake angle	Applicable Insert		Clamping mechanism	No. of items	Features and notes
						Relief angle	Hole			
PN		10CA	40	10	Negative	0°	With ISO hole	Pin-lock	12	• Excellent in economy
		12CA	50	12					14	
		16CA	60	16					14	
		20CA	70	20					10	
CP		10CA	40	10	Positive	11°	Without	Clamp-on	16	• Tough insert • Variety of styles and sizes
		12CA	50	12					16	
		16CA	60	16					16	
		20CA	70	20					2	
CE		10CA	40	10	Positive	20°	Without	Clamp-on	16	• More free cutting action • Best suitable for machining non-ferrous metals
		12CA	50	12					16	
SP		06CA	20	6	Positive	11°	With ISO hole	Screw-on	10	• Provides free cutting action • Good chip control
		08CA	25	8					10	
		10CA	40	10					16	
		12CA	50	12					16	
PNE		10CA	—	10	Negative	0°	With ISO hole	Pin-lock	8	• For external use • Made to order
		12CA	—	12					10	
A		(09CA) (Corresponds to 09CA)	32	9	Positive	11°	With Tungaloy's standard hole	Screw-on	12	• Mini-cartridge

Note: Min. bore diameters shown above are for axial mounting.

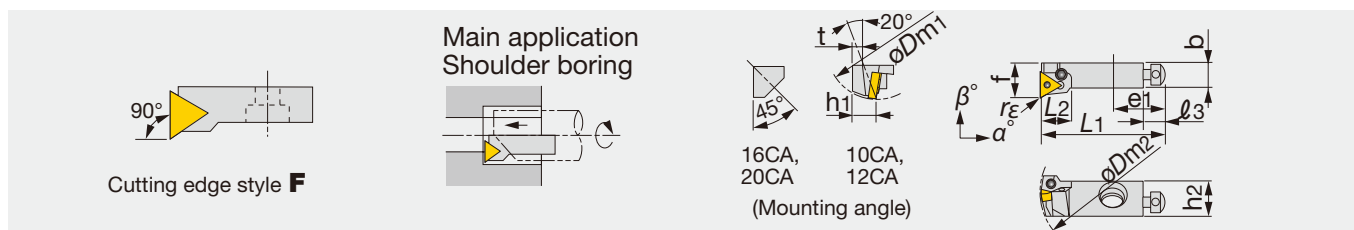
List of ISO Standard Cartridges by Application

Type	Boring		Chamfering and boring			Facing and boring	
			External and internal 45° chamfering Note: PSSN type can not be used for external chamfering.  				
PN	Cutting edge angle 85° Style Y 	Cutting edge angle 75° Style K 	Cutting edge angle 30° Style T 	Cutting edge angle 45° Style S 		Cutting edge angle 0° Style G 	Cutting edge angle 5° 5° Style L 
	Cutting edge angle 90° Style F 	Cutting edge angle 0° Style G 					
	PSYN F167	PSKN F158	PTTN F165	PSSN F162		PTGN F156	PCLN F160
CP	Cutting edge angle 85° Style Y 	Cutting edge angle 75° Style K 	Cutting edge angle 30° Style T 	Cutting edge angle 45° Style S (Square insert) 	Cutting edge angle 60° Style W 	Cutting edge angle 0° Style G 	
	Cutting edge angle 90° Style F 	Cutting edge angle 0° Style G 					
	CSYP F168	CSKP F158	CTTP F166	CSSP F162 CTSP F164	CTWP F161	CTGP F156	
CE	Cutting edge angle 75° Style K 		Cutting edge angle 30° Style T 	Cutting edge angle 45° Style S (Square insert) 		Cutting edge angle 0° Style G 	
	Cutting edge angle 90° Style F 	Cutting edge angle 0° Style G 					
	CSKE F159		CTTE F166	CSSE F163 CTSE F164		CTGE F157	
SP	Cutting edge angle 85° Style Y 	Cutting edge angle 75° Style K 	Cutting edge angle 30° Style T (80° rhombic only for 06CA) 	Cutting edge angle 45° Style S (Square insert) (80° rhombic only for 06CA) 	Cutting edge angle 60° Style W 	Cutting edge angle 0° Style G 	Cutting edge angle 5° 5° Style L 
	Cutting edge angle 90° Style F (80° rhombic only for 06CA) 	Cutting edge angle 0° Style G 					
	SSYP F168	SSKP F159	STTP F167 SCTP F167 (06CA)	SSSP F163 STSP F165 SCSP F165 (06CA)	STWP F161	STGP F157	SCLP F160 (06CA)

The page number for the product details is shown in red.

PN PTFN-CA

Lever lock cartridge with 90° approach angle for negative triangle insert



Right hand (R) shown. 80° rhombic insert used for 06CA.

Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
PTFNR/L10CA-11	40	55	0.4	14	50	12	10	14.5	10	20	8	-6	-8	5	TN**1103...
PTFNR/L12CA-16	50	75	0.8	20	55	16	12	19.5	15	20	8	-6	-8	6	TN**1604...
PTFNR/L16CA	55	-	0.8	25	63	23	16	16	17	25	8	-6	-8	0	TN**1604...
PTFNR/L20CA	70	-	0.8	25	70	28	20	20	19	30	10	-6	-7	0	TN**2204...

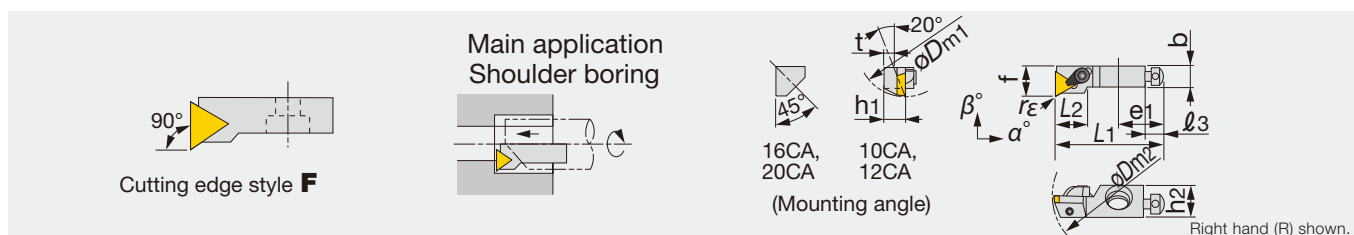
- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand toolholders and the left hand insert is used for right hand toolholders.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Shim retainer	Sizing plate (Optional parts)	Sizing plate ass'y (Optional parts)
PTFNR/L10CA-11	-	LCL22N	LCS22	ASM54	SSH4-4	CHHM6-15	P-2F,P-5	-	-	(PSTR/L10)
PTFNR/L12CA-16	-	LCL33N	LCS33	ASM54	SSH4-4	CHHM6-25	P-2F,P-5	-	-	(PSTR/L12)
PTFNR/L16CA	LST317CA	LCL3	LCS3	ASM6	SSH5-6	BHM8-25U	P-2.5,P-5	LSP3	(S0816B/S1016B)	-
PTFNR/L20CA	LST42CA	LCL4	LCS4	ASM6	SSH5-6	BHM8-30U	P-2.5,P-3,P-5	LSP4	(S0820B/S1020B)	-

CP CTFP-CA

Clamp on cartridge with 90° approach angle for 11° clearance triangle insert



Right hand (R) shown.

Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
CTFPR/L10CA-11	40	55	0.4	14	50	15	10	14.5	10	20	8	4	0	5	TP**1103...
CTFPR/L12CA-16	50	75	0.8	20	55	17	12	19.5	15	20	8	5	2	6	TP**1603...
CTFPR/L16CA	55	-	0.8	25	63	23	16	16	17	25	8	5	0	0	TP**1603...
CTFPR/L20CA	70	-	0.8	25	70	22	20	20	19	30	10	5	0	0	TP**2204...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Shim screw	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Chipbreaker piece	Shim retainer (Optional parts)	Sizing plate ass'y (Optional parts)
CTFPR/L10CA-11	-	-	CSG-5 (CSG-5S)	ASM54	SSH4-10	CHHM6-15	P-2,P-2.5,P-5	CBT-2M	-	(PSTR/L10)
CTFPR/L12CA-16	-	-	CSG-6 (CSG-6S)	ASM54	SSH4-14	CHHM6-25	P-2,P-3,P-5	CBT-3M	-	(PSTR/L12)
CTFPR/L16CA	PAT-32	SM3X0.5X8	CSG-8S	ASM6	SSH5-16	BHM8-25U	P-2.5,P-4	-	(S0816B/S1016B)	-
CTFPR/L20CA	PAT-42	SM3X0.5X8	CSG-8	ASM6	SSH6-16	BHM8-30U	P-3,P-4	-	(S0820B/S1020B)	-

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).
- When not using Chipbreaker piece, clamping screw in () should be used.

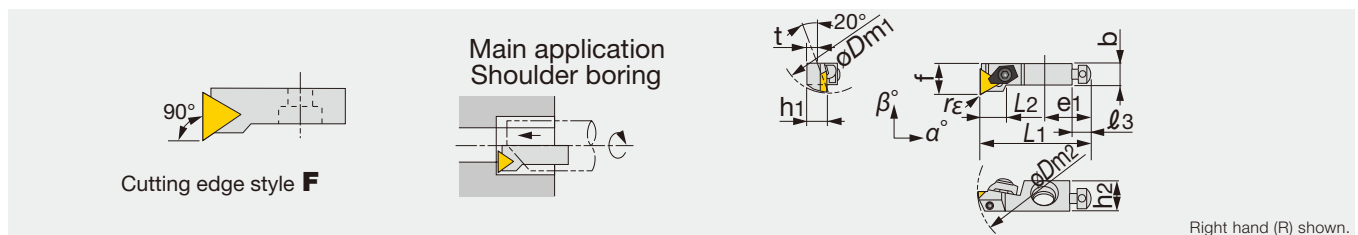
Reference pages

PN PTFN-CA: Inserts → B080 -, CBN → B164 -, PCD → B176

CP CTFP-CA: Inserts → B136 -, CBN → B168 -, PCD → B178

CE CTFE-CA

Clamp on cartridge with 90° approach angle for 20° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
CTFER/L10CA-11	40	55	0.4	14	50	12	10	14.5	10	20	8	10	5	5	TE**1103...
CTFER/L12CA-16	50	75	0.8	20	55	18	12	19.5	15	20	8	10	5	6	TE**1603...

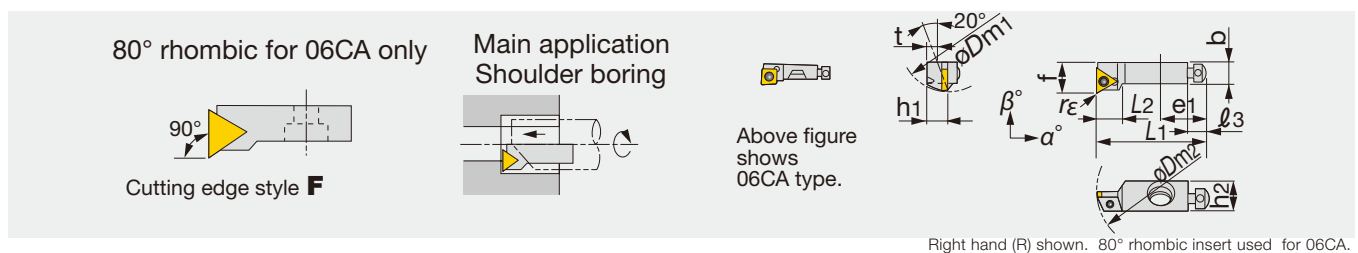
- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamp set	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTFER/L10CA-11	CSW-40	ASM54	SSHM4-8	CHHM6-15	P-2,P-2.5,P-5	CBT-2M	(PSTR/L10)
CTFER/L12CA-16	CSW-50	ASM54	SSHM4-14	CHHM6-25	P-2,P-3,P-5	CBT-3M	(PSTR/L12)

SP STFP-CA / SCFP-CA

Screw on cartridge with 90° approach angle for 11° clearance triangle insert / rhombic insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
SCFPR/L06CA-05	20	30	0.4	8	25	8.5	6	7.5	5.5	12	4.5	0	0	3.5	CP**0502...
STFPR/L08CA-09	25	35	0.4	10	32	10	8	11.5	7.5	17	6	4	0	4.5	TP**0902...
STFPR/L10CA-11	40	55	0.4	14	50	12	10	14.5	10	20	8	4	0	5	TP**1102...
STFPR/L12CA-16	50	75	0.8	20	55	17	12	19.5	15	20	8	5	2	6	TP**16T3...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Torx wrench	Sizing plate ass'y (Optional parts)
SCFPR/L06CA-05	CSTB-2.2S	ASM34S	SSHM3-6	CHHM3.5-10	P-1.5,P-3	T-7F	(PT06)
STFPR/L08CA-09	CSTB-2.2S	ASM34L	SSHM3-6	CHHM4-10	P-1.5,P-3	T-7F	(PSTR/L08)
STFPR/L10CA-11	CSTB-2.5	ASM54	SSHM4-10	CHHM6-15	P-2,P-5	T-8F	(PSTR/L10)
STFPR/L12CA-16	CSTB-4S	ASM54	SSHM4-14	CHHM6-25	P-2,P-5	T-15F	(PSTR/L12)

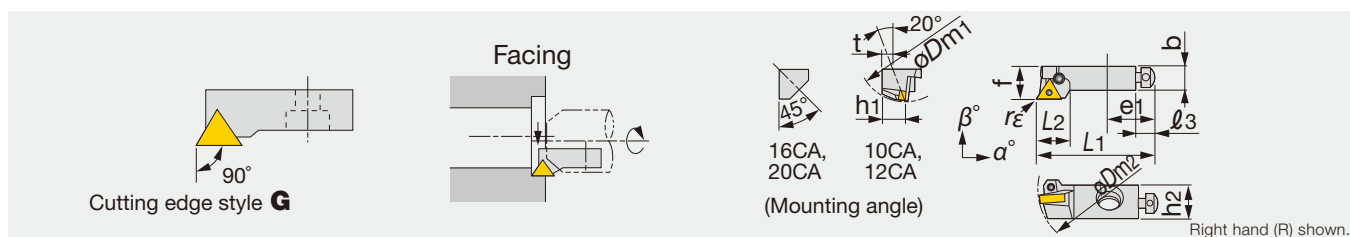
Reference pages

CE CTFE-CA: Inserts → **Special**

SP STFP-CA: Inserts → **B112 (CP**), B136 - (TP**), CBN → B168 -, PCD → B178**

PN PTGN-CA

Lever lock cartridge with 90° approach angle for negative triangle inserts



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
PTGNR/L10CA-11	40	55	0.4	14	50	14	10	14.5	10	20	8	-6	-8	5	TN**1103...
PTGNR/L12CA-16	50	75	0.8	20	55	20	12	19.5	15	20	8	-6	-8	5	TN**1604...
PTGNR/L16CA	60	75	0.8	25	63	23	16	16	17	25	8	-6	-10	0	TN**1604...
PTGNR/L20CA	70	90	0.8	25	70	28	20	20	19	30	10	-6	-8	0	TN**2204...

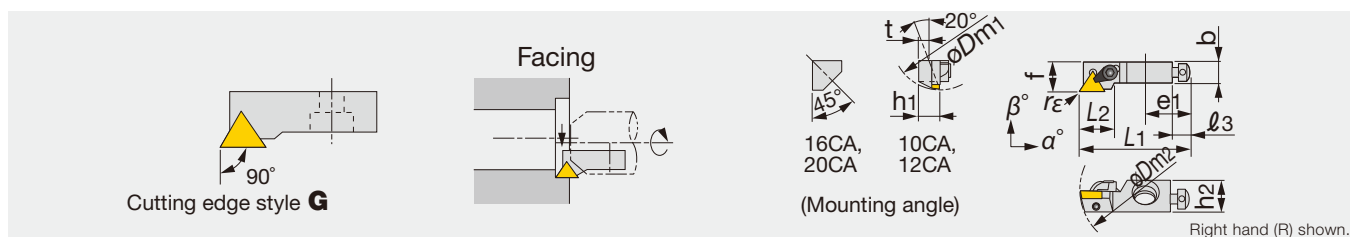
- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Shim retainer	Sizing plate (Optional parts)	Sizing plate ass'y (Optional parts)
PTGNR/L10CA-11	-	LCL22N	LCS22	ASM54	SSH4-4	CHHM6-15	P-2F,P-5	-	-	(PSTR/L10)
PTGNR/L12CA-16	-	LCL33N	LCS33	ASM54	SSH4-4	CHHM6-25	P-2F,P-5	-	-	(PSTR/L12)
PTGNR/L16CA	LST317CA	LCL3	LCS3	ASM6	SSH5-6	BHM8-25U	P-2.5,P-5	LSP3	(S0816B/S1016B)	-
PTGNR/L20CA	LST42CA	LCL4	LCS4	ASM6	SSH5-6	BHM8-30U	P-2.5,P-3,P-5	LSP4	(S0820B/S1020B)	-

CP CTGP-CA

Clamp on cartridge with 90° approach angle for 11° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
CTGPR/L10CA-11	40	55	0.4	14	50	16	10	14.5	10	20	8	4	0	5	TP**1103...
CTGPR/L12CA-16	50	75	0.8	20	55	21	12	19.5	15	20	8	3	2	5	TP**1603...
CTGPL16CA	55	75	0.8	25	63	25	16	16	17	25	8	0	0	0	TP**1603...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Lever	Clamp set	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Chipbreaker piece	Shim retainer (Optional parts)	Sizing plate ass'y (Optional parts)
CTGPR/L10CA-11	-	-	CSG-5 (CSG-5S)	ASM54	SSH4-10	CHHM6-15	P-2,P-2.5,P-5	CBT-2M	-	(PSTR/L10)
CTGPR/L12CA-16	-	-	CSG-6 (CSG-6S)	ASM54	SSH4-14	CHHM6-25	P-2,P-3,P-5	CBT-3M	-	(PSTR/L12)
CTGPR/L16CA	PAT-32	SM3X0.5X8	CSG-8S	ASM6	SSH5-16	BHM8-25U	P-2.5,P-4	-	(S0816B/S1016B)	-

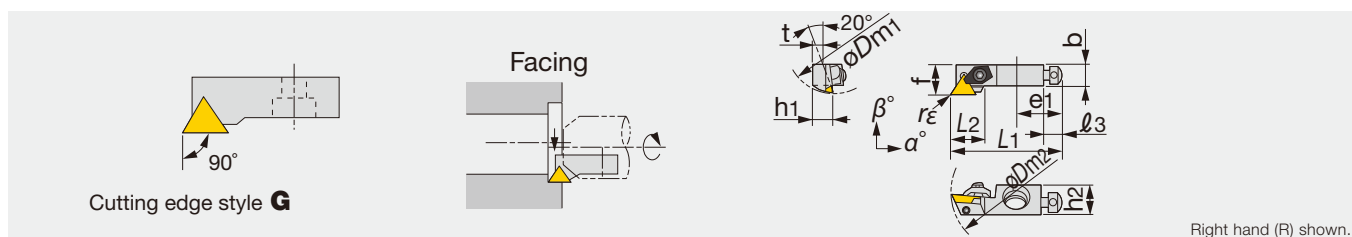
Reference pages

PN PTGN-CA: Inserts → **B080 -**, CBN → **B164 -**, PCD → **B176**

CP CTGP-CA: Inserts → **B136 -**, CBN → **B168 -**, PCD → **B178**

CE CTGE-CA

Clamp on cartridge with 90° approach angle for 20° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
CTGER/L10CA-11	40	55	0.4	14	50	15	10	14.5	10	20	8	5	10	5	TE**1103...
CTGER/L12CA-16	50	75	0.8	20	55	20	12	19.5	15	20	8	5	10	6	TE**1603...

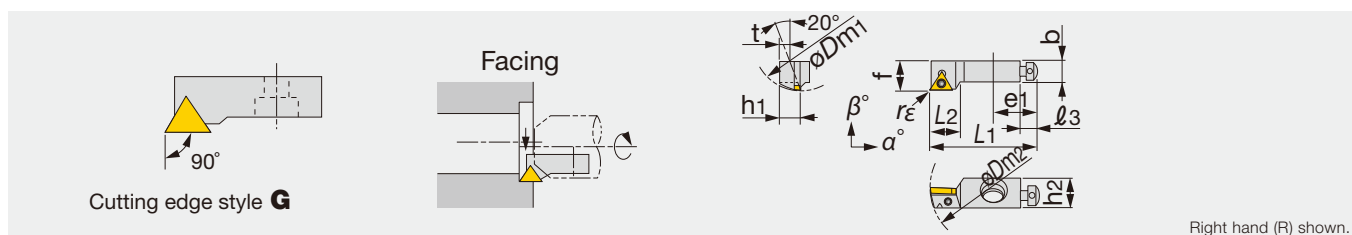
• ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamp set	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTGER/L10CA-11	CSW-40	ASM54	SSHM4-8	CHHM6-15	P-2,P-2.5,P-5	CBT-2M	(PSTR/L10)
CTGER/L12CA-16	CSW-50	ASM54	SSHM4-14	CHHM6-25	P-2,P-3,P-5	CBT-3M	(PSTR/L12)

SP STGP-CA

Screw on cartridge with 90° approach angle for 11° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
STGPR/L08CA-09	25	35	0.4	10	32	10.9	8	11.5	7.5	17	6	4	0	6	TP**0902...
STGPR/L10CA-11	40	55	0.4	14	50	14	10	14.5	10	20	8	4	0	8	TP**1102...
STGPL12CA-16	50	75	0.8	20	55	19	12	19.5	15	20	8	5	2	8	TP**16T3...

• ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Torx wrench	Sizing plate ass'y (Optional parts)
STGPR/L08CA-09	CSTB-2.2S	ASM34L	SSHM3-6	CHHM4-10	P-1.5,P-3	T-7F	(PSTR/L08)
STGPR/L10CA-11	CSTB-2.5	ASM54	SSHM4-10	CHHM6-15	P-2,P-5	T-8F	(PSTR/L10)
STGPR/L12CA-16	CSTB-4S	ASM54	SSHM4-14	CHHM6-25	P-2,P-5	T-15F	(PSTR/L12)

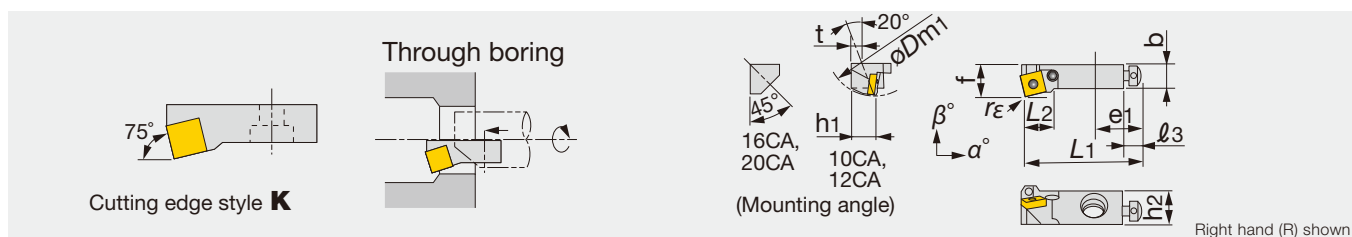
Reference pages

CE CTGE-CA: Inserts → **Special**

CP STGP-CA: Inserts → **B136 -**, CBN → **B168 -**, PCD → **B178**

PN PSKN-CA

Lever lock cartridge with 75° approach angle for negative square insert



Designation	ϕD_{m1}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
PSKNR/L10CA-09	40	0.8	14	50	12	10	14.5	10	20	8	-6	-8	5	SN**0903...
PSKNR/L12CA-12	50	0.8	20	55	16	12	19.5	15	20	8	-6	-8	5	SN**1204...
PSKNR/L16CA	55	0.8	25	63	23	16	16	17	25	8	-6	-8	0	SN**1204...
PSKNR/L20CA	70	1.2	25	70	28	20	20	19	30	10	-6	-7	0	SN**1506...

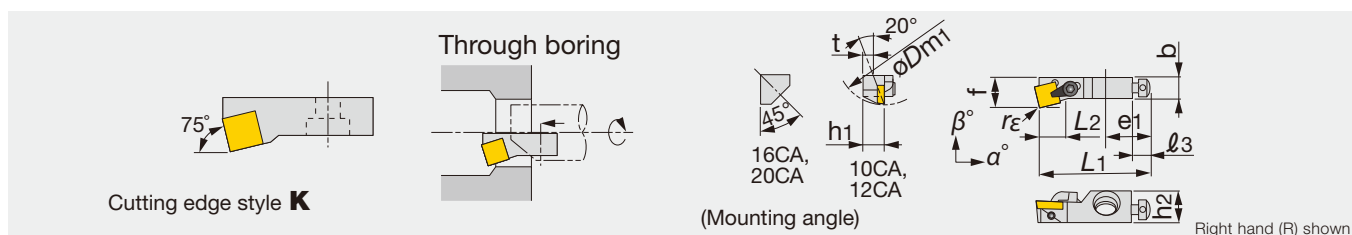
- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Shim retainer	Sizing plate (Optional parts)	Sizing plate ass'y (Optional parts)
PSKNR/L10CA-09	-	LCL32N	LCS22	ASM54	SSH4-4	CHHM4-4	P-2F,P-5	-	-	(PSTR/L10)
PSKNR/L12CA-12	-	LCL43N	LCS43	ASM54	SSH4-4	CHHM6-25	P-2,P-2.5,P-5	-	-	(PSTR/L12)
PSKNR/L16CA	LSS42CA	LCL4	LCS4CA	ASM6	SSH5-6	BHM8-25U	P-2.5,P-3,P-5	LSP4	(S0816B/S1016B)	-
PSKNR/L20CA	LSS53CA	LCL5	LCS5CA	ASM6	SSH5-6	BHM8-30U	P-2.5,P-3,P-5	LSP5	(S0820B/S1020B)	-

CP CSKP-CA

Clamp on cartridge with 75° approach angle for 11° clearance square insert



Designation	ϕD_{m1}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
CSKPR/L10CA-09	40	0.8	14	50	12	10	14.5	10	20	8	5	0	5	SP**0903...
CSKPR/L12CA-12	50	0.8	20	55	17	12	19.5	15	20	8	5	2	6	SP**1203...
CSKPR/L16CA	55	0.8	25	63	22	16	16	17	25	8	5	0	0	SP**1203...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Chipbreaker piece	Shim retainer (Optional parts)	Sizing plate ass'y (Optional parts)
CSKPR/L10CA-09	-	-	CSG-5 (CSG-5S)	ASM54	SSH4-10	CHHM6-15	P-2,P-2.5,P-5	CBS-3M	-	(PSTR/L10)
CSKPR/L12CA-12	-	-	CSG-6 (CSG-6S)	ASM54	SSH4-14	CHHM6-25	P-2,P-3,P-5	CBS-4M	-	(PSTR/L12)
CSKPR/L16CA	PAS-42	SM3X0.5X8	CSG-8S	ASM6	SSH5-16	BHM8-25U	P-2.5,P-4	-	(*)	-

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).
- When not using Chipbreaker piece, clamping screw in () should be used.

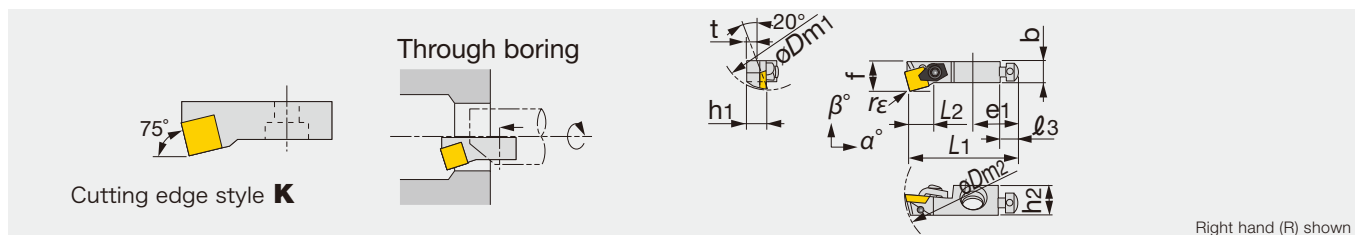
Reference pages

PN PSKN-CA: Inserts → B071 -, CBN → B164 -, PCD → B176

CP CSKP-CA: Inserts → B128 -, CBN → B168 -, PCD → B177

CE CSKE-CA

Clamp on cartridge with 75° approach angle for 20° clearance square insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
CSKER10CA-09	40	55	0.8	14	50	11.3	10	14.5	10	20	8	10	5	8	SE**0903...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

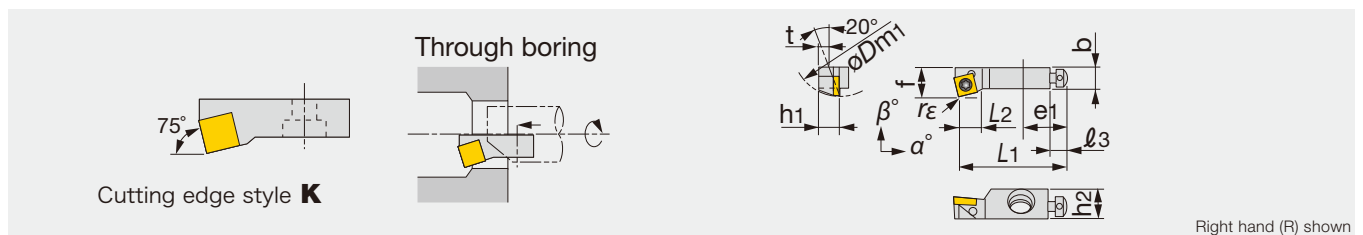
SPARE PARTS

Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CSKER10CA-09	CHHM6-15	P-2	P-2.5	P-5

Designation	Clamp set	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CSKER10CA-09	CSW-40	ASM54	SSHM4-8	CBS-3M	(PSTR/L10)

SP SSKP-CA

Screw on cartridge with 75° approach angle for 11° clearance square insert



Designation	ϕD_{m1}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	l_3	β°	α°	t	Insert
SSKPR10CA-09	40	0.8	14	50	12.7	10	14.5	10	20	8	5	0	8	SP**0903...
SSKPR12CA-12	50	0.8	20	55	16	12	19.5	15	20	8	5	2	8	SP**1204...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
SSKPR10CA-09	CSTB-4S	CHHM6-15	P-2	T-15F	P-5
SSKPR12CA-12	CSTB-5S	CHHM6-25	P-2	T-20F	P-5

Designation	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts)
SSKPR10CA-09	ASM54	SSHM4-10	(PSTR/L10)
SSKPR12CA-12	ASM54	SSHM4-14	(PSTR/L12)

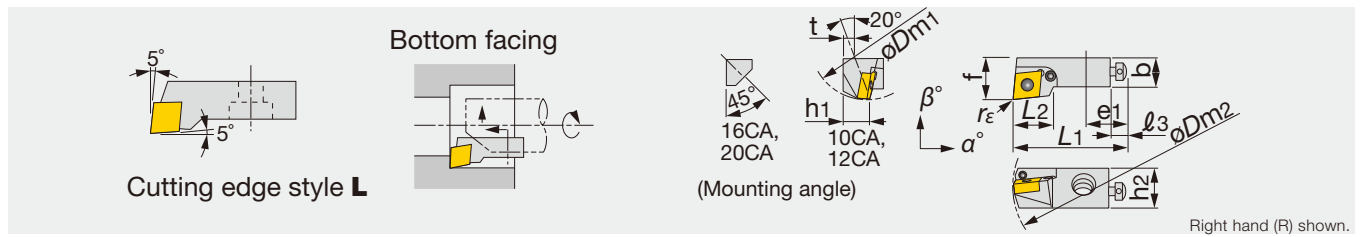
Reference pages

CE CSKE-CA: Inserts → **Special**

SP SSKP-CA: Inserts → **B128 -**, CBN → **B168**

PN PCLN-CA

Lever lock cartridge with 95° approach angle for negative rhombic insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
PCLNR/L12CA-12	50	75	0.8	20	55	19	12	19.5	15	20	8	-6	-8	6	CN**1204...
PCLNR/L16CA	55	75	0.8	25	63	28	16	16	17	25	8	-6	-8	0	CN**1204...
PCLNR/L20CA	70	90	1.2	25	70	31	20	20	19	30	10	-6	-8	0	CN**1606...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

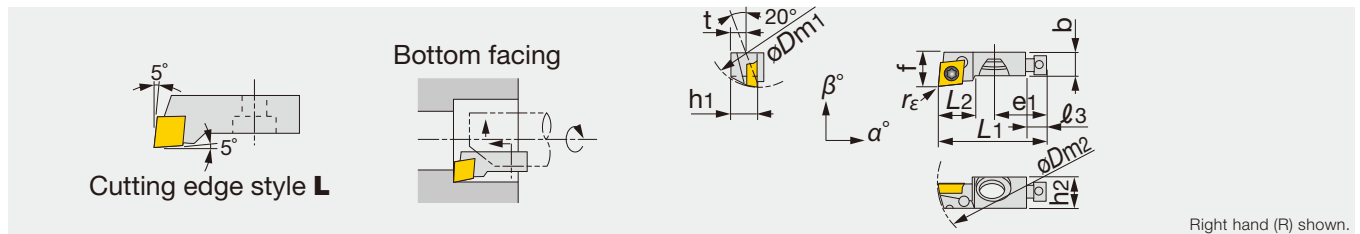
SPARE PARTS

Designation	Cartridge setting screw	Cartridge setting screw 1	Sizing plate	Sizing plate 1	Wrench	Wrench 1	Wrench 2
PCLNR/L12CA-12	-	CHHM6-25	-	-	P-2	P-2.5	P-5
PCLNR/L16CA	BHM8-25U	-	S0816B	S1016B	P-2.5	P-3	P-5
PCLNR/L20CA	-	-	-	-	P-2.5	P-3	P-5

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Shim retainer	Sizing plate ass'y (Optional parts) (PSTR/L12)
PCLNR/L12CA-12	-	LCL43N	LCS43	ASM54	SSHM4-4	-	-
PCLNR/L16CA	LSC 42CA	LCL4	LCS4CA	ASM6	SSHM5-6	LSP4	-
PCLNR/L20CA	LSC 53CA	LCL5	LCS5CA	ASM6	SSHM5-6	LSP5	-

SP SCLP-CA

Screw on cartridge with 95° approach angle for 11° clearance rhombic insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
SCLPR/L06CA-05	20	30	0.4	8	25	8.5	6	7.5	5.5	12	4.5	0	0	3.5	CP**0502...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
SCLPR/L06CA-05	CSTB-2.2S	CHHM3.5-10	P-1.5	T-7F	P-3

Designation	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts) (PT06)
SCLPR/L06CA-05	ASM34S	SSHM3-6	-

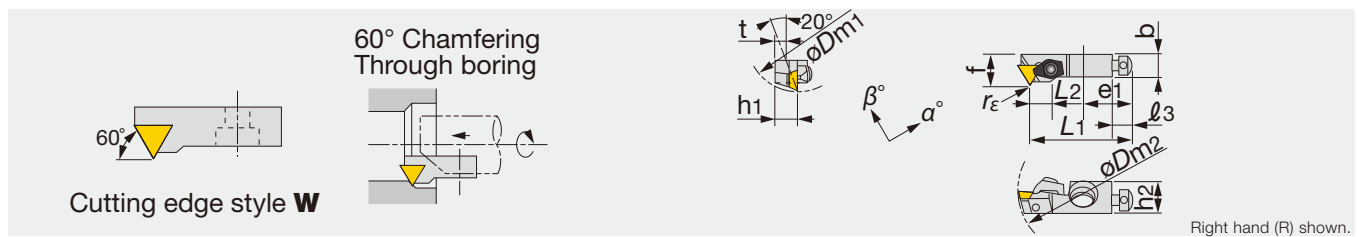
Reference pages

PN PCLN-CA: Inserts → B050 -, CBN → B163 -, PCD → B176

SP SCLP-CA: Inserts → B112

CP CTWP-CA

Clamp on cartridge with 60° approach angle for 11° clearance triangle insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
CTWPR10CA-11	40	55	0.4	14	44	13	10	14.5	10	20	8	4	0	5	TP**1103...
CTWPR/L12CA-16	50	75	0.8	20	47	11	12	19.5	15	20	8	4	0	6	TP**1603...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- **rε: Standard corner radius

SPARE PARTS

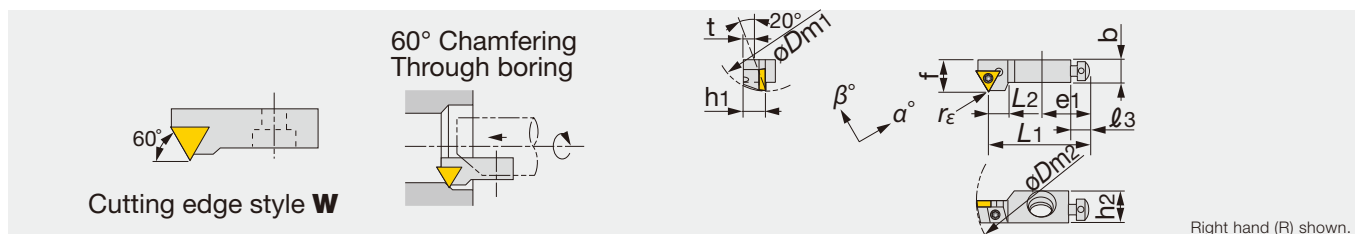
Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CTWPR10CA-11	CHHM6-15	P-2	P-2.5	P-5
CTWPR/L12CA-16	CHHM6-25	P-2	P-3	P-5

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTWPR/L10CA-11	CSG-5 (CSG-5S)	ASM54	SSHM4-10	CBT-2M	(PSTR/L10)
CTWPR/L12CA-16	CSG-6 (CSG-6S)	ASM54	SSHM4-14	CBT-3M	(PSTR/L12)

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).
- When not using Chipbreaker piece, clamping screw in () should be used.
- Hand of the insert should be selected according to the application.

SP STWP-CA

Screw on cartridge with 60° approach angle for 11° clearance triangle insert



Designation	øDm1	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
STWPR08CA-09	25	0.4	10	28	6	8	11.5	7.5	17	6	4	0	6	TP**0902...
STWPR/L10CA-11	40	0.4	14	44	9	10	14.5	10	20	8	4	0	8	TP**1102...
STWPR12CA-16	50	0.8	20	47	9	12	19.5	15	20	8	4	0	8	TP**16T3...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- **rε: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
STWPR08CA-09	CSTB-2.2S	CHHM4-10	P-1.5	T-7F	P-3
STWPR/L10CA-11	CSTB-2.5	CHHM6-15	P-2	T-8F	P-5
STWPR12CA-16	CSTB-4S	CHHM6-25	P-2	T-15F	P-5

Designation	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts)
STWPR08CA-09	ASM34L	SSHM3-6	(PSTR/L08)
STWPR/L10CA-11	ASM54	SSHM4-10	(PSTR/L10)
STWPR12CA-16	ASM54	SSHM4-14	(PSTR/L12)

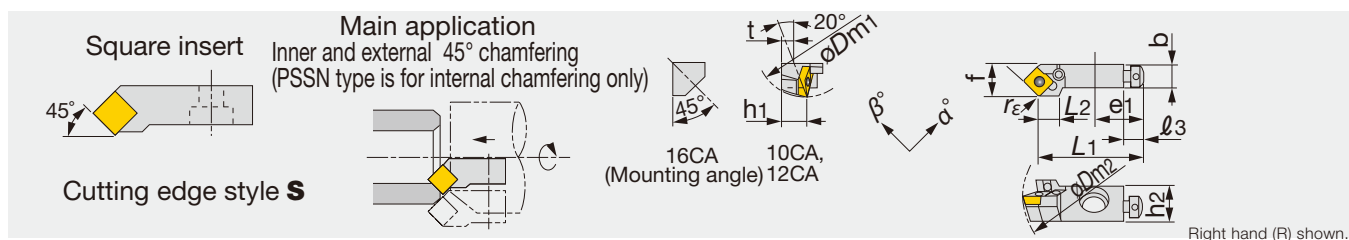
Reference pages

CP CTWP-CA: Inserts → **B136 -**, CBN → **B168 -**, PCD → **B178**

SP STWP-CA: Inserts → **B136 -**, CBN → **B168 -**, PCD → **B178**

PN PSSN-CA

Lever lock cartridge with 45° approach angle for negative square insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
PSSNR/L10CA-09	40	55	0.8	14	44	10	10	14.5	10	20	8	-12	0	5	SN**0903...
PSSNR/L12CA-12	50	75	0.8	20	47	12	12	19.5	15	20	8	-12	0	6	SN**1204...
PSSNR/L16CA	55	75	0.8	25	53	28	16	16	17	25	8	-11	0	0	SN**1204...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- **rε: Standard corner radius

SPARE PARTS

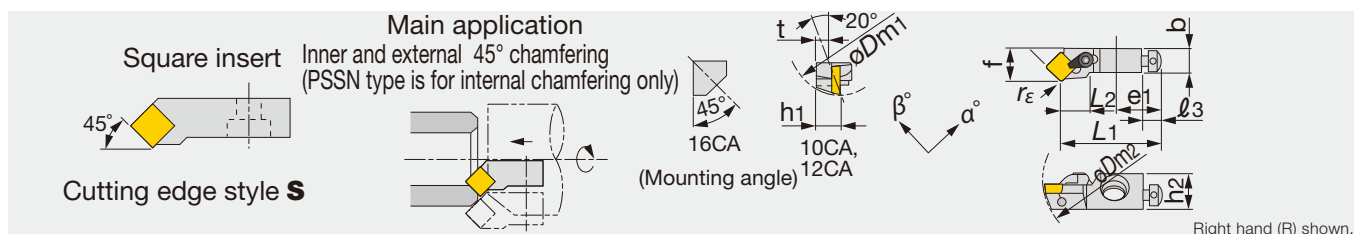
Designation	Cartridge setting screw	Cartridge setting screw 1	Wrench	Wrench 1	Wrench 2	Radial adjusting screw
PSSNR/L10CA-09	-	CHHM4-4	P-5	P-2F	-	SSHM4-4
PSSNR/L12CA-12	-	CHHM6-25	P-2	P-2.5	P-5	SSHM4-4
PSSNR/L16CA	BHM8-25U	CHHM6-25	P-2.5	P-3	P-5	SSHM5-6

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Shim retainer	Sizing plate (Optional parts)	Sizing plate ass'y (Optional parts)
PSSNR/L10CA-09	-	LCL32N	LCS22	ASM54	-	-	(PSTR/L10)
PSSNR/L12CA-12	-	LCL43N	LCS43	ASM54	-	-	(PSTR/L12)
PSSNR/L16CA	LSS42CA	LCL4	LCS4CA	ASM6	LSP4	(S0816B/S1016B)	-

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).

CP CSSP-CA

Clamp on cartridge with 45° approach angle for 11° clearance square insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
CSSPR/L10CA-09	40	55	0.8	14	44	11	10	14.5	10	20	8	3	0	5	SP**0903...
CSSPR/L12CA-12	50	75	0.8	20	47	13	12	19.5	15	20	8	4	0	6	SP**1203...
CSSPR16CA	55	75	0.8	25	53	15	16	16	17	25	8	0	0	0	SP**1203...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- **rε: Standard corner radius

SPARE PARTS

Designation	Cartridge setting screw	Cartridge setting screw 1	Wrench	Wrench 1	Wrench 2	Radial adjusting screw
CSSPR/L10CA-09	-	CHHM6-15	P-2	P-2.5	P-5	SSHM4-10
CSSPR/L12CA-12	-	CHHM6-25	P-2	P-3	P-5	SSHM4-14
CSSPR16CA	BHM8-25U	-	P-2.5	P-4	-	SSHM5-16

Designation	Shim	Shim screw	Clamping screw	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CSSPR/L10CA-09	-	-	CSG-5 (CSG-5S)	ASM54	SSHM4-10	CBS-3M	(PSTR/L10)
CSSPR/L12CA-12	-	-	CSG-6 (CSG-6S)	ASM54	SSHM4-14	CBS-4M	(PSTR/L12)
CSSPR16CA	PAS-42	SM3X0.5X8	CSG-8S	ASM6	SSHM5-16	-	-

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).
- When not using Chipbreaker piece, clamping screw in () should be used.

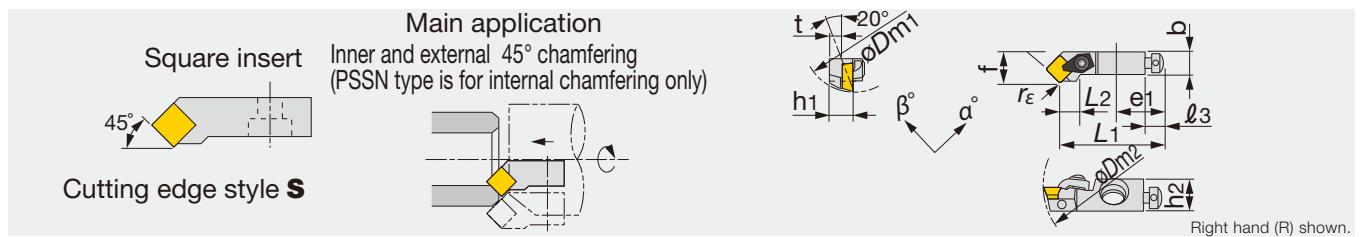
Reference pages

PN PSSN-CA: Inserts → **B071 -**, CBN → **B164 -**, PCD → **B176**

CP CSSP-CA: Inserts → **B128 -**, CBN → **B168 -**, PCD → **B177**

CE CSSE-CA

Clamp on cartridge with 45° approach angle for 20° clearance square insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	L_3	β°	α°	t	Insert
CSSER12CA-12	50	75	0.8	20	47	12	12	19.5	15	20	8	10	0	6	SE**1203...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- ** r_{ϵ} : Standard corner radius

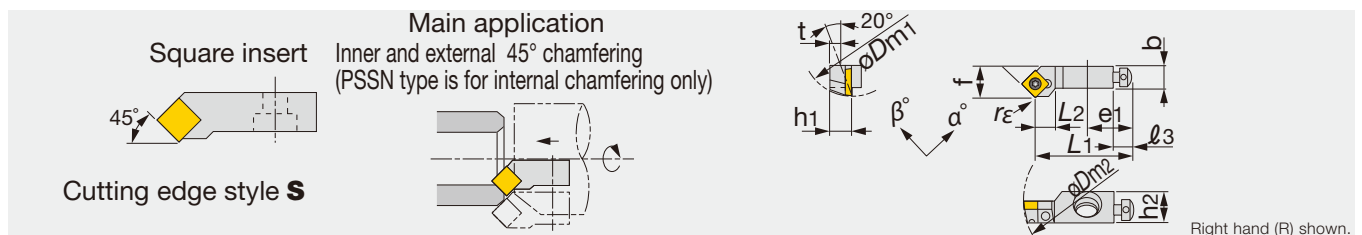
SPARE PARTS

Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CSSER12CA-12	CHHM6-25	P-2	P-3	P-5

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CSSER12CA-12	CSW-50	ASM54	SSHM4-14	CBS-4M	(PSTR/L12)

SP SSSP-CA

Screw on cartridge with 45° approach angle for 11° clearance square insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	L_3	β°	α°	t	Insert
SSSPR/L10CA-09	40	55	0.8	14	44	9	10	14.5	10	20	8	3	0	8	SP**0903...
SSSPR/L12CA-12	50	75	0.8	20	47	13	12	19.5	15	20	8	4	0	8	SP**1204...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- Hand of the insert to be used should be selected depending on the application.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
SSSPR/L10CA-09	CSTB-4S	CHHM6-15	P-2	T-15F	P-5
SSSPR/L12CA-12	CSTB-5S	CHHM6-25	P-2	T-20F	P-5

Designation	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts)
SSSPR/L10CA-09	ASM54	SSHM4-10	(PSTR/L10)
SSSPR/L12CA-12	ASM54	SSHM4-14	(PSTR/L12)

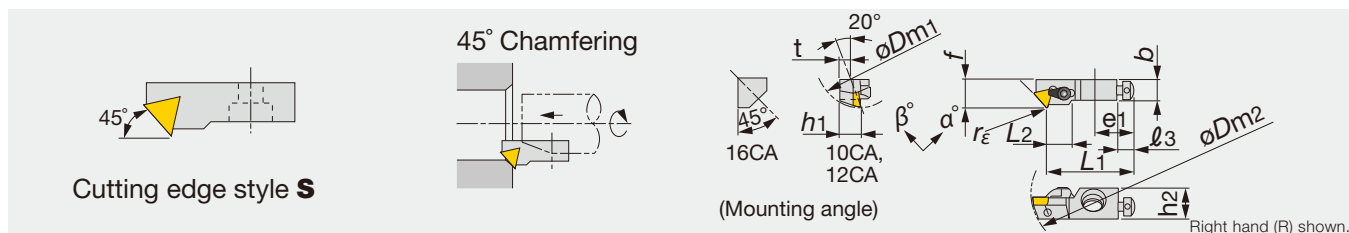
Reference pages

CE CSSE-CA: Inserts → **Special**

SP SSSP-CA: Inserts → **B128 -**, CBN → **B168 -**, PCD → **B177**

CP CTSP-CA

Clamp on cartridge with 45° approach angle for 11° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
CTSPR/L10CA-11	40	55	0.4	14	44	12	10	14.5	10	20	8	3	0	5	TP**1103...
CTSPR/L12CA-16	50	75	0.8	20	47	11	12	19.5	15	20	8	4	0	6	TP**1603...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

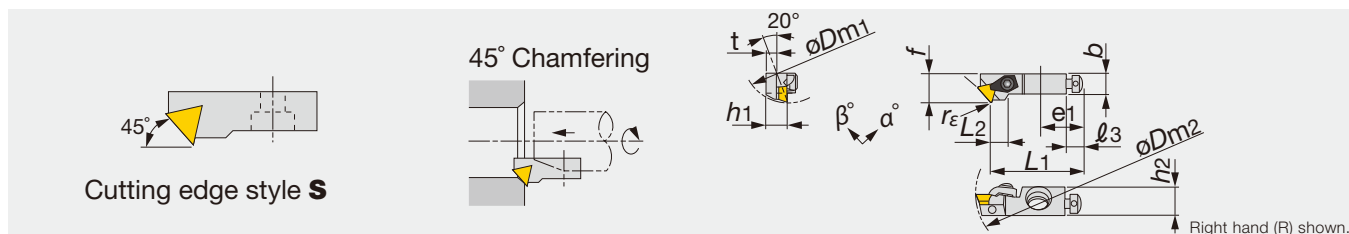
Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CTSPR/L10CA-11	CHHM6-15	P-2	P-2.5	P-5
CTSPR/L12CA-16	CHHM6-25	P-2	P-3	P-5

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTSPR/L10CA-11	CSG-5 (CSG-5S)	ASM54	SSHM4-10	CBT-2M	(PSTR/L10)
CTSPR/L12CA-16	CSG-6 (CSG-6S)	ASM54	SSHM4-14	CBT-3M	(PSTR/L12)

- Cartridges of K-style cutting edge uses S0816A or S1016A, whilst ones of S-style uses S0816C or S1016B (*marked).
- When not using Chipbreaker piece, clamping screw in () should be used.

CE CTSE-CA

Clamp on cartridge with 45° approach angle for 20° clearance triangle insert



Designation	ϕD_{m1}	ϕD_{m2}	r_{ϵ}^{**}	f	L_1	L_2	h_1	h_2	b	e_1	ℓ_3	β°	α°	t	Insert
CTSER10CA-11	40	55	0.4	14	44	8	10	14.5	10	20	8	10	0	5	TE**1103...

- In above table, ϕD_{m1} is min. bore dia. for axial mounting and ϕD_{m2} is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- ** r_{ϵ} : Standard corner radius

SPARE PARTS

Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CTSER10CA-11	CHHM6-15	P-2	P-2.5	P-5

Designation	Clamp set	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTSER10CA-11	CSW-40	ASM54	SSHM4-8	CBT-2M	(PSTR/L10)

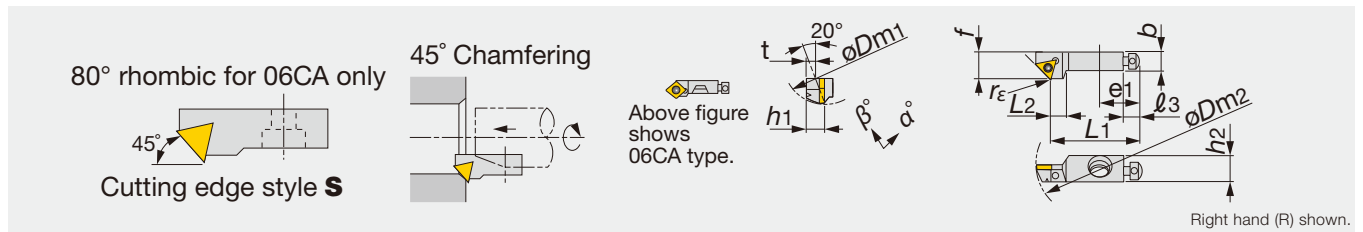
Reference pages

CP CTSP-CA: Inserts → B136 -, CBN → B168 -, PCD → B178

CE CTSE-CA: Inserts → Special

SP STSP-CA / SCSP-CA

Screw on cartridge with 45° approach angle for 11° clearance triangle insert / rhombic insert



Designation	0Dm1	0Dm2	rε**	f	L1	L2	h1	h2	b	e1	L3	β°	α°	t	Insert
SCSPR/L06CA-05	20	30	0.4	8	22	6	6	7.5	5.5	12	4.5	0	0	3.5	CP**0502...
STSPR/L08CA-09	25	35	0.4	10	28	5.2	8	11.5	7.5	17	6	0	0	4.5	TP**0902...
STSPR/L10CA-11	40	55	0.4	14	44	9	10	14.5	10	20	8	3	0	5	TP**1102...
STSPR/L12CA-16	50	75	0.8	20	47	11	12	19.5	15	20	8	4	0	6	TP**16T3...

- In above table, 0Dm1 is min. bore dia. for axial mounting and 0Dm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

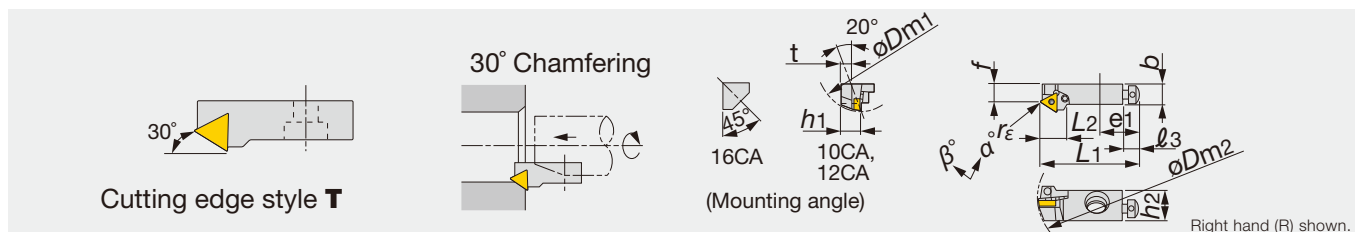
SPARE PARTS

Designation	Clamping screw	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
SCSPR/L06CA-05	CSTB-2.2S	CHHM3.5-10	P-1.5	T-7F	P-3
STSPR/L08CA-09	CSTB-2.2S	CHHM4-10	P-1.5	T-7F	P-3
STSPR/L10CA-11	CSTB-2.5	CHHM6-15	P-2	T-8F	P-5
STSPR/L12CA-16	CSTB-4S	CHHM6-25	P-2	T-15F	P-5

Designation	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts)
SCSPR/L06CA-05	ASM34S	SSHM3-6	(PT06)
STSPR/L08CA-09	ASM34L	SSHM3-6	(PSTR/L08)
STSPR/L10CA-11	ASM54	SSHM4-10	(PSTR/L10)
STSPR/L12CA-16	ASM54	SSHM4-14	(PSTR/L12)

PN PTTN-CA

Lever lock cartridge with 30° approach angle for negative triangle insert



Designation	0Dm1	0Dm2	rε**	f	L1	L2	h1	h2	b	e1	L3	β°	α°	t	Insert
PTTNR/L10CA-11	40	55	0.4	9	50	13	10	14.5	10	20	8	-10	0	5	TN**1103...
PTTNR/L12CA-16	50	75	0.8	13	55	19	12	19.5	15	20	8	-10	0	6	TN**1604...
PTTNR/L16CA	60	75	0.8	15	63	22	16	16	17	25	8	-10	-2	0	TN**1604...

- In above table, 0Dm1 is min. bore dia. for axial mounting and 0Dm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

SPARE PARTS

Designation	Cartridge setting screw	Sizing plate	Sizing plate 1	Wrench	Wrench 1
PTTNR/L10CA-11	CHHM6-15	-	-	P-5	P-2F
PTTNR/L12CA-16	CHHM6-25	-	-	P-5	P-2F
PTTNR/L16CA	BHM8-25U	S0816B	S1016B	P-2.5	P-5

Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Shim retainer	Sizing plate ass'y (Optional parts)
PTTNR/L10CA-11	-	LCL22N	LCS22	ASM54	SSHM4-4	-	(PSTR/L10)
PTTNR/L12CA-16	-	LCL33N	LCS33	ASM54	SSHM4-4	-	(PSTR/L12)
PTTNR/L16CA	LST317CA	LCL3	LCS3	ASM6	SSHM5-6	LSP3	-

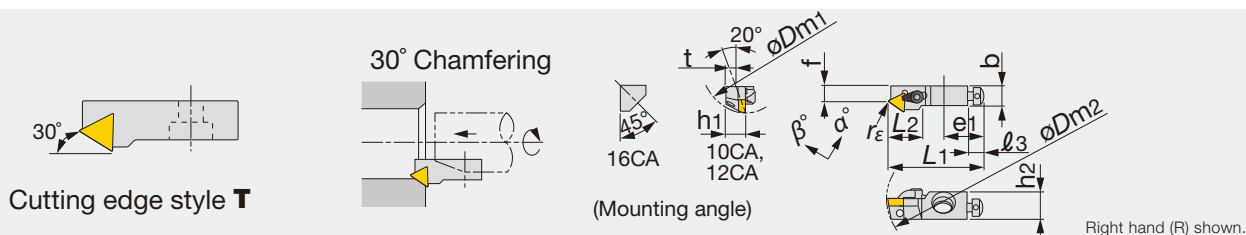
Reference pages

SP STSP-CA: Inserts → B112 (CP**), B136 - (TP**), CBN → B168 -, PCD → B178

PN PTTN-CA: Inserts → B080 -, CBN → B164 -, PCD → B176

CP CTTTP-CA

Clamp on cartridge with 30° approach angle for 11° clearance triangle insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
CTTPR/L10CA-11	40	55	0.4	9	50	18	10	14.5	10	20	8	0	0	5	TP**1103...
CTTPR/L12CA-16	50	75	0.8	13	55	22	12	19.5	15	20	8	4	0	6	TP**1603...
CTTPL16CA	55	75	0.8	15	63	23	16	16	17	25	8	0	0	0	TP**1603...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

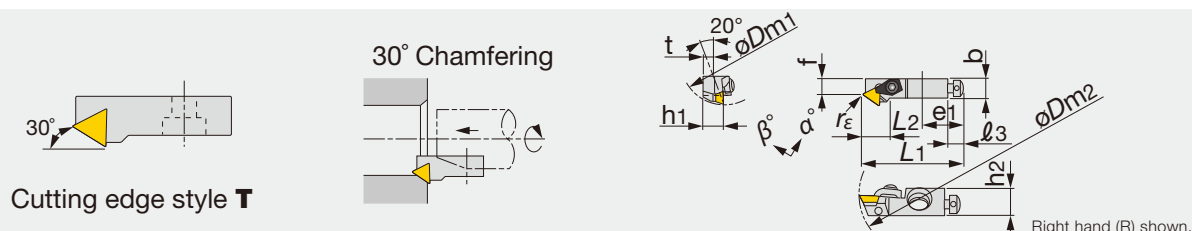
SPARE PARTS

Designation	Cartridge setting screw	Sizing plate	Sizing plate 1	Wrench	Wrench 1	Wrench 2
CTTPL10CA-11	CHHM6-15	-	-	P-2	P-2.5	P-5
CTTPR/L12CA-16	CHHM6-25	-	-	P-2	P-3	P-5
CTTPL16CA	BHM8-25U	S0816B	S1016B	P-2.5	P-4	-

Designation	Shim	Shim screw	Clamping screw	Axial adjusting screw	Radial adjusting screw	Sizing plate ass'y (Optional parts)	Chipbreaker piece
CTTPR/L10CA-11	-	-	CSG-5 (CSG-5S)	ASM54	SSHM4-10	(PSTR/L10)	CBT-2M
CTTPR/L12CA-16	-	-	CSG-6 (CSG-6S)	ASM54	SSHM4-14	(PSTR12)	CBT-3M
CTTPL10CA	PAT-32	SM3X0.5X8	CSG-8S	ASM6	SSHM5-16	-	-

CE CTTE-CA

Clamp on cartridge with 30° approach angle for 20° clearance triangle insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	l3	β°	α°	t	Insert
CTTER10CA-11	40	55	0.4	9	50	14	10	14.5	10	20	8	10	0	5	TE**1103...
CTTER12CA-16	50	75	0.8	13	55	18	12	19.5	15	20	8	10	0	6	TE**1603...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

SPARE PARTS

Designation	Cartridge setting screw	Wrench	Wrench 1	Wrench 2
CTTER10CA-11	CHHM6-15	P-2	P-2.5	P-5
CTTER12CA-16	CHHM6-25	P-2	P-3	P-5

Designation	Clamp set	Axial adjusting screw	Radial adjusting screw	Chipbreaker piece	Sizing plate ass'y (Optional parts)
CTTER10CA-11	CSW-40	ASM54	SSHM4-8	CBT-2M	(PSTR10)
CTTER12CA-16	CSW-50	ASM54	SSHM4-14	CBT-3M	(PSTR12)

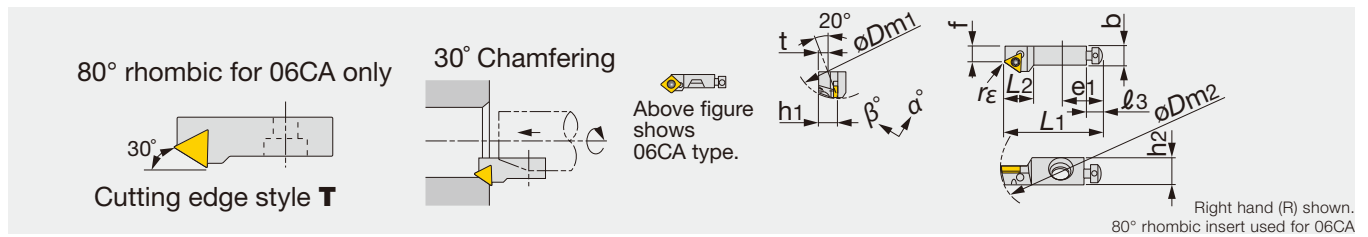
Reference pages

CP CTTTP-CA: Inserts → B136 -, CBN → B168 -, PCD → B178

CE CTTE-CA: Inserts → Special

SP STTP-CA / SCTP-CA

Screw on cartridge with 30° approach angle for 11° clearance triangle insert

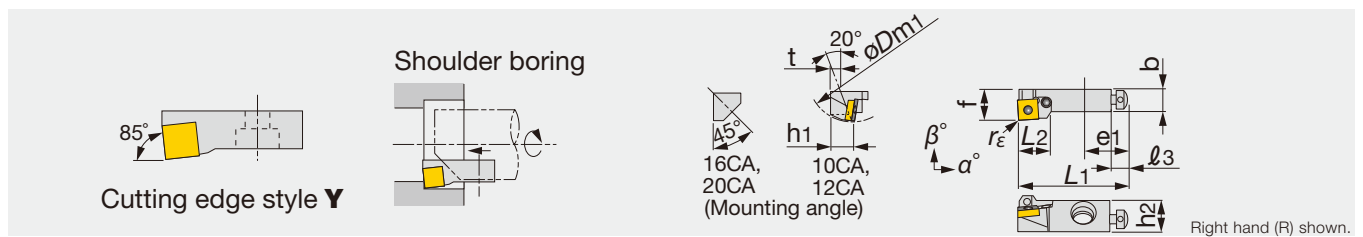


Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	L3	β°	α°	t	Insert
SCTPR06CA-05	20	30	0.4	5.4	25	9	6	7.5	5.5	12	4.5	0	0	3.5	CP**0502...
STTPR/L08CA-09	25	35	0.4	6	32	10	8	11.5	7.5	17	6	0	0	4.5	TP**0902...
STTPR10CA-11	40	55	0.4	9	50	15	10	14.5	10	20	8	0	0	5	TP**1102...

Designation	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Torx wrench	Sizing plate ass'y (Optional parts)
SCTPR/L06CA-05	CSTB-2.2S	ASM34S	SSHM3-6	CHHM3.5-10	P-1.5,P-3	T-7F	(PT06)
STTPR/L08CA-09	CSTB-2.2S	ASM34L	SSHM3-6	CHHM4-10	P-1.5,P-3	T-7F	(PSTR/L08)
STTPR/L10CA-11	CSTB-2.5	ASM54	SSHM4-10	CHHM6-15	P-2,P-5	T-8F	(PSTR/L10)

PN PSYN-CA

Lever lock cartridge with 85° approach angle for negative square insert



Designation	øDm1	øDm2	rε**	f	L1	L2	h1	h2	b	e1	L3	β°	α°	t	Insert
PSYNR10CA-09	40	-	0.8	14	50	14	10	14.5	10	20	8	-6	-8	5	SN**0903...
PSYNR12CA-12	50	-	0.8	20	55	18	12	19.5	15	20	8	-6	-8	6	SN**1204...
PSYNR16CA	55	-	0.8	25	63	26	16	16	17	25	8	-6	-8	0	SN**1204...
PSYNR20CA	70	-	1.2	25	70	30	20	20	19	30	10	-6	-7	0	SN**1506...

- In above table, øDm1 is min. bore dia. for axial mounting and øDm2 is for radial mounting.
- When using a right or left hand insert, the right hand insert is used for left hand cartridge and the left hand insert is used for right hand cartridge.
- The left hand insert is used for the right hand cartridge and right hand insert is used for left hand cartridge.
- **rε: Standard corner radius

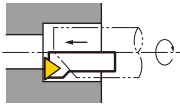
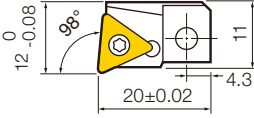
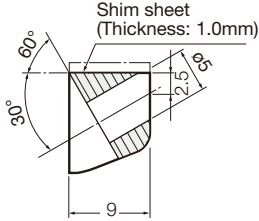
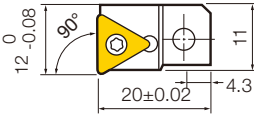
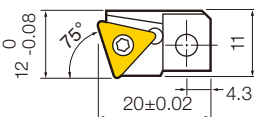
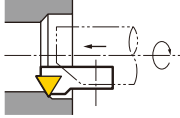
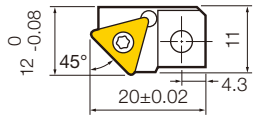
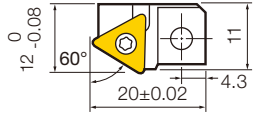
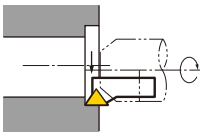
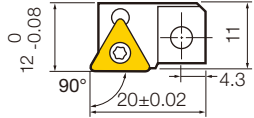
Designation	Shim	Lever	Clamping screw	Axial adjusting screw	Radial adjusting screw	Cartridge setting screw	Wrench	Shim retainer	Sizing plate (Optional parts)	Sizing plate ass'y (Optional parts)
PSYNR10CA-09	-	LCL32N	LCS22	ASM54	SSHM4-4	CHHM4-4	P-2F,P-5	-	-	(PSTR/L10)
PSYNR12CA-12	-	LCL43N	LCS43	ASM54	SSHM4-4	CHHM6-25	P-2,P-2.5,P-5	-	-	(PSTR/L12)
PSYNR16CA	LSS42CA	LCL4	LCS4CA	ASM6	SSHM5-6	BHM8-25U	P-2.5,P-3,P-5	LSP4	(S0816B/S1016B)	-
PSYNR20CA	LSS53CA	LCL5	LCS5CA	ASM6	SSHM5-6	BHM8-30U	P-2.5,P-3,P-5	LSP5	(S0820B/S1020B)	-

Reference pages

SP STTP-CA: Inserts → B112 (CP**), B136 - (TP**), CBN → B168 -, PCD → B178

PN PSYN-CA: Inserts → B071 -, CBN → B164 -, PCD → B176

A-type (Positive rake, compact type)

Application	Shape	Designation	Specification
Boring 		ATX-0 R/L	●Applicable inserts TP□□1103□□ (With Tungaloy's standard hole) ●Min. bore diameter ø32 ●Cutting edge height 9 mm ●Dimension for mounting 
		ATF-0 R/L	
		ATK-0 R/L	
Chamfering 		ATS-0 R/L	
		ATT-0 R/L	
Facing 		ATG-0 L	

Note: Right hand (R) shown.

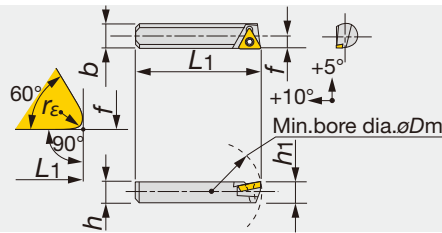
SPARE PARTS

Designation	Mounting screw	Adjusting screw (axial direction)	Insert clamping screw	Shim sheet	Wrench
For all products	M4×15	M3×0.5×8	CSTA-NO2L	SM-00	P-1.5, T-8F

Boring bar tool

TBS1

90° approach angle with square shank



TBS1**T** shown.

Designation	øDm	f	h1	L2	b	h	L1	rε**	Insert
TBS108T08	25	7.8	7.8	9	8	8	40	0.4	TP**0802...
TBS110T09	38	9.8	9.8	10	10	10	50	0.4	TP**0902...
TBS113T11	50	12.8	12.8	12	13	13	60	0.4	TP**1102...
TBS116C12	62	15.8	15.8	18	16	16	80	0.8	CP**1204...
TBS119C12	72	18.8	18.8	18	19	19	95	0.8	CP**1204...
TBS125C16	82	24.8	24.8	22	25	25	125	1.2	CP**1605...

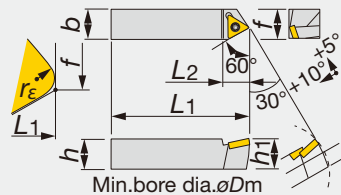
- Figures shown above are of 16 mm or larger square shank types used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBS308T08H).
- TBS116C12 TBS316C12 and TBS416C12 are without-shim types.
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- **rε: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench	Wrench 1
TBS108T08	CSTB-2L	-	-	-	T-6F
TBS110T09	CSTB-2.2	-	-	-	T-7F
TBS113T11	CSTB-2.5	-	-	-	T-8F
TBS116C12	CSTB-5	-	-	-	T-20F
TBS119C12	CSTB-4F	DTS6-4	SSC4T3-P	P-4	T-15F
TBS125C16	CSTB-4F	DTS6-4	SSC54-P	P-4	T-15F

TBS3

30° approach angle with square shank



TBS3**T** shown.

Designation	øDm	f	h1	L2	b	h	L1	rε**	Insert
TBS308T08	25	4.7	7.8	8	8	8	40	0.4	TP**0802...
TBS310T09	38	6	9.8	11	10	10	50	0.4	TP**0902...
TBS313T11	50	8.3	12.8	12	13	13	60	0.4	TP**1102...
TBS316C12	62	9.7	15.8	21	16	16	80	0.8	CP**1204...
TBS319C12	72	12.7	18.8	21	19	19	95	0.8	CP**1204...

- Figures shown above are of 16 mm or larger square shank types used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBS308T08H).
- TBS116C12 TBS316C12 and TBS416C12 are without-shim types.
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- **rε: Standard corner radius

SPARE PARTS

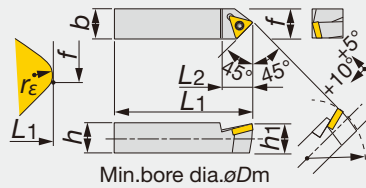
Designation	Clamping screw	Shim screw	Shim	Wrench	Wrench 1
TBS308T08	CSTB-2L	-	-	-	T-6F
TBS310T09	CSTB-2.2	-	-	-	T-7F
TBS313T11	CSTB-2.5	-	-	-	T-8F
TBS316C12	CSTB-5	-	-	-	T-20F
TBS319C12	CSTB-4F	DTS6-4	SSC4T3-P	P-4	T-15F

Reference pages

TBS1, TBS3: Inserts → B136 - (TP**), B112 (CP**), CBN → B168 -, PCD → B178

TBS4

45° approach angle with square shank



TBS4**T** shown.

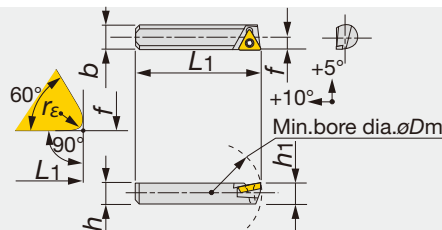
Designation	øDm	f	h1	L2	b	h	L1	rε**	Insert
TBS408T08	25	3.2	7.8	9	8	8	40	0.4	TP**0802...
TBS410T09	38	4.2	9.8	10	10	10	50	0.4	TP**0902...
TBS413T11	50	6.2	12.8	14	13	13	60	0.4	TP**1102...
TBS416C12	62	7.3	15.8	22	16	16	80	0.8	CP**1204...
TBS419C12	72	10.3	18.8	22	19	19	95	0.8	CP**1204...
TBS425C16	82	14.2	24.8	26	25	25	125	1.2	CP**1605...

- Figures shown above are of 16 mm or larger square shank types used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBS308T08H)
- TBS116C12 TBS316C12 and TBS416C12 are without-shim types.
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- **rε: Standard corner radius

Designation	Clamping screw	Shim screw	Shim	Wrench	Wrench 1
TBS408T08	CSTB-2L	-	-	-	T-6F
TBS410T09	CSTB-2.2	-	-	-	T-7F
TBS413T11	CSTB-2.5	-	-	-	T-8F
TBS416C12	CSTB-5	-	-	-	T-20F
TBS419C12	CSTB-4F	DTS6-4	SSC4T3-P	P-4	T-15F
TBS425C16	CSTB-4F	DTS6-4	SSC54-P	P-4	T-15F

TBR1

90° approach angle with round shank



TBR1**T** shown.

Designation	øDm	f	h1	h	øDs	L1	rε**	Insert
TBR108T08	30	4	7	7	8	35	0.2	TP**0802...
TBR110T09	40	5	8.5	8.5	10	50	0.2	TP**0902...
TBR112T11	50	6	10.5	10.5	12	60	0.2	TP**1102...

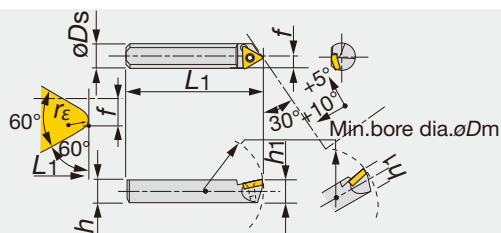
- Figures shown above are of 6 mm or smaller diameter shank used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBR105E04H)
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- **rε: Standard corner radius

Designation	Clamping screw	Wrench
TBR108T08	CSTB-2L	T-6F
TBR110T09	CSTB-2.2	T-7F
TBR112T11	CSTB-2.5	T-8F

Reference pages

TBS4, TBR1: Inserts → B136 - (TP**), B112 (CP**), CBN → B168 -, PCD → B178

30° approach angle with round shank



TBR3**T** shown.

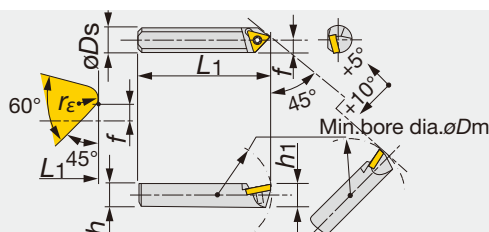
Designation	ϕD_m	f	h_1	h	ϕD_s	L_1	r_{ε}^{**}	Insert
TBR305E04	19	0.5	4	4	5	20	0.2	EP**0401...
TBR308T08	30	0.5	7	7	8	35	0.2	TP**0802...
TBR312T11	50	1	10.5	10.5	12	60	0.4	TP**1102...
TBR316T16	60	1.5	14	14	16	80	0.8	TP**16T3...

- Figures shown above are of 6 mm or smaller diameter shank used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBR105E04H)
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- **r_c: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
TBR305E04	CSTB-2	T-6F
TBR308T08	CSTB-2L	T-6F
TBR312T11	CSTB-2.5	T-8F
TBR316T16	CSTB-4	T-15F

45° approach angle with round shank



TBR4**T** shown.

Designation	ϕD_m	f	h_1	h	ϕD_s	L_1	r_{ϵ}^{**}	Insert
TBR406E04	24	0	5	5	6	25	0.2	EP**0401...
TBR408T08	30	0.5	7	7	8	35	0.2	TP**0802...
TBR410T09	40	1	8.5	8.5	10	50	0.2	TP**0902...
TBR412T11	50	1	10.5	10.5	12	60	0.4	TP**1102...
TBR416T16	60	1.5	14	14	16	80	0.8	TP**16T3...

- Figures shown above are of 6 mm or smaller diameter shank used for normal direction of rotation.
- For the tools used for reverse direction of rotation, letter "H" is added in the last position of the Designation (Example: TBR105E04H).
- For the tools for normal direction of rotation, use a left hand insert, and for reverse direction of rotation, use a right hand insert.
- ** r_c : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
TBR406E04	CSTB-2	T-6F
TBR408T08	CSTB-2L	T-6F
TBR410T09	CSTB-2.2	T-7F
TBR412T11	CSTB-2.5	T-8F
TBR416T16	CSTB-4	T-15F

Reference pages

TBR3, TBR4: Inserts → **B122** - (EP**), **B136** - (TP**), CBN → **B168** -, PCD → **B178**

Top-Borer Tool

Features

- Indexable insert jig boring tools usable for commercially available adjustable boring heads.
- Minimum bore diameter $\varnothing 5.5$ mm.
- Available in three types of SEXP, SWUB and STUP.



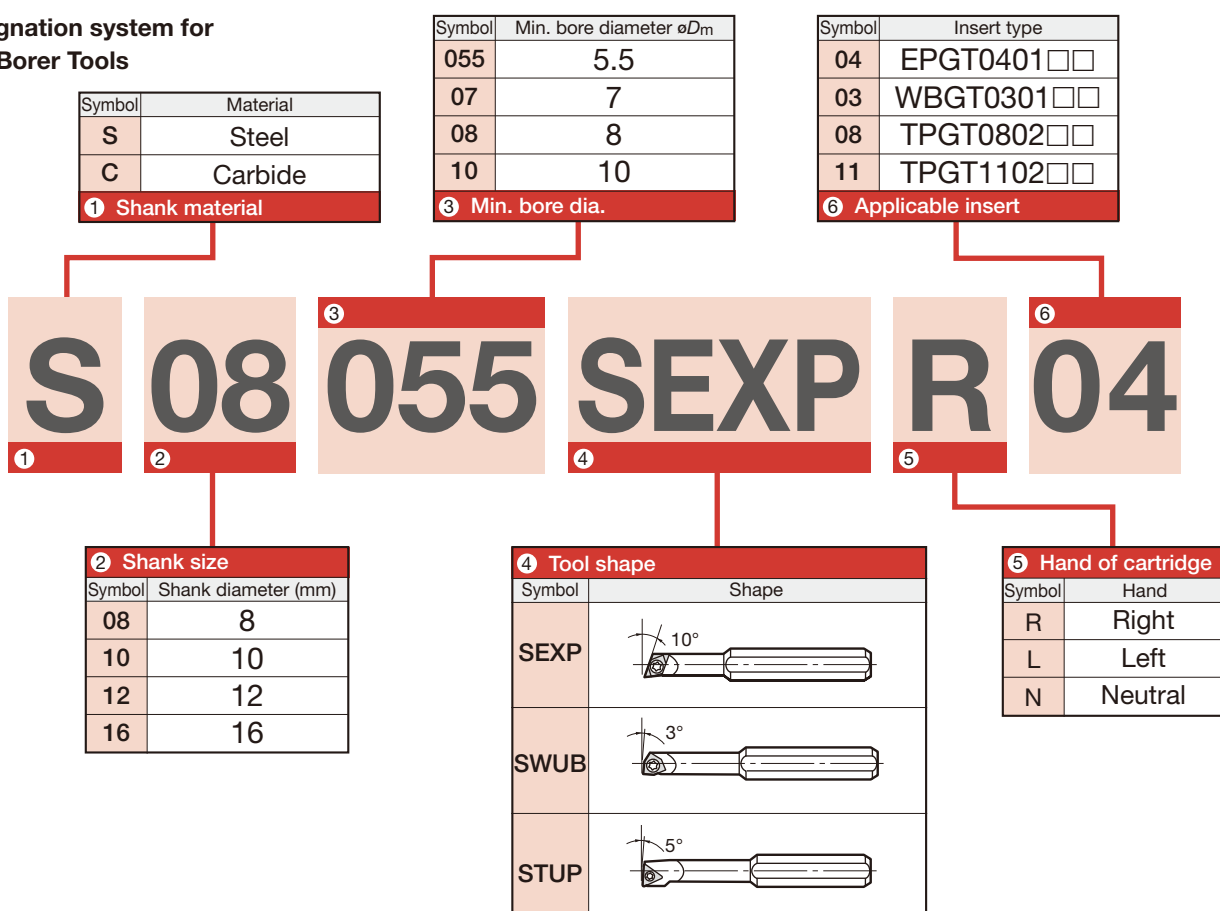
Applicable for PINZBOHR small diameter finish boring heads.

(See page F142)

Applications by Type

SEXP		• Minimum bore diameter: $\varnothing 5.5$ mm. • A 75° rhombic insert is used. Stable insert holding assures precision boring.
SWUB		• Available in two sizes of minimum bore diameters of $\varnothing 7$ and $\varnothing 8$ mm. • Uses an economical trigon insert.
STUP		• Available in five sizes of minimum bore diameters of $\varnothing 10$, $\varnothing 12$, $\varnothing 14$, $\varnothing 16$ and $\varnothing 18$ mm. • Many standard items make them applicable for a wide range of applications.

Designation system for Top-Borer Tools

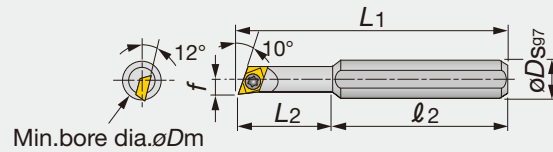


Available holders are supplied from tooling manufactures.

Top-borer tool

S/C-SEXPR/L

Top-Borer Tools, for posi 75° rhombic insert with 11° clearance



Right hand (R) shown.

Designation	Material	ϕD_m	ϕD_s	f	L_1	L_2	l_2	r_e^{**}	Insert
S08055-SEXPR04	STEEL	5.5	8	2.8	45	19	26	0.4	EP**0401...
S10055-SEXPR04	STEEL	5.5	10	2.8	51	19	32	0.4	EP**0401...
S12055-SEXPR04	STEEL	5.5	12	2.8	51	19	32	0.4	EP**0401...
C10055-SEXPR04	CARBIDE	5.5	10	2.8	62	30	32	0.4	EP**0401...
C12055-SEXPR04	CARBIDE	5.5	12	2.8	62	30	32	0.4	EP**0401...

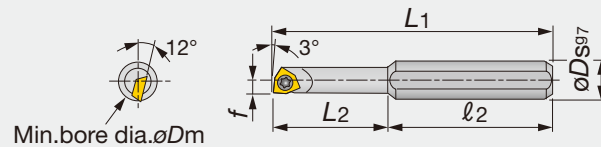
- When using an insert with hand, right hand (R) holders use a left hand (L) insert.
- Left hand (L) holders use a right hand (R) insert.
- ** r_e : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
S/C-SEXPR	CSTB-2	T-6F

S/C-SWUBR

Top-Borer Tools, for posi trigon insert with 5° clearance



Right hand (R) shown.

Designation	Material	ϕD_m	ϕD_s	f	L_1	L_2	l_2	r_e^{**}	Insert
S1008-SWUBR03	STEEL	8	10	4.1	60	28	32	0.4	WBG0301...
S1208-SWUBR03	STEEL	8	12	4.1	60	28	32	0.4	WBG0301...
C1008-SWUBR03	CARBIDE	8	10	4.1	76	44	32	0.4	WBG0301...
C1208-SWUBR03	CARBIDE	8	12	4.1	76	44	32	0.4	WBG0301...

- The hole of inserts conforms to ISO standard. When using an insert with hand, right hand (R) holders use a left hand (L) insert.
- Left hand (L) holders use a right hand (R) insert.
- ** r_e : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
S/C-SWUBR	CSTB-2	T-6F

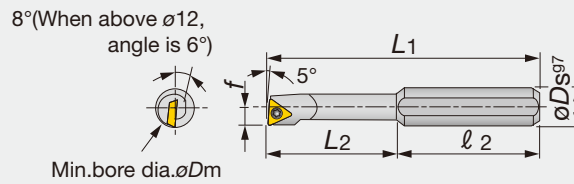
Reference pages

S/C-SEXPR/L: Inserts → B122 -, CBN → B171, PCD → B178

S/C-SWUBR/L: Inserts → B151

S/C-STUPR/L

Top-Borer Tools, for posi triangle insert with 11° clearance



Right hand (R) shown.

Designation	Material	ϕD_m	ϕD_s	f	L_1	L_2	l_2	r_e^{**}	Insert
S0810-STUPR08	STEEL	10	8	5	61	-	-	0.4	TPGT0802...
S1010-STUPR08	STEEL	10	10	5	67	35	32	0.4	TPGT0802...
S1210-STUPR08	STEEL	10	12	5	67	35	32	0.4	TPGT0802...
S1212-STUPR08	STEEL	12	12	6	74	42	32	0.4	TPGT0802...
S1212-STUPR11	STEEL	12	12	6	74	42	32	0.4	TP*T1102...
S1214-STUPR11	STEEL	14	12	7	81	-	-	0.4	TP*T1102...
C1010-STUPR08	CARBIDE	10	10	5	87	55	32	0.4	TP*T0802...
C1210-STUPR08	CARBIDE	10	12	5	87	55	32	0.4	TP*T0802...
C1212-STUPR11	CARBIDE	12	12	6	98	66	32	0.4	TP*T1102...
C1214-STUPR11	CARBIDE	14	12	7	109	84	25	0.4	TP*T1102...

- When using an insert with hand, right hand (R) holders use a left hand (L) insert.
- Left hand (L) holders use a right hand (R) insert.
- **re: Standard corner radius

SPARE PARTS



Designation	Clamping screw	Wrench
S**10-STUPR08	CSTB-2L040	T-6F
S1212-STUPR08	CSTB-2L	T-6F
S121*-STUPR11	CSTB-2.5	T-8F
C1*10-STUPR08	CSTB-2L040	T-6F
C121*-STUPR11	CSTB-2.5	T-8F

Reference pages

S/C-STUPR/L: Inserts → **B136 -**, CBN → **B168 -**, PCD → **B178**