

HOW TO READ THE STANDARD OF HSK-T TOOLS

●How this section page is organized

①Organized by application. (Refer to the index on the next page.)

PRODUCT TYPE
indicates the first four letters of the order number, as well as cutting applications.

TITLE OF PRODUCT SERIES
PRODUCT SECTION

● HSK-T TOOLS

● FOR MULTI-TASK MACHINES

PCLN External turning • Facing

Right hand tool holder shown.

Order Number	Stock	Insert Number	Dimensions (mm)	#2 WT (N)	Shim	Shim Pin	Clamp	Spring	Wrench	
H63TH-PCLNRIL-DX12	+	CN-JA CN-JG CN-JM	43□	63 65 45	2.9	LLSCN42	LLP14	LLCL14	LLCS108	HKY20F

#1 Clamp Torque (Bf-n): LLCS108-29
#2 WT: Mass

DCLN External turning • Facing

Right hand tool holder shown.

Order Number	Stock	Insert Number	Dimensions (mm)	#2 WT (N)	Shim	Shim Pin	Clamp	Spring	Wrench		
H63TH-DCLNRIL-DX12	+	CN-JA CN-JG CN-JM	43□	63 65 45	2.9	LLSCN42	LLP14	DCX2613	DCS1	DC0621T	TKY20F

#1 Clamp Torque (Bf-n): DC0621T-44
#2 WT: Mass

Note 1) Dimensions shown for insert corner RE .031 inch.
Note 2) Insert photo is an example. Letters show chip breaker style. Figures show inscribed circle.

H006

LEGEND FOR STOCK STATUS MARK
is shown on the left hand page of each double-page spread.

PRODUCT STANDARDS
Indicates order numbers, stock status (per right/left hand), applicable inserts, dimensions, and spare parts.

FIGURE SHOWING THE TOOLING APPLICATION
uses illustrations and arrows to depict available machining applications along with cutting edge lead angles.

GEOMETRY
CHIP BREAKER BY CUTTING APPLICATION

PCMN External turning • Facing

Right hand tool holder shown.

Order Number	Stock	Insert Number	Dimensions (mm)	#2 WT (N)	Shim	Shim Pin	Clamp	Spring	Wrench	
H63TH-PCMNRIL-DX12	+	CN-JA CN-JG CN-JM	43□	63 100 3.7	LLSCN42	LLP14	LLCL14	LLCS108	HGM-PT108	HKY20R

#1 Clamp Torque (Bf-n): LLCS108-29
#2 WT: Mass

DCMN External turning • Facing

Right hand tool holder shown.

Order Number	Stock	Insert Number	Dimensions (mm)	#2 WT (N)	Shim	Shim Pin	Clamp	Spring	Wrench	
H63TH-DCMNRIL-DX12	+	CN-JA CN-JG CN-JM	43□	63 100 3.7	LLSCN42	LLP14	DCX2613	DCS1	DC0621T	TKY20F

#1 Clamp Torque (Bf-n): DC0621T-44
#2 WT: Mass

PCMN type inserts > A104-A111
DCMN type inserts > A104-A111
CBN & PCO inserts > B028-B036, B059
CUTTING CONDITIONS > SEE SECTION A
SPARE PARTS > N001
TECHNICAL DATA > P001

H007

REFERENCE PAGE FOR APPLICABLE INSERTS
indicates reference pages for details of inserts that are applicable to the title product.

PAGE REFERENCE
•SPARE PARTS
•TECHNICAL DATA
indicates reference pages, including the above, on the right hand page of each double-page spread.

●To Order : Please specify order number and hand of tool (right/left).

HSK-T TOOLS

OVERVIEW OF HSK-T TOOLS H002

CLASSIFICATION OF HSK-T TOOLS H004

HSK-T TOOL STANDARDS

EXTERNAL TURNING • FACING

CN^{○○○} INSERTS TOOL HOLDERS H006

DN^{○○○} INSERTS TOOL HOLDERS H011

EXTERNAL TURNING • FACING • BORING

CN^{○○○} INSERTS TOOL HOLDERS H008

EXTERNAL TURNING • COPYING

DN^{○○○} INSERTS TOOL HOLDERS H009

EXTERNAL TURNING • FACING • COPYING

RC^{○○○} INSERTS TOOL HOLDERS H012

FACING • COPYING

VB^{○○○} INSERTS TOOL HOLDERS H013

GROOVING

MG INSERTS TOOL HOLDERS H014

THREADING

MMT INSERTS TOOL HOLDERS H016

MT INSERTS TOOL HOLDERS H017

EXTERNAL TURNING TOOL HOLDERS ... H019

BORING BAR HOLDERS H021

BORING BAR SLEEVES H022

★Arranged by Alphabetical order

H022 H100TH-B^{○○○○○}
H020 H100TH-EN3232R/L-130
H019 H100TH-EV3232R/L-180
H008 H63TH-A^{○○○}DCLNR/L12
H021 H63TH-B^{○○○}
H008 H63TH-DCLNL-L12-3
H006 H63TH-DCLNR/L-DX12
H007 H63TH-DCMNN-H/L12
H011 H63TH-DDJNL-L15-3
H009 H63TH-DDJNR/L-DX15
H010 H63TH-DDNNN-H/L15
H020 H63TH-EN2525R/L-115
H021 H63TH-EV2020R/L-105-3
H019 H63TH-EV2525R/L-112

H014 H63TH-MGHR/L-DX43^{○○}
H016 H63TH-MMTENR-H/L16
H016 H63TH-MMTER-DX16
H017 H63TH-MTHR/L-DX43
H006 H63TH-PCLNR/L-DX12
H007 H63TH-PCMNN-H/L12
H009 H63TH-PDJNR/L-DX15
H010 H63TH-PDNNN-H/L15
H012 H63TH-PRDCN-H/L12
H012 H63TH-PRGCR/L-DX12
H013 H63TH-SVPBR/L-DX16
H013 H63TH-SVVBH-H/L16
H022 SL32^{○○○}-90



H001

Tooling system
for turning on
multi-task machines

HSK-T TOOLS

HSK-T System

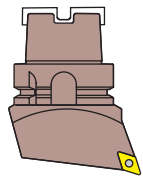
HSK-T is a new HSK system designed for turning on multi-task machines that are compatible with HSK-A type (ISO standard: ISO12164-1:2001). The HSK system was developed by a consortium of 17 Japanese manufacturers and registered in ISO standard (ISO12164-3:2008) under the name HSK-T type in 2008 and JIS standard (JIS B6064-3) in 2013.



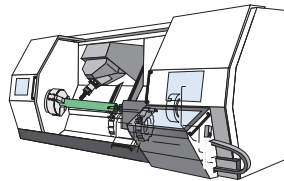
High accuracy cutting edge positioning

The HSK-T type has a closer tolerance between the spindle key and tool holder keyway than the HSK-A type. This results in higher cutting edge positional accuracies. For milling, the conventional HSK-A type tools can be still used.

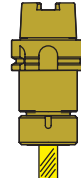
Compatible with both multi-task machines and machining centers



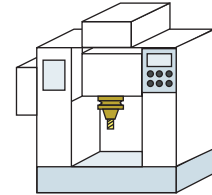
HSK-T
Turning tool holder



HSK-T spindle
Multi-task machines



HSK-A
Rotating tool holder

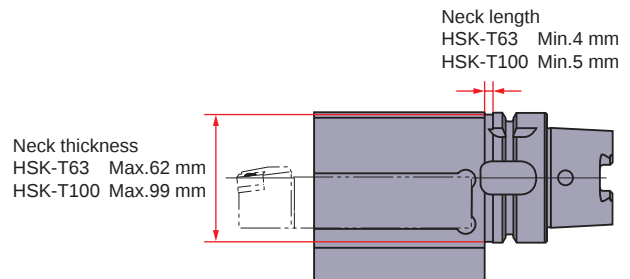


HSK-A spindle
Machining center

H

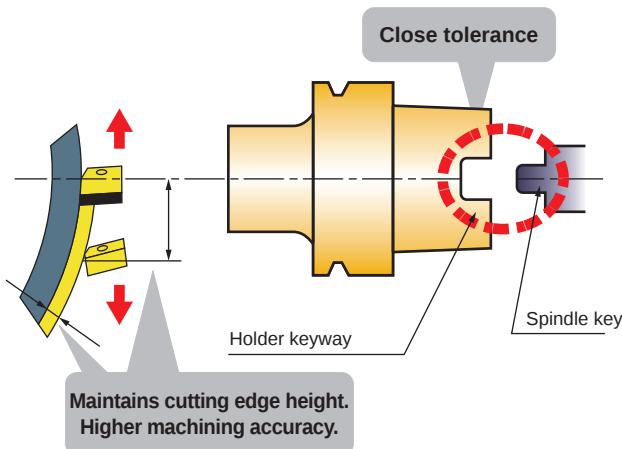
HSK-T TOOLS

★Note
Short neck length from the flange with thick body of the HSK-T turning tool as shown in the figure at the left. Because there are machines which cannot be mounted depending on the ATC specifications of the multi-task machine (HSK-A type), please check beforehand. Also be careful of interference of the magazine with adjacent tools.



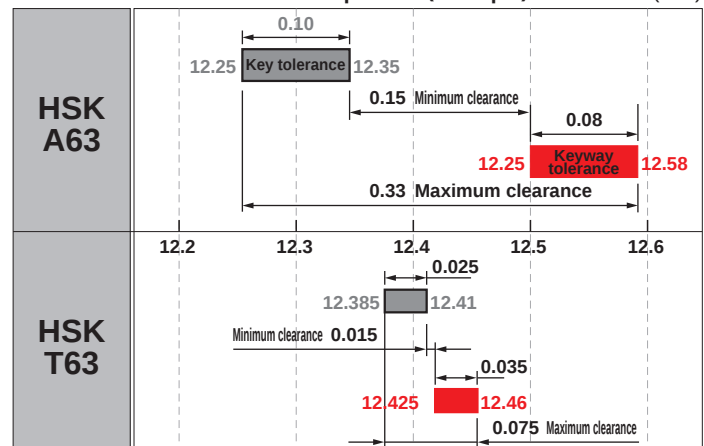
HSK-T turning tool standard (Example)

Improved keyway tolerance



Tolerance comparison (Example)

(mm)

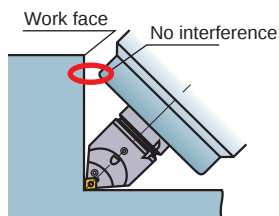


High accuracy and rigidity HSK-T type tooling system developed for use on multi-task machines.

Straight type tools suitable for use on multi-task machines

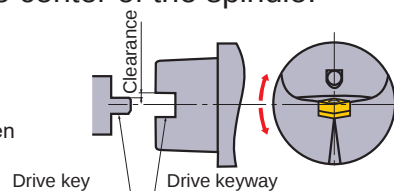
Avoid workpiece interference with improved tool accessibility.

By tilting the machines B spindle (main axis of the tool) at 45 deg, interference between the spindle, holder, workpiece and chuck can be avoided.



Improve centering height by positioning the cutting edge at the center of the spindle.

Increased stability and accuracy can be achieved because the cutting edge centering height is not affected by the gap between the spindle and the key.



New single-action double clamp series

The double clamp mechanism offers high rigidity, accuracy and reliability that ensures secure insert clamping. Therefore making it suitable turning of difficult to machine materials such as stainless and heat resistant alloys.



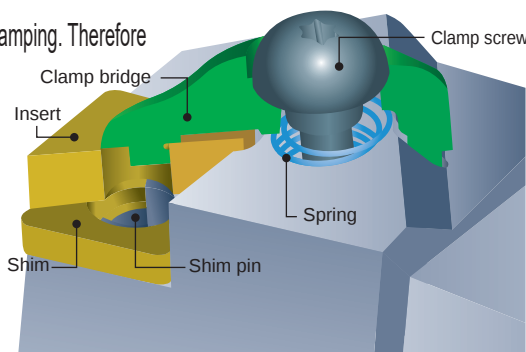
Handed type for turning and facing



Straight type for turning and facing



For turning, facing and boring



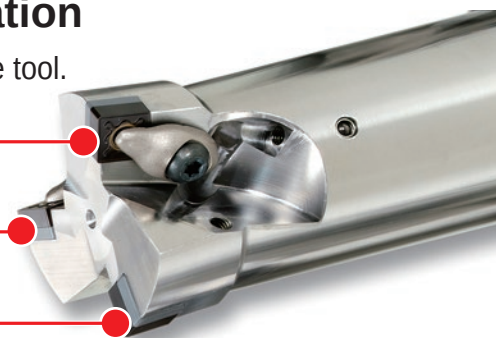
3 on 1 tool for process and tool consolidation

3 turning inserts of the same geometry can be installed on a single tool.

The same type of inserts can be installed for quick change with spare tools.

Different types of inserts can be installed for different applications (roughing, semi finishing and finishing)

Inserts in different grade types can be installed to cover various kinds of workpieces.



New HSK-T100 size for large workpieces

Larger tool holder sizes for high efficiency machining.

Square shank holder type



Boring bar / Drill type



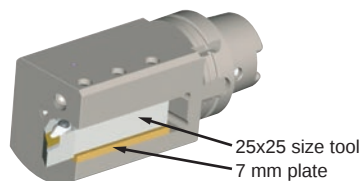
Sleeve



A single tool can be used with different sized tool holders.

- Available for use with JIS B4126 (ISO 5610) 32x32 and 32x25 tools.
- Possible to fit a 25x25 tool by using a 7 mm plate.
- Possible to fit a 1"x1" tool by using a 6.6 mm plate.

*Please prepare a plate on your own.

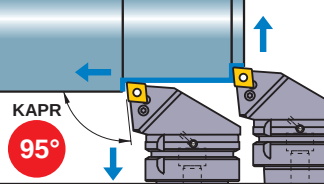
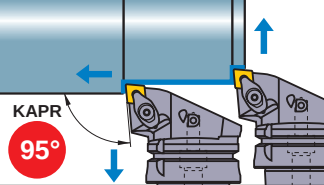
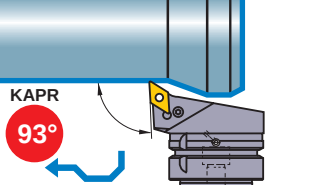
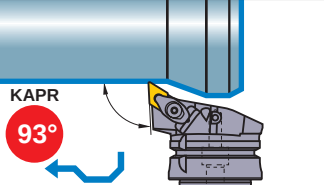
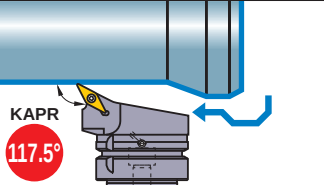
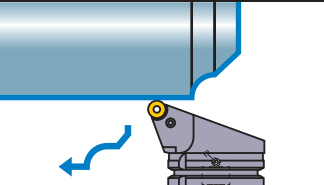
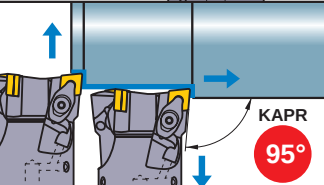
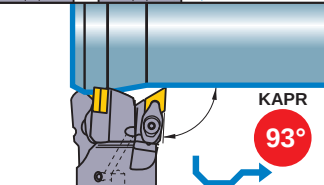


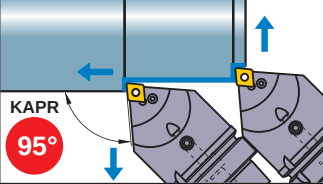
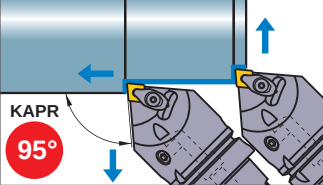
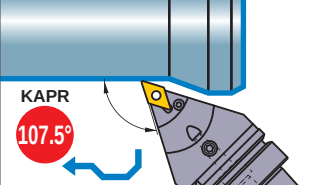
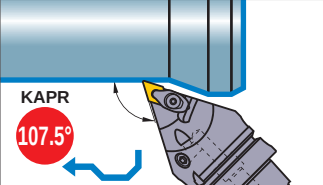
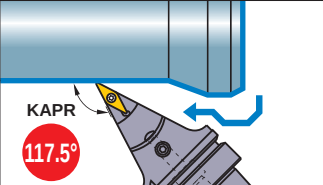
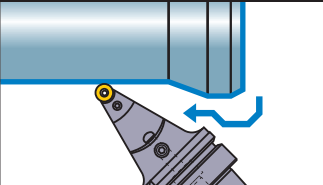
H

HSK-T TOOLS

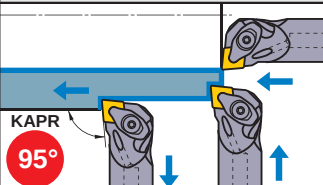
CLASSIFICATION OF HSK-T TOOLS

EXTERNAL TURNING • FACING • COPYING

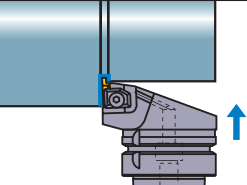
Order Number	Cutting Mode
H63TH-PCLNR/L-DX12  ➔ H006	
H63TH-DCLNR/L-DX12  ➔ H006	
H63TH-PDJNR/L-DX15  ➔ H009	
H63TH-DDJNR/L-DX15  ➔ H009	
H63TH-SVPBR/L-DX16  ➔ H013	
H63TH-PRGCR/L-DX12  ➔ H012	
H63TH-DCLNL-L12-3  ➔ H008	
H63TH-DDJNL-L15-3  ➔ H011	

Order Number	Cutting Mode
H63TH-PCMNN-H/L12  ➔ H007	
H63TH-DCMNN-H/L12  ➔ H007	
H63TH-PDNNN-H/L15  ➔ H010	
H63TH-DDNNN-H/L15  ➔ H010	
H63TH-SVVBH-H/L16  ➔ H013	
H63TH-PRDCN-H/L12  ➔ H012	

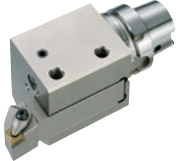
EXTERNAL TURNING • FACING • BORING

Order Number	Cutting Mode
H63TH-A25KDCLNR/L12 H63TH-A32LDCLNR/L12  ➔ H008	

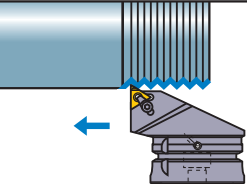
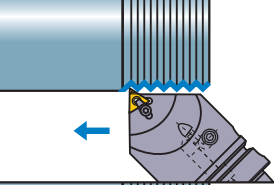
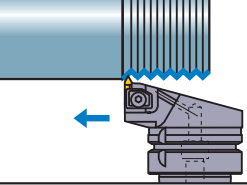
GROOVING

Order Number	Cutting Mode
H63TH-MGHR/L-DX43   	

EXTERNAL TURNING TOOL HOLDERS

Order Number	Holder
H63TH-EV2525R/L-112 	
H100TH-EV3232R/L-180 	
H63TH-EN2525R/L-115 *1 	
H100TH-EN3232R/L-130 *1 	
H63TH-EV2020R/L-105-3 	

THREADING

Order Number	Cutting Mode
H63TH-MMTER-DX16   	
H63TH-MMTENR-H/L16   	
H63TH-MTHR/L-DX43   	

BORING BAR HOLDERS

Order Number	Holder
H63TH-B 	
H100TH-B 	
SL32-90 (Sleeve) *2 	

*1 Mitsubishi Materials is licensed for production and distribution of these tools from MORI SEIKI Co., LTD. under Japan Patent No.3720202.

*2 The SL32-90 sleeve is only for use with H100TH-B32-135.

Note 1) The HSK63A shank type has a built-in coolant pipe for installation.

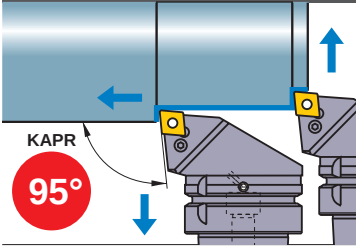
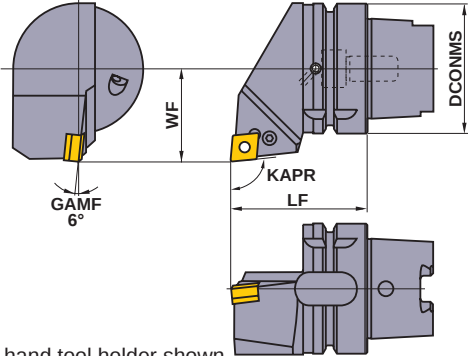
H

HSK-T TOOLS

FOR MULTI-TASK MACHINES

PCLN

External turning • Facing

Right hand tool holder shown.

Finish		Light	Medium
FP	LP	MP	
 (4)	 (4)	 (4)	
Medium		Medium	Medium – Rough
MK	Standard	RP	
 (4)	 (4)	 (4)	
Stainless		CBN	
MM			
 (4)	 (4)		

Order Number	Stock		Insert Number	Dimensions (mm)			*2 WT (lbs)	Shim	Shim Pin	Clamp Lever	Clamp Screw *1	Wrench	
	R	L		DCONMS	LF	WF							
H63TH-PCLNR/L-DX12	★	★	CNCA CNOG CNOM	43	63	65	45	2.9	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R

*1 Clamp Torque (lbf-in) : LLCS108=29

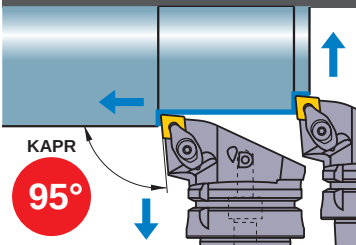
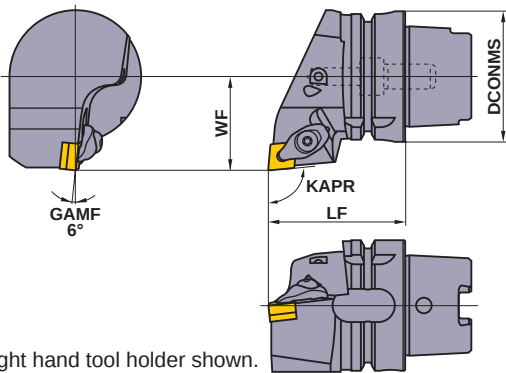
*2 WT : Mass

H

HSK-T TOOLS

DCLN

External turning • Facing **DOUBLE CLAMP type**

Right hand tool holder shown.

Finish		Light	Medium
FP	LP	MP	
 (4)	 (4)	 (4)	
Medium		Medium	Medium – Rough
MK	Standard	RP	
 (4)	 (4)	 (4)	
Stainless		CBN	
MM			
 (4)	 (4)		

Order Number	Stock		Insert Number	Dimensions (mm)			*2 WT (lbs)	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw *1	Wrench	
	R	L		DCONMS	LF	WF								
H63TH-DCLNR/L-DX12	★	★	CNCA CNOG CNOM	43	63	65	45	2.9	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (lbf-in) : DC0621T=44

*2 WT : Mass

Note 1) Dimensions shown for insert corner RE .031 inch.

Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

FOR MULTI-TASK MACHINES

DCLN

External turning • Facing

DOUBLE CLAMP type

Finish	Light	Medium
FP (4)	LP (4)	MP (4)
Medium MK (4)	Medium Standard (4)	Medium – Rough RP (4)
Stainless MM (4)	CBN (4)	

Left hand tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)			*2 WT (lbs)					 *1	
	L			DCONMS	LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-DCLNL-L12-3	★	CN○A CN○G CN○M	43○	63	140	30	4.9	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

★1 Clamp Torque (lbf-in) : DC0621T=44

★2 WT : Mass

H

HSK-T TOOLS

DCLN

External turning • Facing • Boring

DOUBLE CLAMP type

Finish	Light	Medium
FP (4)	LP (4)	MP (4)
Medium MK (4)	Medium Standard (4)	Medium – Rough RP (4)
Stainless MM (4)	CBN (4)	

Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (mm)					DMIN (mm)	*2 WT (lbs)						
	R	L			DCONMS	LF	LU	WF	GAMF			Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-A25KDCLNR/L12	★	★	CN○A CN○G CN○M	43○	63	125	82	17	11°	32	2.4	LLSCP42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
H63TH-A32LDCLNR/L12	★	★			63	140	100	22	13°	40	3.9	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

★1 Clamp Torque (lbf-in) : DC0621T=44

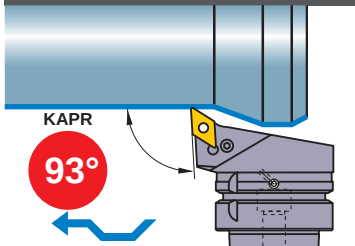
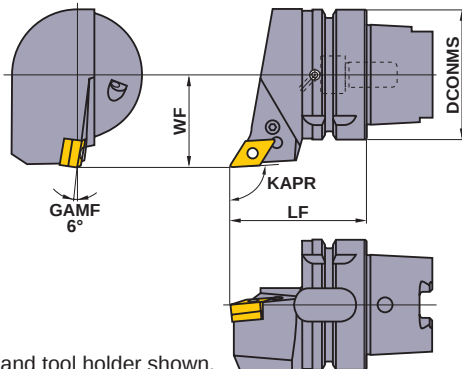
★2 WT : Mass

Note 1) Dimensions shown for insert corner RE .031 inch.

Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

DCLN type inserts	➤ A104–A111
CBN & PCD inserts	➤ B028–B030, B059
CUTTING CONDITIONS	➤ SEE SECTION A

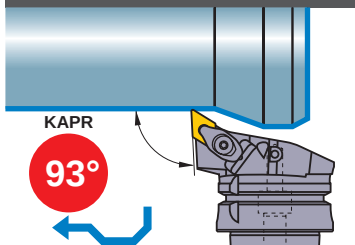
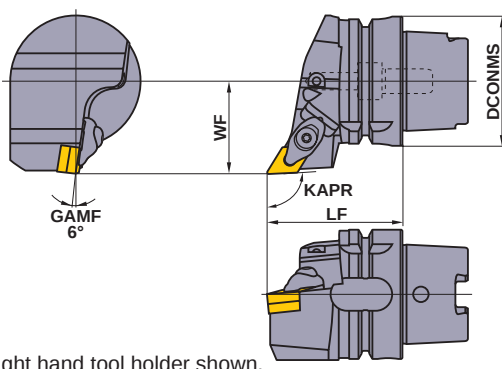
★ : Stocked in Japan

PDJN				External turning • Copying										Finish		Light		Medium	
														FP	LP	MP			
														(4)	(4)	(4)			
														Medium	Medium – Rough	Stainless			
														MK	RP	MM			
														(4)	(4)	(4)			
														G Class	CBN				
														R/L					
														(4)	(4)				
Right hand tool holder shown.																			
Order Number	Stock		Insert Number	Dimensions (mm)			*3 WT (lbs)	*2 											
	R	L		DCONMS	LF	WF							Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench		
H63TH-PDJNR/L-DX15	★	★	DN⊙A DN⊙G DN⊙M DNMX	430	63	65	45	2.6	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R						

★1 Clamp Torque (lbf-in) : LLCS108=29

★2 Please use shim no. LLSDN42 with .25 inch thick inserts. When using .25 inch thick inserts, the shim should be ordered separately.

★3 WT : Mass

DDJN		External turning • Copying										DOUBLE CLAMP type			
													Finish	Light	Medium
													FP	LP	MP
													(4)	(4)	(4)
													Medium	Medium – Rough	Stainless
													MK	RP	MM
													(4)	(4)	(4)
													G Class	CBN	
													R/L		
													(4)	(4)	
Right hand tool holder shown.															
Order Number	Stock		Insert Number	Dimensions (mm)			*3 WT (lbs)	*2 							
	R	L		DCONMS	LF	WF								Shim	Shim Pin
H63TH-DDJNR/L-DX15	★	★	DNØA DNØG DNØM DNMX	430	63	65	45	2.6	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F	

★1 Clamp Torque (lbf-in) : DC0621T=44

★2 Please use shim no. LLSDN42 with .25 inch thick inserts. When using .25 inch thick inserts, the shim should be ordered separately.

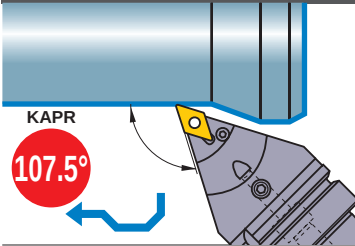
★3 WT : Mass

PDJN type inserts	➤ A112–A118
DDJN type inserts	➤ A112–A118
CBN & PCD inserts	➤ B031–B034, B059

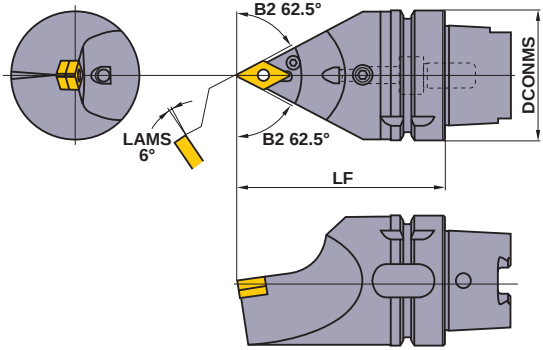
CUTTING CONDITIONS	➤ SEE SECTION A
SPARE PARTS	➤ N001
TECHNICAL DATA	➤ P001

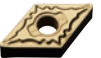
FOR MULTI-TASK MACHINES

PDNN



External turning • Copying



Finish		Light	Medium
FP			
	(4)	(4)	(4)
Medium		Medium – Rough	Stainless
MK			
	(4)	(4)	(4)
G Class		CBN	
R/L			
	(4)	(4)	

Order Number	Stock	Insert Number	Dimensions (mm)		*3 WT (lbs)	*2				*1		
			DCONMS	LF		Shim	Shim Pin	Clamp Lever	Clamp Screw	Plug	Wrench	
H63TH-PDNNN-H15	★	DNOA DNOG DNOM DNMX	63	100	3.5	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HGM-PT1/8	HKY30R	
H63TH-PDNNN-L15	★		63	140	5.5	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HGM-PT1/8	HKY30R	

*1 Clamp Torque (lbf-in) : LLC108=29

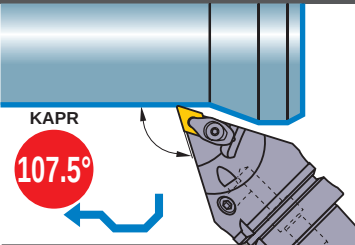
*2 Please use shim no. LLSDN42 with .25 inch thick inserts. When using .25 inch thick inserts, the shim should be ordered separately.

*3 WT : Mass

H

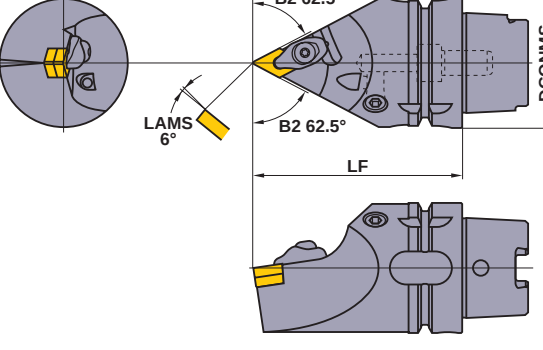
HSK-T TOOLS

DDNN



External turning • Copying

DOUBLE CLAMP type



Finish		Light	Medium
FP			
	(4)	(4)	(4)
Medium		Medium – Rough	Stainless
MK			
	(4)	(4)	(4)
G Class		CBN	
R/L			
	(4)	(4)	

Order Number	Stock	Insert Number	Dimensions (mm)		*3 WT (lbs)	*2					*1	
			DCONMS	LF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
H63TH-DDNNN-H15	★	DNOA DNOG DNOM DNMX	63	100	3.5	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F	
H63TH-DDNNN-L15	★		63	140	5.5	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F	

*1 Clamp Torque (lbf-in) : DC0621T=44

*2 Please use shim no. LLSDN42 with .25 inch thick inserts. When using .25 inch thick inserts, the shim should be ordered separately.

*3 WT : Mass

Note 1) Dimensions shown for insert corner RE .031 inch.

Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

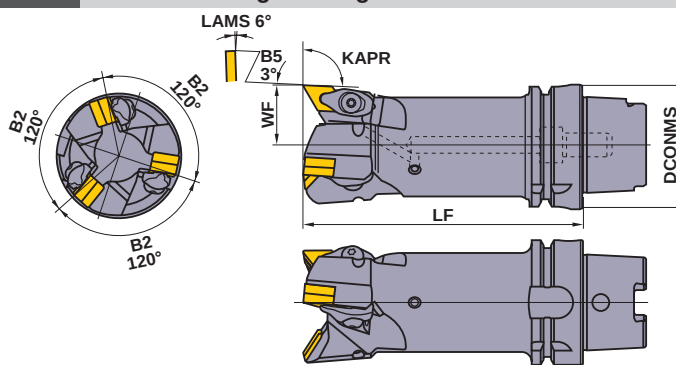
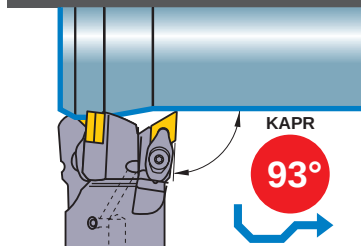
PDNN type inserts	➤ A112–A118
DDNN type inserts	➤ A112–A118
CBN & PCD inserts	➤ B031–B034, B059
CUTTING CONDITIONS	➤ SEE SECTION A

★ : Stocked in Japan

DDJN

External turning • Facing

DOUBLE CLAMP type



Left hand tool holder only.

Finish	Light
FP	LP
 (4)	 (4)
Medium	Medium
MP	MK
 (4)	 (4)
Medium-Rough	Stainless
RP	MM
 (4)	 (4)

Order Number	Stock	Insert Number		Dimensions (mm)			*3 WT (lbs)	*2					(4)	(4)
	L			DCONMS	LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
H63TH-DDJNL-L15-3	★	DNCA DNCG DNOM DNMX	430	63	140	30	4.9	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F	

*1 Clamp Torque (lbf-in) : DC0621T=44

*2 Please use shim no. LLSDN42 with .25 inch thick inserts. When using .25 inch thick inserts, the shim should be ordered separately.

*3 WT : Mass

Note 1) Dimensions shown for insert corner RE .031 inch.

H

HSK-T TOOLS

DDJN type inserts > A112-A118
CBN & PCD inserts > B031-B034, B059

CUTTING CONDITIONS > SEE SECTION A
SPARE PARTS > N001
TECHNICAL DATA > P001

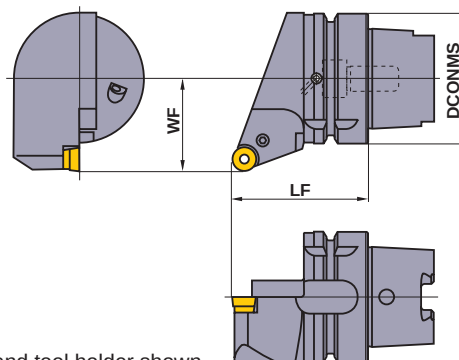
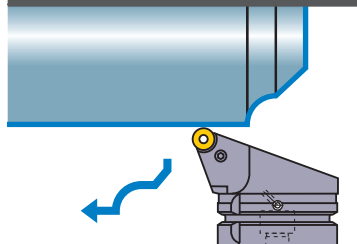
H011

FOR MULTI-TASK MACHINES

PRGC

External turning • Facing • Copying

Medium



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)			*2 WT (lbs)				 *1		
	R	L		DCONMS	LF	WF		Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
H63TH-PRGCR/L-DX12	★	★	RCMX	1204M0	63	65	45	2.6	LLSRN123	LLP13	LLCL112	LLCS106	HKY25R

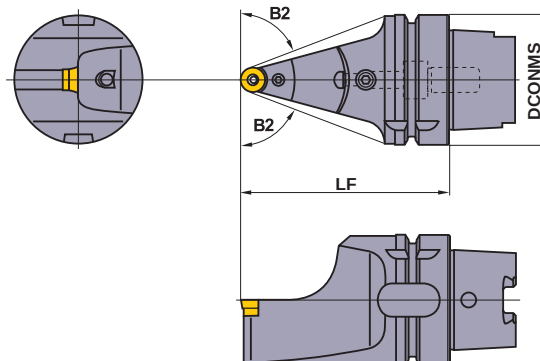
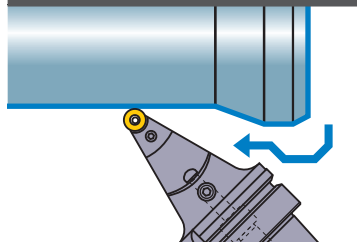
*1 Clamp Torque (lbf-in) : LLCS106=19

*2 WT : Mass

PRDC

External turning • Facing • Copying

Medium



Order Number	Stock	Insert Number		Dimensions (mm)			*2 WT (lbs)				 *1		
				DCONMS	LF	B2		Shim	Shim Pin	Clamp Lever	Clamp Screw	Plug	Wrench
H63TH-PRDCN-H12	★	RCMX	1204M0	63	100	69°	3.1	LLSRN123	LLP13	LLCL112	LLCS106	HGM-PT1/8	HKY25R
H63TH-PRDCN-L12	★			63	140	75°	5.1	LLSRN123	LLP13	LLCL112	LLCS106	HGM-PT1/8	HKY25R

*1 Clamp Torque (lbf-in) : LLCS106=19

*2 WT : Mass

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Cutting Mode	Breaker	Grade	Cutting Speed (SFM)
P	Mild Steel	≤180HB	Medium Cutting	Standard	UE6110	670—1150
	Carbon Steel • Alloy Steel	180HB—350HB	Medium Cutting	Standard	UE6110	490—850
M	Stainless Steel	≤200HB	Medium Cutting	Standard	US735	230—425

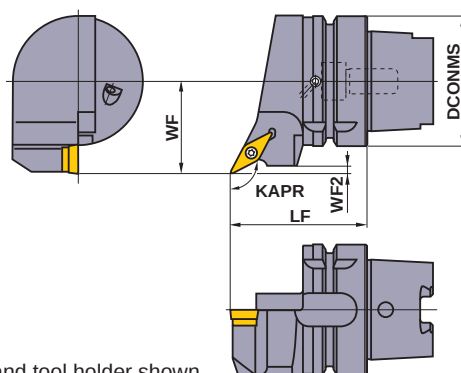
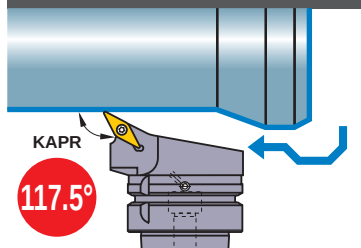
Note 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

★ : Stocked in Japan

PRGC type inserts > A167
PRDC type inserts > A167

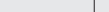
SVPB

Facing • Copying



Right hand tool holder shown.

Finish	Light
R/L-F	SV
(3)	(3)
Medium	Medium
MV	MP
(3)	(3)
CBN	
(3)	

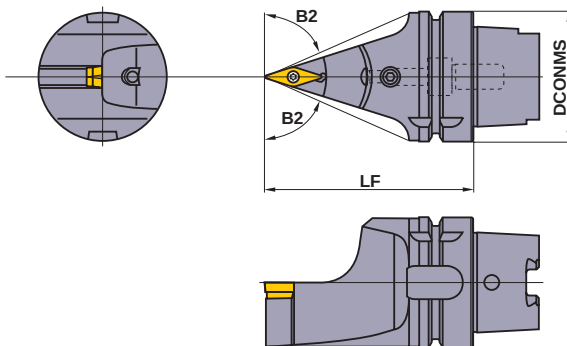
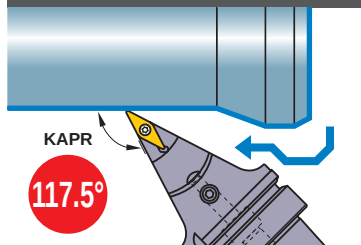
Order Number	Stock		Insert Number	Dimensions (mm)				*2 WT (lbs)			*1 		
	R	L		D	CON	MS	LF	WF	WF2	Shim	Shim Pin	Clamp Screw	Wrench
H63TH-SVPBR/L-DX16	★	★	VB [○] _T VB [○] _W	33 [○]	63	65	45	3.8	2.4	SPSVN32	BCP141	TS35D	TKY15F

★1 Clamp Torque (lbf-in) : TS35D=31

★2 WT : Mass

SVVB

Facing • Copying



Finish	Light
R/L-F	SV
(3)	(3)
Medium	Medium
MV	MP
(3)	(3)
CBN	
(3)	

Order Number	Stock		Insert Number	Dimensions (mm)			*2 WT (lbs)	Shim	Shim Pin	*1 Clamp Screw	Plug	Wrench
	R	L		DCONMS	LF	B2						
H63TH-SVVBH-H16	★	★	VB [○] T VB [○] W	33 [○]	63	100	66.5°	2.9	SPSVN32	BCP141	TS35D	HGM-PT1/8
H63TH-SVVBH-L16	★	★	VB [○] T VB [○] W	33 [○]	63	140	72.5°	4.9	SPSVN32	BCP141	TS35D	HGM-PT1/8

★1 Clamp Torque (lbf-in) : TS35D=31

★2 WT : Mass

RECOMMENDED CUTTING CONDITIONS

Work Material	Hardness	Cutting Mode	Breaker	Grade	Cutting Speed (SFM)
P	Mild Steel	Finish Cutting	F	AP25N	820 (490—985)
		Medium Cutting	MV	UE6020	655 (490—820)
	Carbon Steel Alloy Steel	Finish Cutting	F	AP25N	690 (490—850)
		Medium Cutting	MV	UE6020	555 (390—690)
M	Stainless Steel	Medium Cutting	MM	US735	330 (230—395)
K	Gray Cast Iron	Tensile Strength ≤350MPa	MV	UE6020	555 (460—655)

Note 1) Dimensions shown for insert corner RE .031 inch.

Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

SVPB type inserts ➤ A179—A183

SVVB type inserts ➤ A179—A183
CBN inserts ➤ B053

SPARE PARTS ➤ N001
TECHNICAL DATA ➤ P001

H013

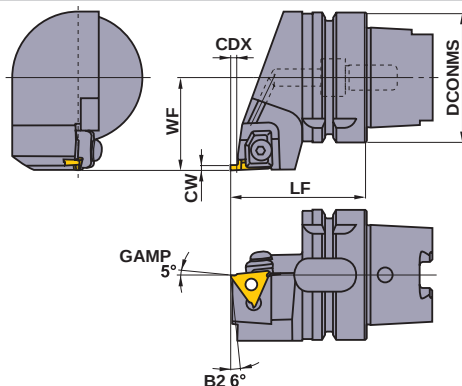
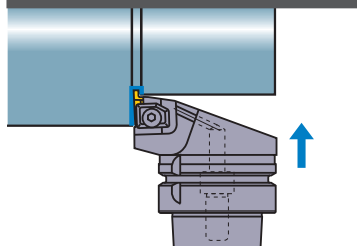
H

HSK-T TOOLS

FOR MULTI-TASK MACHINES

MG

Grooving



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					*2 WT (lbs)				
	R	L		CW	CDX	DCONMS	LF	WF					
H63TH-MGHR/L-DX4315	★	★	MGTR/L 43125 I 43470	1.25	1.2	63	65	45	2.6	MTK1R/L	HBH06020	MES3	HKY40R
				1.45	1.5								
H63TH-MGHR/L-DX4323	★	★		1.5 ≤ CW ≤ 2.3	3								
H63TH-MGHR/L-DX4333	★	★		2.3 < CW ≤ 3.3	4.5								
				3.3 < CW ≤ 4.7	4.5								

*1 Clamp Torque (lbf-in) : HBH06020=62

*2 WT : Mass

H

HSK-T TOOLS

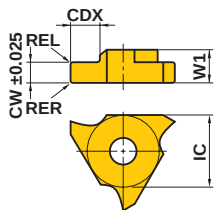
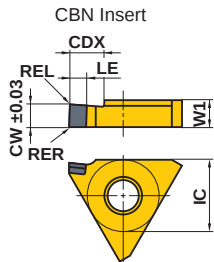
RECOMMENDED CUTTING CONDITIONS

Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P Carbon Steel Alloy Steel	180—350HB	VP20MF	390 (330—460)	.0039 (.0012—.0071)
		NX2525	425 (330—525)	.0047 (.0012—.0079)
M Stainless Steel	≤200HB	VP20MF	390 (330—460)	.0039 (.0012—.0071)
K Gray Cast Iron	Tensile Strength ≤350MPa	VP20MF	390 (330—460)	.0039 (.0012—.0071)

★ : Stocked in Japan

<10 inserts in one case> <1 insert in one case for CBN>

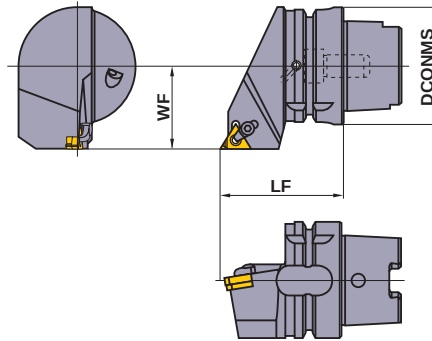
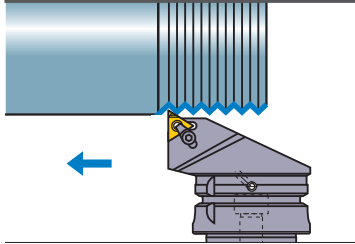
INSERTS FOR MG TYPE

Order Number	Stock							Dimensions (mm)						Geometry
	Coated		Cermet		Carbide		CBN	CW	CDX	IC	W1	RER/L	LE	
	VP20MF		NX2525		UTi20T		MB8025							
	R	L	R	L	R	L	R							
MGTR/L43125	★	★	★	★	★	★	★	1.25	1.2	12.7	4.76	0.2	2.7	MGTR/L...   CBN Insert Right hand insert shown.
MGTR/L43145	★	★			★	★	★	1.45	1.5	12.7	4.76	0.2	—	
MGTR/L43150	★	★	★	★	★	★	★	1.5	3	12.7	4.76	0.2	2.7	
MGTR/L43175	★	★	★	★	★	★		1.75	3	12.7	4.76	0.2	—	
MGTR/L43200	★	★	★	★	★	★	★	2	3	12.7	4.76	0.2	2.7	
MGTR/L43230	★	★	★	★	★	★		2.3	3	12.7	4.76	0.2	—	
MGTR/L43250	★	★	★	★	★	★	★	2.5	4.5	12.7	4.76	0.3	2.7	
MGTR/L43260	★	★	★			★	★	2.6	4.5	12.7	4.76	0.3	—	
MGTR/L43270	★	★				★	★	2.7	4.5	12.7	4.76	0.3	—	
MGTR/L43280		★			★	★	★	2.8	4.5	12.7	4.76	0.3	—	
MGTR/L43300	★	★	★	★	★	★	★	3	4.5	12.7	4.76	0.3	2.7	
MGTR/L43320	★					★	★	3.2	4.5	12.7	4.76	0.3	—	
MGTR/L43330		★			★	★	★	3.3	4.5	12.7	4.76	0.3	—	
MGTR/L43350	★	★	★	★	★	★	★	3.5	4.5	12.7	4.76	0.3	2.7	
MGTR/L43400	★	★	★			★	★	4	4.5	12.7	4.76	0.3	2.7	
MGTR/L43420	★	★	★			★	★	4.2	4.5	12.7	4.76	0.4	—	
MGTR/L43430	★	★	★			★	★	4.3	4.5	12.7	4.76	0.4	—	
MGTR/L43450	★	★	★	★	★	★		4.5	4.5	12.7	4.76	0.4	—	
MGTR/L43470	★	★	★	★	★	★		4.7	4.5	12.7	4.76	0.4	—	

FOR MULTI-TASK MACHINES

MMTE

Threading



Right hand tool holder only.

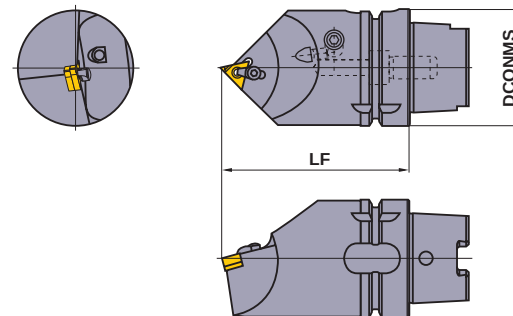
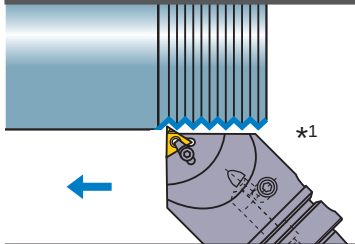
Order Number	Stock R	Insert Number	Dimensions (mm)			*2 WT (lbs)		*1			*1	F R
			DCONMS	LF	WF							
H63TH-MMTER-DX16	★	MMT16ER ○○○○○	63	65	45	2.6	SETK51	SETS51	CR4	CTE32TP15	HFC03008	TKY15F HKY20R

*1 Clamp Torque (lbf-in) : SETS51=31, HFC03008=13

*2 WT : Mass

MMTEN

Threading



Tool holder for right hand insert only.

Order Number	Stock R	Insert Number	Dimensions (mm)			*3 WT (lbs)		*2			*2		F R
			DCONMS	LF									
H63TH-MMTENR-H16	★	MMT16ER ○○○○○	63	100		3.7	SETK51	SETS51	CR4	CTE32TP15	HFC03008	HGM-PT1/8	TKY15F HKY20R
H63TH-MMTENR-L16	★	MMT16ER ○○○○○	63	140		6.0	SETK51	SETS51	CR4	CTE32TP15	HFC03008	HGM-PT1/8	TKY15F HKY20R

*1 For use with B axis tilted at 45 degrees.

*2 Clamp Torque (lbf-in) : SETS51=31, HFC03008=13

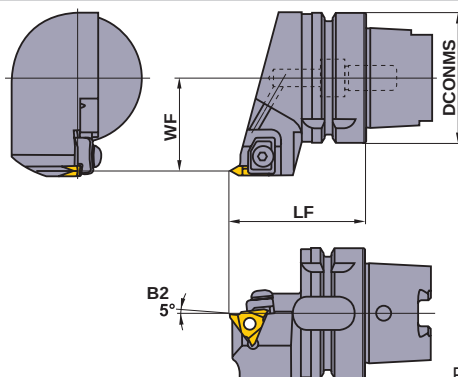
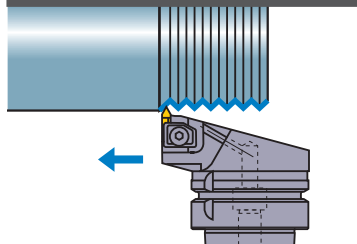
*3 WT : Mass

RECOMMENDED CUTTING CONDITIONS

Work Material		Hardness	Grade	Cutting Speed (SFM)
P	Mild Steel	≤180HB	VP10MF	490 (230—755)
			VP15TF	330 (195—460)
	Carbon Steel Alloy Steel	180—350HB	VP10MF	460 (260—655)
			VP15TF	330 (195—460)
M	Stainless Steel	≤200HB	VP10MF	425 (260—590)
			VP15TF	260 (130—390)
K	Gray Cast Iron	Tensile Strength ≤350MPa	VP10MF	460 (260—655)
			VP15TF	295 (195—390)

MT

Threading



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)			*2 WT (lbs)				
	R	L		DCONMS	LF	WF		Clamp Bridge	Clamp Screw	Spring	Wrench
H63TH-MTHR/L-DX43	★	★	MTTR/L 43○○○○○	63	65	45	2.6	MTK1R/L	HBH06020	MES3	HKY40R

★1 Clamp Torque (lbf-in) : HBH06020=62

★2 WT : Mass

H

HSK-T TOOLS

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)
P	Mild Steel	≤180HB	UP20M	460 (330-590)
			NX2525	655 (490-820)
			UTi20T	390 (330-490)
	Carbon Steel Alloy Steel	180HB-350HB	UP20M	390 (330-490)
			NX2525	555 (490-655)
			UTi20T	330 (230-390)
M	Stainless Steel	≤200HB	UP20M	390 (260-490)
			UTi20T	330 (230-425)
K	Gray Cast Iron	Tensile Strength ≤350MPa	UP20M	260 (195-330)
			UTi20T	260 (195-330)
			HTi10	330 (230-425)

MT type inserts ➤ H018

SPARE PARTS ➤ N001

TECHNICAL DATA ➤ P001

H017

FOR MULTI-TASK MACHINES

INSERTS FOR MT TYPE

Type	Order Number	Class	Coated	Cermet	Carbide		ISO Pitch mm (thread / inch)	Dimensions (mm)			Geometry
			UP20M	NX2525	UT120T	HT110		IC	W1	RE	
General 60°	MTTR436000	G		★	★		-0.8	12.7	4.76	0	MTTR/L(60°) (G Class)   Right hand insert shown.
	MTTR436001	G	★	★	★	★	1.0-1.75	12.7	4.76	0.1	
	MTTL436001	G	★		★	★	1.0-1.75	12.7	4.76	0.1	
	MTTR436002	G	★	★	★	★	2.0-2.5	12.7	4.76	0.2	
	MTTL436002	G		★	★		2.0-2.5	12.7	4.76	0.2	
	MTTR436003	G	★	★	★	★	3.0-3.5	12.7	4.76	0.3	
	MTTL436003	G		★	★		3.0-3.5	12.7	4.76	0.3	
	MTTR436004	G		★	★		4.0-4.5	12.7	4.76	0.4	
General 55°	MTTR435501	G		★	★		(28-10)	12.7	4.76	0.1	MTTR(55°) (G Class)   Right hand insert shown.
	MTTR435502	G		★	★		(16-8)	12.7	4.76	0.2	
	MTTR435503	G		★	★		(11-8)	12.7	4.76	0.3	

STANDARD OF DEPTH OF CUT ● Metric Screw Thread

Unit : mm

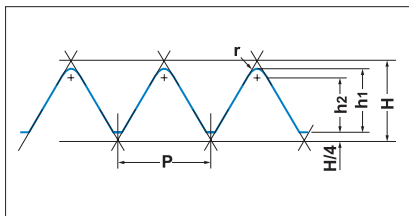
P (Pitch)	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50
h1	0.46	0.61	0.77	0.92	1.07	1.23	1.53	1.84	2.15	2.45	2.76
h2	0.35	0.47	0.59	0.70	0.82	0.94	1.17	1.41	1.65	1.87	2.11
r (Corner Radius)	0.11	0.14	0.18	0.22	0.25	0.29	0.36	0.43	0.50	0.58	0.65
Number of Passes	1	0.18	0.20	0.20	0.25	0.25	0.30	0.30	0.35	0.35	0.40
	2	0.13	0.15	0.18	0.20	0.20	0.25	0.25	0.30	0.30	0.35
	3	0.10	0.10	0.12	0.15	0.20	0.20	0.25	0.25	0.25	0.30
	4	0.05	0.10	0.12	0.15	0.15	0.20	0.20	0.20	0.25	0.25
	5		0.06	0.10	0.10	0.12	0.15	0.15	0.20	0.20	0.25
	6			0.05	0.07	0.10	0.10	0.10	0.15	0.20	0.20
	7					0.05	0.08	0.10	0.15	0.15	0.20
	8						0.05	0.10	0.10	0.15	0.15
	9							0.08	0.10	0.10	0.15
	10							0.05	0.09	0.10	0.15
	11								0.05	0.10	0.10
	12									0.05	0.10
	13										0.05
	14										0.06

Note 1) The first pass causes a high load on the cutting edge.
In order to avoid damage, keep the depth of cut to 0.4-0.5 mm maximum.

H

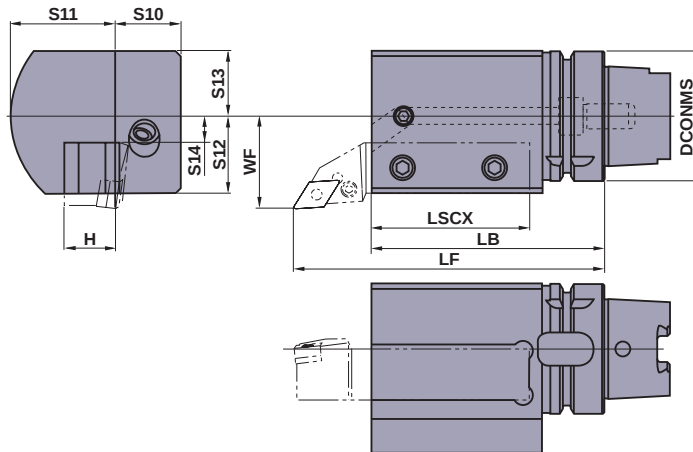
HSK-T TOOLS

- The chart on the right shows the cutting depths when machining external ISO metric screw threads.
- When using cermet grades or cutting stainless steel, please increase the number of passes by 2 or 3 extra passes.

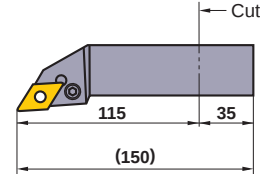


EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 25×25 size tools.
Please shorten the tool as shown below before use.



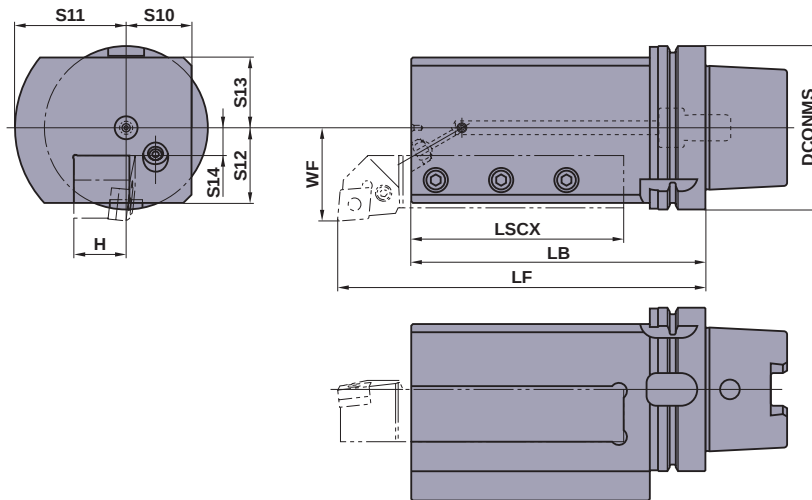
Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)											WT [★] (lbs)		
	R	L	DCONMS	LF	LB	LSCX	H	S10	S11	WF	S14	S12	S13		Clamp Screw	Plug
H63TH-EV2525R/L-112	★	★	63	150	112	77	25	32	53	45	13	38	32	8.6	HSS12025	HGM-PT1/8

★ WT : Mass

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 32×32 and 32×25 size tools.

Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)											WT [★] (lbs)		
	R	L	DCONMS	LF	LB	LSCX	H	S10	S11	WF	S14	S12	S13		Clamp Screw	Plug
H100TH-EV3232R/L-180	★	★	100	220	180	130	32	40	68	57	17	46	43	25.8	HSS14035	HSS06006

★ WT : Mass

Note 1) Possible to fit a 25 x 25 tool by using a 7 mm plate.
Possible to fit a 1" x 1" tool by using a 6.6 mm plate.

SPARE PARTS > N001
TECHNICAL DATA > P001

H019

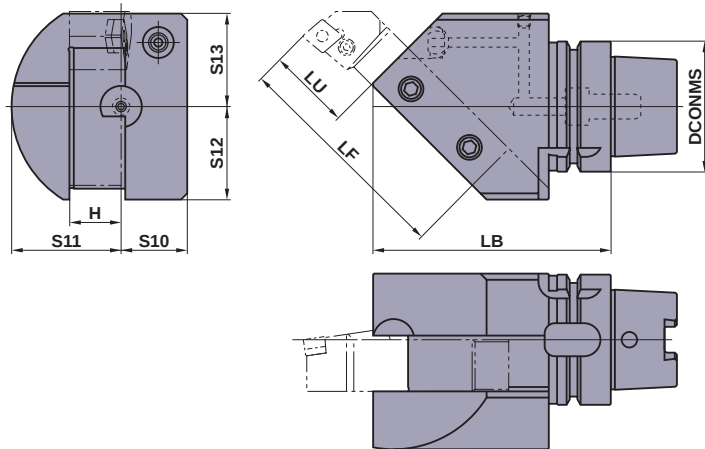
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HSK-T TOOLS

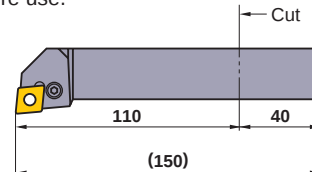
FOR MULTI-TASK MACHINES

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 25×25 size tools.
Please shorten the tool as shown below before use.



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Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)									WT [★] (lbs)		
	R	L	DCONMS	LB	LU	LF	H	S10	S11	S12	S13		Clamp Screw	Plug
H63TH-EN2525R/L-115	★	★	63	115	40	110	25	32	53	45	45	8.2	HSS12030	HSS06006

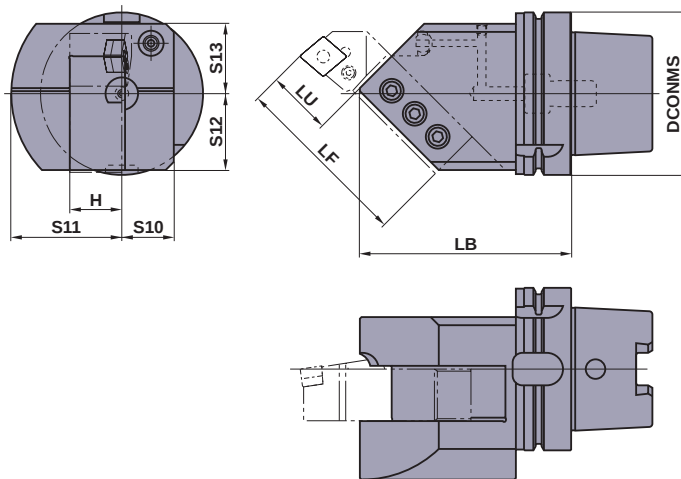
★ WT : Mass

H

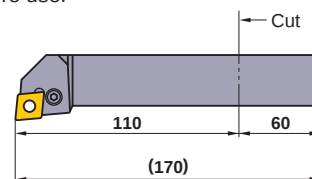
HSK-T TOOLS

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 32×32 and 32×25 size tools.
Please shorten the tool as shown below before use.



Mitsubishi Materials is licensed for production and distribution of these tools from MORI SEIKI CO., LTD under Patent No.3720202.

Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)									WT [★] (lbs)		
	R	L	DCONMS	LB	LU	LF	H	S10	S11	S12	S13		Clamp Screw	Plug
H100TH-EN3232R/L-130	★	★	100	130	40	110	32	32	68	47	43	14.6	HSS14030	HSS06006

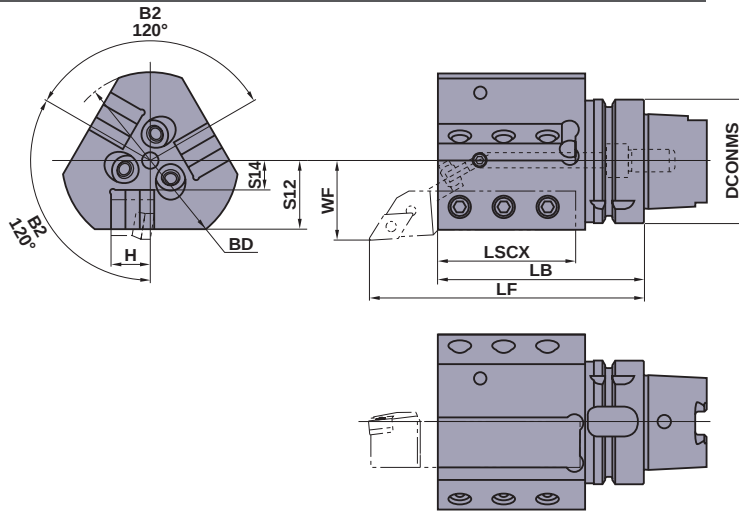
★ WT : Mass

Note 1) Possible to fit a 25 x 25 tool by using a 7 mm plate.
Possible to fit a 1" x 1" tool by using a 6.6 mm plate.

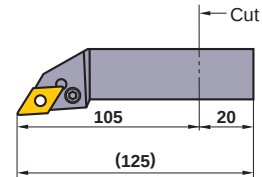
★ : Stocked in Japan

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 20×20 size tools.
Please shorten the tool as shown below before use.



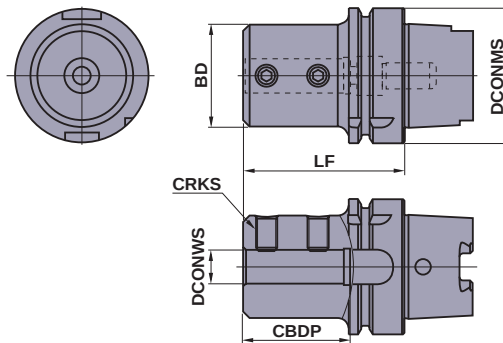
Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)									WT [*] (lbs)			
	R	L	DCONMS	LF	LB	LSCX	H	BD	WF	S14	S12		Clamp Screw	Nozzle Plug	Plug
H63TH-EV2020R/L-105-3	★	★	63	140	105	70	20	90	40	15	35	6.4	HSS12030	HSS05012	HSS06006

★ WT : Mass

BORING BAR HOLDERS

Boring



Order Number	Stock	Dimensions (mm)						WT [★] (lbs)	
		DCONMS	BD	DCONWS	LF	CDBP	CCRKS		Clamp Screw
H63TH-B08-65	★	63	28	8	65	40	M8	2.0	HSS08010
H63TH-B10-70	★	63	35	10	70	45	M8	2.2	HSS08012
H63TH-B12-70	★	63	42	12	70	45	M8	2.4	HSS08012
H63TH-B16-75	★	63	48	16	75	50	M10	2.9	HSS10016
H63TH-B20-75	★	63	52	20	75	50	M10	3.1	HSS10016
H63TH-B25-83	★	63	62	25	83	58	M12	3.7	HSS12016
H63TH-B32-87	★	63	62	32	87	62	M12	3.7	HSS12016
H63TH-B40-97	★	63	65	40	97	72	M16	4.0	HSS16012

★ WT : Mass

Note 1) Please shorten a boring bar to the required shank length. This holder is for boring bars and indexable type drills.

SPARE PARTS > N001
TECHNICAL DATA > P001

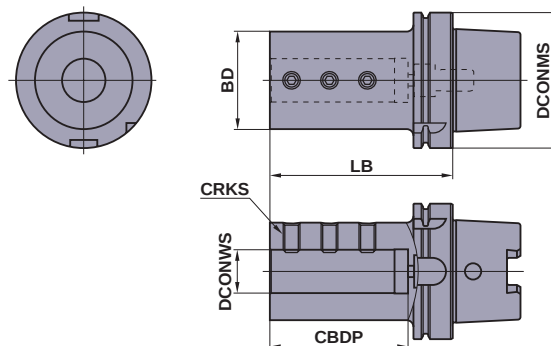
H

HSK-T TOOLS

FOR MULTI-TASK MACHINES

BORING BAR HOLDERS

Boring



Order Number	Stock	Dimensions (mm)						WT [*] (lbs)	 Clamp Screw
		DCONMS	BD	DCONWS	LB	CBDP	CRKS		
H100TH-B25-120	★	100	62	25	120	88	M12	8.6	HSS12016
H100TH-B32-135	★	100	72	32	135	102	M12	10.6	HSS12018
H100TH-B40-150	★	100	82	40	150	117	M16	13.0	HSS16020
H100TH-B50-180	★	100	92	50	180	147	M16	17.0	HSS16020

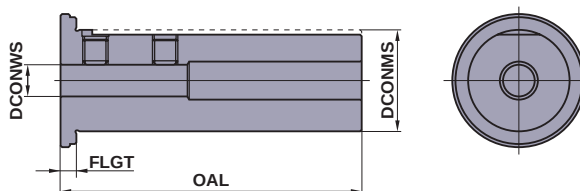
★ WT : Mass

Note 1) Please shorten a boring bar to the required shank length. This holder is for boring bars and indexable type drills.

H

HSK-T TOOLS

BORING BAR SLEEVES FOR H100TH-B32-135



Order Number	Stock	Dimensions (mm)				WT [*] (lbs)	 Clamp Screw
		DCONWS	DCONMS	OAL	FLGT		
SL3208-90	★	8	32	95	5	1.3	HSS06008
SL3210-90	★	10	32	95	5	1.1	HSS08008
SL3212-90	★	12	32	95	5	1.1	HSS08008
SL3216-90	★	16	32	95	5	1.1	HSS08006
SL3220-90	★	20	32	95	5	0.9	HSS08005

★ WT : Mass

Note 1) These sleeves are only compatible with H100TH-B32-135 holder.

